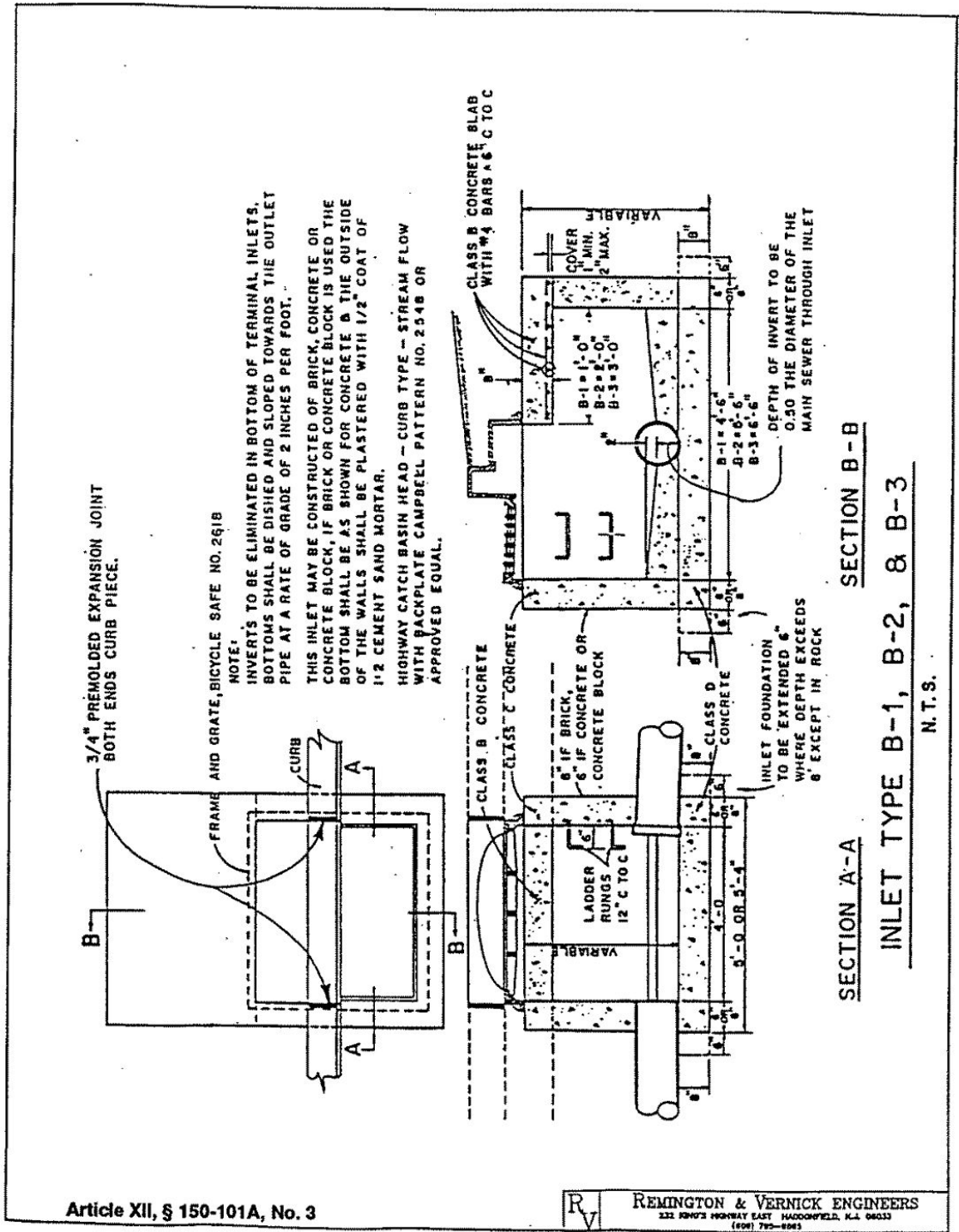
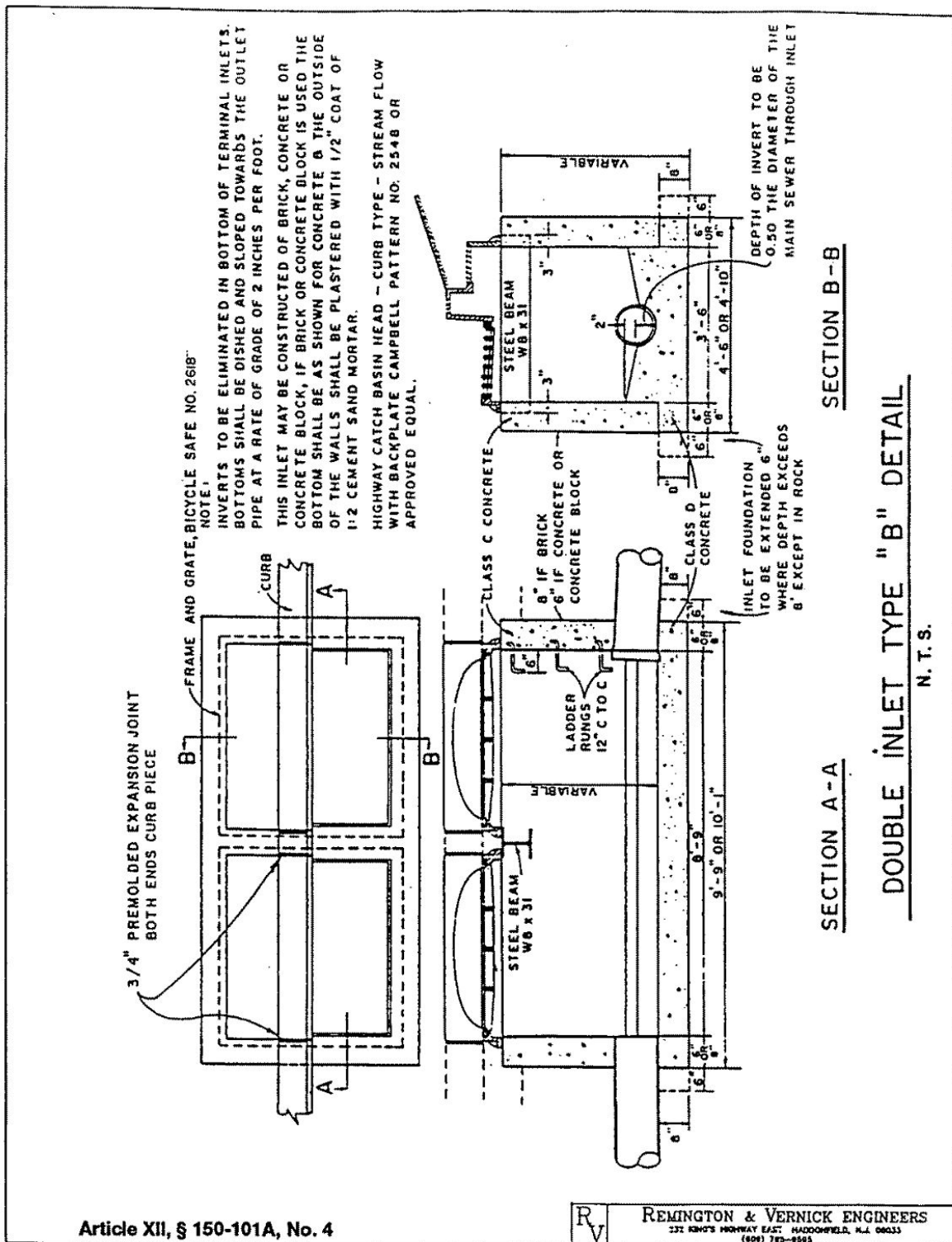


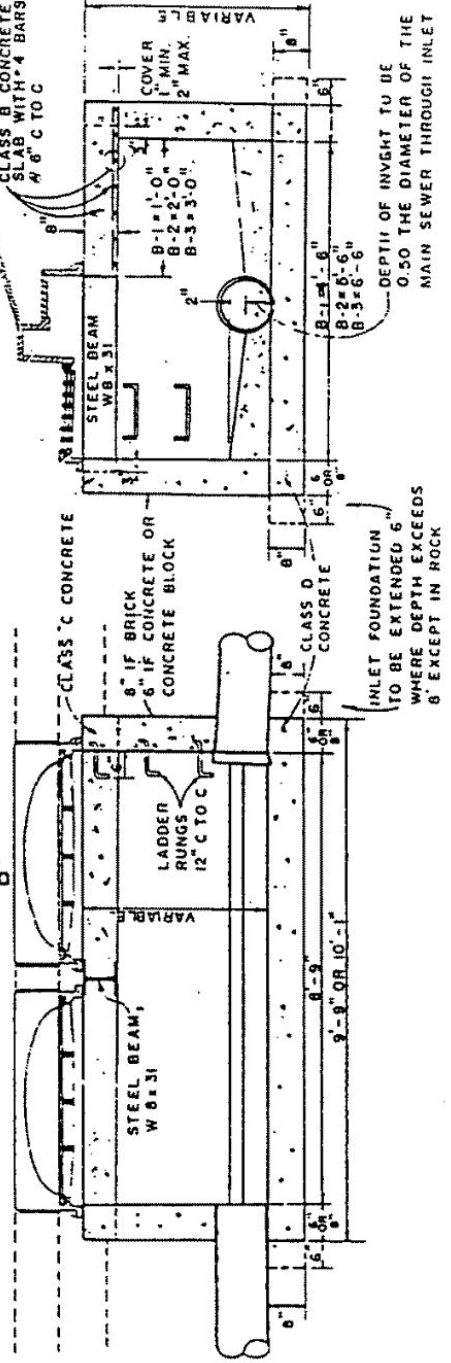
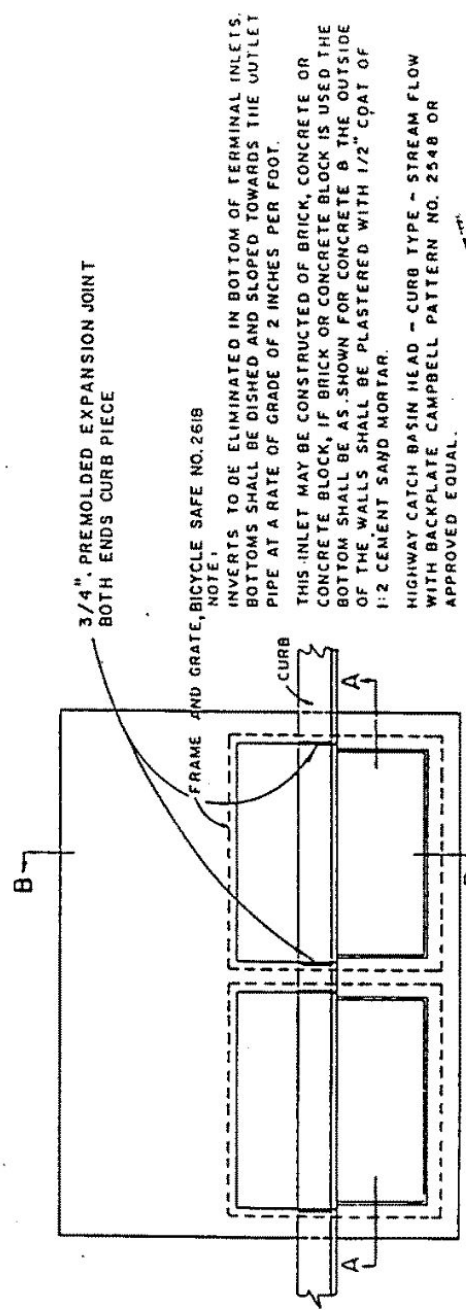
Article XII, § 150-101A, No. 2

REMINGTON & VERNICK ENGINEERS  
 232 KING'S HIGHWAY EAST MADISONFIELD, N.J. 08033  
 (609) 775-6092





**DOUBLE INLET TYPE B-1, B-2, & B-3**  
N.T.S.



3/4" PREMOLDED EXPANSION JOINT  
BOTH ENDS CURB PIECE

FRAME AND GRATE, BICYCLE SAFE NO. 2618  
NOTE:

INVERTS TO BE ELIMINATED IN BOTTOM OF TERMINAL INLETS.  
BOTTOMS SHALL BE DISHED AND SLOPED TOWARDS THE OUTLET  
PIPE AT A RATE OF GRADE OF 2 INCHES PER FOOT.

THIS INLET MAY BE CONSTRUCTED OF BRICK, CONCRETE OR  
CONCRETE BLOCK, IF BRICK OR CONCRETE BLOCK IS USED THE  
BOTTOM SHALL BE AS SHOWN FOR CONCRETE & THE OUTSIDE  
OF THE WALLS SHALL BE PLASTERED WITH 1/2" COAT OF  
1:2 CEMENT SAND MORTAR.

HIGHWAY CATCH BASIN HEAD - CURB TYPE - STREAM FLOW  
WITH BACKPLATE CAMPBELL PATTERN NO. 2548 OR  
APPROVED EQUAL.

SECTION B-B

SECTION A-A

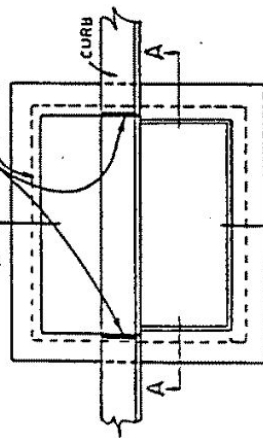
Article XII, § 150-101A, No. 5

**REMINGTON & VERNICK ENGINEERS**  
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(609) 795-8945

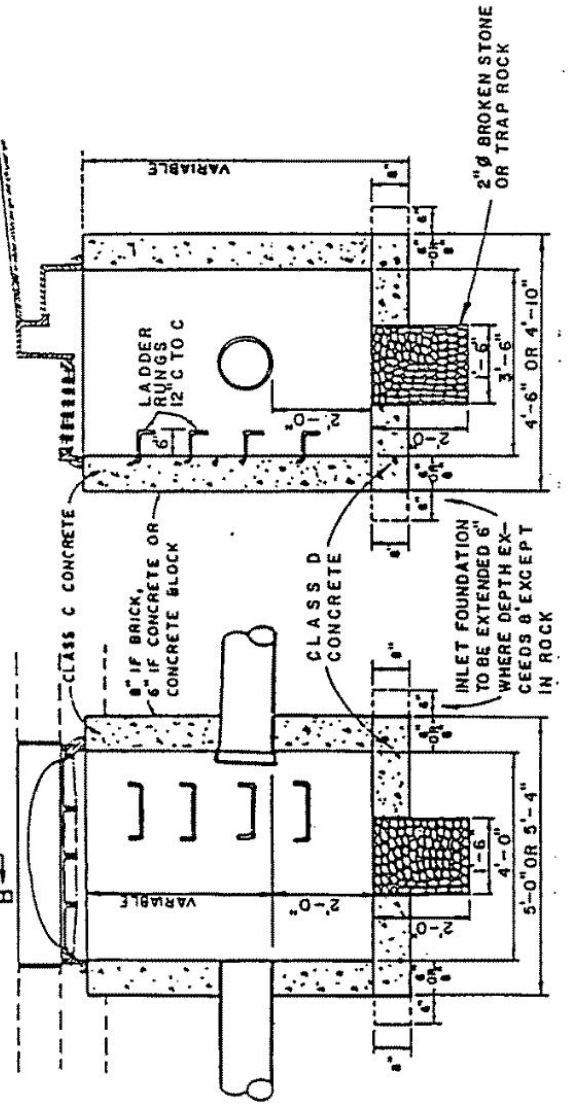
**TYPE "C" INLET DETAIL**

N.T.S.

3/4" PREMOLDED EXPANSION JOINT  
BOTH ENDS CURB PIECE  
FRAME AND GRATE, BICYCLE SAFE NO. 2618

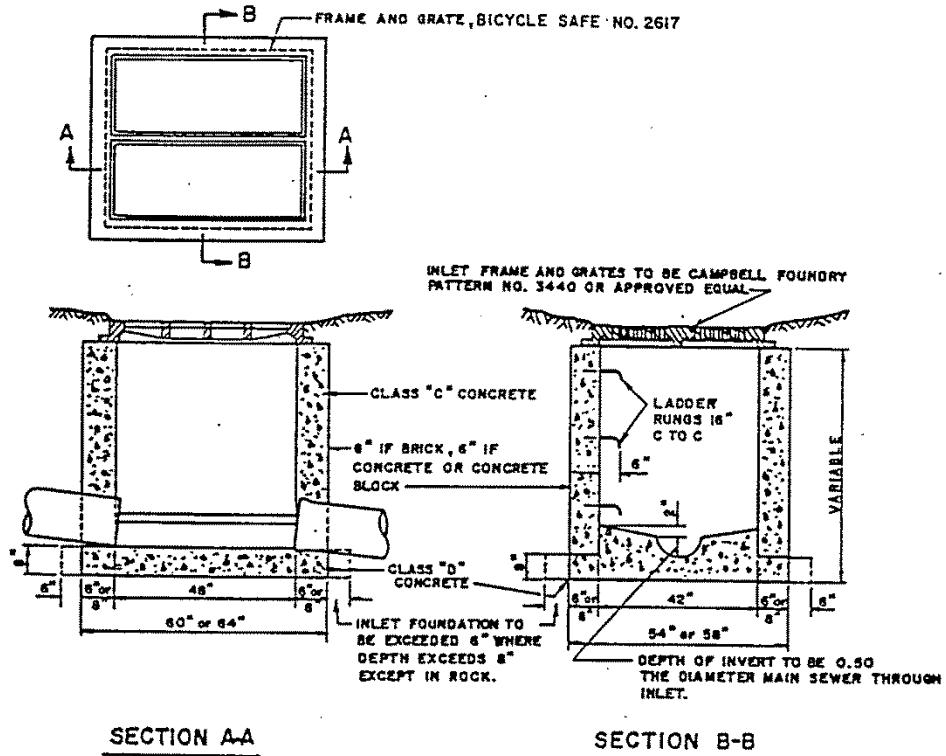


NOTE:  
INVERTS TO BE ELIMINATED IN BOTTOM OF TERMINAL INLETS.  
BOTTOMS SHALL BE DISHED AND SLOPED TOWARDS THE OUTLET  
PIPE AT A RATE OF GRADE OF 2 INCHES PER FOOT.  
THIS INLET MAY BE CONSTRUCTED OF BRICK, CONCRETE OR  
CONCRETE BLOCK, IF BRICK OR CONCRETE BLOCK IS USED THE  
BOTTOM SHALL BE AS SHOWN FOR CONCRETE B THE OUTSIDE  
OF THE WALLS SHALL BE PLASTERED WITH 1/2" COAT OF  
1:2 CEMENT SAND MORTAR.  
HIGHWAY CATCH BASIN HEAD - CURB TYPE - STREAM FLOW  
WITH BACKPLATE CAMPBELL PATTERN NO. 254B OR  
APPROVED EQUAL.



