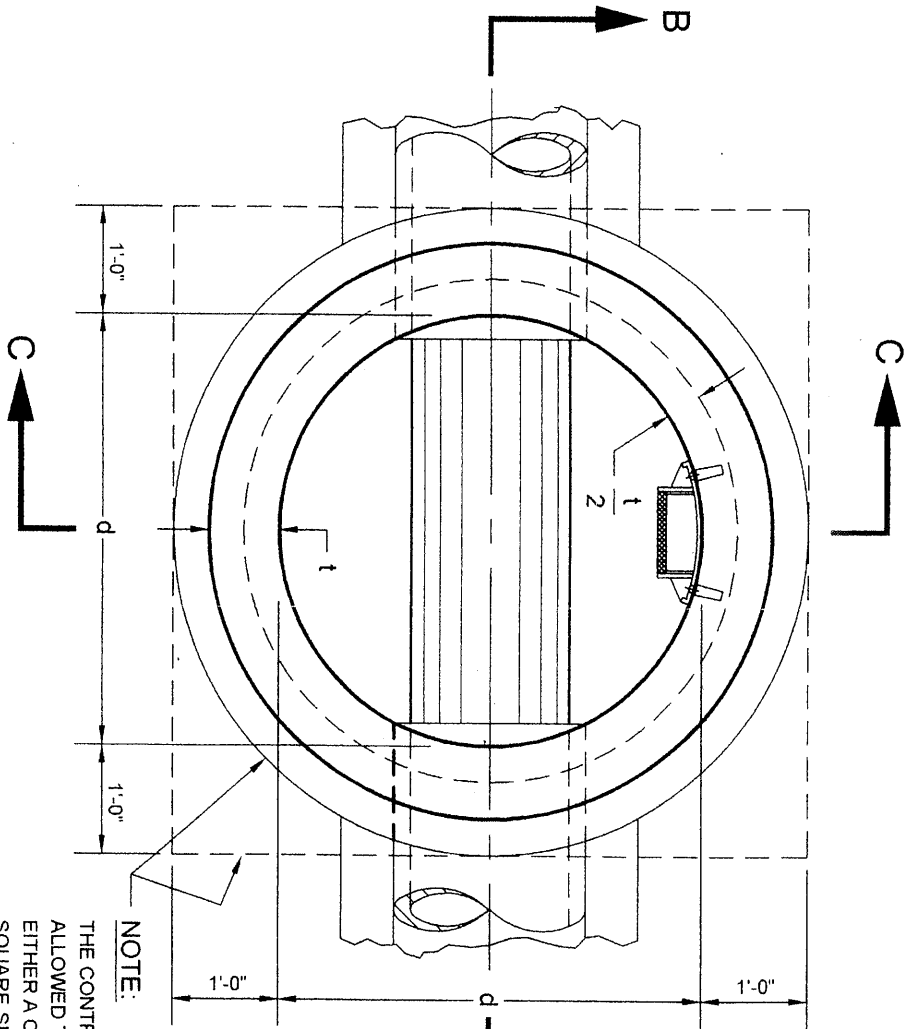
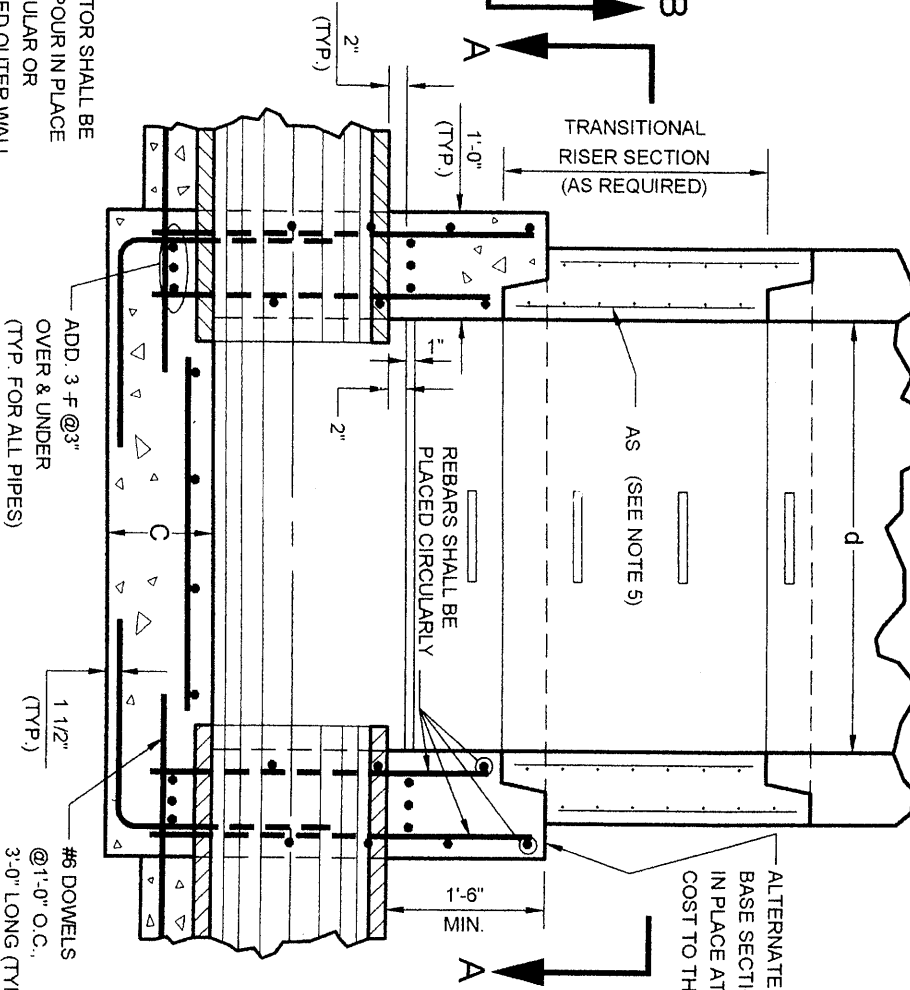


STANDARD FOR ALTERNATE MONOLITHIC BASE SECTION  
FOR PRECAST MANHOLES (POURED IN PLACE)  
(FOR 4'-0", 5'-0", 6'-0", 7'-0", 8'-0" AND 10'-0" DIA. PRECAST MANHOLES)

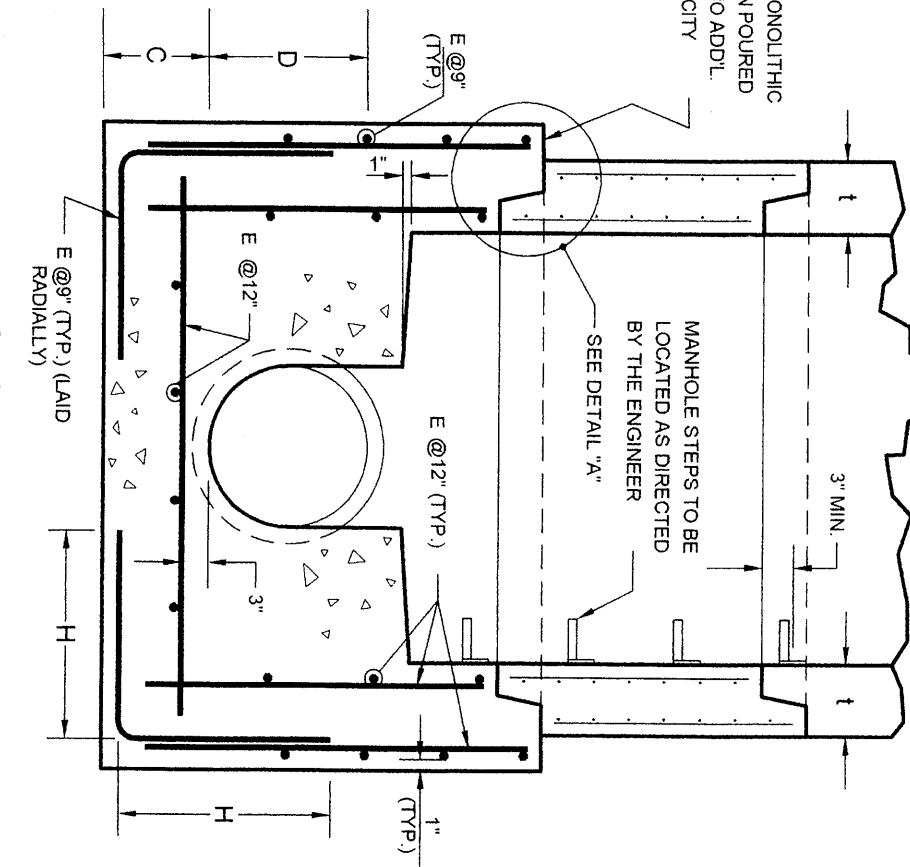


NOTE:  
THE CONTRACTOR SHALL BE ALLOWED TO POUR IN PLACE EITHER A CIRCULAR OR SQUARE SHAPED OUTER WALL FOR THE ALTERNATE MONOLITHIC BASE SECTION.

SECTION A-A



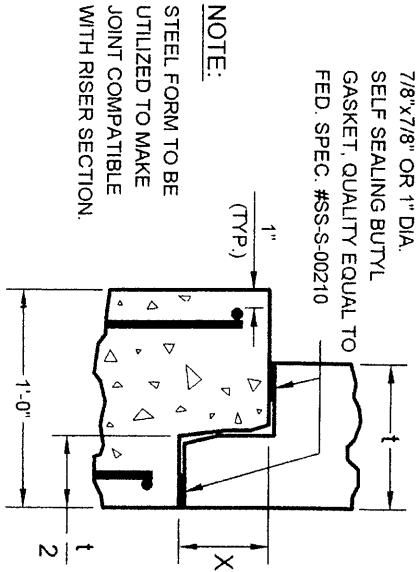
SECTION B-B



SECTION C-C

- NOTES:
- (1) ALL STEEL REINFORCEMENT SHALL BE AS SHOWN. COVER DISTANCES SHOWN ARE CLEAR DISTANCES.
  - (2) FOR ALTERNATE MONOLITHIC BASE SECTION ON PILES SEE PRECAST MANHOLE PILE CAP DETAILS OF STANDARD FOR PRECAST MANHOLE DETAILS DWG. 3 OF 3. ALL PILE CAP DIMENSIONS SHALL REMAIN THE SAME, WITH THE EXCEPTIONS OF DIMENSION "t" WHICH SHALL BE EQUAL TO THE DIMENSION OF THE ALTERNATE MONOLITHIC BASE SECTION AND DIMENSION "A" WHICH SHALL BE ADJUSTED ACCORDINGLY.
  - (3) CONCRETE SHALL BE CLASS 40. STEEL REINFORCEMENT BARS SHALL BE GRADE 60.
  - (4) INVERT SHELVES SHALL HAVE A 1/2" PER LINEAR FOOT PITCH TOWARDS THE SEWER.
  - (5) TRANSITIONAL RISER SECTION SHALL CONFORM TO ALL REQUIREMENTS OF THE STANDARDS FOR PRECAST MANHOLES.

d	t	X	C	E	F	H	AS
4'-0"	5"	3" TO 5"	12"	#4	#6	2'-0"	0.12 X 0.06
5'-0"	6"	3" TO 5"	12"	#4	#6	2'-3"	0.15 X 0.07
6'-0"	7"	3" TO 6"	14"	#4	#6	2'-6"	0.18 X 0.09
7'-0"	8"	3" TO 6"	15 1/2"	#5	#6	2'-9"	0.21 X 0.10
8'-0"	9"	3" TO 8"	18 1/2"	#5	#8	3'-0"	0.24 X 0.12
10'-0"	11"	3" TO 8"	23"	#5	#8	3'-6"	0.30 X 0.15



NOTE:  
STEEL FORM TO BE UTILIZED TO MAKE JOINT COMPATIBLE WITH RISER SECTION.

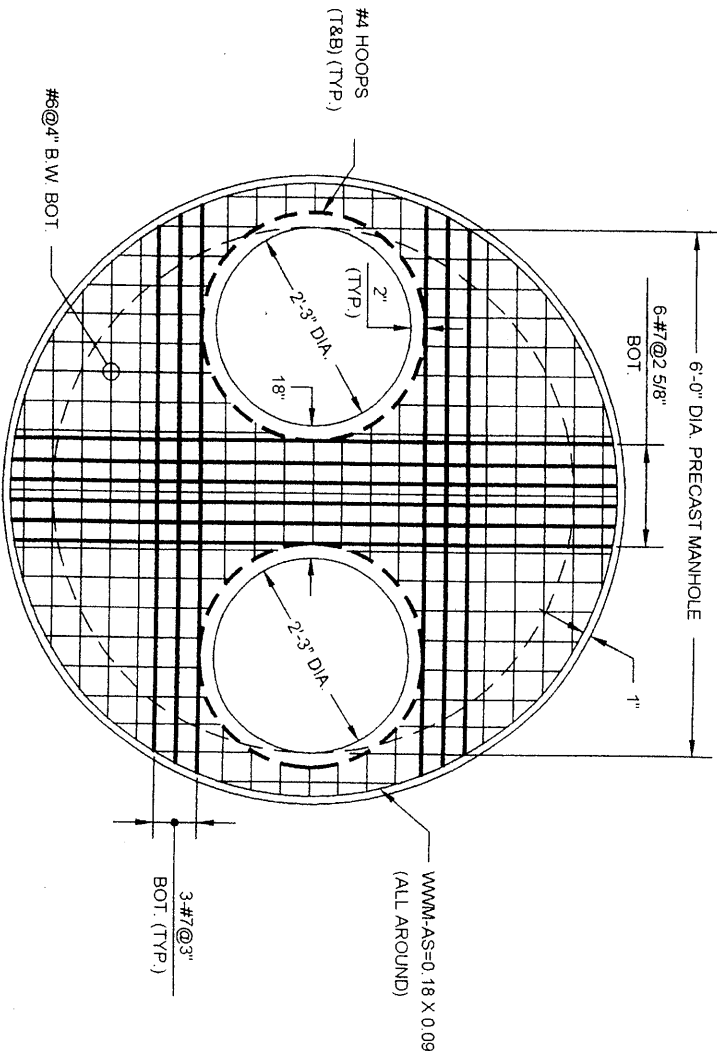
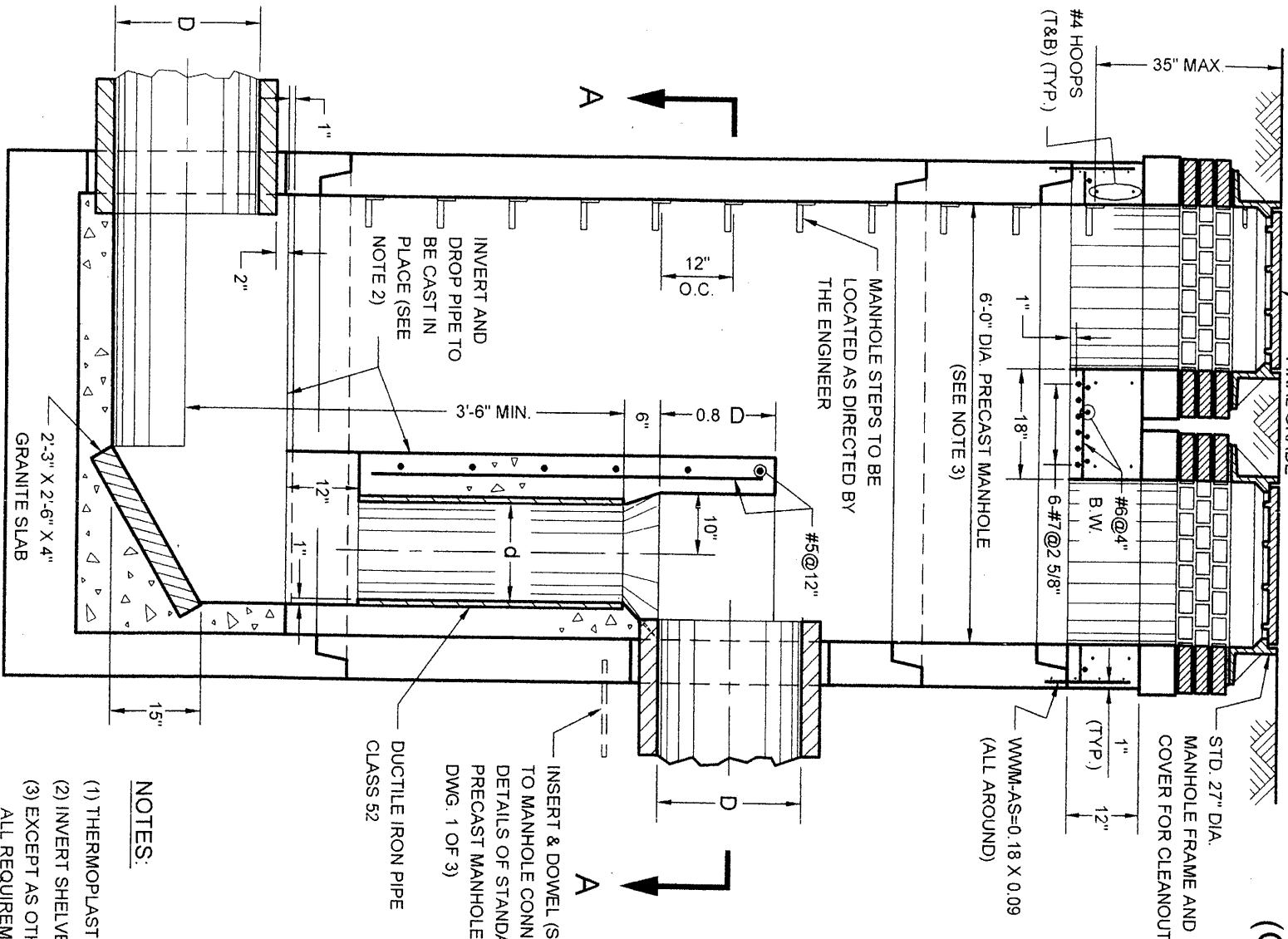
*Asst. M. Khan*  
ASSISTANT COMMISSIONER, DESIGN  
DEPARTMENT OF DESIGN AND CONSTRUCTION  
P.E.

