Response to Request for Information regarding the

ALTERNATIVE DELIVERY CONTRACT OPTION
Cape Fear Memorial Bridge

Submitted to:

STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

May 26, 2022

ACSINFRA

DRAGADOS

May 26, 2022

Attn: David Stark
Manager Priority Projects
North Carolina Department of Transportation

Via Email: dstark@ncdot.gov

RE: Response to Request for Information for the Alternative Delivery Contract Option, Cape Fear Memorial Bridge

Dear Mr. Stark,

ACS Infrastructure Development, Inc. (ACS) and Dragados USA, Inc. (Dragados) (together, the Respondent), is pleased to submit the attached response to the North Carolina Department of Transportation (NCDOT) for the Request for Information issued on April 25, 2022 regarding the Alternative Delivery Contract Option, Cape Fear Memorial Bridge (the Project).

We welcome the opportunity to discuss any aspect of this response at your convenience.

Sincerely,

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Notice

The information and any analyses contained in this response to the Request for Information are taken from, or based upon, information contained in the RFI for the Alternative Delivery Contract Option Cape Fear Memorial Bridge or otherwise received from the State of North Carolina Department of Transportation or from publicly available sources. Neither ACS Infrastructure nor Dragados USA, Inc. have independently verified or investigated the completeness or accuracy of any such information, unless otherwise explicitly stated herein. The information and any analyses in these materials reflect prevailing conditions and our views as of the date hereof, all of which are subject to change. Should the Respondent participate in subsequent stages of the procurement process of the project, further investigations and due diligence analyses will be required to define the overall approach to the project more precisely. Additionally, the information contained herein, in particular our ability to finance the project, assumes a standard allocation of risk reflective of recent market precedents (including, without limitation, customary provisions regarding appropriations and funding, environmental permitting, geotechnical risks, right of way acquisition, maintenance, etc.).

ACS Infrastructure Development, Inc. (ACS) is a US subsidiary of Iridium Concesiones de Infraestructuras, S.A., a wholly owned subsidiary of the ACS Group. The ACS Group is one of the largest transportation infrastructure construction companies and developers in the world, with over 45 years of experience in the concession industry and more than 190,000 employees across 60 countries. In 2021, Engineering News- Record (ENR) ranked ACS Group #1 in the Top 250 International Contractors for the ninth year running. Additionally, the ACS Group led the ranking of major global concession groups as the World's Largest Transportation Developer for 12 consecutive years, as listed by Public Works Financing. ACS has been pursuing P3 projects in North America since 2006 and has been awarded 17 transportation infrastructure P3 projects, valued at more than $24 billion. As P3 experts and global transit leaders, ACS Group companies including ACS and Dragados are experts in partnering with owners to provide development, financing and long-term O&M for transit and transportation infrastructure across the US and globally.

Dragados USA, Inc. (Dragados) is a wholly owned subsidiary of Dragados S.A., a global infrastructure leader and member of the ACS Group. Dragados is a global leader in delivering major transportation and infrastructure construction, projects having built over 6,500 miles of roads highways, 1,500 bridges with a combined length of 932 miles, 925 miles of tunnels, 250 dams, and 1,000 miles of railways and mass transit. In North America alone, Dragados has experience delivering approximately $40 billion worth of major infrastructure projects within the last 10 years and is currently ranked no. 6 on *Engineering News-Record's 2021 Top Transportation Firms and No. 9 on the Top 50 Domestic Heavy Contractors in the US lists.* The firm has experience on more than 200 DB projects and more than 100 P3 projects worldwide. Dragados has a strong balance sheet with 2020 revenues over $3 billion in North America alone. In the past 70 years, Dragados has firmly established itself as an industry leader on infrastructure construction and is known for its innovative approach to complex projects.

Our Recent Roadway/Bridge Specific P3 Experience Across North America

I-595 CORRIDOR ROADWAY IMPROVEMENTS

- DBFOM | $1.68 B | Broward County, Florida
- 10 miles of highway widening and construction including 65 bridges
- ACS as Lead Developer, sole equity investor, Lead O&M firm; Dragados as sole Lead Construction Contractor
- Completed in 2014

GORDIE HOWE INTERNATIONAL BRIDGE

- DBFOM | $2.93B | Detroit, MI/Windsor, Canada
- Largest bridge infrastructure project along the US/Canada border
- ACS as Lead Developer, equity investor, Lead O&M firm; Dragados as Lead Construction Contractor
- Under Construction

SH-288 TOLL LANES

- DBFOM | $1.06B | Harris County, Texas
- Reconstruction of 54 bridges across 10 miles of highway
- ACS as Lead Developer, equity investor, Lead O&M firm; Dragados as Lead Construction Contractor
- Substantial Completion 2020

