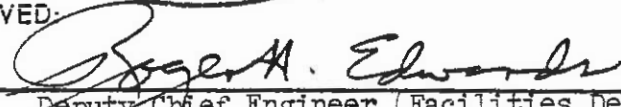


TO:		ENGINEERING INSTRUCTION	
SUPERSEDED BY EI 95-013 EFFECTIVE 3/7/1995		NEW YORK STATE DEPARTMENT OF TRANSPORTATION	
<div style="border: 1px solid black; border-radius: 50%; padding: 10px; display: inline-block;"> PRELIMINARY FLIN REVIEW B KE J APR 10 1978 </div>		SUBJECT: CONCRETE MEDIAN BARRIER	
		Subject Code: 7.27-2-606	
Distribution:		Code: <u>EI 78-16</u>	
<input type="checkbox"/> Main Office <input type="checkbox"/> Regions <input checked="" type="checkbox"/> Special		Date: <u>3/10/78</u>	
APPROVED:		Supersedes:	
 Deputy Chief Engineer (Facilities Design)		E I 77-42	

We are transmitting, under separate cover, copies of the following standard sheets.

606-20 Concrete Median Barrier, Cast-in-Place or Slipformed
 606-21 Precast Concrete Median Barrier

Engineering Instruction 77-42 rescinded Standard Sheet 606-5R1. It also issued details for concrete median barriers to be used until new standards were issued. These new Standard Sheets replace Standard Sheet 606-5R1 and the details issued by Engineering Instruction 77-42 and should be used in all contracts with Concrete Median Barrier commencing with the June 15, 1978 letting.

Standard Sheet 606-20 gives the details for cast-in-place and slipformed barriers, and Standard Sheet 606-21 gives the details for precast barrier. These sheets should always be used together so details of both options permitted by Subsection 606-305 of the Standard Specifications dated January 3, 1978 will be available to the Contractor.

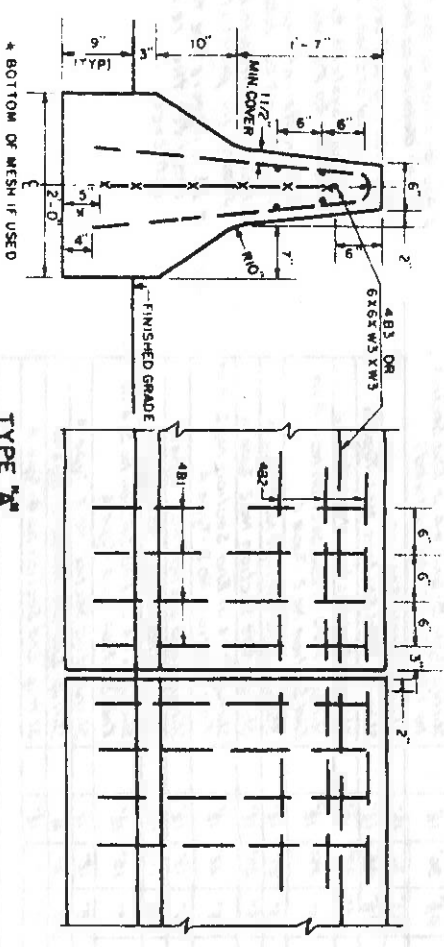
The shape of the concrete median barrier shown on these Standard Sheets is the New Jersey (MB 5) shape and the Type "A" and Type "B" sections have the same dimensions as shown in the temporary details included with Engineering Instruction 77-42. The criteria established for the use of the Type "A" or Type "B" sections in Engineering Instruction 77-42 remains unchanged and is as follows:

"The Type "A" section is to be used on all roadways where lamp post accommodations on top of the median barrier are not required. The Type "B" section is to be used on all roadways where lamp post accommodations on top of the median barrier are required."

We changed the shape of our concrete median barrier to the N.J. (MB5) from the modified G.M. (MB6) for the following reasons:

1. Extensive research has been made on both the N.J. (MB5) and the G.M. (MB6) and it has been determined that the slope of the upper surface of the G.M. (MB6) is more conducive to vehicle climb.
2. Observation of vehicles impacting the concrete median barrier showed the re-direction of the vehicle occurred sooner with the N.J. (MB5) shape.
3. Based on baseline crash test results of the research program, the N.J. (MB5) shape appeared to be the most desirable of the two standard shapes due to its superior performance in subcompact vehicle tests.

