

DEVELOPMENT APPLICATION

CONTROL NO. _____

Block(s) 5 Lot(s) 19 (+ portion of 20) Date Received _____

By _____

TO BE COMPLETED BY APPLICANT (A-T)

A. Property Owner's Name 400 STEPS LLC

Address 3499 ROUTE 9 NORTH, SUITE 1-E
(Street)

FREEHOLD NJ 07728
(City) (State) (Zip)

Phone (732) 625 – 1055

(If property owner is a corporation, complete Section S-1)

FAX (732) 625 – 1060

B. Applicant's Agent Name MICHAEL McCLOSKEY (400 STEPS LLC)

Address 3499 ROUTE 9 NORTH, SUITE 1-E
(Street)

FREEHOLD NJ 07728
(City) (State) (Zip)

Phone (732) 625 – 1055

FAX (732) 625 – 1060

(If applicant is not the owner, complete Section S-2)

(If applicant is a corporation, complete Section S-3)

(All correspondence will be mailed to person listed as applicant's agent)

C. Application Status

New (2) Revision or Resubmission of Prior Application

(If (2) is checked, indicate prior application no. (s) _____)
Attach copies of resolution, if available.

D. Type of Approval Sought

- Concept Preliminary Final Preliminary/Final
- GDP Sign Waiver Request Extension of Approval Request
- Minor Subdivision Major Subdivision Major Site Plan Minor Site Plan Variance Request (Submit Variance Request Form)
- Conditional Use Approval (Submit Conditional Use Request Form)
- Request for Waiver of Submission Requirements (See appropriate subdivision or Site Plan checklist)
- Above Application Pursuant to Board of Adjustment "D" Variance (Attach Resolution of Approval)

E. Engineer's Name and Firm ROBERT KORKUCH, PE (ACT ENGINEERS)

Address 1 WASHINGTON BOULEVARD, SUITE 3
(Street)

ROBBINSVILLE NJ 08691
(City) (State) (Zip)

Phone (609) 918 – 0200

FAX (609) 918 – 1411 E-MAIL rkorkuch@actengineers.com

License No. 33681

F. Architect's Name and Firm LAURA STAINES GIARDINO (L&M DESIGN, LLC)

Address P.O. BOX 155
(Street)

RADNOR PA 19087 – 1055
(City) (State) (Zip)

Phone (610) 688 – 9800

FAX (610) 688 – 9801 E-MAIL lstaines@LMdesignLLC.com

License No. 21AI01011600

G. Plat/Plan Dated 4/20/20 Title Preliminary and Final Major Site Plan, 400 Steps

H. Name and Location of Development (Street or Road and nearest public Street intersection)
NAME: 400 STEPS LLC

LOCATION: CRANBURY RD., 330± ft NORTH OFF OF ROAD, BEHIND LOT 20

I. Present use of Land ABANDONED COMM'L DEVELOPMENT, NEVER OCCUPIED

J. Present Use of Structure TWO (2) UNOCCUPIED 1 STORY BUILDINGS

K. Proposed Use of Land DEMOLISH EXIST. IMPROVEMENTS, BUILD RES. APT'S
(If more than one use proposed, indicate various uses and areas on plat)

L. Proposed Use of Structure FOUR (4) APARTMENT BUILDINGS
(If more than one use proposed, indicate various uses and areas on plan)

M. Plat/Plan Data

1. Acreage to be subdivided N/A..NO CHG'S No. of Lots Proposed ONE

2. Type of Development Proposed (Conventional, Cluster, Planned Development)
RESIDENTIAL APARTMENTS, MARKET RATE AND AFFORDABLE UNITS

3. Lot Areas LOT 19: 3.85± ACRES (No Changes to Lot)

4. Acreage of Contiguous Parcel (s) in Same Ownership, not part of this
Development NA

5. Area of Site Plan to be Developed 3.85 Acres 167,662 SF

6. Floor Area of Proposed Structure:

Floor No. <u>#1</u> BLDG <u>#1</u>	<u>11,521</u>	SF
Floor No. <u>#1</u> BLDG <u>#2</u>	<u>11,521</u>	SF
Floor No. <u>#1</u> BLDG <u>#3</u>	<u>9,170</u>	SF
Floor No. <u>#1</u> BLDG <u>#4</u>	<u>8,914</u>	SF

7. If Addition to Existing Structure: (NOT APPLICABLE)

Floor No. _____ SF
Floor No. _____ SF
Floor No. _____ SF

8. Total Floor Areas _____ SF

9. Number of Parking Spaces 161

N. Utility Data (indicate service proposed)

1. Water XX 4. Electric XX
2. Sanitary XX 5. Telephone XX
3. Gas XX 6. Heating Fuel (NO)

O. Zoning District RP12 (REDEVELOPMENT PLAN DISTRICT)

P. Zone Requirements	(Ordinance)	(Proposed)
1. Min. Tract/Lot Area	N/A	
2. Min. Lot frontage	N/A	
3. Min. Lot Width	N/A	
4. Min. Lot Depth	N/A	
5. Min. Yards:		
Front	10 ft	N/A
Side	5 ft	7.48 ft
Rear	5 ft	5 ft
6. Max F.A.R.	N/A	
7. Max M.I.C.	80%	69%
8. Max. Gross Density	180 UNITS	144 UNITS
9. Max. Bldg. Height	4 sty/80 ft	4 sty/50 ft
10. Parking Spaces Required	1per unit	1.12 per unit

Q. Does Lot abut (check which applies)
 State Road XX County Road Township Road

R. Copies of any Deed Restrictions or Covenants that will Apply (check one)
 Attached X Not Attached

S. Other Information


1. Principal Office Address 3499 RT 9 NORTH SUITE 1-E
(Street)
FREEHOLD NEW JERSEY 07728 Phone(732 625 1055)
(City) (State) (Zip) FAX (732)625-1060

President's Name MICHAEL MCCLOSKEY

Secretary's Name MICHAEL MCCLOSKEY

2. I, MICHAEL McCLOSKEY, consent to the filing of this Site Plan/

Subdivision by _____
(Agent)



(Owner's Signature)
Michael McCloskey

(Owner's Printed Name)

12-9-2020

(Date)

3. Principal Office Address SAME AS ABOVE
(Street)

(City) (State) (Zip) FAX Phone () _____
() _____

T. 

(Applicant's Signature)
Michael McCloskey

(Applicant's Printed Name)

12-9-2020

(Date)

West Windsor Township

Department of Community Development – Division of Land Use

SITE PLAN CHECKLIST

PROPERTY LOCATION:

BLOCK 5 LOT 19 (+ portion of Lot 20) APPLICATION CONTROL NO. _____

CHECKLIST COMPLETED BY ACT ENGINEERS CHECKED BY: RK
DATE: 4/23/20, 10/27/20

() PRELIMINARY () FINAL (X) PRELIMINARY/FINAL () SKETCH PLAN

The following are statutory items required to be shown on plans submitted for Site Plan approval. As the items are completed the applicant should check that item off on the line provided. If a waiver of any item is requested, insert "W.R." on the appropriate line, and on Page 7 indicate your reasons as to why the waiver is requested. Certification of application completeness will be held in abeyance, pending Planning Board action on waiver requests. Applicable Township Ordinances shall be referred to for specific site development design criteria.

Section 200-11.A Map Details - All maps and other documents submitted for Site Plan Review shall contain following information in addition to specific Site Plan details as required for each review stage.

APPLICANT

TOWNSHIP

- X 1) Title and location of property _____
- X 2) Name and address of landowner and applicant. If a corporation is landowner or applicant, the principal office location and name of President and Secretary shall be included. _____
- X 3) Name, address and professional license number and seal of the professional preparing documents and drawings. All plans shall be prepared, signed and sealed by a licensed professional engineer or architect. _____
- X 4) A place for the signature of the Chair and Secretary of the Planning Board and the Health Department. _____
- X 5) Date of plan and any modifications thereto. _____
- X 6) The legends, as shown on Page 8 of this list, shall be on the Site Plan map. _____

Section 200-12 SKETCH PLAN REVIEW

200-12.A Sketch Details - The Sketch Site Plan may be prepared by the applicant and contain sufficient information for discussion by the Board and the applicant.

Section 200-13 PRELIMINARY SITE PLAN APPROVAL

200-13.C Preliminary Site Plan Details – The Preliminary Site Plan Application technical materials, notwithstanding any other requirements of this or other Township ordinances, shall contain the following:

X 1) Locator map at a scale of one inch equals two thousand feet (1"=2,000'), or larger scale, showing the lot and block number of the parcel in question and the lot and block number adjacent and opposite properties. This map should also show any contiguous lot in which the applicant has any direct or indirect interest, and the nature of the applicant's interest.

 X 2) An aerial photograph superimposed upon the plans with the track boundaries outlined. Also photographs of the property where necessary to show any unusual topographic, environmental or physical aspect of the site. This would included but not be limited to rock outcroppings, vegetation, natural drainage ways, wetlands and existing structures and improvements.

 X 3) A preliminary plan at a scale of one inch equals fifty feet (1"=50'), or larger scale and any supplemental plans that are necessary to properly depict the project. In the case of a complex project a scale other than one inch equals 50 feet may be submitted provided that one copy of a photomechanical reduction to a scale of one inch equals fifty feet is submitted. The preliminary plan shall show at least the following information:

 X (a) North arrow, scale, graphic scale, date and notes and dated revisions.

 X (b) The zoning district in which the parcel is located together with the district boundaries included within the boundaries of the parcel or within two hundred (200) feet therefrom. All setback lines, landscape strips, landscape buffers, building heights and other bulk requirements shall be shown and dimensioned. Any deviation from requirements of this Part 1 shall be specifically shown.

 X (c) Survey map, prepared by a licensed surveyor of New Jersey showing boundaries of the properties, lines of all existing streets and roads, easements, rights-of-way, and areas dedicated to public use within two hundred (200') feet of the development. These shall be dimensioned and where applicable, referenced as to direction.

 X (d) References to any existing or proposed deed restrictions or exceptions concerning all or any portion of the parcel. A copy of such covenant, deed restrictions or exceptions shall be submitted with application.

 X (e) The existing and proposed contours, referred to U.S. Coast and Geodetic Survey Datum, at a contour interval of not less than two (2) feet. Existing contours are to be indicated by solid lines. Location of existing rock outcroppings, high points, watercourses and drainage ways, depressions, ponds, marshes, vegetation, wooded areas and other significant existing features including previous flood elevations of water-courses ponds and areas as determined by survey. Trees of five (5) inches or over in caliper shall be specifically located and identified. Any proposed changes of such natural features shall be specifically noted.

 X (f) The location, size, elevation, slope and type of storm drainage structures above and below grade, whether publicly or privately owned. Design calculations supporting the adequacy of proposed drainage shall be submitted. The Site Plan shall include existing ponds, streams, and watercourses as well as the designated Greenbelt, if applicable.

APPLICANT

TOWNSHIP

- X** (g) The location of all existing buildings, bridges, culverts, paving, lighting, signs or any other structures with grade elevations for each structure. Grade elevations may be established from use of Township topographical maps. _____
- X** (h) The distances measured along the right-of-way lines of existing streets abutting the property, to the nearest intersection with other streets. _____
- X** (i) The proposed use or uses of the land, buildings and structures. _____
- X** (j) The quantitative aspects of the proposal such as improvement coverage, number of units, square feet of construction, value of construction, density, coverage, number of employees, number of residents and area of land, etc. Specifically identified on the Site Plan, in tabular form shall be pertinent zoning data, indicating the bulk/area requirements of the zone in which the proposed development is located and how the proposed development responds to the zoning requirements. _____
- X** (k) The proposed buildings and structures and any existing structures to remain, with dimensions, setbacks, heights (in feet and stories), and first floor or grade elevations. Existing buildings and structures to be removed shall be indicated. Sketch or typical building elevations indicating type of materials to be use. _____
- X** (l) The location and designs of any off street parking areas, bicycle parking, service, trash or loading areas showing size and location of bays, aisles, barriers, planters, maneuvering areas, and traffic patterns. Include manufacture’s cut or illustration depicting type of bicycle parking facility proposed. Also provide typical plan layout of facility at an appropriate scale to determine location from walkways and building lines. _____
- X** (m) The means of vehicular access for ingress to and egress from the site, showing the proposed traffic channels, lanes and any other structure or devise intended to control traffic. _____
- X** (n) The location, design, dimensions, and materials details in the form of construction documents (and size of) for any on or off-site pedestrian parks, walkways and bicycle pathways, open space, common open space, plazas, promenades and recreation areas or any other public uses. _____
- X** (o) The location and design of all proposed utility structures and lines, storm water drainage on –site and off-tract, with manholes, inlets, pipe sizes, grades, telephone, inverts and directions of flow, as well as telephone, power and light, water hydrant locations, sewer and gas, whether publicly or privately owned. Where on-site sewage disposal systems and/or potable water wells are provided these shall be located on the site plan indicating size of system and distance between wells and septic fields. _____
- X** (p) The location and the design of the proposed screening landscaping and planting, including a planting plan and schedule of plant materials. _____

- X** (q) The location of all outdoor lighting (freestanding or on building), the size, nature of construction, lumens, heights, area and direction of illumination, foot-candles produces, typical manufacturer cuts illustrating style, and time controls proposed for outdoor lighting and display.
- X** (r) The location and design of all signs, the size, nature of construction height and orientation, including all identification signs, traffic and directional signs and arrows, freestanding and facade signs and time controls for sign lighting.
- X** (s) The location and size of all proposed easements, rights-of-way, public areas to be dedicated to the public or to be restricted or defined by deed or any other arrangement. Also the location of any Master Plan proposals indicating roadway, greenbelt, public area or facility shall be shown.
- X** (t) A tabulation of a proposed building's perimeter that fronts on a public or private street or on a fire apparatus space expressed in feet as well as percentage of total building perimeter linear footage shall be indicated as part of site data information contained on site plan.
- X** (4) All items as required in the Environmental Impact Statement as set forth in Article V, Section 200-23 of this Part 1 or a statement concerning such which does not apply.
- X** (5) Where applicable, the method by which any common or public open space or commonly held building or structure is to be owned and maintained.
- N/A** (6) Where warranted, such other material deemed necessary by the Planning Board to evaluate the physical, fiscal or socioeconomic impact of the proposed development upon the Township.
- (7) Reserved.
- X** (8) Soil Survey Map, prepared by a professional engineer to indicate the different types of soils that exist on the subject tract and within two hundred (200) feet of the extreme limits of the subject tract. This map shall be in conformance with soil survey of Mercer County, New Jersey published by U.S. Department of Agriculture. Where wetlands exist on or within two hundred (200) feet of the extreme limits of the subject tract, as per N.J.A.C. 7:7A, of the wetlands boundary shall be superimposed on the soil survey map.
- Temp. waiver (9) If wetlands exist, as per N.J.A.C. 7:7A, Freshwater Wetlands Protection Act rules are to be complied with prior to submission of plans to the Township. All areas of wetlands shall be depicted on plans with surveyor's metes and bounds information for the outbounds of such areas. A Letter of Interpretation issued by the N. J. Department of Environmental Protection, Division of Coastal Resources shall be submitted indicating the presence or absence of Freshwater Wetlands on the parcel in question.