7/9/07  
DATE

*Ma di Khan*  
DIRECTOR OF ENGINEERING  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
P.E.

8/10/07  
DATE

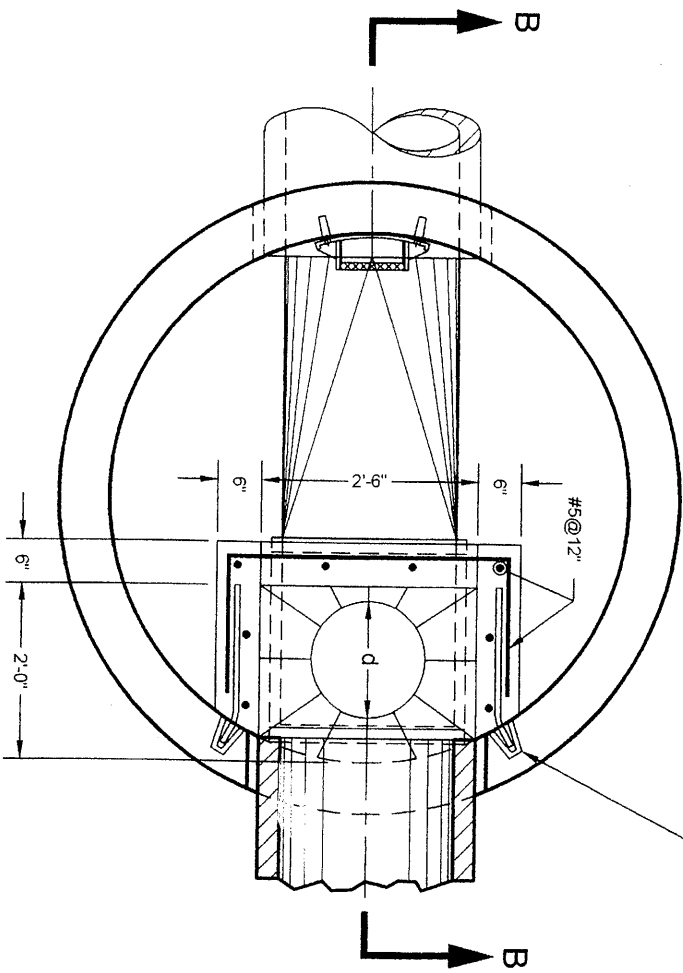
STANDARD FOR PRECAST DROP PIPE MANHOLE (TYPE I)  
(ON 10" DIA. TO 24" DIA. SEWERS)



D	10"	12"	15"	18"	24"
d	8"	10"	12"	14"	16"

NOTES:

- (1) THERMOPLASTIC INSERT AS MANUFACTURED BY PENNSYLVANIA INSERT CORP. OR EQUAL.
- (2) INVERT SHELVES SHALL HAVE A 1/2" PER LINEAR FOOT PITCH TOWARDS THE SEWER.
- (3) EXCEPT AS OTHERWISE SHOWN OR SPECIFIED THE PRECAST MANHOLE SHALL CONFORM TO ALL REQUIREMENTS OF THE STANDARD FOR 6'-0" TO 10'-0" DIA. PRECAST MANHOLES.



SECTION B-B  
*Leah M. Lamm*  
ASSISTANT COMMISSIONER, DESIGN  
DEPARTMENT OF DESIGN AND CONSTRUCTION  
P.E.

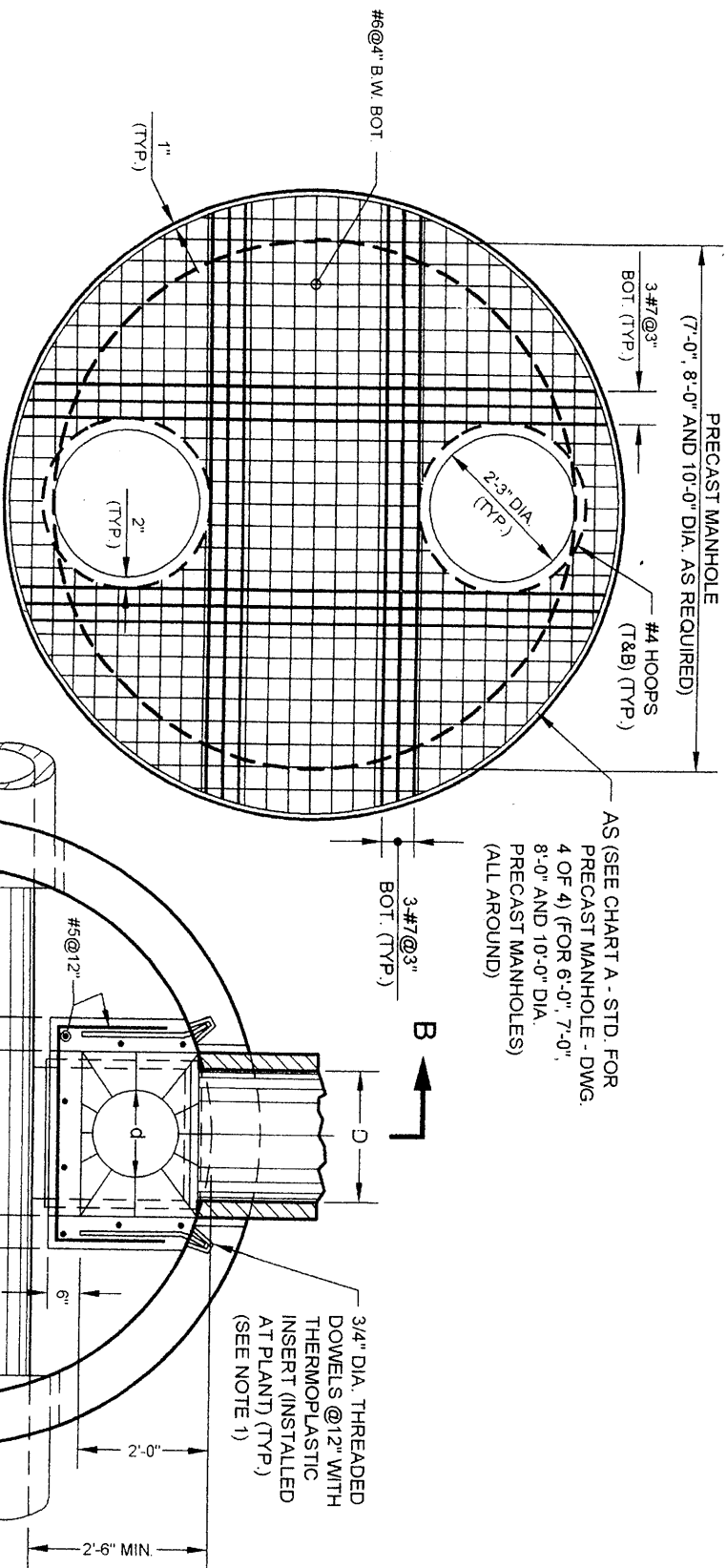
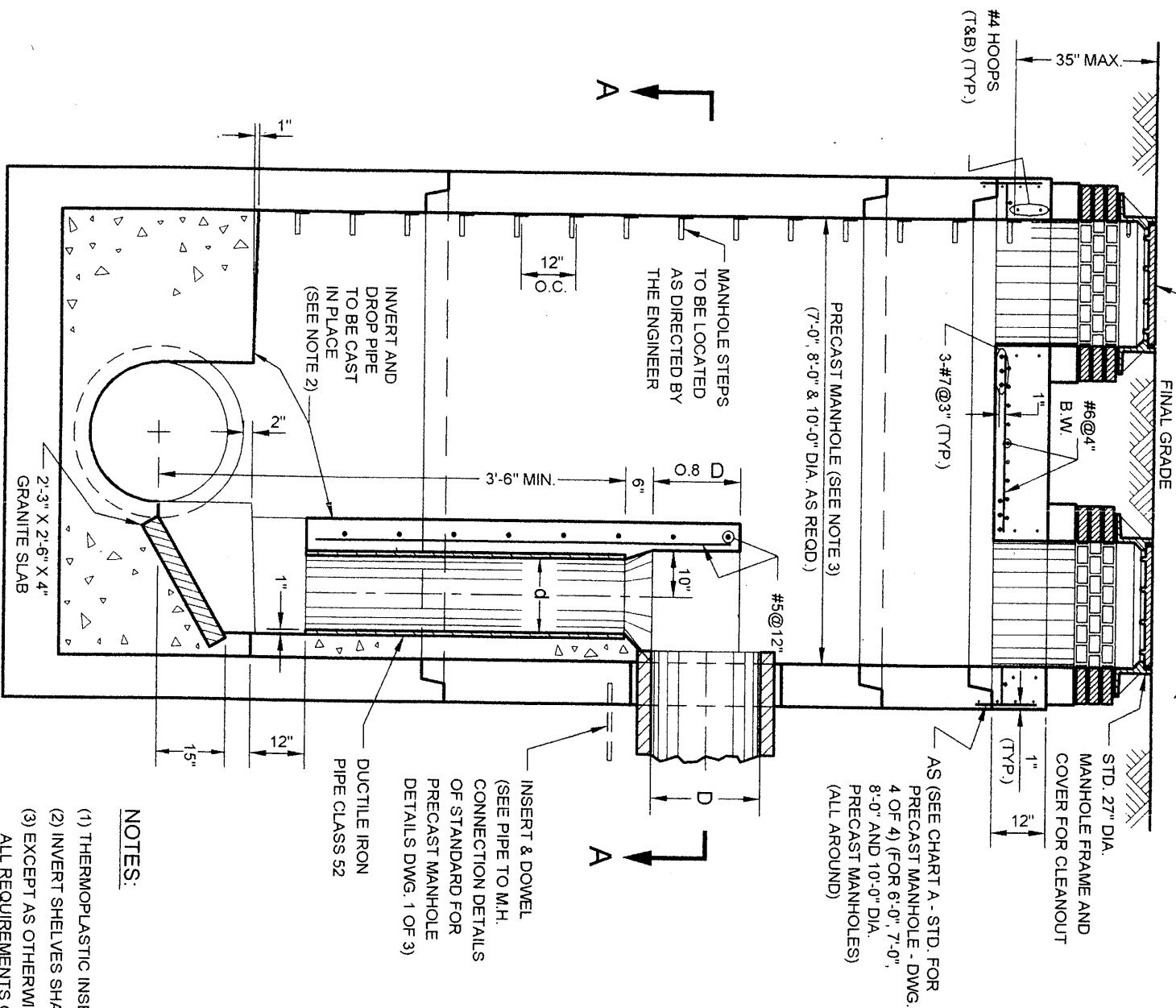
DATE  
*7/9/07*

*Maedric Lamm*  
DIRECTOR OF ENGINEERING  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
P.E.

DATE  
*8/10/07*

# STANDARD FOR PRECAST DROP PIPE MANHOLE (TYPE II)

(FOR 10" DIA. TO 24" DIA. INCOMING DROP PIPE SEWERS)



D	10"	12"	15"	18"	24"
d	8"	10"	12"	14"	16"

- NOTES:
- (1) THERMOPLASTIC INSERT AS MANUFACTURED BY PENNSYLVANIA INSERT CORP. OR EQUAL.
  - (2) INVERT SHELVES SHALL HAVE A 1/2" PER LINEAR FOOT PITCH TOWARDS THE SEWER.
  - (3) EXCEPT AS OTHERWISE SHOWN OR SPECIFIED THE PRECAST MANHOLE SHALL CONFORM TO ALL REQUIREMENTS OF THE STANDARD FOR 6'-0" TO 10'-0" DIA. PRECAST MANHOLES.

## SECTION A-A

Assistant Commissioner, Design  
Department of Design and Construction

P.E.

