

**Minutes**  
**Zebulon Technical Review Committee**  
**January 25, 2011**

Present: Mark Hetrick-Planning, Scott Finch-Police, Sidney Perry-Fire, Rick Hardin-Manager, Lisa Markland-Town Clerk, Julie Wilkins-Planning, Chris Ray-Public Works, Keith Tew-City of Raleigh, Debra Green-Stormwater

Others Present: John with HR Associates, Pam Porter

Mark Hetrick called the meeting to order at 10:00am.

The minutes from November 30, 2010 and December 28, 2010 were adopted by consensus.

**NEW BUSINESS**

*TRC-2011-06—Boys and Girls Club of Zebulon*

Mark Hetrick stated that they would be reviewing the site plan for the proposed Boys and Girls Club to be located at the corner of Old Bunn Road and Shepard School Road.

Police

Scott Finch stated that the Police Department's biggest concern was the traffic and turning in and out of the facility. Mark Hetrick explained that one of the curb cuts had been removed and a turn lane on Shepard School Road was proposed.

City of Raleigh

Keith Tew stated that Patrick Paine had the following comments.

1. Show water main in Old Bunn Rd.
2. You cannot have more than a 30" drop in sewer manhole. You show an 8 foot drop you can adjust slope or step down with another manhole
3. These plans will require construction approval
4. If sewer service is 8" you need to have a manhole not a cleanout
5. You will need a backflow on fire hydrant use detail W-34
6. If there will be a pool then pool water drained to sanitary must be limited to 50 GPM

Keith Tew said that their main concern was the addition of the backflow device for the fire hydrant leg.

If the adjacent residences were tied onto the sewer leg they may need to address that in the construction drawings and how they would maintain uninterrupted service as much as possible.

The water meter appeared to be on the property and not in the right of way, since the sidewalk was right up against the right of way. The meter could be placed right up against the sidewalk within a two by two utility easement.

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They did not show a water main on Old Bunn Road. After discussions earlier in the day he stated that there was a water line that another development had already extended. Please show the water main on the plans on the appropriate side of the road.

### Stormwater

Debbie Green had the following comments on stormwater.

Debbie stated that she had spoken with them briefly before and there would be additional information that they would need such as verification of the wetland delineation, and some drainage area worksheet showing flow paths to support the design tool they were using. Said she would have more detailed comments for the applicant by the end of the week.

A thorough and complete review of the stormwater management plan could not be completed prior to the TRC meeting. The plans and stormwater calculations were picked up last Thursday, January 20<sup>th</sup>. Detailed comments regarding design will be available by the end of the week. General comments follow:

1. Submit a drainage area worksheet for post construction to show the sub drainage areas of runoff that are directed to the bioretention pond. What portion of the total impervious surface area is being directed to the pond?
2. Please show flow paths on the D.A. worksheet for sheet, shallow, and channel flow, both pre and post.
3. Submit verification of the wetland delineation by NCDENR.

### **Erosion and Sedimentation Control Plan:**

The sediment control plan is incomplete and will be reviewed upon submittal of construction plans to Wake County. At that time,

1. Please clearly delineate the limits of construction (including off-site utility and road improvements)
2. Include pipe dissipater design and dimensions
3. Include detailed construction sequencing for use of the BMP as temporary sediment control and then conversion to a bioretention structure
4. Improve the clarity of the proposed contour elevations to be legible
5. Clearly show the proposed inlet protection device for the BMP riser (how will the orifices be plugged and a skimmer or custom basin spillway attached?)
6. Include all supporting design information as applicable

Rick Hardin did not have any comments at this time.

### Fire

Sidney Perry had the following comments.

1. Fire apparatus access roads shall have an unobstructed width of not less than 20 feet. Rear roadway shows 13 feet.( Fire code 503.2)

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2. Application has fire sprinkler checked “no” under water section. An assembly bldg. over 12,000 sq. feet requires a sprinkler system. (Fire code 903.2.1.3)
3. Provide City of Raleigh specification hydrant at first entrance of Shepard School Road. (City of Raleigh manual, page 39 , section 2)

John with HR Associates the project architect said that there were two separate fire areas. The gym would be one fire area and the rest of the building would be the second fire area and would be separated by a two hour separation. The maximum occupancy would be 300 based on the 15’ per square foot. The building was essentially noncombustible since it was concrete block and steel so the biggest issue with the sprinkler system would have been the accidental hitting of the sprinkler heads with athletic equipment.

### Public Works

Chris Ray had the following comments.

