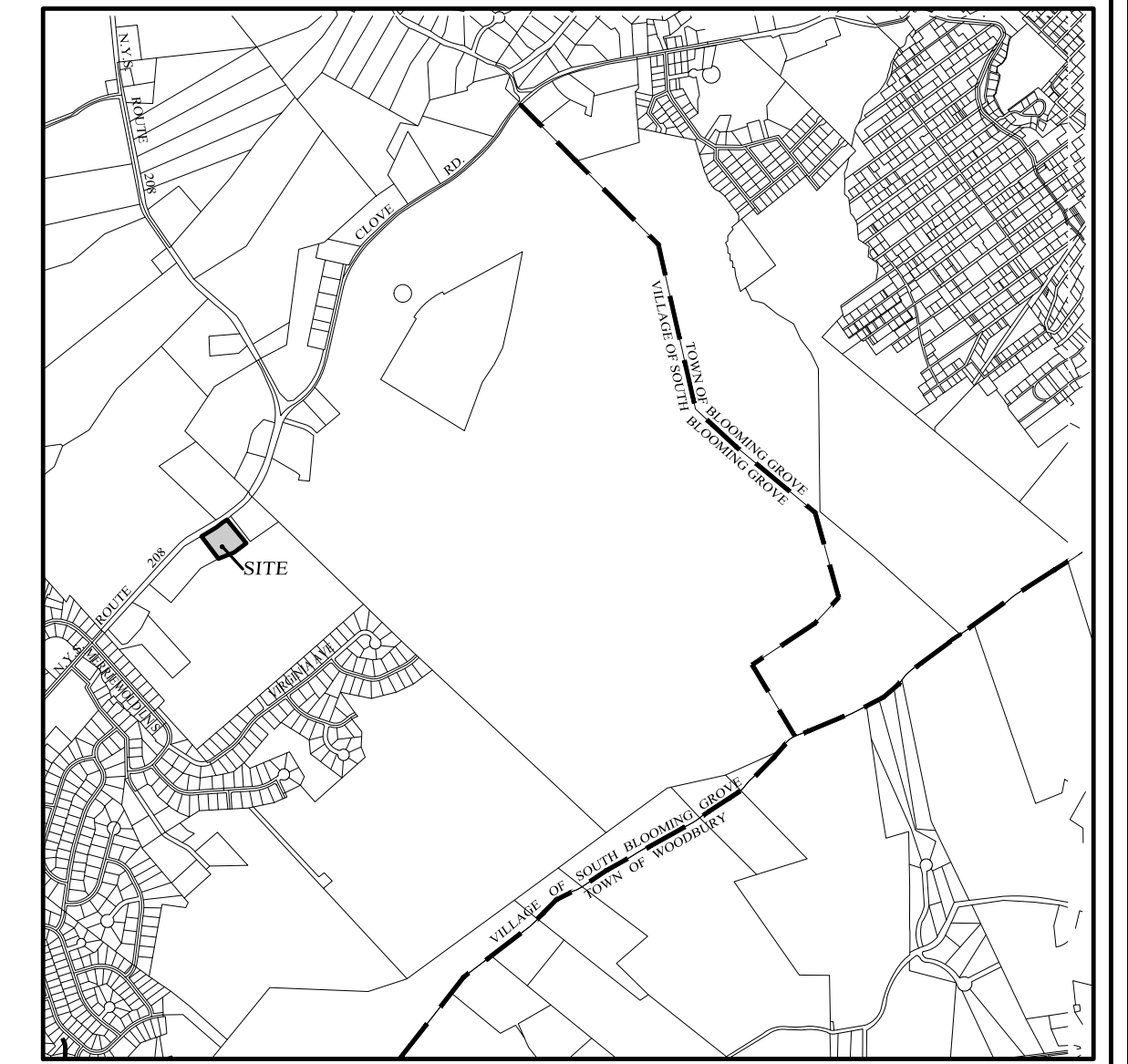


### VILLAGE OF SOUTH BLOOMING GROVE BULK REQUIREMENTS

LOT DIMENSIONS	ZONING DISTRICT
	RURAL CROSSROADS 1
MIN. LOT SIZE	3,000 S.F.
MIN. FRONTAGE	30 FEET
MIN. BUILDING COVERAGE	50%
PRIMARY STRUCTURE	
MIN. FRONT YARD SETBACK	15 FEET
MIN. SIDE YARD	15 FEET
MIN. REAR YARD SETBACK	20 FEET
MAXIMUM HEIGHT (STORIES)	3 STORIES
MAXIMUM HEIGHT (FEET)	40 FEET
ACCESSORY STRUCTURE	
MIN. SIDE YARD	10 FEET
MIN. REAR YARD SETBACK	10 FEET
MAXIMUM HEIGHT (STORIES)	2 STORIES
MAXIMUM HEIGHT (FEET)	20 FEET



LOCATION MAP  
SCALE: 1" = 2,000'

### ZONING NOTES:

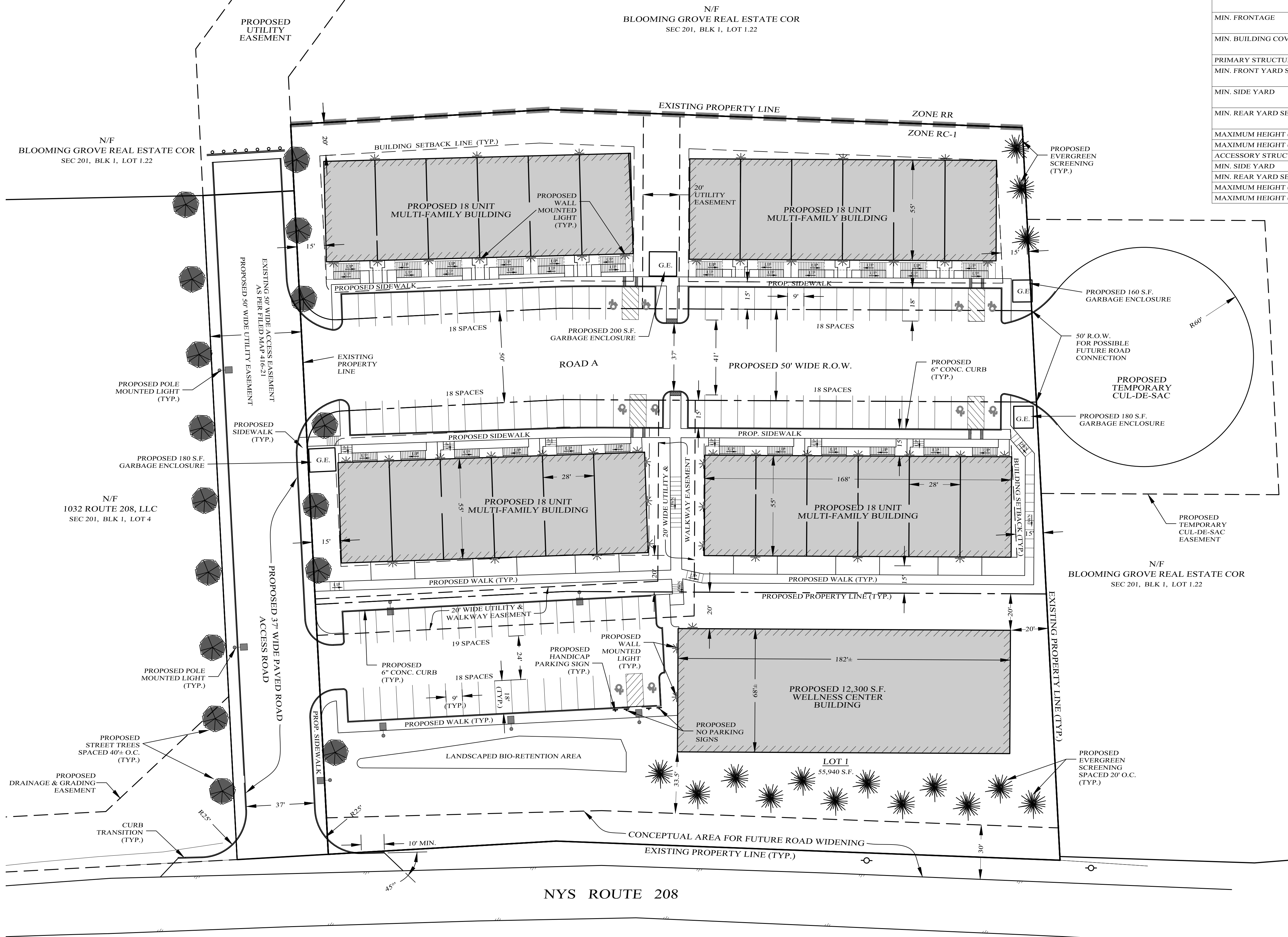
- THE PLAN MEETS ALL REQUIREMENTS OF THE VILLAGE OF SOUTH BLOOMING GROVE ZONING CODE §235-14.2.A THROUGH K, AS FOLLOWS:
- A. MINIMUM LOT SIZE SHALL BE 3,000 SQUARE FEET; PROVIDED.
  - B. ALL BUILDINGS SHALL BE SERVED BY PUBLIC WATER AND SEWER; PROPOSED.
  - C, D. NOT APPLICABLE.
  - E. THE SETBACKS AND BUILD-TO-LINES SHALL BE ESTABLISHED BY THE PLANNING BOARD AT THE TIME OF SITE PLAN APPROVAL; THE APPLICANT REQUESTS THE PLANNING BOARD APPROVE SIDE SETBACKS TO THE BUILD-TO-LINE FOR THE CENTER UNITS OF EACH RESIDENTIAL BUILDING.
  - F. WHENEVER POSSIBLE, ACCESS DRIVES AND CIRCULATION PATTERNS SHALL MINIMIZE CURBS CUTS TO PUBLIC ROADS, JOINT DRIVEWAYS FOR ADJOINING PROPERTIES IS ENCOURAGED; PROVIDED.
  - G. MAXIMUM FOOTPRINT OF ANY STRUCTURE SHALL BE 10,000 SQUARE FEET; PROVIDED (ALL RESIDENTIAL BUILDINGS ARE PROPOSED WITH 9,000 SQUARE FEET FOOTPRINT AND THE WELLNESS CENTER IS PROPOSED WITH A FOOTPRINT OF 9,600).
  - H. AT LEAST 10% OF THE DWELLING UNITS SHALL BE AFFORDABLE; PROVIDED 2 UNITS.
  - I & J. NOT APPLICABLE.
  - K. IN MULTI-ACRE DEVELOPMENTS PROVISIONS SHOULD BE MADE FOR HIKING OR WALKING PATHS THROUGH THE DEVELOPMENT, ALONG PUBLIC ROADS, TO COMMERCIAL AND SERVICE BUSINESSES AND TO THE LOT LINES OF ADJOINING PROPERTIES; PROVIDED.

### PARKING CALCULATION

- RESIDENTIAL BUILDINGS**  
1 SPACE PER DWELLING UNIT = (1 SPACES) x (72 UNITS)  
72 PARKING SPACES  
PARKING SPACES REQUIRED = 72
- WELLNESS CENTER BUILDING**  
1 SPACES PER 800 S.F. = (1 SPACE) x (800 S.F.) / 12,300 S.F.  
800 / 12,300 = 16  
PARKING SPACES REQUIRED = 16
- TOTAL PARKING SPACES REQUIRED = 88  
TOTAL PARKING SPACES PROVIDED = 109
- HANDICAPPED PARKING SPACES REQUIRED = 1 SPACE PER 25 SPACES  
HANDICAPPED PARKING SPACES PROVIDED = 109 / 25 SPACES = 4.4 SPACES  
HANDICAPPED PARKING SPACES PROVIDED = 10

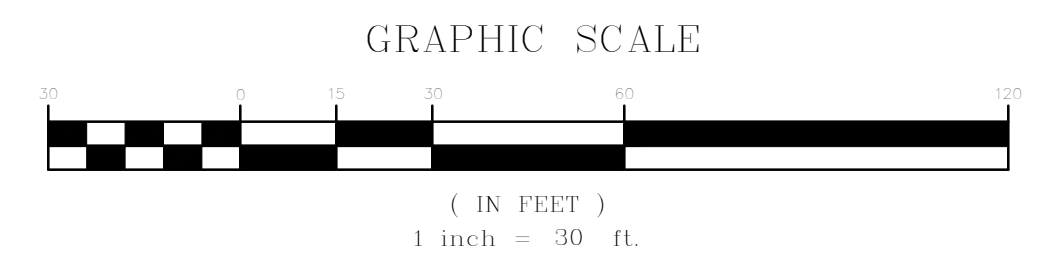
### GENERAL NOTES:

1. VILLAGE OF SOUTH BLOOMING GROVE TAX MAP DESIGNATION: SEC. 207, BLOCK 1, LOT 1.23.
2. PARCEL LOCATED IN THE RC-1 ZONING DISTRICT.
3. AREA OF PARCEL = 3.68 AC.
4. BOUNDARY AND TOPOGRAPHIC SURVEY INFORMATION PROVIDED BY MAP ENTITLED: "SUBDIVISION FOR 20 SHANNON LANE" AS PREPARED BY PETROCIONE, P.E. AND FILED WITH THE ORANGE COUNTY CLERK AS MAP 416-21 ON DECEMBER 28, 2021.
5. EXISTING UTILITY INFORMATION SHOWN HEREON HAS BEEN COLLECTED FROM VARIOUS SOURCES AND IS NOT GUARANTEED AS TO ACCURACY OR COMPLETENESS. THE CONTRACTOR SHALL VERIFY ALL INFORMATION TO HIS SATISFACTION PRIOR TO EXCAVATION. THE CONTRACTOR SHALL NOTIFY THE UNDER SIGNED PROFESSIONAL IMMEDIATELY IF ANY FIELD CONDITIONS ENCOUNTERED DIFFER MATERIALLY FROM THOSE REPRESENTED HEREON. SUCH CONDITIONS COULD RENDER THE DESIGNS HEREON INAPPROPRIATE OR INEFFECTIVE.
6. BUILDING FOOTPRINT DIMENSIONS SHOWN HEREON ARE APPROXIMATE. FINAL BUILDING FOOTPRINT DIMENSIONS FOR EACH BUILDING SHALL BE FURNISHED ON THE INDIVIDUAL ARCHITECTURAL PLANS AT THE TIME OF APPLICATION FOR A BUILDING PERMIT. ALL STRUCTURES SHALL CONFORM TO THE APPROVED BULK ZONING REQUIREMENTS.



### LEGEND

EXISTING PROPERTY LINE	---
PROPOSED PROPERTY LINE	---
EXISTING 2' CONTOUR LINE	---
EXISTING 10' CONTOUR LINE	---
PROPOSED CONTOUR LINE	(600)
EXISTING EDGE OF PAVEMENT	---
BUILDING SETBACK	---



### SHEET INDEX

SHEET #1	- SITE PLAN
SHEET #2	- SUBDIVISION PLAT
SHEET #3	- PROPOSED OFF SITE EASEMENT MAP
SHEET #4	- GRADING & DRAINAGE PLAN
SHEET #5	- ROAD PROFILES & SITE DETAILS
SHEET #6	- PHASE 1 UTILITY PLAN
SHEET #7	- PHASE 2 OFF SITE UTILITY PLAN
SHEET #8	- SANITARY DETAILS
SHEET #9	- EROSION CONTROL PLAN
SHEET #10	- EROSION CONTROL DETAILS
SHEET #11	- DRAINAGE DETAILS
SHEET #12	- STORMWATER MANAGEMENT DETAILS

## SOUTHGROVE

VILLAGE OF SOUTH BLOOMING GROVE,  
ORANGE COUNTY, NEW YORK

### SITE PLAN

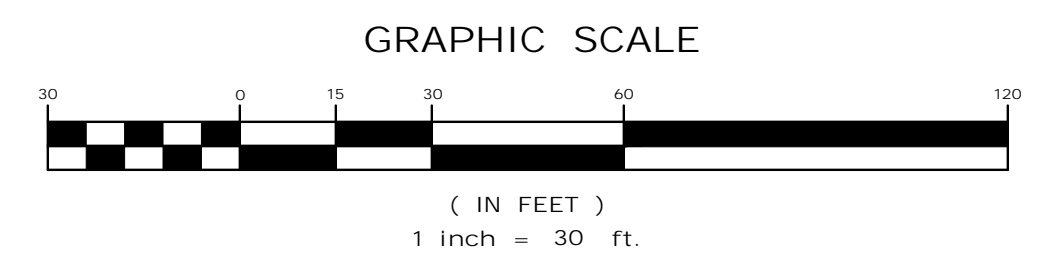
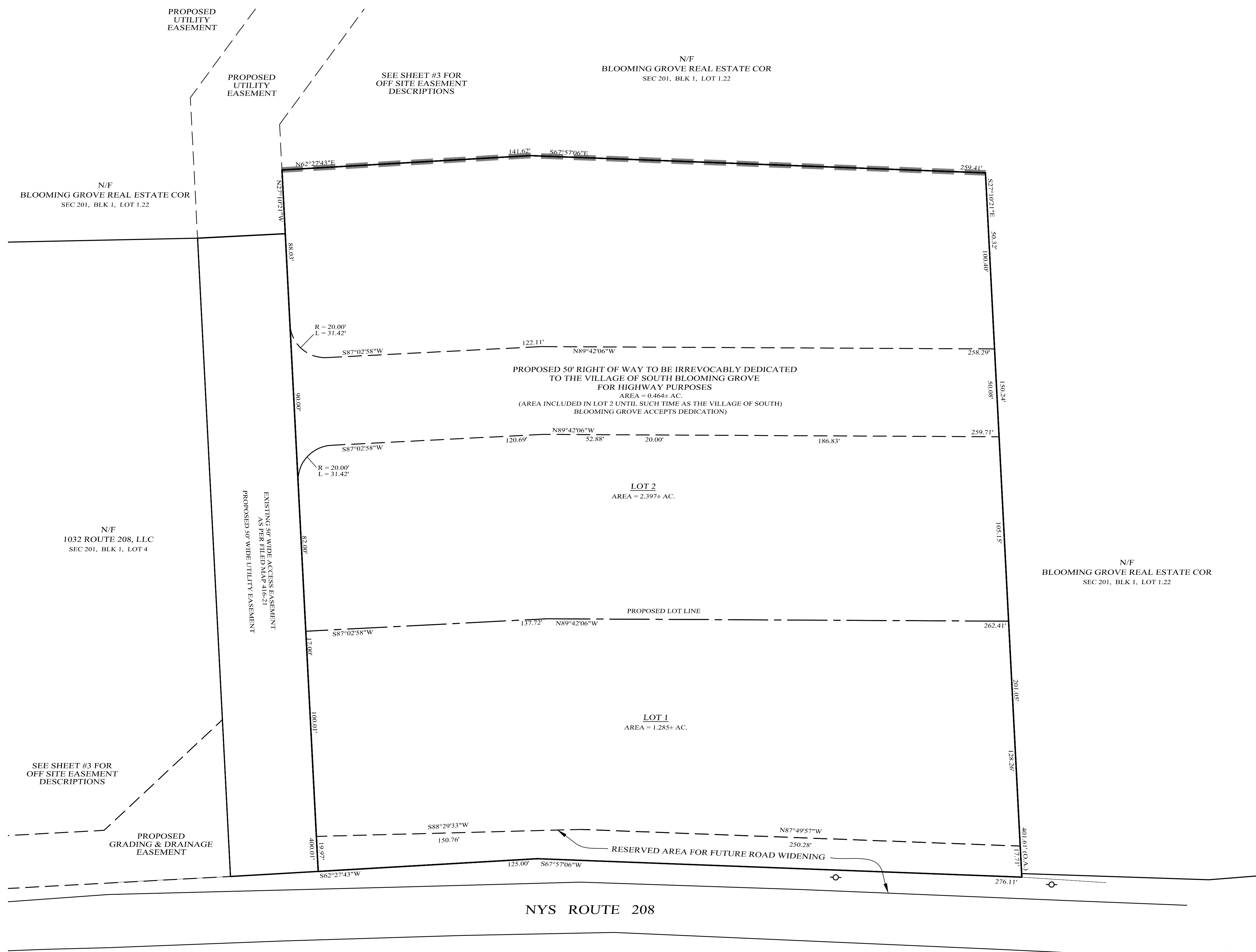
DRAWING TITLE

