# STORM SEWER GENERAL NOTES & TELEVISION REPORT

A. ACCEPTABLE STORM SEWER MAIN MATERIAL ARE AS FOLLOWS:

1. NCTCOG APPROVED REINFORCED CONCRETE PIPE OR BOX
2. HP STORM BY ADS
3. ALUMINIZED FLOW BY CONTECH

B. THE CONTRACTOR WILL PROVIDE A DIGITAL FILE AND SUITABLE LOG OF INSPECTION PERFORMED BY EXPERIENCED PERSONNEL ON A CLOSED CIRCUIT COLOR TELEVISION (ACCURATE FOOTAGE DISPLAYED ON VIDEO).

C. ALL PERTINENT DATA RECORDED IN AUDIO ON THE MEDIA TO INCLUDE:

1. DATE AND TIME OF RECORDING
2. CONTRACTOR'S NAME, PROJECT NAME, AND CONTRACT NUMBER
3. NAME OF THE COMPANY PERFORMING THE TELEVISION INSPECTION AND THE NAME OF THE OPERATOR
4. LOCATION, DESIGNATION, AND SIZE OF THE MAIN AND THE DIRECTION OF THE TEST
5. EVERY 50-FOOT STATION
6. STATION OF EACH MANHOLE
7. LOCATION AND STATION OF DEFICIENCIES IN ACCORDANCE WITH PACP AS DEFINED BY NASSCO
8. LOCATION AND DIRECTION OF ENTRY OF LATERALS

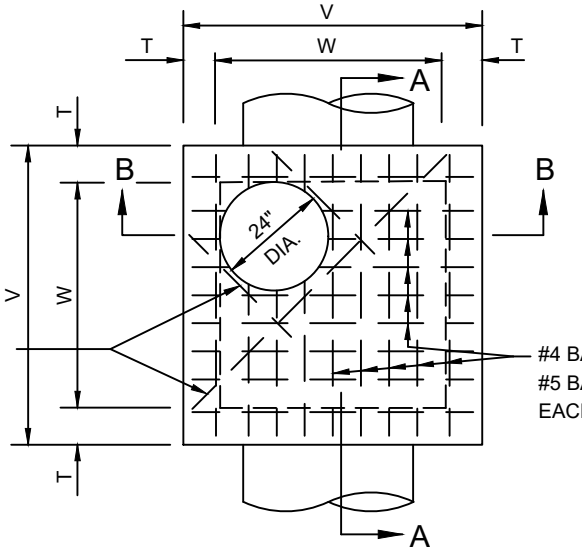
D. THE CONTRACTOR WILL ALSO PROVIDE A WRITTEN TELEVISION REPORT (INDICATING MANHOLE NUMBERS) THAT WILL ACCOMPANY THE VIDEO RECORDING. THIS WRITTEN REPORT MUST INCLUDE:

1. MANHOLE NUMBERS (THESE NUMBERS MUST MATCH MANHOLE NUMBERS ON "AS BUILT" DRAWINGS).
2. SERVICE CONNECTION LOCATIONS RIGHT OR LEFT.
3. REFERENCE TO SERVICE CONNECTION LOCATIONS OUT OF MANHOLES.
4. LOCATIONS OF SUSPECTED AND OBVIOUS DEFICIENCIES (i.e. BAD JOINTS, BREAKS, OR LEAKS, ETC).
5. DEPTH OF EACH MANHOLE.
6. ACTUAL MEASURED DISTANCE (ON GROUND) BETWEEN MANHOLES.

E. ALL VISUAL AND TELEVISION INSPECTIONS SHALL BE COMPLETED AND APPROVED BY THE CITY INSPECTOR FROM THE CITY OF MELISSA ENGINEERING DEPARTMENT PRIOR TO PLACING OF ANY PAVEMENT. AN INSPECTOR FROM THE MELISSA ENGINEERING DEPARTMENT MUST WITNESS THE RECORDING. THE ENGINEERING DEPARTMENT SHALL BE NOTIFIED AT LEAST 48 HOURS IN ADVANCE FOR SCHEDULING. TELEVISION RECORDINGS MUST CLEARLY SHOW DETAILS OF STRUCTURAL DEFECTS, MISALIGNMENTS, AND INFILTRATION. ALL KNOWN OR INDICATED BREAKS SHALL BE REPAIRED BY THE CONTRACTOR REGARDLESS OF THE TEST ALLOWANCES. FAULTY SECTIONS OF STORM SEWER LINES, INLETS, AND MANHOLES REJECTED BY THE ENGINEER SHALL BE REMOVED AND REINSTALLED BY THE CONTRACTOR. SUNKEN MANHOLES AND INLETS WILL NOT BE ACCEPTED. ALL MANHOLE AND INLET INVERTS MUST BE COMPLETED PRIOR TO VIDEO RECORDING.

M * - CITY OF MELISSA REVISION

| STORM SEWER GENERAL NOTES & TELEVISION REPORT | | NCTCOG STANDARD SPECIFICATION REFERENCE 507.5 | |
|---|---|---|---|
| | | MODIFIED DATE 07/31/24 | STANDARD DRAWING NO. 6001M* |
| CITY OF MELISSA, TEXAS | NOTICE DATE 08/01/24 | APPLIED DATE 08/01/24 | ENFORCED DATE 09/01/24 |




3-#4 BARS (4' & 5'M.H.)
OR #5 BARS (6' M.H.) AT
OPENING AS SHOWN.

#4 BARS AT 6" C-C (4' M.H.) OR
#5 BARS AT 8" C-C (5" & 6"M.H.)
EACH WAY. HOOK EACH END

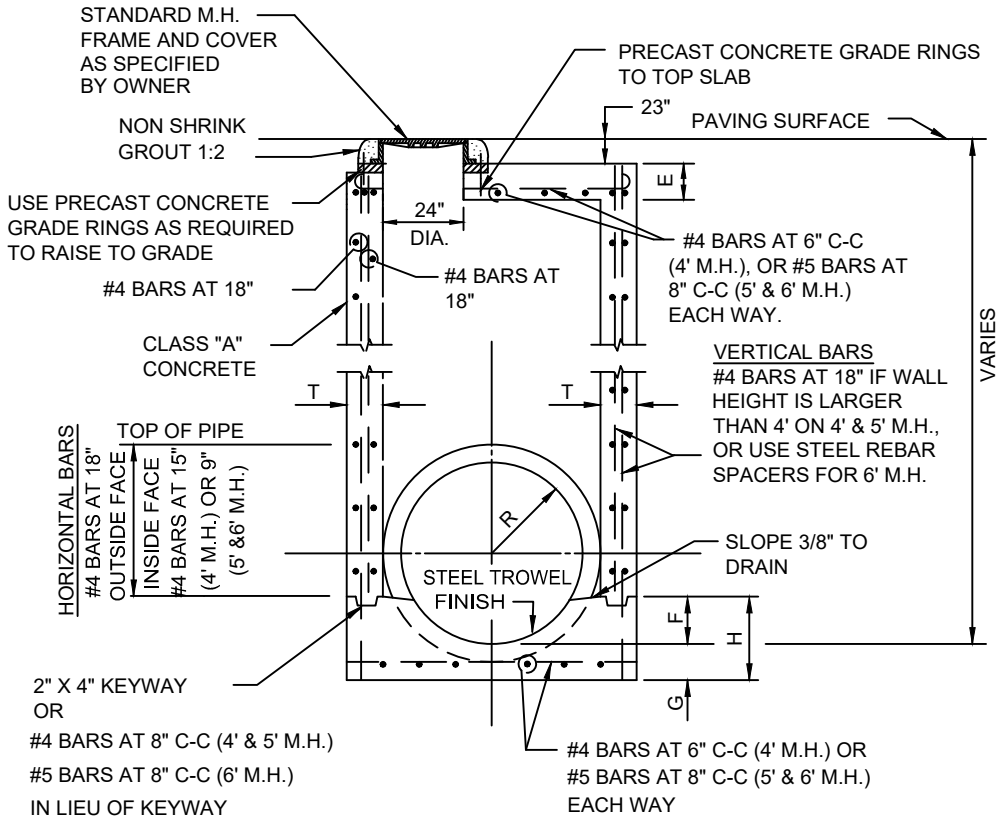
## PLAN

N.T.S.

| M.H. SIZE(W) | V | T | E | F | G | H |
|---|---|---|---|---|---|---|
| 4' | 5'-4" | 8" | 6" | 9" | 6" | 1'-3" |
| 5' | 6'-4" | 8" | 6" | 12" | 8" | 1'-8" |
| 6' | 7'-6" | 9" | 9" | 16" | 10" | 2'-2" |

## TABLE OF DIMENSIONS

N.T.S.




## SECTION B-B

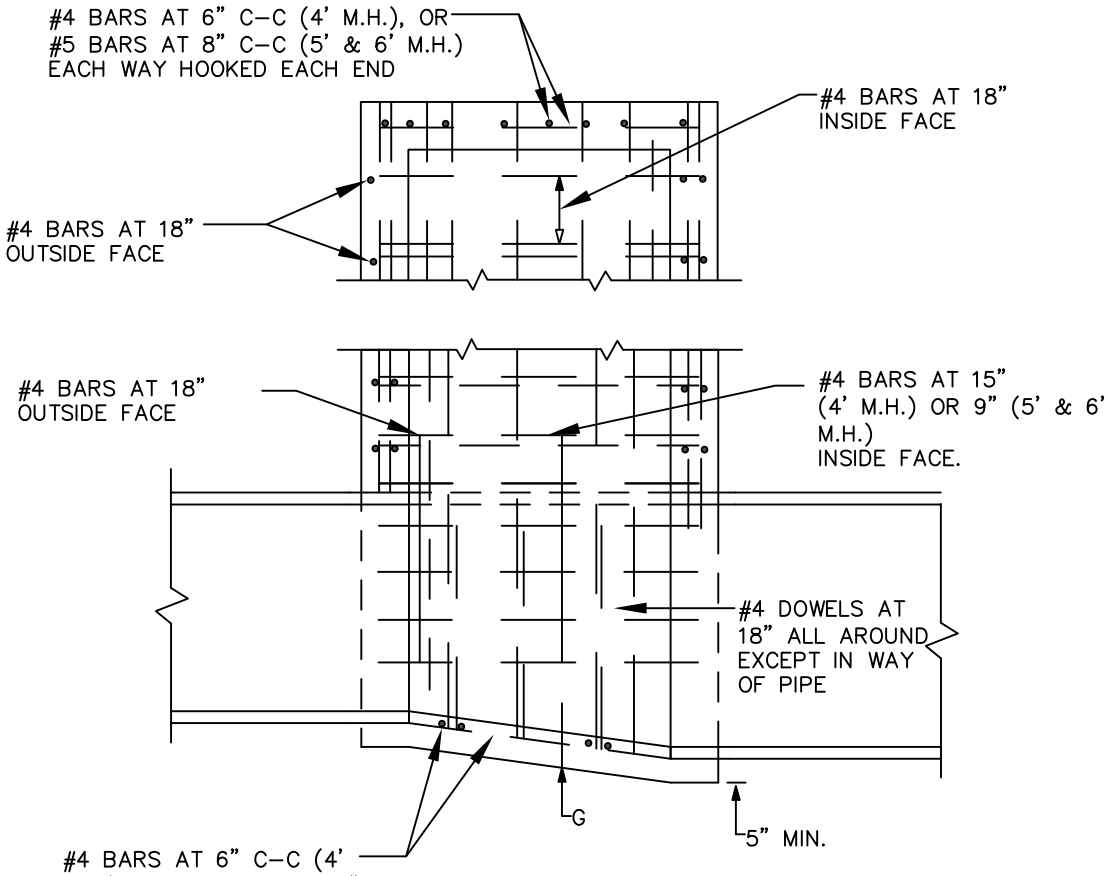
N.T.S.

M* - CITY OF MELISSA REVISION

# STORMWATER MANHOLE

# 4', 5', OR 6' SQUARE

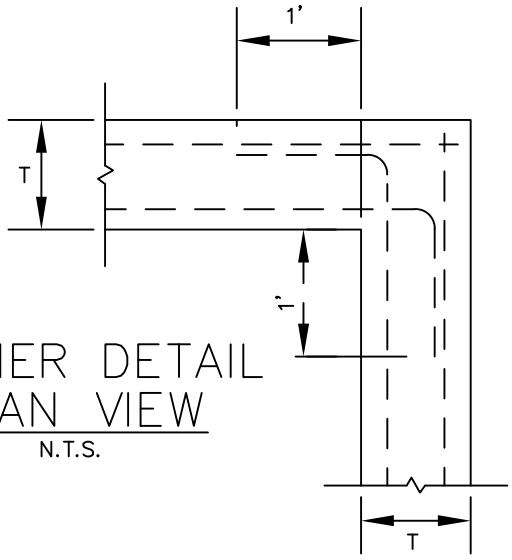
| NCTCOG STANDARD SPECIFICATION REFERENCE | |
|---|---|
| 502.1 | |
| MODIFIED DATE | STANDARD DRAWING NO. |
| 12/17/13 | 6010AM* |
| NOTICE DATE | ADOPTED DATE | ENFORCEMENT DATE |
| | | |




## SECTION A–A

N.T.S.

*REFERENCE TABLE 6010A




## CORNER DETAIL PLAN VIEW

N.T.S.

NOTES:

1. SLOPE INVERT OF MANHOLE AS INDICATED ON PLAN–PROFILE SHEET.
2. LAYERS OF REINFORCING STEEL NEAREST THE INTERIOR AND EXTERIOR SURFACE SHALL HAVE A COVER OF 2" CLEAR OF BARS, UNLESS OTHERWISE NOTED.
3. CONCRETE SHALL BE CLASS "C".
4. PRECAST PRODUCTS MAY BE USED AT THE APPROVAL OF THE OWNER.

# STORM WATER MANHOLE

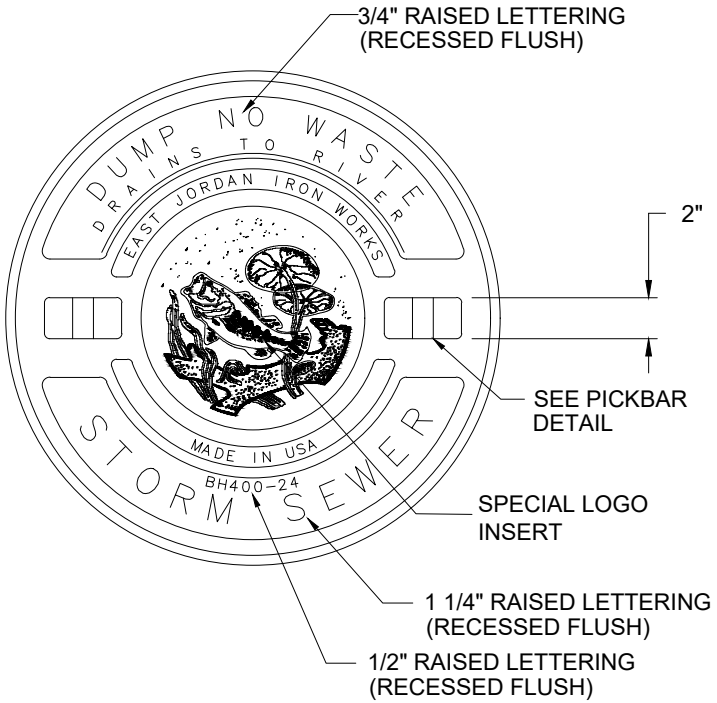
# 4', 5', OR 6' SQUARE

North Central Texas Council of Governments

STANDARD SPECIFICATION REFERENCE
502.1.4.1

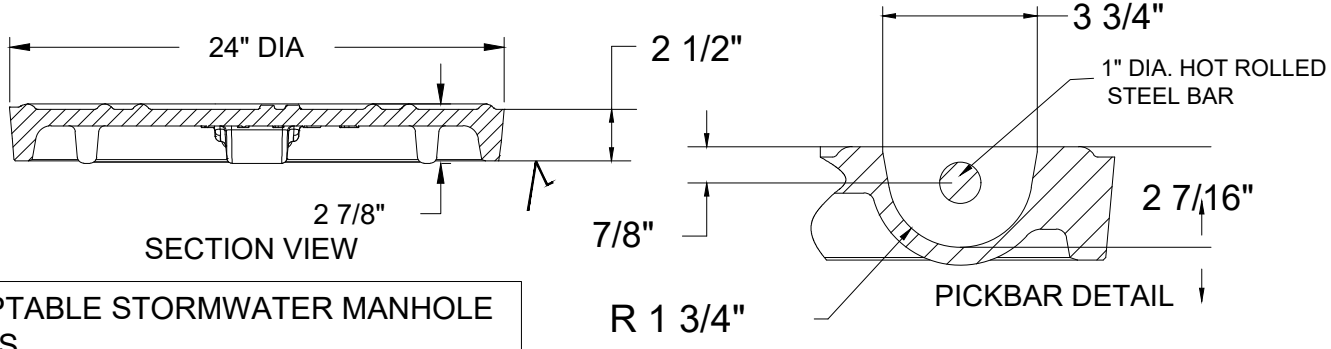
DATE
AUG '23

STANDARD DRAWING NO.
6010B





BOTTOM VIEW




SECTION VIEW

PICKBAR DETAIL

| LIST OF ACCEPTABLE STORMWATER MANHOLE RING & COVERS |
|---|
| 24" DIAMETER COVERS: |
| BASS & HAYES 400-24 |
| NEENAH FOUNDRY DF-1271 |

