

Second Party Opinion **EXECUTIVE SUMMARY**

ISSUER

Indiana Finance Authority

OPINION ON

Taxable Private Activity Refunding Bonds (Ohio River Bridges East End Crossing Project), Series 2021 (Green Bonds)

GREEN STANDARD AND CATEGORY



Sustainable Infrastructure



EVALUATION DATE

September 9, 2021

SUMMARY

Kestrel Verifiers is of the opinion that the Taxable Private Activity Refunding Bonds (Ohio River Bridges East End Crossing Project), Series 2021 (Green Bonds) ("Series 2021 Bonds") conform with the four core components of the Green Bond Principles 2021 as follows:

Use of Proceeds

Proceeds of the Green Bonds will be loaned to East End Crossing Partners, LLC ("Company") to refinance the Indiana Finance Authority's outstanding Tax-Exempt Private Activity Bonds (Ohio River Bridges East End Crossing Project), Series 2013 A ("Series 2013A Bonds"). In refunding the Series 2013A Bonds, the Series 2021 Bonds will refinance the costs of design, construction, and maintenance of the Ohio River Bridges East End Crossing Project ("Project"). The multi-benefit Project addressed regional mobility needs and received an Envision Platinum Sustainability certification which signals comprehensive consideration of vulnerabilities to climate change, restoration of ecosystem functions, and responsible sourcing and reuse of materials during construction. The Series 2021 Bonds align with one eligible project category under the Green Bond Principles: Sustainable Infrastructure.

Process for Project Evaluation and Selection

The Project has a long history of inclusive planning, environmental and other risk assessment, and collaboration. Principles of sustainability have been integrated in each step.

Management of Proceeds

Proceeds from the Series 2021 Bonds will solely be allocated to refunding the Series 2013A Bonds and to finance costs of issuance. Proceeds will be immediately loaned to the Company and allocated to refund the outstanding bonds upon closing. Proceeds will not be held in temporary investments.

Reporting

The Company will post annual continuing disclosures to the Municipal Securities Rulemaking Board through the Electronic Municipal Market Access system. The Company will produce an update report within one year of closing which will contain an update on the use of proceeds and the impact of the Project.

Impact and Alignment with United Nation Sustainable Development Goals

By financing construction of transportation infrastructure that incorporates resilient and sustainable design standards, the Series 2021 Bonds support and advance multiple UN Sustainable Development Goals, including Goals 9: *Industry, Innovation and Infrastructure*, 11: *Sustainable Cities and Communities*, and 17: *Partnership for the Goals*.

- Monica Reid, CEO monica.reid@kestrelverifiers.com +1 541-399-6806
- April Strid, Lead ESG Analyst april.strid@kestrelverifiers.com +1 503-860-1125
- Melissa Audrey, ESG Analyst melissa.audrey@kestrelverifiers.com +1 856-495-5003



Second Party Opinion

Issuer: Indiana Finance Authority

Issue Description: Taxable Private Activity Refunding Bonds (Ohio River Bridges East End

Crossing Project), Series 2021 (Green Bonds)

Project: Ohio River Bridges East End Crossing Project

Green Standard: Green Bond Principles

Green Category: Sustainable Infrastructure

Par: \$527,645,000

Evaluation Date: September 9, 2021

GREEN BONDS DESIGNATION

Kestrel Verifiers, an Approved Verifier accredited by the Climate Bonds Initiative, conducted an independent external review of this bond to evaluate conformance with the Green Bond Principles (June 2021) established by the International Capital Market Association.

This Second Party Opinion reflects our review of the uses and allocation of proceeds, and oversight and conformance of the bonds with the Green Bond Principles. In our opinion, the Taxable Private Activity Refunding Bonds (Ohio River Bridges East End Crossing Project), Series 2021 (Green Bonds) ("Series 2021 Bonds") are aligned with the four core components of the Green Bond Principles and qualify for Green Bonds designation.

ABOUT THE ISSUER

The Indiana Finance Authority is a body politic and corporate entity separate from the State of Indiana but exercising an essential government function. The mission of the Indiana Finance Authority is to oversee State-related debt issuance and provide efficient and effective financing solutions to facilitate state and local government and business investment in Indiana. There are five statutory members of the Indiana Finance Authority including Directors of the State Budget Agency, the Treasurer of the State, and three other members appointed by the Governor.

The Indiana Finance Authority has two separate roles in the Ohio River Bridges East End Crossing Project: (1) as "conduit issuer" of the Series 2021 Bonds, and (2) as party to the Public Private Agreement. Additional parties to the Public Private Agreement include the East End Crossing Partners, LLC.

