



# **AEROTROPOLIS REGIONAL TRANSPORTATION AUTHORITY**

## **ENGINEER'S REPORT AND VERIFICATION OF COSTS ASSOCIATED WITH PUBLIC IMPROVEMENTS**

PREPARED BY:  
SCHEDIO GROUP LLC  
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GREELEY, COLORADO 80631

LICENSED PROFESSIONAL ENGINEER:  
TIMOTHY A. MCCARTHY  
STATE OF COLORADO  
LICENSE NO. 44349

DATE PREPARED: October 27, 2020

Project No. 181107

Engineer's Report and Verification of Costs No. 17 – Draw Request No. 28

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## ENGINEER'S REPORT

### INTRODUCTION

Schedio Group LLC ("Schedio Group") entered into a Master Service Agreement for Engineering Services ("MSA") with Aerotropolis Regional Transportation Authority ("ARTA") on December 11th, 2018. Task Order 01 AACMD/ARTA - Cost Verification, was approved on December 19, 2018. This report is Schedio Group's seventeenth deliverable associated with Task Order 01 of the MSA.

The Intergovernmental Agreement Among the Board of County Commissioners of the County of Adams, The City of Aurora and The Aerotropolis Area Coordinating Metropolitan District Establishing The Aerotropolis Regional Transportation Authority dated February 27, 2018 ("IGA-1") states:

"Capital Plan" means the detailed phasing plan and budget attached hereto as Exhibit D (of the IGA) for the regional capital improvements to be funded by the Authority and incorporated into the Regional Transportation System, including the estimated costs associated with the planning, design, financing, permitting, construction, inspection and acceptance for maintenance of such improvements."

Schedio Group has confirmed that costs verified in this Engineer's Report and Verification were anticipated by the IGA-1 and associated Capital Plan and are therefore authorized to be paid for by ARTA.

See the Exhibit A – Regional Transportation System of IGA-1 for a list of ARTA projects with accompanying brief project descriptions. See Exhibit D – Capital Plan of IGA-1 for cost share percentages, between Aerotropolis Area Coordinating Metropolitan District ("AACMD") and ARTA, for select projects.

The Intergovernmental Agreement Regarding Design and Construction of The Aurora Highlands Parkway, by and between AACMD and ARTA, entered on August 12, 2020 ("IGA-2"), states:

"Parties shall consider all components of Segment 1, Segment 2 and Segment 3 to be one Regional Transportation System Improvement."

Segments 1-3 above refer to the original anticipated construction phasing of The Aurora Highlands Parkway. See Exhibit D – Capital Plan of IGA-1 for details.

Various job code changes were implemented beginning with Draw 26 through Draw 28. These job code changes were determined by others (developer, program manager, construction manager, etc.). Schedio Group was not involved in determining the job code changes. Schedio Group has incorporated the job code changes into Draw 28, therefore amounts herein reflect the job code changes. As a result of the job code changes, historical and current verified dollar amounts have, in some cases, shifted from one job code (project segment) to another job code (project segment), which has caused ARTA's financial obligation to increase per IGA-1 and IGA-2.

Schedio Group has been reviewing, and will continue to review, details associated with the job code changes. Based on our reviews to date, Schedio Group has no reason to doubt the validity of the job code changes. However, Schedio Group reserves the right to revise any verified amount(s) and its(their)

respective assignment to a TAH Code, Job Code or Cost Code should a revision or revisions be warranted.

Project consultants and their roles include, but are not limited to:

- Aztec Consultants (Land Surveyor)
- Beam, Longest & Neff (Transportation Engineer)
- Contour Services (Construction Management)
- CTL Thompson (Geotechnical Engineer)
- Ecological Resource Consultants (Environmental Engineer)
- Felsburg Holt and Ullevig (Traffic Engineer)
- HR Green (Civil Engineer)
- Merrick (Civil Engineer)
- Norris Design (Land Planning / Landscape Architecture)
- Schedio Group (Cost Verifications AACMD/ARTA)
- Summit Strategies (Program Management – AACMD/ARTA)
- Terra Forma Solutions (Program Management – AACMD)

### SUMMARY OF FINDINGS

Schedio Group reviewed invoices and pay applications totaling \$247,709.37 associated with Draw 28 Invoices. Schedio Group finds that the entire \$247,709.37 reviewed is associated with the design and construction of Public Improvements. To date, Schedio Group has verified \$11,565,540.98, which includes \$10,518,165.02 from Draws 1-28 Invoices and \$1,047,375.96 from job Code Changes applied to Draws 1-28. As a result of the Code Changes, ARTA has an increased financial responsibility, associated with Draws 1-28, totaling \$1,047,378.96. In summary, Schedio Group hereby verifies **\$1,295,085.33** as payable by ARTA, which consists of \$247,709.38 associated with Draw 28 Invoices and \$1,047,375.96 associated with job Code Changes applied to Draws 1-28. For details, see *Figure 1 – Summary of Costs Reviewed by Job Code* and *Exhibit A – Summary of Costs Reviewed by Vendor*.