X (10) A Landscape Plan, prepared by a certified or licensed landscape architect, at a minimum scale of 1" = 50' or larger, indicating a planting schedule indicating specific botanical and common plant names, sizes, root spacing, and comments, and indicating the location, form, height and width of other landscape architectural materials such as berms, fences, walls, site furnishings bridges and walks, when required or appropriate, an illustrative section drawing to show the effectiveness of landscape buffers.

 X (11) A Traffic Signage Plan conforming to the requirements of Section 200-91.U, Part 3, Subdivision and Site Plan procedures of this chapter.

SECTION 200-14 FINAL SITE PLAN APPROVAL

200-14.C.1 Final Site Plan Details – The final site plan application technical materials shall include the following:

 waiver a) The approved preliminary site and copy of the preliminary resolution of approval together with all proposed additions, changes or departures therefrom, if applicable.

b) Final construction documents among other items, illustrating:

 waiver (1) The final plans for site development and site improvement including those construction details as may be specified at the time of preliminary approval.

 X (2) The ground floor or other floor plans sufficient to show pedestrian, vehicular or other access as it relates to the final site plan.

 X (3) The building elevation or typical elevations including size, structure, materials, colors and textures.

(4) Elevations or typical illustrations of any accessory structures, sign or area visible to the general public.

 waiver (5) A final Landscape Plan, signed and sealed by a certified or licensed landscape architect, in the form of construction drawings and substantially conforming to the approved preliminary Landscape Plan. The plan shall be prepared for separate halftone sheets of the engineer's grading site plan. The plan shall include the location and detailed specifications for all landscape architectural improvements including planting details which conform with the standard Township details and for the irrigation and maintenance of all planting areas.

 X (6) A Traffic Signage Plan conforming to the requirements of Section 200-91.U, Part 3, Subdivision and Site Plan Procedures, of this chapter.

REQUEST FOR WAIVER

<u>Section From Which Waiver Requested</u>	<u>Reason for Request</u>
(Temporary Waiver) from Checklist Item 9: Metes & Bounds description of wetlands & LOI from NJEDP	The applicant will be applying for a Freshwater Wetlands GP-1 from NJDEP for Maint. & Repair of existing features (SWM basin)
Final Site Plan Checklist Items 200-14.C.1.a) & C.1.b)(1)	Joint Preliminary & Final application
Section 200-27.D.(2) Off-street Loading	Loading for residents will be accommodated through the use of temporary signage
Section 200-29.N.(3) Bicycle Access	The vehicle access driveway will be less than 30 feet wide and will be combined with bicycle access. This is a residential driveway with limited speeds and minimal traffic.
Section 200-36.1 Pervious Surfaces	Pervious surface material is proposed for the grilling area. Pervious material will not be used for walkways because of maintenance and accessibility concerns.
Section 200-31.K Footcandle Intensity	The proposed footcandle intensity exceeds the required average of 0.6 footcandles in residential areas. This will not have an adverse effect on surrounding properties. The maximum footcandle intensity at property Lines is also exceeded because of the lighting Needed for the use of the lower level of the adjacent Ellsworth Center building E1.
Section 200-269.3B.(9)(a) Arch. Style	(If needed) This requirement is somewhat subjective. We do feel that the architectural style of the proposed buildings is in keeping with the intent of the section and will be complimentary to the adjacent Ellsworth Center buildings.
Section 200-269.3B.(9)(d) Roof Pitch	The proposed roof pitch does not fall within The required 6/12 to 12/12. The design of the proposed buildings would be compromised if we were to comply with the roof pitch requirements.

LEGEND

(PRELIMINARY) or (FINAL)

1. SITE PLAN OF _____
BLOCK _____ LOT _____ ZONE _____
DATE _____ SCALE _____
APPLICANT _____
ADDRESS _____
SITE PLAN CONTROL NO. _____

2. I CONSENT TO THE FILING OF THIS SITE PLAN WITH THE TOWNSHIP PLANNING BOARD OF WEST WINDSOR TOWNSHIP.

(Owner) (Date)

3. To be signed before issuance of a Building Permit and incorporated only on a Final Site Plan (as applicable):

I HEREBY CERTIFY THAT A BOND HAS BEEN POSTED FOR ALL THE REQUIRED IMPROVEMENTS IN COMPLIANCE WITH ALL APPLICABLE CODES AND ORDINANCES.

(Township Clerk) (Date)

(Building Permit Issued) (Date)

4. To be incorporated only on Final Site Plan and signed prior to issuance of a Building Permit:
VERIFICATION THAT PAYMENT OF MUNICIPAL TAXES OR ASSESSMENTS IS CURRENT

(Township Clerk) (Date)

5. APPROVED BY THE PLANNING BOARD (Preliminary Approval Date) _____
(Final Approval Date) _____

(Chairman) (Date)

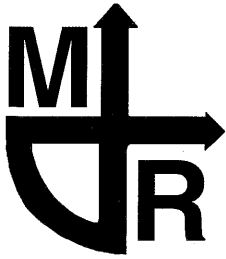
(Secretary) (Date)

6. APPROVED BY THE HEALTH OFFICER

(Chairman) (Date)

7. EXPIRATION OF APPROVAL (PRELIMINARY – 3 YEARS; FINAL – 2 YEARS)

Date of Expiration (Without Extensions)



McDonough & Rea Associates, Inc.

Traffic and Transportation Consulting

Kevin P. McDonough (1953-1994)
John H. Rea, P.E.
Jay S. Troutman, Jr., P.E.
Scott T. Kennel

August 25, 2020

Mr. Michael McCloskey
Everest Realty Group
3499 Route 9 North, Suite 1-E
Freehold, New Jersey 07728

Re: 400 Steps LLC
Lot 19 in Block 5
West Windsor Township, Mercer County, New Jersey
MRA File # 17-262

Dear Mr. McCloskey:

As requested, McDonough & Rea Associates (MRA) has conducted additional traffic analyses, pursuant to a request from West Windsor Township traffic consultant, Jeffrey L'Amoreaux, PE, specifically, the following items are addressed in this report:

- Levels of service at the access from the *400 Steps* project to Cranbury Road and levels of service at the Carlton Place intersection with Cranbury Road.
- Left turn lane warrant analyses for eastbound Cranbury traffic turning left into the access to *400 Steps*.
- A 3 year crash analysis in the area from the West Windsor Township Police Department.

400 STEPS PROPOSAL

400 Steps proposes construction of 144 apartment units on the noted property. Access to Cranbury Road will be shared with the *Ellsworth Center* development which fronts on Cranbury Road. As a result of an approval for redevelopment of the *Ellsworth Center*, the access to the *Ellsworth Center* and *400 Steps* will be realigned opposite Carlton Place. However, this analysis for *400 Steps* assumes that the realigned access is not in place and the access to Cranbury Road as well as the Carlton Place intersection with Cranbury Road, both function as unsignalized "T" intersections.

Please reply to:

- ☐ 1431 Lakewood Road, Suite C, Manasquan, NJ 08736 • (732) 528-7076 • Fax (732) 528-6673
- ☐ 105 Elm Street, Lower Level, Westfield, NJ 07090 • (908) 789-7180 • Fax (908) 789-7181



McDonough & Rea Associates, Inc.

Traffic and Transportation Consulting

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Mr. Michael McCloskey

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August 25, 2020

EXISTING TRAFFIC VOLUMES

Traffic volume data was obtained from a *Traffic Impact Analysis* prepared by Langan Engineering for the *Ellsworth Center* redevelopment project published on November 19, 2018. *Figure 3* from the Langan report identifies 2019 base traffic volumes which have been republished on *Figure 1* in our report which is appended to this letter. AM and PM peak street hour traffic volumes are shown on *Figure 1*.

TRIP GENERATION/DISTRIBUTION

Estimates of traffic to be generated by the 144 apartments were made after consulting the 10th Edition of the Institute of Transportation Engineers (ITE) *Trip Generation Manual*. The following *Table* illustrates anticipated AM and PM peak street hour traffic generation.

TABLE I
TRIP GENERATION
144 APARTMENTS

	IN	OUT	TOTAL
AM Peak Street Hour	15	52	67
PM Peak Street Hour	52	30	82

With respect to the anticipated distribution of traffic generated by the 144 apartments, existing traffic patterns along Cranbury Road were reviewed. Traffic was therefore distributed as follows:

- 2/3 to and from the west on Cranbury Road
- 1/3 to and from the east on Cranbury Road

Figure 2 in the *Appendix* illustrates design year 2023 *no-build* traffic volumes and *Figure 3* in the *Appendix* illustrates site generated traffic volumes.

Site generated and distributed traffic volumes were then surcharged onto design year 2023 *no build* volumes and are shown on *Figure 4* in the *Appendix* entitled *2023 Build Traffic Volumes*.



McDonough & Rea Associates, Inc.

Traffic and Transportation Consulting

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Mr. Michael McCloskey

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August 25, 2020

ANALYSIS OF FUTURE TRAFFIC

A design year of 2023 was assumed for the 144 apartments proposed by *400 Steps*. The New Jersey Department of Transportation's (NJDOT) *Background Growth Table* was consulted and a background growth rate of 1.0 percent per year was added to base 2019 traffic volumes to a design year of 2023.

Traffic engineers calculate levels of service of unsignalized intersections which relate to the quality of traffic flow. Level of service is a measure of average control delay. Average control delay is the time lost due to deceleration and the amount of time from when a vehicle is stopped for a traffic control device (or at the end of the queue) to when the vehicle departs the intersection. Delay is a relative quantity of driver discomfort, frustration, fuel consumption, and loss in travel time.

Levels of service range from "A" to "F" with "A" being the highest or best attainable level of service. Level of service "E" with average control delays of not more than 50 seconds per vehicle at an unsignalized intersection indicates near to or at capacity conditions and is generally considered the limit of acceptable level of service and delay.

Full definitions of levels of service for unsignalized intersections as well as level of service summaries are included in the *Appendix*. The intersections studied by this report were analyzed according to the procedures set forth in the *Highway Capacity Manual 2010*, using the *Highway Capacity Software (HCS)*, release 7.8.5.

Findings were that exiting movements from both the site access to Cranbury Road and on the Carlton Place access to Cranbury Road would operate at level of service "C" or better during all time frames.

LEFT TURN LANE WARRANT ANALYSIS

The latest edition of the American Association of State Highway and Transportation Officials (AASHTO) manual was consulted and a review of *Exhibit 9-75* (appended to this letter) reveals that warrants for an eastbound left turn lane at the site access are marginal for the *build* condition. However, a restriping of Cranbury Road to provide for the left turn lane is not practical in our estimation due to the fact that ultimately, access to this parcel and to the *Ellsworth Center* will be moved further east and realigned with Carlton Place. At that point in time, Mercer County does have the option to restripe Cranbury Road to provide left turn lanes into both the site access that will be shared by *Ellsworth Center* and *400 Steps* and Carlton Place.



McDonough & Rea Associates, Inc.

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Mr. Michael McCloskey

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August 25, 2020

CRASH ANALYSIS

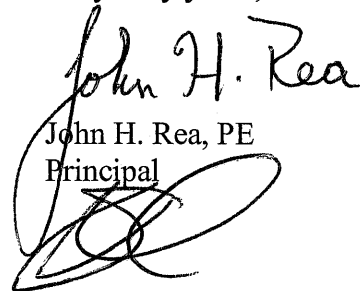
A 3 year crash analysis was requested from the West Windsor Township Police Department for both the site access to Cranbury Road and the Carlton Place/Cranbury Road intersection. Based on information received from the police department, there was 1 rear end accident in the vicinity of this property involving 3 vehicles. However, the accident occurred approximately 400 feet west of the Cranbury Road/CR 571 intersection and was a property damage only incident, with no injuries reported. A copy of the *Police Crash Investigation Report* is appended to this letter.

CONCLUSIONS

Based on our analysis of the aforementioned information, it is our opinion that the existing site access to Cranbury Road which will serve the *400 Steps* residential development will operate at acceptable levels of service prior to the ultimate configuration of the access which will be completed in conjunction with the *Ellsworth Center* redevelopment. At that point in time, the site access for *Ellsworth Center* and *400 Steps* will be moved further east to align with the Carlton Place intersection on the south side of Cranbury Road. When these improvements are completed, Mercer County, which has jurisdiction over Cranbury Road has the option of restriping Cranbury Road in the vicinity to provide for left turn lanes into both Carlton Place and the *Ellsworth Center/400 Steps* site access.

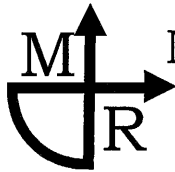
We hope the forgoing information is helpful.

