

Appendix I

Agency Meeting Minutes



Environmental Assessment

LPGA BLVD EXTENSION PD&E STUDY

LPGA Environmental Advisory Group

December 2, 2004 Meeting

LPGA Boulevard Extension PD&E Study

FN: 4010252-1-22-01

From Tomoka Farms Road (CR 415) to US 92

Volusia County

ATTENDEES: Bill Walsh, FDOT
Steve Tonjes, FDOT
Jack Freeman, KAI PM
Joan Budzynski, SJRWMD
Donna Steinbach, Port Orange
Mike Disher, Port Orange
Belinda Collins, Daytona Bch.

John Marshall, DOF
Cathy Lowenstein, DOF
Mike Neidhart, VCMPO
Brian Scheick, FFWCC
Ginger Martin, Volusia Co.
Rosanne Prager, CH2M HILL
Karen Snyder, CH2M HILL

COPIES: Attendees
Richard Fowler, FDOT
David Dangel, Inwood

Carol Barker, CH2M HILL

FROM: Karen A. Snyder and Rosanne Prager

DATE: January 31, 2005

A Kickoff Meeting for the Environmental Advisory Group for the referenced LPGA Boulevard Extension was held on December 2, 2005. Listed below is a summary of the key items that were discussed in the meeting.

- Mr. Jack Freeman provided an overview of the proposed project for the new extension of LPGA Boulevard from Tomoka Farms Road (CR 415) to US 92. The majority of the study area is located within Volusia County and City of Port Orange right-of-way. The proposed LPGA section between Landfill Road and I-4 is within the Volusia County landfill property.
- It was presented in the meeting the importance for this EAG as part of the overall public involvement process in accordance with the NEPA process and the FDOT PD&E guidelines. The goal for this meeting was to introduce the EAG to this project and the PD&E process. Another EAG Meeting will be scheduled during the Alternative Analysis phase of the project to obtain feedback on the alternative

alignments that are being considered, and allow input on which is the preferred alternative for the extension of LPGA.

- The proposed alignments B-1 and B-2 that are being considered were presented in the meeting. The existing conditions that have been identified for the project from an environmental and drainage standpoint (wetlands, wildlife, and floodplain) were presented in the meeting. Potential impacts that may occur with the proposed project were discussed. However, these potential impacts will not be quantified or estimated till the alternative analysis phase and further refinement of the alignments have occurred. Ms. Lowenstein and Ms. Belinda Collins were interested in the estimated wetland impacts for both Alignments B-1 and B-2.
- The closest Bald Eagle nest occurs approximately 1,500 feet of the northern end of the proposed roadway. This location is at the intersection of the existing LPGA Boulevard and US 92. The nest was last active in 2000. Confirmation of this nest tree, or any new nests in the area, has not been obtained yet for the post-2004 hurricane season. The area just north of US 92 did sustain extensive tree damage encountered with the September 2004 storms.

Although no evidence of black bear was found in the field, and no reports of bear sightings have been made by the landfill operators, bears are suspected to move through the area. This information is based on available records of several road kills in the area along I-4, US 92, and LPGA Boulevard. Mr. Brian Scheick with FFWCC discussed in the meeting that larger animal underpasses were not recommended due to the potential road-crossing hazard posed to the black bears if routed east toward the intersection of I-95/US 92/CR 415. Additionally, due to the dense human population east of I-95, routing bears in an east/west direction and closer to that area would increase the nuisance reports of black bears in the area.

Mr. Scheick stated that the black bear movement in this area is more likely coming from a north/south direction and not an east/west direction. Another project for widening I-4 west of our project includes constructing three new large wildlife crossings to allow this north/south movement to continue for the black bears in the Tiger Bay conservation area, which is located two to five miles west of our project study area. For this LPGA Boulevard Extension project, smaller wildlife underpasses with exclusionary chain link and funnel fencing is being considered at this time.

- Mr. John Marshall asked about the realignment of the Tomoka Farm's weigh station. He inquired if Landfill Road could be closed east of the proposed LPGA to CR 415 and utilize Shunz Road or proposed Alignment B-2 in connecting to CR 415. There was discussion that this option would only work and dependent on the Madeline Avenue project being constructed that is being currently studied. It was concluded in the meeting that this would need to be further discussed with the Volusia County Engineering and Solid Waste Staff.
- Mr. Brian Scheick asked about CR 415 and if there is any plans with Volusia County to widen. Mr. Freeman did reply that Volusia County is currently studying that corridor for 415 from US 92 South and east of our study area.

- Mr. Freeman briefed the EAG on the nearby developments that are either already currently under construction; permitted and planned for construction; or on the county's approved master plan for this area.
- Ms. Cathy Lowenstein asked about the future 4 lanes of LPGA being considered under this study. It was discussed in the meeting that only 2 lanes for the new extension of LPGA is being considered for this PD&E Study since only 2 lanes are warranted from a traffic standpoint. However, the future 4 lanes of LPGA is still be taken into account when estimating the horizontal alignment and vertical profile grade for this new extension. Therefore, the full 4 lane typical section width is being considered when estimating the vertical and horizontal profile of the project. The existing and proposed utilities for City of Port Orange at Shunz Road were discussed since that section is being proposed for Alignment B-2. This will have to be further considered and evaluated during the Alternative Analysis phase due to the potential impacts.
- Mr. Freeman presented in the meeting that the alignments were proposed specifically to minimize and avoid wetlands and floodplains to the greatest extent possible. Alignment B-1 was proposed to avoid some of the Tomoka River Floodplain areas in the southern portion just west of CR 415.
- In discussions with Ms. Joan Budzynski/SJRWMD it has been determined that the portion of the project north of I-4, only, is considered to be within the designated Outstanding Florida Water (OFW) for the Tomoka River. Therefore, 50 percent additional water quality treatment will be required for the northern section of LPGA Extension from I-4 to US 92. The First Baptist Church will be constructing this northern section of the proposed LPGA Boulevard Extension from US 92 to their proposed entrance road, that is located just north of I-4. The proposed church development will be responsible for providing the required treatment, attenuation, and floodplain compensation for the northern section of the LPGA Boulevard Extension from US 92 to the centerline of the new bridge crossing over I-4.
- It was demonstrated in the meeting that the LPGA Extension study area is located much further east of the Tiger Bay State Forest. This was determined in coordinating with the State Division of Forestry which confirmed that Clark Bay Tract within the Tiger Bay Forest is located further west of the northern section of the LPGA Extension between I-4 and US 92. The proposed project is located southeast of the Rima Ridge Tract within the Tiger Bay State Forest, which is located north of US 92.

Environmental Advisory Group Meeting No. 2

LPGA Boulevard Extension PD&E Study

From CR 415 (Tomoka Farms Road) to SR 600 (US 92)

Volusia County, Florida

FIN: 410252-1-22-01

MEETING DATE: February 16, 2005

MEETING LOCATION: Port Orange Regional Library
10:00 AM - 12:00 PM

ATTENDEES: Bill Walsh, FDOT
Steve Tonjes, FDOT
Jack Freeman, KAI
Joan Budzynski, SJRWMD
Rick Ottesen, SJRWMD
Donna Steinbach, Port Orange
Lauren Kornel, Volusia County
Susan Gaze, Tomoka F. Landfill

Joe Grusauskas, Tomoka Landfill
Walt Thompson, N. Conservancy
Robert Boggs, Daytona Beach
Cathy Lowenstein, DOF
Alexa Ross, Sierra Club
Rosanne Prager, CH2M HILL
Karen Snyder, CH2M HILL

COPIES: Attendees
Richard Fowler, FDOT

David Dangel, Inwood
Carol Barker, CH2M HILL

FROM: Karen A. Snyder, CH2M HILL

DATE: March 25, 2005

A second Environmental Advisory Group Meeting for the referenced LPGA Boulevard Extension was held on February 16, 2005. Listed below is a summary of the key items that were discussed at the meeting.

- Mr. Jack Freeman provided a brief powerpoint presentation overview of the proposed project for the new extension of LPGA Boulevard from Tomoka Farms Road (CR 415) to US 92. The road would be maintained by Volusia County as a local road and has been identified as the #3 priority by the Volusia MPO. Two alternative alignments have been considered under the study's alternative analysis phase, Alignment B-1 and B-2. Both alignments were described in detail. Alignment B-1 is longer than Alignment B-2. Alignment B-2 ties into the Madeline Avenue Extension in the vicinity of the existing Shunz Road and CR 415 intersection. The Madeline Avenue Extension is a Volusia County roadway that is being extended from Williamson Road westward to CR 415. Right-of-way for this project between I-95 and CR 415 is being donated by the Corraci family as part of a large development located east of CR 415 and west of I-95. Mr. Walt

Thompson inquired about whether traditional mitigation would be utilized for this project. He mentioned that mitigation for wetland impacts might be redirected to include some net gain for upland impacts. He would prefer to see mitigation in the form of preservation along the corridor to be more meaningful.

