

## CITY OF PROVIDENCE - STANDARD DETAILS

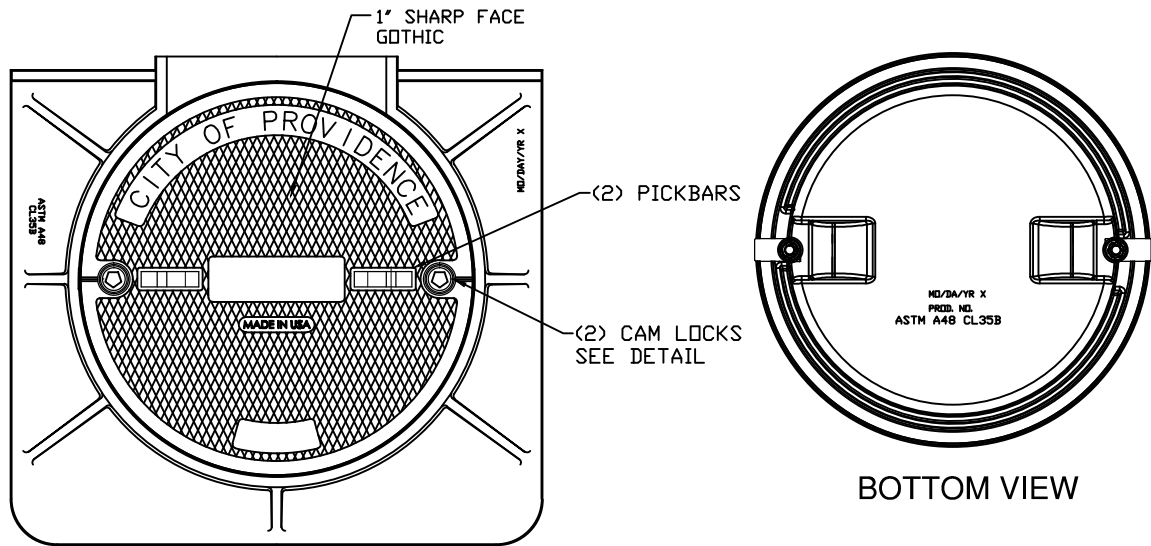
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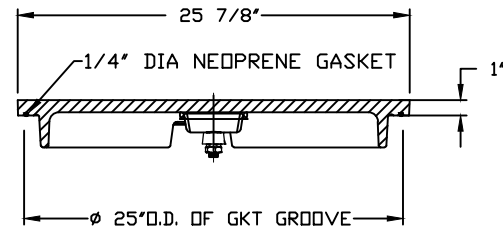
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Details appearing in this document have been adopted as City of Providence Standard. Refer to Rhode Island Department of Transportation (RIDOT) for all other standard details:

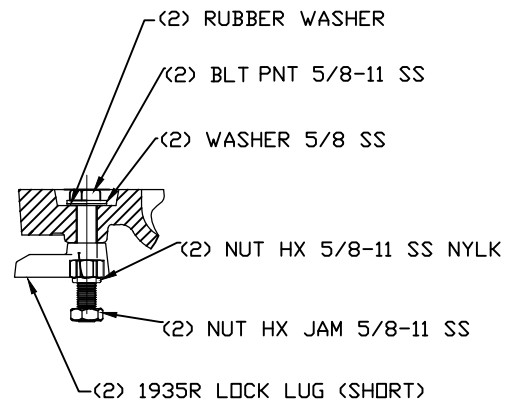
[http://www.dot.ri.gov/documents/doingbusiness/RIDOT\\_Std\\_Details.pdf](http://www.dot.ri.gov/documents/doingbusiness/RIDOT_Std_Details.pdf)



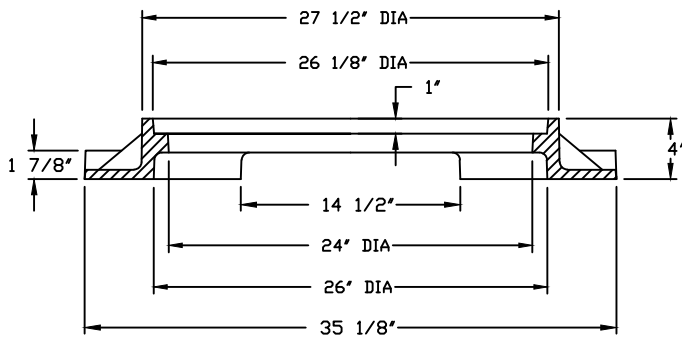
BOTTOM VIEW



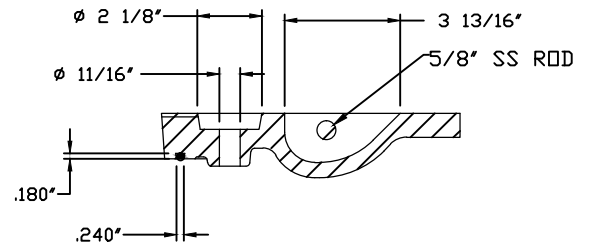
SECTION VIEW



LOCK LUG ASSEMBLY



SECTION



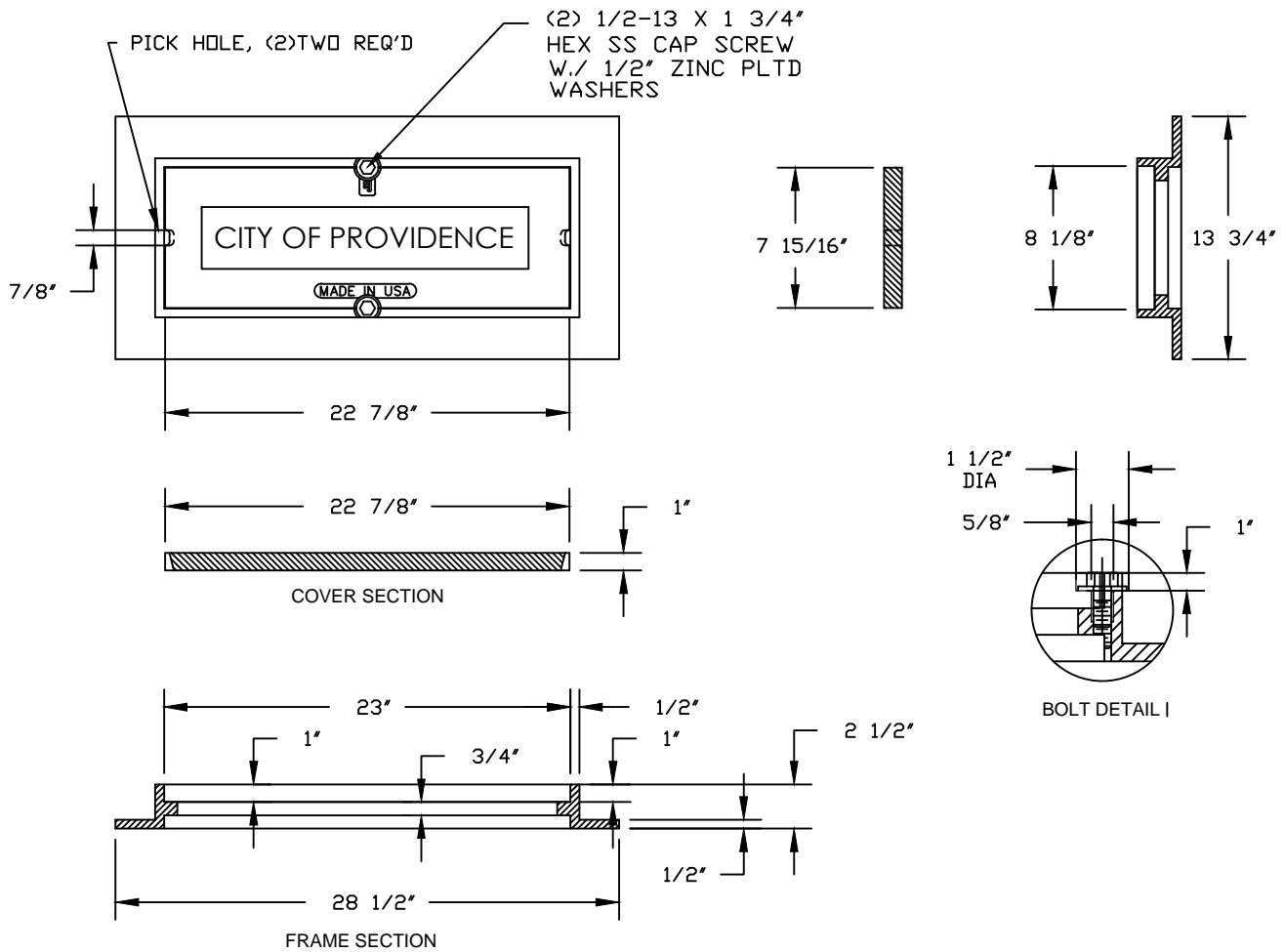
PICKBAR & LOCKLUG HOLE DETAIL

NOTES:

1. MATERIALS SHALL CONFORM TO SECTION M.04 OF THE RHODE ISLAND STANDARD SPECIFICATIONS.
2. ALL MATERIALS SHALL BE GRAY IRON AND SHALL BE ASTM A48 CERTIFIED.
3. SHALL BE EJ PRODUCT 1040081A02 OR APPROVED EQUAL.

SIDEWALK MANHOLE FRAME AND COVER



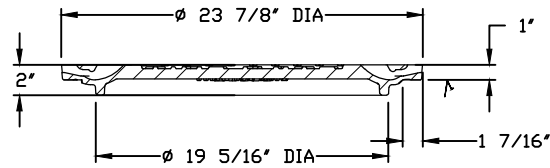
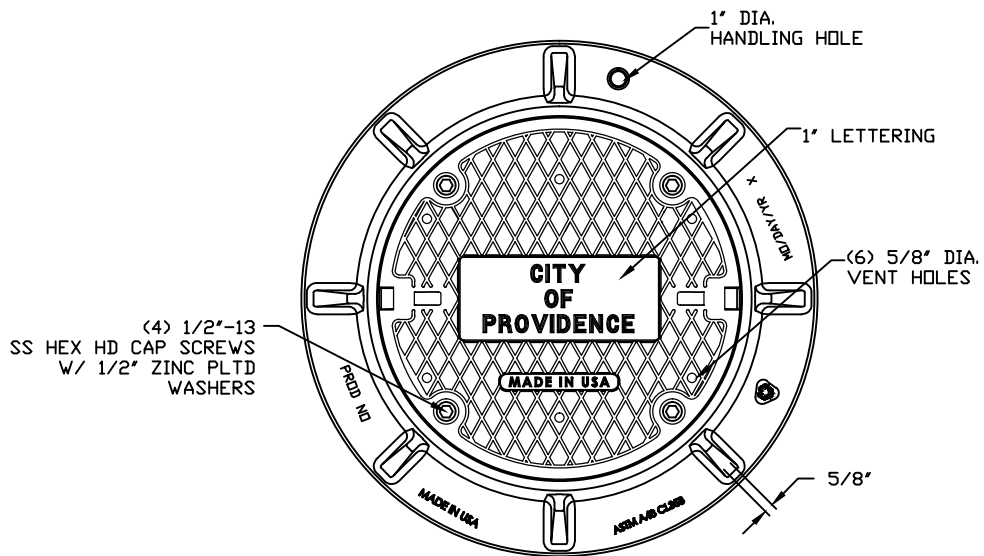


Notes:

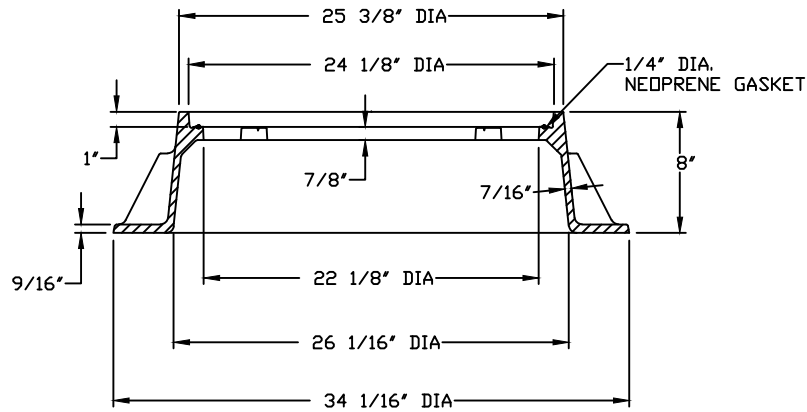
1. Materials shall conform to Section M.04 of the Rhode Island Standard Specifications.
2. All materials shall be gray iron and shall be ASTM A48 certified.
3. Shall be EJ Product 801144B01 or approved equal.

# CHUTE FRAME AND COVER

6.1.2 P  
PROVIDENCE  
STANDARD



COVER SECTION



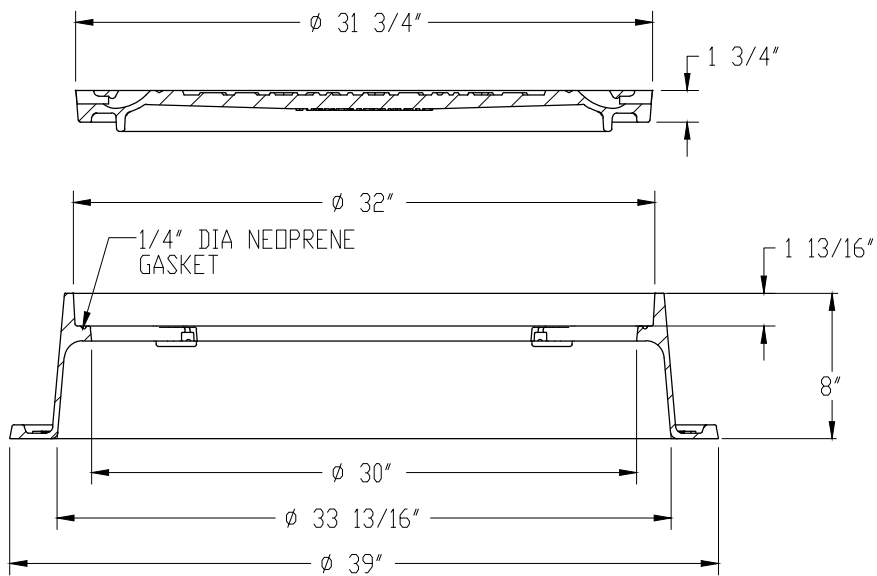
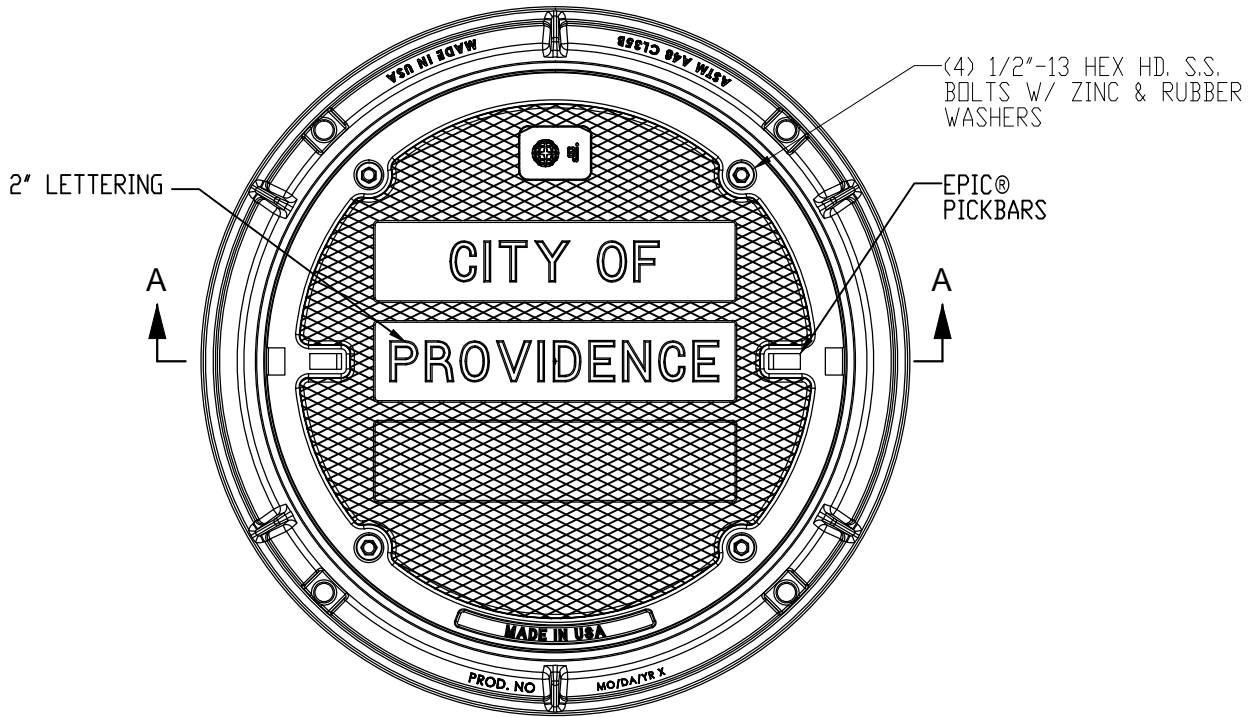
FRAME SECTION

NOTES:

1. MATERIALS SHALL CONFORM TO SECTION M.04 OF THE RHODE ISLAND STANDARD SPECIFICATIONS.
2. THE MATERIALS SHALL BE GRAY IRON AND SHALL BE ASTM A48 CERTIFIED.
3. SHALL BE EJ PRODUCT 240834B01 OR APPROVED EQUAL.

