

# Summary

Project:	Arlington County Biosolids Upgrade	
Subject:	Envision Subcommittee	
Date:	Wednesday, October 18, 2023	
Location:	WebEx	
Attendees:	Steve Young, Joint Facilities Advisory Commission Paul Guttridge, Aurora Highlands Civic Association Mary Glass, Arlington County Civic Association	Mary Strawn, Arlington County Water Pollution Control Bureau Department of Environmental Services Brian Balchunas, HDR Stephanie Spalding, HDR Jennifer Ninete, HDR Melanie Deggins, HDR Rahkia Nance, HDR

## Agenda

1. Introductions
2. Envision Refresher
3. Envision Credit Review
4. Next Steps

### **Welcome and Introductions** (R. Nance and S. Spalding)

Rahkia opened the meeting and welcomed attendees to the Envision subcommittee meeting. She shared details of how to use the WebEx virtual meeting platform.

Stephanie reviewed the agenda and introduced the team. She also thanked the subcommittee members for their work on the project.

### **Overview** (M. Strawn)

Mary Strawn provided the Envision subcommittee members with the purpose of the subcommittee, and reminded them about the program scope and goals.

### **Envision Refresher** (J. Ninete)

Envision is a rating system and framework that is similar to LEED, but is used for civil infrastructure projects.

Envision includes five categories and 14 subcategories.

Program Sustainability Goals were developed based on the Arlington County Green Building Incentive Policy and the Program Goals, and align with the Envision categories.

This demonstrates that the Program goals and the overall county goals are supported.

The Arlington County Green Building Incentive Policy currently requires a LEED certification. HDR wrote a thorough memo to support the use of Envision as an alternative to LEED that better supports sustainability in infrastructure. The highlighted areas were:

- Reducing operating costs
- High-performance and efficient project
- Support staff and community health

The Envision Credits and Subcategories are:

- Quality of Life – Well-being, Mobility, Community
- Leadership – Collaboration, Planning, Economy
- Resource Allocation – Materials, Energy, Water
- Natural World – Siting, Conservation, Ecology
- Climate & Resilience – Emissions, Resilience

Envision includes 64 credits across the five categories, which includes an innovation credit in each category. As a rating system, Envision uses a system in which projects earn points by meeting specific criterion requirements as outlined in the Envision Guidance Manual. The Program Team has reviewed how each credit applies to the Program, looking at the Program at the current status and with consideration of potential sustainable performance improvements. The Program team doesn't look at Envision with the idea of "buying points," but looks at criteria requirements to determine if there are opportunities to add value to the project.

### **Category Summary**

HDR uses a credit workbook they developed to manage Envision project, which has evolved through working on projects over the past 10 years. The team reviewed credits, conducted a gap analysis, and recorded low and high estimates.

Ideas for sustainable performance improvement are generated during credit reviews. If the Program team and County team agree these ideas could add value to the project, they may be elevated for further consideration. Many of these considerations that add value are process or documentation-oriented.

### **Envision Recognition Levels**

The Project recognition level is based on the number of points earned compared to the number of applicable points. The current credit status review places the Program target near a Platinum verification level, which is around 50% of applicable points. The ultimate verification level is contingent on the implementation of all planned activities currently being tracked in the credit workbook, as well confirming as such with thorough documentation in the verification submittal. The verification submittal will be reviewed by a third-party Verifier assigned by the Institute for Sustainability Infrastructure (ISI). This is an iterative review process, in which the Program Team is able to submit additional information to address questions or provide clarification for Verifier comments. It is typical for a project to be returned with fewer points than submitted for review. For that reason, the Program should plan to submit documentation for more points than needed for the target verification level.

## **Envision Credit Review (J. Ninete)**

The numbers shown on the project scorecard illustrate the available points for each credit, with the anticipated Level of Achievement (LOA) or LOA Range shown as shaded cells. If a credit is not pursued, it would receive zero points. However, sometimes credits that can be deemed “not applicable” to the Program. In that case, the sustainability indicator does not exist for the project and ISI allows it to be removed from consideration as to not penalize the Program. For example, there are not historical or cultural resources on this site because of its long-term use as a Water Pollution Control Plant. Credits can be deemed “not applicable” with supporting documentation demonstrating that an effort was made to identify the indicator (such as cultural resources), but they were not found on the site.

## **Leadership Credit Summary**

The Leadership Credit Summary shows the different ranges of what should be considered for criteria that will lead the Program to the next level. Activities related to Leadership credits are unlikely to significantly add to the Program’s capital costs. This category is very process-oriented and considers communication and collaboration on the Program.

## **Resource Allocation**

Credits in this category tend to be much more quantitative and sustainability improvements tend to look at percentage increases or decreases. The determination on the reuse of buildings onsite is currently unresolved to be further evaluated by the Design/Builder during the design phase. Building reuse could affect the LOA for multiple credits in Resource Allocation and other categories. Therefore, these credits will be adjusted as the design phase progresses.

