EISENHOWER WEST/
LANDMARK VAN DORN
IMPLEMENTATION
Advisory Group

22 May 2017
Meeting Agenda

• Air Quality Analysis
• Phase 2 Infrastructure Plan and CIP Projects
• Additional Updates
• Questions and Next Steps
Air Quality Analysis

• Covanta has been partnering with the City on solid waste management since mid ’80

  – Coexists with dense, adjacent mixed-use development and provides cost effective solution to the City’s solid waste management
  – Is consistent with Eco-City charter and co-produces 23 MW of electricity, enough to power ~15,000 homes
  – Achieves excellent environmental records year in, year out
Air Quality Analysis

Purpose:
- With the adoption of the Eisenhower West SAP, there is a need to determine maximum air-quality-compliant heights for buildings currently planned for Van Dorn Metro Center neighborhood and investigate technically feasible mitigation options.

Alexandria Study
- Task 1 – Determine lowest possible baseline emission rates and impacts for existing uses.

- Results: Current operation was found to be in compliance with both National Ambient Air Quality Standards (NAAQS) and the Virginia Significant Ambient Air Concentration (SAAC) standard.
  - Under both normal operations and worst-case having emissions at the regulatory limit levels.
## Air Quality Analysis*

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Averaging Time</th>
<th>Background (µg/m³)</th>
<th>Covanta &amp; Asphalt Paving (µg/m³)</th>
<th>Results + Background (µg/m³)</th>
<th>AAQS (µg/m³)</th>
<th>Exceed Standard?</th>
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*These calculations are based upon the maximum emissions limits allowed by the facility’s operating permit. Emissions generated during normal operating conditions are typically much lower.
## Air Quality Analysis*

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Averaging Time</th>
<th>Covanta &amp; Asphalt Paving (µg/m³)</th>
<th>SAAC (µg/m³)</th>
<th>Exceed Standard?</th>
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*These calculations are based upon the maximum emissions limits allowed by the facility’s operating permit. Emissions generated during normal operating conditions are typically much lower.
Air Quality Analysis

Next Steps

- Task 2 - Determine maximum heights for which air quality at all Building Levels is in compliance – July 15

- Task 3 - Investigate technically feasible mitigation options and re-evaluate maximum heights – July 30

- Task 4 – Final report – August 30
Case Study: Minneapolis, MN
Waste to Energy Facility and Mixed Use Development

Covanta Facility is connected to:
• Target Field (MLB baseball park)
• A light rail station (Target Field Rail Station),
• An amphitheater, and other mixed-use development

Sustainable Features: Green roofs and other water reuse systems.
Phase 2 Infrastructure Plan

• Purpose: To perform analysis to facilitate infrastructure/SAP implementation and coordination
  – Framework streets Preliminary (10%) design
  – Sanitary sewer analysis
  – Sequencing of projects
• Notice to Proceed anticipated Summer 2017
• Additional analysis to be conducted (other studies):
  – Multimodal Bridge preliminary concept (funded FY18)
  – Farrington Connector preliminary concept (funded FY24)
  – Backlick Run stream restoration (TBD)
Sanitary Sewer Analysis
Sanitary Sewer Analysis

• AlexRenew Holmes Run Trunk Sewer
  – Conveys flow from plan area sewers to the treatment plant

• Fairfax County Trunk Sewers
  – All City sewers from plan area into one of three Fairfax County trunk sewers and into ARenew Holmes Run Trunk Sewer

• City Collector Sewers
  – Total of 22.5 miles of sewer
  – 88 percent 10-inch diameter or less
Sanitary Sewer Analysis

• Purpose of Study
  – Assess existing sewer capacity and flows
  – Estimate future flows due to redevelopment
  – Identify capacity constraints
  – Identify required capacity improvements
  – Develop costs, timing and funding strategies
Sanitary Sewer Analysis

• Planned Schedule
  – Notice to Proceed June 2017
  – Fall 2017/Winter 2018
    • Assessment of existing capacity and flows
    • Assessment of future flows
    • Identification of capacity constraints
  – Spring 2018
    • Preliminary capacity improvements
    • Preliminary cost, timing, funding strategies
  – Fall 2018
    • Final findings and report
Multimodal Bridge

Legend:
- Transloading Facility
- Future Planned Road
- Current Development
- Greenhill Site proposed concept
- Option 1
- Option 2
- Option 2a
- Option 3
- Option 3a
Multimodal Bridge

LEGEND:

- Bridge alignment for further Study
- Option 3a from Eisenhower West Plan (Not to be precluded)
- Transloading Facility
- Future Planned Road
- Current Development
- Greenhill Site proposed concept
Multimodal Bridge

• Roadway Infrastructure Study to do additional analysis on Norfolk Southern proposed alignment
  – Coordination with Eisenhower West proposed street grid
  – Curvature / Geometrics
• Preliminary design of bridge through the City’s CIP – FY18/19
• City to continue seeking grant opportunities for bridge construction
Related CIP Projects

- Holmes Run Greenway
- Duke St Transitway
- Holmes Run Trail Conn.
- High Street
- West End Transitway
- Edsall / S Pickett
- Backlick Run Trail
- Farrington Connector
- Multimodal Bridge
- Van Dorn Metro Stn

LEGEND:
- Non-Motorized Project
- Transit Project
- Roadway Project
Additional Updates

- Edsall Road Mural
- Greenhill Meeting May 23rd
- Virginia Paving SUP
- Cameron Run Park Planning Process
Next Steps & Questions

DRAFT SCHEDULE

- **Summer 2017**
  - Phase 2 Infrastructure Plan Consultants Selected and Work Begins
  - Air Quality Analysis Continues

- **Fall 2017**
  - Phase 2 Infrastructure Plan Preliminary Analysis
  - Air Quality Analysis Findings
  - Development Updates as Needed
  - Virginia Paving SUP Docketed
  - Multimodal Bridge Preliminary Analysis

- **Winter 2018**
  - Phase 2 Infrastructure Plan Analysis Continued
  - Development Updates as Needed

- **Spring 2018**
  - Phase 2 Infrastructure Plan Analysis Continued
  - Development Updates as Needed

- **Fall 2018**
  - Phase 2 Infrastructure Plan Analysis Final Findings
  - Development Updates as Needed