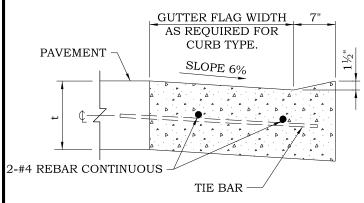
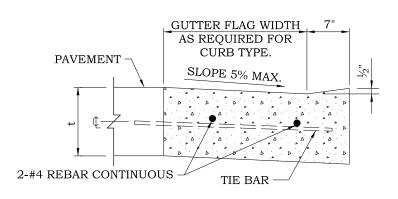
INDEX TO STANDARD ENGINEERING DETAILS

VILLAGE OF HUNTLEY

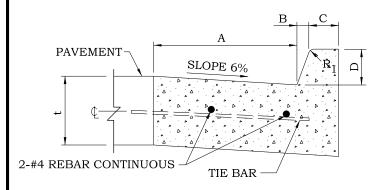
Detail	Description	Detail	Description
DRN -1	Combination Concrete Curb & Gutter	PVT - 5	Minimum Pavement Requirements Roadways
DRN - 2	Modified Rolled Curb	PVT - 6	Minimum Pavement Requirements Parking Lots
DRN - 3	Concrete Curb & Gutter Notes	SAN - 1	Sanitary Manhole
DRN - 4	Storm Manhole Type A	SAN - 2	Sanitary Monitoring Manhole
DRN - 5	Catch Basin Type A	SAN - 3	Sanitary Sewer Connection to Existing Manhole
DRN - 6	Catch Basin Type C	SAN - 4	Sanitary Service Riser
DRN - 7	Inlet Type A	SAN - 5	Sanitary Sewer Saddle Connection
DRN - 8	Inlet Type B	SESC - 1	Silt Fence
DRN - 9	Rip Rap	SESC - 2	Stabilized Construction Entrance
DRN - 10	Storm Water Restrictor Structure	SESC - 3	Temporary Topsoil Stockpile
DRN - 11	Subsurface Drain Tile & Structure Connection	SESC - 4	Temporary Perforated Water Quality Riser
DRN - 12	Sump Pump Connection	SESC - 5	Area Inlet Protection
LGHT - 1	Lighting Controller Cabinet and Foundation	SESC - 6	Illinois Urban Manual Erosion Control Systems
LGHT - 2A	Lighting Controller Wiring	SGN - 1	Typical Sign Placement at Subdivision Entrance
LGHT - 2B	Lighting Controller Component Schedule	SGN - 2	Water Restriction Signage
LGHT - 3	Ground Field	UTL - 1	Typical Trench Cross Sections
LGHT - 4	Electric Service Installation	UTL - 2	Sewer and Water Separation Requirements
LGHT - 5	Light Pole Foundation	UTL - 3	Manhole Cover
LGHT - 6	Light Pole Handhole Wiring Diagram	UTL - 4	Casing Pipe
LGHT - 7	Splicing Electric Cable	UTL - 5	Common Water/Sanitary Service Trench
LGHT - 8	Residential Roadway LED Lighting Unit	WAT - 1	Fire Hydrant Install
LGHT - 9	Collector Roadway LED Lighting Unit	WAT - 2	Fire Hydrant Parallel to Main
LGHT - 10	Arterial Roadway Light Pole	WAT - 3	Valve Vault
LGHT - 11	Electric Conduit Installation	WAT - 4	Valve Box Installation
LGHT - 12	Polymer Concrete Handhole	WAT - 5	Water Service Installation
PVT - 1	P.C. Concrete Residential Driveway Approach	WAT - 6	Water Main Pressure Connection
PVT - 2	HMA Residential Driveway Approach	WAT - 7	Water Main Thrust Blocking
PVT - 3	Non-Residential Driveway Approach	WAT - 8	Irrigation Service
PVT - 4	Concrete Sidewalk	WAT - 9	Water Valve Jumper



DEPRESSED CURB (TYPICAL)



DEPRESSED CURB ADJACENT TO CURB RAMP ACCESSIBLE TO THE DISABLED



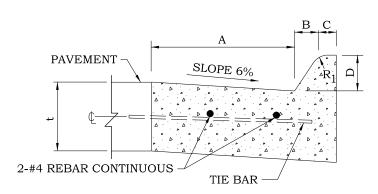
BARRIER CURB

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

^{*} For corner islands only.

NOTES:

1. SEE DETAIL DRN-3 FOR NOTES.



MOUNTABLE CURB

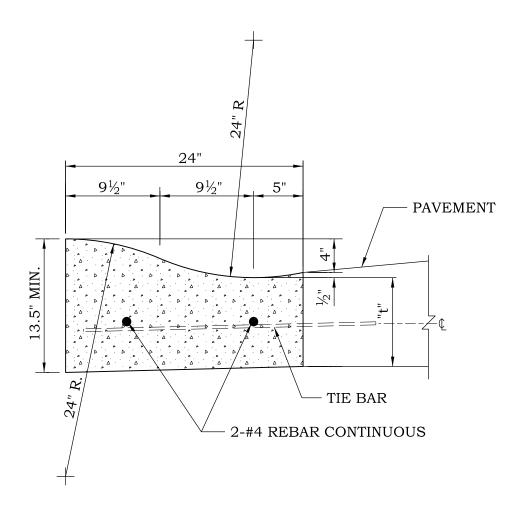
TABLE OF DIMENSIONS MOUNTABLE CURB (INCHES)						
TYPE	A	В	С	D	R ₁	R ₂
M-2.06	6	2	4	2	3	2
M-2.12	12	2	4	2	3	2
M-4.06	6	4	3	4	3	NA
M-4.12	12	4	3	4	3	NA
M-4.18	18	4	3	4	3	NA
M-4.24	24	4	3	4	3	NA
M-6.06	6	6	2	6	2	NA
M-6.12	12	6	2	6	2	NA
M-6.18	18	6	2	6	2	NA
M-6.24	24	6	2	6	2	NA

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	
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	

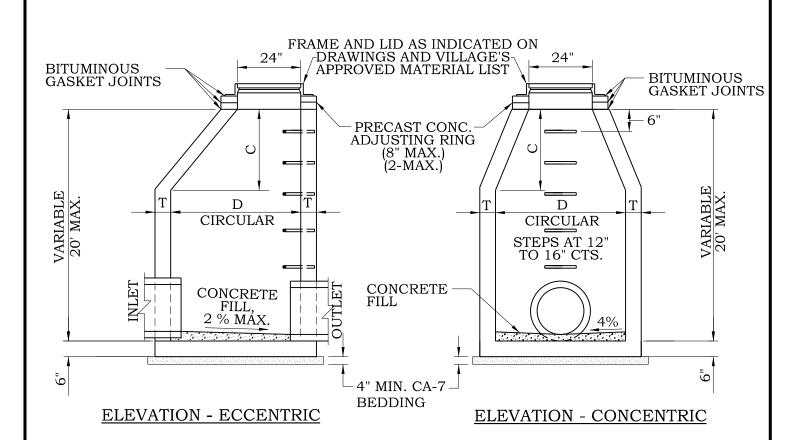
- 1. <u>THICKNESS</u> T THICKNESS OF PAVEMENT, MINIMUM 9". THICKNESS SHALL MATCH THE TOTAL HMA OR PCC PAVEMENT THICKNESS WHEN TOTAL PAVEMENT THICKNESS IS GREATER THAN 9".
- 2. DRAINAGE OPENINGS AT ALL LOCATIONS WHERE METAL CASTINGS ARE INCORPORATED IN THE CURB AND GUTTER, A 1" THICK PREFORMED JOINT FILLER, 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	
DATE:	REVISED:	DRN-3
1/1/2016	10/21/2021	



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

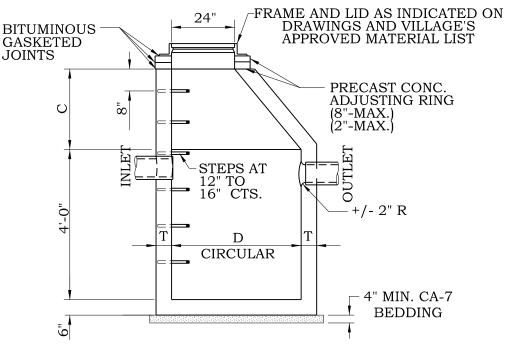
^{*} DIMENSION "C" MAY VARY FROM THE DIMENSION GIVEN TO PLUS 6".

- 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.
- 3A. EXTERNAL CHIMNEY SEALS PER THE VILLAGE'S APPROVED MATERIAL LIST SHALL BE INSTALLED ON ALL STRUCTURES WHEN LOCATED WITHIN LIMITS OF PAVED SURFACES. THE STRUCTURES RIM SHALL BE 1/2" BELOW PAVEMENT GRADE. EXTERNAL CHIMNEY SEALS MAY BE ELIMINATED FOR STRUCTURES LOCATED OUTSIDE OF LIMITS OF PAVED SURFACES.
- 3B. EXTERNAL CHIMNEY SEALS PER THE VILLAGE'S APPROVED MATERIAL LIST SHALL BE INSTALLED ON ALL STRUCTURES WHEN LOCATED WITHIN CURB LINES.
- 4. UNLESS OTHERWISE SPECIFIED CONSTRUCTION AND MATERIAL 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	5511
DATE:	REVISED:	DRN-4
1/1/2016	3/8/2021	



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".

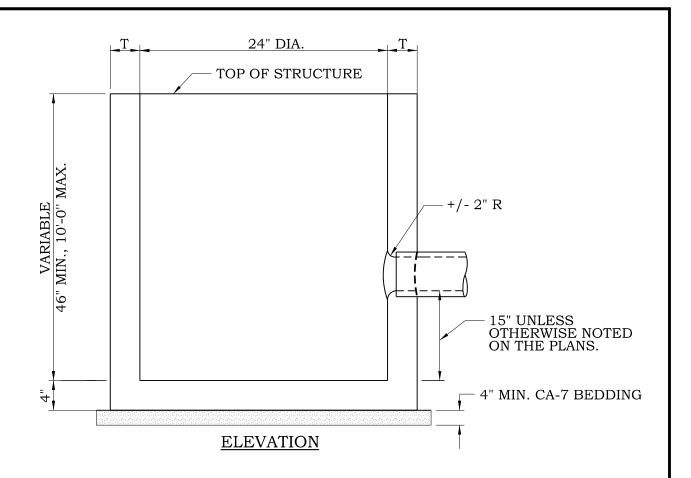
NOTES

- 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.
- 3A. EXTERNAL CHIMNEY SEALS PER THE VILLAGE'S APPROVED MATERIAL LIST SHALL BE INSTALLED ON ALL STRUCTURES WHEN LOCATED WITHIN LIMITS OF PAVED SURFACE. THE MANHOLE RIM SHALL BE 1/2" BELOW PAVEMENT GRADE. EXTERNAL CHIMNEY SEALS MAY BE ELIMINATED FOR STRUCTURES LOCATED OUTSIDE THE LIMITS OF PAVED SURFACES.
- 3B. EXTERNAL CHIMNEY SEALS PER THE VILLAGE'S APPROVED MATERIAL LIST SHALL BE INSTALLED ON ALL STRUCTURES LOCATED WITHIN CURB LINES.
- 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	3/8/2021	



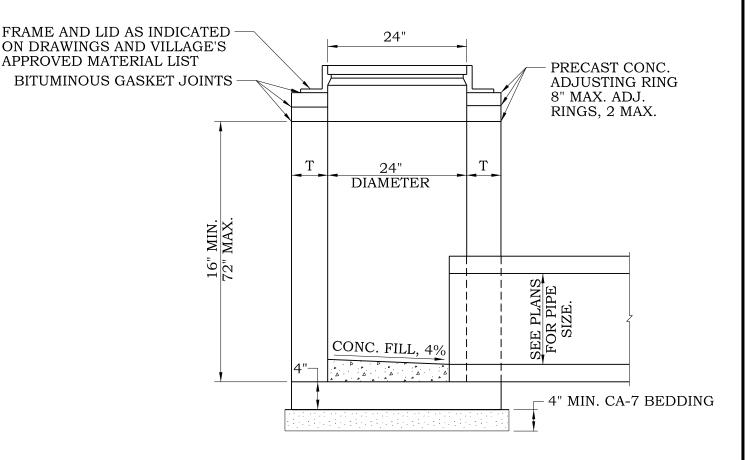
MATERIALS FOR WALLS	T (min.)
PRECAST REINFORCED CONCRETE SECTION	3"

- 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.
- 3A. EXTERNAL CHIMNEY SEALS PER THE VILLAGE'S APPROVED MATERIAL LIST SHALL BE INSTALLED ON ALL STRUCTURES WHEN LOCATED WITHIN LIMITS OF PAVED SURFACES. THE STRUCTURES RIM SHALL BE 1/2" BELOW PAVEMENT GRADE. EXTERNAL CHIMNEY SEALS MAY BE ELIMINATED FOR STRUCTURES LOCATED OUTSIDE LIMITS OF PAVED SURFACES.
- 3B. EXTERNAL CHIMNEY SEALS PER THE VILLAGE'S APPROVED MATERIAL LIST SHALL BE INSTALLED ON ALL STRUCTURES LOCATED WITHIN CURB LINES.



CATCH BASIN TYPE C

SCA	LE:	DRAWN/CHECKED	DRAWING NUMBER
	NTS	CBBEL/TPF	
DATE:		REVISED:	DRN-6
	1/1/2016	3/8/2021	

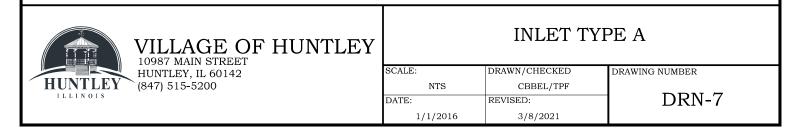


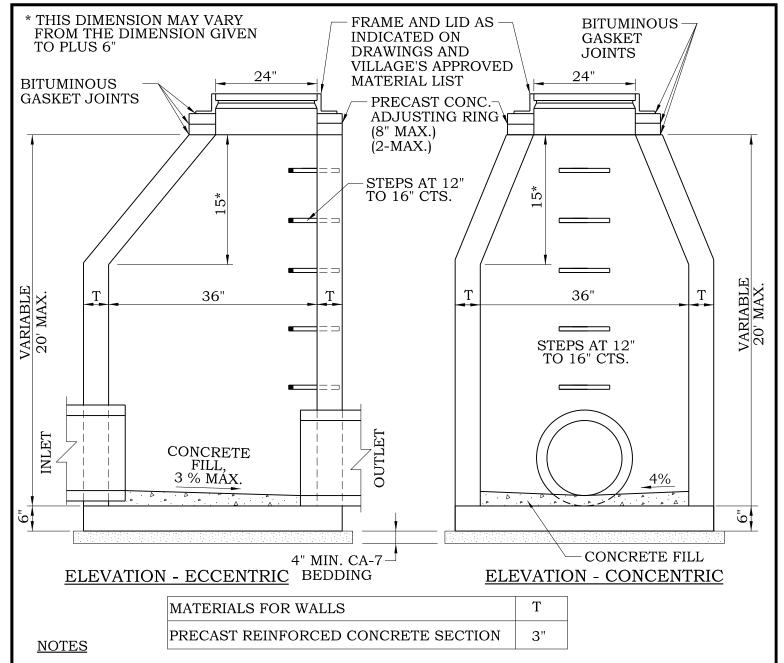
ELEVATION

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
- 2A. EXTERNAL CHIMNEY SEALS PER THE VILLAGE'S APPROVED MATERIAL LIST SHALL BE INSTALLED ON ALL STRUCTURES WHEN LOCATED WITHIN LIMITS OF PAVED SURFACES. THE INLET RIM SHALL BE 1/2" BELOW PAVEMENT GRADE. EXTERNAL CHIMNEY SEALS MAY BE ELIMINATED FOR STRUCTURES LOCATED OUTSIDE LIMITS OF PAVED SURFACES.
- 2B. EXTERNAL CHIMNEY SEALS PER THE VILLAGE'S APPROVED MATERIAL LIST SHALL BE INSTALLED ON ALL STRUCTURES WHEN LOCATED WITHIN CURB LINES.
- 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.