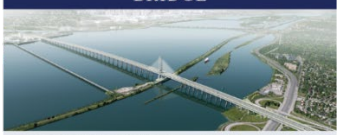
US 181 HARBOR BRIDGE REPLACEMENT

- DBOM | $803M | Corpus Christi, Texas
- New 1,655-foot cable-stay bridge (longest in the US when completed)
- ACS as Lead O&M provider; Dragados as Lead Construction Contractor
- Under Construction

SOUTHERN OHIO VETERAN'S MEMORIAL HIGHWAY

- DBFOM | $654M | Scioto County, Ohio
- Construction of 5 interchanges and 23 new bridges
- ACS as Lead Developer, equity investor, Lead O&M firm; Dragados as Lead Construction Contractor
- Completed in 2018

NEW CHAMPLAIN BRIDGE



- DBFOM | $2.2B | Quebec, Canada
- New 2-mile-long (790-foot span) cable-stay bridge
- ACS as Lead Developer, equity investor, Lead O&M firm; Dragados as Lead Construction Contractor
- Completed in 2019

Together, ACS and Dragados bring significant experience and capacity in transportation infrastructure P3 projects. ACS and Dragados, themselves and through affiliates, partner together on P3 pursuits in North America. Across our P3 projects, ACS leads the development, financing, and long-term operations and maintenance efforts and Dragados provides construction and innovation leadership as part of the design-build teams on our pursuits. Under the delivery method discussed herein, ACS and Dragados would continue in such roles for the Project.

ACSINFRA

Project Lead, Equity Investor, Operations & Maintenance Provider

DRAGADOS

Lead Construction Contractor

INTRODUCTION

Since entering the US P3 market in 2006, we have been strong advocates of partnering and collaboratively working with clients to advance the successful delivery of necessary infrastructure assets, independent of their delivery model. As one of the largest infrastructure developers in the world, we are well versed in numerous project delivery methods – from DBB through full turnkey DBFOM including progressive delivery approaches. While seeking to work with clients on a best-for-project delivery approach, we consider a variety of delivery models to find an optimal fit for the project's intended purpose while ensuring value for money to the client and public. While ACS focuses on the development of P3s inclusive of long-term operations and maintenance, Dragados USA, not only teams with ACS on P3s but is also one of the nation's most prolific design-builders. As a result, we are rather agnostic when it comes to delivery methods in general for prospective projects, and prioritize success of the project for the public owner. However, we do believe it is important to share our view on a perspective delivery approach if we think ultimately a specific approach would prove to be the best approach for any given project. Below we summarize our general thoughts on the Project, how we see the market reacting to the Project, and different approaches to consider.

DELIVERY MODEL

Given the funding challenges for the Project, a toll revenue based approach seems appropriate. We clearly understand the political and public policy considerations that come with tolls in general and the heighted issues when implementing tolls on previously untolled facilities. We do believe that there are several options that can be used to minimize the toll rates and keep them in a range that may prove palatable to the traveling public. We describe a few of these in more detail below.

The Project could be delivered in one of two ways with a toll finance approach:

1. NCTA could finance the Project, use a design-build contract to construct the bridge, charge and collect tolls, etc.
2. NCDOT/NCTA could utilize a Public Private Partnership ("P3") to contract with a private Developer to design, build, finance, operate and maintain the Project.

Based on our review of available information and our experience in developing major infrastructure projects across the US and globally, in our view the implementation of a design-build-finance-operate-maintain ("DBFOM" or synonymously a P3)) delivery approach for the Cape Fear Memorial Bridge project (the "Project" or "Bridge") offers clear opportunities to achieve schedule enhancements, increased efficiency, life-cycle optimization, cost reductions, and a high level of project performance. The allocation of operations, maintenance, and lifecycle responsibility to the private sector, in combination with other properly allocated risks, incentivizes a cost-effective approach to the design, construction and long-term O&M considerations through the optimization of the technical solution.

We have undertaken a high-level review of the Project and have initially concluded that a toll based revenue risk P3 approach, inclusive of a long-term operations & maintenance period, could effectively be utilized to meet or exceed key goals for the Project as well as address the Project funding shortfalls. Some of these key goals include:

(i) accelerating the Project's delivery by providing a funding solution,

(ii) minimizing any public upfront capital expenditures through the use of private equity and debt so as not to disrupt existing publicly funded capital programs and allocations; and

(iii) maximizing the design life by integrating design & construction activities with operations & maintenance and transferring lifecycle risk throughout the term, while providing a high level of asset performance.

Described in further detail below, we have laid out the various reasons why the North Carolina Department of Transportation ("NCDOT" or "Owner") should consider a P3 delivery model, as well as different options that could be considered when delivering a P3.

