



**PUBLIC WORKS DEPARTMENT
MEMORANDUM # 2011 – 32**

DATE: August 25, 2011
TO: Honorable Mayor Joyce Downing and City Council Members
FROM: William A. Simmons, City Manager 
David H. Willett, Director of Public Works 
SUBJECT: CR – 80, 2011 E. 112th Avenue Conceptual Design Contract

BACKGROUND

A conceptual design for E. 112th Avenue will provide the City with improvement alternatives and cost estimates to address the numerous issues that coincide with modernizing the current roadway configuration. The design will also consider the area drainage patterns and recommend storm drainage improvements that compliment the preferred alternative roadway plan. Other structural factors to be considered will include, but not limited to, the impacts of the proposed FasTracks station site, quiet zones, and trail connectivity.

In addition, the conceptual design will identify infrastructure improvements that may be eligible for matching credit with RTD. In addition, Urban Drainage & Flood Control District (UDFCD) will be consulted to identify potential drainage improvements that could be eligible for matching funds.

Major components of the RFP include the following tasks:

- Public/Stakeholder Involvement
- Survey/Data Collection
- Traffic Analysis
- Roadway Alignment Alternative Analysis
- Drainage Assessment
- Cost Estimates and Cost Allocation Matrix (RTD, UDFCD)
- Permit Assessment

On June 9, 2011, the City accepted ten (10) proposals. Bid prices ranged from \$71,500 to \$148,970. Two responses were shortlisted and interviewed – Matrix Design Group and Drexel, Barrell & Co. Matrix Design Group, Inc. was the firm selected based on the request for proposals. During the contract negotiation, staff requested that additional design survey be added to the scope of work to cover the FasTracks TOD/Station Site. The additional work would allow for an expanded hydrology study to be conducted and a better understanding of flood plan issues around the station site. During the negotiation staff also requested one additional public meeting. It is anticipated that two public meetings will be conducted, one to obtain public input/comments, the second to present alternatives.

The Matrix Design Group, Inc. proposal, as negotiated, is in the amount of \$138,454.00. It is further recommended that City Council authorize \$11,546.00 as an 8% contingency. City Staff contacted the references submitted as part of the bid process, and determined the Consultant's past performance meets the City's standards. Copies of the references are on file and the standard agreement is attached.

BUDGET/TIME IMPLICATIONS

The proposed project would be funded out of the following account:

E. 112th Avenue Conceptual Design	
Appropriation (MILL LEVY)	\$ 150,000.00
Contract	\$ 138,454.00
<u>Contingency (10%)</u>	<u>\$ 11,546.00</u>
Remaining Fund Balance	\$ 0.00

RECOMMENDATION

Attached to this memorandum is a Resolution that, if approved, would:

- 1) Authorize the Mayor to execute a contract between the City of Northglenn and Matrix Design Group, Inc. for the *E. 112th Avenue Conceptual Design* in the amount of **\$138,454.00**, and;
- 2) Authorize **\$11,546.00** as a contingency (8%) and authorize the City Manager, on behalf of the City, to approve changes in the scope of work and execute relevant change orders up to the approved expenditure limit of **\$150,000.00**.

Staff recommends approval of the proposed Resolution.

STAFF REFERENCE

David H. Willett, P.E., Director of Public Works
Joliette Woodson, P.E., Transportation Engineer

dwillett@northglenn.org or 303.450.8783
jwoodson@northglenn.org or 303.450.8835

Attachment:

1. Proposal Ranking
2. Proposal Cost per Consultant
3. FasTracks Station Site (as proposed) @ 112th

Reviewer: Debbie

Consultant	Baseline	Drexel Barrell	Huitt-Zollars	Icon	JF Sato	J&T	Kimley Horn	Martin/Martin	Matrix	Vision Land
Firms Experience (25 points)	20	25	25	20	25	25	25	25	25	25
Skills of Project Team (25 points)	20	25	20	23	24	23	24	25	25	25
Understanding of Scope (40 points)	30	40	30	36	35	39	30	38	39	38
Approach to Public Meetings										
Recognize Stakeholders										
Creative Problem Solving										
RTD Fastracks Cost Credit										
Price (10 points)	8	4	9	1	10	3	5	7	6	2
Totals:	78	94	84	80	94	90	84	95	95	90
without cost	70	90	75	79	84	87	79	88	89	88

Reviewer: Hayes

Consultant	Baseline	Drexel Barrell	Huitt-Zollars	Icon	JF Sato	J&T	Kimley Horn	Martin/Martin	Matrix	Vision Land
Firms Experience (25 points)	10	20	23	23	15	20	23	25	20	18
Skills of Project Team (25 points)	10	20	18	20	15	20	18	20	20	20
Understanding of Scope (40 points)	23	33	25	31	15	23	28	31	34	36
Approach to Public Meetings										
Recognize Stakeholders										
Creative Problem Solving										
RTD Fastracks Cost Credit										
Price (10 points)	9	6	10	4	10	6	8	8	8	6
Totals:	52	79	76	78	55	69	77	84	82	80
without cost	43	73	66	74	45	63	69	76	74	74