Article XII, § 150-101A, No. 6

RV REMINGTON & VERNICK ENGINEERS  
232 KING'S HIGHWAY EAST MADISONVILLE, T.N. 37053  
(615) 731-1522



**NOTES:**

THIS INLET MAY BE CONSTRUCTED OF BRICK, CONCRETE OR CONCRETE BLOCK. IF BRICK OR CONCRETE BLOCK IS USED THE BOTTOM SHALL BE AS SHOWN FOR CONCRETE.

INVERTS TO BE ELIMINATED IN BOTTOM OF TERMINAL INLETS. BOTTOMS SHALL BE DISHED AND SLOPED TOWARDS THE OUTLET PIPE AT A RATE OF GRADE OF 2" PER FOOT.

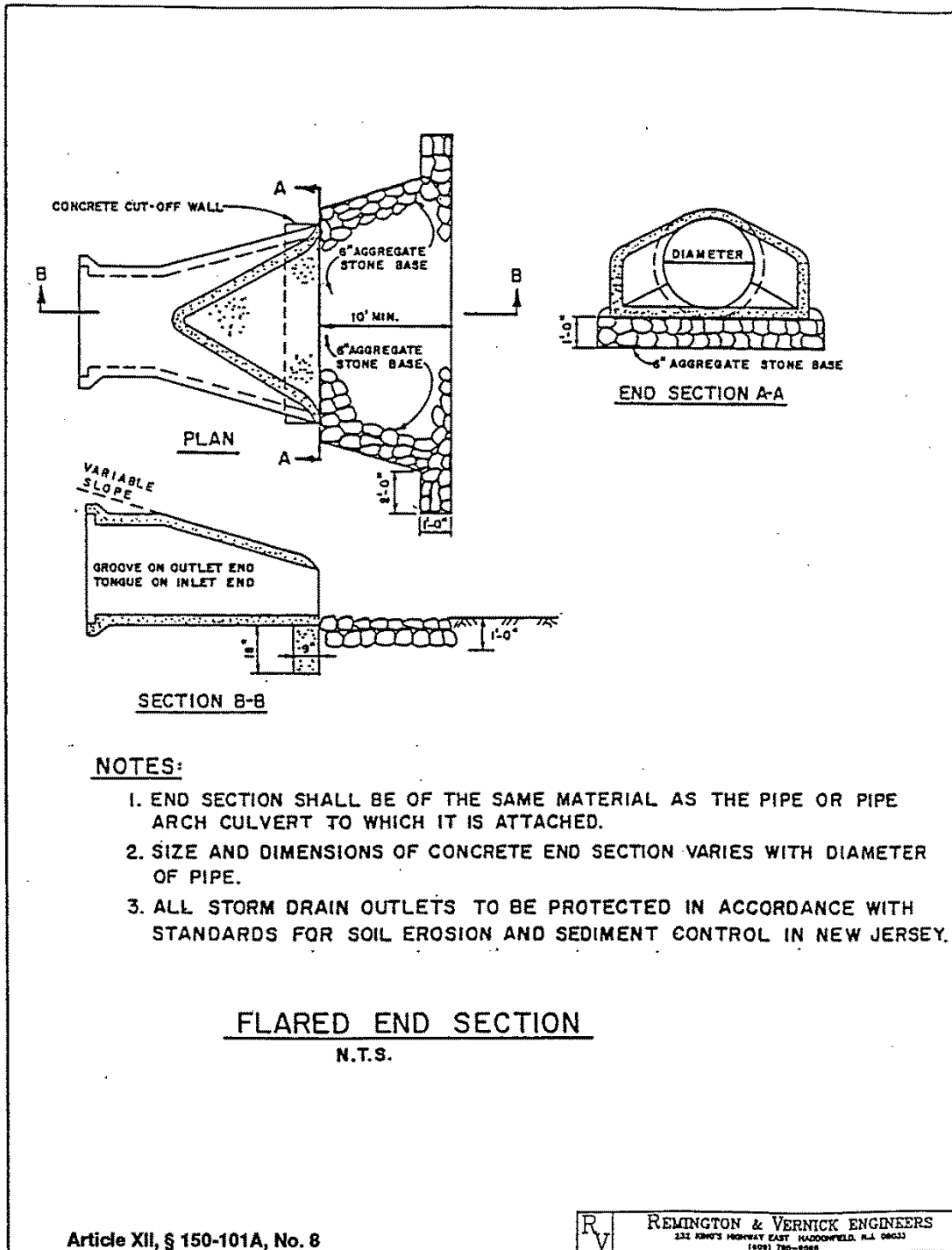
**TYPE "E" INLET DETAIL**

N. T. S.

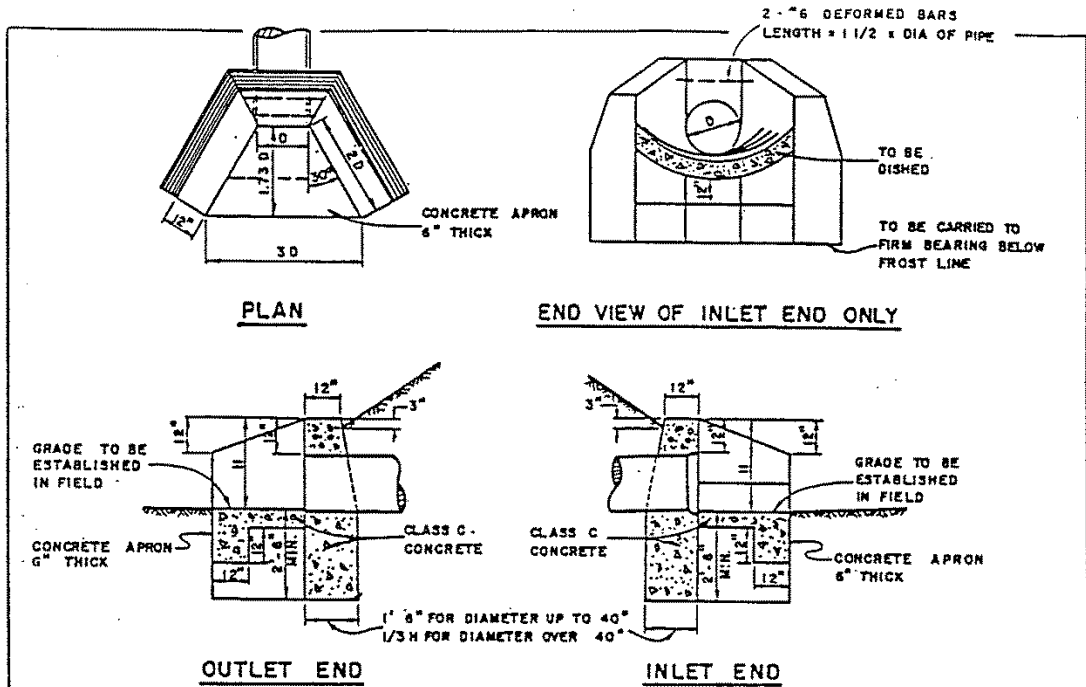
Article XII, § 150-101A, No. 7

RV  
 REMINGTON & VERNICK ENGINEERS  
 232 KING'S HIGHWAY EAST HADDONFIELD, N.J. 08033  
 (609) 795-9583

BUENA CODE



LAND USE



PIPE SIZE	HEADWALL QUANTITY IN CUBIC YARDS		APRONS IN CUBIC YARDS
	CORR. METAL PIPE	REINF. CONC. PIPE	
12"	1.4 C.Y.	1.4 C.Y.	0.2 C.Y.
15"	1.7	1.7	0.2
18"	2.1	2.1	0.3
21"	2.5	2.5	0.4
24"	2.9	2.9	0.5
27"	3.5	3.4	0.6
30"	3.7	3.8	0.7
36"	4.7	4.8	0.9
42"	5.8	6.3	1.2
48"	7.8	8.4	1.5
54"	9.7	10.7	1.8
60"	12.2	13.4	2.1
66"	15.0	16.4	2.5
72"	18.1	19.9	3.0

NOTES:

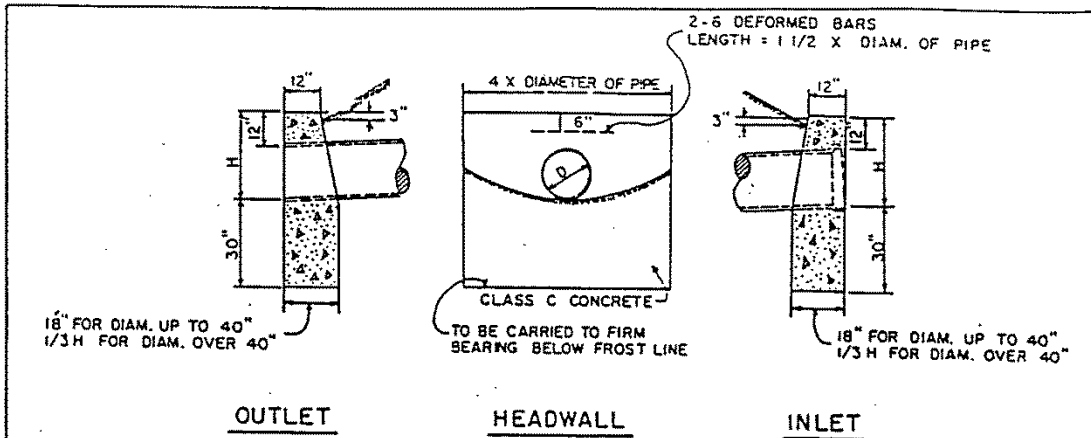
1. ALL EDGES TO BE CHAMFERED 1".
2. FOR ARCH PIPE USE LENGTH OF HEADWALL AS 3H+SPAN.
3. FOR MORE THAN ONE PIPE, SET THE PIPE A MINIMUM OF ONE FOOT APART (OUTSIDE BARREL TO OUTSIDE); THE ENDS OF THE HEADWALL SHALL BE SET 2 D OFF THE E OF THE CONTROLLING PIPE.
4. ALL STORM DRAIN OUTLETS TO BE PROTECTED IN ACCORDANCE WITH STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL IN NEW JERSEY.

CONCRETE HEADWALL WINGS & APRON

Article XII, § 150-101A, No. 9 N.T.S. 

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(609) 795-8855

BUENA CODE



HEADWALL QUANTITY IN CUBIC YARDS		
PIPE SIZE	CORR. METAL PIPE	REINF. CONC. PIPE
12"	0.9 C.Y.	0.9 C.Y.
15"	1.2	1.2
18"	1.4	1.4
21"	1.7	1.7
24"	2.1	2.1
27"	2.4	2.4
30"	2.8	2.8
36"	3.6	3.6
42"	4.4	4.7
48"	5.8	6.2
54"	7.4	7.9
60"	9.2	9.9
66"	11.3	12.1
72"	13.7	14.7

GENERAL NOTES

1. THE RUBBING OF HEADWALLS TO REMOVE FORM MARKS AS REQUIRED ARTICLE 4.1.3 FOR CONCRETE STRUCTURES WILL NOT BE REQUIRED FOR HEADWALLS AT THE BOTTOM OF EMBANKMENTS IN RURAL AREAS
2. ALL EDGES TO BE CHAMFERED 1"
3. FOR ARCH PIPE USE LENGTH OF HEADWALL AS 3H+ SPAN
4. FOR MORE THAN ONE PIPE, SET THE PIPE A MINIMUM OF ONE FOOT APART (OUTSIDE BARREL TO OUTSIDE BARREL); THE ENDS OF THE HEADWALL SHALL BE SET 2D OFF THE  $\phi$  OF THE CONTROLLING PIPE
5. ALL STORM DRAIN OUTLETS TO BE PROTECTED IN ACCORDANCE WITH STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL IN NEW JERSEY