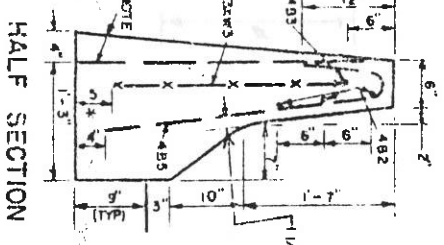
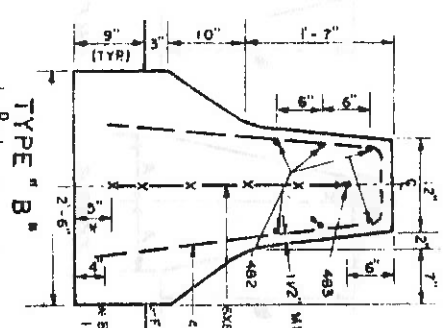
NOTE: IT IS IMPERATIVE THAT THE 1/2 INCH MIN COVER IS ACHIEVED



TYPE "A" CONCRETE MEDIAN BARRIER
(SHOWN WITH OPEN OR EXPANSION JOINT)
CAST-IN-PLACE OR SLIPFORM

BAR LIST

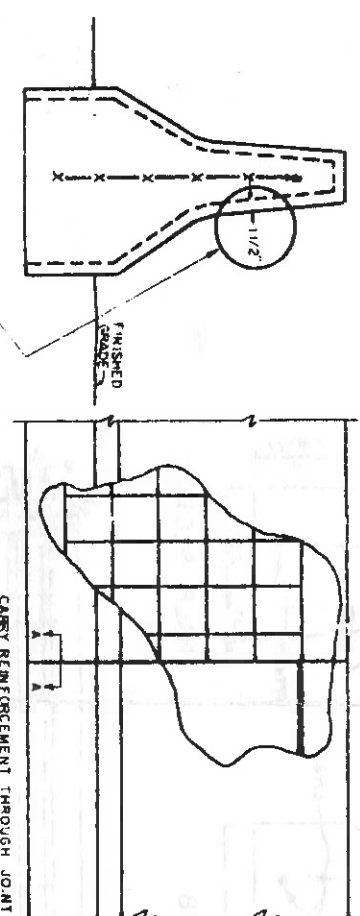
MARK	SIZE	NO.	LENGTH	TYPE	A	B	C	LOCATION
4B1	4	8	5'-11"	STIRRUP	3/8	3/4	1/2	4 ON EACH SIDE OF OPEN OR EXPANSION JOINT
4B2	4	10	2'-0"	STRAIGHT				5 ON EACH SIDE OF OPEN OR EXPANSION JOINT CONTINUOUS FROM OPEN OR EXPANSION JOINT TO OPEN OR EXPANSION JOINT AND THROUGH CONTRACTION JOINTS
4B3	4	1		STRAIGHT OR 6X6X W3X3				



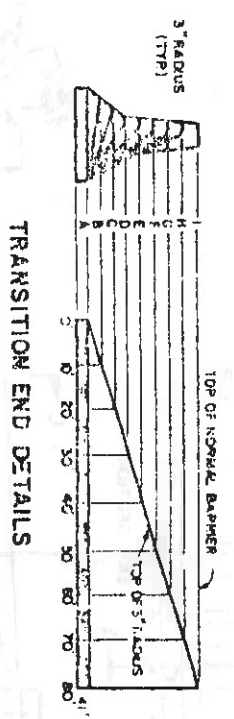
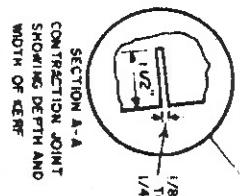
NOTE: USE VERTICAL BACK FACE WHEN TWO SEPARATE HALF SECTIONS ARE USED BACK TO BACK AND ON THE SAME FOUNDATION USE BATTERED BACK FACE WHEN HALF SECTIONS ARE USED BACK TO BACK BUT NOT ON A COMMON FOUNDATION