HEAVY DUTY MANHOLE FRAME AND COVER-24 INCH

6.2.1 P  
PROVIDENCE  
STANDARD



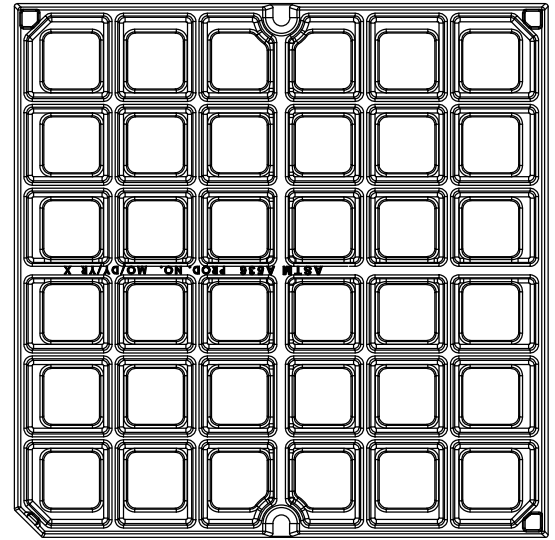
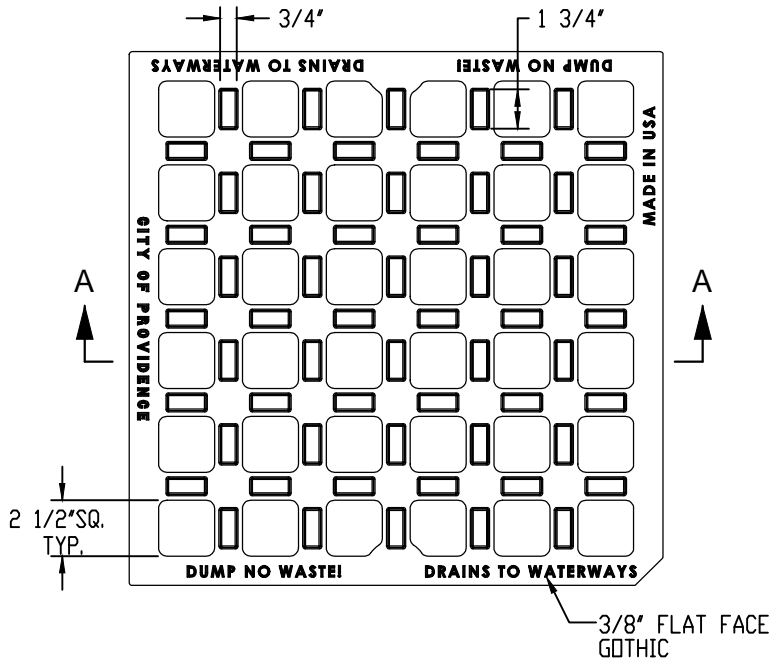
SECTION A-A

Notes:

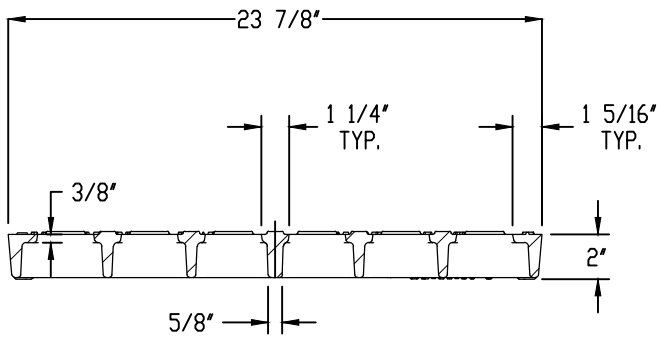
1. Materials shall conform to Section M.04 of the Rhode Island Standard Specifications.
2. All materials shall be gray iron and shall be ASTM A48 certified.
3. Shall be EJ Product 200694W03 or approved equal.

HEAVY DUTY MANHOLE FRAME AND COVER-32 INCH





BOTTOM VIEW

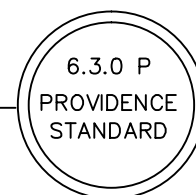


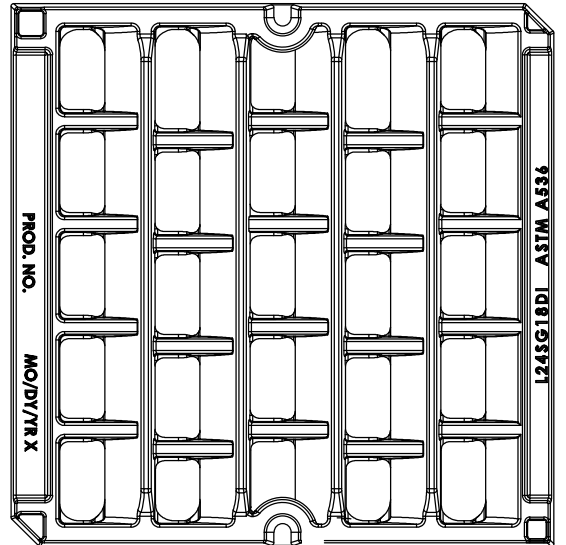
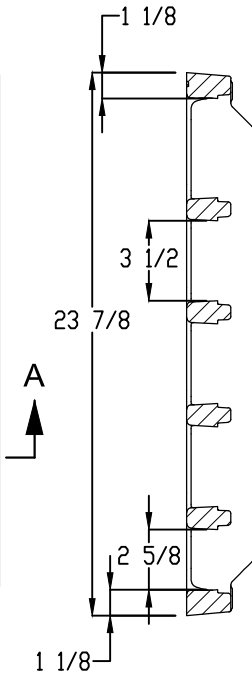
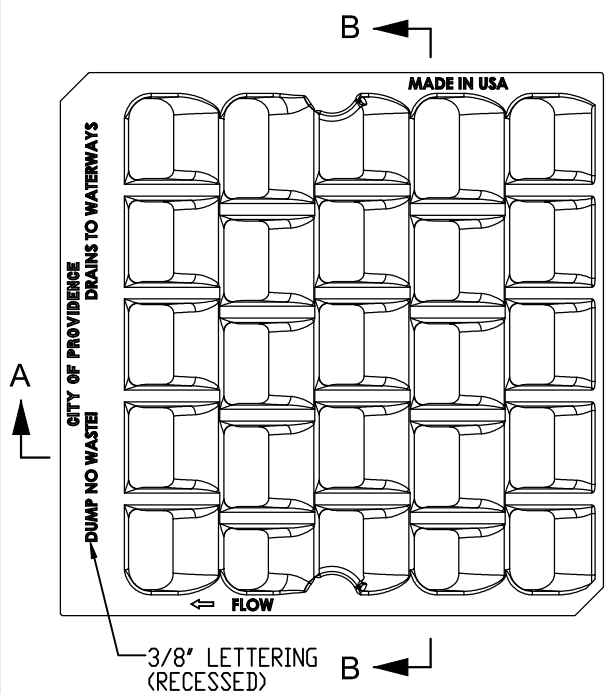
SECTION A-A

NOTES:

1. MATERIALS SHALL CONFORM TO SECTION M.04 OF THE RHODE ISLAND STANDARD SPECIFICATIONS.
2. THE GRATE MATERIAL SHALL BE DUCTILE IRON. MATERIALS SHALL BE ASTM A536 CERTIFIED.
3. OPEN AREA OF GRATE SHALL BE EQUAL TO OR GREATER THAN 217 SQUARE INCHES.
4. SHALL BE EJ PRODUCT 5520002 OR APPROVED EQUAL.

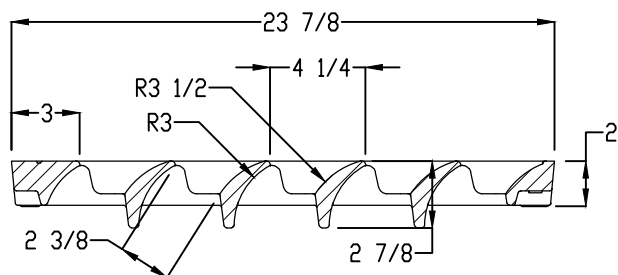
STANDARD CAPACITY GRATE





SECTION B-B

BOTTOM VIEW



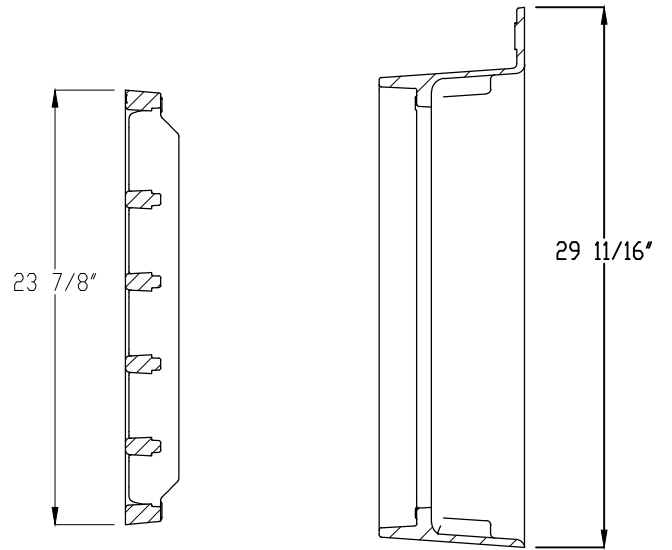
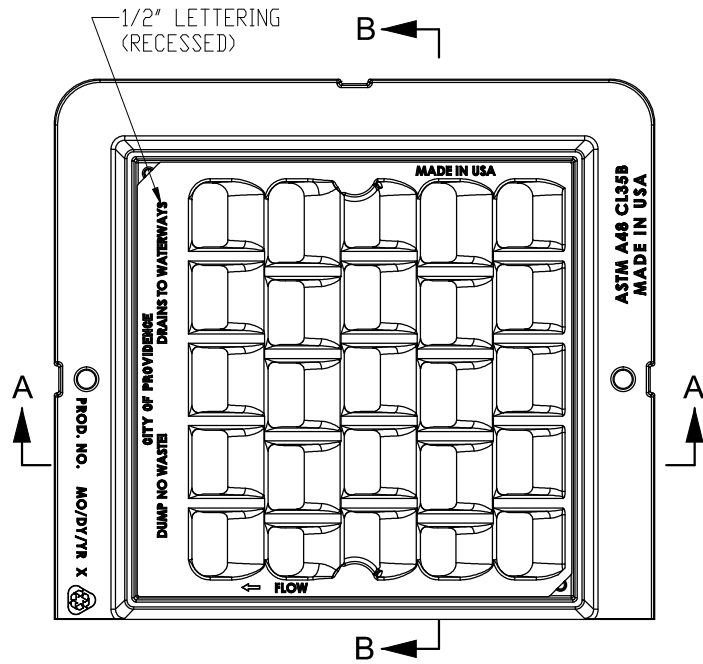
SECTION A-A

NOTES:

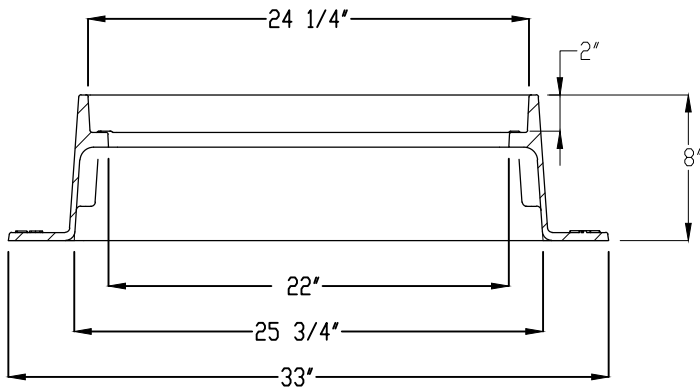
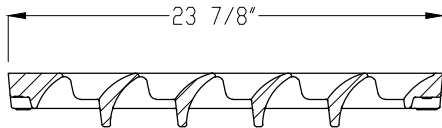
1. MATERIALS SHALL CONFORM TO SECTION M.04 OF THE RHODE ISLAND STANDARD SPECIFICATIONS.
2. THE GRATE MATERIAL SHALL BE DUCTILE IRON. MATERIALS SHALL BE ASTM A536 CERTIFIED.
3. OPEN AREA OF GRATE SHALL BE EQUAL TO OR GREATER THAN 325 SQUARE INCHES.
4. SHALL BE EJ PRODUCT 5520001 OR APPROVED EQUAL.

**HIGH CAPACITY GRATE**





SECTION B-B



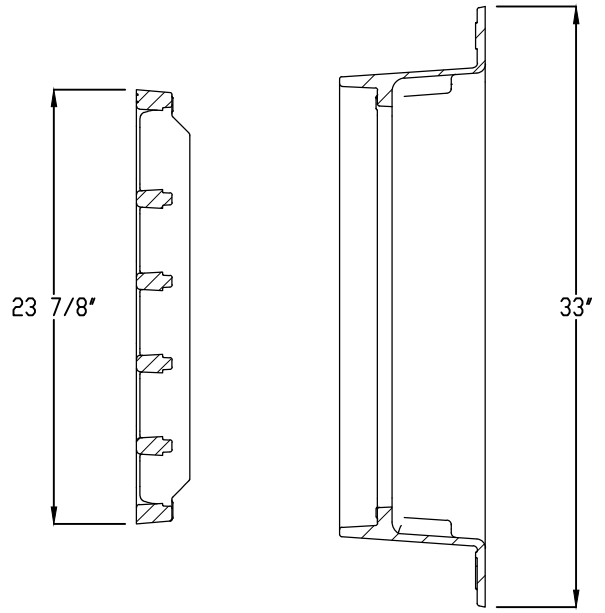
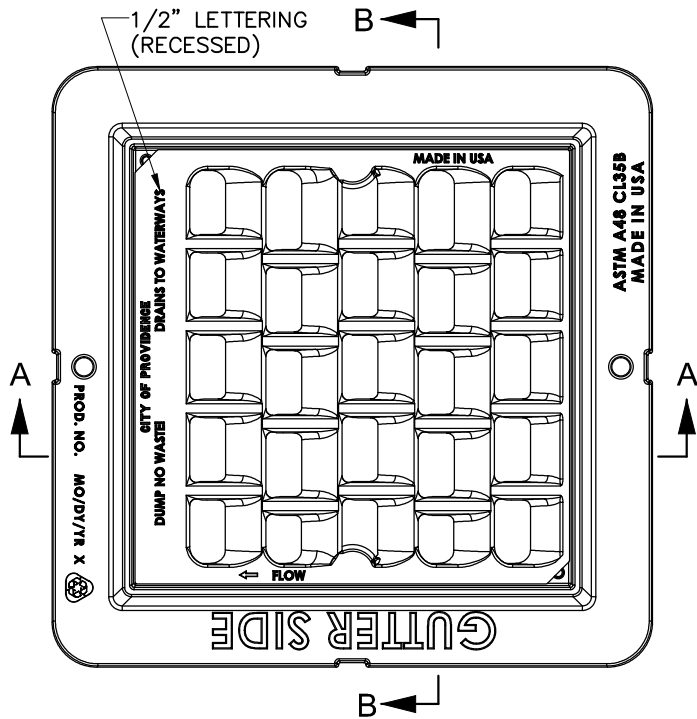
SECTION A-A

Notes:

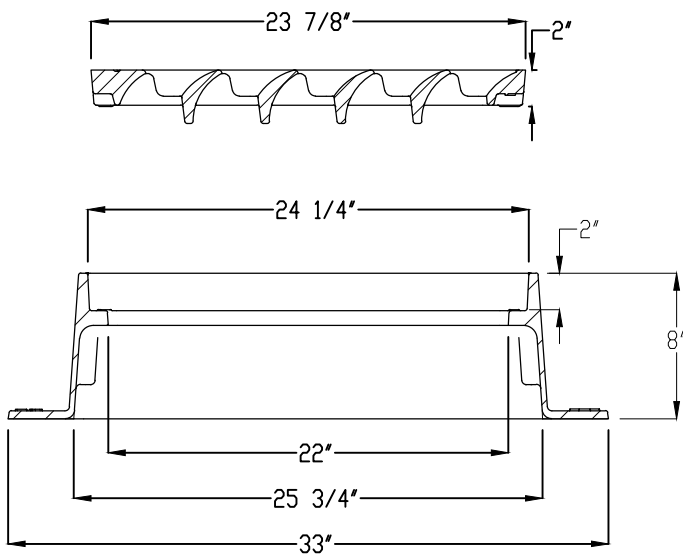
1. Materials shall conform to Section M.04 of the Rhode Island Standard Specifications.
2. The grate material shall be ductile iron and the frame material shall be grey iron. All materials shall be certified ASTM A536 and ASTM A48 respectively.
3. Open area of grate shall be equal to or greater than 325 square inches.
4. Shall be EJ Product 5520001C01 or approved equal.

