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February 10, 2012

Mr. Clark Duncan
Asheville-Buncombe Economic Development Coalition
36 Montford Avenue
Asheville, NC 28801

RE: Project Jo
Truck Routing and Craven Street
Improvements
M&C Commission No: 3227

Dear Clark:

I am pleased to submit to you the attached Truck Routing Study and Craven Street Improvements recommendations for the above proposed facility. These improvement concepts and recommendations are based on previous discussions with the EDC and City staff along with EDC-provided site layouts.

It has been our pleasure to provide you with our services to date and look forward to the next steps in this development project. If you have questions or need additional information please call. We look forward to working with you in the future.

Sincerely,

MATTERN & CRAIG, INC.

Gabriel S. Quesinberry, P.E.

Exhibits
CC: file



12 Broad Street • Asheville, NC 28801
(828) 254-2201 • Fax (828) 254-4562

www.matternandcraig.com

EXHIBIT A
Accessible Truck Routes Map



PROJECT 10 ACCESSIBLE TRUCK ROUTES
ASHEVILLE, NORTH CAROLINA

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EXHIBIT
A

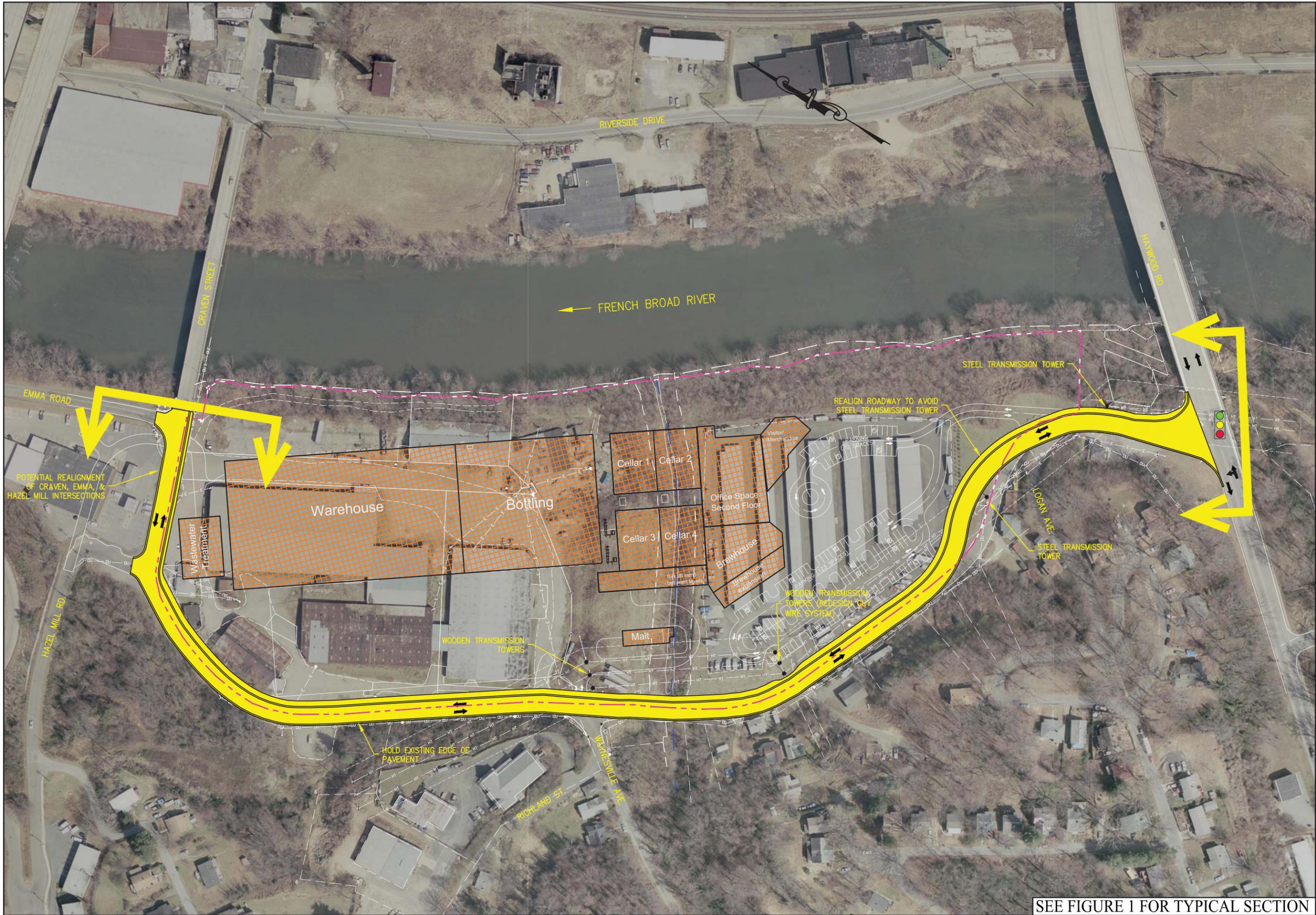
DATE: 2/10/12

SCALE: 1" = 250'