Reviewer: Woodson

Consultant	Baseline	Drexel Barrell	Huitt-Zollars	Icon	JF Sato	J&T	Kimley Horn	Martin/Martin	Matrix	Vision Land
Firms Experience (25 points)	23	25	23	25	23	25	24	25	24	24
Skills of Project Team (25 points)	24	25	24	25	24	25	25	25	25	24
Understanding of Scope (40 points)	34	38	36	40	34	36	34	34	40	36
Approach to Public Meetings										
Recognize Stakeholders										
Creative Problem Solving										
RTD Fastracks Cost Credit										
Price (10 points)	9	10	8	9	8	10	10	10	10	10
Totals:	90	98	91	99	89	96	93	94	99	94
without cost	81	88	83	90	81	86	83	84	89	84

Reviewer: Willett

Consultant	Baseline	Drexel Barrell	Huitt-Zollars	Icon	JF Sato	J&T	Kimley Horn	Martin/Martin	Matrix	Vision Land
Firms Experience (25 points)		20	20	10			20	20	20	15
Skills of Project Team (25 points)		20	20	10			15	20	20	15
Understanding of Scope (40 points)		30	11	12			11	18	35	15
Approach to Public Meetings										
Recognize Stakeholders										
Creative Problem Solving										
RTD Fastracks Cost Credit										
Responsiveness to RFP		45	10	15			10	40	45	15
Price (10 points)										
Totals:	0	115	61	47	0	0	56	98	120	60
without cost	0	115	61	47	0	0	56	98	120	60

Rankings w/o Cost

1	Debbie	Hayes	Woodson	Willett
2	Drexel	Icon (1)	Icon	Matrix
3	Matrix	Matrix (1)	Matrix	Drexel
4	Martin (3)	VL (1)	Drexel	Martin
	VL (3)	Drexel (2)	J&T	Huitt

2011 E. 112th Avenue
Conceptual Design

Consultant	Baseline	Drexel Barrell	Huitt-Zollars	Icon	JF Sato	J&T	Kimley Horn	Martin/Martin	Matrix	Vision Land
Price	\$107,221	\$133,228	\$78,358	\$148,970	\$71,500	\$135,805	\$128,960	\$122,000	\$124,300	\$134,315

112th Avenue Station



SPONSORED BY: MAYOR DOWNING

COUNCILMAN'S RESOLUTION

RESOLUTION NO.

No. CR-80
Series of 2011

Series of 2011

A RESOLUTION APPROVING A PROFESSIONAL SERVICES AGREEMENT BETWEEN THE CITY OF NORTHGLENN AND MATRIX DESIGN GROUP, INC. FOR THE E. 112TH AVENUE CONCEPTUAL DESIGN PROJECT

BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF NORTHGLENN, COLORADO, THAT:

Section 1. The City Council hereby approves the Professional Services Agreement between the City of Northglenn and Matrix Design Group, Inc., attached hereto, for the E. 112th Avenue Conceptual Design Project, in the amount of \$138,454.00 with a contingency of \$11,546.00 for a total amount not to exceed \$150,000.00.

DATED, at Northglenn, Colorado, this _____ day of _____, 2011.

JOYCE DOWNING
Mayor

ATTEST:

JOHANNA SMALL, CMC
City Clerk

APPROVED AS TO FORM:

COREY Y. HOFFMANN
City Attorney

AGREEMENT FOR PROFESSIONAL SERVICES

THIS AGREEMENT is made and entered into this _____ day of _____, 2011, by and between the City of Northglenn, State of Colorado (hereinafter referred to as the "City") and Matrix Design Group, Inc. (hereinafter referred to as "Consultant").

RECITALS:

A. The City requires professional services.

B. Consultant has held itself out to the City as having the requisite expertise and experience to perform the required work for the Project.

NOW, THEREFORE, it is hereby agreed for the consideration hereinafter set forth, that Consultant shall provide to the City, professional consulting services for the Project.

I. SCOPE OF SERVICES

Consultant shall furnish all labor and materials to perform the work and services required for the complete and prompt execution and performance of all duties, obligations, and responsibilities for the Project which are described or reasonably implied from **Exhibit A** which is attached hereto and incorporated herein by this reference.

II. THE CITY'S OBLIGATIONS/CONFIDENTIALITY

The City shall provide Consultant with reports and such other data as may be available to the City and reasonably required by Consultant to perform hereunder. No project information shall be disclosed by Consultant to third parties without prior written consent of the City or pursuant to a lawful court order directing such disclosure. All documents provided by the City to Consultant shall be returned to the City. Consultant is authorized by the City to retain copies of such data and materials at Consultant's expense.

III. OWNERSHIP OF WORK PRODUCT

The City acknowledges that the Consultant's work product is an instrument of professional service. Nevertheless, the products prepared under this Agreement shall become the property of the City upon completion of the work.

IV. COMPENSATION

A. In consideration for the completion of the services specified herein by Consultant, the City shall pay Consultant an amount not to exceed one hundred thirty eight thousand four hundred fifty four dollars (\$138,454.00). Payment shall be made in accordance with the schedule of charges in **Exhibit B** which is attached hereto and incorporated herein by this reference. Invoices will be itemized and include hourly breakdown for all personnel and other charges. The maximum fee specified herein shall include all fees and expenses incurred by Consultant in performing all services hereunder.

B. Consultant may submit monthly or periodic statements requesting payment. Such request shall be based upon the amount and value of the work and services performed by Consultant under this Agreement except as otherwise supplemented or accompanied by such supporting data as may be required by the City.

1. All invoices, including Consultant's verified payment request, shall be submitted by

Consultant to the City no later than the twenty-fourth (24th) day of each month for payment pursuant to the terms of this Agreement. In the event Consultant fails to submit any invoice on or before the twenty-fourth (24th) day of any given month, Consultant defers its right to payment pursuant to said late invoice until the twenty-fourth (24th) day of the following month.

