

## 5TH STREET COLLECTOR DESIGN GUIDELINES

5th Street North from CSAH 13 (Inwood Avenue) to CSAH 15 (Manning Avenue) will become the backbone of future development along the I94 corridor, essentially becoming the primary access in and out of the future neighborhoods and commercial properties. The quality of the street and its connections are critically important. The purpose of the proposed street standards are to 1) improve the function and appearance of the street, 2) encourage pedestrian and bicycle use, and 3) reduce the potential for speeding. From a Community Development perspective, the design of 5th Street is intended to provide a consistent street plan from Manning Avenue to Inwood Avenue that serves to connect the various unique neighborhoods using a common design theme.

2030 PROJECTED ADT is 5,000 [Transportation Plan]. 4-lane road not required in foreseeable future.  
STATE AID URBAN DESIGN [8820.9936] – Collector with ADT > 10,000; 40 mph design speed and posted speed.

### TYPICAL SECTION

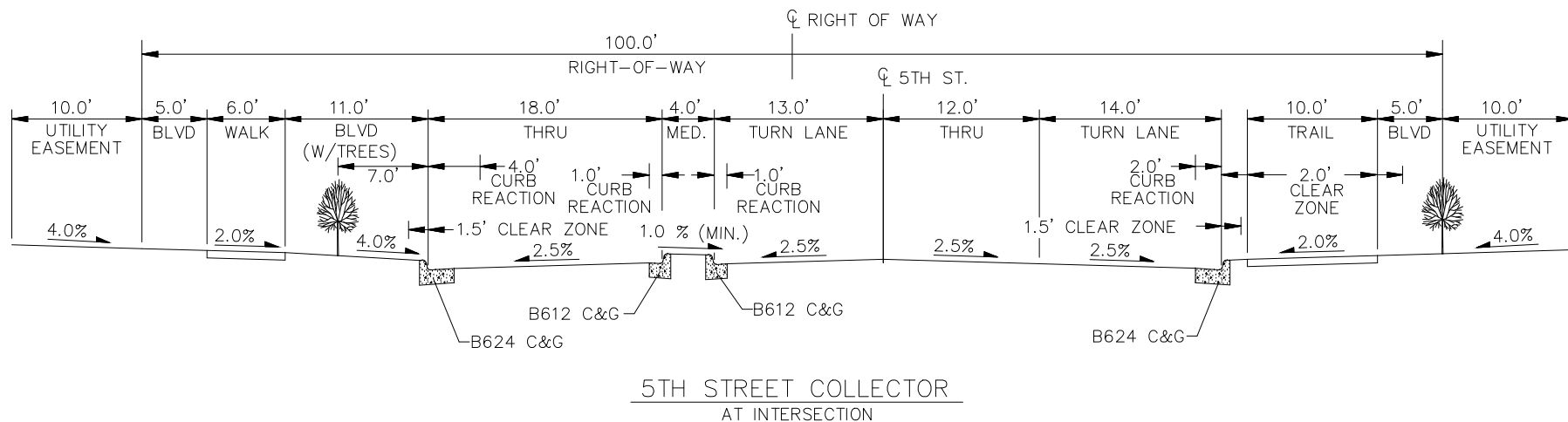
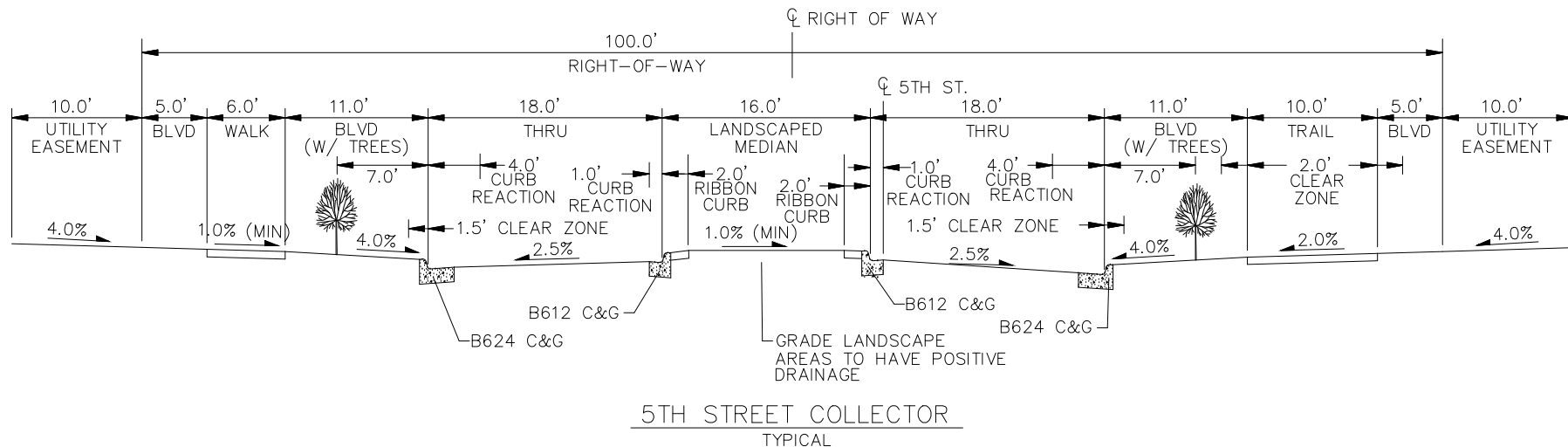
- Minimum R/W is 100 feet. **PLUS** 10-ft utility easements/clear zones on each side of the street.
- Two-lane Parkway design with 16 foot center landscaped median.
- Through Lanes must be 18 feet wide from face-face with 4-foot curb reaction zones.
- Median curb reaction zone is 1 foot on either side.
- Minimum median width with turn lanes is 4 feet hardscaped.
- Posted speed is 40 mph. Requires 1.5 foot minimum clearance from face of curb to fixed objects.
- No on-street parking. If parking is incorporated, minimum parking lane width is 10 feet.
- No super elevation. Maintain 2.5% cross slopes on curves.
- Minimum horizontal centerline curvature is 667 feet.
- Pavement Section must meet minimum 10 ton design. Geotechnical Report required to verify minimum pavement City section or recommend increased pavement section.