BAR LIST

MARK	SIZE	NO.	LENGTH	TYPE	A	B	C	D	LOCATION
4B2	4	4	2'-0"	STRAIGHT					4 ON EACH SIDE OF OPEN OR EXPANSION JOINT SEE TYPE A DETAILS
4B3	4	1		STRAIGHT OR 6X6X W3X3					
4B4	4	8	6'-5"	STIRRUP	3/8	3/4	1/2	9	4 ON EACH SIDE OF OPEN OR EXPANSION JOINT SEE TYPE A DETAILS
4B5	4	8	3'-0"	STIRRUP	5/8	1/4	1/2	2	



CONCRETE MEDIAN BARRIER
(SHOWN WITH CONTRACTION JOINT)
SHOWING ALTERNATE REINFORCEMENT 6X6X W3 OR 1/8" MESH LEFT OF JOINT AND NO. 4 BARR 4B3 BAR RIGHT



TRANSITION END DETAILS

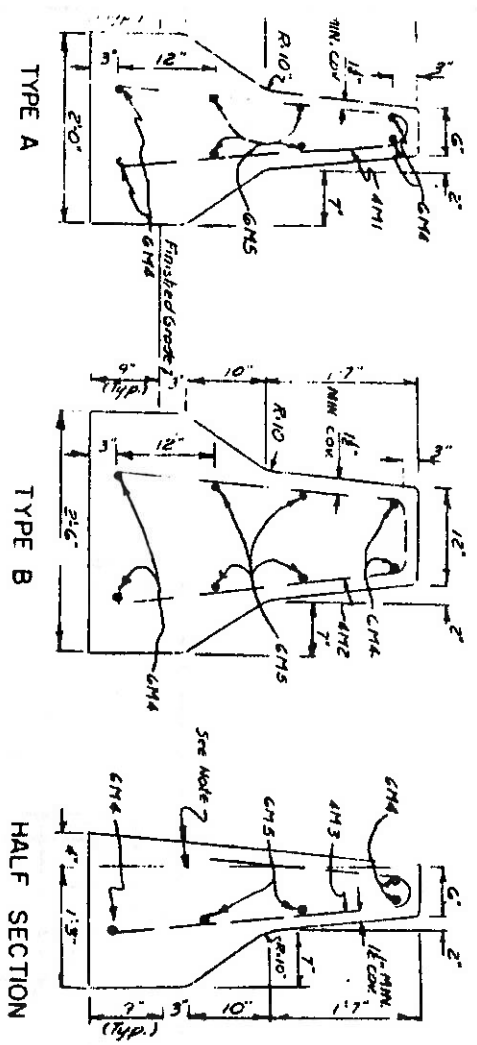
NOTES

- 1 THE REINFORCEMENT IS TYPICAL FOR NEW AND RECONSTRUCTED MEDIANS
- 2 FREE STANDING HALF SECTIONS, BARRIERS ON STRUCTURES AND SPECIAL SECTIONS WILL BE DETAILED ON THE PLANS
- 3 ANY VARIATION OF THE 9" (TYP) EMBEDMENT WILL BE DETAILED ON THE PLANS
- 4 BACK UP SYSTEMS FOR HALF SECTIONS WILL BE DETAILED ON THE PLANS
- 5 END TREATMENTS FOR HALF SECTIONS WILL BE DETAILED ON THE PLANS
- 6 REINFORCEMENT SHOWN IS FOR SLIP FORMED OR CAST IN PLACE BARRIERS

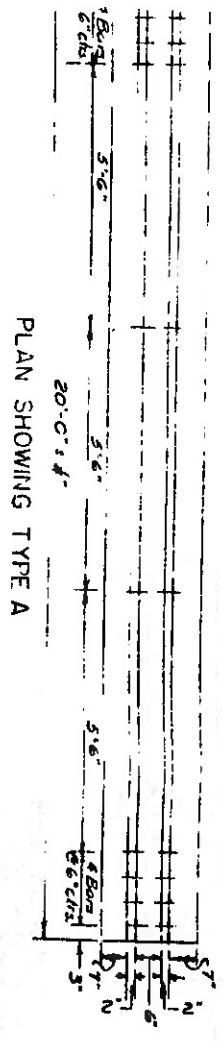
STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION
DESIGN AND CONSTRUCTION DIVISION