## KIRK ROTHER, P.E.

CONSULTING ENGINEER, PLLC  
5 St. Stephens Lane, Warwick, NY 10990  
(845) 983-0620

04-17-24	REV. LAYOUT, GRADING & UTILITY DESIGN
08-17-22	REV. PER VILLAGE ENGINEER'S COMMENTS
07-21-22	REV. PER VILLAGE ENGINEER'S COMMENTS
06-23-22	INITIAL PREPARATION

D.O.T. SHEET #	D.E.C. SHEET #	O.C.H.D. SHEET #	SHEET #
N.A.	N.A.	N.A.	1 OF 12
CAD #	PROJECT #	SCALE	
20129 SP	20129.0	AS SHOWN	



**LEGEND**

EXISTING PROPERTY LINE	—————
PROPOSED PROPERTY LINE	—————
EXISTING 2' CONTOUR LINE	-----
EXISTING 10' CONTOUR LINE	-----
PROPOSED CONTOUR LINE	----- (600)
EXISTING EDGE OF PAVEMENT	-----
BUILDING SETBACK	-----

I HEREBY CERTIFY THAT THIS SUBDIVISION IS BASED ON AN ACTUAL FIELD SURVEY COMPLETED BY EDWARD T. GANNON, PLS, ON

\_\_\_\_\_  
 SIGNATURE  
**EDWARD T. GANNON, PLS.**  
 LICENSE NO. 049907  
 CHERRY HILL ROAD, BLOOMING GROVE, NEW YORK 10914  
 (845) 497-8383

05-30-24	REV. PER MODIFIED SITE PLAN
08-17-22	REV. PER VILLAGE ENGINEER'S COMMENTS
07-21-22	REV. PER VILLAGE ENGINEER'S COMMENTS
06-23-22	INITIAL PREPARATION

**SOUTHGROVE**

VILLAGE OF SOUTH BLOOMING GROVE,  
 ORANGE COUNTY, NEW YORK

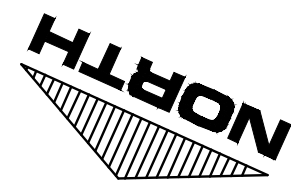
**SUBDIVISION PLAT**

DRAWING TITLE

**Kirk Rother, P.E.**  
 CONSULTING ENGINEER, PLLC  
 5 St. Stephens Lane, Warwick, NY 10990  
 (845) 988-0620

D.O.T. SHEET #	D.E.C. SHEET #	O.C.H.D. SHEET #	SHEET #
N.A.	N.A.	N.A.	2 OF 12
CAD #	PROJECT #	SCALE	
20129 SP	20129.0	AS SHOWN	

KIRK ROTHER, P.E. N.Y.S. LIC. NO. 079053 DATE



PROPOSED UTILITY EASEMENT "A".

PROPOSED UTILITY EASEMENT "B"  
AREA = 0.50± AC.

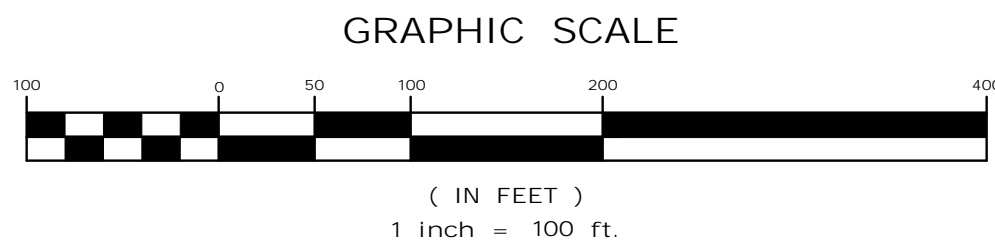
PROPOSED TEMPORARY  
CUL-DE-SAC EASEMENT  
AREA = 0.45± AC.

PROPOSED GRADING &  
DRAINAGE EASEMENT  
AREA = 0.25± AC.

SEE SHEET #2 FOR  
ON-SITE EASEMENTS  
AND DESCRIPTIONS

**LEGEND**

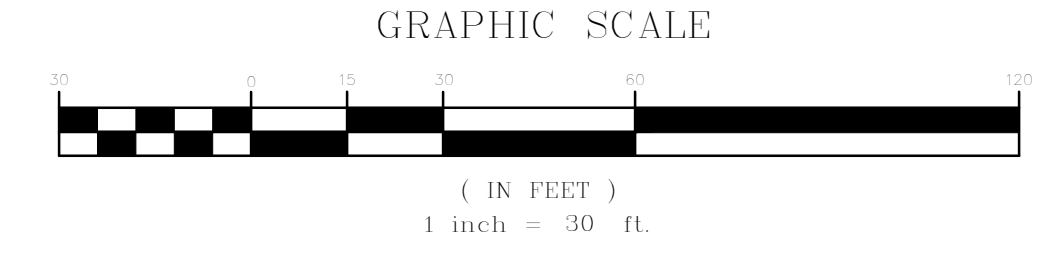
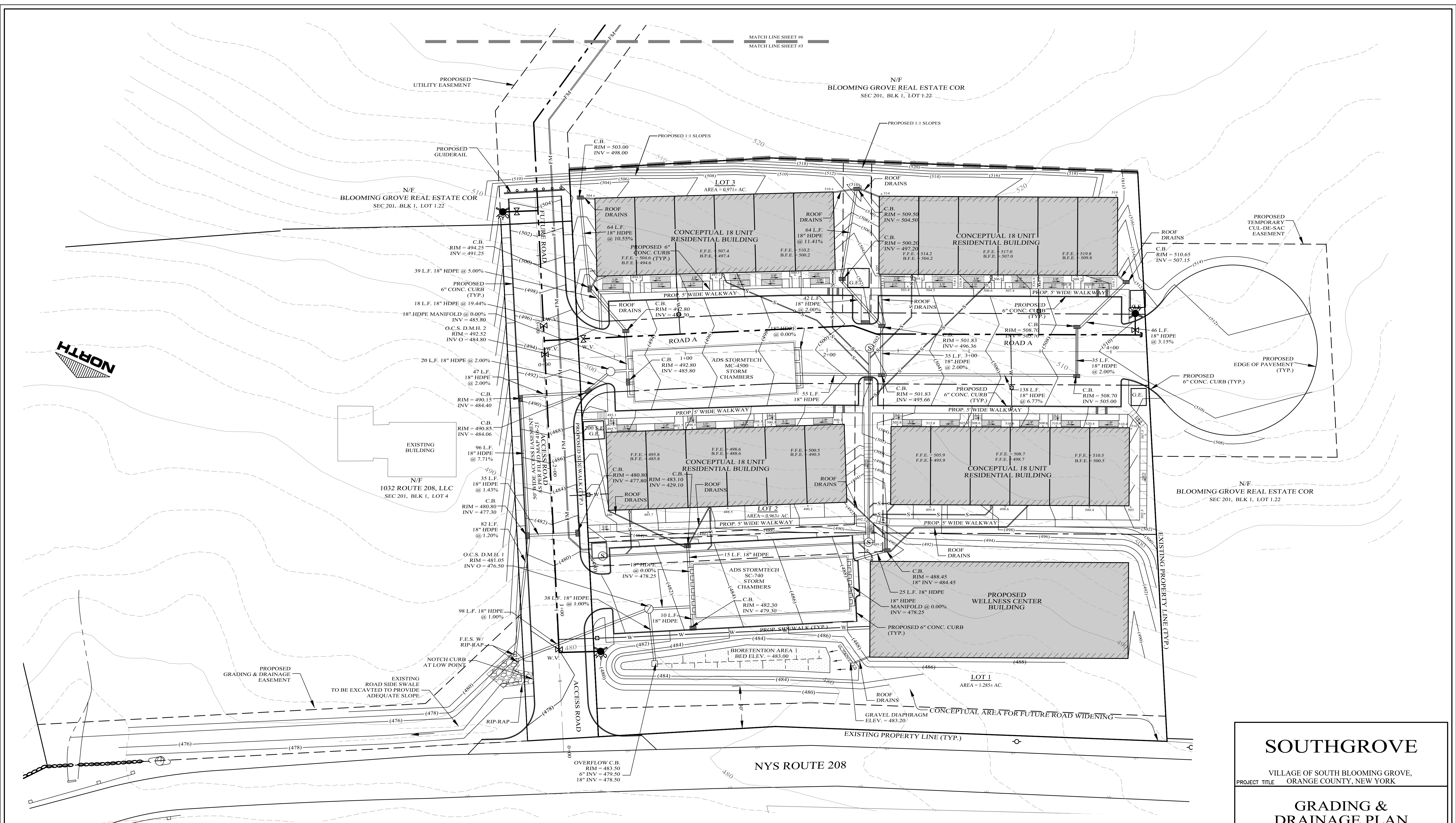
EXISTING PROPERTY LINE	
PROPOSED PROPERTY LINE	
EXISTING 2' CONTOUR LINE	
EXISTING 10' CONTOUR LINE	
PROPOSED CONTOUR LINE	
EXISTING EDGE OF PAVEMENT	
EXISTING BUILDING SETBACK	



<b>SOUTHGROVE</b>			
VILLAGE OF SOUTH BLOOMING GROVE, ORANGE COUNTY, NEW YORK			
<b>PROPOSED OFF SITE EASEMENT MAP</b>			
Kirk Rother, P.E. CONSULTING ENGINEER, PLLC 5 St. Stephens Lane, Warwick, NY 10990 (845) 988-0620			
04-17-24		INITIAL PREPARATION	
D.O.T. SHEET #	D.E.C. SHEET #	O.C.H.D. SHEET #	SHEET #
N.A.	N.A.	N.A.	3 OF 12
CAD #	PROJECT #	SCALE	
20129 SP	20129.0	AS SHOWN	


UNAUTHORIZED ALTERATIONS OR ADDITIONS TO A DOCUMENT BEARING THE SEAL OF A LICENSED PROFESSIONAL ENGINEER IS A VIOLATION OF SECTION 7209, SUBDIVISION 2 OF THE NEW YORK STATE EDUCATION LAW. REPRODUCTIONS OF THIS PLAN WHICH DO NOT BEAR THE ORIGINAL SEAL OF A LICENSED PROFESSIONAL ENGINEER SHALL BE CONSIDERED INVALID.

KIRK ROTHER, P.E. N.Y.S. LIC. NO. 079053 DATE



**LEGEND**

EXISTING PROPERTY LINE	---
PROPOSED PROPERTY LINE	---
EXISTING 2' CONTOUR LINE	---
EXISTING 10' CONTOUR LINE	---
PROPOSED CONTOUR LINE	---
EXISTING EDGE OF PAVEMENT	---
BUILDING SETBACK	---

D.O.T. SHEET #	REV.	DESCRIPTION
04-17-24	REV. LAYOUT, GRADING & UTILITY DESIGN	
08-17-22	REV. PER VILLAGE ENGINEER'S COMMENTS	
07-21-22	REV. PER VILLAGE ENGINEER'S COMMENTS	
06-23-22	INITIAL PREPARATION	

**SOUTHGROVE**

VILLAGE OF SOUTH BLOOMING GROVE,  
ORANGE COUNTY, NEW YORK

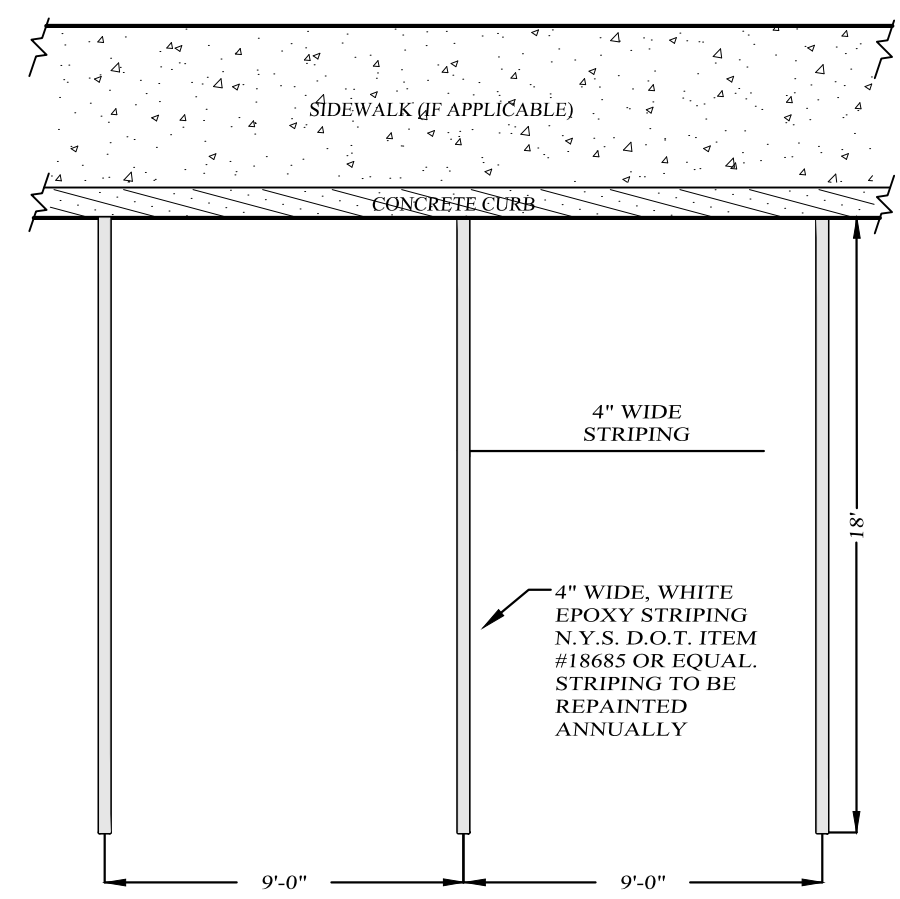
**GRADING &  
DRAINAGE PLAN**

DRAWING TITLE

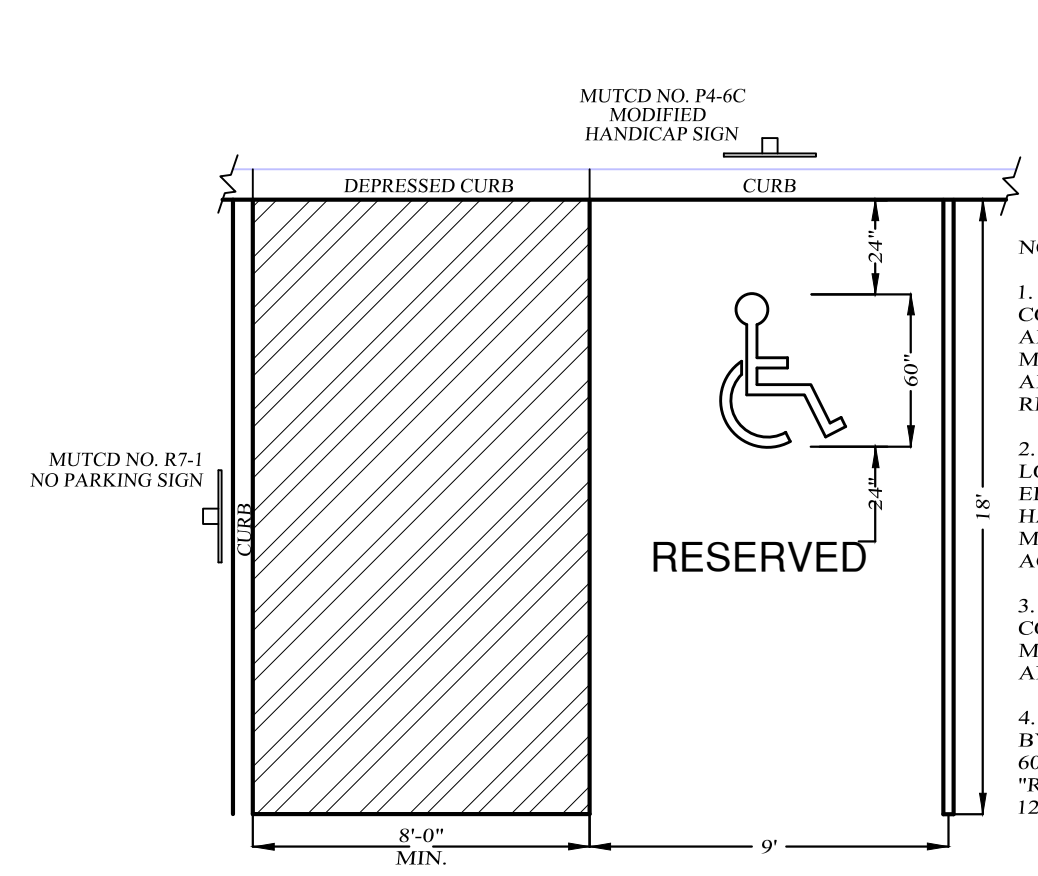
**KIRK ROTHER, P.E.**  
CONSULTING ENGINEER, PLLC  
5 St. Stephens Lane, Warwick, NY 10990  
(845) 988-0620

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D.O.T. SHEET #	SHEET #
N.A.	N.A.
PROJECT #	SCALE
20129 SP	20129.0 AS SHOWN

4 OF 12

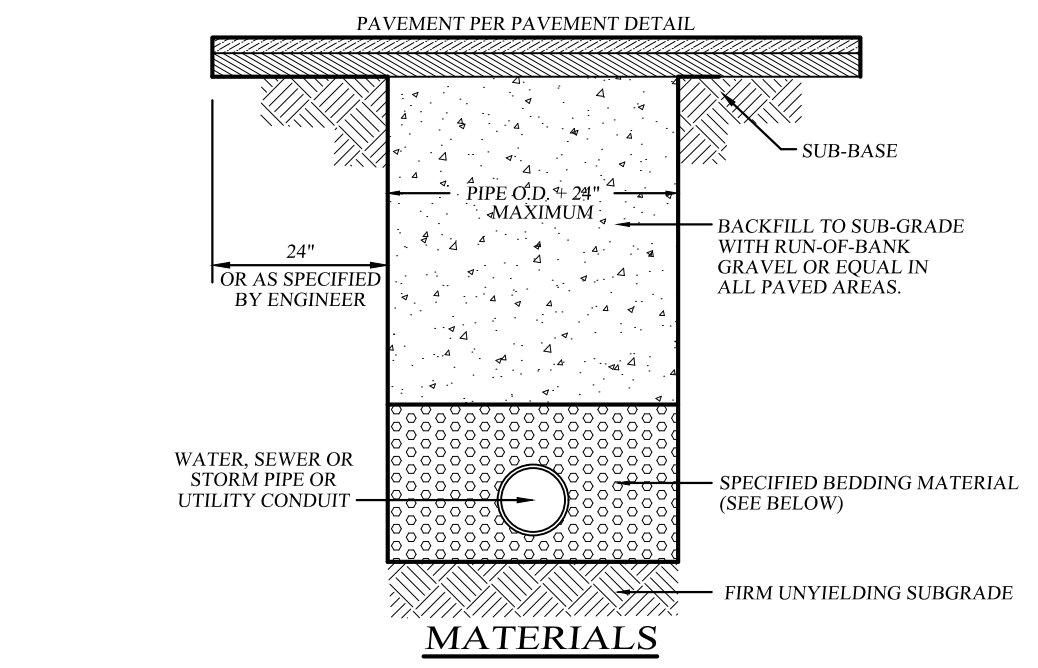


**PARKING SPACE STRIPING DETAIL**  
NOT TO SCALE



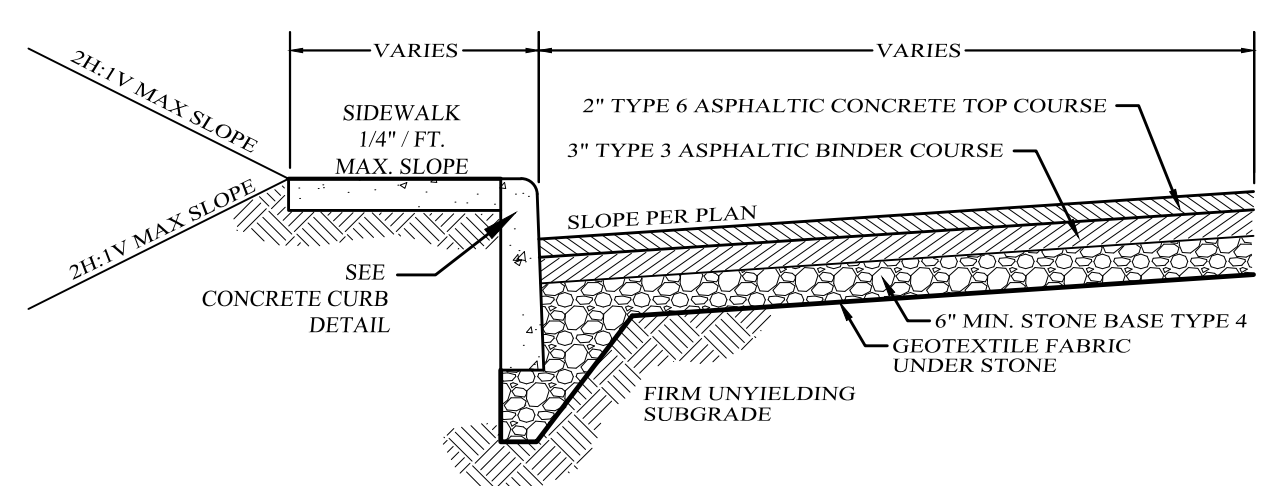
**HANDICAPPED PARKING DETAIL**  
NOT TO SCALE

