

STANDARD DETAIL SPECIFICATIONS
FOR
STREET CONSTRUCTION, WALKWAYS, AND PAVEMENT RESTORATION

CITY OF EDEN PRAIRIE, MINNESOTA

INDEX

<u>ARTICLE</u>	<u>PAGE</u>
1. Pavement Removal and Restoration	P-2
2. Street Cleaning	P-2
3. Manhole and Valve Box Adjustment	P-2
4. Aggregate Base	P-3
5. Street Deflection Testing	P-3
6. Plant Mixed Bituminous Pavement	P-3
7. Bituminous Wearing Course	P-4
8. Concrete.....	P-4
9. Pedestrian Ramps	P-4
10. Temporary Turn-Arounds	P-4
11. Retaining Walls	P-5

(Detail Drawings R-1 Through R-21 Attached)

STANDARD DETAIL SPECIFICATIONS
FOR
STREET CONSTRUCTION, WALKWAYS, AND PAVEMENT RESTORATION

CITY OF EDEN PRAIRIE, MINNESOTA

(A Supplement to MnDOT Standard Specifications for Construction)

1. **PAVEMENT REMOVAL AND RESTORATION**

Where the existing bituminous surface is disturbed, it shall be restored with new pavement of equal thickness to the existing pavement by the Contractor. The minimum thickness shall be as specified in the Special Conditions or Plans.

Prior to aggregate base and bituminous restoration, saw cut the existing bituminous a minimum of two (2) inches deep and one (1) foot from the edge of the trench. The pavement shall be removed to expose a one (1) foot width of undisturbed aggregate base. Materials resulting from the removal shall be disposed of by the Contractor at locations outside the right-of-way.

Payment for pavement removal shall be made by the square yard of pavement removed. Payment for pavement restoration shall be made by the appropriate bid items for bituminous roadway construction. When payment is by surface square yard, it shall be full compensation for the thickness indicated in the Plans. Saw cutting shall be paid for as described in the Special Provisions for concrete and bituminous surfaces.

2. **STREET CLEANING**

It shall be the Contractor's responsibility to thoroughly clean any bituminous surface prior to applying the tack coat for all subsequent "lifts" of bituminous required to achieve the typical pavement section. A pick-up type sweeper shall be used to minimize dust and debris and to assure a good bond between the succeeding layers of bituminous and the tack coat. All street areas within and adjacent to the project shall be kept clean in accordance with the City's "Erosion Control Policy", which shall be obtained by the Contractor prior to construction.

3. **MANHOLE AND VALVE BOX ADJUSTMENT**

All manhole castings and valve boxes located in the street section shall be installed 1/2" below the base course grade during the freeze-thaw cycle to allow for accessibility. Prior to the placement of the final wearing course, the Contractor has the option of either raising the structure to its proper grade (1/2" below finished grade) with plastic adjusting rings or installing an approved casting adjustment ring (Neenah R-1979 Series or approved equal for 1-1/2" wearing course), which will raise the casting the same dimension as the wearing course. An approved epoxy adhesive shall be used to set the casting adjustment ring in place. Two-piece metal adjusting rings will not be allowed.

Catch basin castings shall be adjusted to their final grade at the time the curb is installed and shall be protected by the Contractor using temporary patches or blisters. These patches or blisters shall be removed prior to placement of the final wearing course. Any structure adjustments, materials or adjustment rings needed to obtain the proper grade adjustments shall be incidental to the project cost.

4. AGGREGATE BASE

The aggregate base shall be placed in accordance with MnDOT 2211 and may be virgin materials or recycled materials and must meet MnDOT requirements for Class 5.

Class 5 aggregate base or other approved base material placed under concrete curb and gutter shall be considered incidental unless approved by the Engineer or shown on the typical section of the Plans.

Compaction of the Class 5 aggregate base shall be obtained by the "Specified Density Method". Compaction of the recycled Class 5 shall meet the Penetration Index Method requirements.

5. STREET DEFLECTION TESTING

The Contractor will furnish a tandem truck loaded with a minimum of 14 tons to check the completed subgrade and/or base. This truck will be driven in any locations the Engineer may direct to determine if any soft spots exist so that these areas may be removed and replaced with satisfactory material before completing subgrade or base preparation. Cost of furnishing the loaded truck and driver shall be incidental to construction of the subgrade and/or base and no direct compensation will be made therefore.

Prior to the deflection testing, a representative from the City of Eden Prairie Engineering Division shall be scheduled a minimum of 24 hours in advance so as to observe the testing.

6. PLANT MIXED BITUMINOUS PAVEMENT

The bituminous plant mix shall meet the requirements of MnDOT Specification 2360 or its latest revision. The Contractor may be required to submit to the Engineer a job mix formula prepared by an independent testing laboratory, including the exact proportions of bituminous material and mineral filler. The Contractor shall pay for all samples, reports and tests required to develop the job mix.

A plant mixed bituminous pavement shall be prepared using the following minimum design standards for wear and non-wear surfaces:

	>3" (Non-Wear)	1-1/2"-3" (Non-Wear)	1-1/2" or Less (Wear)
AADT < 2,300	SPNWB230C	SPNWB230C	SPWEA240C
AADT < 2,300 to < 6,000	SPNWB330C	SPNWB330C	SPWEA340C
AADT < 6,000	SPNWB430C	SPNWB430C	SPWEA440C
NOTE: These minimum standards may be modified by the Engineer where traffic and weather conditions warrant and as approved by the City Engineer.			

For overlay construction, bituminous pavement design shall utilize B (PG 58S-28) oil. Driveways will use SPWEA240C placed in one lift, 3-inches thick.

Bituminous tack coat shall be applied to existing bituminous surfaces and to successive plant mix surfaces in accordance with MnDOT 2357.

Asphalt binder material (MnDOT 3151) shall meet the requirement of PG asphalt binder testing tolerances based on the most current MnDOT Technical Memorandum titled "Inspection, Sampling, and Acceptance of Bituminous Materials." The temperature of the bituminous material at the time of application shall be as approved by the Engineer, within the limits specified by the manufacturer. However, in cases where "Ordinary Compaction" is implemented, the minimum lay down temperatures of the mix shall be in accordance with MnDOT specification 2360.3.D.2, Table 2360.3-4 Minimum Temperature Control. Areas under ordinary compaction include bike paths, walking paths and other non-traffic areas.

Compaction requirements for the "Maximum Density Method", as set forth in MnDOT specification 2360.3.D.1, Table 2360.3-1 Required Minimum Lot Density (Mat), shall be implemented. No HMA shall be laid when the temperature is below 32 degrees F. unless directed by the Engineer. No payment incentives will be paid to the Contractor.

At the direction of the Engineer, the Contractor (or testing firm) shall cut or core samples from any bituminous pavement within the scope of the Project or Contract. The number of cores taken shall be in accordance with MnDOT specification 2360.3.D.1.h, Table 2360.3-3 Lot Determination. These samples will be taken at locations designated by the Engineer, by sawing with a power driven masonry saw or diamond core drill. Samples shall be sufficiently large to meet the needs of the testing laboratory. Costs of testing the samples will be paid by the Owner, except retests for failed tests shall be at the Contractor's expense. The surfaces from which samples are taken shall be restored by the Contractor no later than the next succeeding day of plant operation. All test results will be available to the Contractor.

7. BITUMINOUS WEARING COURSE

The bituminous wearing course shall not be installed until the following conditions have been met:

- A. After one (1) freeze-thaw cycle since the bituminous base course has been installed unless approved by the City Engineer.
- B. The watermain, storm sewer, sanitary sewer, and street sections (including sidewalks, trails, and all adjacent areas to the project) have been final inspected and all noted deficiencies corrected.

8. CONCRETE

Concrete shall meet the requirements of MnDOT Specification 2461, 2521, 2531, 2533 and City Detail Drawings.

9. PEDESTRIAN CURB RAMPS

Pedestrian curb ramps shall be installed at all trail and sidewalk crossings in accordance with MnDOT Standard Plans 5-297.250 Pedestrian Curb Ramp Details (sheets 1-6) and Truncated Domes Standard Plate 7038 or latest revision.

10. TEMPORARY TURN-AROUNDS

Temporary turn-arounds shall be constructed in accordance with Detail Drawing R-18.

11. RETAINING WALLS

This work shall consist of constructing dry cast modular block retaining walls (small block walls) and precast or wetcast modular block retaining walls (large block walls) both with and without soil reinforcement in conformity with the lines, grades, standards, design, details and dimensions shown on the plans or otherwise established or as directed by the Engineer.

The Contractor shall submit shop drawings and the manufacturer's suggested installation procedure showing materials and construction methods to the Engineer for approval prior to beginning any retaining wall work. Construction limits, as shown on the plans, shall be strictly observed. It shall be the Contractor's responsibility to verify that the proposed wall system, including geogrid placement (if necessary), remains within the construction limits. Timber or boulder retaining walls shall not be permitted in the right-of-way or on public property without the express written permission of the City Engineer.

Geogrid Reinforcement

Geogrid reinforcement shall be furnished and installed in accordance with the manufacturer's specifications and recommendations for the retaining wall system used and as directed by the Engineer.

Drainage Systems

Drainage system for the retaining walls shall be furnished and installed according to manufacturer's specifications. It shall be the Contractor's responsibility to ensure that any drainage system installed behind any wall is properly discharged either into the proposed storm sewer system or daylighted downgrade of the wall.

Fencing

Unless otherwise specified, fencing above a retaining wall shall be black vinyl chain link 60" in height or vinyl split rail style or approved equal by the City Engineer. Fencing may be fixed to the large block retaining walls or installed behind the face of the wall with posts encased in concrete footings as required by manufacturers recommendations. Space between fence and face of the wall shall be steel edging holding back Type 9 aggregate mulch over a weed barrier fabric. Fence shall be located in rock mulch.

Small Block Walls

Small block walls are to be used for any public retaining wall less than four feet (4') exposed height. Private walls over 4' exposed height require a building permit. See standard detail R-20. Only blocks from the MnDOT approved list will be allowed.

Small block walls shall consist of non-reinforced 8-inch-tall units.

The small block wall units shall be straight faced and tan in color with an approved pattern.

Small block walls shall be constructed as shown in the standard detail and as required by the manufacturer's specifications and in accordance with the following:

Excavation and Backfill

The Contractor shall excavate to the lines and grades shown on the construction drawings or as required by the manufacturer's specifications for constructing the wall. Excavation and backfill required for retaining wall construction shall be incidental to the unit price of the wall. Over excavation and additional compacted backfill shall not be paid for unless directed by the Engineer.

The Contractor shall be careful not to disturb embankment materials and foliage beyond lines shown or as directed by the Engineer. All tree roots encountered during excavation larger than 1-1/2 inch shall be cut vertically with a pruning saw, leaving as much of the root intact as possible.

Landscape ground cover shall be removed and stockpiled at the top of the slope and maintained. Upon completion of the retaining wall, the ground cover shall be spread uniformly over the disturbed area to restore it to its original appearance.

Foundation Soil Preparation

The foundation soil shall be excavated as shown in the standard detail or as required by the manufacturer's specifications or as directed by the Engineer.

Foundation soil shall be examined to assure that the actual foundation soil strength meets or exceeds assumed design strength for the retaining wall system to be constructed. Soils not meeting required strength shall be removed and replaced with acceptable material at the direction of the Engineer.

Over-excavated areas shall be filled with compacted backfill material.

Foundation

Footing materials (6" aggregate base class 5) shall be installed upon undisturbed in situ soils or compacted replacement backfill material.

The material shall be compacted to provide a level hard surface on which to place the first course of units. Compaction shall be by mechanical plate compactors to 95 percent of standard proctor density.

The footing shall be prepared to ensure complete contact of retaining wall unit with base. Gaps shall not be allowed.

Footing materials shall be to the depths and widths shown in the Plans or in accordance with the manufacturer's specifications.

Unit Installation

The units shall be installed according to the manufacturer's specifications and as directed by the Engineer.

Backfill shall be placed as per the manufacturer's specifications and compacted as each course is completed. A minimum of 12 inches of drainage aggregate (3/8" clear crushed rock) shall be placed behind the block units unless otherwise specified by the manufacturer. Geotextile filter fabric shall be placed between the block and the backfill prior to backfilling.

Top cap blocks, if necessary) shall be adhered to the previous course with an approved construction adhesive or epoxy cement.

Retaining walls shall be protected from salt and the elements using a sealant from the MnDOT approved products list following the manufacturers recommend procedures.

Large Block Walls

These wall systems shall be constructed using ReCon Wall Systems, Inc., Redi-Rock Wall System,

Versa-Lok Bronco or approved equal. Large block walls shall be used for any publicly owned retaining walls more than four feet (4') exposed height.