LEGEND

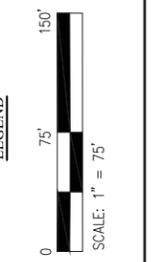
- ROUTE: A
- ROUTE: B
- ROUTE: C
- ROUTE: D
- ROUTE: E

EXHIBIT B
Craven Street Improvements Map



SEE FIGURE 1 FOR TYPICAL SECTION

**CRAVEN STREET IMPROVEMENTS
CONCEPT PLAN**
ASHEVILLE,
NORTH CAROLINA



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EXHIBIT
B

DATE: 2/10/12

EXHIBIT C
Truck Routing Analysis

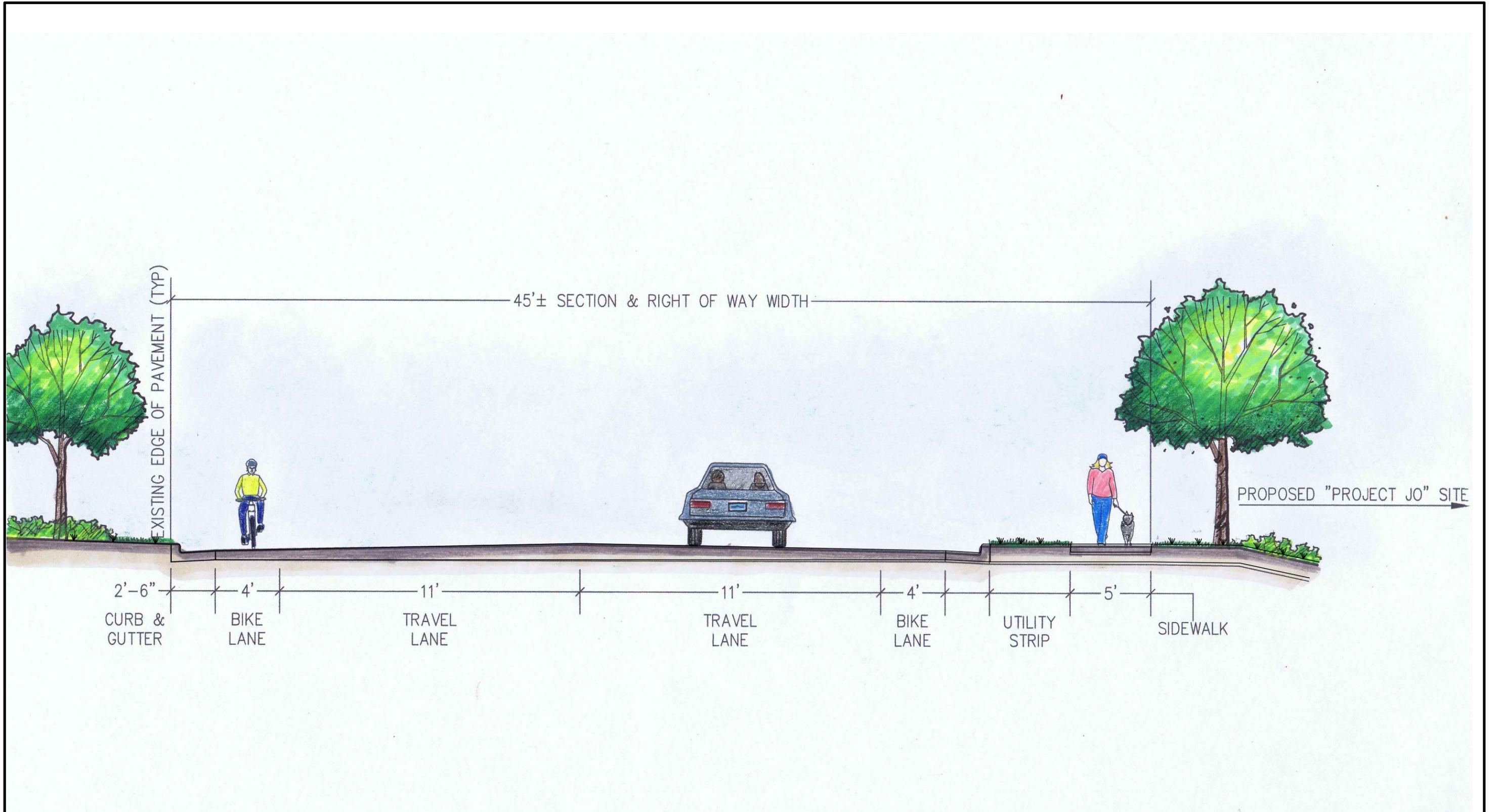
EXHIBIT D
Craven Street Budget Estimate

Description	Budget	Actual Cost	Notes	Variance
1 Demolition	\$ 50,000.00	0.00	Allowance	50,000.00
2 Grading	\$ 75,000.00	0.00	Avg. 3' per LF = 15,000CY @ \$5.00 No import or export material assumed	75,000.00
3 Asphalt Paving	\$ 314,000.00	0.00	30'Wx7"D Heavy Duty Asphalt @\$90/TON	314,000.00
4 Aggregate Base Material	\$ 77,600.00	0.00	40'Wx8"D Aggregate base @\$15/TON	77,600.00
5 Curb and Gutter	\$ 78,000.00	0.00	2600LF x2 @\$15/LF	78,000.00
6 Sidewalks	\$ 43,400.00	0.00	2600'x5' @ \$30/SY	43,400.00
7 Drainage	\$ 63,800.00	0.00	Allowance - 10% of Items 1-6	63,800.00
8 Erosion Control	\$ 16,000.00	0.00	Allowance - 2.5% of Items 1-6	16,000.00
9 Stormwater Management	\$ -	0.00	Assumes none or incorporated into site development	0.00
10 Water	\$ 5,000.00	0.00	Allowance - relocation of appurtenances only	5,000.00
11 Sewer	\$ 5,000.00	0.00	Allowance - relocation of appurtenances only	5,000.00
12 Dry Utilities (Power, Cable, Phone)	\$ 10,000.00	0.00	Allowance - City cost of overhead relocates	10,000.00
