



**TOWNSHIP of HOPEWELL**  
**MERCER COUNTY**

**201 WASHINGTON CROSSING – PENNINGTON ROAD**  
TITUSVILLE, NEW JERSEY 08560-1410

**PROJECT / APPLICATION**

BLOCK:

LOTS:

ADDRESS:

PROJECT NAME:

**REVIEW REPORTS**

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# TOWNSHIP OF HOPEWELL

201 Washington Crossing-Pennington Road  
Titusville, New Jersey 08560-1410  
Phone 609.737.0605 Ext. 6280

## MEMORANDUM

**TO:** Hopewell Township Planning Board

**CC:** Applicant

**FROM:** Mark Kataryniak, P.E., Board Engineer *MK*

**DATE:** February 12, 2021

**RE:** **Engineering Review #1 – PBA 20-11  
Hopewell Parc**  
**Applicant: US Home Corporation, D/B/A Lennar**  
P/F Major Subdivision & P/F Site Plan; IPD-1 Zone  
Block 93, Lot 5.01; Scotch Road  
Block 93, Lot 5.02; 449 Scotch Road  
Block 93, Lot 6.02; 445 Scotch Road

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### **I. Description**

- A. The subject application seeks approval for preliminary and final major subdivision as well as preliminary and final site plan to develop an inclusionary residential development containing a total of 1,077 units, comprised of 861 market-rate and 216 affordable units, and contained within two areas identified as the North and South Sections of Hopewell Parc. Each Section contains a mix of single-family homes, townhomes, stacked townhomes, multi-family buildings and HOA-operated amenities.
- B. The composition of the proposed development by unit type as indicated in the application is as follows:

Building Type	North Section		South Section	
	Market-Rate	Affordable	Market-Rate	Affordable
Multi-Family Units	216	122	38	94
Townhouses, Stacked	92		224	
Townhouses	30		70	
Single-Family, 60' lots	33		47	
Single-family, 70' lots	49		62	
Subtotal:	420	122	441	94
<b>Total Units:</b>	<b>542</b>		<b>535</b>	

- C. Based on the plans submitted, the proposed development will contain 104 residential buildings in the North Section and 152 residential buildings in the South Section. Additionally, three community buildings will be constructed along with outdoor amenities within the development.

### **II. Application Submission Items**

- A. An application submission package was received on December 16, 2020 containing:

**Engineering Review 1 – PBA 20-11**

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1. A letter dated December 16, 2020 from Jason Tuvel, Esq., of Prime and Tuvel, transmitting the subject application and itemizing included materials as further described herein.
2. Completed Application forms executed by Applicant and by the three owners, in counterpart, of the Property; namely, the Applicant, US Home Corporation, D/B/A Lennar, (Block 93, Lot 5.01), CF Hopewell CC&L, LLC (Block 93, Lot 5.02) and Hopewell West Res, LLC, co-owner with Applicant (Block 93, Lot 6.02);
3. Application and Escrow Fee Calculation Form and two checks of the Applicant, made payable to the Township of Hopewell, representing Application Fees and Escrow Deposit;
4. Executed Escrow Agreement with IRS Form W-9 pertaining to Applicant;
5. Hopewell Township Tax Collector's certification of payment of taxes;
6. Consent to Entry executed by all owners and by Applicant;
7. Checklists for Preliminary and Final Site Plan and Preliminary and Final Subdivision, completed and signed by Brian R. Perry, PE, Van Note-Harvey Associates, Inc., Project Engineer;
8. Checklist Submission and Design Waiver Request Form with Addendum;
9. Certificate of Ownership / Applicant Disclosure Statement, completed by Applicant;
10. ALTA / NSPS Land Title Survey, Block 93 Lots 5.01, 5.02 and 6.02 for US Home Corporation D/B/A Lennar, prepared by Kenneth R. Raike, PLS, Van Note-Harvey Associates, Inc., dated May 8, 2019, last revised January 8, 2020, consisting of 1 sheet;
11. Tree Inventory Plan (Existing Conditions Plan, Site Plan Sheet 1 of 5 through Sheet 5 of 5);
12. Preliminary and Final Major Subdivision and Preliminary and Final Site Plan Set, consisting of various sheets as indexed on the plan set cover sheet, prepared and signed by Brian R. Perry, PE of Van Note-Harvey Associates, Inc., Princeton, NJ, dated December 16, 2020;
13. Traffic Impact Study for Hopewell Parc, prepared by Karl A. Pehnke, PE, PTOE and Eric J. Vilorio, PE of Langan Engineering & Environmental Services, Inc., Lawrenceville, NJ, dated December 16, 2020;
14. Environmental Impact Assessment entitled, "Environmental Impact Report for Hopewell Parc," prepared by Van Note-Harvey Associates, Inc., dated December 16, 2020;
15. Engineer's Report for Hopewell Parc, prepared by Van Note-Harvey Associates, Inc., dated December 16, 2020;
16. Stormwater Management Measures Maintenance Plan and Field Manuals for Hopewell Parc, prepared by Van Note-Harvey Associates, Inc., dated December 16, 2020;

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17. Fiscal Impact Report entitled, “Community Impact Statement for a Proposed Residential Development in Hopewell Township, Mercer County, New Jersey,” prepared by Richard B. Reading of Richard B. Reading Associates, Princeton, NJ, dated December 14, 2020;
  18. Preliminary Subsurface Investigation-Proposed Stormwater Facilities, prepared by Melick-Tully, A Division of GZA, dated November 17, 2020;
  19. Copies of the following NJDEP permits:
    - a. NJDEP Freshwater Wetlands Letter of Interpretation: Line Verification Permit dated April 17, 2020 (File No.: 1106-09-0003.2);
    - b. NJDEP Flood Hazard Area Verification dated November 7, 2019 (File No.: 1106-09-0003.2 LUP 190001);
  20. Architectural Elevations and Floor Plans for Hopewell Parc, prepared by:
    - a. Holiday Architects, Inc., dated December 1, 2020, Sheets A-1 through A-34;
    - b. Major Architects, dated December 16, 2020, Sheets A-01 through A-15;
    - c. Preliminary and Final Subdivision Plat for Hopewell Parc, prepared by Van Note-Harvey Associates, Inc., dated December 16, 2020, Sheets CE4-A through CE-15.
- B. Electronic versions of the originally submitted materials described above were received on December 16, 2020.

The application was deemed complete by the Hopewell Township Planning Board at a public hearing on January 28, 2021. Submission waivers were granted by the board as outlined in my office’s memorandum dated January 11, 2021.

**III. Redevelopment Plan & Zoning Compliance**

- A. The site is governed by the Redevelopment Plan for the Project Area, issued on January 29, 2018, the Residential Site Improvement Standards (RSIS) N.J.A.C. 5:21, and by the Township’s Land Use and Development Ordinance (LUDO). Section 3 of the Redevelopment Plan, entitled Land Use and Building Requirements, establishes that the general standards set forth in the LUDO continue to apply except when inconsistent with the standards set forth in the Redevelopment Plan.
- B. We defer to the Board Planner for a complete interpretation of the standards set forth in the Redevelopment Plan, but note the following items that may require further explanation to fully demonstrate compliance:
  1. Under Section 3.5 “Other Requirements”
    - a. Item 2 limits the length of buildings to 225 feet unless a 4-foot offset is provided in the façade. Buildings 1, 2, & 6 in the North Section of the Project slightly exceed this length. Provide testimony on the architectural features of the buildings that reduce the mass of the buildings as guided by this requirement.

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- b. Item 6 requires buildings incorporate spare conduit to accommodate future roof-mounted PV Systems. The Applicant should provide testimony to confirm compliance with this requirement, and we recommend this detail be stipulated as a Condition of any approval granted by the Board.
  - c. Item A.1 requires that a boulevard treatment form the circulation spine of the development. The boulevard does not extend through the entire length of the development. Provide testimony to describe how other design features in the project aide in meeting the intent of this requirement.
  - d. Per Item A.2, demonstrate compliance with the requirement for providing pedestrian and/or bicycle circulation systems designed to extend through and connect with open space and common areas both on and off site.
  - e. Item B.2 requires incorporation of small neighborhood parks, approximately 5,000 square feet, and open/green spaces into the development. Demonstrate how this is accomplished for the north section neighborhood and the single-family home neighborhoods in both sections.
- 2. Provide testimony to demonstrate compliance with LUDO Section 17-262.a.3(a), which requires low- and moderate-income units to be integrated with the market rate units to the extent possible.
  - 3. Affordable bedroom mix compliance with local ordinance and UHAC should be demonstrated. The bedroom counts in the apartment buildings that contain a 20% set aside need to be clarified. These buildings contain a mix of one and two bedroom units, and the unit mix for all of the affordable units should be itemized to demonstrate compliance.
  - 4. A comparison of the Architectural Plans and Site Plans note discrepancies in the unit count and mix for several of the multi-family buildings:

	Architectural Plans			Site Plan
	1 BR	2 BR	Total	Total
North Section				
Bldg. 1 & 2	14	31	45	47
Bldg. 3	10	24	34	39
Bldg. 4 & 5	11	28	39	45 & 40
Bldg. 6	11	27	38	52
		Total	240	270

- 5. Subject to modifications from clarifying issues raised in items 3 & 4 above, demonstrate that the project complies with Section 3.02(a) of the Redevelopment Agreements, which stipulate a cap on the total number of bedrooms in the market rate units of 701 and 1,857 bedrooms in the North and South Sections, respectively.
- 6. Acknowledging that Section 3.02(b) of the Redevelopment Agreements allow shifting or transfer of units between the North and South Sections provided the total count and affordable set aside requirements be maintained, we recommend that a detailed breakdown be provided on the plans, with tabular summaries for each planned phase of construction, showing for each building type in that phase:

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- a. Total market-rate and affordable units by bedroom type
  - b. Total market-rate and affordable bedrooms per building/unit
  - c. Ratio of affordable units to total units by phase
  - d. Ratio of market-rate bedrooms to total bedrooms by phase
  - e. Overall totals by Section and for the entire project, and include provisions for as-built notations.
7. In reviewing the architectural plans for the various building types, some floor plans contain additional rooms that appear to be convertible to additional bedrooms. Areas in question are noted as:
- a. 24 x 30 3-Story Townhome – 6 Unit Building: Ground-floor Rec Room could become 4<sup>th</sup> bedroom.
  - b. 24 x 30 3-Story Townhome – 4 Unit Building: Ground-floor Rec Room could become 5<sup>th</sup> bedroom.
  - c. 50'-wide Single-Family Dwelling: 1<sup>st</sup>-floor Flex Room could become 5<sup>th</sup> bedroom.

These potential additional bedrooms should be accounted for in the overall bedroom count calculation to verify compliance with the stipulated limits for market rate bedrooms within the Redevelopment Agreements.