ABOUT THE BORROWERS

The East End Crossing Partners, LLC (the "Company") is the beneficiary of the Series 2021 Bonds issued by Indiana Finance Authority. The Company, held by VINCI Concessions Investments USA Inc. ("VINCI"), and BBGI East End Holdings Inc. ("BBGI"), entered into a Public Private Agreement with the Indiana Finance Authority to design, build and finance the Project and operate and maintain a specific portion of the Project until 2051.

VINCI designs, finances, builds, operates and maintains nearly 80 airports, highways and rail projects in 24 countries, through its subsidiaries VINCI Airports, VINCI Highways and VINCI Railways. VINCI takes an

innovative approach toward mobility climate resilience and sharing growth with the regions in which they work. Principles of sustainability are central to operations and management at VINCI, as demonstrated by the company's recent commitment to reducing direct greenhouse gases emissions by 40% by the year 2030 (compared to 2018).

BBGI is an infrastructure investment company incorporated in Luxembourg, listed on the Main Market of the London Stock Exchange, and regulated by the Comission de Surveillance du Secteur Financier, a public institution which supervises the professionals and products of the Luxembourg financial sector. As signatory to the United Nations Principles for Responsible Investment ("UN PRI"), BBGI has demonstrated a commitment to responsible investing that is driving change toward a more sustainable world. In 2020 BBGI's reporting through UN PRI received an 'A' rating for strategy, governance, and infrastructure.

The Project

The Ohio River Bridges East End Crossing Project, completed in 2016, is a cross-river transportation and roadway project implemented via a public-private partnership between the Indiana Department of Transportation, the Kentucky Transportation Cabinet, Indiana Finance Authority, VINCI, BBGI, and Walsh Construction Company. Designed to meet current and future mobility needs of the Louisville Metropolitan Area, the Project includes a cable-stayed bridge (now called the Lewis and Clark Bridge) across the Ohio River connecting Clark County, Indiana, with Jefferson County, Kentucky, and associated roadways, tunnels and facilities.

Benefits of the Project include:

- Addressing long-term mobility challenges of the region;
- Increasing cross-river mobility;
- Improving safety and alleviating traffic congestion;
- Integrating with existing highways; and
- Stimulating the economy.

ALIGNMENT TO GREEN STANDARDS

Green Bonds are any type of bond instrument where the proceeds will be exclusively applied to finance or refinance, in part or in full, new and/or existing eligible Green Projects and which are aligned with the four core components of the Green Bond Principles (International Capital Market Association definition). In preparing this Opinion, Kestrel Verifiers recognized the need to establish a new eligible project category: Sustainable Infrastructure.

In Kestrel Verifiers' view, eligible projects in the Sustainable Infrastructure category are aligned with the Envision Sustainable Infrastructure Framework and demonstrate the following: effective collaboration among project teams and communities, a commitment to stewardship and restoration of natural resources, the advancement of social equity within communities, and a resilience to physical and transitional climate risks. More information on the Envision Sustainable Infrastructure Framework can be found on the Institute for Sustainable Infrastructure website: https://sustainableinfrastructure.org/

Use of Proceeds

The Series 2021 Bonds will be loaned to the East End Crossing Partners, LLC ("Company") to refund Indiana Finance Authority's outstanding Tax-Exempt Private Activity Bonds (Ohio River Bridges East End Crossing Project), Series 2013 A ("Series 2013A Bonds") and to pay the costs of issuance. The Ohio River Bridges East End Crossing Project ("Project") that was partially financed by the Series 2013A Bonds is an eligible project as per the Green Bond Principles in the project category of Sustainable Infrastructure. The Project achieved an Envision Platinum certification in 2016 from the Institute for Sustainable Infrastructure, by demonstrating comprehensive integration of principles of sustainability through all stages of the Project.



Envision Framework and Sustainable Design

Envision is a sustainability framework and rating system for physical infrastructure developed in partnership between Harvard University Graduate School of Design and the Institute for Sustainable Infrastructure ("ISI"), which was founded by the American Public Works Association, the American Council of Engineering Companies, and the American Society of Civil Engineers. The Envision framework is widely accepted and promoted by the American Society of Civil Engineers as a best practice for sustainable design. Just as LEED² is a recognizable standard for green building design, Envision is a recognizable standard for sustainable infrastructure of all types. The Envision framework includes 64 sustainability and resilience indicators ("credits") organized around five categories (*Quality of Life, Leadership, Resource Allocation, Natural World,* and *Climate and Resilience*) that collectively address components of community development, human health and well-being, mobility and emissions, wildlife conservation, life cycles of materials, and more.

