

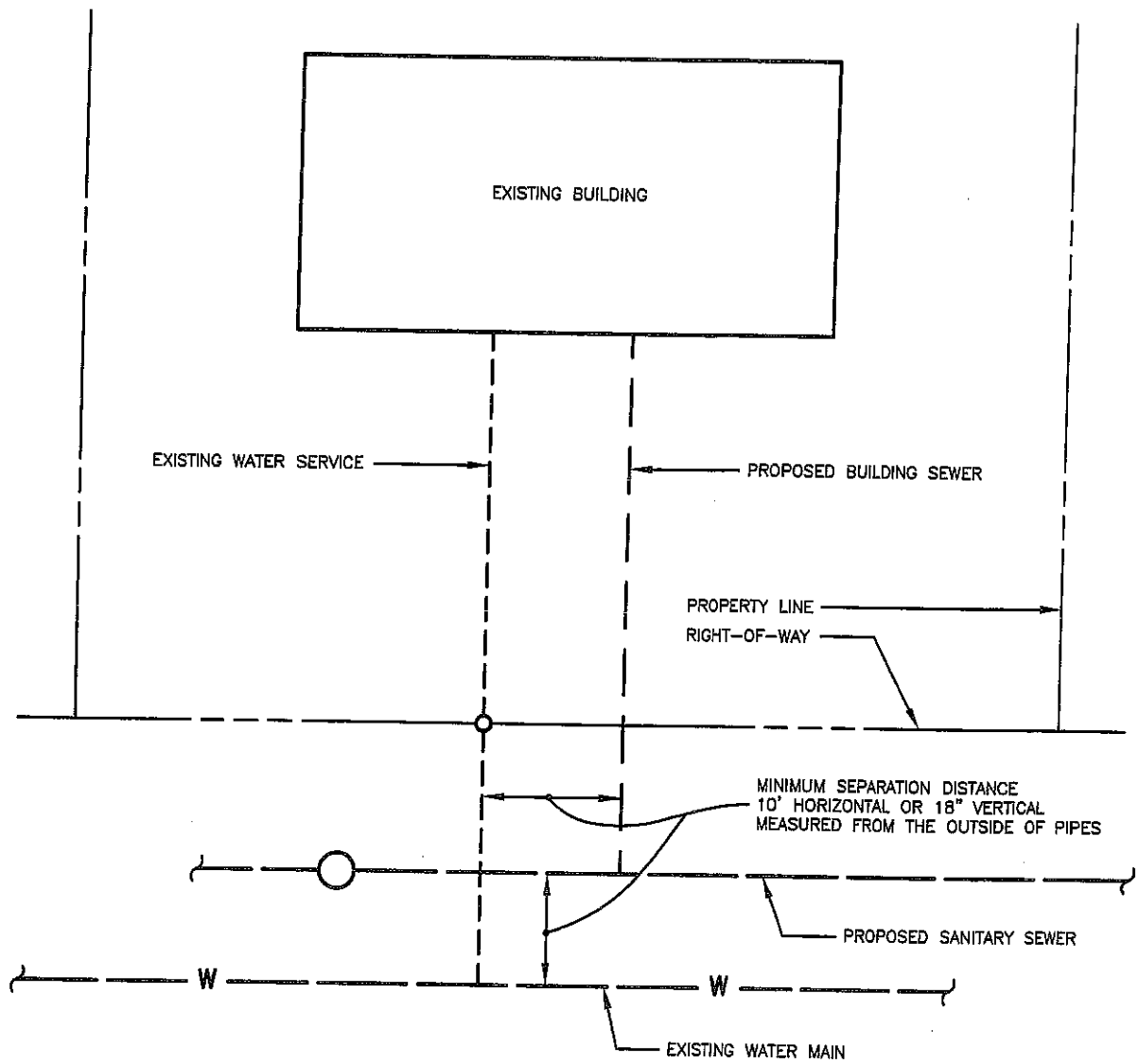
SECTION 4. STANDARD DETAILS

STANDARD DETAIL INDEX

<u>Drawing No.</u>	<u>Title</u>
WS-1	Water and Sewer Line Separation
WS-2	Water Main and Sewer Crossing Vertical Separation Less Than 18"
WS-3	Water Main / Sewer Crossing Detail
WS-4	Thrust Blocking
WS-5	Hydrant Unit
WS-6	Line Valve
WS-7-1	Blow-Off Hydrant
WS-8	Service
WS-9	Sampling and Disinfection Tap
WS-10	Plastic Pit for Water Meter
SA-1	Precast Concrete Manhole
SA-2	Precast Concrete Manhole
SA-4	Building Sewer
SA-5	Building Sewer Riser
SA-6	Building Sewer Cleanout
SA-7	Drop Connection
ST-2	Storm Drain Inlet Precast Concrete
ST-3	Storm Inlet Manhole
RS-1	Concrete Sidewalk
RS-3	Concrete Curb and Granite Curb
RS-4R	Concrete Gutter with Weep
RS-5	Gutter Inlet
RS-6	Special Gutter Inlet

STANDARD DETAIL INDEX (continued)

<u>Drawing No.</u>	<u>Title</u>
RS-7	Driveway Details
RS-8	Standard Turnaround
RS-9	Temporary Turnaround
RS-10	Typical Road Sections Alternate A
RS-11	Typical Road Sections Alternate B
RS-12	Private Road Details
RS-14	Mountable Curb
TR-1	Pipe Bedding Details
TR-2	Typical Trench Section Pavement Areas
TR-3	Typical Trench Section Town Road Crossings
TR-5	Underdrain



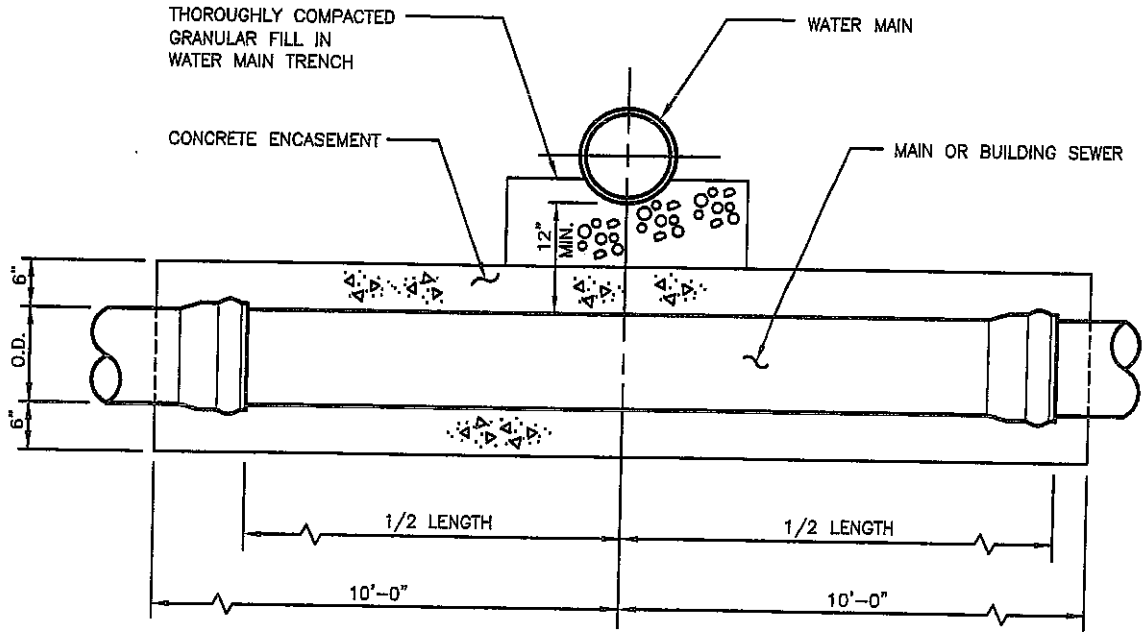
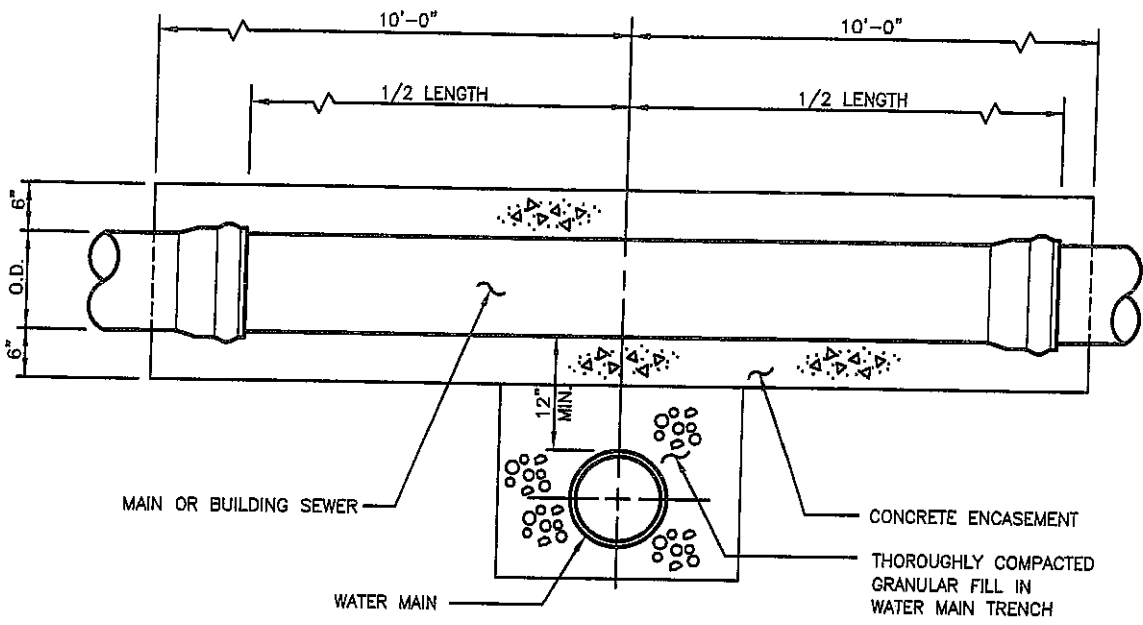
WATER AND SEWER LINE SEPARATION

SNIEDZE ASSOCIATES, CONSULTING ENGINEERS
CANANDAIGUA, NEW YORK

NOT TO SCALE

MAY 2007

WS-1



NOTE:
 PLACE WATER MAIN JOINTS EQUIDISTANT FROM THE MAIN OR BUILDING SEWER.
 WRAP ALL PIPE IN POLYETHYLENE FILM BEFORE ENCASING IN CONCRETE TO PREVENT ADHESION OF CONCRETE TO THE PIPE.

WATER MAIN AND SEWER CROSSING VERTICAL SEPARATION LESS THAN 18"		
SNIEDZE ASSOCIATES, CONSULTING ENGINEERS CANANDAIGUA, NEW YORK		
SCALE: 1/2" = 1'-0"	MAY 2007	WS-2

WATER MAIN / SEWER CROSSING DETAIL

CONDITION	SCHEMATIC	REQUIREMENTS
I WATER LINE ABOVE SEWER LINE		A) WATER LINE AND SEWER LINE PIPE LENGTHS TO BE CENTERED AT CROSSING. EACH LENGTH OF PIPE TO BE 10 FT. MINIMUM.
II WATER LINE ABOVE SEWER LINE		A) WATER LINE AND SEWER LINE PIPE LENGTHS TO BE CENTERED AT CROSSING. EACH LENGTH OF PIPE TO BE 10 FT. MINIMUM. B) WHEN BOTH WATER LINE AND SEWER LINE ARE NEW, SLEEVE SEWER LINE WITH STEEL CASING FOR 10 FT. EACH SIDE OF CROSSING. -OR- WHEN ONE LINE IS EXISTING, SLEEVE PIPE BEING INSTALLED WITH STEEL CASING FOR 10 FT. EACH SIDE OF CROSSING.
III SEWER LINE ABOVE WATER LINE		A) WATER LINE AND SEWER LINE PIPE LENGTHS TO BE CENTERED AT CROSSING. EACH LENGTH OF PIPE TO BE 10 FT. MINIMUM. B) SLEEVE SEWER LINE WITH "STEEL CASING FOR 10FT." EACH SIDE OF CROSSING. C) PROVIDE CRADLE OF CONCRETE OR CRUSHER RUN STONE (SEE TRENCH SECTION DETAIL BELOW) FOR WATER LINE AND SEWER LINE FOR 10 FT. EACH SIDE OF CROSSING.
<p><u>NOTES</u></p> <p>WL (WATER LINE) SL (SEWER LINE, SANITARY OR STORM) D (OUTSIDE DIAMETER OF PIPE)</p> <p>IN NO CASE SHALL PIPES BE CLOSER THAN 12" INCHES APART. DISTANCES ARE MEASURED BETWEEN OUTSIDES OF PIPE.</p>		

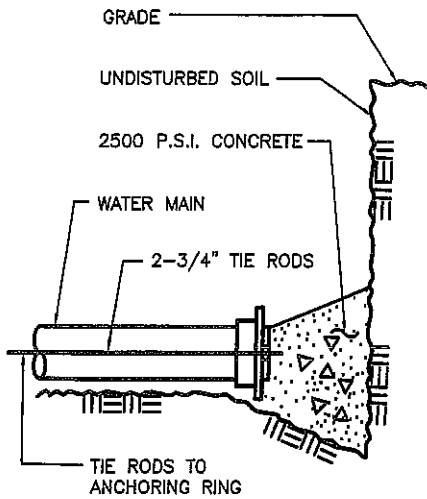
WATER MAIN / SEWER CROSSING DETAIL

SNIEDZE ASSOCIATES, CONSULTING ENGINEERS
 CANANDAIGUA, NEW YORK

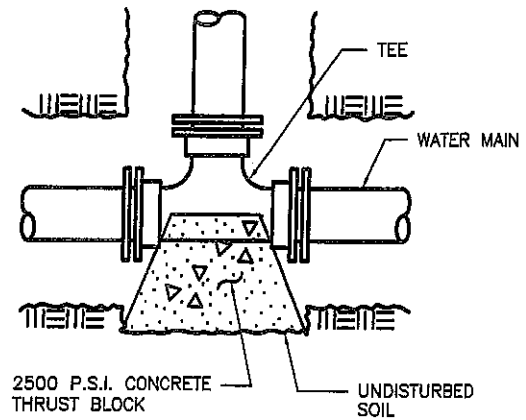
NOT TO SCALE

MAY 2007

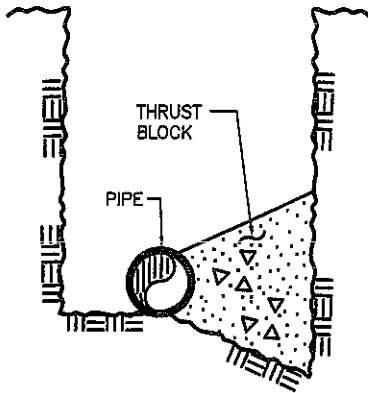
WS-3



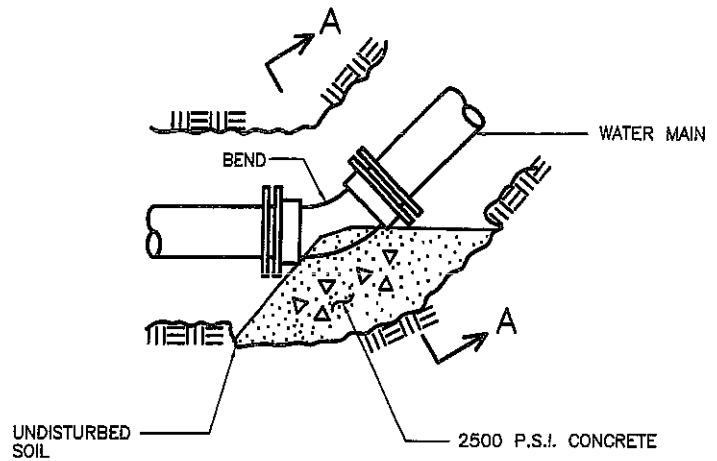
THRUST BLOCK FOR PLUG



THRUST BLOCK FOR TEE



SECTION A-A



PLAN

TYPICAL THRUST BLOCK FOR BENDS

MINIMUM THRUST BLOCK AREA BASED ON 200 PSI OF WATER PRESSURE & SAFE BEARING LOAD OF 2000 LBS/FT.					
PIPE I.D. IN	TEES PLUGS	90° BEND	45° BEND	22½° BEND	11½° BEND
6	3	4	2	1	-
8	5	6	3	2	1
10	7	9	5	3	2
12	9	12	7	4	3