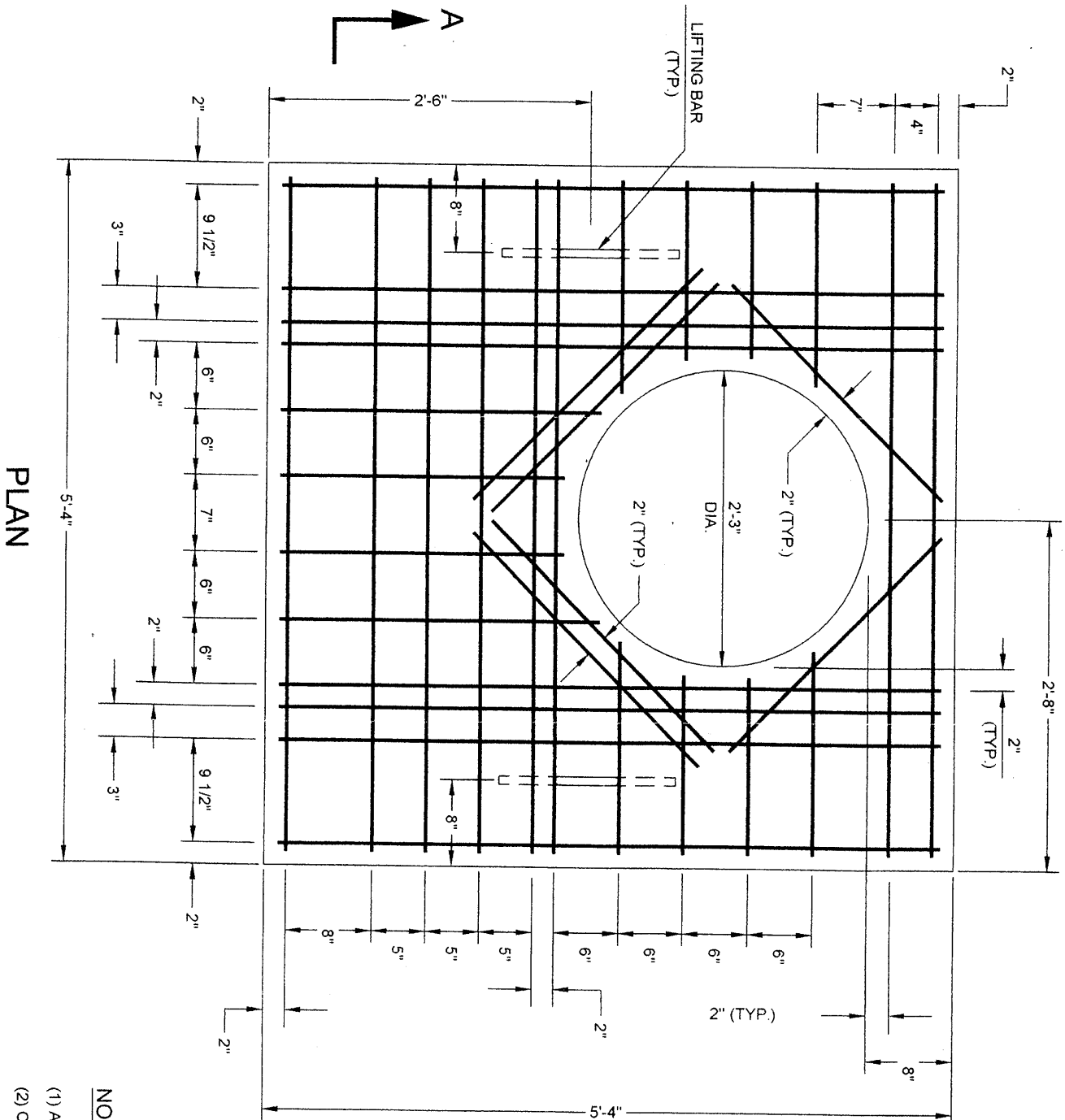
DATE

Director of Engineering  
Department of Environmental Protection

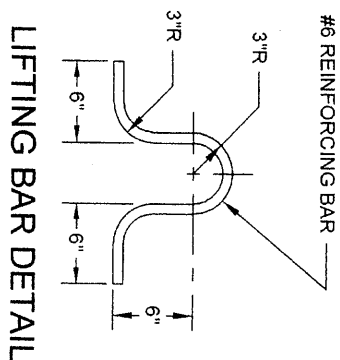
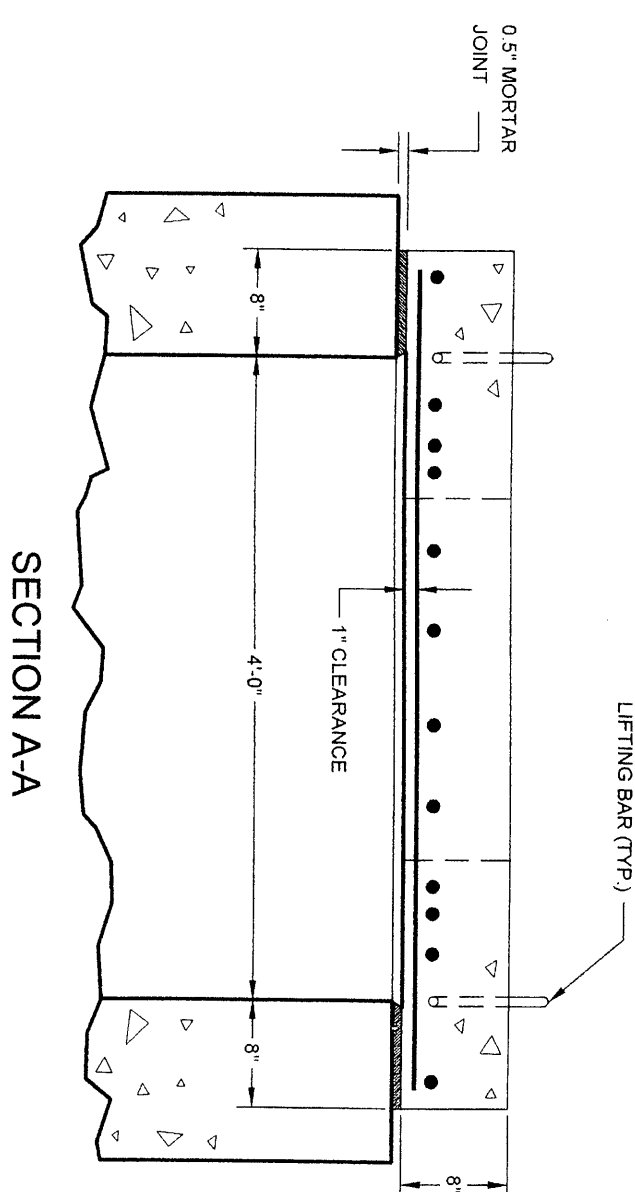
P.E.

DATE

STANDARD FOR REMOVABLE PRECAST REINFORCED CONCRETE SLAB



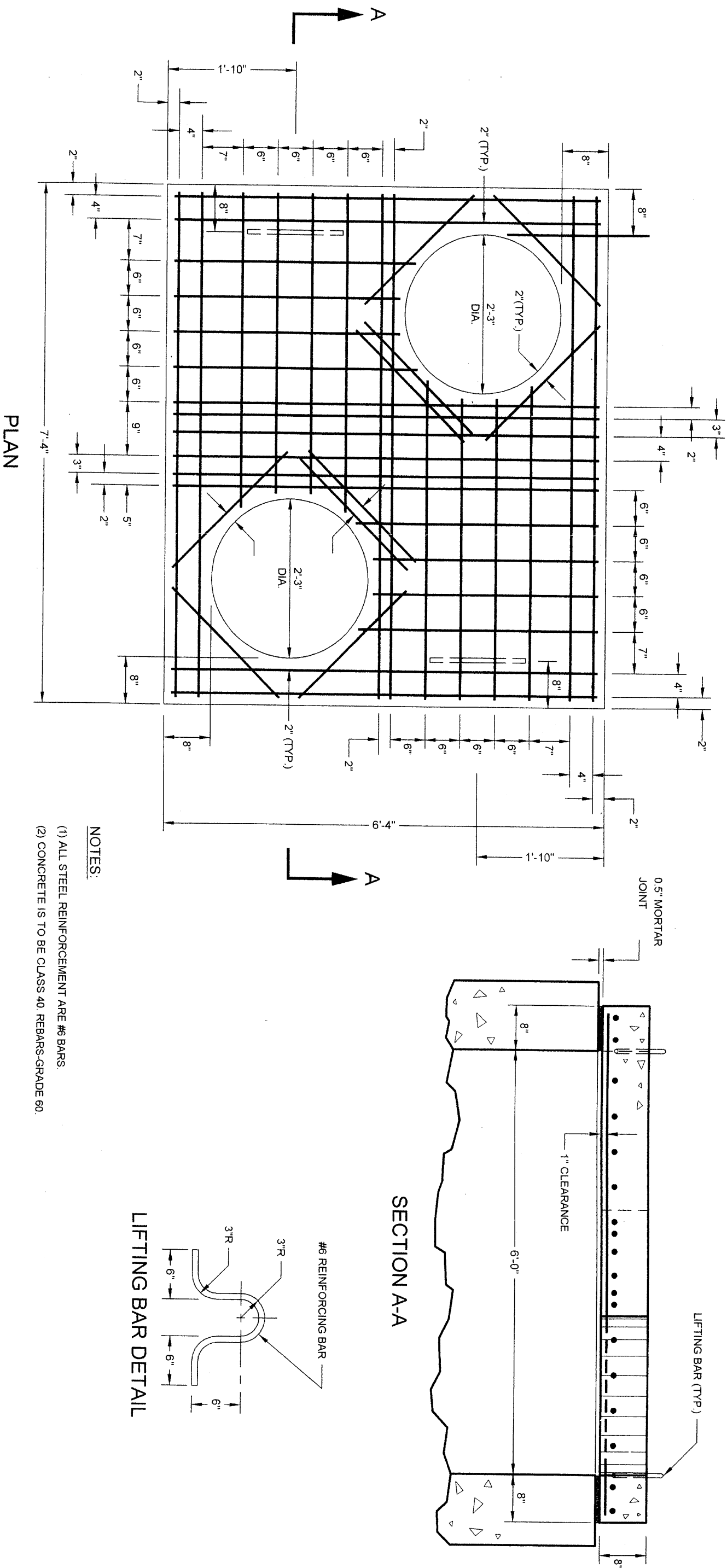
- NOTES:
- (1) ALL STEEL REINFORCEMENT ARE #6 BARS.
  - (2) CONCRETE IS TO BE CLASS 40. REBARS-GRADE 60.



*Joseph M. Loran*  
ASSISTANT COMMISSIONER, DESIGN  
DEPARTMENT OF DESIGN AND CONSTRUCTION  
P.E.  
DATE *7/9/07*

*Maedi Fawad*  
DIRECTOR OF ENGINEERING  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
P.E.  
DATE *8/10/07*

STANDARD FOR REMOVABLE PRECAST REINFORCED  
CONCRETE SLAB FOR DROP PIPE MANHOLE (TYPE I)



NOTES:

- (1) ALL STEEL REINFORCEMENT ARE #6 BARS.
- (2) CONCRETE IS TO BE CLASS 40 REBARS-GRADE 60.

ASSISTANT COMMISSIONER, DESIGN  
DEPARTMENT OF DESIGN AND CONSTRUCTION

*Joe M. Lanza*

P.E.

DATE

7/9/07

DIRECTOR OF ENGINEERING  
DEPARTMENT OF ENVIRONMENTAL PROTECTION

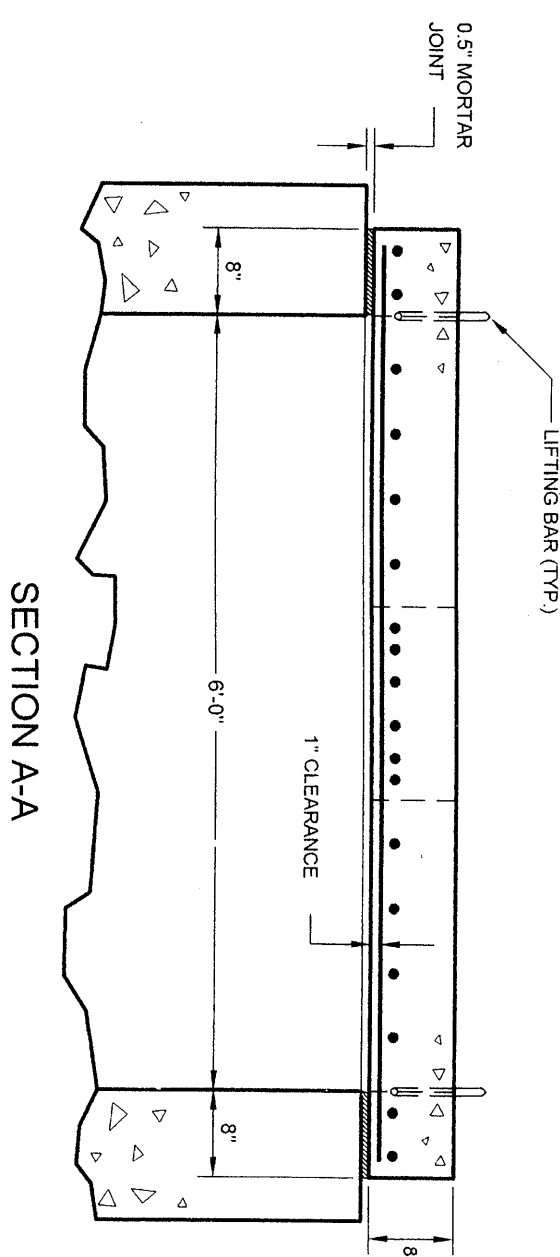
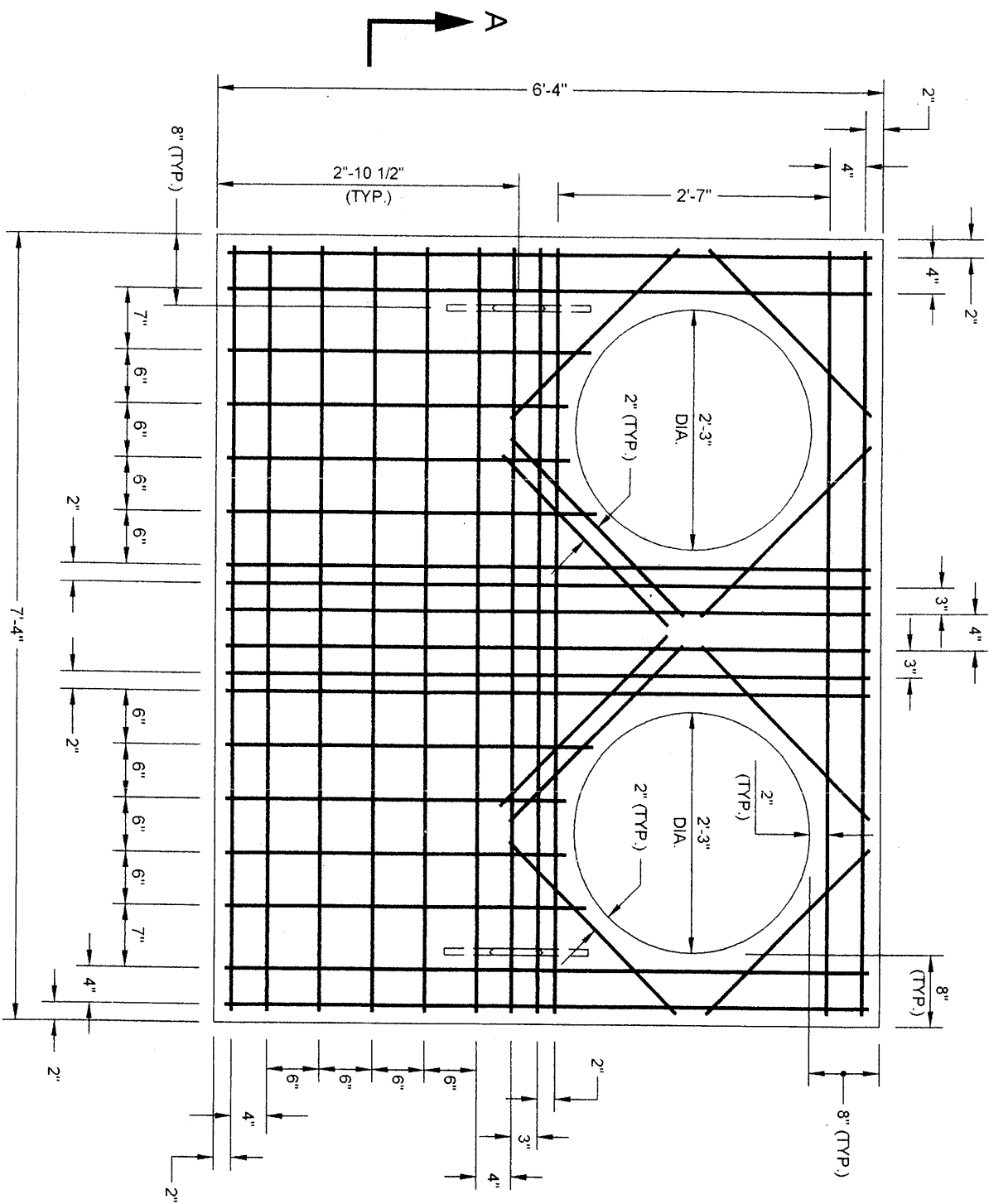
*Joe di Stasio*

P.E.

DATE

8/10/07

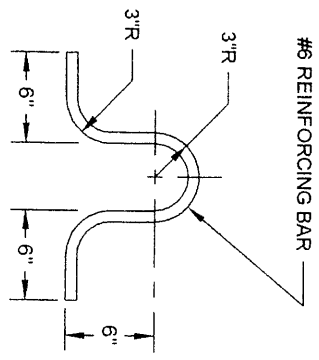
STANDARD FOR REMOVABLE PRECAST REINFORCED  
CONCRETE SLAB FOR DROP PIPE MANHOLE (TYPE II)



NOTES:

- (1) ALL STEEL REINFORCEMENT ARE #6 BARS.
- (2) CONCRETE IS TO BE CLASS 40. REBARS- GRADE 60.

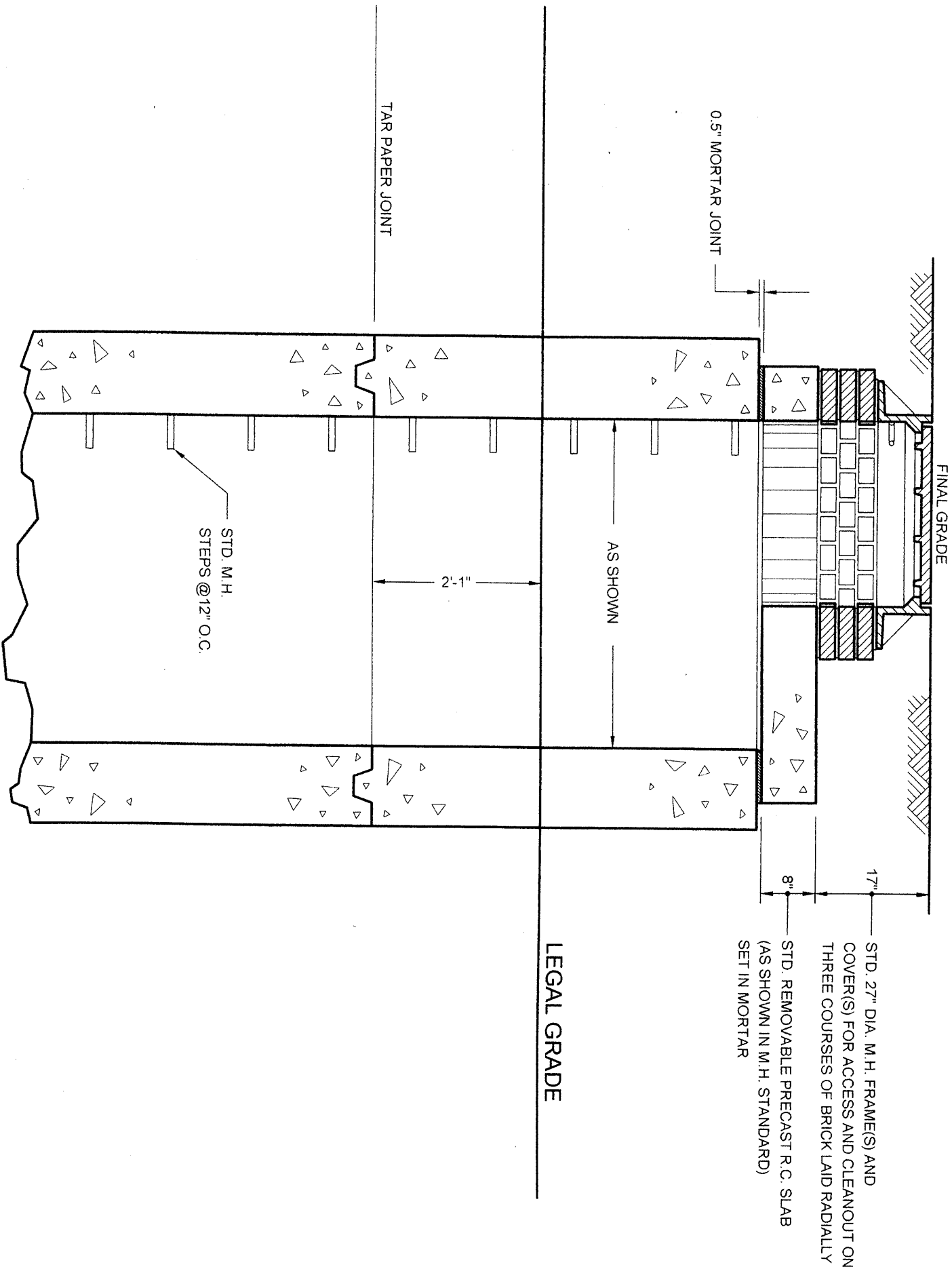
LIFTING BAR DETAIL



*Joe M. Brown*  
ASSISTANT COMMISSIONER, DESIGN  
DEPARTMENT OF DESIGN AND CONSTRUCTION  
P.E.  
DATE 7/9/07

*Madi Brown*  
DIRECTOR OF ENGINEERING  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
P.E.  
DATE 8/10/07

