



MEETING NOTES

Project: East Side Highway Environmental Assessment
Subject: Sustainability FWG Meeting #3
Date: December 10, 2012, 5:00 PM
Location: Bloomington Cultural Center, Bloomington, IL

Minutes of this meeting were prepared by Lindsay Birt of Huff & Huff, Inc. Please inform her of corrections or modifications.

Project Team Attendees: Jerry Payonk (CDI), Joseph Dudeck (HDR), Lindsay Birt (H&H), Evan Markowitz (H&H), and Linda Huff (H&H). The meeting was facilitated by Linda Huff.

See attached sign-in sheets for FWG attendance.

1. Introduction and Geometry Review

Linda Huff provided an overview from the last FWG meeting. Since that time, the project team has worked on the design and sustainability concepts. The goal of this meeting was to review these concepts and collect the FWG's thoughts and ideas.

Before reviewing these concepts, Jerry Payonk summarized some minor changes to the alignments that have taken place since the last time the FWG met.

- Alignments 125 & 127 (the two eastern alignments) no longer contain a jog at the intersection of Ft. Jesse Rd.
- The southern split of the alternatives has been relocated north of Ireland Grove Road. Previously this split was located south of Ireland Grove Road.
- At the south end of the project, the ESH's interchange with I-74 has been modified from a cloverleaf to a trumpet.

Jerry then summarized a preliminary bike trail plan currently being developed which will provide bike facilities along the project corridor and Towanda-Barnes Road. Where the proposed bike trail is located adjacent to the ESH, an access control fence will separate the two facilities.

Linda emphasized that the location of bike trails will need to be considered to better understand constraints for stormwater BMPs.

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A question was asked if there will be multiple types of surfaces considered for the bike trails. This issue hasn't been addressed yet. As the project moves forward, surface type will be studied.

A question was asked if the project team has communicated with Enbridge about the pipeline project. During the previous Corridor Study there were several meetings with the pipeline group. Since commencement of the Environmental Assessment, there has not been communication with Enbridge.

Angelo Caparella explained that he heard they are redoing the environmental studies. He also mentioned that recently a presenter attended a McLean County meeting to discuss how Enbridge plans to redo the environmental assessment as part of the pipeline project. Angelo is concerned that Enbridge is crossing a creek at the same location of the ESH, where a T&E mussel was found.

2. Hydraulic Analysis

Joseph Dudeck discussed the methodology and process the project team is using for hydraulic analysis of waterway crossings. The largest crossing is at Site 28 (on the exhibit map) where Ireland Grove Road crosses Kickapoo Creek.

Angelo explained that the current bridge at this location is designed to protect the flow and function for water flow. He asked if the revised bridge will meet these hydrologic functions. Joe indicated that there are actually two bridges; one is the roadway bridge and the other is the monitoring bridge. The monitoring bridge is upstream. Since this is the case, maintaining the hydrologic functions with the new bridge may be irrelevant, but the project team will investigate.

Joe indicated that all other stream crossings will most likely be a culvert. The type of culvert will depend on the location and the sub-basin size. Robin Weaver stated that hydrology will not be a deciding factor on which alignment is preferred.

3. Best Management Practices (BMPs)

After discussing hydraulic analysis, Linda presented the BMP design concepts, figures, and a handout illustrating examples of BMPs to the FWG. A table was handed out (attached) explaining the BMPs, their benefits, maintenance

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requirements and benefits to stormwater quality. In addition to the table, Linda discussed each BMP.

Natural Bottom Culverts – These four-sided culverts are partially buried in the streambed to allow for fish passage and to preserve the natural streambed. They are designed to maintain low flow through the culvert (to support fish passage). Natural bottom culverts are recommended in locations at stream crossings with greater than one square mile drainage area.

Meandering Swale – These are vegetative swales with a meandering bed/channel. The meanders are designed to slow storm water runoff flows. As storm water runoff velocity is reduced, there are more opportunities for sediment deposition and storm water filtering.