EJIW EAST JORDAN IRON WORKS EST.1883
800-626-4653
www.ejiw.com
MADE IN USA

| | |
|---|---|
| PRODUCT NUMBER | 00202425 |
| CATALOG NUMBER | 2024 A1 |
| | COVER |
| LOAD RATING | HEAVY DUTY |
| COATING | DIPPED |
| ESTIMATED WEIGHT | COVER: 147 LBS |
| MATERIAL SPECIFICATION | COVER - GRAY IRON ASTM A48 CL35B |
| OPEN AREA | N/A |
| √ DESIGNATES MACHINE SURFACE | |
| DRAWN TLC | DATE 08/08/03 |
| LAST REVISED DEW | DATE 02/27/08 |
| REFERENCE INFORMATION | 00202450.1D<br>00202425.1C<br>00202425.LO |



M* - CITY OF MELISSA REVISION

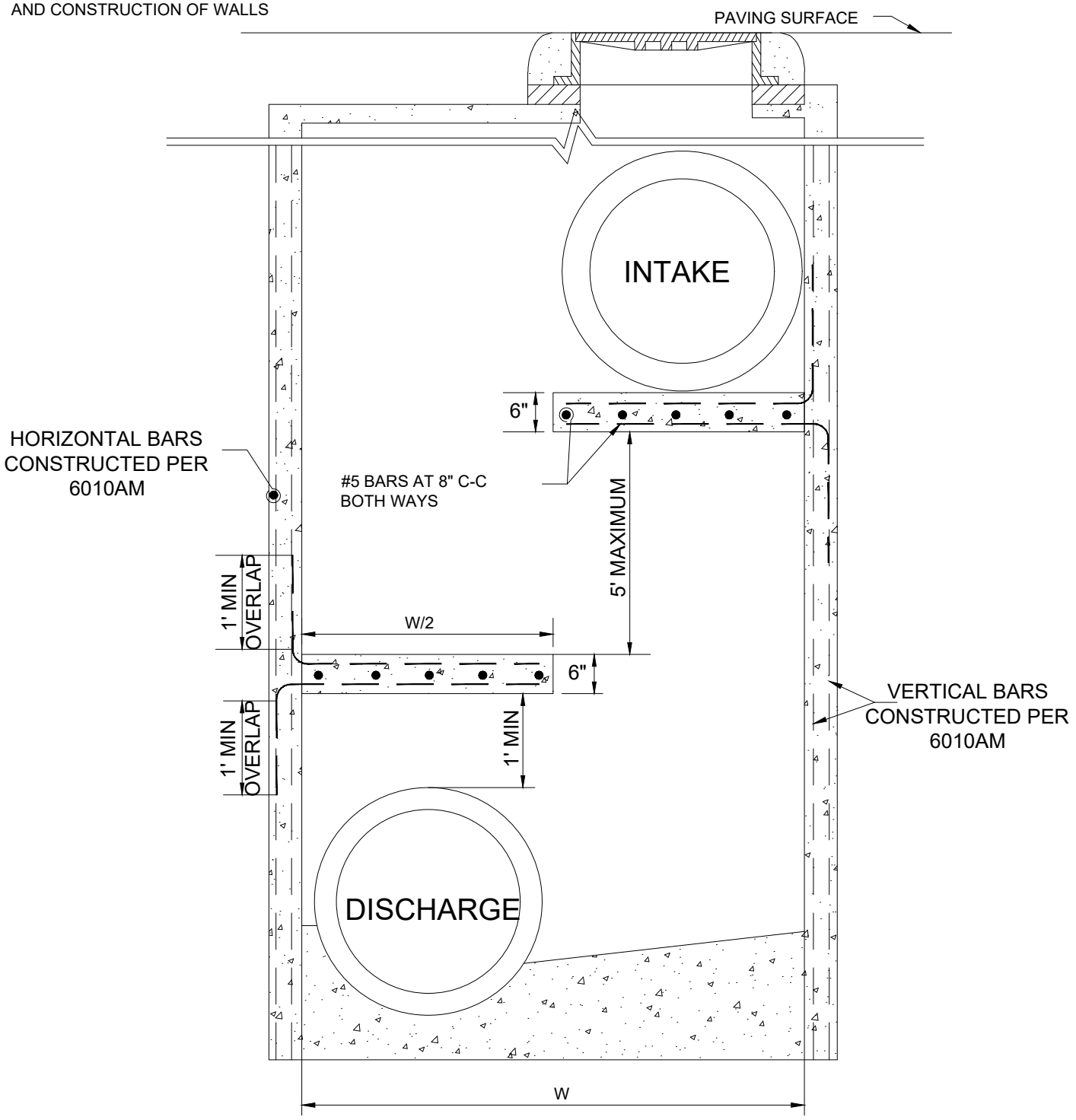
# STORMWATER MANHOLE
# RING AND COVER

MELISSA TX

| NCTCOG STANDARD SPECIFICATION REFERENCE | |
|---|---|
| 508 | |
| DATE | STANDARD DRAWING NO. |
| 02/03/09 | 6011M* |

STANDARD DRAWING NO.
6011M*

SEE DETAIL C6O10AM FOR MANHOLE REBAR SPACING
AND CONSTRUCTION OF WALLS




## SECTION B-B

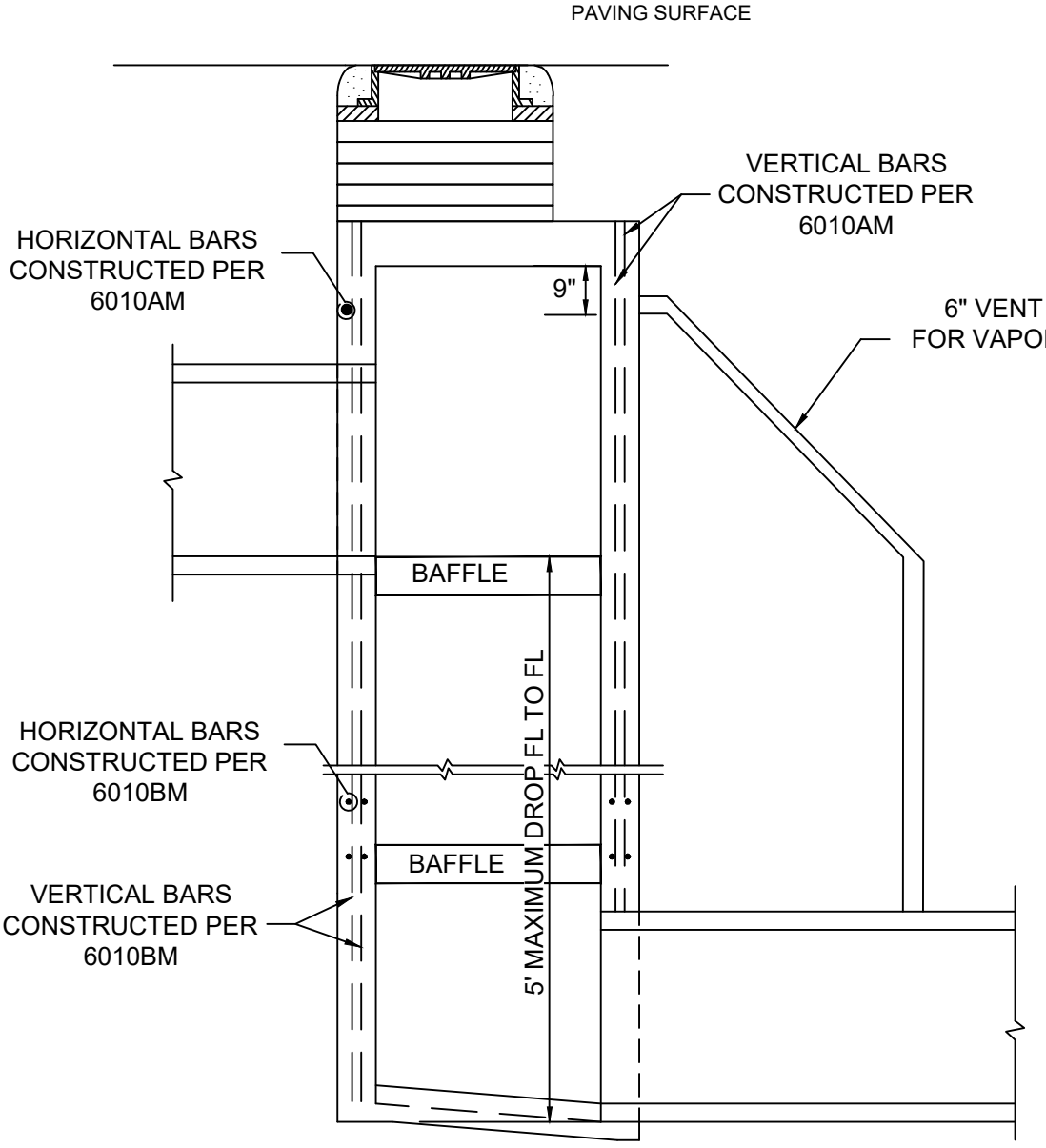
N.T.S.

M* - CITY OF MELISSA REVISION

# DROP STORMWATER MANHOLE

## 6' SQUARE W/ BAFFLES

| NCTCOG STANDARD SPECIFICATION REFERENCE | | |
|---|---|---|
| | MODIFIED DATE | STANDARD DRAWING NO. |
| | 02/24/15 | 6012AM* |
| NOTICE DATE | ADOPTED DATE | ENFORCEMENT DATE |
| | | |




## SECTION A-A

N.T.S.

IF MAX ALLOWABLE VELOCITY (12 FPS) CANNOT BE MET:

1. MAX DROP FROM FL TO FL = 5' AND BAFFLE IS REQUIRED. BAFFLE CONSTRUCTED PER 6012AM.
2. MIN. MANHOLE SIZE TO BE 6'x6'
3. CLASS IV PIPE IS REQUIRED.
4. 6" DIA. VENT PIPE TO BE INSTALLED D/S OF OUTLET & RECONNECT 9" BELOW TOP

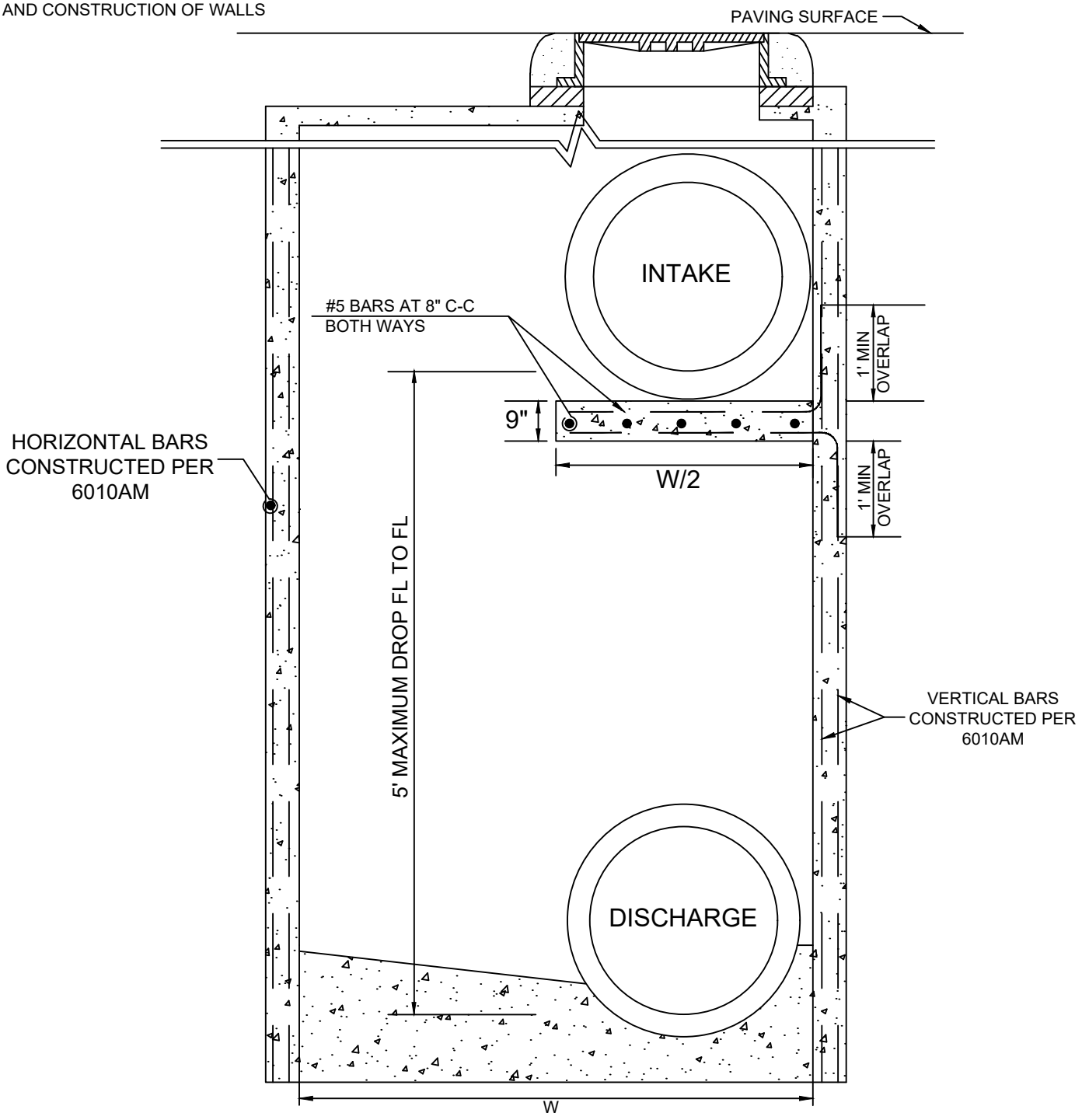
M* - CITY OF MELISSA REVISION

# DROP STORMWATER MANHOLE

# 6' SQUARE W/BAFFLES

| NCTCOG STANDARD SPECIFICATION REFERENCE | | |
|---|---|---|
| | MODIFIED DATE | STANDARD DRAWING NO. |
| | 03/02/15 | 6012BM* |
| NOTICE DATE | ADOPTED DATE | ENFORCEMENT DATE |
| | | |

SEE DETAIL 6010AM FOR MANHOLE REBAR SPACING
AND CONSTRUCTION OF WALLS




SECTION B-B (N.T.S.)

| MH SIZE(W) | V | T | E | F | G | H |
|---|---|---|---|---|---|---|
| 6' | 7'-6" | 9" | 9" | 16" | 10" | 2'-2" |

TABLE OF DIMENSIONS
FROM 6010AM

N.T.S.

IF DESIGN IS GREATER THAN MAX ALLOWABLE VELOCITY (12 FPS):

1. MAX DROP FROM FL TO FL = 5' AND BAFFLE IS REQUIRED.
2. MIN. MANHOLE SIZE TO BE 6'x6'.
3. CLASS IV PIPE IS REQUIRED.
4. 6" DIA. VENT PIPE TO BE INSTALLED DOWNSTREAM OF OUTLET & RECONNECTED 9" BELOW TOP.

M* - CITY OF MELISSA REVISION

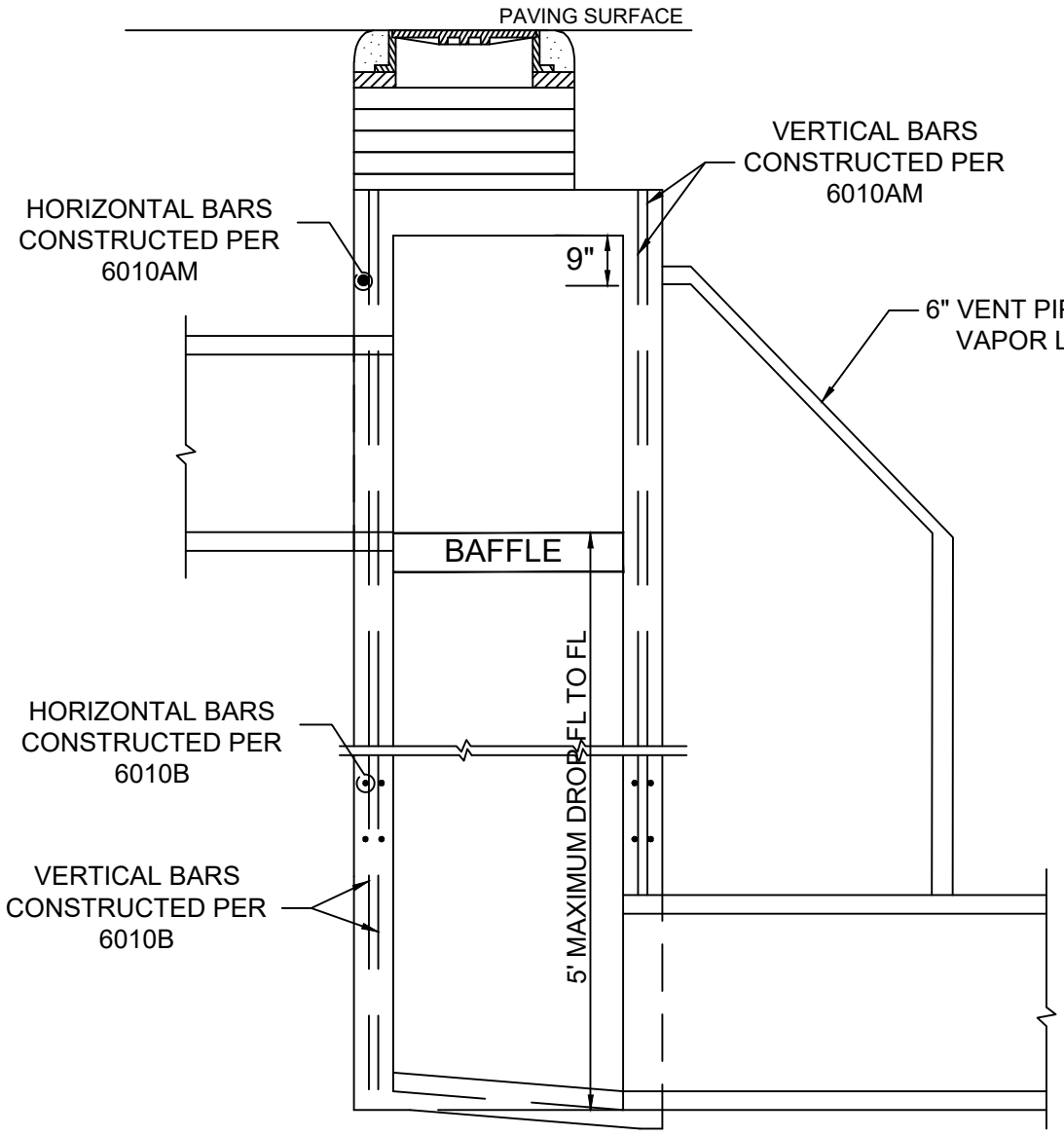
NCTCOG STANDARD SPECIFICATION REFERENCE

# DROP STORMWATER MANHOLE

# 6' SQUARE W/ 1 BAFFLE

| MODIFIED DATE | STANDARD DRAWING NO. |
|---|---|
| 09/15/15 | 6012CM* |

| NOTICE DATE | APPLIED DATE | ENFORCED DATE |
|---|---|---|
| | | |




## SECTION A-A

N.T.S.