STANDARD FOR MANHOLE CHIMNEY DETAIL  
(WHEN FINAL GRADE IS ABOVE LEGAL GRADE)



STANDARD SQUARE MANHOLE CHIMNEY

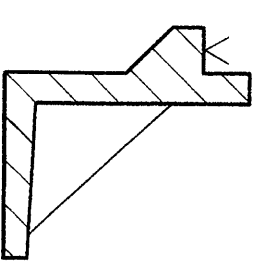
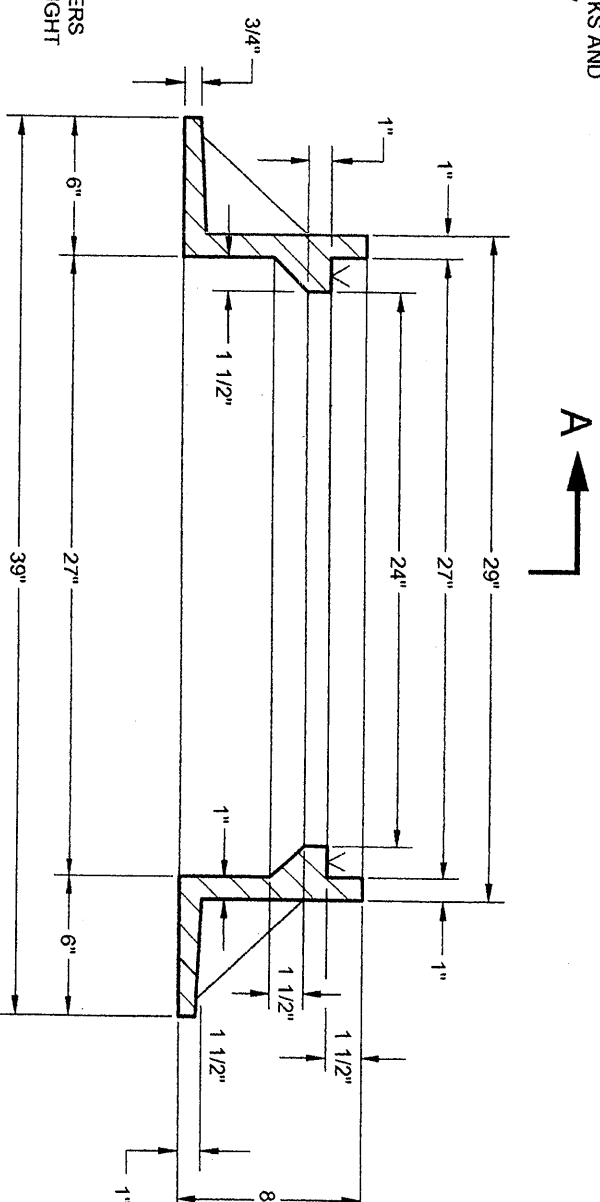
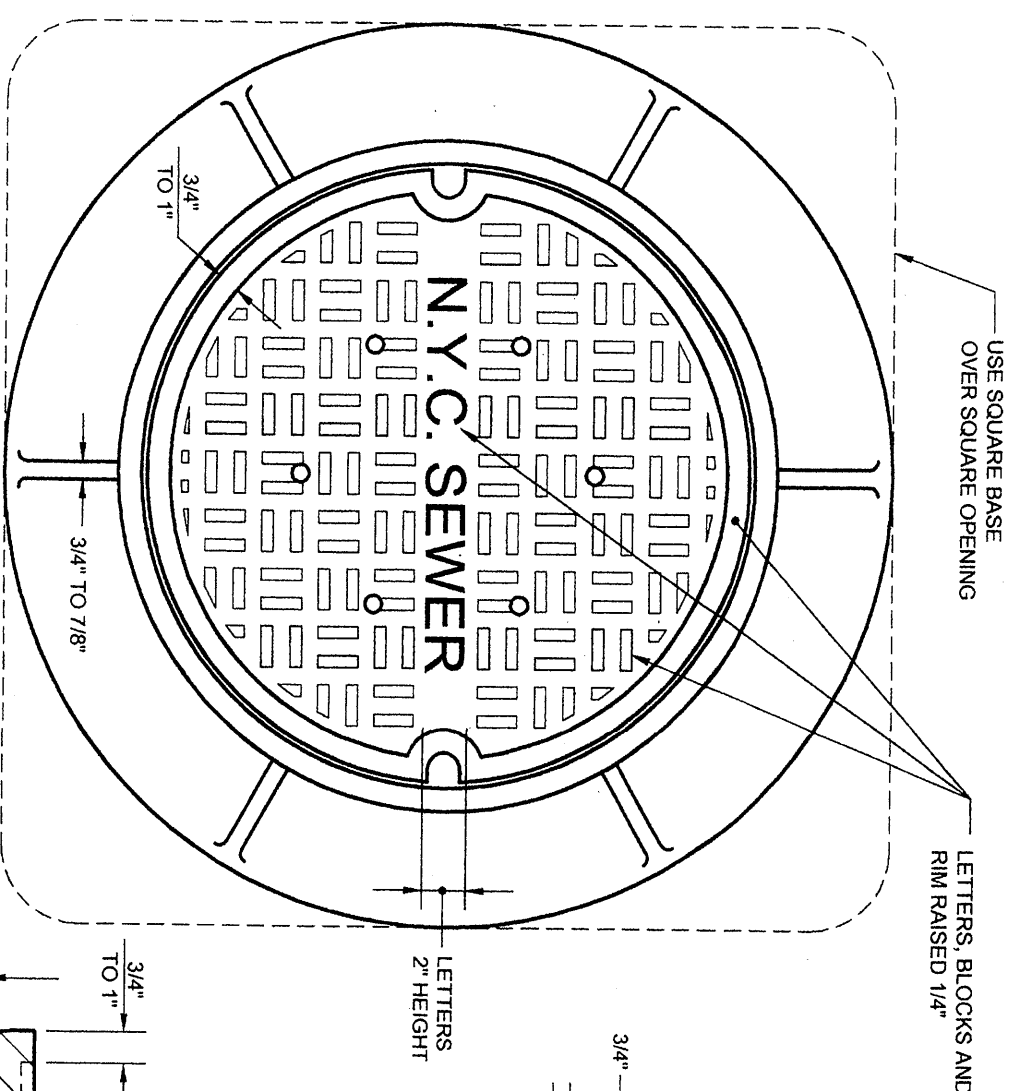
*Angel M. Lavan*  
ASSISTANT COMMISSIONER, DESIGN  
DEPARTMENT OF DESIGN AND CONSTRUCTION P.E.

DATE  
*7/9/07*

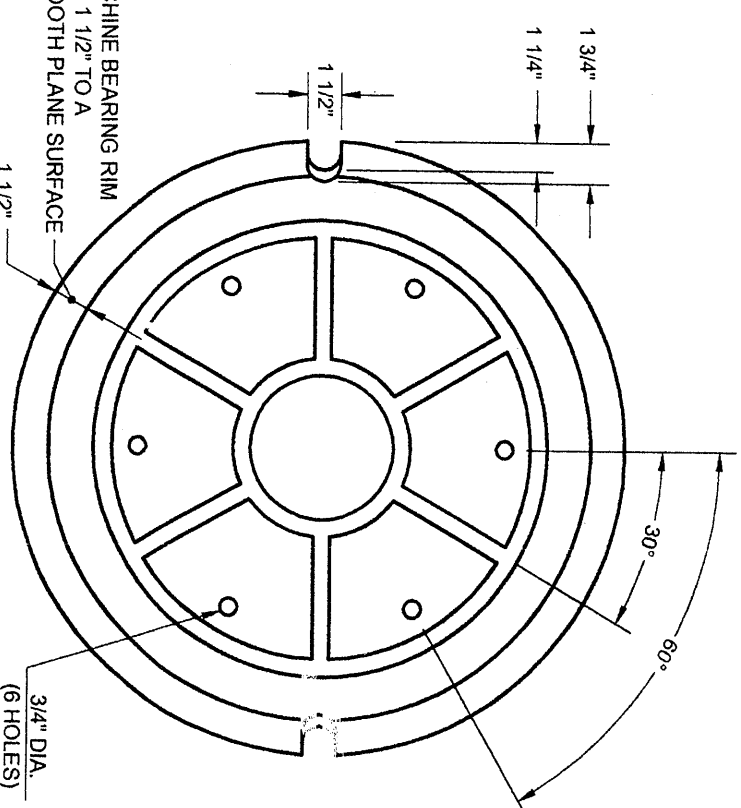
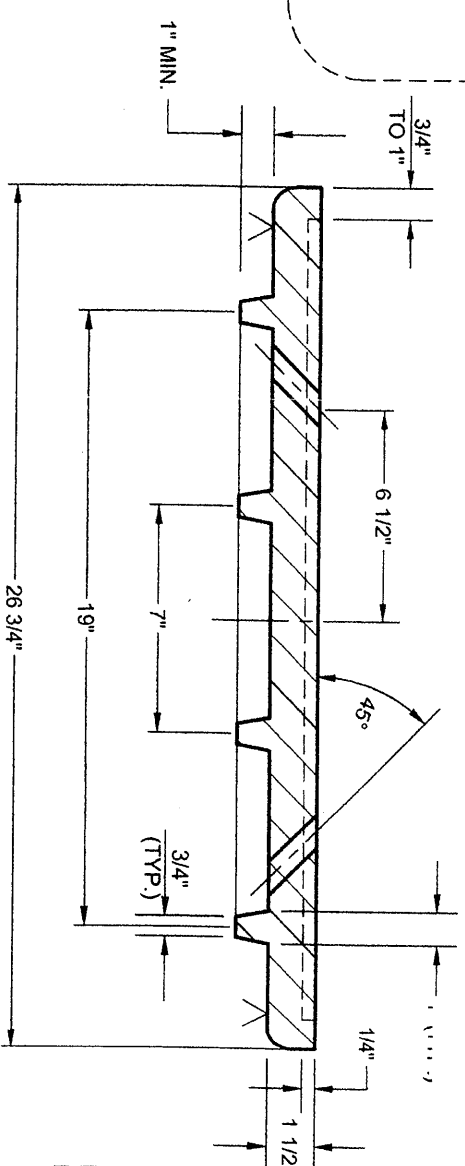
*Mauro di Franco*  
DIRECTOR OF ENGINEERING  
DEPARTMENT OF ENVIRONMENTAL PROTECTION P.E.

DATE  
*8/10/07*

CITY OF NEW YORK  
DEPARTMENT OF ENVIRONMENTAL PROTECTION



## SECTION A-A



**BOTTOM VIEW OF COVER**

## PLAN VIEW OF FRAME AND COVER

- NOTES:**
- (1) FRAME MATERIAL: GRAY CAST IRON ASTM A-48 CLASS 35B.  
MINIMUM WEIGHT OF FRAME IS 345 LBS.
- (2) COVER MATERIAL: GRAY CAST IRON ASTM A-48 CLASS 35B.  
MINIMUM WEIGHT OF COVER IS 195 LBS.
- (3) DESIGN LOADING: HS20-44 HIGHWAY LOADING.
- (4) ALL MANHOLE FRAMES & COVERS SHALL HAVE THE MANUFACTURER'S IDENTIFICATION, CAST DATE OR HEAT NUMBER AND COUNTRY OF ORIGIN INTEGRALLY CAST ON INDIVIDUAL PIECES AT THE TIME OF MANUFACTURE IN ACCORDANCE WITH THE DEP SPECIFICATION.

*Lege M. Davis*  
P. E.

DATE 7/9/07

*maedict*

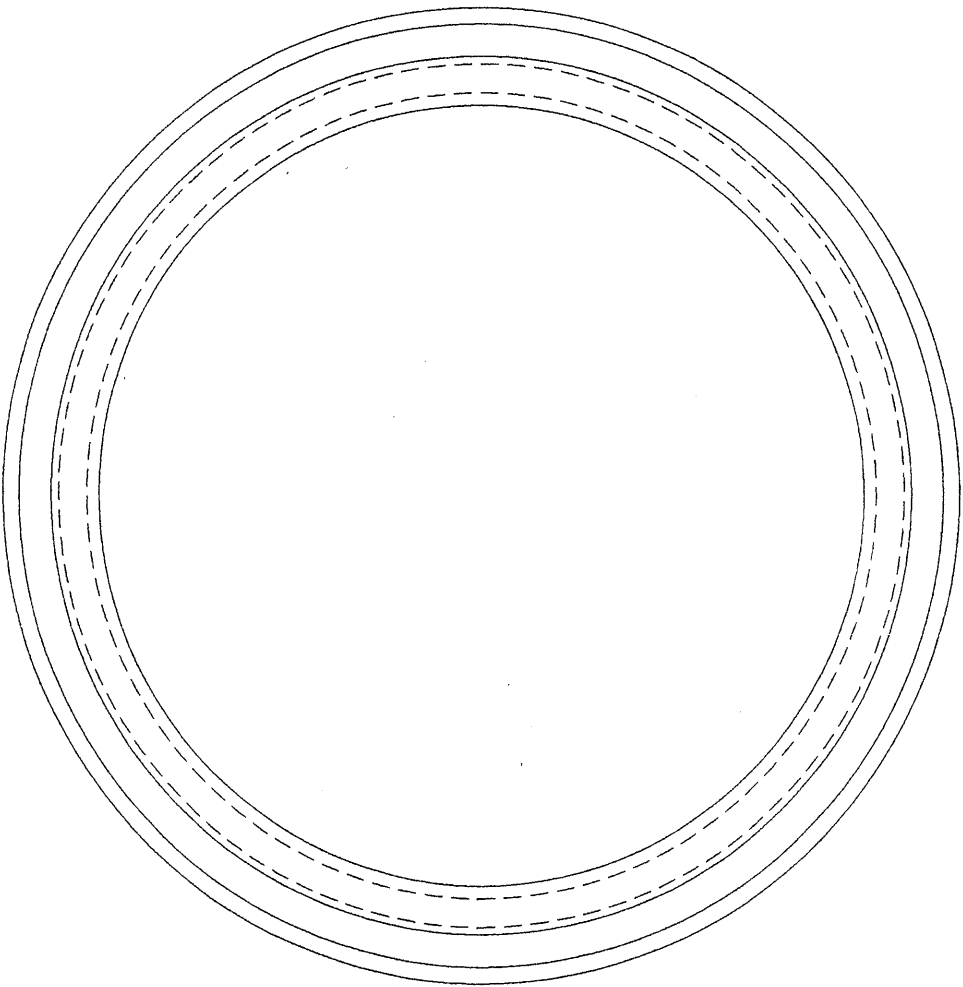
DIRECTOR OF ENGINEERING  
DEPARTMENT OF ENVIRONMENTAL PROTECTION

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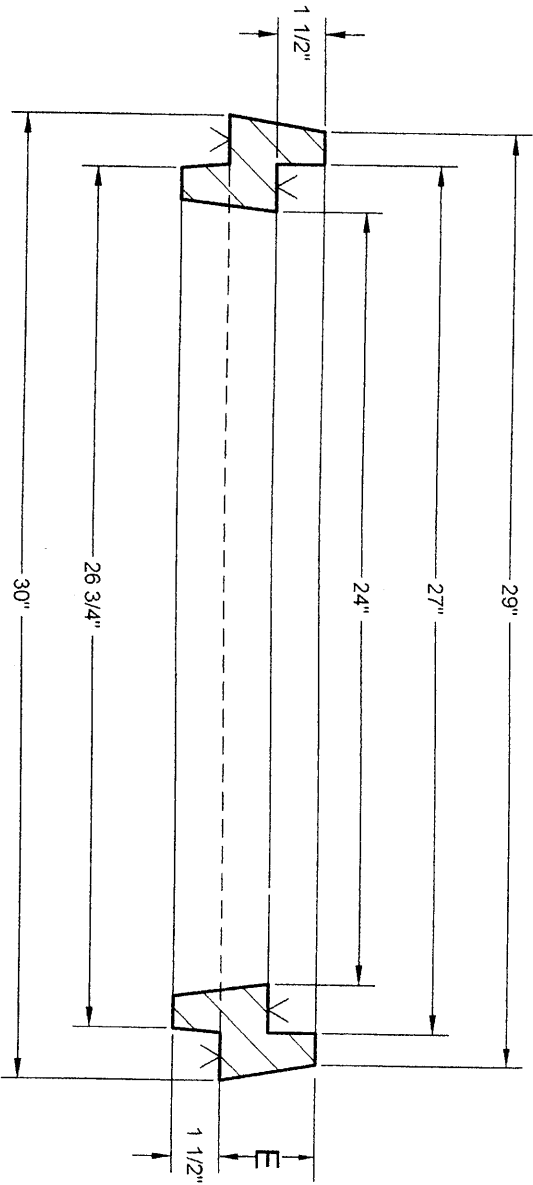
8/10/07  
DATE



STANDARD FOR 27" DIAMETER CAST IRON EXTENSION RING  
FOR 27" DIAMETER MANHOLE FRAME AND COVER



PLAN



SECTION

NOTES:

- (1) MATERIAL: GRAY CAST IRON ASTM A-48, CLASS 35B, MINIMUM WEIGHT OF EXTENSION RINGS:  
2" = 120 LBS.; 3" = 150 LBS.; 4" = 170 LBS.
- (2) DESIGN LOADING: HS20-44 HIGHWAY LOADING.
- (3) ALL MANHOLE FRAMES & COVERS SHALL HAVE THE MANUFACTURER'S IDENTIFICATION, CAST DATE OR HEAT NUMBER AND COUNTRY OF ORIGIN INTEGRALLY CAST ON INDIVIDUAL PIECES AT THE TIME OF MANUFACTURE IN ACCORDANCE WITH THE DEP SPECIFICATION.

