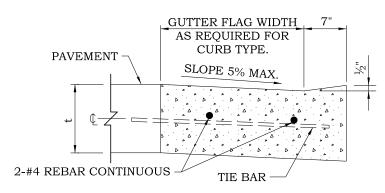
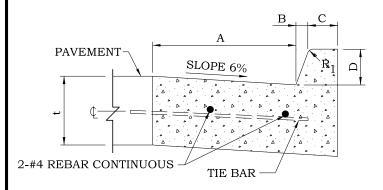


DEPRESSED CURB (TYPICAL)



DEPRESSED CURB ADJACENT TO CURB RAMP ACCESSIBLE TO THE DISABLED



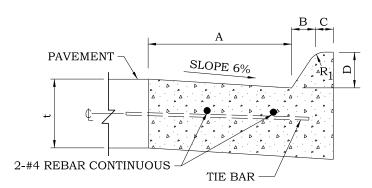
BARRIER CURB

TABLE OF DIMENSIONS BARRIER CURB (INCHES)					
TYPE	A	В	С	D	R ₁
B-6.06 *	6	1	6	6	1
B-6.12	12	1	6	6	1
B-6.18	18	1	6	6	1
B-6.24	24	1	6	6	1
B-9.12	12	2	5	9	1
B-9.18	18	2	5	9	1
B-9.24	24	2	5	9	1

 $[\]ast$ For corner islands only.

NOTES:

1. SEE DETAIL DRN-3 FOR NOTES.



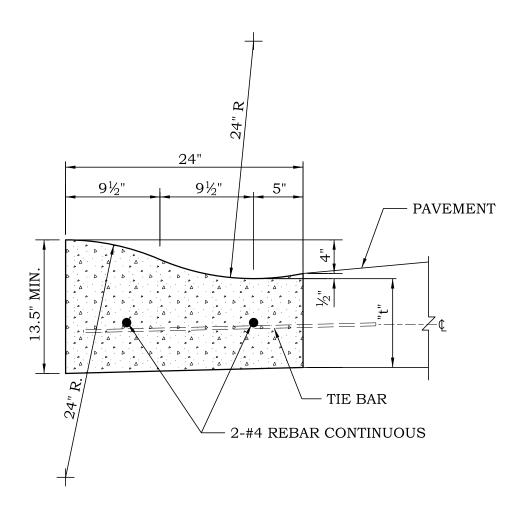
MOUNTABLE CURB

TABLE OF DIMENSIONS MOUNTABLE CURB (INCHES)						
TYPE	A	В	С	D	R ₁	R ₂
M-2.06	6	2	4	2	3	2
M-2.12	12	2	4	2	3	2
M-4.06	6	4	3	4	3	NA
M-4.12	12	4	3	4	3	NA
M-4.18	18	4	3	4	3	NA
M-4.24	24	4	3	4	3	NA
M-6.06	6	6	2	6	2	NA
M-6.12	12	6	2	6	2	NA
M-6.18	18	6	2	6	2	NA
M-6.24	24	6	2	6	2	NA

VILLAGE OF HUNTLEY 10987 MAIN STREET HUNTLEY, IL 60142 (847) 515-5200

COMBINATION CONCRETE CURB AND GUTTER

SCALE:	DRAWN/CHECKED	DRAWING NUMBER
NTS	CBBEL/TPF	DD11.4
DATE:	REVISED:	DRN-1
1/1/2016	1/1/2016	



1. SEE DETAIL DRN-3 FOR NOTES.



MODIFIED ROLL CURB

SCALE:	DRAWN/CHECKED	DRAWING NUMBER
NTS	CBBEL/TPF	
DATE:	REVISED:	DRN-2
1/1/2016	1/1/2016	

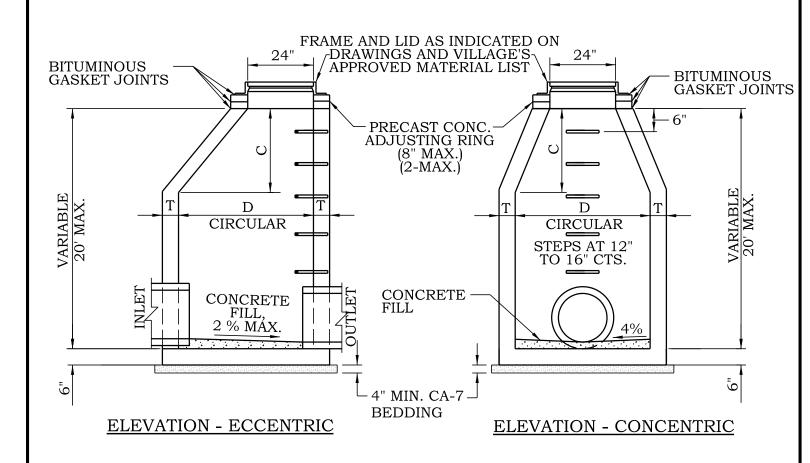
- 1. <u>THICKNESS</u> T THICKNESS OF PAVEMENT. WHEN CURB AND GUTTER IS CONSTRUCTED ADJACENT TO FLEXIBLE PAVEMENT, THE VERTICAL THICKNESS OF THE GUTTER FLAG SHALL MATCH THE EXISTING PAVEMENT THICKNESS, OR BE MINIMUM 9".
- 2. DRAINAGE OPENINGS AT ALL LOCATIONS WHERE METAL CASTINGS ARE INCORPORATED IN THE CURB AND GUTTER, A 1" THICK PREFORMED JOINT FILLER, CONFORMING TO THE CROSS SECTIONS OF THE CURB AND GUTTER SHALL BE INSTALLED A DISTANCE OF 5 FT. FROM EACH SIDE OF THE METAL CASTING.

 WHEN THE WIDTH OF THE METAL CASTING IS LESS THAN THE WIDTH OF THE CURB AND GUTTER, 2 NO. 4 EPOXY COATED REBARS (L = 12" + CASTING LENGTH + 12") SHALL BE INCORPORATED IN THE CONTINUOUS PORTION OF THE CONCRETE CURB AND GUTTER.
- 3. <u>JOINTS</u> IN ADDITION TO THE REQUIREMENTS OF ARTICLE 606 OF THE STANDARD SPECIFICATIONS, JOINTS SHALL BE CONSTRUCTED AS FOLLOWS.
 - A. CONTRACTION JOINTS AND EXPANSION JOINTS SHALL BE INSTALLED IN THE CURB AND GUTTER IN PROLONGATION WITH JOINTS OF ADJACENT P.C.C. PAVEMENT OR BASE COURSE.
 - B. WHEN CURB AND GUTTER IS CONSTRUCTED ADJACENT TO FLEXIBLE PAVEMENT, A 1" THICK PREFORMED JOINT FILLER, CONFORMING TO THE CROSS SECTIONS OF THE CURB AND GUTTER SHALL BE INSTALLED AT POINTS OF CURVATURE FOR SHORT RADIUS CURVES.
 - C. ALL EXPANSION JOINTS SHALL BE PROVIDED WITH TWO 1 1/4" DIA. X 18" COATED SMOOTH DOWEL BAR CONFORMING TO ARTICLE 1006.11B OF THE STANDARD SPECIFICATIONS. THE DOWEL BAR SHALL BE FITTED WITH A CAP HAVING A PINCHED STOP THAT WILL PROVIDE 1" OF EXPANSION.
 - D. CONSTRUCTION JOINT SPACING 12' MAX.
 - E. EXPANSION JOINT SPACING 84' MAX.
- 4. <u>REINFORCEMENT</u> ALL CURB AND GUTTER SHALL CONTAIN 2-#4 REBAR CONTINUOUS THROUGHOUT. <u>RIGID PAVEMENT ONLY</u>: #6 TIE BARS SHALL BE PLACED AT 24" CENTERS. TIE BAR MINIMUM CLEARANCE FROM BACK OF CURB SHALL BE 2".
- 5. AN IDOT APPROVED CURING COMPOUND MUST BE PLACED ON THE FINISHED CONCRETE PER IDOT STANDARD SPECIFICATIONS 1020.13 AND 1022.01 (IDOT APPROVED PAILS OR DRUMS SHALL BE INSPECTED/WITNESSED BY THE VILLAGE OF HUNTLEY OR VILLAGE REPRESENTATIVE). NON IDOT APPROVED CURING/SEALING PRODUCTS WILL BE PROHIBITED.
- 6. ALL CURB/GUTTER SHALL BE INSTALLED ON A MINIMUM 4" COMPACTED CA-6 SUBBASE THAT SHALL EXTEND A MINIMUM OF 6" FROM THE BACK OF CURB UNLESS OTHERWISE INDICATED.
- 7. CURB SHALL BE STAMPED WITH A "W" INDICATING THE LOCATION OF WATER SERVICES AND STAMPED WITH A "S" INDICATING THE LOCATION OF SANITARY SEWER SERVICES.
- 8. ALL WORK AND MATERIAL SHALL CONFORM TO IDOT STANDARD SPECIFICATION ART 606 UNLESS OTHERWISE SPECIFIED.



CONCRETE CURB AND GUTTER NOTES

SCALE:	DRAWN/CHECKED	DRAWING NUMBER
NTS	CBBEL/TPF	D D M 0
DATE:	REVISED:	DRN-3
1/1/2016	1/1/2016	



MATERIALS FOR WALLS	D	C*	T (min.)
PRECAST REINFORCED CONCRETE SECTION	4'-0'' 5'-0'' 6'-0"	2'-6" 3'-9'' 5'-0"	4" 5" 6"

* DIMENSION "C" MAY VARY FROM THE DIMENSION GIVEN TO PLUS 6".

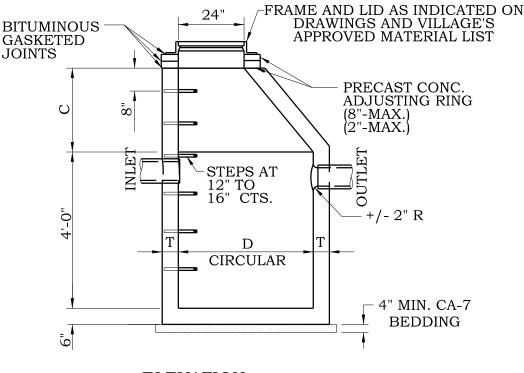
NOTES

- 1. USE ECCENTRIC CONES UNLESS OTHERWISE INDICATED ON THE DRAWING. FLAT TOP SLABS PERMITTED ONLY FOR MANHOLES TOO SHALLOW FOR CONES.
- 2. USE 4'-0" DIAMETER FOR SEWER SIZES THRU 21", 5'-0" DIAMETER FOR SEWER SIZES 24" THRU 30", 6'-0" DIAMETER FOR SEWER SIZES GREATER THAN 30", UNLESS OTHERWISE NOTED.
- 3. EXTERNAL CHIMNEY SEALS SHALL BE INSTALLED ON ALL MANHOLES WHEN LOCATED WITHIN LIMITS OF PAVED SURFACE. THE MANHOLE RIM SHALL BE 1/2" BELOW PAVEMENT GRADE.
- 4. UNLESS OTHERWISE SPECIFIED CONSTRUCTION AND MATERIALS SHALL CONFORM TO IDOT STD. SPEC. ART. 602.
- 5. REMOVE TOP TWO MANHOLE STEPS PRIOR TO FINAL INSPECTION.



STORM MANHOLE TYPE A

SCALE:	DRAWN/CHECKED	DRAWING NUMBER
NTS	CBBEL/TPF	D D 11 4
DATE:	REVISED:	DRN-4
1/1/2016	1/1/2016	



ELEVATION (STANDARD OUTLET)

MATERIALS FOR WALLS	D	C*	T (min.)
PRECAST REINFORCED CONCRETE SECTION	4'-0'' 5'-0'' 6'-0"	2'-6" 3'-9" 5'-0"	4" 5" 6"

* DIMENSION "C" MAY VARY FROM THE DIMENSION GIVEN TO PLUS 6".

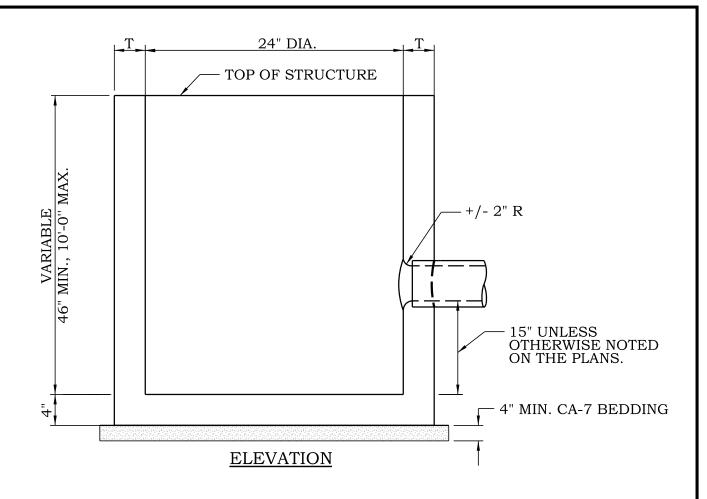
NOTES

- 1. USE ECCENTRIC CONES UNLESS OTHERWISE INDICATED ON THE DRAWING. FLAT TOP SLABS PERMITTED ONLY FOR MANHOLES TOO SHALLOW FOR CONES.
- 2. USE 4'-0" DIAMETER FOR SEWER SIZES THRU 21", 5'-0" DIAMETER FOR SEWER SIZES 24" THRU 30", 6'-0" DIAMETER FOR SEWER SIZES GREATER THAN 30", UNLESS OTHERWISE NOTED.
- 3. EXTERNAL CHIMNEY SEALS SHALL BE INSTALLED ON ALL MANHOLES WHEN LOCATED WITHIN LIMITS OF PAVED SURFACE. THE MANHOLE RIM SHALL BE 1/2" BELOW PAVEMENT GRADE.
- 4. UNLESS OTHERWISE SPECIFIED CONSTRUCTION AND MATERIALS SHALL CONFORM TO IDOT STD. SPEC. ART. 602.
- 5. REMOVE TOP TWO MANHOLE STEPS PRIOR TO FINAL INSPECTION.



CATCH BASIN TYPE A

SCALE:	DRAWN/CHECKED	DRAWING NUMBER
NTS	CBBEL/TPF	
DATE:	REVISED:	DRN-5
1/1/2016	1/1/2016	



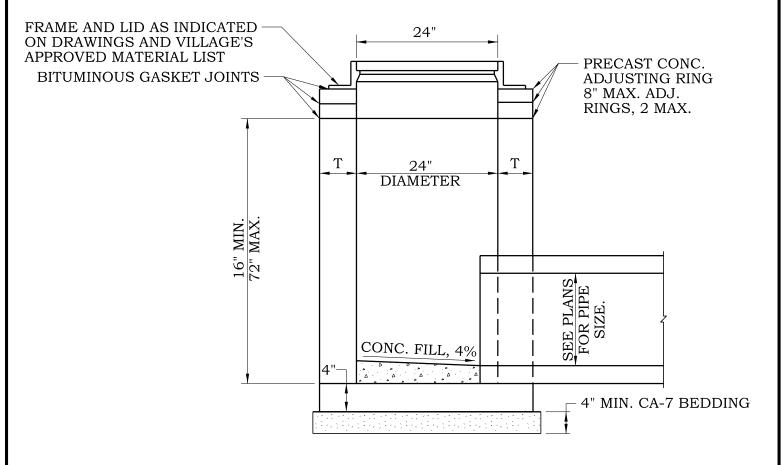
MATERIALS FOR WALLS	T (min.)
PRECAST REINFORCED CONCRETE SECTION	3"

- 1. UNLESS OTHERWISE SPECIFIED CONSTRUCTION AND MATERIALS SHALL CONFORM TO IDOT STD. SPEC. ART. 602.
- 2. BOTTOM SLABS MAY BE CONNECTED TO THE RISER AS DETERMINED BY THE FABRICATOR; HOWEVER, ONLY A SINGLE ROW OF REINFORCEMENT AROUND THE PERIMETER MAY BE UTILIZED.



