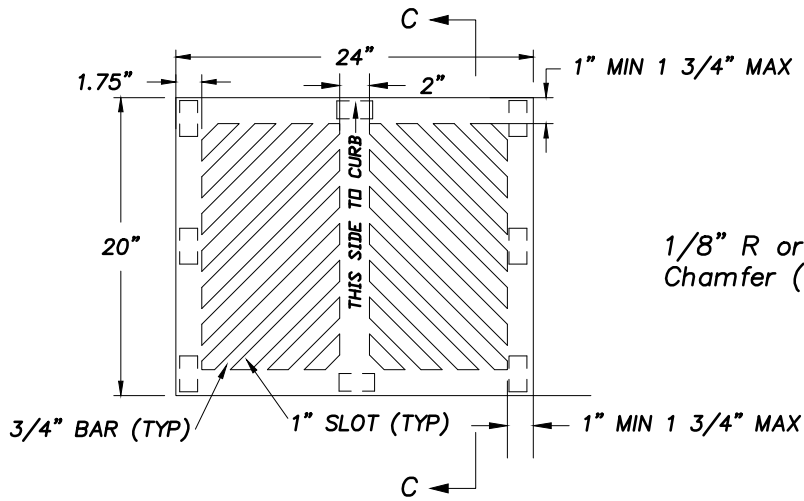
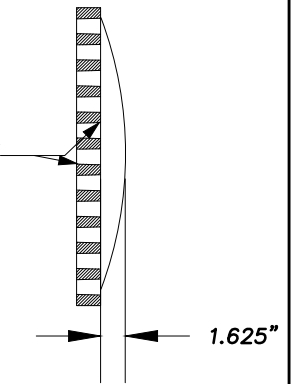


FRAME

FRAME AND GRATE
 OLYMPIC FOUNDRY INC.
 PART NO. SM60 OR
 INLAND FOUNDRY CO.
 INC. UNIT NO. 432
 OR APPROVED EQUAL
 AS MATCHING WSDOT
 STD. PLAN B-2a.



GRATE



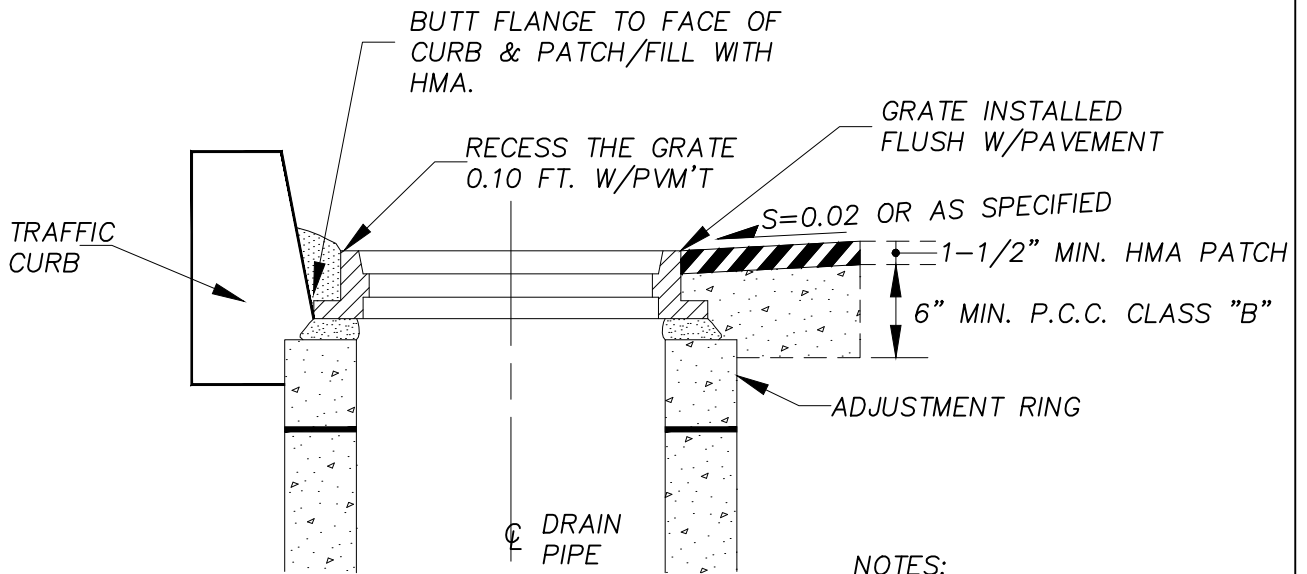
SECTION C-C

NOTES:
 GRATE SHALL COMPLY WITH OR
 EXCEED A.S.T.M. SPECIFICATIONS
 A536-72 GRADE 65-45-12
 DUCTILE IRON.

WEIGHT	
FRAME	158 LBS ±5%
GRATE	118 LBS ±5%

TOLERANCE ON ALL DIMENSIONS SHALL BE
 ± 1/16" UNLESS OTHERWISE NOTED.

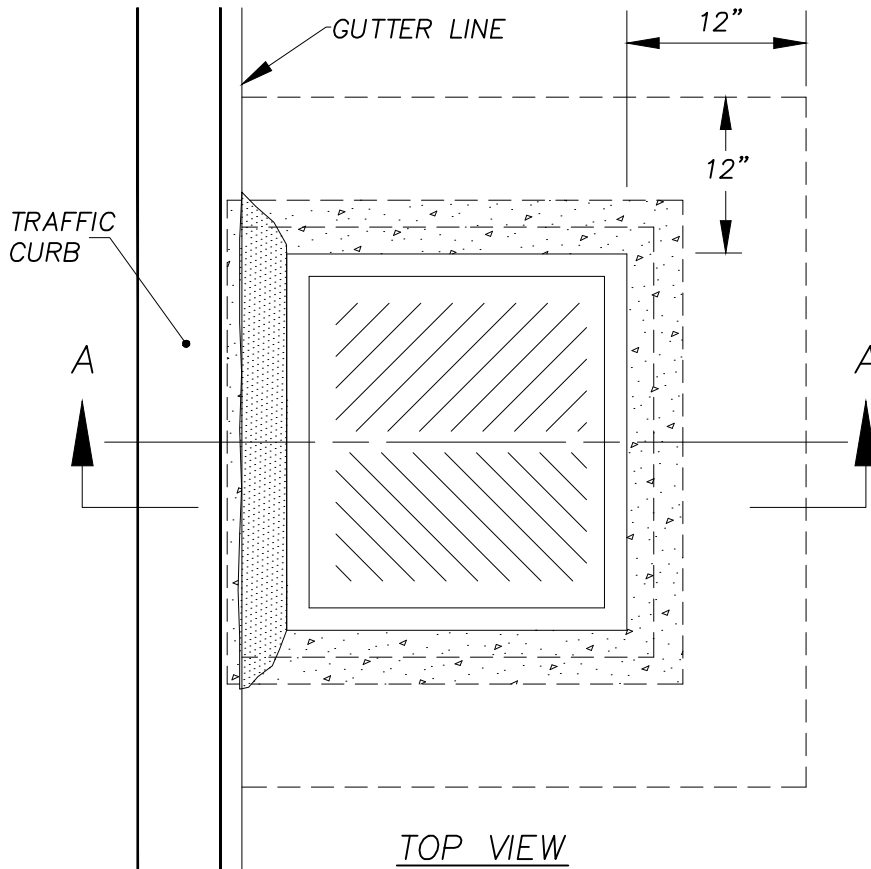
APPROVED BY	REVISED DATE	CITY OF OLYMPIA	STD. PLAN NO.
	12/21/98	STANDARD GRATE AND FRAME	5-5
CITY ENGINEER			