Filter Strips – These are vegetated strips receiving runoff from storm sewers and serving as the discharge point to a stream. Vegetated strips are designed to reduce velocities and filter runoff, with a portion of the runoff infiltrating into the soil.

Bioswales – These are densely vegetated drainage ways with permeable soils that collect and slowly convey runoff. The proposed bioswale locations address the environmentally sensitive water resources at The Grove and at Money Creek. The project team will need to investigate if the bioswales are feasible based on the slope, soil type, and water quality volume.

Plantings - Linda referenced the BMP design matrix to describe the plantings as a BMP design concept. She further explained how tree clusters are considered a visual screening. Once the noise analysis is complete, the project team can provide tree planting screening recommendations.

Stephanie Dobbs from IDOT/D5 mentioned several planting design aspects to consider. She said she reviewed the meeting minutes from the previous meeting and had a comment about grasses being stratified. Having the short grasses in the front and the taller grasses in the back is a good idea, but native grasses will grow anywhere and will eventually spread over. Additionally, establishing prairie grass along the freeway will take four to five years for erosion control benefits.

Stephanie also indicated that there are maintenance concerns to consider for clustering. If you cluster too close, there will be issues with mowing because the space is too small for a 15-ft mower to clear. As result, this small space is enough for invasive species to grow. Stephanie mentioned how she likes native

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grasses. Also, Limber Pine is a good plant because it is salt resistant. Cypress is not originally native (pre-settlement time period), but is now considered a native and is another option to consider. Austrian pines are salt tolerant but have a short life span and are being removed

Stephanie asked will cable rail be used for the ESH project. Jerry stated that cable rail will not be used in this project since the medians will be at least the minimum standard of 55 feet from edge to edge of pavement.

Median Utilization – Linda identified median utilization as the concept of including vegetative swales or bioswales within the roadway median. Stephanie said that there will be safety concerns with ponding. She also raised concern with the potential issues with common reed, cattail species, as well as birds. Robin indicated that there would be aesthetic benefits to median utilization.

Linda asked Stephanie if grasses are the only vegetation that can be placed in the median. Stephanie stated that concerns have been raised by others that deer might hide in the taller grasses which could compromise vehicle safety. Short mixes, such as forb mixes, are reasonable to use in the median. Stephanie also mentioned that the District is currently working on a living demonstration of *Miscanthus* species. This species is a reasonable option and it is a carbon locking/biofuel plant.

Infiltration Basins – These are permeable materials, such as gravel or stone, in areas where underlying soils have insufficient permeability. They consist of shallow basins or trenches. Infiltration facilities store runoff until it gradually infiltrates through the soil and eventually into the water table. The location of infiltration basins is determined by soil types. In general, the project team wants to keep this BMP concept for places where they can use the other types of BMPs and will need to recommend infiltration basins.

Riparian Buffers – These are vegetation strips along or near a stream that can slow storm water runoff velocities and allow for sediment and pollutant sediment. Linda mentioned that the plantings will be what IDOT recommends for erosion control.

A question was asked regarding where soil will come from for the earthwork required for the ESH. Jerry indicated that IDOT does not determine borrow pit locations. The contractor will negotiate borrow pit locations with local land owners. Ideally, prime farmland is not supposed to be a location for borrow pits.

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A question was asked if the State maintains all cross roads. Illinois Route 9 (Empire Street) and US 150 (Morrissey Drive) are State routes maintained by IDOT. All other crossroads are maintained by the County.

A question was asked if there were any efforts done or proposed for the Little Kickapoo Creek area. Joe responded that from a drainage perspective, the distance of the drainage from the agricultural ditches will take care of sediment removal into the Little Kickapoo.

Regarding a question about which BMPs that the FAA was concerned about, Linda indicated that the FAA would be concerned with wet detention and potentially bioswales because they would attract water fowl. Angelo stated that the FAA has not raised an issue with the wetland restoration.

Linda thanked everyone for their participation and informed them that the project team will send the maps to everyone who would like to review the design concepts and provide additional recommendations. In addition, the project team will inform the FWG of updates by email and will plan a meeting when more concrete hydraulic information, tentatively in April 2013.