

- 4 On the drainage plan, we would like to see locations and weir sizes for emergency outfalls.
- 5 What is the pipe size ^{24"} on the drainage plan for the west pond (9A)?
- 6 Drainage plan still lists CN numbers for post as 86.
- 7 Pond 10B should include in its pond routing calcs, the commercial runoff of the east lot that is purported to become future commercial with no detention. Pond 10B needs revised pre and post calcs to reflect accommodation of the east most basin that was omitted, and commercial CN's should use 95 or 96.
- 8 Report needs to be resubmitted as a final document in pdf format, stamped by a P.E.
- 9 Submit revised plat w/ minimum pad elevations & drainage easements.
- 10 Emergency out for storm water in the event SWS is blocked appears to be an issue for lots 12-16 (near Steeplechase Ct). VO's should be a minimum of 1 ft above the emergency out elevation. A spot elevation and drainage easement should be shown for said path of water.

Davidson, Tim

From: Davidson, Tim
Sent: Tuesday, December 08, 2009 1:06 PM
To: 'Joseph Hickle'
Subject: Carriage Oaks comments SWS

Joe,

Just a few comments to consider if Carriage Oaks is resurrected:

- SWS should have some slope to it so it can have self-cleaning velocities.
- SWS flow elevations were different than the static, dry pond elevations.
- I was surprised by the difference in elevations of adjacent ponds for the 100-yr storm given how they were hydraulically connected. The ponds seem to be in pairs, and the one on the east side of a given pair was almost 1 ft higher in pool elevation for the 100-yr event; also, since the outfall of these pairs is to the east, it seemed odd for the east pond to have a higher pool.
- We do not want Greenwich to be overtopped until the 100-yr event. *connected and sent via email — capacity of Greenwich crossing should not be exceeded.* ~~Detention should not exceed the capacity of the Greenwich crossing.~~
- There should be an indication in the plans for capturing runoff into SWS from the proposed commercial site.
- If ponding is to occur around the Greenwich SWS crossing, we would like a stage-storage table for it.

Thanks!

Tim Davidson
Storm Water
Associate Engineer, EIT
316-268-4307
tdavidson@wichita.gov

Davidson, Tim

From: Davidson, Tim
Sent: Wednesday, July 22, 2009 10:24 AM
To: 'joshua.golka@pec1.com'; 'Joseph.Hickle@pec1.com'
Cc: Lindebak, Scott
Subject: Carriage Oaks revisions

Joe, Josh,

The following is our list of concerns regarding the revisions on Carriage Oaks:

1. The west side is still confusing. The storm sewer plan shows the corner elevations as being different from the grading plan. If the grading plan is to be adopted, it seems like you would have to re-grade into private properties in Remington Place 3rd to get slopes to the swale that are vertical. It is unclear between plans what is matching and what is not. We are not convinced that the grading plan shows all the water from the west side is detained into pond 9A as shown in the drainage plan basin outline.
2. The SWS in the SW corner of pond 9A is confusing for us. The elevations for FL and Top appear to make it a 6" pipe. Also, given the natural grade around this pond, is the very SW corner of the plat supposed to be an inlet?
3. East pond outfall pipe must be contained in an easement (20-40'?) with an overflow path that is sized to convey events greater than a 100-yr flood.
4. On the drainage plan, we would like to see locations and weir sizes for emergency outfalls.
5. What is the pipe size on the drainage plan for the west pond (9A)?
6. Drainage plan still lists CN numbers for post as 86.
7. Pond 10B should include in its pond routing calcs, the commercial runoff of the east lot that is purported to become future commercial with no detention. Pond 10B needs revised pre and post calcs to reflect accommodation of the east most basin that was omitted, and commercial CN's should use 95 or 96.
8. Report needs to be resubmitted as a final document in pdf format, stamped by a P.E.
9. Submit revised plat w/ minimum pad elevations & drainage easements.
10. Emergency out for storm water in the event SWS is blocked appears to be an issue for lots 12-16 (near Steeplechase Ct). VO's should be a minimum of 1 ft above the emergency out elevation. A spot elevation and drainage easement should be shown for said path of water.