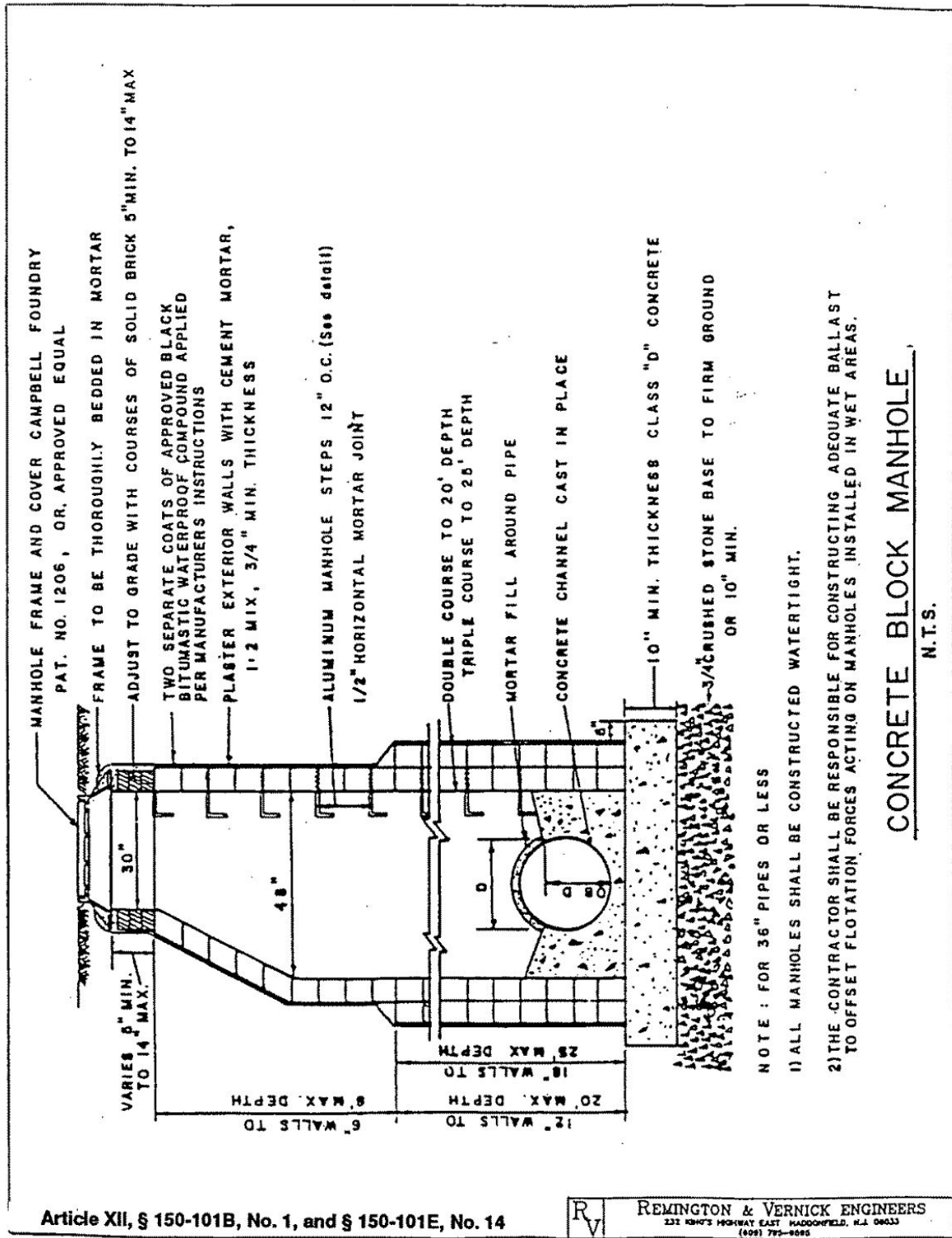
**CONCRETE HEADWALL - STRAIGHT FACE**

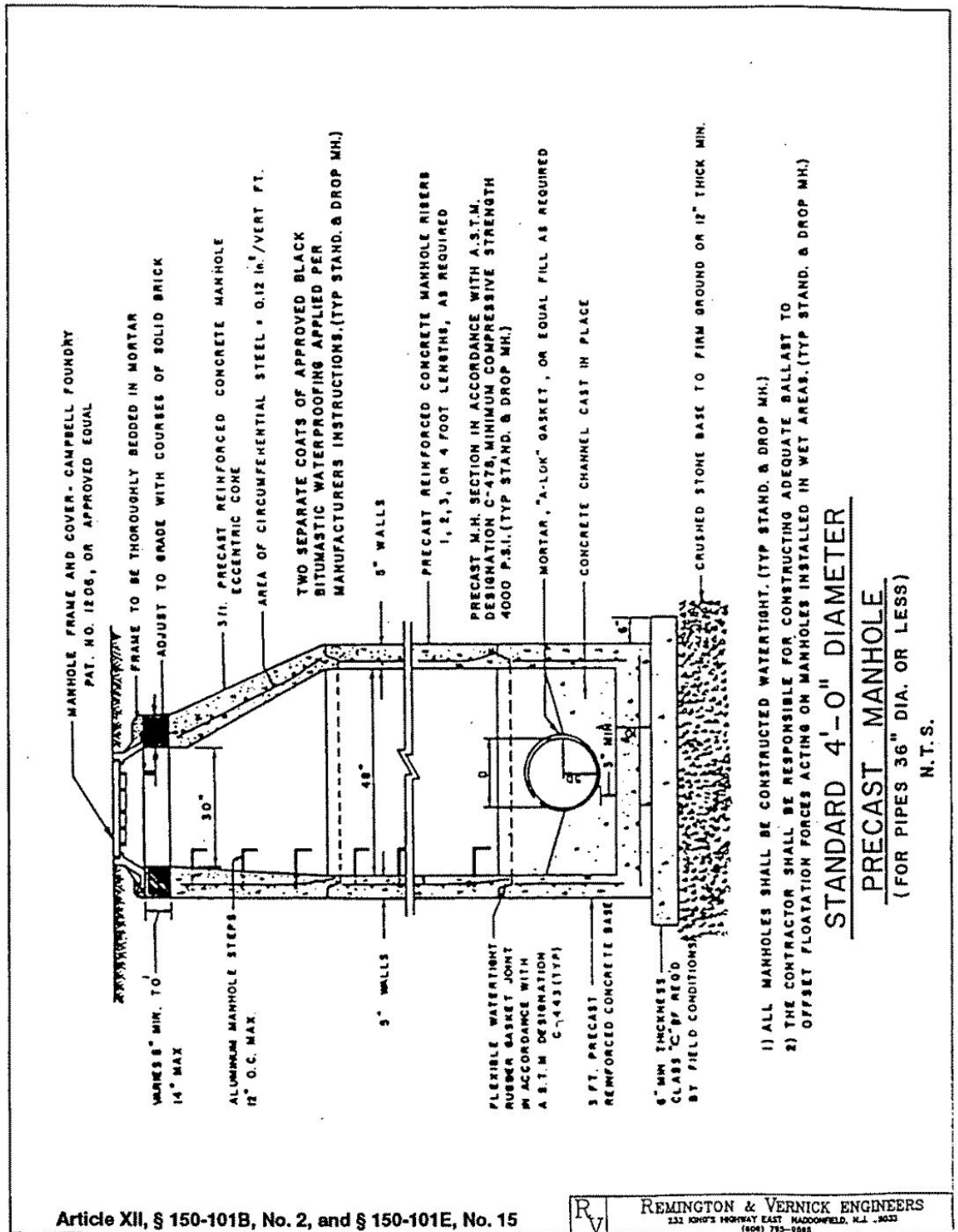
N.T.S.

Article XII, § 150-101A, No. 10



REMINGTON & VERNICK ENGINEERS  
221 KING'S HIGHWAY EAST MADISONVILLE, N.J. 08033  
(609) 785-9385

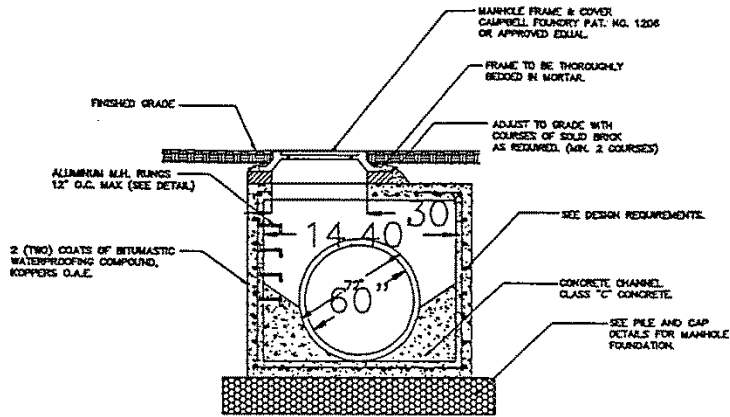




Article XII, § 150-101B, No. 2, and § 150-101E, No. 15

RV REMINGTON & VERNICK ENGINEERS  
232 KING'S HIGHWAY EAST HAZDENFIELD, N.J. 08533  
(609) 793-1988

LAND USE



**8' x 8' PRECAST CONCRETE BOX MANHOLE**  
SCALE 1/4" = 1'-0"

DESIGN CRITERIA

STANDARDS:

1. BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE (ACI 318-77) INCLUDING ALL REFERENCED STANDARDS AND SPECIFICATIONS.
2. AASHTO "STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES".

MATERIALS:

1. CONCRETE—4000 PSI AT 28 DAYS MINIMUM 4000 PSI AT TIME OF DELIVERY.
2. REINFORCEMENT—BARS: ASTM A615 GRADE 60  
WELDED WIRE FABRIC: ASTM A185.

DESIGN LOADS:

1. DEAD LOAD:
  - (a) CONCRETE—150 PCF
  - (b) EARTH COVER—120 PCF
2. LATERAL EARTH PRESSURE ON WALLS:
  - (a) EQUIVALENT FLUID PRESSURE ABOVE WATER TABLE = 32 PSF PER FOOT OF DEPTH.
  - (b) EQUIVALENT FLUID PRESSURE BELOW WATER TABLE = 81.4 PSF PER FOOT OF DEPTH.
  - (c) SURCHARGE ON WALLS = 2 FEET OF EARTH.
3. LIVE LOAD:
 

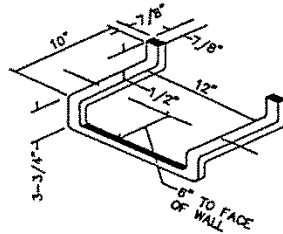
H2O ASHTO TRUCK LOADING REAR WHEEL LOAD	16,000 lbs.
IMPACT (30%)	4,800 lbs.
	20,800 lbs.

Article XII, § 150-101B, No. 3, and § 150-101E, No. 16



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BUENA CODE



PORTION EMBEDDED IN MASONRY  
TO BE COATED WITH COAL TAR,  
PITCH, VARNISH OR OTHER  
SPECIFIED MATERIAL.

ALUMINUM MANHOLE RUNG DETAIL

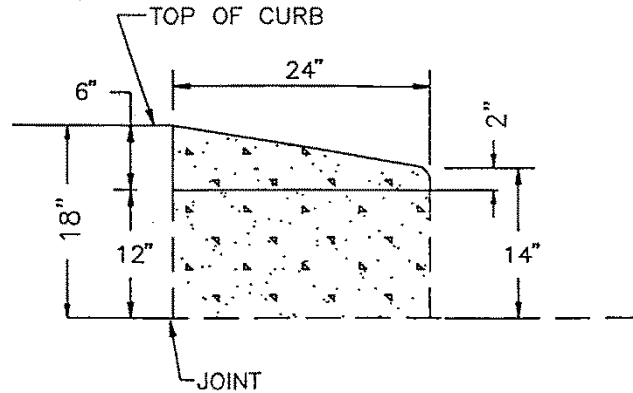
SCALE: N.T.S.

Article XII, § 150-101B, No. 4, and § 150-101E, No. 17

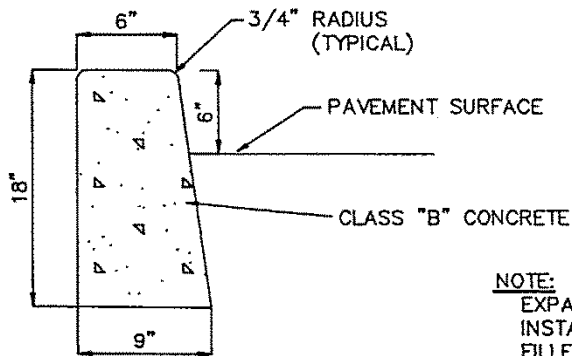


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232 KINGS HIGHWAY EAST WASHINGTONFIELD, N.J. 08083  
(609) 785-8565

LAND USE



CURB TAPER DETAIL  
N.T.S.



NOTE:

EXPANSION JOINTS 1/2" WIDE SHALL BE INSTALLED IN THE CURB 10' APART AND FILLED WITH CELLULAR COMPRESSION MATERIAL AS SPECIFIED, AND RECESSED 1/4" FROM FACE AND TOP OF CURB. EXPANSION JOINTS TO BE INCLUDED IN PRICE BID FOR CURB.

VERTICAL CURB DETAIL  
N.T.S.

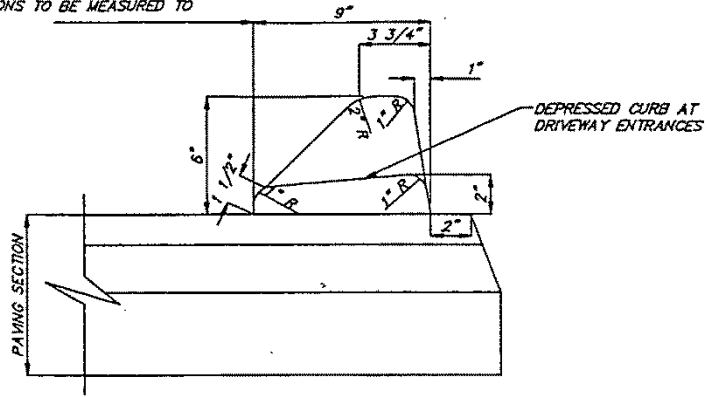
Article XII, § 150-101C, No. 1



REMINGTON & VERNICK ENGINEERS  
532 KING'S HIGHWAY EAST MAZONFIELD, N.J. 08053  
(609) 785-6295

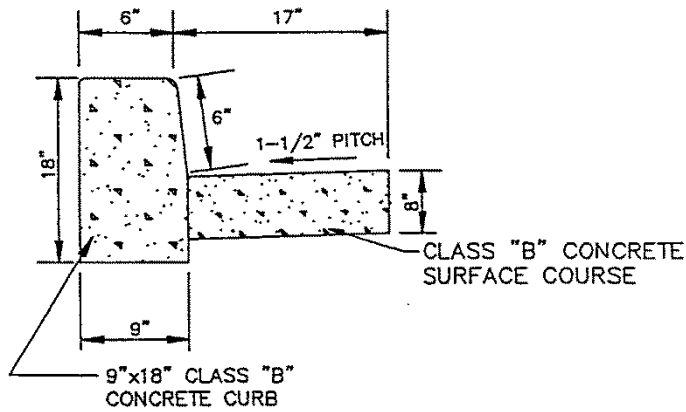
BUENA CODE

PAVEMENT WIDTH INDICATED ON TYPICAL STREET SECTIONS TO BE MEASURED TO THIS POINT



STANDARD BITUMINOUS CURB

N.T.S.



DETAIL OF CONCRETE CURB AND CONCRETE GUTTER

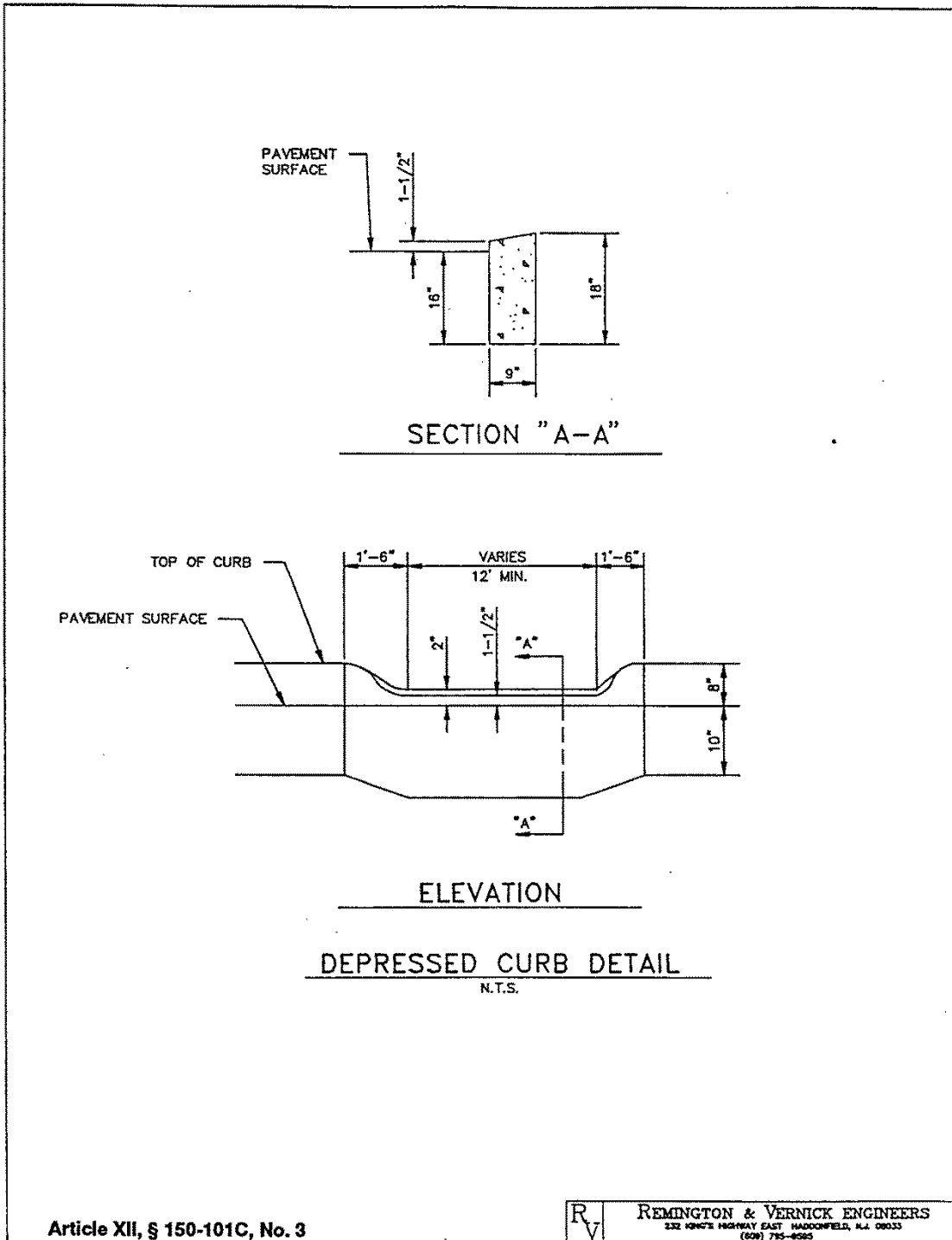
N.T.S.

Article XII, § 150-101C, No. 2

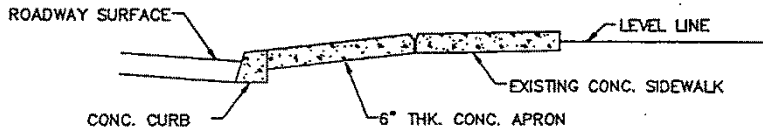


REMINGTON & VERNICK ENGINEERS  
232 HORN'S HIGHWAY EAST HADDONFIELD, N.J. 08033  
(609) 785-8593

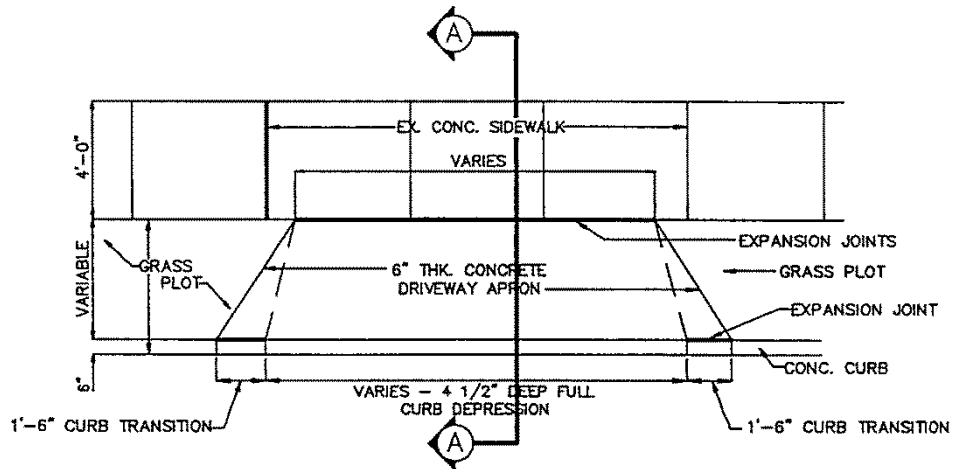
LAND USE



BUENA CODE



SECTION A-A  
N.T.S.



PLAN VIEW

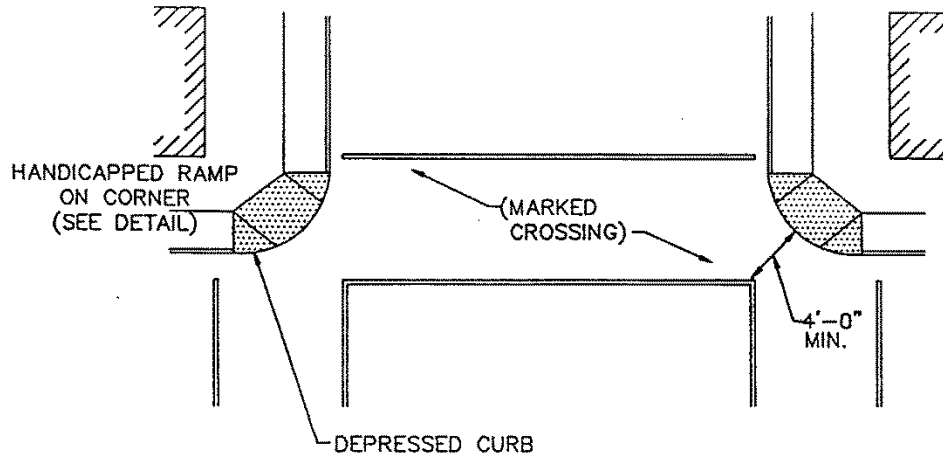
DRIVEWAY APRON & CURB DEPRESSION  
(APPLICABLE WITH STANDARD CURB)  
N.T.S.