- Mr. Thompson asked if the additional fill from the excavation of stormwater and floodplain compensation ponds during construction being considered for wetland mitigation? It was discussed that this type of detail has not been evaluated during the study phase but could be implemented during design and development of the construction specifications.
- He recommended that landscape linkage could be incorporated to benefit the black bears. This mitigation approach is one where a broader view of the surrounding landscape is taken into consideration to help identify strategic mitigation areas. This may include preservation, or enhancement and preservation of uplands and/or wetlands in areas further away from the project corridor. However, because of their location and type, these approaches will soften wetland upland impacts along the project corridor. This broader view also has a strong temporal component in that, future land uses in (and adjacent to) the project area should be taken into consideration when looking for strategic mitigation areas that will serve as meaningful wildlife movement corridors. The U.S. Army Corps of Engineers are not as favorable of this type of mitigation, because the federal wetland protection rules do not allow wide latitude in giving full credit on wetland impacts by providing upland preservation.
- Mr. Freeman discussed some potential alignment shifts that have been raised recently by the Volusia County Solid Waste and during the Project Design Team meetings. According to several agencies (including the Volusia County Solid Waste, City of Port Orange Utilities, and Volusia County), all are in agreement with making some slight modifications to Alignments B-1 and B-2. The adjustments involve the following:
 1. Consider avoidance of an existing Tomoka Farms Landfill wetland mitigation area, by shifting the Alignment B-1/B-2 to the east approximately \pm 700 feet at I-4/LPGA Boulevard.
 2. Reduce impacts to the landfill's drainage canal located on the eastern edge of their property between Landfill Road and I-4. This serves as the drainage outfall for the Landfill's NPDES permit. The original intent for the placement of LPGA was to remain within Volusia County property and maintain a buffer and discourage future development. This shift to the east for Alignment B-1/B-2 would reduce impacts to the canal/outfall, and thereby, reduce overall wetland impacts. However, this shift would require additional right-of-way acquisition from private property.
 3. The Tomoka Farms Landfill is currently in the process of designing the three-laning of Landfill Road. As part of this design and in conjunction with the new industrial park south of Landfill Road, the existing weigh station will be relocated to the west. The previously disturbed area of the weigh station was utilized for the B-1 and B-2 alignment and avoided the relocation of a landfill storage area. Volusia County Solid Waste has indicated that they plan to use the current weigh station area for a stormwater retention area and they would prefer that we relocate the storage area. By shifting the Alignment B-1/B-2 to the west, the pond would be avoided.

4. The original alignment for B-2 was proposed to utilize the existing Shunz Road corridor to tie into the new Madeline Avenue Extension. As Volusia County has continued to develop the Madeline Avenue Extension alignment, it was shifted to the north based on agreements with the Corraci Family. This shift would also avoid impacts to a water main and a reclaimed water line (30-inch and 24-inch pipes respectively) that parallel each side of Shunz Road. A northern shift of the alignment would avoid relocation of these larger utility systems.
 5. Revise Alignment B-1 to tie into Tomoka Farms Road (CR 415) with a plus intersection that aligns with the proposed Town West Boulevard. Currently the Corraci Family is proposing a large development at this intersection. This suggestion was previously made by the City of Port Orange at the Project Coordination Meeting.
- Mr. Jack Freeman mentioned that our main focus for this EAG Meeting was to obtain feedback and comments on the proposed Alignments B-1 and B-2 as part of our Alternative Analysis process.
 - Ms. Alexa Ross with Sierra Club inquired about the bridge crossing at I-4 and proposed location. Mr. Freeman responded that proposed bridge at I-4 is being located to try to minimize the skew angle and length of the bridge.
 - Ms. Cathy Lowenstein with State Division of Forestry expressed concerns about realigning Shunz Road to the north and tying into the Madeline Avenue Extension. She asked whether this would incur more wetland impacts to offset relocating existing utilities. It was discussed in the meeting that additional wetland impacts would occur as a result to this shift. It is necessitated by the aforementioned shift of Madeline Avenue to the north.
 - Ms. Alexa Ross asked that since we are looking at disturbing land why don't we consider using the existing gas transmission easement? It was discussed that the gas transmission easement was too far east resulting in the connection to CR 415 being north of Landfill Road. This connection would not meet the project's fundamental purpose of connectivity to other transportation facilities as expressed by local government.
 - Mr. Walt Thompson with Nature Conservancy suggested we utilize the already filled land within the Volusia County landfill cells. Mr. Thompson also inquired about designing the roadway/landfill to maximize already disturbed landscape. Mr. Freeman indicated that this can be discussed with landfill manager. Mr. Joe Grusauskas, Volusia County Solid Waste, stated that all filled cells come right up to the edge of wetlands. There is a 3:1 slope up from the edge of a wetland that is filled underneath with old garbage. He also indicated that the active Class III cell has about 15 more years of capacity. There are no old cells abandoned onsite that could be converted to other uses (like a roadway). This active cell is part of the 10-15 year growth plan for Volusia County Solid Waste, and after 15 years the Landfill will be expanded to the west of the current active cells and recycling unit. There is an estimate of a 50-year build out within the Volusia County owned property that extends further west. There may be some potential on the east side of the active cells for placement of LPGA.

- Mr. Rick Ottesen with St. Johns River Water Management District asked that if you shift the alignment further west, what will happen to the existing FP&L easement? This area is part of our Corridor A that was considered during the Corridor Analysis phase of the project. Mr. Grusauskas explained that is part of their 50 year expansion plan for the Volusia County Landfill. The utility is there by easement and the land is currently owned by the county. This might eventually be relocated if needed for long term expansion of the Landfill.
- Mr. Walt Thompson indicated that for the SR 429 Wekiva Parkway Study, a 10 - 15 year growth plan has been established. Has something like this been drafted here? Mr. Joe Grusauskas stated that there may be some potential space on the east side for the LPGA Boulevard Extension; but not on the west because the landfill operation will begin to move west after 15 years, and the plan is for a 50-year landfill capacity.
- Mr. Walt Thompson asked Mr. Joe Grusauskas how much of the landfill footprint would be required for the local roadway. Joe indicated that once the cells west of the power line easement were filled that they would start to fill eastward toward the cells east of the power line easement. Because of the height of the fill and 3 to 1 slopes, most any at-grade road through the power line easement would eliminate the opportunity to use this for landfill cells. The Landfill does not want to lose any existing vacant land that can be used for future expansion.
- Mr. Grusauskas asked how much money will be spent to provide a visual and odor buffer for the road users. Also, would you really want the roadway next to a landfill?
- Ms. Cathy Lowenstein expressed concerns about environmental values and mitigation costs for the proposed B-1/B-2 Alignment located within the Landfill property. Joe added that there would be more costs associated with relocations of any existing landfill facilities and impacts in lieu of the original alignment that need to be considered. Mr. Freeman pointed out that the existing tree ordinance was taken into consideration. There is a recorded tree ordinance that depicts a preliminary alignment for the LPGA Extension. A new tree ordinance will need to be updated.
- Mr. Freeman stated that we are working closely with the First Baptist Church since they will be constructing the first section of the LPGA Boulevard Extension, including stormwater ponds and floodplain compensation. This first section will be constructed ahead of the design and construction of the remainder of the LPGA Boulevard Extension and will be coordinated with Volusia County directly.
- Ms. Cathy Lowenstein responded could the proposed improvements for the section of LPGA being implemented by the First Baptist Church include these potential alignment changes being discussed today? Mr. Freeman indicated that coordination with First Baptist Church has occurred regarding the potential alignment shifts to avoid the existing wetland mitigation area. However, feedback from them has not been received at this time.
- Mr. Steve Tonjes asked if landfill property could be used instead of taking undisturbed land. Mr. Joe Grusauskas responded that the east side of their existing cell and recycling unit might be utilized for the LPGA Boulevard Extension. There was discussion in the meeting to potentially locate an alignment for LPGA Boulevard Extension between the

active Landfill cell and the jurisdictional wetlands. Mr. Grusauskas discussed that it would be very expensive to relocate the recycling unit and could potentially cost \$1 Million to relocate and contains \$14 Million in equipment.