JOB CODE	JOB CODE DESCRIPTION	DRAWNS 1-28	DRAW 28	DRAWNS 1-28	DRAWNS 1-28	DRAW 28	DRAWNS 1-27
		CODE CHANGES + INVOICES	CODE CHANGES + INVOICES	CODE CHANGES	INVOICES	INVOICES	INVOICES
		VER NOS 1-17	VER NO 17	VER NO 17	VER NO 17	VER NO 17	VER NOS 1-16
104	Cost Verification	\$ 80,457.84	\$ 72,777.84	\$ 63,562.84	\$ 16,895.00	\$ 9,215.00	\$ 7,680.00
206	I 26th Ave (E470 - Main St)	\$ 248,898.30	\$ (430,711.47)	\$ (440,686.76)	\$ 689,585.06	\$ 9,975.29	\$ 679,609.77
208	K 26th Ave (Harvest - Powhatan)	\$ 18,599.54	\$ 18,599.54	\$ 18,599.54	\$ -	\$ -	\$ -
210	O E470 Interchange (Phase 1)	\$ 4,051,589.16	\$ (292,724.16)	\$ (387,178.73)	\$ 4,438,767.89	\$ 94,454.57	\$ 4,344,313.32
211	O E470 Interchange (Phase 1.5)	\$ 15,610.28	\$ 15,107.78	\$ 14,781.53	\$ 828.75	\$ 326.25	\$ 502.50
212	O E470 Interchange (Phase 2)	\$ 19,234.93	\$ 18,732.43	\$ 18,406.18	\$ 828.75	\$ 326.25	\$ 502.50
213	O E470 Interchange (Phase 3)	\$ 28,548.93	\$ 27,878.93	\$ 27,443.93	\$ 1,105.00	\$ 435.00	\$ 670.00
214	O E470 Interchange (Phase 4)	\$ 91,820.18	\$ 84,902.48	\$ 84,467.48	\$ 7,352.70	\$ 435.00	\$ 6,917.70
240	F TAH Parkway (E470-Main St)	\$ -	\$ (474,187.22)	\$ (474,187.22)	\$ 474,187.22	\$ -	\$ 474,187.22
241	G TAH Parkway (Main St-Denali Blvd)	\$ 4,584,671.91	\$ 2,181,748.02	\$ 2,128,034.90	\$ 2,456,637.01	\$ 53,713.12	\$ 2,402,923.89
246	D 38th Avenue (Himalaya to E470) North	\$ 818,784.58	\$ 403,190.89	\$ 394,196.74	\$ 424,587.84	\$ 8,994.15	\$ 415,593.69
247	E 38th Avenue (Himalaya to E470) South	\$ 14,783.85	\$ (398,458.60)	\$ (398,676.10)	\$ 413,459.95	\$ 217.50	\$ 413,242.45
290	P I-70 Interchange (Phase 1)	\$ 1,332,125.41	\$ 788,635.99	\$ 732,894.99	\$ 599,230.42	\$ 55,741.00	\$ 543,489.42
291	P I-70 Interchange (Phase 2)	\$ 26,010.55	\$ 25,508.05	\$ 25,181.80	\$ 828.75	\$ 326.25	\$ 502.50
292	P I-70 Interchange (Phase 3)	\$ 21,267.30	\$ (935,338.38)	\$ (935,555.88)	\$ 956,823.18	\$ 217.50	\$ 956,605.68
293	P I-70 Interchange (Phase 4)	\$ 15,194.47	\$ 14,859.47	\$ 14,641.97	\$ 552.50	\$ 217.50	\$ 335.00
300	L Powhatan Road (I-70-26th)	\$ 192,316.65	\$ 168,936.65	\$ 155,821.65	\$ 36,495.00	\$ 13,115.00	\$ 23,380.00
320	48th Avenue (E470-Main St)	\$ 5,062.71	\$ 5,062.71	\$ 5,062.71	\$ -	\$ -	\$ -
321	48th Avenue (Main St-Denali Blvd)	\$ 62.71	\$ 62.71	\$ 62.71	\$ -	\$ -	\$ -
322	48th Avenue (Denali Blvd-Harvest)	\$ 125.42	\$ 125.42	\$ 125.42	\$ -	\$ -	\$ -
323	48th Avenue (Harvest-Powhatan)	\$ 376.26	\$ 376.26	\$ 376.26	\$ -	\$ -	\$ -
TOTALS -->		\$ 11,565,540.98	\$ 1,295,085.34	\$ 1,047,375.96	\$ 10,518,165.02	\$ 247,709.38	\$ 10,270,455.64

Figure 1 - Summary of Costs Reviewed by Job Code

**VERIFICATION OF COSTS**

Schedio Group reviewed soft, indirect and hard costs. Schedio Group found costs associated with Public Improvements to be reasonable when compared to similar projects, during similar timeframes in similar locales.