8. The cover letter submitted with the application differentiated the total count of the single-family units on 60' wide versus 70' wide lots. The submitted architectural plans illustrate two potential models, a 40' wide structure and a 50' wide structure. The site plans do not identify where either model is contemplated. However, we note that, under the bulk zoning requirements in the Redevelopment Plan, the 50-wide model can be accommodated on the narrower, 60' wide, lot. Although the Redevelopment Plan does not regulate the allowable building width within the permitted building envelope of each single-family lot, the allowable variations reinforce the need for a thorough accounting on the plans of each unit through approval of construction given the potential for some models to contain additional bedrooms and the caps in place within the Redevelopment Agreements on the total number of allowable market-rate bedrooms.
9. Regulations in the Redevelopment Plan, Item 2 under "Other Requirements", require compatible architectural themes throughout the buildings in the development. The architectural plans provided for the single-family homes present three variations of the front elevations for each model, which maintains an architectural theme but offers variation to enhance visual interest and avoid a monotone streetscape. Testimony should be provided to describe how the variations on the front elevations will be monitored or controlled to avoid grouping elevations of any one alternative to maintain the variation in the streetscape.

**IV. Bulk Requirements**

- A. With respect to the zoning compliance information contained in tabular form on Sheet CE-1, Overall Site Plan Set, we note the following:
  1. The Overall Tract Summary Table does not include the requirement for the minimum

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setback to Scotch Road for townhouses. This information should be included on the Summary Table or depicted on the Overall Site Plan as appropriate.

2. The required and provided maximum building height of single-family units as stipulated in the Redevelopment Plan should be included in the Overall Tract Summary Table.
3. The following is noted in the Unit Count and Parking Summary Table:
  - a. Under the North Section, the item labeled “270-Unit Apartment Area (2 Bedroom) should be revised to reflect any change in the unit count for the comment in item III.B.4 above, and to reflect that the buildings contain a mix of one and two bedroom units.
  - b. Under the South Section, the item labeled “Townhome (3-Bedroom) – 70 Units” does not match the plans, which indicate 42- 3-bedroom units and 28- 4-bedroom units.

The parking calculations should be revised to reflect the unit count/mix changes as required. The Average Calculation Rate, using a 2-bedroom average requirement noted in the footnote of the table is acceptable, but the table should be revised to reflect on which buildings the average rate was applied.

**B. Variances**

1. All of the proposed improvements depicted on the plans fall within the listing of Permitted Principal Uses for the IPD-1 Zone, or within the listing of Permitted Residential Accessory Uses.
2. Clarification is needed on the proposed one and one-half story multi-family clubhouse building proposed in the North Section of the project. The architectural Plans note a building height of 25’ 6” to the roof peak, but do not specify the height of the chimneys that extend considerably above the roof peak. Dimensions should be provided to verify compliance with the established bulk standards for building height.

**C. Design Waivers and/or Exceptions**

We note the following items that may require waivers or exceptions from strict interpretation of the Design Standards established in the LUDO and RSIS:

1. Section 17-76 – Apartments and Townhouses
  - a. Subsection f. requires recycling areas located in convenient proximity to the units. Identify how recycling will be accomplished in the project, and the adequacy of the proposed trash enclosures to accommodate both refuse and recycling if they are intended to serve both purposes.
2. Section 17-95 – Off-Street Parking and Loading
  - a. §17-95.f requires parking areas containing greater than six spaces be screened from adjacent residential lots.

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3. Section 17- 103 – Sewage Disposal
  - a. §17-103.a requires that the developer convey to the Township of Hopewell title to or easements across all lands necessary to ensure the operation and maintenance of the collection system. All easements should be depicted on the plans, and final conveyance of easements should be stipulated as a Condition of any approval granted by the Board.
4. Section 17-106 – Signs
  - a. Provide setback dimensions from the right of way and curb line to the monument signs to demonstrate compliance with §17-106.f.8.
  - b. Additional detail is required to determine compliance with §17-106.f.8 in terms of the maximum permitted area of the sign and accompanying walls. Demonstrate that the proposed sign does not exceed 25 square feet in area, and that the wall does not exceed five times the area of the sign.
  - c. The portion of the wall containing the sign panel exceeds the maximum height of five feet per §17-106.f.8.
  - d. Provide details of the proposed temporary “Coming Soon” signs proposed on Scotch Road, including the size, word message and duration of the installation. Temporary signs, including model home signs, shall comply with §17-106.e or specific relief shall be requested.
5. Section 17-115 – Stream Corridors
  - a. Any areas of encroachment into established Stream Corridors should be clearly marked and delineated on the plans to determine compliance with this Section of the Ordinance. Encroachment areas will ultimately be required to be contained within conservation easements.
6. Section 17-116 – Steep Slopes
  - a. The Applicant should indicate if any steep slopes occurring on the subject property are impacted or disturbed by the proposed development. An analysis of steep slopes should be provided as required by §17-116.a.4.
7. The following items are noted with respect to a review for compliance with the requirements of the Residential Site Improvement Standards (RSIS, N.J.A.C. 5:21):
  - a. The Applicant should provide an analysis of the proposed public streets internal to each section of the development to demonstrate compliance with the ADT limitation of 1,500 vehicles per day for the roadway classification of residential neighborhood streets per §5:21-4.1 & Table 4.3. The internal road links between the various sections of looped roads within the development should not exceed the daily traffic limitation for the street hierarchy using the peak rate values of RSIS Table 4.1.
  - b. §5:21-4.19(b)2 requires a minimum offset or separation of 150 feet for street intersections, where the plans depict a minimum of 97 feet, and the Applicant is seeking a de minimis exception of this requirement to be approved by the



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Board. It is noted that this condition is limited to the privately-owned alleys that serve small groups of townhomes only. Testimony should be provided to the board to support the granting of this exception.

- c. §5:21-4.19(b)5 requires a minimum centerline radius of 100 feet for streets, where 50' is proposed on the alleys, and the Applicant is seeking a de minimis exception of this requirement to be approved by the Board. The Applicant should provide testimony in support of the granting of this exception. We note that this condition is limited to the privately-owned alleys. Line of sight through the inside of the curve is of critical importance with the granting of this type of exception. We recommend the plans be revised to illustrate the lines of sight on the Site, Grading and Landscaping Plans to ensure, at a minimum, driveways, landscaping and grading do not present obstructions through the inside of the curve. We further recommend that sight triangle easements established at these locations and recorded to ensure the lines of sight remain.

**V. Plan Comments**

In addition to the general comments contained within this section, detailed technical comments are contained on a January 28, 2021 memorandum prepared by Van Cleef Engineering Associates, LLC, which are included herein by reference and attached for reference.

- A. The Subdivision and Site Layout plans should illustrate the subdivision of lots for the multi-family units and stacked townhomes anticipating the use of qualifier designations for the areas that occupy multiple dwelling units within the same footprint.
- B. The subdivision plans should also identify separate common open space lots in the areas between the stacked townhouse buildings and the adjacent streets.
- C. Provide testimony as to how the homeowners association or multiple associations will be structured for the various types of units proposed. For example, will the open space areas outside of a stacked townhome building on a single lot be incorporated into the two owners of the end unit or will it be part of the overall open space in the development?
- D. The full extent of the utilities for the site and the connections offsite are not fully detailed on the plans. In particular the sanitary sewer collection system terminates at the proposed pump stations, with no force main shown internal or external to the site. Testimony should be provided to describe the intended route of the force mains and the anticipated connection point to the existing collection system offsite. I recommend that the proposed force main should, at a minimum, be shown within the site on the Utility Plan and Profile sheets so that the board can be assured the main can be constructed without other conflicts within the site.
- E. Several of the technical comments contained in the attached memo identify areas where the sidewalks along the public roads do not remain contained within the proposed right of way.
  1. The applicant should indicate if the sidewalks are intended to be dedicated as public sidewalks or if they will remain under the responsibility of the HOA.
  2. We recommend providing a plan that clearly illustrates all of the elements intended to be dedicated to the township as public improvements. The elements should include

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all utilities and physical roadway infrastructure as well as the limits of all rights of way and easements for the various components.

- F. Testimony should be provided on how trash and recycling will be managed in general across the site. While centralized trash enclosures are provided for areas within the development containing apartment buildings, no centralized trash enclosure locations are provided for the sections of the project containing townhomes. Two particular areas of concern are the use of individual refuse containers at the townhomes given the narrow width of the alleys, and the potential for the trash enclosures at the apartments becoming overloaded given the proximity of them to several townhome buildings.
- G. The Applicant shall identify the square symbols used at the rear of the stacked townhomes shown in the center of the large driveway for the building at the separation between each unit.
- H. We note the following general comments with respect to grading:
  - 1. The grading around several of the single-family homes direct runoff towards the foundation of the structure. The single-family homes in the south section near Road I is an extreme example of this case. If the grading cannot be altered to redirect the runoff away from the foundations, supplemental drainage management measures should be added to the plans.
  - 2. The Applicant should indicate if the pedestrian walkway connecting the North & South Sections is intended to be ADA compliant. The grading of the walkway should reflect landing areas as required by the ADA requirements when longitudinal grade limits are reached. If the intent is that the walkway is not ADA compliant, signage to that affect should be posted on either end of the walkway, with details of the signage included in the plans.
  - 3. The grading around the proposed apartment buildings, numbers 3 & 6 in the North Section, do not appear to reflect the basement level of apartments along one side of the building as depicted on the architectural plans.
  - 4. The location of existing septic disposal fields on properties within 200 feet of the subject property shall be shown on the Grading & Utility Plans. The Applicant should demonstrate that the changes in grading proposed under the project and/or the location of any drainage outfalls do not increase runoff to an adjacent property and surcharge the septic field.
- I. The overall landscaping along the northern boundary of the property in the North Section appears to minimal and does not provide a continuous visual screen of the development to the township-owned open space to the north of the project. Additional landscaping is recommended to provide a more solid screen.

**VI. Traffic Impact Statement and Circulation**

- A. A review of the Traffic Impact Report submitted with the applicant will be addressed in a separate report.

**VII. Outside Approvals**

The following outside agency approvals will be required as a condition of approval:

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1. Mercer County Planning Board
2. Mercer County Soil Conservation District
3. Delaware & Raritan Canal Commission
4. Hopewell Township Board of Fire Commissioners
5. Hopewell Township Health Officer
6. Ewing Lawrence Sewerage Authority, ELSA
7. NJDEP TWA
8. NJDEP Wetlands/FHA

**VIII. Conditions of Approval**

In addition to any Conditions stipulated by the Applicant, recommended herein in this report, we recommend or required by the Board, we have provided the listing below of items that should be included as Conditions of any approval granted by the Board:

- A. Payment of all outstanding fees and escrows.
- B. Certification that any soil imported to site satisfies all applicable NJDEP requirements for clean material.
- C. Submission of all deed restrictions imposed on any portion of the project for review by the Township Engineer and Planning Board attorney.
- D. Submission of a Developer's Agreement for all improvements that will be conveyed to the township for ownership and or maintenance purposes as public improvements.
- E. Confirmation of all street names by the Postmaster of the Post Office.
- F. Confirmation of the adequacy of all utility easements from the various utility service providers that will be providing underground services within the development.
- G. Written confirmation by all utility service providers to provide services to the project.
- H. Confirmation of the block and lot numbers by the Township Tax Assessor.
- I. Submission of quantity and cost estimates for all improvements that will be dedicated to Hopewell Township as public improvements.
- J. Updating all conservation easements to reflect the extents of regulated lands under NJDEP jurisdiction following the issuance of final permit by the NJDEP. Updates should include all plan updates and deed recordings as required.