The meeting was concluded that the potential use of the disturbed landfill property between the active cell and recycling unit and the large wetland systems would be further evaluated. The evaluation will include discussions with Volusia County Public Works and Solid Waste Division to further evaluate this potential use of their facility for the proposed extension of LPGA Boulevard.

SJRWMD Coordination Meeting

LPGA Boulevard Extension PD&E Study

From CR 415 (Tomoka Farms Road) to SR 600 (US 92)

Volusia County, Florida

FIN: 410252-1-22-01

MEETING DATE: July 6, 2005

MEETING LOCATION: SJRWMD Altamonte Springs Service Center - Wekiva Room
2:00 PM- 3:00 PM

ATTENDEES: Cammie Dewey, SJRWMD
Jessie Wheeler, SJRWMD
Bill Walsh, FDOT
Steve Tonjes, FDOT
Jack Freeman, KAI
Karen Snyder, CH2M HILL
Libertad Acosta-Anderson,
CH2M HILL
Rosanne Prager, CH2M HILL

COPIES: Attendees
Margie Cook, SJRWMD
Pat Muench, FDOT
Mike Hill, FDOT
Carol Barker, CH2M HILL

FROM: Libertad Acosta-Anderson, Karen Snyder, and Rosanne Prager

DATE: July 28, 2005

A meeting for the referenced LPGA Boulevard Extension was held on July 6, 2005 at the SJRWMD Altamonte Springs Service Center. In attendance were representatives for the FDOT, SJRWMD, and the LPGA Study Team. The purpose of the meeting was to discuss with the SJRWMD the revised proposed alignment extension for LPGA from CR 415 to US 92, in order to gain insight about potential permitting issues that would need to be considered during design.

- Ms. Snyder provided a brief overview of the proposed project for the new extension of LPGA Boulevard from Tomoka Farms Road (CR 415) to US 92. The road would be maintained by Volusia County as a local road and would tie into Shunz Road. The project limits cross primarily Volusia County owned lands. The proposed typical consists of a 2-lane rural section with roadside swales. Initially two alternative alignments were developed after the Corridor Analysis phase was completed, B-1 and B-2. Alignment B-2 (now referred to as Alignment B-3) has been modified as part of the Alternative Analysis process, and after coordination with local governments and environmental advisory groups. Alignment B-4 was developed to address the

Environmental Advisory Group concerns in trying to minimize wetland impacts by utilizing already disturbed land within the Landfill property. The new proposed Alignment B-4 has some potential contamination concerns since it crosses one of the original unlined landfill cells that contains buried trash 20 feet deep. The revised Alignment B-3 is predominantly outside of the Landfill property on private property between I-4 and Landfill Road. Alignment B-3 will impact fewer wetlands, and wetlands with lower functional value, in comparison to the original Alignment B-2. The adjustments to the original Alignments B-1 and B-2 involve the following:

1. Avoid the existing Tomoka Farms Landfill Mitigation Area just south of I-4, by shifting the alignment to the east approximately ± 700.5 feet at I-4/LPGA Boulevard.
 2. Avoid the drainage canal, which serves as the drainage outfall for the Landfill's NPDES permit. The intent was originally to remain within Volusia County property and maintain a buffer. This shift to the east would avoid the canal/outfall, and thereby, reduce overall wetland impacts to high quality wetlands. This shift will require additional right-of-way acquisition from private property.
 3. The Tomoka Farms Landfill is currently in the process of three-laning Landfill Road. The roadway runoff will be diverted to a proposed pond located behind the current landfill offices. The LPGA alignment was shifted to the west to avoid impacts to the Landfill Road pond.
 4. The alignment was shifted north of Shunz Road to avoid utility relocations.
 5. The development of Alignment B-4 has been requested in the last Environmental Advisory Group meeting to try and minimize the wetland impacts on the Landfill property between I-4 and Landfill Road and utilize the already disturbed land/old landfill cell.
- Mr. Walsh stated that the project is funded for design with the FDOT Work Program in the fiscal year of 2007/2008. The Volusia MPO has this project third on their priority list. He also pointed out that there is regional support for the LPGA Boulevard Extension because:
 1. Volusia County MPO envisions the LPGA Boulevard Extension as a western beltway connection providing improved local access.
 2. LPGA Boulevard Extension would offer an alternative hurricane evacuation route and provide a by-pass to CR 415 at the intersection with Tomoka Farms Road.
 - Mr. Freeman provided a brief overview of the proposed future land use that is currently approved and underway that affects the surrounding area north and southeast of the project area; therefore, demonstrating that the proposed LPGA Boulevard Extension would cause minimal secondary and cumulative impacts from a development standpoint. The following developments are already underway and approved regardless if this project is implemented.
 1. The large Consolidated Tomoka DRI has been approved and currently underway northwest of the existing LPGA.
 2. A large Baptist Church development had been approved and permitted by SJRWMD to be constructed east of the LPGA Boulevard Extension between US 92 and I-4.

3. The Coraci PUD (also known as Coquina Cove), located east and south of the intersection of Shunz Road and CR 415, is included in the Volusia County Long-Term plans. The Coraci family and Volusia County have made agreements on the Madeline Road extension to accommodate the development.
 4. Construction has begun on the Volusia County large Industrial Park south of the Tomoka Farms Landfill as part of the expansion of their landfill. This will include the reconstruction and three laning of Landfill Road, the relocation of the landfill scales, and an access road to accommodate the new Industrial Park.
- Ms. Wheeler inquired about the type of wetland mitigation proposed for this project. It was indicated that mitigation would take place through Senate Bill program since the design is funded through FDOT Work Program. Ms. Wheeler stated that when the project does go to permitting, a percentage of the wetland impacts proposed for the project would be estimated for secondary and cumulative impacts. Mr. Freeman mentioned that Martin Kirton had expressed interest in having his property used as part of the Florida Forever Conservation Plan, and this may be a good mitigation area to be considered if the Senate Bill is not used for compensation.
 - The project limits fall within the Tomoka River Basin and must adhere to special basin criterion that dictates no net reduction in flood storage within the 100-year floodplain. Ms. Snyder explained that the project would have unavoidable floodplain impacts; therefore, compensation is proposed within a pond located adjacent to CR 415 that is outside of the 100-year floodplain and hydraulically connected to the Tomoka River floodplain.
 - It was confirmed in the meeting that the proposed project limits are not within the Tiger Bay Wildlife Management Area and the Tomoka River Riparian Habitat Zone. It was discussed in the meeting that the project area north of I-4 is considered within the OFW of the Tomoka River Basin. However, Ms. Dewey did point out that the first basin just south of I-4 does appear to directly discharge to the Tomoka River via the I-4 roadside ditch system. This basin will be required to meet the standard OFW criteria if it cannot be demonstrated that this basin does undergo the required mixing and dilution specified in Chapter 40C-42 of the F.A.C. prior to discharging into the Tomoka River. The rest of the basins south of I-4 to CR 415 do discharge directly to the adjacent floodplain and wetland systems that are required to provide adequate mixing and dilution prior to discharging to the river. Therefore, it was recommended that the OFW criteria be applied to the project from US 92 to I-4 and include the first basin just south of I-4 on LPGA.
 - Ms. Snyder stated that in performing coordination with the Florida Fish and Wildlife Conservation Commission (FFWCC) on this project that no bear crossings need to be provided for this project, due to bear travel corridors being predominantly in a north/south direction within the Tiger Bay Preserve which is several miles west of our project area. The Tomoka Farms Landfill staff had confirmed that they have not had any bear sightings within the project area in many years. There will be smaller wildlife crossings provided with the new proposed cross drain systems that will accommodate smaller mammals and reptiles within the wildlife habitat in the project area.

- Mr. Tonjes called attention to the FFWCC concern about secondary and cumulative impacts on bear habitat. He asked that the WMD review the correspondence with FFWCC and our documentation of existing development plans for the area in the ESBA and inform us as soon as possible if it seemed likely that additional mitigation would be required for secondary and cumulative impacts on bear habitat.

The meeting was concluded with the following remarks:

1. Avoidance and minimization of wetland impacts should be demonstrated clearly in the project documents.
2. Secondary and cumulative impacts will be considered during design phase, however, documentation at this point (PD&E Study) of any permitted projects or in-progress development in the area, will help define the true secondary and cumulative impacts that may result from this road extension project.
3. Advance Notification has been sent to appropriate environmental agencies and feedback will continue to be actively sought throughout the PD&E Study process.
4. There will be another EAG meeting scheduled for August 2, 2005 at the City of Port Orange Library. It was recommended to add Ms. Wheeler, Ms. Dewey, and Ms. Margie Cook to the EAG mailing list and notification for the next EAG.

