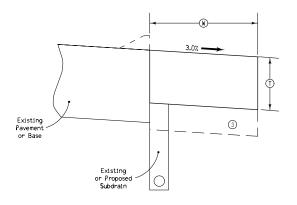


Hot Mix Asphalt Widening on Existing Pavement Without Curb



Hot Mix Asphalt Widening on Existing Pavement With Curb

| Design Quantities per side per station  ◎        |                         |      |      |      |      |      |      |      |      |      |      |      |      |      |                  |       |      |      |      |      |      |     |
|--|-------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------------------|-------|------|------|------|------|------|-----|
| Quantities Per Side                              | Thickness (Millimeters) |      |      |      |      |      |      |      |      |      |      |      |      |      | Special Backfill | Wldth |      |      |      |      |      |     |
| Quantities Fer Side                              |                         | 100  | 110  | 120  | 130  | 140  | 150  | 160  | 170  | 180  | 190  | 200  | 210  | 220  | 230              | 240   | 250  | 260  | 270  | 280  | Mg   | M   |
| HMA Base (Mg)                                    | 5.2                     | 7.0  | 7.7  | 8.4  | 9.1  | 9.8  | 10.5 | 11.2 | 11.9 | 12.6 | 13.3 | 14.0 | 14.6 | 15.3 | 16.0             | 16.7  | 17.4 | 18.1 | 18.8 | 19.5 |      |     |
| Tack Coat (L) ①                                  | 12.0                    | 12.0 | 12.0 | 12.0 | 12.0 | 12.0 | 12.0 | 12.0 | 12.0 | 12.0 | 12.0 | 12.0 | 12.0 | 12.0 | 12.0             | 12.0  | 12.0 | 12.0 | 12.0 | 12.0 | 10.1 | 0.3 |
| Class 13 Excavation, Widening (M <sup>3</sup> )  | 2.3                     | 3.0  | 3.3  | 3.6  | 3.9  | 4.2  | 4.5  | 4.8  | 5.1  | 5.4  | 5.7  | 6.0  | 6.3  | 6.6  | 6.9              | 7.2   | 7.5  | 7.8  | 8.1  | 8.4  |      |     |
| HMA Base (Mg)                                    | 10.5                    | 14.0 | 15.3 | 16.7 | 18.1 | 19.5 | 20.9 | 22.3 | 23.7 | 25.1 | 26.5 | 27.9 | 29.3 | 30.7 | 32.1             | 33.5  | 34.9 | 36.3 | 37.7 | 39.1 |      |     |
| Tack Coat (L) ①                                  | 24.0                    | 24.0 | 24.0 | 24.0 | 24.0 | 24.0 | 24.0 | 24.0 | 24.0 | 24.0 | 24.0 | 24.0 | 24.0 | 24.0 | 24.0             | 24.0  | 24.0 | 24.0 | 24.0 | 24.0 | 20.3 | 0.6 |
| Class 13 Excavation, Widening (M <sup>3</sup> .) | 4.5                     | 6.0  | 6.6  | 7.2  | 7.8  | 8.4  | 9.0  | 9.6  | 10.2 | 10.8 | 11.4 | 12.0 | 12.6 | 13.2 | 13.8             | 14.4  | 15.0 | 15.6 | 16.2 | 16.8 |      |     |
| HMA Base (Mg)                                    | 15.7                    | 20.9 | 23.0 | 25.1 | 27.2 | 29.3 | 31.4 | 33.5 | 35.6 | 37.7 | 39.8 | 41.9 | 43.9 | 46.0 | 48.1             | 50.2  | 52.3 | 54.4 | 56.5 | 58.6 |      |     |
| Tack Coat (L) ①                                  | 36.0                    | 36.0 | 36.0 | 36.0 | 36.0 | 36.0 | 36.0 | 36.0 | 36.0 | 36.0 | 36.0 | 36.0 | 36.0 | 36.0 | 36.0             | 36.0  | 36.0 | 36.0 | 36.0 | 36.0 | 30.4 | 0.9 |
| Class 13 Excavation, Widening (M <sup>3</sup> )  | 6.8                     | 9.0  | 9.9  | 10.8 | 11.7 | 12.6 | 13.5 | 14.4 | 15.3 | 16.2 | 17.1 | 18.0 | 18.9 | 19.8 | 20.7             | 21.6  | 22.5 | 23.4 | 24.3 | 25.2 |      |     |
| HMA Base (MG)                                    | 20.9                    | 27.9 | 30.7 | 33.5 | 36.3 | 39.1 | 41.9 | 44.6 | 47.4 | 50.2 | 53.0 | 55.8 | 58.6 | 61.4 | 64.2             | 67.0  | 69.8 | 72.5 | 75.3 | 78.1 |      |     |
| Tack Coat (L) ①                                  | 48.0                    | 48.0 | 48.0 | 48.0 | 48.0 | 48.0 | 48.0 | 48.0 | 48.0 | 48.0 | 48.0 | 48.0 | 48.0 | 48.0 | 48.0             | 48.0  | 48.0 | 48.0 | 48.0 | 48.0 | 40.5 | 1.2 |
| Class 13 Excavation, Widening (M <sup>3</sup> )  | 9.0                     | 12.0 | 13.2 | 14.4 | 15.6 | 16.8 | 18.0 | 19.2 | 20.4 | 21.6 | 22.8 | 24.0 | 25.2 | 26.4 | 27.6             | 28.8  | 30.0 | 31.2 | 32.4 | 33.6 |      |     |