## MEMORANDUM

**TO:** Mark Kataryniak, PE  
Community Development Director/Township Engineer

**FROM:** James Bash, PE  
For the Firm

**DATE:** January 28, 2021

**RE:** Hopewell Parc - Preliminary & Final Subdivision and Site Plan Review  
Block 86, Lot 3; Block 86, Lots 32-34, 130  
VCEA File No. 78062007

This office has reviewed the Preliminary & Final Subdivision and Site Plan application package submitted for the above referenced project. Upon review of the submitted items, we offer the following comments:

### Site Layout Plan

1. Sidewalks are shown as 5 feet wide throughout the development. The applicant shall provide testimony as to why the sidewalks are wider than a typical sidewalk and its impact to overall impervious coverage on the site.
2. There are areas throughout the site where the sidewalk extends beyond the public right-of-way and onto private lots. Additional right-of-way or easements shall be provided.
3. Typical dimensions for all roads, alleys, driveways and parking areas should be added throughout the layout sheets.
4. It appears that the basin and the basin fencing for Basin N-100 extends onto the adjacent lots. The basin shall be revised to avoid encroaching on a private home owners lot.
5. It appears that the basin and the basin fencing for Basin N-200 extends onto the adjacent lots. The basin shall be revised to avoid encroaching on a private home owners lot.
6. Basin N-2 shows what appears to be a basin access point on a private lot. How is this basin accessed for maintenance? Are access easements provided?
7. The basin walls do not show fencing on top of the walls, this shall be added to the plan.
8. Mailbox kiosks are shown in the single family home portion of the site. Testimony shall be provided as to why mail service will not be provided to individual single family homes.
9. The width of the bituminous walking path adjacent to Lot 12 shall be shown on the plan.
10. Road 'A' abruptly tapers to 24 feet wide from 30 feet wide between stations 20+85 and 21+15. Testimony shall be provided regarding the width reduction.

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11. There are two retaining walls proposed on the interior lots on the westernmost loop of Road 'A'. Testimony shall be provided as to who is responsible for maintaining those walls and whether a maintenance easement will need to be provided to any home owner associations.
12. Road 'B' has designated parallel parking spaces and reduces to a width of 24 feet where parking is not desired. No parking signs shall be added in the areas that are 24 feet wide on Road 'B' and all other locations where this situation occurs.
13. Proposed Road 'C' is labeled as Road 'D' on the Subdivision Plan. This discrepancy shall be revised.
14. Proposed Road 'B' is labeled as Road 'H' north of the roundabout on the Subdivision Plan. This discrepancy shall be revised.
15. Proposed Road 'I' as shown on Site Layout Plans 7 & 8 is labeled as Road 'F' on the Subdivision Plan. This discrepancy shall be revised.
16. Proposed Alley 'J' is labeled as Alley 'J1' and Alley 'J2' on the Subdivision Plan. This discrepancy shall be revised.
17. Proposed Alleys 'K' and 'K1' do not match the Subdivision Plan. This discrepancy shall be revised.
18. There are two proposed 21-unit apartment buildings with a parking area that is only accessible via Alley 'A'. Testimony shall be provided to support that an 18-foot wide Alley can accommodate the traffic to these two buildings.
19. The width of the proposed sidewalk along Scotch Road shall be labeled on the plan. The sidewalk also appears to extend onto private lots. Additional right-of-way or easements shall be provided.
20. There appears to be two existing utility poles located in the Scotch Road sidewalk, north of Road 'A'. These poles shall be relocated or the sidewalk realigned.
21. All median islands shall have the R4-7 "keep right" signs at both ends of the median.
22. Additional info should be provided for the roundabout including interior radii, curb type and materials for the interior of the roundabout.
23. The applicant shall clarify if the portion of Alley 'B' between Road 'A' and Road 'B' (as labeled on the site layout plan) will remain a private alley or have a public right-of-way where it widens to 30 feet.
24. The existing lot south of the intersection of Road 'A' and Scotch Road has an existing driveway that extends through the proposed location of Road 'A'. The plan shall depict where the existing driveway will now terminate to insure there is no access from Road 'A'.

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25. All door locations shall be shown on the apartment buildings with sidewalk access to each.
26. The apartment section depicted on Site Layout Plan 5 shall have additional stop signs and stop bars added throughout, including, but not limited to both ends of the entrance boulevard and the club house parking area.
27. A crosswalk shall be added where the apartment entrance boulevard meets Proposed Road 'A'
28. The apartment section depicted on Site Layout Plan 5 proposes one trash enclosure location for all 6 buildings and it is not centrally located. Additionally, A.D.A. accessible routes are not provided from each building to the enclosure. Testimony shall be provided regarding the location and accessibility of the trash enclosure area.
29. Building and parking setback dimensions to right-of-way/lot lines shall be shown for all apartment buildings and associated improvements.
30. There appears to be old lot lines and easement lines in the vicinity of Apartment Building #2. The lines should be labeled and/or removed as necessary.
31. It should be noted that the Belgian block curb shall transition to concrete curb at all ramps and the detail shall be revised to reflect this. All locations where the sidewalk meets the curb shall have an accessible ramp.
32. Designated fire lanes shall be established in appropriate locations in accordance with RSIS section 5:21-4.16(e)1.
33. The pool shall be completely fenced in, the pool deck material shall be specified on the plan and any other impervious surfaces around the clubhouse shall be identified.
34. The retaining wall to the north of Apartment Building #6 is depicted with no separation between the curb. It does not appear that guiderail and fall protection fencing can be installed in areas where it is against the curb, particularly where head in parking occurs and bumpers may hang over the curbing. The wall location shall be reviewed for constructability and revised as necessary.
35. Will sidewalks be provided to the community garden and dog park in the apartment section.
36. It appears there are patios on the first floor of the 26-unit apartment building with the driveway located at station 8+00 on Proposed Road 'A'. The patios shall be shown on the plan to depict their relationship to the retaining wall behind the building.
37. There are improvements shown in wetlands and wetlands transition areas. All applicable permits shall be obtained by NJDEP.

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38. The pump station access driveways are shown as 12 feet wide, where 14 feet is required by the Township's Sanitary Sewer Design Standards and Construction detail adopted by Ordinance No. 20-1732, dated 11/23/2020. The Township's approved detail should also be added to the plans.
39. On Site Layout Plan Sheet 7, sidewalk should be added on the northwest side of Road 'I' between both intersections of Road 'H'.
40. Sidewalks that are directly adjacent to head in parking shall be 6 feet wide. Dimensions shall be added and the plan shall be revised as necessary.
41. The applicant shall provide testimony as to why mountable curb is used throughout the alleys and why standard depressed curb is not proposed at townhouse driveways.
42. How are basins S-200A and S-200B accessed for maintenance?
43. Due to the narrow width of the alleys, the mailbox kiosks on Proposed Alleys 'D' and 'J' should be relocated.
44. Setback dimensions for all townhouse and stacked townhouse buildings to all right-of-way lines and lot lines shall be added to the plan.
45. It appears there are many different hardscape features in the open space area at the west end of Proposed Road 'D'. All materials shall be labeled on the plan.
46. Setback dimensions for the apartment buildings on Site Layout Plan 12 to all right-of-way lines and lot lines shall be added to the plan. Typical dimensions for parking spaces, drive aisles and other site features shall also be added as necessary.
47. Setback dimensions for the South Clubhouse to all right-of-way lines and lot lines shall be added to the plan.
48. Scotch Road shall be labeled on Site Layout Plan 12.
49. The playground area at the apartment buildings shown on Site Layout Plan 12 should be fenced in due to its location in the center of the parking lot.
50. The monument signs at the site entrance shall be drawn to scale and setback dimensions shall be provided. Sight triangles should be provided to show there is adequate sight distance.

### **Site Grading Plan**

1. All high points shall be shown on the plan.
2. Additional contour labeled should be added to the plans where there are areas with numerous contours without labels.
3. The minimum slope allowable by RSIS for open space areas is 1.5%. The areas between Multi-Family Building 3 and COAH Building 3 has significantly flatter slopes

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than 1.5%. All slopes, including but not limited to this area, shall be revised to a minimum grade of 1.5%.

4. The grading at basin access points shall be reviewed. All locations are graded at 3:1 slopes which will prohibit some maintenance vehicles from accessing.
5. Wall elevations shall be provided for the two retaining walls located on the interior lots at the western end of Road 'A'
6. The contours lines on the driveways of several lots do not match the garage floor elevations. It appears if the contours were drawn correctly, the driveways would be too steep. All driveway grades shall be reviewed and revised as necessary.
7. The grading north of Road 'A' at station 22+00 shall be reviewed and revised.
8. The grading behind lots 47 and 48 shall be reviewed and revised.
9. Grades shall be provided for all walls located in front of the stacked townhouses.
10. Grades shall be provided at all apartment building and club house doors.
11. Grades shall be provided on all A.D.A. parking spaces to determine A.D.A. compliance. Additional grades shall be provided to demonstrate all accessible routes are compliant.
12. There are numerous instances where full height curb grades are shown at ramp locations and ramps that do not appear will be compliant. Grades shall be revised as necessary and additional grades shall be provided to demonstrate full A.D.A. compliance.
13. Will the stacked townhouses have basements?
14. All townhomes and stacked town homes have a 0.4-foot grade difference between the exterior garage grade and the garage floor. This grade difference should be 1.5 inches.
15. Inlet N-234 shall be moved to the low point of Alley 'A'.
16. It is unclear how the grade change between the stacked townhouse units will work with the AC units in the driveway area between the driveway transitions. Additional grade information shall be provided.
17. Additional grades shall be provided on the interior circle of the roundabout.
18. The proposed contours in the vicinity of the dog park area at the intersection Road 'A' and Alley 'B' do not tie into existing contours and it is unclear how the grading in this area will work.
19. Proposed grades/contours shall be provided on the proposed sidewalk along Scotch Road.



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20. Additional grade information shall be provided for the boulevard where Road 'A' meets Scotch Road. It is not clear how the proposed '196' contours tie into the existing grades.
21. The contours to the east of Apartment Building #1 are too steep. It appears that a retaining wall is needed here. The proposed '196' contour in this area does not tie into an existing contour.
22. Grades appear to exceed 3:1 between Alley 'B' and the northern property boundary. This grading shall be revised.
23. The grades at the intersection of Road 'A' and the entrance boulevard to the apartments shall be revised.
24. The retaining wall grades appear to be incorrect for the wall behind the 26-unit apartment building located at the intersection of Road 'A' and Road 'B'.
25. The grades around Inlet N-311 shall be revised to ensure all runoff is collected by the inlet.
26. The grades on the north side of Lot 82 exceed 3:1 and shall be revised.
27. Curb grades at all PC's and PT's shall be provided.
28. There are multiple contours with the same label in the rear of Lot 76. The grading in this location shall be reviewed and revised as necessary.
29. With regards to grading on the single family home lots, swales should be centered on property lines and graded in such a way that runoff from adjacent lots does not cross other properties.
30. It appears the grading behind Lots 59 and 60 intends to convey runoff to the basin via a swale. The grades shall be revised to ensure the slope meets the minimum required slope of 1.5%.
31. Grades for the retaining wall on the south side of Basin N-200 shall be provided.
32. Many of the inlets in the apartment section's parking lot are slightly offset from the corners of the parking lot with grades at the corner slightly lower than the inlet grate. These grades and/or grates should be revised to provide positive drainage.
33. The grades of the center island in the parking area to the east of Apartment Building #3 should be reviewed and revised to demonstrate positive drainage and that the contours are depicted correctly.
34. The grades on the parking lot side of Apartment Building #3 are lower than the contours and shall be revised.
35. The grades on the parking lot side of Apartment Building #2 appear to be too flat.