USACE Environmental Coordination Meeting

LPGA Boulevard Extension PD&E Study

From CR 415 (Tomoka Farms Road) to SR 600 (US 92)

Volusia County, Florida

FIN: 410252-1-22-01

MEETING DATE: July 7, 2005

MEETING LOCATION: U.S. ACE Merrit Island/Cocoa Regulatory Office
10:00 AM - 12:00 PM

ATTENDEES: Andy Phillips, USACE
Bill Walsh, FDOT
Jack Freeman, KAI
Karen Snyder, CH2M HILL
Rosanne Prager, CH2M HILL

COPIES: Attendees
Steve Tonjes, FDOT
Mike Hill, FDOT
Carol Barker, CH2M HILL
Libertad Acosta-Anderson
CH2M HILL

FROM: Karen Snyder and Rosanne Prager

DATE: August 4, 2005

A meeting for the referenced LPGA Boulevard Extension was held on July 7, 2005 with the U.S. Army Corps of Engineers at their Merrit Island/Cocoa Regulatory Office in Cocoa, Florida. In attendance were representatives for the FDOT, USACE, and the LPGA Study Team. The purpose of the meeting was to discuss with Andy Phillips the revised proposed alignment extension for LPGA from CR 415 to US 92, in order to gain insight about potential permitting issues that would need to be considered during design.

- Mr. Jack Freeman, Project Manager with Kittelson and Associates provided an overview of the proposed project for the new extension of LPGA Boulevard from Tomoka Farms Road (CR 415) to US 92. The road will be maintained by Volusia County as a local road and would tie into Shunz Road. The project limits cross primarily Volusia County owned lands. The proposed typical consists of a 2-lane rural section with roadside swales.
- Initially two alternative alignments were developed after the Corridor Analysis phase was completed, B-1 and B-2. Alignment B-2 (now referred to as Alignment B-3) has been modified as part of the Alternative Analysis process, and after

coordination with local governments and environmental advisory groups. Alignment B-4 was developed to address the Environmental Advisory Group concerns in trying to minimize wetland impacts by utilizing already disturbed land within the Landfill property. The new proposed Alignment B-4 has some potential contamination concerns since it crosses one of the original unlined landfill cells that contains buried trash that is reported to be 20 to 25 feet deep. A portion of the revised Alignment B-3 traverses east of the Landfill property on private property between I-4 and Landfill Road. Alignment B-3 will impact wetlands with lower functional value, in comparison to the original Alignment B-1/B-2. The adjustments to the original Alignments B-1 and B-2 involve the following:

1. Avoid the existing Tomoka Farms Landfill Mitigation Area just south of I-4, by shifting the alignment to the east approximately \pm 700.5 feet at I-4/LPGA Boulevard.
 2. Avoid the drainage canal, which serves as the drainage outfall for the Landfill's NPDES permit. The intent was originally to remain within Volusia County property and maintain a buffer. This shift to the east would avoid the canal/outfall, and thereby, reduce overall wetland impacts to high quality wetlands. This shift will require additional right-of-way acquisition from private property.
 3. The Tomoka Farms Landfill is currently in the process of three-laning Landfill Road. The roadway runoff will be diverted to a proposed pond located behind the current landfill offices. The LPGA alignment was shifted to the west to avoid impacts to the Landfill Road pond.
 4. The alignment was shifted north of Shunz Road to avoid utility relocations.
 5. The development of Alignment B-4 was requested at the last Environmental Advisory Group meeting to try and minimize the wetland impacts on the Landfill property between I-4 and Landfill Road and utilize the already disturbed land/old landfill cell.
- Mr. Walsh stated that the project is funded for design with the FDOT Work Program in the fiscal year of 2007/2008. The Volusia MPO has this project third on their priority list. He also pointed out that there is regional support for the LPGA extension because:
 1. Volusia County MPO envisions the LPGA extension as a western beltway connection providing improved local access. There is not a good north/south connectivity within the local road systems for this project area.
 2. LPGA would offer an alternative hurricane evacuation route and relieve the traffic issues at the US 92 and CR 415 intersection.
 - Mr. Freeman provided a brief overview of the proposed future land use that is currently approved and underway that affects the surrounding area north and southeast of the project area; therefore, demonstrating that the proposed LPGA extension would cause minimal secondary and cumulative impacts from a

development standpoint. The following developments are already underway and approved regardless if this project is implemented.

1. The large Consolidated Tomoka DRI has been approved and currently underway northwest of the existing LPGA.
 2. A large Baptist Church development has been approved and permitted by SJRWMD to be constructed east of the LPGA extension between US 92 and I-4.
 3. The Coraci PUD (AKA Coquina Cove), located east and south of the intersection of Shunz Road and CR 415, is included in the Volusia County Long-Term plans with DRI approvals in place for development. The Coraci family and Volusia County have made agreements on the Madeline Road extension to accommodate the development.
 4. Construction has begun by Volusia County on the large Landfill Industrial Park located south of the Tomoka Farms Landfill as part of the expansion of their property. This will include the reconstruction and three laning of Landfill Road, the relocation of the landfill scales, and a new access road to accommodate the new Industrial Park. This project was planned to be let for construction on August 1, 2005.
- Mr. Andy Phillips complimented the proposed land use documentation and stated that this will be very beneficial during the permitting of this project in addressing secondary and cumulative impacts. He recommended that this documentation be included during the study phase and be part of the record of the decision permitting document for USACE. It was discussed in the meeting this documentation will be submitted to Mr. Phillips with the Draft Wetland Evaluation Report for his review. This documentation will be included in the Preliminary Engineering Report and Environmental Assessment documents being prepared for the study.
 - Mr. Andy Phillips inquired about the proposed typical section with multi-use trail. He stated that his agency would not be favorable of this typical since it is not minimizing wetland impacts for the new alignment. He stated that a need would have to be demonstrated for this trail to warrant this typical section. This may be demonstrated from the standpoint that the proposed trail for LPGA is part of an overall long-term network of trail systems that connect public parks.
 - Ms. Rosanne Prager stated that the Florida Fish and Wildlife Conservation Commission (FFWCC) commented on this project that large wildlife underpasses for the Florida Black Bear are not warranted; because underpasses would encourage bears to travel east into the urban area along the I-95 corridor. It is documented that most of the bear movements are along a north/south corridor further west of this project within the Tiger Bay Wildlife Management Area. The widening of I-4, (a separate project) will include three large wildlife crossings for the Florida Black bear within the Tiger Bay Wildlife Management Area. The Tomoka Farms Landfill staff has confirmed that they have not had any bear sightings within the project area in many years. This project will include several smaller wildlife underpasses in combination with required cross drains to accommodate smaller mammals and reptiles within the wildlife habitat in the project area.

Environmental Advisory Group Meeting No. 3

LPGA Boulevard Extension PD&E Study

From CR 415 (Tomoka Farms Road) to SR 600 (US 92)

Volusia County, Florida

FIN: 410252-1-22-01

MEETING DATE: August 2, 2005

MEETING LOCATION: Port Orange Regional Library
10:30 AM - 12:00 PM

ATTENDEES: Bill Walsh, FDOT
Steve Tonjes, FDOT
Jack Freeman, KAI
Walt Thomson, N. Conservancy
Mike Neidhart, Volusia County MPO
Mike Disher, City of Port Orange
Kimberly Dixon, Volusia County

Cathy Lowenstein, DOF
CalLee Davenport, USFWS
Robert Boggs, Daytona Beach
Karen Snyder, CH2M HILL
Rosanne Prager, CH2M HILL
Libertad Acosta-Anderson, CH2M HILL

COPIES: Attendees
Mike Hill, FDOT
Joan Budzynski, SJRWMD
Rick Ottesen, SJRWMD
Donna Steinbach, Port Orange

Lauren Kornel, Volusia County
Joe Grusauskas, Tomoka Landfill
Alexa Ross, Sierra Club
Carol Barker, CH2M HILL

FROM: Karen Snyder, Rosanne Prager, and Libertad Acosta-Anderson

DATE: August 4, 2005

A 3rd Environmental Advisory Group Meeting for the referenced LPGA Boulevard Extension was held on August 2, 2005 at the Port Orange Regional Library. The purpose of the meeting was to discuss the revised alignments for LPGA from CR 415 to US 92 in order to gain insight about issues that would need to be addressed during design. Listed below is a summary of the key items that were discussed at the meeting:

- Mr. Jack Freeman, Project Manager with Kittelson and Associates, provided an overview of the proposed project for the new extension of LPGA Boulevard from Tomoka Farms Road (CR 415) to US 92. The road will be maintained by Volusia County as a local road and would tie into Shunz Road. The project limits cross primarily Volusia County owned lands. The proposed typical consists of a 2-lane rural section with roadside swales.