The Ohio River Bridges East End Crossing Project received an Envision Platinum certification in 2016 as the first Envision project involving (i) a highway, (ii) a river bridge, (iii) a roadway tunnel and (iv) a bi-state location. Parsons acted as a third-party verifier for the certification which was issued by the ISI. The Project earned high marks on *Quality of Life, Leadership,* and *Climate and Resilience* as outlined below. The Project is exemplary in its comprehensive consideration of vulnerabilities to climate change and restoration of ecosystem functions. During construction, at least 80% of excavated material was beneficially reused on site and all disturbed soils were restored to a functional state. The majority of materials, plants, and soils used in construction were locally sourced, as defined by the Envision framework. The full Envision Evaluation Assessment is provided in Appendix B.

Envision Category	Definition	Areas of High Achievement
Leadership - Establish a Sustainability Management System (LD1.2)	A sustainability management system integrates a sustainability policy into project decisionmaking.	The Project has a Sustainability Management Plan with specific Key Performance Indicators measured throughout construction and operation. Metrics are grouped into four categories: People & Communities, Biodiversity & Natural Resources, Climate Change & Energy, and Governance & Partnerships.
Leadership - Provide for Stakeholder Involvement (LD1.4)	Infrastructure demonstrating a comprehensive understanding of sustainability (environmental and social impacts) has been developed and implemented with extensive input from the public, regulators, and consultants.	The Project achieved the highest possible level of achievement by proactively seeking out and responding to diverse stakeholder concerns and opinions throughout the design, risk assessment, and construction stages. A Project-specific Public Involvement Plan, Community Outreach Plan, and Communication Plan established methodologies for effective communication. Features such as noise barriers and aesthetic elements were added as a result of stakeholder involvement. In Kestrel's view, high achievement in this credit is particularly notable due to the complexity and breadth of state, federal, and local involvement.
Climate and Resilience – Assess Climate Threat (CR2.1)	A comprehensive understanding of climate risks associated with any new infrastructure project is critical to the long-term sustainability of the asset.	The Project achieved the highest possible level of achievement by completing a climate impact assessment and adaptation plan that included vulnerability, risk, and adaptation assessments.
Quality of Life - Develop Local Skills and Capabilities (QL1.3)	Infrastructure projects offer opportunities for workforce training which can have farreaching and prolonged positive impacts on communities.	The Project received the highest possible score by prioritizing development of a local, skilled workforce and encouraging involvement of Disadvantaged Business Enterprises through all stages of the Project. Project managers worked collaboratively with local labor unions, recruited trainees, implemented onthe-job training programs, and partnered with community organizations, including local colleges and high schools, to implement training programs.

 $^{^{1}}$ The Institute for Sustainable Infrastructure is a nonprofit education and research organization.

² Leadership in Energy and Environmental Design (LEED) is a green building rating system developed by the US Green Building Council

³ The Project received nearly a dozen awards including Bond Buyer's 2013 Deal of the Year and ARTBA 2013 P3 Project of the Year.

Additional elements contributing to the Platinum certification include:

- a design to withstand a 500-year flood;
- a 100-year design life;
- pavement tailored to withstand local temperature extremes and reduce stormwater runoff;
- salt management to protect water quality;
- LED lighting;
- anti-idling devices on maintenance vehicles;
- solar trash compactors;⁴
- non-motorized access; and
- significant reduction of traffic congestion.

The Project is complete, and ongoing operations and maintenance will follow a comprehensive maintenance plan. Several innovative operations and maintenance practices are currently planned or in discussion by BBGI and VINCI. These include:

- Solar panels on the maintenance facility;
- All electrical vehicle for maintenance fleet;
- Pollinator habitats and other wildlife conservation initiatives;
- Native plant landscaping.

Process for Project Evaluation and Selection

The Envision certification provides verification of an inclusive, forward-thinking, and innovative process that prioritizes sustainability and resilience.

Initial Planning

INDOT and KYTC agreed to pursue an early version of the Project in 1997 based on the Ohio River Major Investment Study, the Metropolitan Louisville Ohio River Bridge Study, and assessments by the Kentucky Transportation Cabinet and the Indiana Department of Transportation.

Environmental Impact Assessment

In accordance with the National Environmental Protection Act, the Project underwent an extensive impact assessment to evaluate alternatives and review physical, social, and biological effects of construction and operation. The Final Environmental Impact Statement ("FEIS") was approved by the Federal Highway Administration in 2003 and a Supplemental FEIS was approved in 2012 after necessary changes to the Project were identified.

BBGI Environmental Assessment

BBGI's own project selection strategy is guided by four key pillars, 1) Low-risk, 2) Globally diversified, 3) Strong ESG approach, and 4) Internally Managed. Assessment criteria consider environmental impacts, alignment with UN SDG's, and climate models and factors including: earthquakes, flooding, and erosion. Business-as-usual scenario testing and risk assessment mapping are also considered. This additional environmental impact assessment from BBGI further confirms the Project's sustainability performance.