SECTION A-A

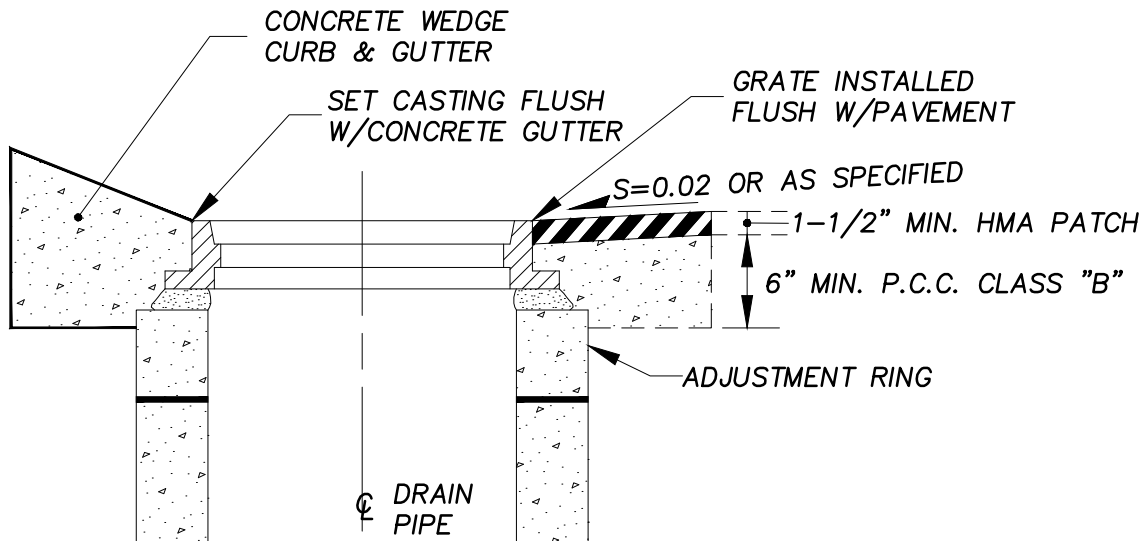
NOTES:

- AN APPROVED MATERIAL WHICH WILL PREVENT BONDING OF THE CURB TO FRAME, GRATE OR CATCH BASIN SHALL BE USED

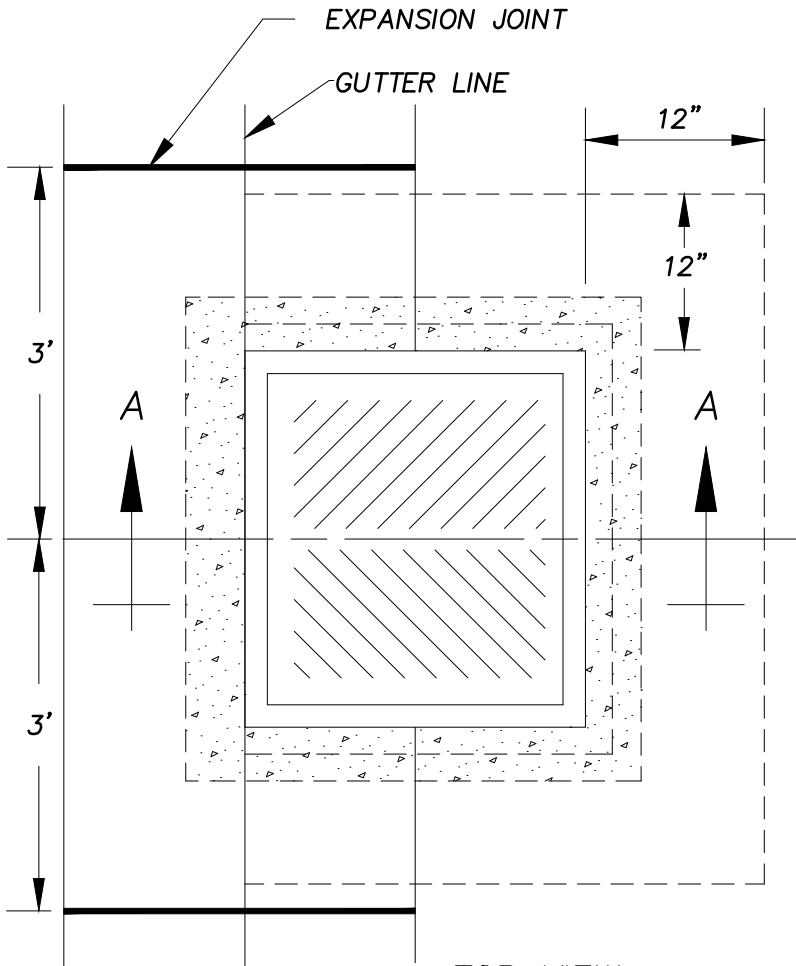


TOP VIEW

APPROVED BY	REVISED DATE	CITY OF OLYMPIA	STD. PLAN NO.
	2/26/2013	CATCH BASIN INSTALLATION	5-6
CITY ENGINEER		TRAFFIC CURB	