- NOTES:
1. ALL HANDICAP MARKINGS SHALL CONFORM TO THE LATEST REVISION OF THE AMERICANS WITH DISABILITIES ACT, MANUAL OF TRAFFIC CONTROL DEVICES AND ALL OTHER APPLICABLE RULES AND REGULATIONS.
  2. HANDICAPPED PARKING SHALL BE LOCATED AS CLOSE AS POSSIBLE TO ELEVATORS, RAMP, WALKWAYS, AND HANDICAP ACCESSIBLE ENTRANCES. MAXIMUM DISTANCE FROM HANDICAP ACCESSIBLE ENTRANCES SHALL BE 200'.
  3. HANDICAP PARKING SPACES SHALL BE CONSTRUCTED NEARLY LEVEL WITH THE MAXIMUM SLOPE NOT TO EXCEED 1:48 IN ANY DIRECTION.
  4. EACH PARKING SPACE SHALL BE MARKED BY A HANDICAP SIGN, PAINTED, 54" WIDE X 60" HIGH HANDICAP SYMBOL AND PAINTED "RESERVED" LETTERING. LETTERING TO BE 12" HIGH AND STRIPING SHALL BE 6" WIDE.

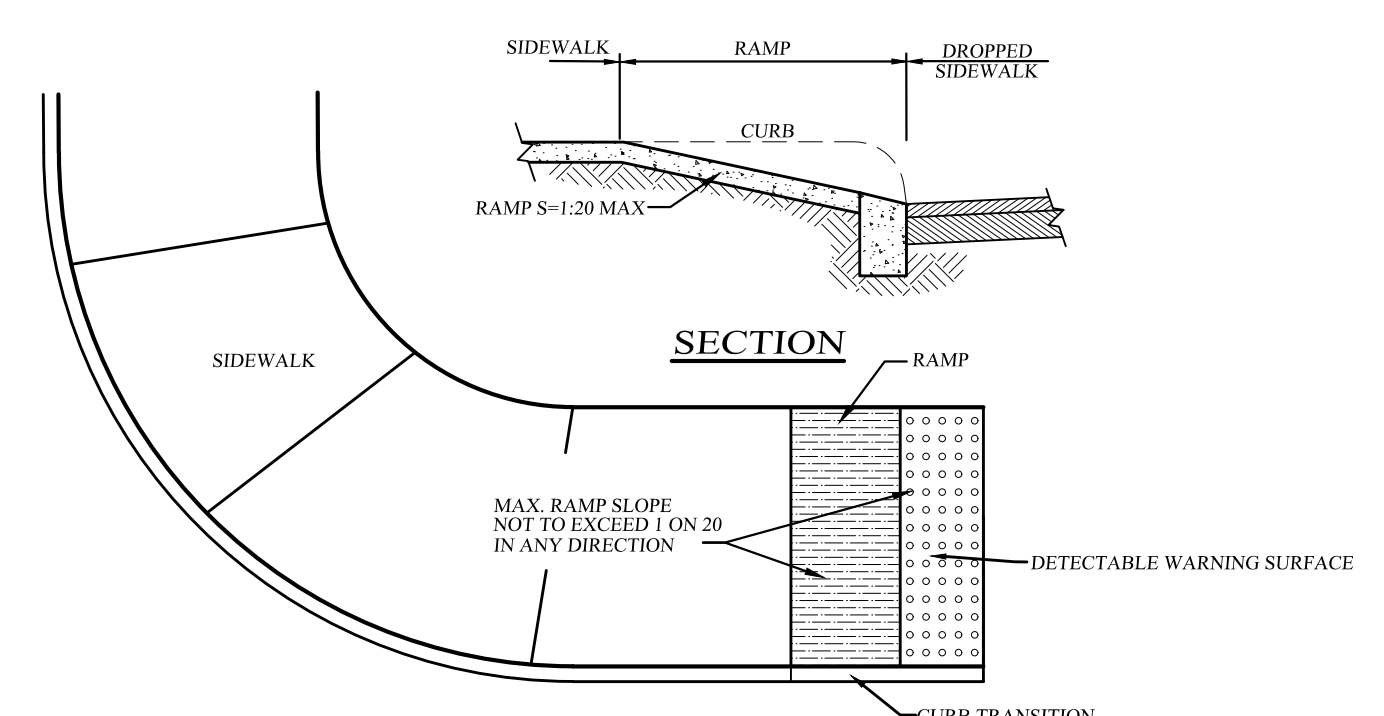


- PIPE ZONE BEDDING MATERIAL:  
1. WATER MAINS: SAND OR RUN-OF-BANK GRAVEL, AS APPROVED BY SOILS ENGINEER.
- PIPE ZONE BACKFILL MATERIAL:  
1. WATER MAINS: ON-SITE MATERIAL FREE OF STONE, CLAY FOREIGN MATERIAL OR FROZEN EARTH AS APPROVED BY SOILS ENGINEER.

**PIPE BEDDING AND BACKFILL DETAIL**  
NOT TO SCALE

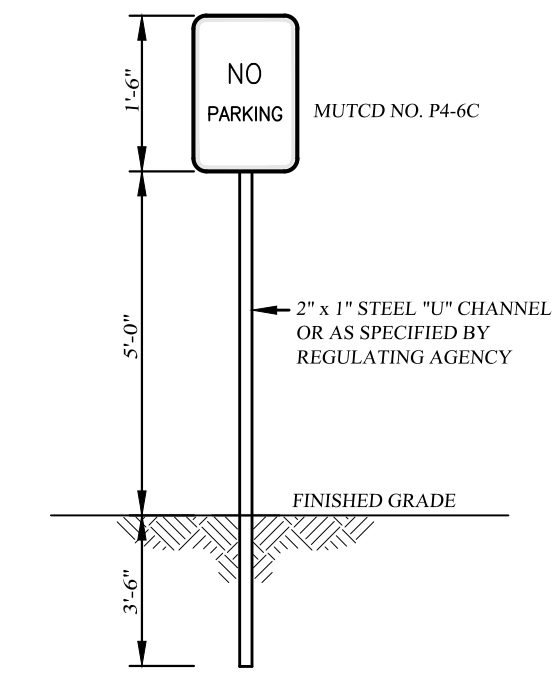


**TYPICAL PAVEMENT SECTION PARKING LOTS & DRIVEWAYS**  
NOT TO SCALE

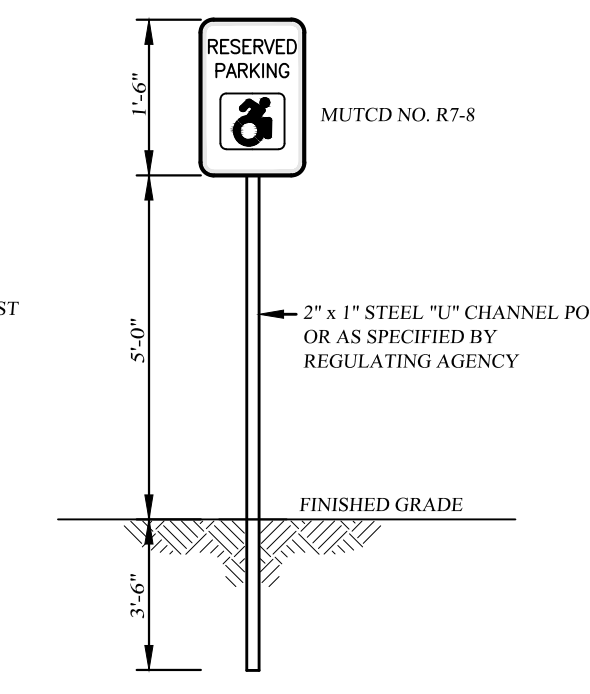


**HANDICAP ACCESSIBLE RAMP DETAIL**  
NOT TO SCALE

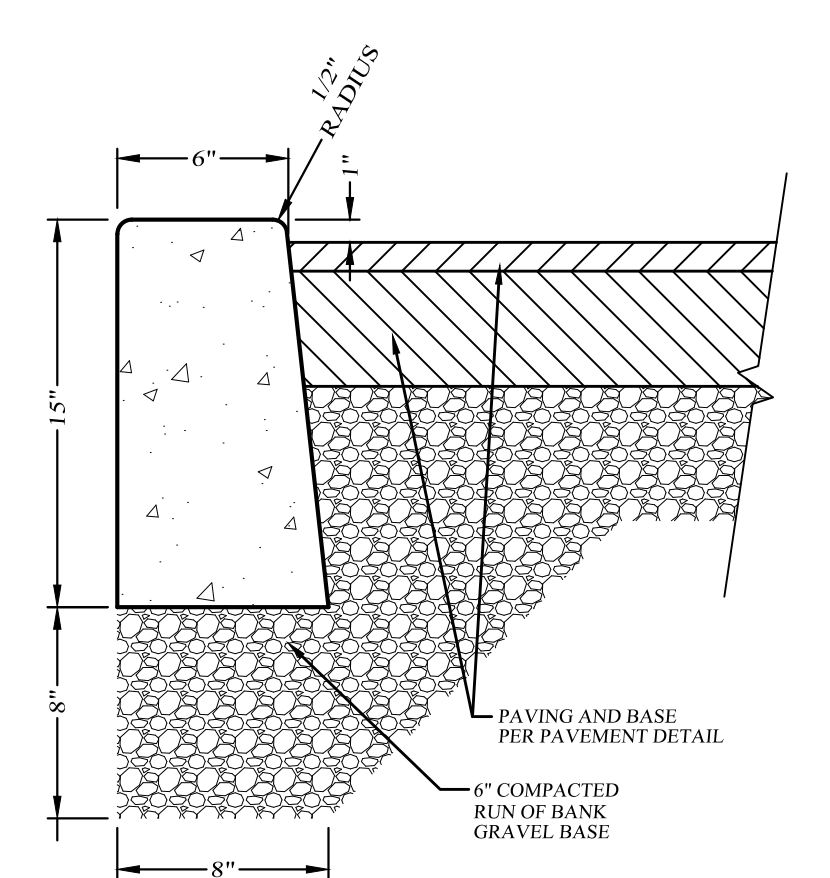
- NOTES:
1. CONSTRUCTION OF ALL HANDICAP ACCESSIBLE FEATURES SHALL CONFORM TO THE LATEST REVISION OF ALL APPLICABLE REGULATORY STANDARDS INCLUDING THE AMERICANS WITH DISABILITIES ACT.



**"NO PARKING" SIGN DETAIL**  
NOT TO SCALE

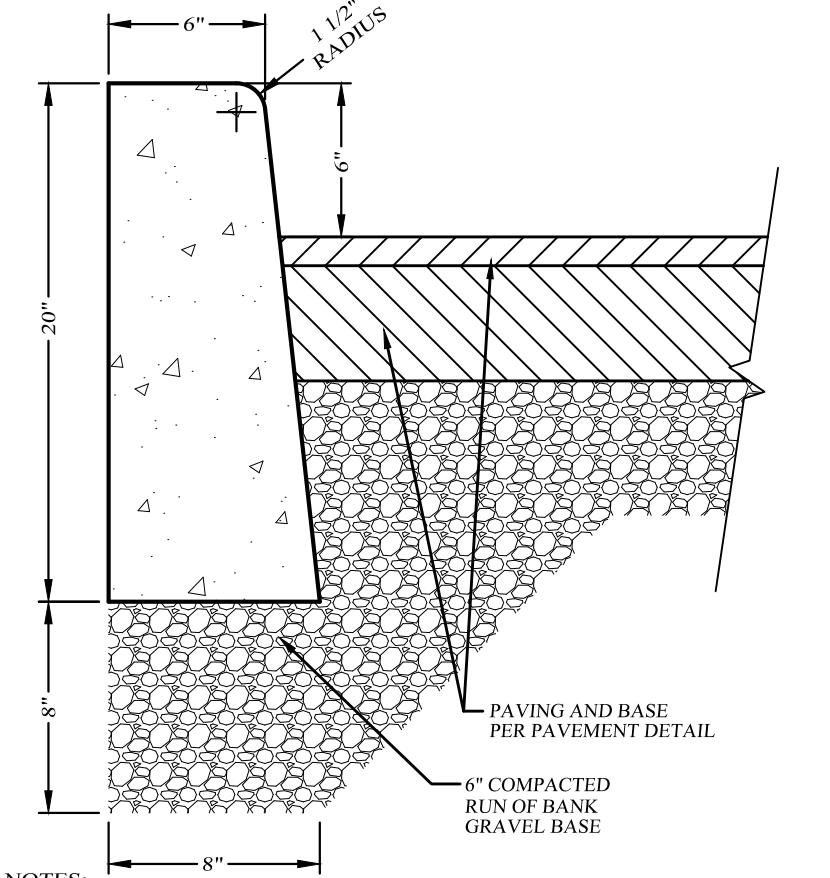


**"HANDICAP PARKING" SIGN DETAIL**  
NOT TO SCALE



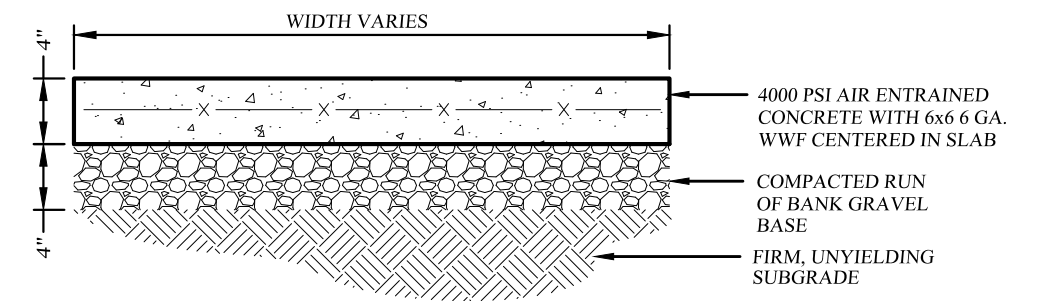
**CONCRETE DROP CURB DETAIL**  
NOT TO SCALE

- NOTES:
1. CURB SHALL BE CAST IN PLACE CONCRETE WITH CELLULOSE, OR EQUIVALENT, EXPANSION JOINTS INSTALLED AT TEN (10) FOOT INTERVALS.
  2. MIX DESIGN SHALL BE IN ACCORDANCE WITH AMERICAN CONCRETE INSTITUTE GUIDELINES FOR CONCRETE EXPOSED TO FREEZING, THAWING AND DE-ICING CHEMICALS. CONCRETE SHALL HAVE A WATER-CEMENTITIOUS RATIO OF 0.45 AND AIR ENTRAINMENT OF 4.12% FOR A 1" NOMINAL AGGREGATE SIZE. CONCRETE TO TEST 4000 PSI AT 28 DAYS.



**CONCRETE CURB DETAIL (WITHIN SITE)**  
NOT TO SCALE

- NOTES:
1. CURB SHALL BE CAST IN PLACE CONCRETE WITH CELLULOSE, OR EQUIVALENT, EXPANSION JOINTS INSTALLED AT TEN (10) FOOT INTERVALS.
  2. MIX DESIGN SHALL BE IN ACCORDANCE WITH AMERICAN CONCRETE INSTITUTE GUIDELINES FOR CONCRETE EXPOSED TO FREEZING, THAWING AND DE-ICING CHEMICALS. CONCRETE SHALL HAVE A WATER-CEMENTITIOUS RATIO OF 0.45 AND AIR ENTRAINMENT OF 4.12% FOR A 1" NOMINAL AGGREGATE SIZE. CONCRETE TO TEST 4000 PSI AT 28 DAYS.