CATCH BASIN TYPE C

SCALE:	DRAWN/CHECKED	DRAWING NUMBER
NTS	CBBEL/TPF	
DATE:	REVISED:	DRN-6
1/1/2016	1/1/2016	



ELEVATION

MATERIALS FOR WALLS	Т
PRECAST REINFORCED CONCRETE SECTION	3"

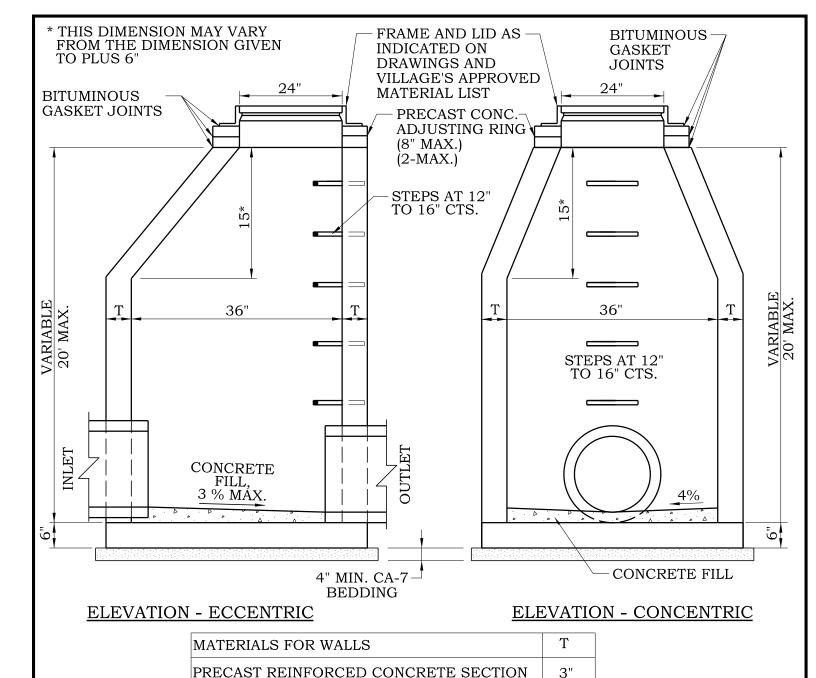
NOTES

- 1. UNLESS OTHERWISE SPECIFIED CONSTRUCTION AND MATERIALS SHALL CONFORM TO IDOT STD. SPEC. ART. 602
- 2. EXTERNAL CHIMNEY SEALS SHALL BE INSTALLED ON ALL INLETS WHEN LOCATED WITHIN LIMITS OF PAVED SURFACE. THE INLET RIM SHALL BE 1/2" BELOW PAVEMENT GRADE.
- 3. BOTTOM SLABS MAY BE CONNECTED TO THE RISER AS DETERMINED BY THE FABRICATOR; HOWEVER, ONLY A SINGLE ROW OF REINFORCEMENT AROUND THE PERIMETER MAY BE UTILIZED.

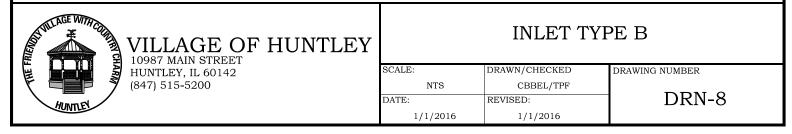


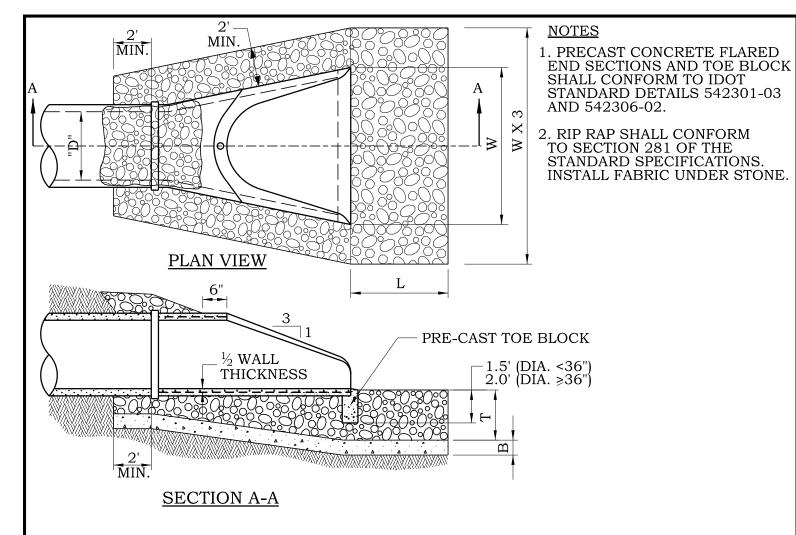
INLET TYPE A

SCALE:	DRAWN/CHECKED	DRAWING NUMBER
NTS	CBBEL/TPF	
DATE:	REVISED:	DRN-7
1/1/2016	1/1/2016	



- 1. USE ECCENTRIC CONES UNLESS OTHERWISE INDICATED ON THE DRAWING. FLAT TOP SLABS PERMITTED ONLY FOR INLETS TOO SHALLOW FOR CONES.
- 2. EXTERNAL CHIMNEY SEALS SHALL BE INSTALLED ON ALL INLETS WHEN LOCATED WITHIN LIMITS OF PAVED SURFACE THE INLET RIM SHALL BE 1/2" BELOW PAVEMENT GRADE.
- 3. BOTTOM SLABS MAY BE CONNECTED TO THE RISER AS DETERMINED BY THE FABRICATOR; HOWEVER, ONLY A SINGLE ROW OF REINFORCEMENT AROUND THE PERIMETER MAY BE UTILIZED.
- 4. UNLESS OTHERWISE SPECIFIED CONSTRUCTION AND MATERIALS SHALL CONFORM TO IDOT STD. SPEC. ART. 602.
- 5. REMOVE TOP TWO INLET STEPS PRIOR TO FINAL INSPECTION.





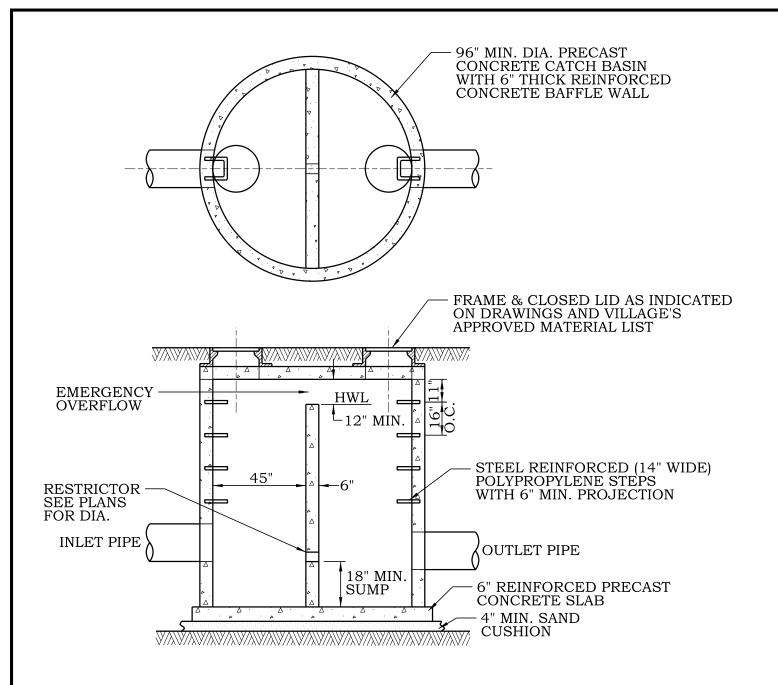
LOW VELOCITY (5 <fps)< td=""><td colspan="3">HIGH VELOCITY (5-10 fps)</td></fps)<>			HIGH VELOCITY (5-10 fps)				
D	T	L	В	D	Т	L	В
PIPE SIZE IN.	ROCK CLASS (MIN. THICKNESS)	LENGTH OF APRON	BEDDING CLASS (THICKNESS)	PIPE SIZE IN.	ROCK CLASS (MIN. THICKNESS)	LENGTH OF APRON	BEDDING CLASS (THICKNESS)
10"	RR-2 (6")	10'	_	10"	RR-2 (6")	10'	CA-1 (6")
12"	RR-3 (15")	12'	_	12"	RR-3 (15")	15'	CA-1 (6")
15"	RR-3 (15")	13'	_	15"	RR-3 (15")	15'	CA-1 (6")
18"	RR-3 (15")	14'	_	18"	RR-4 (16")	16'	CA-1 (6")
21"	RR-3 (15")	15'	_	21"	RR-4 (16")	18'	CA-1 (6")
24"	RR-3 (15")	16'	_	24"	RR-4 (16")	20'	CA-1 (6")
27"	RR-3 (15")	17'	_	27"	RR-4 (16")	21'	CA-1 (6")
30"	RR-4 (16")	18'	_	30"	RR-4 (16")	22'	CA-1 (6")
33"	RR-4 (16")	19'	CA-1 (6")	33"	RR-5 (22")	23'	CA-1 (8")
36"	RR-4 (16")	20'	CA-1 (6")	36"	RR-5 (22")	24'	CA-1 (8")
42"	RR-4 (16")	22'	CA-1 (6")	42"	RR-6 (26")	26'	CA-1 (10")
48"	RR-4 (16")	24'	CA-1 (6")	48"	RR-6 (26")	28'	CA-1 (10")

NOTE: SEE CURRENT ILLINOIS DEPARTMENT OF TRANSPORTATION SPECIFICATION TO VERIFY ROCK SIZE AND BEDDING THICKNESS.



RIP RAP

SCALE:	DRAWN/CHECKED	DRAWING NUMBER
NTS	CBBEL/TPF	
DATE:	REVISED:	DRN-9
1/1/2016	1/1/2016	

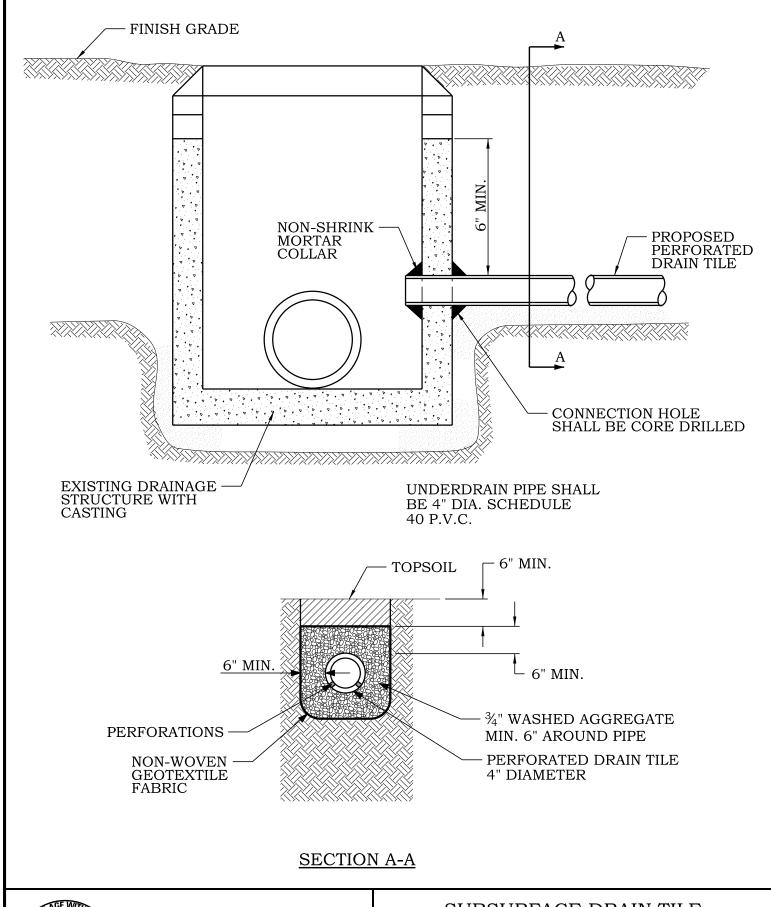


- 1. RESTRICTOR SIZE TO BE APPROVED BY THE VILLAGE ENGINEER.
- 2. UNLESS OTHERWISE SPECIFIED CONSTRUCTION AND MATERIALS SHALL CONFORM TO IDOT STA. SPEC. ART. 602.
- 3. PRECAST STRUCTURE SECTIONS TO BE TONGUE AND GROOVED.
- 4. NON-PRECAST OPENINGS SHALL BE CORED AND RUBBER BOOTED.
- 5. MORTAR ALL PIPE PENETRATIONS INSIDE AND OUTSIDE OF STRUCTURE.
- 6. IN "SUBMERGED" CONDITIONS, ALL PIPE PENETRATIONS TO BE CORED, RUBBER BOOTED AND INTERIOR MORTARED.



STORM WATER RESTRICTOR STRUCTURE

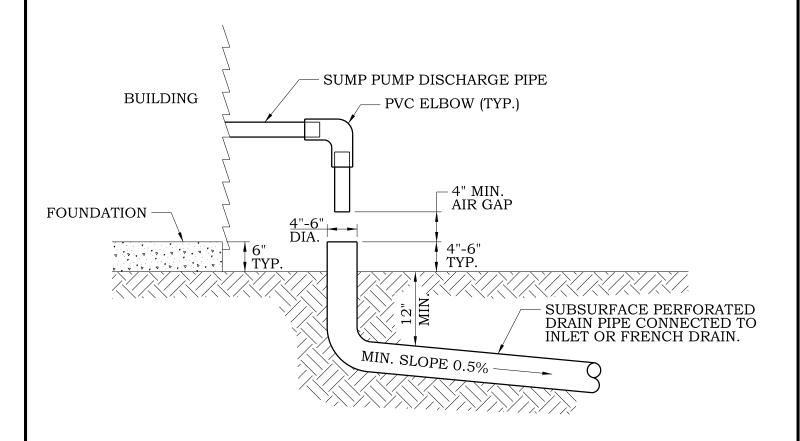
SCALE:	DRAWN	/CHECKED	DRAWING NUMBER
NTS	3 (CBBEL/TPF	
DATE:	REVISE	D:	DRN-10
1/1/20	016	/1/2016	



VILLAGE OF HUNTLEY 10987 MAIN STREET HUNTLEY, IL 60142 (847) 515-5200

SUBSURFACE DRAIN TILE AND STRUCTURE CONNECTION

SCALE:	DRAWN/CHECKED	DRAWING NUMBER
NTS	CBBEL/TPF	
DATE:	REVISED:	DRN-11
1/1/2016	1/1/2016	

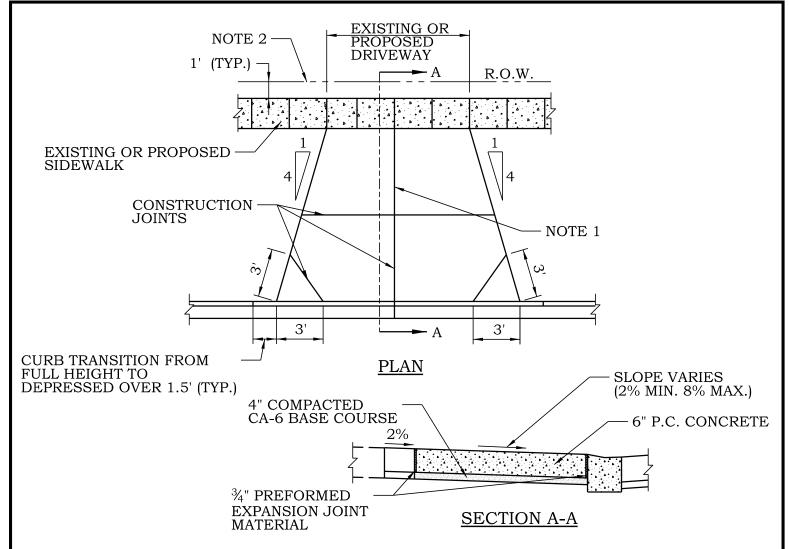


- 1. ALL SUMP PUMP CONNECTIONS TO OUTLET AT GRADE UNLESS WRITTEN APPROVAL IS GIVEN BY THE DIRECTOR OF PUBLIC WORKS. UPON APPROVAL, FOR RESIDENTIAL DEVELOPMENTS WITH AN ON-SITE STORMWATER CONTROL FACILITY, THE SUMP PUMP MAY BE CONNECTED INTO THE STORM SEWER SYSTEM LOCATED OUTSIDE THE PUBLIC RIGHT-OF-WAY.
- 2. SUMP PUMP DISCHARGE SHALL BE DIRECTED AWAY FROM ADJACENT PROPERTIES, AND OUTLET SHALL BE LOCATED A MINIMUM OF 10 FEET FROM PROPERTY LINES.
- 3. INSTALLER ASSUMES FULL RESPONSIBILITY AND LIABILITY FOR ANY AND ALL DAMAGE TO UTILITIES OR ADJOINING PROPERTIES.
- 4. INSTALLATION OF SUMP PUMP DISCHARGE LINES MUST BE INSPECTED BY THE VILLAGE OF HUNTLEY.