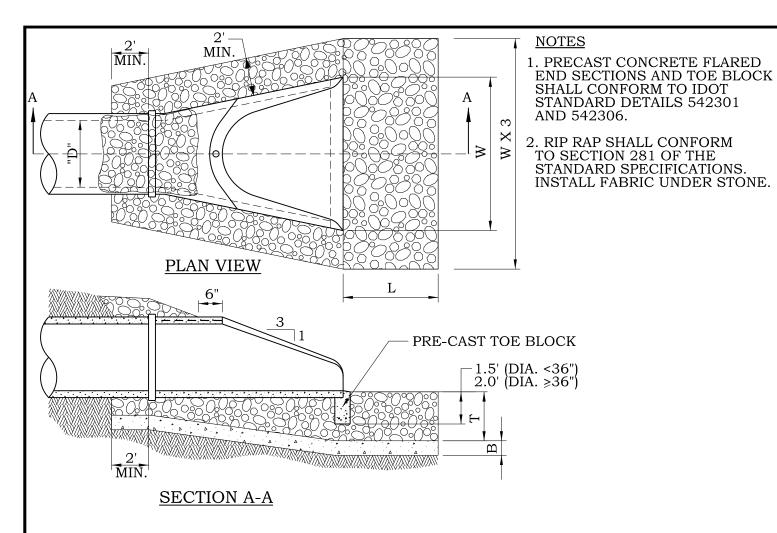


- 1. USE ECCENTRIC CONES UNLESS OTHERWISE INDICATED ON THE DRAWING. FLAT TOP SLABS PERMITTED ONLY FOR INLETS TOO SHALLOW FOR CONES.
- 2A. EXTERNAL CHIMNEY SEALS PER VILLAGE'S APPROVED MATERIAL LIST SHALL BE INSTALLED ON ALL STRUCTURES WHEN LOCATED WITHIN LIMITS OF PAVED SURFACES. THE INLET RIM SHALL BE 1/2" BELOW PAVEMENT GRADE. EXTERNAL CHIMNEY SEALS MAY BE ELIMINATED FOR STRUCTURES LOCATED OUTSIDE LIMITS OF PAVED SURFACES.
- 2B. EXTERNAL CHIMNEY SEALS PER VILLAGE'S APPROVED MATERIAL LIST SHALL BE INSTALLED ON ALL STRUCTURES WHEN LOCATED WITHIN CURB LINES.
- 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.



INLET TYPE B

SCALE:	DRAWN/CHECKED	DRAWING NUMBER
NTS	CBBEL/TPF	
DATE:	REVISED:	DRN-8
1/1/2016	3/8/2021	



LOW VELOCITY (5 <fps)< td=""><td colspan="3">HIGH VELOCITY (5-10 fps)</td></fps)<>			HIGH VELOCITY (5-10 fps)				
D	Т	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.

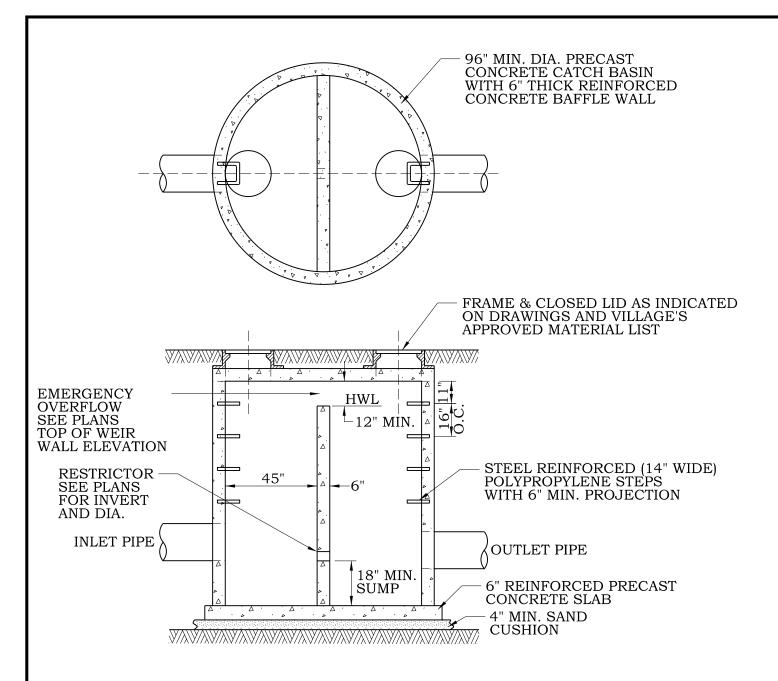


VILLAGE OF HUNTLEY

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

RIP RAP

Ì	SCALE:	DRAWN/CHECKED	DRAWING NUMBER
	NTS	CBBEL/TPF	5511.0
Ì	DATE:	REVISED:	DRN-9
ı	1/1/2016	3/8/2021	

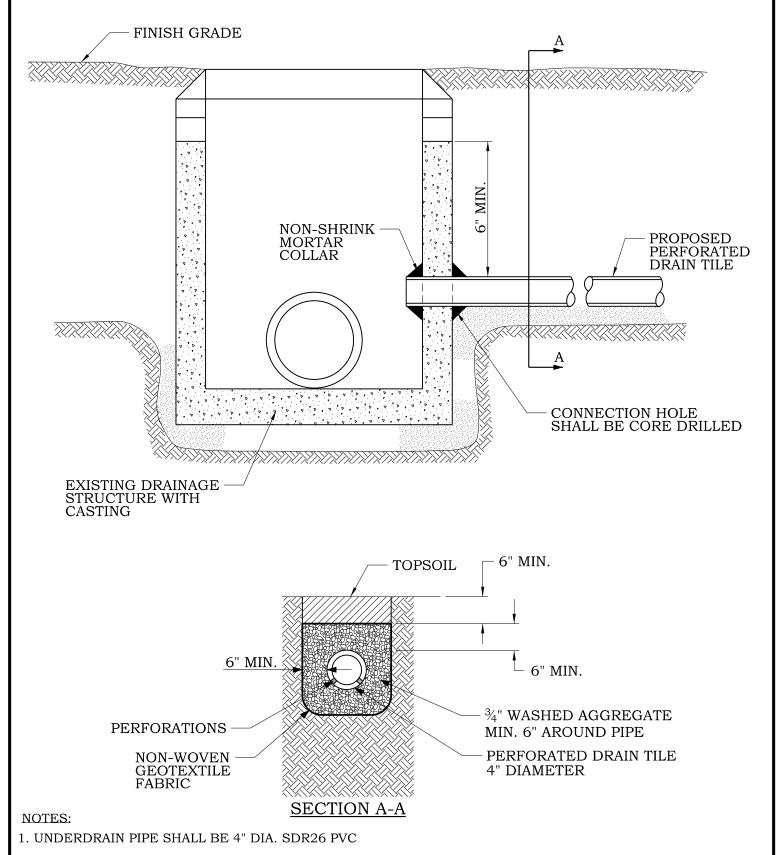


- 1. RESTRICTOR SIZE TO BE APPROVED BY THE VILLAGE ENGINEER.
- 2. UNLESS OTHERWISE SPECIFIED CONSTRUCTION AND MATERIALS SHALL CONFORM TO IDOT STA. SPEC. ART. 602.
- 3. PRECAST STRUCTURE SECTIONS TO BE TONGUE AND GROOVED.
- 4. NON-PRECAST OPENINGS SHALL BE CORED AND RUBBER BOOTED.
- 5. MORTAR ALL PIPE 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	CBBEL/TPF	DD11 40
DATE:	REVISED:	DRN-10
1/1/2016	3/8/2021	



2. PIPE SHALL BE SOLID WALL WHEN NOTED ON PLANS

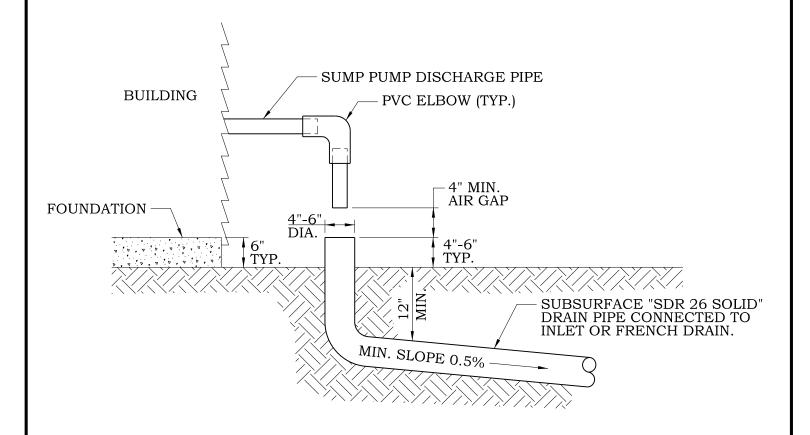


(847) 515-5200

HUNTLEY

SUBSURFACE DRAIN TILE AND STRUCTURE CONNECTION

SCALE:	DRAWN/CHECKED	DRAWING NUMBER
NTS	CBBEL/TPF	
DATE:	REVISED:	DRN-11
1/1/2016	3/8/2021	

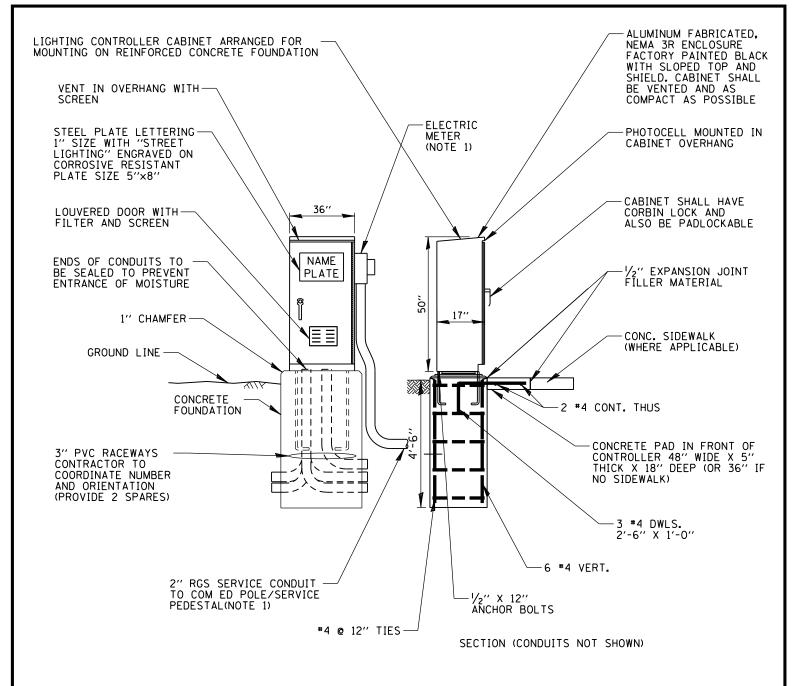


- 1. ALL SUMP PUMP DISCHARGE LINES TO BE CONNECTED TO AN EXISTING STORM STRUCTURE BY CORING STRUCTURE WALL. CORING TO BE DONE ONLY BY VILLAGE OF HUNTLEY PUBLIC WORKS OR VILLAGE AUTHORIZED CONTRACTOR.
- 2. CONNECTION OF SUMP PUMP DISCHARGE LINES TO STRUCTURE MUST BE INSPECTED BY THE VILLAGE OF HUNTLEY.
- 3. INSTALLER ASSUMES FULL RESPONSIBILITY AND LIABILITY FOR ANY AND ALL DAMAGE TO UTILITIES OR ADJOINING PROPERTIES.
- 4. AT-GRADE SUMP PUMP DISCHARGE NOT DIRECTLY CONNECTED TO AN EXISTING STORM STRUCTURE SHALL BE DIRECTED AWAY FROM ADJACENT PROPERTIES AND SHALL BE LOCATED A MINIMUM OF FIVE (5) FEET FROM PROPERTY LINES.



SUMP PUMP CONNECTION

ſ	SCALE:	DRAWN/CHECKED	DRAWING NUMBER
ı	NTS	CBBEL/TPF	
ĺ	DATE:	REVISED:	DRN-12
	1/1/2016	3/8/2021	



- 1. UTILITY METER MOUNTING SHALL MEET REQUIREMENTS OF LOCAL ELECTRIC UTILITY.
- 2. ALL ITEMS SHOWN ABOVE (INCLUDING FOUNDATION, PAD ELECTRIC METER & GROUND FIELD) SHALL BE INCLUDED IN THE PRICE BID FOR "LIGHTING CONTROLLER, BASE MOUNTED, 240 VOLT, 100 AMP", EXCEPT FOR THE SERVICE CONDUIT/WIRE WHICH WILL BE PAID FOR SEPARATELY.