SECTION A-A

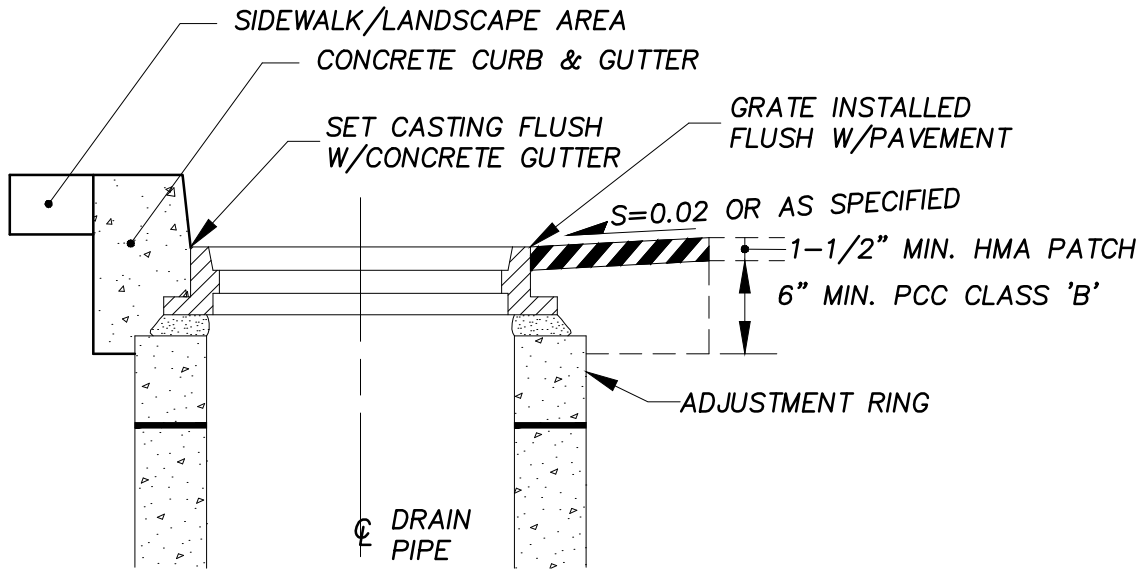


TOP VIEW

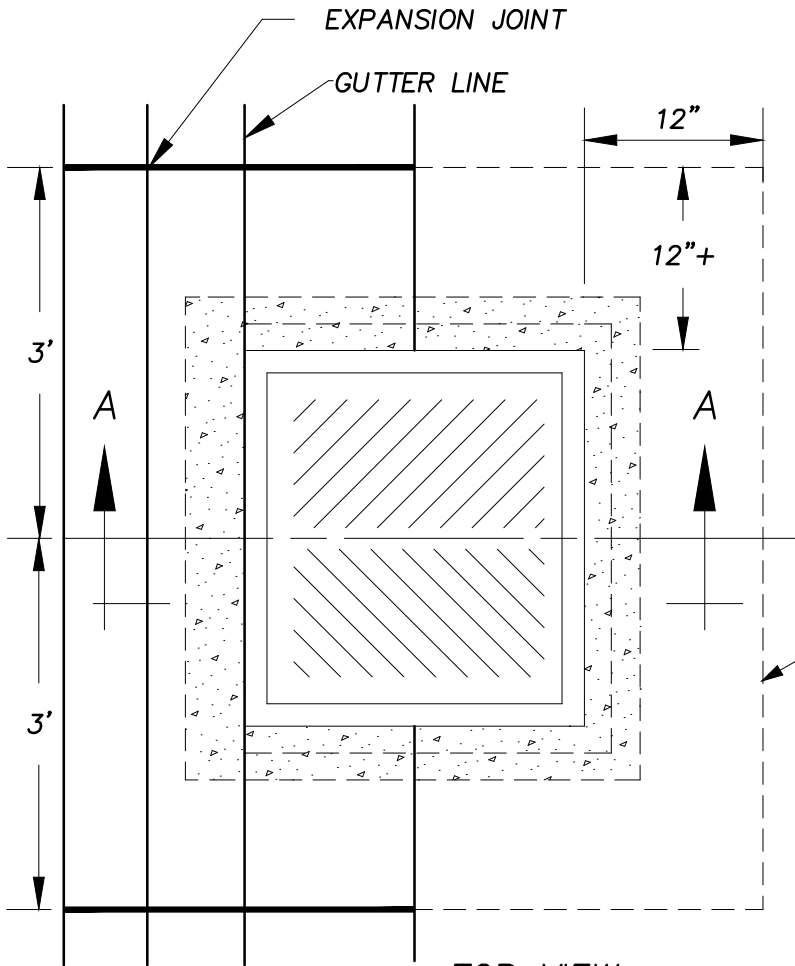
NOTES:

- WHEN LAYING CURB, LEAVE 6' OUT FOR PLACING C.B.
- PLACE CURB AROUND C.B. USING CEMENT CONCRETE CLASS "B"
- SEE CITY OF OLYMPIA FOR STANDARD CONCRETE WEDGE CURB & GUTTER CONSTRUCTION.
- AN APPROVED MATERIAL WHICH WILL PREVENT BONDING OF THE CURB TO FRAME, GRATE OR CATCH BASIN SHALL BE USED

APPROVED BY	REVISED DATE	CITY OF OLYMPIA	STD. PLAN NO.
	11/26/07	CATCH BASIN INSTALLATION CONCRETE WEDGE CURB & GUTTER	5-7
CITY ENGINEER			



