

Summary of Comments from Initial Submittal
Masonboro Lodge Phase 2
6/23/14

THE COMMENTS BELOW WERE PROVIDED BY THE TRC AND DISCUSSED AT THE 6/13/14 MEETING. THE ENGINEER'S RESPONSES ARE IN BOLD TYPE.

Planning

Jim Diepbrock

6/10/14

Initial comment: Improving pedestrian connections into the parking lot from Navaho Trail is highly recommended. This could be accomplished with concrete sidewalk running from the public sidewalk along both sides of the proposed building to the proposed parking lot.

SIDEWALK ADDED TO WEST SIDE OF BUILDING. THERE IS NO ROOM FOR A SIDEWALK ON THE EAST SIDE OF THE BUILDING. BASED ON INPUT FROM TRC WE HAVE ELECTED TO MOVE THE ACCESS TO THE NORTHEAST CORNER OF THE BUILDING TO DIRECT PEOPLE TRAFFIC DIRECTLY OUT TO SIDEWALK ALONG NAVAHO TRAIL.

Planning reserves the right to comment further.

Fire Comments

Chris Elrod

6/10/14

Is the second floor residential, apartments or condominiums. Are there plans for putting a sprinkler system in as with the first phase. if so Standard Fire Department Comments must be added to the utility plan.

THE BUILDING IS PLANNED FOR A SPRINKLER SYSTEM. A DEDICATED FIRE LINE IS PLANNED TO COME OFF EXISTING 12" WATER MAIN DIRECTLY INTO BUILDING'S NORTH WEST CORNER AND INTO A RISER ROOM. THE BFP WILL BE CONTAINED INSIDE BUILDING.

Angela Faison

Preliminary Environmental Planning Comments

June 11, 2014

1. As noted on the plan, the property is located in the Watershed Resource Protection Area.

SO NOTED

2. According to Section 18-257, the site is a Commercial District Mixed Use project. Residential density may exceed two and one-half (2.5) units per acre in the Watershed Resource Protection areas if the development does not exceed a maximum of twenty-five (25) percent impervious area, or is exceptionally designed. Exceptionally designed projects shall meet the criteria of Article 10 and shall reduce runoff from impervious surfaces through porous paving and/or infiltration devices as well as managing runoff with at least one (1) or more of the following water quality best management practices (REF: NCDENR Best Management Practices Manual for design criteria): bio-retention area, filter strip, sand filter, or grassed swales, or other approved LID techniques.

SITE HAS BEEN IS EXCEPTIONALLY DESIGNED USING APPROVED METHODS.

3. A maximum of 25% impervious surface coverage allowed or the project must be Exceptionally Designed in accordance with Article 10.

SITE HAS BEEN IS EXCEPTIONALLY DESIGNED USING APPROVED METHODS.

4. Submit a narrative in accordance with Art. 10, if the project impervious surface coverage exceeds 25%. Exceptional Design includes incorporating Low Impact Development Techniques such as, but not limited to: pervious materials for driveways, side walk and road access, rain gardens, cisterns, roof gardens, use of drought tolerant/ native plants, disconnecting roof drains, etc.

NARRATIVE WAS PREVIOUSLY SUBMITTED. THE NARRATIVE IS RESUBMITTED WITH UPDATED NUMBERS .

5. The property is located in the Whiskey Creek watershed. Any new development design that goes beyond minimum stormwater regulations has a measurable positive impact on water quality within the watershed. Please consider some of the low impact design alternatives located within the Wilmington-New Hanover County LID Guidance Manual, that include:
 - a. Direct any sidewalk runoff to adjacent vegetation to capture, infiltrate, and treat runoff

ACCOMPLISHED

- b. Disconnecting roof drains from the pipe network

ROOF DRAINS ARE DIRECTED INTO THE PREVIOUS PAVEMENT TO ALLOW FOR INFILTRATION.

- c. Utilizing pervious material for new sidewalks, drive ways, etc.

PARKING AND WALKS ARE DESIGNED IN PREVIOUS CONCRETE.