CONCRETE MEDIAN BARRIER
CAST-IN-PLACE OR SLIPFORMED

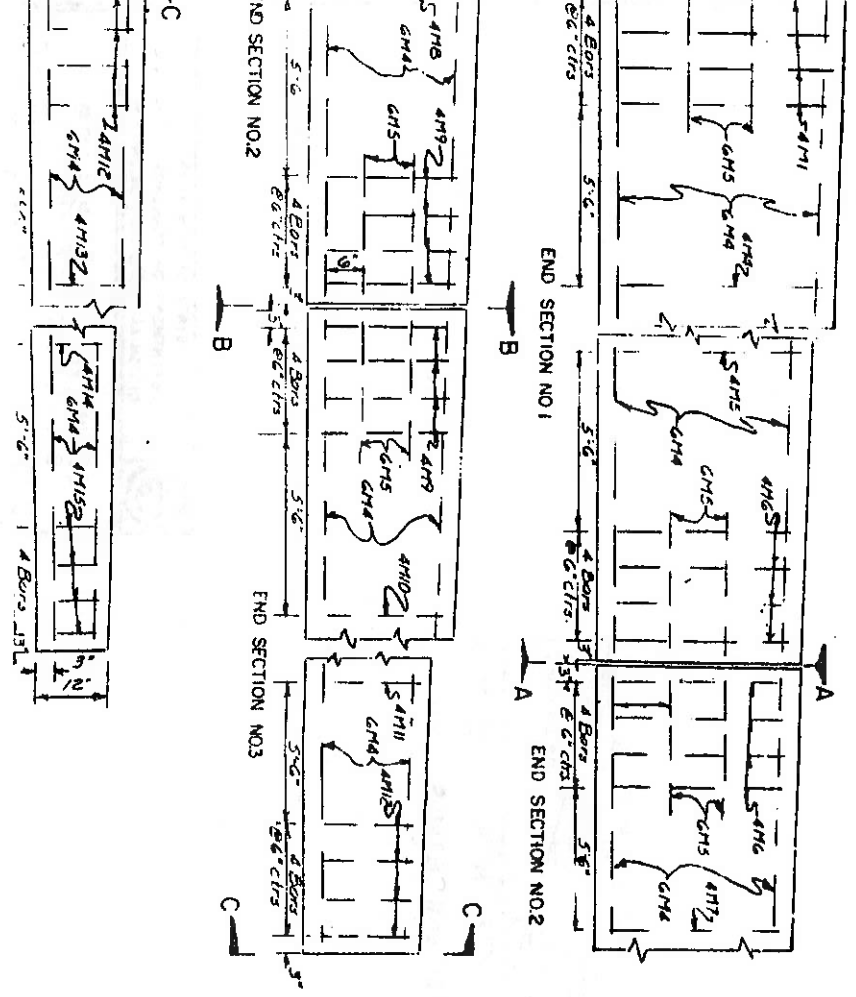
Approved: 4-2-1978



Note: Use rebar/backs face when two separate half sections are used back to back on the same foundation. Use different back face when half sections are used back to back, but not on a common foundation.

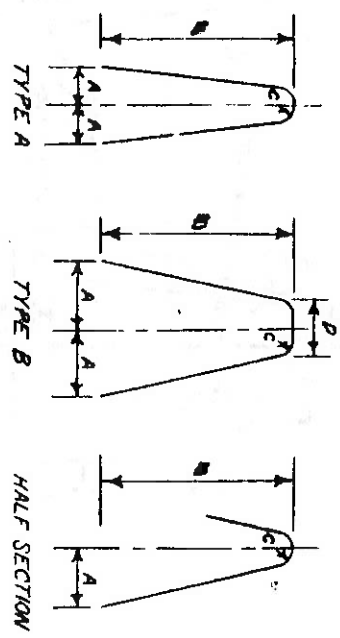
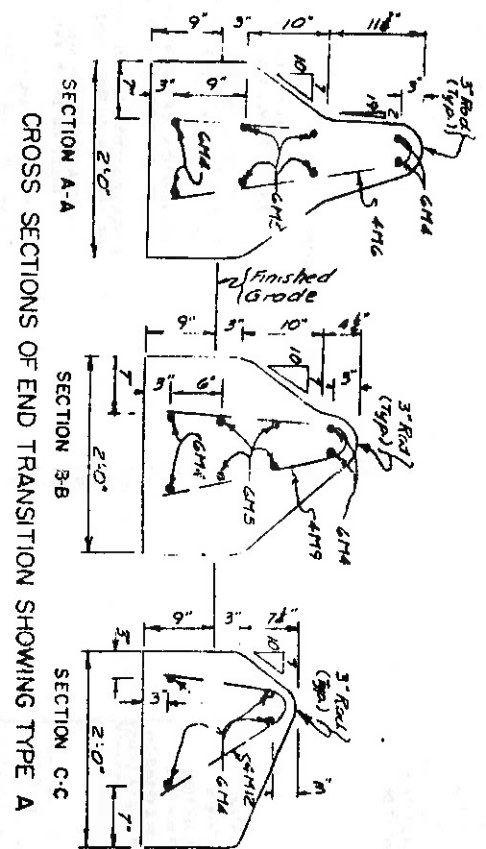
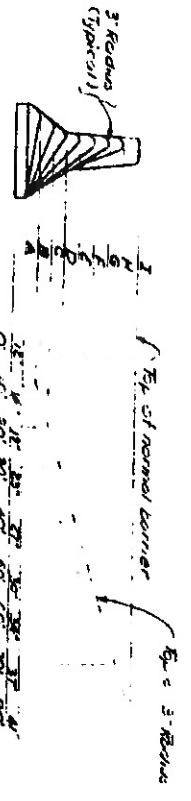


