



MEMO

Office of the Village
Engineer/Building Inspection
Michael Spence, P.E., LEED® AP

TO: Mike Pollocoff/Village Administrator

FROM: Mike Spence/Village Engineer

CC: Jane Romanowski/Village Clerk
Jean Werbie-Harris/Community Development Director
John Steinbrink Jr./Public Works Director

DATE: September 9, 2013

In the Village's efforts to incorporate sustainable infrastructure in future development we have reviewed our existing roadway cross-sections. As funding for roadway maintenance becomes more difficult, it is critical to build infrastructure that will require less costly upkeep over its useful life. To achieve this goal we have looked at modifying our pavement structure to utilize a cross-section that will result in lower maintenance costs over time.

The existing residential *collector* cross-section (49 ft back-of-curb to back-of-curb) includes 6 inches of asphalt in two layers (4-1/2 in binder course and 1-1/2 in surface course). The existing residential cross section (37 ft back-of-curb to back-of-curb) includes 5 inches of asphalt in two layers (3-1/2 in binder course and 1-1/2 in surface course). The pace of development has slowed and the initial binder paving does not hold up over time during the extended period of construction. This results in increases in binder repair before the final surface course is installed.

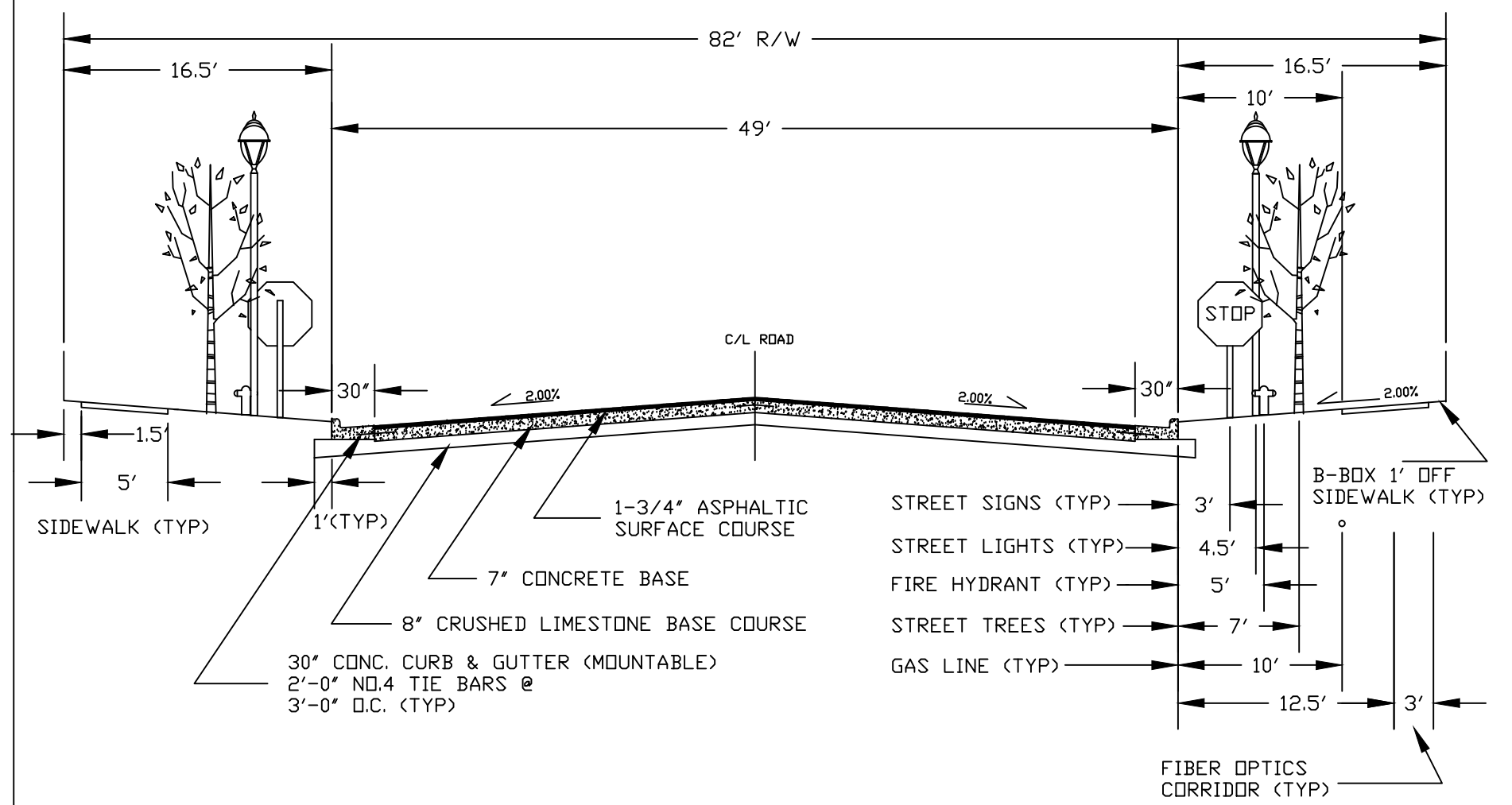
The new detail utilizes a concrete roadway with an asphalt overlay or wear surface. The new residential *collector* cross-section (**49 ft back-of-curb to back-of-curb**) includes **7 inches of concrete base with a 1-3/4 in surface course of asphalt**. The new residential cross section (**37 ft back-of-curb to back-of-curb**) includes **7 inches of concrete base with a 1-3/4 in surface course** of asphalt. This is similar to the cross-section that exists in the Lakeview Corporate Park roads. This pavement section has fared well over its lifetime and has resulted in lower maintenance costs.