## HIGH CAPACITY GRATE AND THREE FLANGE FRAME

6.3.4 P  
PROVIDENCE  
STANDARD



SECTION B-B



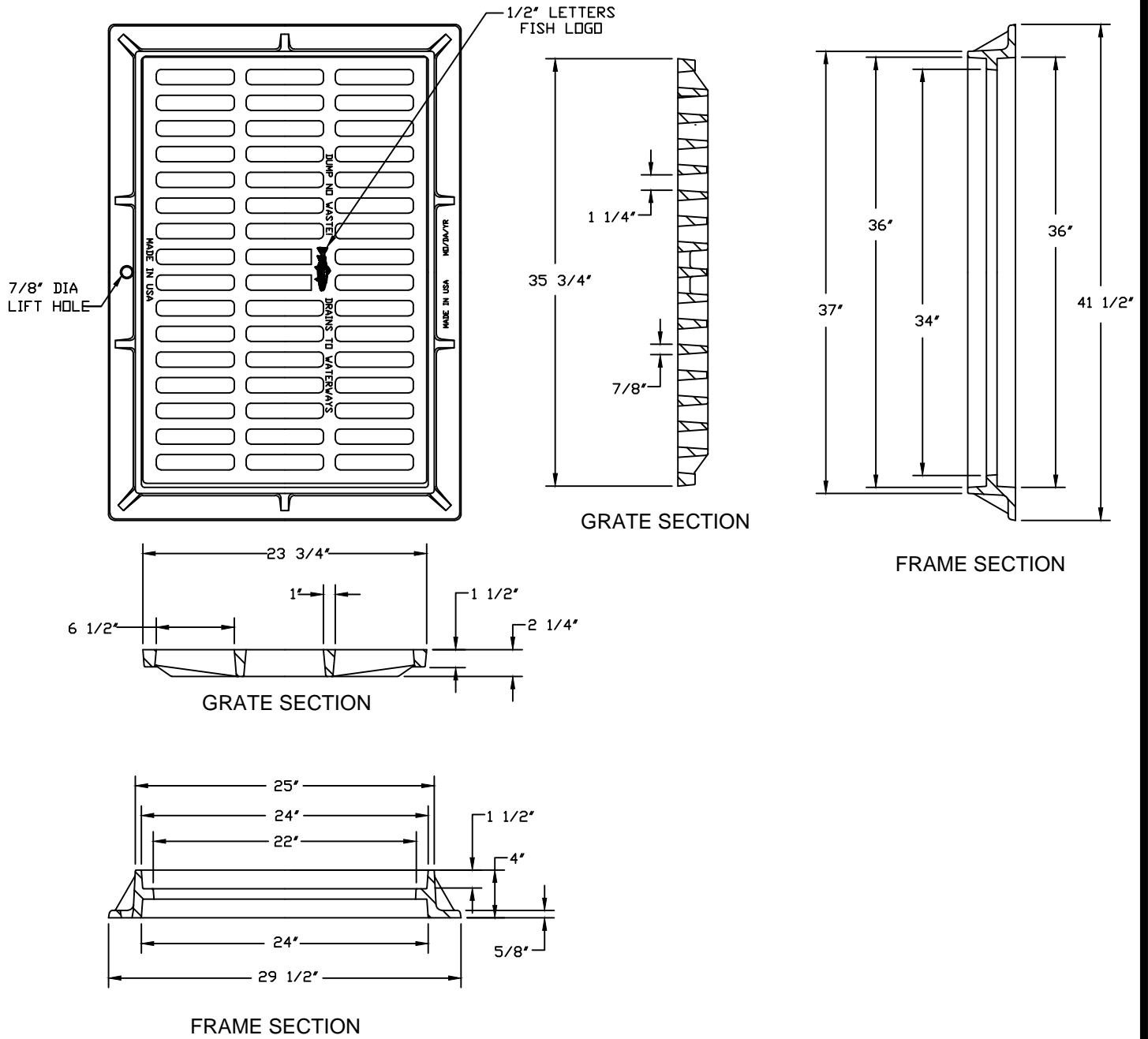
SECTION A-A

Notes:

1. Materials shall conform to Section M.04 of the Rhode Island Standard Specifications.
2. The grate material shall be ductile iron and the frame material shall be grey iron. All materials shall be certified ASTM A536 and ASTM A48 respectively.
3. Open area of grate shall be equal to or greater than 325 square inches.
4. Shall be EJ Product 5520001C02 or approved equal.

## HIGH CAPACITY GRATE AND FOUR FLANGE FRAME

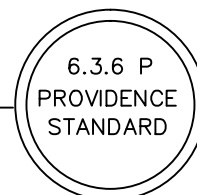


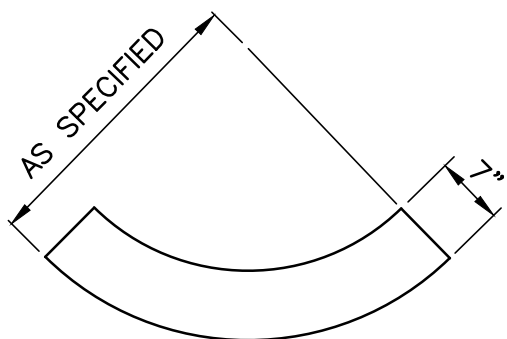
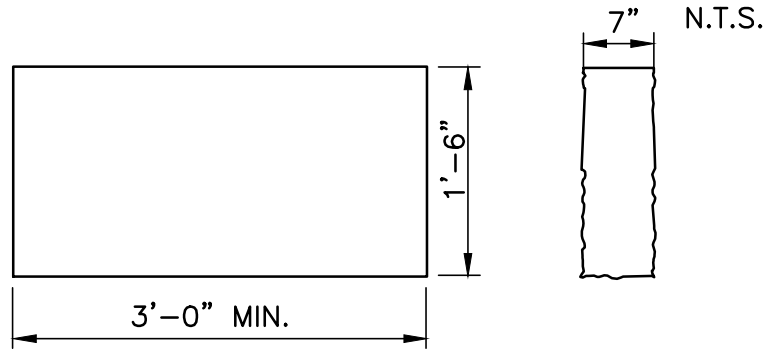


Notes:

1. Materials shall conform to Section M.04 of the Rhode Island Standard Specifications.
2. All materials shall be gray iron and shall be ASTM A48 certified.
3. Open area of grate shall be equal to or greater than 390 square inches.
4. Shall be EJ Product 45660040 or approved equal.

**RECTANGULAR FRAME AND GRATE**



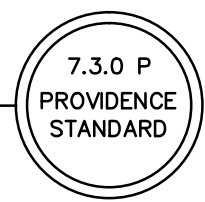


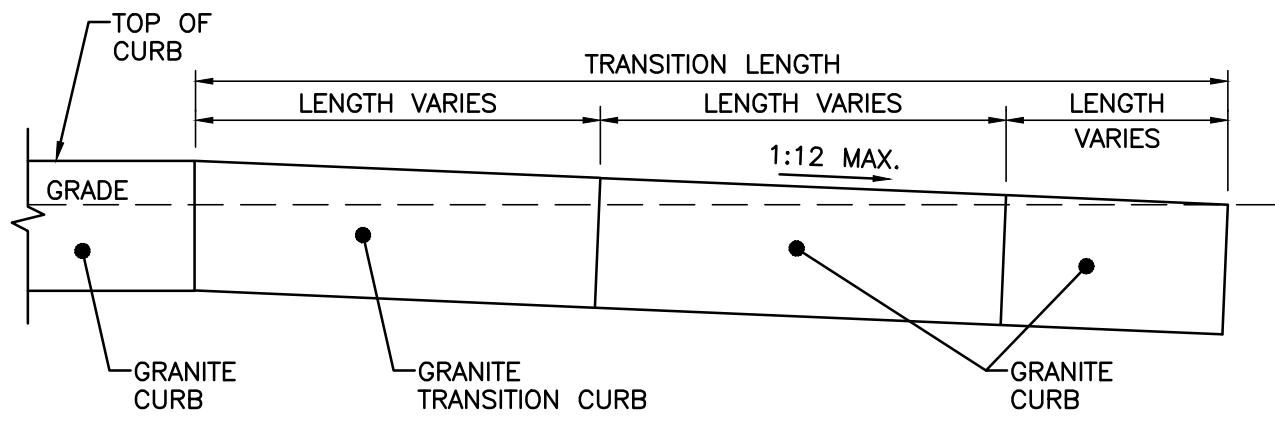
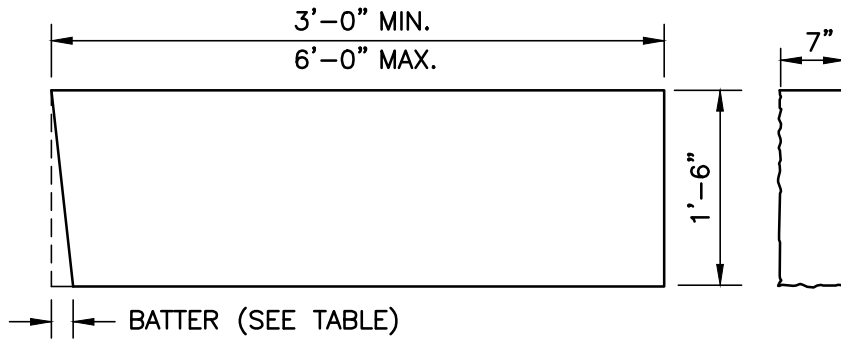
**NOTE:**

1. SHALL BE IN ACCORDANCE WITH SECTION 906 OF THE RI STANDARD SPECIFICATIONS.
2. TOP SURFACE TO BE DRESSED BY SAW. REMAINDER TO BE SAWCUT OR QUARRY SPLIT.
3. MINIMUM LENGTH OR CIRCULAR PIECES TO BE 3'-0".
4. CIRCULAR CURB IS REQUIRED ON CURVES AS INDICATED.  
STRAIGHT CURB TO BE USED ON CURVES OF MORE THAN 160'-0" RADIUS.
5. CURB TO BE SET PER PROVIDENCE CURB SETTING DETAIL.

**GRANITE CURB - STRAIGHT AND CIRCULAR**

N.T.S.





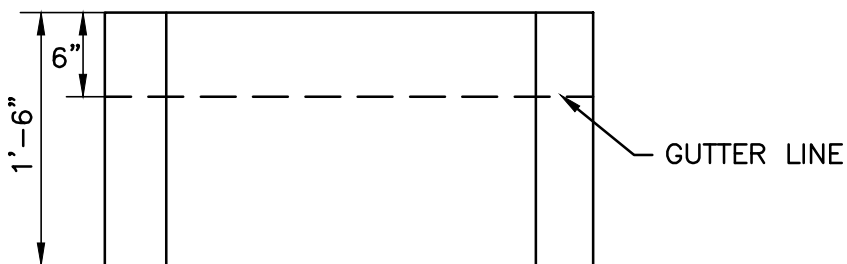
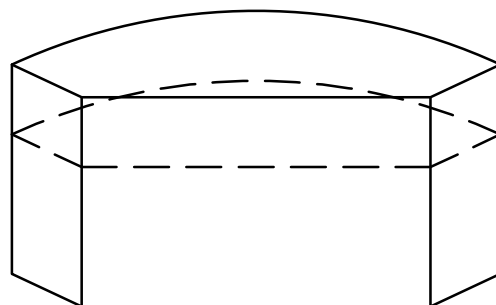
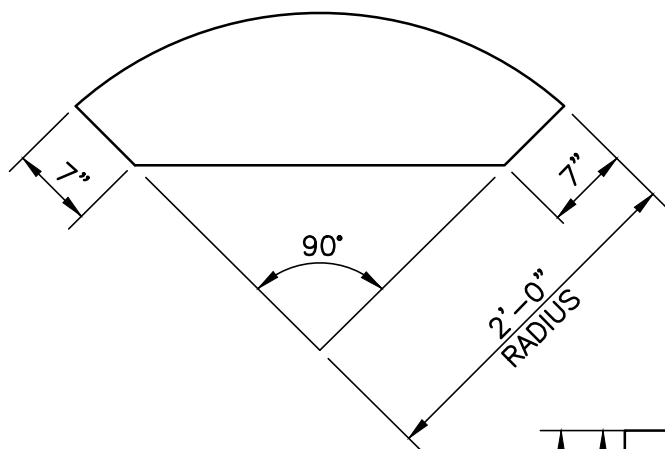
TRANSITION LENGTH (FT.)	BATTER (IN.)
6.0	1.5
7.0	1.3
8.0	1.2
9.5	1.0
11.5	0.8
15.0	0.6
18.0	0.5

**NOTES:**

1. SHALL BE IN ACCORDANCE WITH SECTION 906 OF THE R.I. STANDARD SPECIFICATIONS.
2. THE CONTRACTOR MAY CUT EXISTING CURB SECTIONS AS REQUIRED TO MEET THIS DETAIL AND THE R.I. STANDARD SPECIFICATIONS, WHERE OLD CURBING IS BEING REUSED.
3. MINIMUM LENGTH OF STRAIGHT OR CIRCULAR CURB FILLER PIECES TO BE 3'-0" (GREATER LENGTHS PREFERRED).
4. TOP SURFACE TO BE DRESSED BY SAW. REMAINDER TO BE SAWCUT OR QUARRY SPLIT.
5. CURB TO BE SET PER PROVIDENCE CURB SETTING DETAIL.

**GRANITE WHEELCHAIR RAMP  
TRANSITION CURB**

N.T.S.

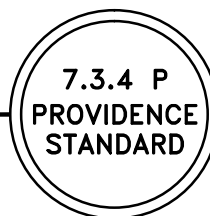


**NOTES:**

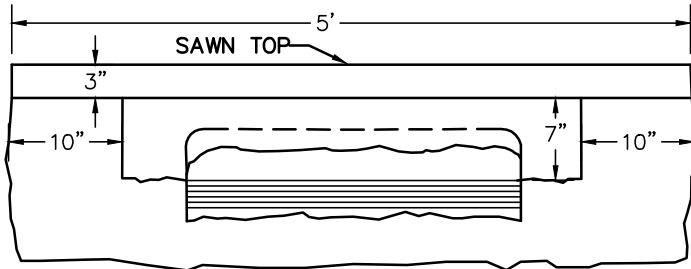
1. SHALL BE IN ACCORDANCE WITH SECTION 906 OF THE R.I. STANDARD SPECIFICATIONS.
2. TOP SURFACE TO BE DRESSED BY SAW. REMAINDER TO BE QUARRY SPLIT OR SAWCUT.

**GRANITE 2'-0" RADIUS CURB RETURN**

N.T.S.

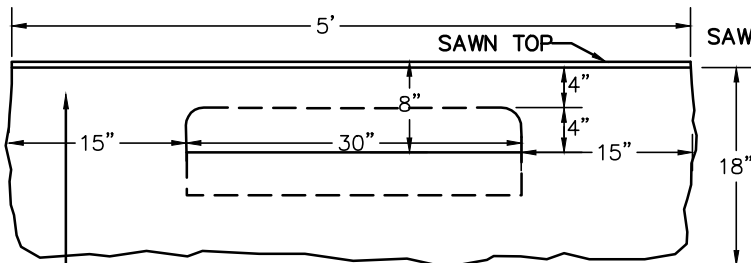


BACK SURFACE SHALL HAVE NO PROJECTIONS FOR A DISTANCE OF 3" DOWN FROM THE TOP UNLESS OTHERWISE SAWN

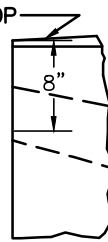


REAR VIEW  
N.T.S.

QUARRY FACED WITH NO PORTIONS MORE THAN 1" ABOVE OR MORE THAN 1" BELOW A GENERAL PLANE, UNLESS OTHERWISE SAWN



FRONT VIEW  
N.T.S.



END OF ALL STONES SHALL BE SQUARE AND SO FINISHED THAT WHEN STONES ARE SET NO SPACE MORE THAN 1/4" SHALL SHOW IN THE JOINT FOR THE FULL WIDTH OF THE TOP OR DOWN THE FACE FOR 9," UNLESS OTHERWISE SAWN

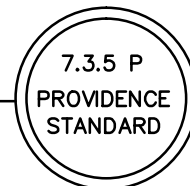
LOWER HALF OF ENDS MAY BE QUARRY FACED WITH NO PROJECTIONS BEYOND DEPRESSED PORTION AND NO DEPRESSION MORE THAN 1" DEEP

FRONT FACE SHALL BE AT RIGHT ANGLES TO THE PLANE OF THE TOP AND SHALL BE SMOOTH QUARRY SPLIT, UNLESS OTHERWISE SAWN

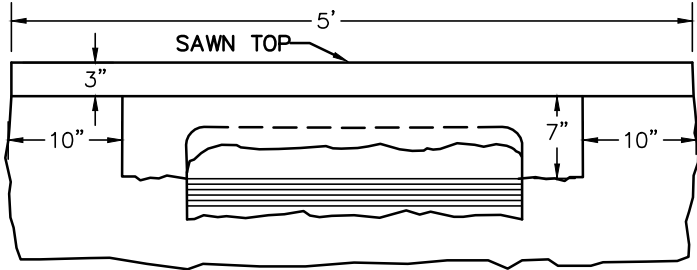
FRONT FACE SHALL HAVE NO PROJECTION GREATER THAN 3/4" OR DEPRESSION GREATER THAN 1/2" FOR A DISTANCE DOWN FROM THE TOP OF 9", UNLESS OTHERWISE SAWN

GRANITE INLET STONE - 30" OPENING

N.T.S.

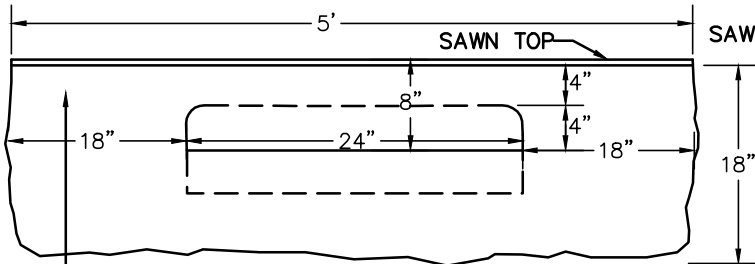


BACK SURFACE SHALL HAVE NO PROJECTIONS FOR A DISTANCE OF 3" DOWN FROM THE TOP UNLESS OTHERWISE SAWN



REAR VIEW  
N.T.S.