2. Progress payments may be claimed on a monthly basis for reimbursable costs actually incurred to date as supported by detailed statements, including hourly breakdowns for all personnel and other charges. The amounts of all such monthly payments shall be paid within thirty (30) days after the timely receipt of invoice as provided by this Agreement.

C. The City has the right to ask for clarification on any Consultant invoice after receipt of the invoice by the City.

D. In the event payment for services rendered has not been made within forty-five (45) days from the receipt of the invoice for any uncontested billing, interest will accrue at the legal rate of interest. In the event payment has not been made within ninety (90) days from the receipt of the invoice for any uncontested billing, Consultant may, after giving seven (7) days written notice and without penalty or liability of any nature, suspend all work on all authorized services specified herein. In the event payment in full is not received within thirty (30) days of giving the seven (7) days written notice, Consultant may terminate this Agreement. Upon receipt of payment in full for services rendered, Consultant will continue with all authorized services.

E. Final payment shall be made within sixty (60) calendar days after all data and reports (which are suitable for reproduction and distribution by the City) required by this Agreement have been turned over to and approved by the City and upon receipt by the City of Consultant's certification that services required herein by Consultant have been fully completed in accordance with this Agreement and all data and reports for the Project.

V. COMMENCEMENT AND COMPLETION OF WORK

Within seven (7) days of receipt from the City of a Notice to Proceed, Consultant shall commence work on all its obligations as set forth in the Scope of Services or that portion of such obligations as is specified in said Notice. Except as may be changed in writing by the City, the Project shall be complete and Consultant shall furnish the City the specified deliverables as provided in Exhibit A.

VI. CHANGES IN SCOPE OF SERVICES

A change in the Scope of Services shall constitute any material change or amendment of services or work which is different from or additional to the Scope of Services specified in Section I of this Agreement. No such change, including any additional compensation, shall be effective, or paid unless authorized by written amendment executed by the City. If Consultant proceeds without such written authorization, then Consultant shall be deemed to have waived any claim for additional compensation, including a claim based on the theory of unjust enrichment, quantum meruit or implied contract. Except as expressly provided herein, no agent, employee, or representative of the City shall have the authority to enter into any changes or modifications, either directly or implied by a course of action, relating to the terms and scope of this Agreement.

VII. PROFESSIONAL RESPONSIBILITY

A. Consultant hereby warrants that it is qualified to assume the responsibilities and render the services described herein and has all requisite corporate authority and professional licenses in good

standing, required by law.

B. The work performed by Consultant shall be in accordance with generally accepted professional practices and the level of competency presently maintained by other practicing professional firms in the same or similar type of work in the applicable community.

C. Consultant shall be responsible for the professional quality, technical accuracy, timely completion, and the coordination of all designs, drawings, specifications, reports, and other services furnished by Consultant under this Agreement. Consultant shall, without additional compensation, correct or resolve any errors or deficiencies in his designs, drawings, specifications, reports, and other services, which fall below the standard of professional practice, and reimburse the City for construction costs caused by errors and omissions which fall below the standard of professional practice.

D. Approval by the City of drawings, designs, specifications, reports, and incidental work or materials furnished hereunder shall not in any way relieve Consultant of responsibility for technical adequacy of the work. Neither the City's review, approval or acceptance of, nor payment for, any of the services shall be construed to operate as a waiver of any rights under this Agreement or of any cause of action arising out of the performance of this Agreement, and Consultant shall be and remain liable in accordance with applicable performance of any of the services furnished under this Agreement.

E. The rights and remedies of the City provided for under this Agreement are in addition to any other rights and remedies provided by law.

VIII. ILLEGAL ALIENS

A. Certification. By entering into this Agreement, Consultant hereby certifies that, at the time of this certification, it does not knowingly employ or contract with an illegal alien who will perform work under the Agreement and that Consultant will participate in either the E-Verify Program administered by the United States Department of Homeland Security and Social Security Administration or the Department Program administered by the Colorado Department of Labor and Employment in order to confirm the employment eligibility of all employees who are newly hired for employment to perform work under the Agreement.

B. Prohibited Acts. Consultant shall not:

1. Knowingly employ or contract with an illegal alien to perform work under this Agreement; or

2. Enter into a contract with a subcontractor that fails to certify to Consultant that the subcontractor shall not knowingly employ or contract with an illegal alien to perform work under this Agreement.

C. Verification.

1. Consultant has confirmed the employment eligibility of all employees who are newly hired for employment to perform work under this Agreement through participation in either the E-Verify Program or the Department Program.

2. Consultant shall not use the E-Verify Program or the Department Program procedures to undertake pre-employment screening of job applicants while this Agreement is being performed.

3. If Consultant obtains actual knowledge that a subcontractor performing work under this Agreement knowingly employs or contracts with an illegal alien who is performing work under the Agreement, Consultant shall:

a. Notify the subcontractor and the City within three (3) days that Consultant has actual knowledge that the subcontractor is employing or contracting with an illegal alien who is performing work under the Agreement; and

b. Terminate the subcontract with the subcontractor if within three (3) days of receiving the notice required pursuant to subparagraph (a) hereof, the subcontractor does not stop employing or contracting with the illegal alien who is performing work under the Agreement; except that Consultant shall not terminate the contract with the subcontractor if during such three (3) days the subcontractor provides information to establish that the subcontractor has not knowingly employed or contracted with an illegal alien who is performing work under the Agreement.