SECTION A-A

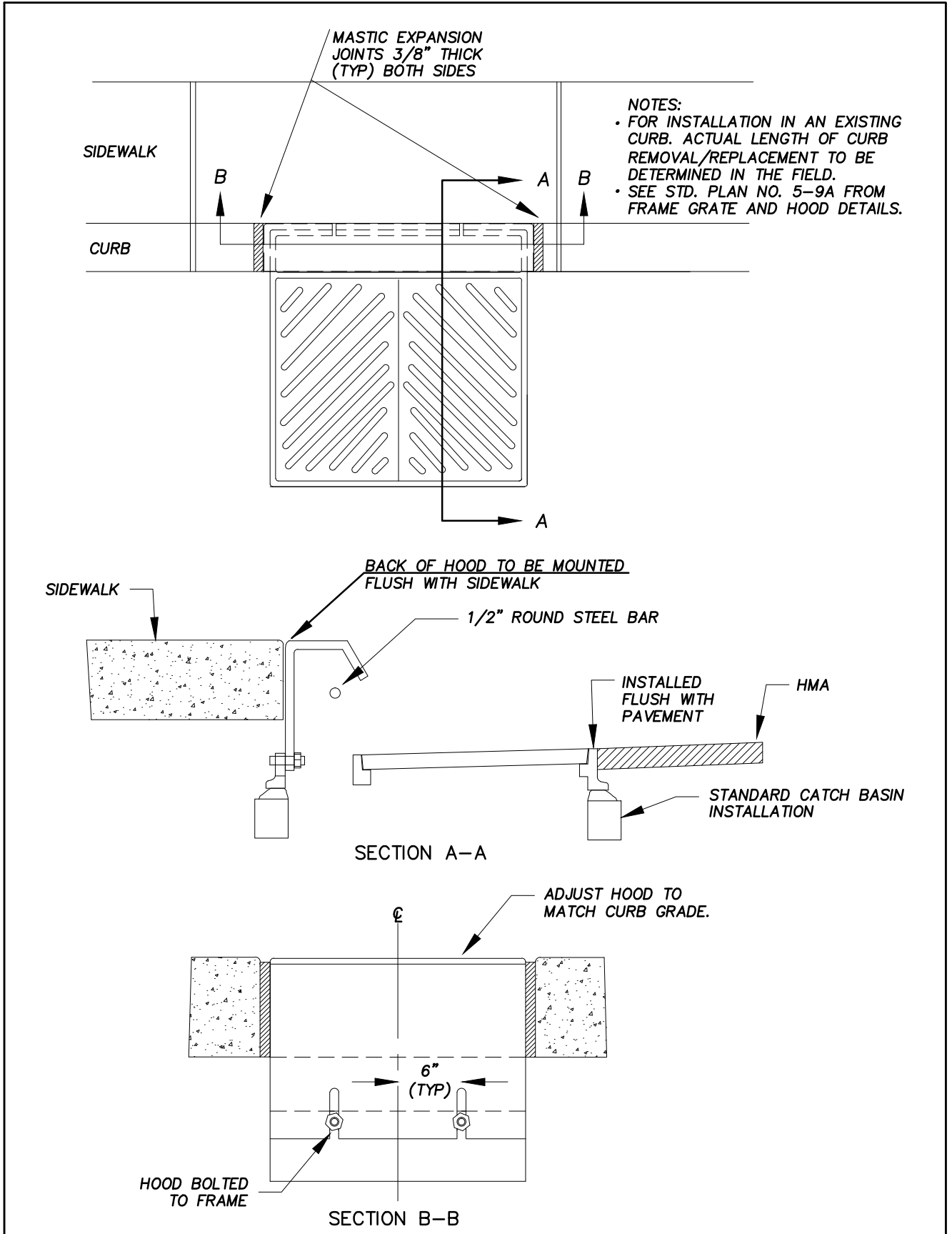


TOP VIEW

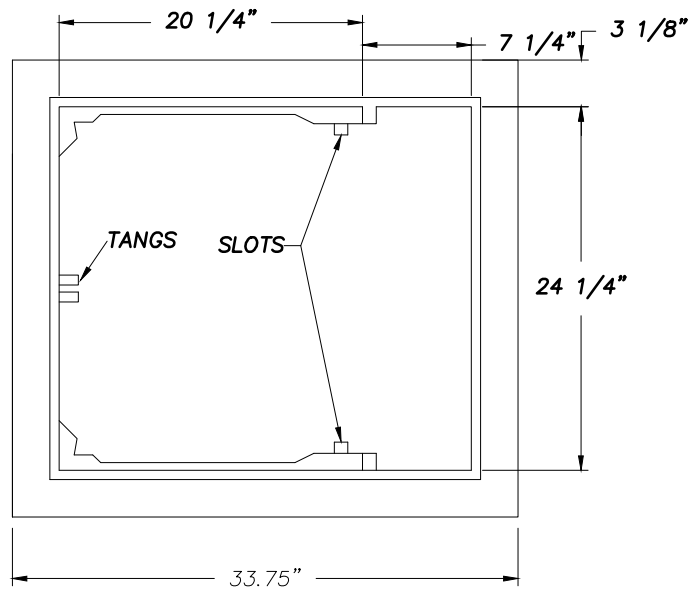
NOTES:

- SEE CITY OF OLYMPIA STANDARD PLANS FOR STANDARD CONCRETE WEDGE CURB & GUTTER CONSTRUCTION.
- AN APPROVED MATERIAL WHICH WILL PREVENT BONDING OF THE CURB TO FRAME, GRATE OR CATCH BASIN SHALL BE USED.
- PLACE CURB & GUTTER AROUND CATCH BASIN USING CEMENT CONCRETE CLASS 'B'.

APPROVED BY	REVISED DATE	CITY OF OLYMPIA	STD. PLAN NO.
CITY ENGINEER	11/26/07	CATCH BASIN INSTALLATION CONCRETE CURB & GUTTER	5-7A

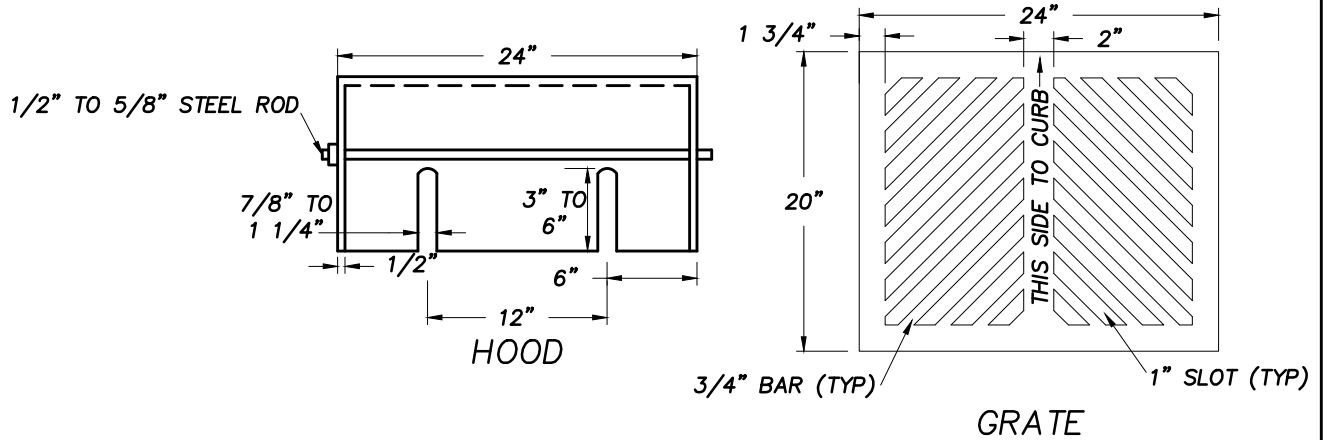


APPROVED BY	REVISED DATE	CITY OF OLYMPIA	STD. PLAN NO.
	11/26/07	HOODED CATCH BASIN INSTALLATION DETAIL	5-9
CITY ENGINEER			



FRAME AND GRATE
 OLYMPIC FOUNDRY INC.
 PART NO. SM65 OR
 INLAND FOUNDRY CO.
 INC. UNIT NO. 560
 OR APPROVED EQUAL

FRAME (TOP VIEW)