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36. It appears that the layout near inlet N345 was revised, but the contours were not revised to match.
37. The sidewalk grades on the southwest corner of Apartment Building #3 are too steep and shall be revised.
38. The driveway grades at the northwest corner of Apartment Building #3 appears to be about 9%. The applicant shall reduce this grade to the maximum extent practicable.
39. Grades shall be provided in the apartments compactor area to ensure positive drainage to the adjacent inlet. Grades on the adjacent retaining wall shall be provided as well.
40. The grades around Inlet N-329 shall be revised to ensure all runoff is collected by the inlet.
41. The grades in the island adjacent to Inlet N-325.1 exceed 3:1 and shall be revised.
42. The grades on the parking lot side of Apartment Building #5 appear to be too flat.
43. The grades on the walking path to the south of the apartments is 10%. This shall be flattened to be A.D.A. compliant.
44. The rear yard grades on Lot 180 are higher than the grades at the rear of the house. The grading on this lot shall be reviewed and revised.
45. The highpoint in between Lots 178 and 179 appears to be higher than the grades at the corners of the building. This shall be revised to provide positive drainage away from the house.
46. It is unclear the intent of the grading design in the rear of lots 174-176. The grading on these lots shall be reviewed and revised.
47. A proposed tree line shall be shown for all areas where grading crosses the existing tree line and trees will need to be cleared.
48. Is a retaining wall proposed between Lots 202 and 203?
49. The rear yards of Lots 167-169 are too flat and shall be regraded to meet the minimum slope requirements.
50. The swale to the west of lot 186 shall be oriented to direct runoff away from the dwelling on lot 186.
51. There is a low point on the curb line near the western end of Proposed Road 'R'.
52. There are several instances where townhouse grades in front of the townhouse are approximately 8 inches below finished floor. With these be slab on grade construction?

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53. With regards to Site Grading Plan 8, the grades on the east side of the apartment buildings should be revised to ensure runoff flows away from the buildings. The contours do not appear to work with wall grades and building grades in some locations.
54. Grade information shall be provided for all trash enclosures.
55. The inlets located in the rear of Lots 213-219 shall be relocated to the low points. Contour lines pass through the inlets, but the grade information shows the grades to be lower than those contours which will result in grades steeper than 3:1.
56. The townhouse unit at the northeast corner of the intersection of Alley 'J' and Road 'J' has multiple '195' contours in the front yard and a spot grade lower than 195.00 at the building. The grading in this locations shall be revised.
57. Basin S-200-B has the 100-yr water surface elevation labeled as 180.24 and the grades at the rear of the homes on lots 158 and 159 are 180.50 and 178.76 respectively. The 100-yr water surface elevation shall not encroach onto any adjacent lots.
58. Basin S-200-A has the 100-yr water surface elevation labeled as 175.40, but the lowest contour in the basin is 177. This label shall be revised.
59. There is an unlabeled contour at the intersection of Road 'I' and Alley 'I' that needs to be clarified on the plan.
60. Grades shall be provided for the retaining wall that is located in the open space area at the west end of Road 'D'.
61. Grades shall be reviewed and revised in the vicinity of the 24-unit apartment building located at the intersection of Road 'D' and Road 'H'. Will the mail kiosks work on a 3:1 slope? The sidewalk cross slope at the southwest corner appears too steep. The inlet placement of Inlet S306 does not work with the proposed contours.
62. The grades behind Lots 124-130 exceed 3:1 and shall be revised.
63. Additional grade information is needed for the 26-unit Apartment Building at the intersection of Scotch Road and Road 'D'. It appears that the runoff between the building and Scotch Road flows directly into the building. Additionally, the proposed contours at the northeast corner do not tie into existing contours.
64. The proposed grades where Road 'A' meets Scotch Road need to be adjusted to properly depict how the grades match the existing road grades.
65. The grades on the northwest corner of the parking island with the playground on Site Grading Plan 12 should be reviewed and revised.

### **Site Drainage Plan**

1. Existing and proposed contours (shaded back as necessary to promote legibility) shall be added to all drainage plans.

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2. Hard copies of the plans were not submitted for review and the storm sewer calculations located within the stormwater management report are extremely incomplete, with only a portion of the storm sewer discharging to Basin S-100 and the entirety of that discharging to Basin S-300 being provided.

The storm sewer calculations are an integral pivot to establishing consistency between the drainage plans and profiles when conducting a review via PDF. Please provide the missing information so that a comprehensive review may be completed. The following comments are limited to that information that was provided.

3. The Storm Sewer chart shows a grate elevation for S103.2 of 169.85 while the plan shows 164.54. Revise the chart as needed.
4. The invert out for each inlet should indicate to which inlet it flows, rather than itself.
5. Locations of all roof leader direct connections to the storm sewer system shall be added to the plans.
6. Structures S-303 and S-318 are identified as MTDs (manufactured treatment devices). Please identify type and size for each.
7. Inlets S-307 and S-308 are identified as Type B inlets, but are not located on a curb line. Revise to "A" or "E" as appropriate.
8. B inlet S-311 has a plan invert out of 202.23 and a chart invert out of 201.98. The invert in of S-311.1 has a similar inconsistency, although the inverts out of the chart and plan for this structure match. Revise the chart as necessary.
9. There is a proposed B Inlet between inlets S-322 and S-323 without identification or design data on Drainage Plan 12 that appears to be identified as S-322.1 on the chart.
10. B Inlet S-323 has a grate elevation of 204.70 on the plan but 205.45 in the chart.
11. MTD S-318 has a rim elevation of 200.63 on the plan but 204.70 on the chart.
12. The pipe run between S-319.1 and S-319 has a length of 26 feet @ 0.35% in the chart but 18 feet @ 0.5% on the plan.
13. E Inlet S-320 has a grate elevation of 196.83 on the plan but 197.03 in the chart.
14. MH S-329 has a rim elevation of 193.55 on the plan but 204.70 on the chart.
15. The plans identify the Basin S-300 outfall conveyance structures as OS S-397 through FES S-399, while the chart uses S-331 through S-333. The profiles on Sheet CE-101 (Drainage and Utility Profiles 4) also identifies these as S-331-333.

### **Site Utility Plan**

1. Sanitary Sewer Easements shall be provided for all sanitary sewer features that are not contained in a right-of-way and are not privately owned.

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2. Storm Sewer easements shall be provided for any pipe that is downstream of a storm sewer to be maintained by Hopewell Township.
3. Sanitary sewer laterals, cleanouts and all utility services shall be shown on the plan to verify potential conflicts with landscaping or other utilities.
4. The location of all water valves shall be shown on the plan.
5. The distance between any dwelling and a fire hydrant shall not exceed 400 feet when measures along a street right-of-way. Additional hydrants are required.
6. Both the sanitary sewer and storm sewer trench detail call for six inches of bedding below the pipes. There are several instances where there is less than six inches of clearance between storm and sanitary sewer crossings when the thickness of the storm pipe is accounted for. Additional detail is needed to determine the constructability of these crossings or inverts shall be revised.
7. All utilities are shown to Scotch Road with no connections to existing utilities. The existing utilities shall be shown and connections shall be depicted on the plan.
8. All required NJDEP permits shall be obtained for sanitary sewer in the Department's regulated areas.
9. The size, length and material of the force main shall be labeled on all applicable plan sheets.
10. The force main's connection to the pump station on Site Utility Plan 6 shall be shown.
11. Who is responsible for maintaining the storm sewer in the land locked lot shown in Site Utility Plan Sheet 7? An access easement for maintenance shall be provided.
12. All storm structures shall be revised to have a drop within the structure for the inverts of the pipe into the structure and pipe out of the structure. The crowns shall be matched where pipe sizes change.
13. The plan does not show roof leaders. Roof leaders shall be shown on the plan with connection points to the storm sewer.
14. Will the site have natural gas service? No gas mains are shown on the plan.
15. All trees shall be adequately distanced from the storm sewer, sanitary sewer and all other utilities.
16. Air release valves shall be shown at all high points and 90-degree bends on the force main.

### **Soil Erosion and Sediment Control Plan**

1. This plan is subject to the review and certification of the Mercer County Soil Conservation district.

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2. Paved transitions shall be provided between Scotch Road and the stabilized construction entrance.
3. A plan showing the soil compaction mitigation areas and test locations shall be provided.

### **Profiles**

1. A profile shall be provided for the force main.
2. The profiles on sheet CE-93 are not aligned at stations 15+00 and 29+50.
3. With regards to the profile on Sheet CE-99, the profile depicts exposed pipe at station 4+50, and very little cover at station 13+00. Additionally, manhole MH-178 is depicted with a sump.
4. The grading and/or pipe lengths shall be reviewed at headwall locations. The profiles indicate that there will be exposed pipe in several of these locations.
5. Identify storm cross drain length and slope on road profiles and/or refer to where the profile view of it may be found elsewhere.
6. The invert out of sewer manholes and storm drains should indicate the next downstream structure to which it flows, not repeat its own identification number.

### **Construction Details**

1. All sanitary sewer details shall be replaced with the Township's approved details as depicted in Sanitary Sewer Design Standards and Construction detail adopted by Ordinance No. 20-1732, dated 11/23/2020.
2. The following sanitary sewer details in accordance with the standard listed above shall be added to the plan:
  - Air Valve Manhole for the force main
  - Butyl-Lok Sealant
  - Force Main Cleanout
  - Force Main Connection at manhole
  - Ladder Rung
  - Stream Crossing Trench
  - Sewer Crossing Sign
  - Typical Meter Chamber for force main
  - Pump Station Driveway
  - All relevant details associated with pump station
3. A cross section for the 24' wide roadway shall be shown on the detail sheet.
4. The sanitary manhole frame and cover detail is for an E.L.S.A. manhole cover. The Hopewell Township standard manhole covers shall be used.
5. The type of paint used for the crosswalk shall be specified on the detail.