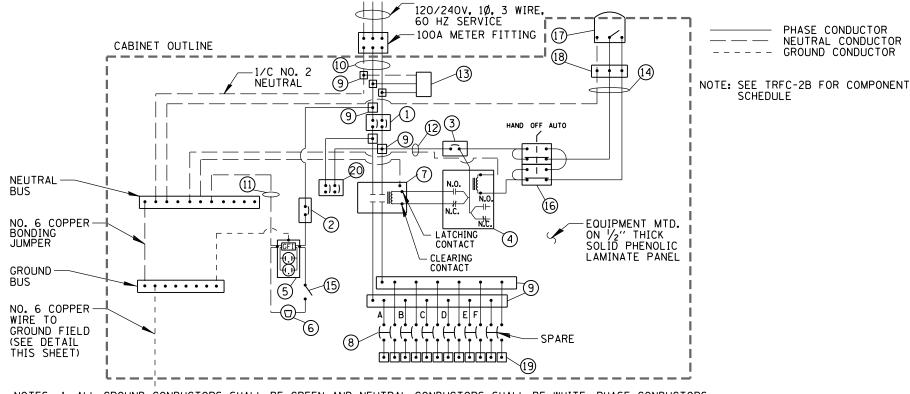
LIGHTING CONTROLLER CABINET AND FOUNDATION

N.T.S.



Lighting Controller and Foundation

SCALE:		DRAWN/CHECKED	DRAWING NUMBER
N	TS	CBBEL/TPF	
DATE:		REVISED:	LGHT-1
1/1/	2016	3/11/2021	



- NOTES: 1. ALL GROUND CONDUCTORS SHALL BE GREEN AND NEUTRAL CONDUCTORS SHALL BE WHITE. PHASE CONDUCTORS SHALL BE COLOR CODED IN ACCORDANCE WITH SECTION 1066.02 OF THE STANDARD SPECIFICATIONS. CONTRACTOR SHALL ONLY USE SOLID COLOR CODED INSULATIONS. COLOR STRIPPING OF PHASE CONDUCTORS SHALL NOT BE ALLOWED.
 - 2. IN ADDITION TO THE TERMINATIONS SHOWN, THE NEUTRAL AND GROUND BUS BARS SHALL EACH ACCOMMODATE A MINIMUM OF 8 ADDITIONAL TERMINATIONS (*2-*14).

LIGHTING CONTROLLER WIRING DETAIL

N.T.S.



VILLAGE OF HUNTLEY
10987 MAIN STREET

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

Lighting Controller Wiring Detail

SCALE: DRAWN/CHCKD NTS DRAWING NUMBER

DATE: REVISED: LGHT-2A

2/11/21 3/11/21

ITEM	SPECIFICATION	MFG./MODEL NO. OR APPROVED EQUAL
1) MAIN CIRCUIT BREAKER	100 AMPERE, 2P, 240V SERVICE RATING, 10KAIC	SIEMENS NO. ED22B100
2 LAMPHOLDER CIRCUIT BREAKER	20 AMPERE, 1P, 120V RATING, 10KAIC	SIEMENS NO. ED21B020
3 PHOTOELECTRIC CONTROL CIRCUIT BREAKER	15 AMPERE, 1P, 120V RATING, 10KAIC	SIEMENS NO. ED21B015
4 AUXILIARY RELAY	120 V OPERATED DPDT 60 HZ COIL 2 NO & 2 NC CONTACTS	MAGNECRAFT NO. 389 FXBXC1 - 120A
5) CABINET RECEPTACLE AND BOX	COMMERCIAL GRADE GFCI 20A/12OV, MOUNTED IN A WEATHERPROOF CAST ALUMINUM SINGLE GANG BOX WITH WEATHERPROOF COVER	RECEPTACLE: LEVITON NO. 8899, BOX: APPLETON NO. WSM150 COVER: APPLETON NO. WHG1
6 CABINET LIGHT AND BOX	DIECAST ALUMINUM BOX AND CAGE, WITH VAPORPROOF FROSTED GLASS GLOBE, EXTERIOR GRADE 120V - 13W LED, WALL MOUNT, 4000K	RAB NO. VXBRLED13NDG
7 CONTACTOR	100 AMPERE, 2P, 120V COIL, MECHANICALLY HELD	SQUARE D NO. 8903 SQ010 V02
8 BRANCH LINE CIRCUIT BREAKERS	6-20A, 2P, 240V RATING, 10KAIC	SIEMENS NO. ED22B020
9 POWER DISTRIBUTION BLOCK	600 VOLT, INSULATED, SIZE AS REO'D, 10KAIC	MARATHON
10 SERVICE CABLES	3-600V (XLP-TYPE USE) NO. #2	N/A
(11) LAMPHOLDER WIRE	2-600V XLP NO. 12	N/A
(12) GROUND/NEUTRAL BUS	COPPER NEUTRAL BUS- MINIMUM 20 SPARE TERMINANATIONS (*1/0-*10), & COPPER GROUND BUS - MINIMUM 12 SPARE TERMINATIONS (*1/0-*10). BUSSES SHALL BE HORIZONTAL LOCATED BASE OF CABINET	ERICO NO. TCB
(13) SURGE ARRESTOR	10 K AMPERE RATING	SQUARE D NO. SDSA 1175
(14) PHOTOELECTRIC/CONTROL WIRE	600V MTW NO. 12, MARKED WITH BRADY MARKERS	N/A
(15) DOOR SWITCH	20A/12OV, DOOR MOUNTED SNAP ACTION TYPE PLUNGER SWITCH	OMRON NO. A-20GQ-K
(16) HAND-AUTO-OFF CONTROL SWITCH	20A, 3 POS. MTD IN CAST ALUM. ENCLOSURE	SQUARE D NO. 9001 KYK 111
17 PHOTOCELL	120V, MTD. ON CABINET, DELAY TYPE, SPST-NC	FISHER PIERCE NO. FPFA-105M
18 TERMINAL BLOCK	3 TERMINAL, SCREW TYPE, MAX. #10 WIRE SIZE	CINCH NO. 3-142
19 TERMINAL BLOCKS	30 AMPERE, 240V, 15 CKTS, (2)*12-*4 AWG, INSULATED, CKTS LABELED, BLOCKS INSTALLED HORIZONTAL LOCATED BASE OF CABINET	SQUARE D NO. GD6
20 SPARE CIRCUIT BREAKER	30 AMPERE, 2P, 240V RATING, 10 KAIC	SIEMENS NO.: ED22B030

NOTES: 1. ALL ITEMS LISTED IN LIGHTING CONTROLLER COMPONENT SCHEDULE SHALL BE CONSIDERED INCIDENTAL TO THE PRICE BID FOR "LIGHTING CONTROLLER, PEDESTAL MOUNTED, 240 VOLT, 100 AMP" INCLUDING CABINET AND FOUNDATION.

- 2. THE LIGHTING CONTROLLER TOGETHER WITH ALL OF ITS COMPONENTS SHALL BE UL LISTED AS AN "ENCLOSED INDUSTRIAL CONTROL PANEL" UNDER UL508A.
- CONNECTION OF SURGE ARRESTOR TO LINE SIDE OF MAIN CIRCUIT BREAKER SHALL NOT BE "DOUBLE LUGGED."
- 4. THE MAIN CIRCUIT BREAKER & LAMP HOLDER CIRCUIT BREAKER SHALL BE LABELED "SERVICE DISCONNECT".
- 5. ALL SWITCHES AND CONTROLS SHALL BE IDENTIFIED USING TWO COLOR ENGRAVED NAMEPLATES.
- 6. THE PANEL MANUFACTURER SHALL LABEL THE CABINET WITH THE APPROPRIATE ARC FLASH WARNING AND PERSONNEL PROTECTION EQUIPMENT REQUIRED FOR SERVICING.
- 7. ALL EXPOSED BUS BARS SHALL BE INSULATED.
- 8. ALL WIRING SHALL BE COPPER.

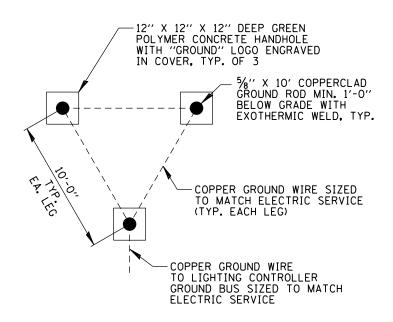
LIGHTING CONTROLLER COMPONENT SCHEDULE



VILLAGE OF HUNTLEY
10987 MAIN STREET

HUNTLEY, IL 60142 (847) 515-5200 Lighting Controller Wiring Schedule

SCALE: DRAWN/CHCKD NTS DRAWING NUMBER LGHT-2B



 ACCESS WELLS SHALL BE INCLUDED IN THE LIGHTING CONTROLLER PAY ITEM.

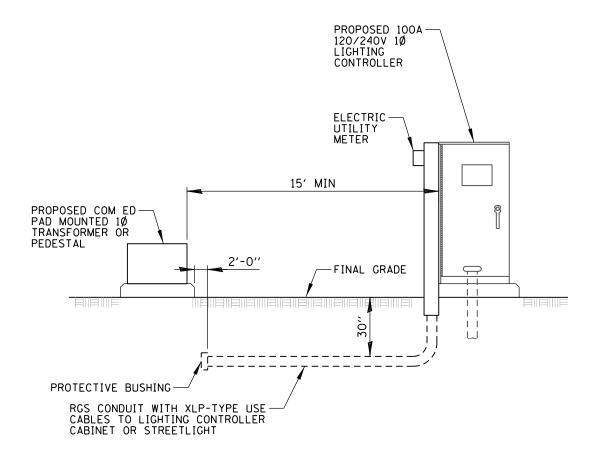
GROUND FIELD DETAIL

N.T.S.



Ground Field Detail

SCALE:	DRAWN/CHCKD NTS	DRAWING NUMBER
DATE: 2/11/21	REVISED: 3/11/21	LGHT-3



- ALL WORK SHALL CONFORM TO COM ED'S BOOK OF "INFORMATION AND REQUIREMENTS FOR THE SUPPLY OF ELECTRIC SERVICE."
- 2. INSTALL SERVICE CONDUIT UP TO 2' AWAY FROM PEDESTAL/TRANSFORMER WITH PROTECTIVE BUSHING ON END OF CONDUIT. PROVIDE ADEQUATE SLACK CABLE COILED UP FOR COM ED TO CONNECT. CONTRACTOR TO SCHEDULE & COORDINATE ALL WORK WITH COM ED.
- 3. ALL MATERIAL ABOVE (EXCEPT FOR TRANSFORMER) SHALL BE_INCLUDED IN THE PRICE BID FOR "ELECTRIC SERVICE INSTALLATION". THE HORIZONTAL SERVICE CONDUIT AND WIRING FROM TRANSFORMER TO CONTROLLER SHALL BE PAID FOR SEPERATELY.

ELECTRIC SERVICE INSTALLATION DETAIL

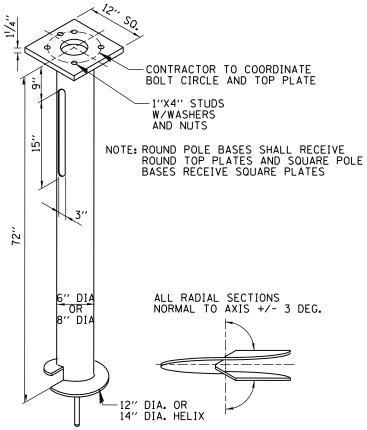
N.T.S.

ILLINOIS



Electric Service Installation Detail To Pedestal/Transformer

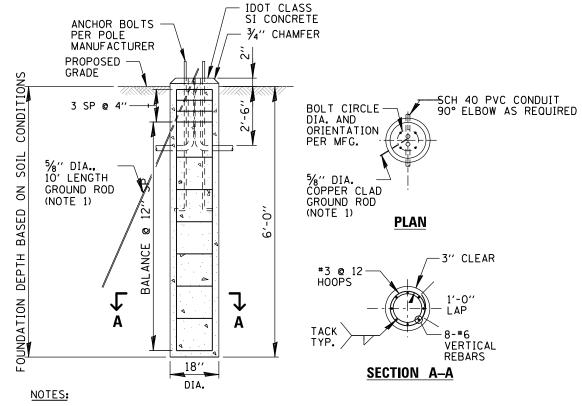
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SCALE:	DRAWN/CHCKD NTS	DRAWING NUMBER
DATE: 2/11/21	REVISED: 3/11/21	LGHT-4



WRAP 24" WIDE FILTER FABRIC TWICE AROUND SHAFT OF HELIX FOUNDATION TO PREVENT SOIL SETTLING. USE MIRAFI "FILTERWEAVE 500" OR EQUAL

HELIX FOUNDATION

HELIX SIDE VIEW



- GROUND ROD SHALL BE CAST INTO CONCRETE FOUNDATION WITH 8 FEET IN CONTACT WITH SOIL.
- 2. FOUNDATIONS SHALL BE VIBRATED IN ACCORDANCE WITH IDOT STANDARD PRACTICES.
- 3. ALL ITEMS SHOWN ABOVE SHALL BE INCLUDED IN THE PRICE BID FOR "LIGHT POLE FOUNDATION, SPECIAL".

LIGHT POLE FOUNDATION DETAIL

N.T.S.

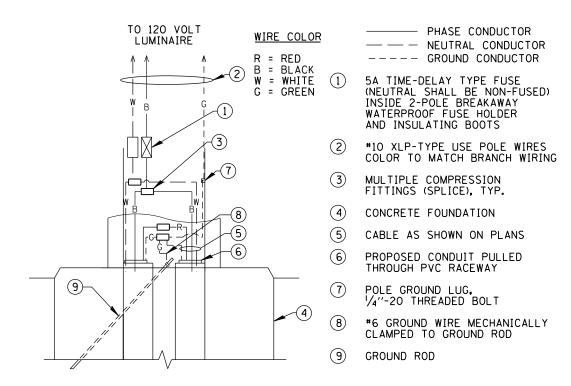


VILLAGE OF HUNTLEY
10987 MAIN STREET

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

Light Pole Foundation Detail

SCALE:	NTS	DRAWN/CHECKED CBBEL/TPF	DRAWING NUMBER	
DATE:		REVISED:		LGHT-5
	1/1/2016	3/11/2021		



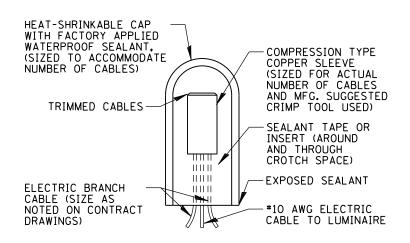
LIGHT POLE HANDHOLE WIRING DIAGRAM

N.T.S.



Light Pole Handhole Wiring Diagram

SCALE:	DRAWN/CHCKD NTS	DRAWING NUMBER
DATE: 2/17/21	REVISED: AJL	LGHT-6



SPLICING ELECTRIC CABLE

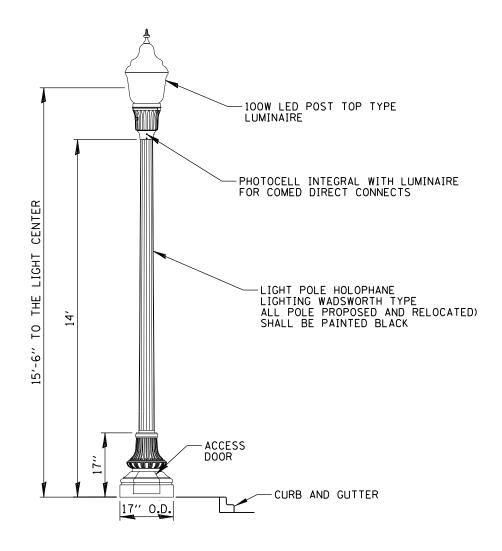
N.T.S.