SUMP PUMP CONNECTION

SCALE:	DRAWN/CHECKED	DRAWING NUMBER
NTS	CBBEL/TPF	DDN 10
DATE:	REVISED:	DRN-12
1/1/2016	1/1/2016	

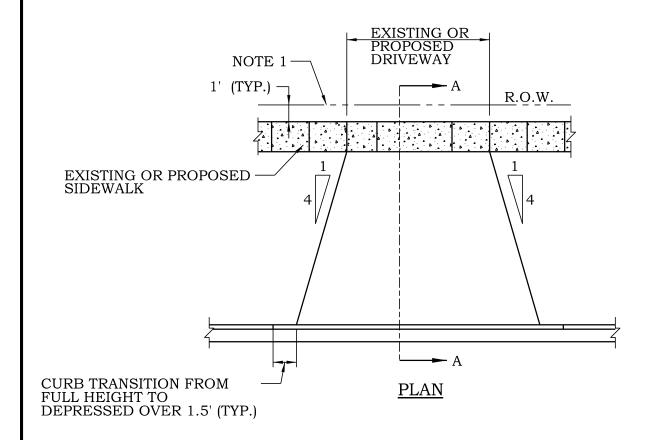


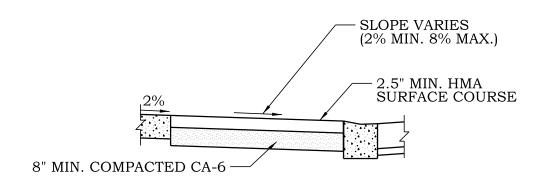
- 1. FOR COMBINED COMMON DRIVEWAYS, THIS JOINT SHALL BE FULL DEPTH WITH PREMOLDED FIBER EXPANSION JOINT ALONG THE COMMON LOT LINE AS EXTENDED. COMMON DRIVEWAY APPROACHES SHALL BE CONSTRUCTED WITH TWO SEPARATE PLACING AND FINISHING OPERATIONS, ONE FOR EACH APPROACH.
- 2. DRIVEWAY WIDTH AT R.O.W. SHALL BE A MAXIMUM 20 FEET.
- 3. CONCRETE SHALL CONTAIN SYNTHETIC FIBER REINFORCEMENT ADDITIVE AND BE AN IDOT APPROVED CLASS SI MIX. THE USE OF WELDED WIRE MESH IS PROHIBITED.
- 4. ALL EXPOSED CONCRETE SURFACES SHALL HAVE A BROOMED FINISH.
- 5. NO MANHOLES, INLETS, VALVE VAULTS, B-BOXES OR OTHER STRUCTURES ARE ALLOWED IN APPROACHES OR SIDEWALK.
- 6. APRON/SIDEWALK SHALL BE POURED SEPARATELY.
- 7. ¾" FIBER EXPANSION JOINT SHALL BE USED AT BOTH APRON/CURB AND APRON/SIDEWALK LINE.
- 8. AN IDOT APPROVED MEMBRANE CURING COMPOUND MUST BE PLACED ON THE FINISHED CONCRETE PER IDOT STANDARD SPECIFICATIONS 1020.13 AND 1022.01 (IDOT APPROVED PAILS OR DRUMS SHALL BE INSPECTED/WITNESSED BY THE VILLAGE OF HUNTLEY OR VILLAGE REPRESENTATIVE). NON-IDOT APPROVED CURING/SEALING PRODUCTS WILL BE PROHIBITED.



P.C. CONCRETE RESIDENTIAL DRIVEWAY APPROACH

SCALE:	DRAWN/CHECKED	DRAWING NUMBER
NTS	CBBEL/TPF	
DATE:	REVISED:	PVT-1
1/1/2016	1/1/2016	





SECTION A-A

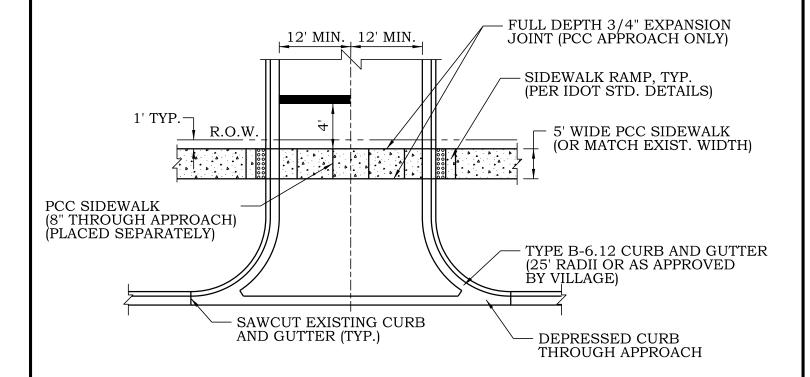
NOTES

- 1. DRIVEWAY WIDTH AT R.O.W. SHALL BE A MAXIMUM OF 20 FEET.
- 2. NO MANHOLES, INLETS, VALVE VAULTS, B-BOXES, OR OTHER STRUCTURES ARE ALLOWED IN APPROACH OR SIDEWALK.



HMA RESIDENTIAL DRIVEWAY APPROACH

SCALE:	DRAWN/CHECKED	DRAWING NUMBER
NTS	CBBEL/TPF	DI 777 0
DATE:	REVISED:	PVT-2
1/1/2016	1/1/2016	

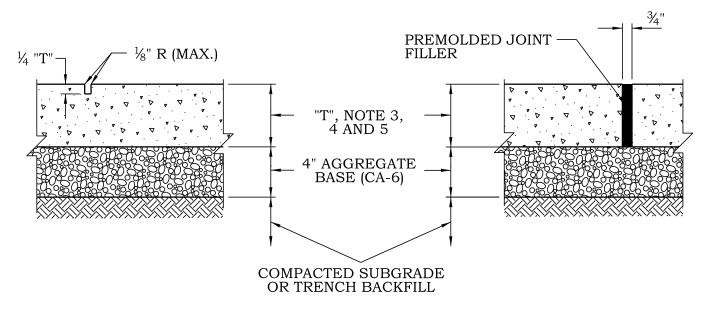


- 1. MAX. APPROACH GRADE=8%. MIN. APPROACH GRADE=2%.
- 2. THICKNESSES OF PCC OR HMA AND AGGREGATE SUBBASE FOR NON-RESIDENTIAL DRIVEWAY APPROACHES SHALL CONFORM TO MINIMUM PAVEMENT REQUIREMENTS AS DETAILED ON PVT-6 "PARKING LOT HEAVY DUTY PAVEMENT" UNLESS APPROVED BY THE VILLAGE ENGINEER.
- 3. APPROACH WIDTH AT R.O.W. PER APPROVED PLANS.
- 4. CONCRETE SHALL CONTAIN SYNTHETIC FIBER REINFORCEMENT ADDITIVE AND BE AN IDOT APPROVED CLASS PV MIX. THE USE OF WELDED WIRE MESH IS PROHIBITED.
- 5. NO MANHOLES, INLETS, VALVE VAULTS, B-BOXES OR OTHER STRUCTURES ARE ALLOWED IN APPROACHES OR SIDEWALK.
- 6. PCC APPROACH/PCC SIDEWALK SHALL BE POURED SEPARATELY.
- 7. ¾" FIBER EXPANSION JOINT SHALL BE USED AT BOTH APPROACH/CURB AND APPROACH/SIDEWALK LINE.
- 8. AN IDOT APPROVED MEMBRANE CURING COMPOUND MUST BE PLACED ON THE FINISHED CONCRETE PER IDOT STANDARD SPECIFICATIONS 1020.13 AND 1022.01 (IDOT APPROVED PAILS OR DRUMS SHALL BE INSPECTED/WITNESSED BY THE VILLAGE OF HUNTLEY OR VILLAGE REPRESENTATIVE). NON-IDOT APPROVED CURING/SEALING PRODUCTS WILL BE PROHIBITED.
- 9. ALL EXPOSED CONCRETE SURFACES SHALL HAVE A BROOMED FINISH.



NON-RESIDENTIAL DRIVEWAY APPROACH

SCALE:	DRAWN/CHECKED	DRAWING NUMBER
NTS	CBBEL/TPF	
DATE:	REVISED:	PVT-3
1/1/2016	1/1/2016	



CONTRACTION JOINT DETAIL

EXPANSION JOINT DETAIL

NOTES

- 1. UNLESS OTHERWISE NOTED ON PLANS, CONTRACTION JOINTS TO BE AT 5'-0" O.C.
- 2. EXPANSION JOINTS TO BE 50'-0" O.C. MAXIMUM, AT BACK OF CURB, CHANGE OF DIRECTION, EXISTING WALK, UTILITY APPURTENANCE, OR FACE OF STRUCTURE.
- 3. PORTLAND CEMENT CONCRETE SHALL BE IDOT CLASS SI, MIN. 3500 PSI (6.1~BAG~MIX) AT 14 DAYS, WITH 5% TO 8% AIR ENTRAINMENT (NO FLY ASH ALLOWED).
- 4. SIDEWALKS THROUGH DRIVEWAYS SHALL CONTAIN SYNTHETIC FIBER REINFORCEMENT ADDITIVE. THE USE OF WELDED WIRE MESH IS PROHIBITED.
- 5. SIDEWALK THICKNESS SHALL BE 5". FOR SIDEWALK THROUGH THE LIMITS OF DRIVEWAYS, THICKNESS SHALL BE 6" FOR RESIDENTIAL DRIVEWAYS AND 8" FOR NON RESIDENTIAL DRIVEWAYS.
- 6. ALL SIDEWALKS SHALL CONFORM TO THE AMERICANS WITH DISABILITIES ACT.
- 7. ALL SIDEWALKS SHALL BE STAMPED WITH A "W" INDICATING THE LOCATION OF WATER SERVICE AND "S" INDICATING THE LOCATION OF SANITARY SERVICES.
- 8. AN IDOT APPROVED MEMBRANE CURING COMPOUND MUST BE PLACED ON THE FINISHED CONCRETE PER IDOT STANDARD SPECIFICATIONS 1020.13 AND 1022.01 (IDOT APPROVED PAILS OR DRUMS SHALL BE INSPECTED/WITNESSED BY THE VILLAGE OF HUNTLEY OR VILLAGE REPRESENTATIVE). NON-IDOT APPROVED CURING/SEALING PRODUCTS WILL BE PROHIBITED.
- 9. ALL SIDEWALK PLACED OVER ALL AREAS OF UTILITY TRENCHES OR EXCAVATED AREAS SHALL BE REINFORCED WITH A MINIMUM OF TWO #4 BARS 24" ON CENTER FOR A LENGTH EXTENDING 10' FROM THE CENTERLINE OF THE TRENCH.



CONCRETE SIDEWALK

	1	
SCALE:	DRAWN/CHECKED	DRAWING NUMBER
NTS	CBBEL/TPF	
DATE:	REVISED:	l PVT-4
1/1/2016	1/1/2016	

STREET CLASSIFICATION	MINIMUM PAVEMENT REQUIREMENTS
MAJOR ARTERIAL	6" AGGREGATE BASE COURSE 8" P.C. CONCRETE - OR - 6" AGGREGATE BASE COURSE 8" HOT-MIX ASPHALT BASE COURSE 2.5" HOT-MIX ASPHALT BINDER COURSE 2" HOT-MIX ASPHALT SURFACE COURSE
SECONDARY ARTERIAL	6" AGGREGATE BASE COURSE 8" P.C. CONCRETE - OR - 6" AGGREGATE BASE COURSE 7" HOT-MIX ASPHALT COURSE 2.5" HOT-MIX ASPHALT BINDER COURSE 2" HOT-MIX ASPHALT SURFACE COURSE
COLLECTOR - INDUSTRIAL/COMMERCIAL LOCAL - INDUSTRIAL/COMMERCIAL	6" AGGREGATE BASE COURSE 8" P.C. CONCRETE - OR - 6" AGGREGATE BASE COURSE 8" HOT-MIX ASPHALT BASE COURSE 2.5" HOT-MIX ASPHALT BINDER COURSE 1.5" HOT-MIX ASPHALT SURFACE COURSE
COLLECTOR - RESIDENTIAL	4" AGGREGATE BASE COURSE 6" HOT-MIX ASPHALT BASE COURSE 2.5" HOT-MIX ASPHALT BINDER COURSE 1.5" HOT-MIX ASPHALT SURFACE COURSE
LOCAL - RESIDENTIAL	10" AGGREGATE BASE COURSE 2.5" HOT-MIX ASPHALT BINDER COURSE 1.5" HOT-MIX ASPHALT SURFACE COURSE

- 1. SECTIONS REPRESENT THE MINIMUM CROSS SECTIONS ALLOWED.
- 2. HOT MIX ASPHALT SURFACE AND BINDER COURSE SHALL CONFORM TO IDOT DISTRICT 1 LOCAL ROAD HMA MIX SELECTION TABLE.
- 3. PORTLAND CEMENT CONCRETE SHALL CONFORM TO IDOT CLASS PV.
- 4. ALL SUBGRADE SHALL HAVE A MINIMUM ILLINOIS BEARING RATIO (IBR) OF 3.0, AND BE COMPACTED TO AT LEAST 90% MODIFIED PROCTOR DENSITY (ASTM. D-1557)



MINIMUM PAVEMENT REQUIREMENTS ROADWAY

SCALE:	DRAWN/CHECKED	DRAWING NUMBER
NTS	CBBEL/TPF	
DATE:	REVISED:	PVT-5
1/1/2016	1/1/2016	

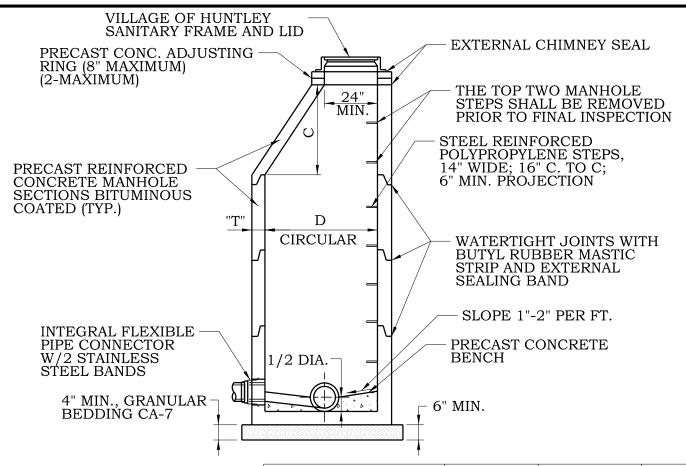
PARKING LOT CLASSIFICATION	MINIMUM PAVEMENT REQUIREMENTS
PARKING LOT STANDARD DUTY PAVEMENT	10" AGGREGATE BASE COURSE 2.5" HOT-MIX ASPHALT BINDER COURSE 1.5" HOT-MIX ASPHALT SURFACE COURSE - OR - 6" AGGREGATE BASE COURSE 6" P.C. CONCRETE
PARKING LOT HEAVY DUTY PAVEMENT	6" AGGREGATE BASE COURSE 4" HOT-MIX ASPHALT BASE COURSE 2.5" HOT-MIX ASPHALT BINDER COURSE 1.5" HOT-MIX ASPHALT SURFACE COURSE - OR - 6" AGGREGATE BASE COURSE 8" P.C. CONCRETE

- 1. SECTIONS REPRESENT THE MINIMUM CROSS SECTIONS ALLOWED.
- 2. HOT MIX ASPHALT SURFACE AND BINDER COURSE SHALL CONFORM TO IDOT HMA MIX SELECTION TABLE.
- 3. PORTLAND CEMENT CONCRETE SHALL CONFORM TO IDOT CLASS PV, MIN. 3500 PSI (NO FLY ASH ALLOWED).
- 4. ALL SUBGRADE SHALL HAVE A MINIMUM ILLINOIS BEARING RATIO (IBR) OF 3.0, AND BE COMPACTED TO AT LEAST 90% MODIFIED PROCTOR DENSITY (ASTM. D-1557)



MINIMUM PAVEMENT REQUIREMENTS PARKING LOTS

SCALE:	DRAWN/CHECKED	DRAWING NUMBER	
NTS	CBBEL/TPF		
DATE:	REVISED:	T PVT-6	
1/1/2016	1/1/2016		

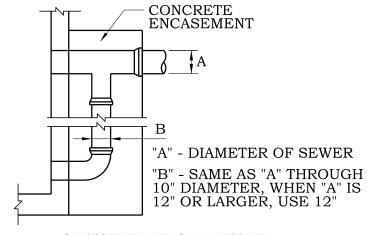


MATERIALS FOR WALLS	D	C*	T (min.)
PRECAST REINFORCED CONCRETE SECTION	4'-0'' 5'-0'' 6'-0"	2'-6" 3'-9'' 5'-0"	4" 5" 6"

^{*} DIMENSION "C" MAY VARY FROM THE DIMENSION GIVEN TO PLUS 6".