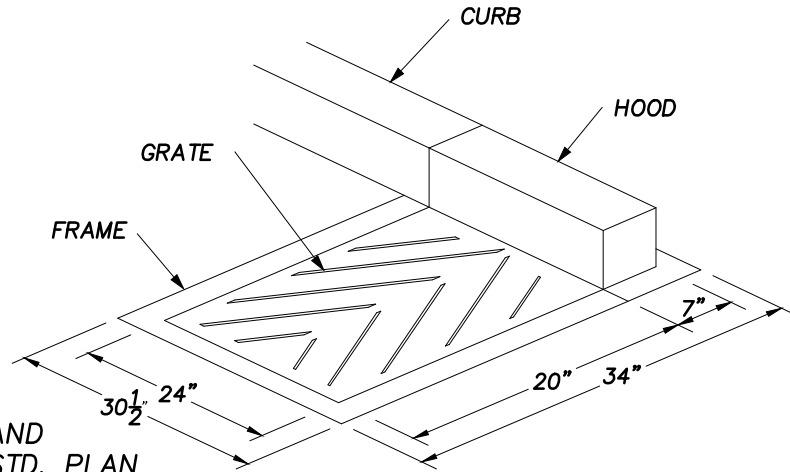


GRATE AND HOOD (SIDE VIEW)

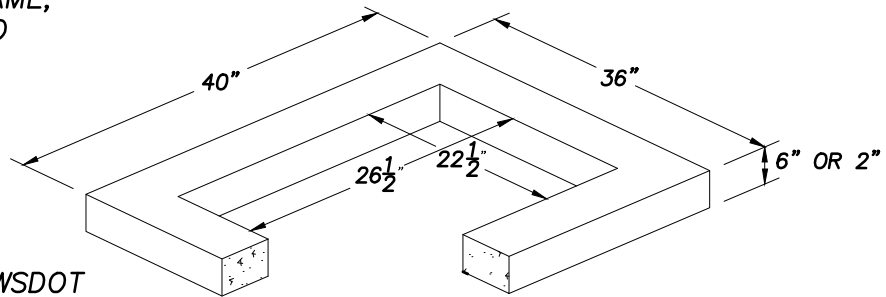
NOTES:

- USE DUCTILE IRON GRATE.
- RATING - H20
- APPROX. WEIGHT: GRATE - 110 LBS.,
 FRAME - 180 LBS., HOOD - 55 LBS.

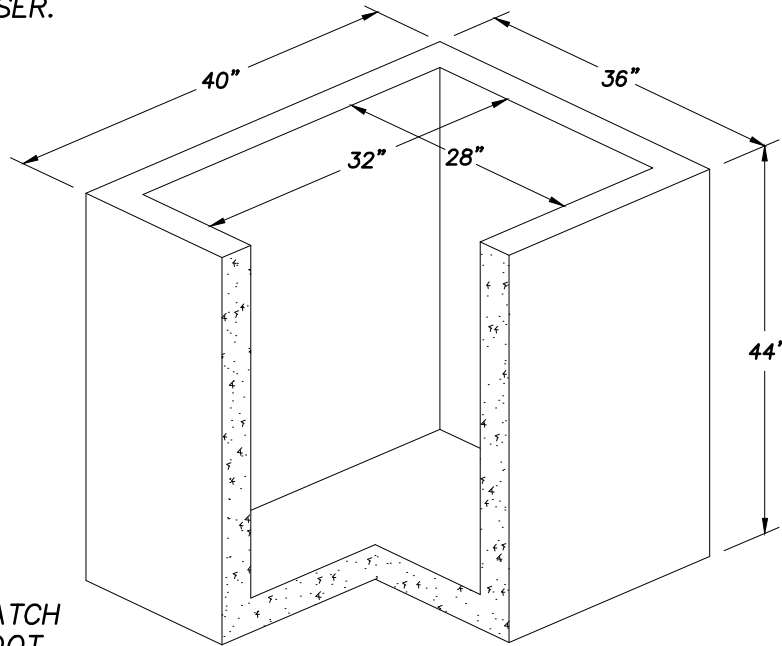
APPROVED BY	REVISED DATE	CITY OF OLYMPIA HOODED CATCH BASIN FRAME, GRATE, AND HOOD	STD. PLAN NO.
CITY ENGINEER	12/18/98		5-9A



CURB INLET AND
GRATE. SEE STD. PLAN
5-9A FOR FRAME,
GRATE & HOOD
DETAILS



RISER. NON-WSDOT
STD. BUT LOCALLY
AVAILABLE RISER.



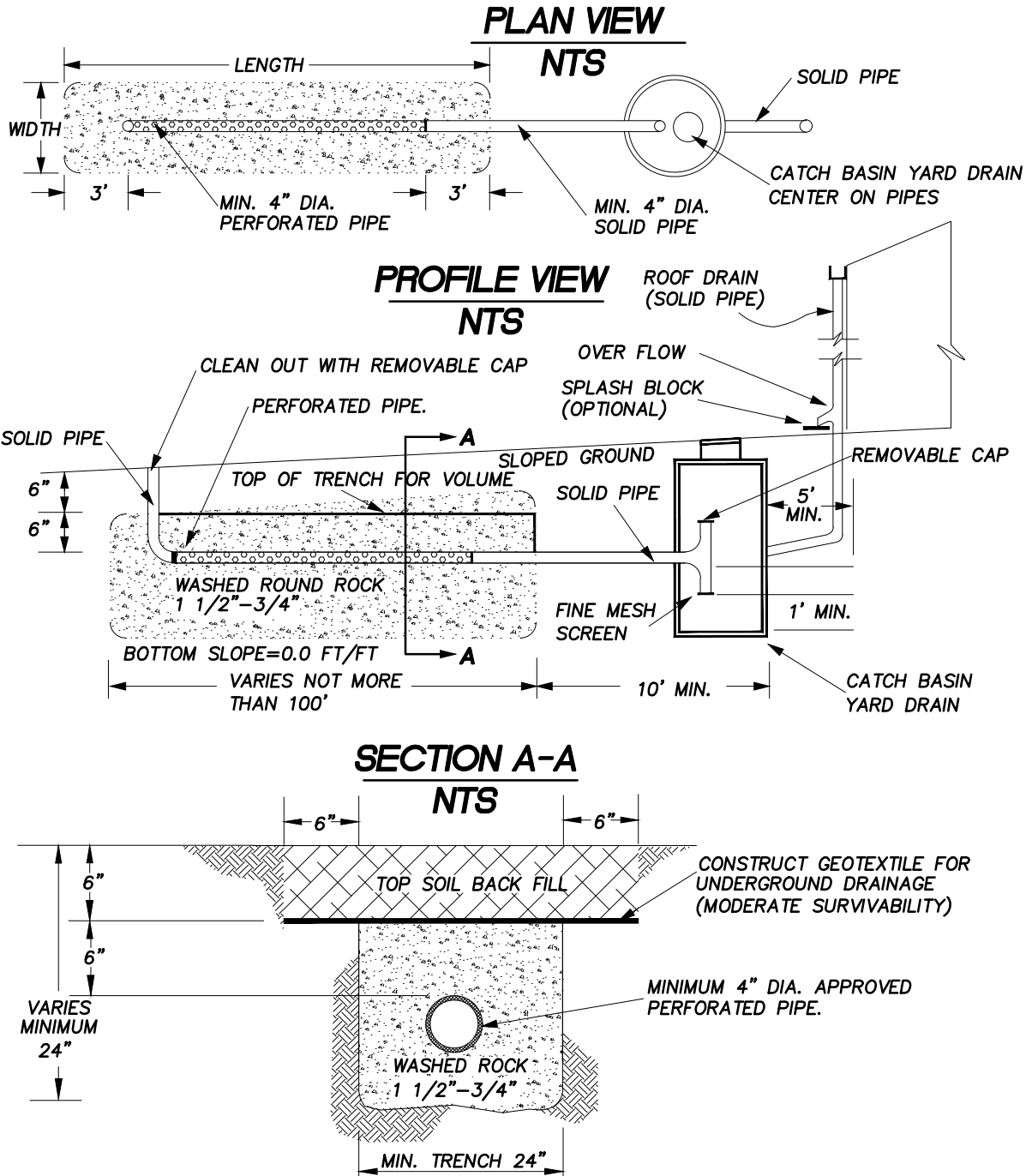
TYPE 1L CATCH
BASIN. WSDOT
STD. PLAN B-1a.