**VERIFICATION OF PAYMENTS**

The District Accountant is responsible for verification of proofs of payments.

**VERIFICATION OF CONSTRUCTION**

Schedio Group LLC performed a site visit on October 19, 2020. Observation of the constructed improvements was performed to ensure that Public Improvements are being constructed in general conformance with the approved construction drawings. Photos are available from Schedio Group LLC upon request.

**SPECIAL CIRCUMSTANCES AND NOTABLE METHODOLOGIES**

Schedio Group reserves the right to revise or amend this report should additional information become available that would warrant such.

## ENGINEER'S VERIFICATION

Timothy A. McCarthy, P.E. / Schedio Group LLC (the Independent Consulting Engineer) states as follows:

The Independent Consulting Engineer is an engineer duly qualified and licensed in the State of Colorado with experience in the design, construction and verification of costs associated with the design and construction of Public Improvements of similar type and function as those described in the above Engineer's Report.

The Independent Consulting Engineer has reviewed applicable construction and legal documents made available by others related to the Public Improvements under consideration to state the conclusions set forth in this Engineer's Verification.

The Independent Consulting Engineer finds and determines that Public Improvements considered in the attached Engineer's Report dated October 27, 2020 were contemplated by the Intergovernmental Agreement Among The Board Of County Commissioners Of The County Of Adams, The City of Aurora And The Aerotropolis Area Coordinating Metropolitan District Establishing The Aerotropolis Regional Transportation Authority, prepared by McGeady Becher P.C. and dated February 27, 2018 and are therefore authorized to be paid for by The Aerotropolis Regional Transportation Authority, and that the values associated with soft, indirect and hard costs associated with the design and construction of Public Improvements as of , October 21, 2020 (date of Draw Request 28) are reasonably valued at **\$1,295,085.34**.

In the opinion of the Independent Consulting Engineer, the above stated value for soft, indirect and hard costs associated with the design and construction of the Public Improvements is reasonable and consistent with costs of similar improvements constructed for similar purposes during the same timeframe and similar locales and is eligible for AACMD Lender reimbursement.



October 27, 2020

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**Timothy A. McCarthy, P.E.**