At times, credits that seem likely achievable on the surface may actually be very difficult to document in practice, due to the criteria and documentation requirements. For example, the County supports sustainable procurement and has a related policy, but the County’s policy doesn’t look at the same topics as what is required by the RA1.1 Support Sustainable Procurement Practices credit. The Program team could decide to implement a sustainable procurement program specific to this Program, but the effort might be too great because the team may not be able to determine who the manufacturers will be or qualify manufacturers or suppliers.

## **Climate and Resilience Credit Summary**

There is interest in pursuing the embodied carbon credit, as this is an emerging area of importance. There is software available to help the Program team understand and calculate the net embodied carbon. This credit accounts for the Program’s primary materials contributing to net embodied carbon. A thorough greenhouse gas emissions study was conducted during the planning phase.

The Program will explore four of the Climate and Resilience credits simultaneously due to the interconnected criteria. These credits can be worth a considerable number of points when pursued successfully, so there is a benefit to allocating time to focus on these credits.

## **Next Steps (J. Ninete and M. Strawn)**

The team will review habitat opportunities for Natural World credits as the site plan is refined.

Paul Guttridge volunteered to report back to the Stakeholder Advisory Group.

Mary Strawn noted that the group will reconvene in December and the group agreed at the Spring meeting to meet in-person at the plant.

Mary Strawn informed the committee members that Samantha Villegas has left her position at Raftelis and will be serving as the Chief of Communication for the U.S. Environmental Protection Agency Office of Water.

### Questions and Responses

Question	Response
Mary Glass: Is this being done and submitted to ISI (Institute for Sustainable Infrastructure) to verify that Arlington County is meeting its own standards or ISI standards?	Jennifer Ninete: This is being done to be submitted to ISI to verify that the Program is meeting Envision standards.
Mary Glass: Is the scoring system set up by ISI?	Jennifer Ninete: Yes, there are five different levels for achievement – Improved, Enhanced, Superior, Conserving, and Restorative. The manual shows agencies how to get from one level to another.
<p>Mary Glass: Who decided on the weighting?</p> <p>I believe this is a great rating system and wonderful process.</p>	<p>Jennifer Ninete: Envision (version 2) came out in 2012. Leading up to that, the American Council of Engineer Companies (ACEC), the American Public Works Association (APWA), and the American Society of Civil Engineers (ASCE) were each developing their own rating system, as well as the Zofnass Program for Sustainable Infrastructure at the Harvard University Graduate School of Design. These organizations came together to form ISI and develop the Envision sustainable infrastructure rating system. Version 2 weighting/points was determined through collaboration of the industry organizations and industry professionals.</p> <p>Version 3 was released in 2018. For this version a large group of contributors went through an in-depth analysis of how points should be allocated to credits and across the LOAs.</p>
Steve Young: I'm pleased that the team is going through this process. The Envision framework is a good set of framework. I get that LEED is focused on new and existing buildings. Is Envision more for infrastructure because LEED doesn't measure the criteria well? I love that you are doing this.	<p>Stephanie Spalding: Yes, Envision is for infrastructure.</p> <p>Mary Strawn: LEED is for people-occupied buildings.</p>

<p>Paul Guttridge: Please explain the numbers.  [referring to slides 12-16 showing the credit review summary]</p>	<p>Jennifer Ninete: The numbers are the available points for each credit. The highlighted cells on the table are the LOA or LOA ranges we believe the Program is in.</p> <p>Stephanie S.: Fall 2021 is the baseline for potential ranges. Those numbers helped guide the facility planning process.</p> <p>Jennifer Ninete: Stakeholder Engagement is a huge part of Envision. There are 13 credits that have a stakeholder engagement component. The current aspect of the aesthetics at the plant was driven by stakeholder engagement.</p>
<p>Mary Glass: It seems like a project is doing what it should be doing. Looks like it needs to be enhanced to push people toward positive direction. Are there more details in the manual about the intent and metrics?</p>	<p>Jennifer Ninete: The manual includes a detailed description about the expectations. It also contains performance improvements within each credit to advance from one LOA to the next.</p>
<p>Paul Guttridge: Is this scored looked at toward the end to ensure collaboration and teamwork is achieved.</p>	<p>Jennifer Ninete: Yes, it's looked at throughout the full timeline of the Program. The verification submittal will illustrate collaboration through the full Program process.</p> <p>Mary Strawn: We submit this information at the end of construction to ISI for final verification. It is incumbent upon the agency to carry this out throughout the Envision process.</p> <p>Jennifer Ninete: ISI has two pathways for submission. Pathway A has two submissions – one after design is substantially complete (90%) and a follow-up when construction is substantially complete. Pathway B has one submission after construction is substantially complete. Projects with long timeline benefit by using Pathway A. This is the Pathway being use for the Program, so the plan it to initially submit at 90% design.</p>
<p>Mary Glass: This is all terrific. Part of the chart has negatives – Natural World.</p>	<p>Jennifer Ninete: Sometimes credits can be deemed not applicable to the Program, if the sustainability indicator does not exist. In this</p>