D. **Duty to Comply with Investigations.** Consultant shall comply with any reasonable request by the Colorado Department of Labor and Employment made in the course of an investigation conducted pursuant to C.R.S. § 8-17.5-102(5)(a) to ensure that Consultant is complying with the terms of this Agreement.

E. If Consultant does not currently employ any employees, Consultant shall sign the NO Employee Affidavit attached hereto.

F. If Consultant wishes to verify the lawful presence of newly hired employees who perform work under the Agreement via the Department Program, Consultant shall sign the Department Program Affidavit attached hereto.

IX. INDEMNIFICATION

Consultant agrees to indemnify and hold harmless the City, its officers, employees, and insurers, from and against all liability, claims, and demands, on account of injury, loss, or damage, including without limitation claims arising from bodily injury, personal injury, sickness, disease, death, property loss or damage, if such injury, loss, or damage is caused in whole or in part by, or is claimed to be caused in whole or in part by, the negligent act, omission, error, professional error, mistake, negligence, or other fault of Consultant, any subcontractor of Consultant, or any officer, employee, representative, or agent of Consultant or of any subcontractor of Consultant, or which arise out of any workmen's compensation claim of any employee of Consultant or of any employee of any subcontractor of Consultant. Consultant agrees to investigate, handle, respond to, and to provide defense for and defend against any such liability, claims or demands at the sole expense of Consultant, or at the option of the City, agrees to pay the City or reimburse the City for the defense costs incurred by the City in connection with, any such liability, claims, or demands. Consultant also agrees to bear all other costs and expenses related thereto, including court costs and attorney fees, whether or not any such liability, claims, or demands alleged are groundless, false, or fraudulent. If it is determined by the final judgment of a court of any competent jurisdiction that such injury, loss, or damage was caused in whole or in part by the act, omission, or other fault of the City, its officers, or its employees, the City shall reimburse Consultant for the portion of the judgment attributable to such act, omission, or other fault of the City, its officers, or employees.

X. INSURANCE

A. Consultant agrees to procure and maintain, at its own cost, a policy or policies of insurance

sufficient to insure against all liability, claims, demands, and other obligations assumed by Consultant pursuant to Section IX, above. Such insurance shall be in addition to any other insurance requirements imposed by this Agreement or by law. Consultant shall not be relieved of any liability, claims, demands, or other obligations assumed pursuant to Section IX, above, by reason of its failure to procure or maintain insurance, or by reason of its failure to procure or maintain insurance in sufficient amounts, durations, or types.

B. Consultant shall procure and maintain, and shall cause any subcontractor of Consultant to procure and maintain, the minimum insurance coverages listed below. Such coverages shall be procured and maintained with forms and insurers acceptable to the City. All coverages shall be continuously maintained to cover all liability, claims, demands, and other obligations assumed by Consultant pursuant to Section IX, above. In the case of any claims-made policy, the necessary retroactive dates and extended reporting periods shall be procured to maintain such continuous coverage.

1. Workmen's compensation insurance to cover obligations imposed by applicable laws for any employee engaged in the performance of work under this Agreement, and Employer's Liability insurance with minimum limits of five hundred thousand dollars (\$500,000) each accident, one million dollars (\$1,000,000) disease - policy limit, and one million dollars (\$1,000,000) disease - each employee. Evidence of qualified self-insured status may be substituted for the workmen's compensation requirements of this paragraph.

2. Commercial general liability insurance with minimum combined single limits of six hundred thousand (\$1,000,000) each occurrence and two million dollars (\$2,000,000) general aggregate. The policy shall be applicable to all premises and operations. The policy shall include coverage for bodily injury, broad form property damage (including completed operations), personal injury (including coverage for contractual and employee acts), blanket contractual, products, and completed operations. The policy shall contain a severability of interests provision.

3. Professional liability insurance with minimum limits of six hundred thousand dollars (\$600,000) each claim and one million dollars (\$1,000,000) general aggregate.

C. The policy required by paragraph 2. above shall be endorsed to include the City and the City's officers, employees, and consultants as additional insureds. Every policy required above shall be primary insurance, and any insurance carried by the City, its officers, its employees, or its consultants shall be excess and not contributory insurance to that provided by Consultant. No additional insured endorsement to the policy required by paragraph 1. above shall contain any exclusion for bodily injury or property damage arising from completed operations. Consultant shall be solely responsible for any deductible losses under any policy required above.

D. The certificate of insurance provided for the City shall be completed by Consultant's insurance agent as evidence that policies providing the required coverages, conditions, and minimum limits are in full force and effect, and shall be reviewed and approved by the City prior to commencement of the Agreement. No other form of certificate shall be used. If the City is named as an additional insured on any policy which does not allow for the automatic addition of additional insureds, the Consultant's insurance agent shall also provide a copy of all accompanying endorsements recognizing the City as an additional insured. The certificate shall identify this Agreement and shall provide that the coverages afforded under the policies shall not be cancelled, terminated or materially changed until at least thirty (30) days prior written notice has been given to the City. The completed certificate of insurance shall be sent to:

City of Northglenn
Attn: Marti Robards
11701 Community Center Drive
Northglenn, Colorado 80233-8061

E. Failure on the part of Consultant to procure or maintain policies providing the required coverages, conditions, and minimum limits shall constitute a material breach of agreement upon which the City may immediately terminate this Agreement, or at its discretion, the City may procure or renew any such policy or any extended reporting period thereto and may pay any and all premiums in connection therewith, and all monies so paid by the City shall be repaid by Consultant to the City upon demand, or the City may offset the cost of the premiums against any monies due to Consultant from the City.