- d. Utilizing native vegetation for landscaping for the site,

DONE

- e. Additional LID alternatives are located in the Wilmington-New Hanover County LID Guidance Manual

THANK YOU

City Engineering
Traffic
Bill McDow
6/11/14

All comments are based on adopted policy documents, specific City of Wilmington Land Development Code (CofW LDC) and City of Wilmington Technical Standards and Specifications Manual (CofWTSSM) requirements in effect at the time of this review. These have been noted after the comment as appropriate for your ease in further research.

The City Engineer may administratively approve dimensional variance requests per LDC Sec. 18-348. If the Applicant feels further interpretation is in order, please contact Transportation Planning directly to discuss in additional detail. Please apply for all administrative variances in

writing, an email is acceptable or this may be included on the plan set. Please see Sec. 18-348 of the Land Development Code for the information required to process a variance request.

SO NOTED

BASE INFORMATION:

- Revise all sheets to accurately illustrate the existing conditions on and surrounding this parcel. Show location of utilities, adjacent traffic signs, lane configurations, overhead/ underground fiber optic cable, traffic control devices and pavement markings on the sheets for existing conditions and the site plan. Please refer to the Technical Standards and Specifications Manual (link is below) Ch. VII C.1.a.2. for specific information and distance requirements. Contact Traffic Engineering at 341-7888 if you need assistance locating these elements.

THIS SITE IS A PHASE 2 OF PREVIOUS PROJECT. THIS PROJECT WILL NOT IMPACT OFF SITE UTILITIES. DETAIL SHOWN.

NCDOT:

It is the Applicant's responsibility to coordinate directly with NCDOT to determine if any driveway permits/ revisions/ review processes are required. Contact Allen Hancock, PE at 910. 251.2655. Please note additional comments may be forthcoming once coordination occurs.

DRIVEWAY WAS CONSTRUCTED UNDER PHASE I OF THE PROJECT. NO ADDITIONAL NCDOT PERMITTING IS REQUIRED.

TECHNICAL STANDARDS – ACCESS (driveway, sidewalk, sight distance):

1. Show proposed driveway centerline elevations at both the front and the back of each concrete driveway apron, at the curb line, property line & points at 26' and 52' behind the property line. ([Chapter VII, C\(1\)\(a\)\(2\)12 CofWTSSM](#))

DRIVEWAY PERMITTED AND CONSTRUCTED UNDER PHASE 1 OF THIS PROJECT.

2. Dimension driveway widths and tapers. ([Sec. 18-529 CofW LDC](#))

DRIVEWAY PERMITTED AND CONSTRUCTED UNDER PHASE 1 OF THIS PROJECT.

3. The minimum two-lane driveway width is 23'. ([7-9 CofW Tech Stds](#))

THANK YOU

4. Distinguish between proposed and existing sidewalk(s) and provide dimensions on the site plan.

COMPLETED

5. The project has frontage on Navaho Trail and Masonboro Loop Road, however, no public sidewalk is proposed. If the applicant received a variance for the public sidewalk during phase 1 of the project, please provide information on the variance.

PHASE 1 OF THE PROJECT HAS SIDEWALK ON NAVAHO TRAIL. NO SIDEWALK ALONG MASONBORO LOOP DUE TO VERTICAL CLEARANCE ISSUES. A SIDEWALK HAS BEEN PROPOSED ALONG NAVAHO TRAIL FOR PHASE 2 AND IS SHOWN ON THE PLANS.

6. Provide a detail for the proposed wood decking sidewalk over the rain garden.

THE WOODEN SIDEWALK OVERPASS HAS BEEN ELIMENATED. NO DETAIL NEEDED.

7. Provide sidewalk detail SD 8-15 on the plan.

DETAIL ADDED TO SHEET C1

8. Show any traffic signal facilities and equipment in front of the development. Contact Traffic Engineering at 341-7888 for help in identifying these.

SO NOTED. PROJECT WILL NOT IMPACT ANY TRAFFIC FACILITES.

9. Show and apply the City's 20'x70' sight distance triangle at each driveway on the site plan and landscaping plan. ([Sec.18-529\(c\)\(3\)CofW LDC](#)) Add a note indicating that all proposed vegetation within sight triangles shall not interfere with clear visual sight lines from 30"-10'. ([Sec.18-566 CofW LDC](#))

SO NOTED. SIGHT TRIANGLE IS SHOWN ON LANDSCAPE PLAN

TECHNICAL STANDARDS – PARKING:

10. Dimension parking stalls, radii and parking aisles. ([Sec. 18-529\(b\)\(2\) CofW LDC](#))

DIMENSIONS ARE SHOWN ON SHEET C1.