- E = 2" for 2" raise
- E = 3" for 3" raise
- E = 4" for 4" raise
- Minimum Raise: 2"
- Maximum Raise: 4"

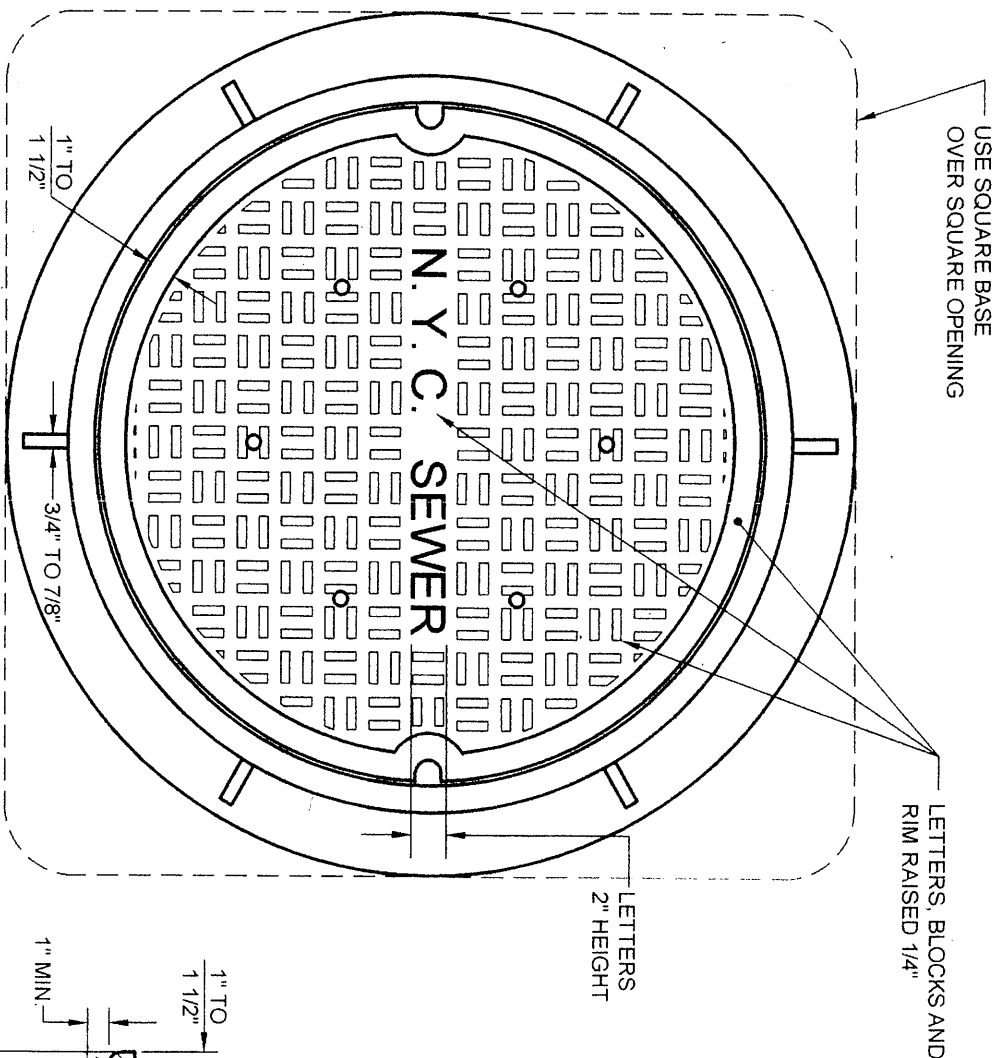
*Greg M. Brown*  
ASSISTANT COMMISSIONER, DESIGN  
DEPARTMENT OF DESIGN AND CONSTRUCTION P.E.

*7/9/07*  
DATE

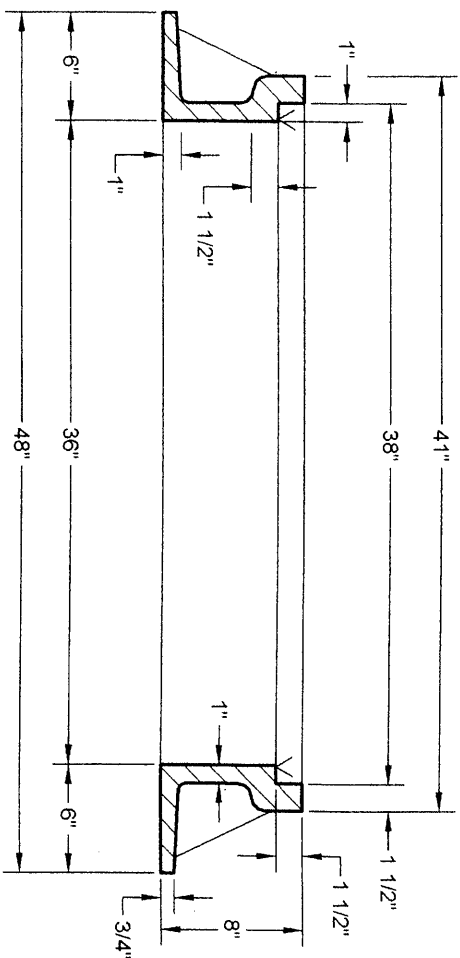
*Maedi Fawad*  
DIRECTOR OF ENGINEERING  
DEPARTMENT OF ENVIRONMENTAL PROTECTION P.E.

*8/10/07*  
DATE

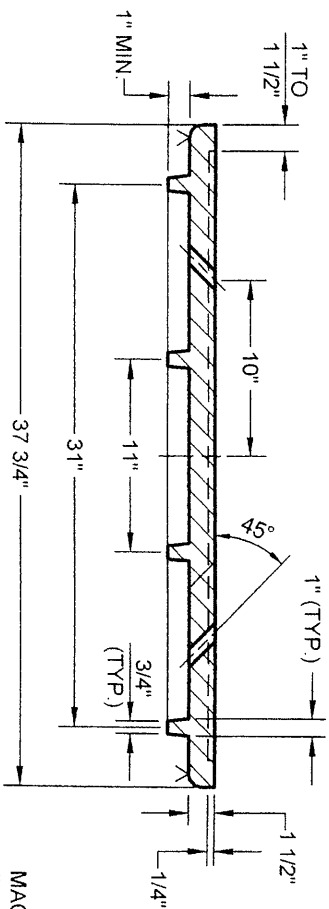
CITY OF NEW YORK  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
STANDARD FOR 36" DIAMETER  
MANHOLE FRAME AND COVER FOR CLEANOUT



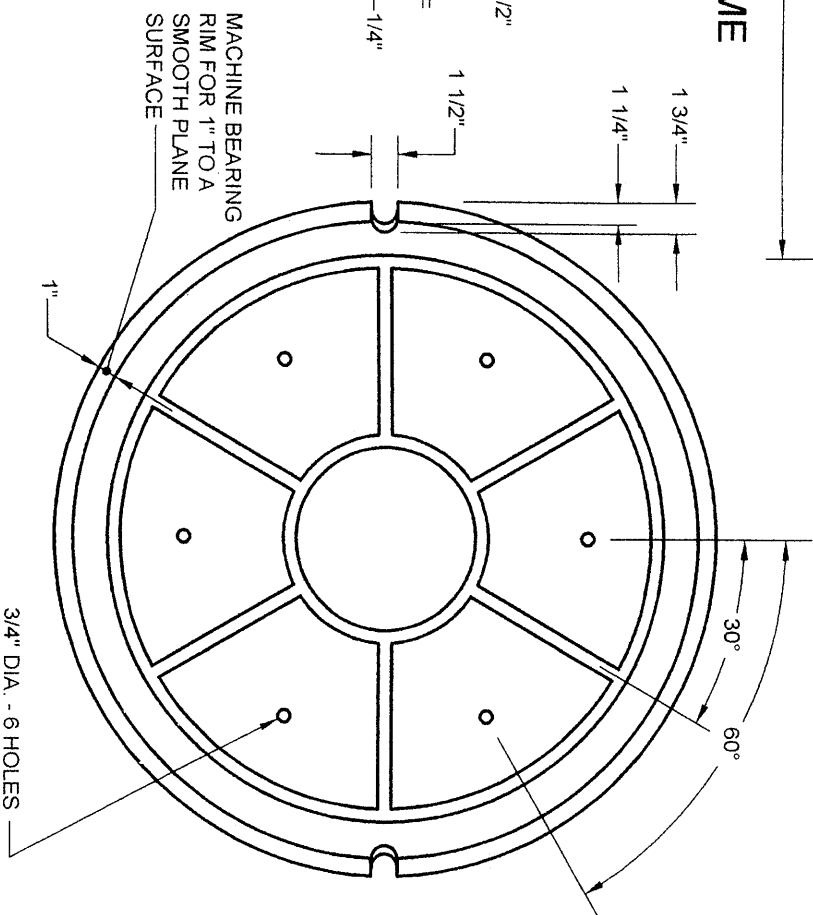
PLAN VIEW OF FRAME AND COVER



SECTION OF FRAME



SECTION OF COVER



BOTTOM VIEW OF COVER

- NOTES:
- (1) FRAME MATERIAL: GRAY CAST IRON ASTM A-48 CLASS 35B.  
MINIMUM WEIGHT OF FRAME IS 480 LBS.
  - (2) COVER MATERIAL: GRAY CAST IRON ASTM A-48 CLASS 35B.  
MINIMUM WEIGHT OF COVER IS 400 LBS.
  - (3) DESIGN LOADING: HS20-44 HIGHWAY LOADING.
  - (4) ALL MANHOLE FRAMES & COVERS SHALL HAVE THE MANUFACTURER'S IDENTIFICATION, CAST DATE  
OR HEAT NUMBER AND COUNTRY OF ORIGIN INTEGRALLY CAST ON INDIVIDUAL PIECES AT THE TIME  
OF MANUFACTURE IN ACCORDANCE WITH THE DEP SPECIFICATION.

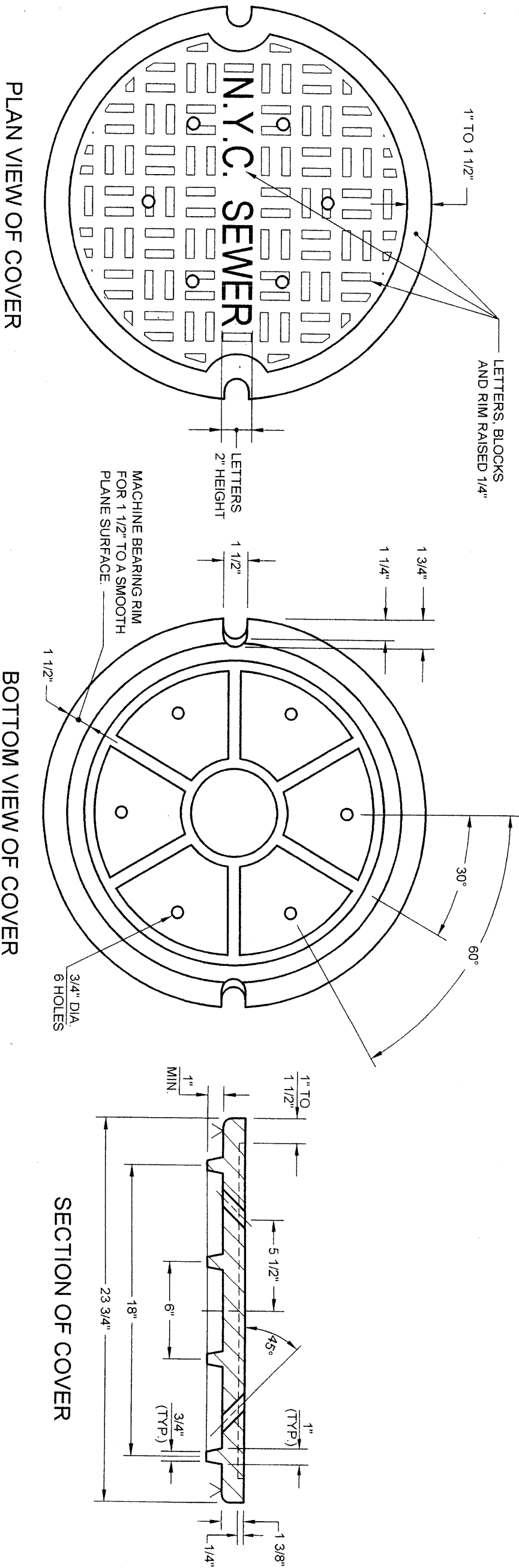
*Scott M. Farn*  
ASSISTANT COMMISSIONER, DESIGN  
DEPARTMENT OF DESIGN AND CONSTRUCTION  
P.E.

DATE  
*7/9/07*

*Maeddi Farn*  
DIRECTOR OF ENGINEERING  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
P.E.

DATE  
*8/10/07*

STANDARD FOR 24" DIAMETER CAST IRON MANHOLE COVER



PLAN VIEW OF COVER

BOTTOM VIEW OF COVER

SECTION OF COVER

NOTES:

- (1) COVER MATERIAL: GRAY CAST IRON ASTM A-48 CLASS 35B. MINIMUM WEIGHT OF COVER IS 130 LBS.
- (2) DESIGN LOADING: HS20-44 HIGHWAY LOADING.
- (3) ALL MANHOLE COVERS SHALL HAVE THE MANUFACTURER'S IDENTIFICATION, CAST DATE OR HEAT NUMBER AND COUNTRY OF ORIGIN INTEGRALLY CAST ON INDIVIDUAL PIECES AT THE TIME OF MANUFACTURE IN ACCORDANCE WITH THE DEP SPECIFICATION.
- (4) TO BE USED ONLY TO REPLACE BROKEN OR DAMAGED EXISTING 24" DIAMETER SEWER MANHOLE COVER.

