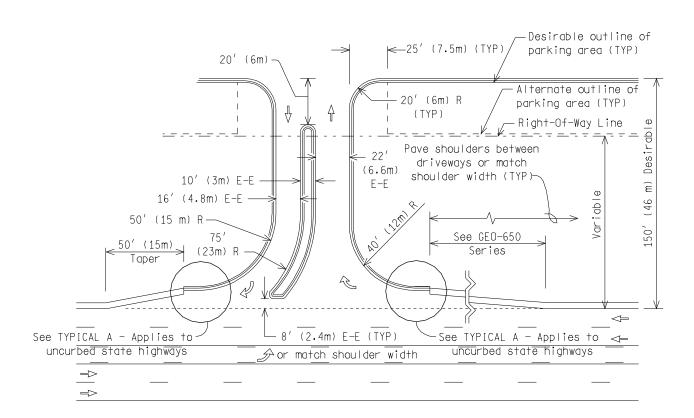
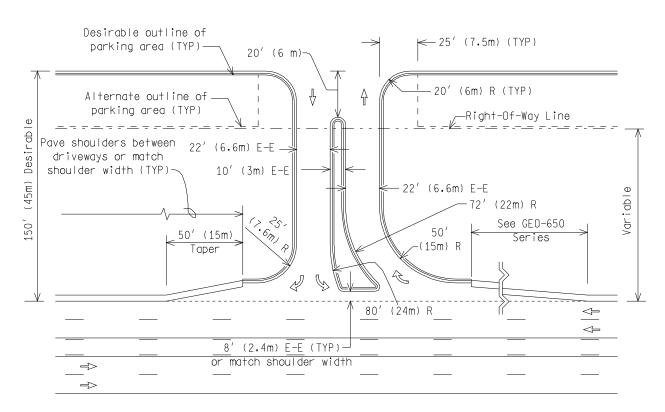
DIRECTIONAL DRIVEWAYS AT HIGHWAYS WITHOUT CURB





01/20/2010

NOT TO SCALE



DRAWN BY:
CHECKED BY: IG/JAT
FILE:PW RD TS Geo/mdot traf GEO-680-B.dgn

BY: John C Friend

ENGINEER OF DELIVERY

BY: Mad a Van Part flow

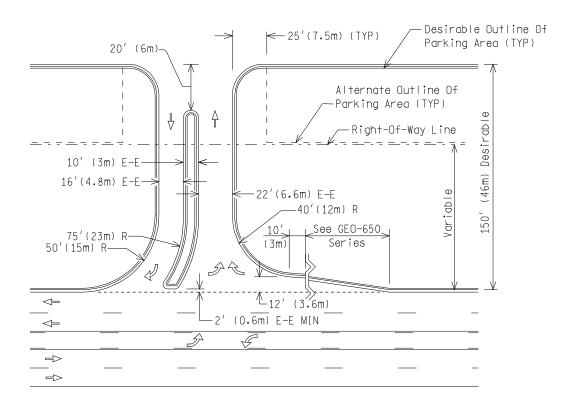
ENGINEER OF DEVELOPMENT

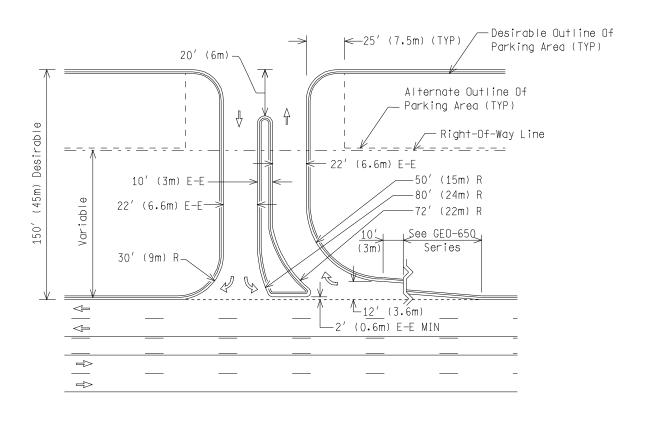
GEOMETRIC DESIGN GUIDE FOR COMMERCIAL DRIVEWAYS