IF DESIGN IS GREATER THAN MAX ALLOWABLE VELOCITY (12 FPS):

1. MAX DROP FROM FL TO FL = 5' AND BAFFLE IS REQUIRED. BAFFLE CONSTRUCTED PER 6012CM.

2. MIN. MANHOLE SIZE TO BE 6'x6'.

3. CLASS IV PIPE IS REQUIRED.

4. 6" DIA. VENT PIPE TO BE INSTALLED DOWNSTREAM OF OUTLET & RECONNECTED 9" BELOW TOP.

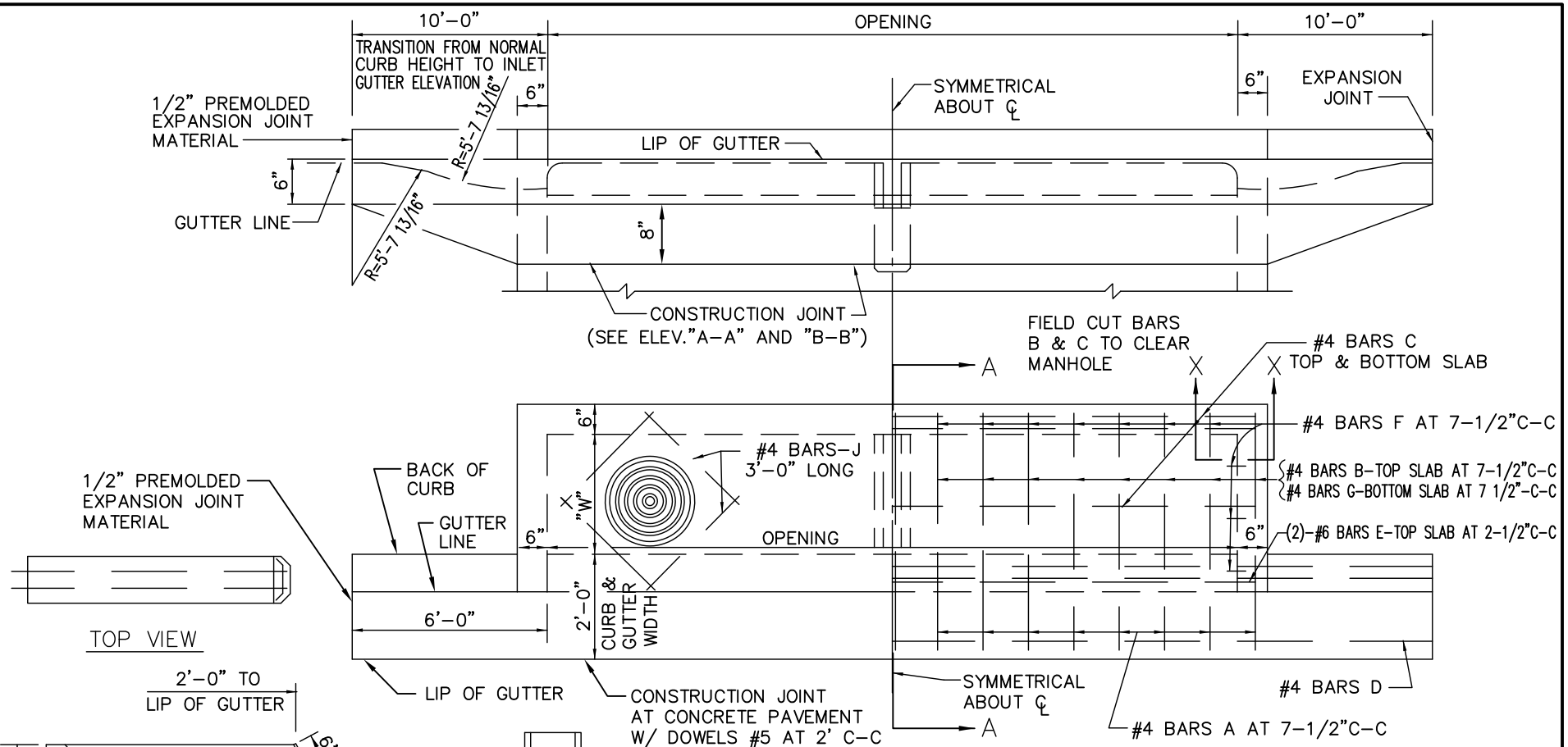
M* - CITY OF MELISSA REVISION

# DROP STORMWATER MANHOLE

# 6' SQUARE W/ 1 BAFFLE

MELISSA TX

| NCTCOG STANDARD SPECIFICATION REFERENCE | | |
|---|---|---|
| | MODIFIED DATE | STANDARD DRAWING NO. |
| | 09/15/15 | 6012DM* |
| NOTICE DATE | APPLIED DATE | ENFORCED DATE |




## TRANSVERSE BEAM DETAIL

(FOR USE WITH 15' & 20' INLETS)
N.T.S.

NOTES:

1. LOCATION OF ACCESS OPENING TO BE AT OUTFALL END, UNLESS OTHERWISE DIRECTED BY THE OWNER.
2. INLETS OVER 10' IN WIDTH SHALL HAVE AN ACCESS OPENING AT EACH END.
3. LAYERS OF REINFORCING STEEL NEAREST THE INTERIOR AND EXTERIOR SURFACE SHALL HAVE A COVER OF 2" CLEAR OF BARS, UNLESS OTHERWISE NOTED.

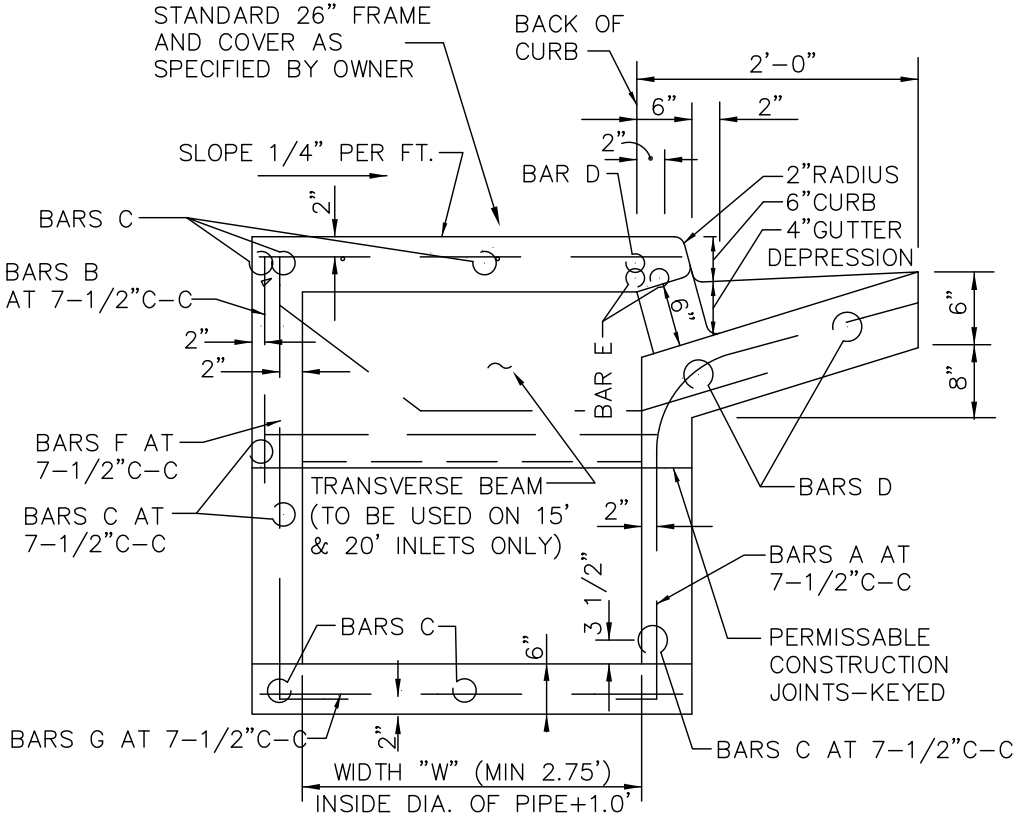
# CURB INLET

## 5', 10', 15' OR 20' OPENING

North Central Texas Council of Governments

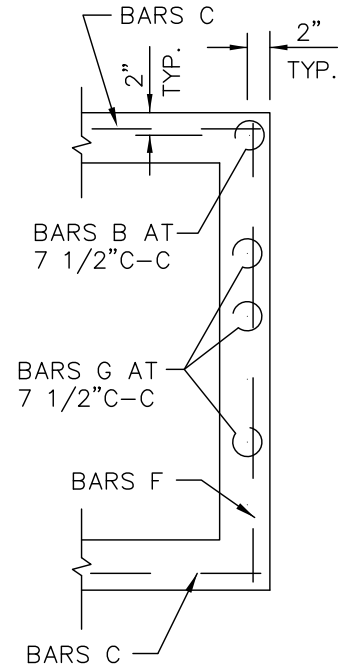
| STANDARD SPECIFICATION REFERENCE | |
|---|---|
| 702 | |
| DATE | STANDARD DRAWING NO. |
| AUG '23 | 6020A |

STANDARD DRAWING NO. 6020A




SECTION "A-A"

N.T.S.




SECTION "X-X"

N.T.S.

GENERAL NOTES:

1. ALL CONCRETE SHALL BE CLASS "C" CONCRETE.
2. REINFORCING BARS SHALL BE STANDARD GRADE STEEL, DEFORMED REINFORCING BARS OF A DIAMETER AND LENGTH AS SHOWN.
3. CHAMFER ALL EXPOSED CORNERS 3/4" EXCEPT WHERE OTHERWISE NOTED.
4. DIMENSIONS RELATING TO REINFORCING STEEL ARE TO OUTSIDE EDGE OF BARS.
5. FIELD CUT AND BEND BARS AS NECESSARY TO ACCOMODATE STORM SEWER PIPE.
6. RING AND COVER SHALL BE APPROVED BY THE OWNER AND INSTALLED BY THE CONTRACTOR.
7. INLET OPENING SHALL BE 6" MIN. OR 8" MAX.
8. PRECAST PRODUCT MAY BE USED AT THE APPROVAL OF THE OWNER.
9. ALLOW 1" MIN. CLEAR SPACE BETWEEN OD OF PIPE OR BOX AND INSIDE WALL OF INLET (OD OF PIPE OR BOX SHOULD ACCOUNT FOR SKEWED CONDITIONS).
10. DEPTHS GREATER THAN 10' NEED TO BE STRUCTURALLY ENGINEERED.
11. KEYWAY JOINT TO BE MIN. 18" ABOVE FLOWLINE, UNLESS APPROVED BY ENGINEER.

STANDARD DRAWING NO. 6020B

# CURB INLET

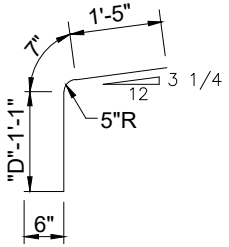
## CROSS SECTION & INLET THROAT

North Central Texas Council of Governments

STANDARD SPECIFICATION REFERENCE 702

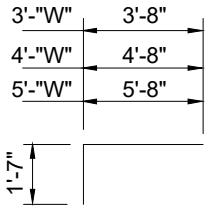
DATE AUG '23

STANDARD DRAWING NO. 6020B



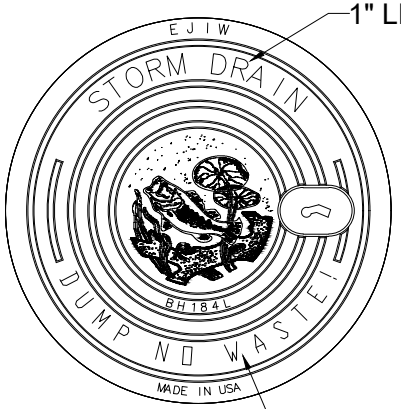

## #4 BARS A

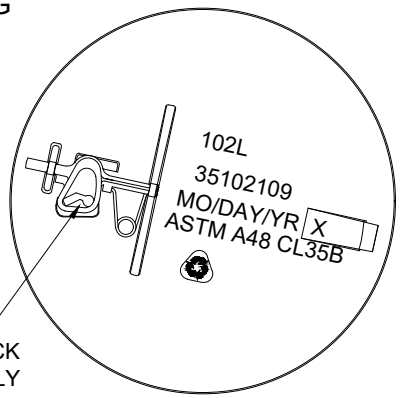
N.T.S.




## #4 BARS B

N.T.S.

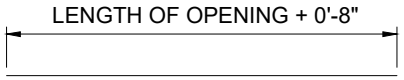



BOTTOM VIEW

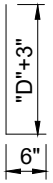

## #4 BARS C & D

N.T.S.



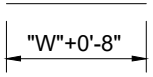

## #4 BARS E

N.T.S.



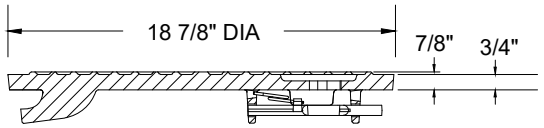

## #4 BARS F

N.T.S.

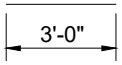



## #4 BARS G

N.T.S.

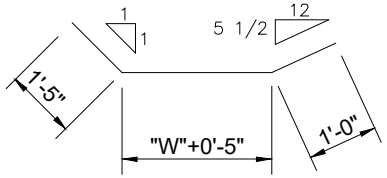



COVER SECTION



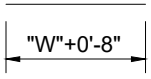

## #4 BARS J

N.T.S.




## #3 BARS M

N.T.S.




## #5 BARS N

N.T.S.