QUARRY FACED WITH NO PORTIONS MORE THAN 1" ABOVE OR MORE THAN 1" BELOW A GENERAL PLANE, UNLESS OTHERWISE SAWN



FRONT VIEW  
N.T.S.



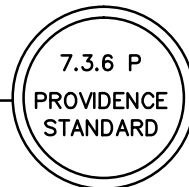
END OF ALL STONES SHALL BE SQUARE AND SO FINISHED THAT WHEN STONES ARE SET NO SPACE MORE THAN 1/4" SHALL SHOW IN THE JOINT FOR THE FULL WIDTH OF THE TOP OR DOWN THE FACE FOR 9," UNLESS OTHERWISE SAWN

LOWER HALF OF ENDS MAY BE QUARRY FACED WITH NO PROJECTIONS BEYOND DEPRESSED PORTION AND NO DEPRESSION MORE THAN 1" DEEP

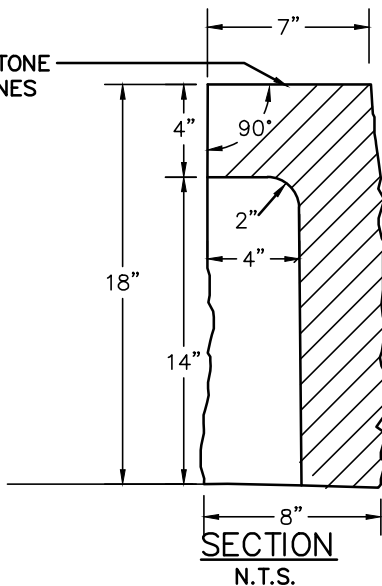
FRONT FACE SHALL BE AT RIGHT ANGLES TO THE PLANE OF THE TOP AND SHALL BE SMOOTH QUARRY SPLIT, UNLESS OTHERWISE SAWN

FRONT FACE SHALL HAVE NO PROJECTION GREATER THAN 3/4" OR DEPRESSION GREATER THAN 1/2" FOR A DISTANCE DOWN FROM THE TOP OF 9", UNLESS OTHERWISE SAWN

GRANITE INLET STONE - 24" OPENING  
N.T.S.

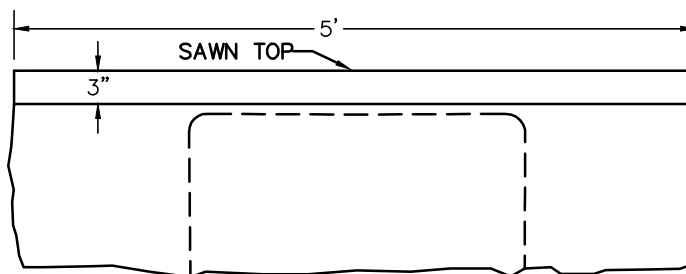


TOP SURFACE OF APRON OR REGULAR INLET STONE SHALL BE SAWN TO APPROXIMATELY TRUE PLANES TOP SURFACE SHALL HAVE NO PROJECTION OR DEPRESSION GRATER THAN 1/8".

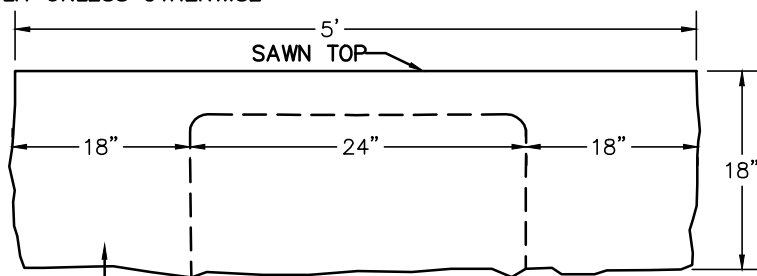


END OF ALL STONES SHALL BE SQUARE AND SO FINISHED THAT WHEN STONES ARE SET NO SPACE MORE THAN 1/4" SHALL SHOW IN THE JOINT FOR THE FULL WIDTH OF THE TOP OR DOWN THE FACE FOR 9"

QUARRY FACED WITH NO PORTIONS MORE THAN 1" ABOVE OR MORE THAN 1" BELOW A GENERAL PLANE, UNLESS OTHERWISE SAWN



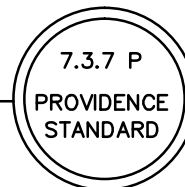
FRONT FACE SHALL BE AT RIGHT ANGLES TO THE PLANE OF THE TOP AND SHALL BE SMOOTH QUARRYSPLIT UNLESS OTHERWISE SAWN



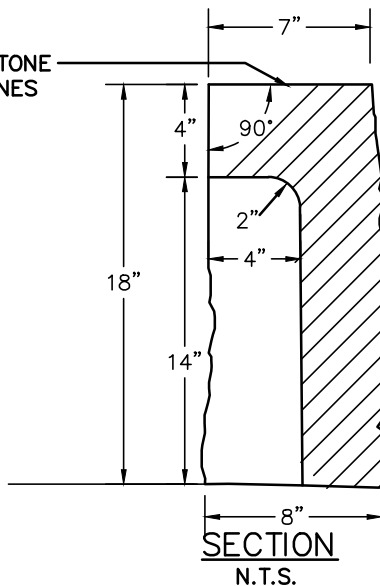
LOWER HALF OF ENDS MAY BE QUARRY FACED WITH NO PROJECTIONS BEYOND DEPRESSED PORTION AND NO DEPRESSION MORE THAN 1" DEEP

FRONT FACE SHALL HAVE NO PROJECTION GREATER THAN 3/4" OR DEPRESSION GREATER THAN 1/2" FOR A DISTANCE DOWN FROM THE TOP OF 9" UNLESS OTHERWISE SAWN

**GRANITE APRON STONE - 24" OPENING**  
N.T.S.

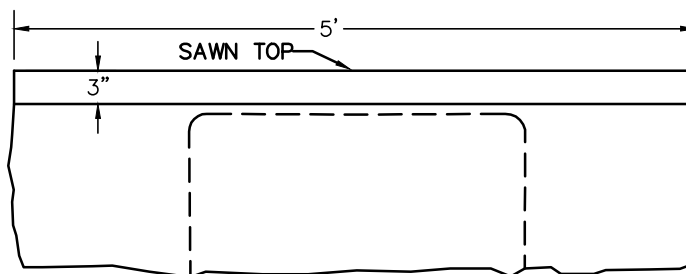


TOP SURFACE OF APRON OR REGULAR INLET STONE SHALL BE SAWN TO APPROXIMATELY TRUE PLANES TOP SURFACE SHALL HAVE NO PROJECTION OR DEPRESSION GRATER THAN 1/8".



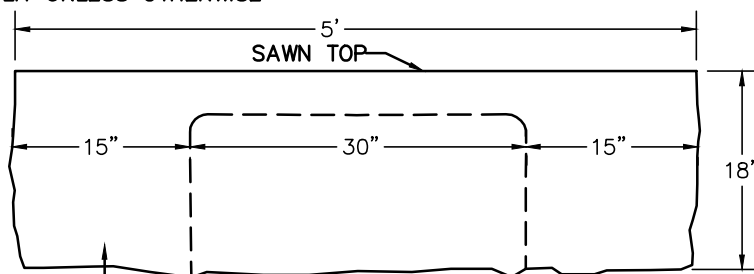
END OF ALL STONES SHALL BE SQUARE AND SO FINISHED THAT WHEN STONES ARE SET NO SPACE MORE THAN 1/4" SHALL SHOW IN THE JOINT FOR THE FULL WIDTH OF THE TOP OR DOWN THE FACE FOR 9"

QUARRY FACED WITH NO PORTIONS MORE THAN 1" ABOVE OR MORE THAN 1" BELOW A GENERAL PLANE, UNLESS OTHERWISE SAWN



FRONT FACE SHALL BE AT RIGHT ANGLES TO THE PLANE OF THE TOP AND SHALL BE SMOOTH QUARRYSPLIT UNLESS OTHERWISE SAWN

REAR VIEW  
N.T.S.

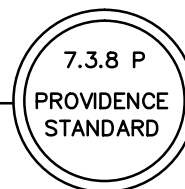


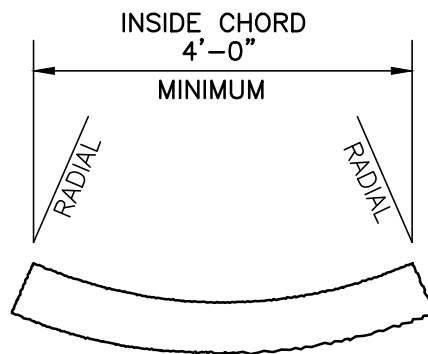
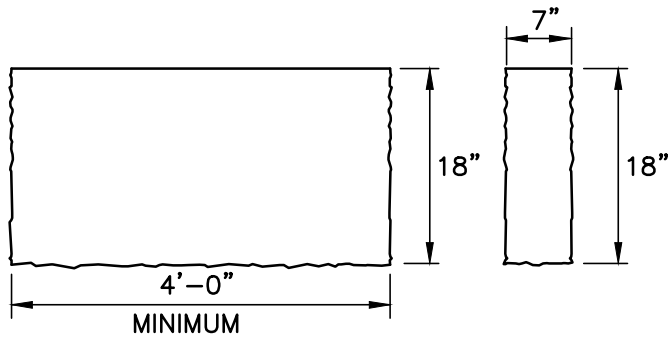
FRONT VIEW  
N.T.S.

LOWER HALF OF ENDS MAY BE QUARRY FACED WITH NO PROJECTIONS BEYOND DEPRESSED PORTION AND NO DEPRESSION MORE THAN 1" DEEP

FRONT FACE SHALL HAVE NO PROJECTION GREATER THAN 3/4" OR DEPRESSION GREATER THAN 1/2" FOR A DISTANCE DOWN FROM THE TOP OF 9" UNLESS OTHERWISE SAWN

GRANITE APRON STONE - 30" OPENING  
N.T.S.



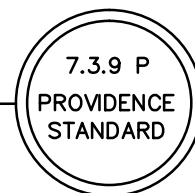


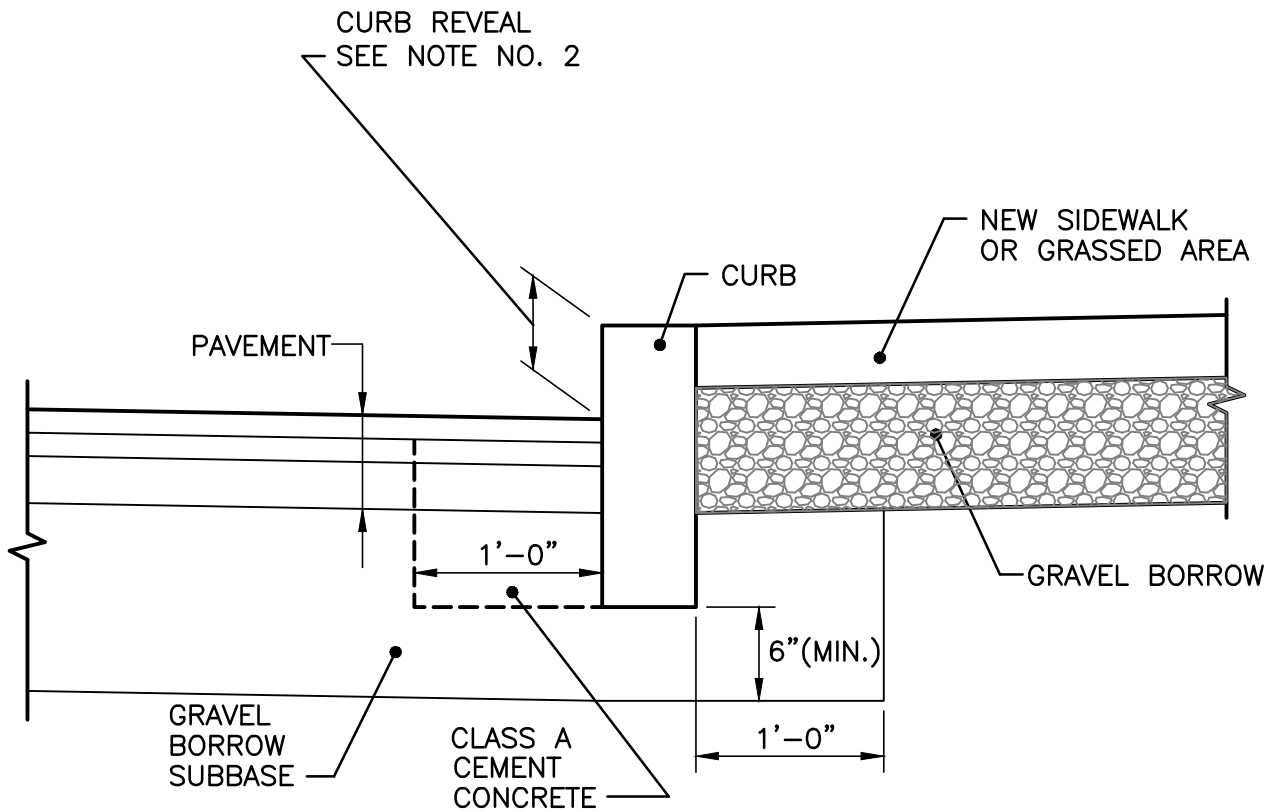
**NOTES:**

1. SHALL BE IN ACCORDANCE WITH SECTION 906 OF THE R.I. STANDARD SPECIFICATIONS.
2. TOP SURFACE TO BE DRESSED BY SAW TO PROVIDE NO-SLIP SURFACE; REMAINDER MAY BE QUARRY SPLIT.
3. MINIMUM LENGTH OF STRAIGHT OR CIRCULAR CURB FILLER PIECES TO BE 4'-0"
4. CIRCULAR RAMP STONE IS REQUIRED ON CURVES AS INDICATED.  
STRAIGHT RAMP STONE TO BE USED ON CURVES OF MORE THAN 160'-0" RADIUS.
5. RAMP STONE SHALL BE SET IN ACCORDANCE WITH PROVIDENCE CURB SETTING STANDARD.

**GRANITE RAMP STONE**

N.T.S.





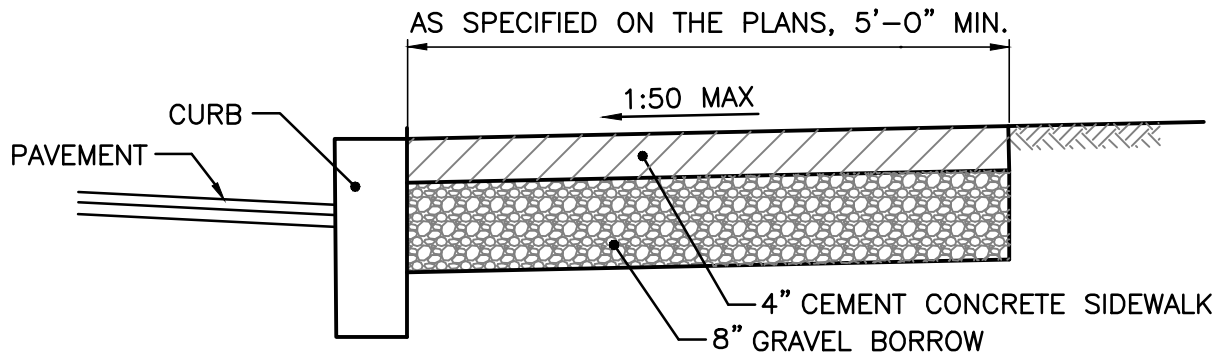
**NOTES:**

1. SHALL BE IN ACCORDANCE WITH SECTION 906 OF THE R.I. STANDARD SPECIFICATIONS.
2. NEW CURBING CONSTRUCTION SHALL BE SET AT A 6 INCH REVEAL OR AS INDICATED ON PLANS OR DIRECTED BY PROVIDENCE DPW. NEW CURBING INSTALLED ADJACENT TO EXISTING CURBING SHALL MATCH THE EXISTING REVEAL OR A MINIMUM OF 4 INCHES, WHICHEVER IS GREATER. IF ADJACENT EXISTING REVEAL IS LESS THAN 4 INCHES, THE FIRST SECTION OF NEW CURB SHALL TRANSITION TO 4" REVEAL,

**CURB SETTING DETAIL**

N.T.S.