Splicing Electric Cable

SCALE:	DRAWN/CHCKD NTS	DRAWING NUMBER
DATE: 2/17/21	REVISED: 3/11/21	LGHT-7





1. DOOR SHALL FACE AWAY FROM TRAFFIC.

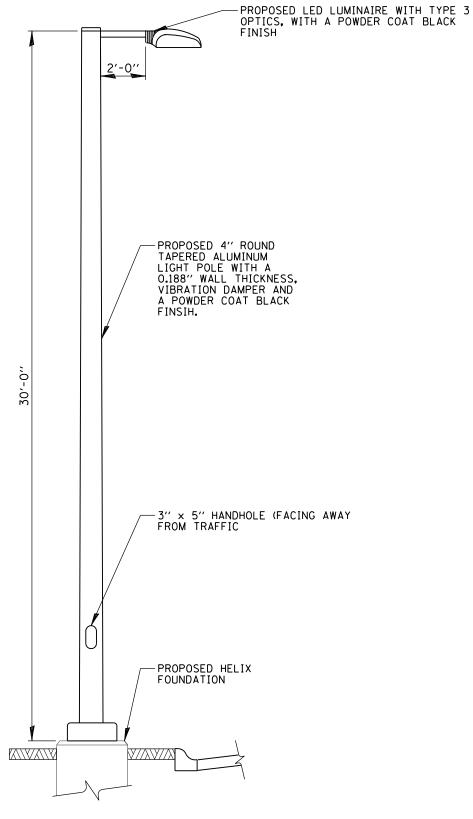
RESIDENTIAL ROADWAY LED LIGHTING UNIT

N.T.S.



Residential Roadway LED Lighting Unit

SCALE:	DRAWN/CHCKD NTS	DRAWING NUMBER
DATE: 2/17/21	REVISED: 3/11/21	LGHT-8



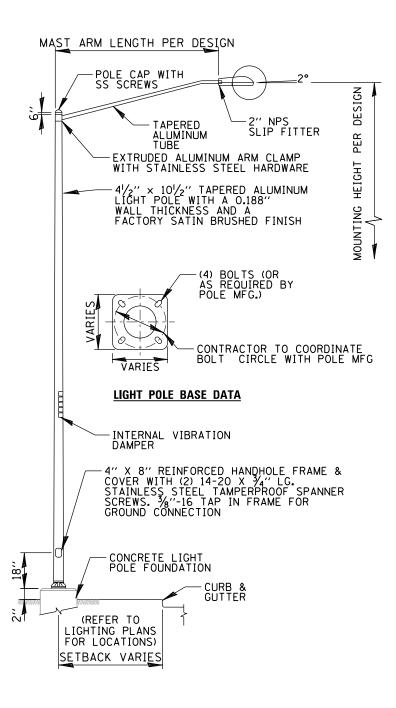
COLLECTOR ROADWAY LED LIGHTING UNIT

N.T.S.



Collector Roadway LED Lighting Unit

SCALE:	DRAWN/CHCKD	DRAWING NUMBER
DATE: 2/11/21	REVISED: 3/11/21	LGHT-9



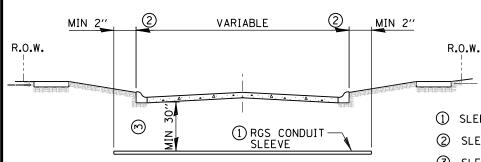
ARTERIAL ROADWAY LIGHT POLE DETAIL

N.T.S.



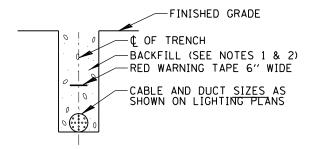
Arterial Roadway Light Pole Detail

SCALE:	DRAWN/CHCKD NTS	DRAWING NUMBER
DATE: 2/17	REVISED: 3/11/21	LGHT-10



ROADWAY / PAVEMENT CROSSING

- ① SLEEVE SHALL BE HEAVY WALL RIGID GALVANIZED STEEL (RGS) OR HDPE CONDUIT, MIN. 2".
- 2 SLEEVE SHALL EXTEND A MINIMUM OF 2 FT. BEYOND BACK OF CURB.
- SLEEVE SHALL BE A MINIMUM OF 30" BELOW ROADWAY OR CURB BOTTOM.



TRENCH CROSS SECTION

NOTES:

- 1. BACKFILL MATERIAL SHALL BE FREE OF BRICK, ROCK, OR ANY MATERIAL THAT COULD DAMAGE THE CONDUIT.
- 2. BACKFILL MATERIAL FOR TRENCHES WHERE THE INNER EDGE OF THE TRENCH IS WITHIN 2 FT OF THE EDGE OFTHE PROPOSED PAVEMENT, CURB, GUTTER, CURB AND GUTTER, STABILIZED SHOULDER, OR SIDEWALK SHALL BE TRENCH BACKFILL, AND PAID FOR AT THE CONTRACT UNIT PAY ITEM "TRENCH BACKFILL."
- 3. ALL WIRE, CABLE, AND UNI-DUCT TO BE FURNISHED ARE TO BE INSTALLED WITH A MINIMUM BURIAL OF 30" IN LOCATIONS ON THE RIGHT-OF-WAY SIDE OF THE FRONT SET-BACK LIMIT AND ARE TO BE INSTALLED WITH A MINIMUM BURIAL OF 48" IN LOCATIONS ON THE REAR YARD SIDE OF THE FRONT SET-BACK LIMIT.
- 4. STREET LIGHT CABLES ALONGSIDE PROPERTY LINES SHALL BE INSTALLED WITHIN UTILITY EASEMENTS AND 3 FT FROM AND PARELLEL TO THE PROPERTY LINE.
- 5. ALL RUNS SHALL BE CONTINUOUS WITHOUT ANY SPLICES IN INDIVIDUAL CABLE SPANS OR UNI-DUCT RUNS FROM TRANSFORMER OR PEDESTAL TO POLE OR HANDHOLE OR POLE OR HANDHOLE TO CONTROL CABINET.

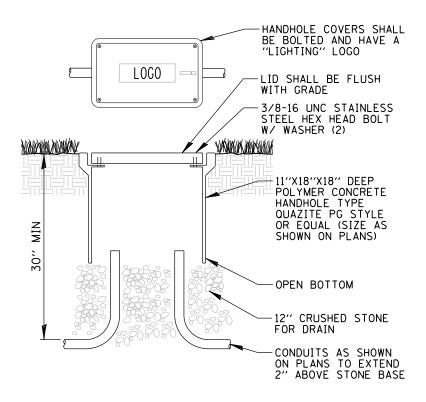
ELECTRIC CONDUIT INSTALLATION

N.T.S.



Electric Conduit Installation

SCALE:	DRAWN/CHCKD NTS	DRAWING NUMBER
	REVISED: 3/11/21	LGHT-11



- NO SPLICES ALLOWED IN HANDHOLE.
- NO SPLICES ALLOWED IN HANDHOLE.
 POLYMER CONCRETE HANDHOLE AND LID SHALL BE GRAY.
 BOX & LID SHALL MEET/EXCEED ANSI TIER 15 LOADING REQUIREMENTS, AND BE TESTED IN ACCORDANCE WITH THE LATEST EDITION OF THE ANSI/SCTE 77 "SPECIFICATION FOR UNDERGROUND ENCLOSURE INTEGRITY", AND THE PROVISIONS OF PARAGRAPHS 5.2.3 AND 5.2.4 OF WESTERN UNDERGROUND COMMITTEE GUIDE 3.6.

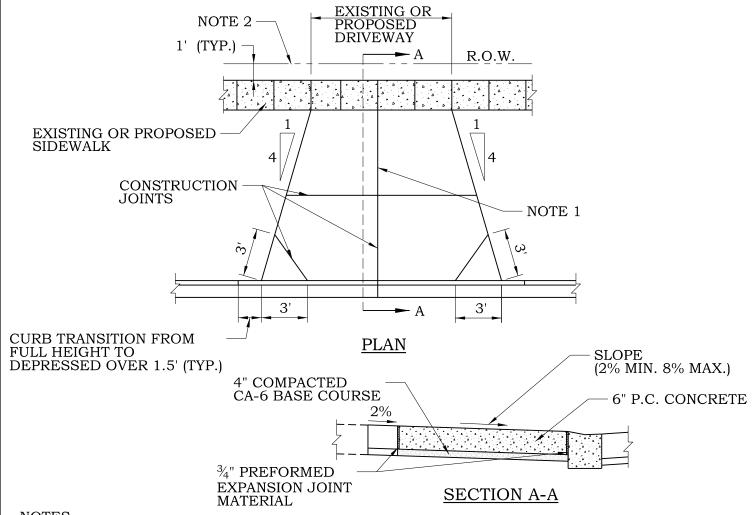
POLYMER CONCRETE HANDHOLE

N.T.S.



Polymer Concrete Handhole

SCALE:		DRAWN/CHCKD NTS	DRAWING NUMBER
DATE:	2/17/21	REVISED: 3/11/21	LGHT-12

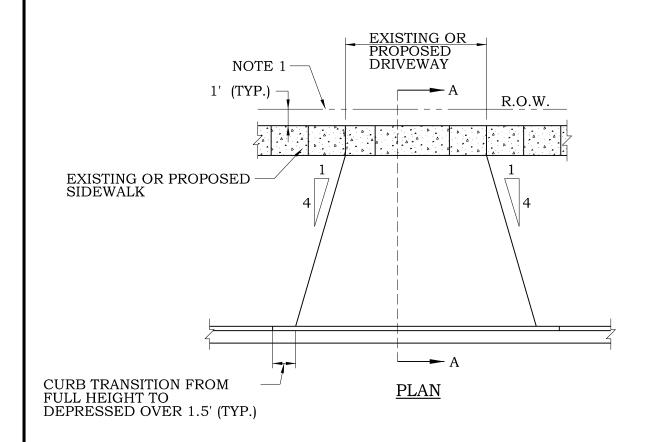


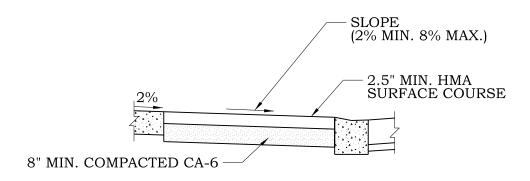
- 1. FOR COMBINED COMMON DRIVEWAYS, THIS JOINT SHALL BE FULL DEPTH WITH PREMOLDED FIBER EXPANSION JOINT ALONG THE COMMON LOT LINE AS EXTENDED. COMMON DRIVEWAY APPROACHES SHALL BE CONSTRUCTED WITH TWO SEPARATE PLACING AND FINISHING OPERATIONS, ONE FOR EACH APPROACH.
- 2. DRIVEWAY WIDTH AT R.O.W. SHALL NOT EXCEED THE ALLOWABLE WIDTH OF THE DRIVEWAY AS ALLOWED BY VILLAGE CODE.
- 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. EXISTING DRIVEWAY APPROACHES MAY NOT BE WIDENED OVER WATER AND SEWER SERVICES.
- 7. APRON/SIDEWALK SHALL BE POURED SEPARATELY.
- 8. ¾" FIBER EXPANSION JOINT SHALL BE USED AT BOTH APRON/CURB AND APRON/SIDEWALK LINE.
- 9. 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:	T PVT-1
1/1/2016	3/8/2021	





SECTION A-A

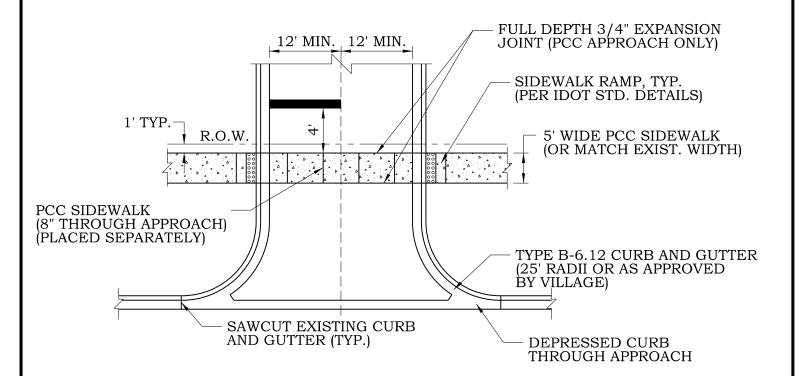
NOTES

- 1. DRIVEWAY WIDTH AT R.O.W. SHALL NOT EXCEED THE ALLOWABLE WIDTH OF THE DRIVEWAY AS ALLOWED BY VILLAGE CODE.
- $2.\ \mbox{NO MANHOLES},$ INLETS, VALVE VAULTS, B-BOXES, OR OTHER STRUCTURES ARE ALLOWED IN APPROACH OR SIDEWALK.
- 3. EXISTING DRIVEWAY APPROACHES MAY NOT BE WIDENED OVER WATER AND SEWER SERVICES.