### ACCESS SPACING AND INTERSECTION REQUIREMENTS

- Residential driveways prohibited.
- Commercial driveways, non-continuous streets, and continuous local streets every 660 feet.
- Collector streets every 1,320 feet. Arterial streets every 2,640 feet.
- Left turn lanes required at all full access intersections.
- Right turn lanes required for all non-residential areas and residential areas with 25 units or greater.

### AMENITIES

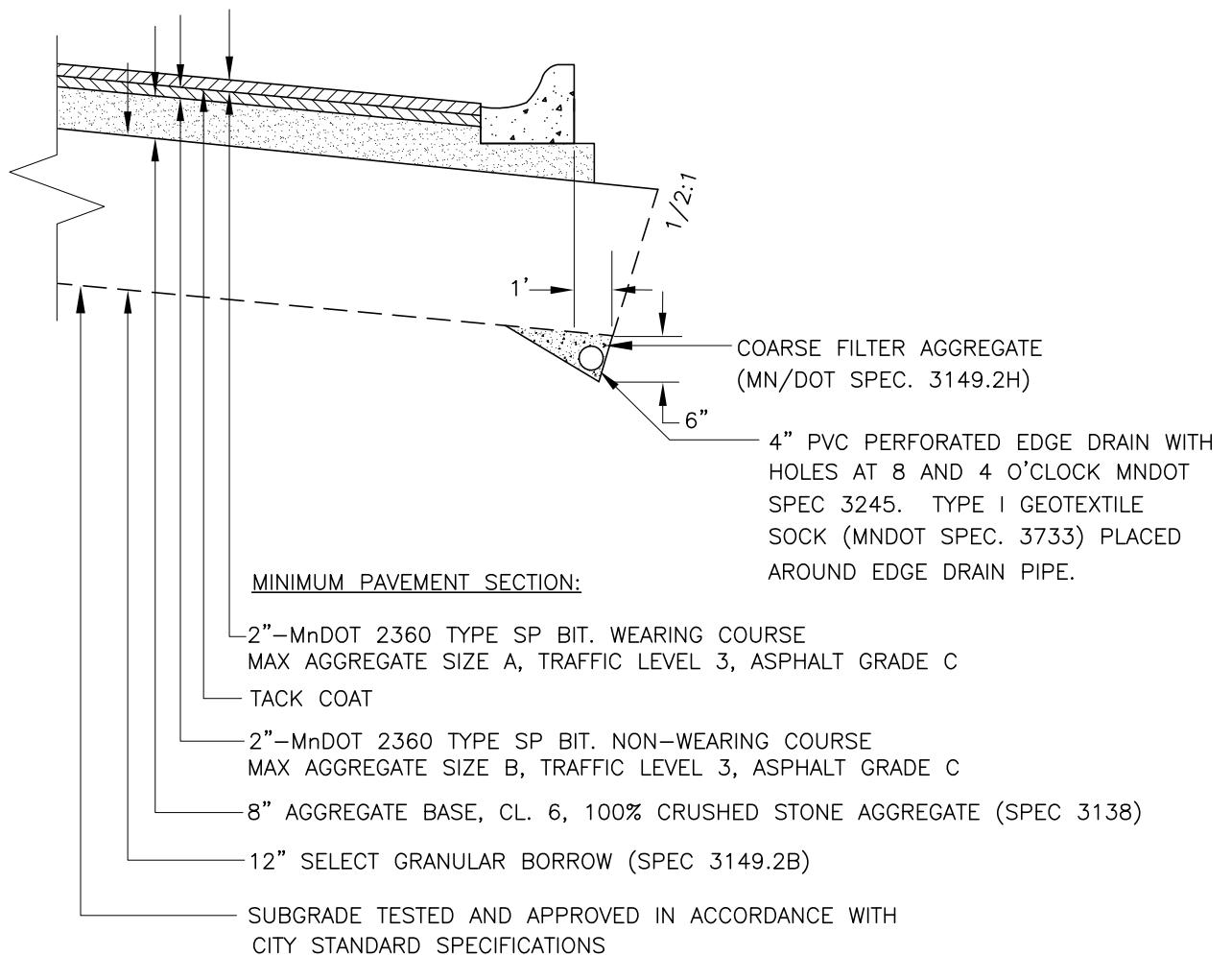
- North side Bituminous Trail. 10 foot minimum with 2 foot clear zone.
- South side Concrete Sidewalk. 6 foot minimum with 2 foot clear zone.
- Landscaping elements (See 5th Street Center Median and Boulevard Landscape Plan Details):
  - Center landscape median. Center median lined with 2 foot wide concrete ribbon curb. Landscape area to be planted with Little Blue Stem, Butterfly Candy and Daffodil Bulbs grouped at nodes.
  - Boulevards to include boulevard trees and sod. Trees to be placed 7 feet behind face of curb, spaced every 40 feet on both sides. Boulevard trees to be Oak, Maple or Elm, minimum 4-inch caliper.
  - Turf sod to be located from back of curb to 5 feet behind trail or sidewalk. Prairie sod may be used for remaining R/W.
  - Site Irrigation required for boulevard areas.
  - Drip irrigation required for center landscaped medians.
- Theming Elements:
  - Street Lighting to include Xcel Energy 'Evans' style lamp on 30 ft. poles. Light Poles to be placed at intersections and every 250 feet apart on alternating sides of the street.
  - White post and rail fencing is encouraged along 5<sup>th</sup> Street at major intersections.