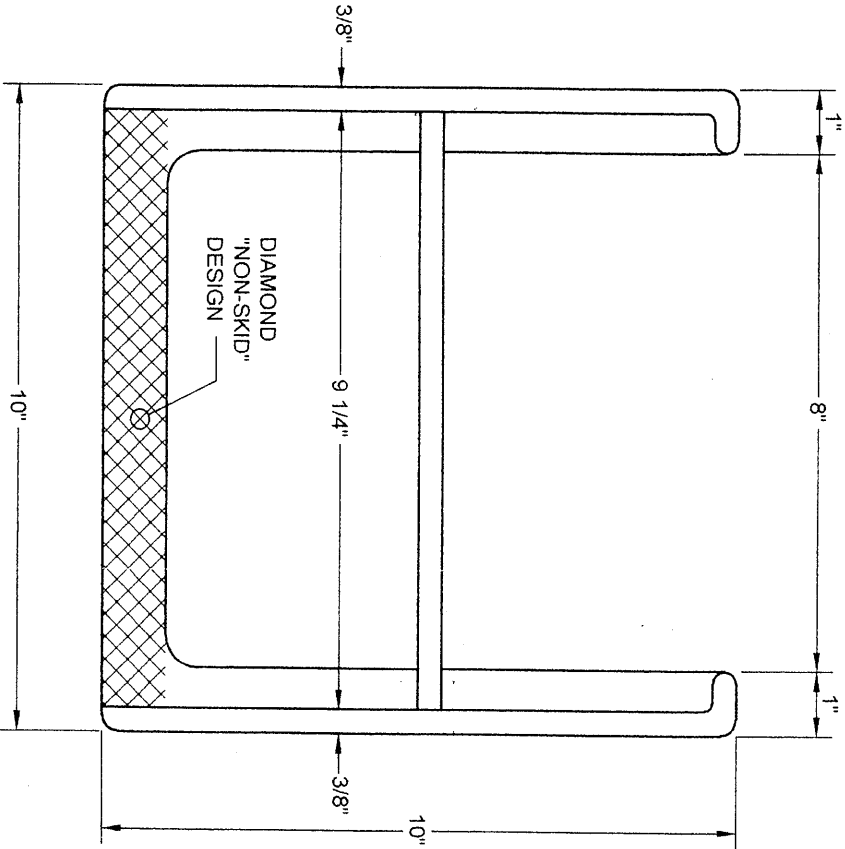
*John M. Savar* P.E.  
ASSISTANT COMMISSIONER, DESIGN  
DEPARTMENT OF DESIGN AND CONSTRUCTION

7/9/07  
DATE

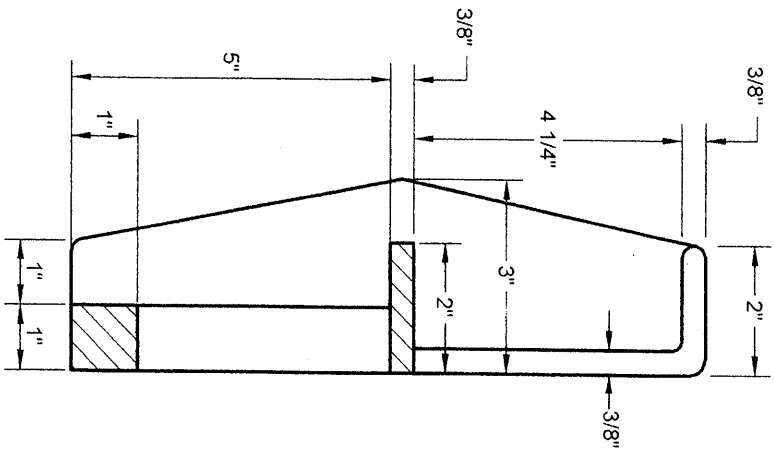
*Maeddi Savar* P.E.  
DIRECTOR OF ENGINEERING  
DEPARTMENT OF ENVIRONMENTAL PROTECTION

8/10/07  
DATE

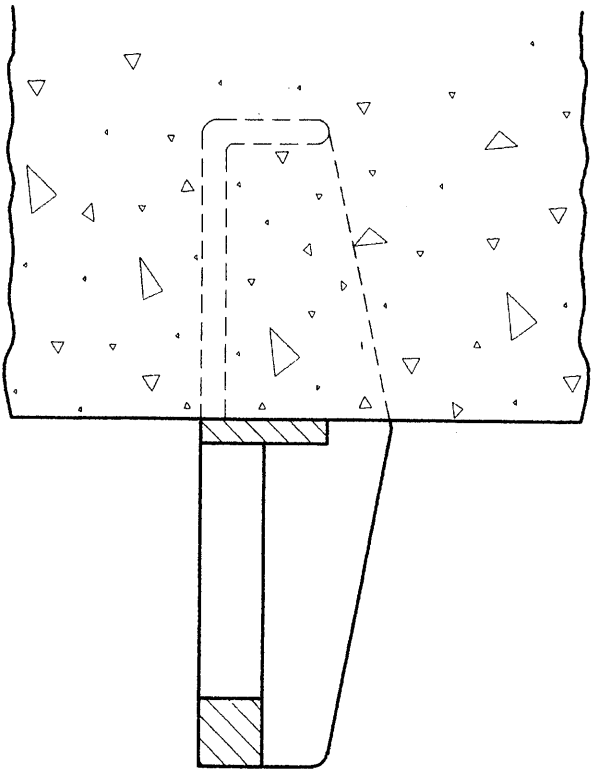
STANDARD FOR CAST IRON MANHOLE STEP



PLAN



SECTION



SECTION OF STEP IN PLACE

NOTES:

- (1) MATERIAL: GRAY CAST IRON ASTM A-48 CLASS 35B. MINIMUM WEIGHT OF STEP IS 11 LBS.
- (2) ALL MANHOLE STEPS SHALL HAVE THE MANUFACTURERS IDENTIFICATION, CAST DATE OR HEAT NUMBER AND COUNTRY OF ORIGIN INTEGRALLY CAST ON INDIVIDUAL PIECES AT THE TIME OF MANUFACTURE IN ACCORDANCE WITH THE DEP SPECIFICATION.

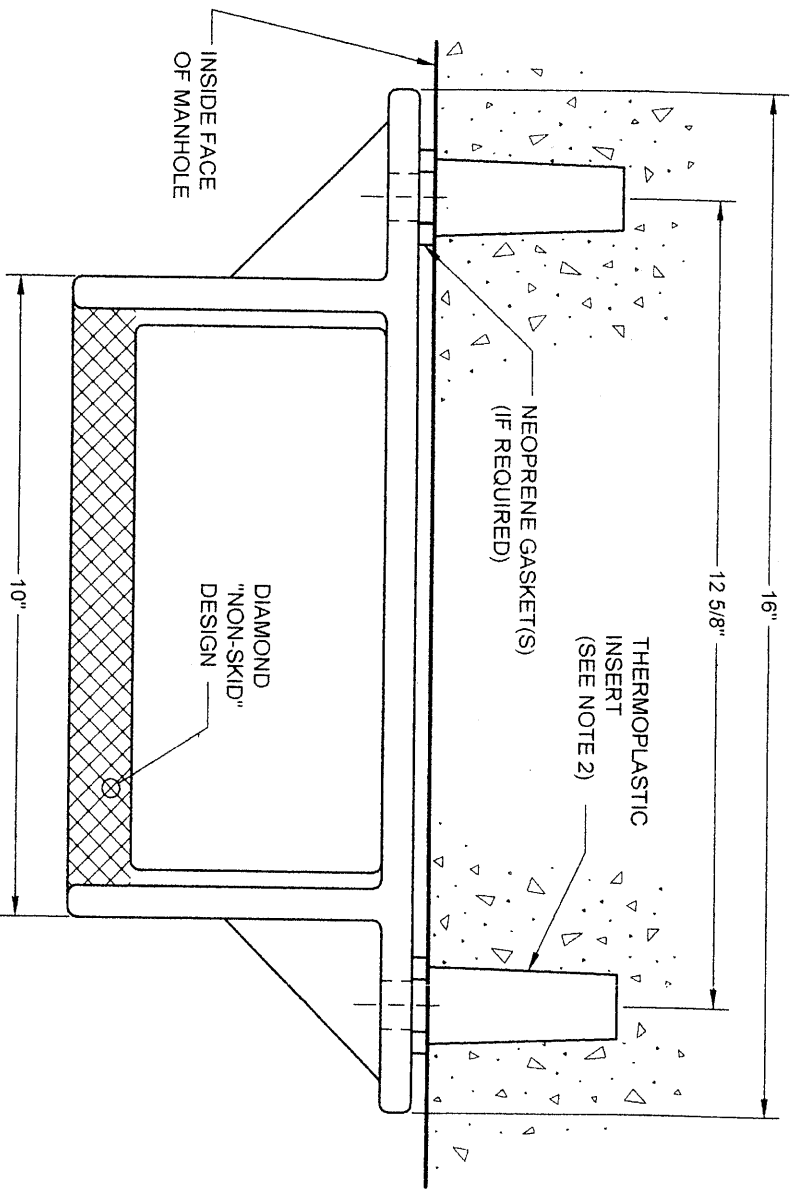
*Greg M. Lemaire*  
ASSISTANT COMMISSIONER, DESIGN  
DEPARTMENT OF DESIGN AND CONSTRUCTION  
P.E.

*7/9/07*  
DATE

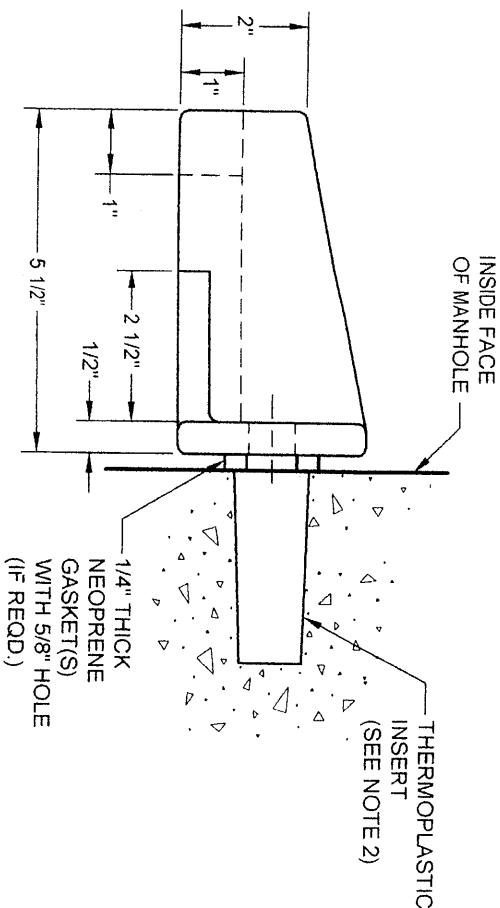
*Mae di Franco*  
DIRECTOR OF ENGINEERING  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
P.E.

*8/10/07*  
DATE

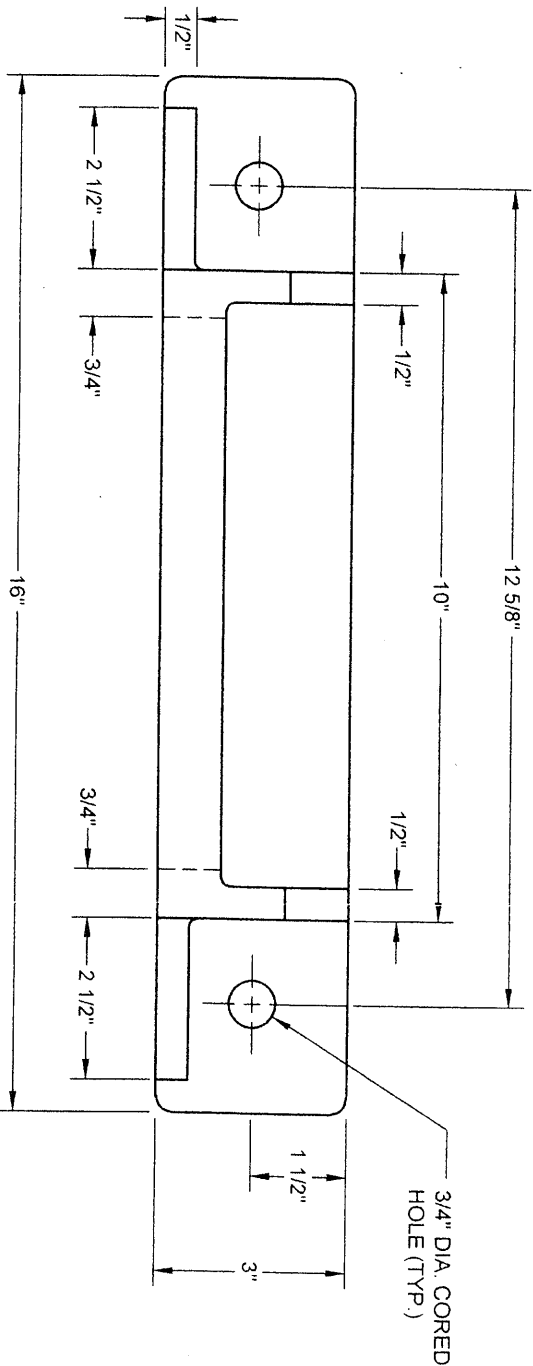
# STANDARD FOR CAST IRON MANHOLE STEP (BOLT-ON TYPE)



PLAN



SIDE ELEVATION



FRONT ELEVATION

**NOTES:**

- (1) MATERIAL: GRAY CAST IRON ASTM A-48 CLASS 35B. MINIMUM WEIGHT OF BOLT-ON STEP IS 13 LBS.
- (2) THERMOPLASTIC INSERT AS MANUFACTURED BY PENNSYLVANIA INSERT CORP., OR EQUAL, WITH 5/8" - 11 X 2 1/2" STAINLESS STEEL BOLT AND WASHER.  
OR  
1 1/8" X 2" CORED HOLE FOR 5/8" - 11 X 2 1/2" STAINLESS STEEL BOLT AND WASHER, WITH ACKERMAN - JOHNSON EXPANSIVE SCREW ANCHOR WITH NONCORROSIVE BRASS CONES, CATALOG NO. 701-62.
- (3) ALL MANHOLE STEPS SHALL HAVE THE MANUFACTURER'S IDENTIFICATION, CAST DATE OR HEAT NUMBER AND COUNTRY OF ORIGIN INTEGRALLY CAST ON INDIVIDUAL PIECES AT THE TIME OF MANUFACTURE IN ACCORDANCE WITH THE DEP SPECIFICATION.

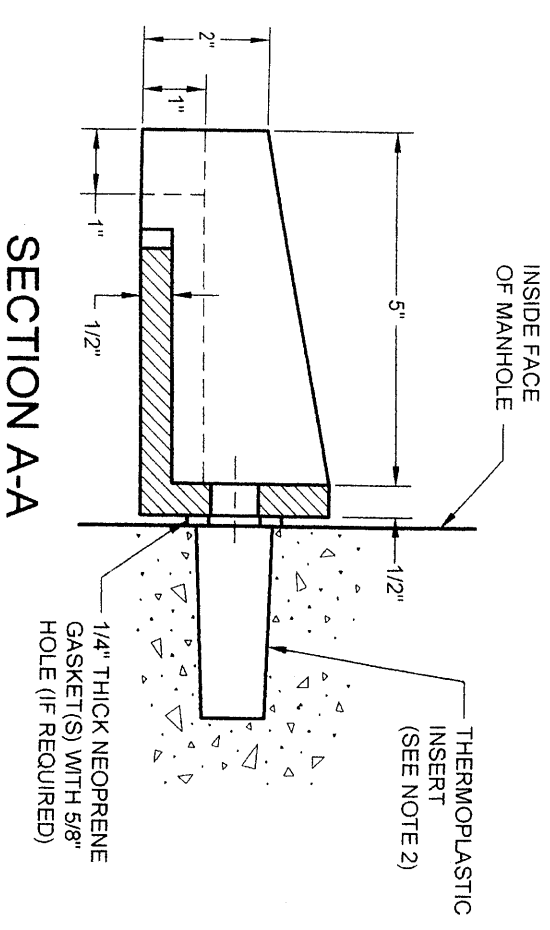
*John W. Brown* P.E.  
ASSISTANT COMMISSIONER, DESIGN  
DEPARTMENT OF DESIGN AND CONSTRUCTION

DATE 7/9/07

*Maedi Farah* P.E.  
DIRECTOR OF ENGINEERING  
DEPARTMENT OF ENVIRONMENTAL PROTECTION

DATE 8/10/07

CITY OF NEW YORK  
DEPARTMENT OF ENVIRONMENTAL PROTECTION

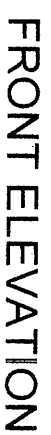


- (1) MATERIAL: GRAY CAST IRON ASTM A-48 CLASS 35B. MINIMUM WEIGHT OF CIRCULAR BOLT-ON STEP IS 13 LBS.
- (2) THERMOPLASTIC INSERT AS MANUFACTURED BY PENNSYLVANIA INSERT CORP. OR EQUAL, WITH 5/8"-11 X 2 1/2" STAINLESS STEEL BOLT AND WASHER.