1. Please have engineer provide lighting plan for site. Submittal Requirements:
  - Engineer Seal Photometric Plan for property.
  - ISO Foot-candle curves
  - Photometric plan should provide the average foot-candle, maximum foot-candle, minimum foot-candle, coefficient variation
  - Luminary Schedule should provide fixture type, quantities, label, lamp, arrangement, Lummis, and pole description
  - Engineer drawings for installation requirements
  - Plan profile of Pole and Fixture.
  - The maximum illumination at the edge of property line adjacent to residential zoning - 1 foot candles.
  - Commercial and Industrial Properties are required to provide 1.0 candle foot horizontal average along street, sidewalks and parking lots to ensure safety of vehicular traffic, pedestrian traffic and provide pedestrian security.
  - Commercial/Industrial Fixture: A metal or fiberglass poles in black, brown or green not to exceed 25 feet in height with a directional shoebox fixture with full cutoff. High pressure sodium or Metal Halide lamps may be used. Surrounding development may dictate type of fixture style and lamp approved by the Town of Zebulon. Development continuity is an overriding consideration during the approval process. No wood or aluminum poles will be allowed. Other fixture and pole types will be evaluated on a case by case basis.
2. Sidewalks
  - Please include NCDOT Sidewalk and handicap ramps details
  - Please add Double Handicap Ramp and connection @ intersection of Bunn and Sheppard School per NCDOT standards
  - Please add walkway striping per NCDOT Standards
  - Please provide curb and gutter entrance on Bunn Street.
  - Sidewalks to be dedicated to TOZ at completion of project. All other roadway improvements shall remain the responsibility of NCDOT.

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- At completion of project; Contractor/property owner shall provide the Town with a one year warranty for dedicated sidewalk.
  - Field locate Sewer Manhole at the south side of the property along Sheppard School outside of sidewalk.
3. Construction Inspection:
- Construction Inspection for sidewalk will be provided by the Town of Zebulon. Please coordinate all work with Jason Brown. Jason can be reached at 795-5640. The contractor must provide a 72 hour notice to the Town prior to construction. A pre-construction meeting with inspector is required before any sidewalk work begins.
  - It is the responsibility of the contractor and property owner to maintain adequate stormwater control devices throughout the duration of the project.
  - Reminder that the property owner/contractor is responsible for obtain NCDOT encroachment agreement. Town of Zebulon needs a fully executed copy of this agreement.
4. Recommendation: Consideration of Fence surrounding Stormwater BMP
5. Update: Revised L-2 does not match C-3 regarding widening
6. Update: Revised L-2 does not match C-1 regarding utilities location.

Pam Porter the landscape designer from Tony Tate Landscape Architecture stated they had a lighting plan from Progress Energy and it was not sealed. Chris Ray said that the Town accepted the plans from Progress Energy without a seal.

Planning

Mark Hetrick had the following comments.

1. Per SU 2011-02:
  - a. Condition #3 – voluntary annexation petition required for utility connection
  - b. Condition #4 – sidewalk and curb and gutter required along Old Bunn Road
  - c. If proposing irrigation, show compliance with Condition #5 which states “*If reclaimed water becomes available at this property, the development must connect to serve all non-potable uses*”.
  - d. Return signed SUP copy to the Planning Department
2. Note correct address – *1320 Shepard School Road*
3. “Do Not Enter” signage for Old Bunn Road egress
4. Submit updated plans showing all site and roadway modifications
5. Provide site lighting plan
6. Landscaping
  - a. **Type “C” landscaping buffer** (eastern and southern property boundaries)
    - i. Requires a large shade tree spaced no greater than 50’ apart
    - ii. 5 bushes (3 gallon, 18” in height minimum) spaced in between shade trees
    - iii. Buffer trees show “WO”, but landscaping plant list key shows “PO”
  - b. **Streetscaping** (northern and western road frontages)
    - i. 5 bushes (3 gallon, 18” in height minimum) spaced in between shade trees
    - ii. Large shade trees shall be a minimum of 2 ½” caliper (Red Buds)

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7. Signage is not approved and will need to be submitted to the town. Sign installation may be included with the appropriate building permit for the site, but a separate sign permit will need to be filled out with the town. All signage must be located 20' outside of any right-of-way.
8. Fees will be calculated once building permit is dropped off, and all fees will need to be paid at the time the building permit is picked up.
9. Provide building elevations with plan

There were no further comments and the meeting was adjourned at 10:36am.

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Date

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Mark Hetrick—Planning Director

SEAL

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Lisa M. Markland, CMC—Town Clerk