Article XII, § 150-101C, No. 4

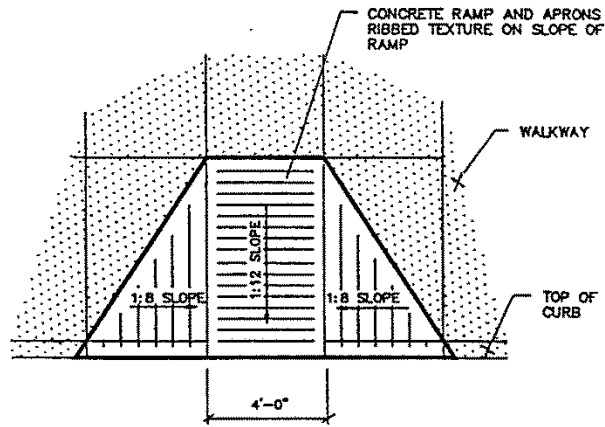


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232 KING'S HIGHWAY EAST HADDONFIELD, N.J. 08033  
(800) 785-0590

LAND USE



PLAN VIEW  
N.T.S.



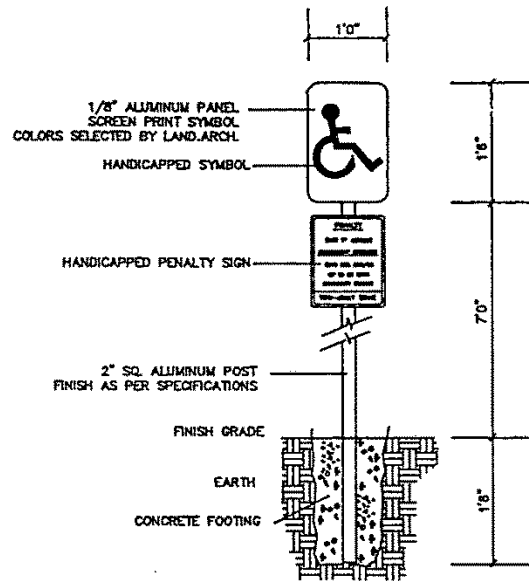
HANDICAPPED RAMP  
SCALE: NOT TO SCALE

Article XII, § 150-101C, No. 5



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(609) 785-8585

BUENA CODE



**HANDICAPPED PARKING SIGN**

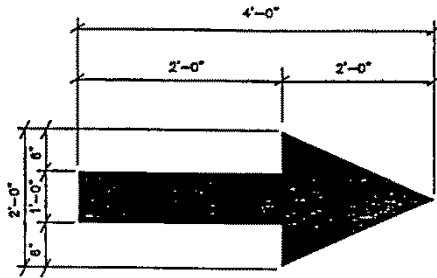
SCALE: NOT TO SCALE

Article XII, § 150-101C, No. 6



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232 KINITE HIGHWAY EAST HADDONFIELD, N.J. 08033  
(609) 785-8285

LAND USE



NOTES:

CURVE AS REQUIRED TO  
PARALLEL CENTERLINE OF ROAD.  
USE WHITE REFLECTIVE PAINT.  
PAINT COLOR— SEE SPECS.

DIRECTIONAL ARROW

SCALE: NOT TO SCALE

Article XII, § 150-101C, No. 7



REMINGTON & VERNICK ENGINEERS  
532 KNATE HIGHWAY EAST HAZLEDENFIELD, N.J. 08033  
(609) 785-8285

BUENA CODE



GRID FOR LAYOUT ONLY  
ONE SQUARE EQUALS 4" x 4"

HANDICAPPED SYMBOL

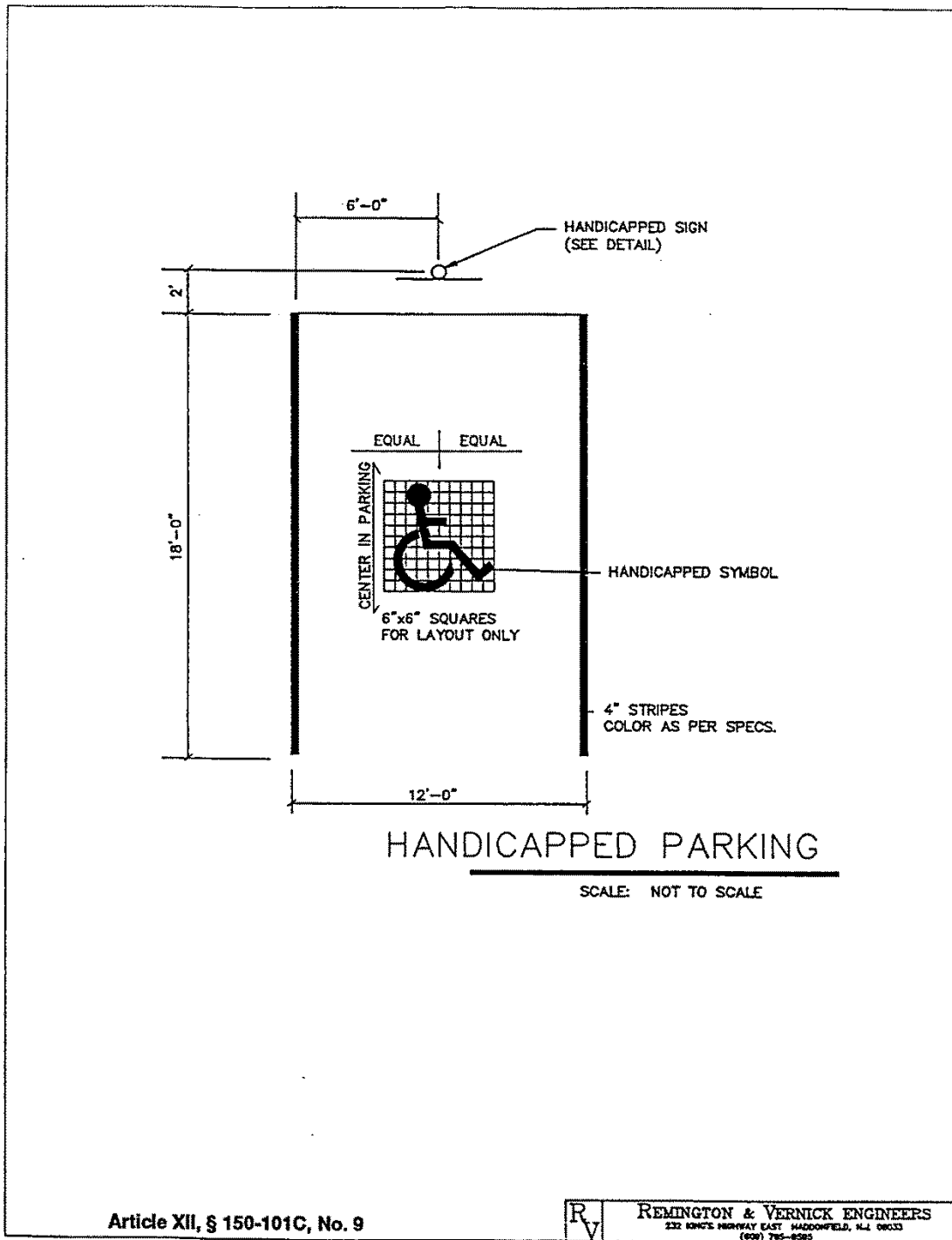
SCALE: NOT TO SCALE

Article XII, § 150-101C, No. 8

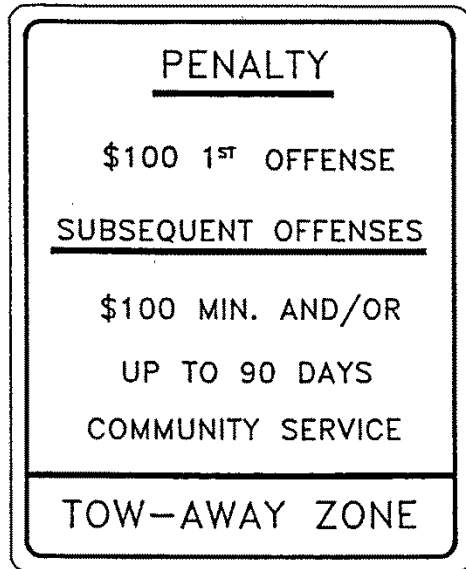


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232 KING'S HIGHWAY EAST HADDONFIELD, N.J. 08033  
(609) 785-8285

LAND USE



BUENA CODE



10" x 12"

NOTE: BLACK LEGEND ON WHITE REFLECTORIZED BACKGROUND

HANDICAPPED PENALTY SIGN

SCALE: NOT TO SCALE

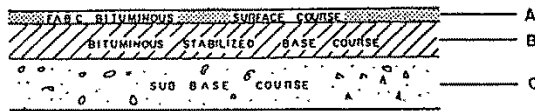
Article XII, § 150-101C, No. 10



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232 ROME'S HIGHWAY EAST HADDONFIELD, N.J. 08033  
(609) 785-6500

LAND USE

PAVING DETAIL



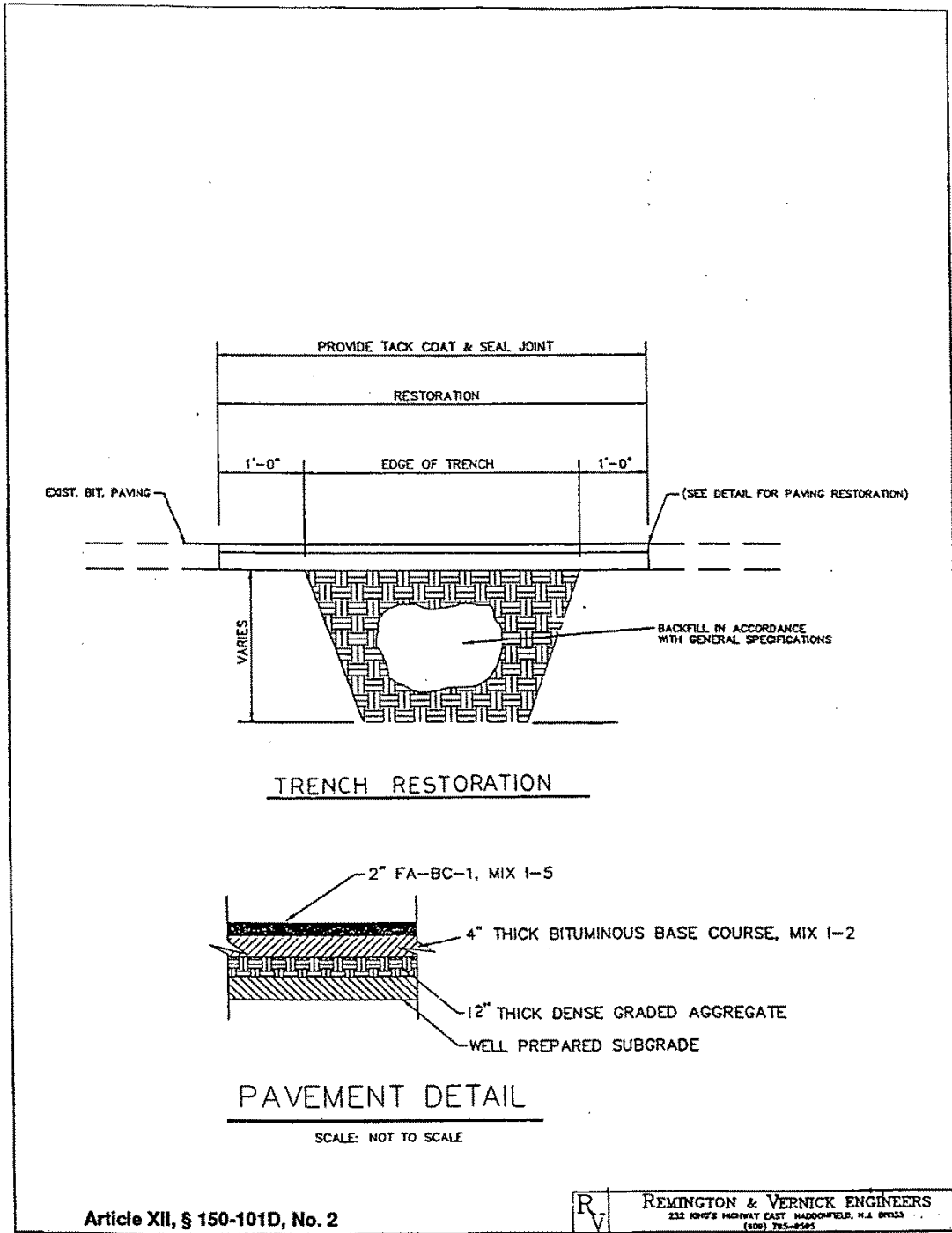
STREET	A	B	C
LOCAL	1 1/2" FABC-1 SURFACE	2" BITUMINOUS STABILIZED BASE	6" CLASS A or B ROAD GRAVEL
MINOR	1 1/2" FABC-1 SURFACE	2" BITUMINOUS STABILIZED BASE	6" CLASS A or B ROAD GRAVEL
COLLECTOR	2" FABC-1 SURFACE	4" BITUMINOUS STABILIZED BASE	6" TYPE 2, CLASS B ROAD GRAVEL
PARKING LOTS	1 1/2" FABC-1 SURFACE	2" BITUMINOUS STABILIZED BASE	6" CLASS A or B ROAD GRAVEL

Article XII, § 150-101D, No. 1

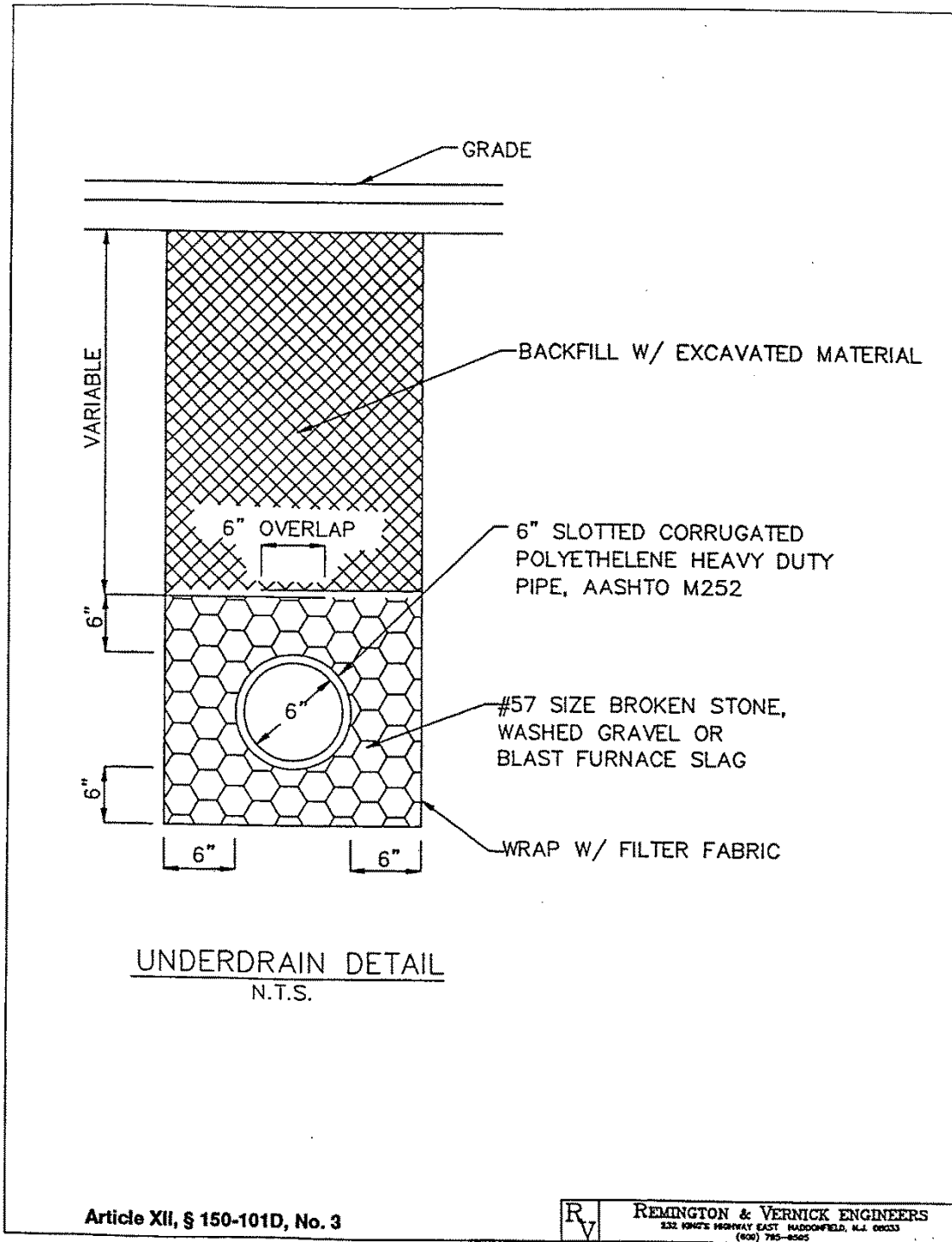


REMINGTON & VERNICK ENGINEERS  
 232 HUNT'S HIGHWAY EAST HAVERHILL, MASS 01830  
 (802) 755-8201

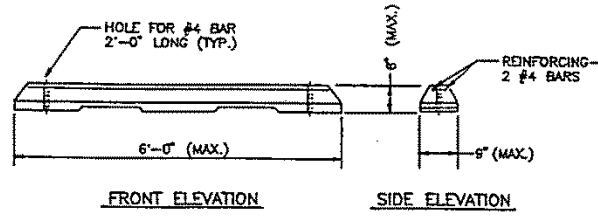
BUENA CODE



LAND USE

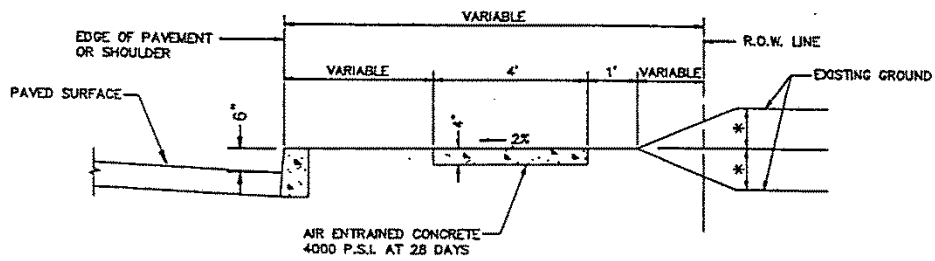


BUENA CODE



PRECAST CONCRETE WHEEL STOP

NO SCALE



\* MAXIMUM SLOPE = 3 HORIZONTAL TO 1 VERTICAL MAXIMUM DESIRABLE HEIGHT OF CUT OR FILL = 1 FOOT. METHOD OF SLOPE STABILIZATION SHALL BE INDICATED ON PLANS.