Large block walls consist of wet cast concrete blocks with a final handling weight in excess of 1,000 pounds per full face unit, may utilize concrete reinforcing steel, have a maximum water/cement ratio of 0.45, slump from 1-8" and have a minimum 28-calendar day compressive strength of 4000 psi.

A Professional Engineer licensed by the State of Minnesota is required to prepare, sign and date the design calculations, shop drawings, and the wall system plans.

Blocks will have a surface texture on all exposed faces (including the exposed faces of the wall back and sides) matching a limestone rock surface or Engineer directed texture. Show proposed texture on the shop drawings for acceptance by the Engineer.

A single-color stain will be applied to all exposed faces (including the wall top and exposed portions of the wall back face). The color shall be a tan buff or otherwise approved by the Engineer. Contractor shall submit color samples prior to wall completion. Use sufficient material to provide color uniformity but avoid buildups and runs. Stain shall be 100 percent acrylic; water-repellant, semi-opaque, tinted emulsion sealer designed for concrete and masonry surfaces. Payment for applying stain will be included in payment for the wall system.

A large block wall specific preconstruction meeting shall be held at least 15 days before wall construction begins. The following should be included in the preconstruction meeting agenda; Safety items, sequence of construction, storage and handling of blocks, specifications, construction limits and any items needed to be resolved prior to construction.

Payment shall be made at the Contract unit price per square foot of wall units (both above and below ground), and shall be compensation in full for all labor, equipment and materials (including but not limited to; pins and miscellaneous hardware, coarse filter aggregate, backfill, foundations, geogrid reinforcement, drainage systems, etc.) required to construct the walls complete in place.

End of Section

CITY OF EDEN PRAIRIE

TYPICAL MINIMUM ROADWAY SECTION

ROAD TYPE	RIGHT-OF-WAY (FEET)	ROADWAY WIDTH BACK-BACK (FEET)		5 ft. X 5 in. SIDEWALK AND / OR 8 ft. BITUMINOUS TRAIL	ENTRANCE SPACING
RESIDENTIAL ^{1,4,5,6}	50	28	1.5" SPWEA240C 2" SPNWB230C 8" CLASS 5 AGGREGATE BASE (100% CRUSHED QUARRY ROCK)*	AS REQUIRED	MINIMUM 150 FEET WITHIN INTERSECTIONS
COLLECTOR ^{4,5,6}	60	32	1.5" SPWEA _{40C} 2" SPNWB _{30C} 10" CLASS 5 AGGREGATE BASE (100% CRUSHED QUARRY ROCK)*	AS REQUIRED	MINIMUM 150 FEET WITHIN INTERSECTIONS
INDUSTRIAL ^{4,5,6}	70-100	37-52	2" SPWEA _{40C} 4" SPNWB _{30C} 10" CLASS 5 AGGREGATE BASE (100% CRUSHED QUARRY ROCK)*	AS REQUIRED	MINIMUM 150 FEET WITHIN INTERSECTIONS
COMMERCIAL ^{4,5,6}	100 ²	52	2" SPWEA _{40C} 4" SPNWB _{30C} 10" CLASS 5 AGGREGATE BASE (100% CRUSHED QUARRY ROCK)*	BOTH SIDES	MINIMUM 600 FEET BETWEEN FULL INTERSECTIONS
DIVIDED ROADWAY ^{4,5,6}	110 ²	2@28 ³	3" SPWEA _{40C} 3" SPNWB _{30C} 4" SPNWB _{30C} 12" CLASS 5 AGGREGATE BASE (100% CRUSHED QUARRY ROCK)*	BOTH SIDES	MINIMUM 600 FEET BETWEEN FULL INTERSECTIONS

1. CUL-DE-SAC REQUIREMENTS, RIGHT-OF-WAY RADIUS 50 FEET, ROADWAY RADIUS 39 FEET TO BACK OF CURB
2. AT MAJOR INTERSECTIONS INCREASE TO 120 FEET
3. FOUR LANE DIVIDED WITH 18 FEET MEDIAN
4. FINAL DESIGN DEPENDENT UPON TRAFFIC VOLUME AND SOIL CONDITIONS
5. AFTER 1 FREEZE - THAW CYCLE OR SECOND YEAR OR CITY ENGINEER'S APPROVAL
6. TO BE DETERMINED BY PAVEMENT DESIGN

GENERAL SPECIFICATIONS

MnDOT 2360 SPECIFICATIONS SHALL APPLY
 MAXIMUM GRADE = 8.0%; MINIMUM GRADE = 0.5%
 RADIUS ON CURB RETURNS MINIMUM 20'

* RECYCLED CL.5 MAY BE USED WITH THE CITY ENGINEER'S APPROVAL AND IN ACCORDANCE WITH CITY SPECIFICATIONS



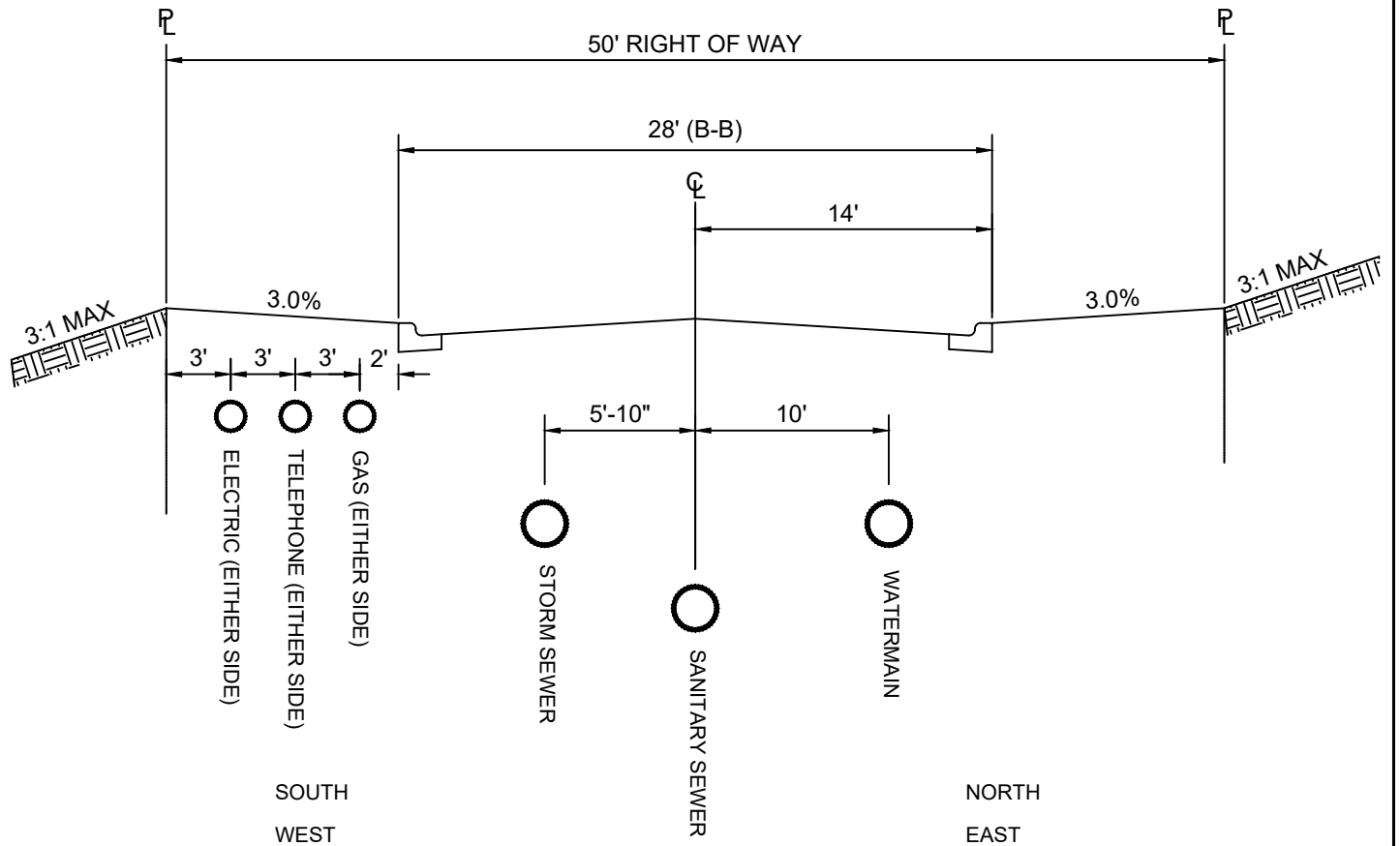
TYPICAL MINIMUM ROADWAY SECTION

CITY OF EDEN PRAIRIE
 DEPARTMENT OF ENGINEERING

R-1

DETAIL NO.

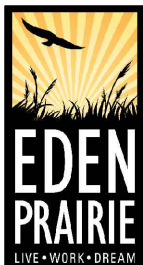
Rev. 02/07/2023



NOTE:

1. ALL BOULEVARDS SHALL HAVE 6" TOPSOIL, SEED AND MULCH ALL DISTURBED AREAS.
2. EDEN PRAIRIE MOUNTABLE CONCRETE CURB & GUTTER (DETAIL R-9) (BOTH SIDES).
3. TRENCH LOCATION FOR UTILITIES MAY BE MODIFIED WHEN JOINT TRENCHING IS IMPLEMENTED.
4. CROWN SHALL BE 2" ABOVE TOP OF MOUNTABLE CURB. WHERE 'B' TYPE CURB IS USED, THE CROWN ELEVATION SHALL BE EQUAL TO TOP OF CURB.

Rev. 04/17/2024

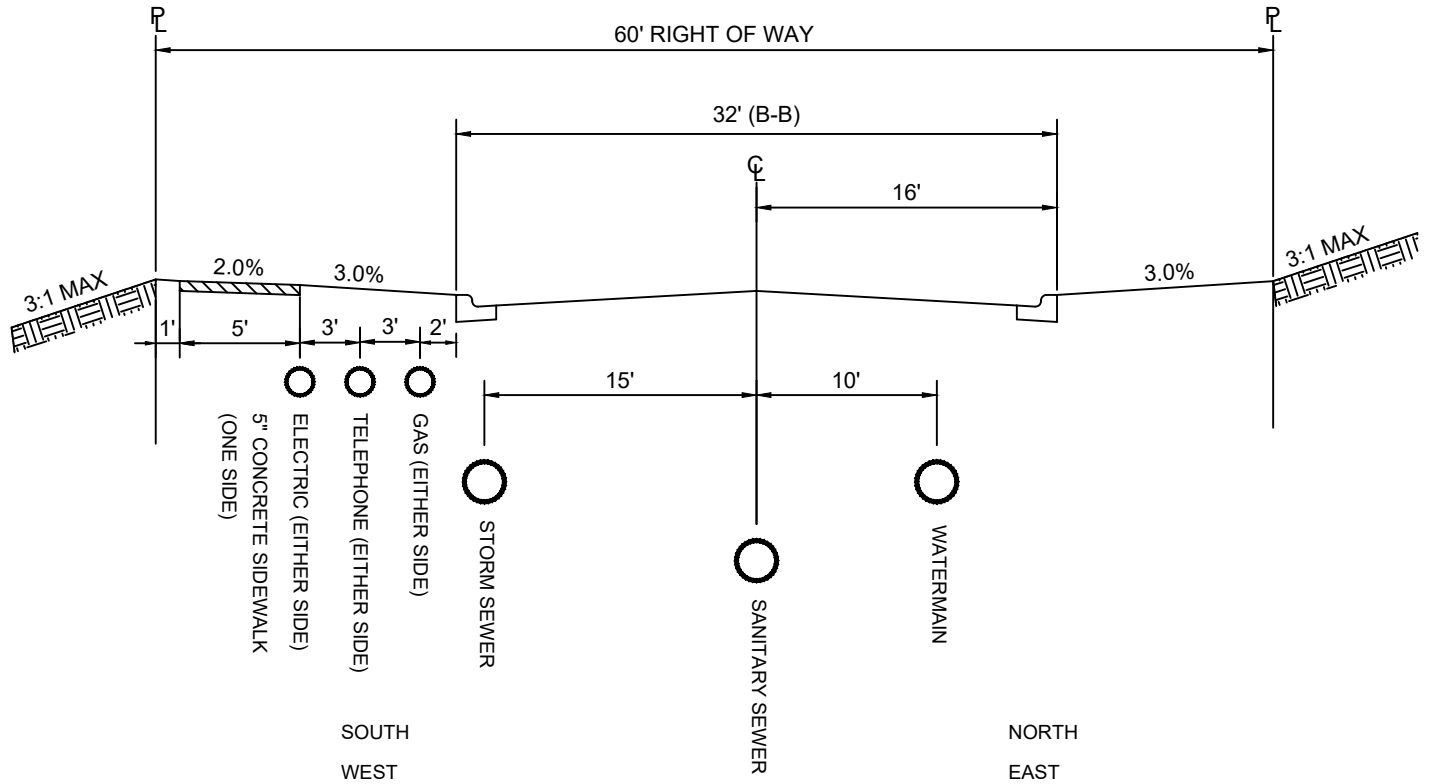


**RESIDENTIAL
MINOR SECTION**

CITY OF EDEN PRAIRIE
DEPARTMENT OF ENGINEERING

DETAIL NO.