EJIW EAST JORDAN IRON WORKS EST.1883
800-626-4653
www.ejiw.com
MADE IN USA

PRODUCT NUMBER
35102209

CATALOG NUMBER
102 LOCK

LOCK COVER ASSEMBLY

LOAD RATING
LIGHT DUTY

COATING
DIPPED

ESTIMATED WEIGHT
COVER: 60 LBS 27kg

MATERIAL SPECIFICATION
COVER - GRAY IRON
ASTM A48 CL35B

OPEN AREA
N/A

√ DESIGNATES MACHINED SURFACE

| DRAWN | DATE |
|---|---|
| DEW | 10/16/06 |
| LAST REVISED | DATE |
| DAL | 07/13/07 |

REFERENCE INFORMATION
35102110



M* - CITY OF MELISSA REVISION

STANDARD DRAWING NO. 6020CM*

# CURB INLET

# REBAR & M.H. FRAME & COVER

MELISSA TX

NCTCOG STANDARD SPECIFICATION REFERENCE
702

DATE
02/03/09

STANDARD DRAWING NO.
6020CM*

BILL OF REINFORCING STEEL

| DEPTH "D" | ALL WIDTHS AND LENGTHS | | | | OPENING LENGTH "L" = 5ft | | | | | | OPENING LENGTH "L" = 10ft | | | | | | OPENING LENGTH "L" = 15 ft | | | | | | | | OPENING LENGTH "L" = 20 ft | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Widths "W" | | | | | | Widths "W" | | | | | | Widths "W" | | | | | | | | Widths "W" | | | | | | | |
| | | | | | 3ft | 4ft | 5ft | | | | 3ft | 4ft | 5ft | | | | 3ft | 4ft | 5ft | | | | | | 3ft | 4ft | 5ft | | | | | |
| | BARS | BARS | BARS | BARS | BARS | BARS | BARS | BARS | BARS | BARS | BARS | BARS | BARS | BARS | BARS | BARS | BARS | BARS | BARS | BARS | BARS | BARS | BARS | BARS | BARS | BARS | BARS | BARS | BARS | BARS | BARS | BARS |
| | C | D | E | J | F | F | F | A | B | G | F | F | F | A | B | G | F | F | F | A | B | G | M | N | F | F | F | A | B | G | M | N |
| 3'–6" | 17 | 3 | 2 | 4 | 20 | 24 | 28 | 10 | 10 | 20 | 28 | 32 | 36 | 18 | 18 | 28 | 36 | 40 | 44 | 26 | 26 | 36 | 2 | 2 | 44 | 48 | 52 | 34 | 34 | 44 | 2 | 2 |
| 3'–9" | 18 | " | " | " | " | " | " | " | " | 20 | " | " | " | " | " | 28 | " | " | " | " | " | 36 | " | " | " | " | " | " | " | 44 | " | " |
| 4'–0" | 19 | " | " | " | " | " | " | " | " | 24 | " | " | " | " | " | 32 | " | " | " | " | " | 40 | " | " | " | " | " | " | " | 48 | " | " |
| 4'–3" | 19 | " | " | " | " | " | " | " | " | 24 | " | " | " | " | " | 32 | " | " | " | " | " | 40 | " | " | " | " | " | " | " | 48 | " | " |
| 4'–6" | 21 | " | " | " | " | " | " | " | " | 26 | " | " | " | " | " | 34 | " | " | " | " | " | 42 | " | " | " | " | " | " | " | 50 | " | " |
| 4'–9" | 21 | " | " | " | " | " | " | " | " | 26 | " | " | " | " | " | 34 | " | " | " | " | " | 42 | " | " | " | " | " | " | " | 50 | " | " |
| 5'–0" | 21 | " | " | " | " | " | " | " | " | 26 | " | " | " | " | " | 34 | " | " | " | " | " | 42 | " | " | " | " | " | " | " | 50 | " | " |
| 5'–3" | 23 | " | " | " | " | " | " | " | " | 28 | " | " | " | " | " | 36 | " | " | " | " | " | 44 | " | " | " | " | " | " | " | 52 | " | " |
| 5'–6" | 23 | " | " | " | " | " | " | " | " | 28 | " | " | " | " | " | 36 | " | " | " | " | " | 44 | " | " | " | " | " | " | " | 52 | " | " |
| 5'–9" | 25 | " | " | " | " | " | " | " | " | 30 | " | " | " | " | " | 38 | " | " | " | " | " | 46 | " | " | " | " | " | " | " | 54 | " | " |
| 6'–0" | 25 | " | " | " | " | " | " | " | " | 30 | " | " | " | " | " | 38 | " | " | " | " | " | 46 | " | " | " | " | " | " | " | 54 | " | " |
| 6'–3" | 26 | " | " | " | " | " | " | " | " | 30 | " | " | " | " | " | 38 | " | " | " | " | " | 46 | " | " | " | " | " | " | " | 54 | " | " |
| 6'–6" | 27 | " | " | " | " | " | " | " | " | 32 | " | " | " | " | " | 40 | " | " | " | " | " | 48 | " | " | " | " | " | " | " | 56 | " | " |
| 6'–9" | 27 | " | " | " | " | " | " | " | " | 32 | " | " | " | " | " | 40 | " | " | " | " | " | 48 | " | " | " | " | " | " | " | 56 | " | " |
| 7'–0" | 29 | " | " | " | " | " | " | " | " | 34 | " | " | " | " | " | 42 | " | " | " | " | " | 50 | " | " | " | " | " | " | " | 58 | " | " |
| 7'–3" | 29 | " | " | " | " | " | " | " | " | 34 | " | " | " | " | " | 42 | " | " | " | " | " | 50 | " | " | " | " | " | " | " | 58 | " | " |
| 7'–6" | 30 | " | " | " | " | " | " | " | " | 34 | " | " | " | " | " | 42 | " | " | " | " | " | 50 | " | " | " | " | " | " | " | 58 | " | " |
| 7'–9" | 31 | " | " | " | " | " | " | " | " | 36 | " | " | " | " | " | 44 | " | " | " | " | " | 52 | " | " | " | " | " | " | " | 60 | " | " |
| 8'–0" | 31 | " | " | " | " | " | " | " | " | 36 | " | " | " | " | " | 44 | " | " | " | " | " | 52 | " | " | " | " | " | " | " | 60 | " | " |
| 8'–3" | 32 | " | " | " | " | " | " | " | " | 36 | " | " | " | " | " | 44 | " | " | " | " | " | 52 | " | " | " | " | " | " | " | 60 | " | " |
| 8'–6" | 33 | " | " | " | " | " | " | " | " | 38 | " | " | " | " | " | 46 | " | " | " | " | " | 54 | " | " | " | " | " | " | " | 62 | " | " |
| 8'–9" | 34 | " | " | " | " | " | " | " | " | 38 | " | " | " | " | " | 46 | " | " | " | " | " | 54 | " | " | " | " | " | " | " | 62 | " | " |
| 9'–0" | 35 | " | " | " | " | " | " | " | " | 40 | " | " | " | " | " | 48 | " | " | " | " | " | 56 | " | " | " | " | " | " | " | 64 | " | " |
| 9'–3" | 36 | " | " | " | " | " | " | " | " | 40 | " | " | " | " | " | 48 | " | " | " | " | " | 56 | " | " | " | " | " | " | " | 64 | " | " |
| 9'–6" | 37 | " | " | " | " | " | " | " | " | 42 | " | " | " | " | " | 50 | " | " | " | " | " | 58 | " | " | " | " | " | " | " | 66 | " | " |
| 10'–0" | 38 | " | " | " | " | " | " | " | " | 42 | " | " | " | " | " | 50 | " | " | " | " | " | 58 | " | " | " | " | " | " | " | 66 | " | " |

NOTES:

– FOR CONVENIENCE, DEPTHS OF INLETS SHOWN IN ABOVE TABLES ARE IN INCREMENTS OF 3 INCHES BUT ANY DEPTHS OTHER THAN THOSE SHOWN ABOVE MAY BE USED WHEREVER DEEMED NECESSARY. QUANTITIES FOR OTHER DEPTHS FALLING WITHIN THE LIMITS OF THE TABLE MAY BE FOUND BY INTERPOLATION.

– DEPTHS GREATER THAN 10' NEED TO BE STRUCTURALLY ENGINEERED.

STANDARD DRAWING NO. 6020D

# CURB INLET

## BILL OF REINFORCING STEEL

North Central Texas Council of Governments

STANDARD SPECIFICATION REFERENCE 702

DATE AUG '23

STANDARD DRAWING NO. 6020D

## SUMMARY OF QUANTITIES FOR CURB INLETS

| DEPTH "D" | 5'–0" OPENING | | | | | | 10'–0" OPENING | | | | | | 15'–0" OPENING | | | | | | 20'–0" OPENING | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | WIDTH 3'–0" | | WIDTH 4'–0" | | WIDTH 5'–0" | | WIDTH 3'–0" | | WIDTH 4'–0" | | WIDTH 5'–0" | | WIDTH 3'–0" | | WIDTH 4'–0" | | WIDTH 5'–0" | | WIDTH 3'–0" | | WIDTH 4'–0" | | WIDTH 5'–0" | |
| | CONC C.Y. | STEEL LBS. | CONC C.Y. | STEEL LBS. | CONC C.Y. | STEEL LBS. | CONC C.Y. | STEEL LBS. | CONC C.Y. | STEEL LBS. | CONC C.Y. | STEEL LBS. | CONC C.Y. | STEEL LBS. | CONC C.Y. | STEEL LBS. | CONC C.Y. | STEEL LBS. | CONC C.Y. | STEEL LBS. | CONC C.Y. | STEEL LBS. | CONC C.Y. | STEEL LBS. |
| 3'–6" | 2.62 | 306 | 2.95 | 332 | 3.28 | 373 | 4.12 | 479 | 4.64 | 521 | 5.20 | 564 | 5.69 | 667 | 6.40 | 721 | 7.10 | 775 | 7.20 | 846 | 8.11 | 909 | 9.03 | 976 |
| 3'–9" | 2.70 | 309 | 3.04 | 341 | 3.39 | 373 | 4.25 | 494 | 4.78 | 536 | 5.34 | 579 | 5.87 | 687 | 6.58 | 741 | 7.30 | 796 | 7.42 | 874 | 8.34 | 937 | 9.27 | 1010 |
| 4'–0" | 2.78 | 328 | 3.14 | 364 | 3.49 | 399 | 4.38 | 518 | 4.92 | 565 | 5.49 | 610 | 6.05 | 718 | 6.77 | 776 | 7.49 | 835 | 7.64 | 909 | 8.58 | 976 | 9.51 | 1046 |
| 4'–3" | 2.87 | 334 | 3.23 | 370 | 3.59 | 406 | 4.51 | 526 | 5.06 | 573 | 5.64 | 619 | 6.22 | 729 | 6.95 | 787 | 7.69 | 847 | 7.87 | 922 | 8.81 | 990 | 9.75 | 1061 |
| 4'–6" | 2.95 | 356 | 3.32 | 394 | 3.69 | 431 | 4.64 | 558 | 5.20 | 607 | 5.79 | 656 | 6.40 | 770 | 7.14 | 830 | 7.88 | 891 | 8.09 | 973 | 9.04 | 1043 | 9.99 | 1115 |
| 4'–9" | 3.03 | 361 | 3.41 | 410 | 3.79 | 438 | 4.77 | 566 | 5.34 | 616 | 5.94 | 665 | 6.57 | 780 | 7.32 | 841 | 8.07 | 903 | 8.31 | 986 | 9.27 | 1056 | 10.23 | 1129 |
| 5'–0" | 3.12 | 367 | 3.51 | 416 | 3.90 | 445 | 4.90 | 574 | 5.47 | 624 | 6.09 | 674 | 6.75 | 791 | 7.51 | 853 | 8.27 | 915 | 8.53 | 999 | 9.50 | 1070 | 10.47 | 1144 |
| 5'–3" | 3.20 | 383 | 3.60 | 424 | 4.00 | 465 | 5.03 | 600 | 5.61 | 652 | 6.23 | 704 | 6.93 | 827 | 7.69 | 890 | 8.46 | 955 | 8.76 | 1044 | 9.73 | 1118 | 10.71 | 1194 |
| 5'–6" | 3.28 | 389 | 3.69 | 430 | 4.10 | 472 | 5.16 | 608 | 5.75 | 661 | 6.38 | 713 | 7.11 | 837 | 7.88 | 901 | 8.66 | 967 | 8.98 | 1057 | 9.97 | 1131 | 10.95 | 1208 |
| 5'–9" | 3.37 | 405 | 3.78 | 451 | 4.20 | 495 | 5.29 | 635 | 5.89 | 690 | 6.53 | 744 | 7.28 | 874 | 8.07 | 940 | 8.85 | 1007 | 9.20 | 1102 | 10.20 | 1178 | 11.19 | 1258 |
| 6'–0" | 3.45 | 415 | 3.88 | 460 | 4.30 | 504 | 5.42 | 646 | 6.03 | 702 | 6.68 | 757 | 7.45 | 888 | 8.25 | 954 | 9.05 | 1022 | 9.42 | 1119 | 10.43 | 1196 | 11.43 | 1276 |
| 6'–3" | 3.53 | 425 | 3.97 | 470 | 4.41 | 515 | 5.55 | 661 | 6.17 | 718 | 6.83 | 773 | 7.63 | 908 | 8.44 | 975 | 9.24 | 1044 | 9.64 | 1147 | 10.66 | 1223 | 11.67 | 1305 |
| 6'–6" | 3.62 | 437 | 4.06 | 486 | 4.51 | 532 | 5.68 | 681 | 6.31 | 739 | 6.97 | 797 | 7.81 | 935 | 8.62 | 1005 | 9.43 | 1057 | 9.87 | 1178 | 10.89 | 1258 | 11.92 | 1340 |
| 6'–9" | 3.70 | 441 | 4.15 | 490 | 4.61 | 537 | 5.81 | 688 | 6.45 | 747 | 7.12 | 806 | 7.98 | 945 | 8.81 | 1015 | 9.63 | 1066 | 10.09 | 1191 | 11.12 | 1272 | 12.15 | 1355 |
| 7'–0" | 3.78 | 460 | 4.25 | 510 | 4.71 | 560 | 5.94 | 716 | 6.59 | 777 | 7.27 | 837 | 8.16 | 981 | 8.99 | 1053 | 9.82 | 1126 | 10.31 | 1237 | 11.35 | 1319 | 12.40 | 1404 |
| 7'–3" | 3.86 | 465 | 4.34 | 516 | 4.81 | 567 | 6.07 | 724 | 6.72 | 785 | 7.42 | 846 | 8.33 | 992 | 9.18 | 1065 | 10.02 | 1138 | 10.53 | 1249 | 11.59 | 1333 | 12.64 | 1418 |
| 7'–6" | 3.95 | 477 | 4.43 | 529 | 4.91 | 570 | 6.20 | 742 | 6.86 | 804 | 7.57 | 866 | 8.51 | 1016 | 9.36 | 1089 | 10.21 | 1163 | 10.75 | 1290 | 11.82 | 1365 | 12.88 | 1451 |
| 7'–9" | 4.03 | 491 | 4.53 | 544 | 5.02 | 597 | 6.33 | 762 | 7.00 | 826 | 7.71 | 890 | 8.67 | 1040 | 9.55 | 1116 | 10.41 | 1193 | 10.98 | 1313 | 12.05 | 1399 | 13.12 | 1498 |
| 8'–0" | 4.12 | 496 | 4.62 | 550 | 5.12 | 604 | 6.46 | 770 | 7.14 | 834 | 7.86 | 899 | 8.86 | 1051 | 9.73 | 1129 | 10.60 | 1205 | 11.20 | 1325 | 12.28 | 1412 | 13.36 | 1510 |
| 8'–3" | 4.20 | 504 | 4.71 | 559 | 5.22 | 613 | 6.59 | 784 | 7.28 | 849 | 8.01 | 915 | 9.04 | 1069 | 9.92 | 1149 | 10.80 | 1228 | 11.42 | 1353 | 12.51 | 1440 | 13.60 | 1529 |
| 8'–6" | 4.28 | 519 | 4.80 | 576 | 5.32 | 632 | 6.71 | 804 | 7.42 | 871 | 8.16 | 938 | 9.21 | 1107 | 10.10 | 1176 | 10.99 | 1257 | 11.64 | 1385 | 12.74 | 1474 | 13.84 | 1565 |
| 8'–9" | 4.37 | 528 | 4.90 | 586 | 5.42 | 643 | 6.84 | 819 | 7.56 | 886 | 8.31 | 954 | 9.39 | 1119 | 10.29 | 1199 | 11.18 | 1280 | 11.87 | 1410 | 12.97 | 1500 | 14.08 | 1592 |
| 9'–0" | 4.45 | 545 | 4.99 | 605 | 5.53 | 664 | 6.97 | 842 | 7.70 | 912 | 8.46 | 982 | 9.56 | 1148 | 10.47 | 1231 | 11.38 | 1313 | 12.09 | 1447 | 13.21 | 1539 | 14.32 | 1631 |
| 9'–3" | 4.53 | 554 | 5.08 | 614 | 5.63 | 674 | 7.10 | 858 | 7.84 | 929 | 8.60 | 999 | 9.74 | 1169 | 10.66 | 1252 | 11.57 | 1335 | 12.31 | 1474 | 13.44 | 1563 | 14.56 | 1660 |
| 9'–6" | 4.62 | 568 | 5.17 | 630 | 5.73 | 692 | 7.23 | 878 | 7.97 | 950 | 8.75 | 1022 | 9.92 | 1195 | 10.84 | 1280 | 11.77 | 1365 | 12.53 | 1505 | 13.67 | 1600 | 14.80 | 1696 |
| 10'–0" | 4.78 | 582 | 5.36 | 645 | 5.93 | 708 | 7.49 | 900 | 8.11 | 974 | 9.05 | 1048 | 10.27 | 1227 | 11.21 | 1312 | 12.16 | 1399 | 12.98 | 1546 | 14.13 | 1642 | 15.29 | 1739 |

NOTE:

– FOR CONVENIENCE, DEPTHS OF INLETS SHOWN IN ABOVE TABLES ARE IN INCREMENTS OF 3 INCHES BUT ANY DEPTHS OTHER THAN THOSE SHOWN ABOVE MAY BE USED WHEREVER DEEMED NECESSARY. QUANTITIES FOR OTHER DEPTHS FALLING WITHIN THE LIMITS OF THE TABLE MAY BE FOUND BY INTERPOLATION.

– DEPTHS GREATER THAN 10' NEED TO BE STRUCTURALLY ENGINEERED.