## GENERAL NOTES:

'W' and 'T' shall be as specified as part of the individual project plans. Dimensions may vary for superelevated curves or at locations specifically designated by the Engineer.

Any asphalt materials excavated shall be handled as detailed elsewhere in the project plans.

Special shaping of widening units through bridge approach sections shall be done at the direction of the Engineer.

Excavation in excess of that indicated shall be considered incidental to other work on the project.

Special Backfill, as indicated, shall be placed only at locations where specifically required by the Engineer. Any such Special Backfill placed shall be paid for as "Extra Work" as per Article 1109.03 of the Standard Specifications.

- Estimated for two (2) applications of tack coat. Priming of subgrade or finished base not required.
- Quantifies indicated are for design purposes and may be adjusted at time of construction when so directed by the Engineer.
- 3 150 mm Special backfill required when widening unit is part of the proposed traffic lane or when noted in project plans.

| Design Rates     |             |  |  |  |  |  |  |  |
|------------------|-------------|--|--|--|--|--|--|--|
| Item             | Rate        |  |  |  |  |  |  |  |
| Base Course      | 2325 kg/m^3 |  |  |  |  |  |  |  |
| Special Backfill | 2250 kg/m^3 |  |  |  |  |  |  |  |
| Tack Coat        | 0.2 L/m^2   |  |  |  |  |  |  |  |

All dimensions given in millimeters unless noted

| All uli        | ilensions given in millimeters offices from                              | su.          |          |  |  |  |  |  |  |  |
|----------------|--|--------------|----------|--|--|--|--|--|--|--|
|                | To leve Development  | REVISION     |          |  |  |  |  |  |  |  |
| M              | lowa Department  | 13           | 10-17-06 |  |  |  |  |  |  |  |
|                | of Transportation  | BA 0         |          |  |  |  |  |  |  |  |
| NO             | STANDARD ROAD PLAN   | RG-8         |          |  |  |  |  |  |  |  |
|                | SIMILAND KOAD I LAIN   | SHEET 1 of 1 |          |  |  |  |  |  |  |  |
| S              | REVISIONS: Deleted details of shoulders and added additional quantities. |              |          |  |  |  |  |  |  |  |
|                | Deanna Maifuld   |              |          |  |  |  |  |  |  |  |
| -              | APPROVED BY DESIGN METHODS ENG   | INEER        |          |  |  |  |  |  |  |  |
| METRIC VERSION | HOT MIX ASPHAL<br>BASE WIDENING  | Γ            |          |  |  |  |  |  |  |  |
| 1              | 1  |              |          |  |  |  |  |  |  |  |