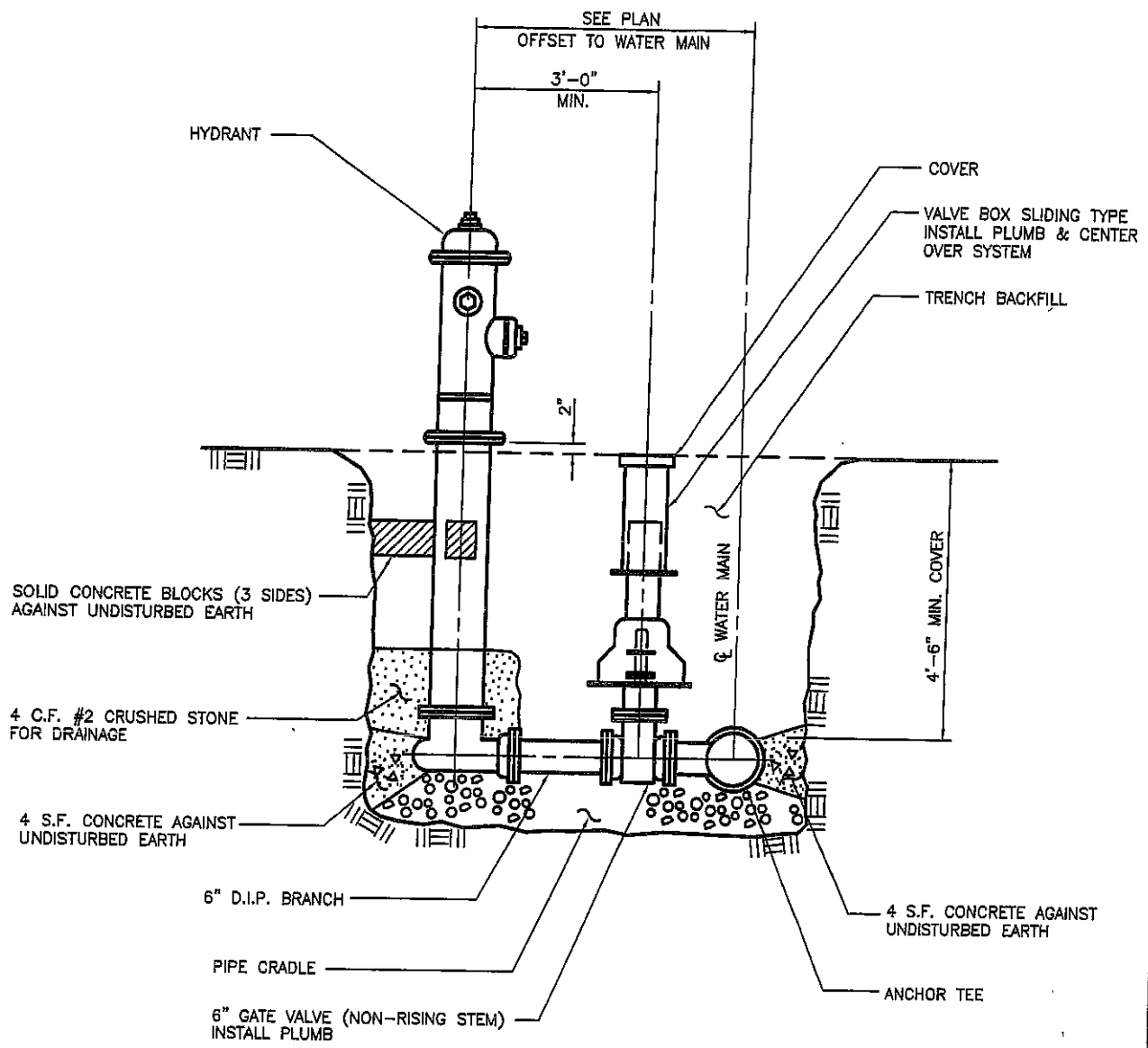
THRUST BLOCKING

SNIEDZE ASSOCIATES, CONSULTING ENGINEERS
CANANDAIGUA, NEW YORK

NOT TO SCALE

MAY 2007

WS-4



NOTE:

1. LOCK-TYPE JOINTS SHALL BE USED
2. ALL HYDRANT WEEP HOLES THAT ARE BELOW MEAN HIGH GROUNDWATER LEVEL SHALL BE PLUGGED. THE HYDRANTS WITH PLUGGED WEEP HOLES SHALL BE SO LABELED OR TAGGED.
3. PROVIDE HYDRANT BARREL EXTENSIONS FOR HYDRANTS LOCATED IN EMBANKMENTS

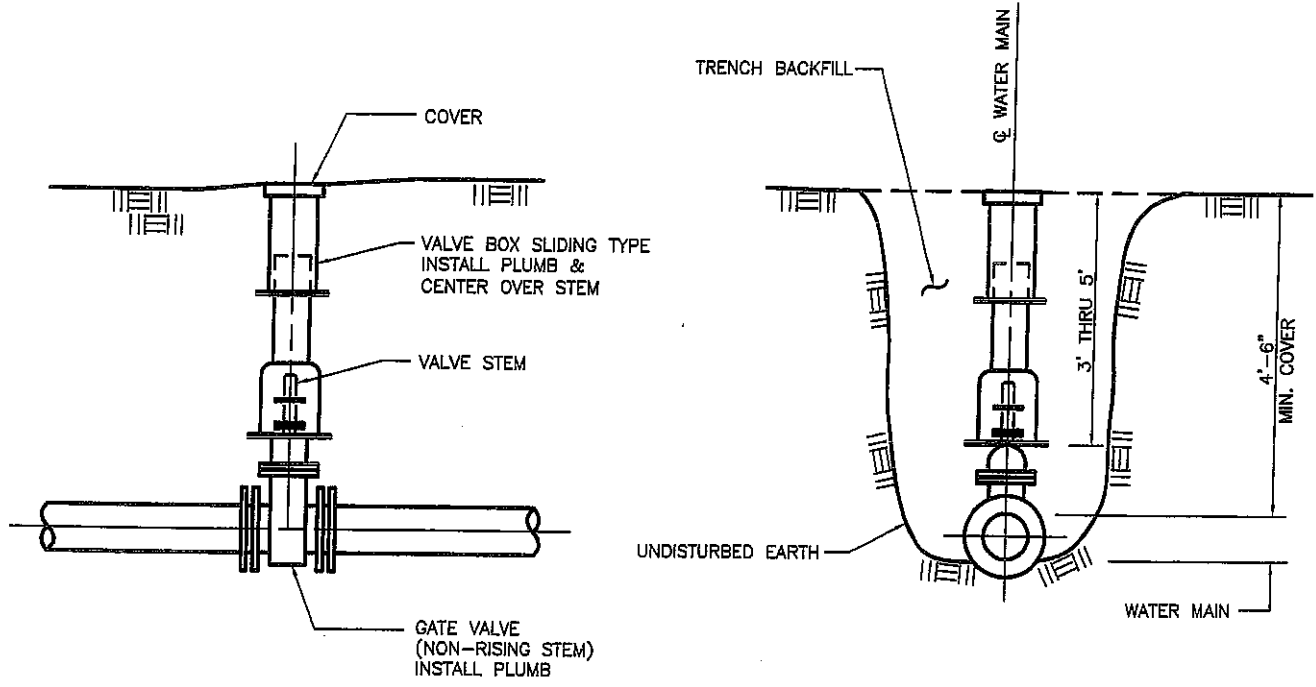
HYDRANT UNIT

SNIEDZE ASSOCIATES, CONSULTING ENGINEERS
CANANDAIGUA, NEW YORK

SCALE: 3/8" = 1'-0"

MAY 2007

WS-5



NOTE:

PROVIDE 6" MINIMUM CRUSHED STONE CRADLE UNDER PIPE AND APPURTENANCES IN ROCK AREAS AND WHERE REQUIRED BY TRENCH AND SOIL CONDITIONS.

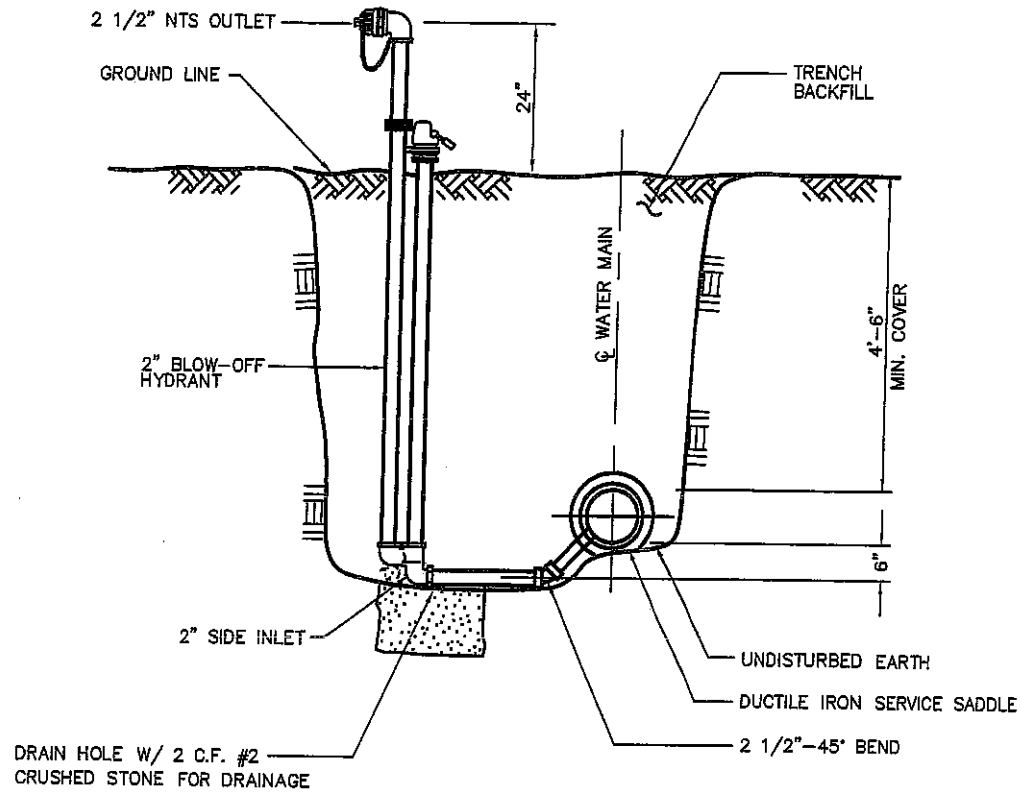
LINE VALVE

SNIEDZE ASSOCIATES, CONSULTING ENGINEERS
CANANDAIGUA, NEW YORK

SCALE: 3/8" = 1'-0"

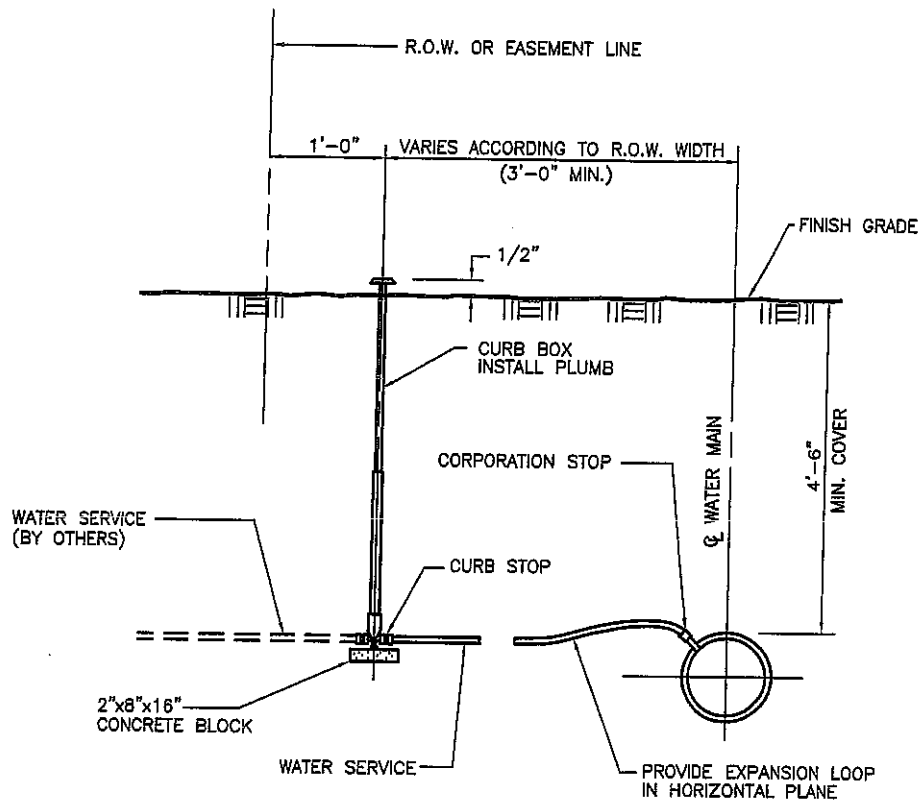
MAY 2007

WS-6-1



NOTE:
 PROVIDE 6" MINIMUM CRUSHED STONE CRADLE UNDER PIPE AND APPURTENANCES IN ROCK AREAS AND WHERE REQUIRED BY TRENCH AND SOIL CONDITIONS.

BLOW-OFF HYDRANT		
SNIEDZE ASSOCIATES, CONSULTING ENGINEERS CANANDAIGUA, NEW YORK		
SCALE: 3/8" = 1'-0"	MAY 2007	WS-7-1



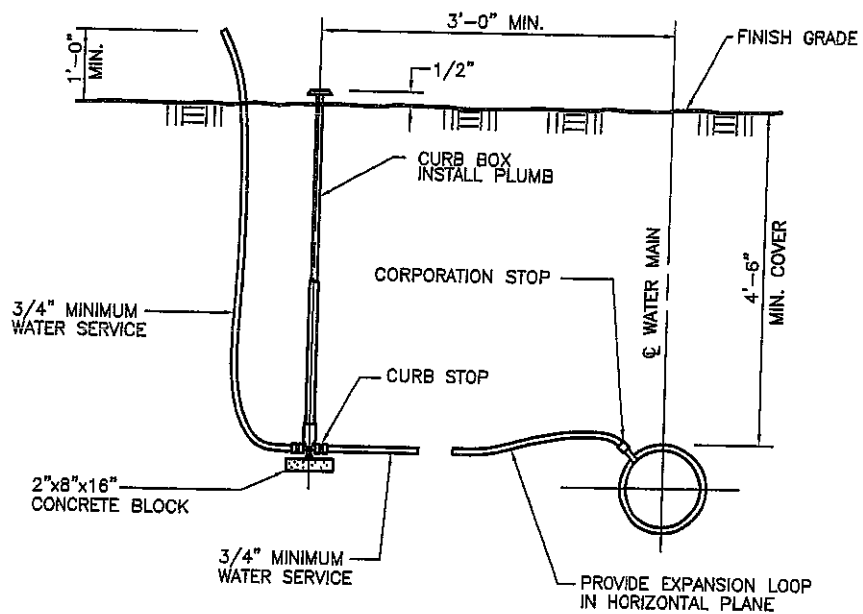
SERVICE

SNIEDZE ASSOCIATES, CONSULTING ENGINEERS
 CANANDAIGUA, NEW YORK

SCALE: 3/8" = 1'-0"

MAY 2007

WS-8



NOTE:

IF THIS TAP IS NOT TO BE USED FOR A WATER SERVICE, THE CONTRACTOR MUST REMOVE THE CORPORATION AND INSERT A BRASS PLUG IN THE MAIN.