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6. The street sign shall meet street sign standard as specified in LUDO Section 17-109.
7. The depressed curb detail for A.D.A. ramps shall indicate that the flush curb shall be concrete, not Belgian block.
8. The depressed curb at driveways detail shall indicate a 1.5" curb reveal.
9. The retaining wall detail shall be revised to depict fall protection fencing at the top of the wall.
10. Signed and sealed structural designs for all retaining walls and the boardwalk structure shall be submitted to the building department prior to construction.
11. All concrete structures shall use 4,500 psi concrete.
12. The precast drainage manholes shall be noted to be designed to accommodate H-20 loading.
13. The manufactured treatment devices shall have elevations labeled for all relevant information including structure invert top of box, manhole rim, weir walls, and pipe inverts.
14. The size of the monument sign shall be labeled in square feet to determine if it complies with LUDO section 17-106.
15. A detail for the temporary signs shall be provided.

#### **Overall Sales Map, Sales Office and Construction Trailer Site Plan**

1. The plan calls for the A.D.A. parking spaces to be paved. As the sales trailers will be open to the public, the entire accessible route to the trailer, including ramp, will need to be A.D.A. compliant.
2. In the Trailer Area #2 detail, A.D.A. parking should be provided on the sales trailer side of the gravel lot with accessible route.

#### **Landscaping**

1. Platanus x acerifolia 'Bloodgood' is not an approved species on the Approved Township Plant List. Specify Platanus occidentalis, American Sycamore, instead, which is native to the area and on the approved list.
2. Magnolia loebneri 'Merrill' is also not on the Approved List of Native Woody Plants. Choose instead Magnolia virginiana, Sweetbay Magnolia, which is native.
3. While Pinus strobus, Eastern White Pine, is on the List of Approved Native Woody Plants, providing just one species throughout the project creates a monoculture, which would be detrimental if a disease should strike this species at any time in the future. Specify 3 or 4 different evergreen species from the Approved List of Native Woody Plants for Hopewell Township.



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4. While many of the Canopy Tree species have been selected from the Approved List of Trees for Hopewell Township, some have very many trees of the same species. Again, in the spirit of avoiding a monoculture, please provide no more than 75 of the same species. In particular, *Acer rubrum*, *Liriodendron tulipifera*, *Platanus (occidentalis)*, *Quercus bicolor* and *Ulmus Americana* should all be reduced and alternate species added to the palette.
5. Please break down the sheets with match lines, and provide a plant schedule for each sheet. It will be easier for contractors to track and order plant material for installation.
6. While Note #8 on Sheet L-001 states that all trees shall have a minimum caliper of 2 ½", the minimum tree caliper listed in the Plant Schedule specifies 2"-2 ½" caliper, thus a minimum of 2" caliper. Please correct this discrepancy.
7. While Note #15 on Sheet L-001 states that plants must be protected from deer browse, there is no protection shown on the Tree Planting Detail. Deer protection shall be added for the Canopy Trees to the Tree Planting Detail on Sheet L-001.
8. Prior to commencement of planting, the contractor shall contact the Township to establish a schedule of planting. A note to this effect shall be added to the General Landscape Notes on Sheet #L-001.
9. Add a Typical Tree Protection Fence Detail to protect trees to remain during construction. The required Detail is attached to this review.
10. In the Plant Schedule, *Prunus laurocerasus* 'Schipkaensis' and *Weigela florida* Wine and Roses are not native woody plants and are not on the list of Approved Plant Material for Hopewell Township. Choose species from the list of approved plant material for the Township.
11. *Juniperus procumbens* 'Nana' and *Juniperus horizontalis* 'Blue Ice' are not on the list of Approved Woody Plant Material for Hopewell Township. However, this office understands the choice of this material for ground cover in the street islands where it will be very salt tolerant and can withstand snow piles in the winter. The approved list really does not offer a viable alternative for these plants. We will, therefore, allow them in the island locations they are specified for this project.
12. The sampling areas to identify trees on site for removal and replacement are an acceptable method for quantifying tree replacement. This is standard industry practice widely used in municipalities throughout New Jersey and Pennsylvania. However, only ½ the work for identifying tree replacement has been completed on the plans. Woodland Removal Areas must be identified on the Existing Conditions Survey in conjunction with the development areas of the project. Percentages shall be applied to the different tree size categories identified in the Ordinance for each of the disturbance areas, based on the sampling area nearest each disturbance area. Then identify Tree Replacements based on the categories as applied from the Tree Replacement Table for each category.



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Replacement trees are required above and beyond street tree requirements, buffering requirements, and parking lot requirements. Replacement trees shall be labeled as such to distinguish them from other trees required on the site, and place their tabulation in their own Tree Replacement Landscape Schedules on each sheet for easy identification.

13. Show sanitary sewer laterals and water connections on the Landscape Plans to ensure there are no conflicts with the locations of proposed street trees. Trees shall not be located within 10' of underground utility pipes.
14. Street trees shall be placed no more than 50' apart. In most cases this appears adequate. Informal groups of street trees are acceptable in areas where it is not possible to provide street trees at 50' O.C.
15. No trees shall be planted within 50' of the intersecting street right-of-way lines.
16. Plugs are noted on Sheet L-300 for the Micro Pond areas, and seed mixtures by Ernst are noted for the Low Marsh and High Marsh Meadow Mix areas. Please identify the Meadow mix for the remainder of the basin areas, as well as a seed mix for the manicured lawn areas on the Landscape Plans.
17. A minimum of 10 shrubs and 1 shade or ornamental tree of 2 ½" min. caliper or larger shall be provided for each 1,500 s.f. of residential dwelling development. Please quantify this on the plans with a calculation, showing required and provided numbers.
18. Native species shall be used to the maximum extent practicable. Not more than 20% of any one species shall be planted in any development. Please show a calculation for each species to demonstrate compliance with this requirement.
19. Any single parking area with 20 or more spaces shall provide at least 10% of its area in green area/landscaping. Show calculations for each parking lot on the site to demonstrate compliance with this requirement.
20. Light Pole locations have been shown on the Landscape Plans in order to evaluate conflicts with plant material.
21. See Note 18 above. We shall endeavor to specify native plant material. Many of the chosen species for the Foundation Plantings are not native species; and are, therefore, not on the Approved List of Native Woody Plants.
22. *Ilex glabra* 'Compacta' and 'Shamrock', *Itea virginica*, and *Rhus aromatica* are all on the Approved List of Woody Plants and are, therefore acceptable.
23. While *Ilex crenata* 'Green Lustre' and 'Sky Box' are not on the Approved List, they both do very well in this area and are acceptable. It is difficult to specify approved evergreen plant material.
24. *Abelia*, *Deutzia*, *Hypericum*, *Hydrangea*, *Ilex* 'Dragon Lady', *Ilex meservae*, *Juniper horizontalis*, *microbiota*, the Cherry Laurels, *Viburnum tomentosum*, and *Weigela florida*

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are not native plants, so they are, therefore, not on the Approved List of Plants. While many of these plants do well in this area, it is the desire of Hopewell Township to utilize native plant material whenever possible. Please choose from the attached List of Approved Native Woody Plants.

25. The planting concepts on Sheets L-200 and L-201 are good for Building Foundation Plantings. It is just the chosen species that must be revised.
26. The Approved List has no groundcover plants on it. Please choose native groundcover plantings to substitute for the Junipers at the Foundation plantings, such as Carex, Andropogon, or the like.
27. Sheet L-109 was missing from the submitted plan set.

### **Lighting**

1. The lighting plan is in general conformance with the Hopewell Township LUDO and R.S.I.S. standards.

### **SWM Study (Portion of “Engineering Report – Volume I” and “Engineering Report – Volume II”)**

1. Extensive soil testing was performed in both the North and South portions of the site as chronicled in a report dated November 17, 2020 by Melick-Tully & Associates both in order to assess the actual Hydrologic Soil Groups contained within the site, as well as the viability of soils in different locations to support infiltration facilities. The report concludes that the majority of the site behaves as HSG D soils with little to no recharge capability, with the remainder behaving as HSG B soils with moderate infiltration potential. I have reviewed the report and the data and concur with the conclusions of that report. I have no objection to the use of the HSG soils as delineated on the map prepared by Melick-Tully rather than the published Mercer County Soils mapping for this site.
2. Use 0.17 (Cultivated Soils, Residue Cover > 20%) for the Manning’s “n” in the existing condition rather than 0.13 (Range, Natural).
3. Explain the use of “User Defined” (i.e., not directly calculated) times of concentration (Tc) in the proposed condition. The 0.1 hour (6 minutes) for impervious areas are an established minimum, but 0.12 hours were used for other impervious areas and pervious areas were given Tcs of 0.1 hours, 0.167 hours (10 minutes) and 0.20 hours (12 minutes) without any supporting calculations.
4. Basin N-200 is showing outflow (0.13 cfs) at 72 hours in the Pond Routed Hydrograph subsection of the Pond Pack output. Verify that the basin will drain within 72 hours in accordance with the applicable standards.
5. The water quality basins have been sized only to store the water quality design storm (WQDS) volume from the pavement proposed to be treated. The basins must be sized to

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store all tributary runoff from the WQDS below the lowest outlet control, including runoff from rooftops, sidewalks and lawn areas.

6. Basin N-300 is proposed to be a "Bio-Infiltration Basin", consisting of 5" of topsoil and seed layer over the standard 6" infiltration basin sand layer. This is not an approved BMP. The standard for infiltration basins requires a 6" bare sand layer at the bottom of the basin and states that "The use of top soil and vegetation is prohibited. If a vegetated BMP is desired, refer to Chapter 9.1: Bio-retention Systems." The designer has the option of providing the 6" bare sand bottom or 18"-minimum of bio-retention medium and plantings.
7. Storm sewer calculations are based upon the 25-year Rational Method design storm. The design shall be modified to size the pipes for the 100-year storm or the engineer shall otherwise demonstrate that the 100-year storm runoff makes it to the basin designed to manage it with minimal on-site flooding and no basin bypass flows offsite.
8. Storm Sewer calculations have been provided only for a portion of the storm sewer system tributary to Basin S-100 and that which is tributary to S-300. Storm sewer calculations for the remainder of the system shall be provided.
9. An Inlet Drainage Area Map (or Maps) shall be added to the report.

### **SWM Maintenance Plan and Field Manuals**

1. The BMP Manual Chapters shall be removed and replaced with the required "Documents", including, but not limited to:
  - Transfer Agreement
  - Deed
  - As-Built Drawings with Drainage Plans
  - Landscaping Plan for the Stormwater Management Measures
  - Permeability Test/Infiltration Test Report (Preconstruction & Post construction)
  - Groundwater Mounding Analysis
  - Soil Boring Logs
  - Local, State, Federal Permits
  - Safety Regulations and Requirements
  - Devices/Tools/Equipment Operation and Maintenance Manual and Warranties

Any documents that are not available at this time (e.g. as-built plans) shall be given a "place-holder" so that one knows to add them at the appropriate time. Any available documentation (soil logs, preconstruction permeability test results) should be added at this time.

2. Field Manuals for each individual BMP must be completed and included in the Maintenance Plan.

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3. N-Basin-100, N-Basin-200, S-Basin-200-A, S-Basin-200-B and S-Basin-300 do not provide recharge. Remove references to same under "Design Purposes" on Pages 4 and 5.
4. S-Basin-300 is referred to as S-Basin-300-A on Page 5. Revise reference.
5. On Page 6, specify that the previous year's maintenance records and inspection logs are to be submitted to Hopewell Township's Tier A Municipal Stormwater Coordinator no later than April 1<sup>st</sup>.