11. The minimum standard parking vehicle space is 8.5' in width by 18' in length.

SMALL VEHICLE PARKING IS PLANNED

12. The proposed parking lot appears to utilizing small vehicle spacing with a vehicle overhang over sidewalks and curbing. When the 2.5' vehicle overhang is being used without wheel stops the parking lot should utilize 4" curb.

SO NOTED 4" CURB SHOWN ON DETAIL

13. Show the dimensions for landscaping islands on the site plan. The minimum radius is 25' for any portion of a parking lot adjacent to a travel way (i.e. islands at the end of a parking bay) for parking that is open to the public. If the travel way will not be used for emergency service vehicles or truck traffic, you may request a tighter radius, the minimum is 15'. This request must be made in writing (an email message is acceptable). ([Chapter VII, Detail SD 15-13 CofWTSSM](#))

SO NOTED. NO EMERGENCY VEHICLE ACCESS IS ANTICIPATED INTO THE SITE. ALL BUILDINGS ARE ACCESSIBLE FROM STREET FRONTAGE

14. Protection from vehicles is required around all required landscaped areas within vehicular areas.

ALL LANDSCAPE ISLANDS ARE PROTECTED BY CURBING

15. Provide information on the required and provided bike parking spaces in the site data table.
16. The landscaping plan sheet for L1.1 was not included with the submission, please provide the sheet.

I BELIEVE IT WAS INCLUDED. FINAL LANDSCAPE PLANS PROVIDED WITH THIS SUBMITTAL

17. The proposed sidewalk appears to be 4' in width. Provide 5' sidewalk on the site plan to meet Cow Technical standards and ADA requirements. ([Chapter VII, Detail SD 15-13 CofWTSSM](#))

5' SIDEWALK PROVIDED

GENERAL NOTES TO ADD TO THE PLAN:

- A. All pavement markings in public rights-of-way and for driveways are to be thermoplastic and meet City and/or NCDOT standards. ([Detail SD-13 CofW Tech Stds](#))

SEE NOTE 18 COVER SHEET

- B. All signs and pavement markings in areas open to public traffic are to meet MUTCD (Manual on Uniform Traffic Control Devices) standards. ([Detail SD 15-13 CofW Tech Stds](#))

SEE NOTE 17 ON COVER SHEET

- C. All traffic control signs and markings off the right-of-way are to be maintained by the property owner in accordance with MUTCD standards.
- D. All parking stall markings and lane arrows within the parking areas shall be white.

SO NOTED. NOTE IS ON COVER SHEET. SEE NOTE 18

- E. A utility cut permit is required for each open cut of a City street. Note this on the plan and contact 341-5888 for more details. In certain cases an entire resurfacing of the area being open cut may be required.

SEE NOTE 19 ON COVER SHEET

- F. Any broken or missing sidewalk panels, driveway panels and curbing will be replaced.

COVER SHEET NOTE 12

- G. A landscaping plan indicating the location of required street trees shall be submitted to the City of Wilmington Traffic Engineering Division and Parks and Recreation Department for review and approval prior to the recording of the final plat. ([SD 15-14 CofW Tech Stds](#))

LANDSCAPE PLAN IS INCLUDED WITH PLAN SET.

- H. Contact Traffic Engineering at 341-7888 forty-eight hours prior to any excavation in the right of way.

COVER SHEET NOTE 11

MISCELLANEOUS:

* Transportation Planning Staff will review the landscape plan once submitted for compliance with sight distance requirements.

LANDSCAPE PLAN SUBMITTED

* Transportation Planning Staff reserves the right to review and comment on any additional plans submitted for this development.

SO NOTED

Please let me know if you have any questions or if I can be of further assistance as this development moves through the review process.

THANK YOU

Additional Planning Comments

Jim Diepbrock 6/12/14

This is a reactivation of the plan that was being processed for release in 2007. Per the applicant, this building will be sprinklered.