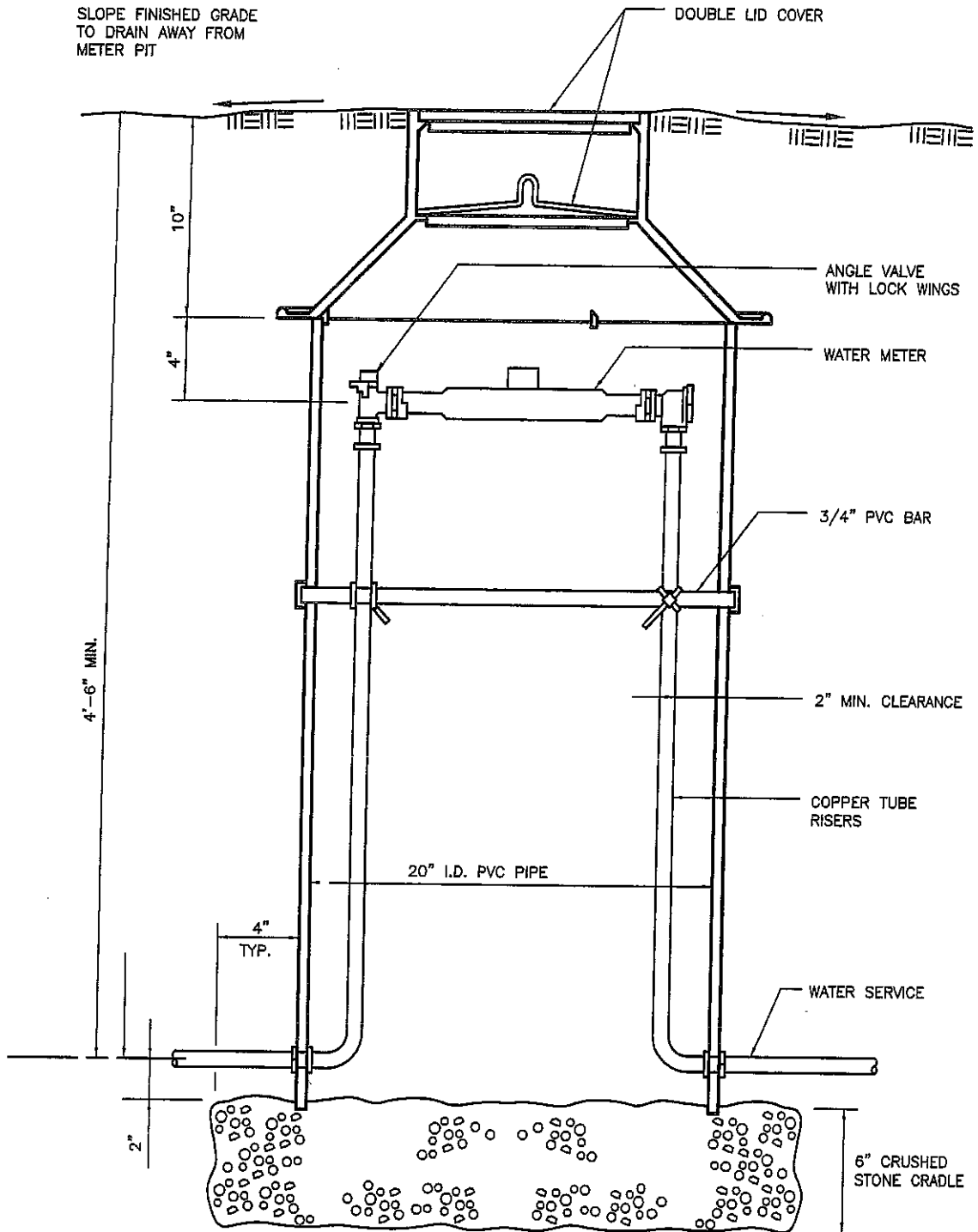
SAMPLING & DISINFECTION TAP

SNIEDZE ASSOCIATES, CONSULTING ENGINEERS
CANANDAIGUA, NEW YORK

SCALE: 3/8" = 1'-0"

MAY 2007

WS-9



NOTE:

1. PROVIDE POLYFOAM INSULATING BLANKET AND DRAPE IT OVER METER AND SETTING.
2. USE PIT FOR INDIVIDUAL SERVICES LONGER THAN 250 FEET FROM WATER MAIN.
3. USE PIT FOR ALL NEW CONSTRUCTION THAT DOES NOT HAVE A BASEMENT OR CRAWL SPACE.

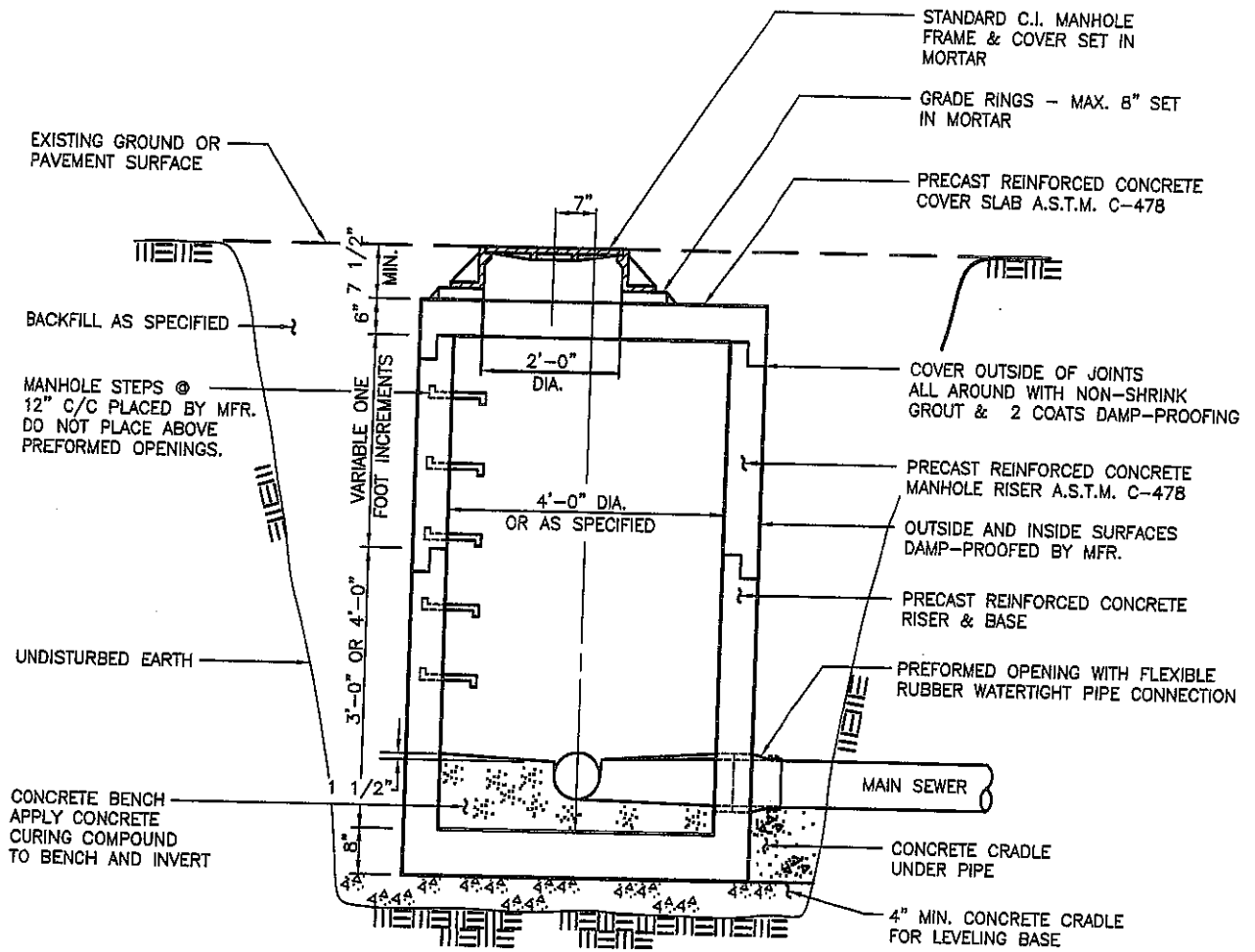
PLASTIC PIT FOR WATER METER

SNIEDZE ASSOCIATES, CONSULTING ENGINEERS
CANANDAIGUA, NEW YORK

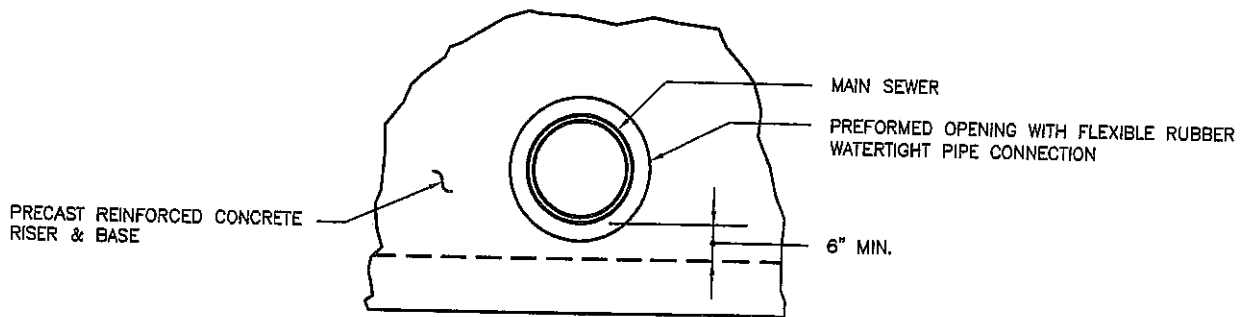
SCALE: 1 1/2" = 1'-0"

MAY 2007

WS-10

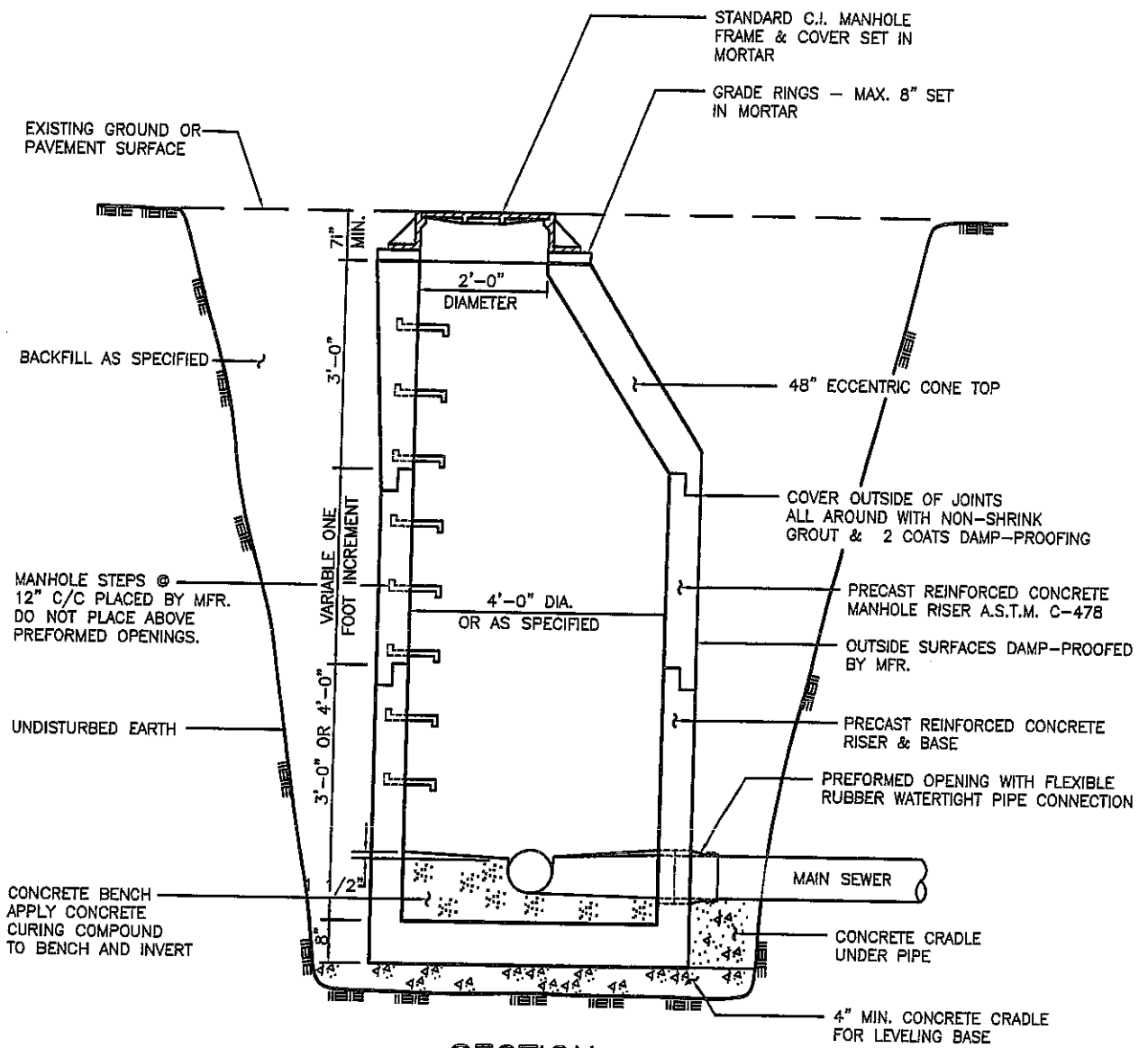


SECTION



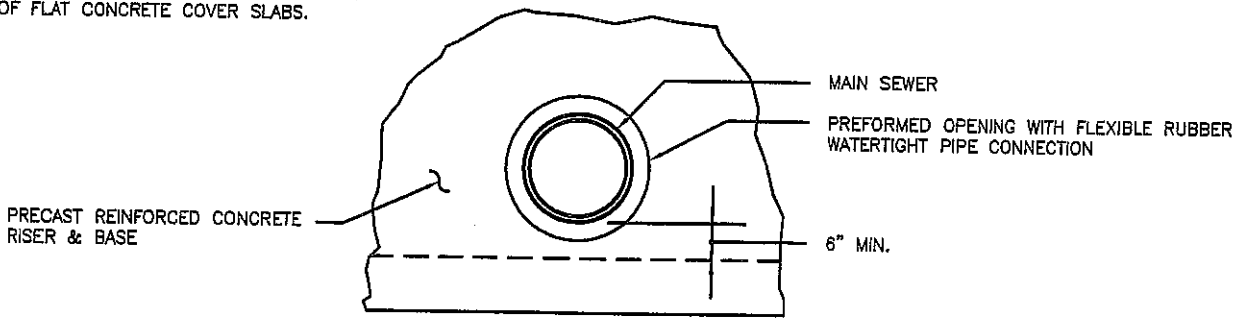
PREFORMED OPENING DETAIL

<h2>PRECAST CONCRETE MANHOLE</h2>		
SNIEDZE ASSOCIATES, CONSULTING ENGINEERS CANANDAIGUA, NEW YORK		
SCALE: 3/8" = 1'-0"	MAY 2007	SA-1



SECTION

NOTE:
 ECCENTRIC CONE TOP FOR MANHOLES OVER 8 FT. DEEP MAY BE USED IN LIEU OF FLAT CONCRETE COVER SLABS.



PREFORMED OPENING DETAIL

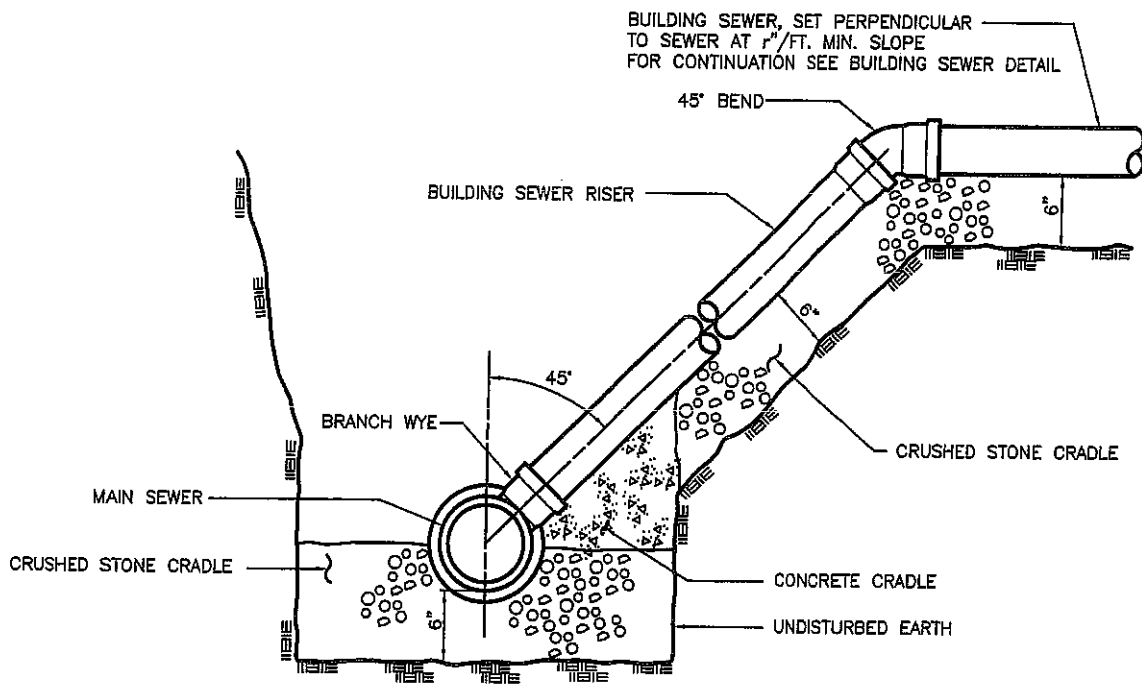
PRECAST CONCRETE MANHOLE

SNIEDZE ASSOCIATES, CONSULTING ENGINEERS
 CANANDAIGUA, NEW YORK

SCALE: 3/8" = 1'-0"

MAY 2007

SA-2



NOTE:
 INSTALL RISER IF REQUIRED
 DURING CONSTRUCTION OF
 MAIN SEWER.