Very truly yours,


John H. Rea, PE
Principal

Scott T. Kennel
Sr. Associate

APPENDIX



McDONOUGH & REA ASSOCIATES

TRAFFIC AND TRANSPORTATION CONSULTING

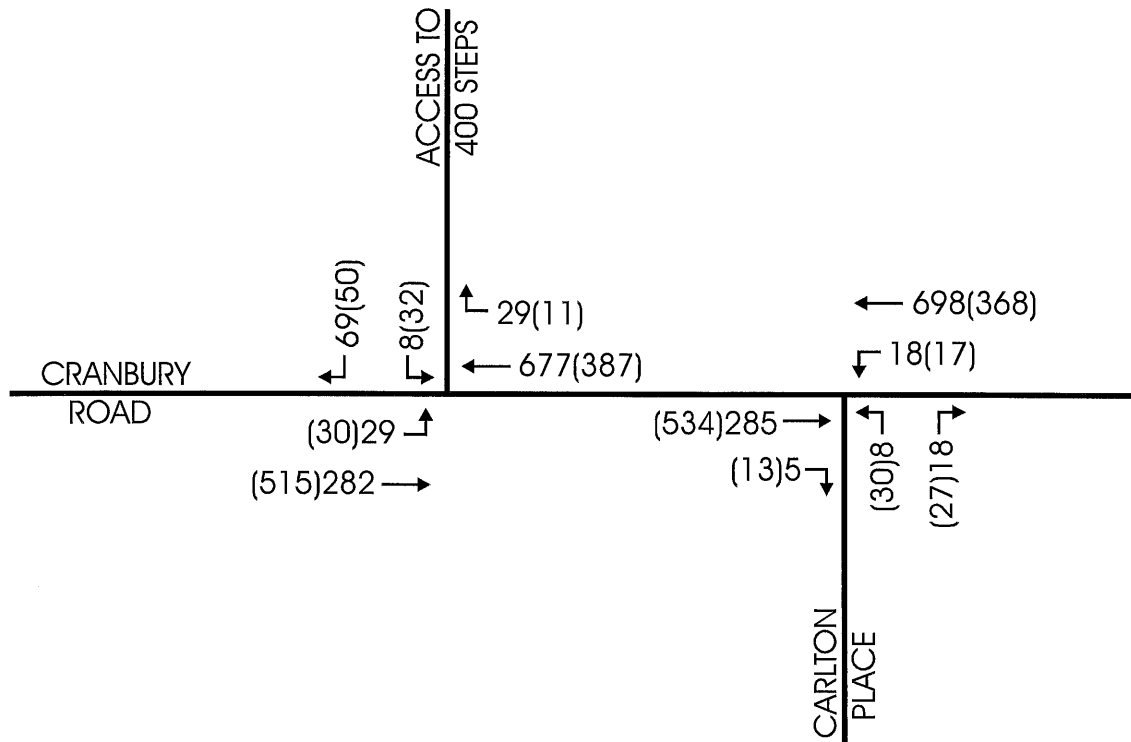
FIGURE 1

JOB NO.
17-262

DATE:
AUG 2020

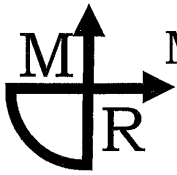
SUBJECT:

400 STEPS - WEST WINDSOR
2019 AM PSH (PM PSH) NO - BUILD TRAFFIC VOLUMES*



LEGEND: ← AM PSH (PM PSH)

* SOURCE LANGAN ENGINEERS



McDONOUGH & REA ASSOCIATES

TRAFFIC AND TRANSPORTATION CONSULTING

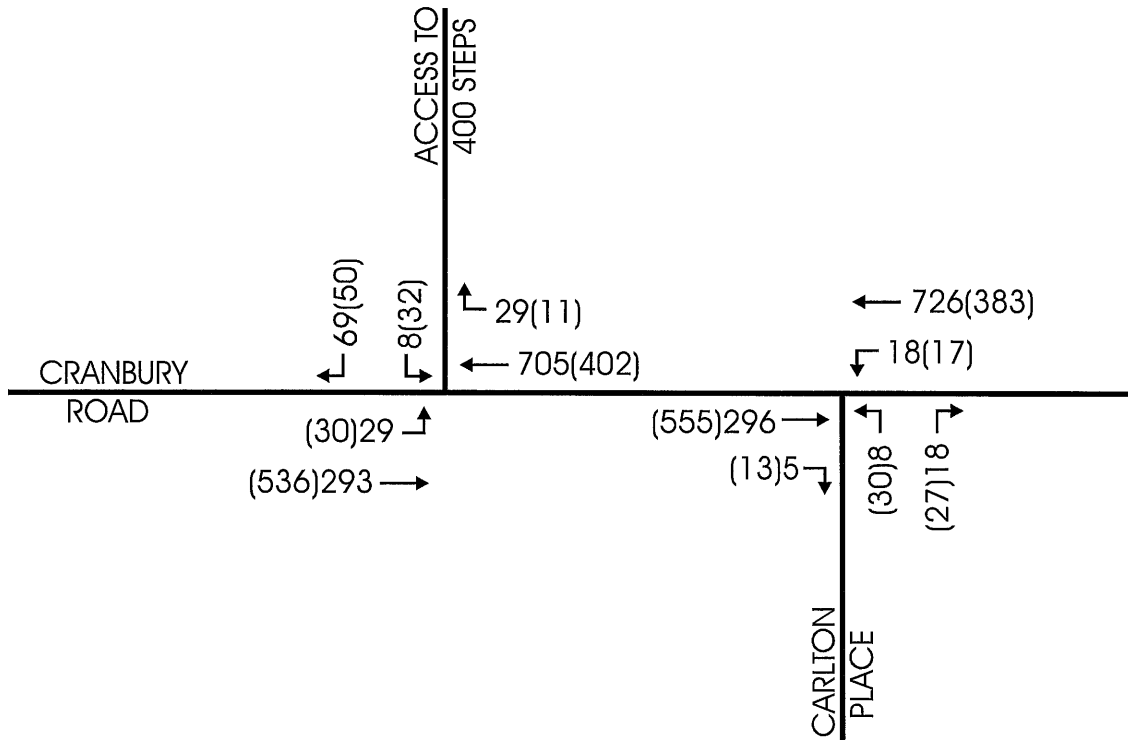
FIGURE 2

JOB NO.
17-262

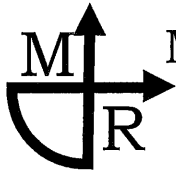
DATE:
AUG 2020

SUBJECT:

400 STEPS - WEST WINDSOR
2023 NO - BUILD TRAFFIC VOLUMES



LEGEND: ← AM PSH (PM PSH)



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TRAFFIC AND TRANSPORTATION CONSULTING

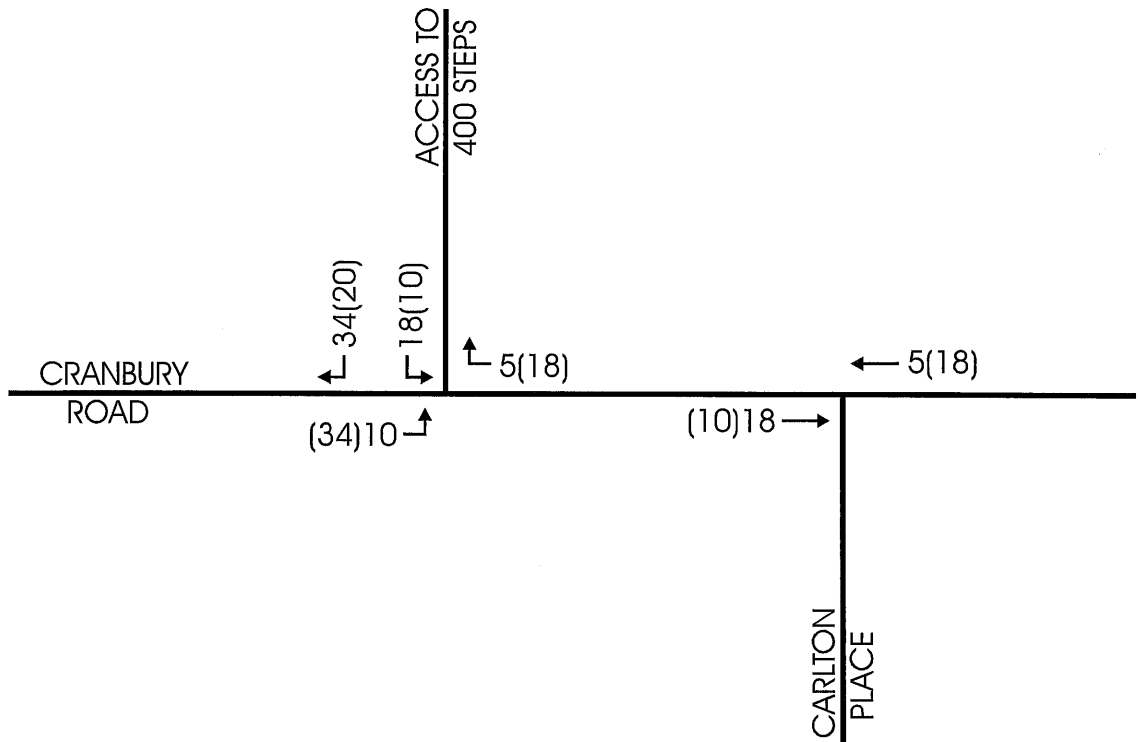
FIGURE 3

JOB NO.
17-262

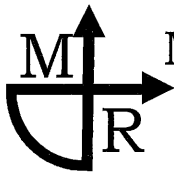
DATE:
AUG 2020

SUBJECT:

400 STEPS - WEST WINDSOR
SITE GENERATED TRAFFIC VOLUMES



LEGEND: ← AM PSH (PM PSH)



McDONOUGH & REA ASSOCIATES

TRAFFIC AND TRANSPORTATION CONSULTING

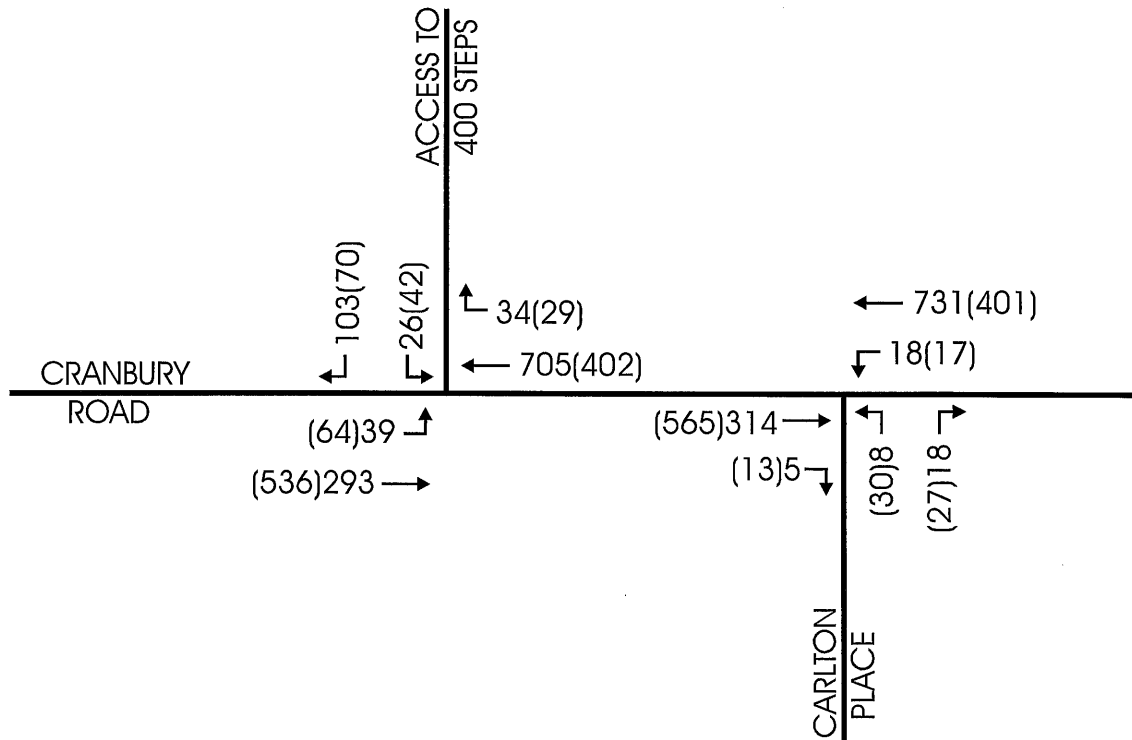
FIGURE 4

JOB NO.
17-262

DATE:
AUG 2020

SUBJECT:

400 STEPS - WEST WINDSOR
2023 BUILD TRAFFIC VOLUMES



LEGEND: ← AM PSH (PM PSH)

**LEVEL OF SERVICE CRITERIA
FOR
TWO-WAY STOP-CONTROLLED INTERSECTIONS¹**

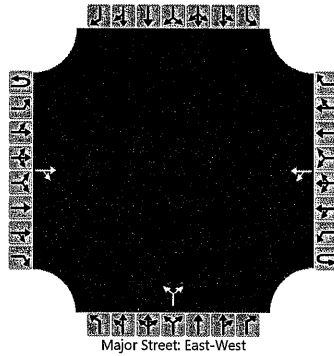
<u>Level of Service</u>	<u>Average Control Delay</u>
A	≤ 10.0 Seconds Per Vehicle
B	> 10.0 and ≤ 15.0 Seconds Per Vehicle
C	> 15.0 and ≤ 25.0 Seconds Per Vehicle
D	> 25.0 and ≤ 35.0 Seconds Per Vehicle
E	> 35.0 and ≤ 50.0 Seconds Per Vehicle
F	> 50.0 Seconds Per Vehicle

¹ Transportation Research Board, Highway Capacity Manual 2010, National Research Council, Washington, DC, 2010.