HUNTLE

- 1. USE ECCENTRIC CONES UNLESS OTHERWISE INDICATED ON THE DRAWING.
- 2. USE 4'-0" DIAMETER FOR SEWER SIZES THRU 21", 5'-0" DIAMETER FOR SEWER SIZES 24" THRU 30", AND 6'-0" DIAMETER FOR SEWER SIZES GREATER THAN 30" UNLESS OTHERWISE NOTED.
- 3. USE OUTSIDE DROP WHEN ANY ENTERING SEWER INVERT DIFFERS BY 2'-0" OR MORE FROM INVERT OF MANHOLE.
- 4. THICKNESS "T"=4" MIN. FOR 4' DIAMETER, 5" MIN. FOR 5' DIAMETER, 6" MIN. FOR 6' DIAMETER.
- 5. UNLESS OTHERWISE SPECIFIED HEREIN CONSTRUCTION AND MATERIALS SHALL CONFORM TO THE STD. SPEC. FOR WATER AND SEWER CONSTRUCTION IN ILLINOIS, LATEST EDITION.

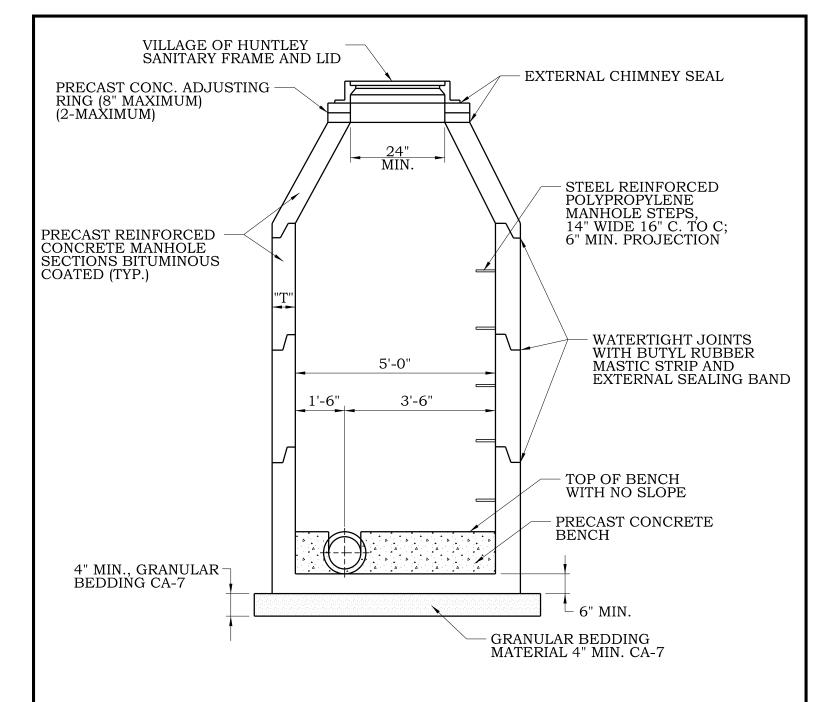


OUTSIDE DROP DETAIL

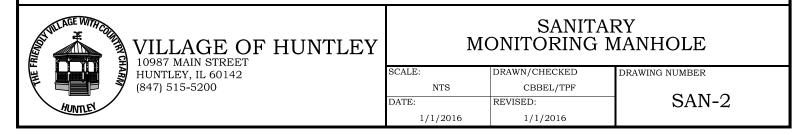


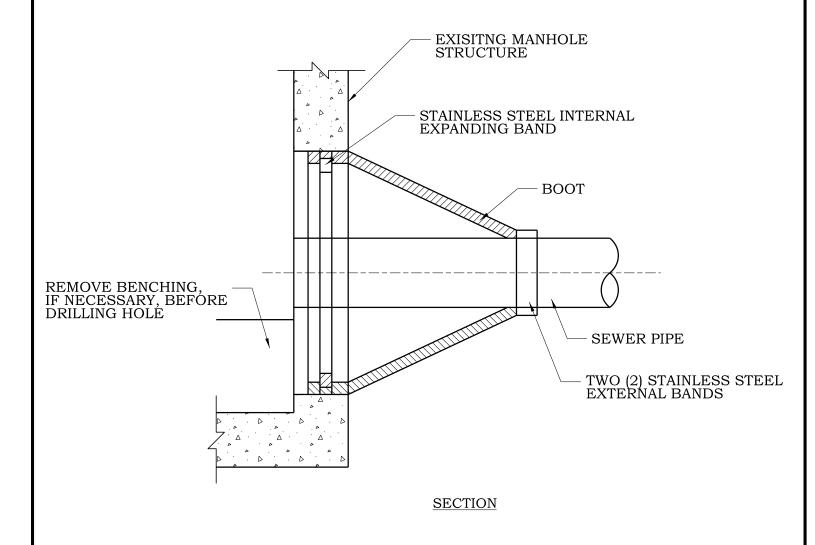
SANITARY MANHOLE

SCALE:	DRAWN/CHECKED	DRAWING NUMBER
NTS	CBBEL/TPF	
DATE:	REVISED:	SAN-1
1/1/2016	1/1/2016	



- 1. ALL PRECAST MANHOLE SECTIONS SHALL BE BITUMINOUS COATED.
- 2. THE TOP TWO (2) MANHOLE STEPS SHALL BE REMOVED PRIOR TO FINAL INSPECTION.
- 3. CONCENTRIC CONE REQUIRED.
- 4. THICKNESS "T" = 5" MINIMUM.
- 5. INTEGRAL FLEXIBLE PIPE CONNECTOR WITH 2 STAINLESS STEEL BANDS SHALL BE USED.
- 6. UNLESS OTHERWISE SPECIFIED HEREIN CONSTRUCTION AND MATERIALS SHALL CONFORM TO THE STD. SPEC. FOR WATER AND SEWER CONSTRUCTION IN ILLINOIS, LATEST EDITION.



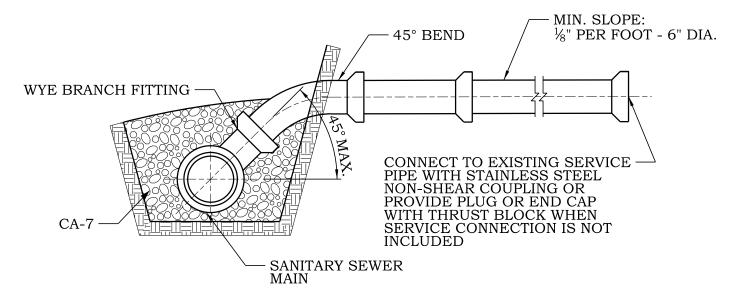


- 1. CORE-DRILL CIRCULAR OPENING IN MANHOLE WALL OF DIAMETER TO FIT THE REQUIRED BOOT SIZE.
- 2. KOR-N-SEAL FLEXIBLE RUBBER BOOT (KOR-N-SEAL I: 106/406 SERIES FOR 12" AND SMALLER; KOR-N-SEAL II: 206 SERIES FOR 15" AND GREATER) SHALL BE USED FOR WATERTIGHT CONNECTION.
- 3. CUT, SHAPE AND SLOPE NEW INVERT CHANNEL IN THE EXISTING CONCRETE BENCH FOR SMOOTH FLOW FROM NEW SANITARY SEWER CONNECTION.
- 4. CLEAN EXISTING MANHOLE OF ANY DIRT, CONRETE OR DEBRIS WHICH MAY ACCUMULATE DURING THE CONSTRUCTION PROCESS.

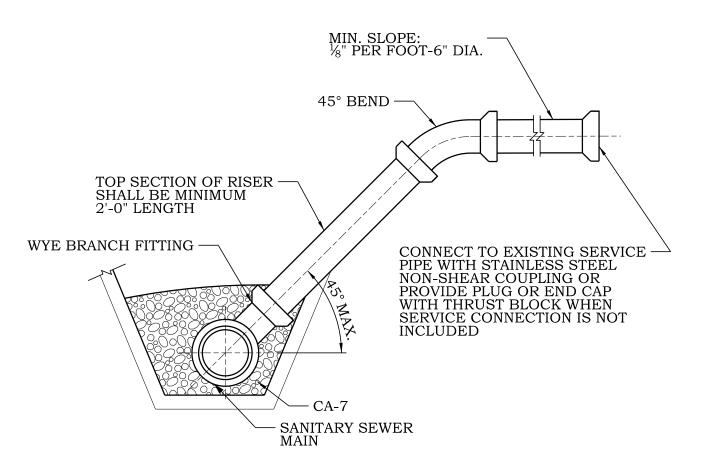


SANITARY SEWER CONNECTION TO EXISTING MANHOLE

SCALE:	DRAWN/CHECKED	DRAWING NUMBER
NTS	CBBEL/TPF	
DATE:	REVISED:	SAN-3
1/1/2016	1/1/2016	



FOR SEWER DEPTHS TO 10 FEET



FOR SEWER DEPTHS GREATER THAN 10 FEET

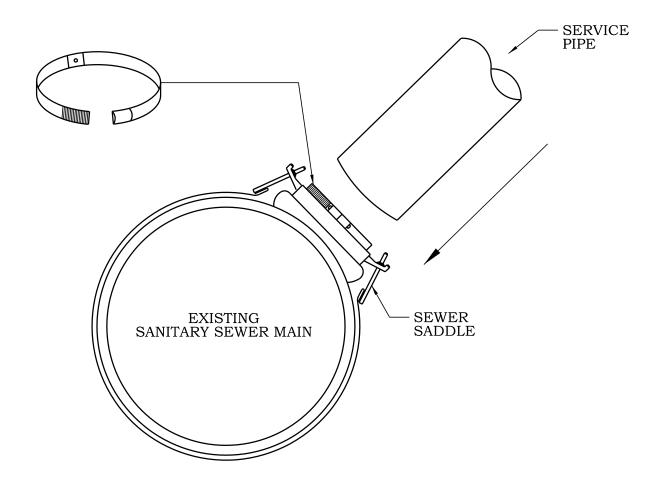
NOTE

1. SERVICE LINES ARE PROHIBITED UNDER DRIVEWAY APPROACHES REGARDLESS OF DEPTH.



SANITARY SERVICE RISER

SCALE:	DRAWN/CHECKED	DRAWING NUMBER
	,	DRAWING NOMBER
NTS	CBBEL/TPF	
DATE:	REVISED:	1 SAN-4
1/1/2016	1/1/2016	

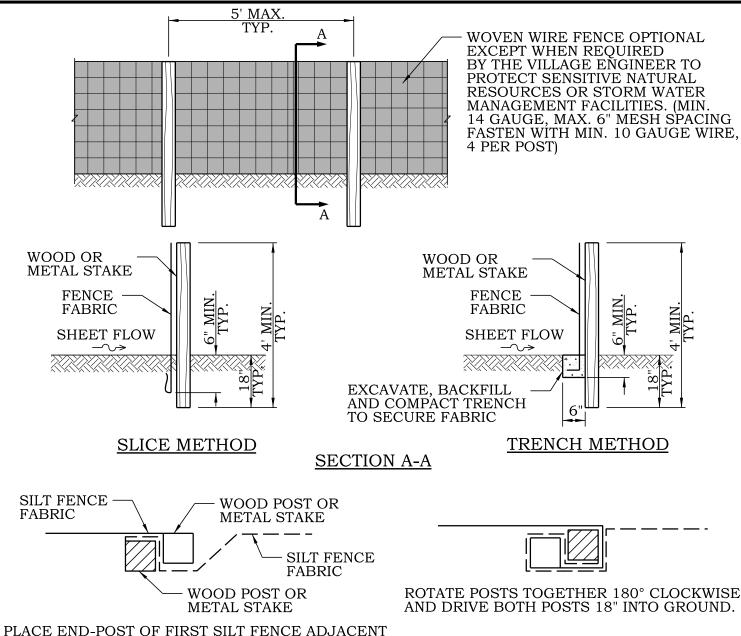


- 1. DETAIL BASED ON STYLE "CB" SEWER SADDLE, MANUFACTURED BY ROMAC INDUSTRIES INC. THE "CB" "UN" SADDLES ARE PROVIDED WITH BAND CLAMP (HOSE CLAMP) WHICH ALLOWS IT TO HAVE A RANGE. THE BAND CLAMP COMES WITH TWO ADJUSTING SCREWS WHICH PROVIDE MUCH GREATER CLAMPING FORCE THAN BAND CLAMPS WITH ONLY ONE ADJUSTMENT SCREW. THE BAND CLAMP NEEDS TO BE ASSEMBLED AROUND THE OUTLET AND BOTH ADJUSTING SCREWS TIGHTENED EVENLY.
- 2. THE HOLE CUT IN THE MAIN SHOULD BE NO LARGER THAN THE INSIDE DIAMETER OF THE SADDLE GASKET.
- 3. TAKE EXTRA CARE TO FOLLOW PROPER TIGHTENING PROCEDURES AND TORQUE RECOMMENDATIONS:
 15-20 FT./LB FOR 6"-12" MAINS AND
 20-30 FT./LB FOR 14"-48" MAINS
 (WAIT 10 MINUTES AND RETORQUE).
- 4. ALL METAL HARDWARE MATERIAL SHALL BE STAINLESS STEEL.



SANITARY SEWER SADDLE CONNECTION

SCALE:	DRAWN/CHECKED	DRAWING NUMBER
NTS	CBBEL/TPF	~
DATE:	REVISED:	SAN-5
1/1/2016	1/1/2016	



PLACE END-POST OF FIRST SILT FENCE ADJACENT TO END-POST OF SECOND SILT FENCE WITH FABRIC POSITIONED AS SHOWN.