06/03/2010 PLAN DATE: GEO-680-B

)-B SHEET 1 OF 6

DIRECTIONAL DRIVEWAYS AT HIGHWAYS WITH CURB



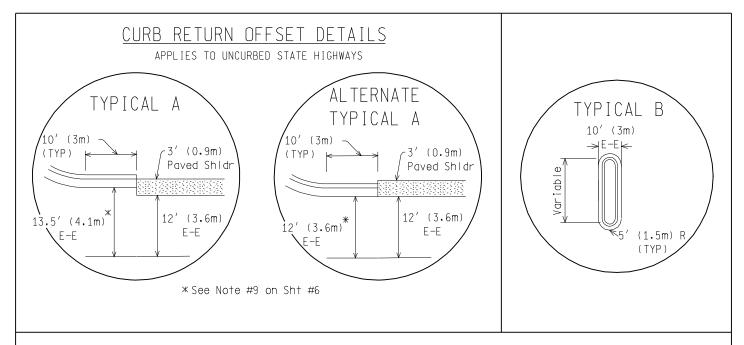


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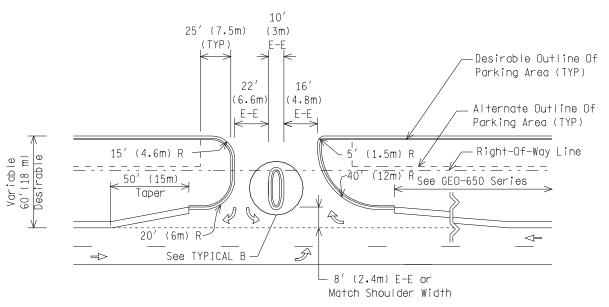
MICHIGAN DEPARTMENT OF TRANSPORTATION TRAFFIC AND SAFETY GEOMETRIC DESIGN GUIDE FILE:PW RD TS Geo/mdot traf GEO-680-B.dgn REV. 01/20/2010

06/03/2010 PLAN DATE:

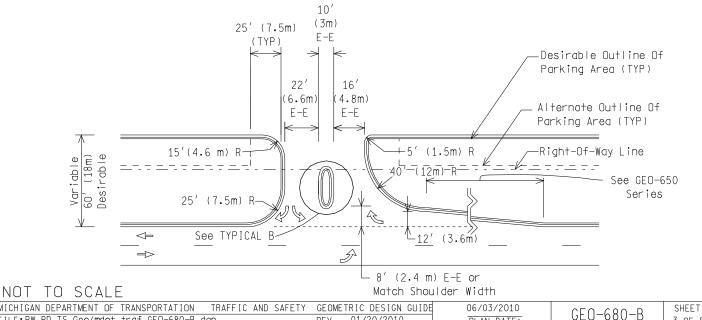
GEO-680-B



DIVIDED DRIVEWAYS ON HIGHWAY WITHOUT CURB

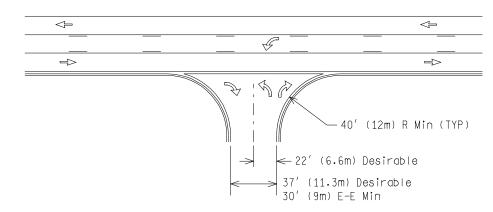


DIVIDED DRIVEWAYS ON HIGHWAY WITH CURB



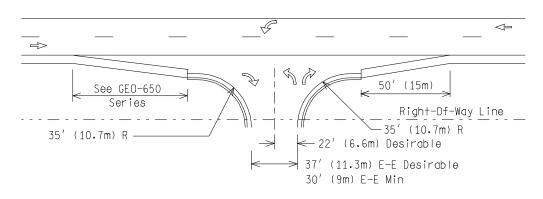
3 OF 6

MICHIGAN DEPARTMENT OF TRANSPORTATION TR FILE:PW RD TS Geo/mdo+ traf GEO-680-B.dgn 01/20/2010 REV. PLAN DATE:

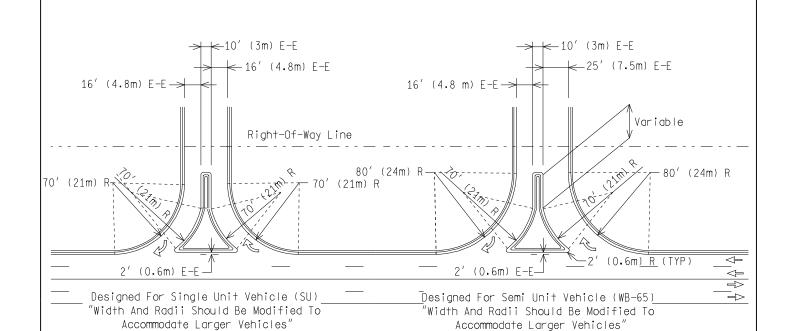


(For Three Lanes, Width Should Be 39' (11.7m) Min)