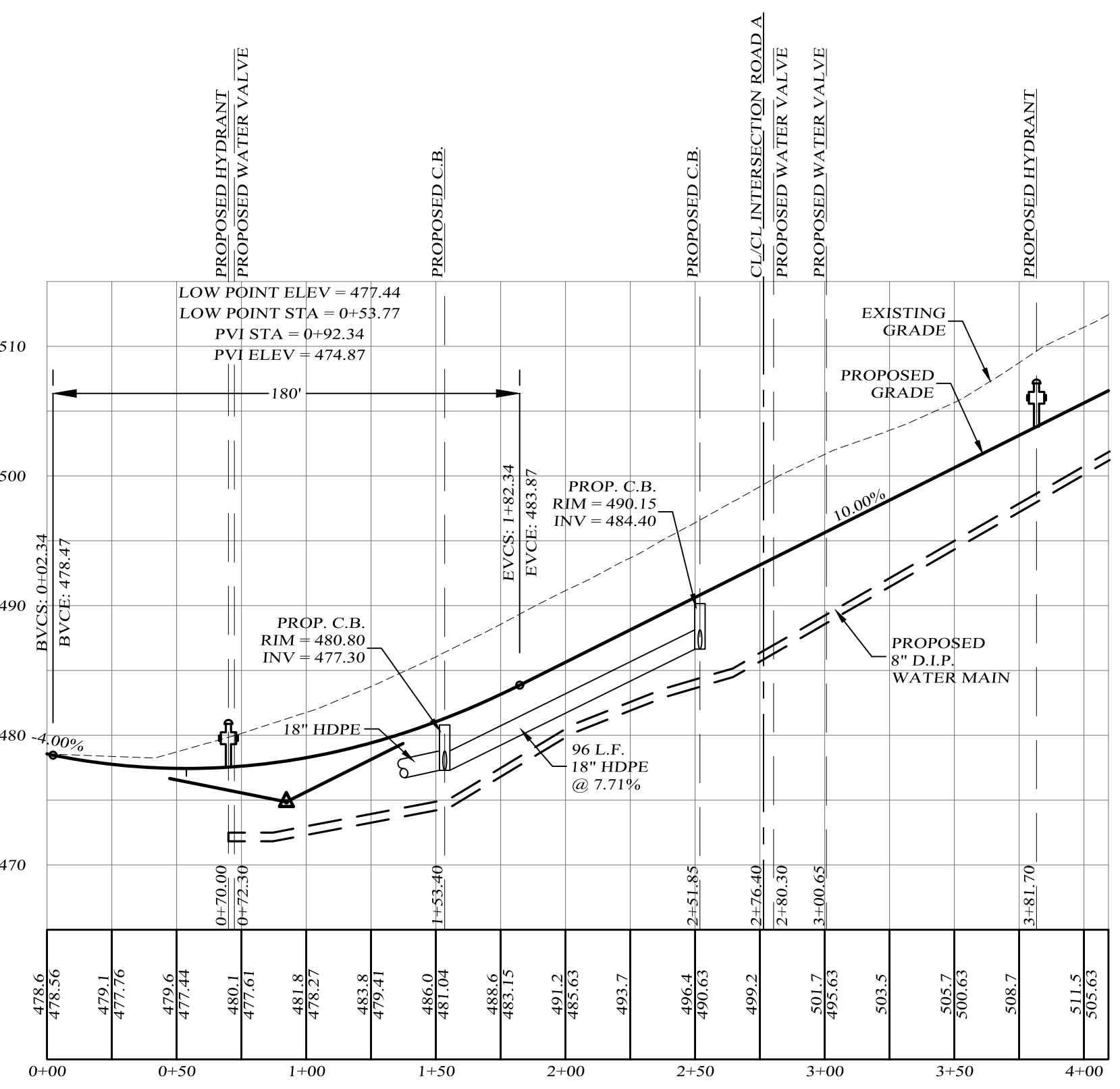
**CONCRETE SIDEWALK DETAIL**  
NOT TO SCALE

- NOTES:
1. SIDEWALKS SHALL BE CAST IN PLACE CONCRETE WITH 1" DEEP JOINTS INSTALLED AT SPACING EQUAL TO THE SIDEWALK WIDTH.
  2. CELLULOSE, OR EQUIVALENT, EXPANSION JOINTS SHALL BE INSTALLED 20 FEET ON CENTER. IF THE SIDEWALK IS POURED AGAINST CONCRETE CURBS, BUILDINGS OR OTHER STRUCTURES, AN EXPANSION JOINT SHALL BE INSTALLED ALONG THE ENTIRE LENGTH OF CONTACT. SIDEWALKS SHALL SLOPE AWAY FROM BUILDINGS TO PROVIDE POSITIVE DRAINAGE AND CONFORM TO THE LATEST REVISION OF ALL APPLICABLE REGULATORY STANDARDS INCLUDING THE AMERICANS WITH DISABILITIES ACT.
  3. MIX DESIGN SHALL BE IN ACCORDANCE WITH AMERICAN CONCRETE INSTITUTE GUIDELINES FOR CONCRETE EXPOSED TO FREEZING, THAWING AND DE-ICING CHEMICALS. CONCRETE SHALL HAVE A WATER-CEMENTITIOUS RATIO OF 0.45 AND AIR ENTRAINMENT OF 4.12% FOR A 1" NOMINAL AGGREGATE SIZE. CONCRETE TO TEST 4000 PSI AT 28 DAYS.
  4. SIDEWALK SURFACE TO BE A BROOM FINISH WITH GROOVES RUNNING PERPENDICULAR TO THE LENGTH OF SIDEWALK.

**CONCRETE SIDEWALK AT PARKING LOT ENTRANCE DETAIL**  
NOT TO SCALE

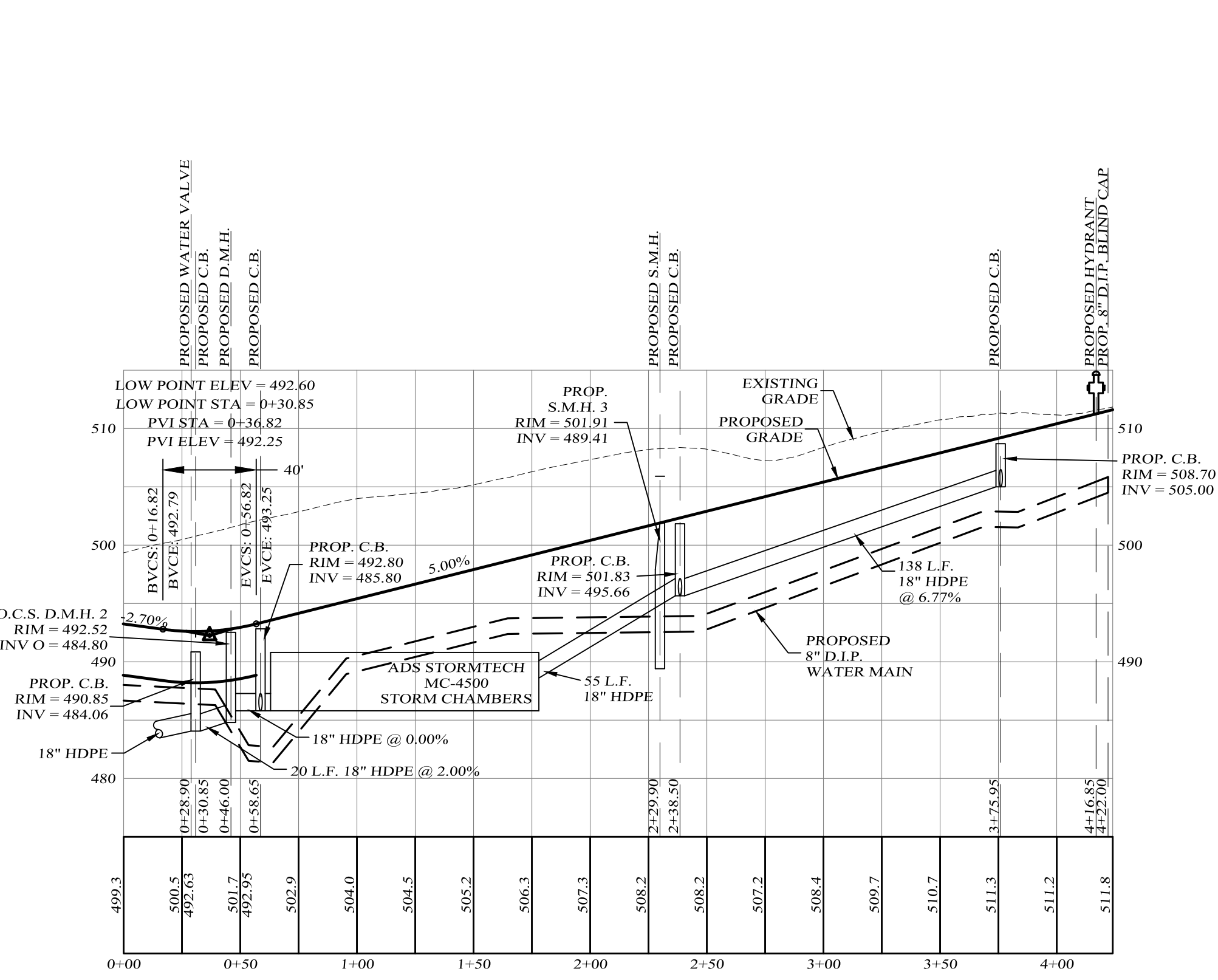
- NOTES:
1. SIDEWALKS SHALL BE CAST IN PLACE CONCRETE WITH 1" DEEP JOINTS INSTALLED AT SPACING EQUAL TO THE SIDEWALK WIDTH.
  2. CELLULOSE, OR EQUIVALENT, EXPANSION JOINTS SHALL BE INSTALLED 20 FEET ON CENTER. IF THE SIDEWALK IS POURED AGAINST CONCRETE CURBS, BUILDINGS OR OTHER STRUCTURES, AN EXPANSION JOINT SHALL BE INSTALLED ALONG THE ENTIRE LENGTH OF CONTACT. SIDEWALKS SHALL SLOPE AWAY FROM BUILDINGS TO PROVIDE POSITIVE DRAINAGE AND CONFORM TO THE LATEST REVISION OF ALL APPLICABLE REGULATORY STANDARDS INCLUDING THE AMERICANS WITH DISABILITIES ACT.
  3. MIX DESIGN SHALL BE IN ACCORDANCE WITH AMERICAN CONCRETE INSTITUTE GUIDELINES FOR CONCRETE EXPOSED TO FREEZING, THAWING AND DE-ICING CHEMICALS. CONCRETE SHALL HAVE A WATER-CEMENTITIOUS RATIO OF 0.45 AND AIR ENTRAINMENT OF 4.12% FOR A 1" NOMINAL AGGREGATE SIZE. CONCRETE TO TEST 4000 PSI AT 28 DAYS.
  4. SIDEWALK SURFACE TO BE A BROOM FINISH WITH GROOVES RUNNING PERPENDICULAR TO THE LENGTH OF SIDEWALK.

**CONCRETE SIDEWALK AT PARKING LOT ENTRANCE DETAIL**  
NOT TO SCALE



**ACCESS ROAD PROFILE**

SCALES:  
HOR: 1" = 50'  
VER: 1" = 10'



**ROAD A PROFILE**

SCALES:  
HOR: 1" = 50'  
VER: 1" = 10'

**SOUTHGROVE**  
VILLAGE OF SOUTH BLOOMING GROVE,  
ORANGE COUNTY, NEW YORK

**ROAD PROFILES & SITE DETAILS**

**KIRK ROTHER, P.E.**  
CONSULTING ENGINEER, PLLC  
5 St. Stephens Lane, Warwick, NY 10990  
(845) 988-0620

04-17-24	REV. LAYOUT, GRADING & UTILITY DESIGN
08-17-22	REV. PER VILLAGE ENGINEER'S COMMENTS
07-21-22	REV. PER VILLAGE ENGINEER'S COMMENTS
06-23-22	INITIAL PREPARATION

KIRK ROTHER, P.E. N.Y.S. Lic. No. 078658 DATE

D.O.T. SHEET #	D.E.C. SHEET #	O.C.H.D. SHEET #	SHEET #
N.A.	N.A.	N.A.	5 OF 12
CAD #	PROJECT #	SCALE	
20129 SP	20129.0	AS SHOWN	

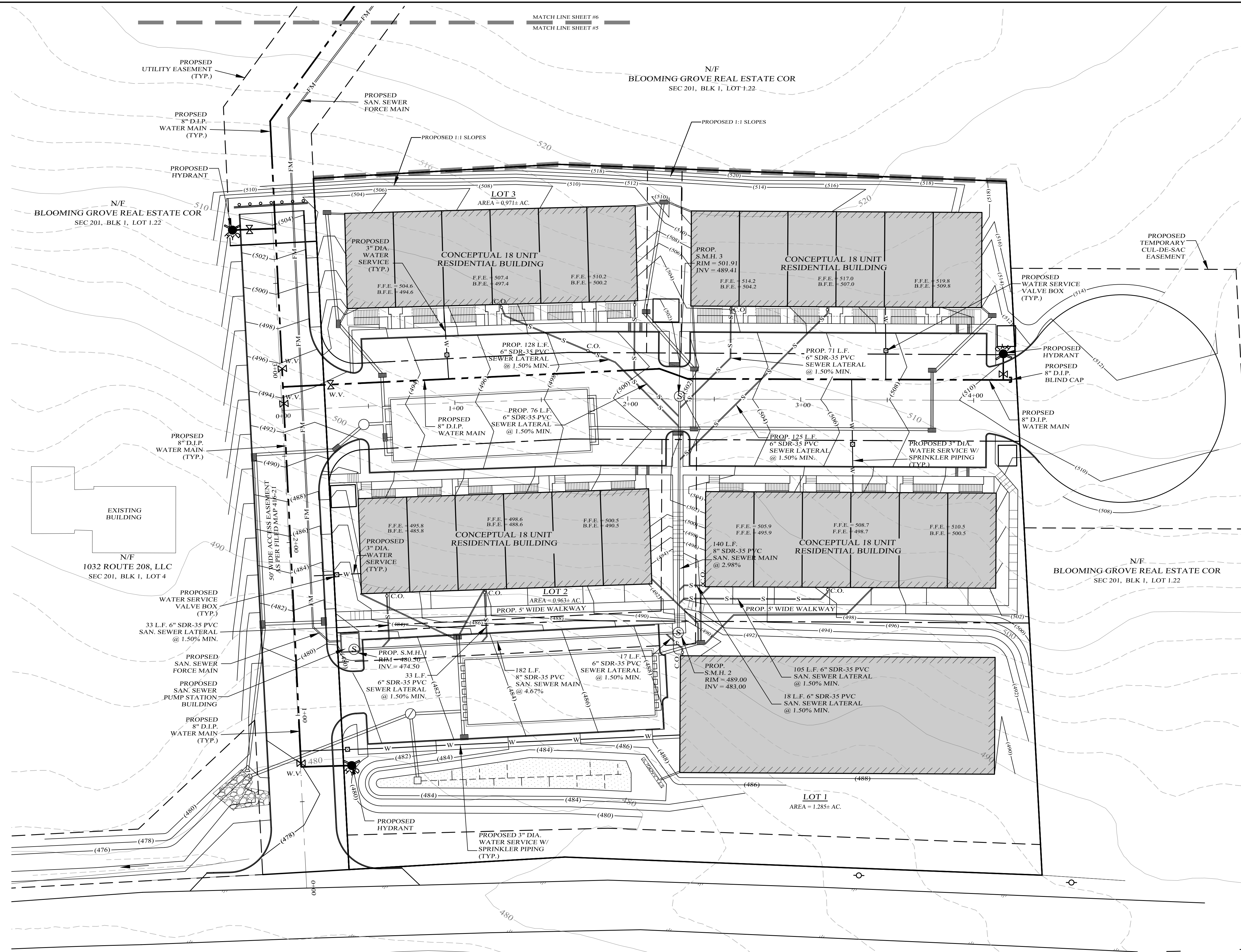
MATCH LINE SHEET #6  
MATCH LINE SHEET #5

N/F  
BLOOMING GROVE REAL ESTATE COR  
SEC 201, BLK 1, LOT 1.22

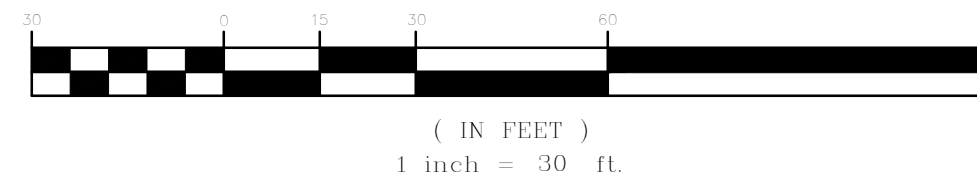
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BLOOMING GROVE REAL ESTATE COR  
SEC 201, BLK 1, LOT 1.22

N/F  
1032 ROUTE 208, LLC  
SEC 201, BLK 1, LOT 4

N/F  
BLOOMING GROVE REAL ESTATE COR  
SEC 201, BLK 1, LOT 1.22



GRAPHIC SCALE



LEGEND

EXISTING PROPERTY LINE	---
PROPOSED PROPERTY LINE	---
EXISTING 2' CONTOUR LINE	---
EXISTING 10' CONTOUR LINE	---
PROPOSED CONTOUR LINE	---
EXISTING EDGE OF PAVEMENT	---
BUILDING SETBACK	---

SOUTHGROVE

VILLAGE OF SOUTH BLOOMING GROVE,  
ORANGE COUNTY, NEW YORK

PHASE 1  
UTILITY PLAN

DRAWING TITLE

KIRK ROTHER, P.E.

CONSULTING ENGINEER, PLLC

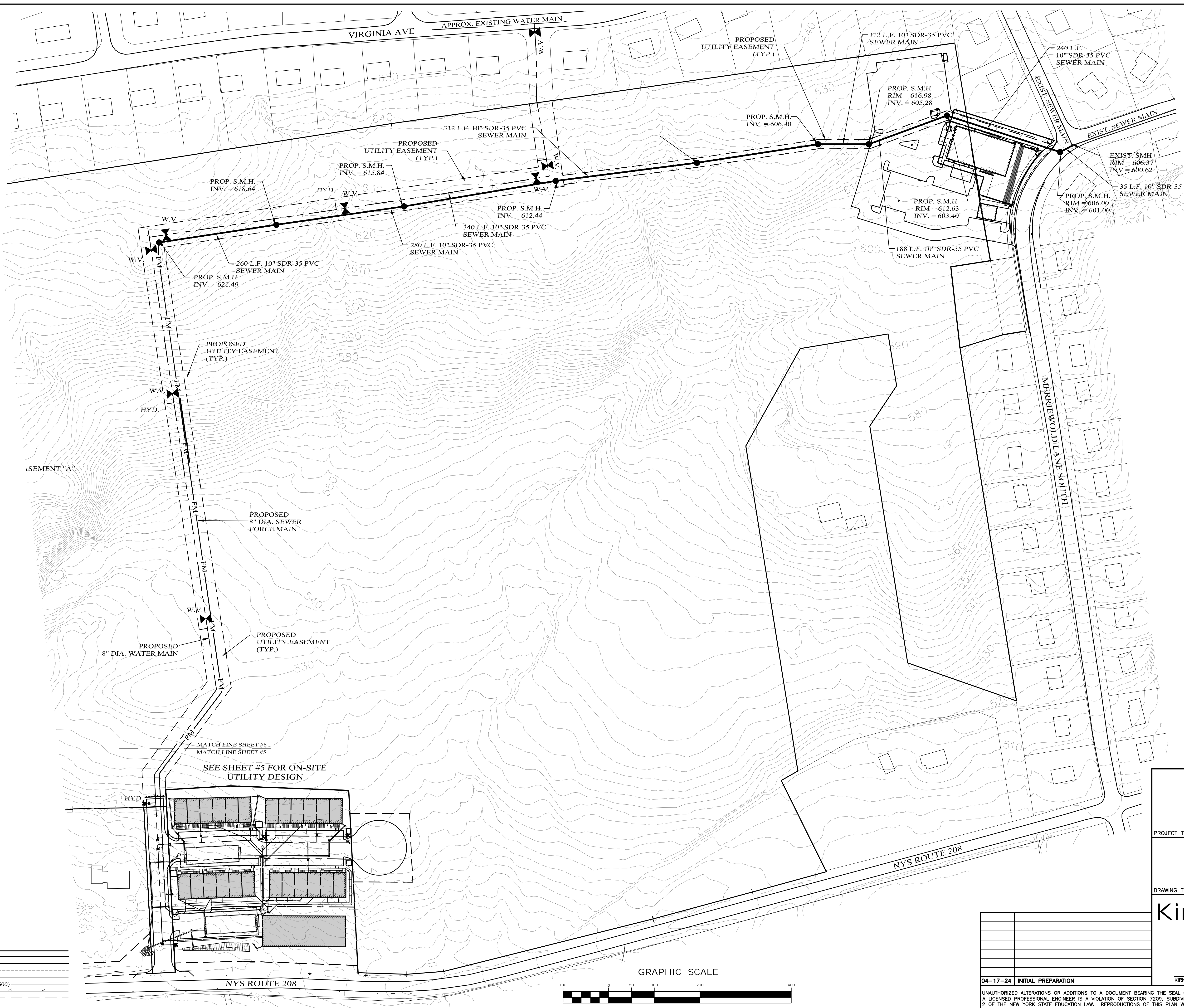
5 St. Stephens Lane, Warwick, NY 10990  
(845) 988-0620