Colorado License No. 44349

## **EXHIBIT A**

### **SUMMARY OF COSTS REVIEWED BY VENDOR**

## SUMMARY OF COSTS REVIEWED BY VENDOR

VENDOR	INV AMT	ARTA PUB AMT	AACMD/ARTA COST SHARE CHANGES	ARTA DRAWS 1-27 + CURRENT INV AMT	CURRENT INV AMT (DRAW 28)	ARTA DRAWS 1-27
Aztec Consultants	\$ 886,146.77	\$ 243,696.23	\$ 55,745.22	\$ 187,951.01	\$ 7,942.35	\$ 180,008.66
Beam, Longest & Neff	\$ 1,177,695.25	\$ 1,177,695.25	\$ -	\$ 1,177,695.25	\$ 65,257.50	\$ 1,112,437.75
Brightview Landscaping	\$ 433,958.57	\$ 61,763.73	\$ 61,763.73	\$ -	\$ -	\$ -
City of Aurora	\$ 677,293.92	\$ 38,582.65	\$ (660.23)	\$ 39,242.88	\$ -	\$ 39,242.88
Contour Services	\$ 1,683,053.13	\$ 302,371.84	\$ 46,365.50	\$ 256,006.34	\$ 22,085.67	\$ 233,920.67
CTL Thompson	\$ 522,392.19	\$ 93,218.35	\$ 8,168.01	\$ 85,050.34	\$ -	\$ 85,050.34
Dyna Electric	\$ 707,298.12	\$ 33,373.73	\$ 8,477.52	\$ 24,896.21	\$ 14,750.12	\$ 10,146.09
E-470 Public Highway Authority	\$ 265,270.21	\$ 220,221.46	\$ 2,834.50	\$ 217,386.96	\$ -	\$ 217,386.96
Ecological Resource Consultants	\$ 42,545.10	\$ 30,123.18	\$ 8,995.18	\$ 21,128.00	\$ -	\$ 21,128.00
Felsburg Holt and Ullevig	\$ 1,065,717.09	\$ 1,065,717.09	\$ -	\$ 1,065,717.09	\$ 60,435.00	\$ 1,005,282.09
HR Green	\$ 4,186,369.31	\$ 1,204,500.32	\$ (3,605.90)	\$ 1,208,106.22	\$ 7,362.05	\$ 1,200,744.17
Iron Woman	\$ 4,548,452.30	\$ 2,049,586.16	\$ -	\$ 2,049,586.16	\$ 20,976.57	\$ 2,028,609.59
JHL	\$ 7,285,619.22	\$ 1,909,572.68	\$ -	\$ 1,909,572.66	\$ -	\$ 1,909,572.66
Kelley Trucking Inc	\$ 2,097,367.68	\$ 971,518.03	\$ 541,966.73	\$ 429,551.30	\$ -	\$ 429,551.30
Kumar & Associates, Inc.	\$ 14,490.25	\$ 14,490.25	\$ -	\$ 14,490.25	\$ -	\$ 14,490.25
Lamb Star	\$ 285,878.90	\$ 141,947.40	\$ -	\$ 141,947.40	\$ 8,293.65	\$ 133,653.75
Merrick	\$ 1,133,861.43	\$ 489,884.28	\$ 434,961.81	\$ 54,922.47	\$ 4,539.47	\$ 50,383.00
Norris Design Inc.	\$ 1,322,396.51	\$ 234,154.21	\$ 84,920.98	\$ 149,233.23	\$ -	\$ 149,233.23
Pase	\$ 504,366.40	\$ 95,281.60	\$ 79,462.25	\$ 15,819.35	\$ -	\$ 15,819.35
QualCorr	\$ 21,650.00	\$ 21,650.00	\$ 21,650.00	\$ -	\$ -	\$ -
Schedio Group	\$ 361,472.19	\$ 80,457.84	\$ -	\$ 80,457.84	\$ 9,215.00	\$ 71,242.84
Stormwater Risk Mgmt	\$ 1,457,825.43	\$ 46,304.37	\$ 15,861.16	\$ 30,443.21	\$ 2,916.40	\$ 27,526.81
Straightline Sawcutting	\$ 5,250.00	\$ 5,250.00	\$ -	\$ 5,250.00	\$ -	\$ 5,250.00
Summit Strategies	\$ 1,019,300.03	\$ 484,721.02	\$ (17,248.84)	\$ 501,969.86	\$ 9,882.18	\$ 492,087.68
Terra Forma Solutions	\$ 1,009,988.40	\$ 338,605.42	\$ 59,013.98	\$ 279,591.44	\$ 4,123.80	\$ 275,467.64
Wagner	\$ 9,096,927.56	\$ 210,354.39	\$ (361,295.11)	\$ 571,649.50	\$ 9,929.61	\$ 561,719.89
Xcel Energy	\$ 444,959.61	\$ 500.00	\$ -	\$ 500.00	\$ -	\$ 500.00
Rounding	NA	\$ (0.53)	\$ (0.53)	\$ -	\$ -	\$ -
	\$ 50,964,571.59	\$ 11,565,540.96	\$ 1,047,375.96	\$ 10,518,164.97	\$ 247,709.37	\$ 10,270,455.60



## **EXHIBIT B**

### **SUMMARY OF DOCUMENTS REVIEWED**

## **SUMMARY OF DOCUMENTS REVIEWED**

### **INTERGOVERNMENTAL AGREEMENT**

- Intergovernmental Agreement Among The Board Of County Commissioners Of The County Of Adams, The City of Aurora And The Aerotropolis Area Coordinating Metropolitan District Establishing The Aerotropolis Regional Transportation Authority, prepared by McGeady Becher P.C. and dated February 27, 2018
- Intergovernmental Agreement Regarding Design and Construction of The Aurora Highlands Parkway Among Aerotropolis Area Coordinating Metropolitan District and Aerotropolis Regional Transportation Authority, prepared by McGeady Becher P.C. and dated August 12, 2020