### **Subdivision Comments**

#### **General Comments**

1. Provide match for each sheet and overall cover sheet showing all the sheets and the match lines for each sheet.
2. Street house numbers to be shown if possible.
3. Proposed Block numbers and tax lot numbers to be shown, lot numbers are assumed and not assigned by the tax assessor.
4. Provide closure calculations for all roads, lots, open space, etc.
5. Show streams on all affected sheets.
6. Sight easement information to be shown.
7. Monumentation not shown as per the Map Filing Law.

#### **Sheet 1/13**

1. NJ State Plane Coordinates to be shown on a minimum of four (4) outbound corners.
2. P.O.B. to be shown.
3. Remove "Filed Map No 2922A" wording.
4. Why are some planimetrics shown on some abutting lots?
5. Are the capped iron pins and monuments found or set?

#### **Sheet 2/13**

1. Tangent distance not shown on Lot 41.
2. Total curve data along road ROW to be bold like on other sheets.
3. Curve data for C44 and C43 not shown in curve tables.

#### **Sheet 3/13**

1. Curve data for lot 90 (L=54.01) not shown.
2. Total distance along rear property line for lots 68 and 69 (111.09') doesn't add up to the total shown (111.08').
3. Distance missing along Road "A" for lot 83.

#### **Sheet 4/13**

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1. Tangent bearings and distances (S75°-31'-15" E-84.55') (N57°-21'-55" E-66.00') should not be in grey scale.
2. Northern Line of lots 116, 117, 118 add up to 66.01', overall distance on plan is shown as 66.00'.
3. Eastern ROW line of Lot 130 along Scotch Road shown a bearing of N11°-08'-37" W-this is part of a curve as shown on sheet 1.
4. All ROW information to be bold as shown on other sheets.

### **Sheet 5/13**

1. Incorrect distance (411.39') along rear property line of lot 61, revise.

### **Sheet 6/13**

- Check closure for lot 134.

### **Sheet 7/13**

1. Curve data for C137 and C135 not provided in curve tables.
2. C141 and C166-is the radius 165.38' as shown or 161.00'?
3. Is L65 67.55 or 68.00'?

### **Sheet 8/13**

1. Outbound of ROW area that includes lots 195-212 and 95 does not close by 0.27'.
2. Northern ROW line of Road "H" notes that the total length is 596.07, adding up the lot individual distances of lots 196-203 add up to 595.80'.
3. Southern ROW line of Road "H" notes a total distance of 596.07', adding up the individual lot distances of lots 167-173 the total is 596.01'.
4. Curve data missing for lot 167.
5. Southern ROW line of Road "F" notes a tangent distance of 273.25', adding up the individual lots of 206-210 adds up to 273.26'.
6. Rear property line of lot 191 notes 61.09', should be 72.18'.
7. Show rear property bearing of lots 179 and 180.
8. Missing side bearings and distances on lots 181 and 180.
9. Rear property line of lots 181 (47.15'), 192 (124.38'), 183 (47.33') add up to 218.86', distance on plan is 218.85'.
10. Rear property line of lots 183 (100.39'), 184 (77.71') 185 (70.00') add up to 248.10', total distance on plan is 248.11'.
11. Curve data missing for lot 167.
12. Remove random line with bearing and distance above "General Notes".

### **Sheet 9/13**

1. Check area of lot 231, calc. 11,179 SF
2. Curve data missing for lot 167.

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3. Check area for lot 213, calc. 14,659 SF.
4. ROW curve data for lot 29 along Road "F" appears to be incorrect.
5. Bearing and distances missing on lot 165 along Road "F" ROW.
6. Check area of lot 28, calc. 3750 SF.
7. Lot distances along southern ROW of Road "H" add up to 423.00', plan notes 422.98'.
8. Distance missing on lot 16 along Road "H".
9. Provide missing bearings and distances for lots 93, 94 and 103.
10. Provide missing distances for lots 96,97 and 98.
11. Northern ROW of Alley "R" should be 395.88' and not 395.18'.
12. Rear property line of lots 222, 221 and 220 add up to 196.79, plan notes 196.78'.
13. C135 curve information is not in curve table.

### **Sheet 11/13**

1. ROW outbound of lot 95 and inner parcels does not close.
2. ROW curve information for lot 95 (L=54.39) appears to be incorrect (used L=55.5, R=275.00').
3. ROW distance of 125.91' on lot 95 along Road "F" appears to be incorrect, should be 126.51'.
4. Adding up the arc distances C154, C203 and 54.39' does not add up to the total ROW arc length of 152.59' (1.11' difference).
5. Adding up the arc length of lot 159 (70.14'), lot 158 (70.14') and lot 157 (34.16') does not add up to the total arc length of 180.33'.
6. Total ROW curve data not shown for R=225.00' along Road "F" near Road "J".
7. Curve data missing for lot 120, lot 71 (Road "J").
8. C216 information not shown in curve tables.
9. Bearing and total distance to be shown for the southern ROW line of Road "J".
10. The northern ROW bearing of Road "F" is missing between Road "F" and Road "J".
11. Total ROW curve data to be shown for the westerly ROW line of Road "F".
12. Curve data missing on lot 42.

### **Sheet 12/13**

1. Curve data missing for lot 42.
2. Bearing and total ROW distance to be shown for northern ROW of Road "F".
3. Many of the delta angles on this sheet are the chord bearing and not delta.
4. Missing bearings or distance information for lots 102, 106, 107, 95, 109, 108 and 111 to be shown.
5. Bearing and distance to be shown along rear property line of lots 129 to lot 149.
6. Missing distance on lot 104.
7. Check area of lot 100, calc. 14407 SF.
8. Lot 111 shows an arc length of 91.33', curve table notes 95.59'.

### **Sheet 13/13**

1. Lots 122-140 do not close by 0.06'.

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2. Curve information for lot 4 is missing.
3. Bearing and distances for lot 3 missing.
4. Lot 4 has an incorrect southern property line distance (631.75').
5. Lot 3 western property line should have a bearing (N4°-35'-50" W or N4°-35'-51" W).
6. Check southern property line of lot 3 (281.25'plan), calc. 281.18'.
7. The ROW outbound for lots 115-117 does not close by 0.53'.
8. The ROW outbound for lots 114-118 does not close by 0.32'.
9. Tangent distance along Alley "D" should be the same on both sides-one side notes 183.83' and the other side is 183.82'.

### **Environmental Impact Report**

1. The applicant provides a list of licenses, permits and approvals required for this project. Section 17-84.c of the LUDO also requires the status of these licenses, permits and approvals be provided, whereas the status is not provided. This list should be updated to include the status of these items.
2. Per Section 17-81.d of the LUDO, the Environmental Impact Report shall discuss the increase in Township services. This section of the applicant's Environmental Impact Report shall be expanded to discuss the impact of the development on all township services including, but not limited to the police department, EMS, public works and the school system.
3. Per Section 17-81.d of the LUDO, the Environmental Impact Report shall discuss the consequences to the township tax structure. This section of the applicant's Environmental Impact Report is limited to one sentence stating "The new homes will generate real property taxes". The applicant shall expand on this section to include all consequences to the township tax structure.
4. Per Section 17-81.e of the LUDO, the Environmental Impact Report shall provide a description of steps to be taken to avoid or minimize adverse environmental impacts during construction and operation. This section of the applicant's report discusses design and permitting, but does not provide a plan to minimize impacts during construction and post construction.
5. References to Interstate 95 shall be revised to reference Interstate 295 where it appears in the report.

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



# TOWNSHIP of HOPEWELL

## MEMORANDUM

TO: Hopewell Township Planning Board

FROM: Dawn Marling, Health Officer

SUBJECT: Completeness Review  
Hopewell Parc  
Block 93, Lots 5.01, 5.02, and 6.02

DATE: January 27, 2021

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The applicant, US Home Corporation, D/B/A Lennar proposes to develop 1,077 residential units on Scotch Road on the above-referenced parcels. The application packets indicate that all of the proposed residential units will be served by public water and sewer and, as such, waivers for septic systems and well water supplies may be granted. A Treatment Works Approval (TWA) submission to NJDEP is needed, however, the applicant has requested that it be a condition of any Board approval.

The Health Department approves the application completeness review with the condition that the required submission for TWA approval from NJDEP be obtained.



## TOWNSHIP OF HOPEWELL

### MEMORANDUM

**TO:** Planning Board Members

**FROM:** Environmental Commission Members

**DATE:** February 20, 2021

**RE: **Hopewell Parc****  
Block 93, Lots 5.01, 5.02, 6.02; 445 & 449 Scotch Road, IPD-1 Zoning District  
Preliminary & Final Major Subdivision & Site Plan

We are writing to inform you of our concerns regarding the subject application, which is scheduled to be reviewed by the Planning Board.

During our Environmental Commission meeting on February 17, 2021, members Nora Sirbaugh, Andrew Plunkett, Mike Aucott, Vanessa Sandom, Rex Parker, Jim Gambino, Mark Bean, and Paul Kinney reviewed and discussed the subject application together with Mark Kataryniak via Zoom. Courtney Peters-Manning was also present.

#### **Trees**

We understand the applicant conducted sample tree surveys at only five locations and question if there are any significant trees located in any non-surveyed areas of the property. Therefore, we request that the applicant identify any Specimen Tree and/or State Record Tree as defined in the Township's Woodlands Ordinance. Where possible, we seek to preserve these trees. We also recommend a full accounting of all proposed tree removal, tree preservation and tree replacement mitigation plan for this project as per the township's ordinance.

We recommend this project strive to minimize tree loss, land disturbances, and all adverse environmental impacts for its duration.

We recommend establishing perimeter landscaping first during each construction phase in order to buffer surrounding areas and maintain viewsapes. We also recommend completing 80 % of the required landscaping, including street trees, for each project phase before beginning the next construction phase.

We note that many landscape planting choices are not native species as required by the Township's Landscape Ordinance. All plantings should be chosen from the Township's approved plant list.

The proposed number of eastern white pine trees will create an undesirable monoculture. We recommend choosing three or four varieties of mixed evergreen species from the town's approved plant list.

A similar monoculture may occur with the proposed street / shade tree selections. We recommend diversifying these plantings so similar species do not occur one after another. The project should alternate species 1,2,3,4 wherever possible. We would be happy to work with the contractor on this as work progresses.

Lastly, we recommend additional plantings along the projects' Northern boundary to create a continuous visual screen.

## **Lighting**

The Township's lighting ordinance states that "Minimal required levels of illumination are to be used in all applications. All lighting shall be designed, selected and installed both to prevent negative impacts caused by misdirected or excessive light and to conserve energy."

The township desires to minimize light pollution and the lighting ordinance requires zero uplight. Therefore, we do not recommend granting a design waiver for full cut-off requirements for any lighting luminaires.

We believe the total number of lighting installations is excessive for the proposed development and recommend reducing this amount, especially type VF1 on poles. Even full cutoff fixtures cause skyglow from reflected and scattered light in direct proportion to the number of fixtures in a given area.