STANDARD DRAWING NO. 6020E

# CURB INLET

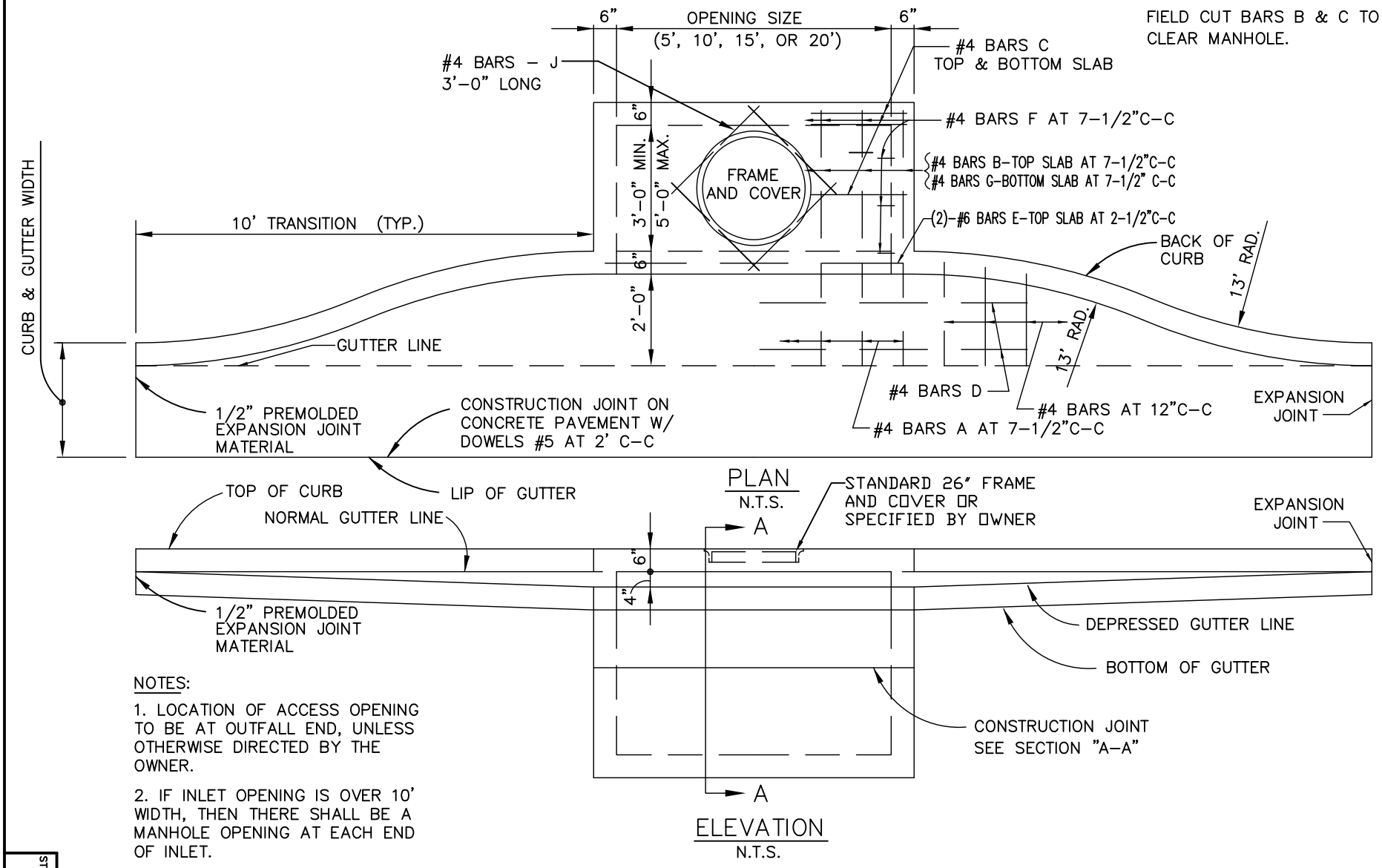
# SUMMARY OF QUANTITIES

North Central Texas Council of Governments

STANDARD SPECIFICATION REFERENCE 702

DATE AUG '23

STANDARD DRAWING NO. 6020E




NOTES:

1. LOCATION OF ACCESS OPENING TO BE AT OUTFALL END, UNLESS OTHERWISE DIRECTED BY THE OWNER.

2. IF INLET OPENING IS OVER 10' WIDTH, THEN THERE SHALL BE A MANHOLE OPENING AT EACH END OF INLET.

STANDARD DRAWING NO. 6030A

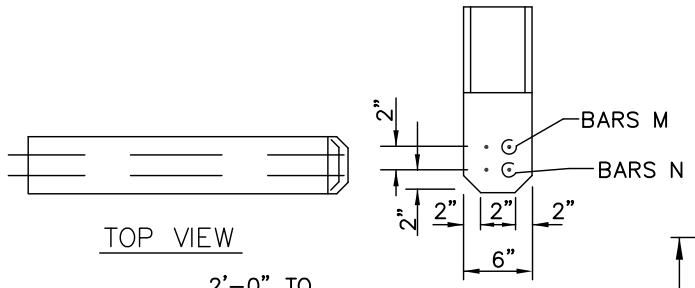
# CURB INLET RECESSED
## 5', 10', 15' OR 20' OPENING

North Central Texas Council of Governments

STANDARD SPECIFICATION REFERENCE
702

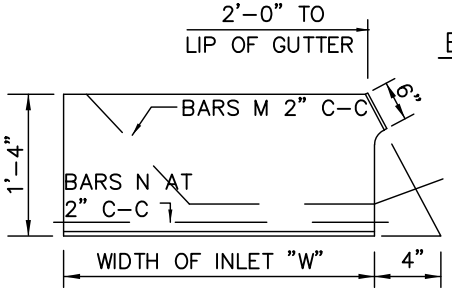
DATE
AUG '23

STANDARD DRAWING NO.
6030A




TOP VIEW

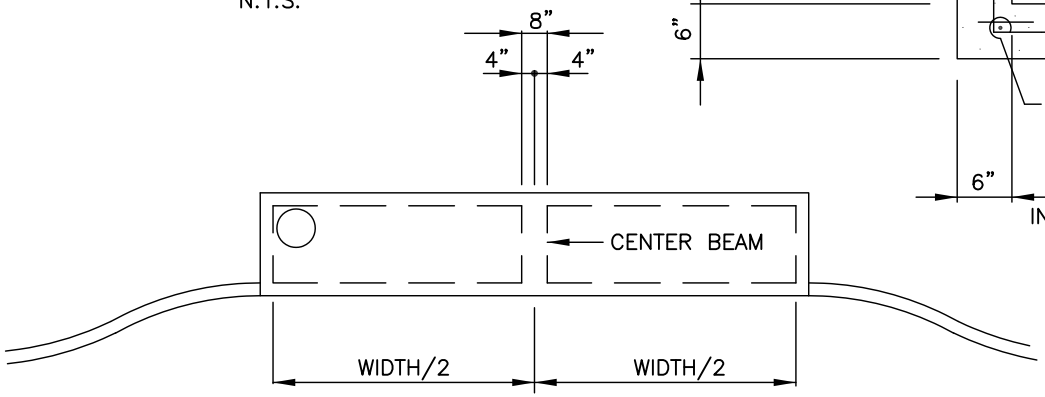
END VIEW




SIDE SECTION

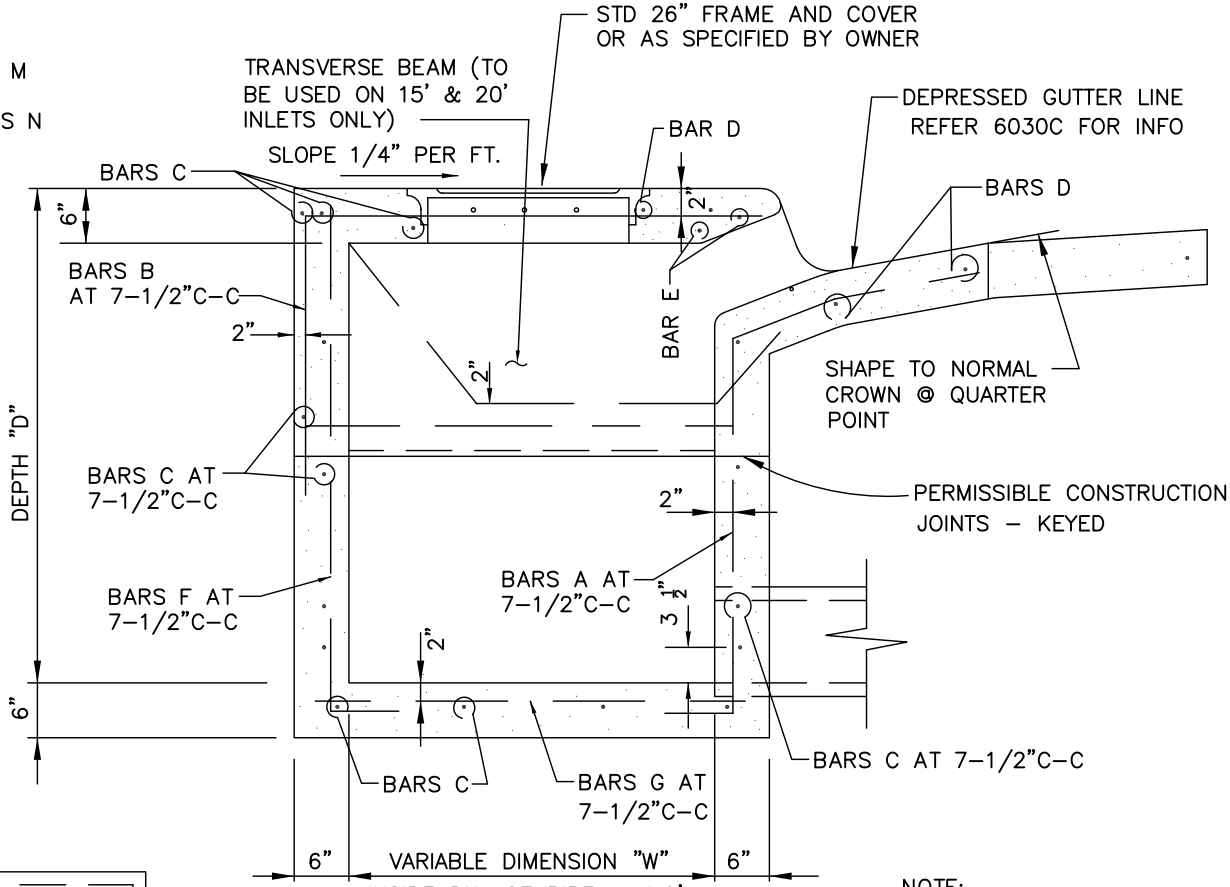
## TRANSVERSE BEAM DETAIL

(FOR USE WITH 15' & 20' INLETS)
N.T.S.




## TRANSVERSE BEAM FOR 15' AND 20' INLETS

N.T.S.




## SECTION A-A

N.T.S.

NOTE:
1. KEYWAY JOINT TO BE MIN. 18" ABOVE FLOWLINE, UNLESS OTHERWISE APPROVED BY ENGINEER.
2. MATCH PAVEMENT THICKNESS TO STREET, TYPICALLY 6".

STANDARD DRAWING NO. 6030B

# CURB INLET RECESSED

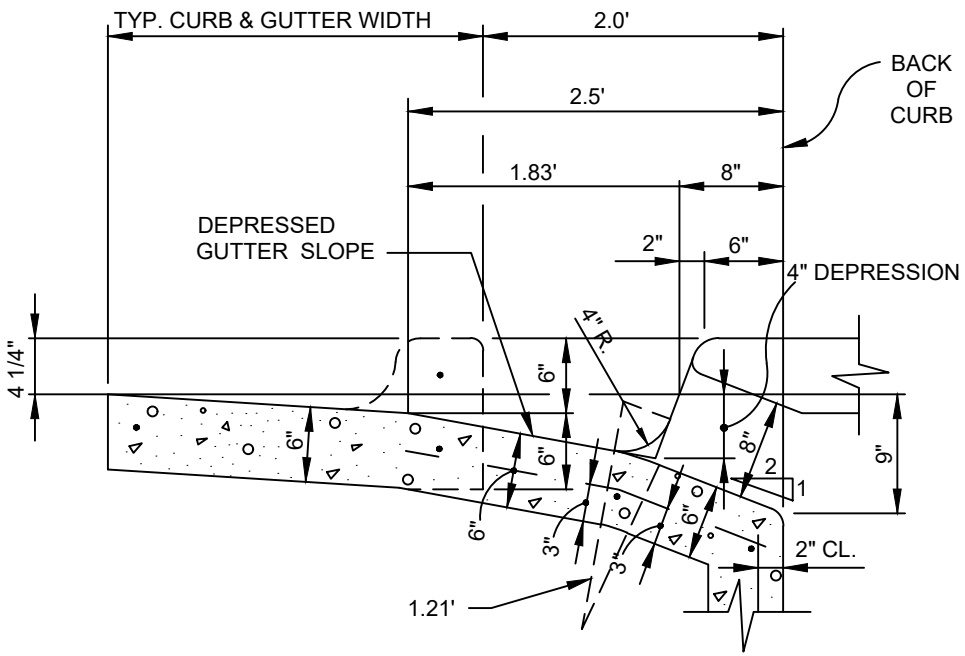
## CROSS SECTION & CENTER BEAM

North Central Texas Council of Governments

STANDARD SPECIFICATION REFERENCE
702

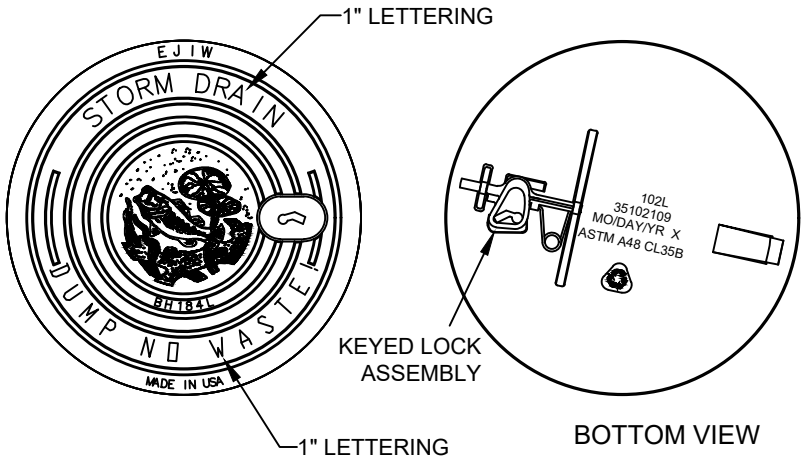
DATE
AUG '23

STANDARD DRAWING NO.
6030B




## INLET THROAT

N.T.S.




## MANHOLE FRAME & COVER

N.T.S.

EJIW EAST JORDAN IRON WORKS EST.1883
800-626-4653
www.ejiw.com
MADE IN USA

| | |
|---|---|
| PRODUCT NUMBER | 35102209 |
| CATALOG NUMBER | 102 LOCK |
| | LOCK COVER ASSEMBLY |
| LOAD RATING | LIGHT DUTY |
| COATING | DIPPED |
| ESTIMATED WEIGHT | COVER: 60 LBS 27kg |
| MATERIAL SPECIFICATION | COVER - GRAY IRON ASTM A48 CL35B |
| OPEN AREA | N/A |
| √DESIGNATES MACHINED SURFACE | |
| DRAWN DEW | DATE 10/16/06 |
| LAST REVISED DAL | DATE 07/13/07 |
| REFERENCE INFORMATION | 35102110 |



M* - CITY OF MELISSA REVISION

STANDARD DRAWING NO. 6030CM*

# CURB INLET RECESSED

# INLET THROAT & M.H. FRAME & COVER

MELISSA TX

| NCTCOG STANDARD SPECIFICATION REFERENCE | |
|---|---|
| 702 | |
| DATE | STANDARD DRAWING NO. |
| 02/03/09 | 6030CM* |

GENERAL NOTES:

1. ALL REINFORCING STEEL SHALL BE GRADE 60. DEFORMED REINFORCING BARS AT A DIAMETER & LENGTH AS SHOWN.
2. ALL CONCRETE SHALL BE CLASS "C". ALL EXPOSED CORNERS SHALL BE CHAMFERED 3/4".
3. ALL REINFORCING STEEL SHALL HAVE A MINIMUM COVER OF 2" CLEAR OF THE BARS.
4. 10'–0" OF EXISTING CURB AND GUTTER UPSTREAM AND 10'–0" OF EXISTING CURB AND GUTTER DOWNSTREAM SHALL BE REMOVED AND REPOURED INTEGRALLY WITH EACH INLET.
5. ALL BACK FILLING SHALL BE PERFORMED BY MECHANICAL TAMPING TO 95% STANDARD PROCTOR DENSITY.
6. PRECAST PRODUCTS MAY BE USED AT THE APPROVAL OF THE OWNER.
7. ALLOW 1" MIN. CLEAR SPACE BETWEEN OD OF PIPE OR BOX AND INSIDE WALL OF INLET (OD OF PIPE OR BOX SHOULD ACCOUNT FOR SKEWED CONDITIONS).
8. FIELD CUT & BEND BARS AS NECESSARY TO ACCOMODATE STORM SEWER PIPE.
9. RING & COVER SHALL BE APPROVED BY THE OWNER AND INSTALLED BT CONTRACTOR.
10. WHEN POURING INVERTS, THE BOTTOM SHALL BE SLOPED NO MORE THAN 1/4"/FT TOWARD PIPE.
11. INLET OPENING SHALL BE 6" MIN OR 8" MAX.
12. 10 FT. MAX DEPTH.

STANDARD DRAWING NO. 6030D

# CURB INLET RECESSED

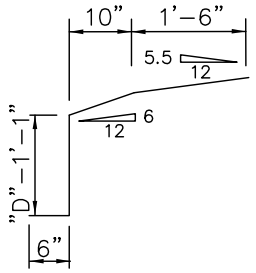
## GENERAL NOTES

North Central Texas Council of Governments

STANDARD SPECIFICATION REFERENCE 702

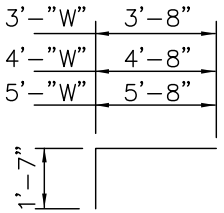
DATE AUG '23

STANDARD DRAWING NO. 6030D




#4 BARS A

N.T.S.




#4 BARS B

N.T.S.

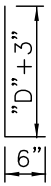

#4 BARS C & D

N.T.S.

FIELD CUT D BARS AS NECESSARY AT TRANSITIONS

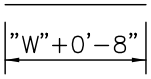

#4 BARS E

N.T.S.




#4 BARS F

N.T.S.




#4 BARS G

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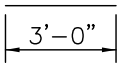


#4 BARS J

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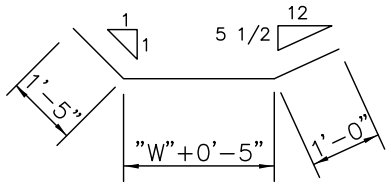
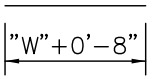



#3 BARS M

N.T.S.




#5 BARS N

N.T.S.