F. The City reserves the right to request and receive a certified copy of any policy and any endorsement thereto.

G. The parties hereto understand and agree that the City, its officers, and its employees, are relying on, and do not waive or intend to waive by any provision of this Agreement, the monetary limitations (presently one hundred fifty thousand dollars (\$150,000) per person and six hundred thousand dollars (\$600,000) per occurrence) or any other rights, immunities, and protections provided by the Colorado Governmental Immunity Act, Colo. Rev. Stat. §24-10-101 et seq., Colo. Rev. Stat., as from time to time amended, or otherwise available to the City, its officers, or its employees.

XI. NON-ASSIGNABILITY

Neither this Agreement, nor any of the rights or obligations of the parties hereto, shall be assigned by either party without the written consent of the other.

XII. TERMINATION

This Agreement shall terminate at such time as the work in Section I is completed and the requirements of this Agreement are satisfied, or upon the City's providing Consultant with seven (7) days advance written notice, whichever occurs first. In the event the Agreement is terminated by the City's issuance of said written notice of intent to terminate, the City shall pay Consultant for all work previously authorized and completed prior to the date of termination. If, however, Consultant has substantially or materially breached the standards and terms of this Agreement, the City shall have any remedy or right of set-off available at law and equity. If the Agreement is terminated for any reason other than cause prior to completion of the Project, any use of documents by the City thereafter shall be at the City's sole risk, unless otherwise consented to by Consultant.

XIII. CONFLICT OF INTEREST

The Consultant shall disclose any personal or private interest related to property or business within the City. Upon disclosure of any such personal or private interest, the City shall determine if the interest constitutes a conflict of interest. If the City determines that a conflict of interest exists, the City may treat such conflict of interest as a default and terminate this Agreement.

XIV. VENUE

This Agreement shall be governed by the laws of the State of Colorado, and any legal action concerning the provisions hereof shall be brought in the County of Adams, State of Colorado.

XV. INDEPENDENT CONTRACTOR

Consultant is an independent contractor. Notwithstanding any provision appearing in this Agreement, all personnel assigned by Consultant to perform work under the terms of this Agreement shall be, and remain at all times, employees or agents of Consultant for all purposes. Consultant shall make no representation that it is the employee of the City for any purposes.

XVI. NO WAIVER

Delays in enforcement or the waiver of any one or more defaults or breaches of this Agreement by the City shall not constitute a waiver of any of the other terms or obligation of this Agreement.

XVII. ENTIRE AGREEMENT

This Agreement and the attached Exhibits A and B is the entire Agreement between Consultant and the City, superseding all prior oral or written communications. None of the provisions of this Agreement may be amended, modified, or changed, except as specified herein.

XVIII. SUBJECT TO ANNUAL APPROPRIATION

Consistent with Article X, Section 20 of the Colorado Constitution, any financial obligations the City not to be performed during the current fiscal year are subject to annual appropriation, and thus any obligations of the City hereunder shall extend only to monies currently appropriated and shall not constitute a mandatory charge, requirement or liability in any ensuing fiscal conflicting provisions in the Agreement establishing any monetary obligation beyond the current fiscal year.

XIX. NOTICE

Any notice or communication between Consultant and the City which may be required, or which may be given, under the terms of this Agreement shall be in writing, and shall be deemed to have been sufficiently given when directly presented or sent pre-paid, first class United States Mail, addressed as follows:

The City: City of Northglenn
11701 Community Center Drive
Northglenn, Colorado 80233-8061

Consultant: Matrix Design Group, Inc.
1601 Blake Street, Suite 200
Denver, CO 80202

IN WITNESS WHEREOF, the parties hereto each herewith subscribe the same in duplicate.

CITY OF NORTHGLENN, COLORADO

By: _____
Joyce Downing Date

Mayor
Title

ATTEST:

Johanna Small, CMC Date
City Clerk

APPROVED AS TO FORM:

Corey Y. Hoffmann Date
City Attorney

CONSULTANT:

By: _____

Print Name

Title

Date

ATTEST:

By: _____

Print Name

Title

8/18/11

Date

ERIC SWANSON

VICE PRESIDENT

8/18/11

City's Contract # _____

Name of City's Project Manager
Joliette Woodson



SCOPE OF WORK

Project Understanding

The City of Northglenn desires to improve East 112th Avenue from Washington Street to the eastern city limits, a distance of approximately 1.5 miles. The purpose of the improvements is to address existing traffic related issues and to safely/efficiently meet the future demands from the 112th Avenue North Metro station and potential transit oriented development opportunities. The scope of work described below outlines the tasks that Matrix Design Group (Matrix) will undertake to deliver a Concept Design for the Corridor.

1.0 Project Coordination

Matrix will conduct a kick-off meeting for the project that includes key city staff and other stakeholders and deemed necessary by the City. During the kick-off meeting the following items will be discussed:

- Specific challenges and expectations associated with the project;
- Key issues;
- Establish the design year;
- Evaluation criteria and acceptable performance standards;
- Identify all potentially affected interests; and
- Establish tentative public meeting dates.

Additionally, frequent project coordination meetings with City staff will be held every three weeks over the course of the project. It is assumed that with a project time frame of six months that this will result in eight (8) progress meetings for the project. This task includes two Matrix staff members attending progress meetings with City staff. This task does not include workshop sessions or Public Meetings which are covered by a separate task. Prior to each progress meeting, Matrix will prepare meeting minutes and distribute to attendees and City staff. Fifty (50) total hours of effort expected for this task.