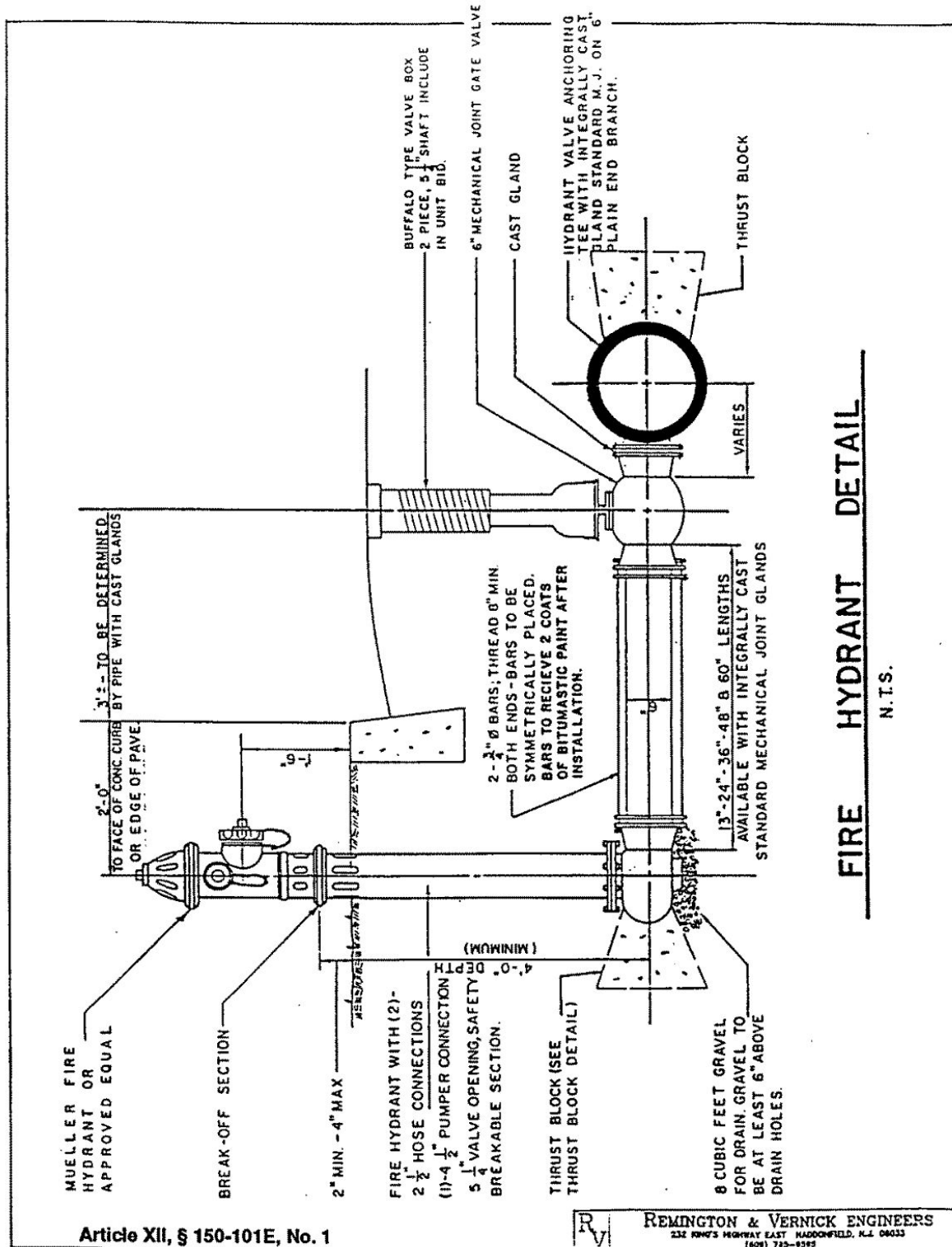
CONCRETE SIDEWALK

NO SCALE

Article XII, § 150-101D, No. 4



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232 NINTH HIGHWAY EAST MADISONFIELD, N.J. 08033  
(609) 785-8585



Article XII, § 150-101E, No. 1



REMINGTON & VERNICK ENGINEERS  
 232 RHW'S HIGHWAY EAST HADDONFIELD, N.J. 08033  
 (609) 743-8393

FIRE HYDRANT DETAIL

N.T.S.

MINIMUM SIZE OF CONCRETE THRUST BLOCKS																					
d	TEES & CROSSES			90° BENDS			45° BENDS			BENDS			REDUCERS								
	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C	dxd		
6"	2'-0"	8"	1'-3"	2'-6"	8"	1'-3"	1'-6"	8"	1'-3"	1'-6"	8"	1'-3"	1'-6"	8"	1'-3"	1'-6"	8"	1'-0"	6"x4"	1'-6"	1'-0"
8"	2'-6"	8"	1'-6"	3'-0"	8"	1'-6"	1'-6"	8"	1'-9"	1'-6"	8"	1'-9"	1'-6"	8"	1'-9"	1'-6"	8"	1'-0"	8"x4"	2'-0"	1'-0"
10"	3'-0"	10"	2'-0"	3'-6"	10"	2'-0"	2'-3"	10"	2'-0"	2'-3"	10"	2'-0"	2'-3"	10"	2'-0"	2'-3"	10"	1'-3"	10"x6"	2'-4"	1'-3"
12"	3'-6"	10"	2'-6"	3'-9"	10"	2'-9"	2'-6"	10"	2'-6"	2'-6"	10"	2'-6"	2'-6"	10"	2'-6"	2'-6"	10"	1'-6"	10"x8"	2'-6"	1'-6"

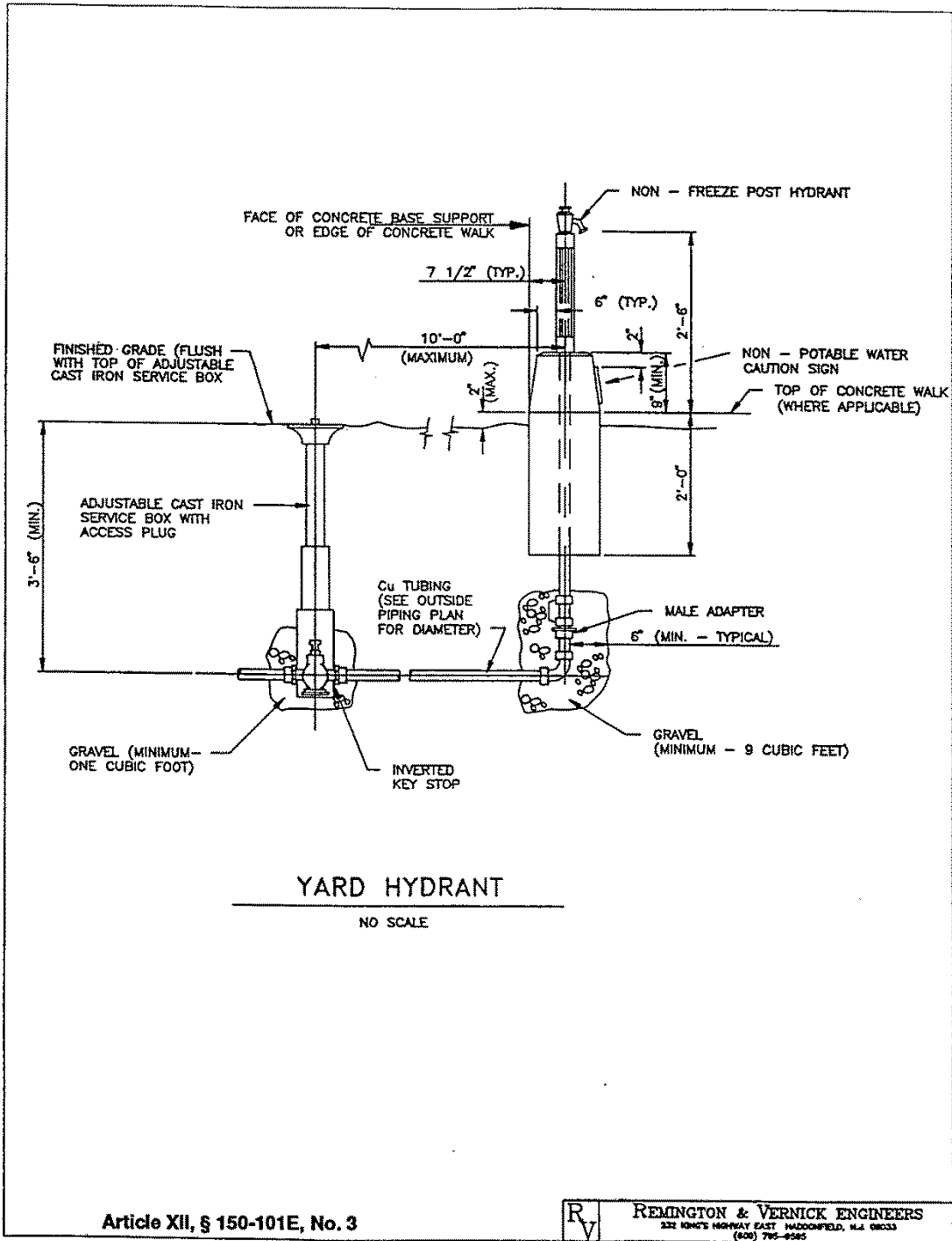
  
  

- THRUST BLOCKS TO BE USED FOR WATER MAIN AND FORCE MAINS AT ALL BENDS, TEES, REDUCERS AND PLUGS.
- BEARING AREAS FOR THRUST BLOCKS ARE BASED ON THE UNDISTURBED SOIL WITH BEARING CAPACITY OF 1000 LBS. PER SQ. FT. FOR OTHER SOILS OF LESS BEARING CAPACITY, THE AREAS SHALL BE ADJUSTED ACCORDINGLY, (FIG. 14, ASCE "PIPELINE DESIGN FOR WATER AND WASTEWATER, 1975").
- ALL CONCRETE FOR THRUST BLOCKS SHALL BE 3000 PSI COMPRESSIVE STRENGTH WITHIN 28 DAYS.
- THE THRUST BLOCKS SHALL BE POURED FROM FITTING SUCH THAT THEY BEAR ON THE UNDISTURBED WALL OF THE TRENCH.
- THE TABULATED CONTACT BEARING AREAS LISTED ARE FOR HORIZONTAL AND DOWNWARD THRUST ONLY AND ARE NOT APPLICABLE FOR UPWARD THRUST.