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	STK			Intersection	CRANBURY RD & CARLTON PL		
Agency/Co.	MRA			Jurisdiction			
Date Performed	8/11/2020			East/West Street	CRANBURY RD		
Analysis Year	2023			North/South Street	CARLTON PL		
Time Analyzed	AM			Peak Hour Factor	0.95		
Intersection Orientation	East-West			Analysis Time Period (hrs)	0.25		
Project Description	17-262ANB-1 NOBUILD						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Priority																
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration				TR		LT					LR					
Volume (veh/h)			285	5		18	698			8		18				
Percent Heavy Vehicles (%)						3				3		3				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1					7.1		6.2			
Critical Headway (sec)						4.13					6.43		6.23			
Base Follow-Up Headway (sec)						2.2					3.5		3.3			
Follow-Up Headway (sec)						2.23					3.53		3.33			

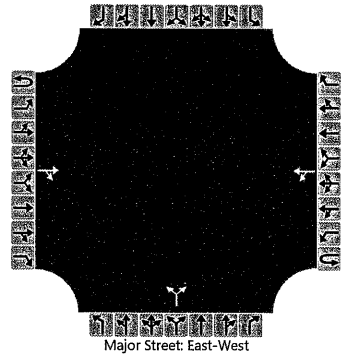
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						19						27				
Capacity, c (veh/h)						1250						445				
v/c Ratio						0.02						0.06				
95% Queue Length, Q ₉₅ (veh)						0.0						0.2				
Control Delay (s/veh)						7.9						13.6				
Level of Service (LOS)						A						B				
Approach Delay (s/veh)					0.4				13.6							
Approach LOS									B							

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	STK			Intersection	CRANBURY RD & CARLTON PL		
Agency/Co.	MRA			Jurisdiction			
Date Performed	8/11/2020			East/West Street	CRANBURY RD		
Analysis Year	2023			North/South Street	CARLTON PL		
Time Analyzed	PM			Peak Hour Factor	0.95		
Intersection Orientation	East-West			Analysis Time Period (hrs)	0.25		
Project Description	17-262PNB-1 NOBUILD						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Priority																
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration				TR		LT					LR					
Volume (veh/h)			534	13		17	368			30		27				
Percent Heavy Vehicles (%)						3				3		3				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

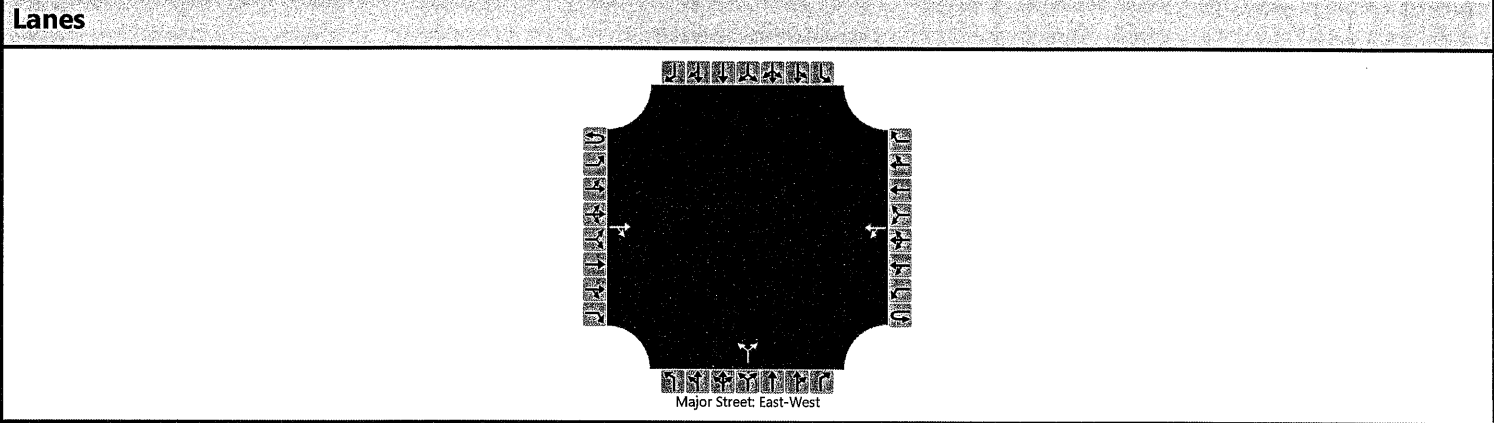
Base Critical Headway (sec)						4.1				7.1		6.2				
Critical Headway (sec)						4.13				6.43		6.23				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.23				3.53		3.33				

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						18						60				
Capacity, c (veh/h)						993						345				
v/c Ratio						0.02						0.17				
95% Queue Length, Q ₉₅ (veh)						0.1						0.6				
Control Delay (s/veh)						8.7						17.6				
Level of Service (LOS)						A						C				
Approach Delay (s/veh)					0.6				17.6							
Approach LOS									C							

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	STK			Intersection	CRANBURY RD & CARLTON PL		
Agency/Co.	MRA			Jurisdiction			
Date Performed	8/11/2020			East/West Street	CRANBURY RD		
Analysis Year	2023			North/South Street	CARLTON PL		
Time Analyzed	AM			Peak Hour Factor	0.95		
Intersection Orientation	East-West			Analysis Time Period (hrs)	0.25		
Project Description	17-262AFB-1 BUILD						



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Priority																
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration				TR		LT					LR					
Volume (veh/h)			314	5		18	731			8		18				
Percent Heavy Vehicles (%)						3				3		3				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1					7.1		6.2			
Critical Headway (sec)						4.13					6.43		6.23			
Base Follow-Up Headway (sec)						2.2					3.5		3.3			
Follow-Up Headway (sec)						2.23					3.53		3.33			

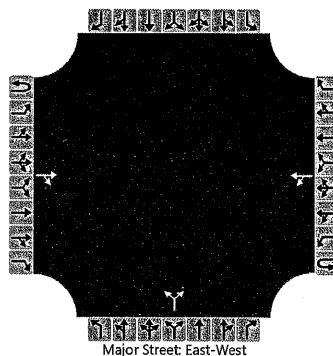
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						19						27				
Capacity, c (veh/h)						1218						415				
v/c Ratio						0.02						0.07				
95% Queue Length, Q ₉₅ (veh)						0.0						0.2				
Control Delay (s/veh)						8.0						14.3				
Level of Service (LOS)						A						B				
Approach Delay (s/veh)					0.4				14.3							
Approach LOS									B							

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	STK			Intersection	CRANBURY RD & CARLTON PL		
Agency/Co.	MRA			Jurisdiction			
Date Performed	8/11/2020			East/West Street	CRANBURY RD		
Analysis Year	2023			North/South Street	CARLTON PL		
Time Analyzed	PM			Peak Hour Factor	0.95		
Intersection Orientation	East-West			Analysis Time Period (hrs)	0.25		
Project Description	17-262PFB-1 BUILD						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Priority	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration				TR		LT					LR					
Volume (veh/h)			565	13		17	401			30		27				
Percent Heavy Vehicles (%)						3				3		3				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

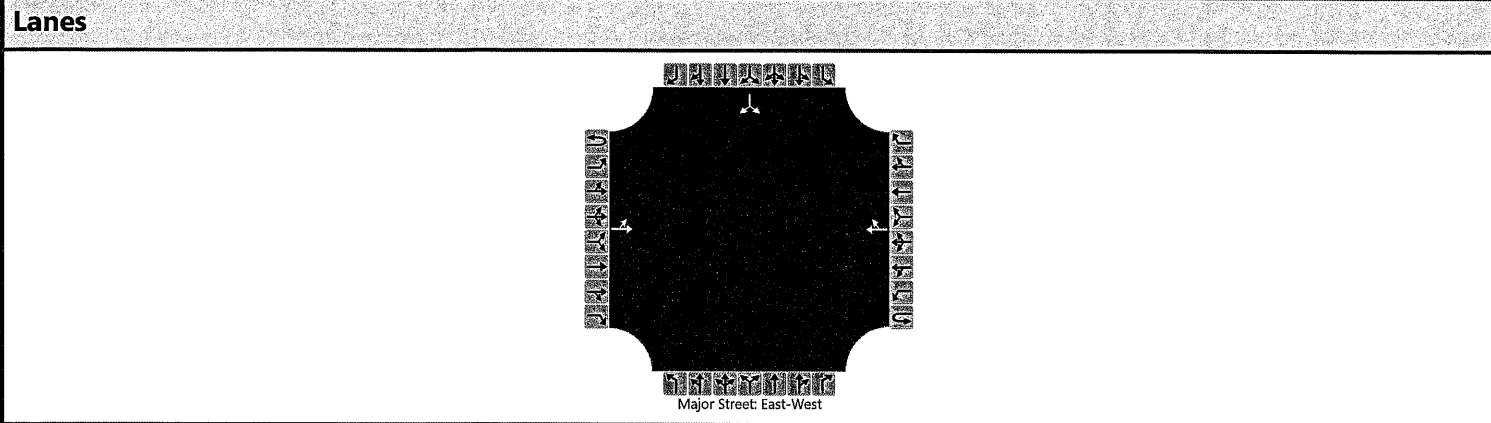
Base Critical Headway (sec)						4.1				7.1		6.2				
Critical Headway (sec)						4.13				6.43		6.23				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.23				3.53		3.33				

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						18					60					
Capacity, c (veh/h)						965					319					
v/c Ratio						0.02					0.19					
95% Queue Length, Q ₉₅ (veh)						0.1					0.7					
Control Delay (s/veh)						8.8					18.9					
Level of Service (LOS)						A					C					
Approach Delay (s/veh)					0.6				18.9							
Approach LOS									C							

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	STK			Intersection	CRANBURY RD & SITE ACCESS		
Agency/Co.	MRA			Jurisdiction			
Date Performed	8/11/2020			East/West Street	CRANBURY RD		
Analysis Year	2023			North/South Street	SITE ACCESS		
Time Analyzed	AM			Peak Hour Factor	0.95		
Intersection Orientation	East-West			Analysis Time Period (hrs)	0.25		
Project Description	17-262ANB-2 NOBUILD						



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	1	0
Configuration		LT						TR							LR	
Volume (veh/h)		29	293				705	29						8		69
Percent Heavy Vehicles (%)		3												3		3
Proportion Time Blocked																
Percent Grade (%)	0															
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

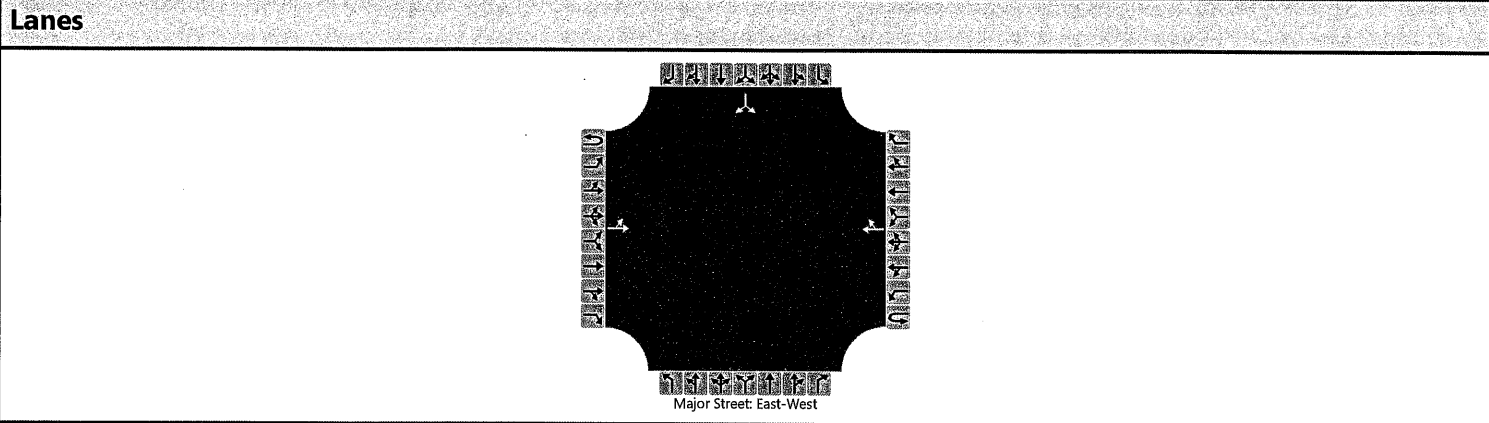
Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		4.13												6.43		6.23
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.23												3.53		3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		31														81
Capacity, c (veh/h)		838														372
v/c Ratio		0.04														0.22
95% Queue Length, Q ₉₅ (veh)		0.1														0.8
Control Delay (s/veh)		9.5														17.4
Level of Service (LOS)		A														C
Approach Delay (s/veh)	1.2								17.4							
Approach LOS	A								C							

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	STK			Intersection	CRANBURY RD & SITE ACCESS		
Agency/Co.	MRA			Jurisdiction			
Date Performed	8/11/2020			East/West Street	CRANBURY RD		
Analysis Year	2023			North/South Street	SITE ACCESS		
Time Analyzed	PM			Peak Hour Factor	0.95		
Intersection Orientation	East-West			Analysis Time Period (hrs)	0.25		
Project Description	17-262PNB-2 NOBUILD						



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Priority																
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	1	0
Configuration		LT						TR							LR	
Volume (veh/h)		30	536				402	11						32		50
Percent Heavy Vehicles (%)		3												3		3
Proportion Time Blocked																
Percent Grade (%)	0															
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

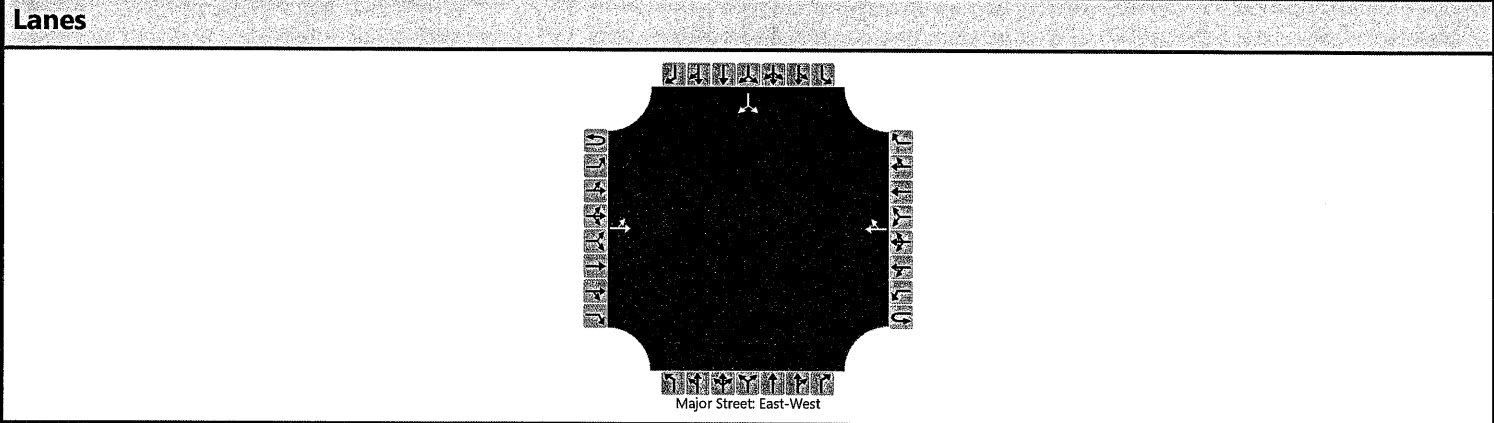
Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		4.13												6.43		6.23
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.23												3.53		3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		32														86
Capacity, c (veh/h)		1120														382
v/c Ratio		0.03														0.23
95% Queue Length, Q ₉₅ (veh)		0.1														0.9
Control Delay (s/veh)		8.3														17.1
Level of Service (LOS)		A														C
Approach Delay (s/veh)	0.8								17.1							
Approach LOS	A								C							

