

## DESIGN OPTIONS CONSIDERED – EXHIBIT 1 of 2

### INITIAL SCREENING

The following is the summary of the design options considered for the Butler Warren Road reconstruction:

#### **Alternate 1 Equal Widening on Both Sides of the Existing Survey Centerline**

1. **Alternate 1a – Tylersville Road to Bethany Road** – 12 foot lanes, five lane section
2. **Alternate 1b – Tylersville Road to Hampton Court** – 12 foot lanes, five lane section; **Hampton Court to Bethany Road** – four lane section with left turn lanes
3. **Alternate 1c – Tylersville Road to Bethany Road** – 11 foot lanes, five lane section
4. **Alternate 1d – Tylersville Road to Hampton Court** – 11-foot lanes, five lane section; **Hampton Court to Bethany Road** – four-lane section with left turn lanes

#### **Alternate 2 All the Widening to the West Side of Butler Warren Road**

1. **Alternate 2a – Tylersville Road to Bethany Road** – 12 foot lanes, five lane section
2. **Alternate 2b – Tylersville Road to Hampton Court** – 12 foot lanes, five lane section; **Hampton Court to Bethany Road** – four-lane section with left turn lanes
3. **Alternate 2c – Tylersville Road to Bethany Road** – 11 foot lanes, five lane section
4. **Alternate 2d – Tylersville Road to Hampton Court** – 11 foot lanes, five lane section; **Hampton Court to Bethany Road** – four-lane section with left turn lanes

#### **Alternate 3 All the Widening to the East Side of Butler Warren Road**

1. **Alternate 3a – Tylersville Road to Bethany Road** – 12 foot lanes, five lane section
2. **Alternate 3b – Tylersville Road to Hampton Court** – 12 foot lanes, five lane section; **Hampton Court to Bethany Road** – four lane section with left turn lanes
3. **Alternate 3c – Tylersville Road to Bethany Road** – 11 foot lanes, five lane section
4. **Alternate 3d – Tylersville Road to Hampton Court** – 11 foot lanes, five lane section; **Hampton Court to Bethany Road** – four-lane section with left turn lanes

#### **Alternate 4 Combination of Alternates 1, 2 and 3**

Widening to the west side from Tylersville Road to Hampton Court, equal widening from Hampton Court to north of the Heritage Club subdivision entrance, unequal widening (widening more to the east) from north of the Heritage Club entrance to Bethany Road.

1. **Alternate 4a – Tylersville Road to Bethany Road** – 12 foot lanes, five lane section
2. **Alternate 4b – Tylersville Road to Hampton Court** – 12 foot lanes, five lane section; **Hampton Court to Bethany Road** – four lane section with left turn lanes
3. **Alternate 4c – Tylersville Road to Bethany Road** – 11 foot lanes, five lane section
4. **Alternate 4d – Tylersville Road to Hampton Court** – 11 foot lanes, five lane section; **Hampton Court to Bethany Road** – four lane section with left turn lanes

### SECONDARY SCREENING

The alternatives for each option were screened qualitatively with respect to impacts to the park property, residential properties, subdivision landscaping mounds, existing retaining walls along the subdivisions and existing ponds. The screening process eliminated most of the options and four feasible alternatives, one from each option, were selected for further screening. The selected alternatives have the most economical typical section within the design standards and minimize the impacts to the surrounding environment.

The feasible alternatives selected after initial screening are as follows:

1. **Alternate 1d – Tylersville Road to Hampton Court** – 11 foot lanes, five lane section; **Hampton Court to Bethany Road** – four lane section with left turn lanes
2. **Alternate 2d – Tylersville Road to Hampton Court** – 11 foot lanes, five lane section; **Hampton Court to Bethany Road** – four lane section with left turn lanes
3. **Alternate 3d – Tylersville Road to Hampton Court** – 11 foot lanes, five lane section; **Hampton Court to Bethany Road** – four lane section with left turn lanes
4. **Alternate 4d – Tylersville Road to Hampton Court** – 11 foot lanes, five lane section; **Hampton Court to Bethany Road** – four lane section with left turn lanes