- Mr. Freeman explained that initially two alternative alignments, B-1 and B-2, were developed during the Corridor Analysis phase. As part of the Alternative Analysis process, and after coordination with local governments and environmental advisory groups, Alignment B-2 was modified and is now referred to as Alignment B-3, and Alignment B-1 was eliminated from further consideration. The adjustments to the original Alignment B-2 involve the following:
 1. The alignment was shifted east approximately 700 feet at I-4/LPGA Boulevard to avoid the existing Tomoka Farms Landfill Mitigation Area just south of I-4.
 2. The alignment was shifted east to avoid the landfill drainage canal that serves as the drainage outfall for the Landfill's NPDES. The original intent was to remain within Volusia County property. This shift will require additional right-of-way acquisition from private property; however, it would reduce the overall wetland impact to high quality wetlands.
 3. The Tomoka Farms Landfill is currently in the process of three-laning Landfill Road. The roadway runoff will be diverted to a proposed pond located behind the current landfill administration office. The LPGA alignment was shifted to the west to avoid impacts to the proposed Landfill Road pond. This west shift will impact a landfill storage facility.
 4. The alignment was shifted north of Shunz Road to avoid utility relocations and to match the proposed Madeline Avenue alignment by Volusia County as was discussed during the Project Design Team meetings with Volusia County, City of Port Orange, and City of Daytona Beach.
 5. Alignment B-4 was developed to address the Environmental Advisory Group concerns to minimize wetland impacts by utilizing already disturbed land within the Landfill property. The new proposed Alignment B-4 presents potential contamination concerns because it traverses one of the original unlined landfill cells containing buried trash that is reported to be 20 to 25 feet deep. In addition, Alignment B-4 would require the filling and relocation of an existing retention pond.
- Mr. Walt Thompson inquired if this old cell on the Tomoka Landfill is a designated Superfund Site. He suggested that FDOT might want to inquire about this possible designation for two reasons, if the site is a superfund site: (1) there might be federal dollars already allocated for the clean up of any contamination, and (2) there might already be monitoring in place that defines the extent of the contamination; thus the new owner (e.g. purchased ROW) would have documentation as to the extent of the contamination plume and the previous owner would retain the responsibility of the remediation. Mr. Steve Tonjes did reply that if the FDOT did acquire the landfill property they would be responsible to clean up the site if considered contaminated.
- Mr. Freeman described the proposed roadway typical section as a two-lane, rural typical section, with 12-foot travel lanes and 8-foot shoulders in each direction. It will adhere to FDOT roadway design standards for a 55 mile-per-hour design speed facility with a 6:1 front slope, a 4:1 back slope, and a 3:1 slope to tie into natural ground. Mr. Steve Tonjes suggested that a 4:1 slope be considered and a variation obtained in order to reduce the right-of-way width required to accommodate the alignment and thereby reduce the wetland impacts.

- Mr. Freeman added that the typical section right-of-way widths from border width to border width consist of 120 ft for a section without multi-use trail and a 146 ft for a section with multi-use trail; however, these widths do not account for the appropriate distance to tie into existing ground. That distance varies considerably throughout the entire project. Therefore, to obtain a true level of impacts for wetlands and floodplains, cross sections have been prepared to define where the toe of the backslope matches natural ground and to set the right-of-way accordingly. There really is not a standard typical right-of-way width for the corridor; however, the footprints depicted for each of the alignments accurately reflect the required right-of-way requirements for each of the alternatives being evaluated. Mr. Freeman indicated that the typical section with trail has local government support.
- Ms. Cathy Lowenstein inquired about the trail connectivity to other local and regional recreational facilities. Mr. Freeman responded that support documentation is being requested at this time from Volusia County. Mr. Mike Neidhart suggested the County Leisure Department be contacted.
- Mr. Freeman stated that the project is funded for design with the FDOT Work Program in the fiscal year of 2007/2008. The Volusia MPO has this project third on their priority list. He also pointed out that there is regional support for the LPGA extension because:
 1. Volusia County MPO envisions the LPGA extension as a western beltway connection providing improved local access. There is no good north/south connectivity within the local road systems for this project area.
 2. LPGA would offer an alternative hurricane evacuation route and relieve the traffic issues at the US 92 and CR 415 intersection.
- Mr. Freeman provided a brief overview of the proposed future land use that is currently approved and underway that affects the surrounding area north and southeast of the project area; therefore, demonstrating that the proposed LPGA extension would cause minimal secondary and cumulative impacts from a development standpoint. The following developments are already underway and approved regardless if this project is implemented.
 1. The large Consolidated Tomoka DRI has been approved and currently underway northwest of the existing LPGA. Based on the LPGA DRI Phase 2 Monitoring and Modeling Methodology (March 14, 2005) 461 residential units, 69,000 sq ft of office, 40,500 sq ft of manufacturing, 6,560 sq ft of convenience market, 153,340 sq ft of new car sales, 93,752 sq ft of medical office, 65,700 sq ft of church, and 36 holes of golf course. The remaining development plan consists of 7,206 residential units, 840,891 sq ft of office, 598,840 sq ft of retail, 450,200 sq ft of manufacturing, 8,522 sq ft of fast-food restaurant, 25,390 sq ft of pharmacy, 20,622 sq ft of bank, 71,904 sq ft of new car sales, 20,000 sq ft of medical office, and 20,000 sq ft of nursing home.
 2. The First Baptist Church development has been approved and permitted by SJRWMD to be constructed east of the LPGA extension between US 92 and I-4.

3. The Coraci PUD (AKA Coquina Cove), located east and south of the intersection of Shunz Road and CR 415, is included in the Volusia County Long-Term plans with DRI approvals in place for development. The Coraci family and Volusia County have made agreements on the Madeline Road extension to accommodate the development. Two phases have been approved. The first, Port Orange Plantation Phase I, is under construction, and includes 90 single-family lots. This phase is almost finished as reported in July 2005. The other, Coquina Cove Phase I, includes 332 single-family and duplex lots, and is just beginning construction (July 2005). The City of Port Orange is also reviewing final plans for Port Orange Plantation Phase II, which would include 104 single-family lots. It is on hold while the City and County work out solutions to the anticipated traffic impacts with the developer. There are several other phases of Port Orange Plantation and Coquina Cove on the drawing board. With Port Orange Plantation, another 210 single-family units and 571 multi-family units are proposed. For Coquina Cove, another 700 units are proposed.
 4. Construction has begun by Volusia County on the large Landfill Industrial Park located south of the Tomoka Farms Landfill as part of the expansion of their property. This will include the reconstruction and three laning of Landfill Road, the relocation of the landfill scales, and a new access road to accommodate the new Industrial Park.
- Mr. Freeman presented the alignment alternatives evaluation matrix indicating that the costs had been finalized late the previous evening and had not been carefully checked; therefore, they were being offered only to show the order of magnitude of the costs for the two alignments. He also pointed out that construction costs were higher than for the previous alignments considered because:
 1. Construction costs have increased
 2. Right-of-way footprint is wider than previously considered to allow for tying into natural ground
 3. There are more wetland impacts
 4. There are more floodplain impacts
 5. The initial estimate was based upon First Baptist Church donating right-of-way for the roadway and stormwater retention ponds north of I-4 and constructing parts of the initial roadway south of US 92 plus the stormwater retention and floodplain compensating storage pond.
 - Mr. CalLee Davenport inquired if there are plans to construct an interchange at the proposed LPGA Boulevard Extension and I-4. Mr. Jack Freeman indicated that there is one discussed in the current Volusia MPO Long Range Plan but will probably be removed in the updated Long Range Plan, which Mr. Neidhart corroborated.
 - Ms. Karen Snyder gave an overview of the wetland lines, threatened and endangered (T&E) species, stormwater ponds, and compensation ponds locations. She pointed out that it was not possible to avoid wetland impacts due to the fact that wetlands are widespread through out the project area. She also reiterated that, although the wetland impacts have increased because the wider right-of-way, the quality of the wetlands being impacted has decreased when compared to the original alignments considered.