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	STK			Intersection	CRANBURY RD & SITE ACCESS		
Agency/Co.	MRA			Jurisdiction			
Date Performed	8/11/2020			East/West Street	CRANBURY RD		
Analysis Year	2023			North/South Street	SITE ACCESS		
Time Analyzed	AM			Peak Hour Factor	0.95		
Intersection Orientation	East-West			Analysis Time Period (hrs)	0.25		
Project Description	17-262AFB-2 BUILD						



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Priority																
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	1	0
Configuration		LT						TR							LR	
Volume (veh/h)		39	293				705	34						26		103
Percent Heavy Vehicles (%)		3												3		3
Proportion Time Blocked																
Percent Grade (%)														0		
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		4.13												6.43		6.23
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.23												3.53		3.33

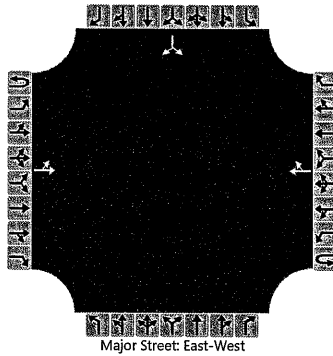
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		41														136	
Capacity, c (veh/h)		834														338	
v/c Ratio		0.05														0.40	
95% Queue Length, Q ₉₅ (veh)		0.2														1.9	
Control Delay (s/veh)		9.5														22.6	
Level of Service (LOS)		A														C	
Approach Delay (s/veh)		1.6												22.6			
Approach LOS		A												C			

HCS7 Two-Way Stop-Control Report

General Information				Site Information			
Analyst	STK			Intersection	CRANBURY RD & SITE ACCESS		
Agency/Co.	MRA			Jurisdiction			
Date Performed	8/11/2020			East/West Street	CRANBURY RD		
Analysis Year	2023			North/South Street	SITE ACCESS		
Time Analyzed	PM			Peak Hour Factor	0.95		
Intersection Orientation	East-West			Analysis Time Period (hrs)	0.25		
Project Description	17-262PFB-2 BUILD						

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Movement	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Priority	1	1	2	3	4	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	0	0		0	1	0
Configuration		LT						TR							LR	
Volume (veh/h)		64	536				402	29						42		70
Percent Heavy Vehicles (%)		3												3		3
Proportion Time Blocked																
Percent Grade (%)														0		
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		4.13												6.43		6.23
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.23												3.53		3.33

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		67														118	
Capacity, c (veh/h)		1102														349	
v/c Ratio		0.06														0.34	
95% Queue Length, Q ₉₅ (veh)		0.2														1.5	
Control Delay (s/veh)		8.5														20.5	
Level of Service (LOS)		A														C	
Approach Delay (s/veh)		1.6												20.5			
Approach LOS		A												C			

- Where fully protected, left-turn phasing is to be provided;
- Where space permits, left-turn lanes should be considered when left-turn volumes exceed 100 vph (left-turn lanes may be provided for lower volumes as well on the basis of the judged need and state of local practice, or both); and
- Where left-turn volumes exceed 300 vph, a double left-turn lane should be considered.

Exhibit 9-75 is a guide to traffic volumes where left-turn facilities should be considered on two-lane highways. For the volumes shown, left turns and right turns from the minor street can be equal to, but not greater than, the left turns from the major street.

Metric					US Customary				
Opposing volume (veh/h)	Advancing volume (veh/h)				Opposing volume (veh/h)	Advancing volume (veh/h)			
	5% left turns	10% left turns	20% left turns	30% left turns		5% left turns	10% left turns	20% left turns	30% left turns
60-km/h operating speed					40-mph operating speed				
800	330	240	180	160	800	330	240	180	160
600	410	305	225	200	600	410	305	225	200
400	510	380	275	245	400	510	380	275	245
200	640	470	350	305	200	640	470	350	305
100	720	515	390	340	100	720	515	390	340
80-km/h operating speed					50-mph operating speed				
800	280	210	165	135	800	280	210	165	135
600	350	260	195	170	600	350	260	195	170
400	430	320	240	210	400	430	320	240	210
200	550	400	300	270	200	550	400	300	270
100	615	445	335	295	100	615	445	335	295
100-km/h operating speed					60-mph operating speed				
800	230	170	125	115	800	230	170	125	115
600	290	210	160	140	600	290	210	160	140
400	365	270	200	175	400	365	270	200	175
200	450	330	250	215	200	450	330	250	215
100	505	370	275	240	100	505	370	275	240

Exhibit 9-75. Guide for Left-Turn Lanes on Two-Lane Highways (6)

Additional information on left-turn lanes, including their suggested lengths, can be found in published sources (2, 11, 13). In the case of double left-turn lanes, a capacity analysis of the intersection should be performed to determine what traffic controls are needed in order for it to function properly.

Local conditions and the cost of right-of-way often influence the type of intersection selected as well as many of the design details. Limited sight distance, for example, may make it desirable to control traffic by yield signs, stop signs, or traffic signals when the traffic densities are less than those ordinarily considered appropriate for such control. The alignment and grade of the intersecting roads and the angle of intersection may make it advisable to channelize or use auxiliary pavement areas, regardless of the traffic densities. In general, traffic service, highway design designation, physical conditions, and cost of right-of-way are considered jointly in choosing the type of intersection.

ITE Land Use: 220, Multifamily Housing (Low-Rise)		144 Dwelling Units		10th													
Size of Development:		Average Rate		Studies		Avg. Size		R ²		Trips		Equation		Trips		Split	
Time Period																	
Weekday Daily		7.32	168	29	1054.1	0.96	T=	7.560	(x)-	40.860	1047.8	50	50				
AM Peak Street Hour		0.46	199	42	66.2	0.90	Ln(T)=	0.950	Ln(x)-	0.510	67.4	23	77				
PM Peak Street Hour		0.56	187	50	80.6	0.86	Ln(T)=	0.890	Ln(x)-	0.020	81.7	63	37				
AM Peak Hour of Generator		0.56	161	36	80.6	0.91	Ln(T)=	0.940	Ln(x)-	0.290	80.0	28	72				
PM Peak Hour of Generator		0.67	146	35	96.5	0.94	T=	0.660	(x)+	1.410	96.5	59	41				
Saturday Daily		8.14	89	5	1172.2	0.93	T=	14.010	(x)-	521.690	1495.8	50	50				
Saturday Peak Hour of Generator		0.70	89	5	100.8	0.92	T=	1.080	(x)-	33.240	122.3	N/A					
Sunday Daily		6.28	89	5	904.3	0.96	T=	10.130	(x)-	341.890	1116.8	50	50				
Sunday Peak Hour of Generator		0.67	89	5	96.5	0.93	T=	1.120	(x)-	40.410	120.9	N/A					

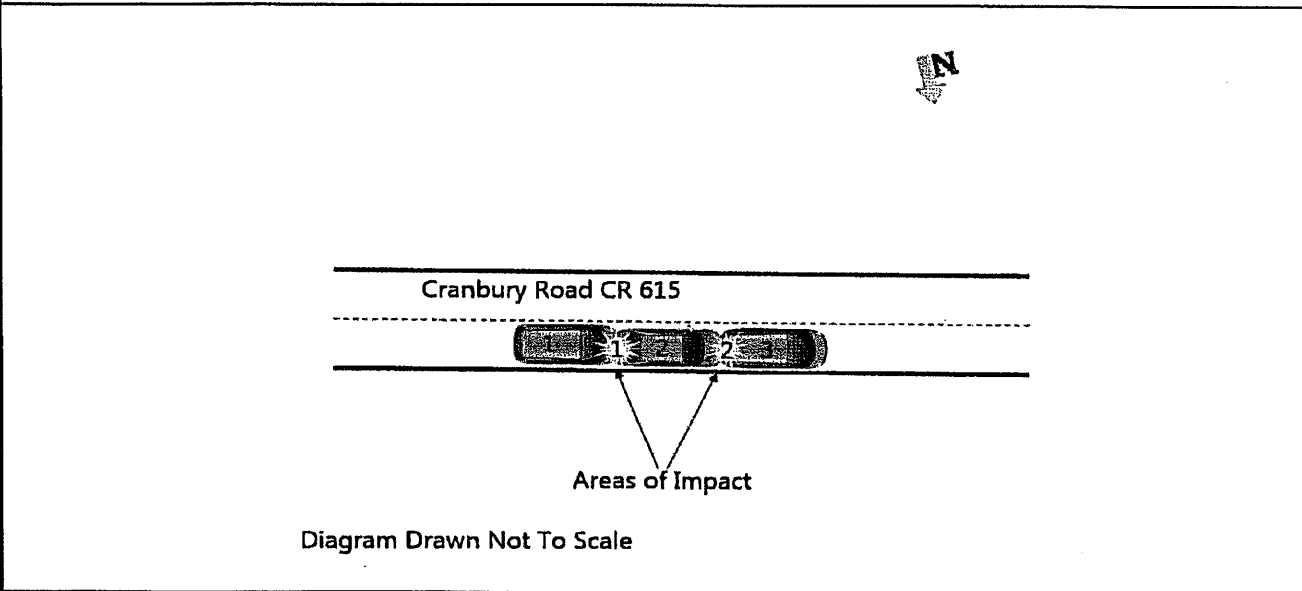
96	PAGE 2 OF 3 <input type="checkbox"/> Fatal		New Jersey Police Crash Investigation Report										<input checked="" type="checkbox"/> Reportable <input type="checkbox"/> Non-Reportable <input type="checkbox"/> Change Report													
05	1 Case Number 2019-14874			10 Crash Occurred On: CRANBURY ROAD						11 Speed Limit 25		12 Route No. 0615 - 13 Milepost 000.00		118a	25											
01	2 Police Dept of WEST WINDSOR POLICE 01			<input type="checkbox"/> At Intersection With <input checked="" type="checkbox"/> Feet <input type="checkbox"/> N <input type="checkbox"/> E of: PRINCETON-HIGHTSTOWN RD CR 571 <input type="checkbox"/> Miles <input type="checkbox"/> S <input checked="" type="checkbox"/> W						17 Cross Road Name		18 Speed Limit 40		118b	-											
01	3 Station/Precinct 2019-14874			14 400		15 1113		16 ---		19 Ramp <input type="checkbox"/> To <input type="checkbox"/> From: ---		20 Route/Name		21 Latitude		22 Longitude		119a	-							
05	4 Date of Crash mm dd yy 06/06/19		5 Day Of Week THURSDAY		6 Time (use 2400 hrs) 0807		7 Municipality Code 1113		8 Total Killed ---		9 Total Injured ---		20 Route/Name		22 Longitude		119b	-								
100a	23 Veh # 3			24 Policy No. 4506 18 03 16			25 NJ Ins. Code 148			53 Veh #			54 Policy No.			55 NJ Ins. Code			120a	01						
100b	<input type="checkbox"/> Parked <input type="checkbox"/> Ped <input type="checkbox"/> Pedalcyclist <input type="checkbox"/> Resp To Emergency <input type="checkbox"/> Hit & Run						<input type="checkbox"/> Parked <input type="checkbox"/> Ped <input type="checkbox"/> Pedalcyclist <input type="checkbox"/> Resp To Emergency <input type="checkbox"/> Hit & Run						120b			-										
02	26 Driver's First Name Initial Last Name BRIAN D YUAN						29 Sex M						56 Driver's First Name Initial Last Name			59 Sex			121a	-						
01	27 Number & Street 5 BEECHTREE LN						57 Number & Street						121b			-										
01	28 City State Zip PLAINSBORO NJ 08536						58 City State Zip						121c			-										
104	30 Eyes DL Class Restrictions Endorsements 02 D			31 State NJ			60 Eyes DL Class Restrictions Endorsements ---			61 State ---			122			08										
105	32 Driver's License Number Y90060966405942			33 DOB mm dd yyyy 05/20/1994			34 Expires mm yy 01 21			62 Driver's License Number			63 DOB mm dd yyyy			64 Expires mm yy			123	-						
106	35 Owner's First Name Initial Last Name <input type="checkbox"/> Same As Driver LILY M HUBER						65 Owner's First Name Initial Last Name <input type="checkbox"/> Same As Driver ---						124			04										
107	36 Number & Street 5 BEECHTREE LN						66 Number & Street						125			-										
108	37 City State Zip PLAINSBORO NJ 08536						67 City State Zip						126a			-										
109	38 Make TOY		39 Model HIG		40 Color BL		41 Year 2004		42 Plate No. N63JLL		43 State NJ		68 Make		69 Model		70 Color		71 Year		72 Plate No.		73 State		126b	26
110	44 VIN JTEEP21AX40026563						45 Expires 11 19			74 VIN						75 Expires			126c	-						
111	46 Vehicle Removed To						76 Vehicle Removed To						126d			-										
112	<input checked="" type="checkbox"/> Driven <input type="checkbox"/> Towed Disabled <input type="checkbox"/> Towed Disabled & Impounded <input type="checkbox"/> Left At Scene <input type="checkbox"/> Towed Impounded						<input type="checkbox"/> Driven <input type="checkbox"/> Towed Disabled <input type="checkbox"/> Towed Disabled & Impounded <input type="checkbox"/> Left At Scene <input type="checkbox"/> Towed Impounded						126e			-										
113	47 Authority <input type="checkbox"/> Owner <input checked="" type="checkbox"/> Driver <input type="checkbox"/> Police						77 Authority <input type="checkbox"/> Owner <input type="checkbox"/> Driver <input type="checkbox"/> Police						126f			26										
114	48 Alcohol/Drug Test Given: <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> Refused Type: <input type="checkbox"/> Breath <input type="checkbox"/> Blood <input type="checkbox"/> Urine Results: 0. -- % <input type="checkbox"/> Pending			49 Hazardous Material <input type="checkbox"/> None <input type="checkbox"/> On Board <input type="checkbox"/> Spill Hazard Class Placard No.			78 Alcohol/Drug Test Given: <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> Refused Type: <input type="checkbox"/> Breath <input type="checkbox"/> Blood <input type="checkbox"/> Urine Results: 0. -- % <input type="checkbox"/> Pending			79 Hazardous Material <input type="checkbox"/> None <input type="checkbox"/> On Board <input type="checkbox"/> Spill Hazard Class Placard No.			127a			-										
115	50 Carrier No. <input type="checkbox"/> USDOT <input type="checkbox"/> None <input type="checkbox"/> MC/MX			51 GVWR/GCWR <input type="checkbox"/> Weight <= 10,000 lbs <input type="checkbox"/> Weight 10,001-26,000 lbs <input type="checkbox"/> Weight >= 26,001 lbs			80 Carrier No. <input type="checkbox"/> USDOT <input type="checkbox"/> None <input type="checkbox"/> MC/MX			81 GVWR/GCWR <input type="checkbox"/> Weight <= 10,000 lbs <input type="checkbox"/> Weight 10,001-26,000 lbs <input type="checkbox"/> Weight >= 26,001 lbs			127b			-										
116	52 Motor Carrier or Government Entity						82 Motor Carrier or Government Entity						127c			-										
117	Number & Street						83 Motor Carrier or Government Entity						127d			-										
118	City State Zip						84 Motor Carrier or Government Entity						127e			-										
119	City State Zip						85 Motor Carrier or Government Entity						127f			-										
120	135 Damage To Other Property <input type="checkbox"/> Yes (If Yes, describe) <input checked="" type="checkbox"/> No						86 Motor Carrier or Government Entity						127g			-										
121	Oper. 136 Charge			137 Summons. No.			Oper. 138 Charge			139 Summons. No.			127h			-										
122	Oper. 140 Charge			141 Summons. No.			Oper. 142 Charge			143 Summons. No.			127i			-										
123	Oper. 144 Charge			145 Summons. No.			Oper. 146 Charge			147 Summons. No.			127j			02										
124	Oper. 148 Charge			149 Summons. No.			Oper. 150 Charge			151 Summons. No.			127k			-										
125	83 84 85 86 87 88 89 90 91 92 93 94 95 Names & Addresses of Occupants - If Deceased, Date & Time of Death												127l	-												
A													127m	-												
B													127n	-												
C													127o	-												
D													127p	-												