Lastly, the lighting ordinance specifies that LED color temperature for residential applications should be 2700K, and for commercial applications 3500 K or lower. The plan documents appear to indicate 3000K for all three types of luminaires (SD1 and VF1 and VF1-H). We recommend that color temperature 2700 K should be selected if possible.

## **Ecosystem**

We understand there are six stormwater basins proposed for this project; two of which are constructed wetlands, three bioretention and one detention basin. We recommend the applicant establish an Integrated Pest Management plan and incorporate biological controls to mitigate any mosquito issues and diminish the need to use pesticides.

We suggest the following list of native plants be used in and around the basins since they will attract beneficial "mosquito eating" insects and birds:

Terrestrial plants - *Rudbeckia hirta*, *Asclepias incarnate*, *Eupatorium fitulosum*, *Echinacea purpurea*, *Achillea millefolium*, *Liatris spicata*, and *Helenium autumnale*

Aquatic plants - *Sagittaria latifolia*, *Vallisneria americana*, *Nymphaea odorata*, *Equisetum fluviatile*, and *Pontederia cordata*

Flat rocks placed around the basins will provide Dragonflies a place to sun, and strategically placed birdhouses designed for Purple Martins and Tree Swallows will provide nearby homes for these mosquito eating predators.

We also advise the planting of drought tolerant grasses, such as Meyer Zoysia Grass, throughout the development to reduce water usage and diminish the need for fertilizers and their associated pollution problems.

We believe the above measures will benefit this development by providing more enjoyable time outdoors for residents, more picturesque scenery for resident yards, common spaces, and anthropogenic and natural aquatic ecosystems, and lead to healthier residents and a healthier ecosystem.

### **Climate Change**

We believe we must employ every means possible to reduce our greenhouse gas emissions. This applies to any new construction. While we would like to see the use of extra building insulation, rooftop solar panels and/or community solar throughout the development, we understand this is not a requirement and would create an added expense for the project. However, the contract does require all buildings to be “solar ready” by including conduit for future solar systems. We also believe the applicant can incorporate light-colored (white) roofing on all buildings to diminish heat gain without additional cost. We would also like the applicant to consider adding electric car charging stations where appropriate, since electric vehicles will become more dominant in the near future.

Please consider all of our observations and suggestions as you review this project.

Respectfully submitted: Jim Gambino, Secretary

cc: M. Kataryniak, C. Peters-Manning, EC Members



**HOPEWELL TOWNSHIP FIRE DISTRICT NO. 1**  
**Board of Fire Commissioners**  
MERCER COUNTY

201 Washington Crossing-Pennington Road  
Titusville, New Jersey 08560-1410

February 17, 2021

Mark Kataryniak  
Director of Community Development, Zoning Officer  
Township of Hopewell  
201 Washington Crossing-Pennington Rd  
Titusville, NJ 08560-1410

VIA ELECTRONIC MAIL

RE: Block 93, Lots 5.01, 5.02, 6.02 – Scotch Rd Pennington, NJ 08534 (Hopewell Parc)  
US Home Corporation (dba Lennar)  
Planning Board Application Review

Dear Mark:

The Office of Fire Safety in conjunction with The Pennington Fire Company and The Pennington First Aid Squad, have reviewed the application documents and offer the follow comments for consideration by The Board. The applicant provided a full set of drawings (hard copies) for our review, and we thank them. The review of the submitted site plans and elevation drawings raises many concerns and issues for both Fire and Emergency Medical Services in the proposed development. These issues include:

1. Impacts on emergency services call volume and volunteer retention
2. All elevators should be large enough to accommodate a stretcher in the fully horizontal position with four emergency medical personnel in the elevator.
3. The proposed development is divided into a north and south sections that do not connect for vehicle traffic and only have one way in and out of each area. A fire near the entrance road to either the north or south side will totally shutdown access and egress from the remainder of the development.
4. Fire department access to all sides of the buildings. (proposed alleys)
5. We request that all private roads be added to both the Township Ordinances for handicap and fire lane parking as well as have Title 39 enforceable on them. This will allow the Police department and the fire safety to enforce the parking laws and keep these limited access private roads unobstructed by vehicles.
6. Fire hydrant locations and access
7. Parking plan and fire lane designations
8. The installation of residential fire sprinklers in all of the dwelling units.
9. The installation of fire sprinklers in the attic spaces of the stacked townhomes, apartment buildings and COAH buildings.
10. Documents should be prepared that show the following only:
  - a. Turning radius calculations
  - b. Water main size and location
  - c. Location of fire hydrants to include estimated water flow in gallons per-minute and pound per square inch.
  - d. Fire Department Connection locations
  - e. Proposed fire lanes and detail drawing of street and sign markings
  - f. Detail drawing of fire hydrant street and sign markings

The plan review revealed the overall density of the proposal with the Condo/Apartment buildings, townhomes, stacked townhomes and COAH buildings. Both the north and south sides start with these dense buildings and transition to the single-family homes as you move to the rear of the development. Any fire in the area of the main entrance roads to the development will totally block both ingress and egress for the development.

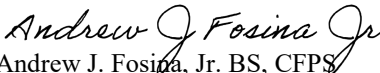
The closest comparable area of development is the area commonly referred to as Brandon Farms. We have attached a simple evaluation of the emergency call volume averaged over the years of 2017 to 2020 for the area. Given the proposed development, between Hopewell Parc and Collections at Hopewell is only 137 less dwellings than Brandon Farms, it is the closest assessment of things to come once these developments are finished. However, it is not a precise comparison. Hopewell Par represents approximately 90% of the development between the two areas.

Over the years, we have had several fires in the Brandon Farms area, averaging 4.5 dwelling fires a year. The challenges surrounding fire department access affect the effectiveness of fighting fires in these types of developments. These concerns are for public safety and the safety of first responders to fire and medical calls for service in the development. The current proposal requires additional plan review and discussion to provide the best possible outcome for the residents, visitors and first responders when a fire or medical emergency occurs.

We request a meeting with the applicant and the applicant's design professionals to discuss the following concerns with the proposed development.

Please feel free to contact me at any time directly at (609) 537-0212 with any questions that may arise. On behalf of the Board of Fire Commissioners I would like to thank you for your assistance.

Regards,

  
Andrew J. Fosina, Jr. BS, CFPS  
Fire Official – Hopewell Valley Bureau of Fire Safety

CC: Hopewell Township Board of Fire Commissioners  
Pennington Fire Company  
Pennington First Aid Squad  
Matthew Martin – Chief of Emergency Services  
File

# Memorandum

To: Hopewell Township Planning Board  
From: Francis J. Banisch III, PP/AICP  
Date: February 23, 2021  
Re: Preliminary and Final Major Subdivision and Site Plan  
Hopewell Parc/US Home Corporation/D/B/D Lennar  
Block 93; Lots 5.01, 5.02 & 6.02 (Scotch Road)  
IPD-1 Zone

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## 1.0 MATERIALS REVIEWED FOR THIS REPORT

- Completed Application forms executed by Applicant and by the three owners (in counterpart) of the Property, namely the Applicant US Home Corporation (dba Lennar), (Block 93, Lot 5.01), CF Hopewell CC&L, LLC, (Block 93, Lot 5.02) and Hopewell WEST RES, LLC, co- owner with Applicant, (Block 93, Lots 6.02), collectively, the "Owners;"
- Application and Escrow Fee Calculation Form and two checks of the Applicant made payable to the Township of Hopewell representing Application Fees of \$9,410.00 and an initial Escrow Deposit, of \$90,002.50;
- Executed "Escrow Agreement" with IRS Form W-9 pertaining to Applicant;
- Hopewell Township Tax Collector's Certification of Payment of Taxes: Response to request dated December 1, 2020 is pending (copies attached);
- "Consent to Entry," executed by Applicant and all Owners;
- Checklists for Preliminary & Final Site Plan and Preliminary & Final Subdivision, completed and signed by Brian R. Perry, P.E., Van Note-Harvey Associates Inc., project engineer, dated December 16, 2020;
- Checklist Submission and Design Waiver Request Form with Addendum;
- Certificate of Ownership I Applicant's Corporate Disclosure Statement, completed by Applicant;
- "ALTA I NSPS Land Title Survey, Block 93 Lots 5.01, 5.02 and 6.02 for .US. Home Corporation d/b/a Lennar" prepared by Kenneth R. Raike, P.L.S., dated May 8, 2019, last revised to January 8, 2020 consisting of one (1) sheet;
- Tree Inventory Plan, contained in "Existing Conditions Plan" Sheet 1 of 5 through Sheet 5 of 5 (see Plan Set referenced in Item 11 herein, infra);
- Preliminary and Final Major Subdivision and Preliminary and Final Site Plan Set ("Plan Set") consisting of Sheets as indexed on Plan Set Cover Sheet, prepared and signed by

Brian R. Perry, P.E., of Van Note-Harvey Associates, Inc. Princeton, New Jersey, drawn in compliance with the requirements of the Engineering, Planning, Lighting and Landscaping sections of the Submission Checklists, dated December 16, 2020;

- "Traffic Impact Study for Hopewell Parc" prepared by Karl A. Pehnke, P.E. PTOE and Eric J. Vilorio, P.E. of Langan Engineering & Environmental Services, Inc., Lawrenceville, NJ, dated December 16, 2020;
- Environmental Impact Assessment entitled "Environmental Impact Report for Hopewell Parc" prepared by Van Note-Harvey Associates, Inc., dated December 16, 2020;
- Engineer's Report for Hopewell Parc prepared by Van Note-Harvey Associates, Inc. and dated December 16, 2020;
- Stormwater Management Measures Maintenance Plan and Field Manuals for Hopewell Parc prepared by Van Note-Harvey Associates, Inc. and dated December 16, 2020;
- Fiscal Impact Report entitled "Community Impact Statement for a Proposed Residential Development in Hopewell Township, Mercer County, New Jersey," prepared by Richard Reading of Richard B. Reading Associates, Princeton, NJ, dated December 14, 2020;
- Preliminary Subsurface Investigation- Proposed Stormwater Facilities (collated, bound, signed and sealed) prepared by Melick-Tully, A Division of GZA, dated November 17, 2020;
- Copies of following NJDEP permits for Block 93, Lots 5.02 and 6.02:
- NJDEP Freshwater Wetlands Letter of interpretation: Line Verification Permit dated April 17, 2020, (File No.: 1106-09-003.2)
- NJDEP Flood Hazard Area Verification dated November 7, 2019, (File No.:1106-09-03.2 LUP 190001)
- Architectural Elevations and Floor Plans for Hopewell Parc prepared by:
- Holiday Architects, Inc. dated December 1, 2020, Sheets A-1 through A-34 in Plan Set Index of Sheets;
- Major Architects, dated December 16, 2020, Sheets A-01 through A-15 in Plans Set Index of Sheets;
- Preliminary and Final Subdivision Plat for Hopewell Parc prepared Van Note-Harvey Associates, Inc. dated December 16, 2020, as set forth in Plan Set Sheet Index, Sheets CE4-A through CE-15.