STANDARD DRAWING NO. 6030E

# CURB INLET RECESSED

## REBAR

North Central Texas Council of Governments

STANDARD SPECIFICATION REFERENCE 702

DATE AUG '23

STANDARD DRAWING NO. 6030E

BILL OF REINFORCING STEEL

| DEPTH "D" | ALL WIDTHS AND LENGTHS | | | | OPENING LENGTH "L" = 5ft | | | | | | OPENING LENGTH "L" = 10ft | | | | | | OPENING LENGTH "L" = 15 ft | | | | | | | | OPENING LENGTH "L" = 20 ft | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Widths "W" | | | | | | Widths "W" | | | | | | Widths "W" | | | | | | | | Widths "W" | | | | | | | |
| | | | | | 3ft | 4ft | 5ft | | | | 3ft | 4ft | 5ft | | | | 3ft | 4ft | 5ft | | | | | | 3ft | 4ft | 5ft | | | | | |
| | BARS | BARS | BARS | BARS | BARS | BARS | BARS | BARS | BARS | BARS | BARS | BARS | BARS | BARS | BARS | BARS | BARS | BARS | BARS | BARS | BARS | BARS | BARS | BARS | BARS | BARS | BARS | BARS | BARS | BARS | BARS | BARS |
| | C | D | E | J | F | F | F | A | B | G | F | F | F | A | B | G | F | F | F | A | B | G | M | N | F | F | F | A | B | G | M | N |
| 3'–6" | 17 | 3 | 2 | 4 | 20 | 24 | 28 | 10 | 10 | 20 | 28 | 32 | 36 | 18 | 18 | 28 | 36 | 40 | 44 | 26 | 26 | 36 | 2 | 2 | 44 | 48 | 52 | 34 | 34 | 44 | 2 | 2 |
| 3'–9" | 18 | " | " | " | " | " | " | " | " | 20 | " | " | " | " | " | 28 | " | " | " | " | " | 36 | " | " | " | " | " | " | " | 44 | " | " |
| 4'–0" | 19 | " | " | " | " | " | " | " | " | 24 | " | " | " | " | " | 32 | " | " | " | " | " | 40 | " | " | " | " | " | " | " | 48 | " | " |
| 4'–3" | 19 | " | " | " | " | " | " | " | " | 24 | " | " | " | " | " | 32 | " | " | " | " | " | 40 | " | " | " | " | " | " | " | 48 | " | " |
| 4'–6" | 21 | " | " | " | " | " | " | " | " | 26 | " | " | " | " | " | 34 | " | " | " | " | " | 42 | " | " | " | " | " | " | " | 50 | " | " |
| 4'–9" | 21 | " | " | " | " | " | " | " | " | 26 | " | " | " | " | " | 34 | " | " | " | " | " | 42 | " | " | " | " | " | " | " | 50 | " | " |
| 5'–0" | 21 | " | " | " | " | " | " | " | " | 26 | " | " | " | " | " | 34 | " | " | " | " | " | 42 | " | " | " | " | " | " | " | 50 | " | " |
| 5'–3" | 23 | " | " | " | " | " | " | " | " | 28 | " | " | " | " | " | 36 | " | " | " | " | " | 44 | " | " | " | " | " | " | " | 52 | " | " |
| 5'–6" | 23 | " | " | " | " | " | " | " | " | 28 | " | " | " | " | " | 36 | " | " | " | " | " | 44 | " | " | " | " | " | " | " | 52 | " | " |
| 5'–9" | 25 | " | " | " | " | " | " | " | " | 30 | " | " | " | " | " | 38 | " | " | " | " | " | 46 | " | " | " | " | " | " | " | 54 | " | " |
| 6'–0" | 25 | " | " | " | " | " | " | " | " | 30 | " | " | " | " | " | 38 | " | " | " | " | " | 46 | " | " | " | " | " | " | " | 54 | " | " |
| 6'–3" | 26 | " | " | " | " | " | " | " | " | 30 | " | " | " | " | " | 38 | " | " | " | " | " | 46 | " | " | " | " | " | " | " | 54 | " | " |
| 6'–6" | 27 | " | " | " | " | " | " | " | " | 32 | " | " | " | " | " | 40 | " | " | " | " | " | 48 | " | " | " | " | " | " | " | 56 | " | " |
| 6'–9" | 27 | " | " | " | " | " | " | " | " | 32 | " | " | " | " | " | 40 | " | " | " | " | " | 48 | " | " | " | " | " | " | " | 56 | " | " |
| 7'–0" | 29 | " | " | " | " | " | " | " | " | 34 | " | " | " | " | " | 42 | " | " | " | " | " | 50 | " | " | " | " | " | " | " | 58 | " | " |
| 7'–3" | 29 | " | " | " | " | " | " | " | " | 34 | " | " | " | " | " | 42 | " | " | " | " | " | 50 | " | " | " | " | " | " | " | 58 | " | " |
| 7'–6" | 30 | " | " | " | " | " | " | " | " | 34 | " | " | " | " | " | 42 | " | " | " | " | " | 50 | " | " | " | " | " | " | " | 58 | " | " |
| 7'–9" | 31 | " | " | " | " | " | " | " | " | 36 | " | " | " | " | " | 44 | " | " | " | " | " | 52 | " | " | " | " | " | " | " | 60 | " | " |
| 8'–0" | 31 | " | " | " | " | " | " | " | " | 36 | " | " | " | " | " | 44 | " | " | " | " | " | 52 | " | " | " | " | " | " | " | 60 | " | " |
| 8'–3" | 32 | " | " | " | " | " | " | " | " | 36 | " | " | " | " | " | 44 | " | " | " | " | " | 52 | " | " | " | " | " | " | " | 60 | " | " |
| 8'–6" | 33 | " | " | " | " | " | " | " | " | 38 | " | " | " | " | " | 46 | " | " | " | " | " | 54 | " | " | " | " | " | " | " | 62 | " | " |
| 8'–9" | 34 | " | " | " | " | " | " | " | " | 38 | " | " | " | " | " | 46 | " | " | " | " | " | 54 | " | " | " | " | " | " | " | 62 | " | " |
| 9'–0" | 35 | " | " | " | " | " | " | " | " | 40 | " | " | " | " | " | 48 | " | " | " | " | " | 56 | " | " | " | " | " | " | " | 64 | " | " |
| 9'–3" | 36 | " | " | " | " | " | " | " | " | 40 | " | " | " | " | " | 48 | " | " | " | " | " | 56 | " | " | " | " | " | " | " | 64 | " | " |
| 9'–6" | 37 | " | " | " | " | " | " | " | " | 42 | " | " | " | " | " | 50 | " | " | " | " | " | 58 | " | " | " | " | " | " | " | 66 | " | " |
| 10'–0" | 38 | " | " | " | " | " | " | " | " | 42 | " | " | " | " | " | 50 | " | " | " | " | " | 58 | " | " | " | " | " | " | " | 66 | " | " |

NOTE:

– FOR CONVENIENCE, DEPTHS OF INLETS SHOWN IN ABOVE TABLES ARE IN INCREMENTS OF 3 INCHES BUT ANY DEPTHS OTHER THAN THOSE SHOWN ABOVE MAY BE USED WHEREVER DEEMED NECESSARY. QUANTITIES FOR OTHER DEPTHS FALLING WITHIN THE LIMITS OF THE TABLE MAY BE FOUND BY INTERPOLATION.

– DEPTHS GREATER THAN 10' NEED TO BE STRUCTURALLY ENGINEERED.

STANDARD DRAWING NO. 6030F

# CURB INLET RECESSED

## BILL OF REINFORCING STEEL

North Central Texas Council of Governments

STANDARD SPECIFICATION REFERENCE 702

DATE AUG '23

STANDARD DRAWING NO. 6030F

## SUMMARY OF QUANTITIES FOR CURB INLETS

| DEPTH "D" | 5'–0" OPENING | | | | | | 10'–0" OPENING | | | | | | 15'–0" OPENING | | | | | | 20'–0" OPENING | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | WIDTH 3'–0" | | WIDTH 4'–0" | | WIDTH 5'–0" | | WIDTH 3'–0" | | WIDTH 4'–0" | | WIDTH 5'–0" | | WIDTH 3'–0" | | WIDTH 4'–0" | | WIDTH 5'–0" | | WIDTH 3'–0" | | WIDTH 4'–0" | | WIDTH 5'–0" | |
| | CONC C.Y. | STEEL LBS. | CONC C.Y. | STEEL LBS. | CONC C.Y. | STEEL LBS. | CONC C.Y. | STEEL LBS. | CONC C.Y. | STEEL LBS. | CONC C.Y. | STEEL LBS. | CONC C.Y. | STEEL LBS. | CONC C.Y. | STEEL LBS. | CONC C.Y. | STEEL LBS. | CONC C.Y. | STEEL LBS. | CONC C.Y. | STEEL LBS. | CONC C.Y. | STEEL LBS. |
| 3'–6" | 2.87 | 324 | 3.23 | 357 | 3.59 | 390 | 4.41 | 496 | 4.95 | 540 | 5.50 | 584 | 5.94 | 684 | 6.67 | 742 | 7.40 | 799 | 7.48 | 858 | 8.40 | 926 | 9.31 | 995 |
| 3'–9" | 2.96 | 333 | 3.32 | 367 | 3.69 | 401 | 4.54 | 512 | 5.09 | 556 | 5.64 | 601 | 6.12 | 706 | 6.86 | 764 | 7.60 | 822 | 7.70 | 886 | 8.63 | 955 | 9.55 | 1024 |
| 4'–0" | 3.04 | 353 | 3.42 | 390 | 3.79 | 428 | 4.66 | 537 | 5.23 | 585 | 5.79 | 633 | 6.29 | 737 | 7.04 | 799 | 7.79 | 861 | 7.92 | 923 | 8.86 | 996 | 9.79 | 1068 |
| 4'–3" | 3.12 | 358 | 3.51 | 396 | 3.89 | 434 | 4.79 | 545 | 5.37 | 594 | 5.94 | 643 | 6.47 | 748 | 7.23 | 811 | 7.99 | 873 | 8.14 | 937 | 9.09 | 1010 | 10.03 | 1083 |
| 4'–6" | 3.21 | 376 | 3.60 | 417 | 4.00 | 457 | 4.92 | 573 | 5.51 | 624 | 6.09 | 675 | 6.64 | 786 | 7.41 | 850 | 8.18 | 915 | 8.36 | 984 | 9.32 | 1059 | 10.27 | 1134 |
| 4'–9" | 3.29 | 382 | 3.69 | 423 | 4.10 | 464 | 5.05 | 581 | 5.65 | 633 | 6.24 | 684 | 6.82 | 796 | 7.60 | 862 | 8.37 | 927 | 8.59 | 997 | 9.55 | 1073 | 10.51 | 1149 |
| 5'–0" | 3.37 | 387 | 3.79 | 429 | 4.20 | 471 | 5.18 | 589 | 5.79 | 641 | 6.38 | 693 | 7.00 | 807 | 7.78 | 873 | 8.57 | 939 | 8.81 | 1011 | 9.78 | 1087 | 10.75 | 1164 |
| 5'–3" | 3.46 | 406 | 3.88 | 450 | 4.30 | 493 | 5.31 | 617 | 5.92 | 671 | 6.53 | 725 | 7.17 | 845 | 7.97 | 912 | 8.76 | 980 | 9.03 | 1057 | 10.02 | 1136 | 10.99 | 1215 |
| 5'–6" | 3.54 | 411 | 3.97 | 456 | 4.40 | 500 | 5.44 | 625 | 6.06 | 680 | 6.68 | 735 | 7.35 | 855 | 8.15 | 924 | 8.96 | 992 | 9.25 | 1071 | 10.25 | 1150 | 11.23 | 1229 |
| 5'–9" | 3.62 | 429 | 4.06 | 476 | 4.50 | 523 | 5.57 | 653 | 6.20 | 710 | 6.83 | 767 | 7.52 | 893 | 8.34 | 963 | 9.15 | 1034 | 9.48 | 1118 | 10.48 | 1199 | 11.48 | 1280 |
| 6'–0" | 3.71 | 435 | 4.16 | 482 | 4.61 | 530 | 5.70 | 661 | 6.34 | 719 | 6.98 | 776 | 7.70 | 903 | 8.53 | 975 | 9.35 | 1046 | 9.70 | 1131 | 10.71 | 1213 | 11.72 | 1295 |
| 6'–3" | 3.79 | 444 | 4.25 | 492 | 4.71 | 540 | 5.83 | 676 | 6.48 | 735 | 7.12 | 793 | 7.88 | 925 | 8.71 | 997 | 9.54 | 1069 | 9.92 | 1159 | 10.94 | 1242 | 11.96 | 1324 |
| 6'–6" | 3.87 | 459 | 4.34 | 509 | 4.81 | 559 | 5.96 | 697 | 6.62 | 757 | 7.27 | 818 | 8.05 | 952 | 8.90 | 1026 | 9.74 | 1100 | 10.14 | 1191 | 11.17 | 1276 | 12.20 | 1361 |
| 6'–9" | 3.96 | 464 | 4.43 | 515 | 4.91 | 566 | 6.09 | 705 | 6.76 | 766 | 7.42 | 827 | 8.23 | 962 | 9.08 | 1037 | 9.93 | 1112 | 10.36 | 1205 | 11.40 | 1290 | 12.44 | 1376 |
| 7'–0" | 4.04 | 482 | 4.53 | 536 | 5.01 | 589 | 6.22 | 733 | 6.90 | 796 | 7.57 | 859 | 8.40 | 1000 | 9.27 | 1077 | 10.12 | 1154 | 10.59 | 1252 | 11.64 | 1339 | 12.68 | 1427 |
| 7'–3" | 4.12 | 488 | 4.62 | 542 | 5.12 | 595 | 6.35 | 741 | 7.04 | 805 | 7.72 | 869 | 8.58 | 1010 | 9.45 | 1088 | 10.32 | 1166 | 10.81 | 1265 | 11.87 | 1353 | 12.92 | 1442 |
| 7'–6" | 4.21 | 497 | 4.71 | 552 | 5.22 | 606 | 6.48 | 756 | 7.17 | 821 | 7.87 | 885 | 8.76 | 1032 | 9.64 | 1110 | 10.51 | 1189 | 11.03 | 1293 | 12.10 | 1382 | 13.16 | 1471 |
| 7'–9" | 4.29 | 512 | 4.80 | 568 | 5.32 | 625 | 6.61 | 777 | 7.31 | 843 | 8.01 | 910 | 8.93 | 1059 | 9.82 | 1139 | 10.71 | 1219 | 11.25 | 1326 | 12.33 | 1417 | 13.40 | 1508 |
| 8'–0" | 4.37 | 517 | 4.90 | 574 | 5.42 | 632 | 6.74 | 785 | 7.45 | 852 | 8.16 | 919 | 9.11 | 1069 | 10.01 | 1150 | 10.90 | 1231 | 11.48 | 1339 | 12.56 | 1431 | 13.64 | 1522 |
| 8'–3" | 4.46 | 526 | 4.99 | 584 | 5.52 | 642 | 6.87 | 800 | 7.59 | 868 | 8.31 | 936 | 9.28 | 1091 | 10.19 | 1173 | 11.10 | 1254 | 11.70 | 1367 | 12.79 | 1459 | 13.88 | 1551 |
| 8'–6" | 4.54 | 541 | 5.08 | 601 | 5.63 | 661 | 7.00 | 820 | 7.73 | 891 | 8.46 | 961 | 9.46 | 1118 | 10.38 | 1201 | 11.29 | 1285 | 11.92 | 1399 | 13.02 | 1494 | 14.12 | 1588 |
| 8'–9" | 4.62 | 550 | 5.17 | 611 | 5.73 | 672 | 7.13 | 836 | 7.87 | 907 | 8.61 | 978 | 9.64 | 1139 | 10.56 | 1224 | 11.49 | 1308 | 12.14 | 1427 | 13.26 | 1522 | 14.36 | 1617 |
| 9'–0" | 4.71 | 565 | 5.27 | 628 | 5.83 | 691 | 7.26 | 856 | 8.01 | 929 | 8.75 | 1002 | 9.81 | 1166 | 10.75 | 1252 | 11.68 | 1339 | 12.36 | 1460 | 13.49 | 1557 | 14.60 | 1654 |
| 9'–3" | 4.79 | 574 | 5.36 | 638 | 5.93 | 701 | 7.39 | 872 | 8.15 | 945 | 8.90 | 1019 | 9.99 | 1187 | 10.93 | 1275 | 11.87 | 1362 | 12.59 | 1487 | 13.72 | 1585 | 14.85 | 1683 |
| 9'–6" | 4.87 | 588 | 5.45 | 654 | 6.03 | 720 | 7.52 | 892 | 8.29 | 968 | 9.05 | 1044 | 10.16 | 1214 | 11.12 | 1303 | 12.07 | 1393 | 12.81 | 1520 | 13.95 | 1620 | 15.09 | 1720 |
| 10'–0" | 5.04 | 603 | 5.64 | 670 | 6.24 | 738 | 7.78 | 916 | 8.56 | 993 | 9.35 | 1070 | 10.51 | 1246 | 11.49 | 1337 | 12.46 | 1428 | 13.25 | 1561 | 14.41 | 1662 | 15.57 | 1764 |

NOTE:

- FOR CONVENIENCE, DEPTHS OF INLETS SHOWN IN ABOVE TABLES ARE IN INCREMENTS OF 3 INCHES BUT ANY DEPTHS OTHER THAN THOSE SHOWN ABOVE MAY BE USED WHEREVER DEEMED NECESSARY. QUANTITIES FOR OTHER DEPTHS FALLING WITHIN THE LIMITS OF THE TABLE MAY BE FOUND BY INTERPOLATION.
- DEPTHS GREATER THAN 10' NEED TO BE STRUCTURALLY ENGINEERED.