N.T.S.

APPROVED BY	REVISED DATE	CITY OF OLYMPIA HOODED CATCH BASIN INSTALLATION ORIENTATION (TYPE 1L)	STD. PLAN NO.
CITY ENGINEER	03/15/00		5-9B

NOTES:

1. PIPE MATERIAL SHALL BE AS APPROVED IN UNIFORM PLUMBING CODE AND BE INSTALLED ACCORDING TO MANUFACTURER SPECIFICATIONS.
2. TRENCH LENGTH IS GREATER THAN OR EQUAL TO WIDTH.
3. BENDS AND TEES ALLOWED IN PIPE.
4. TOP OF TRENCH FOR VOLUME CALCULATION IS HORIZONTAL LINE EXTENDED FROM LOWEST TOP OF WASHED ROCK.
5. CATCH BASIN/YARD DRAIN TO BE MIN. 18 INCH DIA. AND 30 INCH DEEP. MUST HAVE REMOVABLE COVER, AND SOLID BASE. STRUCTURE MAY BE MADE OF CONCRETE, HDPE OR PVC. USE HANCOR SUMP PUMP WELL (CASW0180000) AND LID (CALW0180000) OR EQUAL. DRILL HOLES IN LID AS NEEDED TO ALLOW WATER ENTRY.
6. WASHED ROUND ROCK 1 1/2"-3/4" 100% PASSING 1 1/2" SIEVE. LESS THAN 10% PASSING 3/4" SIEVE. ROUND ROCK TO BE WASHED BEFORE INSTALLATION.



APPROVED BY	REVISED DATE	CITY OF OLYMPIA	STD. PLAN NO.
	11/1/04	DOWN SPOUT INFILTRATION TRENCH	5-10A1 SHEET 1/2
CITY ENGINEER			

DOWN SPOUT/INFILTRATION TRENCH DESIGN

THE FOLLOWING MINIMUM TRENCH VOLUMES, INCLUDING ROCK BACK FILL, ARE REQUIRED PER 1,000 SQUARE FEET OF ROOF AREA:

HYDROLOGIC GROUP A AND B (SANDY SOILS), 125 CUBIC FEET.

HYDROLOGIC GROUP C (LOAMY, LAYERED, OR "TILL" SOILS), 250 CUBIC FEET.

HYDROLOGIC GROUP D SOILS (SILTY SOILS AND FILL MATERIALS), 750 CUBIC FEET. INFILTRATION IS NOT RECOMMENDED IN THESE SOILS.

CALCULATE THE TRENCH VOLUME IN CUBIC FEET AS FOLLOWS:

DETERMINE HYDROLOGIC SOIL GROUP (A, B, C, OR D)—SEE SOIL MAP.

1. DETERMINE ROOF AREA THAT CONTRIBUTES TO THE TRENCH, IN SQUARE FEET.
2. TRENCH VOLUME = SOIL FACTOR (SEE TABLE BELOW) TIMES ROOF AREA.

EXAMPLE: 2,000 SQUARE FOOT ROOF, "B" SOIL, TRENCH VOLUME = 0.125 TIMES 2,000@DIG A 250-CUBIC-FOOT HOLE, SUCH AS 5 FEET DEEP BY 5 FEET WIDE BY 10 FEET LONG. MULTIPLE TRENCHES MAY BE USED AS LONG AS THEY ADD UP TO THE REQUIRED VOLUME.

HYDROLOGIC SOIL GROUP SOIL FACTOR:

- A 0.125
- B 0.125
- C 0.250
- D 0.750

INFILTRATION TRENCH SETBACKS ARE AS FOLLOWS:

1. THIRTY FEET UP GRADIENT (UPHILL) OR 10 FEET DOWN GRADIENT (DOWNHILL) FROM ON SITE SEPTIC SYSTEMS, WATER SUPPLY WELLS, BUILDING CRAWL SPACES, OR BASEMENTS. INFILTRATION TRENCHES IN "TILL" OR "LAYERED" SOILS MUST BE LOCATED DOWN GRADIENT OF ON SITE SEPTIC SYSTEMS, CRAWL SPACES, OR BASEMENTS.
2. SLOPES OVER 15 PERCENT, 25 FEET. MAY BE INCREASED IF LANDSLIDE HAZARDS ARE PRESENT.

APPROVED BY	REVISED DATE	CITY OF OLYMPIA	STD. PLAN NO.
	11/1/04	DOWN SPOUT INFILTRATION TRENCH	5-10A2 SHEET 2/2
CITY ENGINEER			

THE CITY OF OLYMPIA ACCEPTS THE EXECUTION OF THE FOLLOWING PROCEDURES TO MEET THE REQUIREMENTS OF STORMWATER MANUAL BMP T5.13.