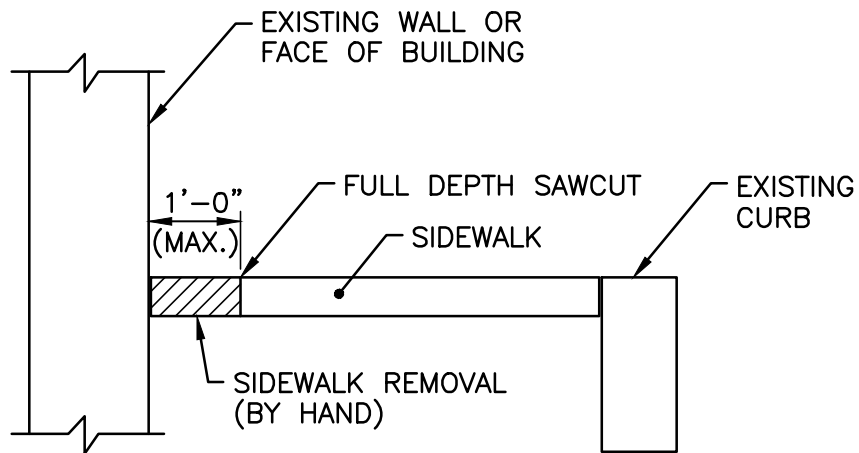
NOTES

1. SHALL BE IN ACCORDANCE WITH SECTION 905 OF THE R.I. STANDARD SPECIFICATIONS.
2. SEE CURB SETTING DETAIL WHERE APPLICABLE.
3. RUNNING SLOPE OF SIDEWALK SHALL NOT EXCEED 8.3% (1:12). TYPICALLY, RUNNING SLOPE SHALL MATCH ROAD SLOPE.
4. CROSS SLOPE OF SIDEWALK SHALL NOT EXCEED 2% (1:50).
5. SIDEWALK MAY BE SUBJECT TO GRASS STRIP INSTALLATION. CONSULT WITH DPW ENGINEERING
6. GRAVEL BORROW BASE SHALL COMPACT TO ACHIEVE SOIL DENSITY VALUES OF 95% MODIFIED PROCTOR DENSITY (AASHTO T180).
7. SIDEWALK REPAIRS TWENTY FEET OR LONGER ARE SUBJECT TO REQUIREMENTS HEREIN. SIDEWALK REPAIRS SHORTER THAN TWENTY FEET SHALL MAKE EVERY EFFORT TO MEET REQUIRED SLOPES.
8. CONTROLL JOINTS SHALL BE INSTALLED EVERY 5 FEET IN EACH DIRECTION.
9. EXPANSION JOINTS SHALL BE INSTALLED EVERY 20 FEET IN EACH DIRECTION AT FOUNDATIONS AND WALLS AND IN A SQUARE PATTERN AROUND MANHOLE COVERS, HYDRANTS, SIGN POSTS AND UTILITY POLES. THE EXPANSION JOINT SHALL BE THE FULL DEPTH OF THE SIDEWALK AND FILLED WITH AN APPROVED TYPE OF PREMOLDED EXPANSION JOINT FILLER.

**CEMENT CONCRETE SIDEWALK**

N.T.S.



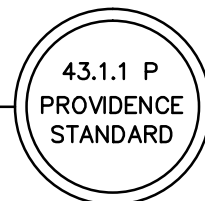


**NOTES:**

1. IN AREAS WHERE SIDEWALKS ARE TO BE REMOVED IN FRONT OF EXISTING WALLS OR BUILDINGS, THE CONTRACTOR SHALL SAWCUT ONE(1) FOOT (MAXIMUM) IN FRONT OF THE WALL/BUILDING AND REMOVE THE SIDEWALK STRUCTURE BY HAND.
2. IN THE EVENT THAT THE EXISTING SIDEWALK IS A STRUCTURAL ELEMENT OF THE WALL/BUILDING, THE EXISTING SIDEWALK IN FRONT OF THESE STRUCTURES WILL REMAIN IN-PLACE AND A NEW SIDEWALK CONSTRUCTED TO MATCH THE EXISTING SECTION.
3. ANY DAMAGE TO THE WALL OR BUILDING BY THE CONTRACTOR SHALL BE REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE CITY.

**SIDEWALK REMOVAL DETAIL**

N.T.S.





Issue Date: 1/6/17

Revised: 6/14/19

## **PROVIDENCE WHEELCHAIR RAMP STANDARDS**

The City of Providence has adopted the Rhode Island Department of Transportation's (RIDOT) wheelchair ramp standards:

43.3.0 – Wheelchair Ramp

43.3.1 – Wheelchair Ramp for Limited Right-of-Way Areas

43.3.2 – Ramp-Landing for Narrow Sidewalk

48.1.0 – Detectable Warning Panel Placement

### Please note:

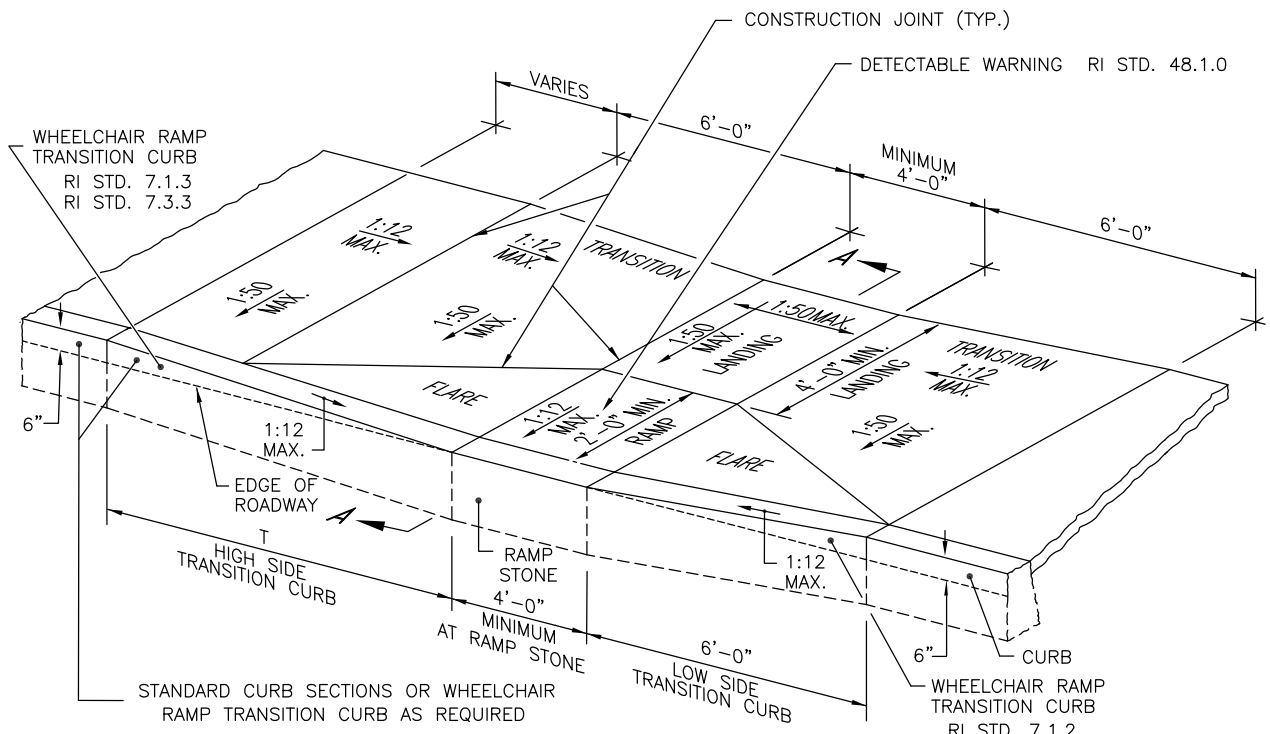
1. All sidewalks and wheelchair ramps shall be Portland cement concrete.
2. All references to curbing in the RIDOT standard details shall be Providence Standard 7" wide granite curb

## **DEPARTMENT OF PUBLIC WORKS**

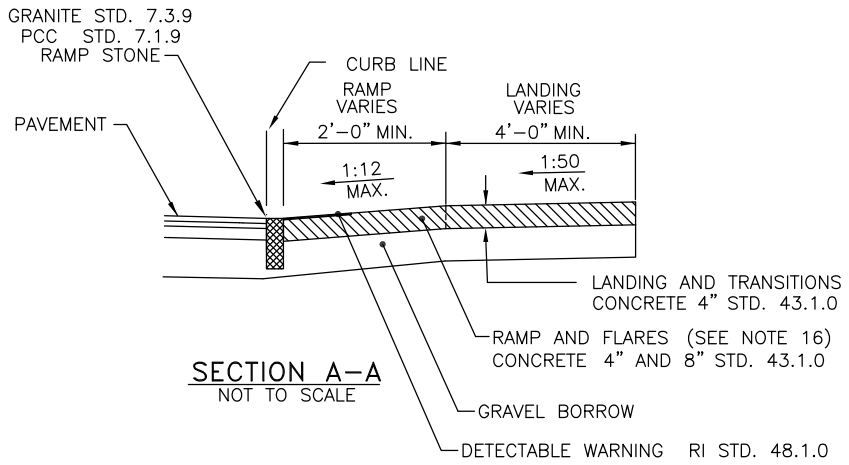
700 Allens Avenue Providence, Rhode Island 02905

401 467 7950 ph | 401 941 2567 fax

[www.providenceri.com](http://www.providenceri.com)



**ISOMETRIC VIEW**  
NOT TO SCALE



**SECTION A-A**  
NOT TO SCALE

ROADWAY PROFILE GRADE	T (FT.)
0.00	6.0
0.01	7.0
0.02	8.0
0.03	9.5
0.04	11.5
0.05	15.0

**NOTES:**

- SHALL BE IN ACCORDANCE WITH SECTION 905 OF THE RI STANDARD SPECIFICATIONS.
- WHEN ANY OBSTRUCTION LOCATED IN THE SIDEWALK FALLS WITHIN A CROSSWALK AREA, THE WHEELCHAIR RAMP SHALL BE PLACED SUCH THAT THE OBSTRUCTION FALLS OUTSIDE OF THE RAMP.
- AT NO TIME IS ANY PART OF THE WHEELCHAIR RAMP TO BE LOCATED OUTSIDE OF THE CROSSWALK, AND IT IS TO BE CENTERED WHENEVER POSSIBLE.
- DRAINAGE FACILITIES ARE TO BE LOCATED UP-GRADE OF ALL WHEELCHAIR RAMPS.
- LOCATION OF WHEELCHAIR RAMPS IS AS SHOWN ON CONTRACT DRAWINGS.
- IN NO INSTANCE SHALL THE SIDEWALK CROSS SLOPE EXCEED 1:50 EXCEPT WITHIN THE RAMP AREA.
- AN UNOBSTRUCTED PATH OF TRAVEL WITH A MINIMUM WIDTH OF 4'-0" SHALL BE MAINTAINED.
- THE WHEELCHAIR RAMP SLOPE AND SIDE SLOPES (TRANSITIONS), MUST NOT BE STEEPER THAN 1:12. HOWEVER, THESE SLOPES MAY BE FLATTER THAN 1:12 WHEN WARRANTED BY SURROUNDING CONDITIONS.
- WHERE THE ROAD PROFILE EXCEEDS 5% THE HIGH SIDE TRANSITION LENGTH (T) SHALL BE EIGHTEEN FEET (18'-0").
- IN NO CASE, WHERE A STOP LINE IS WARRANTED, SHALL A RAMP BE PLACED BEHIND THE STOP LINE.
- THE ENTRANCE OF THE WHEELCHAIR RAMP SHALL BE FLUSH WITH THE ROADWAY.
- THE WHEELCHAIR RAMP SHALL BE CENTERED RADIALLY, OPPOSITE THE RADIUS POINT WHEN POSSIBLE.
- MINIMUM LENGTH OF STRAIGHT OR CIRCULAR FILLER PIECES TO BE 3'-0" (GREATER LENGTHS PREFERRED).
- ALL REQUIRED CUTTING OF CURB PIECES TO BE PAID FOR UNDER COST OF CURB.
- DETECTABLE WARNINGS TO BE PAID FOR UNDER SECTION 942 OF THE RI STANDARD SPECIFICATIONS
- 8" CONCRETE DEPTH FOR RADIUS WHEELCHAIR RAMPS ONLY. USE 4" DEPTH FOR TANGENT (MID-BLOCK) LOCATIONS.

**RHODE ISLAND DEPARTMENT OF TRANSPORTATION**

**WHEELCHAIR RAMP**

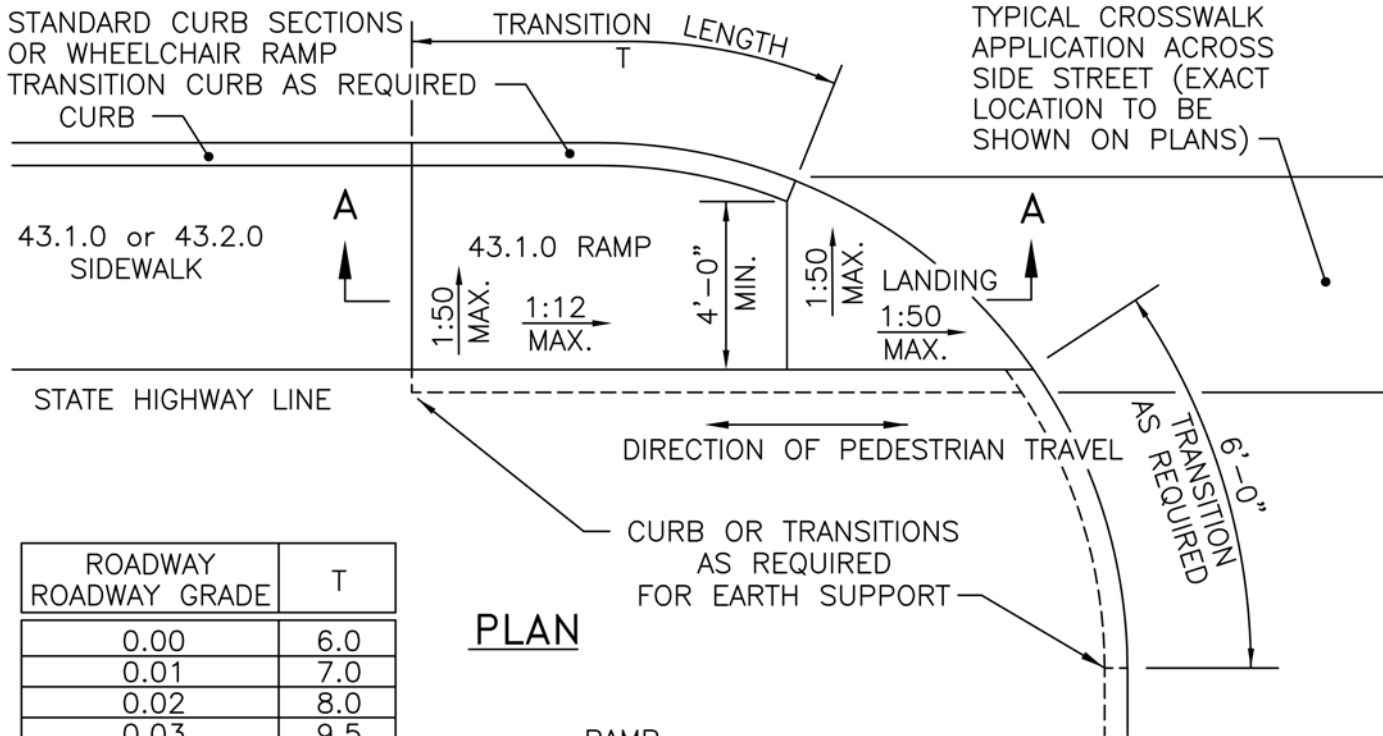
REVISIONS		
NO.	BY	DATE
1	MLP	Oct 2005
2	MLP	Jun 2008
3	MLP	Sep 2012

*James A. Capaldi*  
CHIEF ENGINEER  
TRANSPORTATION

*Edward Parker*  
CHIEF DESIGN ENGINEER  
TRANSPORTATION

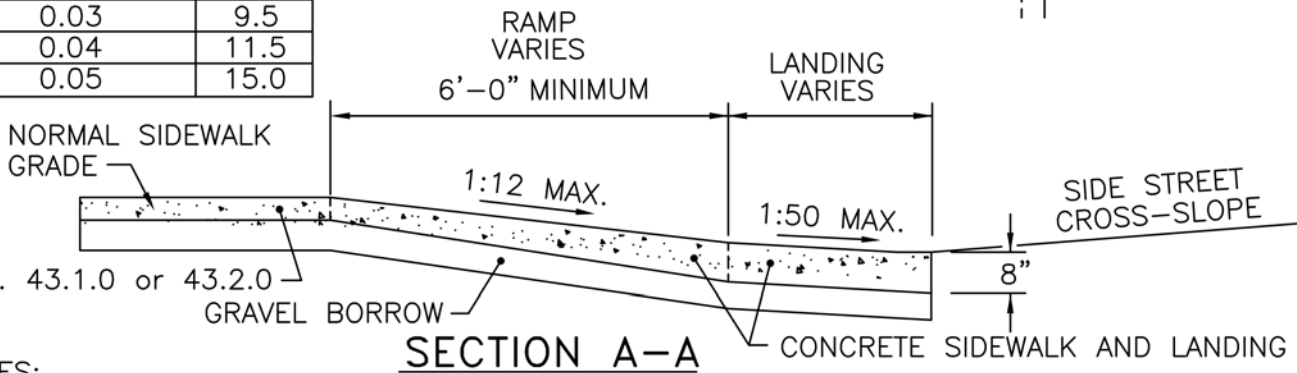
JUNE 15, 1998  
ISSUE DATE





ROADWAY ROADWAY GRADE	T
0.00	6.0
0.01	7.0
0.02	8.0
0.03	9.5
0.04	11.5
0.05	15.0

**PLAN**



**SECTION A-A**

**NOTES:**

1. SHALL BE IN ACCORDANCE WITH SECTION 905 OF THE R.I. STANDARD SPECIFICATIONS.
2. THIS DETAIL IS TO BE USED ONLY WHEN STATE RIGHT-OF-WAY IS LIMITED TO BACK OF SIDEWALK, AND SIDEWALK IS NARROW WITH NO PEDESTRIAN TRAFFIC FROM SIDE STREET.
3. WHEN ANY OBSTRUCTION LOCATED IN THE SIDEWALK FALLS WITHIN A CROSSWALK AREA, IF POSSIBLE, THE OBSTRUCTION SHALL BE PLACED SUCH THAT IT FALLS OUTSIDE OF THE RAMP.
4. AT NO TIME IS ANY PART OF THE WHEELCHAIR RAMP TO BE LOCATED OUTSIDE OF THE CROSSWALK, AND IT IS TO BE CENTERED WHENEVER POSSIBLE.
5. DRAINAGE FACILITIES ARE TO BE LOCATED UP-GRADE OF ALL WHEELCHAIR RAMPS.
6. LOCATION OF WHEELCHAIR RAMPS IS AS SHOWN ON CONTRACT DRAWINGS.
7. ALL REQUIRED CUTTING OF CURB PIECES TO BE PAID FOR UNDER COST OF CURB.
8. WHERE THE ROAD PROFILE EXCEEDS 5% THE TRANSITION LENGTH (T) SHALL BE EIGHTEEN FEET (18'-0").
9. THE ENTRANCE OF THE WHEELCHAIR RAMP SHALL BE FLUSH WITH THE ROADWAY.
10. MINIMUM LENGTH OF STRAIGHT OR CIRCULAR FILLER PIECES TO BE 3'-0" (GREATER LENGTHS PREFERRED).
11. AN UNOBSTRUCTED PATH OF TRAVEL WITH A MINIMUM WIDTH OF 4'-0" SHALL BE MAINTAINED.