Stakeholder Involvement

Project proponents intentionally engaged with the community during the design and construction phases and achieved nearly all points in the Envision framework related to community involvement. Project teams met regularly with community members and stakeholders, and collaborated on problem-solving. For example, the Project team preserved a significant historic and cultural resource, a landmark heritage home, by creating a tunnel to mitigate harmful impacts from construction. This commitment to outreach ensured the Project met regional needs while minimizing negative impacts to local communities. Long-lasting positive social impacts include economic development and job creation, in correlation with improved mobility.

⁴ The implementation of the solar compactors with the adjacent recycling container has resulted in significantly higher levels of recyclable collection than the project team originally anticipated. As of 2021, 75% of collected material has consisted of recyclable material.

Management of Proceeds

Proceeds from the Series 2021 Bonds will solely be allocated to refunding the Series 2013A Bonds and to finance costs of issuance. Proceeds will be immediately loaned to the Company and allocated to refund the outstanding bonds upon closing. Proceeds will not be held in temporary investments.

Reporting

The Company intends to submit continuing disclosures to the Municipal Securities Rulemaking Board ("MSRB") through the Indiana Finance Authority so long as the Series 2021 Bonds are outstanding. The Indiana Finance Authority will also provide reports in the event of material developments. This reporting will be done annually on the Electronic Municipal Market Access ("EMMA") system operated by the MSRB.

BBGI and VINCI prioritize transparency in operations and reporting. BBGI reports on alignment with the UN Principles for Responsible Investment, is required to meet the EU Sustainable Finance Disclosure Regulations, and will report using the Task Force for Climate Related Financial Disclosures for the first time in 2021. Consistent with these commitments to ESG transparency, VINCI and BBGI will produce a one-time voluntary update report confirming that proceeds were spent on the refunding. This report will be made publicly available on a project website within approximately one year of closing. The report will reaffirm conformance with Envision standards and will include project-specific scope 1 and 2 emissions beginning in January 2022, as well as information related to the continued operation of the Project.

IMPACT AND ALIGNMENT WITH UN SDGS

The Project supports the vision of the UN SDGs. Full text of the Targets for Goals 9, 11, and 17 can be found in Appendix A, with additional information available on the United Nations website: www.un.org/sustainabledevelopment

By refinancing a project that reduced traffic congestion in Louisville, the Series 2021 Bonds advance Targets 11.2 and 11.6. Integration of the pedestrian and bike path further support Target 11.2. The extensive involvement of stakeholders in the risk assessment and design phases of the Project indicate alignment with Target 11.3. Target 9.4 is advanced by achieving an exceptional Envision Sustainable Infrastructure award. Multiple innovative technologies and features were integrated into the Project to support the objectives of Target 9.4. The successful public-private partnership and the Envision award made possible, in part, by the collaborative partnership supports Target 17.7.





Industry, Innovation, and Infrastructure (Target 9.4)

Possible Indicators

- CO₂ emission per unit of value added
- Avoided emissions through LED conversion, no idling, or other efficiency features
- Avoided stormwater runoff through detention ponds
- Lost Time Incident Rate (LTIR) or Loss Time Incident Frequency Rate (LTIFR)

Sustainable Cities and Communities (Target 11.2, 11.3, 11.6)

11 SUSTAINABLE CITIES AND COMMUNITIES

Possible Indicators

- Number of vehicles using the Project
- Reduction in particulate matter as a result of reduced congestion
- Number of public meetings or stakeholders involved in Project design and operation
- Number of non-motorized crossings per vear
- Percent of collected waste diverted from landfills
- Charitable contributions made to local communities

17 PARTINERSHIPS FOR THE GOALS

Partnerships for the Goals (Target 17.17)

Possible Indicators

- Achievement in Envision Leadership category
- Evidence of collaboration through public-private partnership

CONCLUSION

Based on our independent external review, the Series 2021 Bonds (Green Bonds) conform, in all material respects, with the Green Bond Principles (2021) and are in complete alignment with the *Sustainable Infrastructure* category. By meeting holistic sustainability standards and achieving an Envision Platinum certification, the Ohio River Bridges East End Crossing Project has exceeded local and regional expectations for an interstate infrastructure project.

© 2021 Kestrel 360, Inc.

ABOUT KESTREL VERIFIERS



For 20 years Kestrel has been a trusted consultant in sustainable finance. Kestrel Verifiers, a division of Kestrel 360, Inc. is a Climate Bonds Initiative Approved Verifier qualified to verify transactions in all asset classes worldwide. All of Kestrel's Verification Team holds the Envision Sustainability Professional (ENV SP) credential from Envision. Kestrel is a US-based certified Women's Business Enterprise.