OR

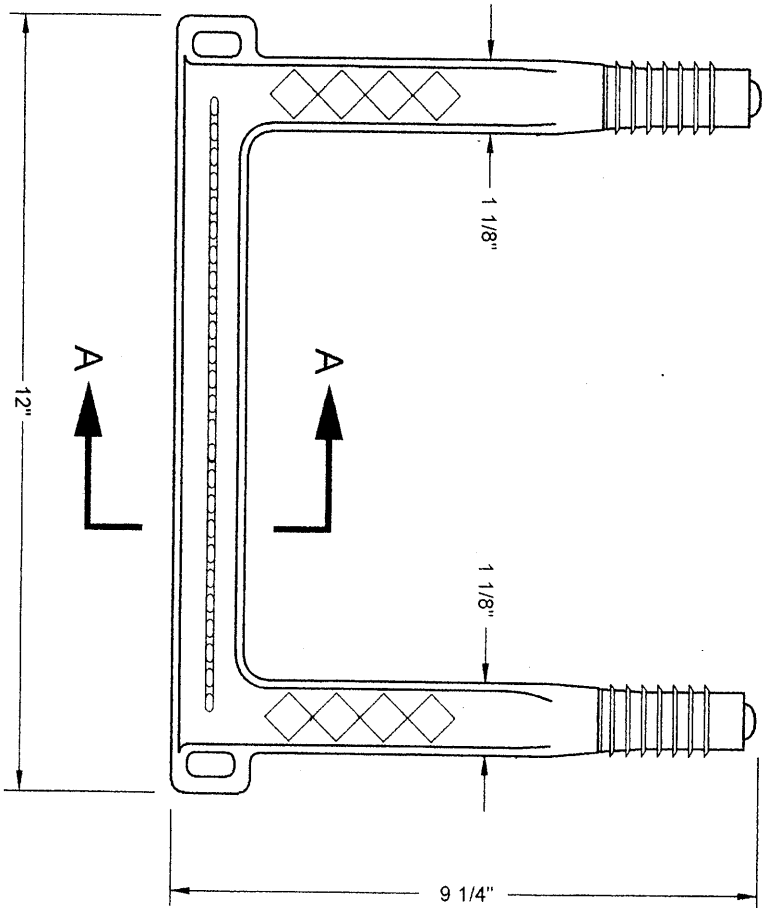
1 1/8" X 2" CORED HOLE FOR 5/8"-11 X 2 1/2" STAINLESS STEEL BOLT AND WASHER, WITH ACKERMAN - JOHNSON EXPANSIVE SCREW ANCHOR WITH NONCORROSIVE BRASS CONES, CATALOG NO. 701-62.

- (3) ALL MANHOLE STEPS SHALL HAVE THE MANUFACTURER'S IDENTIFICATION, CAST DATE OR HEAT NUMBER AND COUNTRY OF ORIGIN INTERNALLY CAST ON INDIVIDUAL PIECES AT THE TIME OF MANUFACTURE IN ACCORDANCE WITH THE DEP SPECIFICATION.

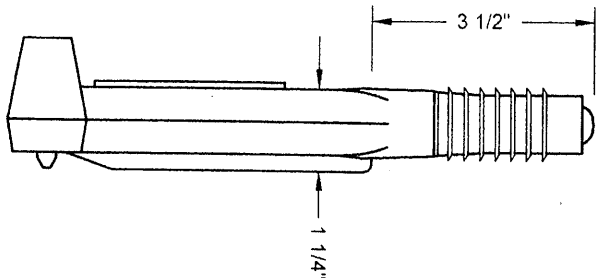


\_\_\_\_\_  
 DIRECTOR OF ENGINEERING  
 DEPARTMENT OF ENVIRONMENTAL PROTECTION  
 \_\_\_\_\_  
 P.E.  
 \_\_\_\_\_  
 8/10/07  
 \_\_\_\_\_  
 DATE

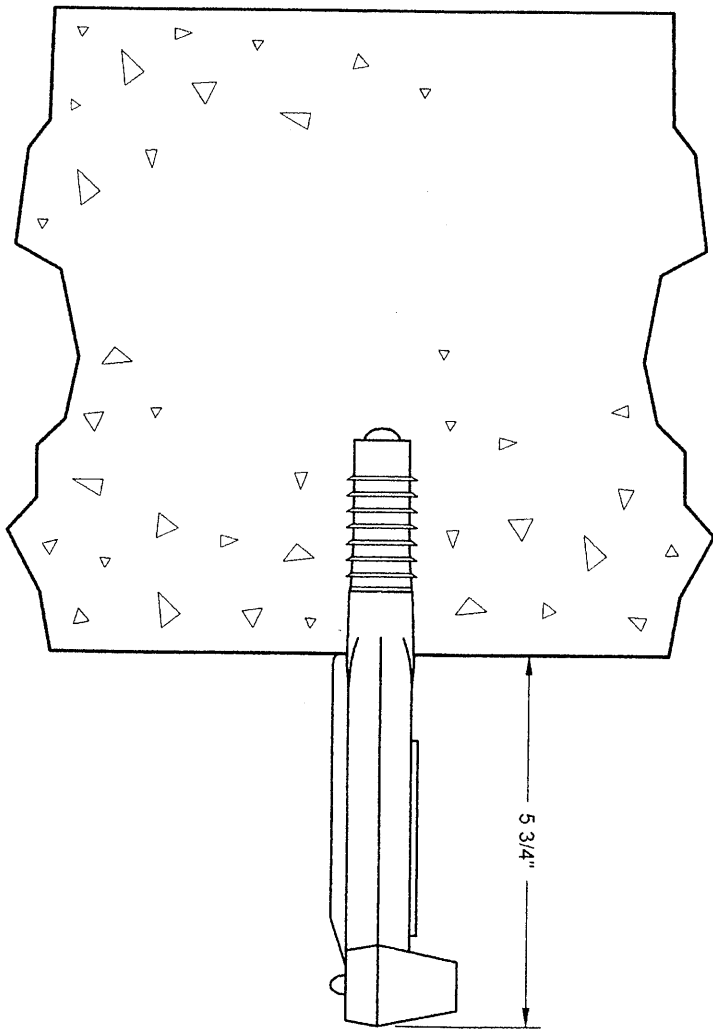
STANDARD FOR PLASTIC MANHOLE STEP  
(COPOLYMER POLYPROPYLENE PLASTIC MANHOLE STEP)



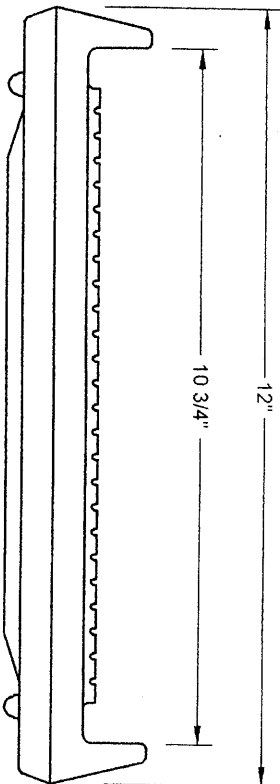
PLAN



SIDE ELEVATION



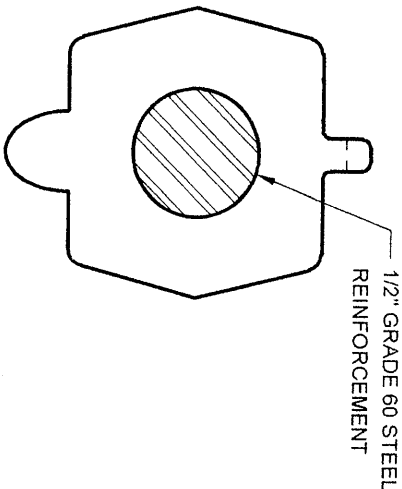
ANCHORAGE DETAIL



FRONT ELEVATION

NOTE:

PLASTIC MANHOLE STEP MAY BE SUBSTITUTED FOR CAST IRON MANHOLE STEP,  
UNLESS OTHERWISE DIRECTED BY THE ENGINEER.



SECTION A-A

*Loge M. Turner*  
ASSISTANT COMMISSIONER, DESIGN  
DEPARTMENT OF DESIGN AND CONSTRUCTION  
P.E.

*7/9/07*  
DATE

*Mae di Fano*  
DIRECTOR OF ENGINEERING  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
P.E.

*8/10/07*  
DATE

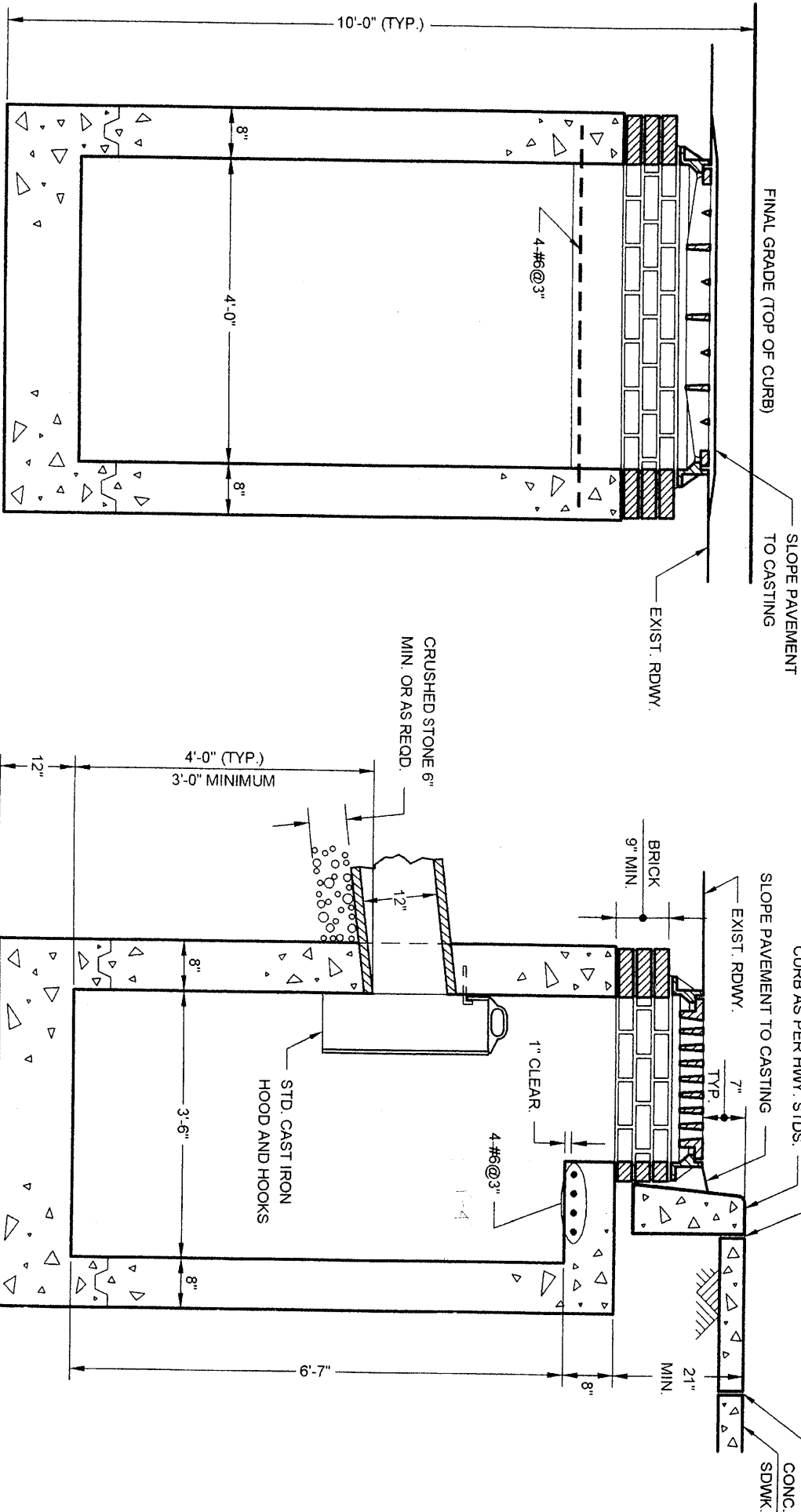
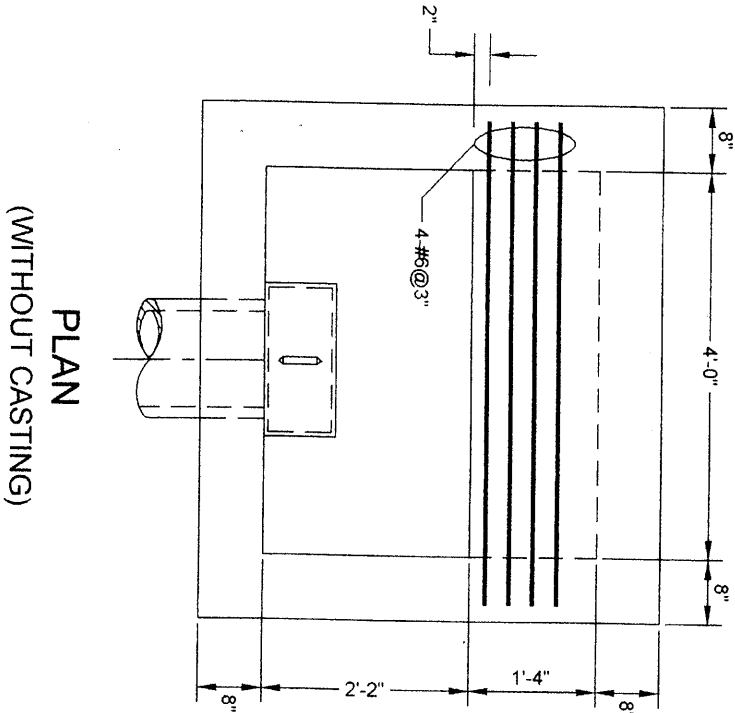
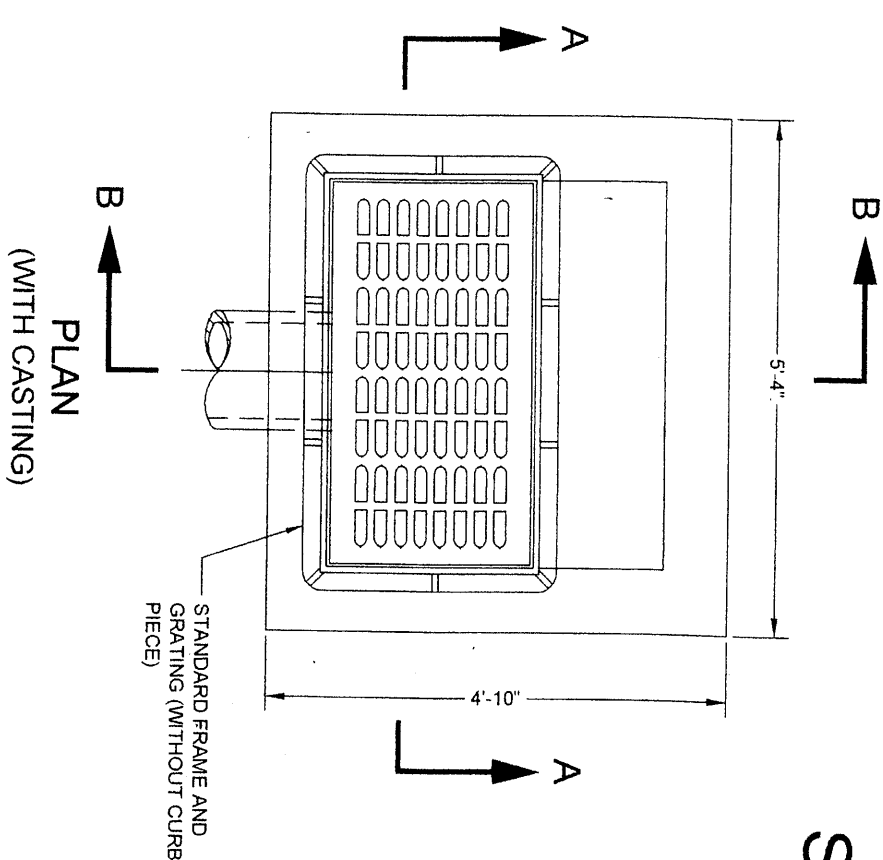
# PLAN (WITH CASTING)



- 8/10/07  
DATE



STANDARD FOR TYPE 2 CATCH BASIN  
(WITHOUT CURB PIECE)



NOTES:

- (1) LOCATION OF CURB SHALL BE AS SHOWN UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
- (2) LOCATION AND ANGLE OF BASIN CONNECTION MAY BE VARIED TO SUIT FIELD CONDITIONS.
- (3) KEYED CONSTRUCTION JOINTS ARE REQUIRED BETWEEN ANY SUCCESSIVE POURS.
- (4) THE MINIMUM DROP FROM BASIN TO SEWER SHALL BE 6".
- (5) EXPANSION JOINTS ARE REQUIRED IN THE CONCRETE SIDEWALK AREA AT A DISTANCE OF 1'-0" AROUND THE PERIMETER OF THE BASIN.
- (6) CONCRETE IS TO BE CLASS 40. REBARS-GRADE 60.

*Sege M. Lawen*  
ASSISTANT COMMISSIONER, DESIGN  
DEPARTMENT OF DESIGN AND CONSTRUCTION  
P.E.

7/9/07  
DATE

*Mae di Fuen*  
DIRECTOR OF ENGINEERING  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
P.E.