04-17-24	REV. LAYOUT, GRADING & UTILITY DESIGN
08-17-22	INITIAL PREPARATION

KIRK ROTHER, P.E. N.Y.S. LIC. NO. 076053 DATE

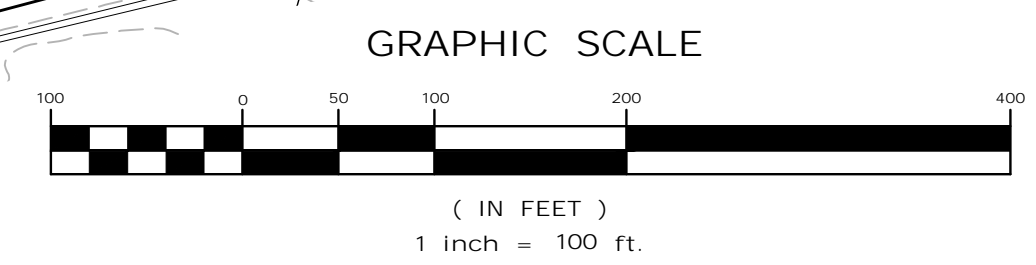
UNAUTHORIZED ALTERATIONS OR ADDITIONS TO A DOCUMENT BEARING THE SEAL OF A LICENSED PROFESSIONAL ENGINEER IS A VIOLATION OF SECTION 7209, SUBDIVISION 2 OF THE NEW YORK STATE EDUCATION LAW. REPRODUCTIONS OF THIS PLAN WHICH DO NOT BEAR THE ORIGINAL SEAL OF A LICENSED PROFESSIONAL ENGINEER SHALL BE CONSIDERED INVALID.	D.O.T. SHEET #	D.E.C. SHEET #	O.C.H.D. SHEET #	SHEET #
	N.A.	N.A.	N.A.	6 OF 12
	CAD #	PROJECT #	SCALE	
	20129 SP	20129.0	AS SHOWN	



**LEGEND**

- EXISTING PROPERTY LINE
- PROPOSED PROPERTY LINE
- EXISTING 2' CONTOUR LINE
- EXISTING 10' CONTOUR LINE
- PROPOSED CONTOUR LINE
- EXISTING EDGE OF PAVEMENT
- BUILDING SETBACK

MATCH LINE SHEET #6  
MATCH LINE SHEET #5  
SEE SHEET #5 FOR ON-SITE  
UTILITY DESIGN



# SOUTHGROVE

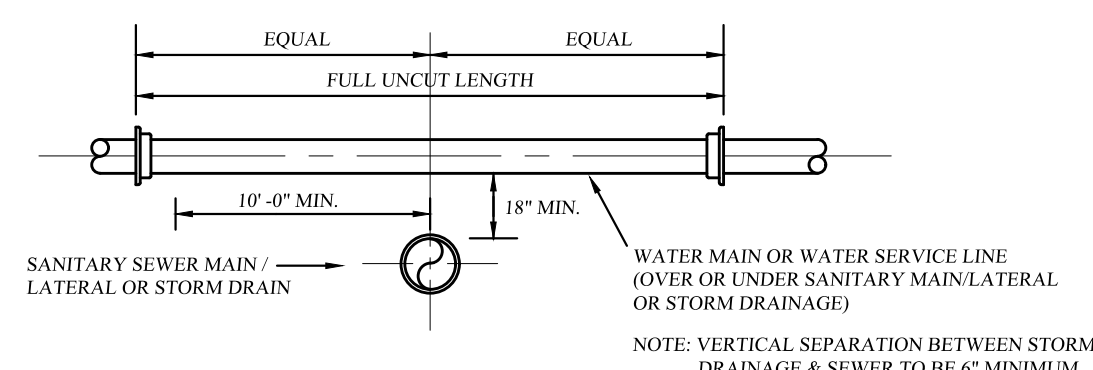
VILLAGE OF SOUTH BLOOMING GROVE,  
ORANGE COUNTY, NEW YORK

## PHASE 2 UTILITY PLAN

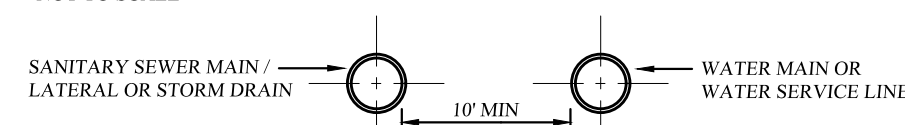
**Kirk Rother, P.E.**  
CONSULTING ENGINEER, PLLC  
5 St. Stephens Lane, Warwick, NY 10990  
(845) 988-0620

04-17-24 INITIAL PREPARATION		KIRK ROTHER, P.E. N.Y.S. LIC. NO. 079063		DATE
D.O.T. SHEET #	D.E.C. SHEET #	O.C.H.D. SHEET #	SHEET #	
N.A.	N.A.	N.A.	7 OF 12	
CAD #	PROJECT #	SCALE		
20129 SP	20129.0	AS SHOWN		

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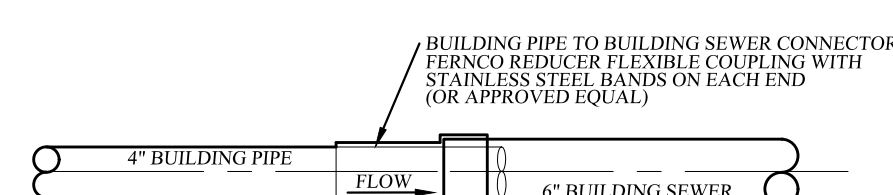
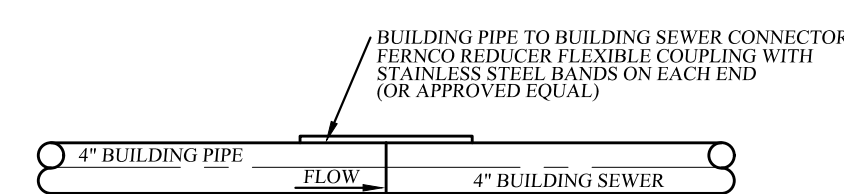
**VERTICAL SEPARATION DETAIL**  
NOT TO SCALE



**HORIZONTAL SEPARATION DETAIL**  
NOT TO SCALE

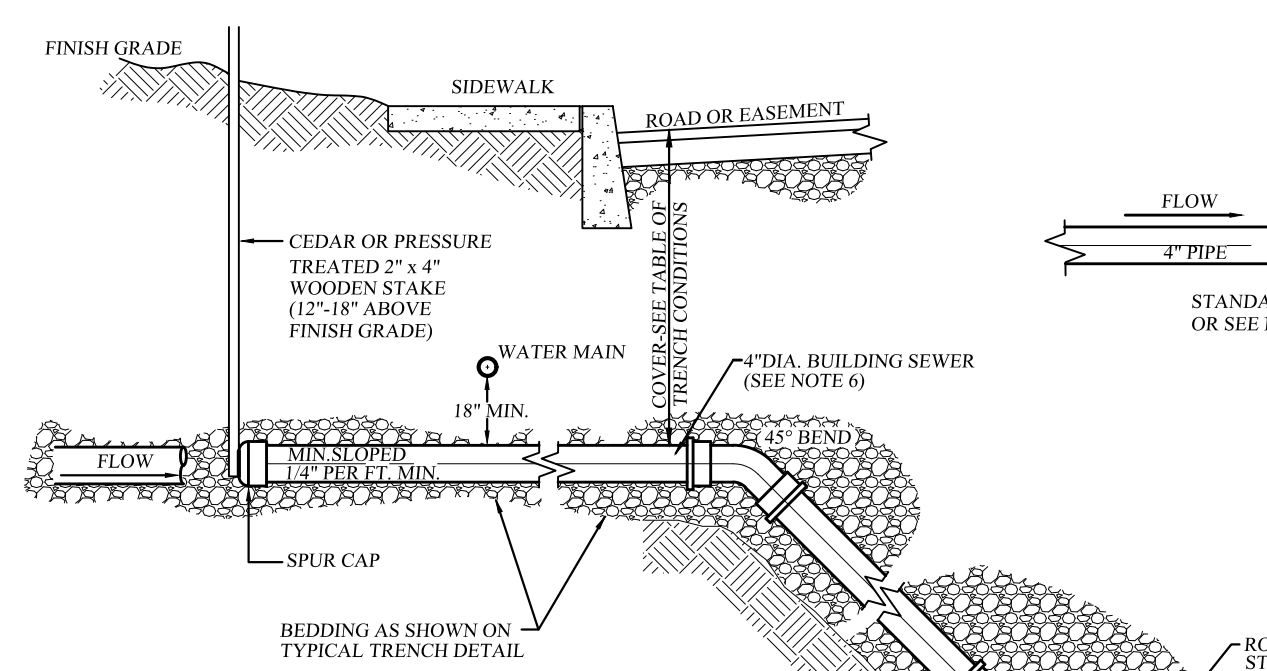
NOTE: THE SEPARATION REQUIREMENT SHALL CONFORM TO CURRENT ORANGE COUNTY DEPARTMENT OF HEALTH STATUTES, CODES, RULES, REGULATIONS AND LAWS AS THEY APPLY. ANY DEVIATION FROM THE ABOVE SEPARATION REQUIREMENTS SHALL REQUIRE WRITTEN APPROVAL FROM THE ORANGE COUNTY DEPARTMENT OF HEALTH.

**WATER/SEWER SEPARATION REQUIREMENTS**  
NOT TO SCALE



- NOTES:**
1. 4" BUILDING PIPE TO STUB APPROXIMATELY 6" INTO 6" BUILDING SEWER.
  2. EACH 4" BUILDING SEWER MAY BE APPROVED FOR CONSTRUCTION OF SINGLE (1) AND TWO (2) FAMILY DWELLINGS ONLY.
  3. EACH 6" BUILDING SEWER SHALL BE REQUIRED FOR ALL COMMERCIAL USES AND SERVE NO MORE THAN TWELVE (12) EQUIVALENT LIVING UNITS, AS DETERMINED BY O.C.S.D. 1, UNLESS A REQUESTED DEVIATION IS APPROVED IN WRITING BY O.C.S.D. NO. 1.
  4. BUILDING PIPE SHALL NOT EXCEED MORE THAN 10' FROM EXTERIOR OF BUILDING FOUNDATION.
  5. 6" BUILDING PIPE TO 6" BUILDING SEWER SHALL BE MADE BY INSTALLING A TYPE 1, STYLE 62 DRESSER COUPLING OR DRESSER STYLE 262 HYRAX COUPLING (OR APPROVED EQUAL).

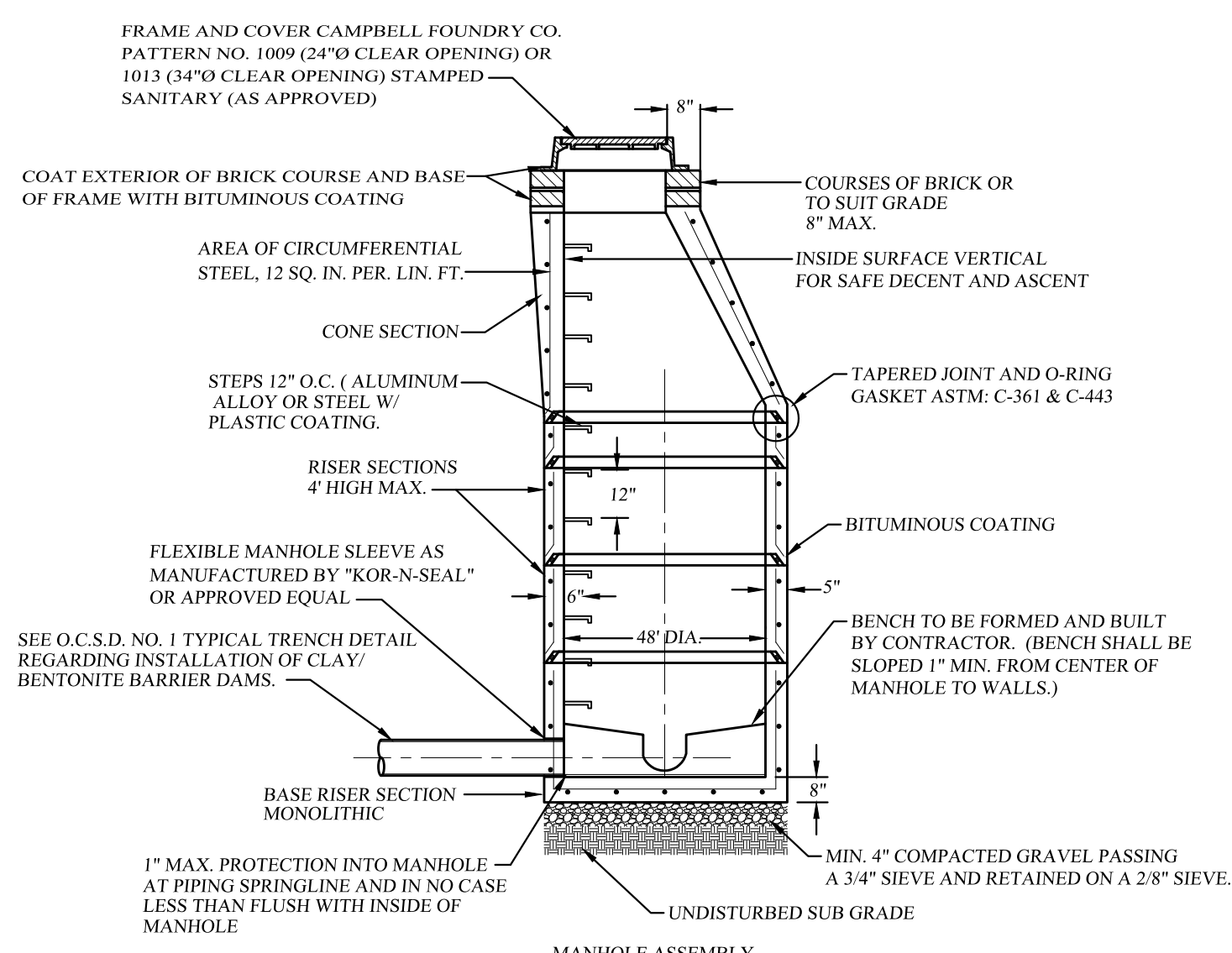
**BUILDING PIPE TO BUILDING SEWER CONNECTION**  
NOT TO SCALE



SPECIAL CONDITIONS FOR SHALLOW TRENCH	
COVER	PIPE
LESS THAN 4'-0"	CLASS 52 DUCTILE IRON OR CAST IRON EXTRA HEAVY OR APPROVED EQUAL.

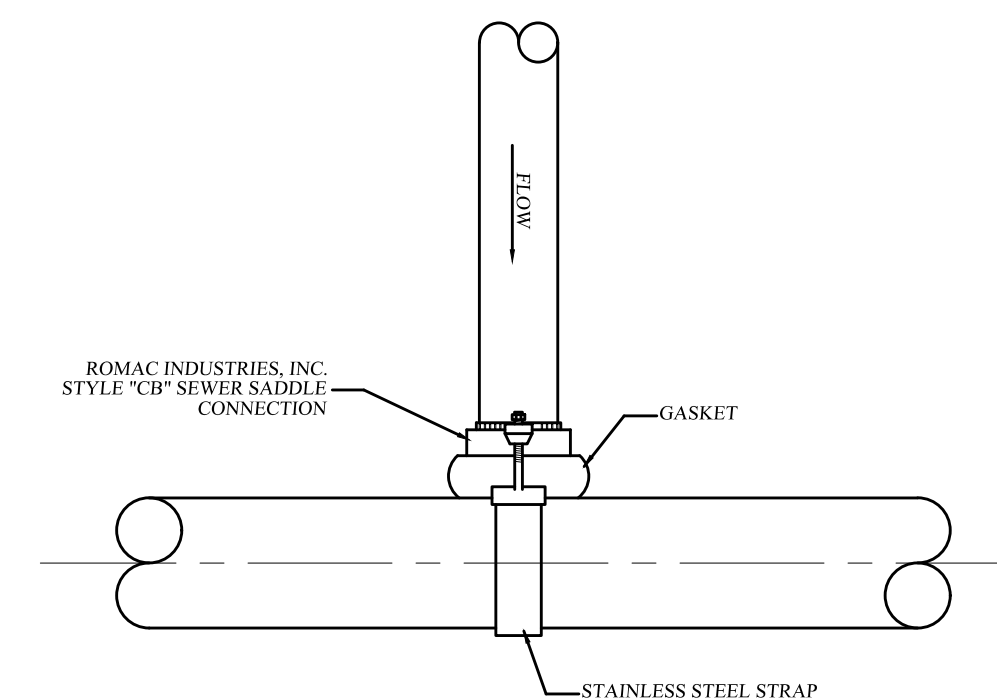
- NOTES:**
1. EACH 6" BUILDING SEWER SHALL PROVIDE SERVICE FOR NO MORE THAN TWELVE (12) EQUIVALENT LIVING UNITS, DETERMINED BY O.C.S.D. NO. 1 UNLESS A REQUESTED DEVIATION IS APPROVED IN WRITING BY SEWER DEPARTMENT.
  2. ALL APPROVED BUILDING SEWER PIPE MATERIAL FOR EACH CONNECTION MADE SHALL BE CONSTRUCTED FROM THE SAME MATERIAL.
  3. MINIMUM HORIZONTAL SEPARATION BETWEEN SPUR CAP AND SIDEWALK SHALL BE 2'-0". IN ALL CASES THE SPUR CAP LOCATION SHALL EXTEND A MINIMUM HORIZONTAL DISTANCE OF 2'-0" TO ALL BUILDING LOT PROPERTIES.
  4. TRANSITION BETWEEN DIFFERENT PIPE MATERIAL (AS APPROVED) SHALL BE MADE BY INSTALLING A TYPE 1, STYLE 62 DRESSER COUPLING OR DRESSER STYLE 262 HYMAX COUPLING (OR APPROVED EQUAL).
  5. SADDLE CONNECTION SHALL BE A FITTING CONSTRUCTED SPECIFICALLY FOR THE INSTALLED MAIN LINE SEWER MATERIAL CLASS (OR APPROVED EQUAL).
  6. THE BUILDING SEWER SHOWN FROM THE MAIN LINE SOURCE SADDLE CONNECTION FITTING TO THE SPUR CAP SHALL MEET THE SPECIFICATIONS SHOWN FOR 6" BUILDING SEWER SERVICE LATERALS.
  7. 4" BUILDING SEWER LATERAL MAY BE APPROVED FOR CONSTRUCTION OF SINGLE (1) AND TWO (2) FAMILY DWELLINGS ONLY. ALL OTHER BUILDING LATERAL SEWERS (INCLUDING COMMERCIAL) SHALL BE 6" IN DIA.

**SEWER MAIN CONNECTION DETAIL**  
NOT TO SCALE



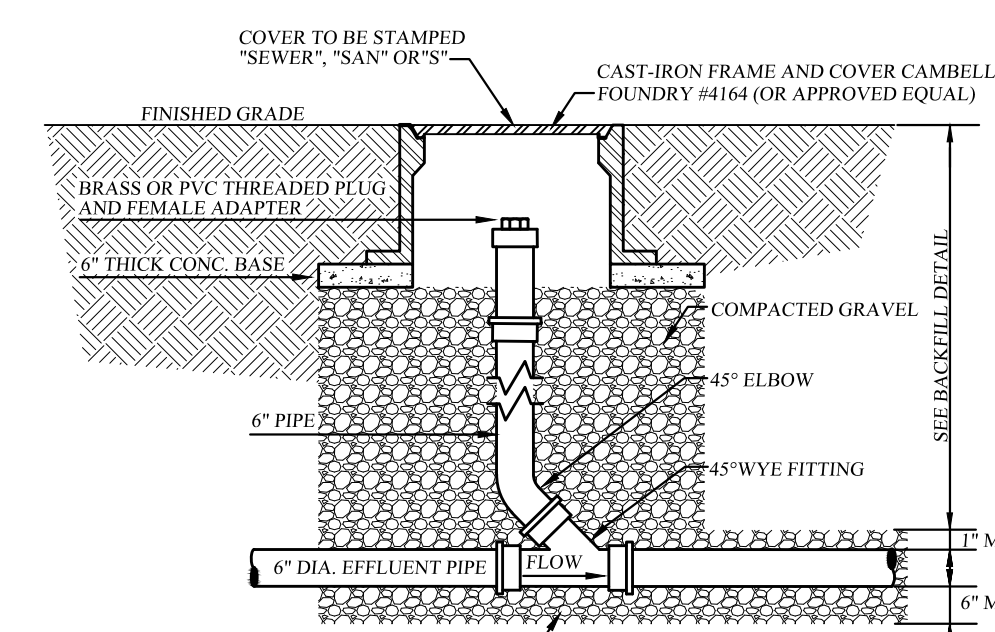
**PRECAST REINFORCED CONCRETE MANHOLE**  
NOT TO SCALE

- MANHOLE TO MEET CURRENT REQUIREMENTS OF ASTM C-478
- JOINTS: LOCK TYPE WITH ROUND RUBBER GASKETS. THE WEIGHT OF EACH SECTION MUST MAKE AN INFILTRATION PROOF JOINT BY FORCING THE GASKET TIGHT.
- ALL MATERIALS AND CONSTRUCTION SHALL MEET THE REQUIREMENTS OF O.C.S.D. NO. 1
- MANHOLE TO BE SUITABLE FOR H-20 LOADING.
- MANHOLE EXTERIOR MUST BE 100% BITUMINOUS COATING.



