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**Barney S. Heath**  
Director

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## MEMORANDUM

**DATE:** March 16, 2018

**TO:** Deborah Crossley, Chair  
Members of the Public Facilities Committee

**FROM:** James McGonagle, Commissioner of Public Works  
Louis M. Taverna, P.E., City Engineer  
Barney Heath, Director of Planning & Development  
Lily Canan Reynolds, Community Engagement Manager, Planning Department

**RE:** Docket Item #88-18 - Newtonville Village Streetscape Design and Engineering Services

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The scope of services for the integrated Newtonville Village Streetscape project described below has been revised in response to comments of the Public Facilities Committee on January 17, 2018. The services described will integrate streetscape improvements to be provided by Austin Street Partners, as required under the special permit for their project at 28 Austin Street, with the City's overall investments in the streetscape and roadway in Newtonville under the existing Walnut Street Enhancements Project, presenting one consistent design under the City's direction.

### Purpose of an Integrated Scope

This request for funds addresses portions of streets and sidewalks in Newtonville that have been found to be key to promoting walkable connections in Newtonville and were not part of either the original Walnut Street Enhancements Project or the 28 Austin Street project. Integrating these additional elements into the Walnut Street Enhancements Project will result in better connections for people parking and walking to and from retail shops, the new plaza at 28 Austin Street, the Senior Center, and points in Newtonville north of the Mass Turnpike. Residents and business owners in Newtonville have discussed enhancing and beautifying the streetscape at the heart of the village for several years. This is an opportunity to ensure seamless connections between the soon to be refreshed Austin Street Lot and the soon to be enhanced Walnut Street.

These gap-filling and linkage additions to the scope include:

- Bram Way: intersection reconfigurations and sidewalk improvement
- Austin Street alignment
- Village lighting design

- Walnut Street bridge over the Massachusetts Turnpike

#### Design Services and Estimated Construction Costs

- ***\$147,411 requested for engineering design services for new integrated scope***
- Original Walnut Street Enhancements Project Scope
  - \$400,000 engineering design services for existing Walnut Street Enhancements
  - \$3,000,000 estimated construction cost for existing Walnut Street Enhancements
- \$450,000 estimated construction cost for new integrated scope

The engineering design services for the new integrated scope go beyond a traditional roadway engineering project. In addition to standard roadway design services such as survey, marking plan, and construction details; this project also includes design and integration of streetscape elements, landscaping plans, lighting design, and review of 28 Austin Street. Furthermore, the proposed services include reintegrating a unique element – the Walnut Street bridge over the Massachusetts Turnpike – into the Newtonville village streetscape. There is a relatively small percentage increase in the total construction area, but the expanded areas involve more complex design tasks and so the percentage increase is higher. Overall the integrated project scope is consistent with typical design cost to construction cost ratio.

#### Bram Way intersection reconfigurations and sidewalk improvement

*(Items 1 & 3 in “Newtonville Village Additional Services Fee Schedule”: approx. \$36,000)*

The 28 Austin Street project includes a major investment in Bram Way. The roadbed will be repaved, and a raised plaza will be constructed at the Austin Street end of the passage. The new plaza is expected to be a place for events and daily pedestrian use. While Walnut Street will continue to act as Newtonville’s main street, it is anticipated that the plaza will draw more pedestrians along Bram Way. As of now, fixing the sidewalk along Bram Way is not in the scope of either project. It is in the interest of the City to ensure Bram Way has a sidewalk that is continuous ADA-compliant, and well-lit in the evening.

The intersections of Bram Way with Austin Street and Highland Avenue will also be updated to ensure safety for pedestrians crossing south to the Senior Center on one side or to Star Market on the other. Integrating these elements into the Walnut Street Enhancements Project scope will mean designing and engineering sidewalks, curb cuts, crosswalks, lighting, and pavement markings.

#### Austin Street Roadway & 28 Austin Street

*(Items 2 & 4 in “Newtonville Village Additional Services Fee Schedule”: approx. \$64,000)*

The 28 Austin Street project includes a newly rebuilt sidewalk along the edge of the new building (south-side of Austin Street) and new street trees on the northern sidewalk abutting the Star Market parking lot.

The Walnut Street design team has found that this segment of Austin Street is inefficiently laid out as it connects into the Walnut Street Enhancements project and recommends realignment to this area to improve safety and enhance the retail environment. Furthermore, street parking could be reallocated to the southern side of Austin Street, maximizing the efficiency of space and bringing visitors parking closer to retail destinations.