HMA RESIDENTIAL DRIVEWAY APPROACH

SCALE:	DRAWN/CHECKED	DRAWING NUMBER
NTS	CBBEL/TPF	
DATE:	REVISED:	PVT-2
1/1/2016	3/8/2021	

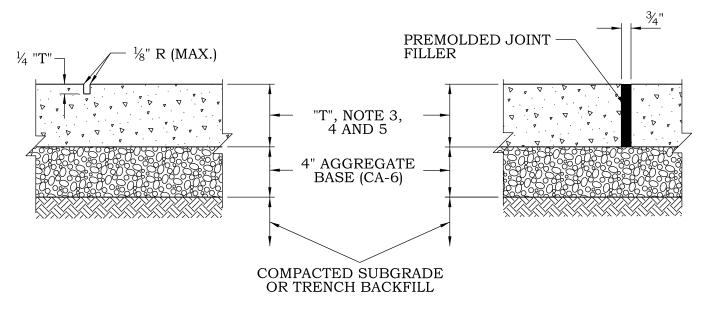


- 1. MAX. APPROACH SLOPE=8%. MIN. APPROACH SLOPE=2%.
- 2. THICKNESSES OF PCC OR HMA AND AGGREGATE SUBBASE FOR NON-RESIDENTIAL DRIVEWAY APPROACHES SHALL CONFORM TO MINIMUM PAVEMENT REQUIREMENTS AS DETAILED ON PVT-6 "PARKING LOT HEAVY DUTY PAVEMENT" UNLESS APPROVED BY THE VILLAGE ENGINEER.
- 3. APPROACH 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	3/8/2021	



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

SCALE:	DRAWN/CHECKED	DRAWING NUMBER
NTS	CBBEL/TPF	
DATE:	REVISED:	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 2" HOT-MIX ASPHALT SURFACE COURSE
COLLECTOR - RESIDENTIAL	4" AGGREGATE BASE COURSE 6" HOT-MIX ASPHALT BASE COURSE 2.5" HOT-MIX ASPHALT BINDER COURSE 2" HOT-MIX ASPHALT SURFACE COURSE
LOCAL - RESIDENTIAL	10" AGGREGATE BASE COURSE 2.5" HOT-MIX ASPHALT BINDER COURSE 2" 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	3/8/2021	

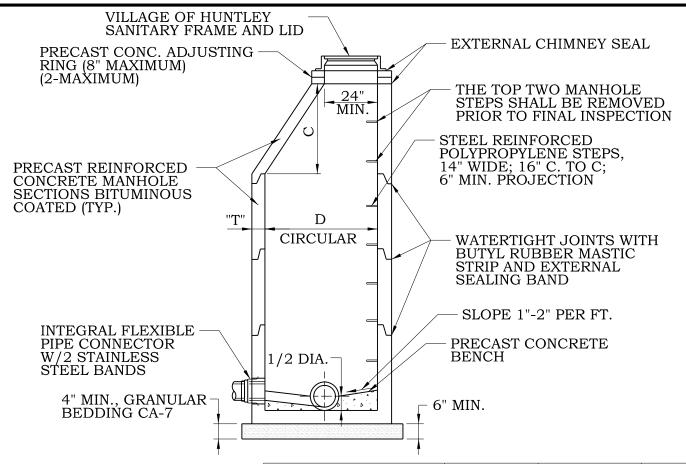
PARKING LOT CLASSIFICATION	MINIMUM PAVEMENT REQUIREMENTS
PARKING LOT STANDARD DUTY PAVEMENT	10" AGGREGATE BASE COURSE 2.5" HOT-MIX ASPHALT BINDER COURSE 1.5" HOT-MIX ASPHALT SURFACE COURSE - OR - 6" AGGREGATE BASE COURSE 6" P.C. CONCRETE
PARKING LOT HEAVY DUTY PAVEMENT	6" AGGREGATE BASE COURSE 4" HOT-MIX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

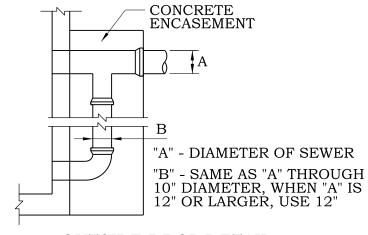
SCALE:	DRAWN/CHECKED	DRAWING NUMBER
NTS	CBBEL/TPF	
DATE:	REVISED:	PVT-6
1/1/2016	1/1/2016	



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".

- 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.

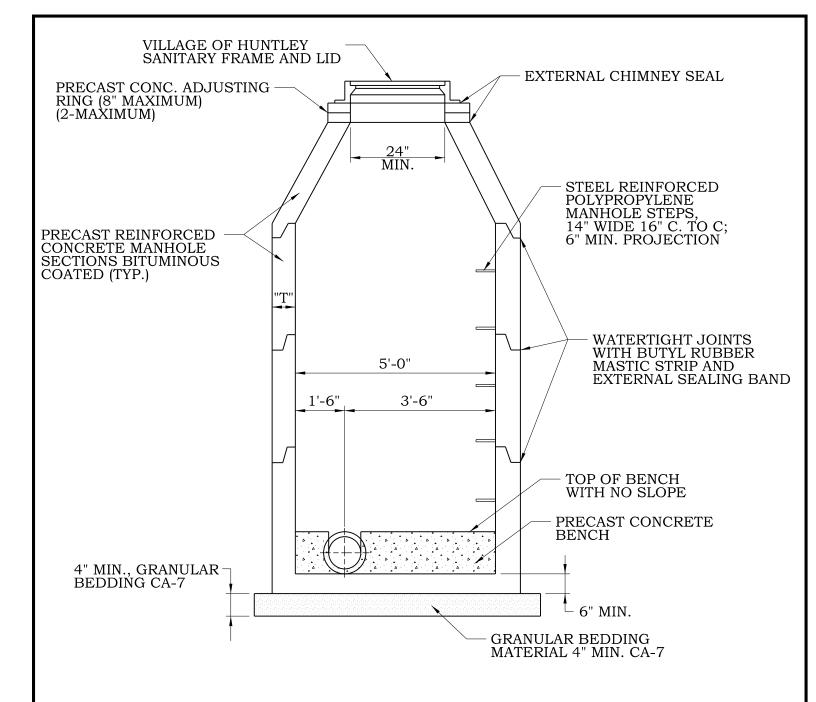


OUTSIDE DROP DETAIL

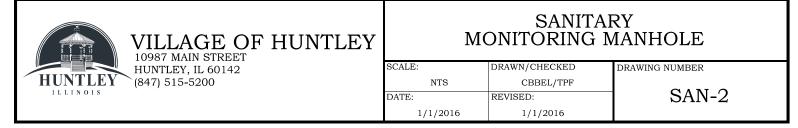


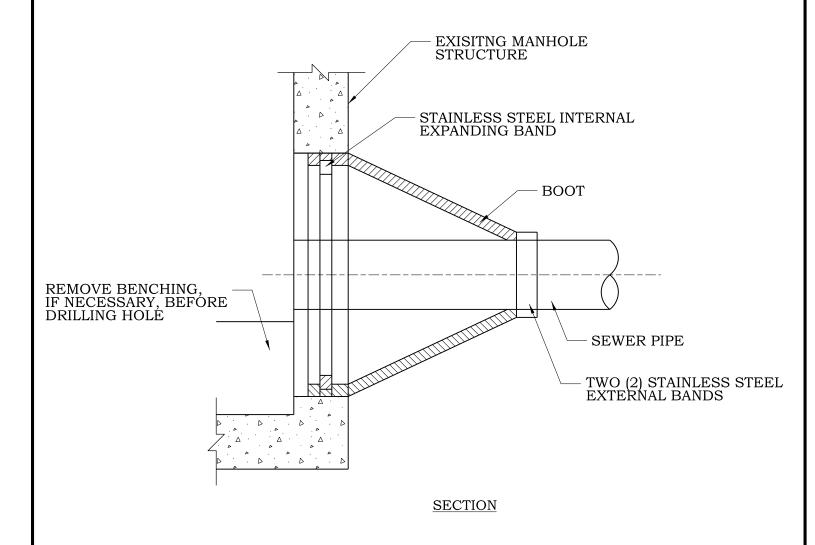
SANITARY MANHOLE

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.



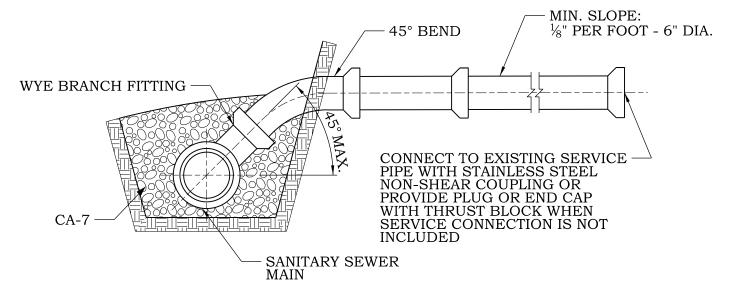


- 1. CORE-DRILL CIRCULAR OPENING IN MANHOLE WALL OF DIAMETER TO FIT THE REQUIRED BOOT SIZE.
- 2. KOR-N-SEAL FLEXIBLE RUBBER BOOT (KOR-N-SEAL I: 106/406 SERIES FOR 12" AND SMALLER; KOR-N-SEAL II: 206 SERIES FOR 15" AND GREATER) SHALL BE USED FOR WATERTIGHT CONNECTION.
- 3. CUT, SHAPE AND SLOPE NEW INVERT 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.

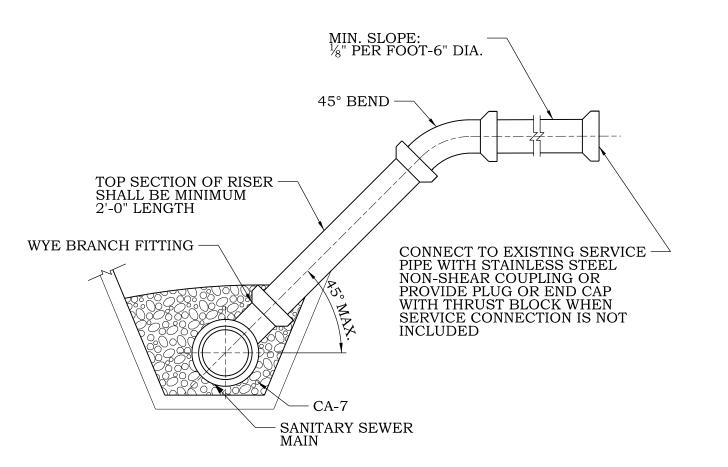


SANITARY SEWER CONNECTION TO EXISTING MANHOLE

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



FOR SEWER DEPTHS TO 10 FEET



FOR SEWER DEPTHS GREATER THAN 10 FEET

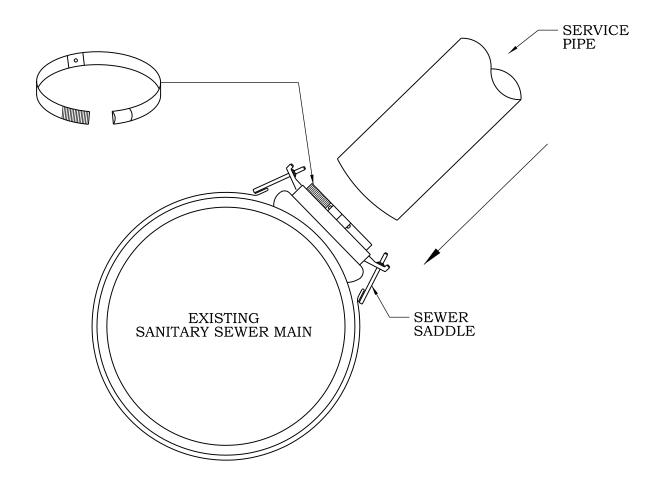
NOTE

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



SANITARY SERVICE RISER

SCALE:	DRAWN/CHECKED	DRAWING NUMBER
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DATE:	REVISED:	SAN-4
1/1/2016	1/1/2016	

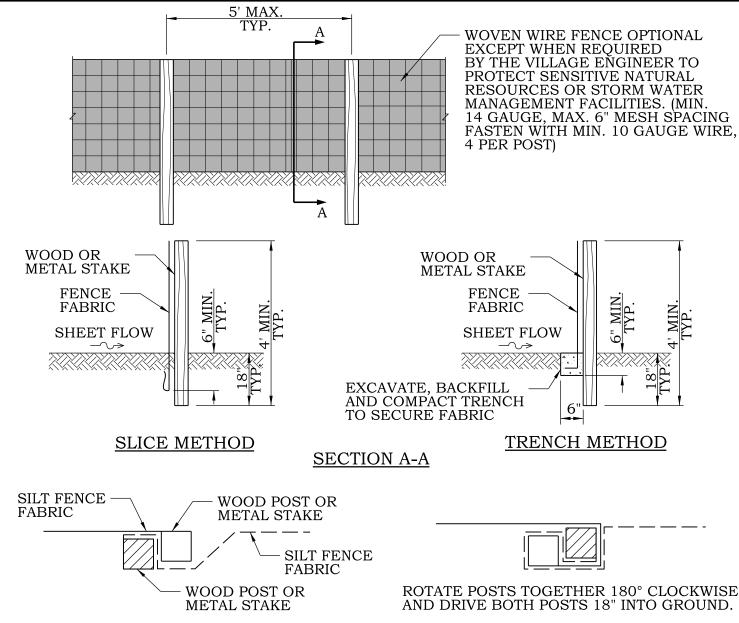


- 1. DETAIL BASED ON STYLE "CB" SEWER SADDLE, MANUFACTURED BY ROMAC INDUSTRIES INC. THE "CB" "UN" SADDLES ARE PROVIDED WITH BAND CLAMP (HOSE CLAMP) WHICH ALLOWS IT TO HAVE A RANGE. THE BAND CLAMP COMES WITH TWO ADJUSTING SCREWS WHICH PROVIDE MUCH GREATER CLAMPING FORCE THAN BAND CLAMPS WITH ONLY ONE 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.

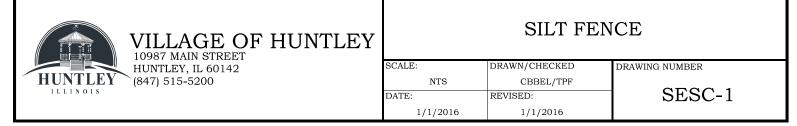
STEP 1

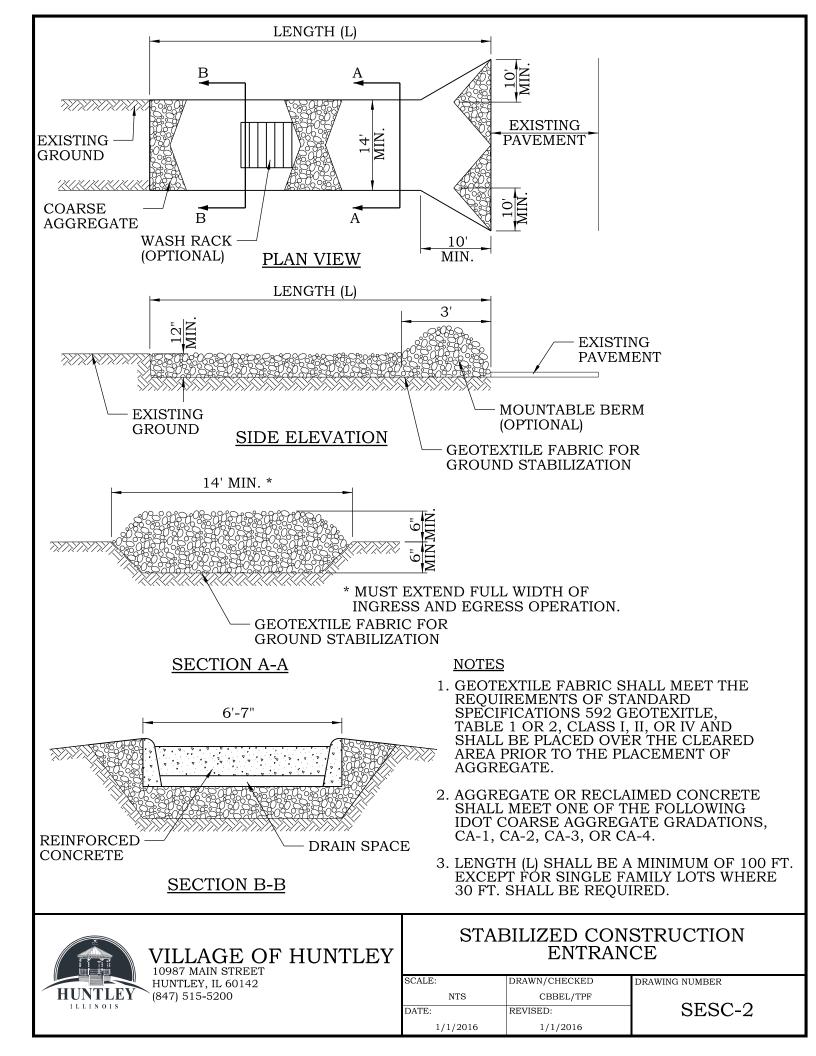
STEP 2

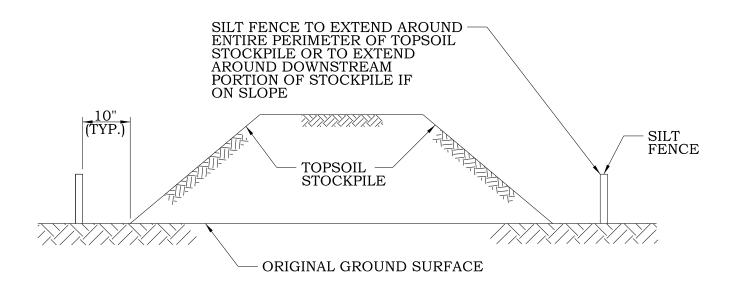
ATTACHING TWO SILT FILTER FENCES

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.