- NOTES:**
1. ALL APPROVED BUILDING SEWER PIPE MATERIAL FOR EACH CONNECTION MADE SHALL BE CONSTRUCTED FROM THE SAME MATERIAL.
  2. SADDLE CONNECTION TO BE STYLE "CB" SEWER SADDLE AS MANUFACTURED BY ROMAC INDUSTRIES, INC. OR APPROVED EQUAL.
  3. REFER TO DETAIL SPECIFICATIONS FOR STYLE "CB" SEWER SADDLE AS PROVIDED BY ROMAC INDUSTRIES, INC. FOR INSTALLATION GUIDELINES.
  4. INSTALLATION AND MATERIALS OF THE SADDLE CONNECTION TO CONFORM WITH O.C.S.D. NO. 1 CRITERIA. THERE WILL BE NO DEVIATION FROM THE APPROVED PLAN WITHOUT WRITTEN APPROVAL FROM THE SEWER DEPARTMENT.

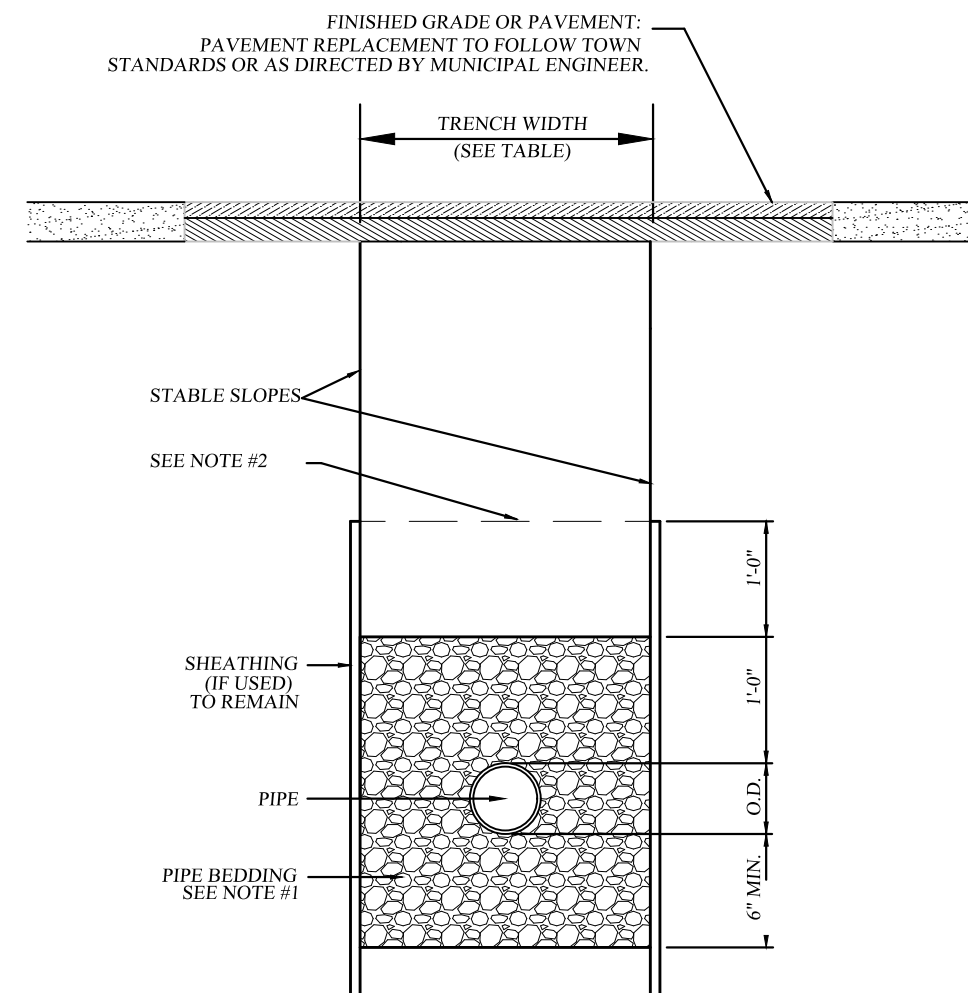
**SADDLE CONNECTION DETAIL**  
NOT TO SCALE



- NOTES:**
1. EACH BUILDING SEWER SHALL HAVE A CLEANOUT INSTALLED APPROXIMATELY 2' DOWNSTREAM OF THE BUILDING PIPE TO BUILDING SEWER CONNECTION. THEREAFTER, CLEANOUTS SHALL BE INSTALLED ALONG THE BUILDING SEWER APPROXIMATELY EVERY 100' MAXIMUM FOR THE PURPOSE OF CLEANOUT LOCATIONS. DISTANCE SHALL BE MEASURED FROM THE FIRST CLEANOUT LOCATED DOWNSTREAM OF THE HOUSE PIPE TO BUILDING SEWER CONNECTION, HENCE DOWNSTREAM ALONG THE BUILDING SEWER TO THE CENTER OF THE SEWER MAIN LINE (GENERALLY LOCATED IN THE CENTER OF THE STREET).
  2. A CLEANOUT LOCATED IN A ROAD, DRIVEWAY OR PARKING AREA SHALL REQUIRE A CAMPBELL FOUNDRY #4164 CAST IRON FRAME AND COVER. (OR APPROVED EQUAL)

**BUILDING SEWER CLEAN-OUT DETAIL**  
NOT TO SCALE

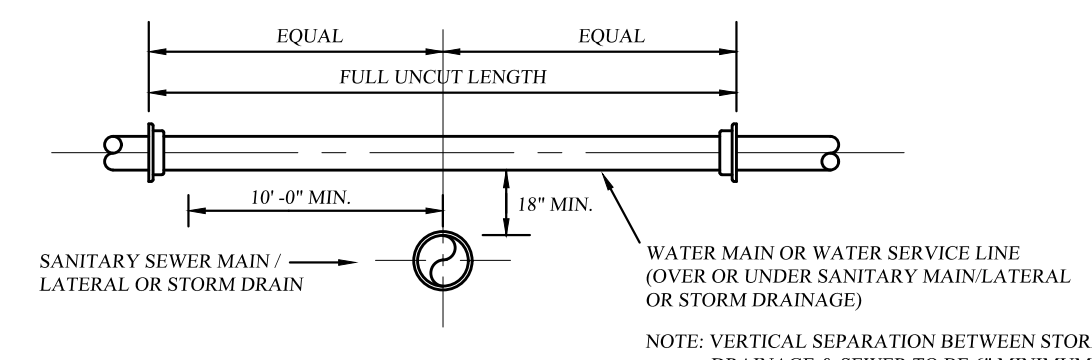
- Notes:**
- 1) PIPE BEDDING SHALL BE A CLASS 1 ASTM D2321 EMBEDMENT MATERIAL THAT SHALL BE EITHER CRUSHED STONE OR WASHED GRAVEL PASSING A 3/4" SIEVE AND RETAINED ON 3/8" SIEVE. THE EMBEDMENT MATERIAL SHALL BE HAND TAMPED AND COMPACTED TO 90% OF THE MAXIMUM DENSITY OF THE EMBEDMENT MATERIAL AS DETERMINED BY STANDARD PROCTOR TEST IN ACCORDANCE WITH AASHTO DESIGNATION T-99. THE CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE A GO-NO-GO TESTING GAUGE, AS DEFINED IN THE GREEN-TITE (TRADEMARK) PVC GRAVITY SEWER PIPE INSTALLATION GUIDE AS PUBLISHED BY J-M PIPE (OR APPROVED EQUAL) FOR TESTING DEFLECTION OF MAIN LINE SEWER PIPE, AS DIRECTED BY O.C.S.D. MAXIMUM MAIN LINE SEWER DEFLECTION SHALL BE NO GREATER THAN 5%.
  - 2) BACKFILL FROM 12 IN. TO 24 IN. ABOVE THE PIPE EMBEDMENT MATERIAL SHALL BE FINE EARTH FREE FROM CINDERS AND SHALL BE MECHANICALLY COMPACTED. REMAINING BACKFILL SHALL BE FREE FROM LARGE CLOUDS, NATURAL DEBRIS, ROCKS, AND CINDERS.
  - 3) PLACE EMBEDMENT MATERIAL BY HAND AND HAND COMPACT UNDER AND AROUND SIDES OF PIPE. PLACE EMBEDMENT MATERIAL IN 6" LAYERS ABOVE TOP OF PIPE, AND HAND COMPACT TO A POINT 12 INCH MAXIMUM ABOVE THE TOP OF PIPE.
  - 4) THE OWNER AND CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE A COMPETENT PERSON DURING ALL PHASES OF CONSTRUCTION WHOSE DUTY SHALL BE TO INSURE THAT ALL PHASES OF CONSTRUCTION ARE IN FULL COMPLIANCE WITH O.C.S.D. NO. 1 SPECIFICATIONS AND ALL APPLICABLE FEDERAL, STATE AND LOCAL STATUTES, CODES, RULES, REGULATIONS AND LAWS INCLUDING, BUT NOT LIMITED TO, UNITED STATES DEPARTMENT OF LABOR FOR OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION AND N.Y.S. DEPARTMENT OF LABOR FOR SECTION 1910.146 PERMITTED CONFINED SPACE ENTRY, OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION SECTION 1926.650 EXCAVATION GENERAL PROTECTION REQUIREMENTS AND OSHA SECTION 1926.651 TRENCHING AND SHORING STATE OF NEW YORK UNIFORM FIRE PREVENTION AND BUILDING CODES AND NATIONAL FIRE PROTECTION ASSOCIATION CODES.
  - 5) ALL APPROVED MAIN LINE SEWER PIPE SHALL BE THE SAME MATERIAL FROM MAN-HOLE TO MAN-HOLE.
  - 6) FILL SECTION AREA MUST BE GRADED WITH THE PLACEMENT OF SUITABLE SOIL MATERIAL, AS DETERMINED BY THE PROJECT SITE ENGINEER, IN 12" (MAX) LAYERS COMPACTED TO 95% OF THE MAXIMUM DENSITY OF THE SOIL AS DETERMINED BY THE STANDARD PROCTOR TEST (ASHTO DESIGNATION T-99) TO 2'-0" (MIN.) ABOVE TOP OF PIPE AT A MINIMUM WIDTH OF O.D. + 4'-0" BEFORE TRENCH EXCAVATING.
  - 7) WHERE ROCK IS ENCOUNTERED IN TRENCH BOTTOM, UNDERCUT MUST BE MADE BETWEEN 12" MIN. TO 24" MAX.
  - 8) WHERE UNSUITABLE MATERIAL IS ENCOUNTERED IN TRENCH BOTTOM, UNDERCUT TO SUITABLE MATERIAL (AS APPROVED BY TOWN ENGINEER).



PIPE O.D.	TRENCH WIDTH
24" AND SMALLER	O.D. + 1'-4"
30" AND LARGER	O.D. + 2'-0"

**TYPICAL TRENCH DETAIL (SANITARY SEWER)**  
NOT TO SCALE

- SANITARY SEWER SPECIFICATIONS (FOR BUILDING SEWERS AND SEWER MAIN LINE)**
- REQUIRED MAIN LINE SEWER (OR APPROVED EQUAL):
    - ABS-TRUSS PIPE.
    - PIPE: STAMPED ASTM D2680.
    - FITTINGS: STAMPED ASTM D2680.
    - JOINTS: SOLVENT WELD, ASTM D2325.
  - PVC-TRUSS PIPE:
    - PIPE: STAMPED ASTM D2680.
    - FITTINGS: STAMPED ASTM D2680.
    - JOINTS: SOLVENT WELD, ASTM D2564 OR ELASTOMERIC (GASKET).
  - PVC - SDR 26 HEAVY WALL PIPE
    - PIPE (8"-15" DIAMETER): STAMPED ASTM 3034.
    - PIPE (18" AND GREATER DIAMETER): STAMPED ASTM F679.
    - FITTINGS: STAMPED ASTM 3034 OR F679.
    - PVC - SDR 35 SOLID WALL PIPE
      - PIPE (8"-15" DIAMETER): STAMPED ASTM D3034.
      - PIPE (18" OR GREATER DIAMETER): STAMPED ASTM F769.
      - FITTINGS: STAMPED ASTM 3034 OR F679.
      - JOINTS: BELL & SPIGOT WITH ELASTOMERIC GASKET ASTM D3034 OR SOLVENT WELD ASTM D2564.
  - REQUIRED 6" BUILDING LATERAL SEWER (OR APPROVED EQUAL):
    - PVC - SDR 35 SOLID WALL PIPE
      - PIPE STAMPED ASTM D3034 AND SDR 35.
      - FITTINGS: STAMPED SDR 35 AND ASTM 3034.
      - JOINTS: BELL & SPIGOT WITH ELASTOMERIC GASKET ASTM D3034 OR SOLVENT WELD ASTM D2564.
    - PVC - SDR 26 HEAVY WALL PIPE
      - PIPE STAMPED ASTM D3034 AND SDR 26.
      - FITTINGS: STAMPED D3034 AND SDR 26.
      - JOINTS: BELL & SPIGOT WITH ELASTOMERIC GASKET ASTM D3034 OR SOLVENT WELD ASTM D2564.
  - PVC - SDR 23.5 ABS SOLID WALL PIPE
    - PIPE STAMPED ASTM D2751 AND SDR 23.5.
    - FITTINGS: STAMPED SDR 23.5 AND ASTM D2751.
    - JOINTS: SOLVENT WELD ASTM D2564.
  - OTHER REQUIRED PIPE MATERIALS FOR 6" LATERAL AND SEWER MAIN LINE (OR APPROVED EQUAL):
    - CAST IRON, EXTRA HEAVY, COATED, HUB & PLAIN END, ASTM C-74 WITH ELASTOMERIC COMPRESSION GASKET (ASTM C-564).
    - DUCTILE IRON PIPE: CLASS 52, CEMENT LINED AND TAR COATED INSIDE AND OUT.



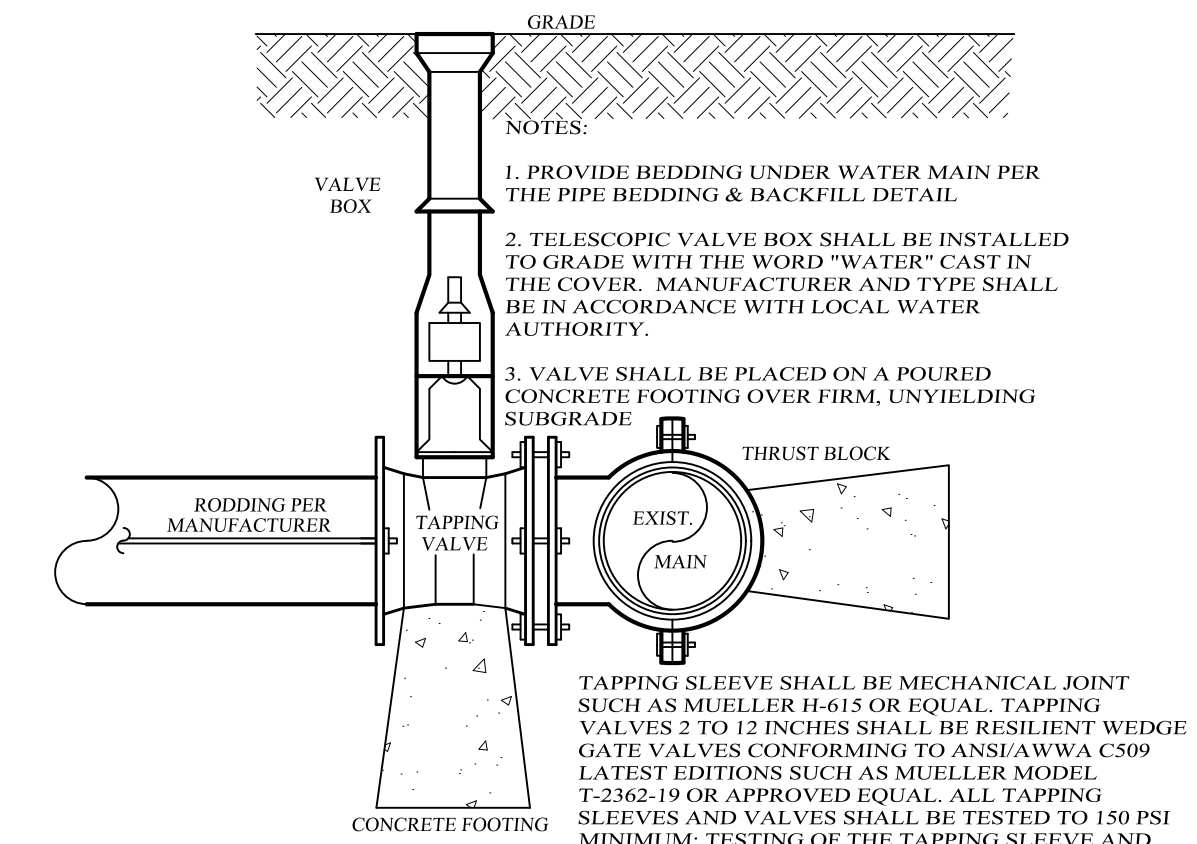
**VERTICAL SEPARATION DETAIL**  
NOT TO SCALE