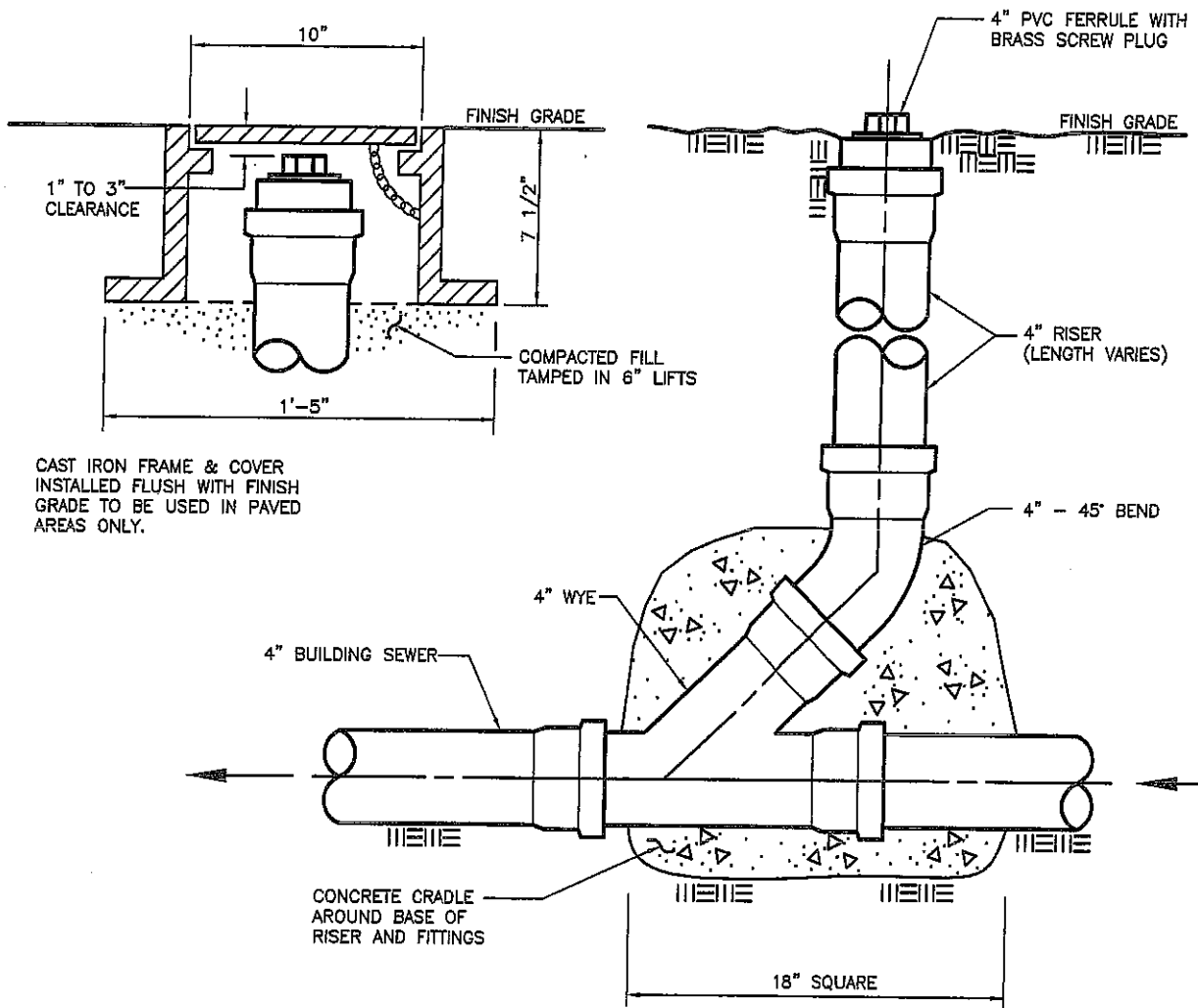
BUILDING SEWER RISER

SNIEDZE ASSOCIATES, CONSULTING ENGINEERS
 CANANDAIGUA, NEW YORK

SCALE: 3/4" = 1'-0"

MAY 2007

SA-5



CAST IRON FRAME & COVER
 INSTALLED FLUSH WITH FINISH
 GRADE TO BE USED IN PAVED
 AREAS ONLY.

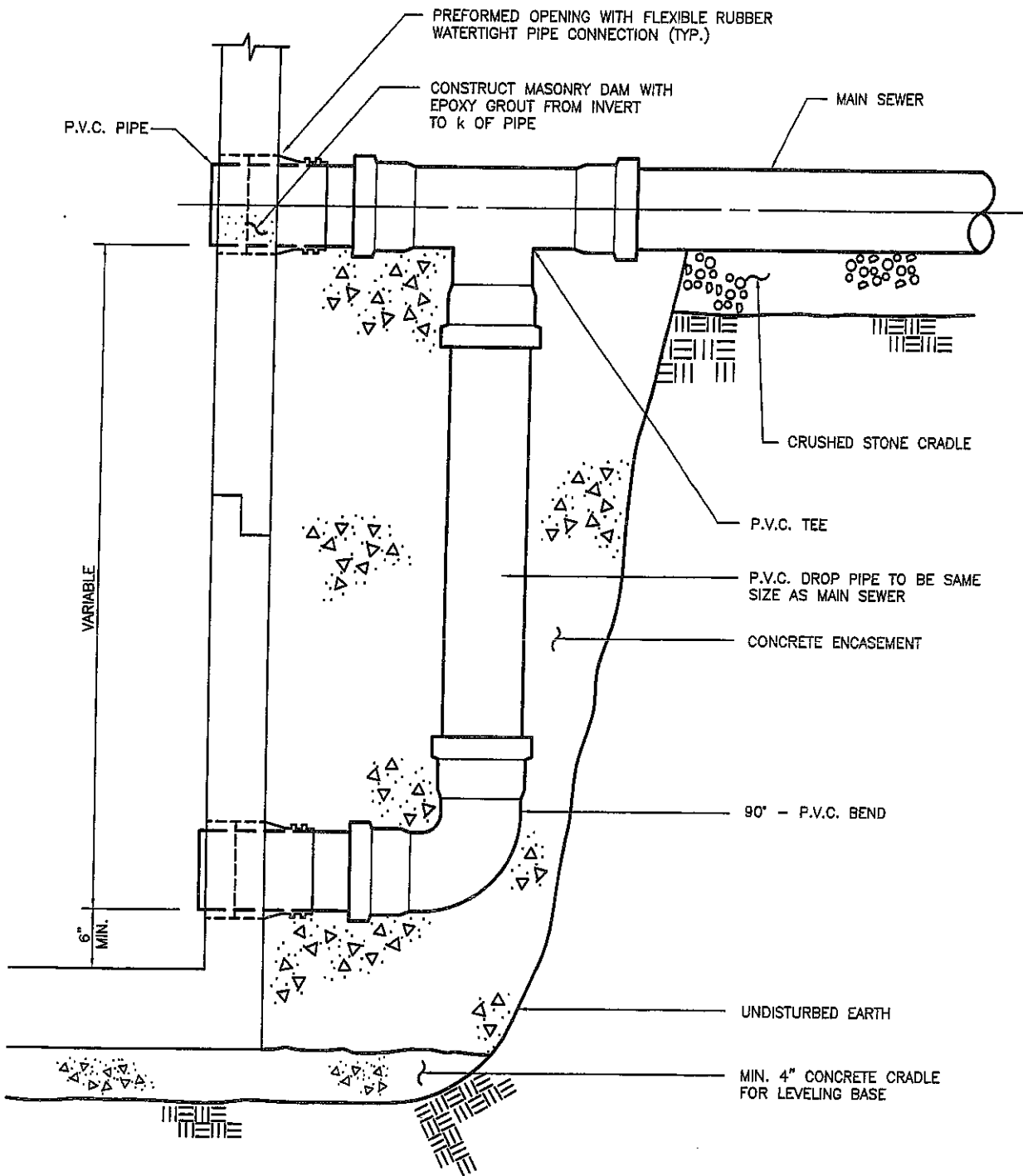
BUILDING SEWER CLEANOUT

SNIEDZE ASSOCIATES, CONSULTING ENGINEERS
 CANANDAIGUA, NEW YORK

SCALE: 1 1/2" = 1'-0"

MAY 2007

SA-6



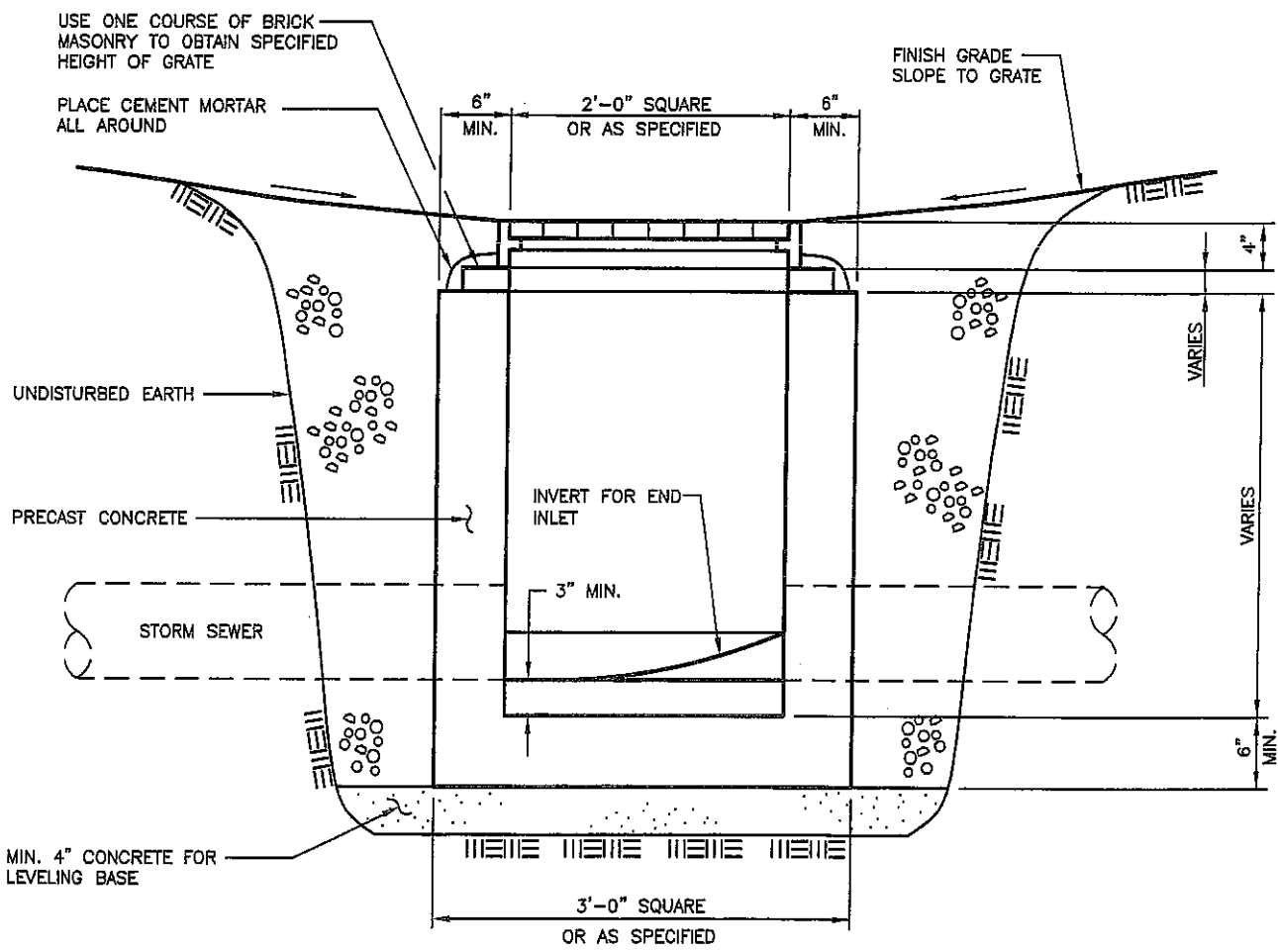
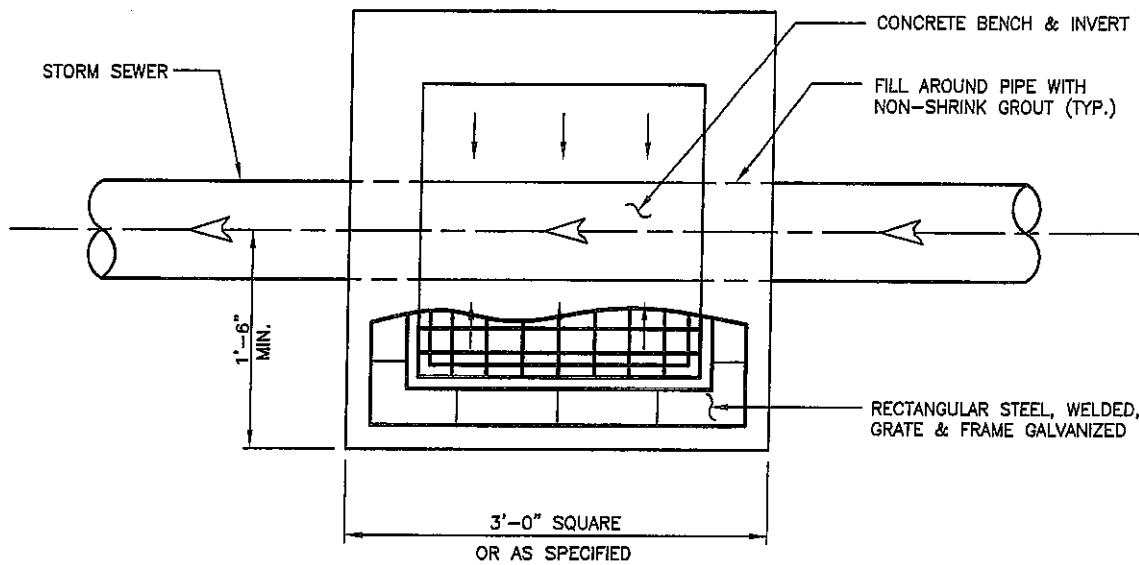
DROP CONNECTION

SNIEDZE ASSOCIATES, CONSULTING ENGINEERS
CANANDAIGUA, NEW YORK

SCALE: 3/4" = 1'-0"

MAY 2007

SA-7



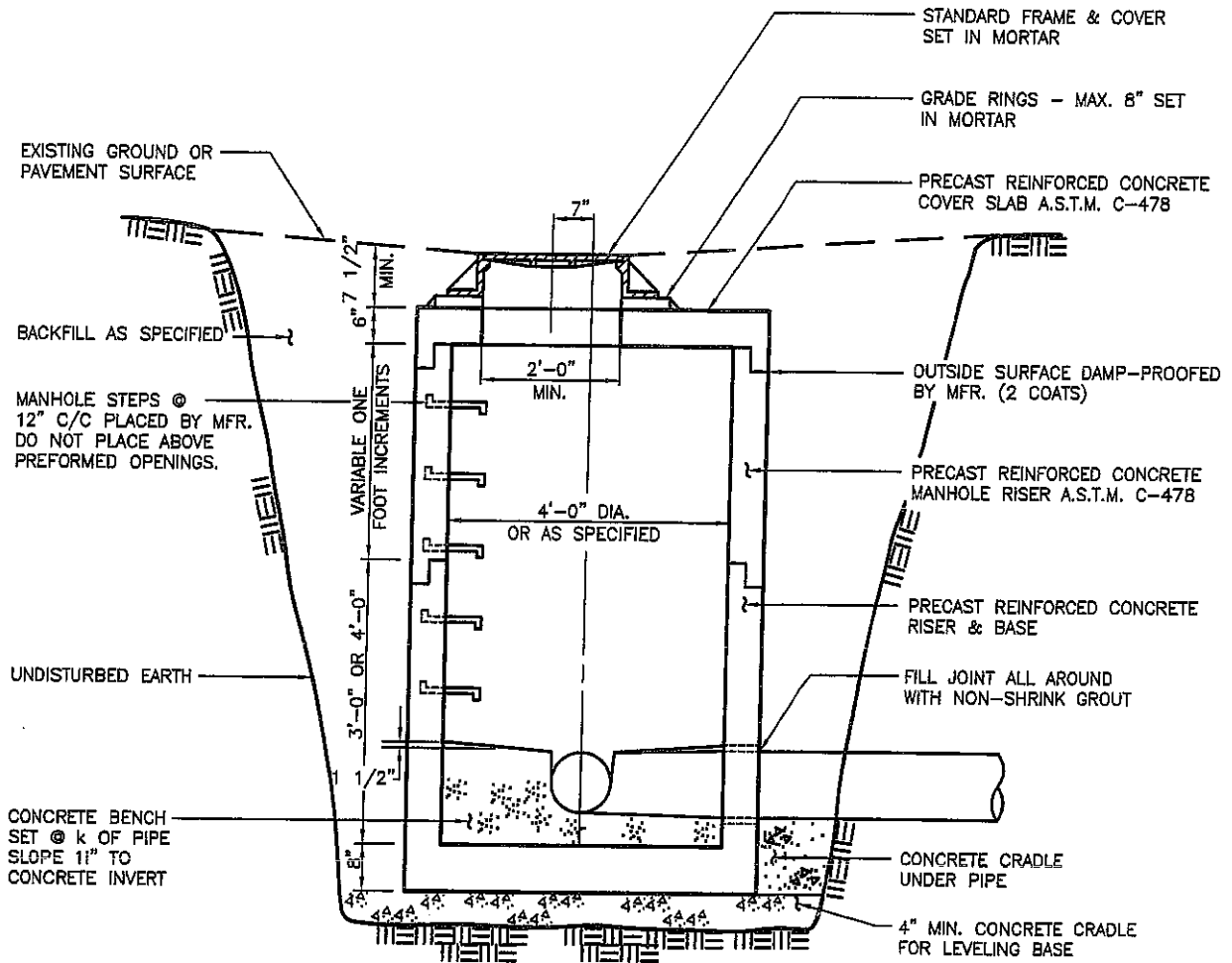
STORM DRAIN INLET PRECAST CONCRETE

SNIEDZE ASSOCIATES, CONSULTING ENGINEERS
CANANDAIGUA, NEW YORK

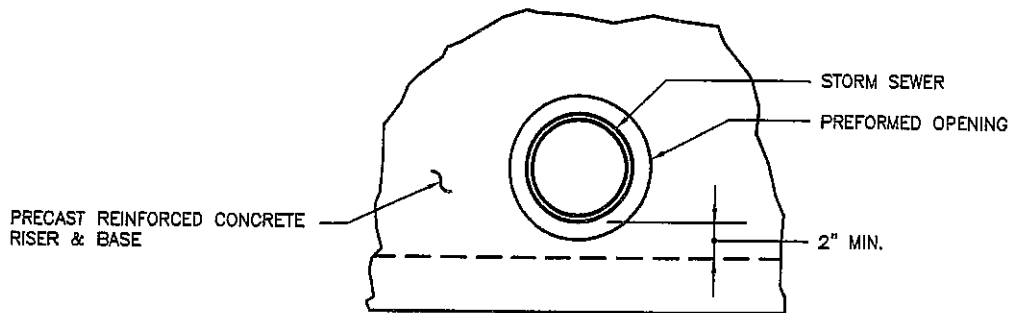
SCALE: 3/4" = 1'-0"