PREPARATION METHOD

1. TILL THE SUB GRADE SOIL TO AN 8-INCH DEPTH; THOSE AREAS SUBJECTED TO VEHICLE TRAFFIC SHALL BE TILLED TO A DEPTH OF 12 INCHES. DO NOT SCARIFY OR TILL WITHIN THE DRIP LINE OF EXISTING TREES THAT WILL BE RETAINED.
2. PLACE 3 INCHES OF COMPOST MATERIAL AND TILL INTO 5 INCHES OF SOIL (A TOTAL AMENDED DEPTH OF ABOUT 9.5 INCHES, FOR A SETTLED DEPTH OF 8 INCHES).
3. RAKE THE AREA SMOOTH AND REMOVE SURFACE ROCKS LARGER THAN 1 INCH IN DIAMETER.
4. PLACE 2 INCHES OF AA COMPOST AND RAKE.

COMPOST AMENDMENT QUALITY STANDARDS

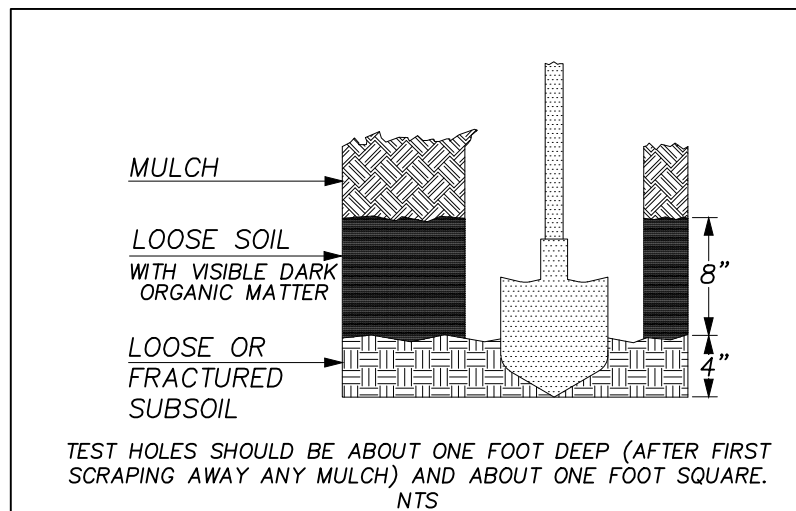
1. THE ORGANIC CONTENT FOR "PRE-APPROVED" AMENDMENT RATES CAN BE MET ONLY BY USING COMPOST THAT MEETS THE DEFINITION FOR "COMPOSTED MATERIALS" IN WAC 173-350-220, AVAILABLE ONLINE AT <http://www.ecy.wa.gov/programs/swfa/compost/>
2. THE COMPOST MUST ALSO HAVE AN ORGANIC MATTER CONTENT OF 35 TO 65 PERCENT, CARBON TO NITROGEN RATIO BELOW 25:1.
3. THE CARBON TO NITROGEN RATIO MAY BE AS HIGH AS 35:1 FOR PLANTINGS COMPOSED ENTIRELY OF PLANTS NATIVE TO THE PUGET SOUND LOWLANDS REGION.

FOR SINGLE FAMILY RESIDENTIAL LOTS: PREPARATION FOR INSPECTION

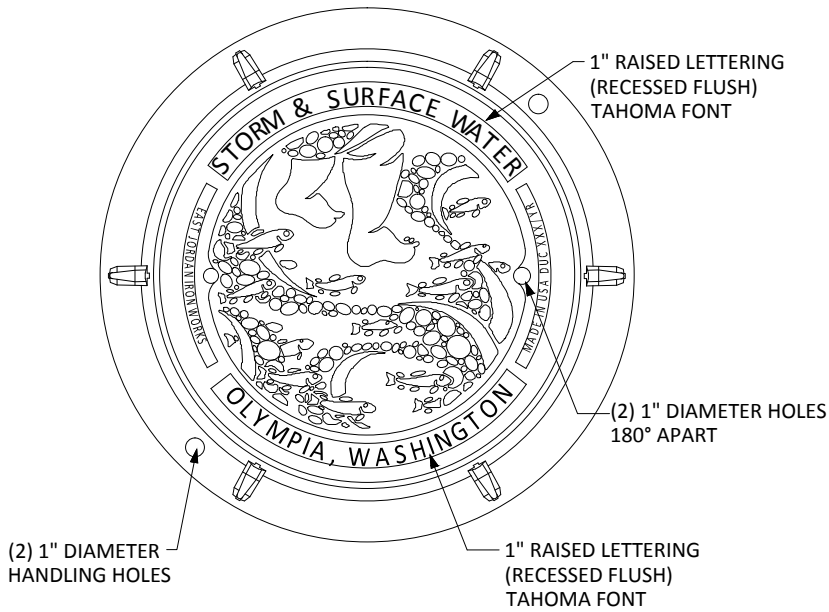
- PROVIDE SIX HOLES PER SITE; TWO FOR THE FRONT YARD, ONE EACH FOR SIDE YARDS, AND TWO FOR THE BACKYARD. ALL HOLES SHALL BE EVENLY PLACED THROUGHOUT THE PROPERTY TO DEMONSTRATE AUGMENTATION HAS BEEN COMPLETED.
- TEST HOLES SHALL BE A MINIMUM OF 1 FOOT DEEP AND 1 FOUR SQUARE.
- PERMITTEE SHALL PROVIDE DOCUMENTS FOR THE AA COMPOST VOLUME DELIVERED TO THE SITE TO CONFIRM COMPOST ORIGIN AND QUALITY.

INSPECTION VERIFICATION

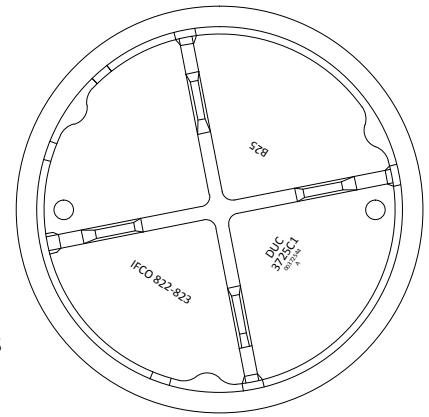
- 2 INCHES OF ORGANIC MULCH MATERIAL ON ALL DISTURBED SURFACES.
- LOOSE SOIL FOR 8 INCHES WITH VISIBLE DARK ORGANIC MATTER.
- LOOSE FRACTURED SUB SOILS SHOULD NOT BE EASY TO PENETRATE WITH A SHOVEL 4 INCHES BELOW THE 8 INCHES. TOTAL DEPTH OF AUGMENTED AND LOOSENED SOIL SHALL BE 12 INCHES.