New Jersey Police Crash Investigation Report	Police Dept: WEST WINDSOR POLIC Code: 01 Station: 2019-14874 Case No: 2019-14874
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(Refer to vehicle by number)

	Veh	Pos	Phys			Loc	Type	Ref	Equip	Equip	Bag	Hosp		
	Occ	Inj/On	Eject	Cond	Age	Sex	Inj	Inj	Med	Avail	Used	Dept		Code
A	83	84	85	86	87	88	89	90	91	92	93	94	95	Names & Addresses of Occupants - If Deceased, Date & Time of Death
L														
E														
L														
F														
I														
N														
V														
O														
L														
H														
V														
E														
I														
D														
J														

144 Crash Diagram (NOT TO SCALE)



145 Crash Description/Narrative

D01 stated she crashed into V02 which in turn pushed V02 into V03.

D02 stated she was stopped in traffic when she was struck in the rear and pushed into V03.

D03 stated he was stopped in traffic when he was struck in the rear by V02.

Vehicle Damage:
01 minor to front bumper
02 minor to front and rear bumper
03 minor to rear bumper

Weather Conditions: clear, roadway dry

Investigation on scene revealed that all three vehicles remained in their final resting positions. Area of impact was determined by evidence on scene. The crash occurred on Cranbury Road, approximately 400 feet west of Princeton-Hightstown Road. V03, and V02 were stopped in traffic. D01 failed to control her vehicle and crashed into V02 causing it in turn to crash into V03. I find D01 at fault due to driver inattention. No injuries were reported or observed. No summons were issued due to the minor nature if the crash.

146 Officer's Signature CAMPBELL KNOX	147 Badge # 0077	148 Reviewer BAL	Badge # 0067	149 Case Status <input type="checkbox"/> Pending <input checked="" type="checkbox"/> Complete
---	----------------------------	----------------------------	------------------------	--

For Office Use



WEST WINDSOR TOWNSHIP POLICE DEPARTMENT

20 Municipal Drive • P.O. Box 38
West Windsor, New Jersey 08550
Robert Garofalo PhD(c), Chief of Police
Records (609) 799-9282 Fax (609) 799-6338

PERMIT NUMBER

6051

DATE: 4-8-19

BUSINESS
RESIDENCE

CHECK # 5546

Due by 4-30-2020

ALARM PERMIT RENEWAL

Please make \$25 check payable to West Windsor Township

1. Full name of applicant ANIRBAN SANBUI

2. Address of applicant: 16 DICKENS DRIVE
WEST WINDSOR, NJ - 08550

3. Telephone number: 732-297-9461 / 732-266-5470 Email: asanbui@gmail.com
rupa.sanbui@gmail.com

4. If business, common name of alarm premises: _____

5. Name, address and phone number of alarm company (if applicable) VECTOR SECURITY

2000 ERICSSON DRIVE, WARRENTON, PA - 15086, Ph: 1-800-734-1553

6. Alarm type: Burglar Fire Panic Hold Up _____ Audible Silent _____

7. Names, addresses and telephone numbers of three persons to be contacted in case of alarm and/or malfunction. (List in order depending upon shortest distance from business or residence)

1) ANIRBAN SANBUI 732-266-5470
16 DICKENS DRIVE, WEST WINDSOR, NJ - 08550

2) RUPA SANBUI 908-705-4868
16 DICKENS DRIVE, WEST WINDSOR, NJ - 08550

3) _____

8. Date of alarm system installation: DEC-30th-2015

9. Are there any flammable or hazardous substances on the premises? If so, explain:
NONE (as far as I know)

Anirban Sanbui
(Signature)



8-19-20
3rd Emt mail
EM 6-24-20
EM 3-12-20

For Office Use



WEST WINDSOR TOWNSHIP POLICE DEPARTMENT

20 Municipal Drive • P.O. Box 38
West Windsor, New Jersey 08550
Robert Garofalo PhD(c), Chief of Police
Records (609) 799-9282 Fax (609) 799-6338

PERMIT NUMBER

6332

DATE: 4/8/19

BUSINESS

RESIDENCE

CHECK # 189

Due by 4-20-20

ALARM PERMIT RENEWAL

Please make \$25 check payable to West Windsor Township

1. Full name of applicant PADMA RATI KUMAR MOGALI
2. Address of applicant: 2, DOGWOOD COURT
PRINCETON JUNCTION, NJ-08550
3. Telephone number: 347-495-2521 Email: PMOGALI@GMAIL.COM
4. If business, common name of alarm premises: NA Mogali
5. Name, address and phone number of alarm company (if applicable) C.O.P.S monitoring (Simplisafe)
800-633-2677

6. Alarm type: Burglar Fire Panic Hold Up Audible Silent

7. Names, addresses and telephone numbers of three persons to be contacted in case of alarm and/or malfunction. (List in order depending upon shortest distance from business or residence)

- 1) Jagadish Gummam PH: 848-565-4995
20, PROVIDENCE DR. West Windsor NJ-08550
- 2) SRINIVASA RAO KUCHADI - PH: ~~848-278-5443~~ 609-255-7666
119 COMMONWEALTH CT Apt #7, PRINCETON, NJ-08540
- 3) HARI MULIKA PH: 732-423-5657
15, DARVEL DR, PRINCETON JUNCTION, NJ-08550

8. Date of alarm system installation: 12/17/2017

9. Are there any flammable or hazardous substances on the premises? If so, explain:

no

(Signature)



*Em 8-19-20
EM 6/24/20
3/12/20
EM*

West Windsor Township Green Development Practices Checklist - Cover Sheet

February 14, 2019

Adopted by Environmental Commission

Development
Application Name: 400 Steps

PB 20-05
Application #

Address (Location): Rear of 19 Cranbury Road
Street # and Name

West Windsor, NJ
Town & State

Address (Mailing): _____
Street # and Name

Town & State

Name & Title: Ingrid Kohler
Print Name

Director, Landscape Architectural Services
Title

Person Completing
Checklist Ingrid Kohler
Signature

6/1/2020, 12/4/20
Date

I (above) certify that the information provided herewith is true and accurate to the best of my knowledge.

The "Green Development Practices" are intended to function as "guiding principles" for all Site and Subdivision applications in West Windsor Township. Each applicant shall be expected to responsibly incorporate as many of these items, as practical, into the project design. The practices are offered as a checklist to enable flexibility to be progressive and innovative, since many of these practices are still being incorporated into the mainstream realm of the development industry. It is expected that these items will facilitate more sustainable development. Sustainable development seeks to balance environmental, economic and social aspects of a proposal such that the resultant neighborhood or business will be efficient in cost, impact and function. This list is not intended to be exclusive; incorporation of additional "Green Development Practices" similar to these items is strongly encouraged to help achieve the goal of making West Windsor Township a more sustainable community.

By incorporating this checklist into the Township plan submission checklist, developers will be encouraged to consider "Green Development Practices" with the genesis of the project program.

Township staff will be using this checklist to review the "green" character of an application.

Applicants will be asked to provide testimony and support documents to describe the actions or practices that will be incorporated into their proposal, including verification subsequent to implementation.

Attached Checklist: 6 pages

Cover Sheet

West Windsor Township Green Development Practices Checklist

February 14, 2019

Adopted by Environmental Commission

400 Steps

PB 20-05

DEVELOPMENT APPLICATION NAME

DEVELOPMENT APPLICATION #

1. Landscape					
	Item	YES	Describe how this practice will be implemented and the benefits	NO	Reason this practice can not be integrated into this project
a	Plants - Specify only indigenous plant species within 3,000 feet of the Township Greenbelt and elsewhere when possible. Completely avoid exotic invasive plant species. Township will offer guidance for species to avoid.	<input type="checkbox"/>		<input checked="" type="checkbox"/>	Several native plant species will be used on the project. No exotic invasive species will be used.
b	Develop landscape and stormwater maintenance specifications that employ integrated pest management post-bond to assure implementation for five years after occupancy	<input checked="" type="checkbox"/>	In accordance with the NJDEP Best Management Practices (BMP), a Stormwater Maintenance Manual will be provided and must be adhered to by the owner.	<input type="checkbox"/>	
Total		<input type="checkbox"/>		<input type="checkbox"/>	

2. Water					
a	Construct drip landscape irrigation in lieu of spray systems and/or install soil water sensors to conserve irrigation water use.	<input type="checkbox"/>		<input checked="" type="checkbox"/>	Irrigation will not be provided after initial establishment period.
b	Maximize water efficiency – Use low flow fixtures for faucets, toilets and shower heads, dry fixtures, or occupant sensors.	<input checked="" type="checkbox"/>	Low flow fixtures will be utilized to the extent possible.	<input type="checkbox"/>	
c	Use native, drought tolerant plants to reduce landscape watering	<input type="checkbox"/>		<input checked="" type="checkbox"/>	Drought tolerant plants will be used to reduce landscape watering.
d	Provide a system for recycling grey water (non-potable / landscape)	<input type="checkbox"/>		<input checked="" type="checkbox"/>	
Total		<input type="checkbox"/>		<input type="checkbox"/>	

3. Stormwater Management					
	Item	YES	Describe how this practice will be implemented and the benefits	NO	Reason this practice can not be integrated into this project
a	Design and construct 10% to 30% of parking lots with pervious pavements (eco-pavers, etc.). Consider pervious paver or pavement parking stalls and drive aisles where permitted by code.	<input type="checkbox"/>		<input checked="" type="checkbox"/>	
b	Utilize pervious materials for pedestrian sidewalks and paths.	<input checked="" type="checkbox"/>	Pervious material will be used in the Grilling/gathering area.	<input type="checkbox"/>	
c	Develop innovative and progressive stormwater best management practices that embrace ecosystem-based, natural and sustainable versus artificial and high-maintenance means of treating storm water quality at the conceptual design phase (e.g., raingardens; bioretention swales / basins). Sand bottom basins are not considered sustainable since they are not ecosystem-based.	<input checked="" type="checkbox"/>	Project includes a bioretention swale. Project is designed in accordance with NJDEP Best Management Practices and complies with Nonpoint Source Pollution requirements.	<input type="checkbox"/>	
d	Re-think stormwater management — do not think of stormwater as a by-product — manage stormwater as a resource. Implement stormwater harvesting elements such as collection of stormwater in cistern that is pumped into a building for water closet flushing, or into a water feature using solar-powered pumps.	<input type="checkbox"/>		<input checked="" type="checkbox"/>	The site is not conducive to applying these practices.
Total		<input type="checkbox"/>		<input type="checkbox"/>	

4. Energy					
	Item	YES	Describe how this practice will be implemented and the benefits	NO	Reason this practice can not be integrated into this project
a	Implement solar or other alternative energy generation systems for the building, or planned development. Goal: 20% electric energy generation from on-site sustainable sources.	<input type="checkbox"/>		<input checked="" type="checkbox"/>	The site is not conducive to applying these practices.
b	Lighting - Implement L.E.D. lighting technology for site lighting fixtures. Consider solar powered pedestrian scale lighting systems and signage. Install motion sensors & timers for lights.	<input checked="" type="checkbox"/>	Site lighting fixtures will be LED and will have timers.	<input type="checkbox"/>	
c	Energy Use Reduction – Building design promotes passive solar shading & natural daylighting. Implement green roof or light color roof surface. Specify energy efficient windows. Install high eff. HVAC. Install Energy Star compliant equipment & fixtures.	<input checked="" type="checkbox"/>	Energy use reducing building design and materials will be utilized to the extent possible.	<input type="checkbox"/>	
d	Apply site planning techniques, from the W.W.Twp. high density housing ordinance - Site planning for climate & wind orientation siting building to promote energy conservation (e.g. max. south, solar building exposure, consider prevailing wind - reduce effect of cold winter wind & enhance cool summer breeze). Landscape design enhances conservation.	<input type="checkbox"/>		<input checked="" type="checkbox"/>	The site is not conducive to applying these practices.
Total		<input type="checkbox"/>		<input type="checkbox"/>	