MAY 2007

ST-2



SECTION



PREFORMED OPENING DETAIL

STORM INLET MANHOLE

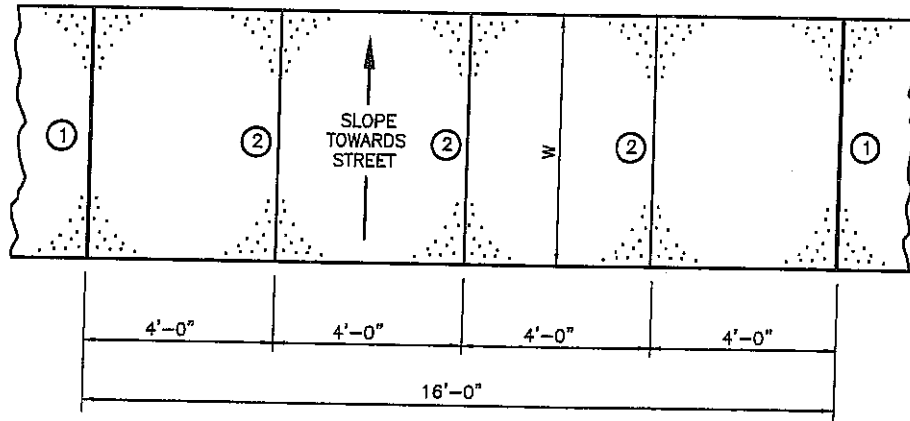
SNIEDZE ASSOCIATES, CONSULTING ENGINEERS
CANANDAIGUA, NEW YORK

SCALE: 3/8" = 1'-0"

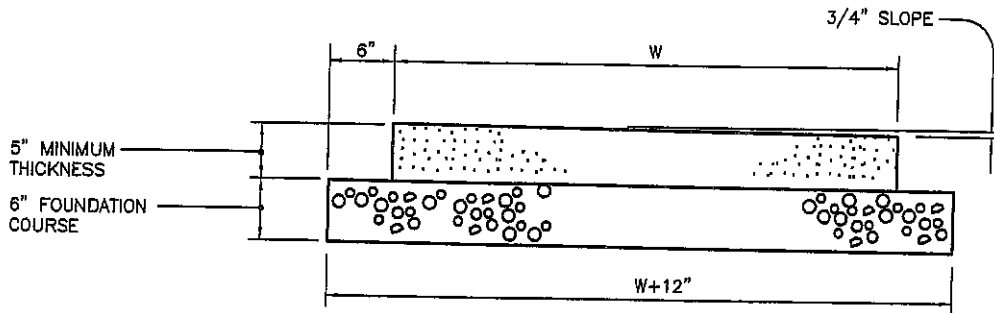
MAY 2007

ST-3

- ① EXPANSION JOINT WITH PREMOLDED RESILIENT JOINT FILLER
- ② CONTRACTION JOINT



PLAN



SECTION

NOTE:
 PROVIDE 6x6-8/8 WELDED WIRE FABRIC
 AT DRIVEWAYS TO EXTEND 4' EACH SIDE
 OF DRIVEWAY.

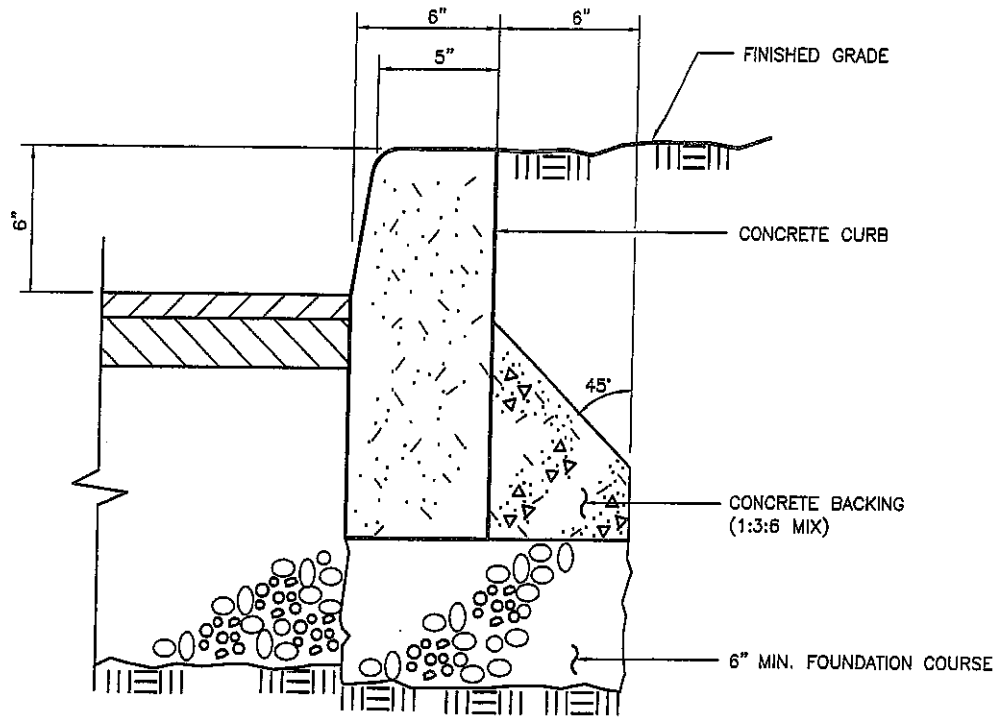
CONCRETE SIDEWALK

SNIEDZE ASSOCIATES, CONSULTING ENGINEERS
 CANANDAIGUA, NEW YORK

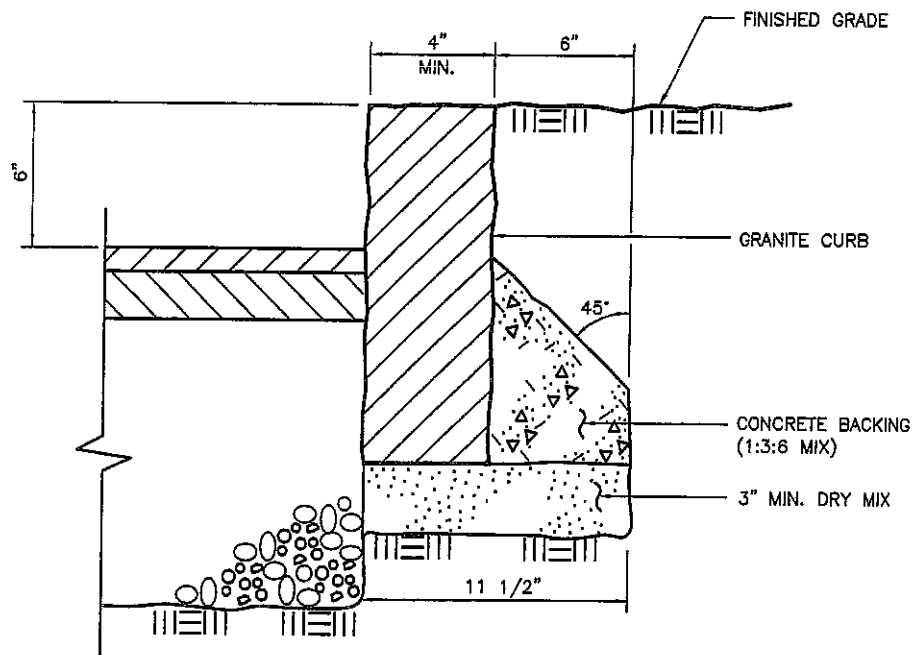
NOT TO SCALE

MAY 2007

RS-1



CONCRETE CURB



GRANITE CURB

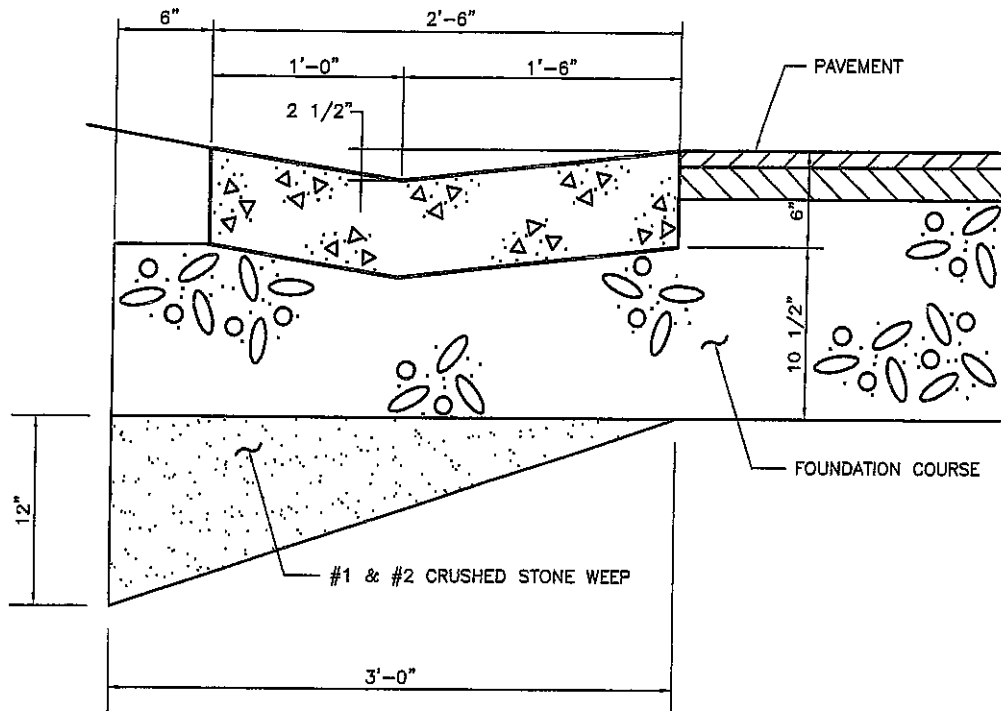
CONCRETE CURB AND GRANITE CURB

SNIEDZE ASSOCIATES, CONSULTING ENGINEERS
CANANDAIGUA, NEW YORK

SCALE: 1 1/2" = 1'-0"

MAY 2007

RS-3



NOTES:

1. CRUSHED STONE WEEPS SHALL BE PROVIDED UNDER ALL CONCRETE GUTTERS.
2. 6' LONG SECTION OF 4" PERFORATED PVC DRAIN PIPE WITH END CAP SHALL EXTEND FROM EACH CATCH BASIN INTO WEEP.

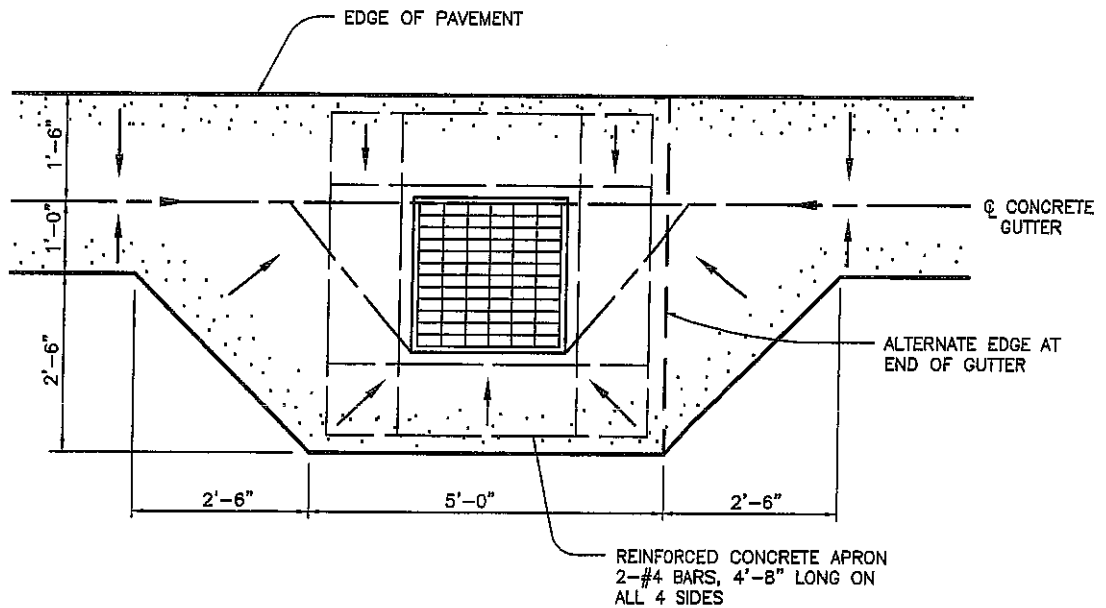
**CONCRETE GUTTER
WITH WEEP**

**SNIEDZE ASSOCIATES, CONSULTING ENGINEERS
CANANDAIGUA, NEW YORK**

SCALE: 1" = 1'-0"

MAY 2007

RS-4R



NOTE:

CONCRETE APRONS SHALL
BE 6 INCHES THICK

GUTTER INLET

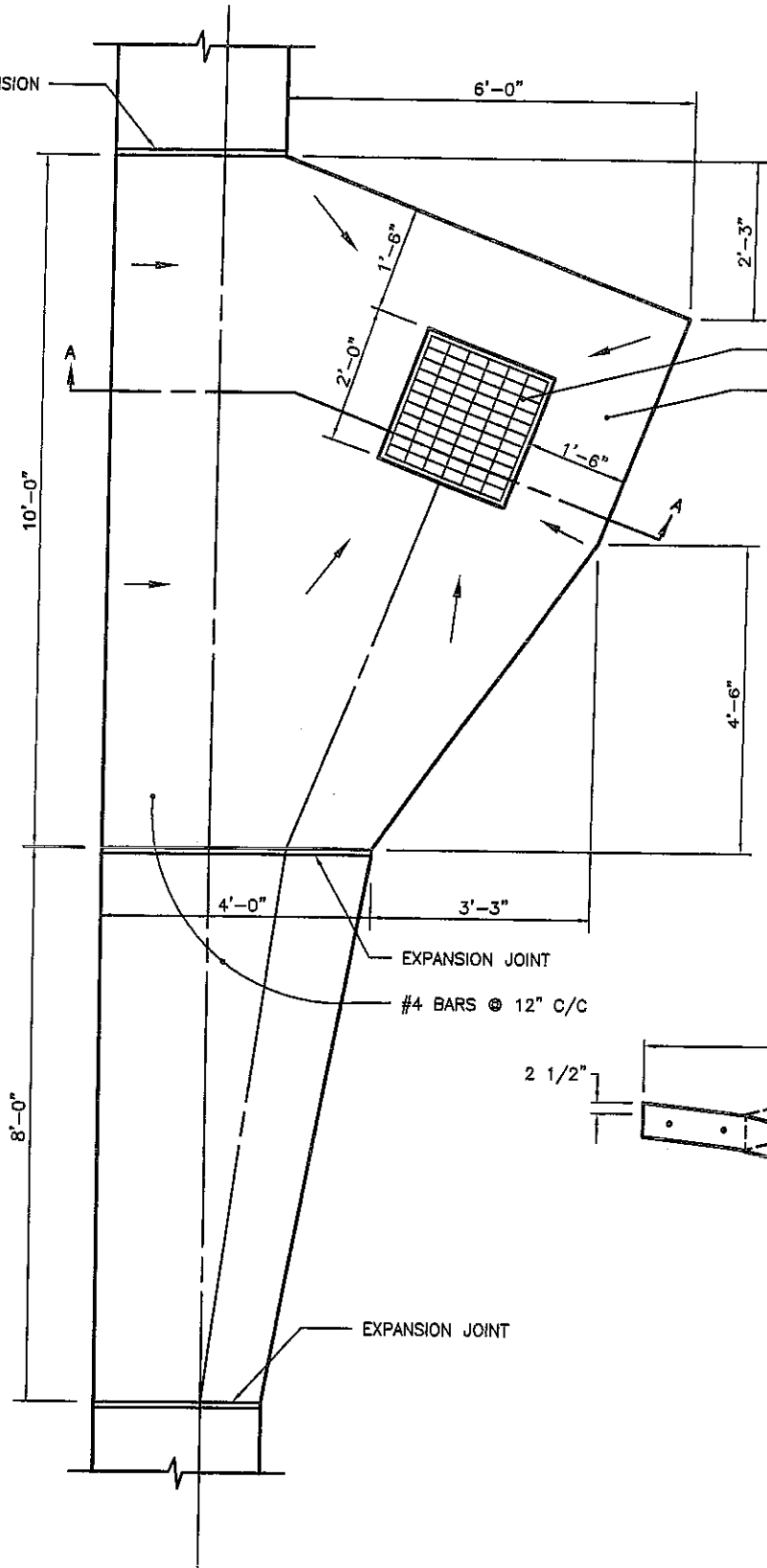
SNIEDZE ASSOCIATES, CONSULTING ENGINEERS
CANANDAIGUA, NEW YORK

SCALE: 3/8" = 1'-0"