The second change relates to the Village's *2010 Bicycle and Pedestrian Trails Plan*. This plan demonstrates the Village's commitment to providing facilities for walking. For walking to be a viable form of transportation and recreation, there must be facilities that allow residents to safely and comfortably participate in these activities and reach their destinations. The Village's roadway cross-sections are proposed to include the provision of **five foot concrete sidewalks on each side of the street**. Right-of way is increased from **80 foot to 82 feet for the 49 ft roadway section** and from **66 foot to 70 foot for the 37 ft roadway section**.

By proactively planning for bicycle and pedestrian facilities and programs and policies that encourage cycling and walking, Pleasant Prairie is demonstrating a commitment to offering Village residents and visitors accessible, environmentally friendly and inexpensive transportation and recreation options.

I am recommending that the Village Board *adopt revised details R-2 and R-4* which are included in Appendix A of Chapter 405 of the Village Ordinance. Detail R-2 is for a residential collector street cross-section for a 49 foot roadway (back-of-curb to back-of-curb) and includes the new pavement section (concrete with an asphalt overlay) and the provision of five foot sidewalks on each side of the street and the additional right-of-way. Detail R-4 is for a residential cross-section for a 37 foot roadway (back-of-curb to back-of-curb) and includes the new pavement section (concrete with an asphalt overlay) and the provision of five foot sidewalks on each side of the street and the additional right-of-way. The two cross-sections are attached.

DETAIL: R-2



NOTE:
 * UNDERGROUND POWER, TELEPHONE, & CABLE ARE TO BE IN REAR YARDS. (TYP)

VILLAGE OF PLEASANT PRAIRIE

RESIDENTIAL COLLECTOR SECTION DETAIL (49' B-B)