## 5TH STREET STANDARD DETAILS

JUNE 2015

## COLLECTOR TYPICAL SECTIONS



NOTE:

1. TACK FACE OF GUTTER PRIOR TO BOTH LIFTS OF BITUMINOUS
2. 4" PVC PERFORATED EDGE DRAIN REQUIRED AT ALL LOW POINTS. EDGE DRAIN DESIGN PER APPROVAL OF CITY ENGINEER.

10-TON DESIGN MINIMUM

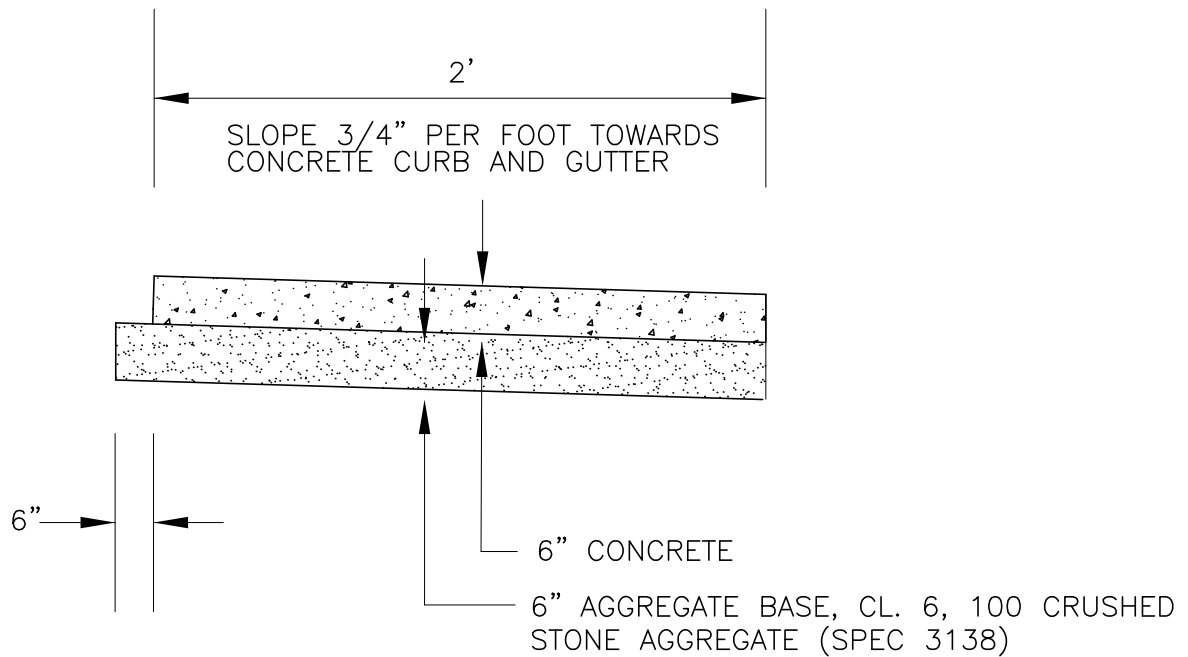
GEOTECHNICAL REPORT REQUIRED TO VERIFY MINIMUM PAVEMENT CITY SECTION OR RECOMMEND INCREASED PAVEMENT SECTION.



5TH STREET  
STANDARD DETAILS

MARCH 2015

MINIMUM PAVEMENT  
SECTION



RIBBON CURB DETAIL



NOTE:

1. TOOL JOINTS 2' O/C.

CONCRETE MEDIAN DETAIL



5TH STREET  
STANDARD DETAILS

MARCH 2015

STREET MEDIAN  
CONCRETE  
SURFACING