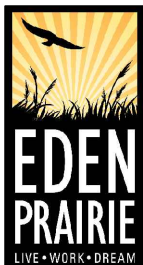
R-2



NOTE:

1. ALL BOULEVARDS SHALL HAVE 6" TOPSOIL, SEED AND MULCH ALL DISTURBED AREAS.
2. EDEN PRAIRIE B618 CURB & GUTTER (DETAIL R-9) (BOTH SIDES).
3. TRENCH LOCATION FOR UTILITIES MAY BE MODIFIED WHEN JOINT TRENCHING IS IMPLEMENTED.
4. CROWN SHALL BE A MINIMUM OF 2%.

Rev. 04/17/2024

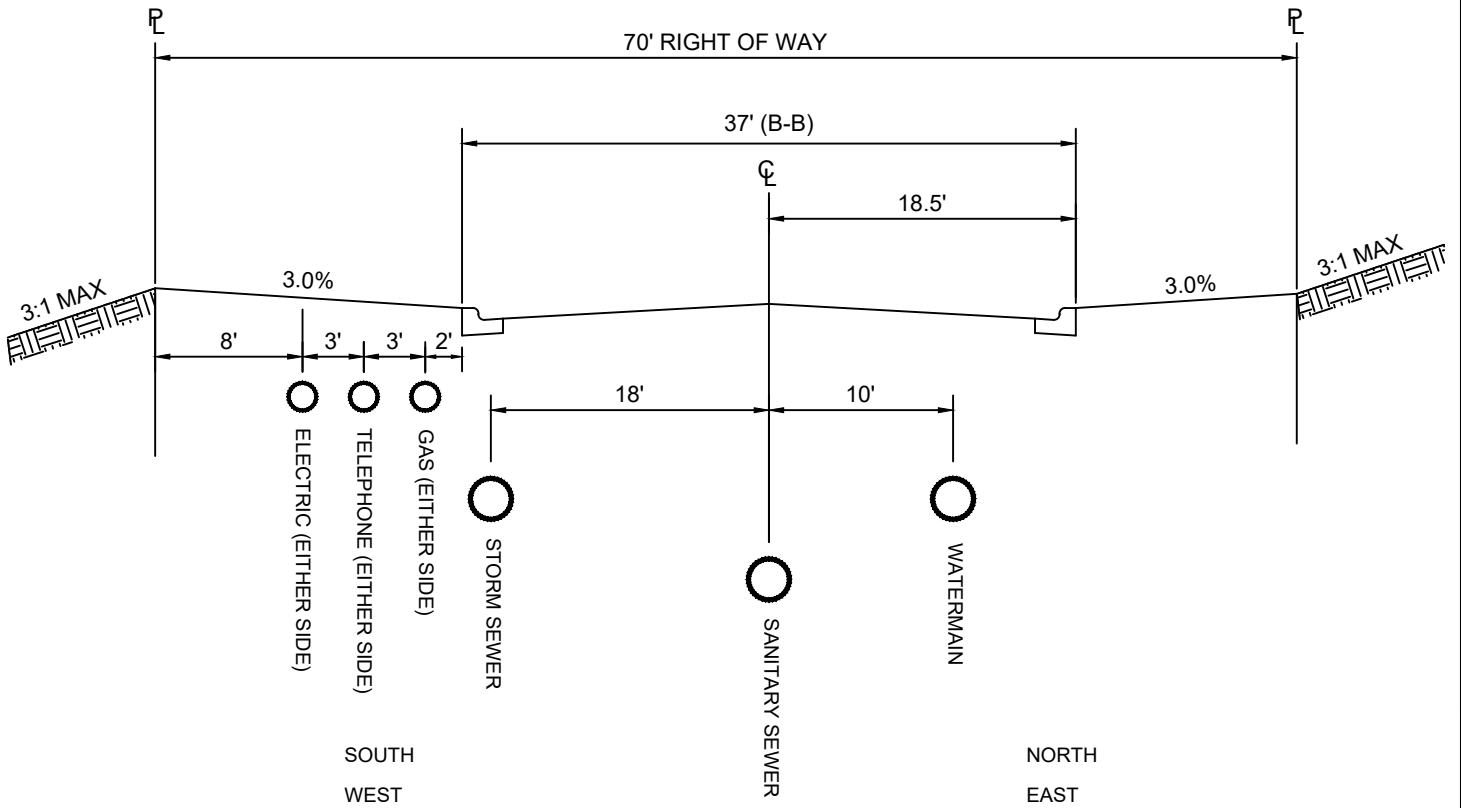


**RESIDENTIAL
COLLECTOR SECTION**

CITY OF EDEN PRAIRIE
DEPARTMENT OF ENGINEERING

DETAIL NO.

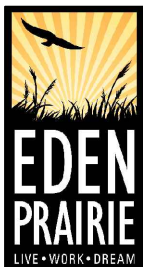
R-3



NOTE:

1. ALL BOULEVARDS SHALL HAVE 6" TOPSOIL, SEED AND MULCH ALL DISTURBED AREAS.
2. B6-18 CONCRETE CURB & GUTTER (DETAIL R-9) (BOTH SIDES).
3. TRENCH LOCATION FOR UTILITIES MAY BE MODIFIED WHEN JOINT TRENCHING IS IMPLEMENTED.
4. CROWN SHALL BE A MINIMUM OF 2%.

Rev. 04/17/2024

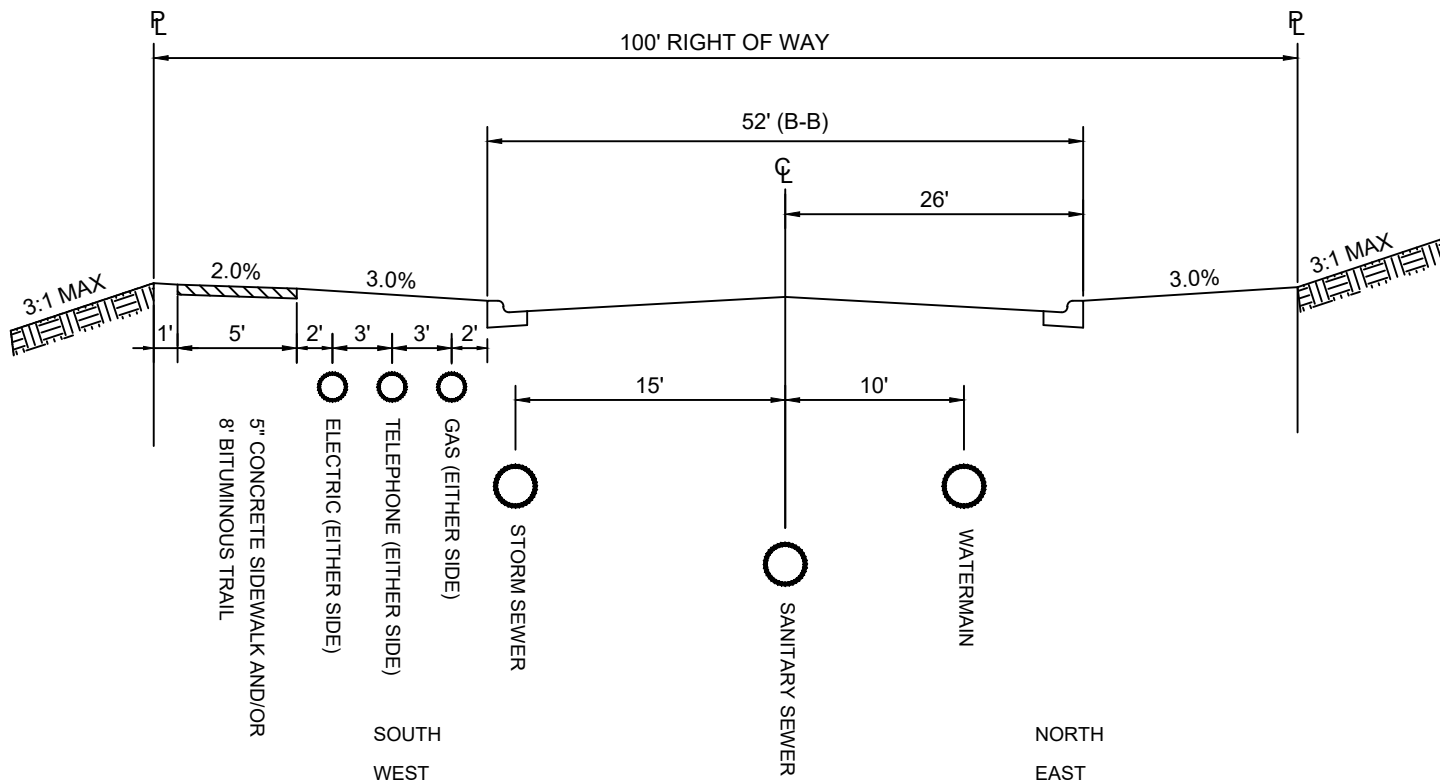


INDUSTRIAL SECTION

CITY OF EDEN PRAIRIE
DEPARTMENT OF ENGINEERING

DETAIL NO.

R-4



NOTE:

1. ALL BOULEVARDS SHALL HAVE 6" TOPSOIL, SEED AND MULCH ALL DISTURBED AREAS.
2. B6-18 CONCRETE CURB & GUTTER (DETAIL R-9) (BOTH SIDES).
3. TRENCH LOCATION FOR UTILITIES MAY BE MODIFIED WHEN JOINT TRENCHING IS IMPLEMENTED.
4. CROWN SHALL BE A MINIMUM OF 2%.

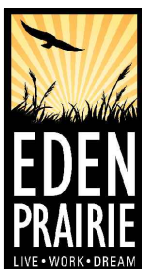
Rev.04/17/2024

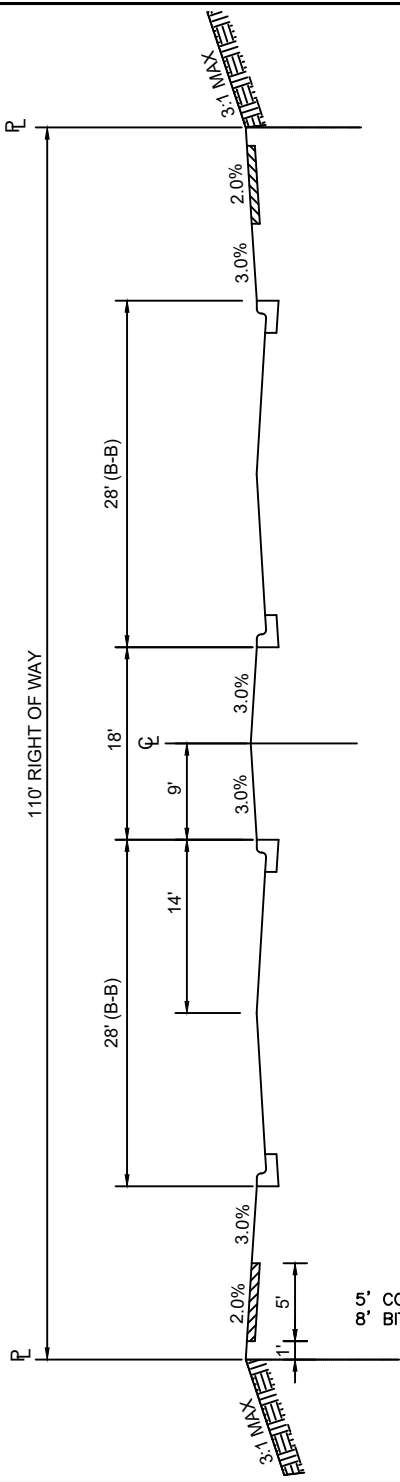
DETAIL NO.

COMMERCIAL SECTION

R-5

CITY OF EDEN PRAIRIE
DEPARTMENT OF ENGINEERING





5' CONCRETE SIDEW-LK -ND/OR
8' BITUMINOUS TR-IL

NOTE:

1. ALL BOULEVARDS AND ISLANDS SHALL HAVE 6" TOPSOIL, SEED AND MULCH ALL DISTURBED AREAS.
2. B6-18 CONCRETE CURB & GUTTER (DETAIL R-9) (BOTH SIDES).
3. TRENCH LOCATION FOR UTILITIES MAY BE MODIFIED WHEN JOINT TRENCHING IS IMPLEMENTED.
4. CROWN SHALL BE A MINIMUM OF 2%.