For more information, visit www.kestrelverifiers.com

DISCLAIMER

This Opinion aims to explain how and why the discussed financing meets the ICMA Green Bond Principles based on the information which was available to us during the time of this engagement (August-September 2021) only. By providing this Opinion, Kestrel Verifiers is not certifying the materiality of the projects financed by the Green Bonds. It was beyond Kestrel Verifiers' scope of work to review for regulatory compliance and no surveys or site visits were conducted. Furthermore, we are not responsible for surveillance on the project or use of proceeds. Kestrel Verifiers relied on information provided by the Company and publicly available information. The Opinion delivered by Kestrel Verifiers does not address financial performance of the Green Bonds or the effectiveness of allocation of its proceeds. This Opinion does not make any assessment of the creditworthiness of the Company, or its ability to pay principal and interest when due. This is not a recommendation to buy, sell or hold the Bonds. Kestrel Verifiers is not liable for consequences when third parties use this Opinion either to make investment decisions or to undertake any other business transactions. This Opinion may not be altered without the written consent of Kestrel Verifiers. Kestrel Verifiers reserves the right to revoke or withdraw this Opinion at any time. Kestrel Verifiers certifies that there is no affiliation, involvement, financial or non-financial interest in the Company or the projects discussed. Language in the offering disclosure supersedes any language included in this Second Party Opinion.

Use of the United Nations Sustainable Development Goal (SDG) logo and icons does not imply United Nations endorsement of the products, services or bond-financed activities. The logo and icons are not being used for promotion or financial gain. Rather, use of the logo and icons is primarily illustrative, to communicate SDG-related activities.



Appendix A. UN SDG TARGET DEFINITIONS

Target 9.4

By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resourceuse efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities

Target 11.2

By 2030, provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons

Target 11.3

By 2030, enhance inclusive and sustainable urbanization and capacity for participatory, integrated and sustainable human settlement planning and management in all countries

Target 11.6

By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and municipal and other waste management

Target 17.17

Encourage and promote effective public, public-private and civil society partnerships, building on the experience and resourcing strategies of partnerships



Appendix B. ENVISION ASSESSMENT

Category: Quality of Life					
Subcategory	Credit Title & Identification Number	Final ISI Assessment	Total Possible Points	Envision 2.0 Definition of Achievement of the Project	
	QL1.1 Improve Community Quality of Life	25	25	Restorative: Through rehabilitation of important community assets (e.g., upgraded and extended access, increased safety, improved environmental quality, and additional infrastructure capacity) the project substantially reinvigorates the host and nearby communities. Working in genuine collaboration with stakeholders and community decision makers, the project owner and the project team scope the project in a way that elevates community awareness and pride. Overall quality of life in these communities is markedly elevated.	
Purpose	QL1.2 Stimulate Sustainable Growth and Development	13	16	Conserving: The completed project is designed to contribute substantially to community attractiveness for compatible businesses and industries by improving the overall business environment. This may include increased productivity, cost-effective access to facilities and infrastructure, and enhanced cultural and recreational opportunities. People want to live and work in the community.	
	QL1.3 Develop Local Skills and Capabilities	15	15	Restorative: The project team commits to working with the local community to assess local employment and educational needs and to address future community competitiveness. Working with community leaders, programs are established to identify educational and employment needs and shortfalls. The team then works with the community to improve and retrofit the local skills base, thereby improving long-term competitiveness.	
Community	QL2.1 Enhance Public Health and Safety	16	16	Conserving: The project team puts in place health and safety plans and programs that substantially exceed all applicable regulations. Explicit and comprehensive consideration given to the application of new technologies, materials, equipment, and methodologies and the corresponding new health and safety requirements and considerations.	
	QL2.2 Minimize Noise and Vibration	8	11	Conserving: Proposals for mitigation of airborne and ground-borne noise and vibration to acceptable levels in the affected community are created based on studies and determination of the noise goals of the affected communities. Proposals are presented, approved, and incorporated into project designs. Project team sets construction specifications for noise and vibration limits. Programs to monitor noise and vibration during operation are established.	
	QL2.3 Minimize Light Pollution	4	11	Superior: The project team aligns the project with appropriate lighting zones and existing zoned districts. The team establishes lighting zones based on lighting needs balanced against the needs and limitations posed by sensitive environments and receptors. The team assesses street lighting needs and specifies the removal of unneeded street lighting.	
	QL2.4 Improve Community Mobility and Access	14	14	Conserving: The project team expands the range of discussion. The team works with decision makers in adjacent facilities and also with local community officials. Design considerations have moved beyond access and flow issues and now address the reduction of traffic congestion, improvements in walkability in the community, and other key measures of mobility and access. The location of the project has been chosen to utilize and improve the existing transportation infrastructure. It incorporates a community transportation strategy. Principles and specifications for reducing negative construction impacts include strong programs for working with the affected community.	