13 Street Lighting Budget	\$ 15,000.00	0.00	Allowance	15,000.00
14 Required Landscaping	\$ 19,200.00	0.00	Allowance - 3% of Items 1-6	19,200.00
15 Traffic Signal - Haywood Road	\$ -	0.00	Assumes NCDOT Funded - \$100,000 budget	0.00
16 Hard Cost Contingency @ 20%	\$ 140,560.00	0.00		140,560.00
SUB-TOTAL HARD COSTS	\$ 862,560.00	0.00		862,560.00
17 Maintenance	\$ -	0.00	By Contractor	0.00
18 Superintendent	\$ -	0.00	By Contractor	0.00
19 Landscape Architect	\$ -	0.00	N/A	0.00
20 Environmental/Geotech	\$ 8,500.00	0.00	Allowance - compaction, construction materials testing	8,500.00
21 Engineering	\$ 90,000.00	0.00	Engineering costs for design, approvals, bid administration, and inspections.	90,000.00
22 Architecture	\$ -	0.00	N/A	0.00
23 Surveys	\$ 10,000.00	0.00	Supplemental field survey, Record Drawings	10,000.00
24 Construction surveys and as-builts per City	\$ 5,000.00	0.00		5,000.00
25 Legal	\$ -	0.00	By City	0.00
26 Soft Cost Contingency @ 20%	\$ 22,700.00	0.00		22,700.00
SUB-TOTAL SOFT COSTS	\$ 136,200.00	0.00		136,200.00
26 Land Cost	\$ -	0.00	Assumes by City	0.00
27 City Permits	\$ -	0.00	Assumes by City	0.00
28 MSD Permit	\$ -	0.00	Assumes by City	0.00
29 Bonds	\$ -	0.00	Assumes by City	0.00
30 Taxes	\$ -	0.00	Assumes by City	0.00
31 Misc. Payables	\$ -	0.00	Assumes by City	0.00
SUB-TOTAL LAND AND PERMITS	\$ -	0.00		0.00
TOTAL	\$ 998,760.00			998,760.00