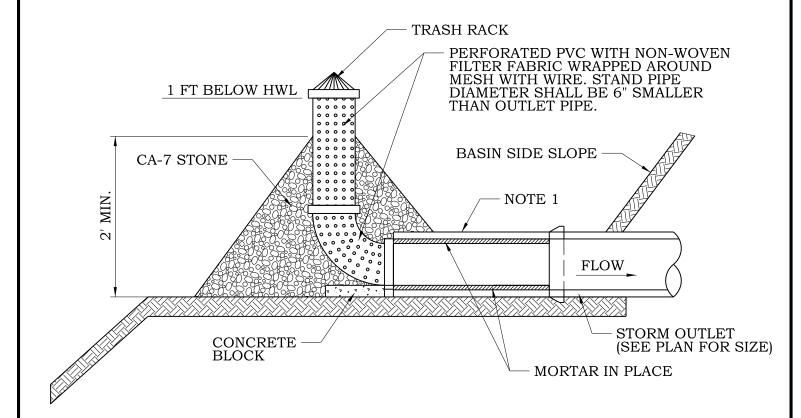


- 1. AN ON-SITE DRAINAGE SWALE SHALL BE LOCATED BETWEEN THE TOPSOIL STOCKPILE AND OFF-SITE PROPERTY.
- 2. REFERENCE THE SILT FENCE DETAIL FOR MATERIALS AND INSTALLATION METHODS.
- 3. IF THE STOCKPILE IS TO REMAIN FOR MORE THAN 14 DAYS, IT SHALL BE STABILIZED WITHIN 7 DAYS OF COMPLETION TO MINIMIZE EROSION.
- 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	a=a a a
DATE:	REVISED:	SESC-3
1/1/2016	1/1/2016	

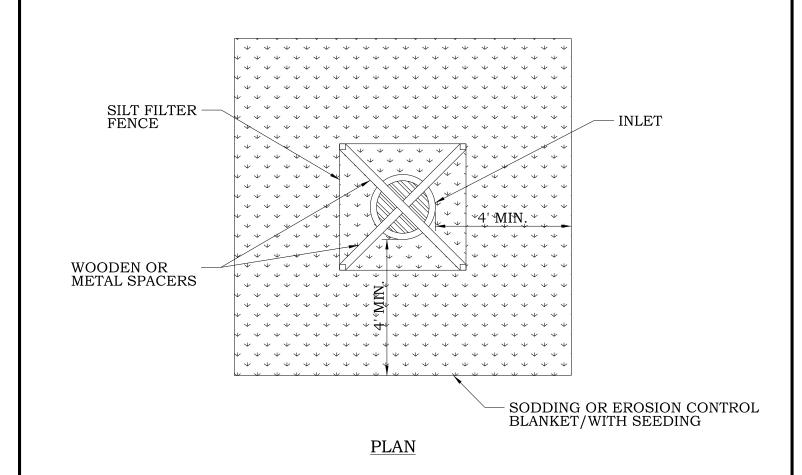


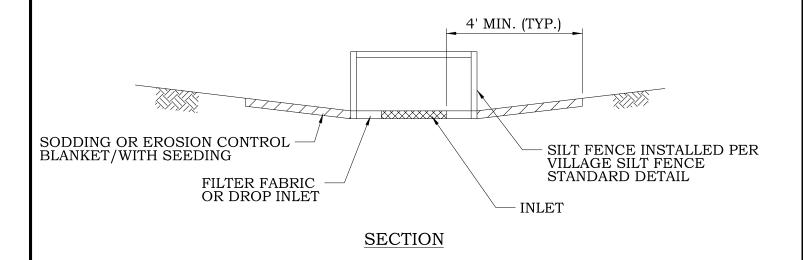
1. ADDITIONAL LENGTH (OR HALF LENGTH) OF OUTLET PIPE TO BE REMOVED AND REPLACED WITH FLARED END SECTION ONCE PERMANENT EROSION CONTROL IS IN PLACE THROUGHOUT WATERSHED.



TEMPORARY PERFORATED WATER QUALITY RISER

SCALE:	DRAWN/CHECKED	DRAWING NUMBER
NTS	CBBEL/TPF	
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	

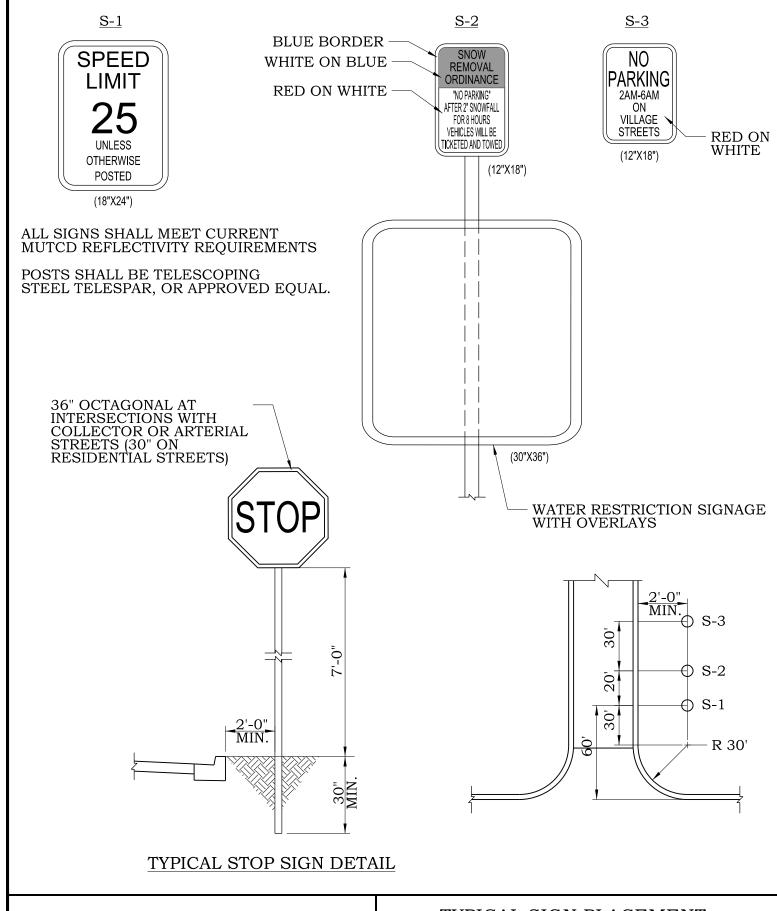
STANDARD	DESCRIPTION
IUM-530 IUM-531	EROSION CONTROL BLANKET EROSION CONTROL BLANKET, TURF REINFORCEMENT MAT (TRM)
IUM-531 IUM-531 IUM-561C IUM-561D IUM-562	MANUFACTURED ABOVE GRADE MONOFILAMENT FABRIC BARRIER FENCE IMPERVIOUS AREAS CURB PROTECTION PAVED AREAS DROP-IN PROTECTION LOG TYPE
IL-508ST IL-610 IL-611	CULVERT INLET PROTECTION - STONE PIPE OUTLET TO FLAT AREA PIPE OUTLET TO CHANNEL
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
IL-650	SUMP PIT PLAN
IUM-654BW IUM-654ET IUM-654SB	TEMPORARY CONCRETE WASHOUT - BARRIER WALL TEMPORARY CONCRETE WASHOUT - EARTHEN TEMPORARY CONCRETE WASHOUT - STRAW BALE
IUM-501	BACK CUT CURB
	IUM-531 IUM-531 IUM-531 IUM-561C IUM-561D IUM-562 IL-508ST IL-610 IL-611 IUM-514PC IUM-514RC IUM-514VC IUM-514VC IUM-514VC IL-605CA IL-605R IL-650 IUM-654BW IUM-654BW IUM-654SB

1. STANDARDS PER THE NATURAL RESOURCES CONSERVATION SERVICE AS PUBLISHED IN THE ILLINOIS URBAN MANUAL, LATEST EDITION. FOUND AT: https://illinoisurbanmanual.org



ILLINOIS URBAN MANUAL EROSION CONTROL SYSTEMS

SCALE:	DRAWN/CHECKED	DRAWING NUMBER
NTS	CBBEL/TPF	G T G G
DATE:	REVISED:	SESC-6
1/1/2016	3/9/2021	



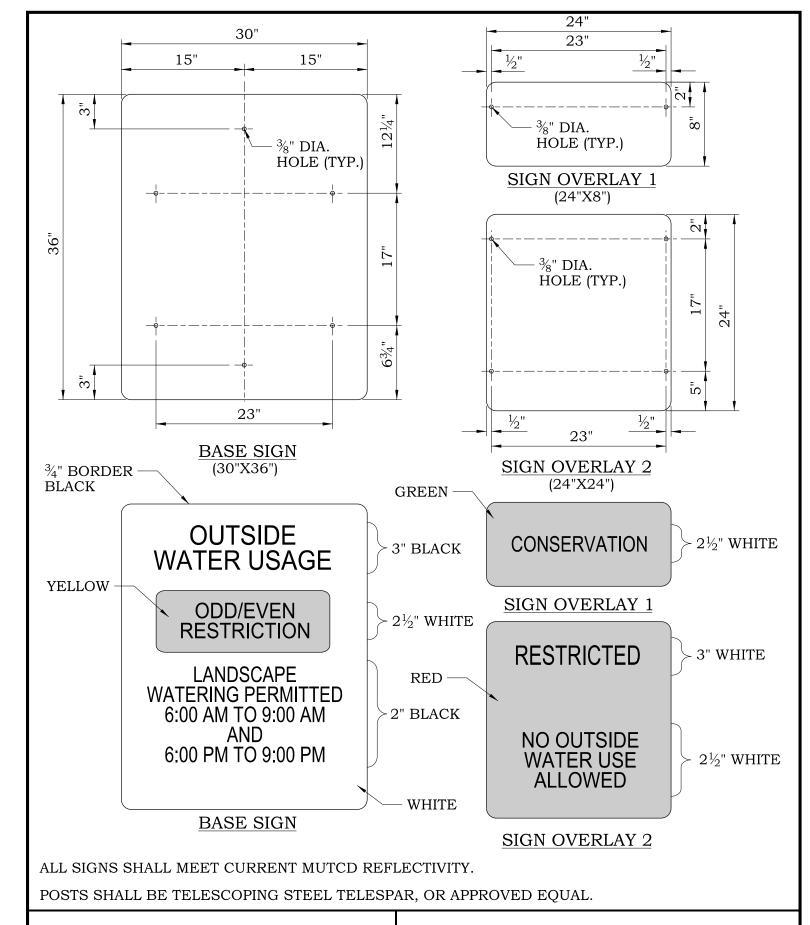


(847) 515-5200

HUNTLEY

TYPICAL SIGN PLACEMENT AT SUBDIVISION ENTRANCE

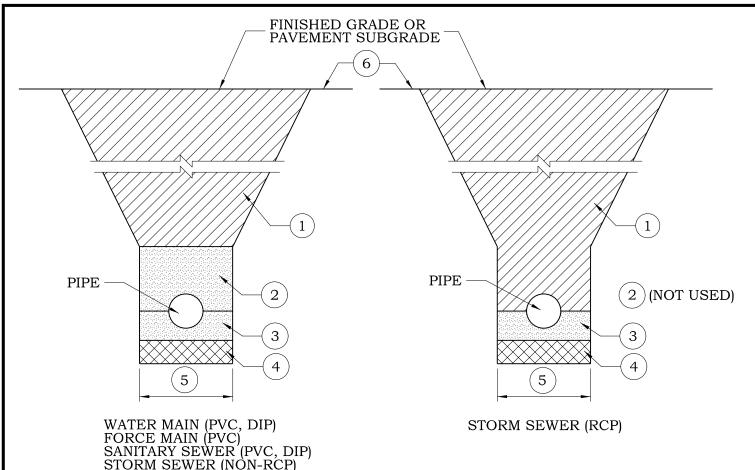
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1/1/2016	1/1/2016	





WATER RESTRICTION SIGNAGE

SCALE:	DRAWN/CHECKED	DRAWING NUMBER
NTS	CBBEL/TPF	221
DATE:	REVISED:	SGN-2
1/1/2016	1/1/2016	



- 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 TOPSOIL.
- 2. INITIAL BACKFILL TO 12" OVER TOP OF PIPE. MATERIAL SHALL MATCH PIPE BEDDING.
- 3. PIPE BEDDING MATERIAL 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 AND REPLACED TO A DEPTH AS DIRECTED BY ENGINEER. ADDITIONAL BEDDING MATERIAL THICKNESS AND GRADATION AS DIRECTED BY ENGINEER.
- 5. TRENCH WIDTH:
 - 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:

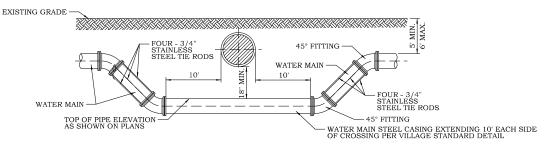
SLOPING AND BENCHING TRENCH WALLS; TRENCH SUPPORT AND SHORING SYSTEMS; SHIELD SYSTEMS; AND

HAZARDOUS ATMOSPHERES.