Subcategory	Credit Title & Identification Number	Final ISI Assessment	Total Possible Points	Envision 2.0 Definition of Achievement of the Project
	QL2.5 Encourage Alternative Modes of Transportation	12	15	Conserving: The project enhances public transportation facilities or implements programs to encourage the use of public and non-motorized transportation. Enhancements include provisions for sheltered and well-lit bus stops, tram stops, or transit access points. Enhancements also include effective display of information such as time and route of public transportation.
	QL2.6 Improve Accessibility, Safety & Wayfinding	15	15	Restorative: Beyond the accessibility, safety, and wayfinding aspects of the project, the changes made to the site and general vicinity of the completed project improve overall access and safety of the adjacent neighborhoods, providing an increase from previous levels.
	QL3.1 Preserve Historic and Cultural Resources	16	16	Restorative: The project is designed to fully preserve the character-defining features of that resource and enhances the resource in a significant manner. Examples may include rehabilitation in accordance with the Secretary of Interior Standards, restoration of lost features such as a historic landscape or green spaces, upgrade and expansion of recreational facilities, or a publicly accessible educational or museum site in accordance with historic/cultural stakeholder wishes.
Wellbeing	QL3.2 Preserve Views and Local Character	11	14	Conserving: The project team assists the local community to establish or enhance the regulations, policies, and standards on view corridors, views from public/open spaces, views of features associated with community identity, or natural features. Fit with local character is considered a key aspect of the project and alternatives are developed and implemented in collaboration with community stakeholders. Significant efforts are made in siting the project and during design and construction to preserve landscape features.
	QL3.3 Enhance Public Space	11	13	Conserving: Examples include creating new space or facilities, addition of recreational facilities to an existing resource, and/or significantly improving access for current and future users. Stakeholder satisfaction with planned efforts and outcomes. Official with jurisdiction over the resource must concur in writing with impact assessment, both for temporary and permanent impacts.
	QL0.0 Innovate or Exceed Credit Requirements	6	bonus	-

166 181

Category: Leadership

Subcategory	Credit Title & Identification Number	Final ISI Assessment	Total Possible Points	Envision 2.0 Definition of Achievement of the Project
Subcategory	LD1.1 Provide Effective Leadership & Commitment	17	17	Conserving: Sustainability is a core value of the organization and the project team as demonstrated by their policies, activities, and performance. Apparent full commitment by all parties to address all aspects of the triple bottom line as they apply to the project. Understanding of the issues and problems associated with sustainability. Explicit recognition of the need for action to address the consequences of operating in a nonsustainable environment.
Collaboration	LD1.2 Establish a Sustainability Management System	7	14	Superior: The project management plan contains a sufficient set of business processes and management controls to address most any issue. Systems are mostly complete, but fall short of a full sustainability management system. Mechanisms are present and sufficient for the project, but are not necessarily robust and able to handle change. For the most part, a member(s) of the project team have been assigned the appropriate roles and responsibilities of the position(s). The roles and responsibilities of the person(s) assigned to manage the sustainability aspects of the project are well defined, and their authority on the project to affect change is sufficient.