**HORIZONTAL SEPARATION DETAIL**  
NOT TO SCALE

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**WATER/SEWER SEPARATION REQUIREMENTS**  
NOT TO SCALE



**WATER MAIN TAPPING VALVE DETAIL**  
NOT TO SCALE

**SOUTHGROVE**  
VILLAGE OF SOUTH BLOOMING GROVE,  
ORANGE COUNTY, NEW YORK

**SANITARY  
DETAILS**

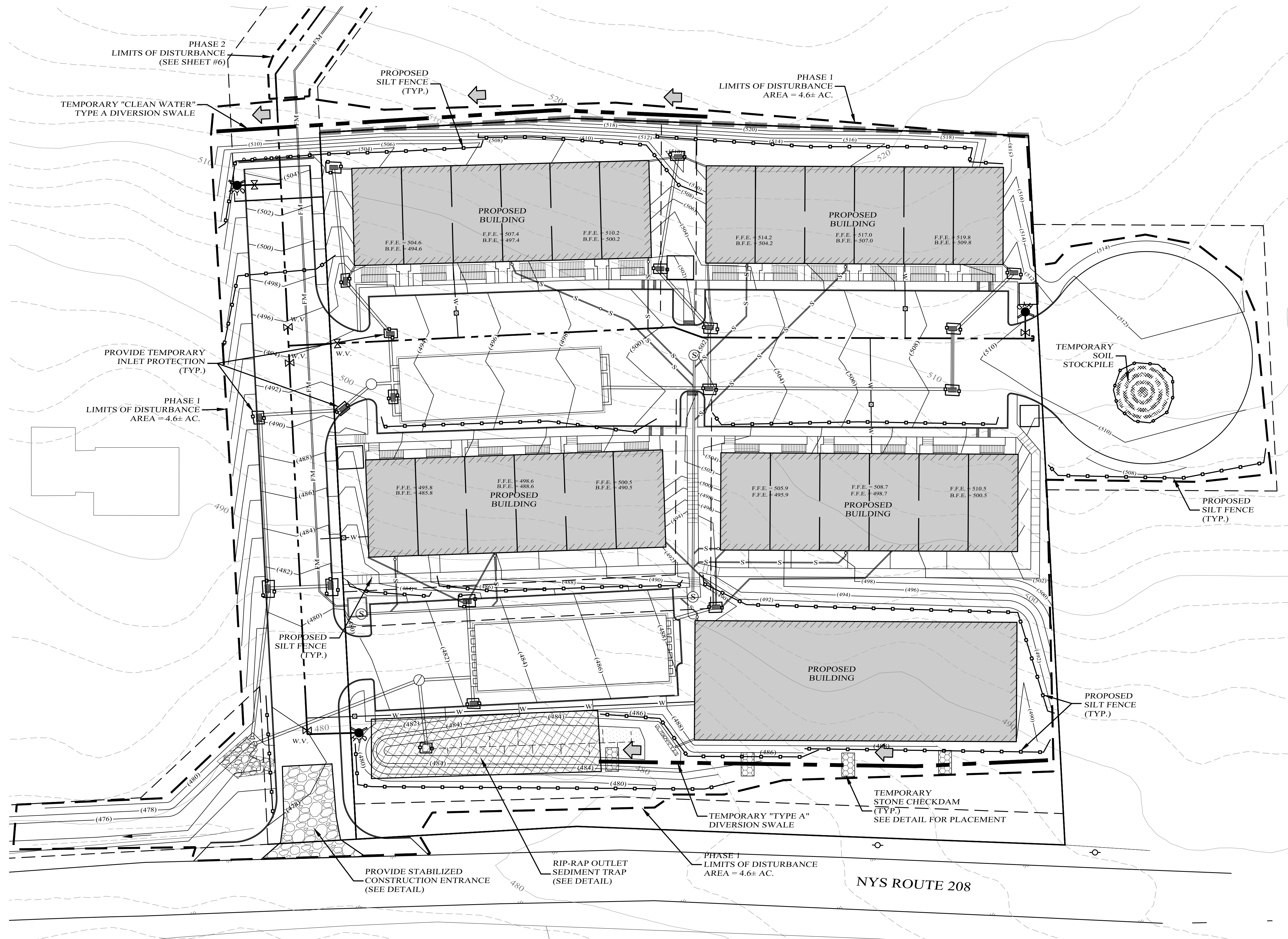
**KIRK ROTHER, P.E.**  
CONSULTING ENGINEER, PLLC  
5 St. Stephens Lane, Warwick, NY 10990  
(845) 948-0620

08-17-22	REV. PER VILLAGE ENGINEER'S COMMENTS	KIRK ROTHER, P.E.	N.Y.S. Lic. No. 078053	DATE
07-21-22	INITIAL PREPARATION			

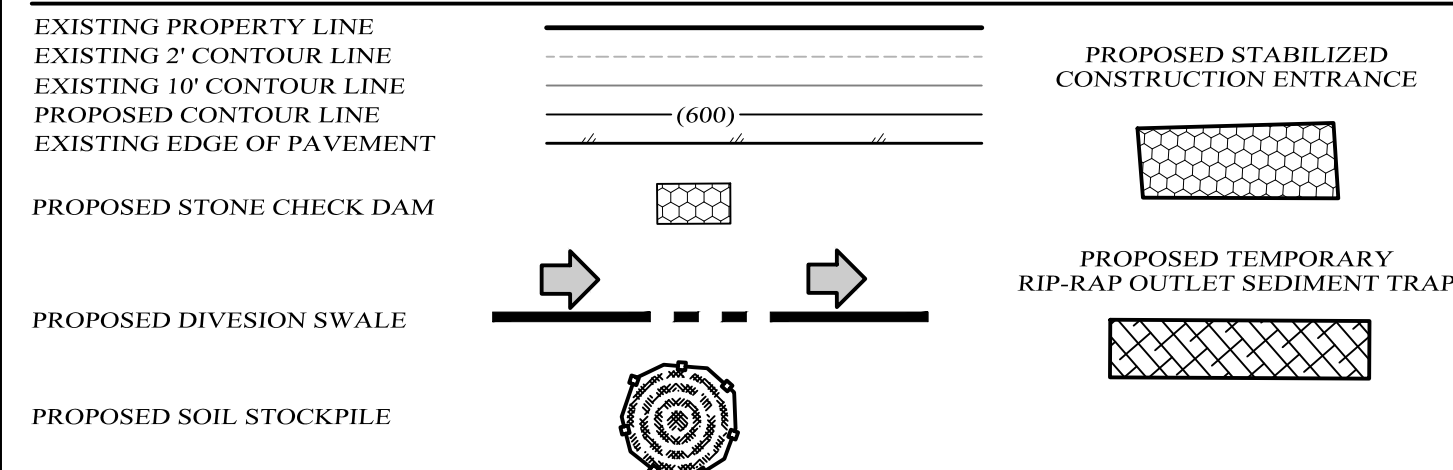
D.O.T. SHEET #	D.E.C. SHEET #	O.C.H.D. SHEET #	SHEET #
N.A.	N.A.	N.A.	8 OF 12
CAD #	PROJECT #	SCALE	
20129 SP	20129.0	AS SHOWN	

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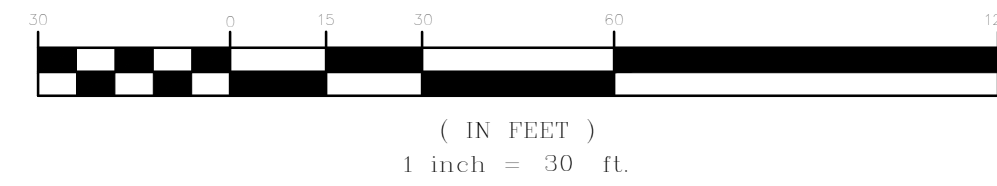




LEGEND



GRAPHIC SCALE



SOUTHGROVE

VILLAGE OF SOUTH BLOOMING GROVE, ORANGE COUNTY, NEW YORK

EROSION CONTROL PLAN

DRAWING TITLE

KIRK ROTHER, P.E.

CONSULTING ENGINEER, PLLC

5 St. Stephens Lane, Warwick, NY 10990  
(845) 988-0620

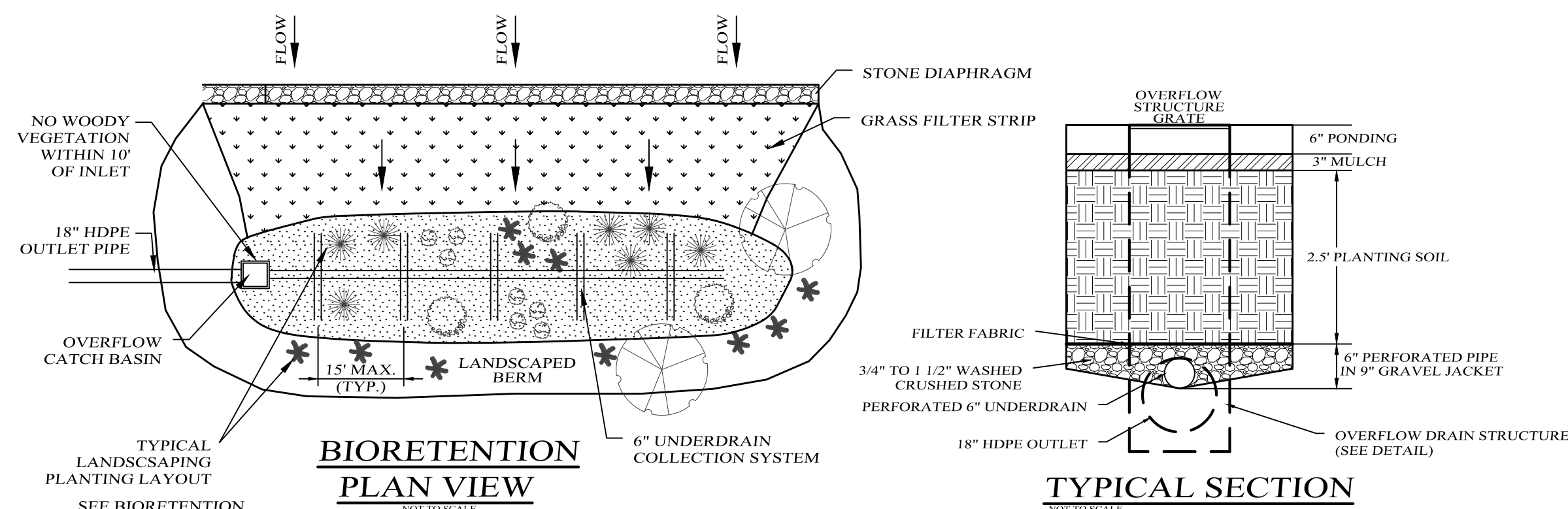


04-17-24	REV. LAYOUT, GRADING & UTILITY DESIGN
08-17-22	INITIAL PREPARATION

KIRK ROTHER, P.E. N.Y.S. REG. NO. 078653 DATE

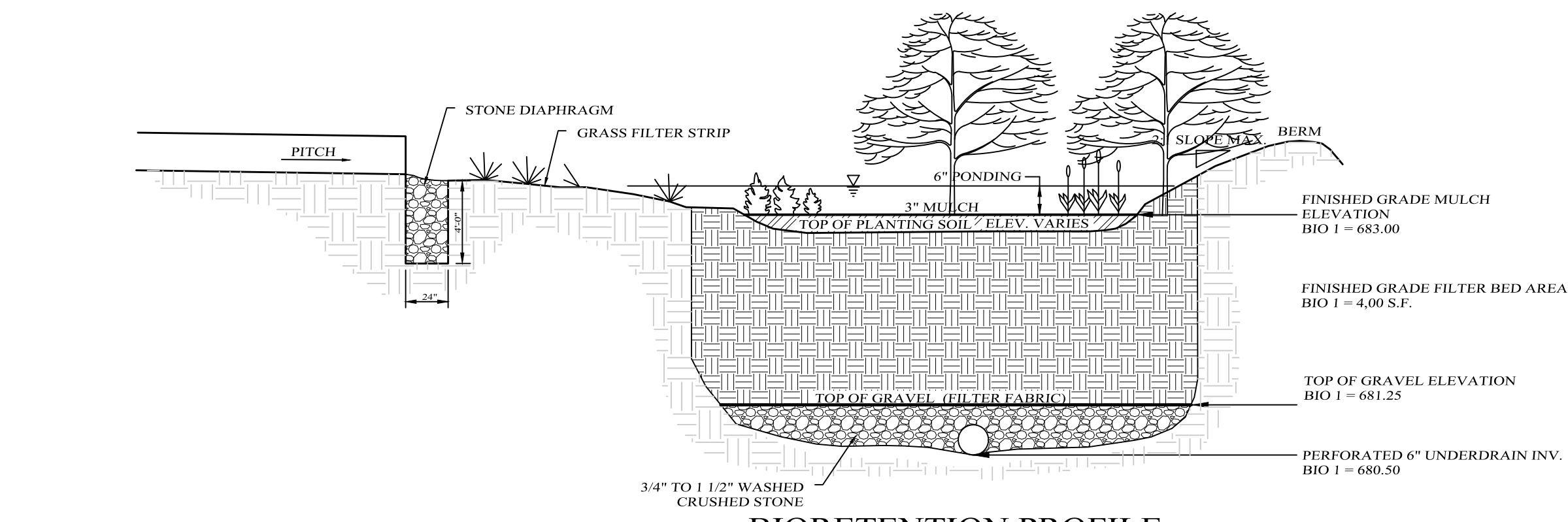
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	N.A.	N.A.	N.A.	9 OF 12
	CAD #	PROJECT #	SCALE	
	20129 SP	20129.0	AS SHOWN	





**BIORETENTION PLAN VIEW**  
NOT TO SCALE

**TYPICAL SECTION**  
NOT TO SCALE



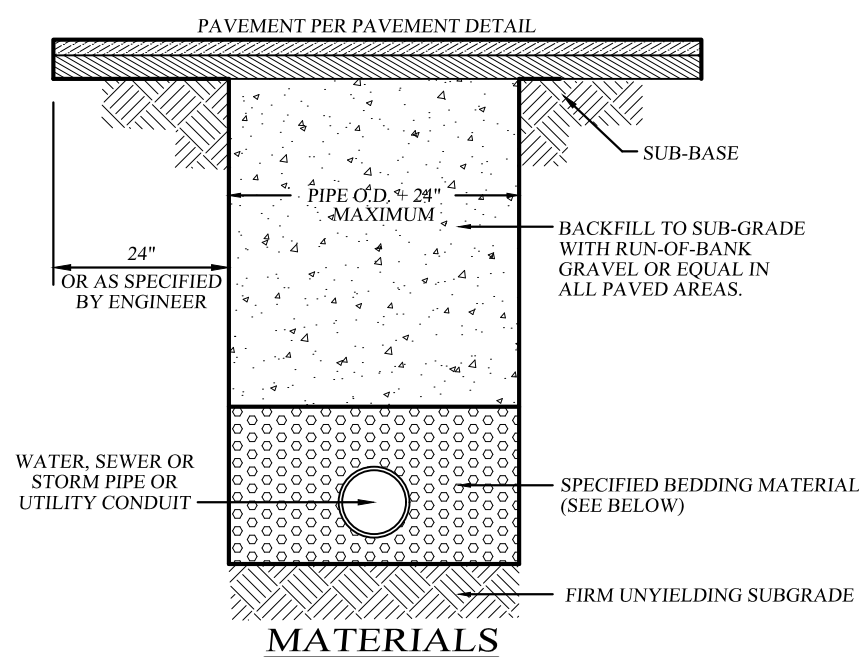
**BIORETENTION PROFILE**  
NOT TO SCALE

**NOTES:**

1. A DENSE AND VIGOROUS VEGETATIVE COVER SHALL BE ESTABLISHED OVER THE CONTRIBUTING PERVIOUS DRAINAGE AREAS BEFORE RUNOFF CAN BE ACCEPTED.
2. LANDSCAPING SHALL FOLLOW THE APPROVED PLANS OR A PLAN MUST BE PROVIDED BY A LANDSCAPE ARCHITECT FOR ALL BIORETENTION AREAS.
3. PLANT MATERIALS SHOULD CONFORM TO THE AMERICAN STANDARD NURSERY STOCK, PUBLISHED BY THE AMERICAN ASSOCIATION OF NURSERYMEN, AND SHOULD BE SELECTED FROM CERTIFIED, REPUTABLE NURSERIES.
4. SILT/SEDIMENT SHALL BE REMOVED FROM THE FILTER BED WHEN ACCUMULATION EXCEEDS ONE INCH.
5. WHEN WATER PONDING ON THE SURFACE OF THE FILTER BED FOR MORE THAN 48 HOURS THE TOP FEW INCHES OF DISCOLORED MATERIAL SHALL BE REMOVED IN AN ACCEPTABLE MANNER (i.e., LANDFILL) AND REPLACED WITH FRESH MATERIAL.
6. AREAS DEVOID OF MULCH SHALL BE RE-MULCHED ANNUALLY.
7. DEAD OR DISEASED PLANTS SHALL BE REMOVED AND REPLACED AS NECESSARY.
8. GRASS AROUND BIORETENTION AREA SHALL BE MOWED A MINIMUM OF 3 TIMES PER YEAR TO MAINTAIN MAX. GRASS HEIGHT OF 12".
9. FILTERBED AREA SHALL BE INSPECTED FOR SAND BUILD-UP FOLLOWING THE SPRING MELT EVENT.
10. THE MULCH LAYER SHOULD BE STANDARD LANDSCAPE STYLE, SINGLE OR DOUBLE, SHREDDED HARDWOOD MULCH OR CHIPS. THE MULCH LAYER SHOULD BE WELL AGED (STOCKPILED OR STORED FOR AT LEAST 12 MONTHS), UNIFORM IN COLOR, AND FREE OF OTHER MATERIALS, SUCH AS WEED SEEDS, SOIL, ROOTS, ETC. THE MULCH SHOULD BE APPLIED TO A MAXIMUM DEPTH OF THREE INCHES. GRASS CLIPPINGS SHOULD NOT BE USED AS A MULCH MATERIAL.

**BIORETENTION AREA PLANTING SCHEDULE**

SYMBOL	PLANT NAME	SCIENTIFIC NAME	SIZE	SPACING	BIO 1 QTY.	BIO 2 QTY.	BIO 3 QTY.	BIO 4 QTY.
	Red Maple	Acer rubrum	B & B 2-1/2" TO 3" CALIPER	15' O.C.	2	3	2	2
	Tupelo	Nyssa sylvatica vari	B & B 5'-6" IN HEIGHT	10' O.C.	8	10	9	6
	Red-Osier Dogwood	Cornus stolonifera	2 GAL.	4' O.C.	13	15	13	10
	Sweet Pepperbush	Clethra alnifolia	2 GAL.	6' O.C.	10	11	10	8
	Fox Sedge	Carex vulpinoides	2 GAL.	2' O.C.	19	22	20	15
	MULCH		6" High		1,950 C.F.	2,190 C.F.	2,000 C.F.	1,530 C.F.