**RHODE ISLAND DEPARTMENT OF TRANSPORTATION**

**WHEELCHAIR RAMP FOR LIMITED RIGHT-OF-WAY AREAS**

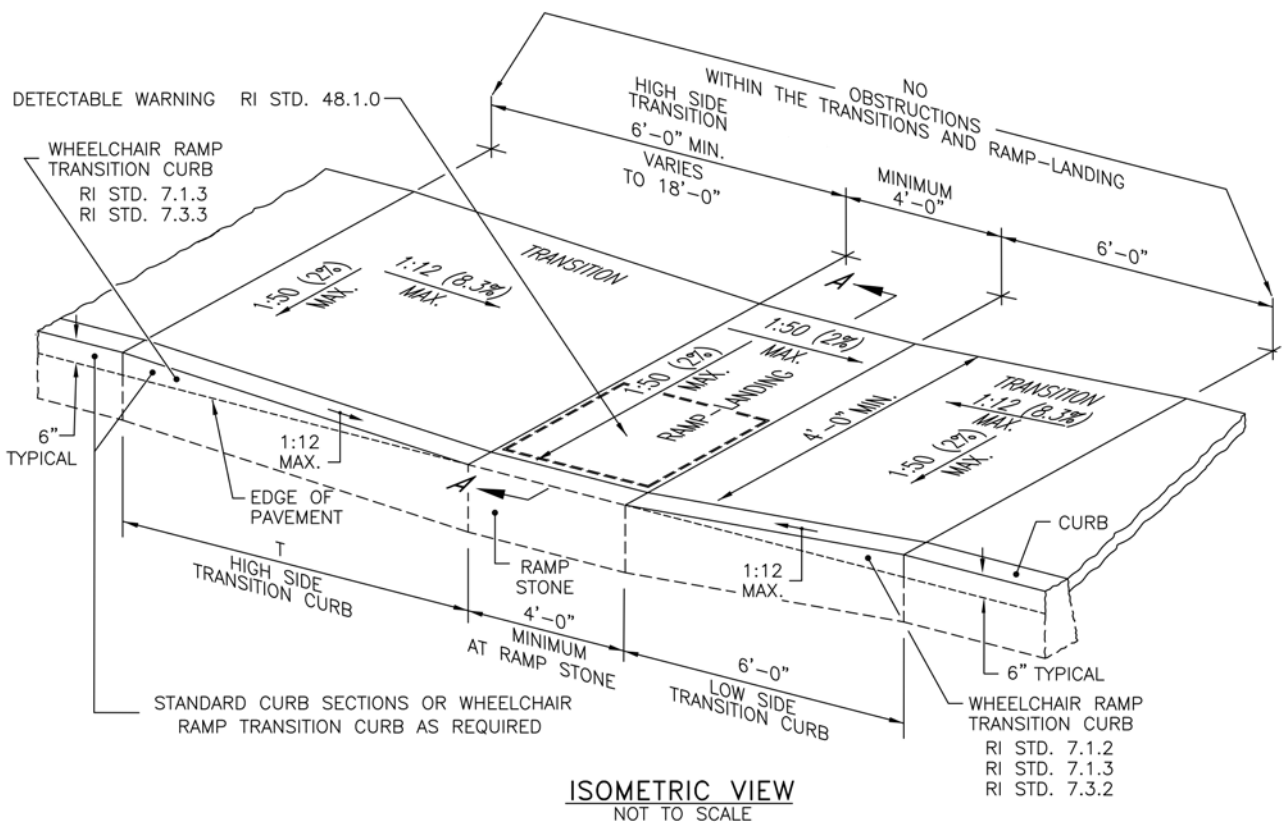
REVISIONS		
NO.	BY	DATE
1	MLP	Dec 2005
2	MLP	Sep 2012

*James A. Casabadi*  
CHIEF ENGINEER  
TRANSPORTATION

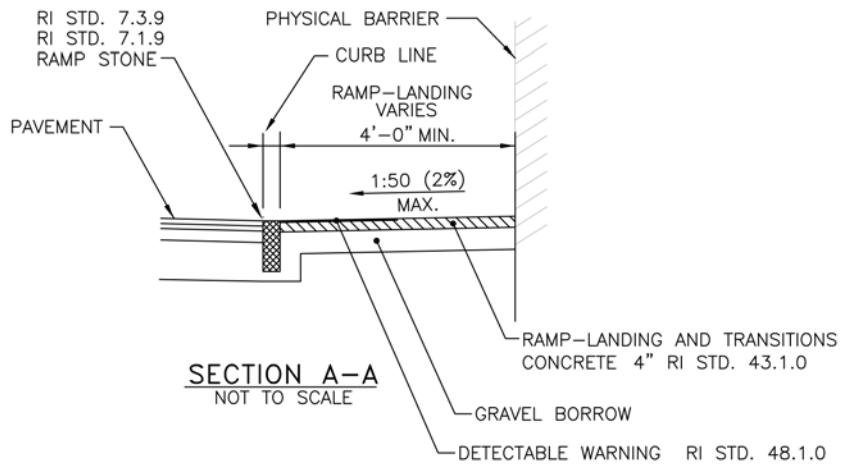
*Edmund J. Parker Jr.*  
CHIEF DESIGN ENGINEER  
TRANSPORTATION

JUNE 15, 1998  
ISSUE DATE





**ISOMETRIC VIEW**  
NOT TO SCALE



ROADWAY PROFILE GRADE	T (FT.)
0.00	6.0
0.01	7.0
0.02	8.0
0.03	9.5
0.04	11.5
0.05	15.0
> 0.05	18.0

**NOTES:**

1. THIS DETAIL MAY BE USED WHEN A PHYSICAL BARRIER IS PRESENT AND THERE IS INSUFFICIENT ROOM TO PROPERLY CONSTRUCT AN ADA ACCESSIBLE RAMP AND LANDING; A TECHNICAL INFEASIBILITY FINDING IS REQUIRED.
2. SHALL BE IN ACCORDANCE WITH SECTION 905 OF THE RI STANDARD SPECIFICATIONS.
3. THE RAMP-LANDING AND TRANSITIONS SHALL BE FREE OF OBSTRUCTIONS.
4. LOCATION OF THE RAMP-LANDING IS AS SHOWN ON CONTRACT DRAWINGS.
5. AN UNOBSTRUCTED PEDESTRIAN ACCESS ROUTE (PATH OF TRAVEL) WITH A MINIMUM WIDTH OF 4'-0" SHALL BE MAINTAINED.
6. THE ENTRANCE OF THE RAMP-LANDING SHALL BE FLUSH WITH THE PAVEMENT.
7. MINIMUM LENGTH OF STRAIGHT OR CIRCULAR FILLER PIECES TO BE 3'-0" (GREATER LENGTHS PREFERRED).
8. ALL REQUIRED CUTTING OF CURB PIECES TO BE PAID FOR UNDER COST OF CURB.
9. DETECTABLE WARNINGS TO BE PAID FOR UNDER SECTION 942 OF THE RI STANDARD SPECIFICATIONS

**RHODE ISLAND DEPARTMENT OF TRANSPORTATION**

**RAMP-LANDING FOR NARROW SIDEWALK**

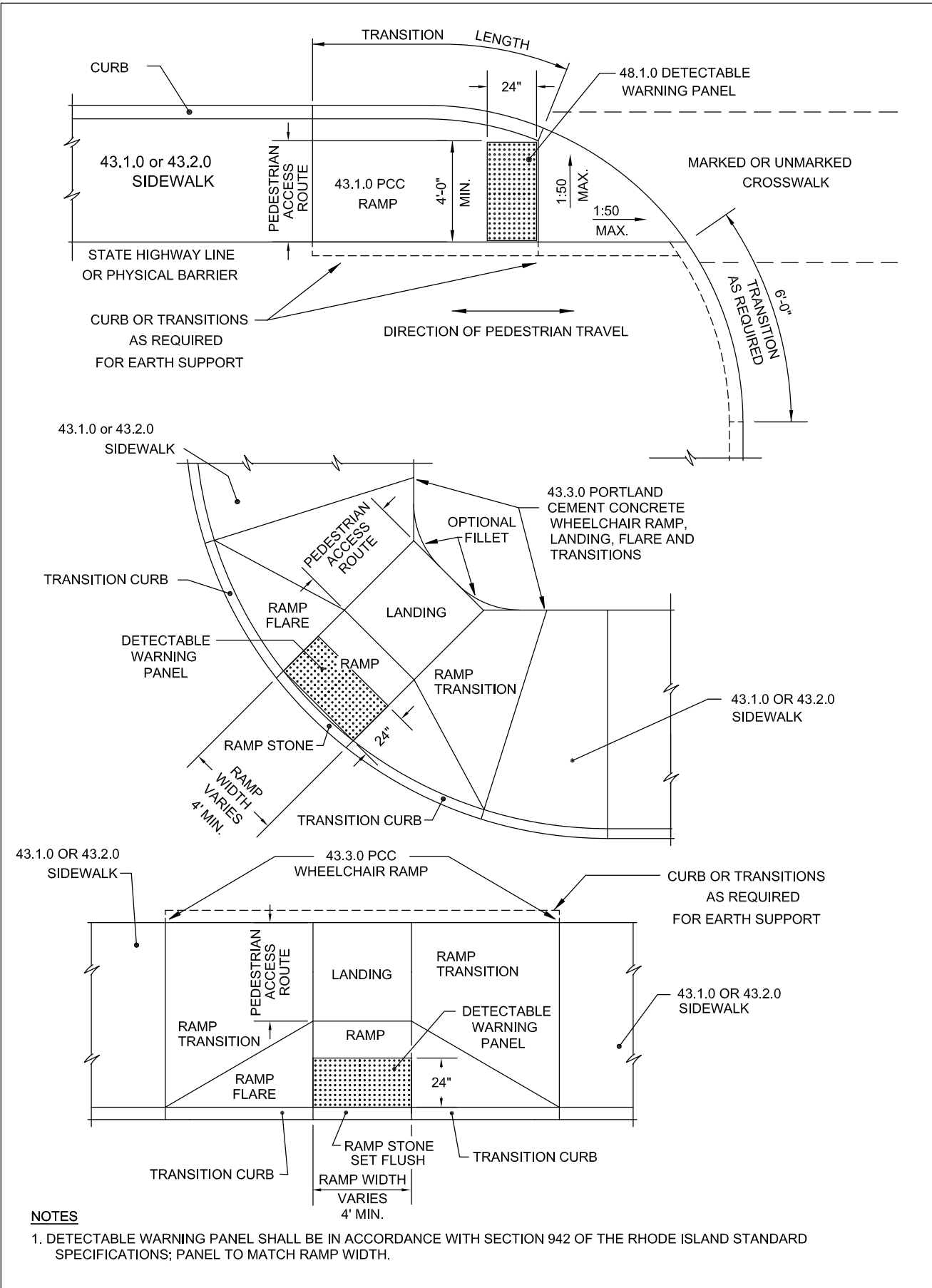
REVISIONS		
NO.	BY	DATE

*Kay Folan*  
CHIEF ENGINEER  
TRANSPORTATION

*Nit D'Ala*  
CHIEF DESIGN ENGINEER  
TRANSPORTATION

MARCH 31, 2015  
ISSUE DATE





RHODE ISLAND DEPARTMENT OF TRANSPORTATION

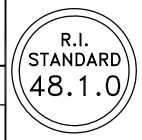
DETECTABLE WARNING PANEL PLACEMENT

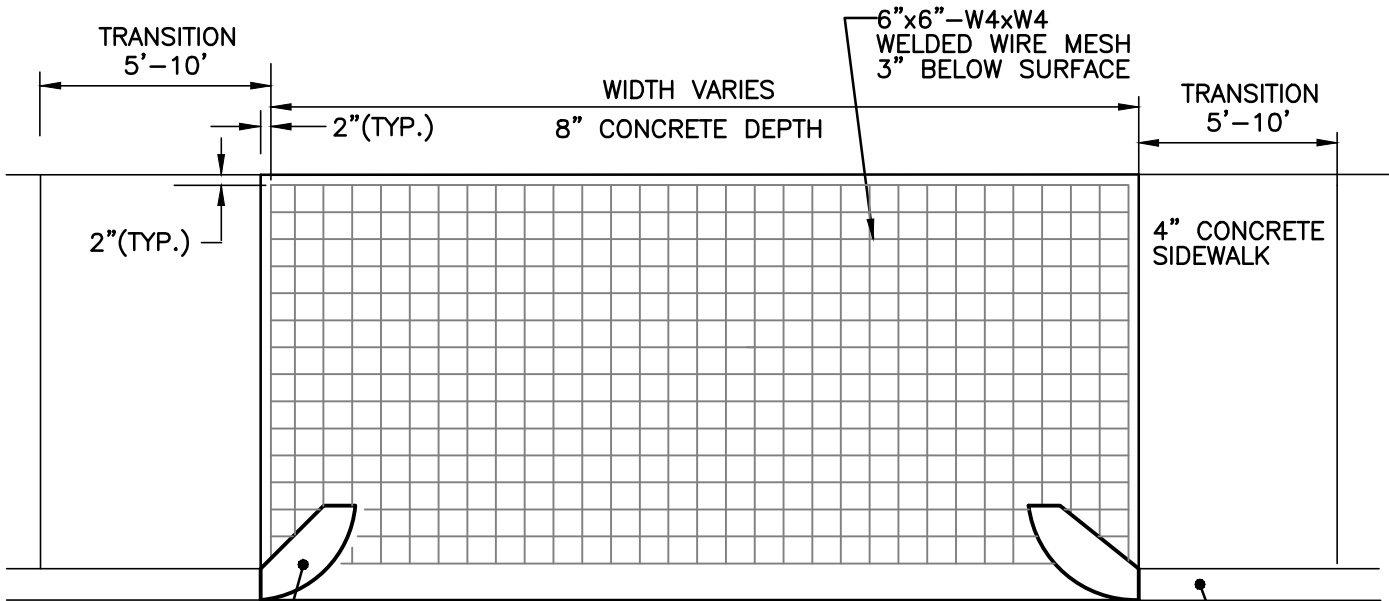
REVISIONS		
NO.	BY	DATE
1	MLP	Mar 2005
2	MLP	Sep 2012

*James M. Capelli*  
 CHIEF ENGINEER  
 TRANSPORTATION

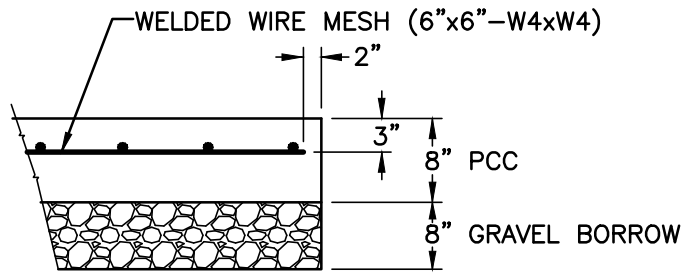
*Edward J. Parkes Jr.*  
 CHIEF DESIGN ENGINEER  
 TRANSPORTATION