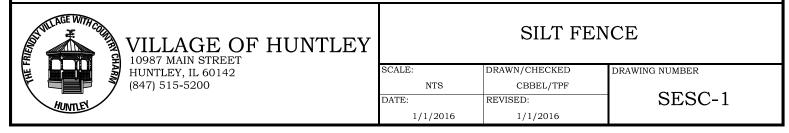
STEP 1

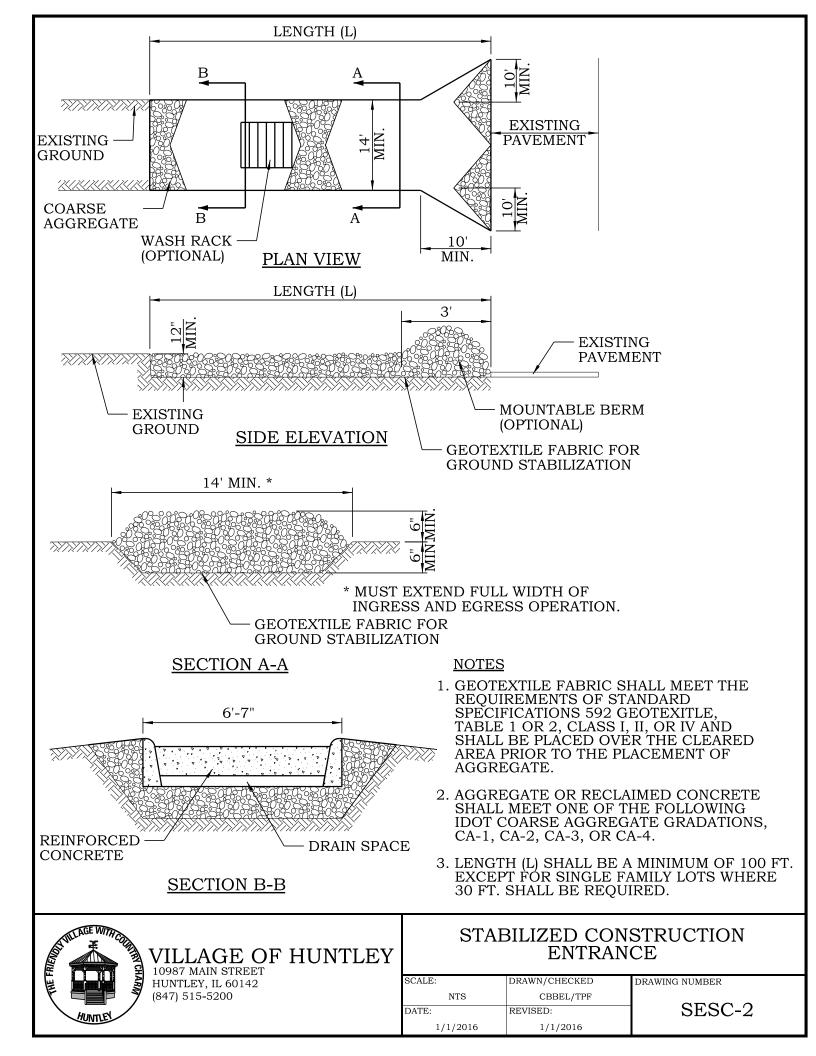
STEP 2

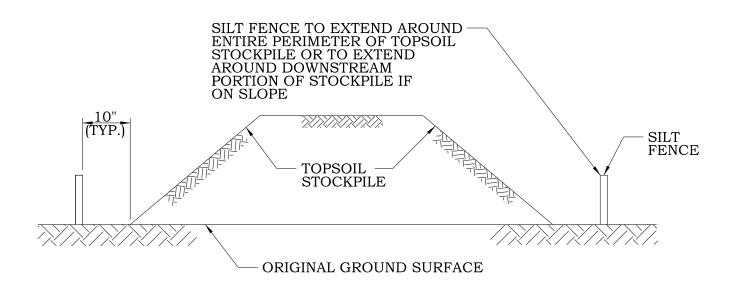
ATTACHING TWO SILT FILTER FENCES

NOTES:

- 1. TEMPORARY SILT FENCE SHALL BE INSTALLED PRIOR TO ANY GRADING WORK IN THE AREA TO BE PROTECTED. TEMPORARY SILT FENCE SHALL BE MAINTAINED THROUGHOUT THE CONSTRUCTION PERIOD AND REMOVED IN CONJUNCTION WITH THE FINAL GRADING AND SITE STABILIZATION.
- 2. FILTER FABRIC SHALL MEET THE REQUIREMENTS OF MATERIAL SPECIFICATION 592 GEOTEXTILE TABLE 1 OR 2, CLASS 1 WITH EQUIVALENT OPENING SIZE OF AT LEAST 30 FOR NONWOVEN AND 50 FOR WOVEN.
- 3. FENCE POSTS SHALL BE EITHER STANDARD STEEL (EITHER "T" OR "U" TYPE) OR WOOD WITH A MINIMUM CROSS-SECTIONAL AREA OF 3.0 SQ. IN.





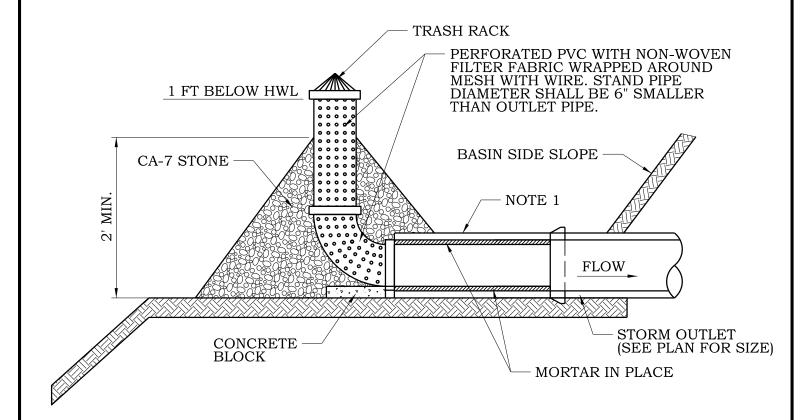


- 1. AN ON-SITE DRAINAGE SWALE SHALL BE LOCATED BETWEEN THE TOPSOIL STOCKPILE AND OFF-SITE PROPERTY.
- 2. REFERENCE THE SILT FENCE DETAIL FOR MATERIALS AND INSTALLATION METHODS.
- 3. IF THE STOCKPILE IS TO REMAIN FOR MORE THAN 14 DAYS, IT SHALL BE STABILIZED WITHIN 7 DAYS OF COMPLETION TO MINIMIZE EROSION.
- 4. SEDIMENT TRAPPED BY THE FENCES SHALL BE REMOVED AND PROPERLY DISPOSED OF WHENEVER SIGNIFICANT ACCUMULATION OCCURS.
- 5. SILT FENCES SHALL BE MAINTAINED IN PLACE UNTIL TOPSOIL STOCKPILE HAS BEEN ELIMINATED AND SILT FENCE SHALL BE REMOVED ONLY WHEN DIRECTED BY THE VILLAGE.



TEMPORARY TOPSOIL STOCKPILE

SCALE:	DRAWN/CHECKED	DRAWING NUMBER
NTS	CBBEL/TPF	
DATE:	REVISED:	SESC-3
1/1/2016	1/1/2016	



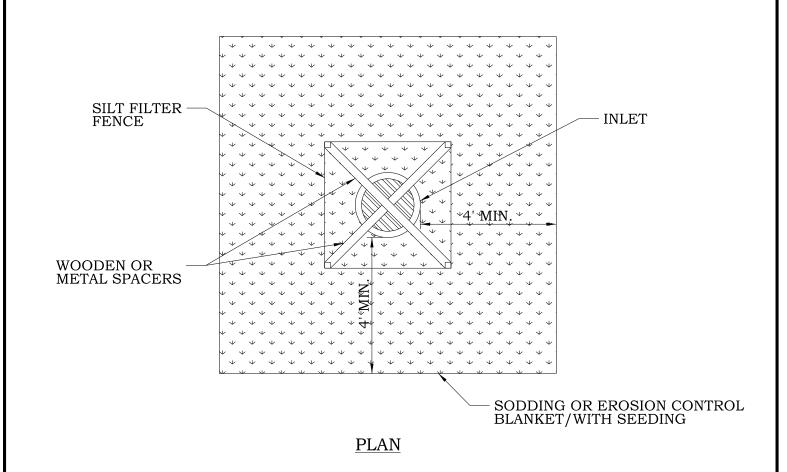
NOTE:

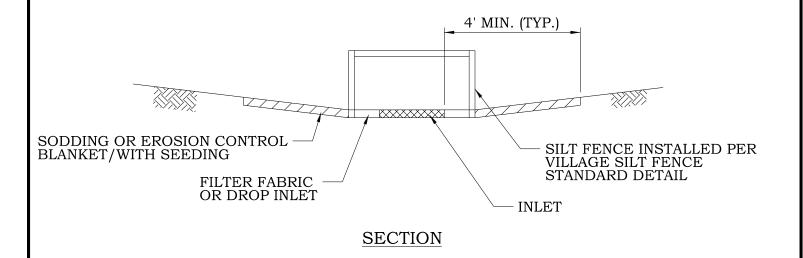
1. ADDITIONAL LENGTH (OR HALF LENGTH) OF OUTLET PIPE TO BE REMOVED AND REPLACED WITH FLARED END SECTION ONCE PERMANENT EROSION CONTROL IS IN PLACE THROUGHOUT WATERSHED.



TEMPORARY PERFORATED WATER QUALITY RISER

SCALE:	DRAWN/CHECKED	DRAWING NUMBER
NTS	CBBEL/TPF	a=aa .
DATE: REVISED:		SESC-4
1/1/2016	1/1/2016	





NOTE

1. THE SODDING OR SEEDING/WITH BLANKET SHOULD BE FLUSH WITH SURROUNDING GROUND SURFACE.



AREA INLET PROTECTION

SCALE:	DRAWN/CHECKED	DRAWING NUMBER
NTS	CBBEL/TPF	
DATE:	REVISED:	SESC-5
1/1/2016	1/1/2016	

	STANDARD	DESCRIPTION
EROSION CONTROL BLANKET	IUM-530 IUM-531	EROSION CONTROL BLANKET EROSION CONTROL BLANKET, TURF REINFORCEMENT MAT (TRM)
INLET PROTECTION	IL-560 IUM-561C IUM-561D	FABRIC DROP FILTER BAG SEDIMENT BAG/FILTER
END SECTION INLET PROTECTION	IL-508SF IL-508ST IL-610 IL-611	CULVERT INLET PROTECTION - SILT FENCE CULVERT INLET PROTECTION - STONE PIPE OUTLET TO FLAT AREA PIPE OUTLET TO CHANNEL
DITCH CHECK	IUM-514PC IUM-514RC IUM-514SC IUM-514UF IUM-514VC IL-605CA IL-605R	PLASTIC PERMEABLE ROLLED EROSION CONTROL SYNTHETIC POROUS CONTROL URETHANE FOAM GEOTEXTILES VEGETATED EROSION CONTROL ROCK CHECK DAM - COARSE AGGREGATE ROCK CHECK DAM - RIP RAP
DEWATERING	IL-650	SUMP PIT PLAN
CONCRETE WASHOUT	IUM-654BW IUM-654ET	TEMPORARY CONCRETE WASHOUT - BARRIER WALL TEMPORARY CONCRETE WASHOUT - EARTHEN

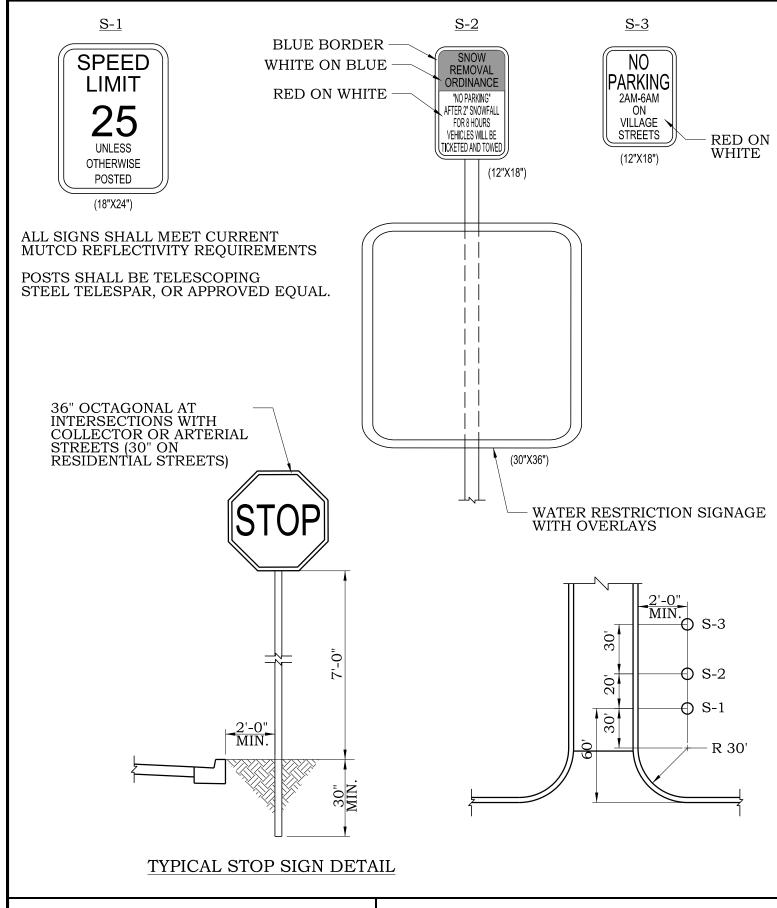
NOTE:

 $1.\ STANDARDS$ PER THE NATURAL RESOURCES CONSERVATION SERVICE AS PUBLISHED IN THE ILLINOIS URBAN MANUAL, LATEST EDITION.



ILLINOIS URBAN MANUAL EROSION CONTROL SYSTEMS

SCALE:	DRAWN/CHECKED	DRAWING NUMBER
NTS	CBBEL/TPF	2522
DATE:	REVISED:	SESC-6
1/1/2016	1/1/2016	

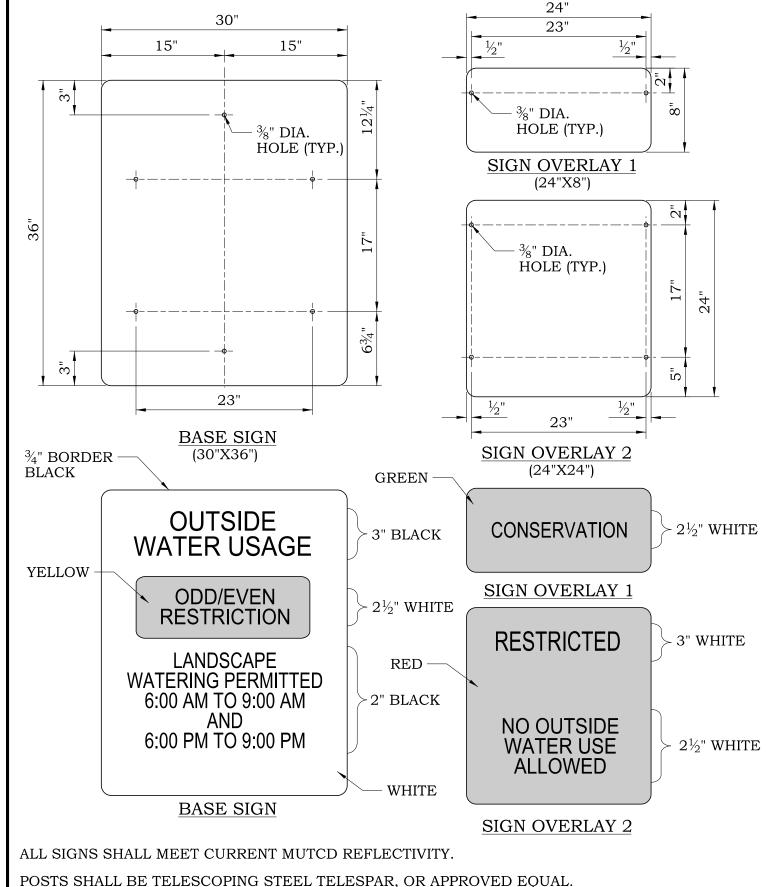


VILLAGE OF HUNTLEY 10987 MAIN STREET HUNTLEY, IL 60142 (847) 515-5200

HUNTLE

TYPICAL SIGN PLACEMENT AT SUBDIVISION ENTRANCE

SCALE:	DRAWN/CHECKED	DRAWING NUMBER
NTS	CBBEL/TPF	
DATE:	REVISED:	SGN-1
1/1/2016	1/1/2016	

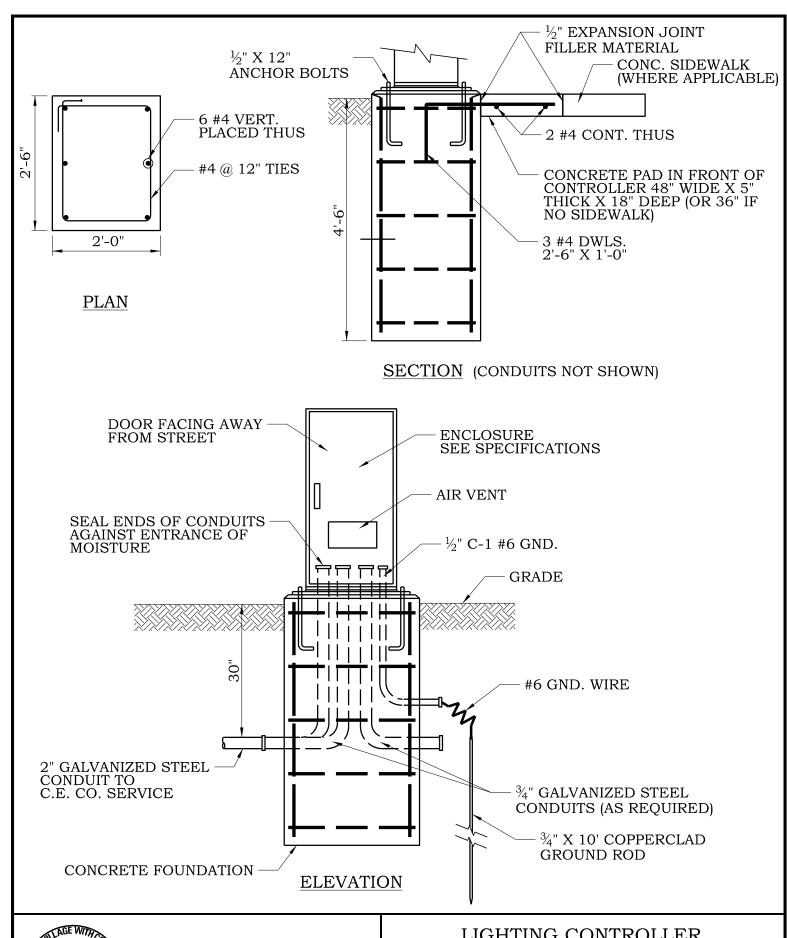


POSTS SHALL BE TELESCOPING STEEL TELESPAR, OR APPROVED EQUAL.