PUBLIC-PRIVATE PARTNERSHIP

Funding

As stated in the Request for Information ("RFI"), the Bridge is near the end of its effective life and it will not be able to meet the demands of the increasing traffic volumes (~Δ20,000 vpd from 2019 to 2045). In addition, the Project is not in the State Transportation Improvement Program (STIP) and therefore, does not have any state funding allotted to replace it.

Introducing a P3 model could greatly reduce the necessary funding required at commencement of construction. The Developer awarded the Project would finance the design & construction, taking into account any available Milestone Payments (described below), and after construction completion the Developer would be paid either through toll revenues, a monthly Availability Payment ("AP") from the Owner, or a combination of toll revenues and APs. Such payments would serve to reimburse the Developer for the balance of the capital construction and financing costs, as well as for the long-term operations, maintenance and tolling services.

Procurement Structure

NCDOT could consider an Availability Payment, a Revenue Risk, or a hybrid P3 structure to deliver the Project. Regardless of the ultimate Project configuration (as noted in the Express Design Evaluation Study dated May 2020) a Revenue Risk or hybrid approach could be an appropriate model to minimize any traditional public funding requirements and instead rely on direct user based revenues to finance the Project (https://www.wmpo.org/wp-content/uploads/2021/03/H185357-Express-Design-Summary_20200508.pdf).

The procurement structures envisioned include:

- **Revenue-Risk (Toll Revenue)**
  With a toll based revenue-risk P3 delivery approach, a private sector developer, working with the NCDOT/NCTA and local entities as appropriate, would develop, finance, and execute the construction of the Project with toll revenues supporting the Project costs. The developer would be 100% at risk for the toll revenues providing sufficient (presumably at this point) revenue to repay all Project debt and cover all operations and maintenance costs over the life of

the long-term contract. The developer would implement, maintain and operate the toll system as part of the Project. The tolling application should include implementation of innovative tolling strategies to optimize (**not** maximize) the tolling revenue and provide the highest value at the lowest possible toll rate for the Project users.

A key consideration under a pure revenue risk approach is the ability of the Project to be self-sustaining based on toll revenues alone. Tolling policy under such an approach would need to allow toll rates to be set and include escalation considerations over the life of the financing to keep the toll rates at a "reasonable level" upon Project implementation. Should early Project financial plans show that the Project is not financially feasible by tolls alone, the Owner could consider some level of milestone or substantial completion payments that can be used to ensure financial feasibility. Should the financial feasibility test be met without any Owner funding contribution(s) but the resultant toll rates are unpalatable for Project users, milestone and/or substantial completion payments should be considered by the Owner to suppress/lower the tolls.

Alternately, through a hybrid approach, a combination of revenue risk obligations on the developer coupled with annual availability payments made by the Owner can be an effective tool to minimize toll rates.

- **Availability Payment (AP)**
  If NCDOT decides that toll revenue is not the preferred funding mechanism or that NCDOT/NCTA decides a tolled approach is ultimately the only option to deliver the Project within a reasonable delivery period but wishes to totally control and keep toll rates in a suppressed state due to user considerations, there is opportunity to deliver the project as a P3 through the use of APs during the operations and maintenance term. The AP approach allows for the leveraging of funds over a long period of time as opposed to traditional project delivery that requires funding availability upfront.

  APs will still reduce the necessary upfront capital needed to deliver a completed project, therefore not upsetting a substantial part of an existing capital program. AP contracts do require the public agency to budget for annual payments after construction completion and these amounts can be sizeable depending on the size of the project and the amounts being financed.

Regardless of the approach, we would suggest the consideration of both TIFIA and PABs to support and optimize and Project funding plan.

Contract Term

Should a P3 approach be advanced for the project, it is important to note that the implementation of a long-term P3 contract incentivizes the private sector to optimize the long-term cost of the project. Shifting long-term liability for a period of time that far exceeds the useful life of most of the elements to the private sector encourages optimizations in the design and construction phases. In addition, strict handback requirements incentivize a combined optimization of the design and construction in

conjunction with long-term operations & maintenance considerations. With our ACS/Dragados vertically integrated team structure, we consistently develop technical solutions that meet the contract specifications, while achieving cost effectiveness in the long-term. On the contrary, under a DB/DBB approach, the incentives for the contractor are not necessarily aligned to optimize the long-term cost of the project and are essentially focused on the reduction of the construction cost, sometimes at the expense of lifecycle and operation and maintenance considerations. Typical contract term durations for each procurement approach are elaborated on below.