Rev. 04/17/2024

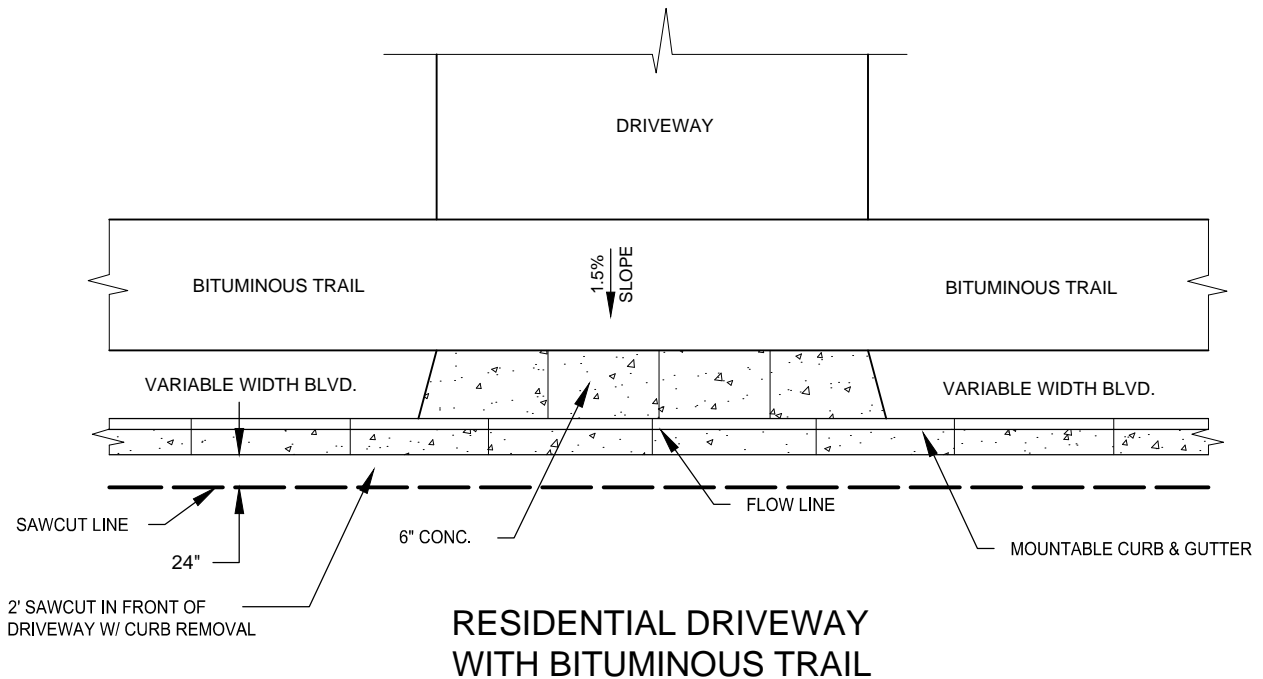
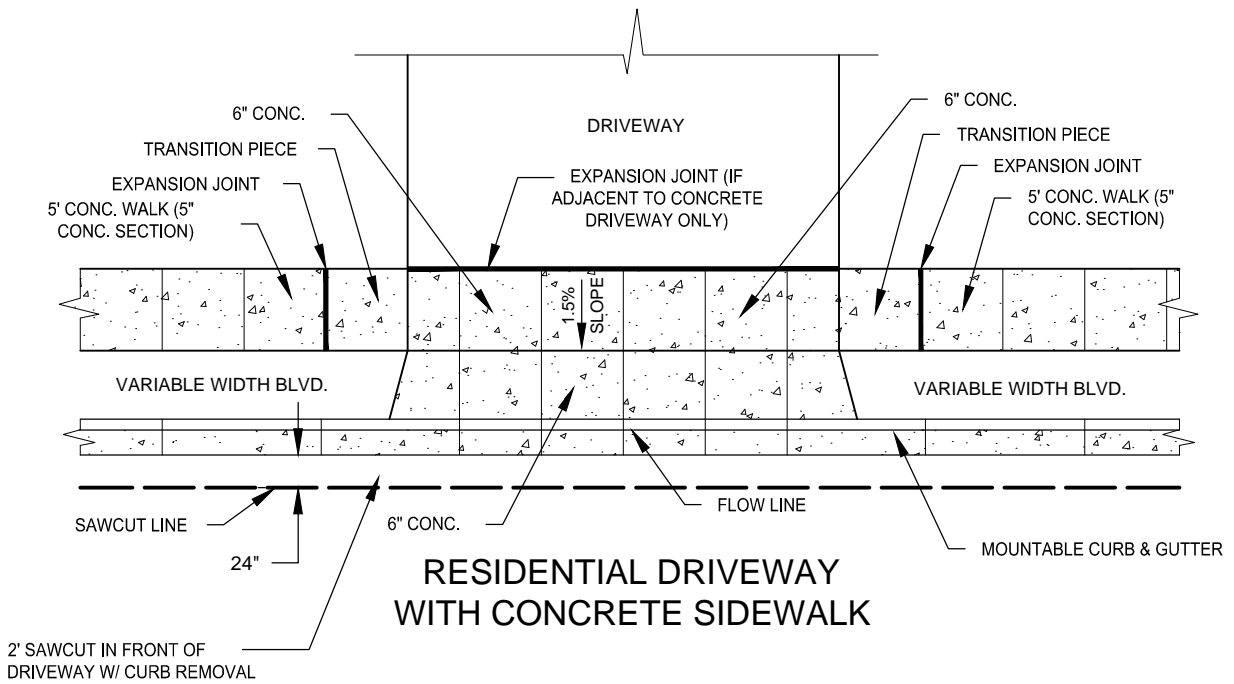


DIVIDED ROADWAY

CITY OF EDEN PRAIRIE
DEPARTMENT OF ENGINEERING

DETAIL NO.

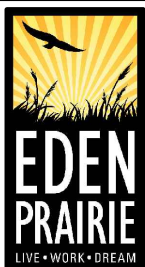
R-6



NOTES:

1. FORM CONTRACTION JOINT AS NEEDED TO PRODUCE APPROXIMATELY SQUARE PANELS.
2. CONCRETE APRON SHALL BE 6" THICK WITH 5" AGGREGATE BASE CL 5.
3. CONCRETE WALK THROUGH DRIVEWAY AND FIRST PANEL ON EITHER SIDE SHALL BE 6" THICK.
4. LONGITUDINAL SLOPE OF SIDEWALK/TRAIL THROUGH TRANSITION PIECE SHALL NOT EXCEED 8.33%.
5. TWO (2) FOOT SAWCUT OF PAVEMENT IN FRONT OF DRIVEWAY NOT REQUIRED UNLESS A NEW DRIVEWAY WITH NEW CURB CUT IS INSTALLED OR IF MODIFYING GRADES IN FRONT OF DRIVEWAY.

REV 01/16/2019

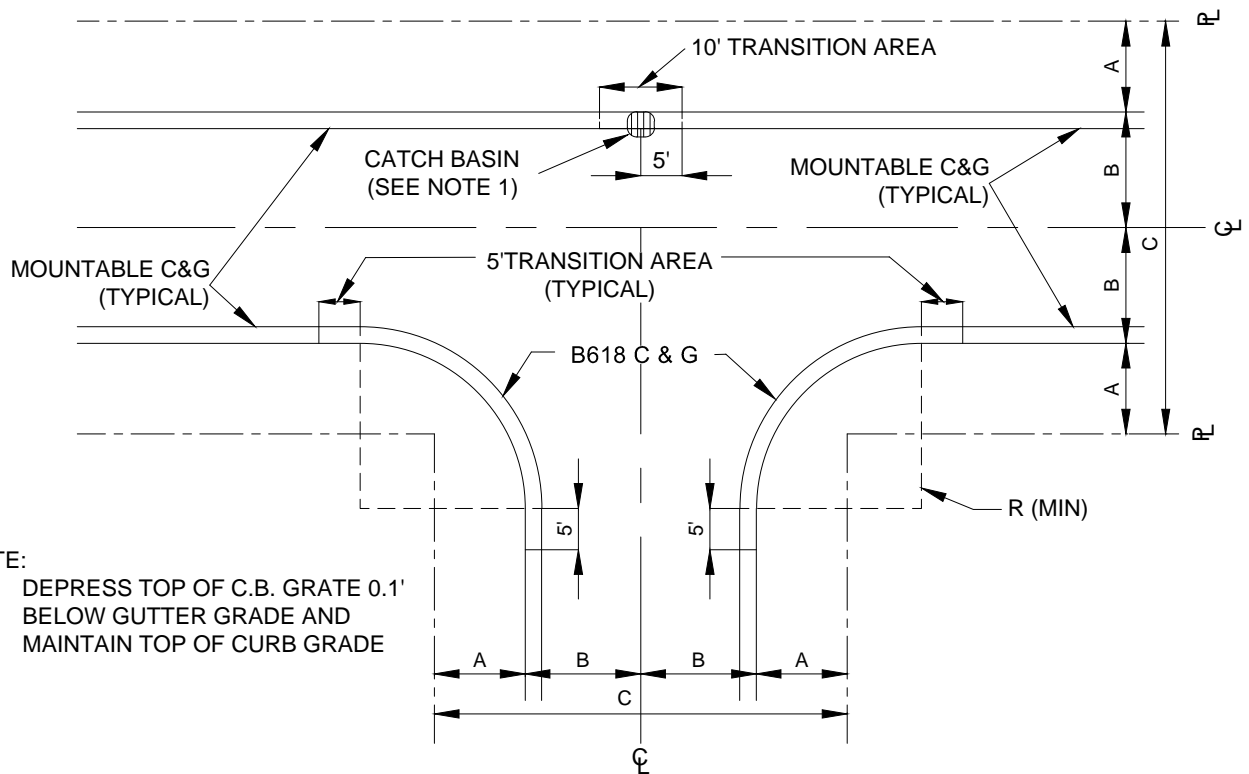


RESIDENTIAL DRIVEWAY ENTRANCE

DETAIL NO.

R-7

CITY OF EDEN PRAIRIE
DEPARTMENT OF ENGINEERING



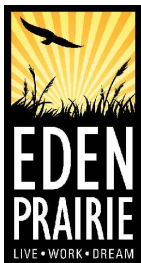
NOTE:
 1. DEPRESS TOP OF C.B. GRATE 0.1'
 BELOW GUTTER GRADE AND
 MAINTAIN TOP OF CURB GRADE

NOTE: THE TOP ELEVATION OF ALL STRUCTURES LOCATED WITHIN THE STREET SURFACING SHALL BE A MINIMUM OF 0.05' BELOW THE TOP OF THE FINAL SURFACE ELEVATION IMMEDIATELY ABOVE SAID STRUCTURE

CURB MEASUREMENTS *																
	50' R/W				60' R/W				70' R/W				80' R/W			
B TO B	A'	B'	C'	D'	A'	B'	C'	D'	A'	B'	C'	D'	A'	B'	C'	D'
28'	11'	14'	50'	20'												
32'					14'	16'	60'	20'								
37'									16'	19'	70'	40'				
48'													16'	24'	80'	35'

* ALL CURB MEASUREMENTS ARE TO BACK OF CURB

Rev. 03/15/2022



CURB AND CATCH BASINS AT INTERSECTIONS, STRUCTURE ELEVATIONS AT PAVING SURFACE

CITY OF EDEN PRAIRIE
 DEPARTMENT OF ENGINEERING

DETAIL NO.

R-8



CITY OF EDEN PRAIRIE
DEPARTMENT OF ENGINEERING

B612, B618 & MOUNTABLE
CURB & GUTTER

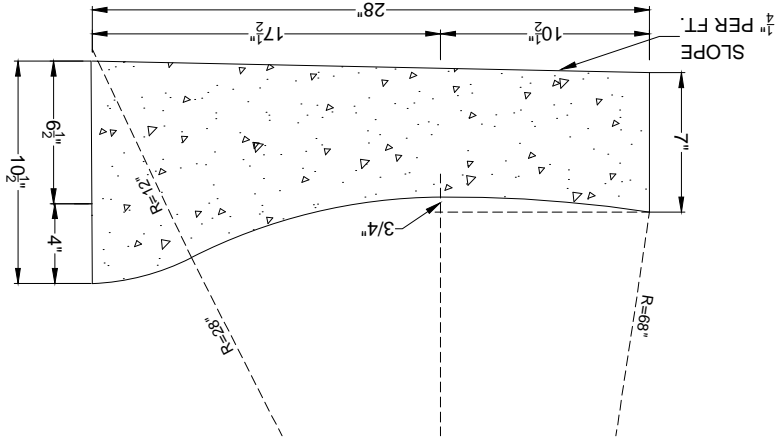
R-9

DETAIL NO.