2.0 Planning

Preparatory to the corridor concept design, Matrix will conduct preliminary data collection to identify existing conditions and impacts of future improvements along 112th Avenue. This will be accomplished by the following sub-tasks.

- **Data Collection** – The first step in the study process will involve developing a complete and thorough understanding of the existing conditions. Matrix staff will compile a complete inventory of existing roadway corridor conditions including number of lanes, lane widths, right-of-way, sidewalks, traffic



Scope of Work East 112th Avenue Conceptual Design

control features and speed limits. This information will be provided in a concise existing conditions summary table. Matrix will also collect 24-hour traffic counts in the corridor, accident data, and peak hour turning movement counts at all key intersections. Matrix will use the services of a professional traffic data collector for this task. The existing traffic conditions will be summarized in the traffic study as part of Task 3-B below. Additional data that will be collected include GIS data provided by the City, existing Drainage Reports, Traffic Studies and Comprehensive Land-Use plans that pertain to the corridor. Sixteen (16) total hours of effort expected for this task.

- **Concept Hydrology Study/Memo for Transit Oriented Development Site/Station.** A critical element within the overall corridor is the presence of a floodplain that is tributary to Grange Hall Creek. There is a strong opportunity for the City to evaluate relocation of existing stormwater drainage facilities that would then permit for removal of portions of the roadway corridor and adjacent future Transit Oriented Development (TOD) site from the existing FEMA floodplain. This possibility would create great value for the City of Northglenn, City of Thornton, RTD, and the private landowner. This increased value could be captured by the City of Northglenn as a potential value match to the proposed RTD light rail station. To determine the viability of this approach, Matrix will perform a concept hydrology study to gain understanding to the viability of this concept and assign costs/values to the approach. It will also include one meeting with City of Northglenn staff, one meeting with Urban Drainage and Flood Control District (UDFCD) staff, and one meeting with City of Thornton staff (along with Northglenn staff). The work will entail seventy-eight (78) hours of effort and will result in a memorandum that summarizes the hydrologic/floodplain revisions and anticipated costs.
- **Identify FasTracks Impacts.** This task will involve reviewing the proposed FasTracks station site improvements to obtain understanding of impacts as they relate to additional traffic impacts, Quiet Zones, and Trail Connectivity. This will be summarized in a memo along with the contents of Task 2-D. This will include eight (8) hours of staff time.
- **Identify TOD Impacts.** This task will include reviewing the potential impacts of a TOD upon the adjacent Northglenn and Thornton Comprehensive Plan and how it relates to existing zoning and planning themes and concepts. This will be summarized in a memo along with the contents of Task 2-C. This will include eight (8) hours of staff time.
- **Opportunity Assessment Workshop #1.** The purpose of this workshop will be to discuss opportunities and constraints regarding the FasTracks/TOD site impacts to the 112th Avenue Corridor along with the findings from the concept hydrology memo. The workshop will be attended by three staff from Matrix and other City staff to set the framework for the roadway corridor opportunities. Matrix will prepare meeting minutes for this workshop. This will include ten (10) hours of staff time.



Scope of Work East 112th Avenue Conceptual Design

- **Public Meeting #1.** The first meeting is intended to introduce the project opportunities to the public, establish the need for the project and solicit public issues/concerns. For the meeting, Matrix will prepare a sign-in sheet, prepare high quality presentation materials, take notes, and summarize public feedback in a memo. This task will include thirty-five (35) hours of staff time.

- **Opportunity Assessment Workshop #2.** The purpose of this second workshop will be to discuss further the opportunities and constraints regarding the FasTracks/TOD site impacts to the 112th Avenue Corridor along with the feedback from the first public meeting. The workshop will be attended by three staff from Matrix and other City staff to set the framework for the roadway corridor opportunities. Matrix will prepare meeting minutes for this workshop. This will include ten (10) hours of staff time.

- **Utility Coordination Locates.** Matrix will coordinate with the following utility agencies to gather existing information and location data, mapping (if available) and planning/relocation/adjustment expectations by the affected agency/company:
 - A. Comcast
 - B. Qwest/Century Link
 - C. XCEL Energy (Electrical)
 - D. XCEL Gas
 - E. City of Northglenn Utilities
 - F. Fiber-Optic Companies (Expect two that are yet undetermined)

Matrix will coordinate with each of the above companies for a total of eight (8) hours. Matrix will use the services of a professional utility locating company to provide paint marks/flags of underground utilities within the project corridor. Matrix will then survey the located utilities to prepare a base map of existing utility locations. The survey portion of this task includes sixteen (16) hours of survey crew time to collect existing utilities over a two day period. The area to be utility surveyed includes the existing ROW from Washington Street to Colorado Boulevard between the existing right-of-way.

After the utility survey base-map is prepared, it will be checked against as-builts provided by the utility companies/agencies. If no as-builts are provided by the above listed utility companies, it will be noted in the project file. Then a preliminary design utility base-map will be prepared one time for submittal to each of the above listed utility companies. It is expected that this will take sixteen (16) hours total.

Once the utility companies have had three weeks to review the existing information collected and submitted, Matrix will make revisions received from the individual utility companies. Forty-four (44) total hours of effort are expected for this task.