5. Resources					
	Item	YES	Describe how this practice will be implemented and the benefits	NO	Reason this practice can not be integrated into this project
a	Specify and implement site furnishings, site improvement and exterior building materials that are manufactured locally - within a radius of 500 miles - Provide list of products and manufacturer location to be evaluated with resolution compliance	<input checked="" type="checkbox"/>	Local materials will be utilized to the extent possible.	<input type="checkbox"/>	
b	Construction Waste Management - Divert construction, demolition and land clearing debris from landfill disposal. Recycle and or salvage at least 50 % to 75% (by weight) all construction, demolition and land clearing waste.	<input checked="" type="checkbox"/>	Construction, demolition and land clearing waste will be recycled and or salvaged to the maximum extent economically practical.	<input type="checkbox"/>	
Total		<input type="checkbox"/>		<input type="checkbox"/>	

6. Social					
a	Art - Implement indigenously inspired art in the landscape (sculpture — garden — mural/ relief — artistic site furnishing, etc.) - one application per building or per 300 residential units.	<input type="checkbox"/>		<input checked="" type="checkbox"/>	This project is not conducive to this practice.
b	Reduce Light Pollution - Eliminate all light trespass from the building & site.	<input checked="" type="checkbox"/>	Site lighting has been designed to eliminate light trespass.	<input type="checkbox"/>	
Total		<input type="checkbox"/>		<input type="checkbox"/>	

7. Transportation					
	Item	YES	Describe how this practice will be implemented and the benefits	NO	Reason this practice can not be integrated into this project
a	Bicycles - Bicycle friendly parking area and road design, including exclusive or shared marked bike lanes and crossings. Provide lockable bicycle parking and lockers and showers for employees to encourage biking to work. Multi family residences should have accessible bicycle storage areas.	<input checked="" type="checkbox"/>	Bicycle storage areas will be provided.	<input type="checkbox"/>	
b	Pedestrian – Pedestrian friendly design, to encourage walking between buildings. Follow best practices in design including sidewalks, crosswalks, signs and safe access to parking lots and buildings.	<input checked="" type="checkbox"/>	Sidewalks and crosswalks between buildings and parking lots are included in the design.	<input type="checkbox"/>	
c	Public Transportation – Provide safe pedestrian and bicycle access to available nearby public transportation. Provide or work with transportation officials to provide a safe and dry waiting area for nearby public transportation.	<input checked="" type="checkbox"/>	This development is within walking distance of the Princeton Junction Train Station. Sidewalk connections will be provided.	<input type="checkbox"/>	
d	Electric vehicles – Provide electric vehicle charging stations with minimum Level 2 (240 volt) capability. Charging spots should be clearly marked as reserved for vehicles while charging only.	<input checked="" type="checkbox"/>	Accommodations for future electric vehicle charging stations will be provided.	<input type="checkbox"/>	
Total		<input type="checkbox"/>		<input type="checkbox"/>	

8. Other Green Building Practices

	Item	YES	Describe how this practice will be implemented and the benefits	NO	Reason this practice can not be integrated into this project
a	Other Green Building Practices that could be voluntarily implemented, exceeding building code requirements, to be listed for verification as part of code official review, but distinctly separate from the requirements of the building code review.	<input checked="" type="checkbox"/>	To be determined	<input type="checkbox"/>	
b		<input type="checkbox"/>			
c		<input type="checkbox"/>			
Total		<input type="checkbox"/>		<input type="checkbox"/>	

THANK YOU

**WEST WINDSOR TOWNSHIP
ENVIRONMENTAL IMPACT STATEMENT WORKSHEET**

Application Status: X Preliminary X Final ___ Concept

The purpose of this worksheet is to assist the West Windsor Township Environmental Commission in determining the environmental impact of a proposed project. The Commission will review the information as part of the Environmental Impact Statement (EIS) requirements. If the information supplied is insufficient or a high potential for an adverse environmental impact exists, then additional details on specific environmental parameters may be requested.

This worksheet has been formatted so that each question must be answered for both the preliminary and the final stages of plan submission. Consequently, this worksheet must be submitted to the Township prior to preliminary approval and again after final approval is granted by the planning board/ZBA. This procedure is used to monitor the changes that may occur during or as a result of the Township's review process.

It is recommended that the Natural Resource Inventory (NRI) Booklet (1985) and maps be used in conjunction with field acquired data and other secondary sources to accurately answer these questions. The NRI is available for purchase from the Township Community Development Department to assist the applicant in completing the worksheet. Large scale (1" = 800') natural resource maps are available for purchase from the Township Engineer.

1. Name of Applicant: 400 Steps, LLC
2. Mailing Address: 3499 ROUTE 9 NORTH, SUITE 1-E
FREEHOLD, NJ 07728
3. Telephone Number: (732) 625 – 1055 Fax Number: (732) 625 – 1060
E-mail: mmkk_mc@yahoo.com
4. Name of Property Owners: 400 Steps, LLC
5. Mailing Address: Same as above
6. Telephone Number: Same as above Fax Number: _____
E-mail: _____
7. Name of Agent: ACT Engineers, Inc.
8. Mailing Address: 1 Washington Boulevard, Suite 3
Robbinsville, NJ 08691
9. Telephone Number: (609) 918-0200 Fax Number: (609) 918-1411
E-mail: ikohler@actengineers.com

10. Name of Development: 400 STEPS
11. Type of Development: RESIDENTIAL (APARTMENTS)
12. Application Number: PB20-05
13. General Location of proposed project (street address or nearest intersection):
BEHIND BL.5 / LOT 20 (ELLSWORTH CENTER), 330± FT. NORTH OFF OF CRANBURY ROAD
14. Area of project: 3.85 acres; dimensions: _____ (Enclose Site Location
Map with project area delineated.)
15. Intended use of property (include details such as number of units, volume, etc.):
Preliminary: DEMOLISH ABANDONED COMM'L FACILITIES AND
Final: CONSTRUCT FOUR (4) APARTMENT BLDGS w/144 UNITS
Concept _____
- Generally describe the present and past use of the site.
SITE WAS DEVELOPED AS A COMM'L FACILITY (2 BLDGS, MULTIPLE STORES IN THE 1990'S) BUT
WAS ABANDONED / NEVER OCCUPIED. BUILDINGS AND ALMOST ALL IMPROVEMENTS WILL BE
DEMOLISHED AND REPLACED WITH FOUR 2-STY APARTMENT BUILDINGS, WITH A NEW DRIVEWAY
AND PRKING LAYOUT SCHEME, NEW UTILITITES, AND WILL UTILIZE / UPGRADE EXIST. DET. BASIN.
16. Construction dates (month/year) for which permit is requested: (If more than one
phase is anticipated, give dates for each phase.)
- Preliminary:
Begin Winter/Spring 2021 End Winter/Spring 2022
- Final:
Begin Winter/Spring 2021 End Winter/Spring 2022
- Concept:
Begin _____ End _____
17. List any other permits for this project from federal, state, local, or other governmental agencies for which you have applied or will apply, including the name of the issuing agency, whether the permit has been applied for, and if so, the date of the application (leave blank if not submitted), whether the application was approved or denied (including date) or pending, and the number of the application or permit.

Agency	Permit Type	Date Submitted	Number	Status
Concept:				

18. Topographic Slope

19a. Do slopes >10% occur on the site? ___ yes X no

If yes, give the acreage: 10-15% slope ___ acres

(Identify on map.) >15%-20% slope _____ acres

(Identify on map.) >20% STEEP SLOPES acres

19b. Will slopes >10% be developed? If yes, give details.

Preliminary: ___ yes ___ no

Final: ___ yes ___ no

Additional details may be presented in the mitigative measures section.

19. Excavation/Fill

20a. Has any portion of the site been excavated? X Yes Filled? No (Identify on map.)

20b. Do you plan to excavate? X Yes Or fill? No (Identify on map.)

20. Flood Hazard and Riparian Buffers

21a. Do sections of the site lie within the floodway or flood hazard areas and/or a required riparian buffer?

___ Yes X no If yes, how much?

___ acres in flood hazard area ___ acres in floodway (Identify on map.)

___ in feet riparian buffer ___ acres riparian buffer area (Identify on map.)

21b. How will the flood hazard area and floodway be disturbed or developed?

Preliminary: _____

Final: _____

Concept: _____

Additional details may be provided in mitigative measures section.

21c. Did the applicant use the flood insurance maps produced by the Federal Emergency Management Agency (FEMA) dated May 1, 1984 to identify the flood hazard areas noted on the plan? yes ___ no

If not, what other source was used? _____

21. Aquifer Recharge

22a. Describe the geologic formation(s) at the site.

22b. How many acres of the following categories are present on the site? (Identify on map.)

Area of Prime Aquifer Recharge: 0 acres

Area of Moderate Aquifer Recharge: 0 acres

Area of High Aquifer Recharge: 0 acres

Area of Low or Minimal Aquifer Recharge: 0 acres

22c. How many acres of prime and high aquifer recharge areas will be covered at full development?

Preliminary: ___ acres-prime recharge Final: ___ acres-prime recharge
 _____ acres-high recharge acres-high recharge

Concept _____ acres-prime recharge Final: _____ acres-prime recharge
 _____ acres-high recharge acres-high recharge

Measures used to encourage recharge should be discussed in the mitigative measures section.

22. Depth of Seasonally High Water Table

23a. What is the extent of the following depth to water table categories on the site? (Identify on map.)

Deep or Usually Deep: 0 acres _____ ft.)

Shallow to Moderately Shallow: _____ 0 acres (___ ft.)

Very Shallow 0 acres (_____ ft.)

23b. How will the areas of shallow, moderately shallow and very shallow depths to water table be developed? (Identify on map.)

Preliminary: _____

Final: _____

Concept: _____

23c. Will areas of the site be artificially drained? ___ yes X no

Preliminary yes no

If yes, give details: _____

Final yes no

If yes, give details: _____

Concept yes no

If yes, give details: _____

Additional comments may be presented in the mitigative measures section.

23. Suitability for Septic System Effluent Disposal (Answer only if on-site sewerage treatment will be used for the project.)

24a. How many acres of the following categories are on the site?

Few to slight limitations for septic effluent: N/A acres

Moderate to severe limitations for septic effluent: N/A acres

Severe to very severe limitations for septic effluent: N/A acres

Describe limitations:

24b. Will the areas having severe or very severe limitations be used for septic system effluent disposal?

Preliminary: ___ yes ___ no

If yes, describe measures which will be used to protect water quality in the mitigative measures section. If any percolation tests have been conducted, please attach details.

Final: ___ yes ___ no

If yes, describe measures which will be used to protect water quality in the mitigative measures section. If any percolation tests have been conducted, please attach details.

Concept: _____ yes ___ no

If yes, describe measures which will be used to protect water quality in the mitigative measures section. If any percolation tests have been conducted, please attach details.

24c. Are there any potable water wells (existing or proposed) in the vicinity of the proposed septic system effluent fields?

Preliminary yes ___ no Final ___ ___ ___ yes X no

Concept: _____yes _____no

If yes, are they down gradient from the septic system fields?

Preliminary yes ___ no Final _____yes X no

Concept: _____yes _____no

What is the distance between the wells and the closest disposal field? ___feet

Preliminary ___ feet Final: ___ feet

Concept: _____yes _____no

What is the depth of each existing or proposed well? _____feet

Additional Comments:.....

24d. Are there any existing ponds, proposed stormwater detention/retention basins or streams in the vicinity of the proposed septic fields?

Preliminary ___ yes ___ no Final _____yes ___ no

Concept: _____yes _____no

If yes, what is the distance between the water body and the closest disposal field?

Preliminary ___ feet Final: ___ feet

Concept: _____feet

Please include map or schematic drawing to aid explanation if necessary.

Additional Comments:.....

24e. Do any of the proposed septic fields overlie prime aquifer recharge areas?

Preliminary: ___ yes no Final: ___ yes no

Concept: _____yes _____no

24. Suitability for Buildings with Basements (Answer only if basements are proposed on the site.)

25a. What is the extent of the following categories on the site?

Slight limitations for basements: acres

Moderate limitations for basements: acres

Severe limitations for basements: acres

25b. What are the reasons for the limitations (i.e., flooding, slope, drainage, etc.)? _____

25c. Are buildings with basements planned for areas of severe limitations?

Preliminary: ___ yes ___ no Final: ___ yes ___ no

Concept: _____yes ___ no

If yes, what corrective measures will be taken?

Preliminary: _____

Final: _____

Concept: _____

Additional details may be provided in the mitigative measures section.

25. Vegetation and Wildlife Habitat (Provide location map for all vegetation and trees.)

26a. What are the predominant vegetation categories on the site and their acreage before and after development? (Identify on map.)

Vegetation Type	Acres Existing	Acres Post Development
Preliminary:		

Vegetation Type	Acres Existing	Acres Post Development
Final:	0	0

Vegetation Type	Acres Existing	Acres Post Development
Concept:		

26b. List the number and species of trees on the site having a diameter at breast height (dbh) of 12 inches or greater. (Identify on map.)

Number	Species	

Will any of these large diameter trees be removed due to construction? (Identify on map.)

Preliminary: ___yes___no Final _ --yes_____no

Concept: ___ __yes_____no

26. Green Belt

27a. Is the Township Green Belt, as it appears on the approved land use plan, present on the proposed development site? (Identify on map.)

27b. If yes, how many acres does it cover? _____ acres

27c. If yes, do you plan to disturb the Green Belt area? ___ _yes ___ no

Preliminary: ___ __, es ___ no Final ___ __es ___ no

Concept: ___ __, es _____no

27d. How many acres of the Green Belt are proposed to be lost to development?

Preliminary: ___ acres Final: _____ acres

Concept: ___ acres

27e. How many acres of the Green Belt are proposed to be covered by a conservation easement or dedicated to the Township?

Preliminary: _____ acres Final: _____ acres

Concept: _____ acres

Additional Comments:.....

28. Land Suitability for Development The project is part of the Princeton Junction
Redevelopment Plan per the West Windsor Master Plan.

28a. What is the extent of the following suitability categories on the site as defined in the most recently approved Natural Resource Inventory?

Most suitable for development: _____ acres

Moderately suitable for development: _____ acres

Unsuitable for development: _____ acres

28b. Using the matrix of soil suitability in the most recently approved Natural Resource Inventory: check the factors causing the soils on site to be unsuitable for development.