- Ms. Snyder showed the location of the compensation ponds adjacent to CR 415. She noted that the floodplain compensation pond sites were selected to ensure that the ponds were outside but adjacent to the floodplain to avoid further impacts to the floodplain and provide connectivity. She also explained that the area west of CR 415 and east of the proposed alignment that is not within the 100-year floodplain was not considered because there is a private landfill operation in that area.
- Ms. Snyder referred to the eagle's nest located south of US 92 and west of the proposed LPGA Extension as the only potential federally-listed T&E species impact. She explained that because of the design restrains to tie the new alignment to US 92 and the existing LPGA Boulevard, 1500 ft buffer from the roadway to the eagle's nest could not be provided. Mr. Davenport pointed out that the eagle is probably well acclimated to roadway movement because of its proximity to US 92 so the distance provided will probably be sufficient. He also added that Mr. John White with the Florida Fish and Wildlife Conservation Commission would be a good contact to get further information on the active status of this nesting pair. Mr. Tonjes interjected that in that case it may be worth it to have the alignment be closer to the eagle if it implies avoiding further wetland impacts.
- Ms. Rosanne Prager explained that the wetland impacts overshadow wildlife issues. Because of the topographical make up of the area there are no uplands for tortoises or scrub jays. Furthermore, no wood stork nesting colonies have been documented within 40 miles of the project; and the only T&E species within the project limits is the aforementioned eagle. Ms. Lowenstein inquired if the nest is active. Ms. Prager indicated that the data reviewed showed it was active in 2000, but she will follow up with FFWCC to inquire of their recent survey results. [Subsequent to this meeting, it has been confirmed by FFWCC that this nest is gone as of the 2004 flyover surveys.]
- Mr. Thompson asked if wildlife corridors were being impacted by the proposed LPGA Extension. Ms. Prager answered that in discussions with local Florida Fish and Wildlife Conservation Commission (FFWCC), it was] concluded that the bear movements are generally from north to south west of this project within the Tiger Bay Wildlife Management Area. The Tomoka Farms Landfill staff has confirmed that they have not had any bear sightings within the project area in many years. Ms. Prager added that large crossings will not be provided because the FFWCC does not want to encourage an eastern movement for the bears to allow them to enter the existing developed areas of Daytona Beach. There will be smaller wildlife crossings provided with the new proposed cross drain systems that will accommodate smaller mammals and reptiles within the wildlife habitat in the project area.
- Ms. Prager stated that vegetation alone can not be used as a good indicator of the jurisdictional wetland limits for this project; but rather because the area is a mosaic of slight topographic changes, all three wetland parameters (wetland vegetation, hydric soil indicators, and clear evidence of surface hydrology) will have to be used extensively to delineate wetlands during the design/permitting phase.

- Mr. Thompson inquired about the mitigation methods being considered for this project. He showed concern that with the PUDs and DRIs proposed for this area, the landscape will be changed drastically and that consideration should be given to offering mitigation locally. Ms. Prager welcomed all of the discussion and suggestions on possible mitigation options; and pointed out that in the meetings with SJRWMD and ACOE, agency representatives stressed minimization and avoidance first, before mitigation can be considered.
- Discussion on different mitigation opportunities ensued with the following suggestions being offered for further research and consideration:
 1. Contacting Mr. Tom Workman? (SJRWMD) to explore possible mitigation opportunities within the Clark Bay Area.
 2. Contacting the City of Port Orange for mitigation opportunities within their wellfield properties.
 3. Looking into land acquisition of a 660 foot strip, adjacent to the Tiger Bay preservation area that is privately owned and could potentially become developed.
 4. Looking into funding studies being conducted or proposed by the Division of Forestry in the Bennett Swamp/Rima Ridge Area.
 5. Contacting Volusia Forever.
- The meeting was concluded with Mr. Freeman indicating that the project is scheduled to be completed by the end of the year and design is scheduled for the 07-08 fiscal year. He added that there is no date set yet for right-of-way acquisition. He also offered a summary of what is to be done before the public hearing scheduled in late October:
 1. Getting the project evaluation matrix completed.
 2. Obtaining feedback from FDOT on the reports submitted.
 3. Meeting with the local governments as part of the Project Design Team on the revised alignments

Action Items

1. Kim Dixon to follow up for Volusia County on information requested on local recreational facilities that would connect to the proposed trail to demonstrate connectivity.
2. Kim Dixon to provide information on who to contact to investigate possible mitigation opportunities with the County.
3. Rosanne Prager to review 2004 data from FFWCC to determine eagle's nest status.
4. KAI to provide Volusia County, City of Port Orange, City of Daytona Beach, and Volusia MPO an electronic copy of the proposed revised alignments for the LPGA Boulevard Extension.

Gutierrez, Sandra/ORL

From: Gilbert, Terry [terry.gilbert@MyFWC.com]
Sent: Sunday, March 13, 2005 6:59 PM
To: Prager, Rosanne/GNV
Cc: Scheick, Brian
Subject: RE: LPGA field visit near Daytona Beach

I will get back to you after the SR-40 meeting in Ocala on Monday March 14th, and send some comments along the lines I spoke to you about by phone. We'll talk about the field trip too. Thanks.

Terry Gilbert
Biological Scientist IV
Florida Fish and Wildlife Conservation Commission
620 South Meridian Street
Tallahassee, Florida 32399-1600
Phone: (850) 488-6661
Fax: 850-922-5679
E-mail: terry.gilbert@fwc.state.fl.us

-----Original Message-----

From: Rosanne.Prager@CH2M.com [mailto:Rosanne.Prager@CH2M.com]
Sent: Thursday, March 10, 2005 10:12 AM
To: Gilbert, Terry
Cc: Scheick, Brian
Subject: LPGA field visit near Daytona Beach

Hi Terry,
Hope you are well. Do you and Brian still want to make a site visit for the LPGA Extension PD&E project? Let me know when and we'll make the arrangements with the landfill manager, Joe Grusauskas, and meet you out there.

Last we spoke, you and Brian were going to send written comments. We'll be wrapping up the draft wildlife report soon and we've tried to incorporate the comments and concerns that you've shared so far. Still it would be good if we had more recent written comments from FFWCC to attach to the document. So anything you can do along those lines would be great.

Thank you,

Rosanne Prager
CH2M HILL
3011 Williston Rd.
Gainesville, FL 32608
Office Phone 352-335-5877 x 2471
Cell 352-262-2069
FAX 352-381-3900
rprager@ch2m.com

Gutierrez, Sandra/ORL

From: Scheick, Brian [Brian.Scheick@MyFWC.com]
Sent: Monday, June 06, 2005 2:06 PM
To: Sanders, Scott
Cc: Prager, Rosanne/GNV
Subject: FW: LPGA Blvd Extension PD&E in Volusia County

Scott,

I gave Rosanne your phone number as the correct FWC contact for the LPGA Blvd. extension, but since it started prior to ETDM, neither she nor I were 100% sure you were still the right contact for this project. If so, you now have her contact info, if not, please pass this on to the right person.

Thanks!

Brian Scheick

From: Rosanne.Prager@CH2M.com [mailto:Rosanne.Prager@CH2M.com]
Sent: Mon 6/6/2005 1:23 PM
To: Scheick, Brian
Subject: LPGA Blvd Extension PD&E in Volusia County

Hi Brian,

Thanks for your help today. I left a message on Scott Sanders voice mail. After that I found out that the LPGA is NOT in the ETDM program, because it was started before the ETDM process was implemented.

If you would, please pass this email along to Scott. It might help him decide who at FWC should be our main contact for wildlife issues in general. Terry's last letter to me was dated March 17, 2005. RE: LPGA Blvd Extension, Volusia County.

thanks,

Rosanne Prager, P.W.S.
CH2M HILL
3011 Williston Rd.
Gainesville, FL 32608
Office Phone 352-335-5877 x 2471
Cell 352-262-2069
FAX 352-381-3900
rprager@ch2m.com <mailto:rprager@ch2m.com>

Gutierrez, Sandra/ORL

From: Prager, Rosanne/GNV
Sent: Thursday, September 01, 2005 11:05 AM
To: 'CalLee_Davenport@fws.gov'
Cc: Snyder, Karen/ORL
Subject: FW: LPGA Blvd. Extension PD&E Study, Volusia County
Attachments: proposeddrain.pdf

CalLee, I left you a VM today. Specifically, we're asking if you have reviewed the Draft Endangered Species Biological Assessment (ESBA) that was prepared by CH2M HILL for the FDOT and Volusia County of the LPGA Blvd. Extension PD&E Study?