The City would benefit from investing in a new sidewalk on the northern side of Austin Street to match the south-side sidewalk built by Austin Street Partners, and to better ensure the longevity and health of the trees planted on the northern sidewalk by addressing the conditions in which the trees will grow. Instead of planting trees in the existing northern sidewalk, which would significantly limit the amount of soil volume and tree viability, a new sidewalk with higher quality below grade soils would likely result in longer term benefits such as a larger street tree canopy.

The street lighting, landscaping, and furniture elements selected by Austin Street Partners for 28 Austin Street's frontage should complement the entire Newtonville village, while still maintaining a unique sense of place. In order to ensure the City meets this objective the scope of work includes review by the landscape design team working on Walnut Street Enhancements.

This scope would include a new roadway alignment and pavement markings on Austin Street, further sidewalk redesign for the north side of Austin Street (approx. 300 ft), and review of the Austin Street project by the Walnut Street design team.

#### Village Lighting Design

*(Item 5 in "Newtonville Village Additional Services Fee Schedule": approx. \$12,000)*

A comprehensive lighting design with photometric analysis for the entire Walnut Street corridor would provide safety benefits as well as enhance a unified streetscape environment. A significant number of students at Newton North High School and surrounding lower schools walk on Walnut Street south of the commercial core.

This scope would allow for a detailed study of appropriate lighting levels and fixture selection throughout the integrated scope area including Walnut Street.

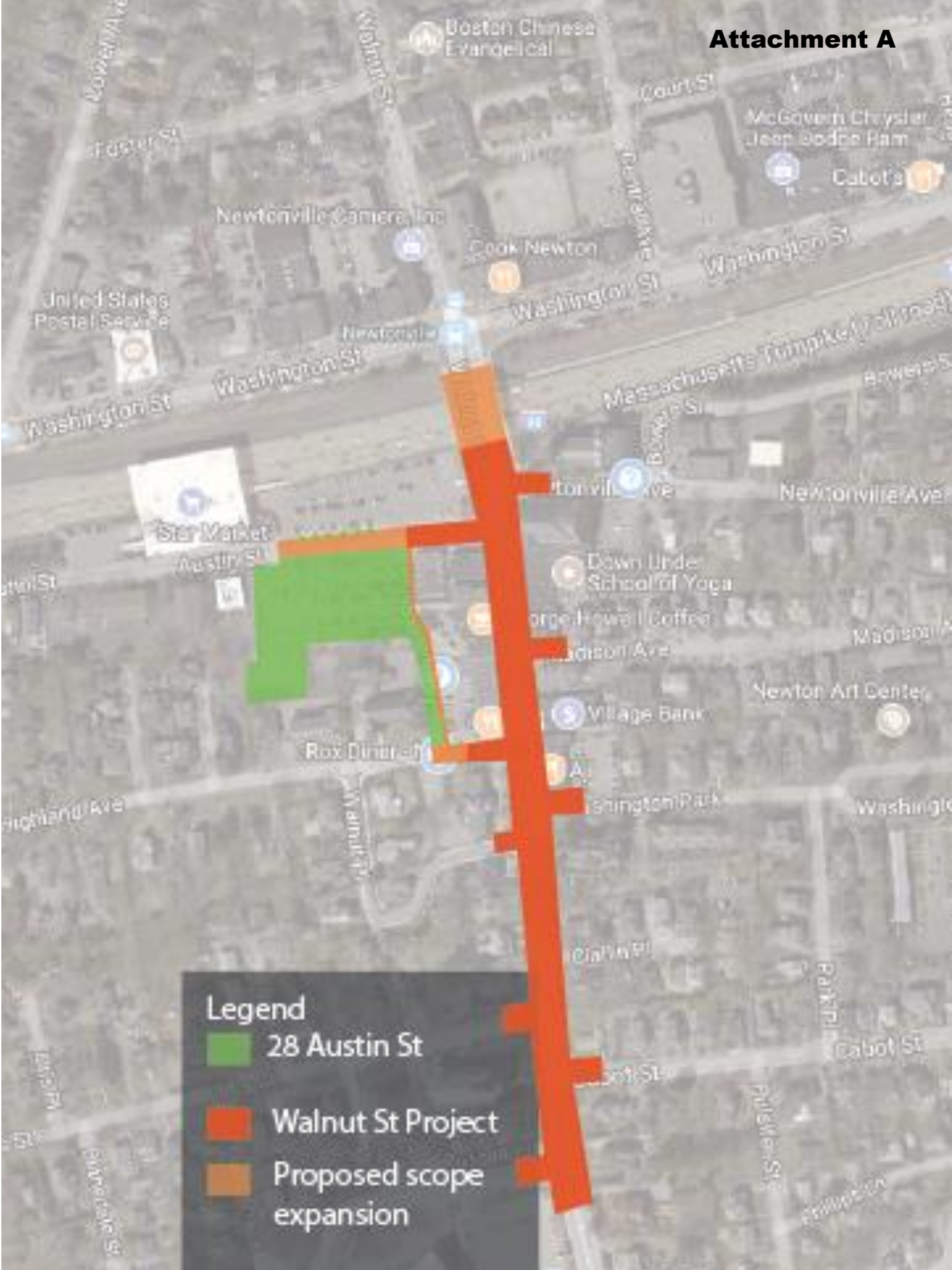
#### Walnut Street Bridge over the Massachusetts Turnpike