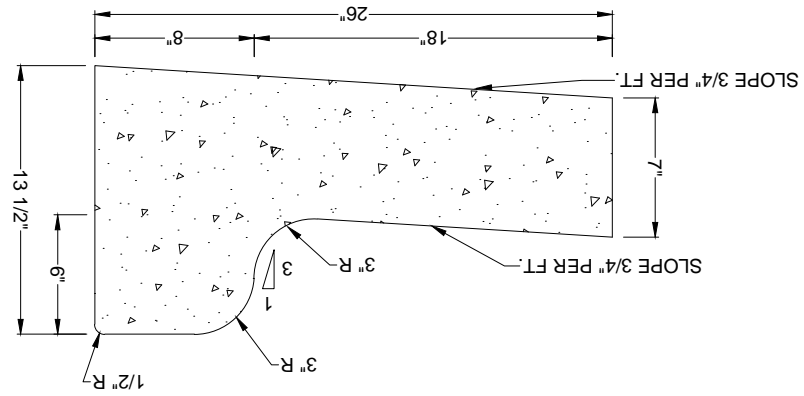
NOTE: 100' EXPANSION JOINT SPACING (TYP)

Rev. 03/16/2022

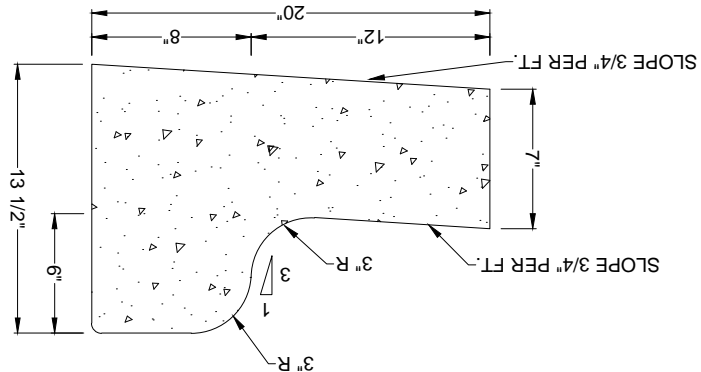
MOUNTABLE	
Concrete	
CY/LF	LF/CY
0.0540	18.5

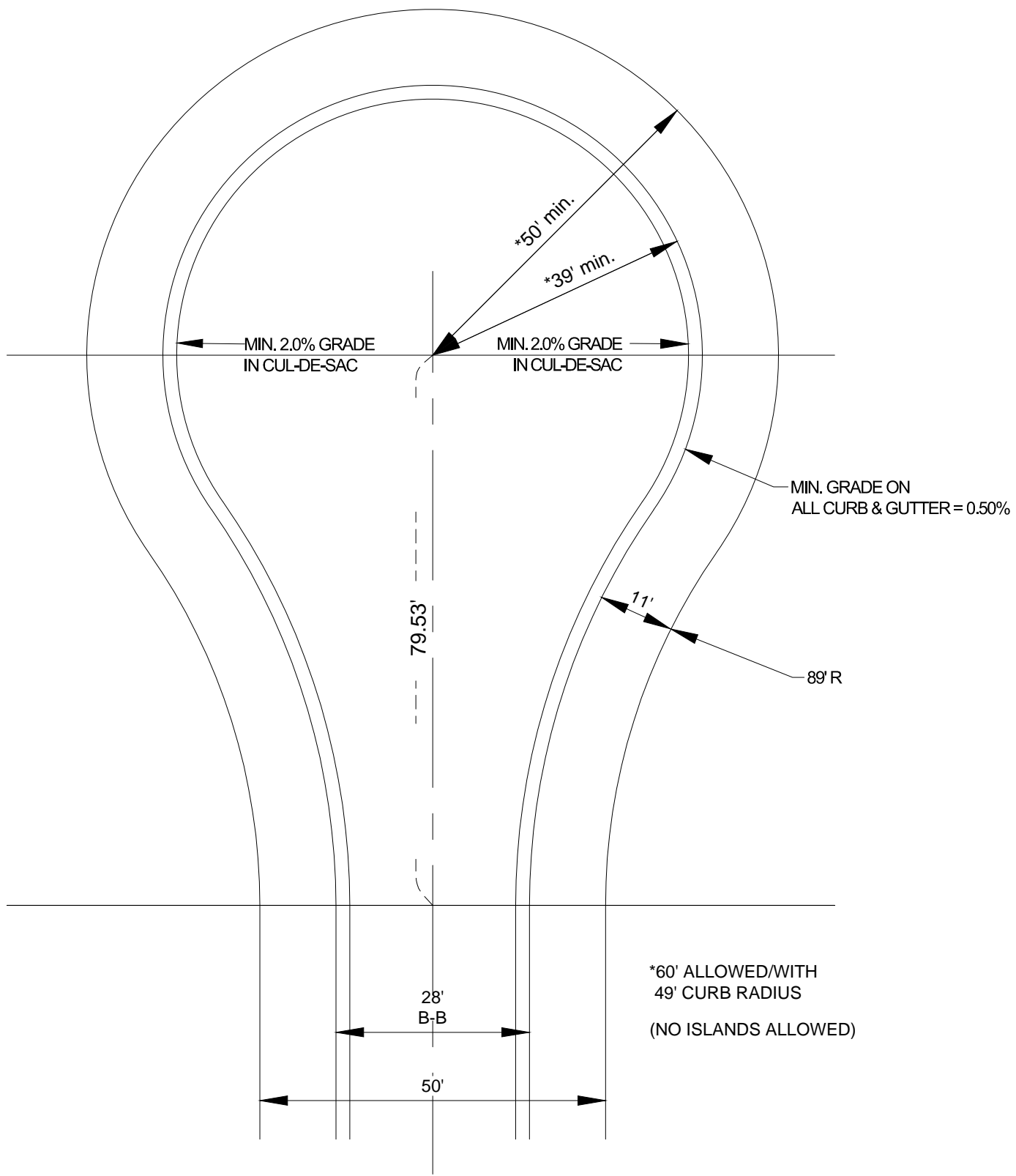


B618	
Concrete	
CY/LF	LF/CY
0.0582	17.2

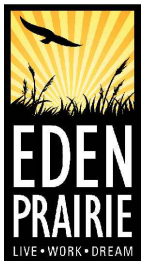


B612	
Concrete	
CY/LF	LF/CY
0.0474	21.1





REV 01/01/1998



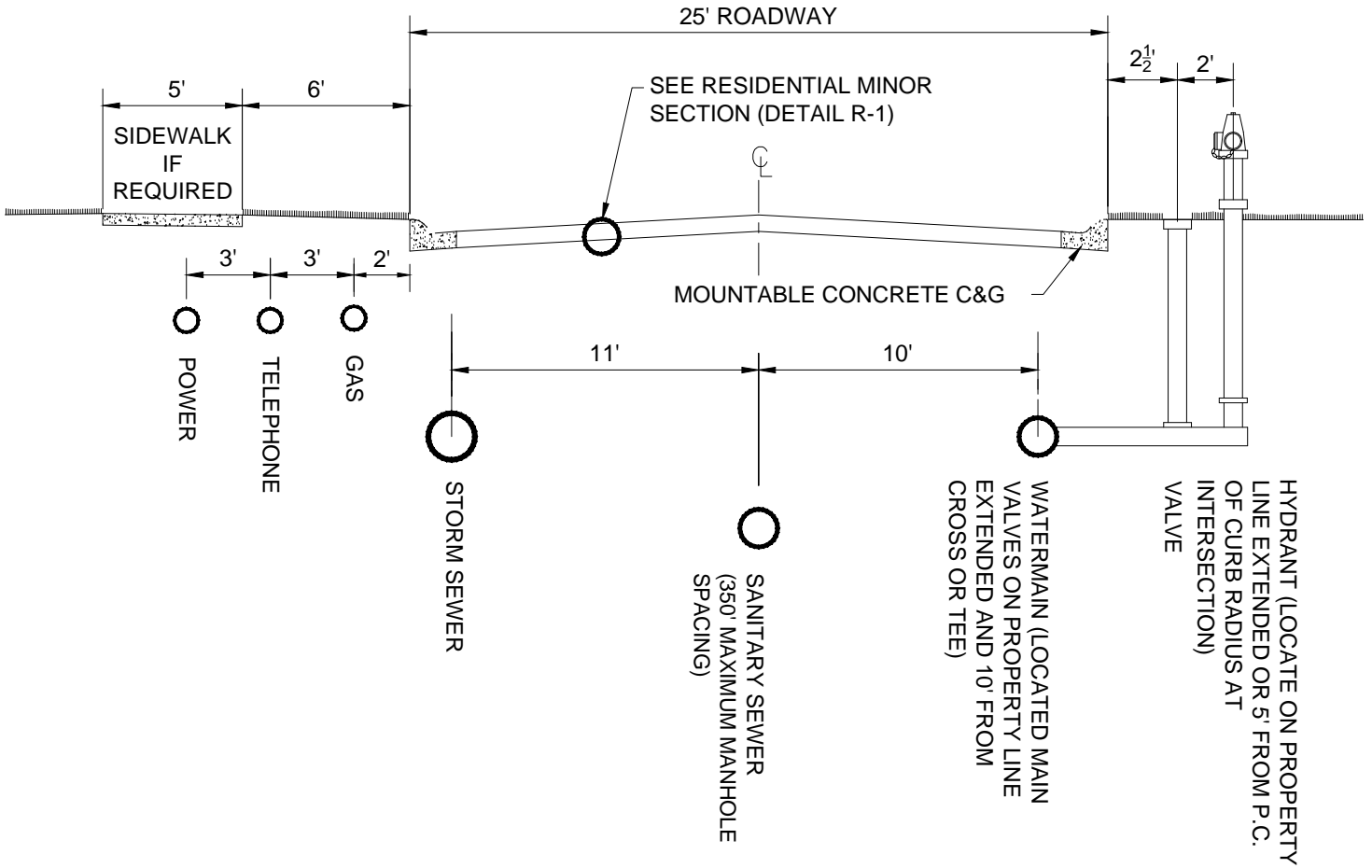
TYPICAL 50' RADIUS CUL-DE-SAC

CITY OF EDEN PRAIRIE
DEPARTMENT OF ENGINEERING

DETAIL NO.

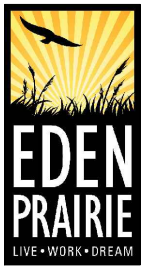
R-12

WATER ON NORTH AND EAST SIDE
 STORM SEWER ON SOUTH AND WEST SIDE
 TYPICAL PRIVATE STREET
 (NO PARKING ALLOWED)



NOTE:
 TRENCH LOCATION FOR UTILITIES MAY BE MODIFIED WHEN JOINT TRENCHING IS IMPLEMENTED.

REV 01/01/1998



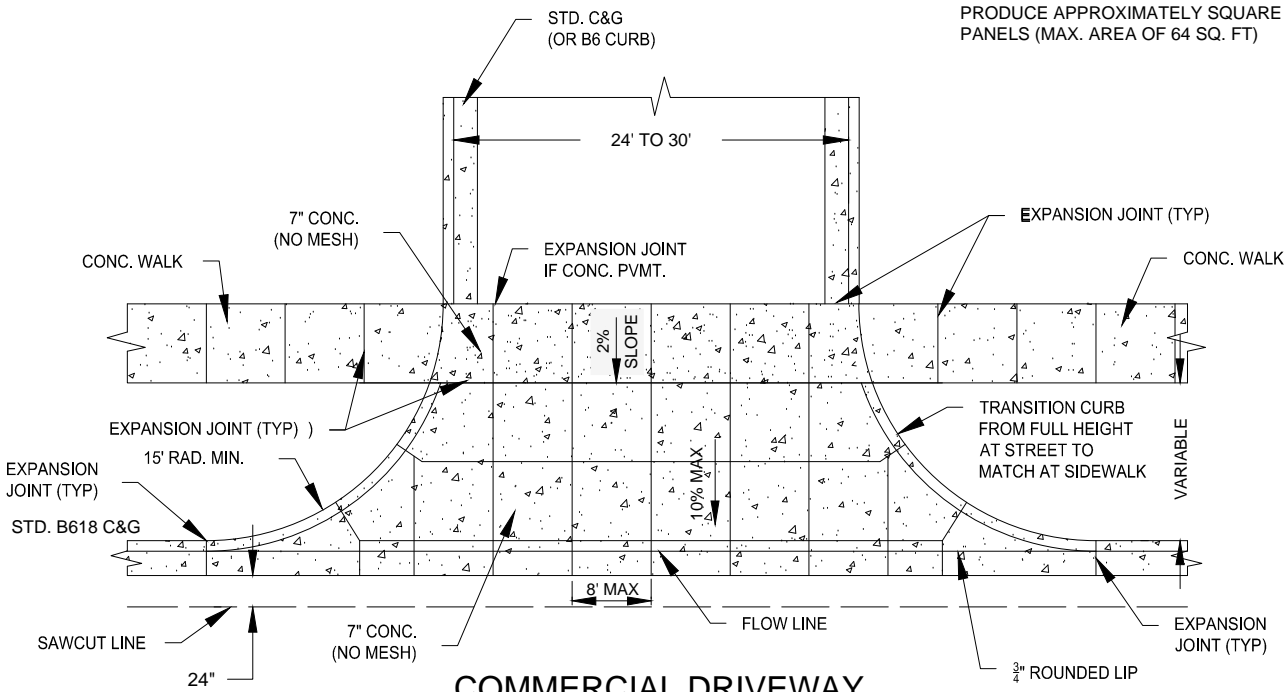
TYPICAL PRIVATE STREET

CITY OF EDEN PRAIRIE
 DEPARTMENT OF ENGINEERING

DETAIL NO.