8/10/07  
DATE

(WITHOUT CURB PIECE)



## LIFTING BAR DETAIL

## SECTION A-A

## SECTION B-B

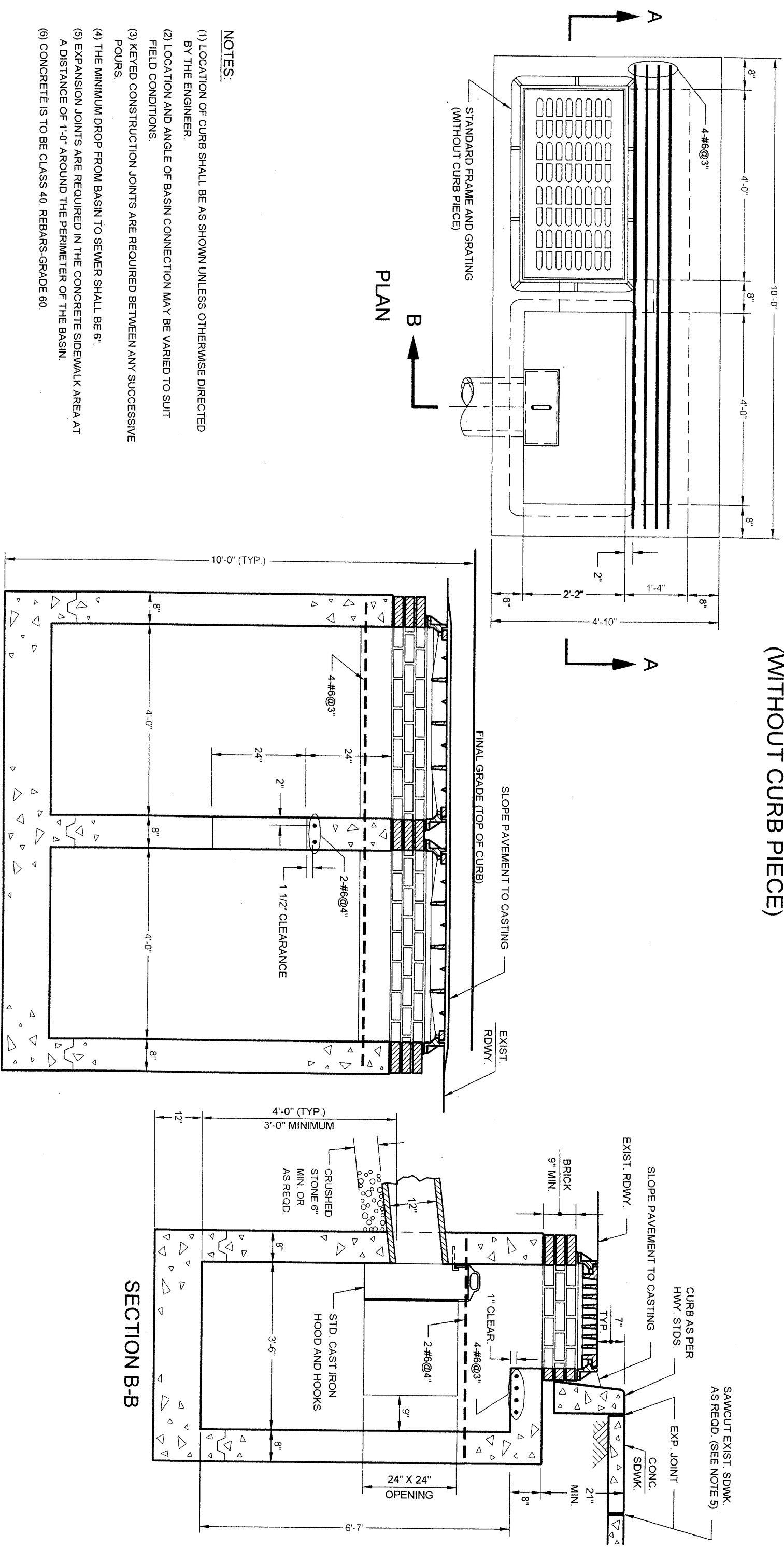
**NOTES:**

DETAIL "A"

- (1) LOCATION OF CURB SHALL BE AS SHOWN UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
- (2) LOCATION AND ANGLE OF BASIN CONNECTION MAY BE VARIED TO SUIT FIELD CONDITIONS.
- (3) THE MINIMUM DROP FROM BASIN TO SEWER SHALL BE 6".
- (4) KEYED CONSTRUCTION JOINTS ARE REQUIRED BETWEEN ANY SUCCESSIVE POURS.
- (5) EXPANSION JOINTS ARE REQUIRED IN THE CONC. SIDEWALK AREA AT A DISTANCE OF 1'-0" AROUND THE PERIMETER OF THE BASIN.
- (6) ALL REINFORCEMENT IS #6 REINFORCING BARS UNLESS OTHERWISE SHOWN.
- (7) CONCRETE IS TO BE CLASS 40. REBARS- GRADE 60.

DATE \_\_\_\_\_

DATE \_\_\_\_\_



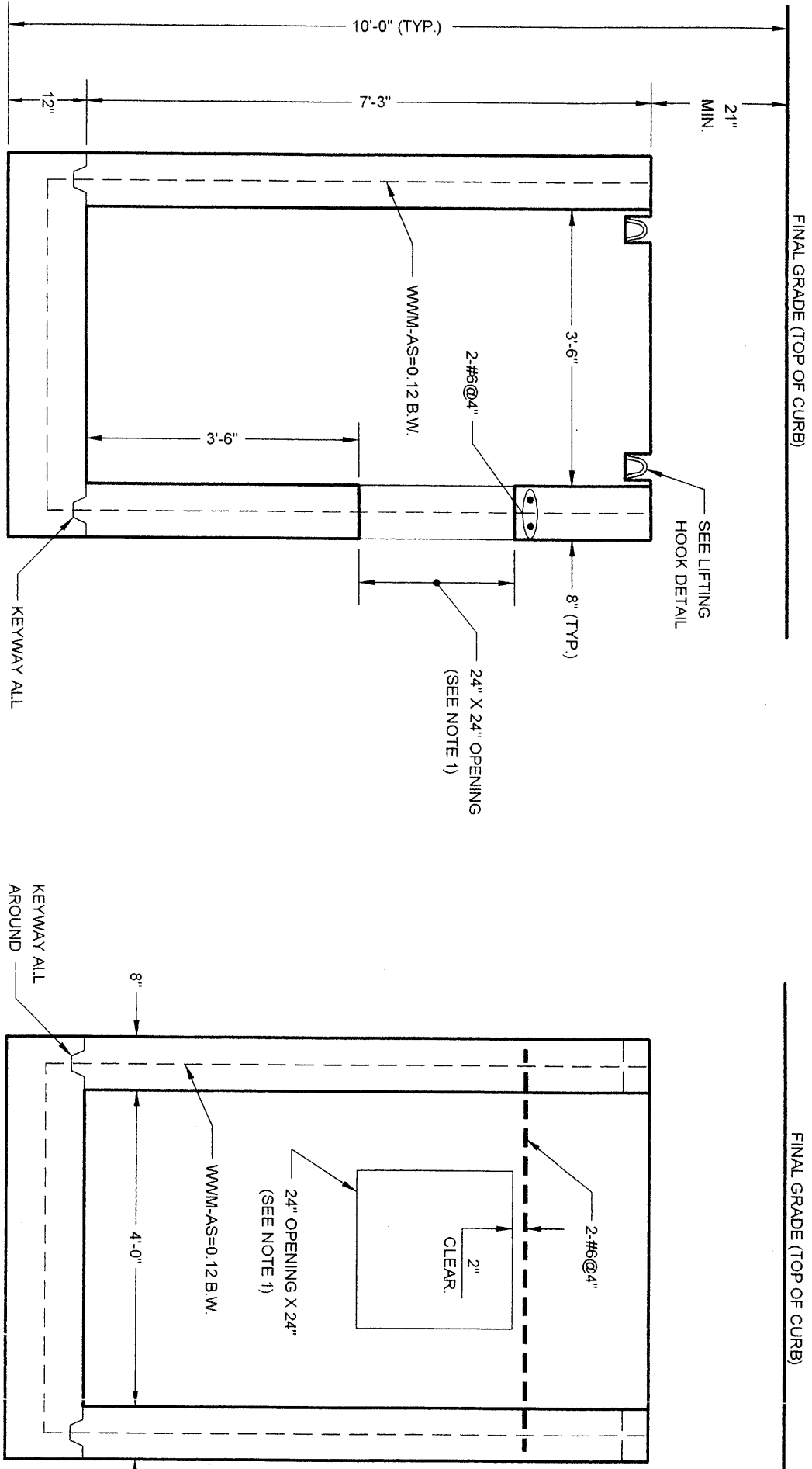
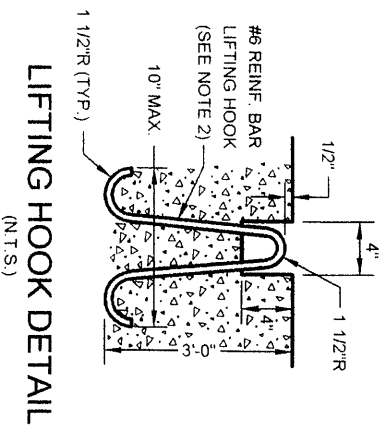
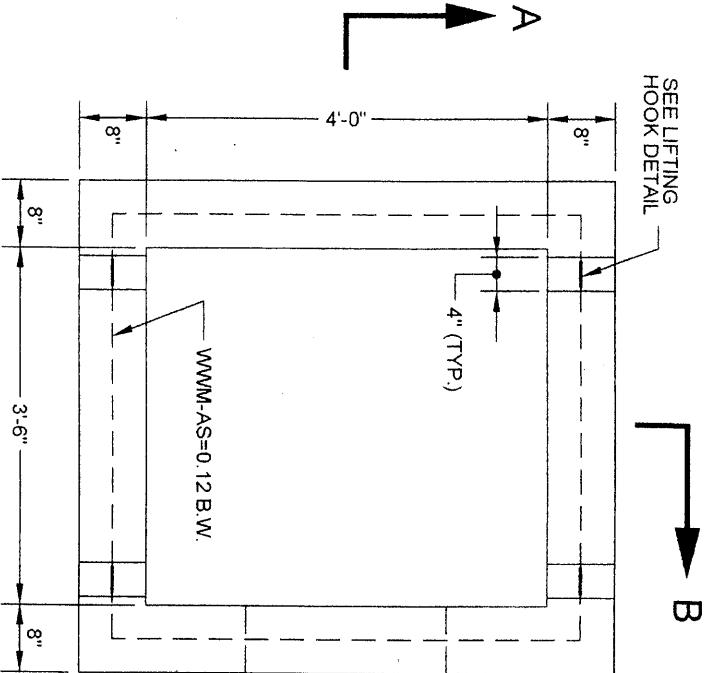
- (1) LOCATION OF CURB SHALL BE AS SHOWN UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
- (2) LOCATION AND ANGLE OF BASIN CONNECTION MAY BE VARIED TO SUIT FIELD CONDITIONS.
- (3) KEYED CONSTRUCTION JOINTS ARE REQUIRED BETWEEN ANY SUCCESSIVE POURS.
- (4) THE MINIMUM DROP FROM BASIN TO SEWER SHALL BE 6" .
- (5) EXPANSION JOINTS ARE REQUIRED IN THE CONCRETE SIDEWALK AREA AT A DISTANCE OF 1'-0" AROUND THE PERIMETER OF THE BASIN.
- (6) CONCRETE IS TO BE CLASS 40. REBARS-GRADE 60.

DATE \_\_\_\_\_

DATE \_\_\_\_\_

8/10/07  
DATE

STANDARD FOR PRECAST TYPE 1 CATCH BASIN



NOTES:

- (1) LOCATION OF OPENING SHALL BE DETERMINED PRIOR TO MANUFACTURE OF BASIN BY LOCATION AND ANGLE OF BASIN CONNECTION REQUIRED DUE TO FIELD CONDITIONS AND OPENING SHALL BE PLACED IN THE PROPER WALL AT THE TIME OF MANUFACTURE.
- (2) LIFTING HOOKS SHALL BE LOCATED IN THE SECTION AS PER MANUFACTURERS RECOMMENDATIONS AND GROUTED PRIOR TO BACKFILLING. (FOUR (4) LIFTING HOOKS SHALL BE PROVIDED FOR EACH SECTION AND SHALL BE PLACED SYMMETRICALLY AND IN SUCH A MANNER AS TO PROVIDE FOR THE EVEN LIFTING OF THE SECTION.)
- (3) CONCRETE IS TO BE CLASS 40 AND 5% AIR ENTRAINED. REBARS- GRADE 60. WMM-FS=65,000 PSI.

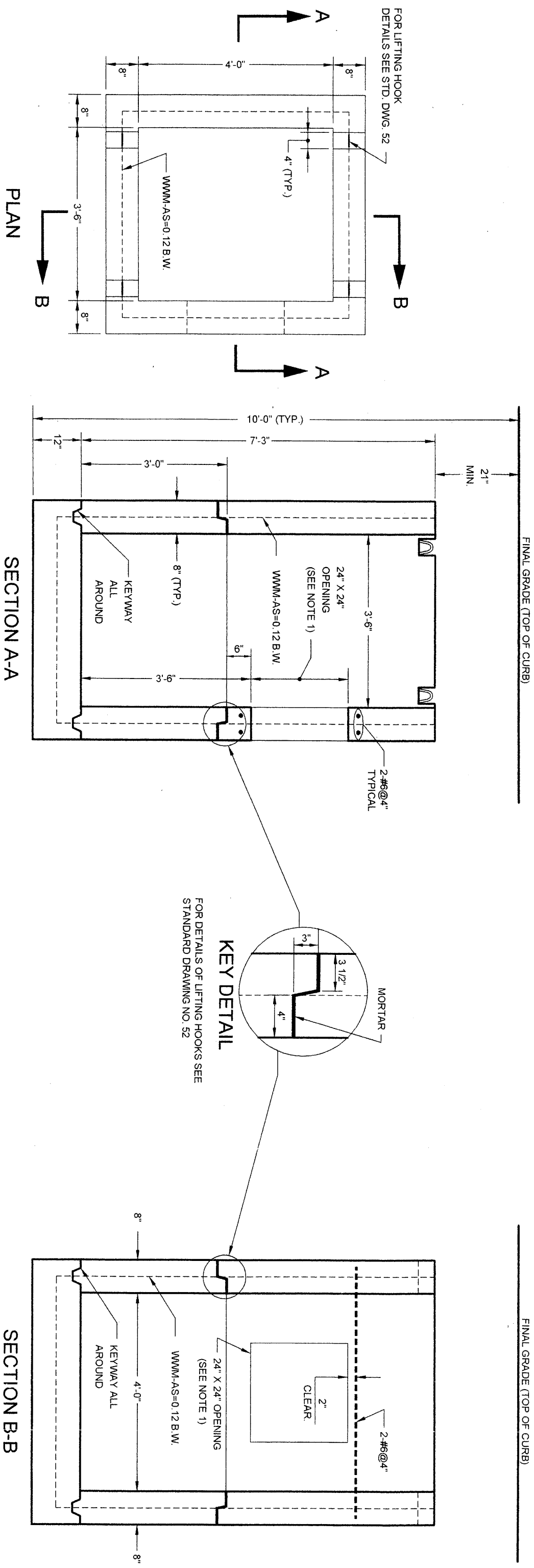
*Greg M. Lamm*  
ASSISTANT COMMISSIONER, DESIGN  
DEPARTMENT OF DESIGN AND CONSTRUCTION  
P.E.

7/9/07  
DATE

*Mae di Fano*  
DIRECTOR OF ENGINEERING  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
P.E.

8/10/07  
DATE

CITY OF NEW YORK  
DEPARTMENT OF ENVIRONMENTAL PROTECTION



(1) LOCATION OF OPENING SHALL BE DETERMINED PRIOR TO MANUFACTURE OF BASIN BY LOCATION AND ANGLE OF BASIN CONNECTION REQUIRED DUE TO FIELD CONDITIONS AND OPENING SHALL BE PLACED IN THE PROPER WALL AT THE TIME OF MANUFACTURE.

(2) LIFTING HOOKS SHALL BE LOCATED IN THE SECTION AS PER MANUFACTURERS RECOMMENDATIONS AND GROUTED PRIOR TO BACKFILLING. (FOUR (4) LIFTING HOOKS SHALL BE PROVIDED FOR EACH SECTION AND SHALL BE PLACED SYMMETRICALLY AND IN SUCH A MANNER AS TO PROVIDE FOR THE EVEN LIFTING OF THE SECTION.)

(3) CONCRETE IS TO BE CLASS 40 AND 5% AIR ENTRAINED. REBARS-GRADE 60. WWM-FS=65,000 PSI

(4) SPLIT BASINS WILL ONLY BE PERMITTED WHERE STANDARD BASINS CAN NOT BE INSTALLED DUE TO VERTICAL HEIGHT RESTRICTIONS SUCH AS STRUCTURES OR AERIAL ELECTRICAL FACILITIES.

8/10/07  
DATE