STANDARD DRAWING NO. 6030G

# CURB INLET RECESSED

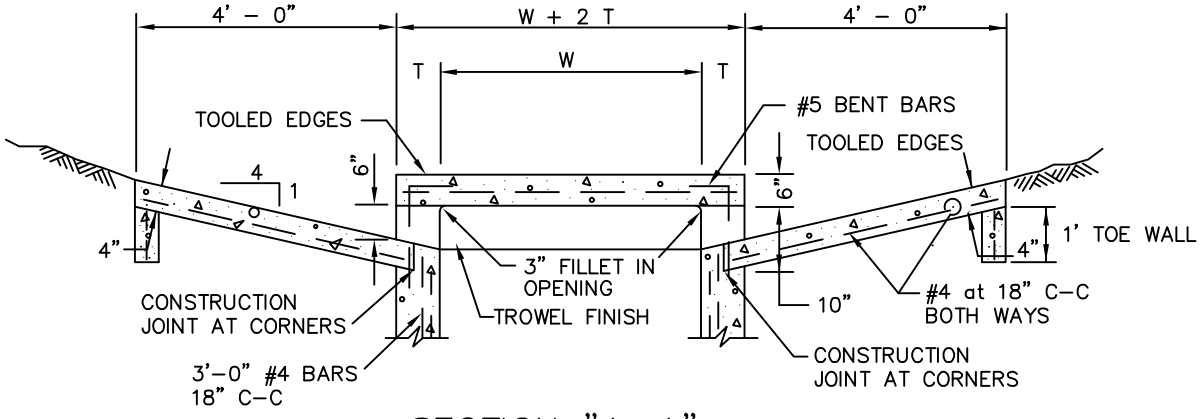
# SUMMARY OF QUANTITIES

North Central Texas Council of Governments

STANDARD SPECIFICATION REFERENCE 702

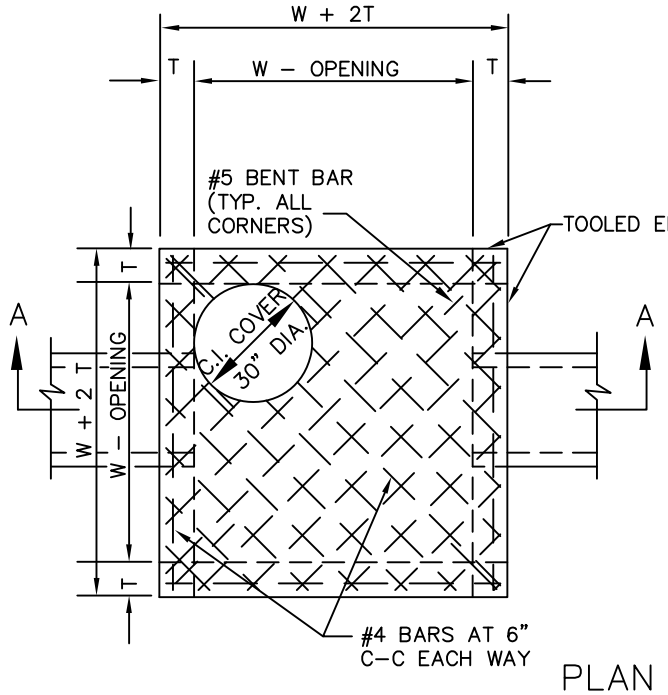
DATE AUG '23

STANDARD DRAWING NO. 6030G




SECTION "A–A"

N.T.S.




| INLET SIZE | T | W |
|---|---|---|
| 2' SQUARE | 7" | 2'–0" |
| 4' SQUARE | 7" | 4'–0" |
| 5' SQUARE | 8" | 5'–0" |
| 6' SQUARE | 9" | 6'–0" |

PLAN OF TOP SLAB

N.T.S.

NOTES:

1. MATERIAL AND WORKMANSHIP SHALL CONFORM WITH THE REQUIREMENTS OF NCTCOG STANDARD SPECIFICATIONS FOR STANDARD CONCRETE MANHOLES. MINIMUM CLASS "C" CONCRETE.
2. LAYERS OF REINFORCING STEEL NEAREST THE INTERIOR AND EXTERIOR SURFACES SHALL HAVE A COVER OF 2" CLEAR OF BARS, UNLESS OTHERWISE NOTED.
3. FOR DETAILS OF REINFORCING OF LOWER PORTION OF INLET SEE APPROPRIATE SQUARE MANHOLE DETAILS.
4. DEPTH OF DROP INLET FROM FINISHED GRADE TO FLOW LINE OF INLET IS VARIABLE. APPROXIMATE DEPTH WILL BE SHOWN ON PLANS AT LOCATION OF INLET.
5. ALL STANDARD DROP INLETS SHALL HAVE ONE OPENING ON EACH SIDE UNLESS OTHERWISE SHOWN ON PLANS.
6. TOP SLAB MAY BE REINFORCED SAME AS 4' SQUARE MANHOLE.
7. PRECAST PRODUCTS MAY BE USED AT THE APPROVAL OF THE OWNER.
8. ALLOW 1" MIN CLEAR SPACE BETWEEN OD OF PIPE OR BOX AND INSIDE WALL OF INLET (OD OF PIPE OR BOX SHOULD ACCOUNT FOR SKEWED CONDITIONS).
9. DEPTHS OF GREATER THAN 10' NEED TO BE STRUCTURALLY ENGINEERED.

# DROP INLET

## 2', 4', 5', OR 6' SQUARE

North Central Texas Council of Governments

STANDARD SPECIFICATION REFERENCE
702

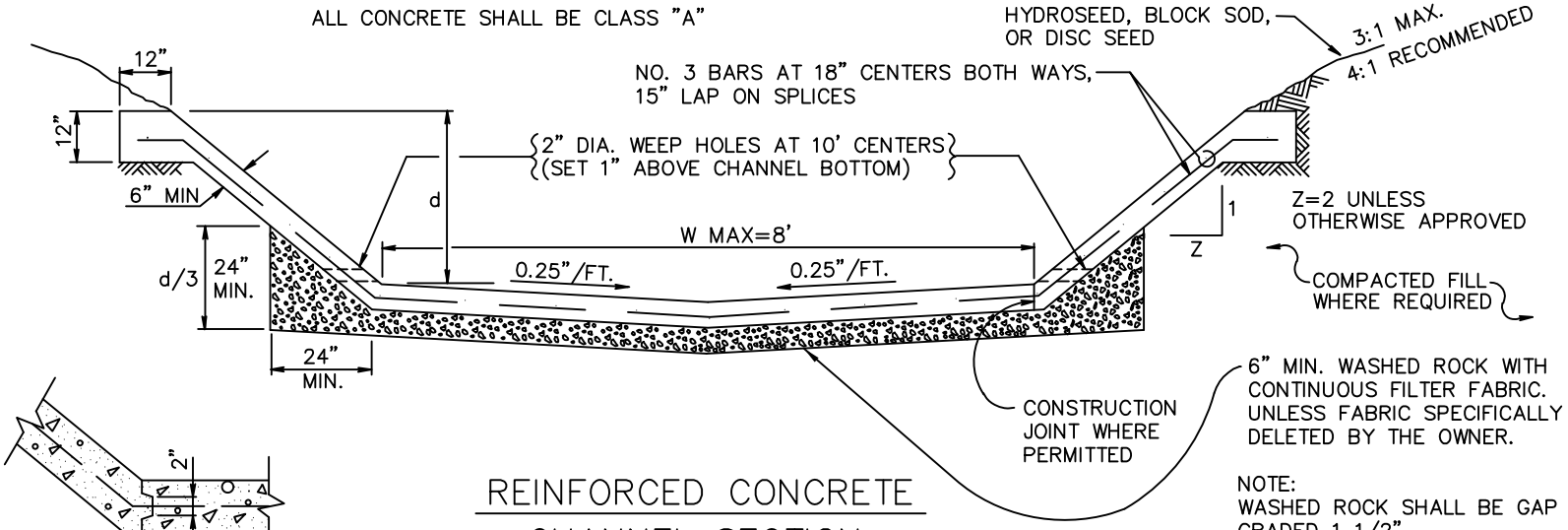
DATE
AUG '23

STANDARD DRAWING NO.
6040

FILL AREAS SHALL BE COMPACTED TO 95% STD. PROCTOR DENSITY AT OPTIMUM MOISTURE CONTENT PRIOR TO CHANNEL EXCAVATION.

* GEO TEXTILE RECOMMENDED AT CONNECTION OF TOP OF SLOPE TO EARTHEN MATERIAL.

ALL CONCRETE SHALL BE CLASS "A"




NOTE:
WASHED ROCK SHALL BE GAP GRADED 1 1/2".

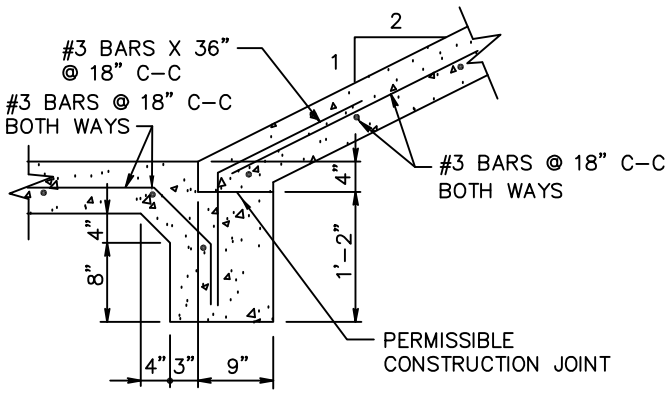
## REINFORCED CONCRETE CHANNEL SECTION

N.T.S.



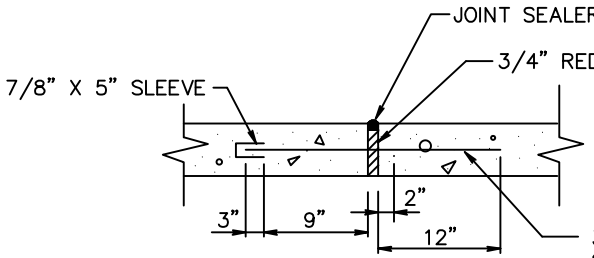

## CONSTRUCTION JOINT

N.T.S.




## ALTERNATE CONSTRUCTION JOINT

N.T.S.




## TRANSVERSE EXPANSION JOINT

SPACE 100' C-C AND USE AT ENDS OF CURVES – P.C. AND P.T.
N.T.S.

*REFER TO ISWM FOR ALTERNATE BIOSWALE OPTIONS

STANDARD DRAWING NO. 6050

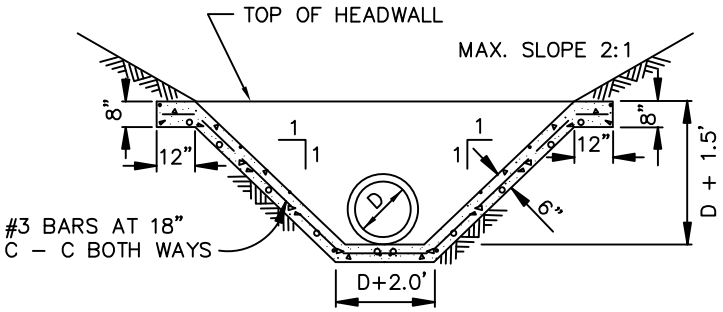
# LOW FLOW CHANNEL LINING
# CONCRETE REINFORCED

North Central Texas Council of Governments

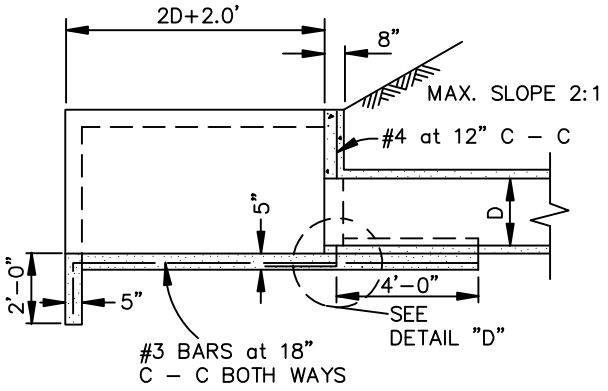
STANDARD SPECIFICATION REFERENCE: 803.3

DATE: AUG '23

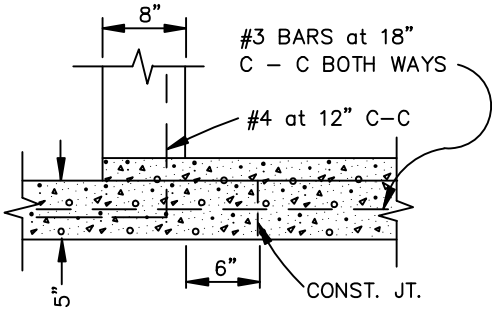
STANDARD DRAWING NO.: 6050



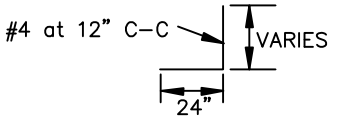

SECTION "B–B"
N.T.S.



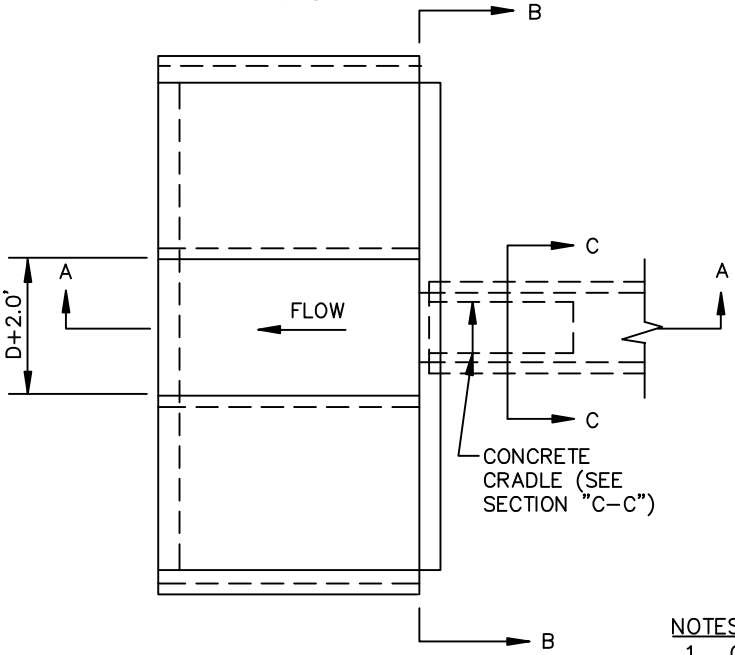

SECTION "A–A"
N.T.S.



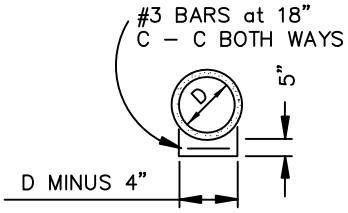

DETAIL "D"
N.T.S.




BAR DETAIL
N.T.S.




PLAN
N.T.S.




SECTION "C–C"
N.T.S.

NOTES:
1. CONCRETE SHALL BE CLASS "C"
2. SEE TXDOT DETAILS FOR ADDITIONAL HEADWALL OPTIONS.

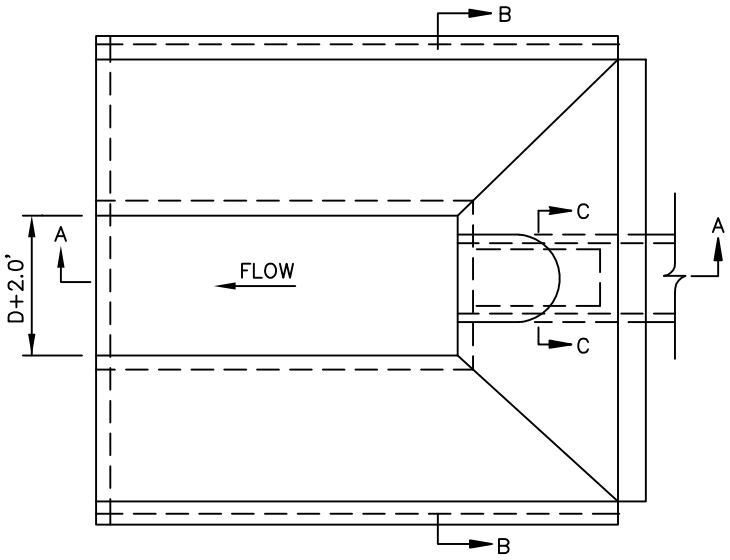
# CONCRETE APRON
# VERTICAL HEADWALL

North Central Texas Council of Governments

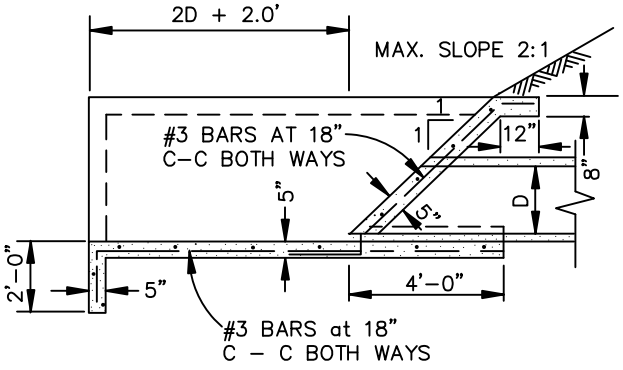
STANDARD SPECIFICATION REFERENCE
803.3

DATE
AUG '23

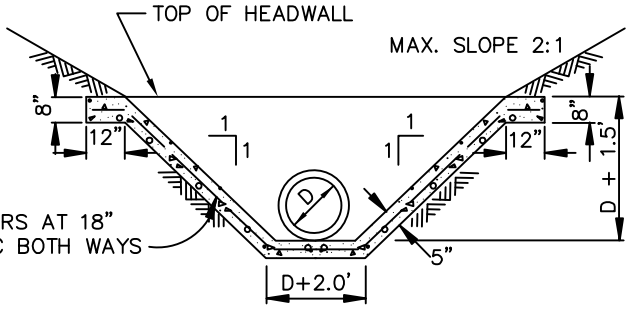
STANDARD DRAWING NO.
6060



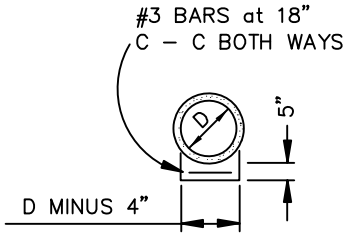

PLAN
N.T.S.