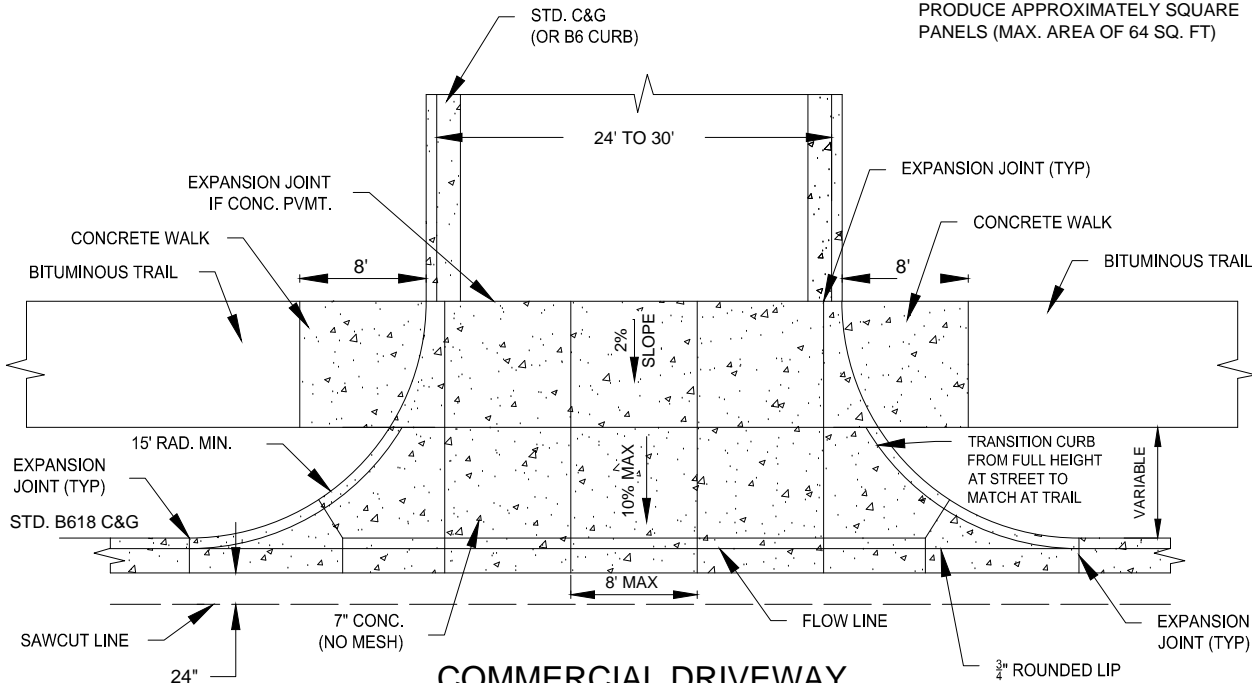
R-13

NOTES:
FORM CONTRACTION JOINT AS NEEDED TO PRODUCE APPROXIMATELY SQUARE PANELS (MAX. AREA OF 64 SQ. FT)



COMMERCIAL DRIVEWAY WITH CONCRETE SIDEWALK

NOTES:
FORM CONTRACTION JOINT AS NEEDED TO PRODUCE APPROXIMATELY SQUARE PANELS (MAX. AREA OF 64 SQ. FT)



COMMERCIAL DRIVEWAY WITH BITUMINOUS TRAIL

REV 02/01/2016

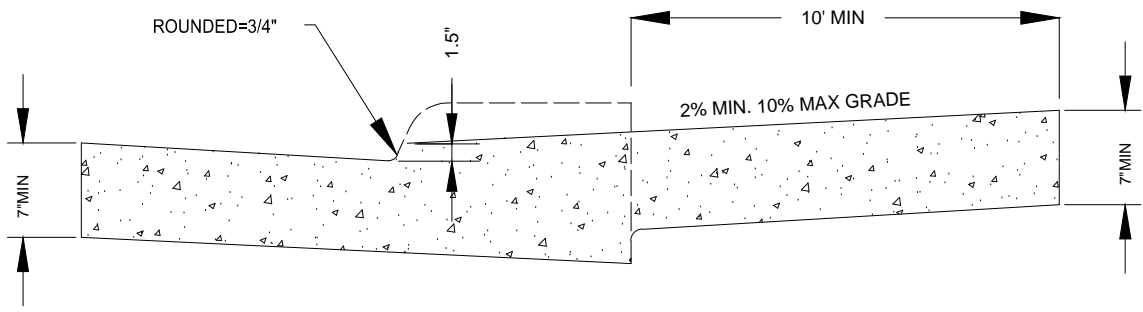
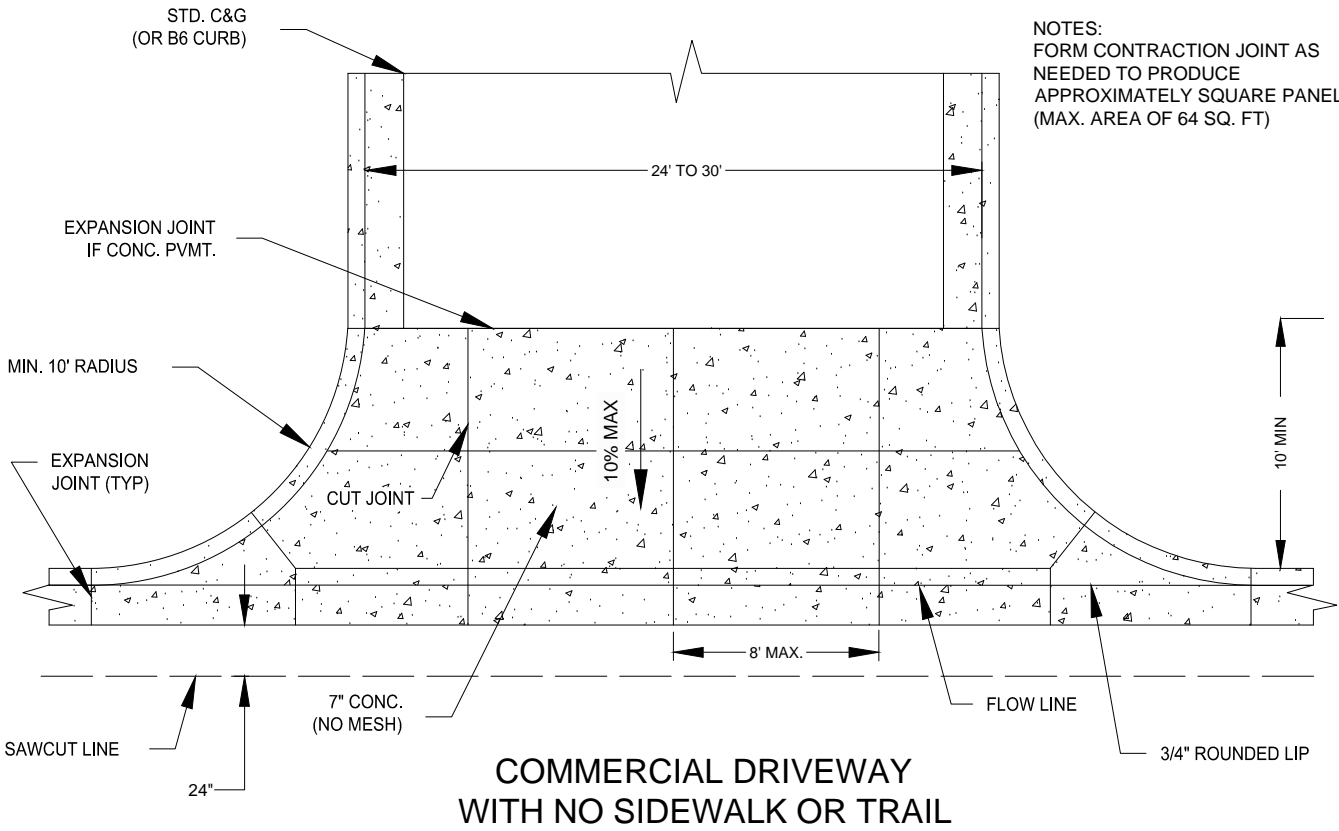


**COMMERCIAL DRIVEWAY ENTRANCE
(1 OF 2)**

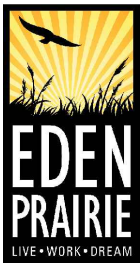
**CITY OF EDEN PRAIRIE
DEPARTMENT OF ENGINEERING**

DETAIL NO.

R-14



REV 02/01/2016

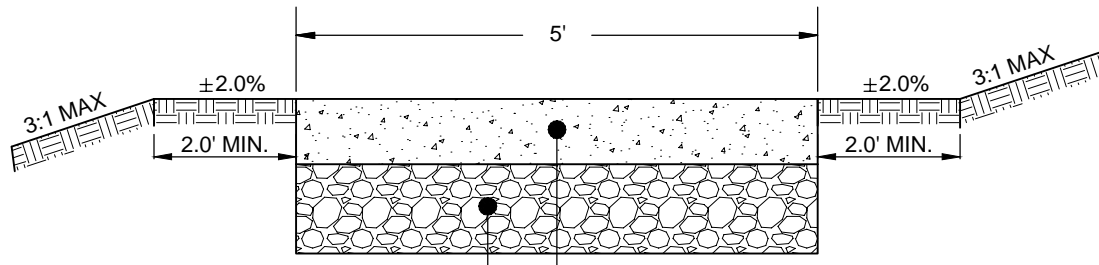


**COMMERCIAL DRIVEWAY ENTRANCE
(2 OF 2)**

**CITY OF EDEN PRAIRIE
DEPARTMENT OF ENGINEERING**

DETAIL NO.

R-15

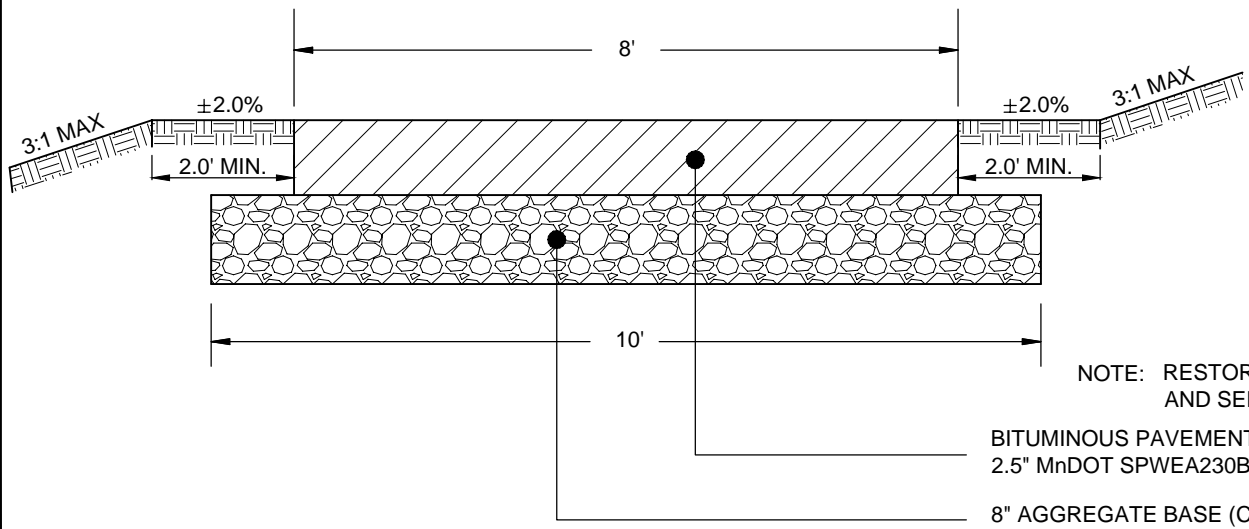


NOTE: CONCRETE WALK SECTION SHALL BE 6" THICK IN DRIVEWAY AREAS, EXCEPT WHEN WALK IS MACHINE LAID. EXPANSION JOINTS SHALL BE REQUIRED ON BOTH SIDES OF DRIVEWAY.