*(Item 6 in "Newtonville Village Additional Services Fee Schedule": approx. \$35,500)*

To the north, the current Walnut Street Enhancements Project scope ends at the southern abutment of the Massachusetts Turnpike Bridge. The Special Permit for the Washington Place project, anticipated to begin construction in 2019 or 2020, includes improving the intersection of Washington and Walnut Streets with new sidewalk, roadway, ADA-compliant curb cuts, and a new traffic signal.

Integrating the bridge into the Walnut Street Enhancements Project scope includes design and engineering services to connect the new roadway and traffic configurations of Walnut Street north and south of the Bridge. In addition, this expanded scope includes design services to enhance the experience of crossing between the northern and southern areas of Newtonville that are otherwise divided by the Turnpike.

Given the constraints from MassDOT, it is anticipated these elements would be artistic, light touch pieces that serve to unify Newtonville across the Mass Pike but do not include elements which would require structural evaluation and engineering designs.



# Project Fee Schedule

Attachment B

## City of Newton

### Newtonville Village - Additional Services

REV 02/06/18

STAFF	EPG				KMDG			HOURLY RATE	TOTAL	TOTAL PER TASK
	PM	Sr. Eng.	Eng	Jr. Eng.	Princ.	Assoc.	Jr Designer			
TASK DESCRIPTION	J. Fitzgerald	B. Hung	J. Crabb	A. Towle	K. Martin	K. Petschke	A. Allen	TASK	TOTAL	TOTAL PER TASK
HOURLY RATE	205.00	195.00	110.00	95.00	198.00	121.00	82.50			
<b>1. Highland Avenue</b>										<b>\$17,350</b>
a. coordinate & incorporate additional survey into Walnut Street base plan; Site visit for verification	0.5	1	2					3.5	\$518	
b. finalize Bram intersection conceptual design on surveyed plan using previously developed concept	1	3			2	4	8	18	\$2,330	
c. Preliminary Design (Construction, Profile, Sign and Pavement Marking Plan, Grading plans & est.)	4	6	10	4				24	\$3,470	
d. Preliminary Design (Landscape/Streetscape plans and estimate); incorporate LA plans	1		2		2	4	8	17	\$1,965	
e. Final Design (Construction, Sign and Pavement Marking Plan, Grading plans, Curb Tie and est.)	4	6	12	4				26	\$3,690	
f. Final Design (Landscape/Streetscape plans and estimate); incorporate LA plans	1		2		2	4	8	17	\$1,965	
Misc. coordination with expanded limits for Highland Avenue; No meetings anticipated	6	2			4			12	\$2,412	
EXPENSES (EPG)										\$200
EXPENSES (KMDG)										\$200
EXPENSES (Survey)										\$600
EXPENSES (Lighting)										\$0
<b>2. Austin Street</b>										<b>\$37,728</b>
Previously performed- develop Austin Street alternatives	3	5			1			9	\$1,788	
a. coordinate & incorporate additional survey into Walnut Street base plan; Site visit for verification	0.5	1	4						\$738	
b. finalize Austin Street sidewalk and roadway concept using one of the previously developed concepts	1	3			2	4	8	18	\$2,330	
c. Preliminary Design (Construction, Profile, Sign and Pavement Marking Plan, Grading plans & est.)	6	16	36	6				64	\$8,880	
d. Preliminary Design (Landscape/Streetscape plans and estimate); incorporate LA plans	1		2		2	4	16	25	\$2,625	
e. Final Design (Construction, Sign and Pavement Marking Plan, Grading plans, Curb Tie and est.)	6	16	40	6				68	\$9,320	
f. Final Design (Landscape/Streetscape plans and estimate); incorporate LA plans	1		2		2	4	16	25	\$2,625	