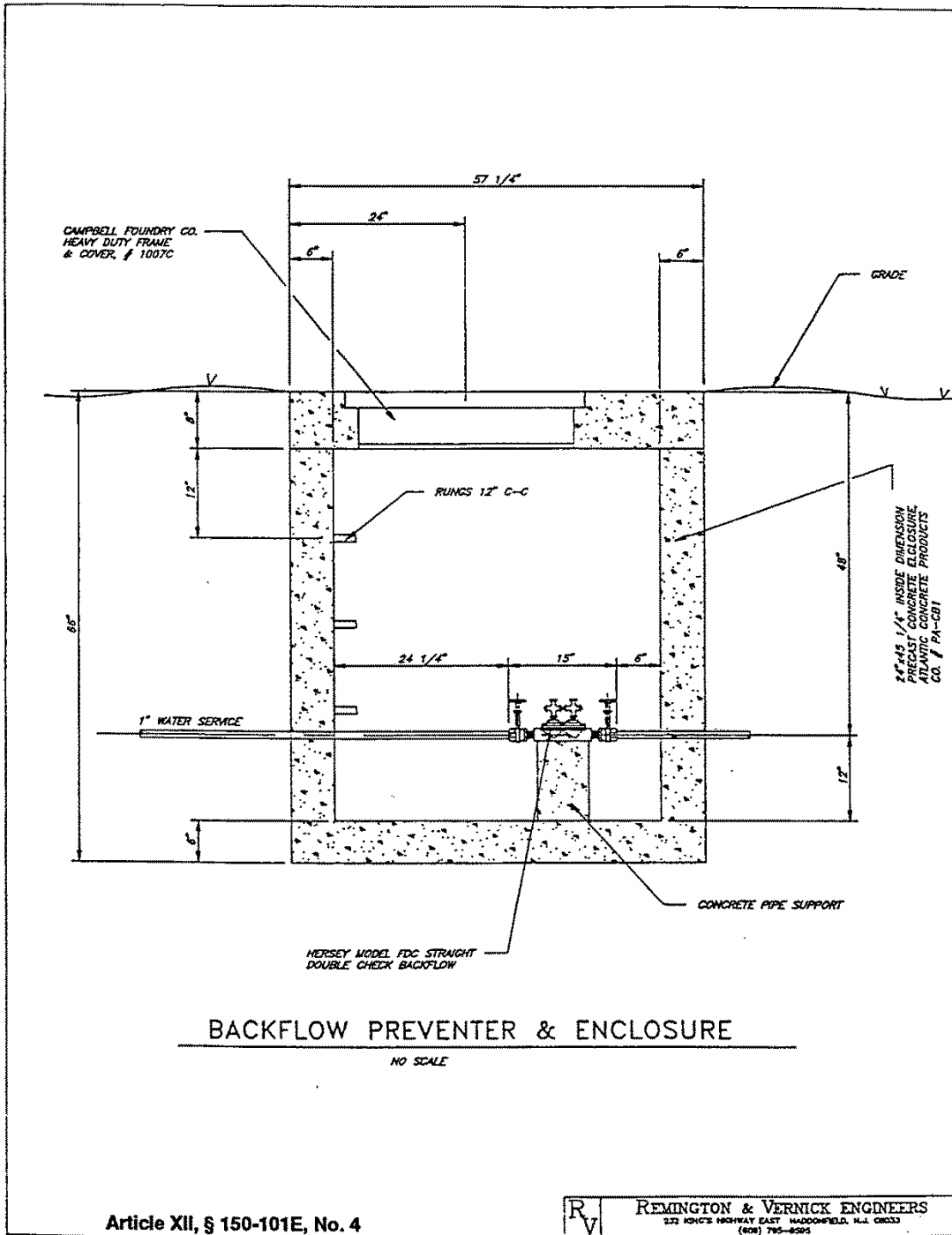
Article XII, § 150-101E, No. 2

**REMINGTON & VERNICK ENGINEERS**  
 232 KING'S BRIDGWAY EAST, MADISONVILLE, MISSISSIPPI 39323  
 (601) 795-8592

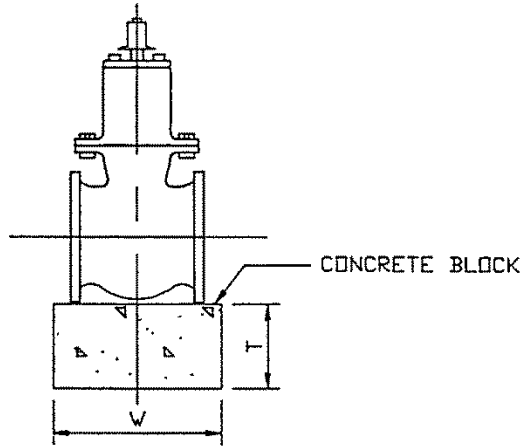
LAND USE



BUENA CODE



LAND USE



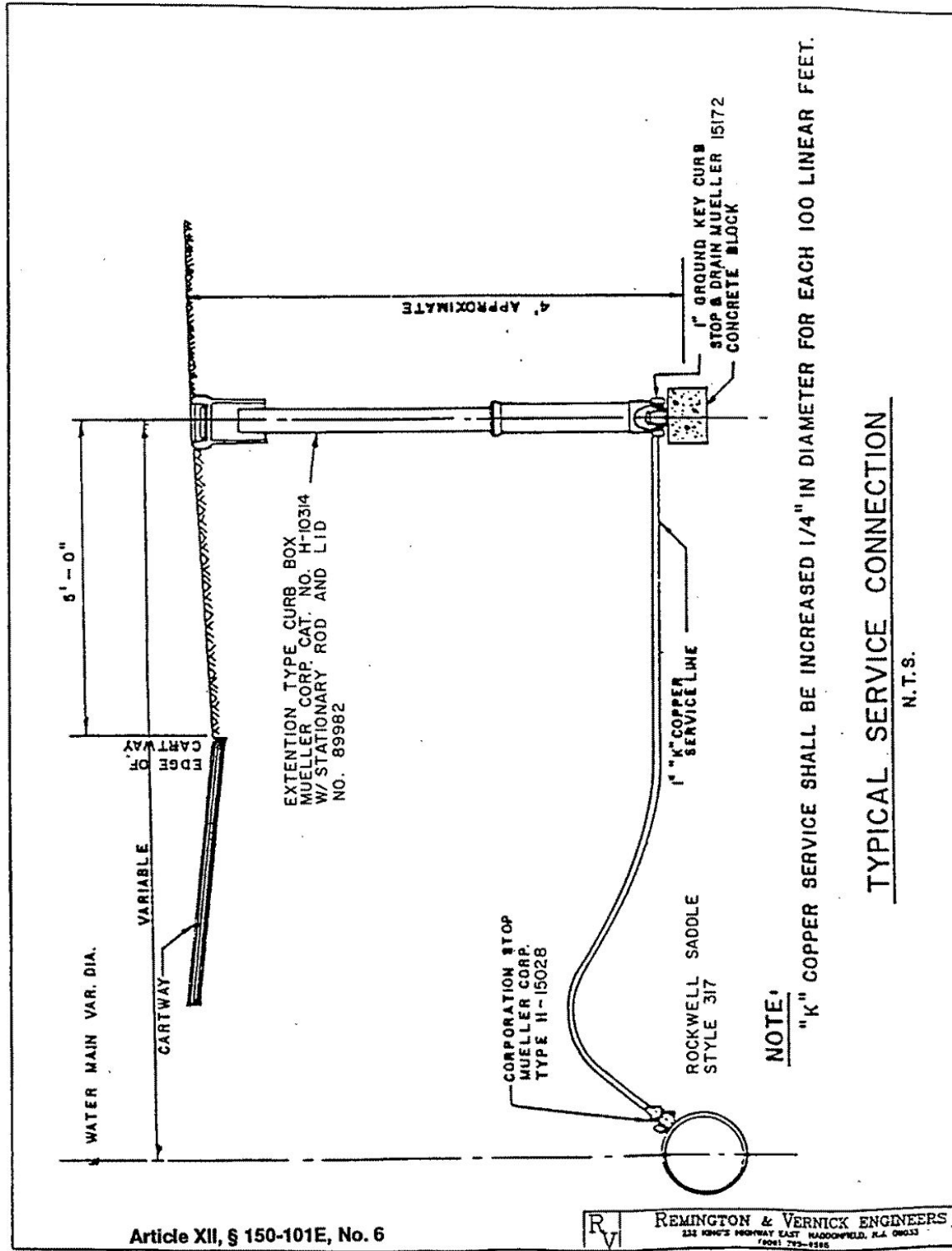
SIZE	T	W	L
6'	8'	16'	16'
8'	8'	18'	18'
12'	10'	20'	20'
16'	12'	26'	26'
20'	14'	28'	28'

VALVE SUPPORT  
N.T.S.

Article XII, § 150-101E, No. 5

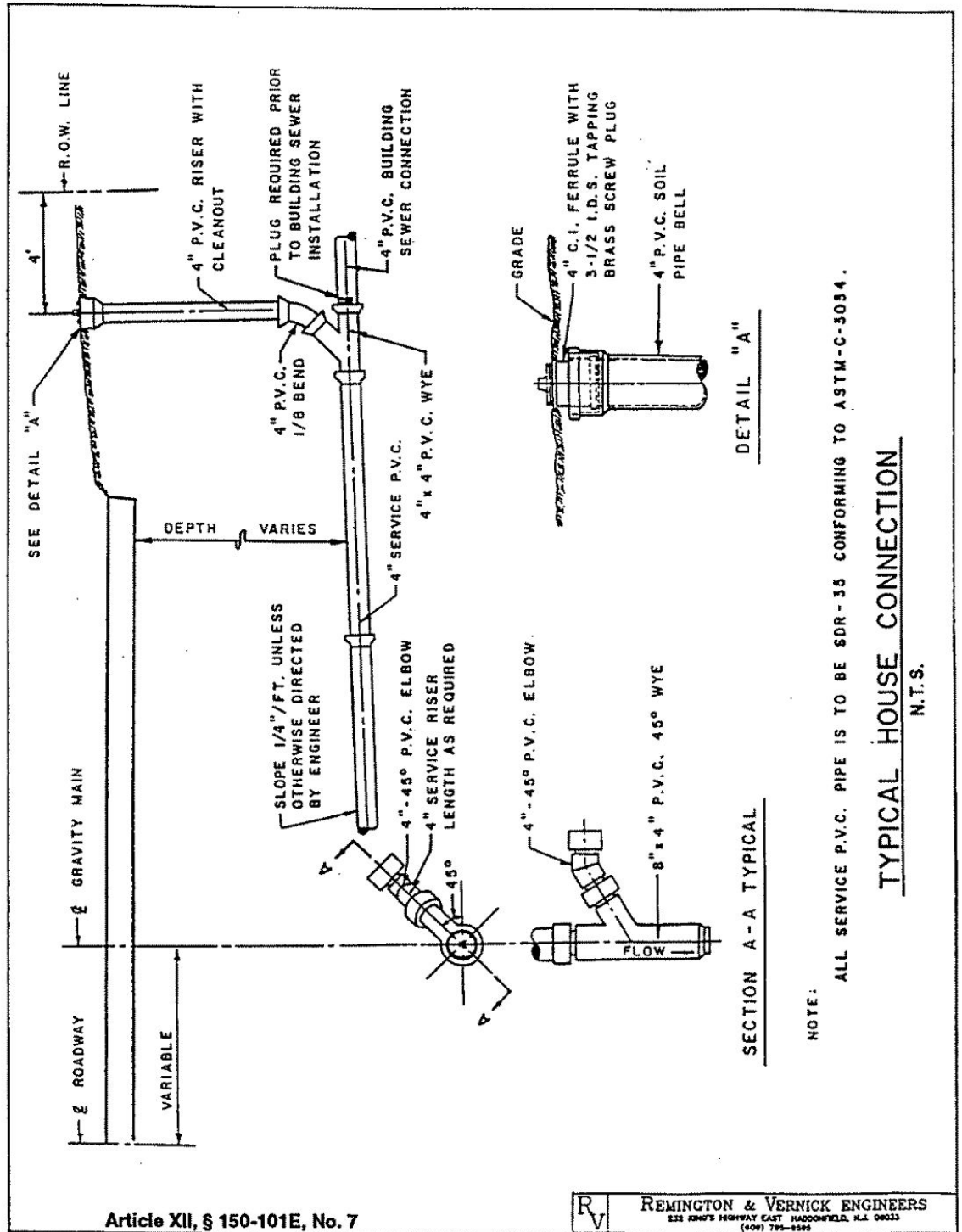


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(609) 765-4202



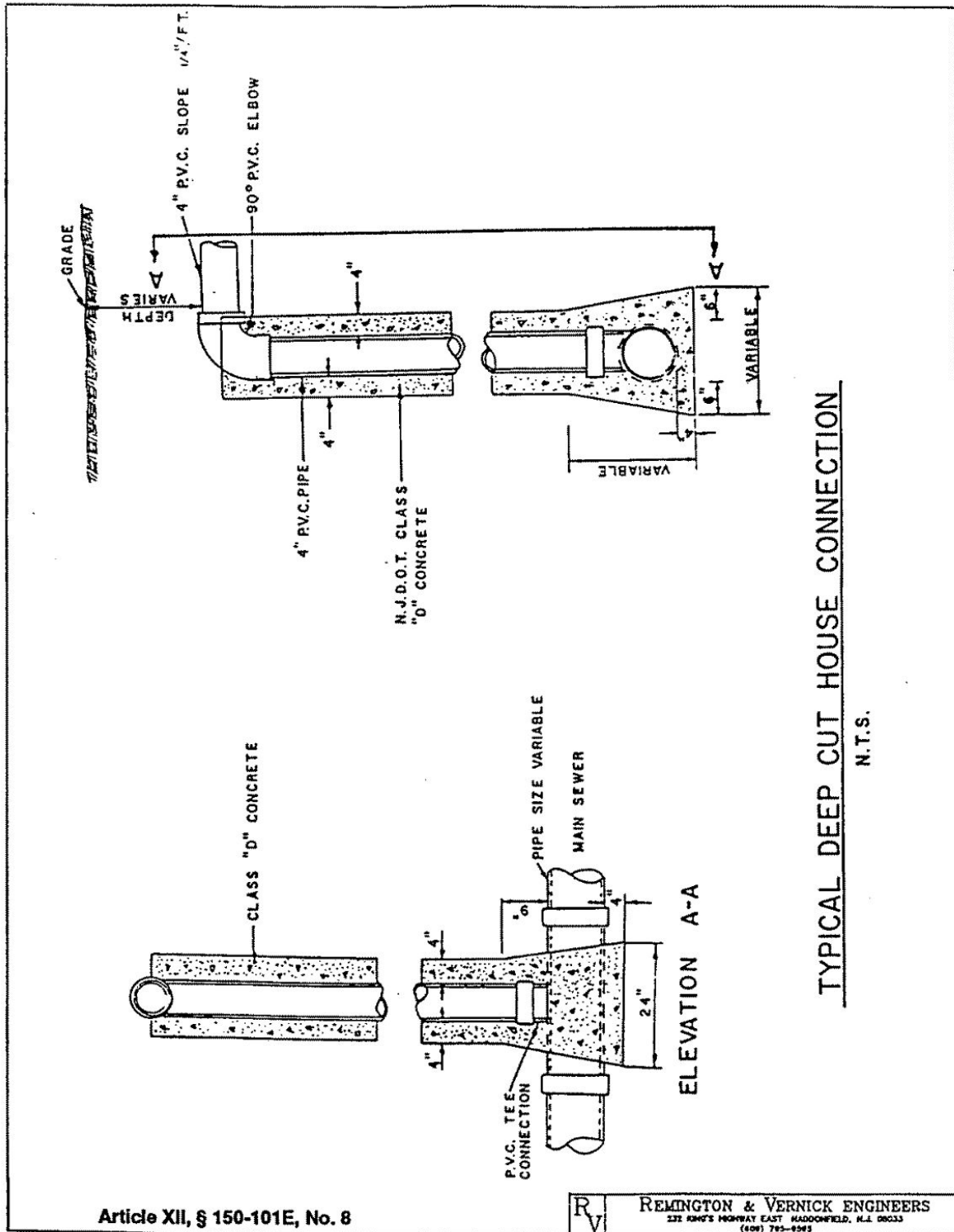
Article XII, § 150-101E, No. 6

REVISIONS: R, V  
REMINGTON & VERNICK ENGINEERS  
11001 7th Street East, Greenwood, N.C. 28033  
704-742-1200

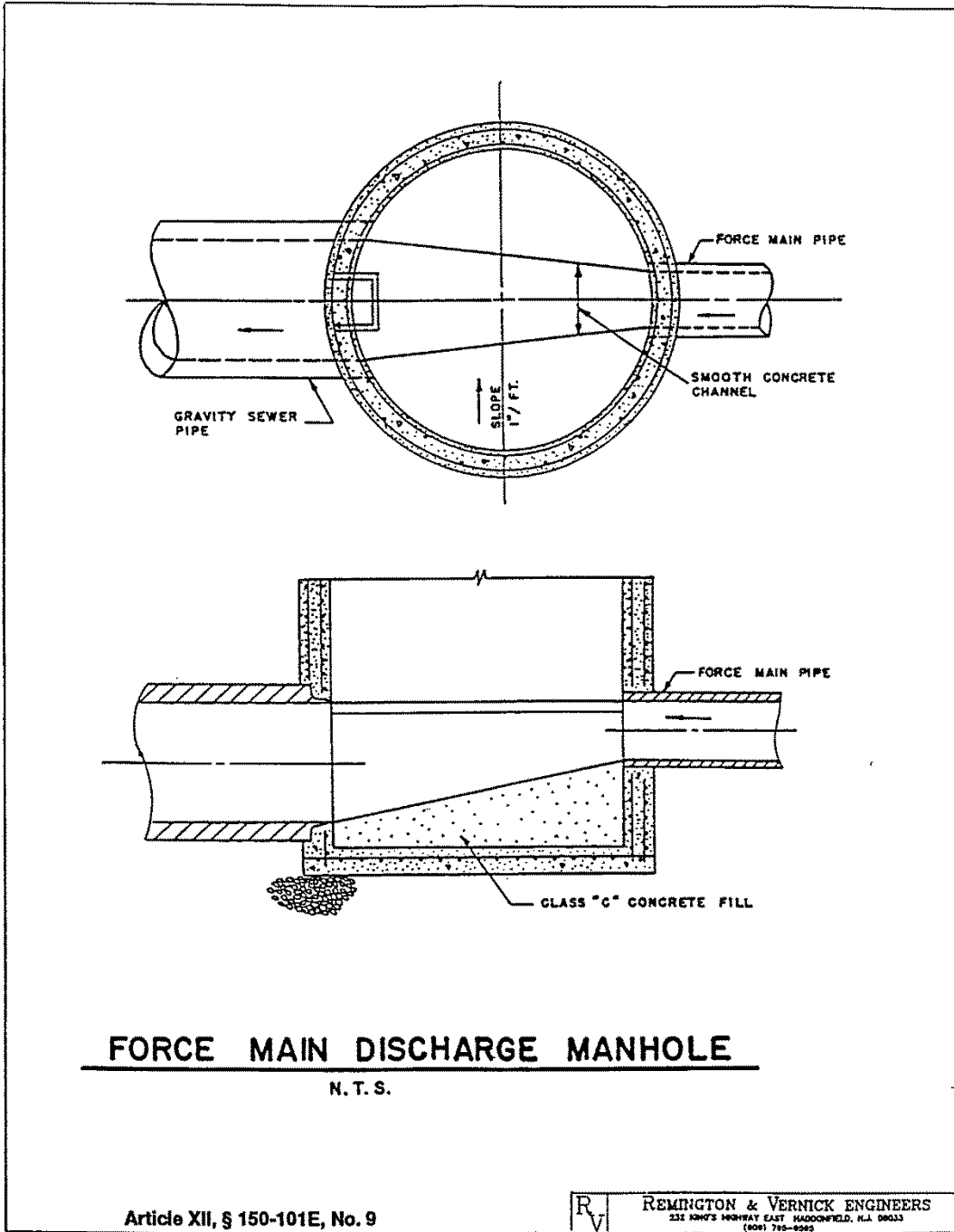


Article XII, § 150-101E, No. 7

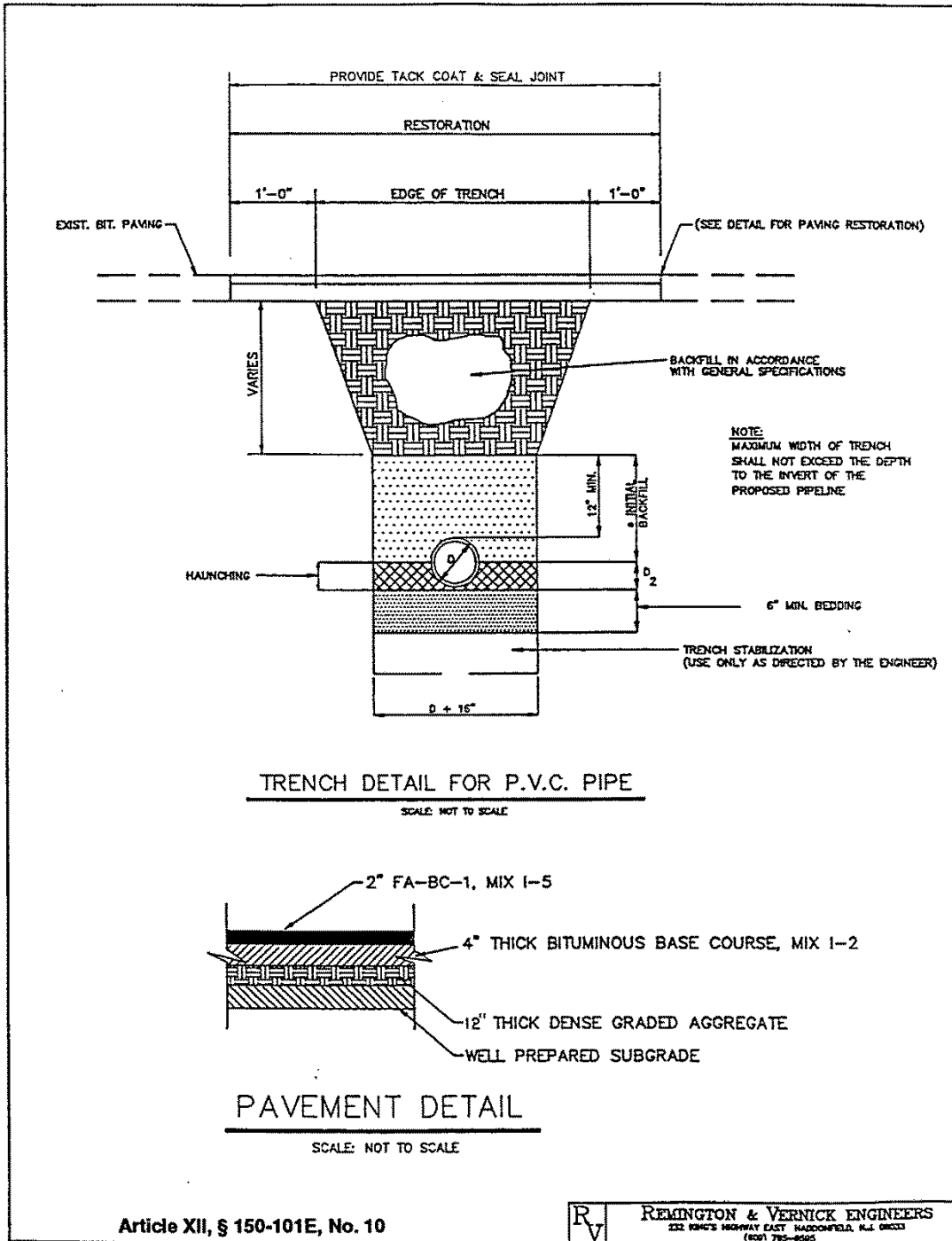
RV REMINGTON & VERNICK ENGINEERS  
223 HOWE'S HIGHWAY EAST, MADISONVILLE, ALA. 35763  
(205) 795-8286