ELEVATION SHOWING TYPE A



BAR LIST							LOCATION	
MARK	SIZE	NO.	LENGTH	TYPE	A	B	C	D
4M1	4	10"	6'-1"	Stirrup	36"	36"	18"	Stirrup - Type A - Unit # 4 in End Section No. 1 for Type A
4M2	4	10"	6'-7"	Stirrup	36"	36"	18"	Stirrup - Type B - Unit # 4 in End Section No. 1 for Type B (Not detailed)
4M3	4	10	3'-11"	Stirrup	36"	36"	18"	Stirrup - Half Section
4M4	4	1	3'-8"	Stirrup	36"	36"	18"	Stirrup - End Section No. 1 Type A
4M5	4	1	3'-4"	Stirrup	36"	36"	18"	Stirrup - End Section No. 2 Type A
4M6	4	4-14	4'-11"	Stirrup	36"	36"	18"	Stirrup - # 4 in End Section No. 4 in End Section No. 2 - Type A
4M7	4	1	4'-5"	Stirrup	36"	36"	18"	Stirrup - End Section No. 2 Type A
4M8	4	1	4'-7"	Stirrup	36"	36"	18"	Stirrup - End Section No. 2 Type A
4M9	4	4-14	3'-8"	Stirrup	36"	36"	18"	Stirrup - # 4 in End Section No. 2 in End Section No. 2 Type A
4M10	4	1	3'-3"	Stirrup	36"	36"	18"	Stirrup - End Section No. 3 Type A
4M11	4	1	2'-11"	Stirrup	36"	36"	18"	Stirrup - End Section No. 3 Type A
4M12	4	4-14	2'-6"	Stirrup	36"	36"	18"	Stirrup - # 4 in End Section No. 3 Type A
4M12	4	1	2'-1"	Stirrup	36"	36"	18"	Stirrup - End Section No. 4 Type A
4M14	4	1	1'-8"	Stirrup	36"	36"	18"	Stirrup - End Section No. 4 Type A
4M15	4	4	1'-3"	Stirrup	36"	36"	18"	Stirrup - End Section No. 4 Type A
4M4	4	4	19'-6"	Stringer				Longitudinal # 4 top and # 2 bottom except half sections. Not Sect. 2 top and 1 bot.
4M5	4	4	2'-0"	Stringer				Longitudinal # 4 of each End, except half section. Not Section 2 of each End.

TRANSITION END DETAILS



TYPICAL STIRRUPS

- Notes:
- The 9" embedment is typical for new and rebar; structured medians.
 - Any variation of the 9" (typical) embedment will be detailed on the plans.
 - Free standing half-section, barriers or structures, and special sections will be detailed on the plans.
 - Back-up systems for half-sections will be detailed on the plans.
 - End treatments for half-sections and Type B sections will be detailed on the plans.
 - Reinforcement details are typical and are shown for precast barriers.
 - It is imperative the 1/2 inch minimum cover for the reinforcing steel be achieved.

STAGE OF BIDDING
 DEPARTMENT OF TRANSPORTATION
 PRECAST CONCRETE
 MEDIAN BARRIER