TWO-WAY DRIVEWAYS ON HIGHWAYS WITH CURB



TWO-WAY DRIVEWAYS ON HIGHWAYS WITHOUT CURB



RIGHT-IN RIGHT-OUT DRIVEWAYS WITH CURB

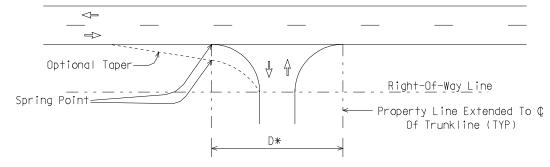
NOT TO SCALE

MICHIGAN DEPARTMENT OF TRANSPORTATION TRAFFIC AND SAFETY GEOMETRIC DESIGN GUIDE FILE:PW RD TS Geo/mdot traf GEO-680-B.dgn REV. 01/20/2010

06/03/2010 PLAN DATE:

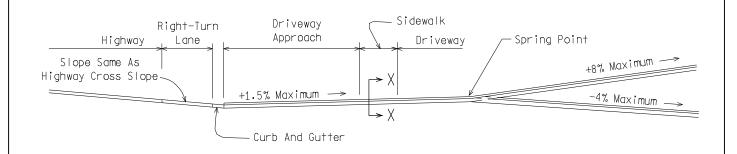
GEO-680-B

SHEET 4 OF 6



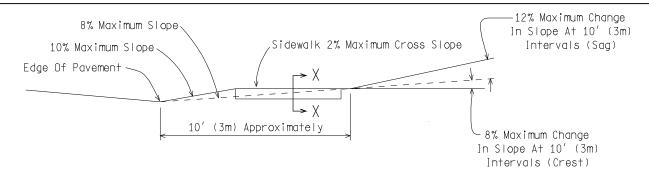
* Driveways For Each Property Including Radii, Must Be Located Within These Limits Unless Written Permission Of The Adjacent Property Owner Is Obtained

HIGHWAY FRONTAGE



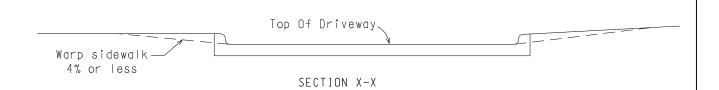
COMMERCIAL DRIVEWAY PROFILE FOR MAJOR TRAFFIC GENERATORS

Over (100) Peak Hour Directional Trips



When transverse slope is less than 1.5%, longitudinal drainage must be provided. See also R-29-Series.

LOW VOLUME COMMERCIAL OR RESIDENTIAL DRIVEWAY SLOPES



In urban areas the sidewalk shall be lowered at the edge of the driveway or lowered as shown in Section X-X whenever the maximum grades shown will be exceeded.

See also R-28-Series when sidewalk ramps are required.

SIDEWALK LOWERING DETAIL

SHEET

5 OF 6

NOT TO SCALE

NOTES:

- 1. The Region or TSC Traffic Engineer shall determine the necessary signing and pavement marking requirements to ensure that the driveway will operate safely and efficiently. The property owner shall erect and maintain all required signing and pavement markings as a condition of the driveway permit.
- 2. Consult the Region or TSC Traffic Engineer whenever:
 - A. There is a question as to which type of driveway a commercial establishment should use.
 - B. Operational conflicts with existing or anticipated future driveways across the highway may occur.
- 3. Suitable median crossovers may be required on divided highways as per Geometric Design Guide GED-670-Series.
- 4. For dimensions not shown on this guide, refer to the document "Administrative Rules Regulating Driveways, Banners, and Parades On And Over Highways".
- 5. One-way driveways should be complemented with a well designed angle parking area to encourage one-way operation.
- 6. Driveway widths and radii shall be designed for the proper design vehicle.
 Where proper radii can not be provided, increase the drive throat width.
- 7. In urban areas a partial arc radius should be used when the distance from the edge of pavement to the sidewalks is between 5' (1.5m) and 20' (6m). When this distance is less than 5' (1.5m), consult the Region or TSC Traffic and Safety Engineer to determine the width and radii of the driveway.
- 8. See MDDT Construction Permit Manual.
- 9. Alternate Typical A may be used when construction and maintenance issues make the 13.5' (4.1m) curb setback undesirable.
- 10. For divided driveways, the desirable area of separating islands is 75ft^2 (7m^2) , preferably 100ft^2 (9m^2) . The island width shall not be less than 4' (1.2m).
- 11. To eliminate left turns locking up from the cross street or driveways at unsignalized divided drives, the left turning vehicles should be headed up across from each other.
- 12. Current AASHTO "A Policy on Geometric Design of Highways and Streets" and MDOT Guidelines should be used for sight distance requirements.
- 13. These design concepts are for new construction. Where modifications may be needed for retrofitting to existing road features, consult the Geometric Review and Congestion Analysis Unit, Division of Operations.