EXHIBIT E
Craven Street Connector Budget Estimate

Description	Budget	Actual Cost	Notes	Variance
1 Demolition	\$ 35,000.00	0.00	Allowance	35,000.00
2 Grading	\$ 37,500.00	0.00	Avg. 5' per LF = 5,000CY @ \$7.50 No import or export material assumed	37,500.00
3 Asphalt Paving	\$ 96,600.00	0.00	24'Wx7"D Heavy Duty Asphalt @\$90/TON	96,600.00
4 Aggregate Base Material	\$ 17,900.00	0.00	40'Wx8"D Aggregate base @\$15/TON	17,900.00
5 Curb and Gutter	\$ 30,000.00	0.00	1000LF x2 @\$15/LF	30,000.00
6 Retaining Walls	\$ 63,000.00	0.00	200'x10'x2' wall @ \$425CY or \$30/SFF	63,000.00
7 Sidewalks	\$ -	0.00	N/A	0.00
8 Drainage	\$ 32,600.00	0.00	Allowance - 15% of Items 1-5	32,600.00
9 Erosion Control	\$ 14,000.00	0.00	Allowance - 5% of Items 1-6	14,000.00
10 Stormwater Management	\$ -	0.00	Assumes none or incorporated into site development	0.00
11 Water	\$ 5,000.00	0.00	Allowance - relocation of appurtenances only	5,000.00
12 Sewer	\$ 5,000.00	0.00	Allowance - relocation of appurtenances only	5,000.00
13 Dry Utilities (Power, Cable, Phone)	\$ 10,000.00	0.00	Allowance - City cost of overhead relocates	10,000.00
14 Street Lighting Budget	\$ -	0.00	N/A	0.00
16 Required Landscaping	\$ -	0.00	N/A	0.00
17 Hard Cost Contingency @ 20%	\$ 62,320.00	0.00		62,320.00
SUB-TOTAL HARD COSTS	\$ 373,920.00	0.00		373,920.00
18 Maintenance	\$ -	0.00	By Contractor	0.00
19 Superintendent	\$ -	0.00	By Contractor	0.00
20 Landscape Architect	\$ -	0.00	N/A	0.00
21 Environmental/Geotech	\$ 15,000.00	0.00	Allowance - wall foundation, compaction, construction materials testing	15,000.00
22 Engineering	\$ 55,000.00	0.00	Engineering costs for design, approvals, bid administration, and inspections.	55,000.00
23 Architecture	\$ -	0.00	N/A	0.00
24 Surveys	\$ 10,000.00	0.00	Field survey, Record Drawings	10,000.00
25 Construction surveys and as-builts per City	\$ 5,000.00	0.00		5,000.00
26 Legal	\$ -	0.00	By City	0.00
27 Soft Cost Contingency @ 20%	\$ 17,000.00	0.00		17,000.00
SUB-TOTAL SOFT COSTS	\$ 102,000.00	0.00		102,000.00
28 Land Cost	\$ -	0.00	Assumes by City	0.00
29 City Permits	\$ -	0.00	Assumes by City	0.00
30 MSD Permit	\$ -	0.00	Assumes by City	0.00
31 Bonds	\$ -	0.00	Assumes by City	0.00
32 Taxes	\$ -	0.00	Assumes by City	0.00
33 Misc. Payables	\$ -	0.00	Assumes by City	0.00
SUB-TOTAL LAND AND PERMITS	\$ -	0.00		0.00
TOTAL	\$ 475,920.00			475,920.00

FIGURE 1
Craven Street Typical Section



NOT TO SCALE

**CRAVEN STREET
PROPOSED SECTION**

ASHEVILLE, NC
2/10/12



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SITE PHOTOS
Accessible Truck Routes



Fig. 1 – Haywood Road/I-240E on ramp. Looking North



Fig. 2 – Haywood Road/I-240W off ramp. Looking West



Fig. 3 – Haywood Road/Ridgelawn Intersection. Looking East



Fig. 4 – Westgate Resort Drive off ramp. Looking North



Fig. 5 – Westgate Resort Drive/Craven Connector. Looking South



Fig. 6 – Craven Connector/Hazel Mill. Looking West



Fig. 7 – Craven Connector/Hazel Mill. Looking East



Fig. 8 – Riverside/Craven St. Looking Southwest



Fig. 9 – Craven St./Riverside. Looking East



Fig. 10 – Craven St./Riverside. Looking West



Fig. 11 – Riverside/Norfolk Southern Bridge.