Hazardous Wildlife Attractant Review, Environmental Assessment, and Construction Access for Lauder SWDB

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Texas Floodplain Management Association
2022 Annual Meeting, Houston, TX
March 10, 2022
Track L9

Agenda
- Project Team
- Background
- Hazardous Wildlife Attractant Review
- NEPA - Environmental Assessment
- Construction Access

Background
Background

- Funded by the 2018 Bonds in partnership with US Department of Agriculture Natural Resources Conservation Service (NRCS) and Texas Water Development Board (TWDB)
- Currently under design for Compartment 1
Wildlife Hazard Attractant Concern

2020 FAA Advisory Circular (AC)

AC 150/5300-33C
(Hazardous Wildlife Attractant Avoidance Guidance)

PERIMETER A:
Airports serving piston-powered aircrafts. Recommends hazardous wildlife attractants be 5,000 feet from the nearest aircraft operations area (AOA).

PERIMETER B:
Airports serving turbine-powered aircrafts. Recommends hazardous wildlife attractants be 10,000 feet from AOA.

PERIMETER C:
All airports 5-mile range to protect approach, departure, and circling airspace.

Proximity of Lauder SWDB to IAH Airport
Lauder SWDB Wet-Bottom Design Alternative

Lauder SWDB Dry-Bottom Design Alternative

Coordination Process with Houston Airport System (HAS) and City of Houston (COH)

- Developed an Interlocal Agreement (ILA) with HAS
- Exchanged Points of Contacts with COH
- Created Internal Project Review Forms and a GIS Layer for Airport Separation Distance Planning
- Established Early Notification Protocol with HAS and COH to provide:
  - Aerial Map
  - Airport Separation Distance Planning Map
  - Design Layout Sheet
  - Project Description
The Need for NEPA

- Partial Federal funding available through the USDA's NRCS Emergency Watershed Protection Program
- NEPA is a law that requires agencies to assess the environmental effects of federally-funded projects
The NEPA Umbrella

- Clean Air Act
- Clean Water Act
- Endangered Species Act
- Executive Orders
- Native American
- U.S. Department of Transportation
- NEPA
- Section 106 of the National Historic Preservation Act
- Contaminated Materials
- Endangered Species Act
- Cultural Resource Act
- Migratory Bird Treaty Act
- Protection of Wetlands
- Endangered Species Act
- Fish and Wildlife Service
- Executive Order
- NEPA
- Environmental Protection Act
- Endangered Species Act
- Section 106 of the National Historic Preservation Act
- NEPA

Environmental Tasks for Lauder SWDB Phase 2

- Jurisdictional Delineation
- T&E Species and Habitat Assessment
- Cultural Resource Review
- Phase I ESA
- Tree Inventory Survey
- Hazardous Wildlife Attractant Review
- NEPA Documentation

NEPA Process and Public Outreach

- NRCS Funding
  - No public meetings required
  - Minimum 30 days of public notice in a newspaper of general circulation (English and language of local population)
  - 15 additional days after public notice to allow for public comments
- NRCS CPA 52 Form (precursor step unique to NRCS)
- Determine level of assessment
Discovery

- During the EA process three constraints were identified:
  - The Federal Avian Administration (FAA) Wildlife Hazard Zones
  - U.S. Army Corps of Engineers Clean Water Act (CWA) Nationwide Permit (NWP)
  - Public feedback regarding construction access through residential areas and near school zones

Construction Access

Locations of Nearby Schools
Coordination and Design of Construction Access

Option 4
Greenranch Drive to a temporary road to Miranda Street

Option 4A - Uniformed peace officer
Option 4B - Flagperson

Pay Items

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<th>Unit</th>
<th>Unit Cost ($)</th>
<th>Quantity</th>
<th>Est. Cost ($)</th>
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<tr>
<td>Uniformed peace officers</td>
<td>70</td>
<td>5,544.0</td>
<td>388,080</td>
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<tr>
<td>Flagperson</td>
<td>250</td>
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Schedule delay

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<th>Cost ($)</th>
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<tr>
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<td>0</td>
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<tr>
<td>232</td>
<td>5,526,010</td>
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Total net cost including schedule delay cost: $3,470,230

Total net cost plus 15% contingency but excluding schedule delay cost: $308,870

Ranking based on Est. Cost without Schedule Delay:
1. Option 4
2. Option 3
3. Option 2
4. Option 1

Ranking based on Schedule Delay Days:
1. Option 4
2. Option 3
3. Option 2
4. Option 1

Recommended based on less cost, Option 4

Substantial coordination with Aldine ISD and YES Prep
Decision to go with Option 4

Design of Construction Access
Thank You!

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Questions?

Lauder
SWDB
Phase 2
Team

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Questions?
Air Bridge to Cross Sunoco Gasline