MAY 2007

RS-5

EXPANSION JOINT



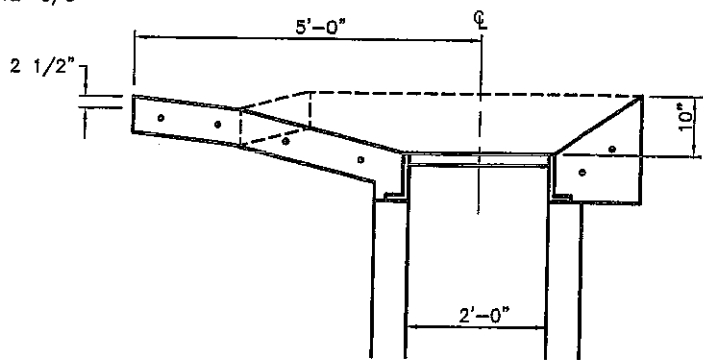
INLET FRAME AND GRATE

REINFORCED CONCRETE APRON
2-#4 BARS, 4'-8" LONG
ON ALL 4 SIDES

NOTES:

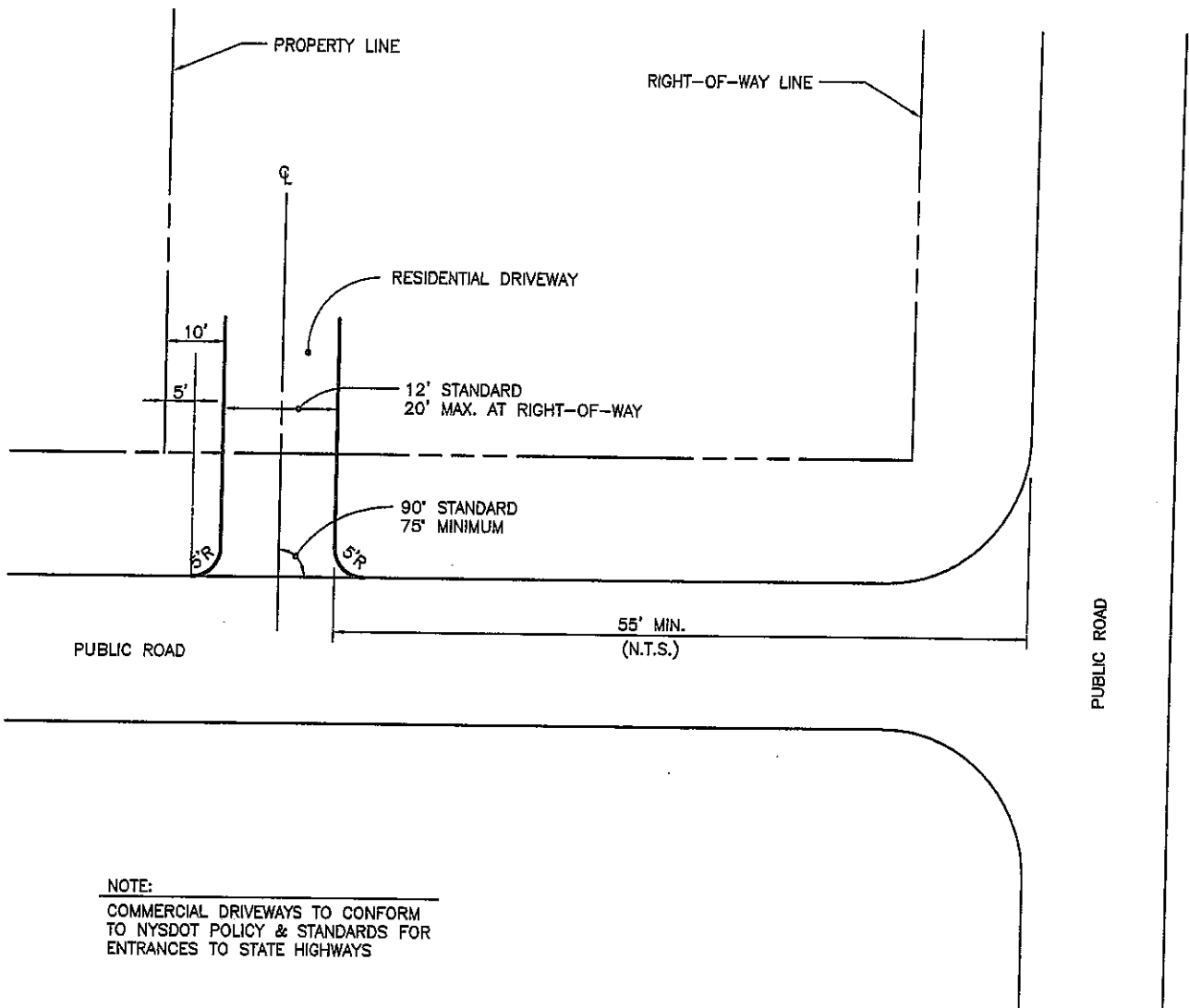
USE SPECIAL INLET ON
SLOPES OF 6% OR GREATER

CONCRETE APRONS TO BE
6" MIN. THICK



SECTION A-A

<h2>SPECIAL GUTTER INLET</h2>		
SNIEDZE ASSOCIATES, CONSULTING ENGINEERS CANANDAIGUA, NEW YORK		
SCALE: 3/8" = 1'-0"	MAY 2007	RS-6



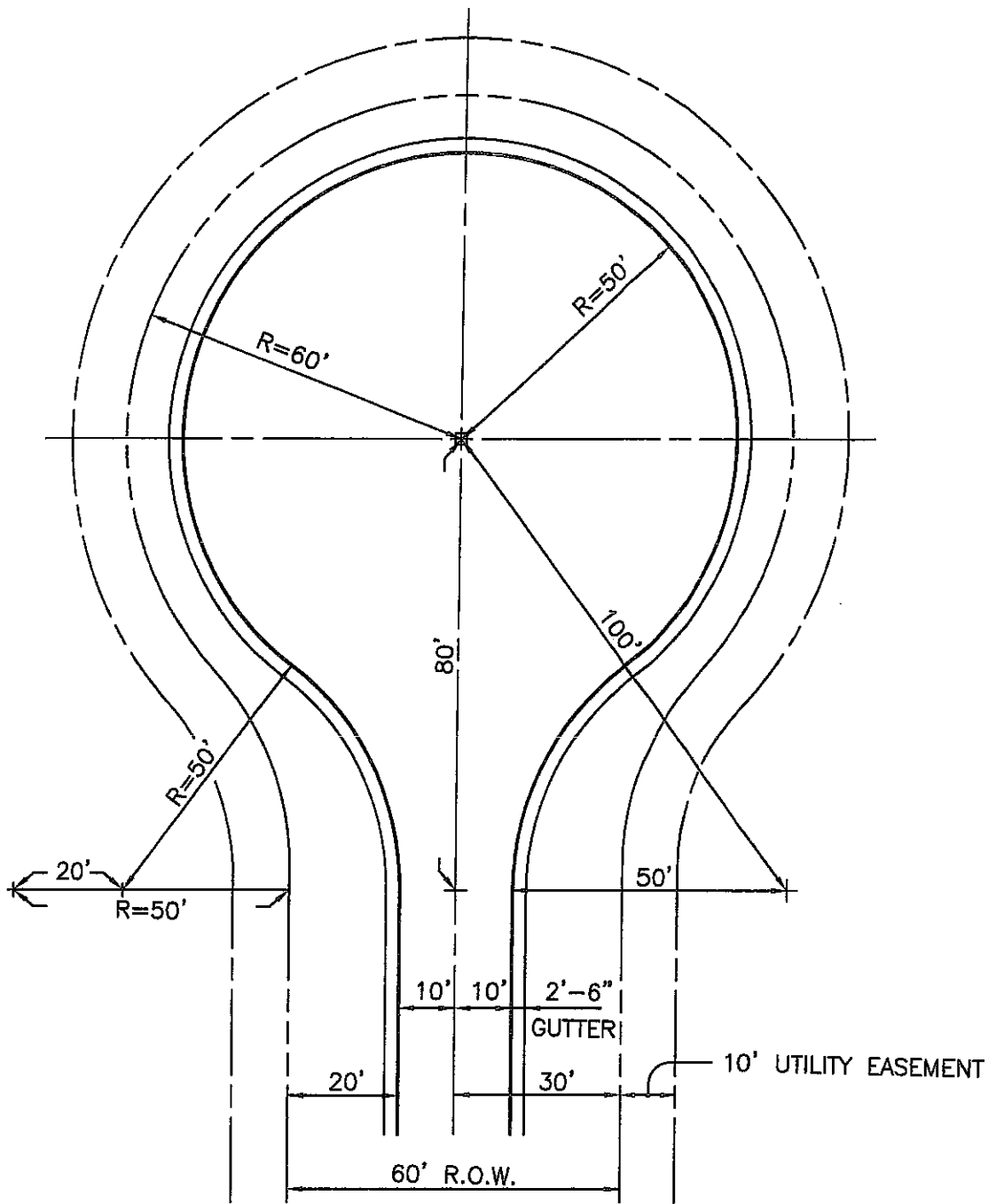
DRIVEWAY DETAILS

SNIEDZE ASSOCIATES, CONSULTING ENGINEERS
CANANDAIGUA, NEW YORK

SCALE: 1" = 30'

MAY 2007

RS-7



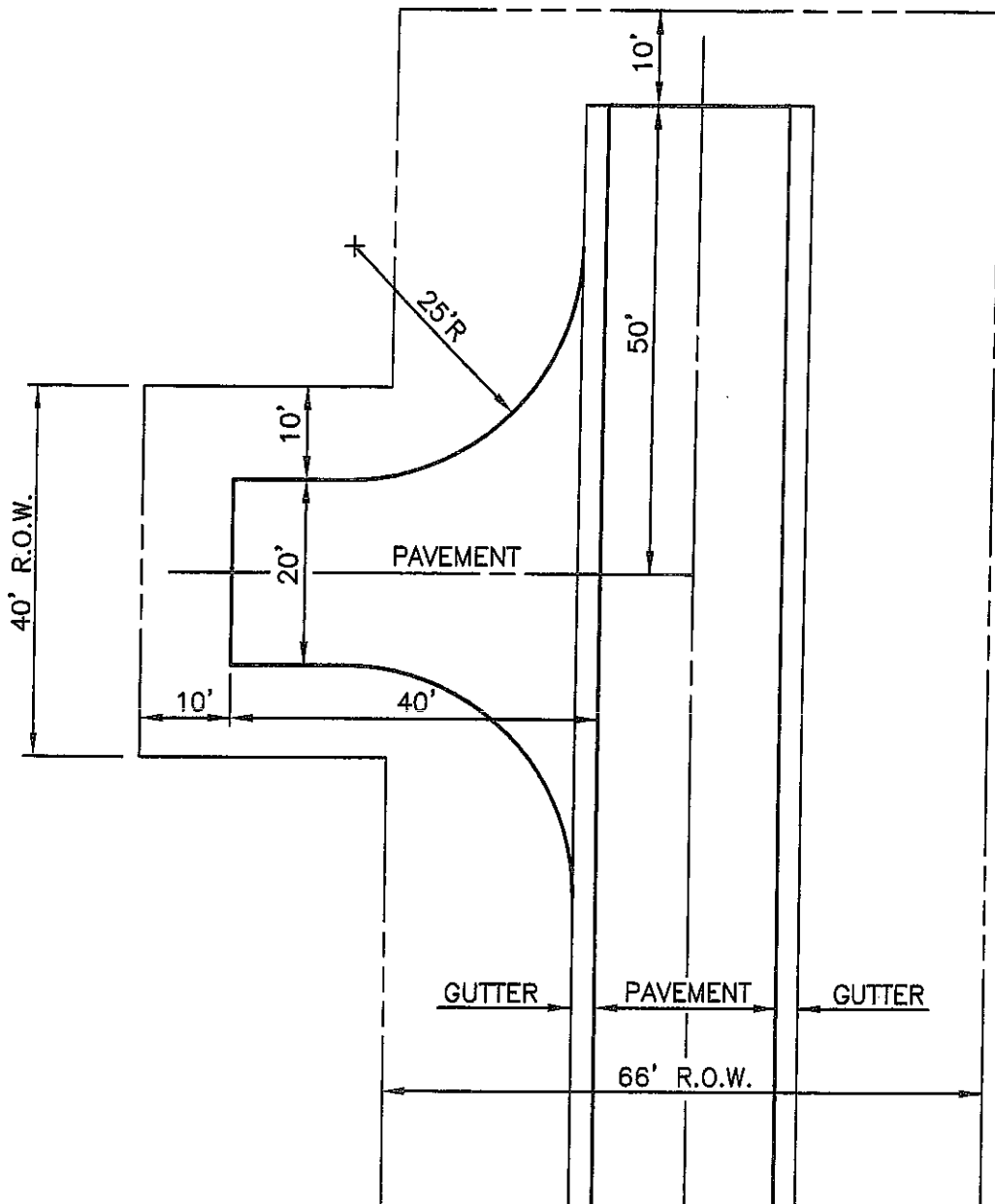
STANDARD TURNAROUND

SNIEDZE ASSOCIATES, CONSULTING ENGINEERS
 CANANDAIGUA, NEW YORK

SCALE: 1" = 30'

MAY 2007

RS-8



NOTE:

FOUNDATION COURSE - 12" MINIMUM COMPACTED THICKNESS
 PAVEMENT - 3" MINIMUM THICKNESS ASPHALT CONCRETE

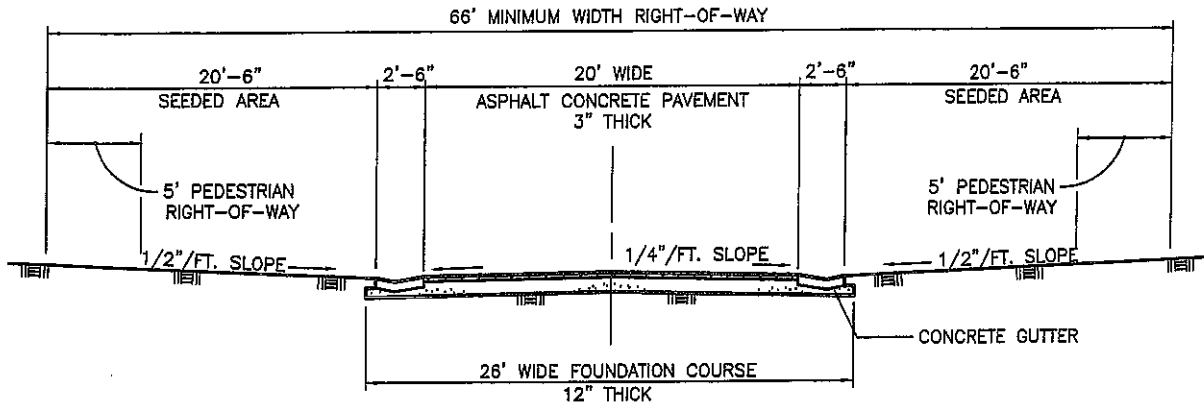
TEMPORARY TURNAROUND

SNIEDZE ASSOCIATES, CONSULTING ENGINEERS
 CANANDAIGUA, NEW YORK

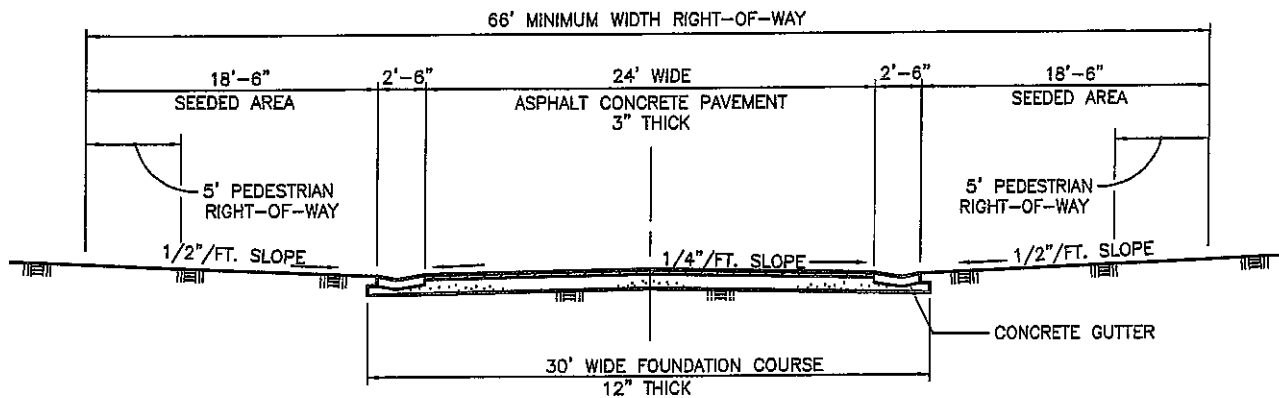
SCALE: 1" = 20'