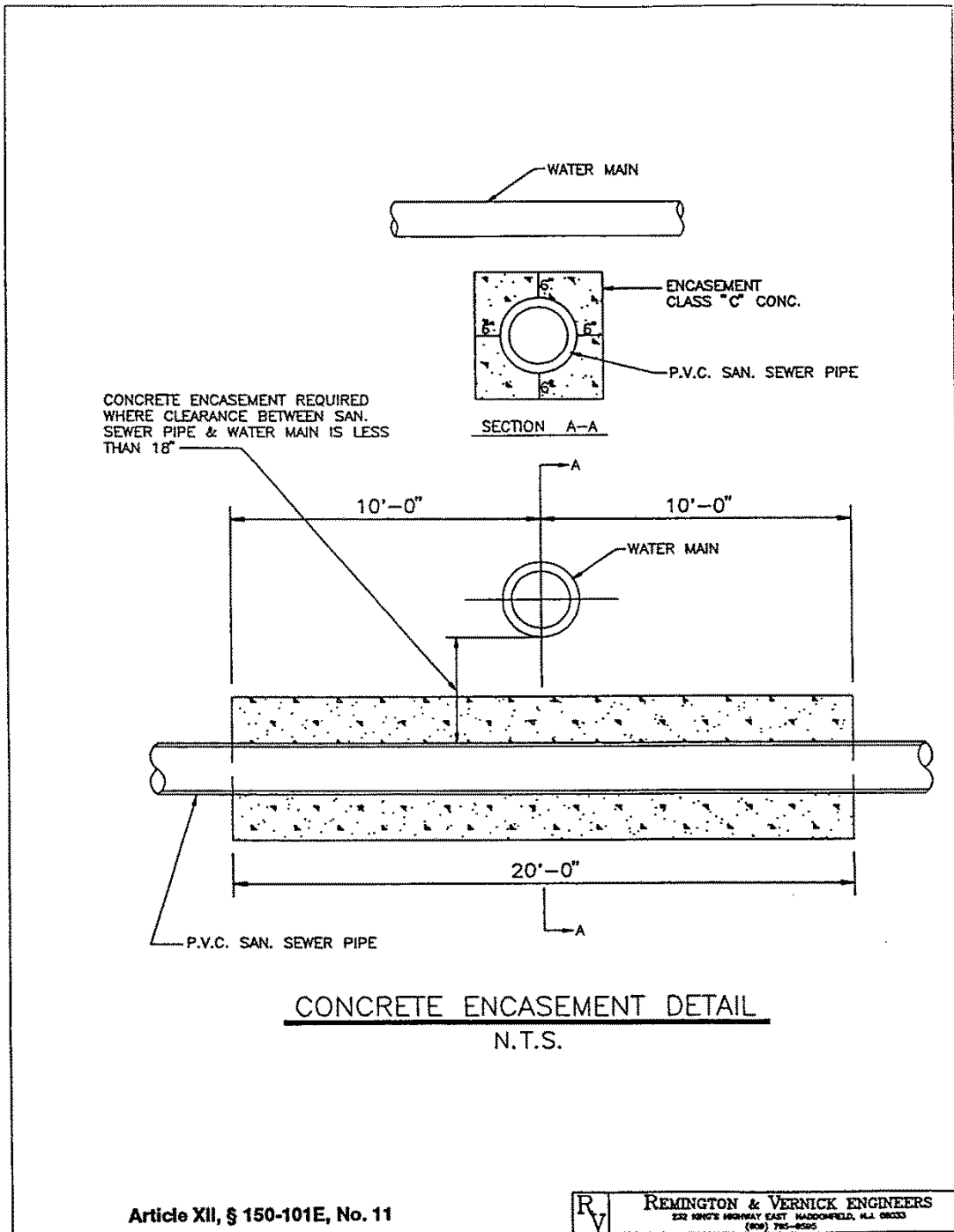
LAND USE

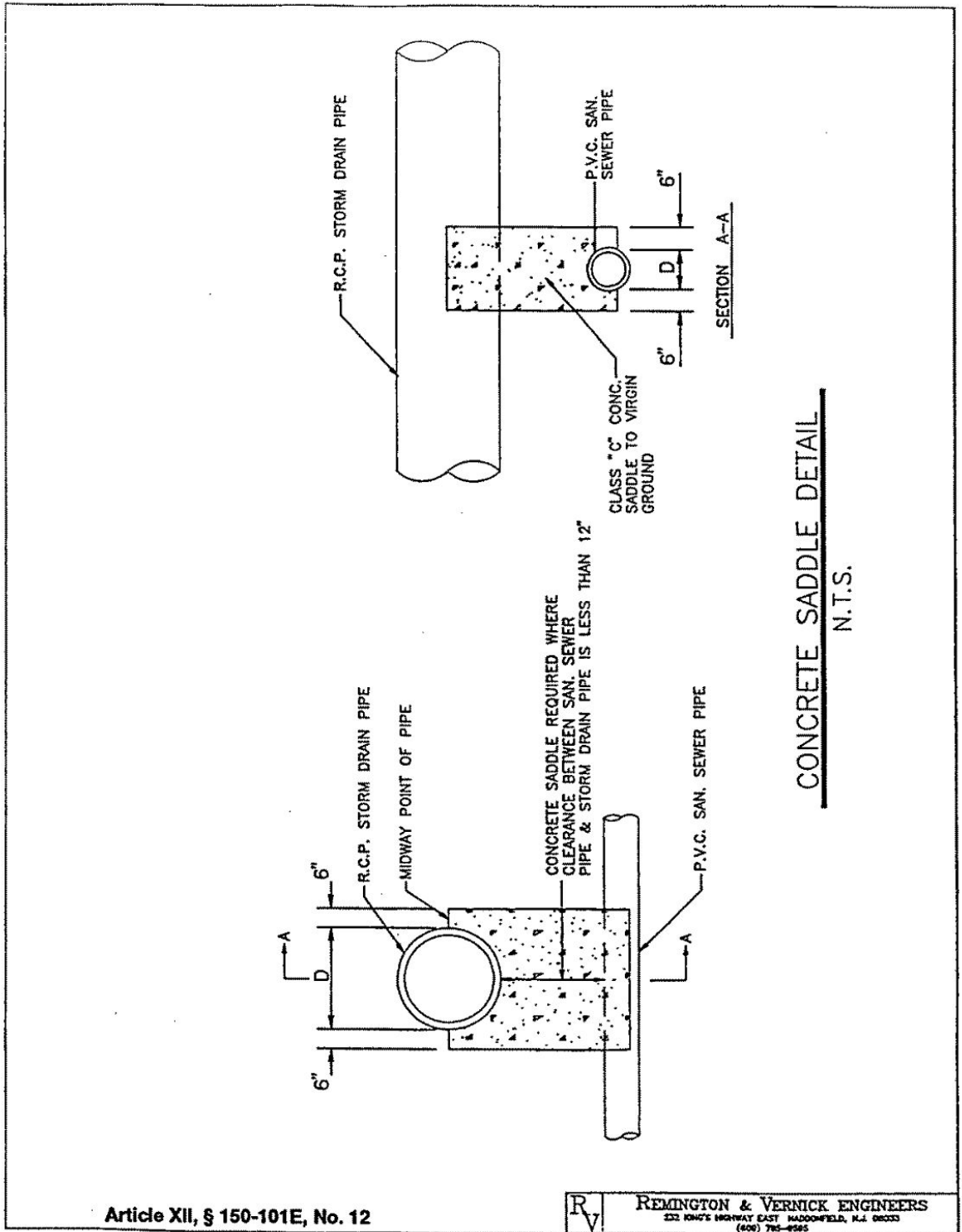


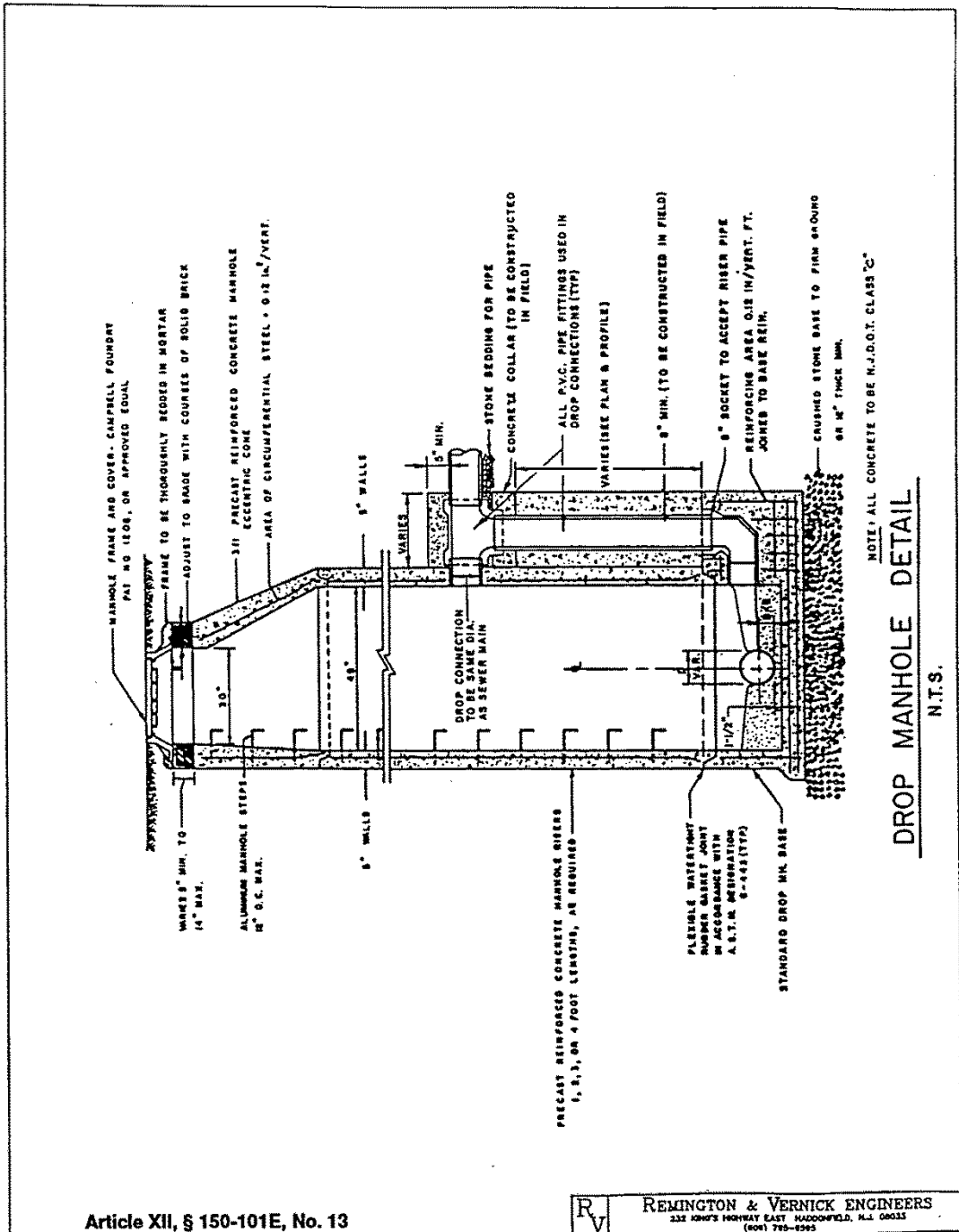
BUENA CODE



LAND USE







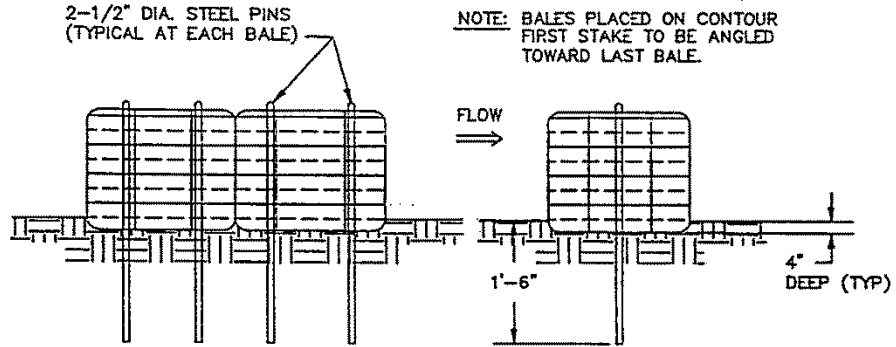
Article XII, § 150-101E, No. 13

**REVISIONS**

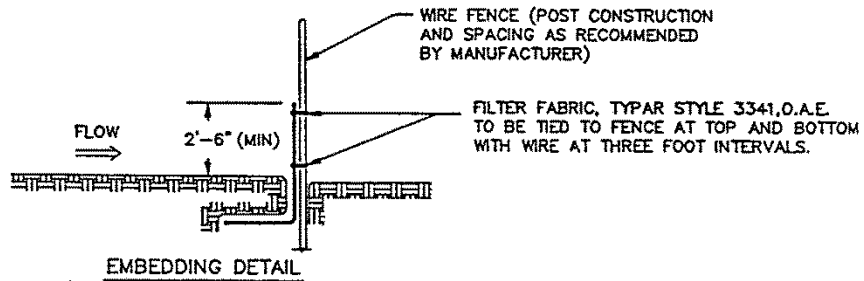
1	AS NOTED
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333 KINGS HIGHWAY EAST - HADDONFIELD, N.J. 08033  
(609) 793-8595

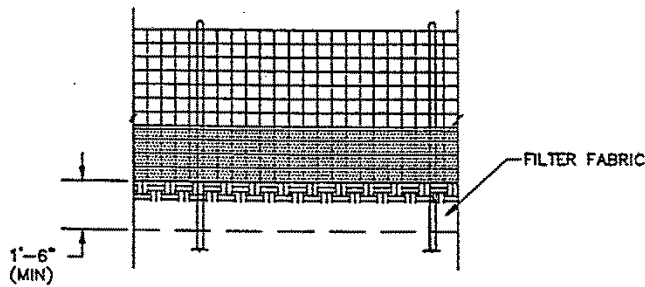
BUENA CODE



INSTALLATION/EMBEDDING DETAIL  
N.T.S.



EMBEDDING DETAIL



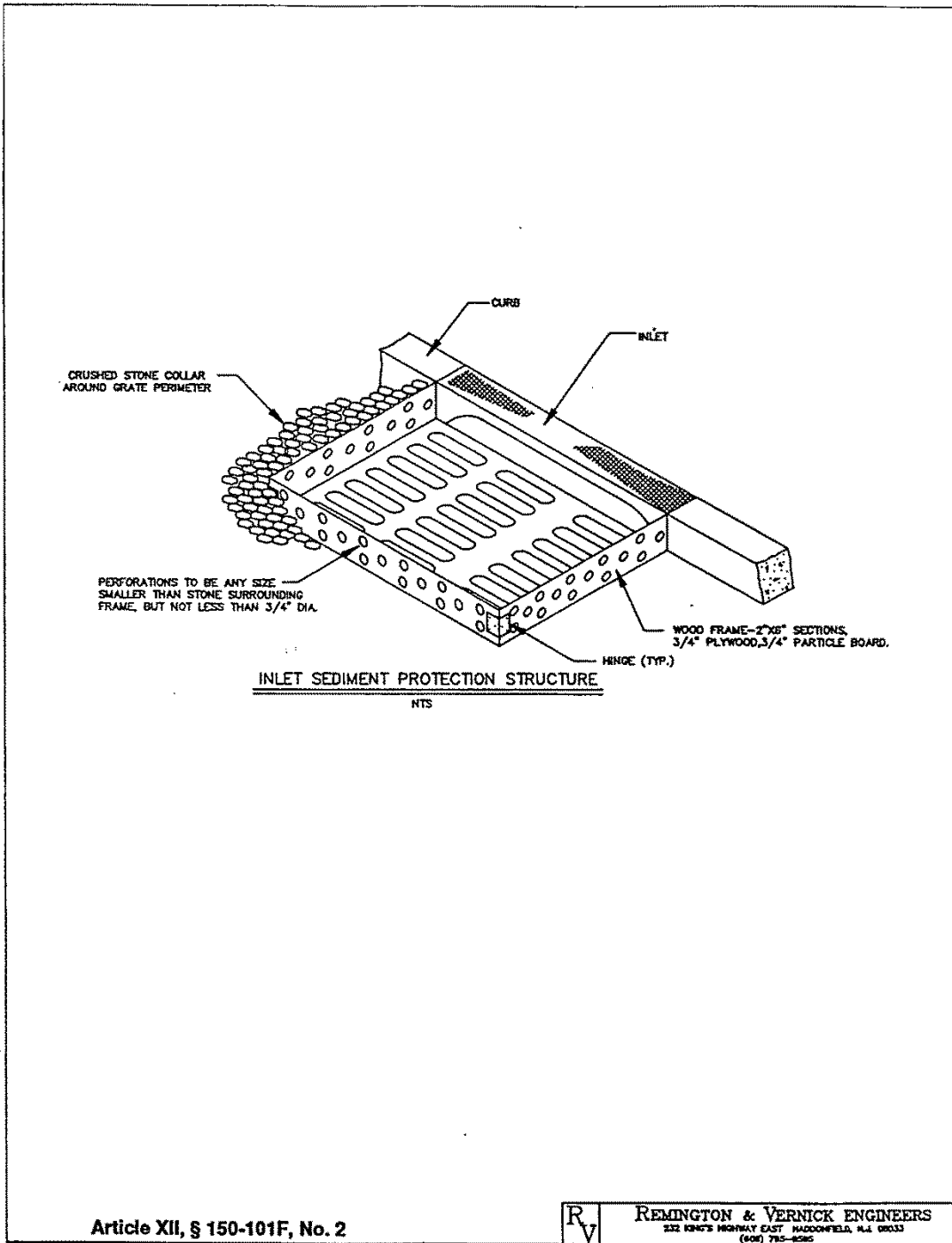
FILTER FABRIC AND WIRE FENCE DETAIL  
OR APPROVED EQUAL  
N.T.S.