Cubestagem	Credit Title & Identification	Final ISI	Total Possible	Envision 2.0 Definition of Ashiovement of the Project
Subcategory	Number LD1.3 Foster Collaboration and Teamwork	Assessment 15	Points 15	Envision 2.0 Definition of Achievement of the Project Conserving: Whole systems design processes, procedures, and methodologies are incorporated into the overall project delivery process. The multidisciplinary project team works together to find ways to improve sustainable performance commensurate with the owner's goals and objectives, technical feasibility, costs, and appetite for risk. Design considerations include reducing sources of demand, using recycled and/or renewable resource supplies and excess resources generated within the system, and eliminating design conflicts and duplicate functions or unnecessary redundancies. Risk/reward sharing is part of the owner's contract with the design team.
	LD1.4 Provide for Stakeholder Involvement	14	14	Conserving: Communication programs and exercises are designed to develop relationships with key stakeholders and give them involvement in the project decision-making processes. Solid, credible programs are established for soliciting feedback from the public and key stakeholders regarding communications and public involvement in the project decision-making processes. The project can demonstrate specific and significant case(s) in which changes were made based on feedback. Given the likely broad array of issues and positions, the project team not only focuses on obtaining meaningful input, but also making the process for project decisions fair and equitable. Built properly, these relationships can assist in breaking project logjams. Feedback programs are designed to give complete credible feedback regarding the communications and public involvement processes. Project decisions incorporate fairness and equity.
	LD2.1 Pursue By-Product Synergy Opportunities	0	15	-
Management	LD2.2 Improve Infrastructure Integration	13	16	Conserving: The project owner and designer place the project in a community context and participate in multisectoral regional strategic planning for integrated community sustainability plans. They assess the existing community's physical infrastructure as well as its nonphysical assets. Project is planned and designed to take into account not only physical infrastructure, but also related community infrastructure. The project incorporates and takes advantage of valuable community assets (e.g., knowledge and social capital). The project integrates with the community's asset management program.
	LD3.1 Plan Long-Term Maintenance and Monitoring	10	10	Conserving: A comprehensive maintenance and monitoring plan has been prepared well in advance of project completion. The owner recognizes that attention to implementation during early stages is important to ensure that resources are available and that the personnel assigned understand their responsibilities.
Planning	LD3.2 Address Conflicting Regulations and Policies	8	8	Conserving: Extensive assessments conducted, but with an eye toward structural change. Laws, standards, regulations, and policies that unintentionally run counter to sustainability objectives and practices are addressed broadly with the intent of changing overall approaches and philosophies. The owner and the project team offer a view of how overall design and construction standards and practices need to be changed to address new problems arising from sustainability issues.
	LD3.3 Extend Useful Life	12	12	Conserving: The project team has broad latitude to explore ways to extend the useful life of the project. The project team uses that latitude to expand opportunities to add to the project's useful life, improve durability, flexibility, and resilience, and ease retrofitting and repair. The project includes investment in areas of both short and long-term payback.
	LD0.0 Innovate or Exceed Credit Requirements	0	Bonus	

96 121

Category: Resource Allocation

category. N	esource Allo	cation		
Cubestages	Credit Title & Identification Number	Final ISI Assessment	Total Possible Points	Envision 2.0 Definition of Achievement of the Project
Subcategory	RA1.1 Reduce	ASSESSITIETIL ()	18	Envision 2.0 Dennition of Achievement of the Project
	Net Embodied Energy			
	RA1.2 Support Sustainable Procurement Practices	0	9	-
	RA1.3 Use Recycled Materials	0	14	-
Materials	RA1.4 Use Regional Materials	6	10	Enhanced: At least 60% of all materials, plants, and soils are sourced within the distances specified: soils (50 mi, 80 km), aggregate (50 mi, 80 km), concrete (100 mi, 160 km), plants (250 mi, 400 km), and all other materials (500 mi, 800 km).
	RA1.5 Divert Waste from Landfills	0	11	
	RA1.6 Reduce Excavated Materials Taken Off Site	5	6	Conserving: Reuse at least 80%. Percentage of excavated material suitable for reuse beneficially reused on site.
	RA1.7 Provide for deconstructio n and Recycling	1	12	Improved: Disassembly, deconstruction, and recycling or upcycling are minimally considered. Generally, at least 15% of the components or prefabricated units can be easily separated for reuse or recycling and it is reasonable to assume that they will be.
	RA2.1 Reduce Energy Consumption	0	18	-
	RA2.2 Use Renewable Energy	0	20	-
Energy	RA2.3 Commission and Monitor Energy Systems	11	11	Conserving: An extensive initial commissioning is conducted. Information has been provided by the project team for the operator to train operations and maintenance personnel. Equipment and/or software are incorporated in the design to allow detailed monitoring of performance. At a minimum, the equipment installed is capable of monitoring all primary project functions, accounting for at least an accumulated 80% of energy use.
	RA3.1 Protect Fresh Water Availability	0	21	-
Water	RA3.2 Reduce Potable Water Consumption	0	21	
	RA3.3 Monitor Water Systems	1	11	Improved: An initial commissioning of the project's water systems is specified to validate design objectives, but little to no effort is made to incorporate and facilitate long-term monitoring.
	RA0.0 Innovate or Exceed Credit Requirements	0	bonus	-