YES DETAIL ON THE DEDICATED FIRE LINE IS SHOWN ON THE PLANS INCLUDING BFP DEVICE TO BE LOCATED INSIDE THE RISER ROOM OF THE BUILDING

Fire

There was discussion regarding configuring fire line and backflow preventers.

Capt. Elrod will send relevant specs to the designer

CAPT. ELROD FORWARDED STANDARD NOTES ON 6-17-14. THEY ARE LISTED BELOW AND SHOWN ON THE COVER SHEET. SEE NOTES

Urban forestry

There appears to be agreement regarding trees/vegetation proposed for removal as well as that proposed to be preserved. Protection fencing needed for preservation and for proposed area to remain natural. Please use code-mandated tree save signage, att. To fencing. Aaron is your contact on this.

NOTED ADDED TO PLANS SEE SHEET C1 MID LEFT HAND SIDE.

Environmental

Past exceptional design criteria that was prev. submitted is acceptable; however,

LEAST WE DID NOT HAVE TO REINVENT THE WHEEL. THANK YOU

Asked for update to the narrative If revisions needed, just mark narrative up and initial the revised document.

I HAVE MARKED UP THE NARRATIVE AND AM INCLUDING IT WITH THIS ANNOTATED COMMENTS

Stewardship good for award this phase possibly can be considered for award, just as was

received for Phase I

SO NOTED

Transportation

Sidewalk on Navaho frontage - **SIDEWALK IS PLANNED FOR NAVAHO TRAIL**

Why was sidewalk not provided on Masonboro Loop with Phase I. **PER ALLAN HANCOCK AT NCDOT VERTICAL CLEARANCE WAS THE DECLINING FACTOR.**

Parking space overhangs/header curb please dimension this properly per the stds.

DETAIL HAS BEEN MODIFIED

CFPUA

This phase proposes to extend private extensions that are in place. No public main extensions or new meters are proposed.

FIRE SERVICE WILL BE COORDINATED WITH CFPUA. SEPERATE REVIEW WILL BE DONE. IN ADDITION THE OWNER HAS REQUESTED A SEPERATE WATER METER FOR THIS BUILDING

Planning

6/12/14

Please provide a Sidewalk connection to Navaho Trail

SIDEWALK ADDED TO WEST SIDE OF BUILDING WITH CONNECTION TO NAVAHO TRAIL

City Stormwater/Plan review engineering

Engineering has the necessary materials; however, a new fee is required.

SO NOTED. SEPERATE SUBMITTAL WILL BE MADE TO ENGINEERING OFFICE

No state permit was ever issued for Phase I.

CORRECT

Derek is willing to approve a city permit pretty much as is.

ONE CAN HOPE

Ensure that enough stone under the perv concrete is used

CALCUALTIONS FROM THE DENR BMP MANUAL WILL BE INCLUDED WITH SEPERATE SUBMITTAL TO ENGINEERING

Note sidewalk connection is needed that does not interfere with rain garden proposed to be constructed near the Navaho Trail frontage.

BASED ON NEW ALLOWABLES PER NCDOT/COW IN REGARDS TO PERVIOUS PAVEMENT THIS RAIN

GARDEN HAS BEEN ELIMENATED.

Planning Development Transportation has no further comments at this time.

Fire Comments

6/17/14

- Fire Hydrants cannot be further than 8' from the curb - **COVER SHEET NOTE 22**
 - Parking and Landscaping cannot block Fire Hydrants or FDC's - **NOTE 23**
 - FDC's can be no further than 40' from Fire Department Vehicle Placement - **NOTE 24**
 - FDC's can be no further than 150' from a Fire Hydrant. **NOTE 25**
 - All weather access road must be maintained around construction site at all times. **NOTE 1**
 - New Hydrants must be brought into service prior to combustible materials being delivered to the job site. - **N/A EXISTING FIRE HYDRANT AVAIABLE**
 - Type of Construction of Building according to the International Building Code must be present on the plans. - **INCLUDED ON ARCHITECTURAL PLANS**
 - Hydrants shall be of sufficient numbers to accommodate base fire flow requirements of structure. **SO NOTED**
 - In addition to the standard comments, additional fire protection and accessibility requirements may be required due to any special circumstances concerning the project.-**SO NOTED**
 - Private Underground Fire Lines require a separate underground fire line permit from the Wilmington Fire and Life Safety Division 910-343-0696 **SO NOTED**
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Masonboro Lodge
Project Narrative