MAY 2007

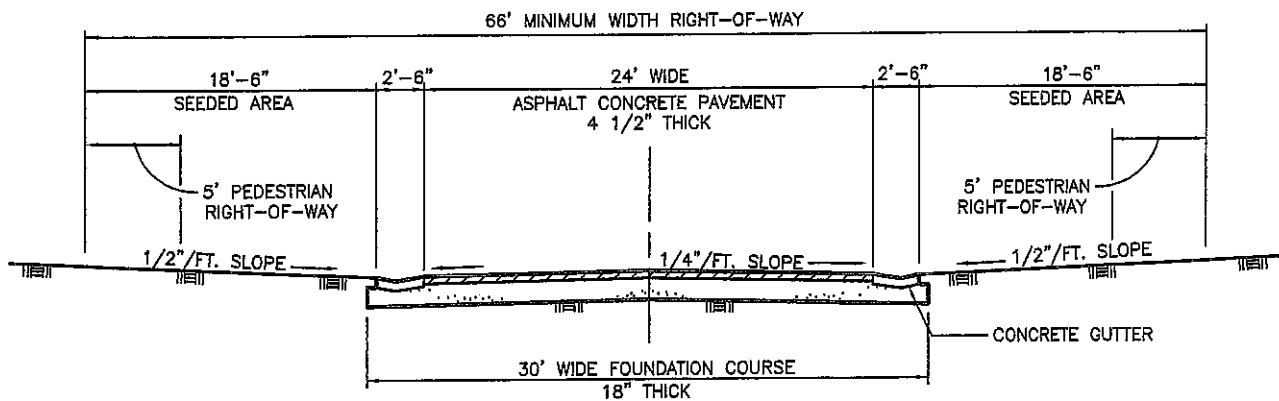
RS-9



LOCAL RESIDENTIAL STREET



COLLECTOR STREET



PRIMARY OR MAJOR THOROUGHFARE
(INCLUDING ALL STREETS SERVING COMMERCIAL AND INDUSTRIAL SUBDIVISIONS)

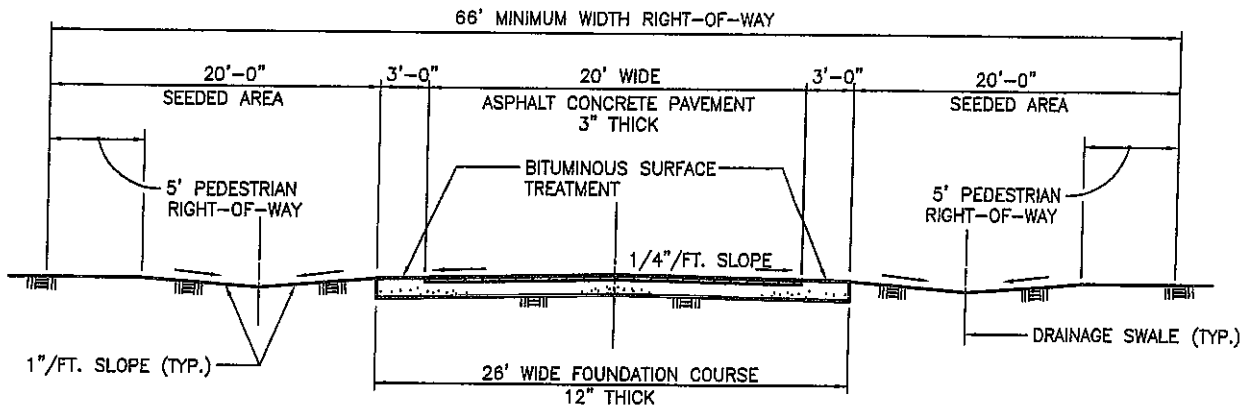
TYPICAL ROAD SECTIONS ALTERNATE A

SNIEDZE ASSOCIATES, CONSULTING ENGINEERS
CANANDAIGUA, NEW YORK

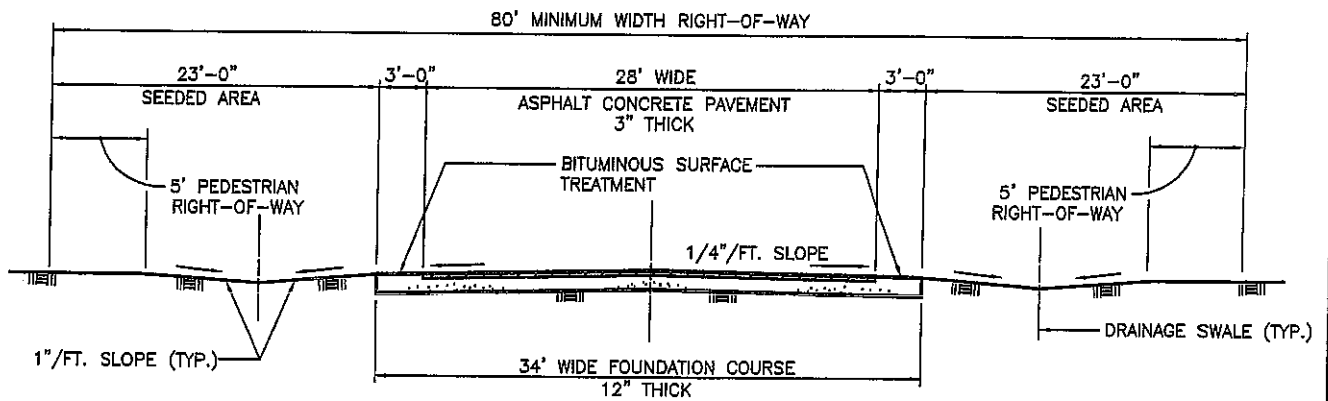
NOT TO SCALE

MAY 2007

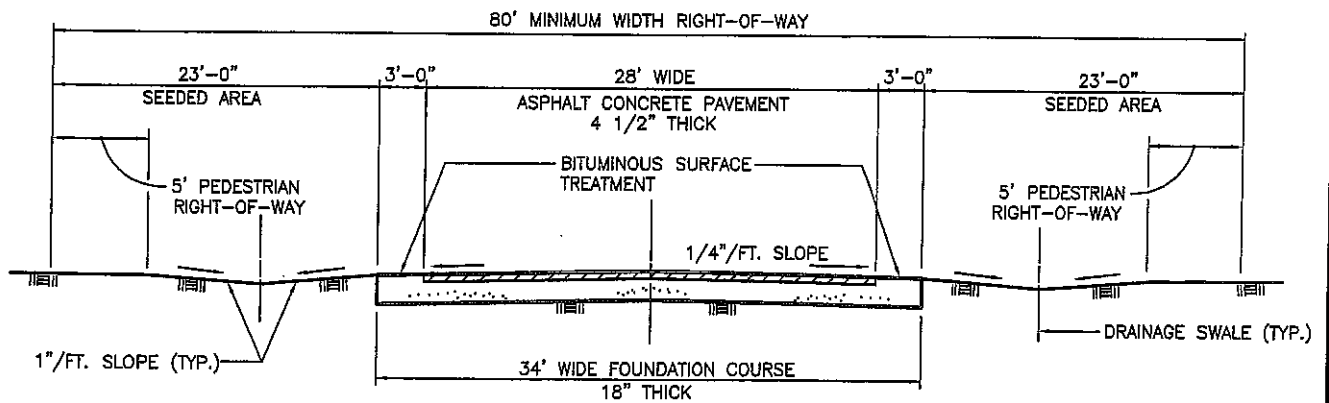
RS-10



LOCAL RESIDENTIAL STREET



COLLECTOR STREET



PRIMARY OR MAJOR THOROUGHFARE
(INCLUDING ALL STREETS SERVING COMMERCIAL AND INDUSTRIAL SUBDIVISIONS)