SECTION A–A
N.T.S.



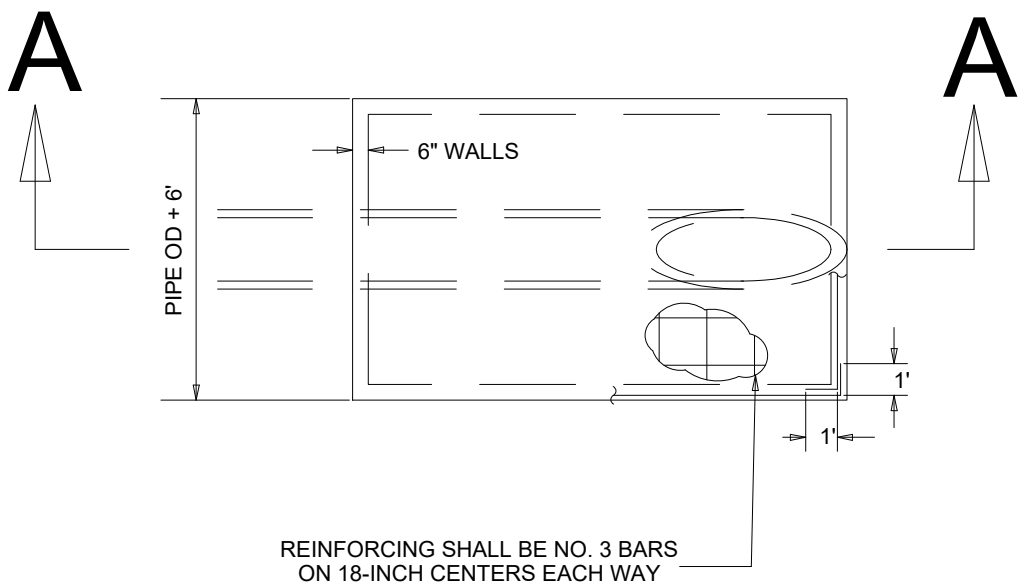

SECTION B–B
N.T.S.

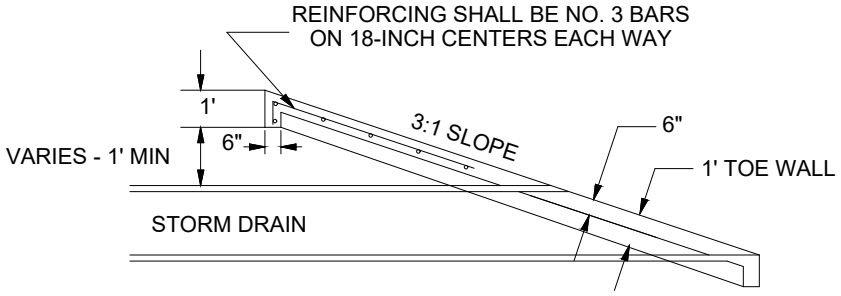



SECTION C–C
N.T.S.

NOTES:
1. CONCRETE SHALL BE CLASS "A".
2. WHEN SITE IT NOT APPLICABLE, SEE TXDOT

| CONCRETE APRON | North Central Texas Council of Governments | STANDARD SPECIFICATION REFERENCE 803.3 | |
|---|---|---|---|
| SLOPING HEADWALL | | DATE AUG '23 | STANDARD DRAWING NO. 6070 |




SECTION A-A

NOTE:

CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI AT 28 DAYS.

M* - CITY OF MELISSA REVISION

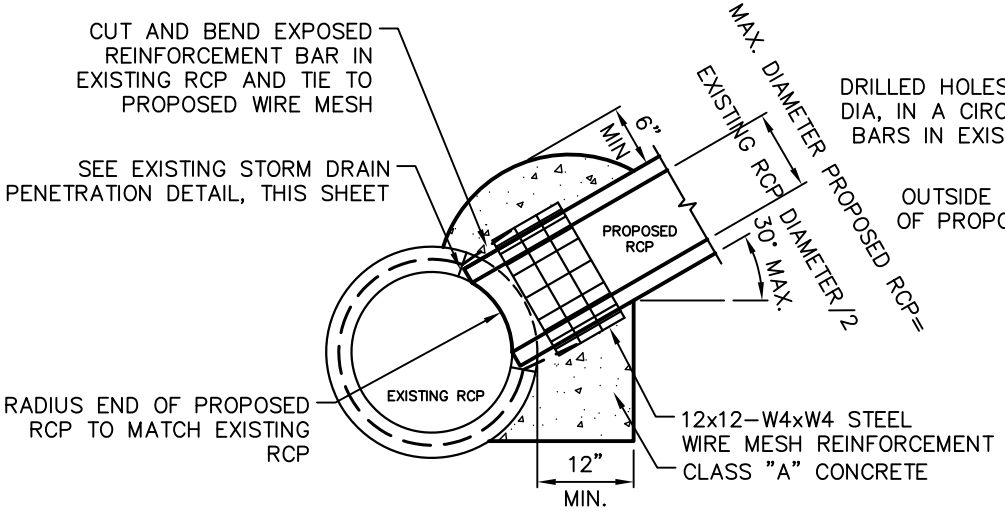
# SLOPED END HEADWALL

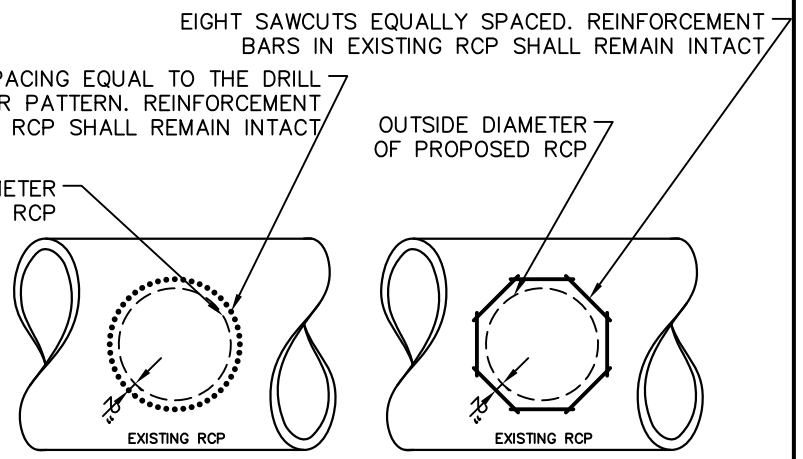
# CITY OF MELISSA, TEXAS

NCTCOG STANDARD SPECIFICATION REFERENCE

DATE 12/04/03

STANDARD DRAWING NO. 6070AM*




## EXISTING STORM DRAIN PENETRATION METHODS

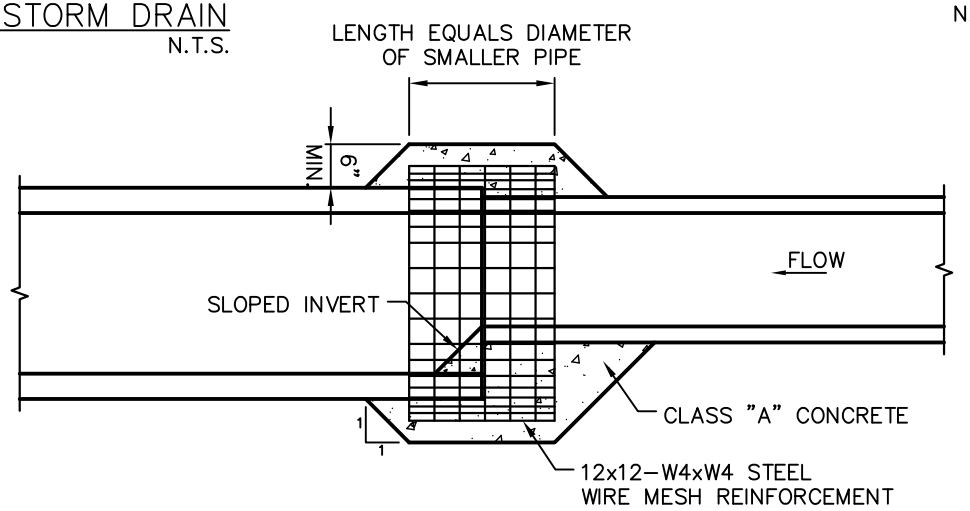
N.T.S.

## CONNECTION OF PROPOSED TO EXISTING RCP STORM DRAIN

N.T.S.

NOTES:

1. THE CONNECTION METHODS SHOWN ON THIS DETAIL SHALL ONLY BE EMPLOYED WHEN THE USE OF A PREFABRICATED RCP CONNECTION IS NOT POSSIBLE, AND WITH THE APPROVAL OF THE OWNER.
2. NO. 3 BARS ON 6" CTRS. MAY BE USED IN PLACE OF WIRE MESH REINFORCEMENT.
3. FOR OTHER PIPE MATERIALS, REFER TO MANUFACTURER'S DETAILS.

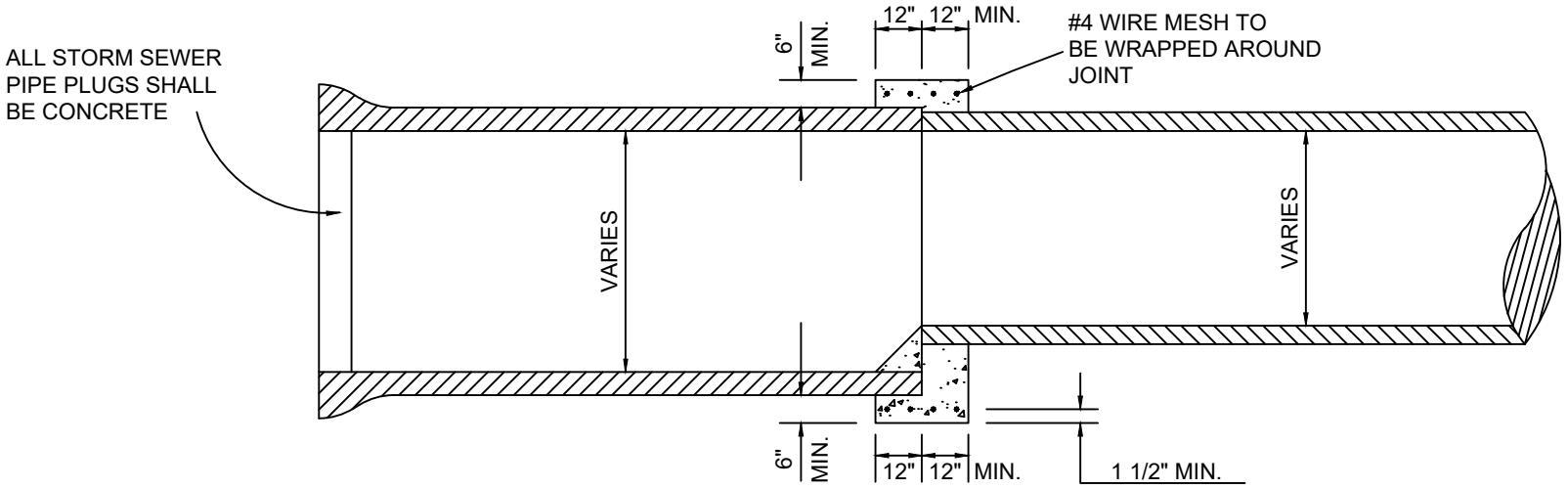



## PIPE COLLAR FOR FIELD CONNECTION

N.T.S.

STANDARD DRAWING NO. 6080

| STORM DRAIN PIPE COLLAR FOR FIELD CONNECTION | North Central Texas Council of Governments | STANDARD SPECIFICATION REFERENCE 501, 702 | |
|---|---|---|---|
| | | DATE AUG '23 | STANDARD DRAWING NO. 6080 |




# DETAIL OF CONCRETE COLLAR FOR PIPE CONNECTIONS

N.T.S.

NOTES:

1. CONCRETE SHALL BE CLASS A CONCRETE (3,000 PSI)

M* - CITY OF MELISSA REVISION

| | | | |
|---|---|---|---|
| STANDARD DRAWING NO. 6080M* | CONCRETE COLLAR FOR PIPE CONNECTIONS | MELISSA TX | NCTCOG STANDARD SPECIFICATION REFERENCE |
| | | | MODIFIED DATE |
| | | | STANDARD DRAWING NO. 6080M* |
| | | NOTICE DATE 01/12/17 | APPLIED DATE 01/12/17 |
| | | | ENFORCED DATE 02/12/17 |

# TYPICAL MAINTENANCE ACTIVITIES FOR PONDS

| ACTIVITY | SCHEDULE |
|---|---|
| • CLEAN AND REMOVE DEBRIS FROM INLET AND OUTLET STRUCTURES<br>• MOW WIDE SLOPES<br>• CHECK VISUALLY FOR ILLEGAL DUMPING OR OTHER POLLUTANTS | MONTHLY |
| • IF WETLAND COMPONENTS ARE INCLUDED, INSPECT FOR INVASIVE VEGETATION | SEMIANNUAL INSPECTION |
| • INSPECT FOR DAMAGE, PAYING PARTICULAR ATTENTION TO THE CONTROL STRUCTURE<br>• CHECK FOR SIGNS OF EUTROPHIC CONDITIONS<br>• NOTE SIGNS OF HYDROCARBON BUILD-UP, AND REMOVE APPROPRIATELY<br>• MONITOR FOR SEDIMENT ACCUMULATION IN THE FACILITY AND FOREBAY<br>• EXAMINE TO ENSURE THAT INLET AND OUTLET DEVICES ARE FREE OF DEBRIS AND OPERATIONAL<br>• CHECK ALL CONTROL GATES, VALVES OR OTHER MECHANICAL DEVICES<br>• CHECK THE DOWNSTREAM FACE OF DAM FOR SEEPAGE(EARTH AND CONCRETE), SETTLING (EARTH) AND CRACKING (CONCRETE) | ANNUAL INSPECTION |
| • REPAIR UNDERCUT OR ERODED AREAS | AS NEEDED |
| • PERFORM WETLAND PLANT MANAGEMENT AND HARVESTING | ANNUALLY (IF NEEDED) |
| • REMOVE SEDIMENT FROM THE FOREBAY | 5 TO 7 YEARS OR AFTER 50% OF THE TOTAL FOREBAY HAS BEEN LOST |
| • MONITOR SEDIMENT ACCUMULATIONS, AND REMOVE SEDIMENT WHEN THE POOL VOLUME HAS BECOME REDUCED SIGNIFICANTLY, OR THE POND BECOMES EUTROPHIC | 10 TO 20 YEARS AFTER 25% OF THE PERMANENT POOL VOLUME HAS BEEN LOST |

NOTES:

- A SEDIMENT MARKER SHOULD BE LOCATED IN THE FOREBAY TO DETERMINE WHEN SEDIMENT REMOVAL IS REQUIRED
- SEDIMENTS EXCAVATED FROM STORMWATER PONDS THAT DO NOT RECEIVE RUNOFF FROM DESIGNATED HOTSPOTS ARE NOT CONSIDERED TOXIC OR HAZARDOUS MATERIAL AND CAN BE SAFELY DISPOSED OF BY EITHER LAND APPLICATION OR LANDFILLING. SEDIMENT TESTING MAY BE REQUIRED PRIOR TO SEDIMENT DISPOSAL WHEN A HOTSPOT LAND USE IS PRESENT
- PERIODIC MOWING OF THE POND BUFFER IS ONLY REQUIRED ALONG MAINTENANCE RIGHTS-OF-WAY AND THE EMBANKMENT. THE REMAINING BUFFER CAN BE MANAGED AS A MEADOW (MOWING EVERY OTHER YEAR) OR FOREST.
- CARE SHOULD BE EXERCISED DURING POND DRAWDOWNS TO PREVENT DOWNSTREAM DISCHARGE OF SEDIMENTS, ANOXIC WATER, OR HIGH FLOWS WITH EROSIVE VELOCITIES. THE APPROVING JURISDICTION SHOULD BE NOTIFIED BEFORE DRAINING A STORMWATER POND.
- REGULAR INSPECTION AND MAINTENANCE IS CRITICAL TO THE EFFECTIVE OPERATION OF STORMWATER PONDS AS DESIGNED. MAINTENANCE RESPONSIBILITY FOR A POND AND ITS BUFFER SHOULD BE VESTED WITH A RESPONSIBLE AUTHORITY BY MEANS OF A LEGALLY BINDING AND ENFORCEABLE MAINTENANCE AGREEMENT THAT ITS EXECUTED AS A CONDITION OF PLAN APPROVAL.

M * - CITY OF MELISSA REVISION

# STORMWATER POND INSPECTION AND MAINTENANCE REQUIREMENTS

# CITY OF MELISSA, TEXAS

MELISSA TX

| iSWM TECHNICAL MANUAL REFERENCE | | |
|---|---|---|
| 22.7 | | |
| MODIFIED DATE | STANDARD DRAWING NO. | |
| 7/6/19 | 6090M* | |
| NOTICE DATE | APPLIED DATE | ENFORCED DATE |
| 7/11/19 | 7/11/19 | 8/11/19 |