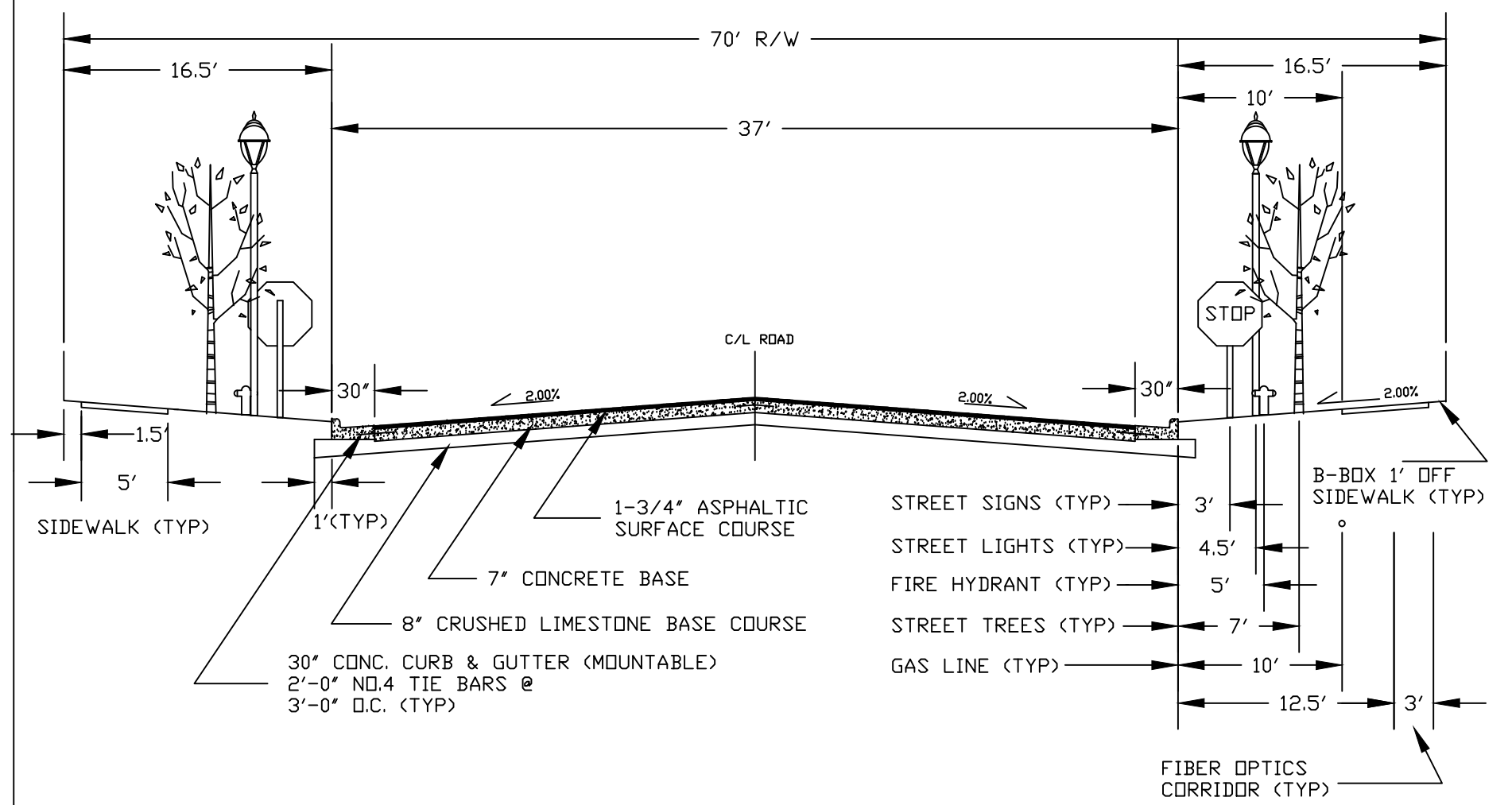
CREATED: 11-21-12
 REVISED: 9-6-13

SCALE: NTS

DRAWN BY: K.ROBERS
 REVISED BY: S.WLAHOVICH

APPROVED BY: M.SPENCE

DETAIL: R-4



NOTE:
 * UNDERGROUND POWER, TELEPHONE, & CABLE ARE TO BE IN REAR YARDS. (TYP)

VILLAGE OF PLEASANT PRAIRIE

RESIDENTIAL SECTION DETAIL (37' B-B)

CREATED: 11-21-12
 REVISED: 9-6-13

SCALE: NTS

DRAWN BY: K.ROBERS
 REVISED BY: S.WLAHOVICH

APPROVED BY: M.SPENCE