3.0 Concept Design Alternatives

- **Survey/Data Collection** - As part of this step, Matrix will initiate an aerial/field survey and produce a planimetric map of the corridor. The base mapping will depict topography, physical features including drainage facilities, utilities and surface features. The survey will include 1-foot contours and spot elevations. This survey will be accomplished by using aerial surveying. The datum for the survey will be tied to the existing published control networks supporting NAD83 /NAVD88 and will utilize the control at both the intersections of East 112th Avenue and Washington Street and East 112th Avenue and York Street. Forty-eight (48) total hours of effort are expected for this task.
- **Traffic Analysis** – The purpose of this task is to prepare reliable turning movement forecasts. For this project, Matrix will work with City and DRCOG staff to obtain the following regional model runs: 2010 Base Year and Future Design Year as part of Task 2-A above. The model output will then go through a refinement process to obtain future year forecasts. The entering and exiting volumes for each intersection will then be converted to turning movements. To account for the expected demands associated with the 112th Avenue station and potential new development in the vicinity of the station, we will work closely with Northglenn, Thornton and RTD planners to identify a land use mix/density for the area. After the land use is defined, Matrix will then calculate the trip generation, determine the likely trip distribution patterns and assign the trips to the roadway network. A manual adjustment process will be used to blend the site generated trips with the forecasted volumes from the DRCOG model.

Once the future traffic volumes have been determined, Matrix will analyze the corridor using Synchro software. Level of service, delay and queue lengths will be the primary operational outputs used to develop future laneage requirements and to compare alternatives. In addition to the capacity and operational performance analysis, we intend to quantitatively analyze the safety impacts of each alternative.

One hundred sixty-eight (168) total hours of effort are expected for this task.

- **Roadway Alignment Alternatives Analysis** - The initial alternatives for East 112th Avenue will consist of a series of typical sections that accommodate a variety of travel modes, including vehicles, transit, pedestrians, and bicycles in different ways and capacities. Matrix will also consider various edge and urban design concepts for the corridor that will be added to the different typical sections. Concurrent with the typical section selection process, alternative intersection configurations and traffic control features will be identified and tested. Once the above analyses are complete and the City has selected a proposed course of action, Matrix will develop a conceptual design for the corridor. This design will include plan and profile sheets, cross-sections, intersection layouts and traffic control recommendations, landscaping, construction phasing, utility impacts/proposed



Scope of Work East 112th Avenue Conceptual Design

modifications, drainage improvements, and water quality features. It is expected that the following plan sheets will be included in the concept plans (number of sheets shown in parenthesis):

- Title Sheet (1)
- Typical Section Sheet (2)
- Existing Utilities Plan (7)
- Roadway Plan and Profile Sheets (7)
- Overall Drainage Plan Concept (3)
- Overall Landscape/Urban Design Plan Concept (5)

All plans will conform to the City of Northglenn Public Right-of-Way Standards and Specifications. The concept plans will be prepared one time for review and one time for submittal. Two hundred fifty-eight (258) total hours of effort are expected for this task including effort by landscape architect sub-consultant.

Drainage Assessment - Storm drainage in East 112th Avenue is tributary to Grange Hall Creek which is tributary to the South Platte River. Drainage flows from west to east in East 112th Avenue as part of the “Northeast Tributary” of Grange Hall Creek. There are two governing documents by the UDFCD for the East 112th Avenue drainageway on Grange Hall Creek. These documents set the hydrology and proposed improvements on this drainageway.

- “*Grange Hall Creek Watershed, Major Drainageway Planning Study, Preliminary Design Report*”, for Urban Drainage & Flood Control District, February 1997.
- “*Remedial Maintenance – Tributary to Grange Hall Creek at 112th Avenue*”, Construction Drawings for Urban Drainage & Flood Control District, 1982.

Expansion of the East 112th Avenue roadway cross section will require replacing the open channel with an underground box culvert. Design of the box culvert will adhere to Northglenn’s Public Right-of-Way Standards and Specifications, updated 2010, and the Urban Drainage and Flood Control District (UDFCD) Volumes 1, 2 & 3.

A final drainage report will be prepared to redefine and update the design hydrology and hydraulics to size the box culvert that will be necessary to enclose the East 112th Avenue drainageway. It is assumed that UDFCD will be involved in the design process so that the improvements are eligible for UDFCD maintenance and meet their requirements. In addition, water quality treatment of urban runoff. Detention and water quality needs will be identified as part of the effort. The ultimate deliverable will be a drainage report and overall drainage plan that will be included in the final corridor report. One hundred eighty (180) total hours of effort are expected for this task.



Scope of Work East 112th Avenue Conceptual Design

- **Opinion of Probable Cost** – Once the conceptual design is completed, Matrix will estimate quantities and work with City staff to develop acceptable unit costs. The opinion of probable cost will include hard costs, soft costs, allowances, and potential right-of-way acquisition. The hard costs will be for roadway improvements including traffic control, utility relocations, drainage facilities, landscaping, pedestrian/bicycle facilities, demolition, and temporary facilities (if required). General condition items will be part of the hard cost estimate. Soft costs will consist of Construction Soft Costs (Bid/Construction Contingency and Mobilization) and Design Soft Costs (Design and Permits). The opinion of probable cost will be broken into at least two segments to aid in local match discussions with RTD. Thirty-six (36) total hours of effort are expected for this task.
- **Public Meeting #2.** The second meeting will present conceptual alternatives, review the results of the analysis and receive public feedback. For the meeting, Matrix will prepare a sign-in sheet, prepare high quality presentation materials, take notes, and summarize public feedback in a memo. Thirty-five (35) total hours of effort are expected for this task.
- **Permits** – Matrix will prepare a Permit and Approval matrix that outlines the anticipated permits, duration to obtain permit and Agency that requires the Permit. The intention of the matrix is that it will be used during the Final Design to assist with defining design schedule and timing required to obtain the different permits and approvals (ie CDPHE, ROW if needed, etc). Fourteen (14) total hours of effort are expected for this task.
- **Presentation to City Council** – Matrix will prepare a Permit and Approval matrix that outlines the anticipated permits, duration to obtain permit and Agency that requires the Permit. The intention of the matrix is that it will be used during the Final Design to assist with defining design schedule and timing required to obtain the different permits and approvals (ie CDPHE, ROW if needed, etc). Six (6) total hours of effort are expected for this task.