- **Availability Payment**
  30 to 35 years is generally the appropriate term length for an AP concession for this class of infrastructure. It is important to consider the lifecycle of the project elements when determining the appropriate term length. NCDOT will garner the best value from the contract if the concession term is shorter than the lifecycles of all elements to benefit from passing on the costs and risks of lifecycle replacements to the Developer. On the other hand, if the period is too long, the contract will lose value to NCDOT as later cash flows are heavily discounted.
- **Revenue Risk**
  50 years is generally the appropriate term length for a revenue risk concession term. All of the reasons for a long contract term as described above are still present for a revenue risk deal. However, the term is typically longer than that of an AP concession because the consortium is relying on traffic and toll revenue, which comes with a heightened risk given traffic fluctuations in traffic volumes over the life of the term.

BENEFITS

Increased Competition

The size, scope and location of the Project, coupled with the right procurement strategy and risk allocation, would ensure strong industry interest in either a revenue risk or AP P3 approach. The estimated design & construction value (regardless of bridge configuration option chosen) would be attractive to a large number of industry participants.

Accelerated Delivery

We are keenly aware that the Project is not currently in the STIP and does not have any state funding allotted to replace it. A P3 delivery approach will help NCDOT advance the Project more quickly from a funding perspective, typically allowing the public to enjoy the benefits of the Project sooner than under a traditional DB or DBB approach where upfront funding is required. This is however, predicated on a tolled approach or some other financing option that could be based on local taxes or other revenue sources.

Whole-Life Approach

By entering into a P3 agreement through which operations, maintenance and lifecycle responsibility are transferred to the private sector over the term, the Owner gains a long-term partner who is highly incentivized to take a whole lifecycle view of the overall Project. The long-term obligations of the developer over the term of the concession include the transfer of key performance risks and

opportunities to increase efficiency and reduce costs on a whole lifecycle basis. Importantly, the allocation of operations, maintenance and lifecycle responsibilities to the developer incentivizes a cost-effective approach to the design and construction and long-term operations & maintenance considerations through the optimization of technical solutions, including routine maintenance and major rehabilitation cycles, over the life of the Project.

Alternative Technical Concepts (ATCs)

We see significant value in ATCs during the procurement phase. It has been our experience on P3 and design-build projects that ATCs can bring notable innovation to projects and provide efficiencies to safety, cost, schedule, environmental enhancements, fast-tracking, life-cycle performance, and revenue. NCDOT has a long tradition of utilizing the ATC process in their projects. The process is even more beneficial in DBFOM projects as we are able to include considerations to both construction and long-term operations & maintenance, therefore resulting in a maximization of the whole-life benefits providing a best value solution to each client.

Operational Accountability

P3 contract documents will stipulate strict performance requirements that the developer shall adhere to. In the event that these performance requirements are not adhered to, the developer would be charged liquidated damages for each noncompliant item. The performance / noncompliance regime set forth in contract documents force the developer to ensure that the requirements are either met or exceeded during the term of the Project.

Sharing Toll Revenue

On most toll revenue risk projects in the U.S., toll revenues that exceed certain thresholds of the developer's forecasted toll revenues at the time of financial close are shared with the Owner.

OTHER ITEMS FOR CONSIDERATION

Milestone Payments

Milestone payments made by the Owner during construction and/or upon substantial completion provide opportunities to reduce long-term financing requirements and potentially lower the cost of capital for the Project and are sometimes used to ensure project financial feasibility and/or as an option to reduce/minimize toll rates on toll based P3 projects. Appropriate milestones for partial payments should be easily measurable and tied to a percentage of work completed for the overall Project.

Optimal Risk Transfer

Regardless of the ultimate project delivery approach, whether a P3, a design-build or anything else, this Project, like any other project of this size would benefit greatly from an optimized risk allocation to ensure those risks best managed by the government remain with the government and those best managed by the private sector are managed by them.

Environmental Approvals (NEPA)

A key to accelerating any project is having NEPA well in hand. We would strongly encourage this process to be advanced quickly to ensure delivery as soon as funding/revenue/financing decisions are made.

TIFIA

NCDOT is well aware of the benefits of TIFIA as it has been used on other NCDOT projects. As one of the most cost-effective forms of debt available in the US infrastructure market, it combines low interest rates with a great level of flexibility when it comes to interest capitalization and is often key to ensuring project feasibility. TIFIA should remain a consideration for the project and could ultimately be a key part of any Project financing should the NCDOT advance an applicable procurement approach.

CLOSING

Thank you for your consideration of our response to this RFI. We appreciate the opportunity to share our thoughts and hope that our input will be beneficial to NCDOT in advancing the Project.

We would welcome the opportunity to speak with you further about the Project in general and more specifically about our thoughts on Project delivery or P3s in general.

Please contact us if you have any further questions or would like clarification of any of the points we have raised in this response.