## **2.0 NATURE OF APPLICATION**

- 2.1 Lots 5.01, 5.02 and 6.01 consist of approximately 223 acres and contain agricultural lands and uses and wooded stream corridors. The property is subject to a redevelopment plan, adopted in January 2018, and subsequent Ordinance No. 19-1717 which provides for multi-family inclusionary development on the subject lots.
- 2.2 The proposed development will be located in the central and eastern portion of the property with a surrounding greenway and open space area ringing the north and west portion of the site.
- 2.3 The project consists of North and South sections, with 542 residential units located within the north section and 535 units located in the South section for a total of 1,077 units, of which 216 will be deed-restricted for affordable housing.

2.4 The project includes a mix of residential unit types including:

- Multifamily units: 470 units (338 units North, 132 units South)
- Stacked Townhouses: 316 units (92 units North, 224 units South)
- Townhouses; 100 units (30 units North, 70 units South)
- Single-Family 60' lots: 80 units (33 units North, 47 units South)
- Single Family 70' lots: 111 units (49 units North, 62 units South)

2.5 Facilities to support the development include:

North Section

- Clubhouse and pool
- Community Garden
- Dog Parks

South Section

- Outdoor recreation area with tot lot, fields and other uses
- Community Center area including a clubhouse, pool, sports court, dog park, pickleball court, tot lots, special event center.
- Secondary playground areas

2.6 Additional site improvements include a roadway system with two points of boulevard access to Scotch Road. The North and South sections are not internally connected for vehicular access. Walkways are located throughout the development including paths to connect the two sections.

2.7 There are six retention basins proposed and landscaping throughout each section.

**3.0 VARIANCES REQUESTED**

3.1 The applicant is not seeking use or bulk variances.

**4.0 PLAN REVIEW COMMENTS**

4.1 The affordable housing units are primarily located in a series of apartment buildings. In the North section, a total of 122 units of affordable housing are proposed with 68 (55%) located in 100% affordable apartment buildings consisting of two 21-unit apartment buildings located enclosed within the center of the site (within proposed Alley "A" and Proposed Road "A"), and one 26-unit building located next to the entry roundabout. The remaining 54 units are scattered throughout the north section.

In the South section, 94 affordable units are to be provided with 84 units (89%) located in three 100% apartment building and 10 units scattered throughout the remainder of the site. The three buildings consist of one 13-unit building, one 19-unit building and two 26-unit buildings. The remainder are scattered within two 24-unit buildings.



The redevelopment plan requires the affordable units to be distributed throughout the inclusionary planned development zones. However, locating 70% of the total units within five apartment buildings in effects results in a 100% affordable development where the affordable units are not mixed within buildings with market rate units. The applicant should provide testimony regarding the placement of the affordable housing units within segregated apartment buildings rather than integrating the affordable units within market rate units as this may require a variance or redevelopment plan amendment.

- 4.2 The applicant should provide testimony regarding the total number of affordable units and the bedroom mix to ensure compliance with the redevelopment plan and UHAC bedroom distribution.
- 4.3 The North section of the development includes an ‘apartment area clubhouse with pool’ along the southeasterly portion of the North section, a dog park along Scotch Road to the north and a tot lot near the two 21-unit apartment buildings. No recreation facilities are located to the west, in the single-family portion of the development. The applicant should provide testimony regarding the available recreation facilities for the North section and if the recreation facilities meet the intent of the redevelopment plan which states that neighborhood-scale open spaces shall be distributed thorough the developed areas, including neighborhood parks (approximately 5,000 square feet) and green space. In addition, will residents of the entire development have access to any or all of the recreation facilities in the North and South sections?
- 4.4 The South section includes more recreational opportunities and areas than the North section; and these areas are also clustered within the apartment and townhouse portion of the site, with no recreational areas near the single-family homes. As stated above, the applicant should provide testimony regarding the recreation and open space areas and access for the entire development.
- 4.5 Two walking paths connect the North and South Sections. The first extends between the North and South single-family portions of the development. The second path extends from the North section, below the apartment complex area, and dead ends on the lot reserved for future development. Given the size and complexity of the site, and the required areas of recreation and open space, the applicant should provide testimony regarding the sufficiency of the single walking path located on the westerly side of the development. Where would additional pedestrian and/or bicycle connections between the sections be provided?
- 4.6 Sidewalks are provided throughout the development. Given the number of units and mix of residential unit types and their associated parking areas and driveways, are traffic calming measures in place to provide safe pedestrian access across the roadways and parking areas, especially the play areas, dog parks, outdoor active recreation spaces, and the clubhouse area?

- 4.7 The proposed landscaping includes shade trees, ornamental trees, evergreen trees, and shrubs and groundcover which line the parking areas, residential units, recreation areas and driveways. The interior of the site shows typical residential development landscaping with shade trees, foundation plantings, ornamentals and shrubs. Larger evergreen trees are located around trash enclosures and utility areas. Along Scotch Road, a combination of existing vegetation and supplemental trees have been used to create screening from the roadway. The north and western portion of the site will remain undeveloped with a greenway area retaining natural vegetation to buffer the development.
- 4.8 The applicant should provide testimony regarding the total site landscaping including areas along Scotch Road and within the interior of the site around the apartment buildings.
- 4.9 In the South section, white pines are situated in linear groups between Scotch Road and the 26-unit affordable housing apartment building. Additional buffering in this area may be needed to shield the building from roadway. White pines die back.
- 4.10 The redevelopment plan calls for building lengths to not exceed 225 feet unless a 4 foot offset is provided in the façade. It appears some of the buildings in the North section exceed this length. The applicant should provide testimony regarding the overall building and design and how it meets the requirements of the plan.
- 4.11 The proposed lighting is typical for this type of development. The applicant should provide testimony regarding the lighting impacts, in particular, how lighting in the parking lot areas will affect adjoining properties.
- 4.12 The site plan shows that some apartment buildings have a dedicated dumpster enclosure in the parking area; however, some buildings do not appear to have a dedicated enclosure. Will buildings without a dedicated dumpster include interior trash compactors? Is there a need for additional dumpsters or other enclosures? How will recycled goods be collected?
- 4.13 The applicant should provide testimony regarding signage, including any monument or freestanding signs.
- 4.14 The applicant should provide testimony regarding the parking. Are the number of spaces provided adequate to meet the needs of the townhomes and apartment areas? Will the single-family homes have adequate off-street parking, and is on-street parking permitted and possible? We defer to the Board Engineer for compliance with the parking regulations.
- 4.15 One of the goals of the redevelopment plan is to “protect the rural character and unique sense of place of the Township.” Toward that end, the Redevelopment Plan “preserves most of the woodland west of Scotch Road as a natural buffer to the residential neighborhood to the west. Surrounding land to the north will also be preserved

protecting *the vista between Co. Rt. 546 south to the redevelopment area* helping to retain the rural aspect of this scenic corridor.”

The primary vista concern relates to the view from CR 546. The Applicant should identify the extent to which development will be visible from the RT 546 corridor, using photographs, aerial photos with sight lines and cross-sectional representations of the view to new development.

4.16 Any approval by the Planning Board should be conditioned on approval by any other agency having jurisdiction.

cc via email: Linda Barbieri, for distribution to Planning Board members, Professionals and Applicant



181 WEST HIGH STREET  
SOMERVILLE, NJ 08876

908 927 0100 p  
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March 16, 2021

Email: [lbarbieri@hopewelltwp.org](mailto:lbarbieri@hopewelltwp.org)

Planning Board  
Township of Hopewell  
201 Washington Crossing Pennington Road  
Titusville, NJ 08560

Attn: Linda Barbieri, Asst. Comm. Dev. Coord.

Re: First Traffic Study Review  
"Hopewell Parc"  
Block 83, Lots 5.01, 5.02 & 6.02  
445/449 Scotch Road

Dear Ms. Barbieri and Planning Board Members:

As requested, our office has prepared this initial traffic engineering review for the above-noted application that seeks Preliminary & Final Major Subdivision and Site Plan approval for 1,077 residential units to be divided between two separate communities along southbound Scotch Road.

In preparing this review, we have examined the December 16, 2020 Traffic Impact Study for "Hopewell Parc" prepared by Langan Engineering. As will be outlined in this review, we believe there are several threshold issues that may result in the need for an updated traffic impact study for which additional review comments may be appropriate.

We offer the following comments for the Board's consideration regarding the Traffic Impact Study:

- T1. Within the intersection descriptions on Page 3 and 4 of the report, many of the descriptions explain that U-turns are permitted along most of the approaches. We recommend that each approach to these intersections be reviewed to determine if U-turns are permitted, as our reviewers have not been able to verify this description.
- T2. The report describes the westbound Capital Way approach with a left-turn lane, a through lane and shared thru/right-turn lane. Based on a site inspection and as noted in the photograph, this approach provides two left turn lanes and a shared through right turn lane.



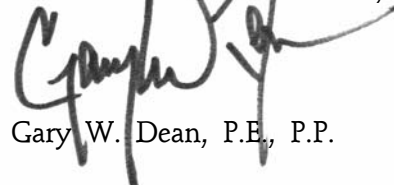
- T3. Scotch Road, Washington Crossing Pennington Road, and Nursery Road are all under Mercer County jurisdiction. Has any submission been made to the County? We recommend that all correspondence between the applicant and the County pertaining to traffic, access or circulation be provided to our office for review.
- T4. The manual traffic counts and ATR data that serve as the basis for the conclusions reached in the study were collected in July and August of 2019. While these counts predate the COVID-19 pandemic, they were taken during summer months when traffic activity along Scotch Road could be lower than “typical” traffic conditions during most of the year when local schools are in session. We recommend further explanation as to the validity of the counts at the off-tract intersections or for adjustments to be made to account for representative traffic conditions. The impacts of school-related traffic particularly for a residential project should be considered in the analysis.
- T5. There are some instances where the existing, “no-build” and “build” traffic volumes are not balanced along Scotch Road. While they may not have substantial impact on the results of this analysis, we recommended the volumes be balanced or validated.
- T6. Table II on Page 8 illustrates the distribution of site traffic anticipated for the subject development. It is stated that a journey to work model was used to develop this distribution. This information should be provided for our review. We question why no traffic was assigned to the west along Washington Crossing Pennington Road which leads to Bear Tavern Road and provides regional access to/from the north.
- T7. The traffic report includes traffic from other developments proposed in the area as well as the NJDOT annual traffic growth factor of 1.0%. However, the traffic report states that the site may be completely operational by the end of 2022. With approvals not yet granted and with 1,077 units to be constructed, sold and occupied, it is unlikely that the design year is realistic. As such, we recommend that the “build” year be expanded to a date that more realistically accounts for agency approvals, unit construction, marketing and absorption of 1,077 dwelling units.

Overall the traffic study has been prepared following standard accepted practices, however, many of the comments above will impact the results and conclusions reached in the report. As such, we recommend that the comments above be addressed prior to a further review of the project traffic impacts.

If you have any questions regarding the above, please do not hesitate to contact us. We look forward to discussing these concerns at the appropriate public hearing.

Very truly yours,

DOLAN & DEAN  
CONSULTING ENGINEERS, LLC



Gary W. Dean, P.E., P.P.