



## Legislation Details (With Text)

|                        |  |                      |              |              |  |
|------------------------|--|----------------------|--------------|--------------|--|
| <b>File #:</b>         | 11-1569  | <b>Version:</b>      | 1            | <b>Name:</b> | 12/19/11 - Rectangular Rapid Flashing Beacons (RRFB) |
| <b>Type:</b>           | Resolution   | <b>Status:</b>       | Passed       |              |  |
| <b>File created:</b>   | 12/19/2011   | <b>In control:</b>   | City Council |              |  |
| <b>On agenda:</b>      | 12/19/2011   | <b>Final action:</b> | 12/19/2011   |              |  |
| <b>Enactment date:</b> | 12/19/2011   | <b>Enactment #:</b>  | R-11-543     |              |  |
| <b>Title:</b>          | Resolution to Approve and Appropriate the Preliminary Project Budget for the Design and Installation of Rectangular Rapid Flashing Beacons (RRFB) at Plymouth Road and at S. Seventh Street (\$81,000.00) (8 Votes Required) |                      |              |              |  |
| <b>Sponsors:</b>       | John Hieftje   |                      |              |              |  |
| <b>Indexes:</b>        |  |                      |              |              |  |
| <b>Code sections:</b>  |  |                      |              |              |  |
| <b>Attachments:</b>    | 1. RR FLASHING BEACON.PDF  |                      |              |              |  |

| Date       | Ver. | Action By    | Action   | Result |
|------------|------|--------------|----------|--------|
| 12/19/2011 | 1    | City Council | Approved | Pass   |

Resolution to Approve and Appropriate the Preliminary Project Budget for the Design and Installation of Rectangular Rapid Flashing Beacons (RRFB) at Plymouth Road and at S. Seventh Street (\$81,000.00) **(8 Votes Required)**

The attached resolution requests approval of the preliminary project budget for the design and installation of four (4) RRFB at Plymouth Road and one (1) RRFB at S. Seventh Street south of W. Washington Street.

Plymouth Road between Murfin Ave and Huron Parkway is a five (5) lane facility with four (4) pedestrian refuge islands. The posted speed limit on Plymouth Road is 35 mph and 45 mph, with a daily vehicular traffic volume of approximately 22,000. The nearby developments include City residential units, University of Michigan's north campus housing and offices, apartments, shopping malls, businesses and religious facilities. The mid-block pedestrian crossing islands provide the primary crossing points for the very large students and residents foot traffic, AATA and UM bus customers and the businesses on the opposite sides of Plymouth Road.

S. Seventh Street at Washington Street is a busy roadway with the posted speed limit of 30 mph, a daily vehicular traffic volume of close to 10,000, and a relatively short sight distance at the Washington Street intersection. This intersection is only a few blocks from an elementary school, with a marked crosswalk for the foot traffic that is generated by the students and the residents. About two years ago the City installed a pedestrian refuge island at S. Seventh Street just south of Washington Street.

To further enhance the pedestrian safety at the above pedestrian crossing points we are proposing the addition of Rectangular Rapid Flashing Beacons (RRFB) to the existing pedestrian refuge islands at the locations mentioned above. A Rectangular Rapid Flashing Beacon consists of two (2) rectangular stutter flash beacons below pedestrian warning signage. They are push button actuated by the pedestrian and can include audible messages. The beacons are similar in nature to the light

bars on the top of emergency vehicles. The unique nature of the strobe seems to increase awareness. Although they are relatively new devices, in use for less than 5 years, they have been thoroughly tested in the last couple of years. Average yielding compliance rates of 77-85% are reported in recent studies and yielding rates do not diminish over time based on a two year study of effectiveness.

The preliminary estimated cost is \$81,000.00 for the installation for five (5) RRFB which will be financed from the Major Streets Fund Balance. The projected fund balance in the Major Street Fund as of June 30, 2011 is \$7,440,430.00. Per the City's Fund Balance and Debt Policies, the Major Street Fund should be maintaining one year's collection of the weight and gas tax revenues, which is approximately \$5,400,000.00.

Annual operation and maintenance cost are estimated to be \$160 per crossing.

The installation of the five (5) RRFBs by the City's Field Operations Unit is scheduled to begin in February 2012, and to be completed by April 2012. The actual delivery of the parts and equipments for the RRFB may impact the projected installation dates.

Prepared by: Homayoon Pirooz, P.E., Manager, Project Mgmt. Services Unit

Reviewed by: Sue F. McCormick, Public Services Area Administrator

Approved by: Steven D. Powers, City Administrator

Whereas, The City of Ann Arbor is committed to providing access for all modes of transportation;

Whereas, it is estimated that over 15% of Ann Arbor residents walk to work and thousands of students walk to the public schools;

Whereas, with the rise of vehicular traffic volume it is becoming increasingly more challenging for the pedestrians to cross the busy streets;

Whereas, to date all or most of our investment in traffic signal installations have been for the automobiles operation and safety;

Whereas, it is time to invest in actuated signals and other technologies that will assist with the pedestrians' mobility and their safety;

Whereas, The Rectangular Rapid Flashing Beacon (RRFB) is a new technology that improves the safety at the streets marked crossing points;

Whereas, Plymouth Road is a major corridor in the City of Ann Arbor with over 22,000 automobiles per day, posted speed limits of 35 mph and 45 mph, and four (4) marked pedestrian crossing points; and

Whereas, S. Seventh Street south of Washington Street is a major roadway with nearly 10,000 automobiles per day, posted speed limit of 30 mph, a nearby public school and one marked pedestrian crossing points;

RESOLVED, That staff be directed to design and install four (4) Rectangular Rapid Flashing Beacons (RRFB) at Plymouth Road and one (1) Rectangular Rapid Flashing Beacons (RRFB) at S. Seventh Street; and

RESOLVED, That the preliminary project budget for the design and installation of the Rectangular Rapid Flashing Beacons (RRFB) at Plymouth Road and S. Seventh Street (\$81,000.00) be appropriated from the ACT 51 Major Street Fund Balance.

Sponsored by: John Hieftje, Mayor