24 182

Category: Natural World

	Credit Title &	Final ICI	Total	
Subcategory	Identification Number	Final ISI Assessment	Possible Points	Envision 2.0 Definition of Achievement of the Project
	NW1.1 Preserve Prime Habitat	14	18	Conserving: The project establishes a minimum 300-foot natural buffer zone around all areas deemed "prime habitat". Exceptions are possible if developed sites not within the project scope exist within the minimum distance.
	NW1.2 Preserve Wetlands and Surface Water	0	18	-
	NW1.3 Preserve Prime Farmland	0	15	-
Siting	NW1.4 Avoid Adverse Geology	3	5	Superior: Based on extensive geotechnical and hydrogeologic assessments, the adverse geologic areas and associated aquifers are well defined. Hazard areas are defined, designated, and avoided. Buffers around faults, coastlines, and karst features are established. Runoff controls, spill prevention, and cleanup plans are created and implemented.
	NW1.5 Preserve Floodplain Functions	14	14	Conserving: Modify or remove structures frequently damaged by floods. The project is designed to not inadvertently trap sediment and to allow fish passage through project reach. If repeatedly damaged structures are in project reach, they are removed or modified to reduce the potential for flood damages.
	NW1.6 Avoid Unsuitable Development on Steep Slopes	1	6	Improved: Assess the selected site. Design the project to minimize alteration to avoid excessive erosion and the potential for landslides. Institute management practices for the completed project to control erosion and prevent landslides. Add protection to down-slope buildings, facilities, and infrastructure from erosion and landslides.
	NW1.7 Preserve Greenfields	0	23	-
	NW2.1 Manage Stormwater	0	21	-
	NW2.2 Reduce Pesticides and Fertilizer Impacts	1	9	Improved: Operational policies and programs are designed to control the application of pesticides and fertilizers so they are not over applied. Runoff controls are put in place to minimize contamination of groundwater and surface water.
Land & Water	NW2.3 Prevent Surface and Groundwater Contamination	9	18	Superior: During the design stage, the location of equipment and facilities containing potentially polluting substances are located away from sensitive environments. Runoff interceptors and drainage channels are designed to accommodate pollutants in stormwater runoff or ice melt, potential spills, and leakage. Spill prevention and response plans are in place. During operation, methods to monitor and minimize pollutants in stormwater runoff or ice melt are used.
	NW3.1 Preserve Species Biodiversity	13	16	Conserving: The project team works with state and local agencies to identify existing habitats in or near the project site. During the course of the project, efforts are made to not only protect existing habitats, but also to upgrade them. Efforts are made to plant appropriate vegetation, improve and expand wildlife corridors, and link existing habitats. Projects can preserve portions of the site, which are contiguous to natural areas outside of the site, in an undisturbed condition; create new connections between areas of important habitat; or remove existing barriers to movement.
Biodiversity	NW3.2 Control Invasive Species	11	11	Restorative: Effective programs and actions established to eliminate existing invasive species from the project site.
	NW3.3 Restore Disturbed Soils	8	10	Conserving: Restore 100% of soils disturbed during construction in the site's vegetated area. Soils must be reused for functions comparable to their original function (i.e., topsoil is used as topsoil, subsoil as subsoil, or subsoil is amended to become functional topsoil).
	NW3.4 Maintain Wetland and Surface Water Functions	19	19	Restorative: All four functions are maintained or enhanced and restored to have a fully functioning aquatic and riparian ecosystem.

Subcategory	Credit Title & Identification Number	Final ISI Assessment	Total Possible Points	Envision 2.0 Definition of Achievement of the Project
	NW0.0 Innovate or Exceed Credit	0	bonus	-
	Requirements			

93 203

Category: Climate & Risk

Subcategory	Credit Title & Identification Number	Final ISI Assessment	Total Possible Points	Envision 2.0 Definition of Achievement of the Project
Emission	CR1.1 Reduce Greenhouse Gas Emissions	0	25	-
	CR1.2 Reduce Air Pollutant Emissions	0	15	-
Resilience	CR2.1 Assess Climate Threat	15	15	Conserving: A comprehensive climate impact assessment and adaptation plan has been developed. The plan should include the following components: Vulnerability assessment, Risk assessment, and Adaptation assessment. The process should include collaborations with the local emergency management department and meetings with the local community.
	CR2.2 Avoid Traps and Vulnerabilities	16	20	Conserving: Work with community decision makers and stakeholders to make a full and comprehensive assessment of resource demands and supplies, resource and infrastructure traps, and vulnerabilities. Use the assessment as a basis for making changes to the project design. Considerations include how the project contributes to the community's assessment of resource demands and supplies, as well as resource and infrastructure traps, and vulnerabilities.
	CR2.3 Prepare For Long-Term Adaptability	16	20	Conserving: Plans and designs have been created and implemented to prepare for long-term climate change, including the effects of increased intensity and frequency of extreme weather events, water scarcity, sea level rise, extended droughts and heat waves, and increased ambient temperature.
	CR2.4 Prepare for Short-Term Hazards	17	21	Conserving: Plans and designs have been created and implemented to prepare for short-term hazards that have a 1-in-100-year or better chance of occurring, including direct and indirect impacts. Designs may limit the hazard itself, fortify against the hazard, or allow the project to adapt to the hazard.
	CR2.5 Manage Heat Island Effects	6	6	Conserving: At least 90% of hardscape surfaces meet shading or SRI requirements of 29 or higher.
	CR0.0 Innovate or Exceed Credit Requirements	0	bonus	-

70 122

Grand Total Across All Categories

Final ISI Assessment: 449
Total Possible Points: 809