TYPICAL TRENCH CROSS SECTIONS

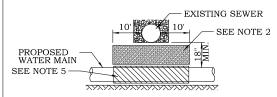
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1/1/2016	3/9/2021	



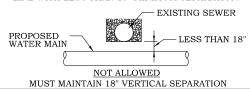
PROPOSED WATER MAIN BELOW EXISTING SEWER LINE WITH 18" MINIMUM SEPARATION.

NOTES:

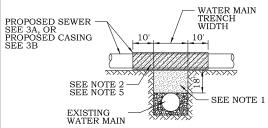
- 1. OMIT SELECT GRANULAR CRADLE AND GRANULAR
 BACKFILL TO ONE (1) FOOT OVER TOP OF PIPE AND
 USE SELECT EXCAVATED MATERIAL (CLASS IV) AND
 COMPACT FOR 10 FEET ON EITHER SIDE OF
 SEWER LINE.
- 2. IF SELECT GRANULAR BACKFILL EXISTS, REMOVE WITHIN WIDTH OF EXISTING SEWER LINE TRENCH AND REPLACE WITH SELECT 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.



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

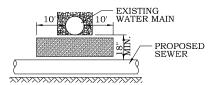


NOTES:

- 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.
- 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.

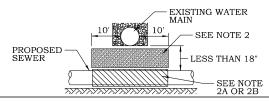
PROPOSED SEWER LINE BELOW EXISTING WATER MAIN WITH 18" MINIMUM SEPARATION. NOTES:

- 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.

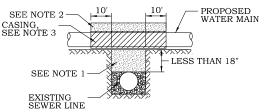


PROPOSED SEWER LINE <u>BELOW EXISTING</u> WATER MAIN WITH LESS THAN 18" MINIMUM SEPARATION. NOTES:

- 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.
- A. 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.



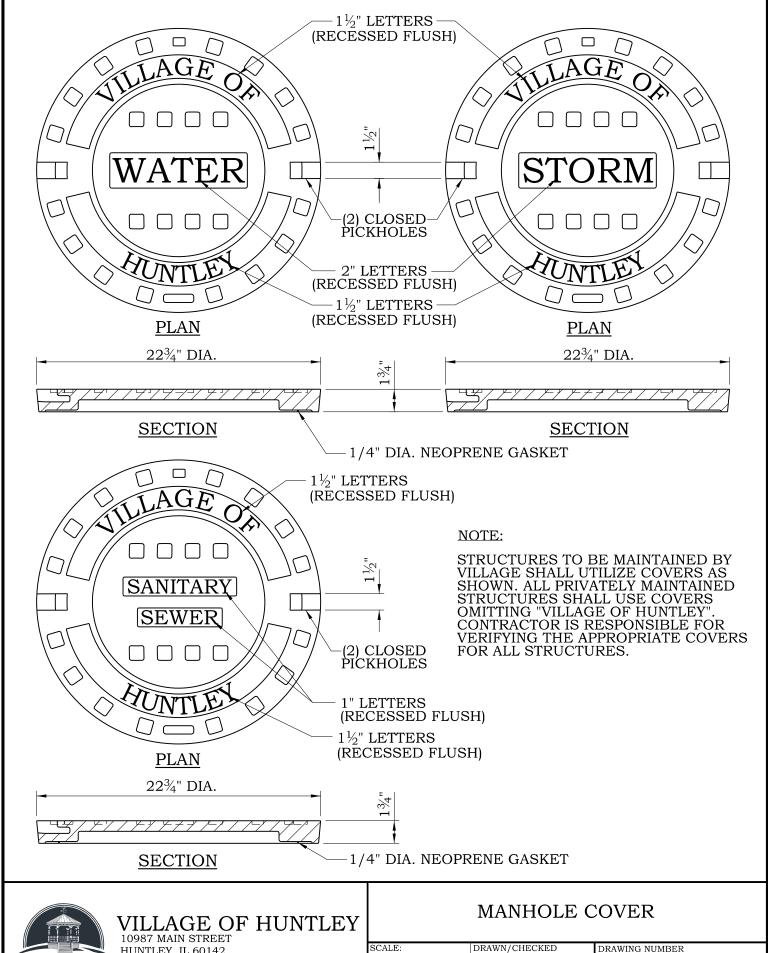
VILLAGE OF HUNTLEY

HUNTLEY, IL 60142 (847) 669-3450

SEWER AND WATER SEPARATION REQUIREMENTS

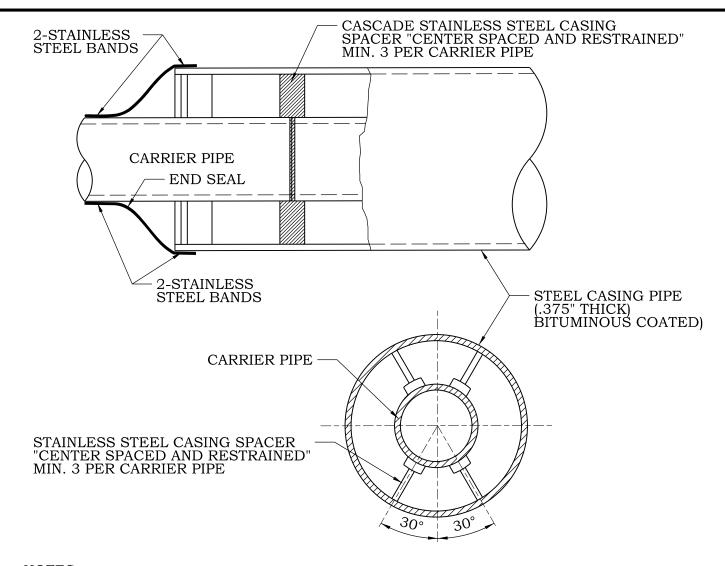
NTS CBBEL/TPF REVISED: DATE 1/1/2016 3/9/2021

UTL-2



HUNTLEY, IL 60142 HUNTLEY (847) 515-5200

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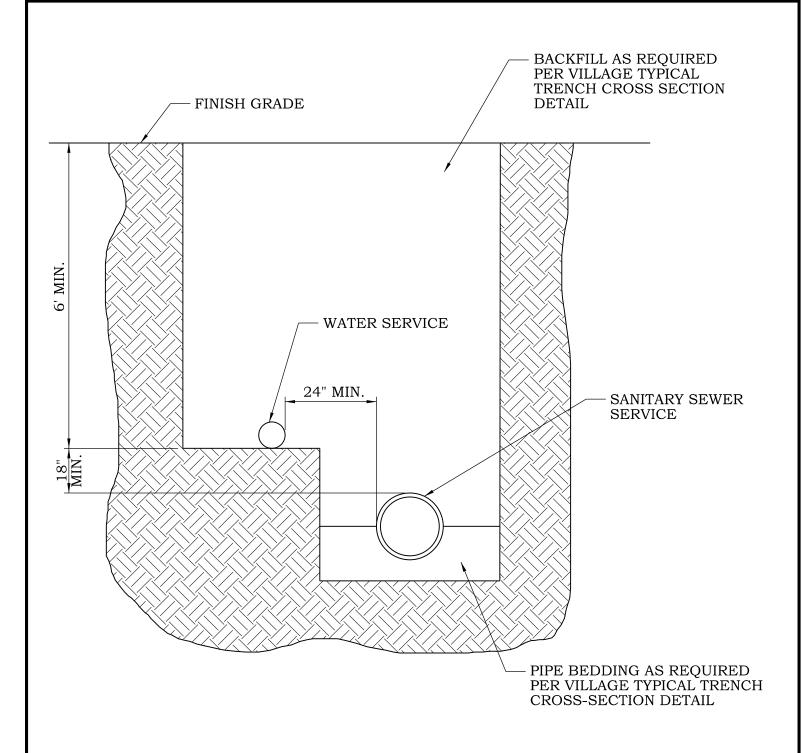


- 1. THE PIPE MATERIAL SHALL BE "CENTER SPACED AND RESTRAINED" ON TOP AND BOTTOM UTILIZING CASING SPACERS EQUALLY SPACED PER MANUFACTURER SPECIFICATIONS.
- 2. CASING SPACERS ARE TO BE CASCADE MFG. BRAND OR APPROVED EQUAL.
- 3. STEEL CASING PIPE SHALL BE IN ACCORDANCE WITH AMERICAN NATIONAL STANDARDS 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

SCALE:	DRAWN/CHECKED	DRAWING NUMBER
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DATE:	REVISED:	UTL-4
1/1/2016	1/1/2016	

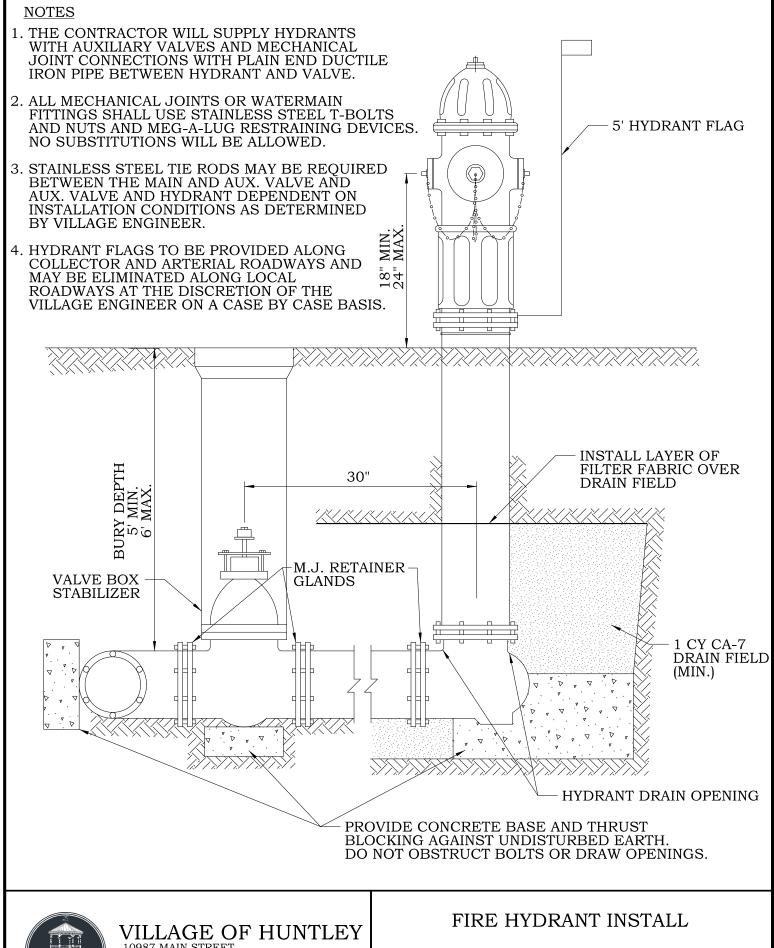


- 1. THE WATER SERVICE PIPING AND BUILDING SEWER PIPING MAY BE INSTALLED IN A COMMON TRENCH PROVIDED THAT THE WATER SERVICE PIPE IS PLACED ON A SHELF A MINIMUM OF EIGHTEEN (18) INCHES ABOVE AND TWENTY FOUR (24) INCHES HORIZONTALLY FROM THE BUILDING SEWER PIPING.
- 2. SERVICES PROHIBITED UNDER DRIVEWAY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



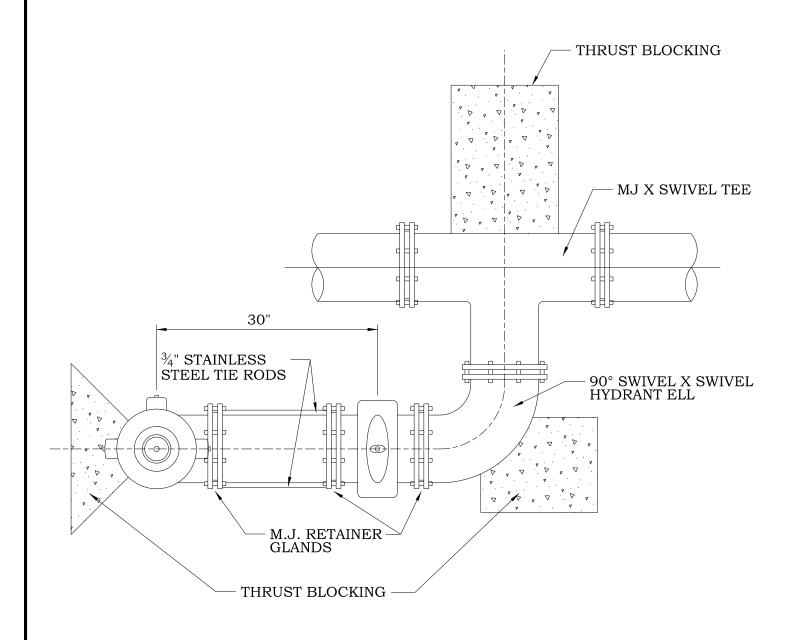
COMMON WATER/SANITARY SERVICE TRENCH

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





SCALE:	DRAWN/CHECKED	DRAWING NUMBER
NTS	CBBEL/TPF	
DATE:	REVISED:	WAT-1
1/1/2016	3/9/2021	

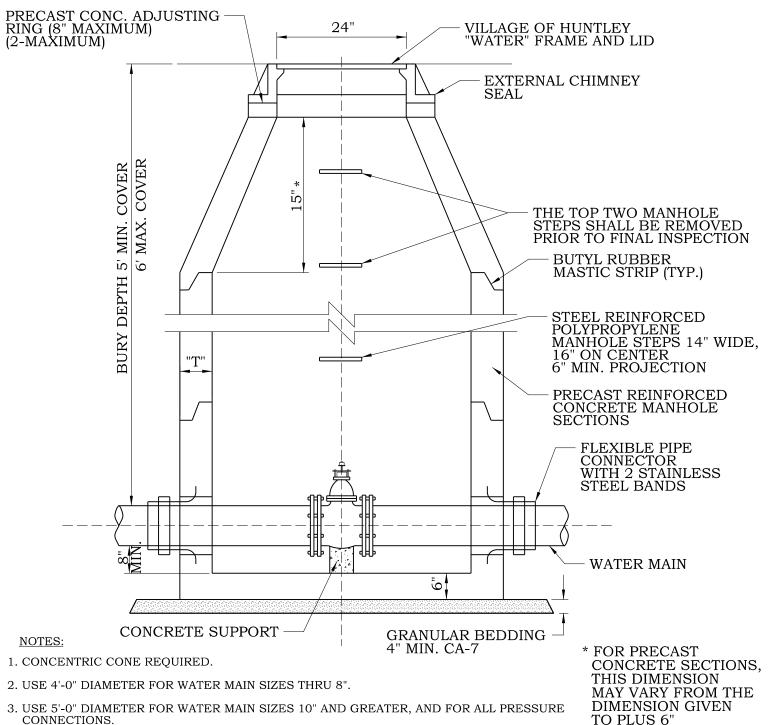


- 1. THE CONTRACTOR WILL SUPPLY HYDRANTS WITH AUXILARY VALVES AND MECHANICAL JOINT CONNECTIONS WITH PLAIN END DUCTILE IRON PIPE BETWEEN HYDRANT AND VALVE.
- 2. ALL MECHANICAL JOINTS OR WATER MAIN FITTINGS SHALL USE STAINLESS STEEL T-BOLTS AND NUTS AND MEGALUG RESTRAINING DEVICES. NO SUBSTITUTIONS WILL 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