_____ slope

_____ erosion hazard

_____ drainage

_____ depth to bedrock

_____ depth to seasonally high water table

_____ runoff potential

_____ suitability for septic drainage field

28c. If development is proposed on areas considered unsuitable for development, what corrective measures will be taken?

Preliminary: _____

Final:.....

Concept: _____

29. Environmentally Sensitive Areas

29a. Does the proposed development site include any environmentally sensitive areas as defined on the Environmentally Sensitive Area map in the most recent, approved Natural Resource Inventory? _____ yes X no

29b. If yes, check the environmentally sensitive area category which occurs on the site and give acreage:

	Sensitive Areas	<u>Preliminary</u>	Final Acreage
		Acreage	
	Wetlands		
	Freshwater Marshes		
	Flood prone Acres		
	Prime Aquifer Recharge Areas		
	Woodland and Wildlife (Green Belt Plan)		
	Prime Agricultural Land		
	Archaeological Sites (number)		
	Historical Sites and Routes (number)		
	Streams with Extremely Low Flow		

29c. Will these environmentally sensitive areas be impacted by development?

Preliminary: ___ ---yes ___ no Final ___ _yes . no

Concept: ___ _yes_____no

Explain: (More details may be given in the mitigative measures section.)___ _

30. Historic/Archaeological Sites

Is the proposed project located within 500 feet of an area or structure having recognized historic, cultural or archaeological value?___ _yes X no

31. Surface Water

31a. Do any streams run through the property?___ yes X no

31b. What is the distance to the nearest stream off the property?850 feet

31c. Are these point (i.e., wastewater treatment plant discharges) or nonpoint (i.e., stormwater) pollution sources on or near the site?___ _yes X no

If yes, give details:_____

31d. If a stream exists on the property, give a brief description of its condition including details on, but not limited to, flow, nutrient levels, aquatic community, substrate, bank stability: _____

31e. If any surface water impoundments exist on the site, indicate below their present surface area and average depth. Will these dimensions be changed after site development?

	Surface Area	Average Depth
Impoundment 1		
existing condition		
post development		
Impoundment 2		
existing condition		
post development		

31f. What types of fish are found in the impoundments?

31g. Are the impoundments _____ natural, or _____ man-made?

31h. Are the impoundments used for _____ fishing, _____ irrigation, or
 other?

31i. Additional comments on impoundment quality: _____

32. Water Supply

32a. What is the anticipated daily demand for water?

Preliminary: _____ average; _____ peak

Final: TBD _____ average; _____ peak

Concept: _____ average; _____ peak

32b. What is the proposed source of water for the project?

Public – New Jersey American Water

32c. Are there known groundwater pollution problems on or near the site?

X yes _____ no

Is there a groundwater supply problem _____ yes X no If yes, give details:

32d. If the water is to be supplied from the site, attach a statement substantiating the adequacy of the water source and assessing the potential impact on existing and proposed wells and streams within the predicted zone of influence.

32e. If a development of fifty (50) or more dwelling units is proposed, certification of adequacy (of proposed water supply) must be obtained from the New Jersey Department of Environmental Protection (NJDEP). (List permit number under Question No. 18.)

32f. If the water is to be supplied from the site or other new source and the total project demand for water supply is in excess of 100,000 gallons per day, the applicant must obtain a diversion permit from the NJDEP and, where applicable, the Delaware River Basin Commission. (List permit number under Question No. 18.)

32g. If water is to be supplied by an existing public or private facility, attach documentary proof that the facility has the available excess capacity to supply the proposed project and is willing to do so. State location of the existing distribution point to which the proposed project would be connected.

33. Wastewater Management (Answer only if off-site treatment system is proposed.)

33a. What is the projected daily wastewater flow?

Preliminary: _____ average; _____ peak Final _____ average; _____ peak

Concept: _____ average _____ peak

33b. Will any non-domestic wastewater be produced by the project?

Preliminary: _____ yes _____ no Final _____ yes _____ X no

Concept: _____ ---yes _____ no

If yes, give details:

Preliminary _____

Final: _____

Concept: _____

33c. Attach documentation on the facility to be used for wastewater treatment, correspondence with NJDEP Division of Water Resources and, if required, the Delaware River Basin Commission.

34. Solid Waste Management (List permit number under Question No. 18.)

34a. What is the proposed method of solid waste disposal?

On-site dumpsters

34b. Estimate the volume of solid wastes, by type, expected from the proposed project during construction and during operation.

During Construction: _____

During Operation: _____

35. Air Quality (Answer only if commercial or industrial development is proposed.) (List permit number under Question No. 18.)

List sources, identify, and quantify air pollutants which will be generated by the project:

(See Section 5.11 of the Site Plan Ordinance for West Windsor's Technical Performance Standards.) Provide detail in mitigative measures section, if necessary.

36. Noise Levels (Answer if nonresidential use is proposed or if proposed residential development has more than five (5) dwelling units.) Describe sources, location and decibel rating for noise generation on-site after construction. (See Section 5.11 of the Site Plan Ordinance for West Windsor's Technical Performance Standards.)

No anticipated environmentally adverse effects to acoustical quality during redevelopment.

37. Land Use

37a. Check types of land use occurring on parcels adjacent to project site. (Identify on map.)

residential commercial ___ industrial recreational
___ agricultural ___ institutional _____ vacant

37b. What are the effects (detrimental and beneficial) of proposed development on adjacent land uses?

The Beneficial effects of the proposed development on adjacent land uses is the revitalization of a dilapidated abandoned eyesore.

38. Mitigation Measures

Describe the methods that will be used during and after construction to avoid or minimize adverse environmental impacts associated with the project. Use additional sheets as required.

Silt Fences, dust control measures, noise control measures, and associated methods to avoid or minimize adverse environmental impacts associated with the project.

39. Adverse Impacts Which Cannot be Avoided

List all adverse environmental impacts that will be caused by the proposed development, including the construction phase and post-development. Short-term impacts should be distinguished from long-term impacts. Reversible impacts should be distinguished from irreversible impacts. Specify the types of impacts on critical areas which include, but are not limited to, the Green Belt, streams, floodways, wetlands, steep slopes, areas of high water table, prime aquifer recharge areas and mature strands of native vegetation (specify the type of critical area involved). Define the extent of the area to be affected and the extent of similar areas of the site which will not be affected.

The project is a redevelopment project located in the RP-12 zone (Redevelopment Plan District). No long-term adverse environmental impacts are anticipated.

40. Proximity to Electrical Transmission Lines, Distribution Lines or Substations

Is proposed development site located near an electric utility Right of Way (ROW) or electrical substation? (Identify on map.) yes no

If yes:

40a. What is the distance from the utility ROW in relation to boundaries of the proposed building site? Please include map or schematic drawing to aid explanation.

40b. What is the kV*** voltage in the transmission* and/or distribution** lines?

40c. How many dwelling units will actually back up to the utility ROW?

40d. What is the proposed distance of dwelling units from the edge of the utility ROW?

40e. What are the projected magnetic field measurements for those dwellings backing up to the ROW?

41. Is radon present on the site? ___ yes ___ no ___ X Unknown

If so, what measures will be taken to mitigate radon accumulation? _____

*Transmission Lines - high voltage power lines that efficiently carry electric power over long distances from generating facilities to substations. Lines are mounted on high towers and voltages are usually 115kV, 230kV and 500kV.

**Distribution Lines - secondary conductor power lines that radiate from a substation and carry electrical power to local neighborhoods. Voltages are usually 11-15kV but 26kV and 69kV are also classified as distribution lines.

***kV - refers to voltage or the electrical force that causes electrical current to flow in a conductor (wire). The electrical force or "strength" is measured in volts.

Attachment D – Major Development Stormwater Summary

General Information	
1. Project Name:	400 STEPS
2. Municipality:	WEST WINDSOR TWP County: MERCER Block(s): 5 Lot(s): 19
3. Site Location (State Plane Coordinates – NAD83):	E: 458,900 N: 541,100
4. Date of Final Approval for Construction by Municipality:	TBD
Date of Certificate of Occupancy:	TBD
5. Project Type (check all that apply):	Residential <input checked="" type="checkbox"/> Commercial <input checked="" type="checkbox"/> Industrial <input type="checkbox"/> Other (please specify) _____
6. Soil Conservation District Project Number:	TBD
7. Did project require an NJDEP Land Use Permit?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Land Use Permit #: TBD
8. Did project require the use of any mitigation measures?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
If yes, which standard was mitigated?	_____

Site Design Specifications	
1. Area of Disturbance (acres):	3.8 Area of Proposed Impervious (acres): 0.2 AC NEW IMPERV.
2. List all Hydrologic Soil Groups:	A, B, D
3. Please Identify the Amount of Each Best Management Practices (BMPs) Utilized in Design Below:	
Bioretention Systems	1
Constructed Wetlands	___
Dry Wells	___
Extended Detention Basins	1
Infiltration Basins	___
Combination Infiltration/Detention Basins	___
Manufactured Treatment Devices	1
Pervious Paving Systems	___
Sand Filters	___
Vegetative Filter Strips	___
Wet Ponds	___
Grass Swales	___
Subsurface Gravel Wetlands	___
Other	___

Storm Event Information	
Storm Event - Rainfall (inches and duration):	2 yr.: 3.31" - 24 hr 10 yr.: 5.01" - 24 hr
	100 yr.: 8.33" - 24 hr WQDS: 1.25" - 2 hr
Runoff Computation Method:	
NRCS: Dimensionless Unit Hydrograph	<input checked="" type="checkbox"/>
NRCS: Delmarva Unit Hydrograph	<input type="checkbox"/>
Rational	<input type="checkbox"/>
Modified Rational	<input type="checkbox"/>
Other:	_____

Basin Specifications (answer all that apply)	
If more than one basin, attach multiple sheets	
1. Type of Basin:	EXTENDED DETENTION Surface/Subsurface (select one): Surface <input checked="" type="checkbox"/> Subsurface <input type="checkbox"/>
2. Owner (select one):	<input type="checkbox"/> Public <input checked="" type="checkbox"/> Private: If so, Name: 400 STEPS, LLC Phone number: 732-625-1055
3. Basin Construction Completion Date:	TBD
4. Drain Down Time (hr.):	25.3 hr
5. Design Soil Permeability (in./hr.):	N/A
6. Seasonal High Water Table Depth from Bottom of Basin (ft.):	7.9 ft Date Obtained: 2/20/20
7. Groundwater Recharge Methodology (select one):	2 Year Difference <input type="checkbox"/> NJGRS <input type="checkbox"/> Other <input type="checkbox"/> NA <input checked="" type="checkbox"/>
8. Groundwater Mounding Analysis (select one):	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> If, Yes Methodology Used: _____
9. Maintenance Plan Submitted:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Is the Basin Deed Restricted: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>

Comments:

Name of Person Filling Out This Form: _____

Signature: _____

Title: _____

Date: _____

2/2/2018

Basin Specifications (answer all that apply)

If more than one basin, attach multiple sheets

1. Type of Basin: BIORETENTION	Surface/Subsurface (select one): Surface <input checked="" type="radio"/> Subsurface <input type="radio"/>
2. Owner (select one): <input type="radio"/> Public <input checked="" type="radio"/> Private: If so, Name: 400 STEPS, LLC Phone number: 732-625-1055	
3. Basin Construction Completion Date: TBD	
4. Drain Down Time (hr.): 17.1 hr	
5. Design Soil Permeability (in./hr.): 0.8 in/hr	
6. Seasonal High Water Table Depth from Bottom of Basin (ft.): 3.08 ft Date Obtained: 2/20/20	
7. Groundwater Recharge Methodology (select one): 2 Year Difference <input type="radio"/> NJGRS <input checked="" type="radio"/> Other <input type="radio"/> NA <input type="radio"/>	
8. Groundwater Mounding Analysis (select one): Yes <input checked="" type="radio"/> No <input type="radio"/> If, Yes Methodology Used: HANTUSH EQ	
9. Maintenance Plan Submitted: Yes <input checked="" type="radio"/> No <input type="radio"/> Is the Basin Deed Restricted: Yes <input checked="" type="radio"/> No <input type="radio"/>	

Basin Specifications (answer all that apply)

If more than one basin, attach multiple sheets

1. Type of Basin:	Surface/Subsurface (select one): Surface <input type="radio"/> Subsurface <input type="radio"/>
2. Owner (select one): <input type="radio"/> Public <input type="radio"/> Private: If so, Name:	Phone number:
3. Basin Construction Completion Date:	
4. Drain Down Time (hr.):	
5. Design Soil Permeability (in./hr.):	
6. Seasonal High Water Table Depth from Bottom of Basin (ft.):	Date Obtained:
7. Groundwater Recharge Methodology (select one): 2 Year Difference <input type="radio"/> NJGRS <input type="radio"/> Other <input type="radio"/> NA <input type="radio"/>	
8. Groundwater Mounding Analysis (select one): Yes <input type="radio"/> No <input type="radio"/> If, Yes Methodology Used:	
9. Maintenance Plan Submitted: Yes <input type="radio"/> No <input type="radio"/> Is the Basin Deed Restricted: Yes <input type="radio"/> No <input type="radio"/>	

Basin Specifications (answer all that apply)

If more than one basin, attach multiple sheets

1. Type of Basin:	Surface/Subsurface (select one): Surface <input type="radio"/> Subsurface <input type="radio"/>
2. Owner (select one): <input type="radio"/> Public <input type="radio"/> Private: If so, Name:	Phone number:
3. Basin Construction Completion Date:	
4. Drain Down Time (hr.):	
5. Design Soil Permeability (in./hr.):	
6. Seasonal High Water Table Depth from Bottom of Basin (ft.):	Date Obtained:
7. Groundwater Recharge Methodology (select one): 2 Year Difference <input type="radio"/> NJGRS <input type="radio"/> Other <input type="radio"/> NA <input type="radio"/>	
8. Groundwater Mounding Analysis (select one): Yes <input type="radio"/> No <input type="radio"/> If, Yes Methodology Used:	
9. Maintenance Plan Submitted: Yes <input type="radio"/> No <input type="radio"/> Is the Basin Deed Restricted: Yes <input type="radio"/> No <input type="radio"/>	

Name of Person Filling Out This Form: REECE NORDEEN

Signature: 

Title: ENGINEER IN TRAINING (EIT)

Date: 10/15/20