Article XII, § 150-101F, No. 1

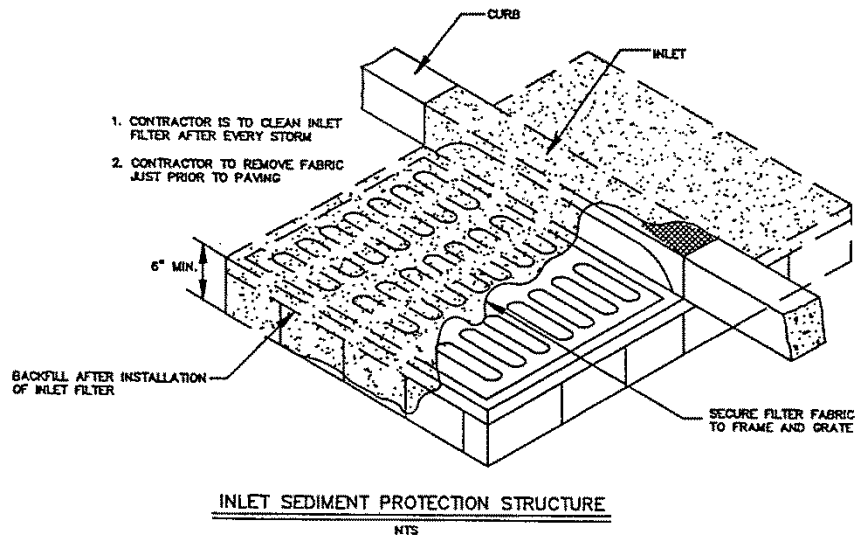


REMINGTON & VERNICK ENGINEERS  
332 KING'S HIGHWAY EAST HADDONFIELD, N.J. 08033  
(609) 795-8545

LAND USE



BUENA CODE

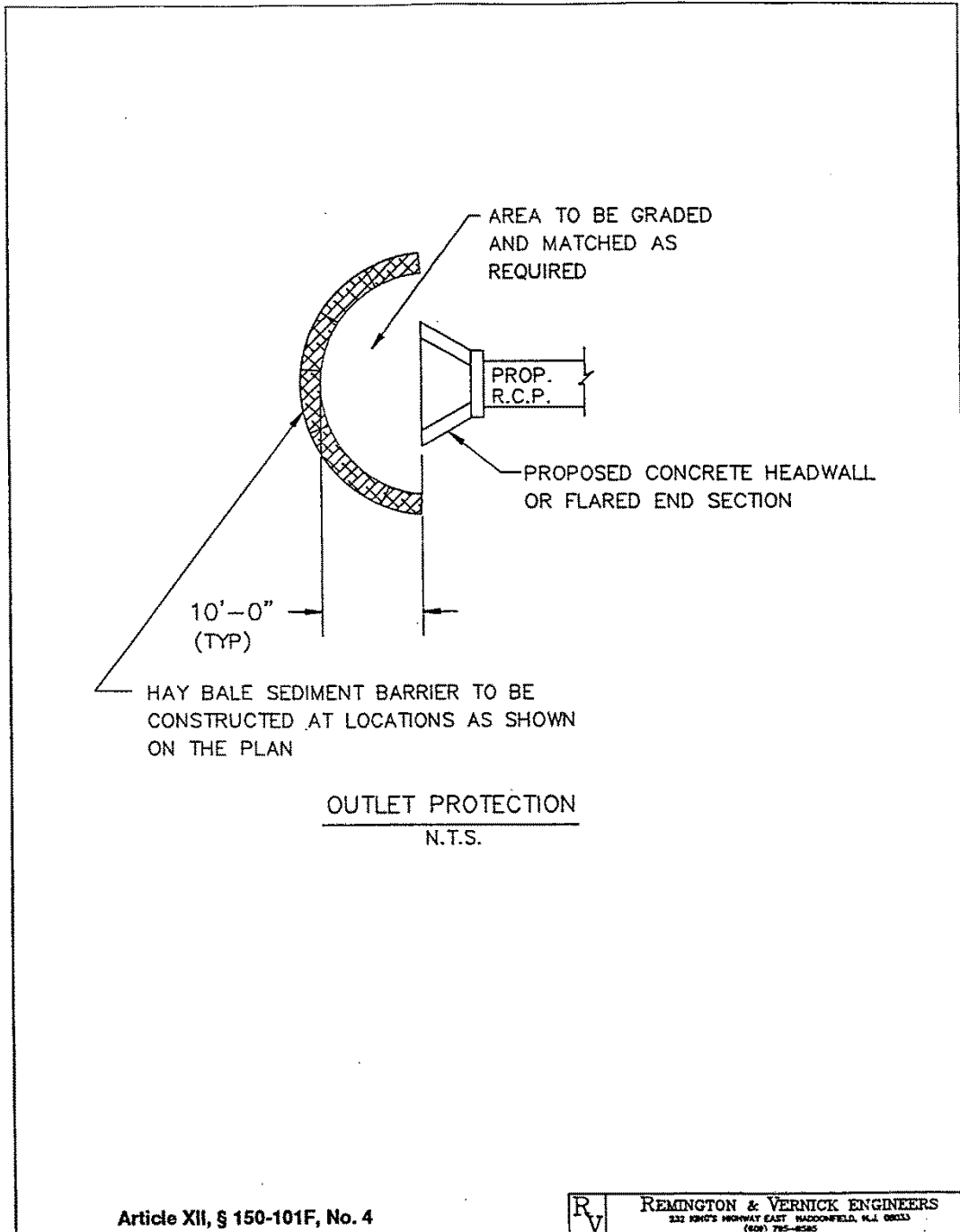


Article XII, § 150-101F, No. 3

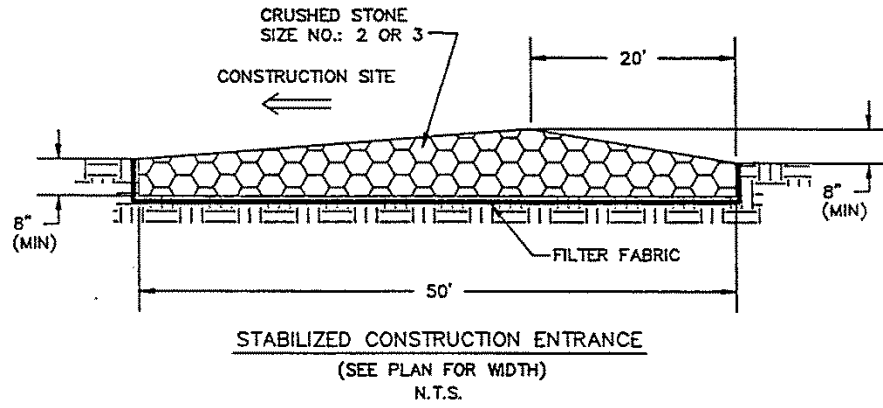


REMINGTON & VERNICK ENGINEERS  
232 KING'S HIGHWAY EAST HADDONFIELD, N.J. 08033  
(609) 795-4500

LAND USE



BUENA CODE



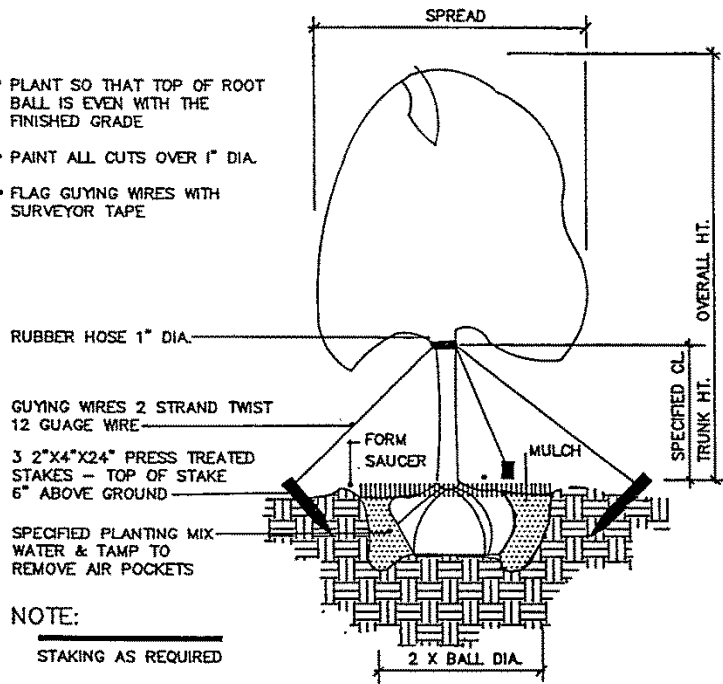
Article XII, § 150-101F, No. 5



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222 KING'S HIGHWAY EAST MADISONVILLE, ALA. 35753  
(602) 795-8285

LAND USE

- PLANT SO THAT TOP OF ROOT BALL IS EVEN WITH THE FINISHED GRADE
- PAINT ALL CUTS OVER 1" DIA.
- FLAG GUYING WIRES WITH SURVEYOR TAPE



TREE PLANTING - GUY WIRES

SCALE: NOT TO SCALE

Article XII, § 150-101G, No. 1



REMINGTON & VERNICK ENGINEERS  
232 KING'S HIGHWAY EAST MADISONFIELD, ALA 36033  
(601) 795-4525

BUENA CODE

- PLANT SO THAT TOP OF ROOT BALL IS EVEN WITH THE FINISHED GRADE
- PAINT ALL CUTS OVER 1" DIA.

2 STRAND TRISTED 12 GAUGE GAL. WIRE ENCASED IN 1" DIA. RUBBER HOSE

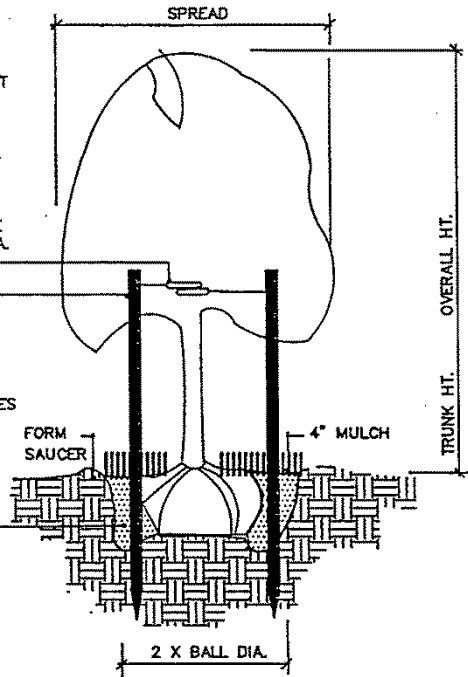
HARDWOOD STAKES  
1-3 STAKES 2" X 2"  
DRIVEN (MIN. 18") FIRMLY INTO SUBGRADE PRIOR TO BACKFILLING

STAKE ABOVE FIRST BRANCHES OR AS NECESSARY FOR FIRM SUPPORT

SPECIFIED PLANTING MIX WATER & TAMP TO REMOVE AIR POCKETS

NOTE:

STAKING AS REQUIRED



TREE PLANTING — VERTICAL STAKES  
(DECIDUOUS TREE)

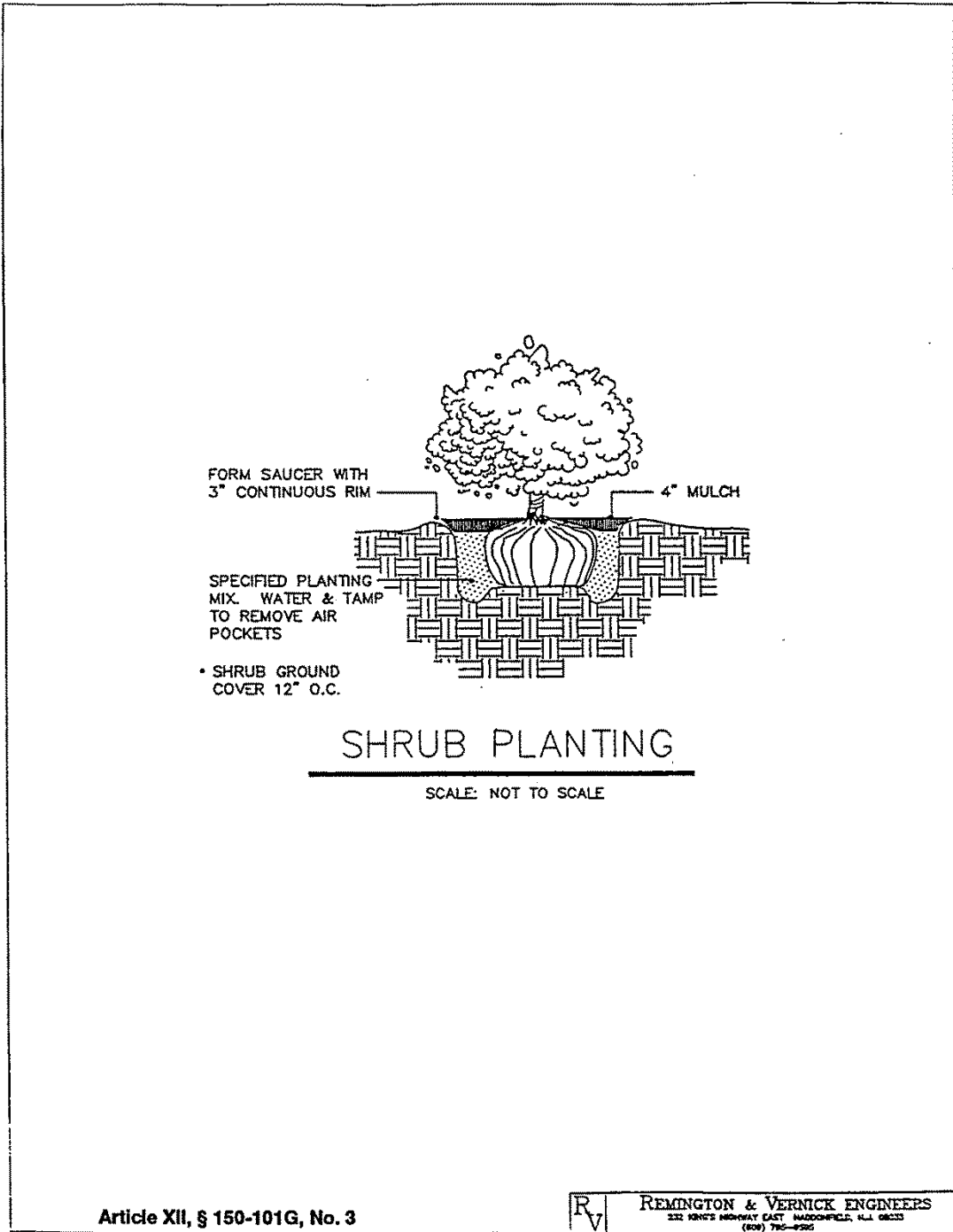
SCALE: NOT TO SCALE

Article XII, § 150-101G, No. 2

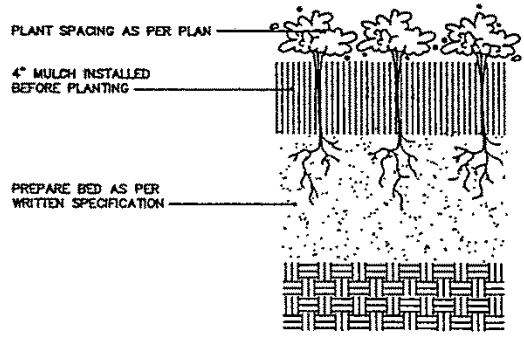


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(904) 786-4025

LAND USE



BUENA CODE



GROUNDCOVER PLANTING DETAIL

SCALE: NOT TO SCALE

Article XII, § 150-101G, No. 4



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(609) 785-8985