Misc. coordination and (3) meetings for the expanded limits	16	8			9			33	\$6,622	
EXPENSES (EPG)										\$200
EXPENSES (KMDG)										\$200
EXPENSES (Survey)										\$2,400
EXPENSES (Lighting)										\$0
<b>3. Bram Way</b>										<b>\$18,638</b>
a. coordinate & incorporate additional survey into Walnut Street base plan; Site visit for verification	0.5	1	3					4.5	\$628	
b. lay out sidewalk and driveway apron concepts (2 alternatives)	2	4						6	\$1,190	
c. Preliminary Design (Construction, Profile, Sign and Pavement Marking Plan, Grading plans & est.)	4	8	16	4	2	4	4	42	\$5,730	
d. Final Design (Construction, Sign and Pavement Marking Plan, Grading plans, Curb Tie and est.)	4	8	20	4	2	4	4	46	\$6,170	
Misc. coordination with expanded limits for Bram Way	6	2						8	\$1,620	
EXPENSES (EPG)										\$200
EXPENSES (KMDG)										\$200
EXPENSES (Survey)										\$2,900
EXPENSES (Lighting)										\$0
<b>4. Austin Street Development</b>										<b>\$26,254</b>
Previously performed- meetings and coordination with City, design team and developer	11	7			6	6		30	\$5,534	
a. design oversight of the streetscape investments					8	8		16	\$2,552	
b. 2 to 3 meetings with Austin St Partners team	12				6	2		20	\$3,890	
ongoing coordination/questions	6				8	8		22	\$3,782	
REVIEW Streetscape & Landscape along Austin St and Brahmy Way based on Master Pl					8	16		24	\$3,520	
REVIEW Landscape design:										
prepare report on lighting, landscaping, streets, and sidewalks					8	4		12	\$2,068	
one additional review of minor changes					4	4		8	\$1,276	
write up of additional LA review (above)					8	4		12	\$2,068	
f. Shop drawing and materials reviews to ensure consistency with Walnut St project					2	8		10	\$1,364	
EXPENSES (EPG)										\$0
EXPENSES (KMDG)										\$200
EXPENSES (Survey)										\$0
EXPENSES (Lighting)										\$0
<b>5. Photometric Analysis and Lighting Design</b>										<b>\$11,866</b>
a. Photometric analysis (between Elm Road and Walnut Place); Preliminary Design (plan and est.)	1	2	4					7	\$1,035	
b. Final Design (Lighting Plan and estimate)	1	2	4			8	4	19	\$2,333	
EXPENSES (EPG)										\$0
EXPENSES (KMDG)										\$0
EXPENSES (Survey)										\$0
EXPENSES (Lighting- Prelim.)										\$4,406
EXPENSES (Lighting- Final)										\$4,092
<b>6. Massachusetts Turnpike Bridge</b>										<b>\$35,577</b>
previously performed bridge concept and presentation					8	16	32	56	\$6,160	
a. finalize pavement markings using the previously developed concept	1	2						3	\$595	
b. develop artistic treatments on Mass Pike bridge fence	2				12	16	32	62	\$7,362	
c. Preliminary Design (Construction, Sign and Pavement Marking Plan, and estimate)	1	4		4				9	\$1,365	
d. Preliminary Design (Landscape/Streetscape plans and estimate); incorporate LA plans	1		2		4	16	40	63	\$6,453	
e. Final Design (Construction, Sign and Pavement Marking Plan, and estimate)	1	4		4				9	\$1,365	
f. Final Design (Landscape/Streetscape plans and estimate); incorporate LA plans	1		2		4	16	40	63	\$6,453	
Misc. coordination and (2) meetings with MassDOT for approval	14	6			8			28	\$5,624	
EXPENSES (EPG)										\$200
EXPENSES (KMDG)										\$0
EXPENSES (Lighting)										\$0
<b>TOTAL:</b>									<b>\$147,411</b>	
<b>SAY:</b>										

The above budget is based on several assumptions listed in the "Scope of Services- Walnut Street Enhancements Project: Expanded to Integrate Investments from Austin Street Partners" document.