JUNE 15, 1998  
 ISSUE DATE



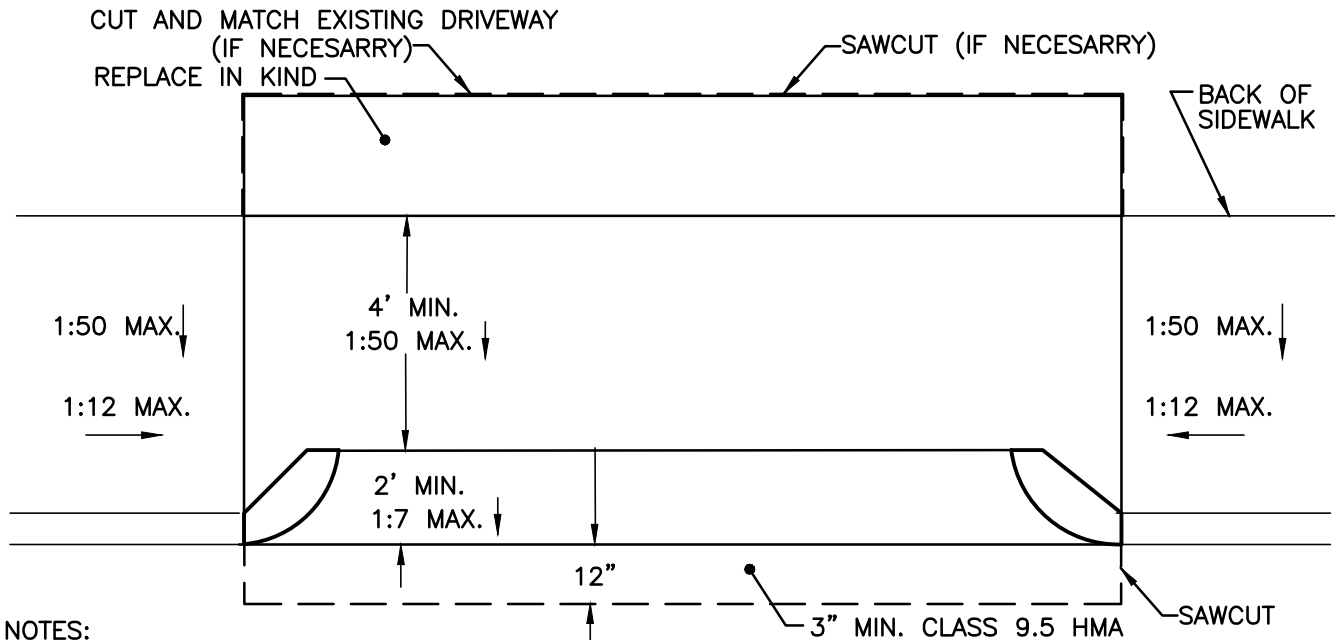


GRANITE 2' RADIUS CURB RETURN



7" GRANITE CURB

DRIVEWAY SECTION



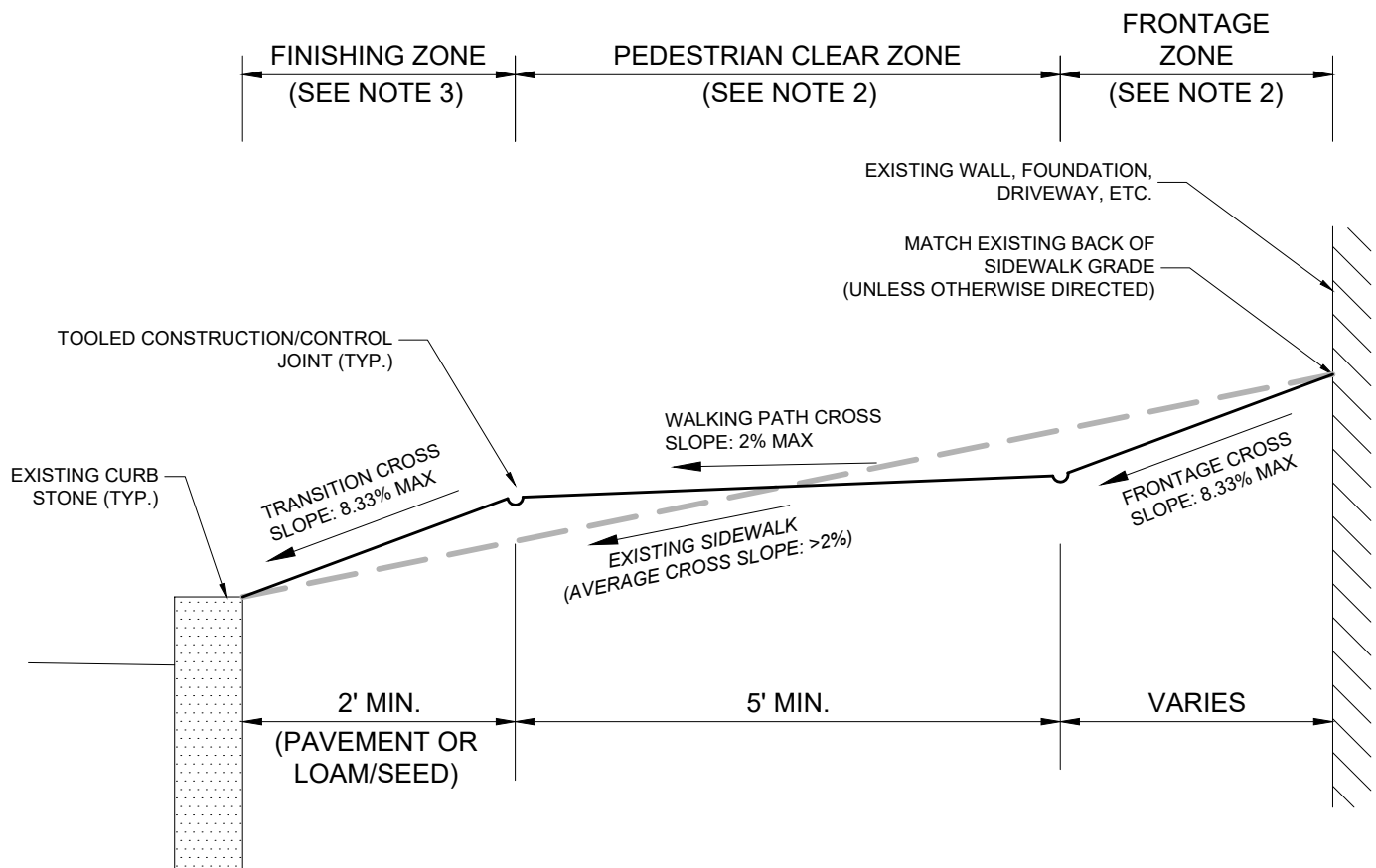
NOTES:

1. SHALL BE IN ACCORDANCE WITH SECTION 905 OF THE RIDOT STANDARD SPECIFICATIONS.
2. RUNNING SLOPE OF SIDEWALK/DRIVEWAY SHALL NOT EXCEED 8.3% (1:12)
3. 4' MINIMUM ACCESSIBLE PATH SHALL BE INSTALLED WITH CROSS SLOPE NOT EXCEEDING 2% (1:50)
4. RESIDENTIAL CURB CUTS SHALL BE NO WIDER THAN 12' FROM INSIDE OF CURB RETURNS.

**CEMENT CONCRETE DRIVEWAYS**

N.T.S.



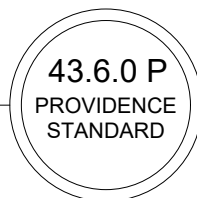


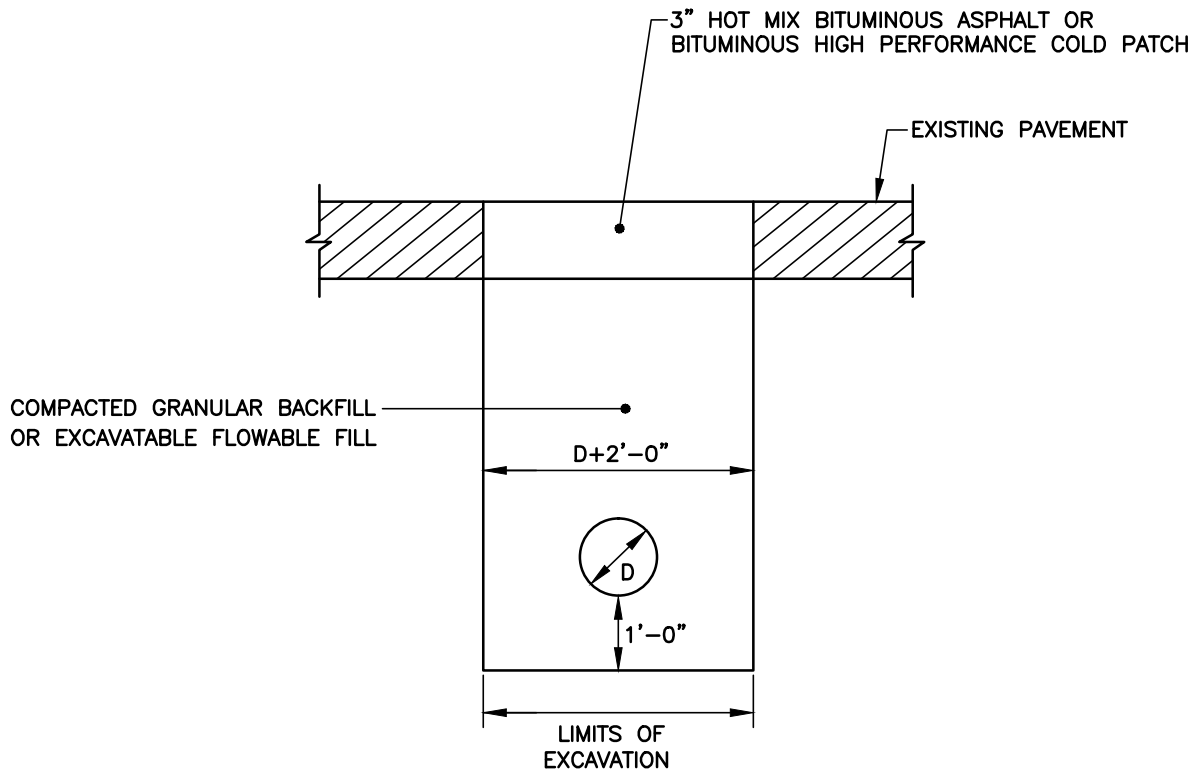
1. FOR REPAIRS TO EXISTING SIDEWALKS, A COMPOUND CROSS SLOPE SHALL BE PROVIDED TO MEET ADA REQUIREMENTS IF THE FOLLOWING CONDITIONS ARE MET:
  - A. EXISTING CROSS SLOPE: > 2% (1V:50H)
  - B. BACK OF SIDEWALK/CURB ELEVATION: ELEVATION(S) CANNOT BE ADJUSTED TO ACHIEVE A CROSS SLOPE OF <= 2%.
  - C. LENGTH OF REPAIR: > 25 FT.
  - D. SIDEWALK WIDTH: 7 FT. (MIN.)
  - E. ACCESSIBLE SIDEWALK SECTION/ROUTE WIDTH: 5 FT. (MIN.)
  - F. COMPOUND SLOPE: 8.33 % (1V:12H) (MAX.)
  - G. COMPOUND SECTION WIDTH: >= 2 FT.
2. A 5 FT WIDE, ACCESSIBLE PEDESTRIAN ROUTE SHALL BE FREE OF PROJECTIONS, BUILDING FEATURES, STREET FURNITURE OR OTHER OBSTRUCTIONS. A FRONTAGE ZONE SHALL BE PROVIDED TO ACCOMMODATE SUCH OBSTRUCTIONS. THE CROSS SLOPE OF THE FRONTAGE ZONE SHALL NOT EXCEED 8.33% (1V:12H).
3. IN CASES OF TREES, PLANTING BOXES, MAILBOXES, FIRE HYDRANTS, STREET SIGNS, STREET FURNITURE OR OTHER OBSTRUCTIONS IN THE FINISHING ZONE, THE FINISHING ZONE MAY BE WIDENED TO ACCOMMODATE SUCH OBSTRUCTIONS AND PROVIDE A 5 FT WIDE, ACCESSIBLE PEDESTRIAN ROUTE.
4. IF THE ABOVE CONDITIONS CANNOT BE MET A UNIFORM CROSS SLOPE SHALL BE PROVIDED UNLESS OTHERWISE SPECIFIED BY THE ENGINEER.
5. FINAL LAYOUT OF COMPOUND SLOPE SIDEWALKS REQUIRES THE REVIEW AND APPROVAL OF THE ENGINEER PRIOR TO INSTALLATION.

## COMPOUND SLOPE SIDEWALK SECTION

N.T.S.

ISSUE DATE: XX/XX/XXXX





**NOTES:**

1. BITUMINOUS CONCRETE SHALL ADHERE TO RIDOT STANDARD SPECIFICATIONS, SECTION 401.
2. GRANUAL BASE MATERIAL SHALL BE COMPACTED TO 95% OF MODIFIED PROCTOR DENSITY (AASHTO T180), AND SHALL ADHERE TO RIDOT STANDARD SPECIFICATIONS, SECTION 301.
3. EXCAVATABLE FLOWABLE FILL (CONTROLLED DENSITY FILL, CDF) SHALL ADHERE TO RIDOT STANDARD SPECIFICATIONS, SECTION 603.
4. ANY TEMPORARY PATCH INSTALLED PRIOR TO SEPTEMBER 1 IN ANY YEAR SHALL BE REPLACED WITH PERMANENT PATCH NO LATER THAN DECEMBER 1 OF THAT YEAR.

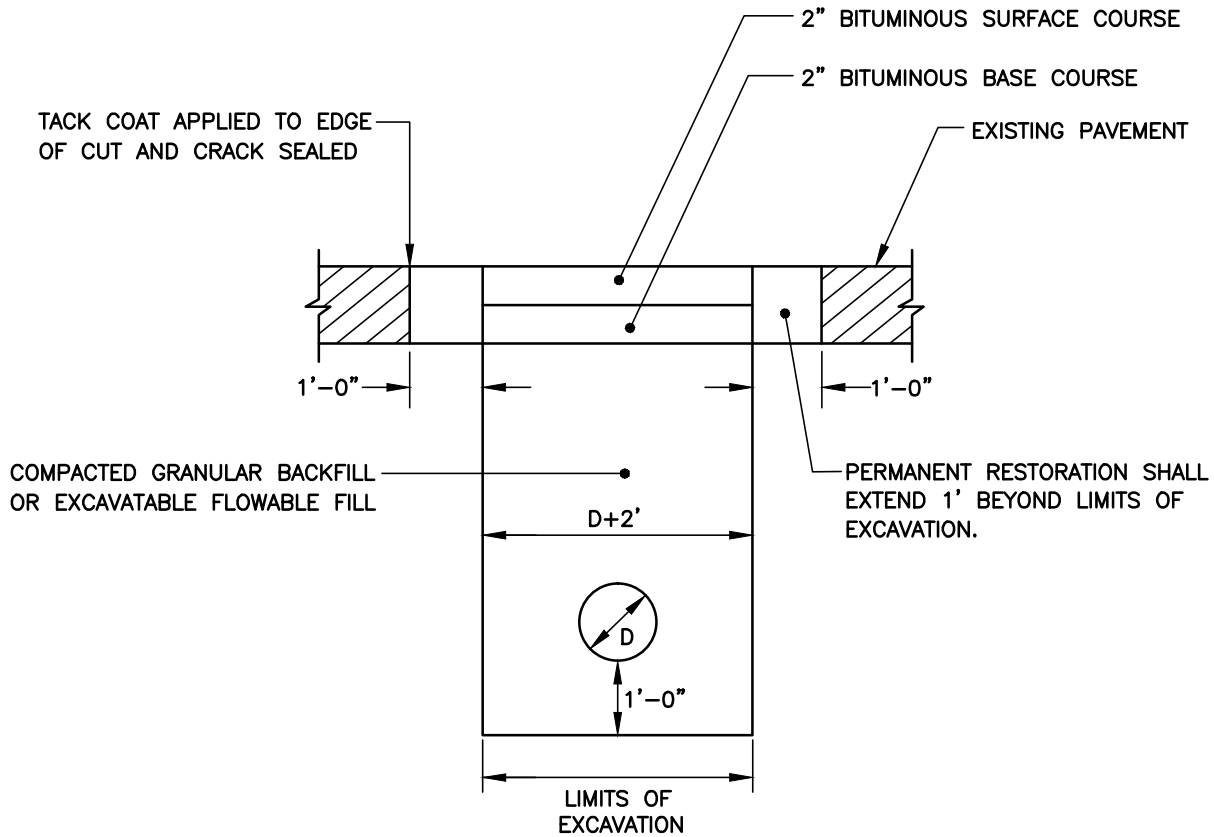
TEMPORARY PATCHES MADE BETWEEN SEPTEMBER 1 AND MARCH 30 SHALL BE MAINTAINED BY THE PERMITTEE UNTIL A PERMANENT PATCH CAN BE INSTALLED, NO LATER THAN JUNE 15.

5. IF TEMPORARY PATCH IS INSTALLED, PERMITTEE MAY ALLOW NO MORE THAN 45 DAYS FOR SETTLING BEFORE PERMANENT RESTORATION. THE PERMITTEE SHALL BE RESPONSIBLE TO MAINTAIN TEMPORARY ROADWAY RESTORATIONS IN A SAFE CONDITION FOR ALL TYPES OF TRAVEL UNTIL A PERMANENT PAVEMENT REPAIR HAS BEEN MADE. TO ENSURE PROPER MAINTENANCE, THE PERMITTEE SHALL PERFORM PERIODIC INSPECTION OF EACH TEMPORARY PATCH UNTIL IT IS REPLACED WITH A PERMANENT PATCH.

**TEMPORARY ROADWAY RESTORATION**

N.T.S.