4.0 Concept Design Alternatives

- A. **Final Design Report** - The end product will be a Final Design Report for East 112th Avenue. This report will be concisely written, well organized and include quality graphics. The content will include both the results of the planning and alternative development process and the conceptual design of the preferred concept. The format will be 11" x 17" so it can include half size plan sheets prepared as part of task 3-C above. Matrix will provide the following deliverables as part of the overall effort:
1. *Planning Report that summarizes the TOD/FasTracks/Hydrology Opportunities. This will be a concise report that identifies land-use, traffic and drainage constraints and opportunities as they relate to 112th Avenue. The report will also summarize feedback and input for Public Meeting #1. The Planning Report will be submitted one time only. Revisions to the report will be incorporated into the Final Design Report.*
 2. *Preliminary conceptual drawings consistent with task 3-C above to include three half size bound sets of drawings, including a CD with electronic drawings in PDF format and AutoCAD version 2011.*
 3. *Powerpoint presentations for Public Meeting and for Council Study Session.*
 4. *Final Design Report including traffic study and drainage study. Three bound copies will be provided including a CD with document in PDF Format. The Final Design Report will be submitted one time for review and one time for final submission.*

Forty-four (44) total hours of effort are expected for preparing the Final Design Report.

FEE PROPOSAL

The hourly fee estimate for this project is provided on the attached fee summary table. The hourly estimate reflects the tasks as described above.



TASK #	TASK DESCRIPTION	ITEM COST	HOUR TOTAL	STAFF												Subconsultants
				John Blanchard	Gerrit Slatter	Lee Kellar	Robert Krehbiel	Tim Dreese	Mike McGoldrick	Brian Bern	Support	Survey Crew (2-Man)	Chris Brooks	Heath Smith	Admin	
				Principal-In-Charge	Project Manager	Trans Planner	Water Res Engineer	Public Involvement	Utilities	Traff Engineer	Engineering		Surveyor	Survey Tech		
1.0	Project Coordination			\$180.00	\$140.00	\$150.00	\$150.00	\$125.00	\$125.00	\$90.00	\$85.00	\$130.00	\$114.00	\$75.00	\$55.00	
A	Includes 1 Kick-Off and 9 internal progress meetings with City Staff	\$7,560	50	8	18	12	12									
	Subtotal	\$7,560	50													
2.0	Planning															
A	Data collection	\$5,740	16		4				4		8					\$4,000
B	Concept Hydrology Study/Memo for TOD Site	\$9,200	78	4	2		32				40					
C	Identify FasTracks Impacts	\$1,200	8			8										
D	Identify TOD Impacts	\$1,200	8			8										
E	Opportunity Assessment Workshop #1	\$1,290	10	2	2	2				2	2					
F	Public Meeting #1	\$3,655	35		4	4		3		16	8					
G	Opportunity Assessment Workshop #2	\$1,370	10	2	2	2			2	2						
H/I	Utility Coordination/Locates	\$8,040	44		4				24			16				\$2,400
	Subtotal	\$31,695	209													
3.0	Concept Design Alternatives															
A	Design Surveys	\$13,174	48		2				2		4	16	16	8		\$7,800
B	Traffic Analysis	\$16,460	168		4	24				80	60					
C	Roadway Alignment/Alternatives Analysis	\$31,920	258	2	24	8	16		8	120	80					\$6,000
D	Drainage Assessment	\$19,200	180	8	4		40		8		120					
E	Opinion of Probable Cost	\$3,920	36		4		8			24						
F	Public Meeting #2	\$3,655	35		4	4		3		16	8					
G	Permits	\$1,980	14		2		8		4							
H/I	Presentation to City Council	\$940	6	2	2	2										
	Subtotal	\$91,249	745													
4.0	Final Concept Report															
A	Final Report Preparation/Submittal	\$5,600	44		4	16	8			16						
	Subtotal	\$5,600	44													

DIRECT LABOR: (ESTIMATE)	\$136,104																
TOTAL HOURS	1048	1048	28	86	90	124	6	52	276	330	32	16	8	0	\$20,200		

SUBCONSULTANTS:	
ALL TRAFFIC DATA	\$4,000
AERIAL MAPPING INC	\$7,800
UTILITY LOCATING AND MAPPING	\$4,000
LANDSCAPE ARCHITECTURE	\$6,000

DIRECT COSTS: (ESTIMATE)	TOTAL EXPENSES	Roll Plots (36" Width)	Bond Plots (11x17)	Copies (8 1/2x11)	Supplies												
	\$2,350	\$900	\$1,050	\$200	\$200												

GRAND TOTAL:	\$138,454
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