5" MnDOT 2521 CONCRETE MIX DESIGN
 6" AGGREGATE BASE (CL.5)
 NOTE: EXPANSION JOINT SPACING 100'

CONCRETE WALK SECTION

NOT TO SCALE



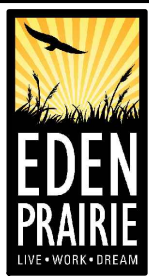
NOTE: RESTORE ADJACENT AREA AND SEED.

BITUMINOUS PAVEMENT
 2.5" MnDOT SPWEA230B
 8" AGGREGATE BASE (CL.5)

BITUMINOUS BIKE/PED SECTION

NOT TO SCALE

REV 01/16/2019

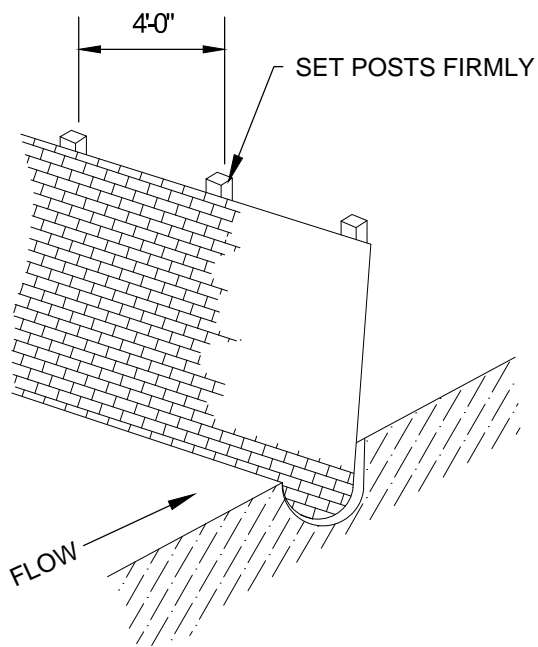
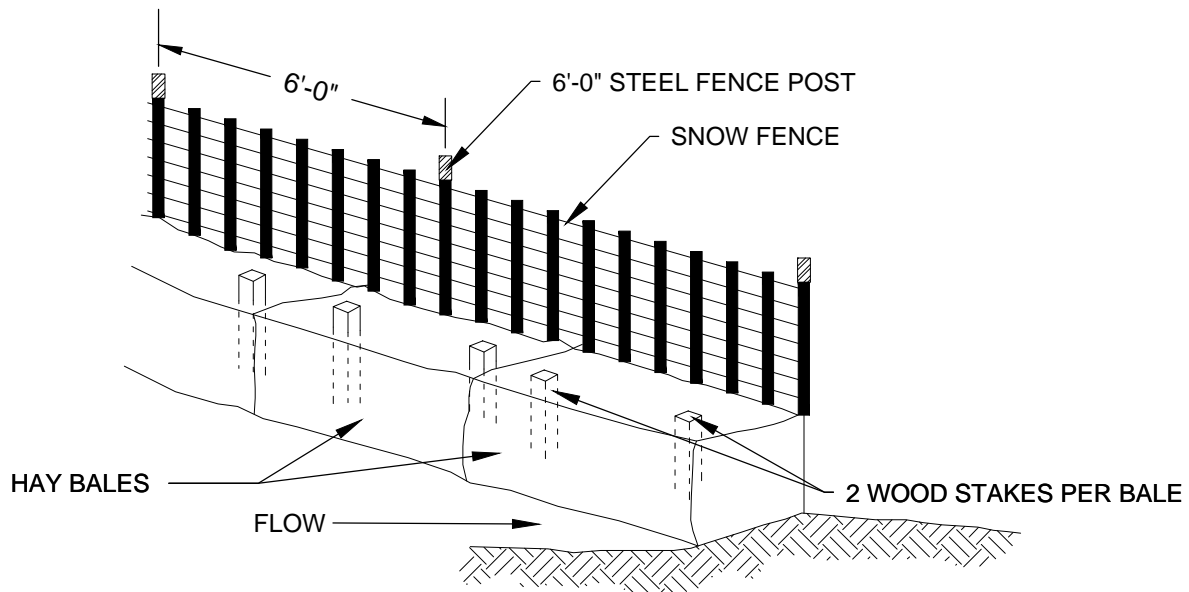


TYPICAL WALKWAY SECTION

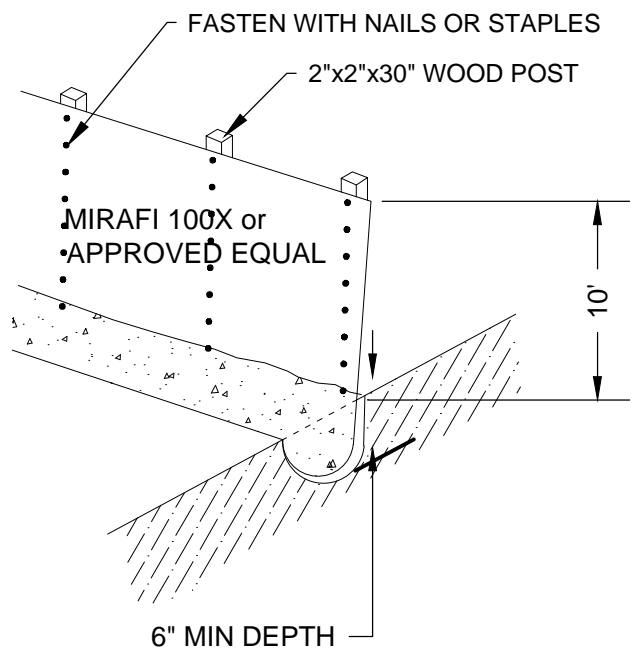
CITY OF EDEN PRAIRIE
 DEPARTMENT OF ENGINEERING

DETAIL NO.

R-16

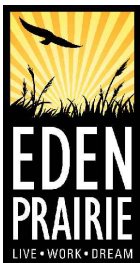


A. DIG TRENCH



B. LAY IN FABRIC AND BACKFILL

REV 01/01/1998

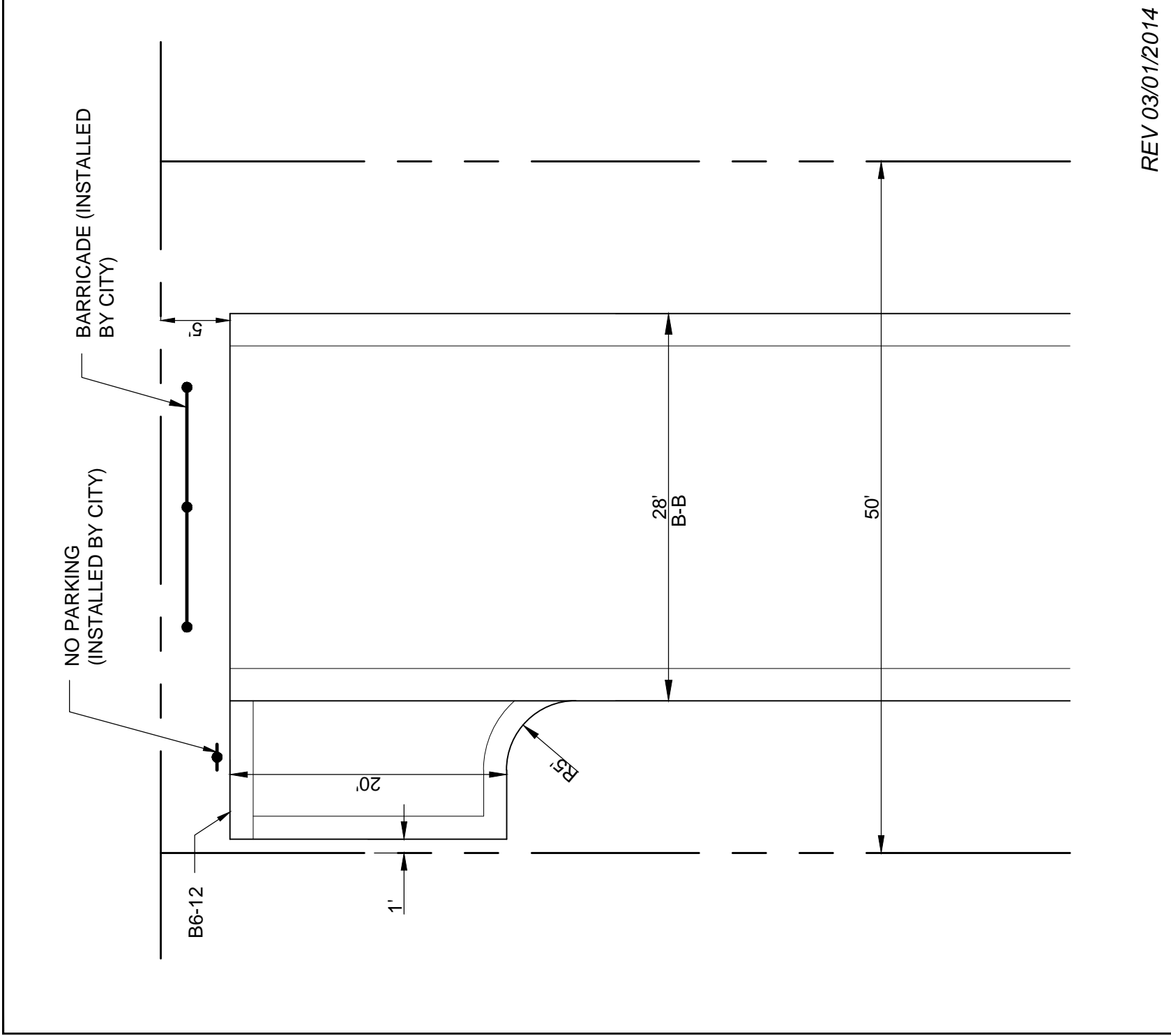


EROSION CONTROL

CITY OF EDEN PRAIRIE
DEPARTMENT OF ENGINEERING

DETAIL NO.

R-17



REV 03/01/2014



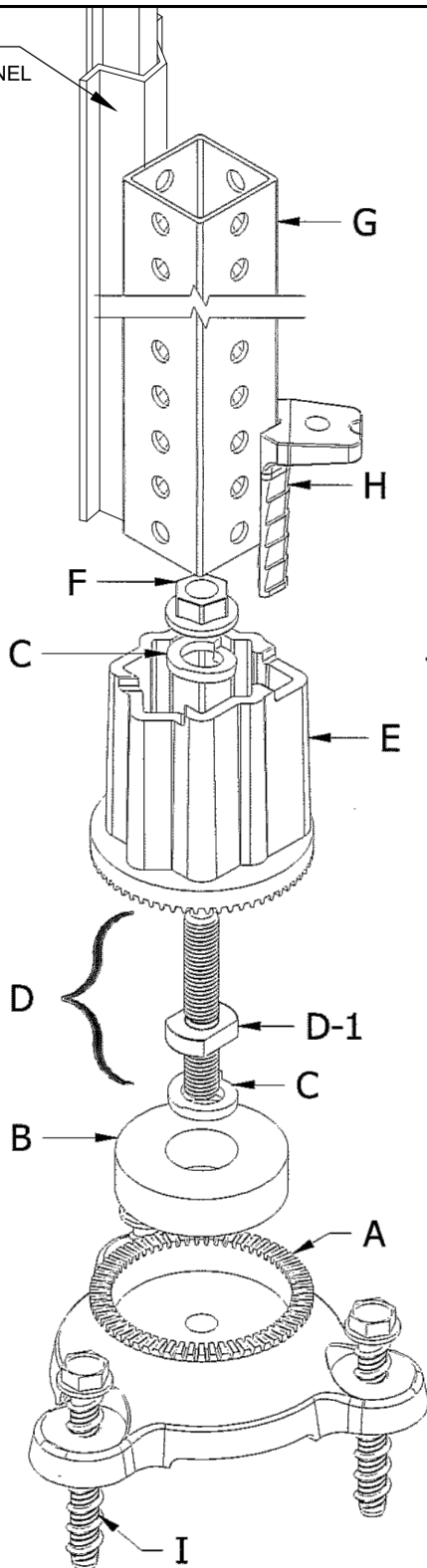
DETAIL NO.