WATER RESTRICTION SIGNAGE

SCALE:	DRAWN/CHECKED	DRAWING NUMBER
NTS	CBBEL/TPF	
DATE:	REVISED:	SGN-2
1/1/2016	1/1/2016	

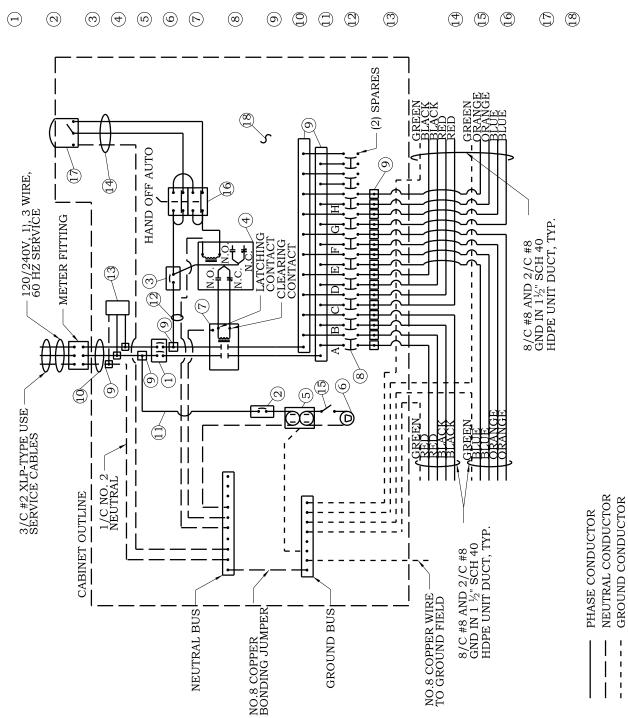




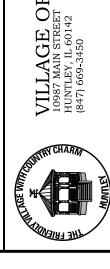
HUNTLE

LIGHTING CONTROLLER AND FOUNDATION

SCALE:	DRAWN/CHECKED	DRAWING NUMBER
NTS	CBBEL/TPF	
DATE:	REVISED:	TRFC-1
1/1/2016	1/1/2016	



- ARRESTER FOR ROADWAY LIGHTING PHOTOCELL WITH INTEGRAL SURGE
- ARRESTER FOR NAVIGATION LIGHTING PHOTOCELL WITH INTEGRAL SURGE
- HAND-OFF-AUTO SELECTOR SWITCH
- 100 AMP*, ELECTRICALLY HELD CONTACTOR
- 60 AMP*, ELECTRICALLY HELD CONTACTOR
- 15 AMP*, 1-POLE CIRCUIT BREAKER
- (TWO SPARES REQUIRED BUT NOT SHOWN) 20 AMP*, SINGLE-POLE CIRCUIT BREAKER
- 20 AMP*, SINGLE-POLE CIRCUIT BREAKER (TWO SHOWN, QUANTITY AS REQUIRED)
- SURGE ARRESTER
- GFCI DUPLEX RECEPTACLE
- SINGLE-POLE, SINGLE-THROW SWITCH
- INCANDESCENT LUMINAIRE, ENCLOSED AND GASKETTED WITH 100 WATT LAMP
- SOLID NEUTRAL IN NEMA 4X ENCLOSURE SERVICE DISCONNECT SWITCH - 2-POLE, 3-WIRE, 100 AMP*, FUSED AT 100 AMP*, HAVING LACKABLE EXTERNAL HANDLE
- 60 AMP*, 2-POLE CIRCUIT BREAKER
- 30 AMP*, 2-POLE CIRCUIT BREAKER
- 120/240V SECONDARY, SINGLE PHASE, 60 Hz TRANSFORMER - 1 KVA*, 480V PRIMARY,
- 15 AMP, 2-POLE CIRCUIT BREAKER
- TERMINAL BLOCK SIZED FOR CONDUCTORS AS SHOWN ON PLANS
- SIZE LARGER AS NEEDED



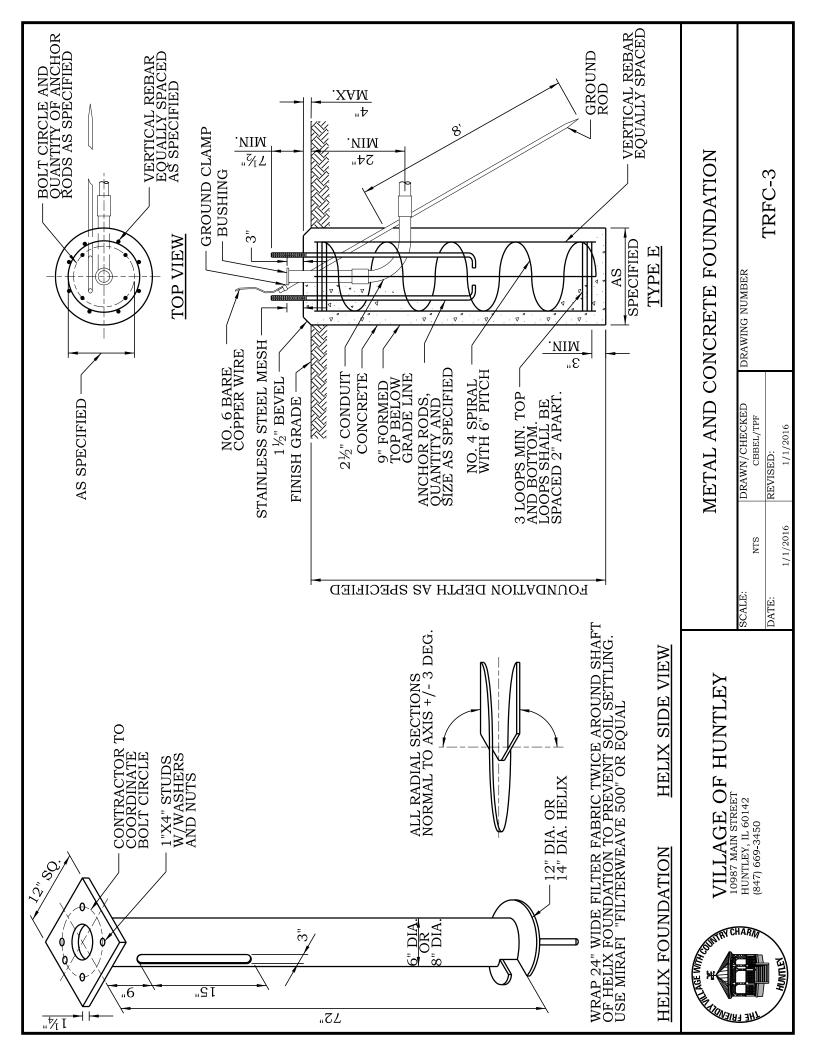
VILLAGE OF HUNTLEY

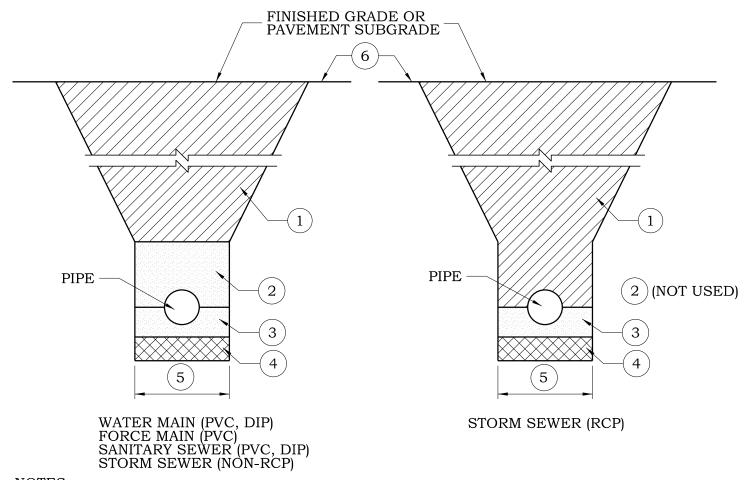
LIGHTING CONTROLLER WIRING

NTS CBBEL/TPF DATE: REVISED:	SCALE:
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- 1. FINAL BACKFILL MATERIAL CA-6 PER IDOT STANDARD SPECIFICATION ARTICLE 208 TO SUBGRADE AND WITHIN 2 FEET HORIZONTAL OF PROPOSED PAVEMENT, DRIVEWAY, SIDEWALK OR CURB AND GUTTER. 12" MAX. LIFT THICKNESS COMPACTED TO 90% STANDARD PROCTOR DENSITY. CLSM MAY BE USED WHERE DIRECTED BY ENGINEER. IN NON-STRUCTURAL AREAS BACKFILL WITH APPROVED EXCAVATED MATERIALS AND 6" MINIMUM OF BLACK TOPSOIL.
- 2. INITIAL BACKFILL TO 12" OVER TOP OF PIPE. MATERIAL SHALL MATCH PIPE BEDDING.
- 3. PIPE BEDDING MATERIAL TO PIPE SPRING LINE AS FOLLOWS: WATER MAIN AND FORCE MAIN: FA-1, FA-2, FA-6 OR FA-21. SANITARY SEWER AND STORM SEWER: CA-7.
- 4. UNSUITABLE MATERIAL TO BE REMOVED WHERE DIRECTED BY ENGINEER AND REPLACED WITH COMPACTED CA-7.
- 5. TRENCH WIDTH:

HUNTLE

- 12" + OD + 12" WHEN DEPTH TO TRENCH BOTTOM ≤ 5 FT.
- 18" + OD + 18" WHEN DEPTH TO TRENCH BOTTOM > 5 FT.
- 6. HMA SURFACES AND BASES SHALL BE FULL DEPTH SAW CUT 12" BEYOND EDGE OF TRENCH. PAVEMENT SHALL BE RESTORED IN ACCORDANCE WITH VILLAGE STANDARD PAVEMENT DETAILS.
- 7. CONTRACTORS SHALL COMPLY WITH THE LATEST OSHA STANDARDS INCLUDING, BUT NOT LIMITED TO: SLOPING AND BENCHING TRENCH WALLS;

TRENCH SUPPORT AND SHORING SYSTEMS;

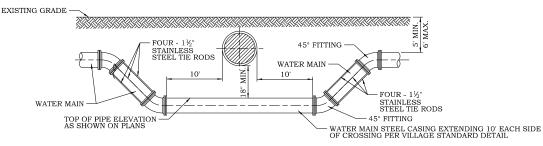
SHIELD SYSTEMS; AND

HAZARDOUS ATMOSPHERES.



TYPICAL TRENCH CROSS SECTIONS

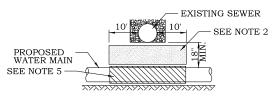
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NTS	CBBEL/TPF	
DATE:	REVISED:	UTL-1
1/1/2016	1/1/2016	



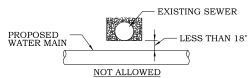
PROPOSED WATER MAIN BELOW EXISTING SEWER LINE WITH 18" MINIMUM SEPARATION.

NOTES

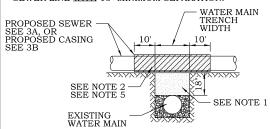
- 1. OMIT SELECT GRANULAR CRADLE AND GRANULAR BACKFILL TO ONE (1) FOOT OVER TOP OF PIPE AND USE SELECT EXCAVATED MATERIAL (CLASS IV) AND COMPACT FOR 10 FEET ON EITHER SIDE OF SEWER LINE
- 2. IF SELECT GRANULAR BACKFILL EXISTS, REMOVE WITHIN WIDTH OF EXISTING SEWER LINE TRENCH AND REPLACE WITH SELECT EXCAVATED MATERIAL (CLASS IV) AND COMPACT.
- 3. PROVIDE ADEQUATE SUPPORT FOR EXISTING SEWER LINE TO PREVENT DAMAGE DUE TO SETTLEMENT.
- 4. CLASS IV MATERIAL SHALL BE COMPACTED TO 95% OF STANDARD PROCTOR MAXIMUM DENSITY.
- 5. USE STEEL CASING WITH PROPOSED WATER MAIN AND SEAL ENDS OF THE CASING.



PROPOSED WATER MAIN BELOW EXISTING SEWER LINE WITH LESS THAN 18" MINIMUM SEPARATION.



MUST MAINTAIN 18" VERTICAL SEPARATION
EXISTING WATER MAIN BELOW PROPOSED
SEWER LINE WITH 18" MINIMUM SEPARATION.

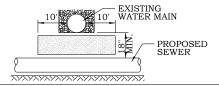


NOTES:

- IF SELECT GRANULAR BACKFILL EXISTS;
 REMOVE WITHIN WIDTH OF PROPOSED
 SEWER TRENCH AND REPLACE WITH SELECT
 EXCAVATED MATERIAL (CLASS IV) AND COMPACT.
- 2. OMIT SELECT GRANULAR CRADLE AND GRANULAR BACKFILL TO ONE (1) FOOT OVER TOP OF PIPE AND USE SELECT EXCAVATED MATERIAL (CLASS IV) AND COMPACT FOR 10 FEET ON EITHER SIDE OF WATER MAIN.
- 3A. CONSTRUCT PROPOSED SEWER WITH WATER MAIN QUALITY PIPE AND PRESSURE TEST, OR
- 3B. USE STEEL CASING WITH PROPOSED SEWER AND SEAL ENDS OF CASING. $\label{eq:cases}$
- 4. POINT LOADS SHALL NOT BE ALLOWED BETWEEN SEWER OR SEWER CASING AND WATER MAIN.
- 5. PROVIDE ADEQUATE SUPPORT FOR EXISTING WATER MAIN TO PREVENT DAMAGE DUE TO SETTLEMENT OF SEWER TRENCH.
- 6. CLASS IV MATERIAL TO BE COMPACTED TO 95% OF STANDARD PROCTOR MAXIMUM DENSITY.

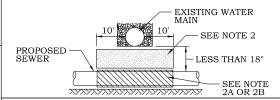
PROPOSED SEWER LINE BELOW EXISTING WATER MAIN WITH 18" MINIMUM SEPARATION. NOTES:

- 1. PROVIDE ADEQUATE SUPPORT FOR EXISTING WATER MAIN TO PREVENT DAMAGE DUE TO SETTLEMENT OF SEWER TRENCH.
- 2. MAINTAIN 18" MINIMUM VERTICAL SEPARATION FOR 10 FEET HORIZONTALLY.