Thanks,

Tim Davidson
Storm Water
Associate Engineer, EIT
316-268-4307
tdavidson@wichita.gov

Davidson, Tim

From: Davidson, Tim
Sent: Thursday, July 16, 2009 11:54 AM
To: 'Joseph.Hickle@pec1.com'
Cc: Lindebak, Scott
Subject: Carriage Oaks

Joseph,

Regarding Carriage Oaks and Storm Water's initial review:

- Need drainage easements through the backyards.
- Curve number calc revisions – post-development should be an 88, not an 86.
- Revise the grading plan so that the west pond outfall drains to a defined waterway or pond – with an offsite easement.
- Extend SWS pipe from Greenwich Rd to east pond outfall – through an appropriate easement.
- Minimum pad elevations for Lots 3-8, Blk 1 and Lot 8 Blk 2.

To avoid deferral, please make the corrections and submit them to Storm Water by the end of the business day, Monday.

Additional comments will arrive later, today.

Tim Davidson
Storm Water
Associate Engineer, EIT
316-268-4307
tdavidson@wichita.gov

Davidson, Tim

From: Davidson, Tim
Sent: Monday, July 20, 2009 5:38 PM
To: 'Rob Hartman'; 'Joseph.Hickle@pec1.com'
Cc: Lindebak, Scott
Subject: carriage oaks

Joe, Rob,

I had more time to go over the grading plan for Carriage Oaks. Additional comments:

- Flow elevations for end-sections on SWS.
- Rim elevations for field and curb inlets.
- Pond elevations (static & 100-yr).
- Lot 5, SW corner seems to have a typo or low spot.
- Lot 5 has < 1% cross-lot drainage.
- VO's on Lots 4, 5, 16, 15, 10 – seem too low, either in terms of emergency out issues, or not meeting minimum drops from lowest opening to the low point in the yard.
- Looks like a drainage easement should go along the berms on 19th St (if not already specified).
- Spot elevations along the S edge of berm on 19th St along drainage path. As it is, the corner elevations distort the intent of the drainage as some corner elevations are on the top of berms and others are near the base of the berm. Such elevations might clear up the emergency out issues which currently appear in the backyards of lots 12-16.

Thank you,

Tim Davidson
Storm Water
Associate Engineer, EIT
316-268-4307
tdavidson@wichita.gov

July 23, 2009

**Carriage Oaks Development
PEC Project No. 35-09223-5526**

Comment Agenda:

Date	Item	Comment
7/16/2009	1	Missing top of curb elevations
	2	Is the water on the west draining off the subdivision onto adjacent property? -- spot swales to the pond are needed.
	3	Is the berm going to remain along 19th? -- if so I am worried about emergency outs for some of the homes.
7/20/2009	1	Flow elevations for end-sections on SWS.
	2	Rim elevations for field and curb inlets.
	3	Pond elevations (static & 100-yr).
	4	Lot 5, SW corner seems to have a typo or low spot. <i>OK</i>
	5	Lot 5 has < 1% cross-lot drainage. <i>OK</i>
	6	VO's on Lots 4, 5, 16, 15, 10 -- seem too low, either in terms of emergency out issues, or not meeting minimum drops from lowest opening to the low point in the yard.
	7	Looks like a drainage easement should go along the berms on 19th St (if not already specified).
	8	Spot elevations along the S edge of berm on 19th St along drainage path. As it is, the corner elevations distort the intent of the drainage as some corner elevations are on the top of berms and others are near the base of the berm. Such elevations might clear up the emergency out issues which currently appear in the backyards of lots 12-16.
7/22/2009	1	The west side is still confusing. The storm sewer plan shows the corner elevations as being different from the grading plan. If the grading plan is to be adopted, it seems like you would have to re-grade into private properties in Remington Place 3rd to get slopes to the swale that are vertical. It is unclear between plans what is matching and what is not. We are not convinced that the grading plan shows all the water from the west side is detained into pond 9A as shown in the drainage plan basin outline.
	2	The SWS in the SW corner of pond 9A is confusing for us. The elevations for FL and Top appear to make it a 6" pipe. Also, given the natural grade around this pond, is the very SW corner of the plat supposed to be an inlet?
	3	East pond outfall pipe must be contained in an easement (20-40'?) with an overflow path that is sized to convey events greater than a 100-yr flood.