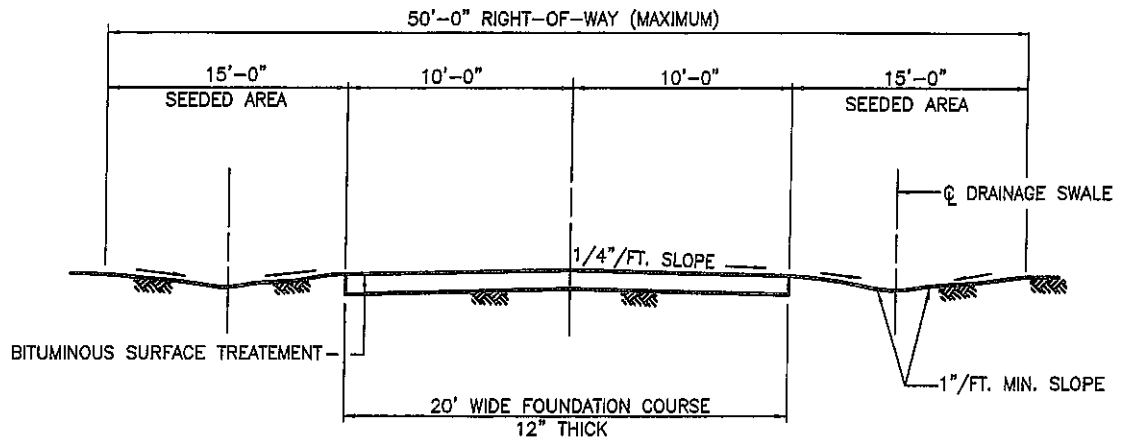
TYPICAL ROAD SECTIONS ALTERNATE B

SNIEDZE ASSOCIATES, CONSULTING ENGINEERS
CANANDAIGUA, NEW YORK

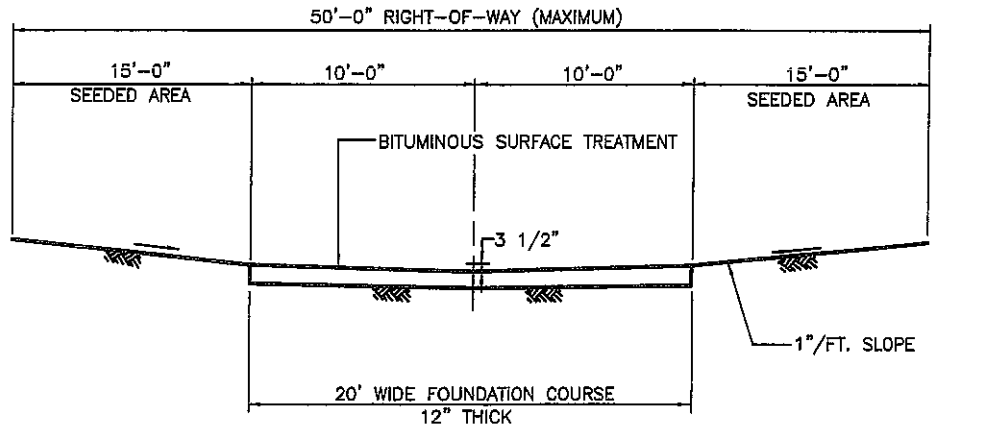
NOT TO SCALE

MAY 2007

RS-11



CROWNED ROADWAY



200' MAX. BETWEEN DROP INLETS

DEPRESSED ROADWAY

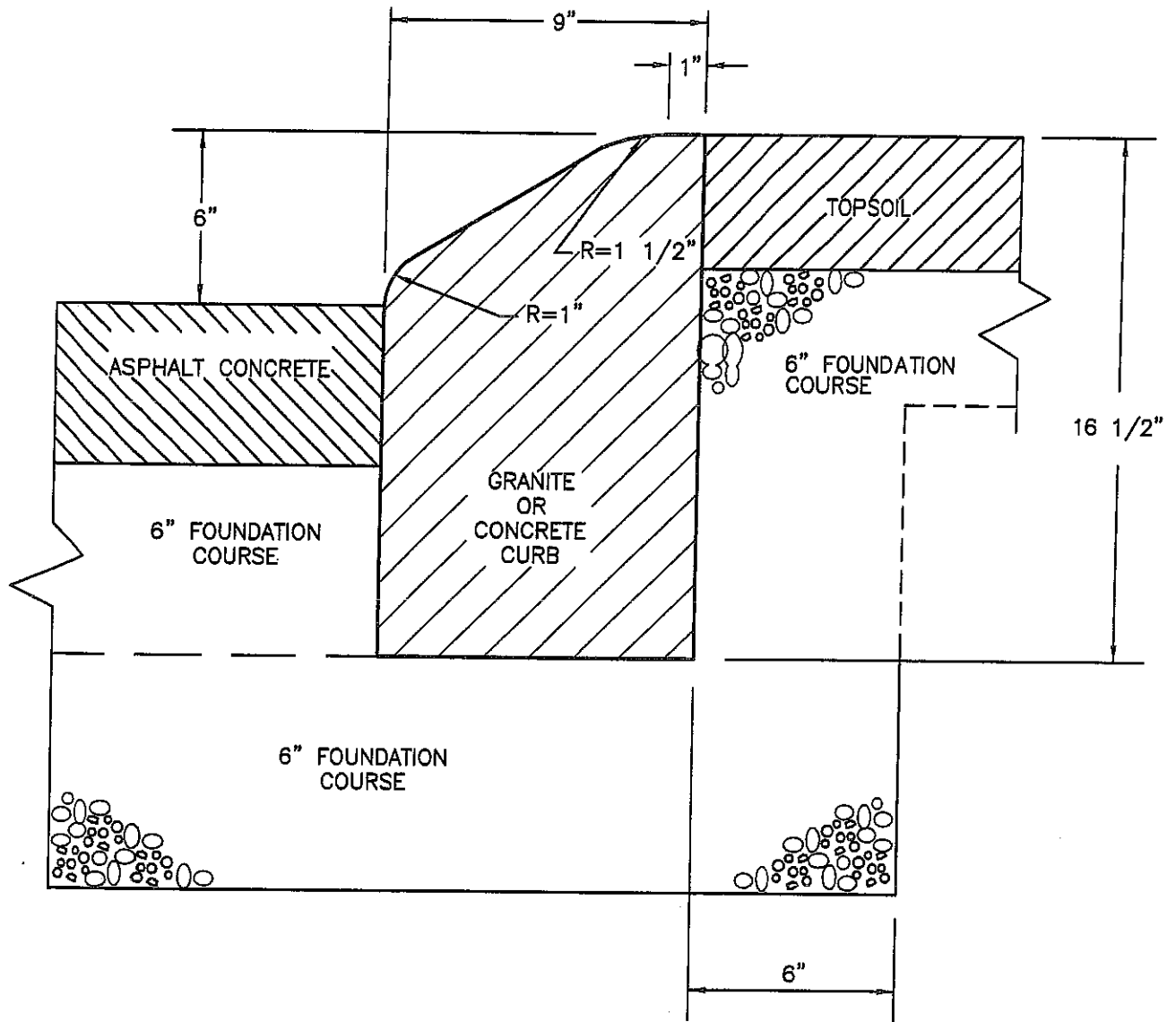
PRIVATE ROAD DETAILS

SNIEDZE ASSOCIATES, CONSULTING ENGINEERS
CANANDAIGUA, NEW YORK

NOT TO SCALE

MAY 2007

RS-12



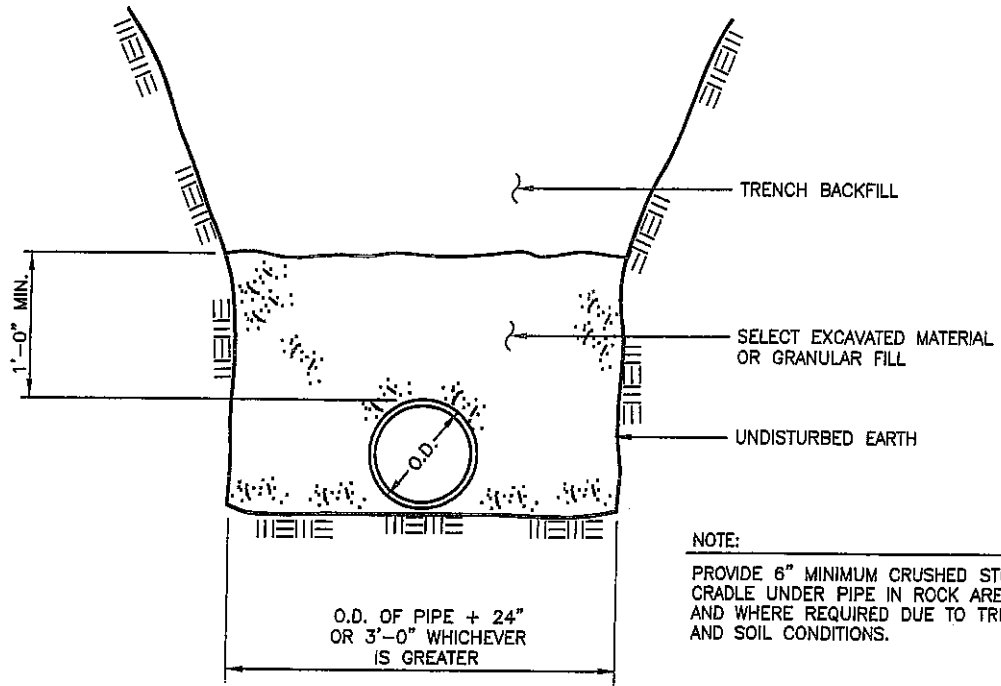
MOUNTABLE CURB

SNIEDZE ASSOCIATES, CONSULTING ENGINEERS
 CANANDAIGUA, NEW YORK

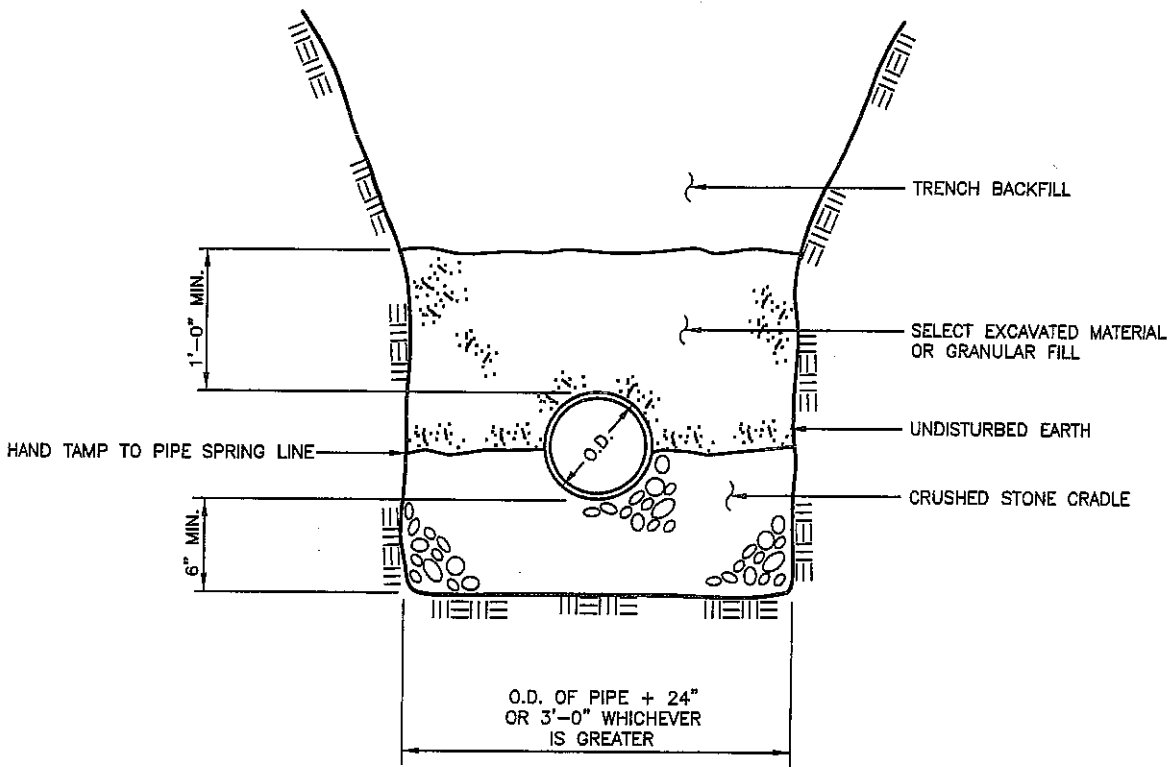
N.T.S.

MAY 2007

RS-14



STORM SEWERS & D.I.P. WATER MAIN



PVC WATER MAIN & SANITARY SEWERS

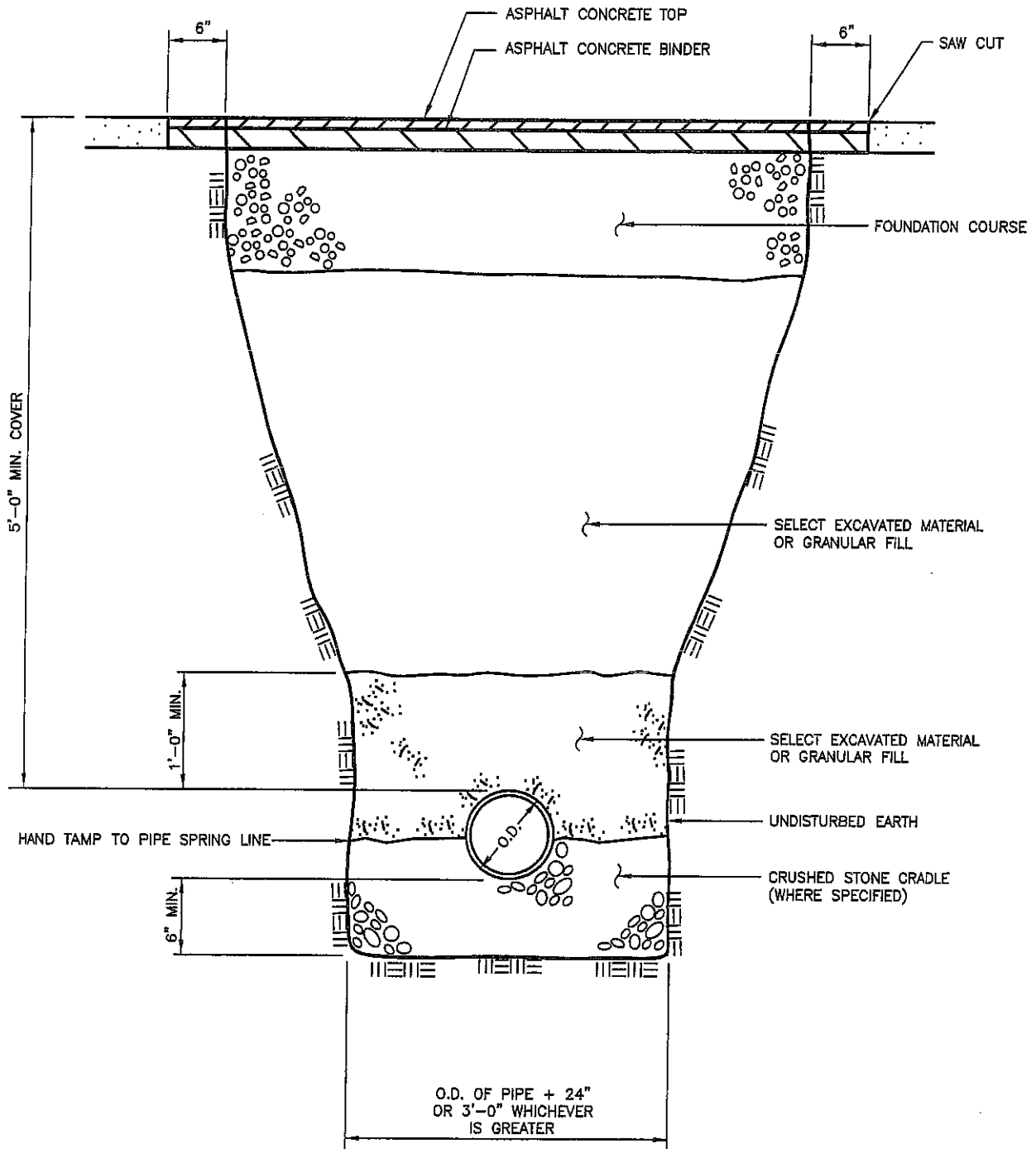
PIPE BEDDING DETAILS

SNIEDZE ASSOCIATES, CONSULTING ENGINEERS
CANANDAIGUA, NEW YORK

SCALE: 3/4" = 1'-0"

MAY 2007

TR-1



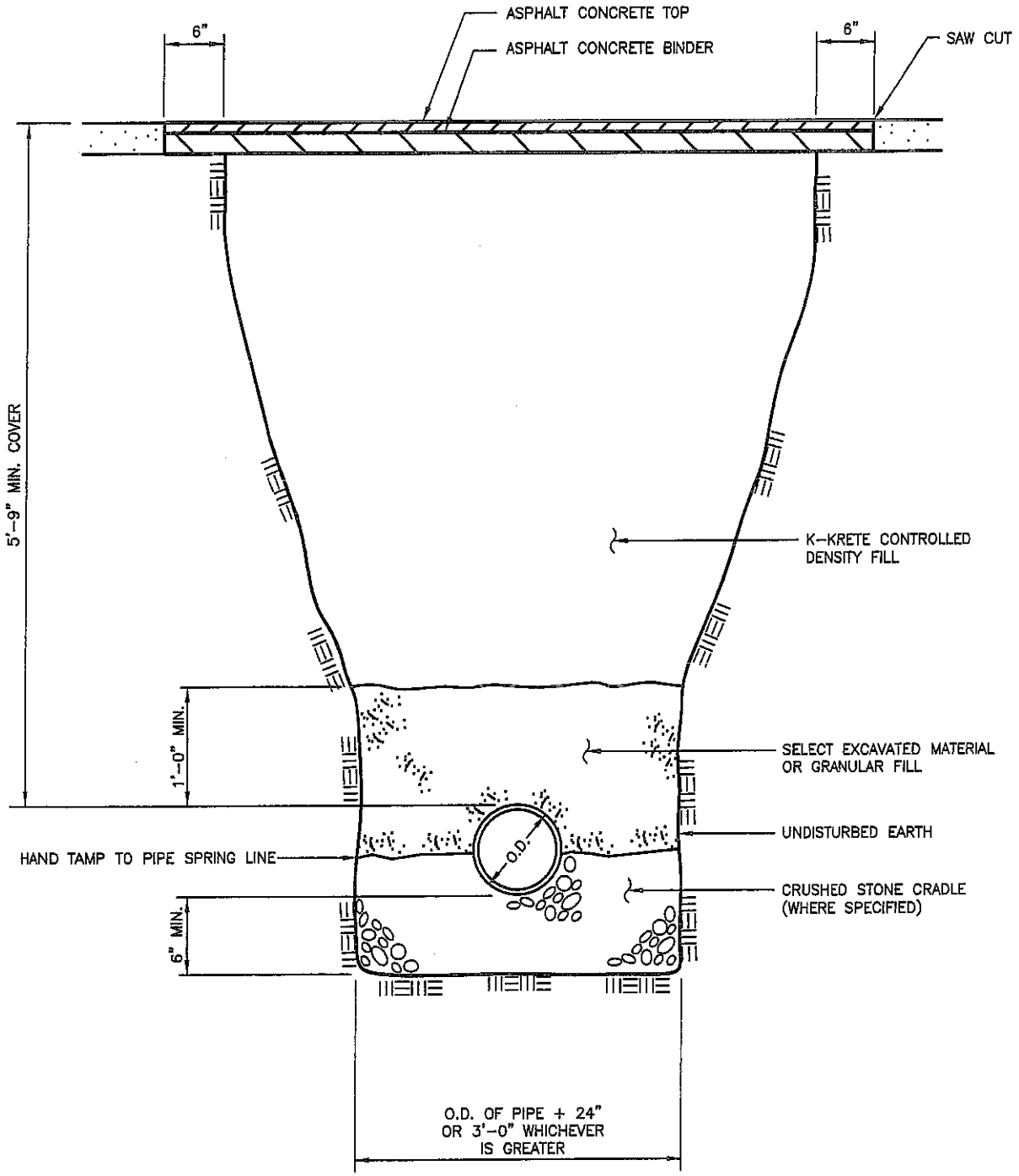
TYPICAL TRENCH SECTION PAVEMENT AREAS

SNIEDZE ASSOCIATES, CONSULTING ENGINEERS
CANANDAIGUA, NEW YORK

SCALE: 3/4" = 1'-0"

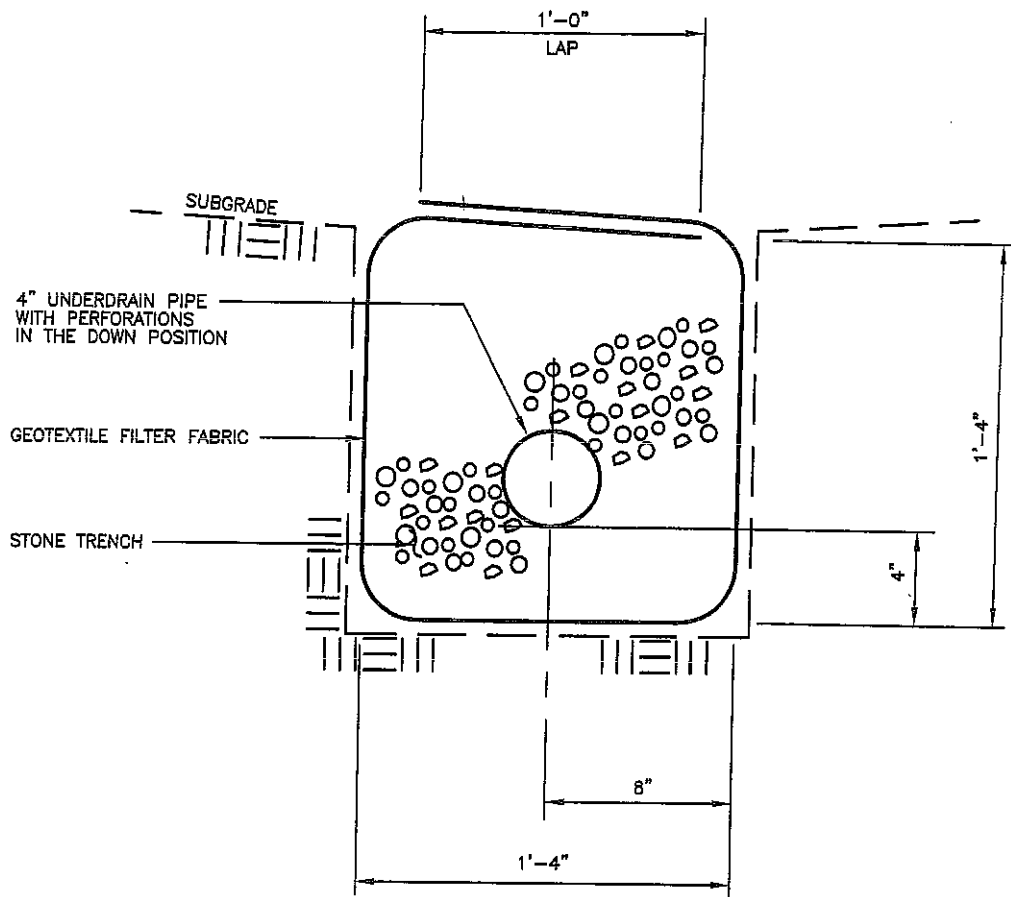
MAY 2007

TR-2



NOTE: OPEN CUTTING OF TOWN ROADS IS NOT ALLOWED UNLESS AN EXCEPTION IS GRANTED BY THE TOWN HIGHWAY SUPERINTENDENT

<h2 style="margin: 0;">TYPICAL TRENCH SECTION</h2> <h2 style="margin: 0;">TOWN ROAD CROSSINGS</h2>		
<p style="margin: 0;">SNIEDZE ASSOCIATES, CONSULTING ENGINEERS CANANDAIGUA, NEW YORK</p>		
<p style="margin: 0;">SCALE: 3/4" = 1'-0"</p>	<p style="margin: 0;">MAY 2007</p>	<p style="margin: 0;">TR-3</p>



UNDERDRAIN

SNIEDZE ASSOCIATES, CONSULTING ENGINEERS
CANANDAIGUA, NEW YORK

SCALE: 1 1/2" = 1'-0"

MAY 2007

TR-5

SECTION 5. ACCESS MANAGEMENT