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



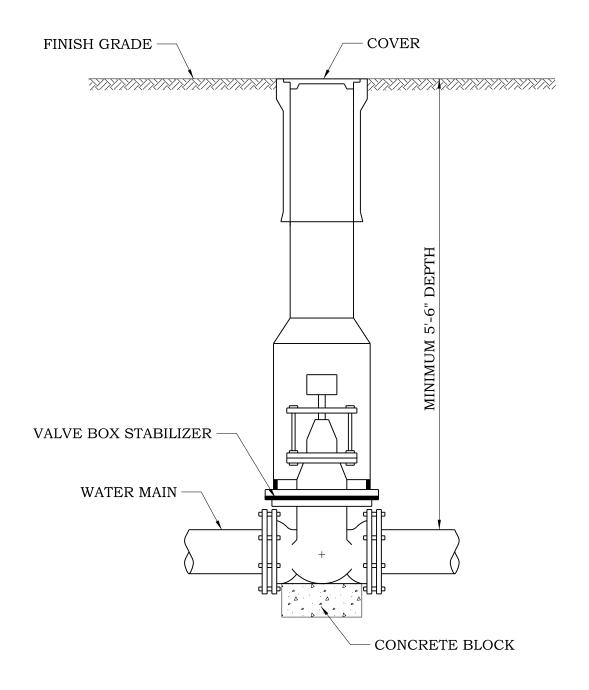
- CONNECTIONS.
- 4. THICKNESS "T"=4" MIN. FOR 4' DIAMETER AND 5" MIN. FOR 5' DIAMETER VAULTS.
- 5. ALL PRECAST VAULT SECTIONS SHALL BE BITUMINOUS COATED.
- 6. EXTERNAL CHIMNEY SEALS PER THE VILLAGE'S APPROVED MATERIAL LIST SHALL BE INSTALLED ON ALL STRUCTURES WHEN LOCATED WITHIN LIMITS OF PAVED SURFACES. THE STRUCTURE'S RIM SHALL BE 1/2" BELOW PAVEMENT GRADE. EXTERNAL CHIMNEY SEALS MAY BE ELIMINATED FOR STRUCTURES OUTSIDE LIMITS OF PAVED SURFACES.
- 7. UNLESS OTHERWISE SPECIFIED HEREIN CONSTRUCTION AND MATERIALS SHALL CONFORM TO THE STD. SPEC. FOR WATER AND SEWER CONSTRUCTION IN ILLINOIS, LATEST EDITION.



VILLAGE OF HUNTLEY 10987 MAIN STREET HUNTLEY, IL 60142

VALVE VAULT

SCALE:	DRAWN/CHECKED	DRAWING NUMBER
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1/1/2016	3/9/2021	

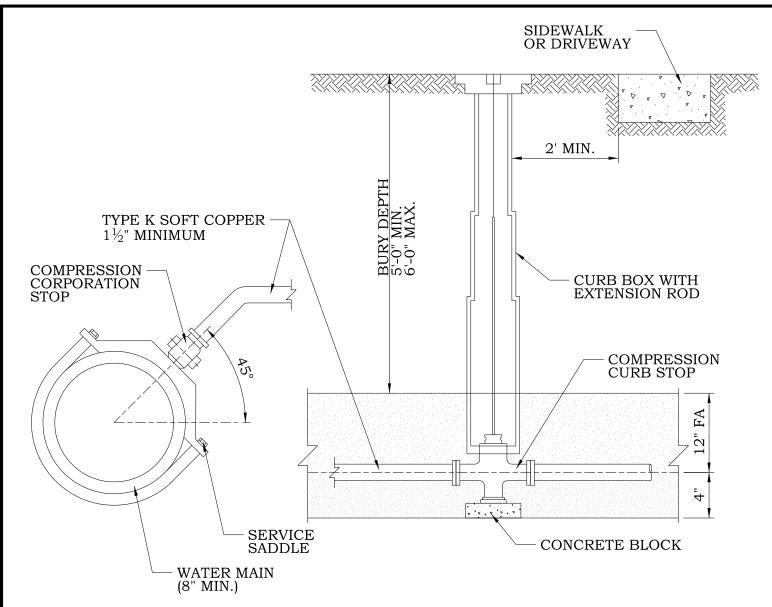


- 1. ALL VALVES $2\frac{1}{2}$ " THRU 8" SHALL BE PLACED IN A VALVE BOX, UNLESS APPROVED BY THE VILLAGE ENGINEER.
- 2. ALL VALVES 10" OR LARGER SHALL BE PLACED IN A VALVE VAULT.
- 3. ALL VALVES REGARDLESS OF SIZE LOCATED WITHIN PAVEMENT LIMITS SHALL BE PLACED IN A VALVE VAULT.



VALVE BOX INSTALLATION

SCALE:	DRAWN/CHECKED	DRAWING NUMBER
NTS	CBBEL/TPF	****
DATE:	REVISED:	WAT-4
1/1/2016	3/9/2021	

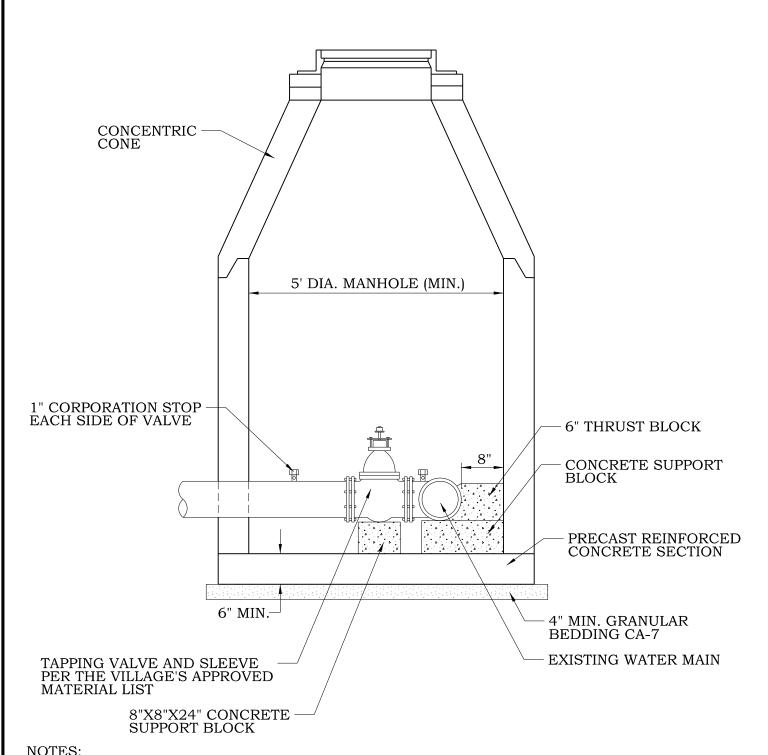


- 1. NO CORPORATION STOPS, SERVICE LINES, OR CURB BOXES MAY BE LOCATED UNDER PAVED AREAS INCLUDING DRIVES AND SIDEWALKS, OR WITHIN 2 FEET OF ANY PAVED SURFACE.
- 2. ALL WATER SERVICE HARDWARE SHALL BE MUELLER.
- 3. SERVICE LINES TO BE CONTINUOUS WITHOUT JOINTS FROM CORPORATION STOP TO CURB STOP.
- 4. 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

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

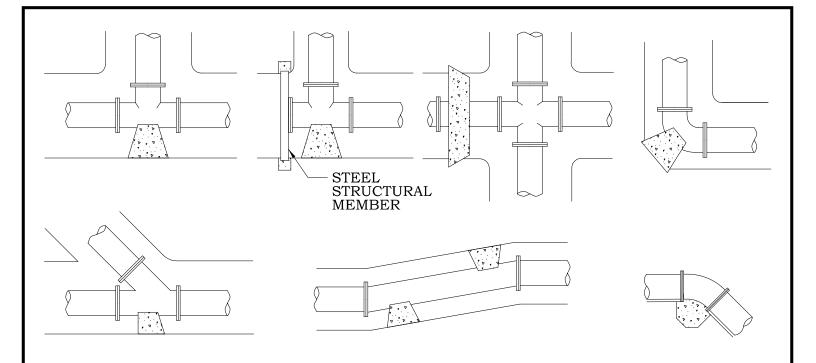


- 1. VALVE VAULT SHALL BE CONSTRUCTED PER THE STANDARD DETAIL WAT-3.
- 2. EXTERNAL CHIMNEY SEALS PER THE VILLAGE'S APPROVED MATERIAL LIST SHALL BE INSTALLED ON ALL STRUCTURES WHEN LOCATED WITHIN LIMITS OF PAVED SURFACES. THE STRUCTURE'S RIM SHALL BE 1/2" BELOW PAVEMENT GRADE. EXTERNAL CHIMNEY SEALS MAY BE ELIMINATED FOR STRUCTURES OUTSIDE THE LIMITS OF PAVED SURFACES.



WATER MAIN PRESSURE CONNECTION

SCALE:	DRAWN/CHECKED	DRAWING NUMBER
NTS	CBBEL/TPF	*****
DATE:	REVISED:	WAT-6
1/1/2016	3/9/2021	



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

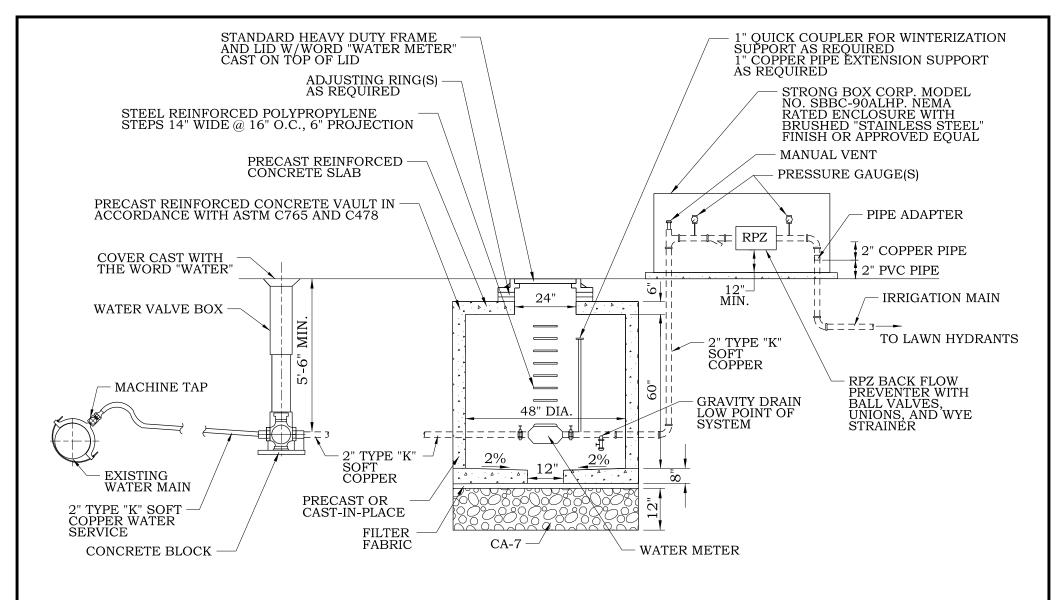
NOTES:

- 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 $11\frac{1}{4}^\circ$ AND FIRE HYDRANTS SHALL HAVE "MEGA LUG" JOINT RESTRAINTS AND STAINLESS STEEL BOLTS AND NUTS.
- 4. ALL PUSH ON JOINTS A MINIMUM DISTANCE OF TWO JOINTS ON EITHER SIDE OF ALL WATERMAIN FITTINGS SHALL BE RESTRAINED BY THE USE OF JOINT RESTRAINTS MEETING THE VILLAGE'S APPROVED MATERIAL LIST.



WATER MAIN THRUST BLOCKING

SCALE:	DRAWN/CHECKED	DRAWING NUMBER
NTS	CBBEL/TPF	
DATE:	REVISED:	WAT-7
1/1/2016	3/9/2021	



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

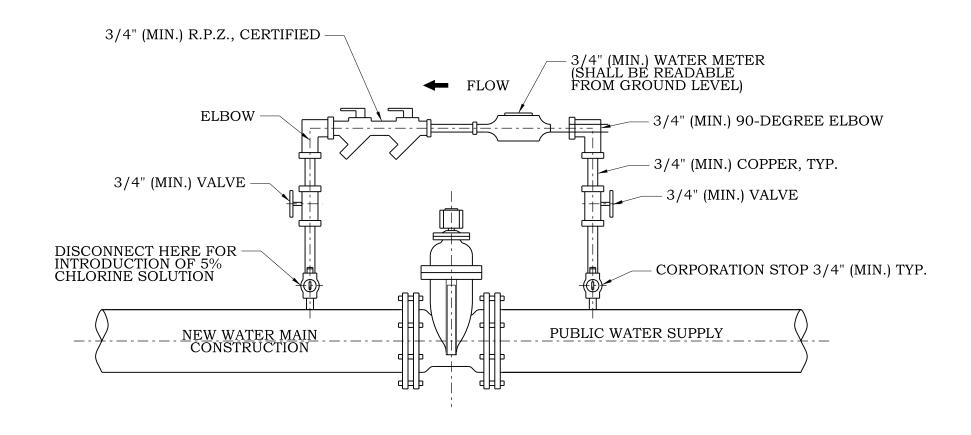


VILLAGE OF HUNTLEY

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

IRRIGATION SERVICE

SCALE:	NTS	DRAWN/CHECKED CBBEL/TPF	DRAWING NUMBER	
DATE:		REVISED:		WAT-8
	1/1/2016	1/1/2016		



1. VALVE JUMPER MUST BE ABOVE MANHOLE LID.



VILLAGE OF HUNTLEY 10987 MAIN STREET

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

WATER VALVE JUMPER

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