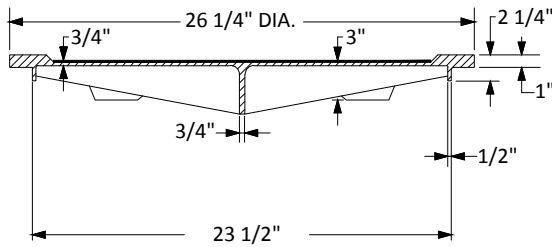
APPROVED BY	REVISED DATE	CITY OF OLYMPIA	STD. PLAN NO.
	2/26/2013	POST-CONSTRUCTION SOIL QUALITY AND DEPTH	5-11
CITY ENGINEER			



PLAN VIEW

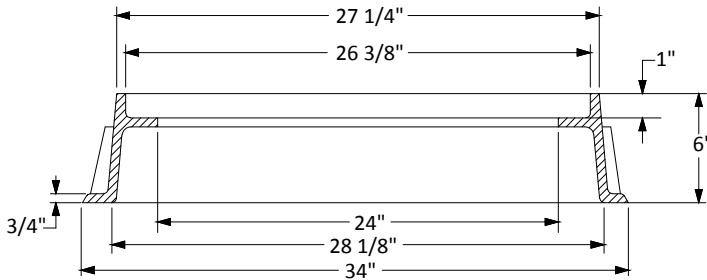


BOTTOM VIEW



COVER SECTION

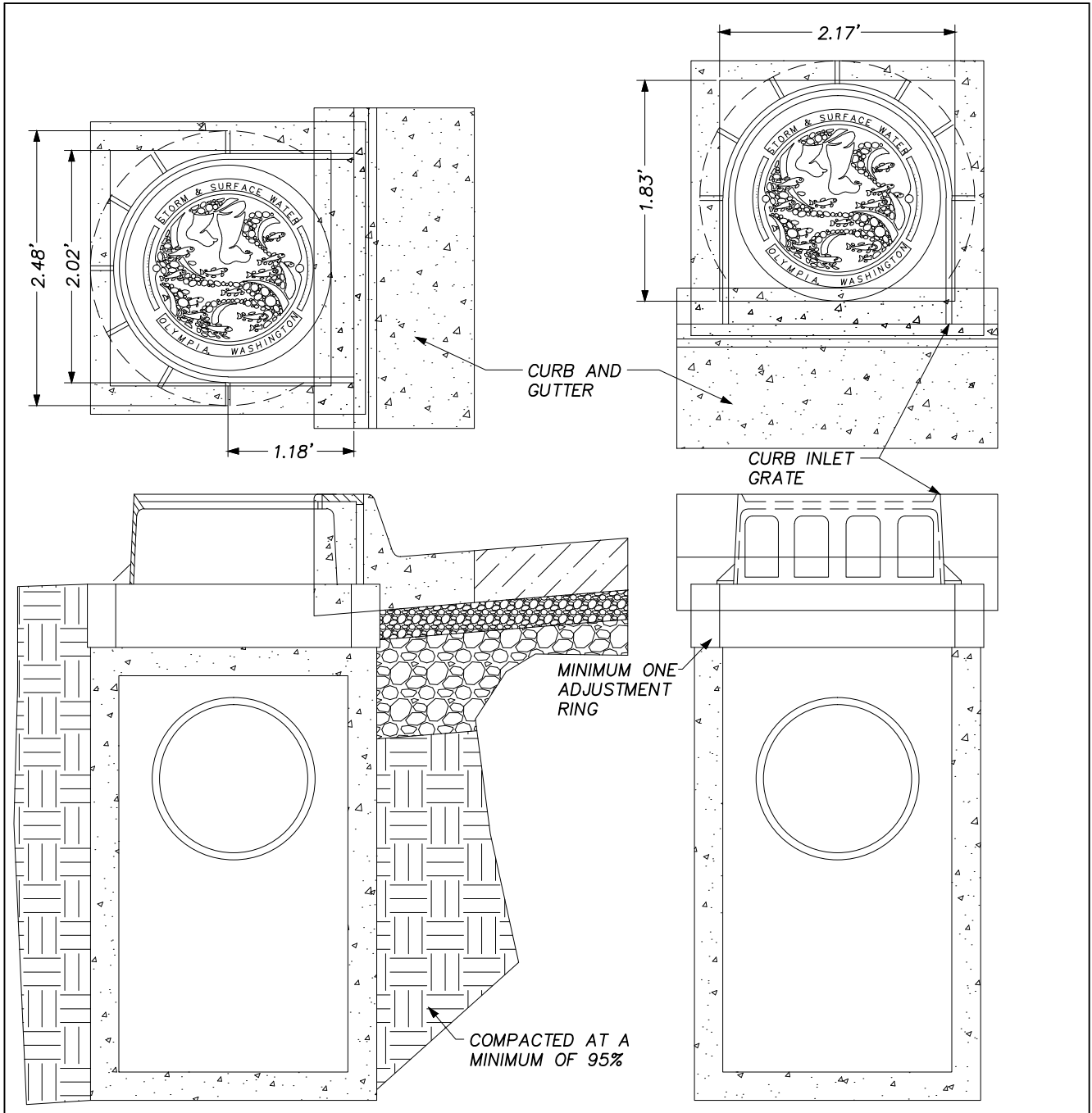
NOTES:
1. MANHOLE RING AND COVER SHALL COMPLY WITH WSDOT 9-05.15.



SECTION VIEW

N.T.S.

APPROVED BY	REVISED DATE	CITY OF OLYMPIA	STD. PLAN NO.
CITY ENGINEER	2/26/2013	SOLID ROUND DECORATIVE CATCH BASIN COVER	5-12



NOTES:

SIDE VIEW

FRONT VIEW

1. CONCRETE PADS FOR ALL CURB INLET BASINS SHALL BE A MINIMUM OF 3' X 3' X 8".
2. ALL STORM MANHOLE LID AND RING ASSEMBLIES SHALL BE EAST JORDAN IRON WORKS 7500 OR OLYMPIC FOUNDRY SM94 WITH CITY OF OLYMPIA LOGO LIDS WHEN AVAILABLE. SEE OLYMPIA STANDARD PLAN 5-12 FOR LID.
3. ALL STORM MANHOLE LID AND RING ASSEMBLIES SHALL BE DUCTILE IRON AND MANUFACTURED IN THE USA.
4. THIS APPLICATION SHALL BE USED ONLY FOR INSTALLATIONS WHERE EXISTING UTILITIES OR GRADES CONFLICT WITH PLACEMENT OF STORM PIPING WITHIN THE ROADWAY.
5. USE A 2" RECTANGULAR ADJUSTMENT SECTION TURNED LENGTHWISE TO ELIMINATE THE GAP UNDER THE FRAME.

APPROVED BY	REVISED DATE	CITY OF OLYMPIA	STD. PLAN NO.
CITY ENGINEER	2/26/2013	CURB INLET GRATE AND CATCH BASIN INSTALLATION	5-13