### **CONSULTANT CONTRACTS**

- Aztec Consultants, Inc. Master Service Agreement, prepared by McGeady Becher P.C., executed August 23, 2018, and associated, executed Task Orders
- Beam, Longest and Neff, LLC Master Service Agreement, prepared by McGeady Becher P.C. executed August 10, 2018, and associated, executed Task Orders
- Contour Services Master Service Agreement, prepared by McGeady Becher P.C. executed August 6, 2018, and associated, executed Task Orders
- CTL Thompson, Inc. Master Service Agreement prepared by McGeady Becher P.C., executed August 13, 2018 and associated, executed Task Orders
- Ecological Resource Consultants, Inc. Master Service Agreement prepared by McGeady Becher P.C., executed August 13, 2018, and associated, executed Task Orders
- Felsburg Holt & Ullevig Master Service Agreement prepared by McGeady Becher P.C., executed October 2, 2018, and associated, executed Task Orders
- HR Green Development, LLC Master Service Agreement prepared by McGeady Becher P.C., executed August 6, 2018 and associated, executed Task Orders
- Lamb-Star Engineering, L.P., Master Service Agreement prepared by McGeady Becher P.C., executed August 7, 2019, and associated, executed Task Orders
- Merrick & Company Master Service Agreement prepared by McGeady Becher P.C., executed August 10, 2018, and associated, executed Task Orders
- Norris Design Inc. Master Service Agreement, prepared by McGeady Becher P.C., executed September 6, 2018, and associated, executed Task Orders.
- Stormwater Risk Management, LLC Master Service Agreement prepared by McGeady Becher P.C., executed November 12, 2018, and associated, executed Task Orders
- Summit Strategies, Inc. Service Agreement, prepared by McGeady Becher P.C., executed August 21, 2018, and associated, executed Task Orders

- Terra Forma Solutions Service Agreement, prepared by McGeady Becher P.C., executed August 18, 2018, and associated, executed Task Orders

### **CONTRACTOR CONTRACTS**

- Brightview Landscape Development, Inc. Construction Agreement, prepared by McGeady Becher P.C., executed January 29, 2019, and associated, executed Change Orders
- Iron Woman Construction and Environmental Services, LLC for site utilities for TAH Mainstreet Phase 2, 42<sup>nd</sup> Avenue Phase 1 and Aura Boulevard Phase 1 executed July 1, 2019, and associated, executed Change Orders
- Iron Woman Construction and Environmental Services, LLC for site utilities for TAH E470 and 38<sup>th</sup> Place Interchange Phase 1 prepared by McGeady Becher P.C. and executed July 3, 2019, and associated, executed Change Orders
- JHL Constructors, Inc. Construction Agreement prepared by McGeady Becher P.C., executed on March 6, 2019, and associated, executed Change Orders, and associated, executed Change Orders
- Kelley Trucking Inc. Construction Agreement, prepared by McGeady Becher P.C., executed January 28 2020, and associated, executed Change Orders
- Pase Contracting, Inc. Construction Agreement, prepared by McGeady Becher P.C., executed on December 17, 2019, and associated, executed Change Orders
- Wagner Construction, Inc Construction Agreement, prepared by McGeady Becker P.C, executed on August 17, 2019, and associated, executed Change Orders

### **CONSULTANT INVOICES AND CONTRACTOR PAY APPLICATIONS**

- AACMD Draw Request No. 01, dated September 7, 2018 and revised October 15, 2018
- AACMD Draw Request No. 02, dated September 14, 2018
- AACMD Draw Request No. 03, dated September 30, 2018
- AACMD Draw Request No. 04, dated October 15, 2018
- AACMD Draw Request No. 05, dated November 13, 2018
- AACMD Draw Request No. 06, dated December 11, 2018
- AACMD Draw Request No. 07, dated January 15, 2019
- AACMD Draw Request No. 08, dated February 12, 2019
- AACMD Draw Request No. 09, dated March 12, 2019
- AACMD Draw Request No. 10, dated April 12, 2019
- AACMD Draw Request No. 11, dated May 16, 2019
- AACMD Draw Request No. 12, dated June 20, 2019
- AACMD Draw Request No. 13, dated July 18, 2019

- AACMD Draw Request No. 14, dated August 15, 2019
- AACMD Draw Request No. 15, dated September 19, 2019
- AACMD Draw Request No. 16, dated October 17, 2019
- AACMD Draw Request No. 17, dated November 21, 2019
- AACMD Draw Request No. 18, dated December 19, 2019
- AACMD Draw Request No. 19, dated January 16, 2020
- AACMD Draw Request No. 20, dated February 20, 2020
- AACMD Draw Request No. 21, dated March 19, 2020
- AACMD Draw Request No. 22, dated April 16, 2020
- AACMD Draw Request No. 23, dated May 21, 2020
- AACMD Draw Request No. 24, dated June 18, 2020
- AACMD Draw Request No. 25, dated July 16, 2020
- AACMD Draw Request No. 26, dated August 20, 2020
- AACMD Draw Request No. 27, dated September 17, 2020
- AACMD Draw Request No. 28, dated October 21, 2020