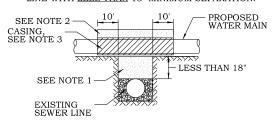


PROPOSED SEWER LINE BELOW EXISTING WATER MAIN WITH LESS THAN 18" MINIMUM SEPARATION NOTES.

- 1. OMIT SELECT GRANULAR CRADLE AND GRANULAR BACKFILL TO ONE (1) FOOT OVER TOP OF PIPE AND USE SELECT EXCAVATED MATERIAL (CLASS IV) AND COMPACT FOR 10 FEET ON EITHER SIDE OF WATER MAIN.
- 2A. CONSTRUCT PROPOSED SEWER WITH WATER MAIN QUALITY PIPE AND PRESSURE TEST, OR
- 2B. USE STEEL CASING WITH PROPOSED SEWER AND SEAL ENDS OF CASING/
- 3. POINT LOADS SHALL NOT BE ALLOWED BETWEEN SEWER OR SEWER CASING AND WATER MAIN.
- 4. PROVIDE ADEQUATE SUPPORT FOR EXISTING SEWER LINE TO PREVENT DAMAGE DUE TO SETTLEMENT.
- 5. CLASS IV MATERIAL SHALL BE COMPACTED TO 95% OF STANDARD PROCTOR MAXIMUM DENSITY.



PROPOSED WATER MAIN ABOVE EXISTING SEWER LINE WITH LESS THAN 18" MINIMUM SEPARATION.



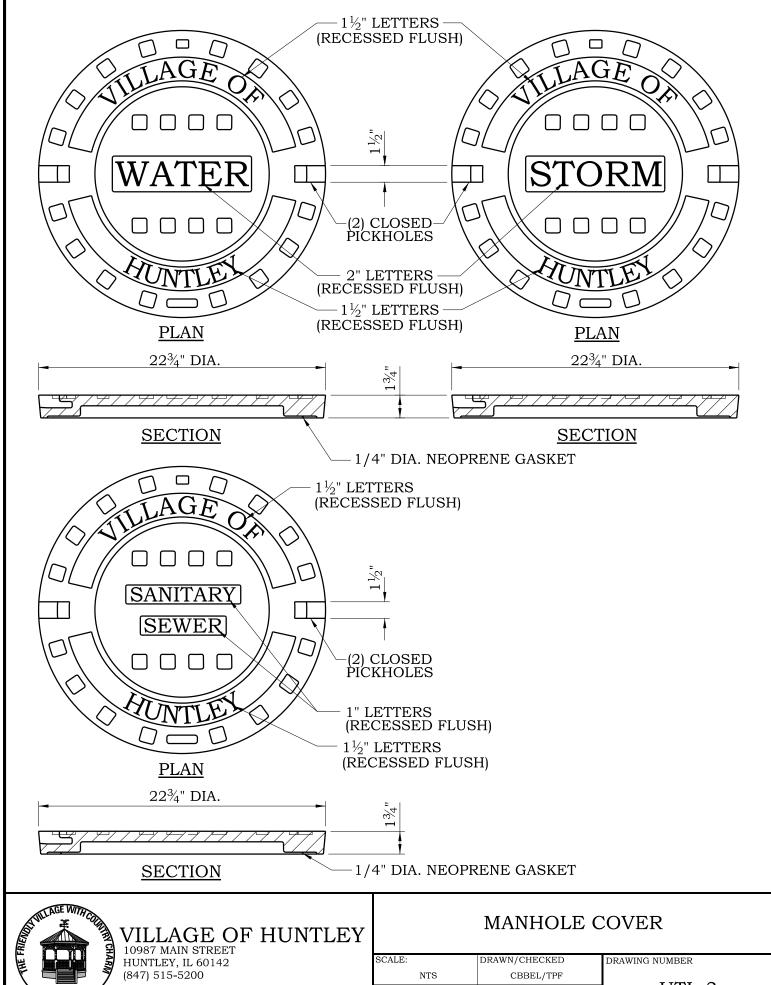
NOTES:

- 1. IF SELECT GRANULAR BACKFILL EXISTS; REMOVE WITHIN WIDTH OF EXISTING SEWER LINE TRENCH AND REPLACE WITH SELECT EXCAVATED MATERIAL (CLASS IV) AND COMPACT.
- 2. OMIT SELECT GRANULAR CRADLE AND GRANULAR BACKFILL TO ONE (1) FOOT OVER TOP OF PIPE AND USE SELECT EXCAVATED MATERIAL (CLASS IV) AND COMPACT FOR 10 FEET ON EITHER SIDE OF SEWER LINE.
- 3. USE A STEEL CASING FOR PROPOSED WATER MAIN AND SEAL ENDS OF CASING.
- 4. POINT LOADS SHALL NOT BE ALLOWED BETWEEN WATER MAIN OR WATER MAIN AND SEWER.
- 5. CLASS IV MATERIAL TO BE COMPACTED TO 95% OF STANDARD PROCTOR MAXIMUM DENSITY.

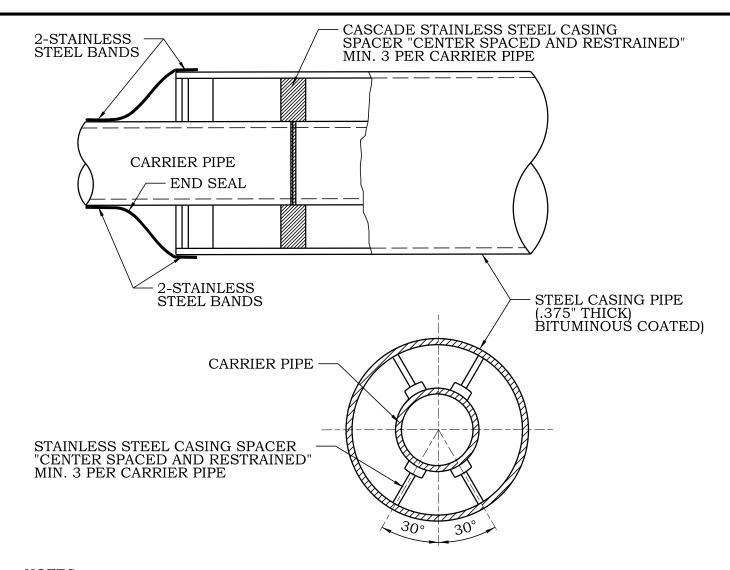


SEWER AND WATER SEPARATION REQUIREMENTS

SCALE:		DRAWN/CHECKED	DRAWING NUMBER
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DATE:		REVISED:	UTL-2
	1/1/2016	1/1/2016	



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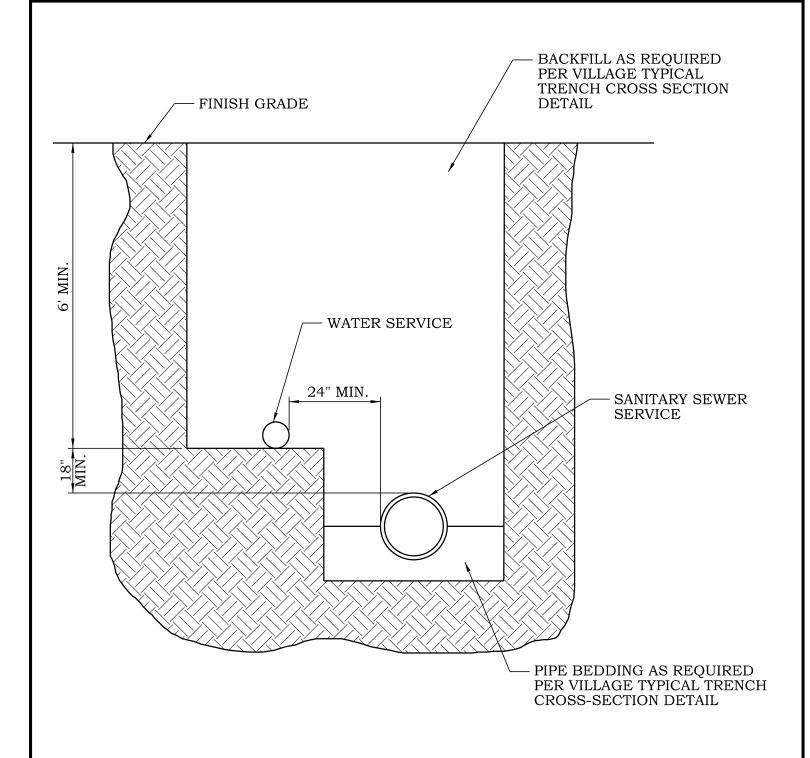


- 1. THE PIPE MATERIAL SHALL BE "CENTER SPACED AND RESTRAINED" ON TOP AND BOTTOM UTILIZING CASING SPACERS EQUALLY SPACED PER MANUFACTURER SPECIFICATIONS.
- 2. CASING SPACERS ARE TO BE CASCADE MFG. BRAND OR APPROVED EOUAL.
- 3. STEEL CASING PIPE SHALL BE IN ACCORDANCE WITH AMERICAN NATIONAL STANDARDS INSTITUE (ANSI) B36.10 WITH A YIELD STRENGTH OF 35,000 PSI, 0.375" MINIMUM WALL THICKNESS.
- 4. IF REQUIRED, WELDS SHALL BE IN ACCORDANCE WITH THE AMERICAN WELDING SOCIETY (AWS) D1.1 AND BE CONTINUOUS CIRCUMFERENTIAL WELDS. THE STEEL CASING PIPE SHALL HAVE A BITUMINOUS COAT ON THE INSIDE AND OUTSIDE SURFACE IN ACCORDANCE WITH AMERICAN ASSOCIATION OF STATE HIGHWAY TRANSPORTATION OFFICIALS (AASHTO) M190.
- 5. CASING END SEALS SHALL BE SYNTHETIC RUBBER WITH STAINLESS STEEL BANDING AS MANUFACTURED BY CASCADE WATERWORWORKS MFG. CO. MODEL CCES, OR APPROVED EQUAL.
- 6. ALL CARRIER PIPE BELL AND SPIGOT JOINTS WITHIN CASING AND THE FIRST CARRIER PIPE BELL AND SPIGOT JOINT OUTSIDE EACH END OF THE STEEL CASING SHALL BE INSTALLED WITH JOINT RESTRAINTS, "FIELD LOK 350 GASKETS" OR APPROVED EQUAL.



CASING PIPE

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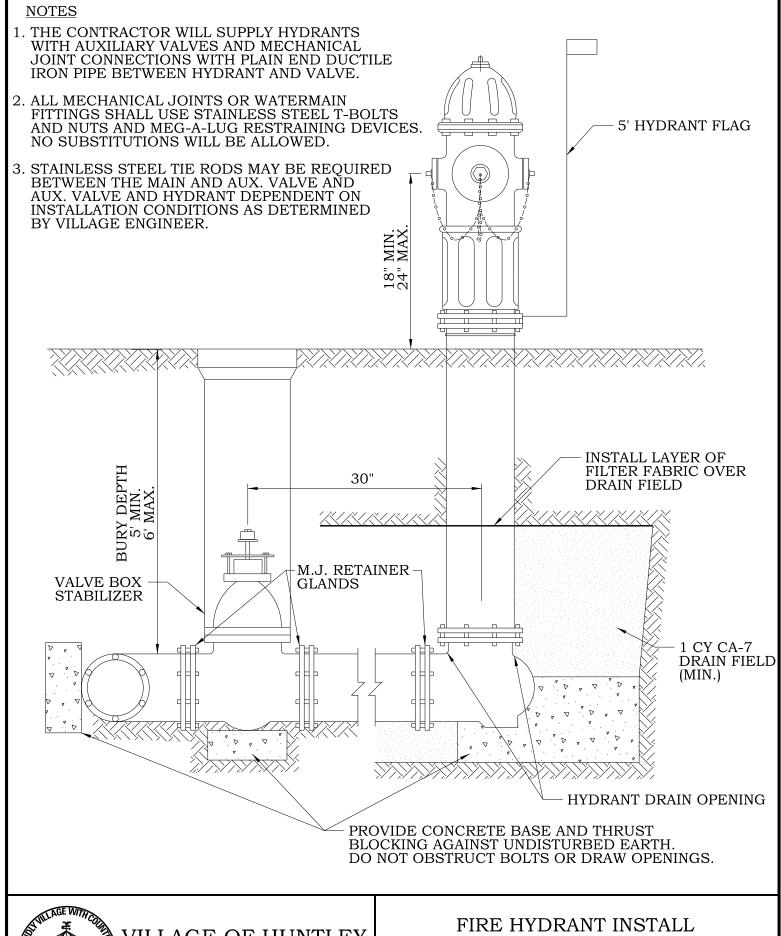


- 1. THE WATER SERVICE PIPING AND BUILDING SEWER PIPING MAY BE INSTALLED IN A COMMON TRENCH PROVIDED THAT THE WATER SERVICE PIPE IS PLACED ON A SHELF A MINIMUM OF EIGHTEEN (18) INCHES ABOVE AND TWENTY FOUR (24) INCHES HORIZONTALLY FROM THE BUILDING SEWER PIPING.
- 2. SERVICES PROHIBITED UNDER DRIVEWAY APPROACHES.



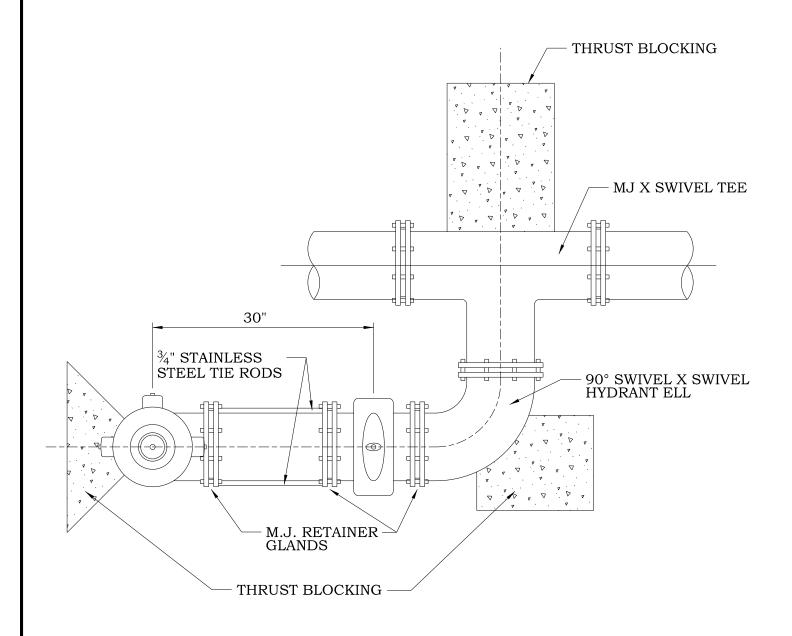
COMMON WATER/SANITARY SERVICE TRENCH

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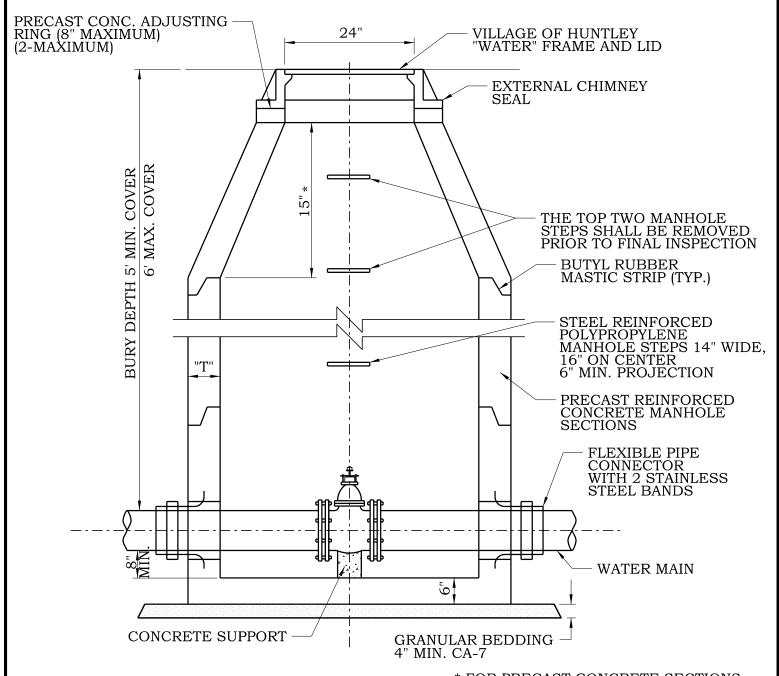


- 1. THE CONTRACTOR WILL SUPPLY HYDRANTS WITH AUXILARY VALVES AND MECHANICAL JOINT CONNECTIONS WITH PLAIN END DUCTILE IRON PIPE BETWEEN HYDRANT AND VALVE.
- 2. ALL MECHANICAL JOINTS OR WATER MAIN FITTINGS SHALL USE STAINLESS STEEL T-BOLTS AND NUTS AND MEGALUG RESTRAINING DEVICES. NO SUBSTITUTIONS WILL BE ALLOWED.
- 3. WHEN CONDITIONS REQUIRE, SUCH AS LIMITED ACCESS OR UTILITY CONFLICTS THE HYDRANT SHALL BE INSTALLED AND/OR RELOCATED PER THE FIRE HYDRANT PARALLEL TO MAIN DETAIL SHOWN. THE COST OF ANY ADDITIONAL MATERIALS OR LABOR SHALL BE CONSIDERED INCIDENTAL TO THE COST OF HYDRANT INSTALLATION AND/OR RELOCATION.