And we're needing for an official letter of consensus from USFWS.

Although no federal species were found along the corridor, except for wood stork foraging in the nearby ponds of the land fill, I thought this detailed information (attached and below) might help clarify some statements in the ESBA about wildlife crossings. We're still coordinating with FFWCC (Mr. Steve Lau in Vero Beach 772-778-5094) about the size of small animal underpasses that we are proposing. I'm forwarding an email we sent to Steve that describes the 11 proposed crossings, which would total about 14 locations where small wildlife could get under the 3-mile length of this 2-lane road. You can zoom in on the attachment to see sizes and locations more clearly.

These crossings would serve the indigo snake, if any are in the area.
Recall that the one nearby eagle nest is no longer there -- confirmed by John White's office in an email from Aug 5, 2005.

No EFH habitat will be crossed by the road. Of course, runoff from ALL of the new roadway will be treated per regulations, the section north of I-4 will meet OFW regulations.

call if you have any questions.
Thank you,

Rosanne

From: Prager, Rosanne/GNV
Sent: Monday, August 15, 2005 3:33 PM
To: 'Steve.lau@FWC.state.fl.us'
Cc: Snyder, Karen/ORL
Subject: LPGA Blvd. Extension PD&E Study, Volusia County

Steve Lau,
We are writing you to ask if you have had a chance yet to review the Draft Endangered Species Biological Assessment (ESBA) that was prepared by CH2M HILL for the FDOT and Volusia County of the LPGA Blvd. Extension PD&E Study? If you have any questions, please feel free to contact either Karen Snyder or myself.

We are contacting you specifically, at this time, to ask for some guidance about the size of small animal underpasses that we are proposing for this new roadway. See the attached drainage map figure. As shown on the attached PDF, the 100-series are needed for hydrologic connections (& aquatic species), and the 200-series are additional structures for small wildlife in general. With the existing structures, proposed hydrologic structure, and additional wildlife underpasses, and a bridge over I-4, in total there would be 14 potential underpasses along this

3-mile extension; of various sizes, as shown on the figure.

Our question to you -- Is there a minimum size culvert, or box culvert that you would recommend for this purpose? LPGA extension is a 2-lane road, about 3 miles. It may or may not have a multiuse trail along one side. The habitats being crossed by the road are mainly forested hydric flatwoods and cypress-pine-cabbage palm community, and cut over managed pine areas.

The height is critical in this project, because of the area being crossed by the road is mostly hydric. Consequently, the higher the profile above seasonal high or natural grade, the more wetland impact there will be.

The locations of the additional underpass structure were selected to line up with existing habitat ecotone edges, existing dirt roads, or berms that animals most likely use today.

Brian Scheik and Terry Gilbert have both said (at an EAG meeting and in telephone conversations) that large mammal (i.e bear) underpasses were not warranted, or even recommended in this project location. The main reason being that these would encourage bear movement further east into the highly urban area of I-4 and I-95 in the Daytona Beach area. However, both have said that smaller structures used by a variety of animals would better serve the habitats out there.

In addition to the agency correspondence in the ESBA, included in this email (below) is correspondence to/from Brian Scheik and Kim Dixon (Volusia County) about bears in the area.

Thank you for your time and consideration on the PD&E Study.

Rosanne Prager, P.W.S.
 CH2M HILL - Gainesville
 Phone 352-335-5877 x 2471
 FAX 352-381-3900
rprager@ch2m.com

and

Karen A. Snyder, P.E.
 CH2M HILL - Orlando
 Phone 407-423-0030 xt. 302
 Fax 407-839-5901
ksnyder@ch2m.com

-----Original Message-----

From: Kim Dixon [<mailto:kdixon@co.volusia.fl.us>]

Sent: Friday, August 27, 2004 7:36 AM

Cc: Snyder, Karen/ORL; Gerald Brinton; Jon Cheney; Josef Grusauskas; amir.asgarinik@dot.state.fl.us; anna.porter@dot.state.fl.us; annette.brennan@dot.state.fl.us; ed.barfield@dot.state.fl.us; gary.bass@dot.state.fl.us; George.lovett@dot.state.fl.us; jenice.hall@dot.state.fl.us; michael.hill@dot.state.fl.us; michael.ruland@dot.state.fl.us; randy.stafford@dot.state.fl.us; richard.fowler@dot.state.fl.us; richard.johnson@dot.state.fl.us; richardw.bell@dot.state.fl.us; tom.percival@dot.state.fl.us; william.walsh@dot.state.fl.us; ahull@inwoodinc.com; jfreeman@kittelton.com; kpassetti@kittelton.com

Subject: Fwd: RE: bear travels

FYI, You may already have this contact but this is the response from FWC. I sent Brian the Madeline Ave. and LPGA draft map the county produced from our study.

Kimberly Dixon, P.E., CPM

2/14/2006

County of Volusia
 Construction Engineering
 Room 402
 123 West Indiana Ave.
 DeLand, FL 32724-4262
 voice (386) 736-5967 # 2701
 fax (386) 822-5736

>>> "Scheick, Brian" <Brian.Scheick@MyFWC.com> 08/26/04 04:36PM >>>

Kimberly Dixon,

I apologize for the delay in answering your question, I was on leave for a few days. FWC does not have well defined areas within which we know bears travel, but we do have locations from documented roadkills, nuisance complaints, observations, and locations of research bears. I'll provide an idea of what we know of bears in the area of your map, but if you need more, please feel free to contact me.

I've reviewed our database for the area within your map. While we have seen tracks, heard of observations and collected bear hair (what a job!) during research from the county property west and south of the landfill (during a 2001-2003 research project on the Port Orange Well field), we do not have data on bears in the landfill or moving east of Tomoka Farms Road. I have not been into the landfill property to look, but would not be surprised to hear that a bear had investigated the landfill. There are no documented roadkills or nuisance complaints in this area either. We have several roadkills on I-4, and on the southern end of LPGA Blvd., by US 17/92, but not on Tomoka Farms Rd. Please call me if this is not sufficient. I could plot the data we do have on a map for you if that is needed. Please keep in mind that these are documented occurrences, and bears could well have crossed towards the east at times, and unless it was struck or seen by a motorist, or caused nuisance problems, FWC will not have known of it.

Brian Scheick
 Terrestrial Mammals Research Program
 Florida Wildlife Research Institute
 Florida Fish & Wildlife Conservation Commission
 1526 Kelvin Avenue
 Deltona, FL 32738-5002
 386-789-7063 (SC: 389-7063)

> Visit our web site: MyFWC.com

-----Original Message-----

From: Kim Dixon [<mailto:kdixon@co.volusia.fl.us>]
 Sent: Wednesday, August 25, 2004 9:53 AM
 To: Scheick, Brian
 Subject: bear travels

I was directed by Randy Sliester that you may have information regarding bear traveling limits mapped through the Volusia County landfill property? I attended a FDOT meeting on Tuesday and someone there thought their was a map documenting bear traveling limits. Attached is the area of the landfill. Limits being Tomoka Farms Road on the east, I-4 on the north and west and Shuntz Road on the South. Any direction you could provide would be appreciated.

Kimberly Dixon, P.E., CPM
 County of Volusia
 Construction Engineering
 Room 402
 123 West Indiana Ave.
 DeLand, FL 32724-4262
 voice (386) 736-5967 # 2701
 fax (386) 822-5736

2/14/2006

Gutierrez, Sandra/ORL

From: stephen.tonjes@dot.state.fl.us
Sent: Wednesday, September 07, 2005 2:37 PM
To: Prager, Rosanne/GNV; djs3@ufl.edu
Cc: Steve.lau@FWC.state.fl.us
Subject: Fw: LPGA Blvd. Extension PD&E Study, Volusia County

Attachments: pic19405.jpg; Dan Smith's report.pdf; proposeddrain.pdf



pic19405.jpg (245 KB)



Dan Smith's report.pdf (4 MB)



proposeddrain.pdf (819 KB)

I just returned from ICOET and was reminded that FDOT has paid for a lot of work to determine what size animal crossings should be. The screen print is from the report by Dan Smith, and I've attached the document. From a quick read, it looks like we don't need to go much higher than 36" for the upland crossings, but we should probably go wider and square. If the water crossings are to function for wildlife as well, we may need to add ledges just above SHW with at least 3' of clearance above.

Dan, am I reading it right?