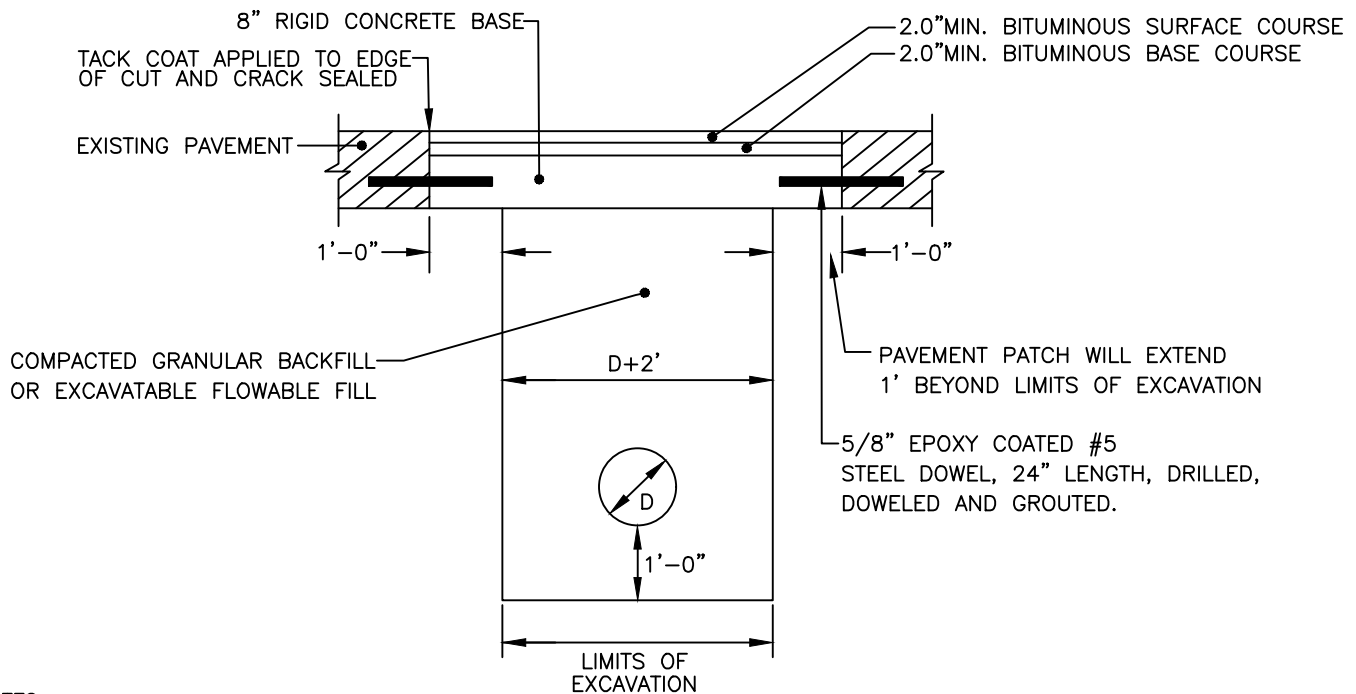
**NOTES:**

1. BITUMINOUS CONCRETE SHALL ADHERE TO RIDOT SPECIFICATIONS, SECTION 401.
2. GRANULAR BASE MATERIAL SHALL BE COMPACTED TO 95% OF MODIFIED PROCTOR DENSITY (AASHTO T180). GRAVEL BASE COURSE SHALL ADHERE TO RIDOT SPECIFICATIONS, SECTION 301.
3. EXCAVATABLE FLOWABLE FILL (CONTROLLED DENSITY FILL, CDF) SHALL ADHERE TO 95% OF THE MODIFIED PROCTOR DENSITY (AASHTO T180), ADHERING TO RIDOT SPECIFICATIONS, SECTION 603.
4. PRIOR TO PERMANENT RESTORATION, ALL EDGES OF THE EXCAVATED AREA AND ONE FOOT BEYOND SHALL BE SAWCUT TO A CLEAN, SQUARE EDGE.
5. IF EXCAVATION IS ON A PROTECTED STREET, THE REMAINING ROADWAY OUTSIDE THE TRENCH TO THE NEAREST CURB SHALL BE MILLED 2 INCHES WITH 2 INCH BITUMINOUS CONCRETE SURFACE OVERLAY. THE JOINTS SHALL BE SEALED USING INFRARED TECHNOLOGY. THE LENGTH OF THE NEW PAVED AREA MUST BE A MINIMUM OF 10 FEET TO ALLOW FOR PROPER ROLLING.
6. IF EXCAVATION IS ON A NON-PROTECTED STREET, AND THE DISTANCE FROM EDGE OF EXCAVATION TO EDGE OF ROADWAY IS TWO FEET OR LESS, THE REMAINING AREA TO EDGE OF ROADWAY SHALL BE REMOVED AND REPLACED IN CONJUNCTION WITH THE PERMANENT PAVEMENT RESTORATION.

**PERMANENT ROADWAY RESTORATION - GRANULAR BASE**

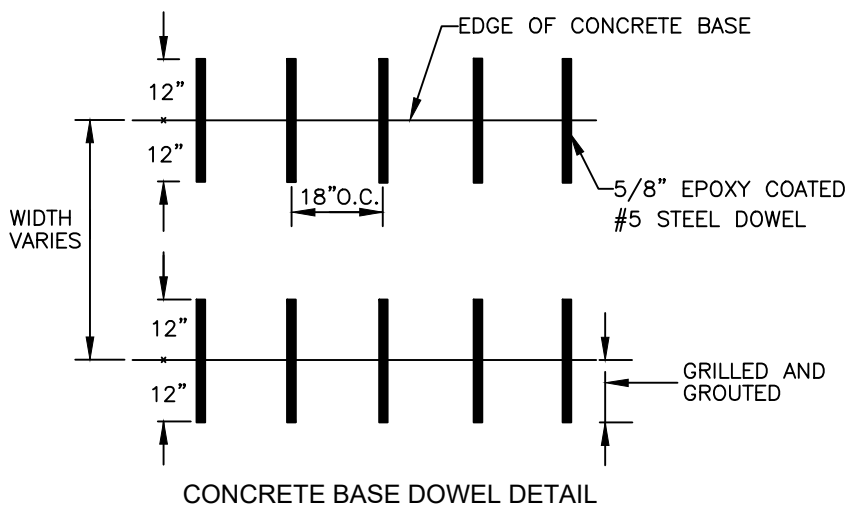
N.T.S.





**NOTES:**

1. CONCRETE ROAD BASE MUST BE RESTORED TO THE EXISTING DEPTH OR A MINIMUM OF 8 INCHES. A MINIMUM OF 4.0 INCHES OF BITUMINOUS CONCRETE SURFACE COURSE MEETING RIDOT SPECIFICATIONS, SECTION 401 SHALL BE PLACED OVER BASE.
2. 8 INCH RIGID CONCRETE BASE SHALL BE TYPE XX (28 DAY -4000 PSI) PER RIDOT SPECIFICATIONS, SECTION 601.
3. PRIOR TO PERMANENT RESTORATION, ALL EDGES OF THE EXCAVATED AREA AND ONE FOOT BEYOND SHALL BE SAWCUT TO A CLEAN, SQUARE EDGE.
4. GRANULAR SUBGRADE MATERIAL SHALL BE COMPACTED TO 95% OF THE MODIFIED PROCTOR DENSITY (AASHTO T80), MEETING RIDOT SPECIFICATIONS, SECTION 301.
5. EXCAVATABLE FLOWABLE FILL (CONTROLLED DENSITY FILL, CDF) SHALL ADHERE TO RIDOT SPECIFICATIONS, SECTION 603.
6. IF EXCAVATION IS ON A PROTECTED STREET, THE REMAINING ROADWAY OUTSIDE THE TRENCH TO THE NEAREST CURB SHALL BE MILLED 2.0 INCHES WITH A 2.0 INCH BITUMINOUS CONCRETE SURFACE OVERLAY. THE JOINTS SHALL BE SEALED USING INFRARED TECHNOLOGY. THE LENGTH OF THE NEW PAVED AREA MUST BE A MINIMUM OF 10 FEET TO ALLOW FOR PROPER COMPACTION.
7. IF EXCAVATION IS ON NON PROTECTED STREET, AND THE DISTANCE FROM EDGE OF EXCAVATION TO EDGE OF ROADWAY IS TWO FEET OR LESS, THE REMAINING AREA TO SUCH EDGE OF ROADWAY SHALL BE REMOVED AND REPLACED IN CONJUNCTION WITH THE PERMANENT PAVEMENT RESTORATION.



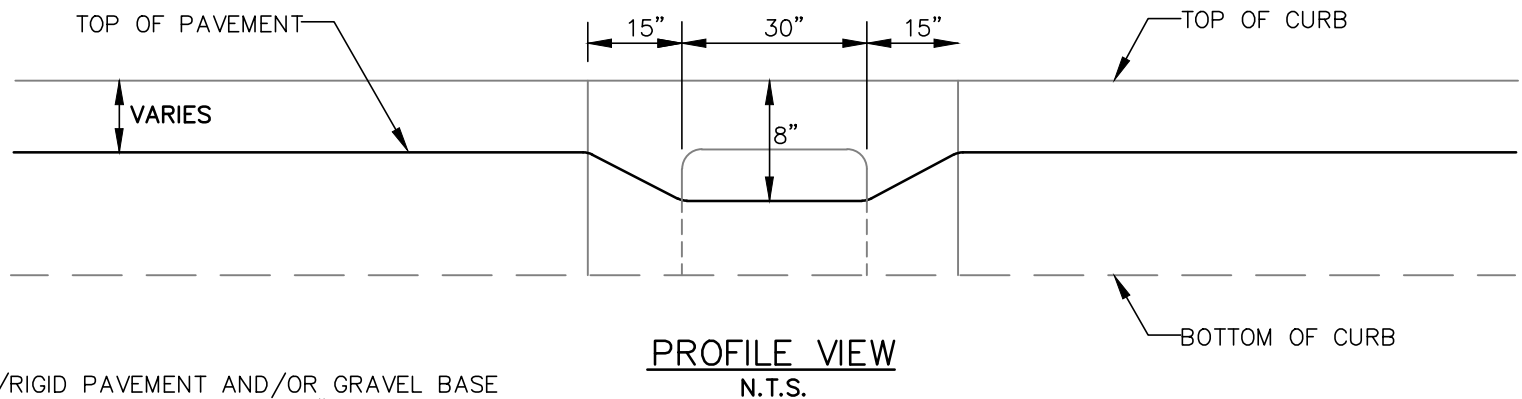
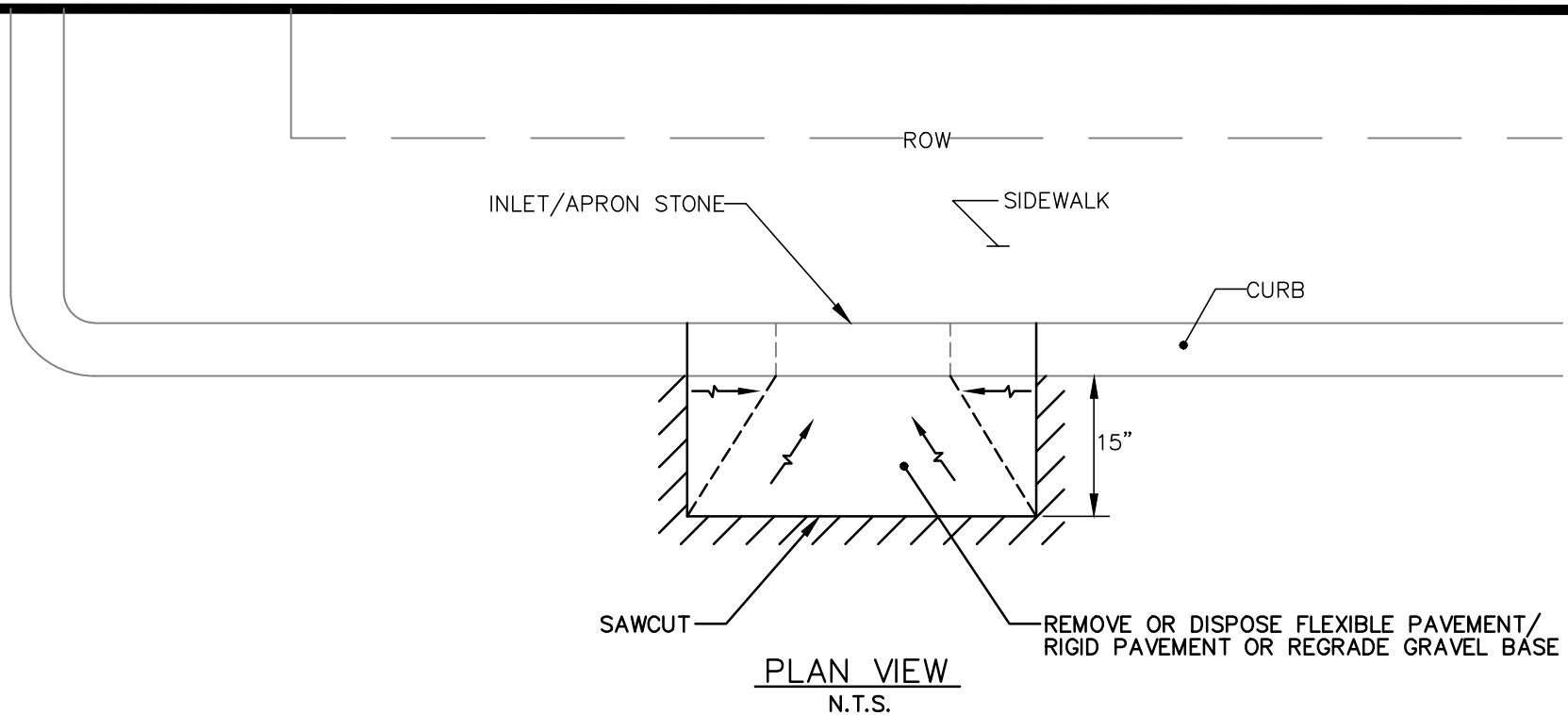
**NOTES:**

1. DOWEL SHALL BE INSTALLED 4" FROM SURFACE OF CONCRETE BASE.
2. THE EXISTING CONCRETE ROAD BASE SHALL BE DRILLED AND GROUTED EVERY 18" ON CENTER TO RECEIVE THE EPOXY COATED STEEL DOWELS.

**PERMANENT ROADWAY RESTORATION - CONCRETE BASE**

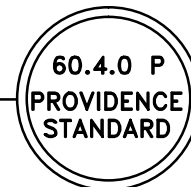
N.T.S.

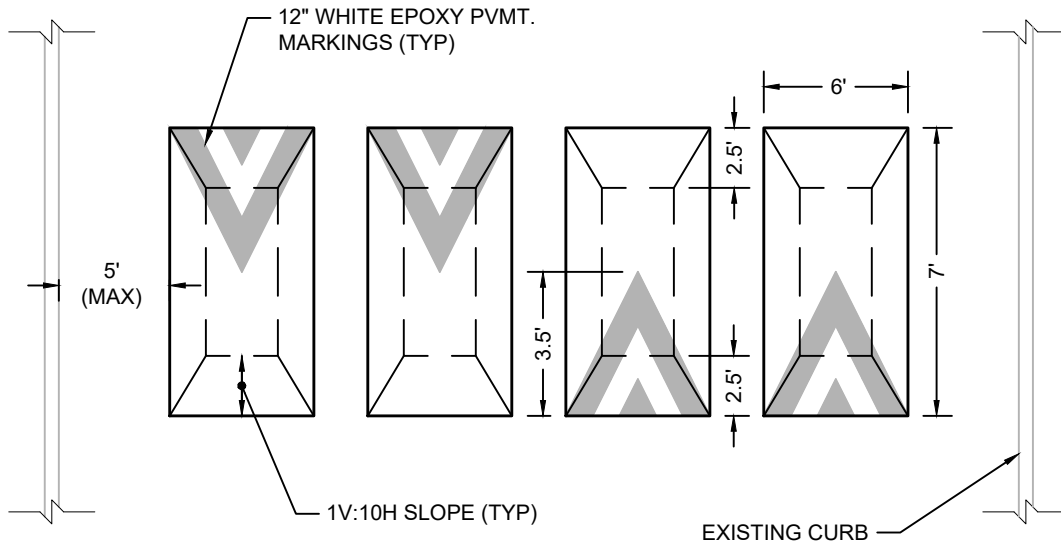




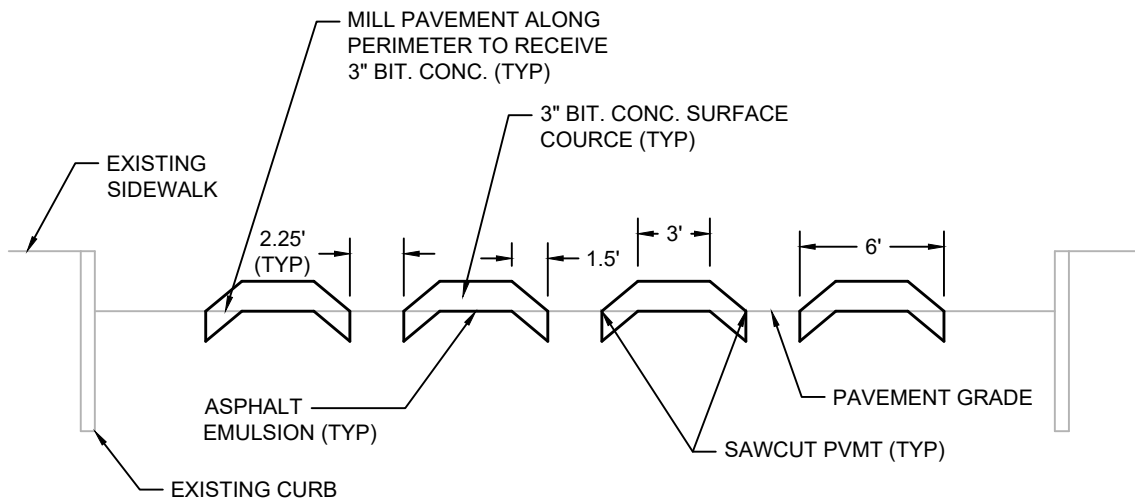
- NOTES: 1. FLEXIBLE/RIGID PAVEMENT AND/OR GRAVEL BASE SHALL BE GRADED TO DRAIN TO 8" BELOW THE TOP OF CURB.  
2. ITEMS SHALL BE PAID AT RESPECTIVE BID PRICES

**INLET / APRON STONE REVEAL**  
N.T.S.





**Plan View**



**Cross Section**

**NOTES:**

1. 12" WHITE EPOXY SPEED HUMP MARKINGS SHALL BE INSTALLED AND CONFORM TO SECTION 3B.29 OF THE MUTCD.
2. 12" WHITE EPOXY ADVANCE WARNING PAVEMENT MARKINGS SHALL BE INSTALLED AND CONFORM TO SECTION 3B.30 OF THE MUTCD.

**SPEED LUMPS**

N.T.S.

ISSUE DATE: 4/1/2026