The proposed Masonboro Lodge development, being considered for conditional district rezoning to O&I, includes three residential units in an area designated as a Resources protection land class in the most recent CAMA land classification map. Impervious surfaces on residential developments are limited to 25% of the total buildable area on the site, and residential density is limited to 2.5 units/acre (Article 6, sec 18-298 of the Wilmington Land Development Code). However, if the project meets certain requirements it is an exceptionally designed project. Impervious surface area and residential density may be increased (Article 10). This narrative is a summary of the project elements intended to satisfy these requirements.

Section 18-543 Baseline Criteria

Site Assessment

A site inventory map has been submitted as a required part of the rezoning application (Sheet L1.1), including topography, existing drainage swales, and existing trees. This map is based on a survey conducted by Danford and Bristow Land Surveying, PA dated December 15, 2005.

The site does not contain any wetlands, conservation overlay districts, or areas of environmental significance. It is approximately 0.93 acres in size and is mostly cleared with the exception of several pine trees with some understory growth along the perimeter and one large oak tree which will be preserved. Currently, most stormwater runoff is absorbed on site, as there are no existing impervious surfaces.

The proposed plan will add 2 buildings (8,837 SF), regular concrete walkways (567 SF), previous concrete sidewalks (1,121 SF) and pervious concrete parking and sidewalks (12,624 SF). Because of changing environmental laws Phase 1 pervious pavement can be credited at 40% and Phase 2 pervious pavement can be credited at 75%. Total net coverage of the site with the weighted number by using pervious concrete credits equals 14,071 SF of coverage 34.7% of the site.. The stormwater runoff not absorbed by the pervious pavement will be managed and filtered by several bioretention basins located about the site. Another measure to control runoff will be the use of xeric landscaping for at least 50% of the site. All buffer yards and interior parking lot islands will be adequately landscaped to fulfill the requirements of Article 8.

Development Plans

A preliminary site plan has been submitted as a required part of the rezoning application (Sheet L2.1). The plan shows footprint areas for both buildings and the parking lot, as well as conceptual locations of the bioretention facilities and xeric landscape areas.

Low Impact Development Techniques

The project seeks to maintain the hydrological function of the site and mimic predevelopment runoff patterns by maximizing infiltration and retention of the stormwater onsite.

a) Small scale techniques for managing precipitation as close as possible to where it hits the ground will include pervious paving material on the parking lot and some sidewalks as well as bioretention basins to control excess runoff from rooftops and the parking lots as well as thru curb cuts and gutter discharge where necessary. Bioretention basins have been strategically located at low points on the site.

b) Linked lot level controls will not be applicable due to the small area of the site.

c) Devices that allow infiltrating rainfall water to groundwater: pervious pavement and bioretention will serve this function as well.

d) Site fingerprinting: the two proposed building have been sited to restrict ground disturbance to the smallest area possible and minimize adverse impact on the adjacent properties, leaving adequate landscape buffer yards and streetyards. All existing significant trees will be preserved. Limits of areas to be disturbed and tree protection areas will be clearly indicated during construction. Existing topography will be maintained. Soil compaction will be maintained in undisturbed areas to allow for adequate infiltration, and sub-base material for the pervious parking lots will be engineered for maximum infiltration capacity. Use of pervious pavement will minimize coverage of the site as much as possible.

Note: To further limit the impact of the project on the water and sewer systems, low-flow water fixtures will be installed.

Summary of Points claimed to meet Exceptional Design Criteria

Points required for increase in impervious area to 35%	30
Points claimed for 50% xeric landscaping	15
Points claimed for bioretention facilities on-site	20
Total Points claimed	35

Impervious Surface Calculations

Total Site Area	40,511 SF
Buildings & Non pervious walks	9,953 SF
Pervious Parking & Walks	<u>4,118 SF</u>
Total	14,071 SF
Percent of Site	34.7%