(Embedded image moved to file: pic19405.jpg)

(See attached file: Dan Smith's report.pdf)

Stephen Tonjes, FDOT
stephen.tonjes@dot.state.fl.us
719 S. Woodland Boulevard
DeLand, FL 32720
Phone 386-943-5394 (SC 373-5394)
Fax 386-740-4343

----- Forwarded by Stephen Tonjes/D5/FDOT on 09/07/2005 01:23 PM -----

<Karen.Snyder@CH2M.com>

To
09/01/2005 05:00 PM <jfreeman@kittelson.com>,
<william.walsh@dot.state.fl.us>,
<stephen.tonjes@dot.state.fl.us>

cc
<Sandra.Gutierrez@CH2M.com>,
<Rosanne.Prager@CH2M.com>

Subject
FW: LPGA Blvd. Extension PD&E
Study, Volusia County

FYI. Here is the coordination Rosanne has performed today with FFWCC. Steve was joking about bridging the whole job.

From Rosanne:

I just spoke to Steve Lau. He has not had time to even look at it. I gave him the big picture over view { what's out there, joint project (county - city-DOT) and briefed him on where we left off with Terry Gilbert and Brian Scheick. And I mentioned what we were looking from him specifically - feedback on the size / location of the wildlife crossings. He asked if they considered a road type that did not impact wetlands (i.e. bridge it).

He said he'd try to look at it this week.

Thanks,

Rosanne

From: Prager, Rosanne/GNV
Sent: Thursday, September 01, 2005 10:33 AM
To: 'Steve.lau@FWC.state.fl.us'
Subject: FW: LPGA Blvd. Extension PD&E Study, Volusia County

Steve, thanks for moving this to the top of what I imagine is a huge pile. Here's the latest email again, for your convenience. At least you can zoom in on the attached PDF to clearly see the 11 proposed crossings and sizes easier than on an 8.5 x 11 sheet.

call if you have any questions.

Rosanne

From: Prager, Rosanne/GNV
Sent: Monday, August 15, 2005 3:33 PM
To: 'Steve.lau@FWC.state.fl.us'
Cc: Snyder, Karen/ORL
Subject: LPGA Blvd. Extension PD&E Study, Volusia County

Steve Lau,
We are writing you to ask if you have had a chance yet to review the Draft Endangered Species Biological Assessment (ESBA) that was prepared by CH2M HILL for the FDOT and Volusia County of the LPGA Blvd. Extension PD&E Study? If you have any questions, please feel free to contact either Karen Snyder or myself.

We are contacting you specifically, at this time, to ask for some guidance about the size of small animal underpasses that we are proposing for this new roadway. See the attached drainage map figure. As shown on the attached PDF, the 100-series are needed for hydrologic connections (& aquatic species), and the 200-series are additional structures for small wildlife in general. With the existing structures, proposed hydrologic structure, and additional wildlife underpasses, and a bridge over I-4, in total there would be 14 potential underpasses along this 3-mile extension; of various sizes, as shown on the figure.

Our question to you -- Is there a minimum size culvert, or box culvert that you would recommend for this purpose? LPGA extension is a 2-lane road, about 3 miles. It may or may not have a multiuse trail along one side. The habitats being crossed by the road are mainly forested hydric flatwoods and cypress-pine-cabbage palm community, and cut over managed pine areas.

The height is critical in this project, because of the area being crossed by the road is mostly hydric. Consequently, the higher the profile above seasonal high or natural grade, the more wetland impact there will be.

The locations of the additional underpass structure were selected to line up with existing habitat ecotone edges, existing

dirt roads, or berms that animals most likely use today.

Brian Scheik and Terry Gilbert have both said (at an EAG meeting and in telephone conversations) that large mammal (i.e bear) underpasses were not warranted, or even recommended in this project location. The main reason being that these would encourage bear movement further east into the highly urban area of I-4 and I-95 in the Daytona Beach area. However, both have said that smaller structures used by a variety of animals would better serve the habitats out there.

In addition to the agency correspondence in the ESBA, included in this email (below) is correspondence to/from Brian Scheik and Kim Dixon (Volusia County) about bears in the area.

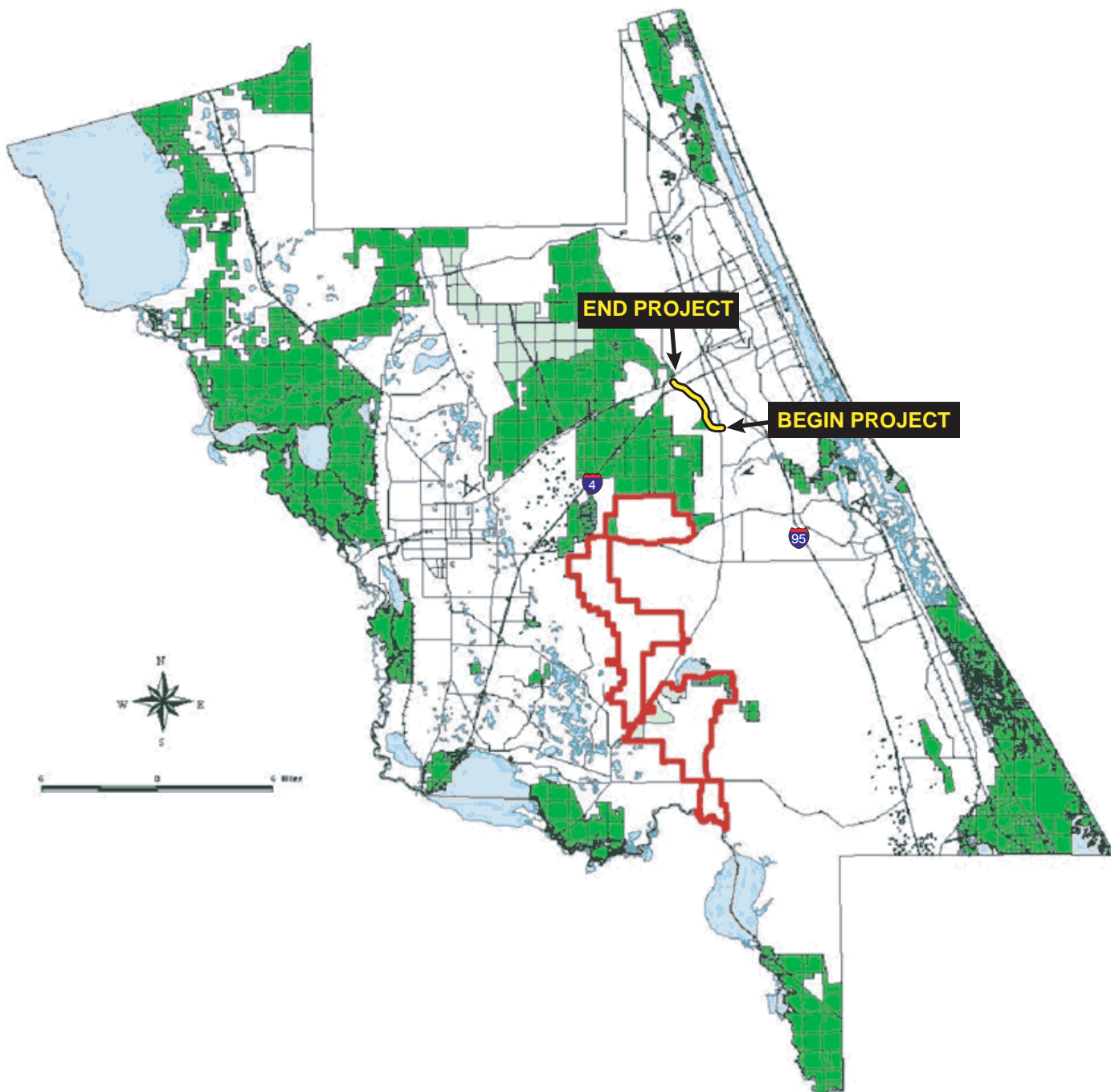
Thank you for your time and consideration on the PD&E Study.

Rosanne Prager, P.W.S.
CH2M HILL - Gainesville
Phone 352-335-5877 x 2471
FAX 352-381-3900
rprager@ch2m.com

and

Karen A. Snyder, P.E.
CH2M HILL - Orlando
Phone 407-423-0030 xt. 302
Fax 407-839-5901
ksnyder@ch2m.com

fax (386) 822-5736(See attached file: proposeddrain.pdf)



LEGEND

- Volusia Conservation Corridor
- Federal, State, Regional, & County
- Privately Owned Property Encumbered by a Public Conservation Easement

Map source: Volusia Forever Feb 2006:
<http://volusiaforever-echo.com/forever/Maps.htm>

VOLUSIA CONSERVATION CORRIDOR