	<p>case, ISI allows the credit to be removed from scoring consideration as to not penalize the Program. Credits can be deemed not applicable with supporting documentation demonstrating that an effort was made to identify the indicator, but it was not found on the site.</p>
<p>Mary Glass: (Referencing stormwater in relationship to credit NW3.2 Enhance wetland and surface water functions) My concern is that you are right next to Four Mile Run. It seems as if you are a little optimistic.</p>	<p>Jennifer Ninete: We are a bit optimistic, but the Envision Guidance Manual outlines clear applicability guidelines for each credit. We want to be confident when submitting a credit as not applicable, because the verifier can disagree and say a credit is applicable based on other things they've reviewed in the submission.</p> <p>Brian Balchunas: We understand your comments about being close to Four Mile Run and stormwater. The Envision scoring is really about the project itself and not surrounding areas of the entire Water Pollution Control Plant, which is why we say it's not applicable.</p> <p>[For context, applicability for credit NW3.2 is defined in the Envision Guidance Manual as: Consideration is given to whether the project contains or impacts wetlands or surface waters. This includes direct, indirect, and/or cumulative impacts. Projects that do not contain or impact natural wetlands or surface waters may apply to have this credit deemed not applicable with supporting documentation.]</p>
<p>Steve Young: This is the area that I wanted to push back (Natural World Credit Summary). I see a potential opportunity to do more creative thinking about habitat. Chimney Swift birds lost most of their natural habitat. As a result, they moved from hollow trees to manmade chimneys and incinerator stacks. They are starting to gravitate toward man-made structures. We can claim credits for a chimney structure. Also, Ospreys are attracted to rooftops.</p>	<p>Mary Strawn: We will take those suggestions into consideration.</p>

<p>We can look into doing things to rooftops or other spaces for low capital costs. We can similarly look into rain gardens or micro wetlands. I would love to see creative thinking to create a little bit of habitat that is affordable for the overall project. I think there are creative opportunities for ecology.</p>	
<p>Paul Guttridge: Stormwater management is a hot button issue in Arlington. There are mostly hard surfaces. Are we taking any steps towards ground/stormwater? Was there any consideration to do so?</p>	<p>Jennifer Ninete: to the stormwater credit looks at both runoff and infiltration. There currently aren't any steps being taken for infiltration. Even though the credit is currently not planning to be pursued, we won't finalize those decisions until we start writing the credit documentation.</p> <p>Mary Strawn: Stormwater is very tricky for us because we have to ensure the system is protected so we won't get a spill that enters the storm sewer. Therefore we have a limited stormwater network on site to avoid spills and contamination. We will look for opportunities, but we have to be careful.</p>
<p>Paul Guttridge: Are you looking at what the impact currently is or improve upon current conditions?</p>	<p>Jennifer Ninete: We are looking to improve upon current conditions.</p>
<p>Paul Guttridge: We need to improve air pollutants. We have a flare and boiler, which would seem that it's more emission with the project versus less.</p>	<p>Stephanie Spalding: Truck reduction will help with reducing air emissions.</p> <p>Jennifer Ninete: Odor control improvements can also be included as a benefit to support the air pollutant emissions credit. An Improved level of achievement involves strategies to reduce air pollution emissions during operations.</p>
<p>Steve Young: Glad to see that Envision provides a resilience framework and that the project is doing a climate assessment and risk evaluation. We keep being surprised by extreme weather and high precipitation, as well as high heat events. This evaluation is great and important. Storm surge scenarios are what I think every time I go on the bike path. This is what has to happen. It doesn't surprise me that it gets a lot of points.</p>	<p>Mary Strawn: We are looking at flooding resiliency at the plant on other projects. This area in which the upgrades will occur is outside of the 500-year flood area.</p>

<p>Mary Glass: This is very informative. Is Arlington considering using this method for other projects?</p>	<p>Mary Strawn: We had to get special permission from the County to use Envision for this project. Everyone from Department of the Environmental Services agreed this is the best framework to use for this project. I will share these comments with the DES leadership. I don't have any input if this will be used for other projects.</p>
<p>Steve Young: Is this the first project in Arlington County to use Envision?</p>	<p>Mary Strawn: Yes, it is.</p>
<p>Mary Glass: December is a hard time for a meeting with so many competing priorities.</p>	<p>Mary Strawn: We can look into postponing until January 2024, since December is challenging for people.</p>
<p>Steve Young: Can we also look into a hybrid scenario? My concern is what's going on with Covid numbers rising again.</p>	<p>Mary Strawn: We will take Covid into consideration. We will poll the group and see how everyone feels.</p>

**CHAT:**

- Mary Glass to everyone: 6:24 PM
  - Yes, I'm a tree hugger too!
- Steve Young to everyone: 6:40 PM
  - That is excellent!
- Steve Young to everyone: 6:42 PM
  - Is this Arlington's first known use of Envision?
- Steve Young to everyone: 6:44 PM
  - Kudos to the whole team and thank you!