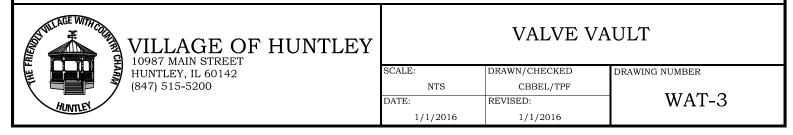
FIRE HYDRANT PARALLEL TO MAIN

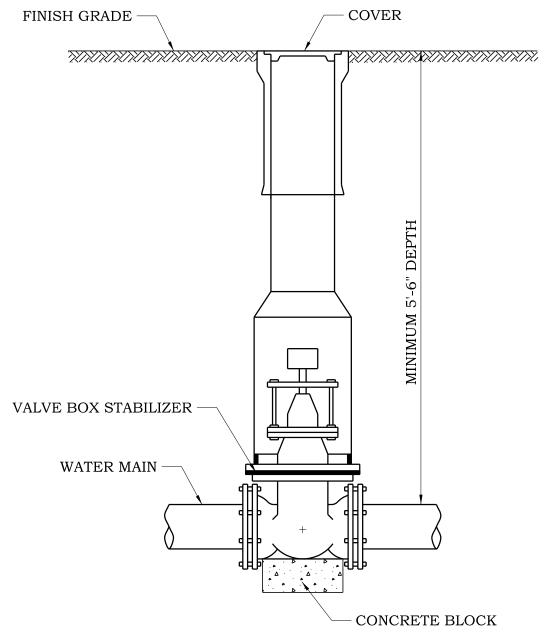
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1. CONCENTRIC CONE REQUIRED.

- * FOR PRECAST CONCRETE SECTIONS, THIS DIMENSION MAY VARY FROM THE DIMENSION GIVEN TO PLUS 6"
- 2. USE 4'-0" DIAMETER FOR WATER MAIN SIZES THRU 8".
- 3. USE 5'-0" DIAMETER FOR WATER MAIN SIZES 10" AND GREATER, AND FOR ALL PRESSURE CONNECTIONS.
- 4. THICKNESS "T"=4" MIN. FOR 4' DIAMETER AND 5" MIN. FOR 5' DIAMETER VAULTS.
- 5. ALL PRECAST VAULT SECTIONS SHALL BE BITUMINOUS COATED.
- 6. UNLESS OTHERWISE SPECIFIED HEREIN CONSTRUCTION AND MATERIALS SHALL CONFORM TO THE STD. SPEC. FOR WATER AND SEWER CONSTRUCTION IN ILLINOIS, LATEST EDITION.



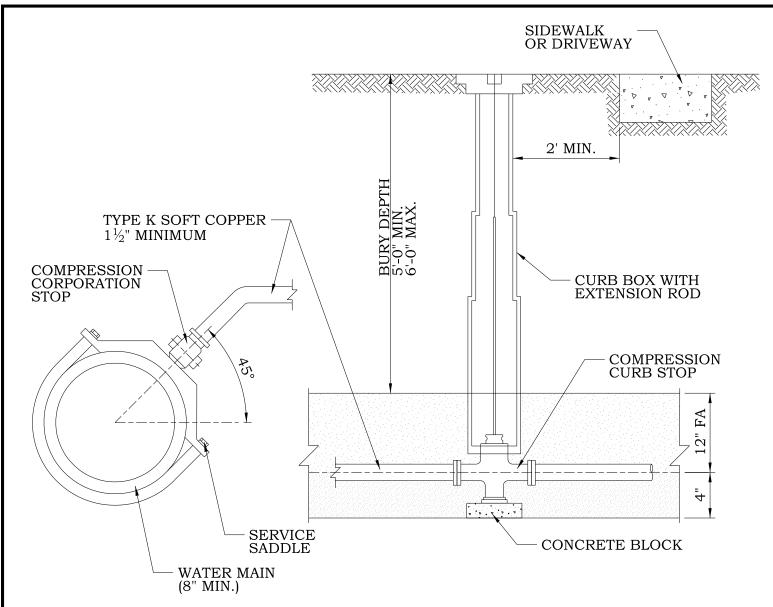


- 1. ALL VALVES $2\frac{1}{2}$ " THRU 8" SHALL BE PLACED IN A VALVE BOX, UNLESS APPROVED BY THE VILLAGE ENGINEER.
- 2. ALL VALVES 10" OR LARGER SHALL BE PLACED IN A VALVE VAULT.
- 3. ALL VALVES REGARDLESS OF SIZE LOCATED WITHIN PAVEMENT LIMITS SHALL BE PLACED IN A VALVE VAULT.
- 4. APPROVED VALVE TYPES ARE MUELLER A-2360 RESILIENT SEAT GATE VALVES WITH STAINLESS STEEL TRIM BOLTS (6" THRU 10") OR CLASS 150B MUELLER B-3211 BUTTERFLY VALVES (12" OR LARGER).



VALVE BOX INSTALLATION

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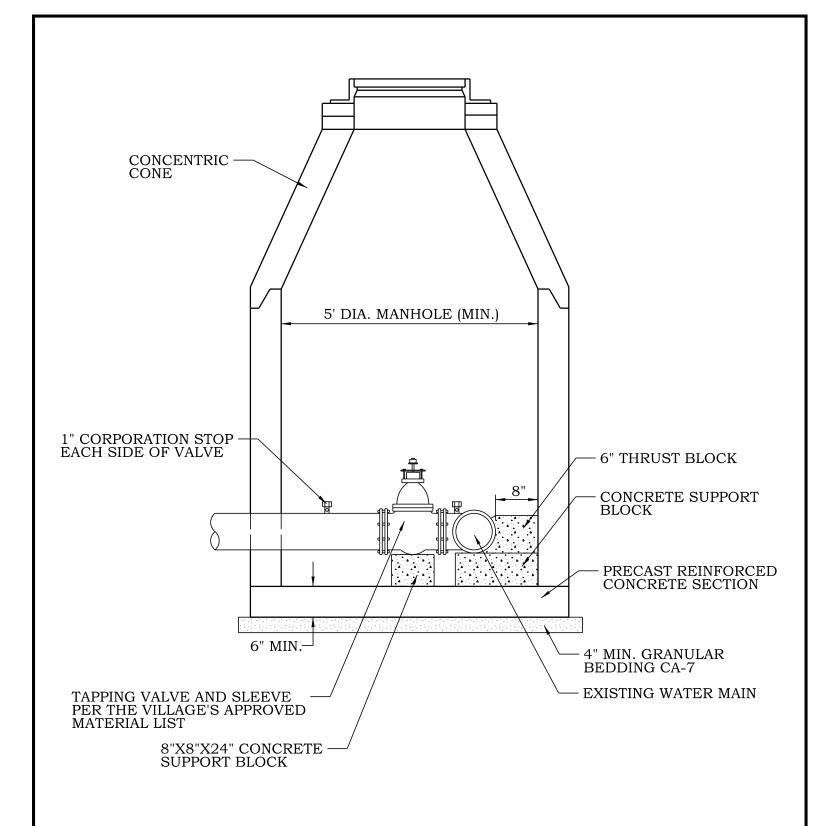


- 1. NO CORPORATION STOPS, SERVICE LINES, OR CURB BOXES MAY BE LOCATED UNDER PAVED AREAS INCLUDING DRIVES AND SIDEWALKS, OR WITHIN 2 FEET OF ANY PAVED SURFACE.
- 2. ALL WATER SERVICE HARDWARE SHALL BE MUELLER.
- 3. SERVICE LINES TO BE CONTINUOUS WITHOUT JOINTS FROM CORPORATION STOP TO CURB STOP.
- 4. MULTIPLE TAPS INTO MAIN SHALL BE NO CLOSER THAN 2' APART.
- 5. SERVICE LINES SHALL BE BEDDED AND BACKFILLED WITH FA-1, FA-2, FA-6 OR FA-21. TRENCH FROM MAIN TO BACK OF SIDEWALK TO BE COMPACTED TRENCH BACKFILL PER THE VILLAGE'S STANDARD TRENCH DETAILS.
- 6. ALL MATERIALS PER THE VILLAGE'S APPROVED MATERIAL LIST.
- 7. CONNECTION OF EXISTING WATER SERVICES LESS THAN 1 1/2" MAY BE RE-CONNECTED UPON THE AUTHORIZATION OF THE DIRECTOR OF PUBLIC WORKS UTILIZING THE DIRECT TAP METHOD TO 6 INCH MAINS AND LARGER ONLY.



WATER SERVICE INSTALLATION

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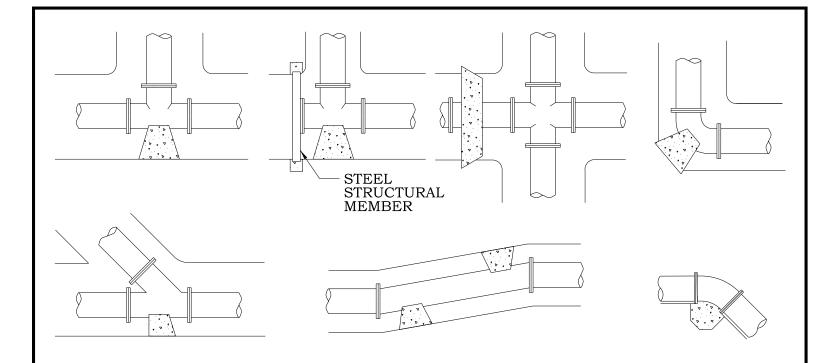


1. VALVE VAULT SHALL BE CONSTRUCTED PER THE STANDARD DETAIL WAT-3.



WATER MAIN PRESSURE CONNECTION

SCALE:	DRAWN/CHECKED	DRAWING NUMBER
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1/1/2016	1/1/2016	



BEARING AREA (SQ. FT.)

PIPE SIZE	TEE/PLUG	90 DEG.	45 DEG.	22½°	11½°
6	4	2	1	1	1
8	6	4	3	1	1
10	7	5	3	2	1
12	8	6	4	3	2
14	12	9	6	4	3
16	15	12	7	5	3
18	18	15	9	5	4
24	40	30	15	10	5

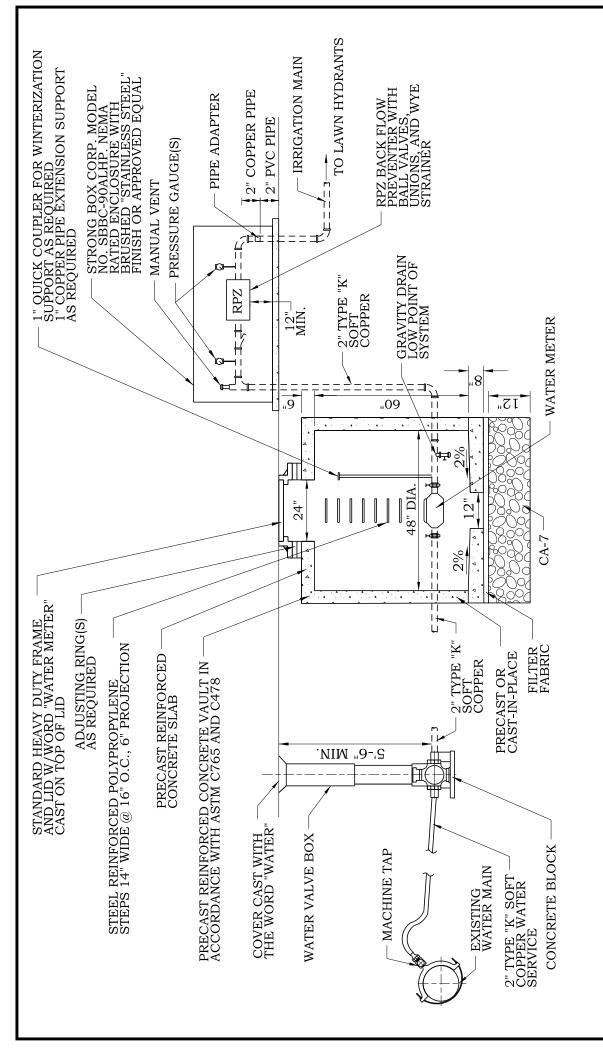
NOTES:

- 1. ALL BLOCKING SHALL BE POURED CONCRETE AGAINST UNDISTURBED EARTH.
- 2. ALL BENDS OR ELBOWS GREATER THAN $11\frac{1}{4}$ ° SHALL HAVE THRUST BLOCKING.
- 3. IN ADDITION TO THRUST BLOCKING, ALL MECHANICAL JOINTS, BENDS OVER $11^{1}\!\!4^\circ$ AND FIRE HYDRANTS SHALL HAVE "MEGA LUG" JOINT RESTRAINTS AND STAINLESS STEEL BOLTS AND NUTS.



WATER MAIN THRUST BLOCKING

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- EXACT LOCATION OF SERVICE STUBS TO BE DETERMINED BY CONTRACTOR.
- THE WATER SERVICE PIPING SHALL BE AUGERED UNDER ROADS WHERE INDICATED ON THE DRAWINGS.



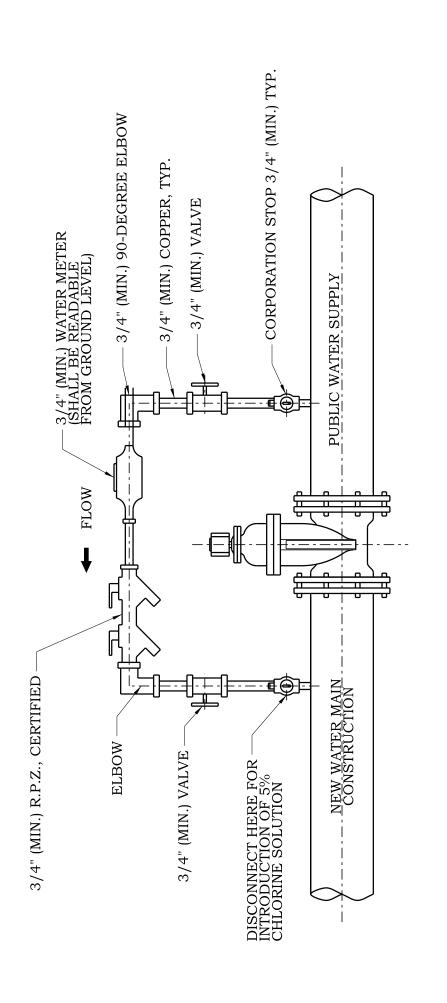
VILLAGE OF HUNTLEY 10987 MAIN STREET HUNTLEY, IL 60142 (847) 669-3450

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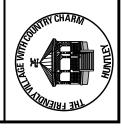
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IRRIGATION SERVICE

WAT-8



1. VALVE JUMPER MUST BE ABOVE MANHOLE LID.



WATER VALVE JUMPER

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VILLAGE OF HUNTLEY	10987 MAIN STREET	HUNTLEY, IL 60142	(847) 669-3450	

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