TEMPORARY TURN-AROUND

R-18

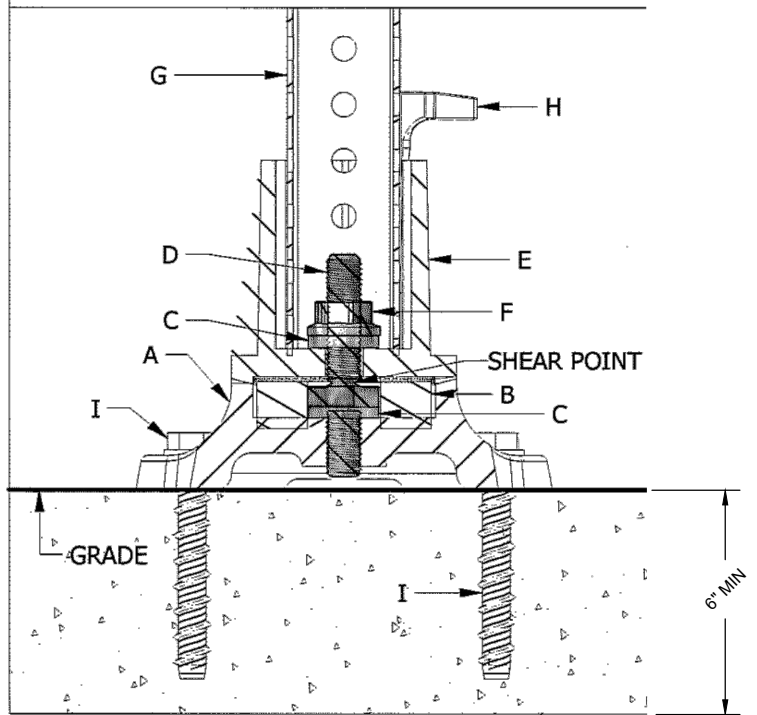
CITY OF EDEN PRAIRIE
DEPARTMENT OF ENGINEERING

2 LB PER FOOT
GALVANIZED U-CHANNEL
POST, 8' IN LENGTH



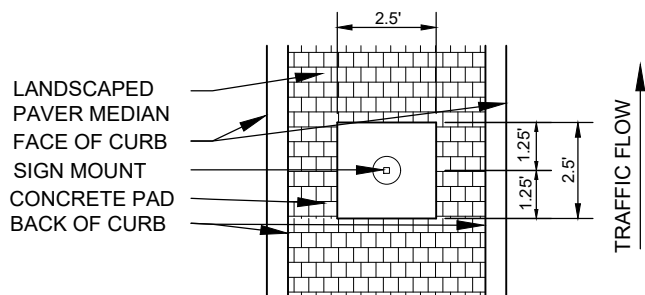
SURFACE MOUNT CONCRETE
INSTALLATIONS (NO SCALE)

INSTALLED CROSS SECTION VIEW



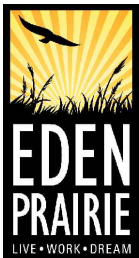
PARTS LIST

- A SURFACE MOUNT ANCHOR BASE
- B RUBBER BUSHING
- C LOCK WASHER
- D 5/8"-11 x 4" SHEAR BOLT
- D-1 SHOULDER
- E TOP HALF COUPLER
- F 5/8"-11 SERRATED FLANGE NUT
- G SIGN SUPPORT - 1 3/4"- 14 GAUGE GALVANIZED TELSPAR
- H SIGN SUPPORT LOCKING WEDGE
- I CONCRETE MOUNTING FASTENER (not included)



CONCRETE PAD FOR SIGN SOCKETS WHEN
LOCATED ON RAISED ISLANDS WITH
LANDSCAPE PAVER SURFACE (NO SCALE)

REV 04/24/2023

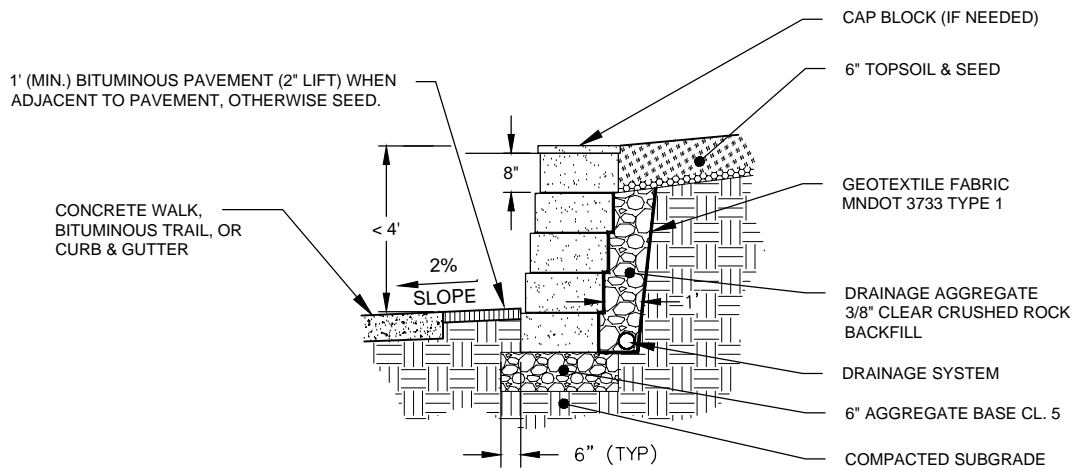


SQUARE POST SIGN SUPPORT

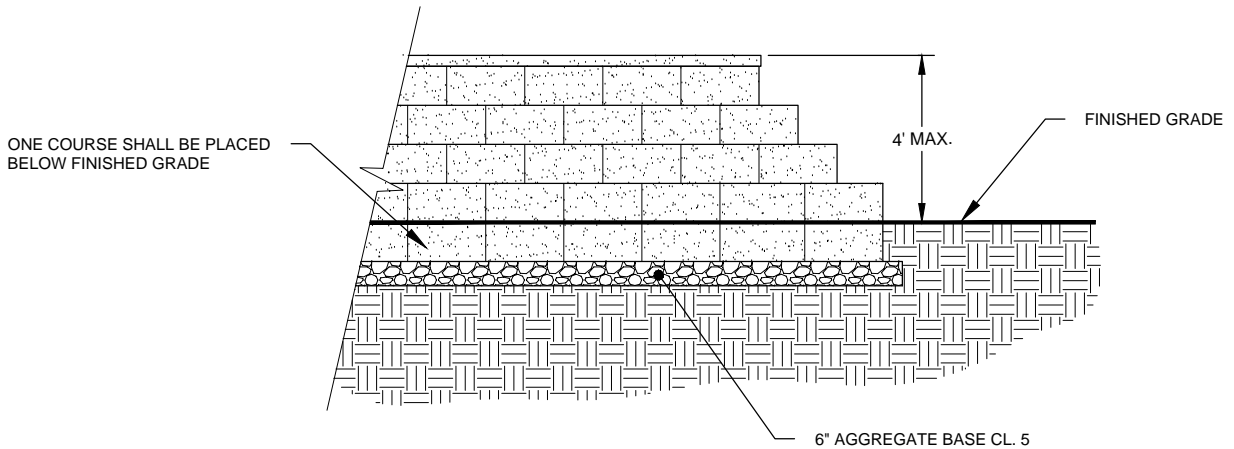
CITY OF EDEN PRAIRIE
DEPARTMENT OF ENGINEERING

DETAIL NO.

R-19



CROSS SECTION



ELEVATION

NOTES:

1. WALL COURSES SHALL BE LAID LEVEL.
2. TAPER OR ROUND OFF ENDS OF WALLS AS DIRECTED BY ENGINEER.
3. WALLS TALLER THAN 4' EXPOSED HEIGHT SHALL BE A LARGE BLOCK PRECAST WALL SYSTEM SIGNED BY PROFESSIONAL ENGINEER.
4. PAYMENT FOR MODULAR BLOCK RETAINING WALL BY SQ. FT. INCLUDES ALL LABOR, EQUIPMENT, AND MATERIALS NECESSARY TO CONSTRUCT WALL INCLUDING, BUT NOT LIMITED TO FABRIC, DRAINAGE, AGGREGATE, LEVELING PAD, AND BLOCK.
5. CONTRACTOR TO SUBMIT:
 - MODULAR BLOCK SUPPLIER FROM MNDOT APPROVED PRODUCTS LIST
 - COLOR / SAMPLES

Rev. 03/16/2022



MODULAR BLOCK RETAINING WALL

CITY OF EDEN PRAIRIE
DEPARTMENT OF ENGINEERING

DETAIL NO.

R-20

TREE MUST MEET OR EXCEED ANSI Z60.1 (AMERICAN STANDARD FOR NURSERY STOCK). ONE DOMINANT LEADER MUST BE MAINTAINED THROUGH THE WARRANTY PERIOD. REMOVE TAGS & LABELS.

DO NOT STAKE OR WRAP TRUNK UNLESS NECESSARY. IF STAKING IS NECESSARY, USE A WIDE FLEXIBLE STEM ATTACHMENT MATERIAL PLACED $\frac{1}{3}$ OR $\frac{2}{3}$ THE DISTANCE FROM THE GROUND UP TO THE FIRST SET OF BRANCHES. STAKING AND TRUNK WRAPPING MUST BE REMOVED AT THE END OF THE FIRST COMPLETE GROWING SEASON.

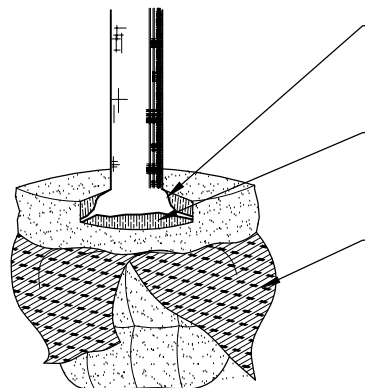
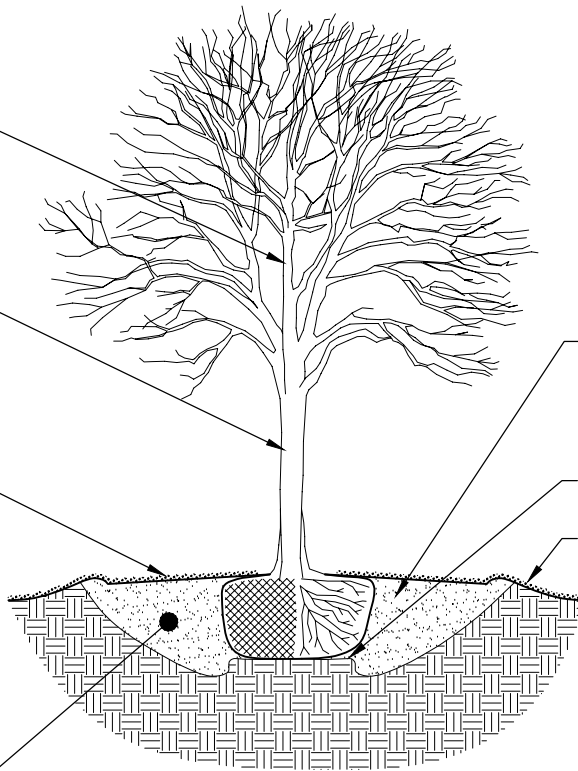
MULCH 4-6 INCHES DEEP LEAVING A 6-INCH CIRCLE OF BARE SOIL AROUND THE TRUNK OF THE TREE, PAST THE EDGE OF THE PLANTING HOLE

DIAMETER OF THE PLANTING HOLE SHALL BE TRIPLE THE DIAMETER OF THE ROOTBALL. IF AUGER IS USED TO DIG HOLES, SCARIFY THE SIDES OF THE HOLE WITH HAND TOOLS.

SIT SOILBALL ON UNDISTURBED OR COMPACTED SOIL TO PREVENT SETTLING

IMPERMEABLE LANDSCAPE MATERIAL SHALL NOT BE PLACED AROUND TREES

IF TREE IS PLANTED IN NATIVE SOILS IN GOOD CONDITION, RE-FILL PLANTING HOLE WITH EXCAVATED NATIVE SOIL MATERIAL. IF TREE IS PLANTED IN POOR SOILS, RE-FILL PLANTING HOLE WITH A 50/50 MIX OF COMPOST AND NATIVE SOILS.



EACH TREE MUST BE PLANTED WITH THE FIRST MAIN LATERAL ROOT AT FINISH GRADE. TREES WITH THE FIRST MAIN LATERAL NOT VISIBLE WILL BE REJECTED

REMOVE EXCESS SOIL/ROOTS FROM THE SOILBALL TO EXPOSE THE FIRST MAIN LATERAL ROOT. PRUNE ALL ENCIRCLING ROOTS

IF B&B, REMOVE ALL TWINE AROUND THE STEM, ALL SYNTHETIC BURLAP MUST BE REMOVED. NON-SYNTHETIC BURLAP, IF PEELED BACK MUST BE REMOVED, NOT FOLDED DOWN. ASSURE WIRE BASKET DOES NOT PROTRUDE ABOVE FINAL GRADE.

REV 01/18/2019

DETAIL NO.

TREE PLANTING DETAIL

R-21

CITY OF EDEN PRAIRIE
DEPARTMENT OF ENGINEERING