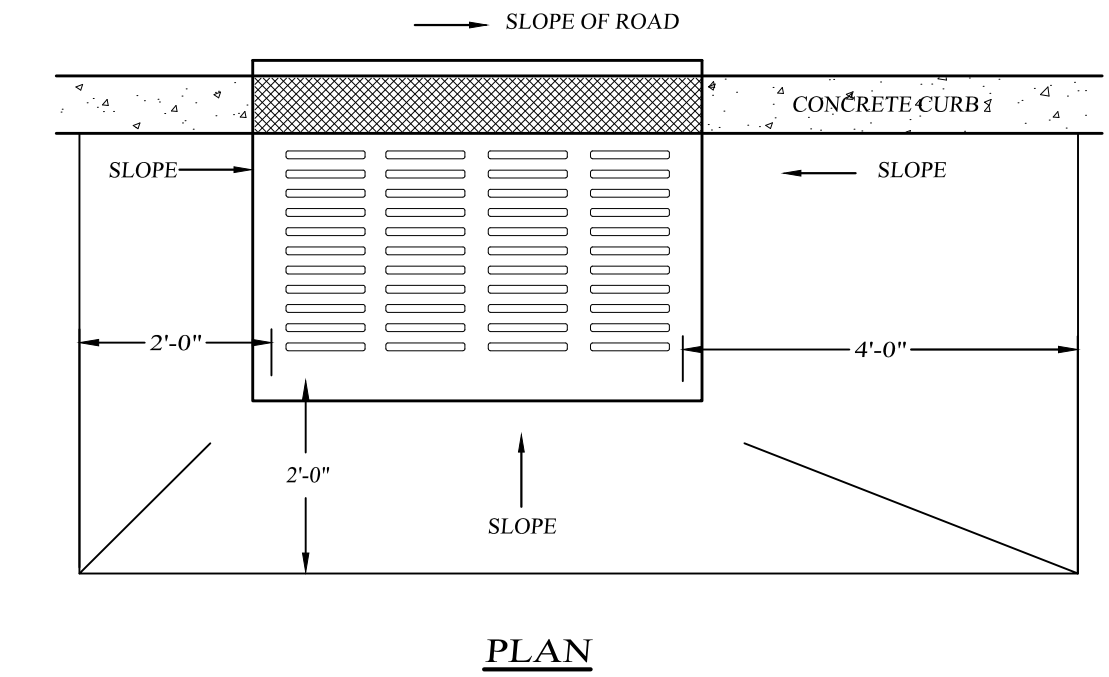


**PIPE BEDDING AND BACKFILL MATERIALS**

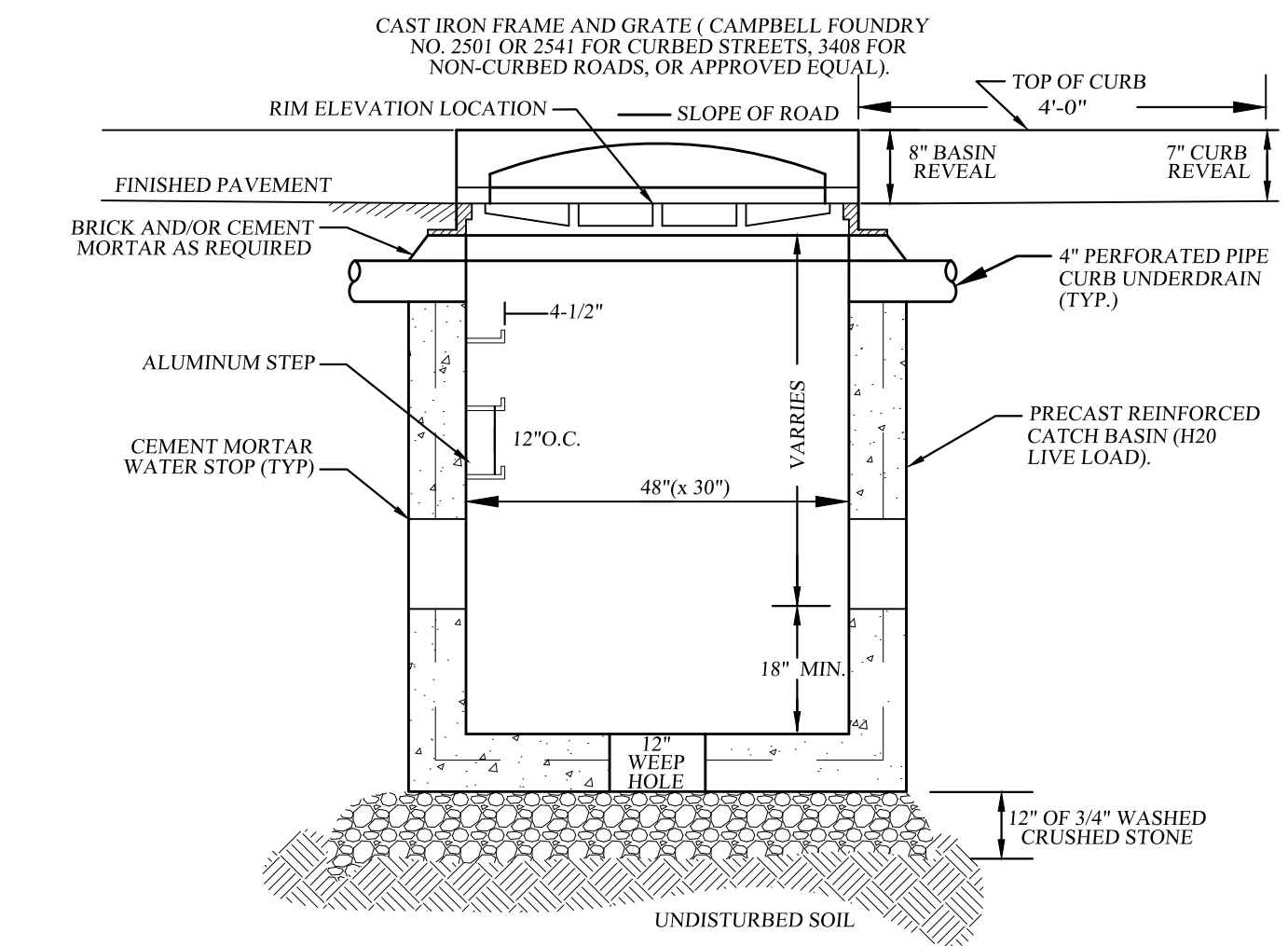
**PIPE ZONE BEDDING MATERIAL:**  
 1. WATER MAINS: SAND OR RUN-OF-BANK GRAVEL, AS APPROVED BY SOILS ENGINEER.  
 2. SEWER MAINS: 1/4" CRUSHED STONE.

**PIPE ZONE BACKFILL MATERIAL:**  
 1. WATER MAINS: ON-SITE MATERIAL FREE OF STONE, CLAY, FOREIGN MATERIAL OR FROZEN EARTH, AS APPROVED BY SOILS ENGINEER.  
 2. SEWER MAINS: 1/4" CRUSHED STONE.

**PIPE BEDDING AND BACKFILL DETAIL**  
NOT TO SCALE



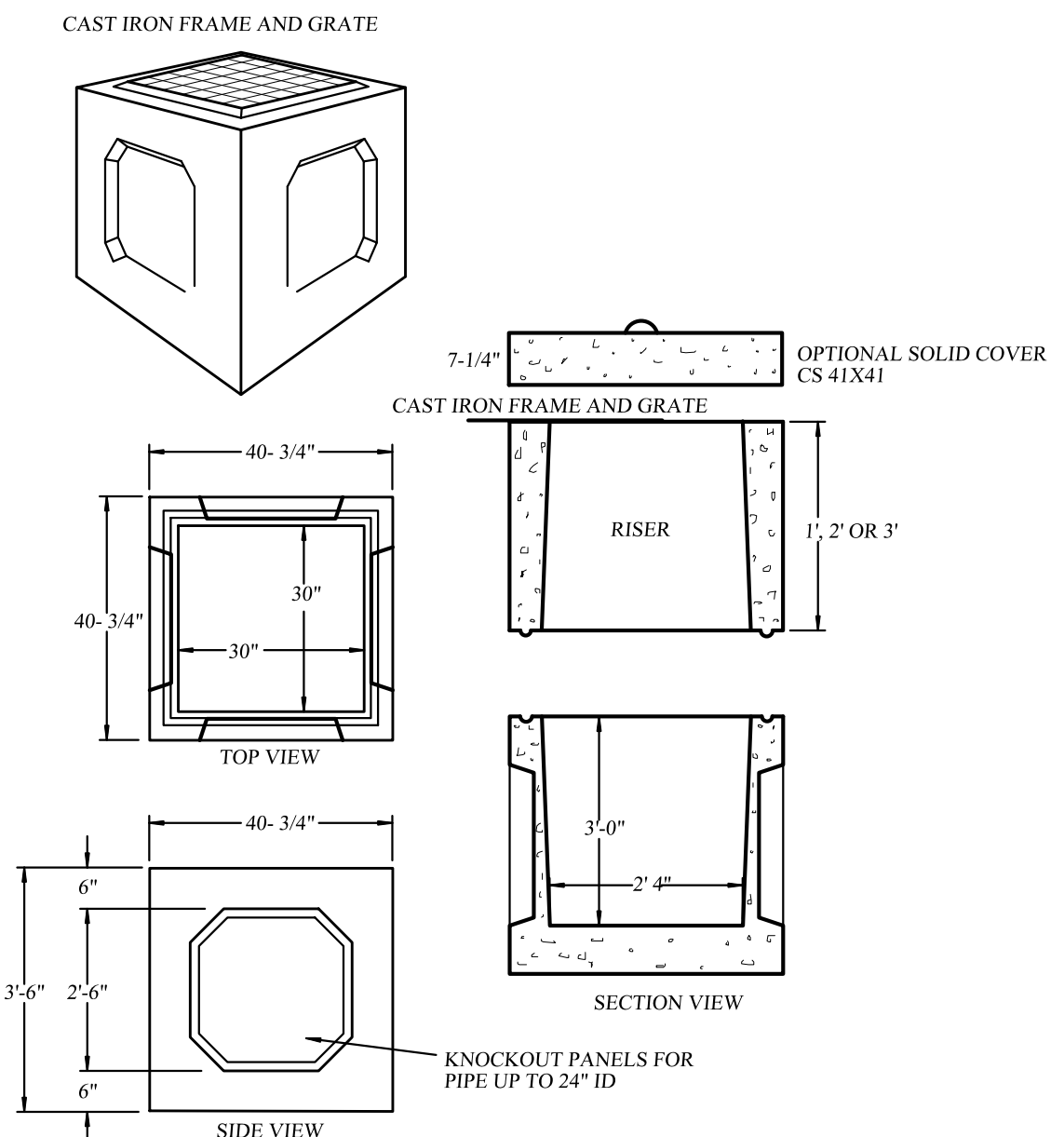
**PLAN**



**FRONT ELEVATION**

- NOTES:**
1. BACKFILL AROUND CATCH BASIN TO BE COMPACTED IN MAX. 8" LIFTS.
  2. THE ENDS OF ALL PIPES SHALL BE CUT OFF FLUSH WITH THE INSIDE SURFACE OF CATCH BASIN AND ADEQUATELY MORTARED.
  3. PRECAST CONCRETE TO BE 4000 PSI @ 28 DAYS

**PRECAST CONCRETE CURB INLET DETAIL**  
NOT TO SCALE



- NOTES:**
1. BACKFILL AROUND CATCH BASIN TO BE COMPACTED IN MAX. 8" LIFTS.
  2. THE ENDS OF ALL PIPES SHALL BE CUT OFF FLUSH WITH THE INSIDE SURFACE OF CATCH BASIN AND ADEQUATELY MORTARED.
  3. PRECAST CONCRETE TO BE 4000 PSI @ 28 DAYS

**PRECAST CONCRETE FIELD INLET DETAIL**  
NOT TO SCALE

**SOUTHGROVE**  
 VILLAGE OF SOUTH BLOOMING GROVE,  
 ORANGE COUNTY, NEW YORK

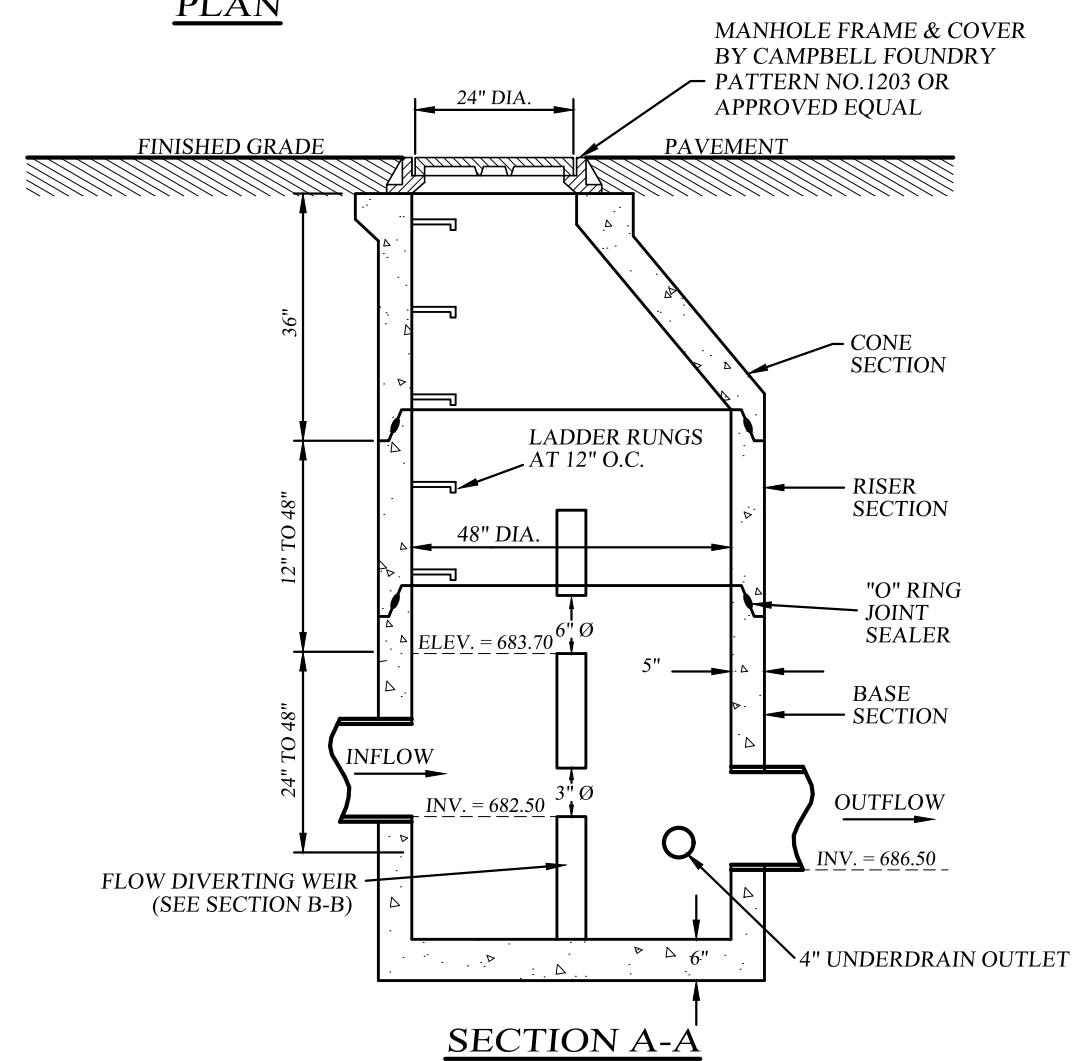
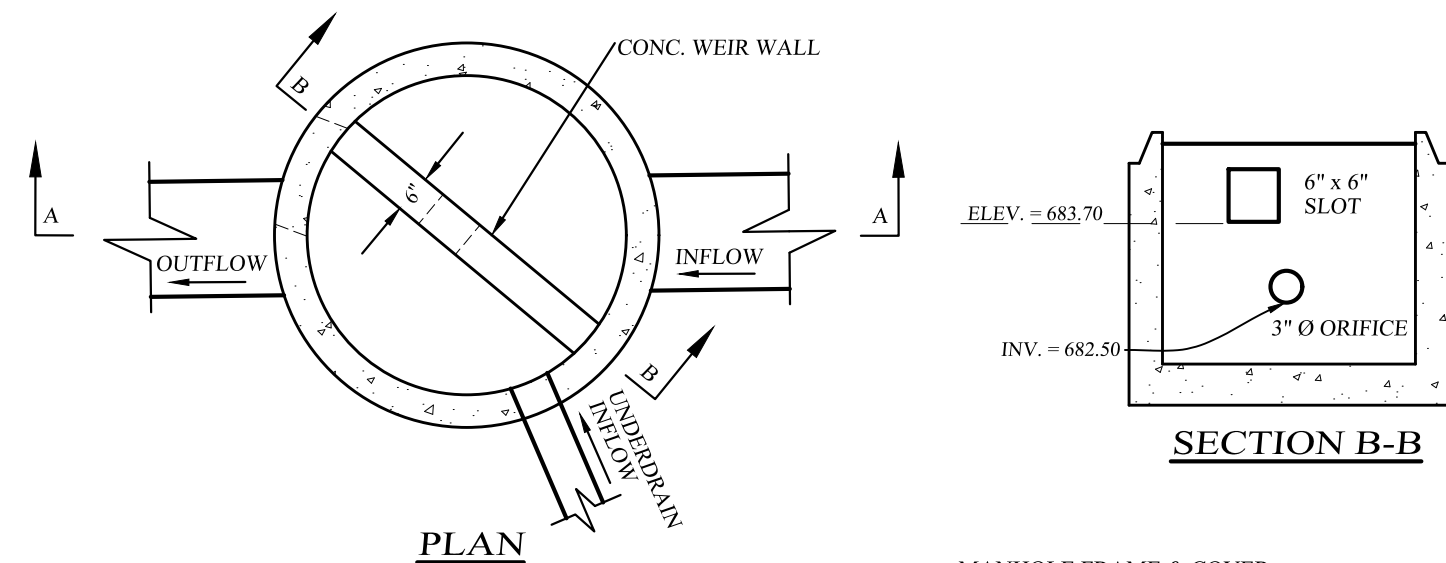
**DRAINAGE DETAILS**

DRAWING TITLE

**KIRK ROTHER, P.E.**  
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 5 St. Stephens Lane, Warwick, NY 10990  
 (845) 988-0620

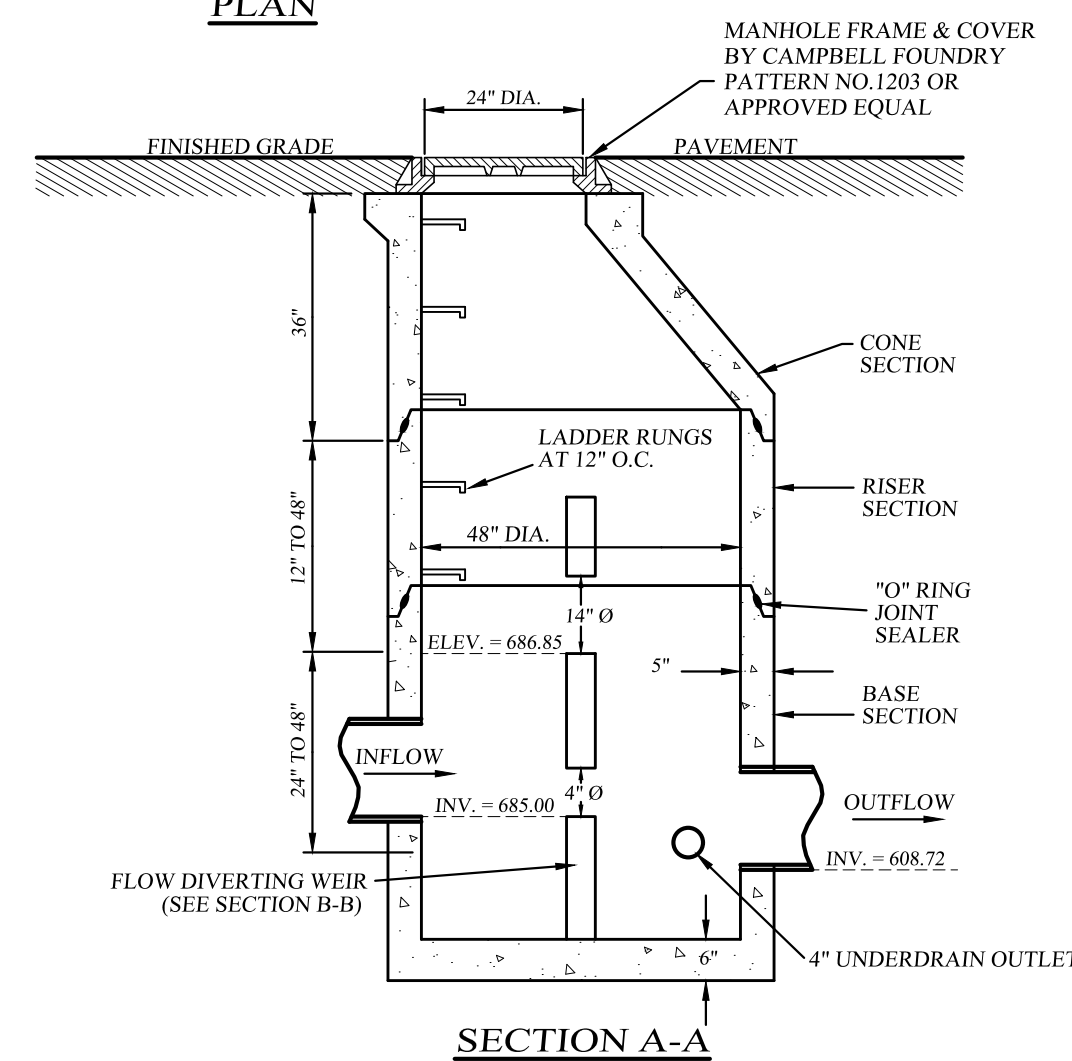
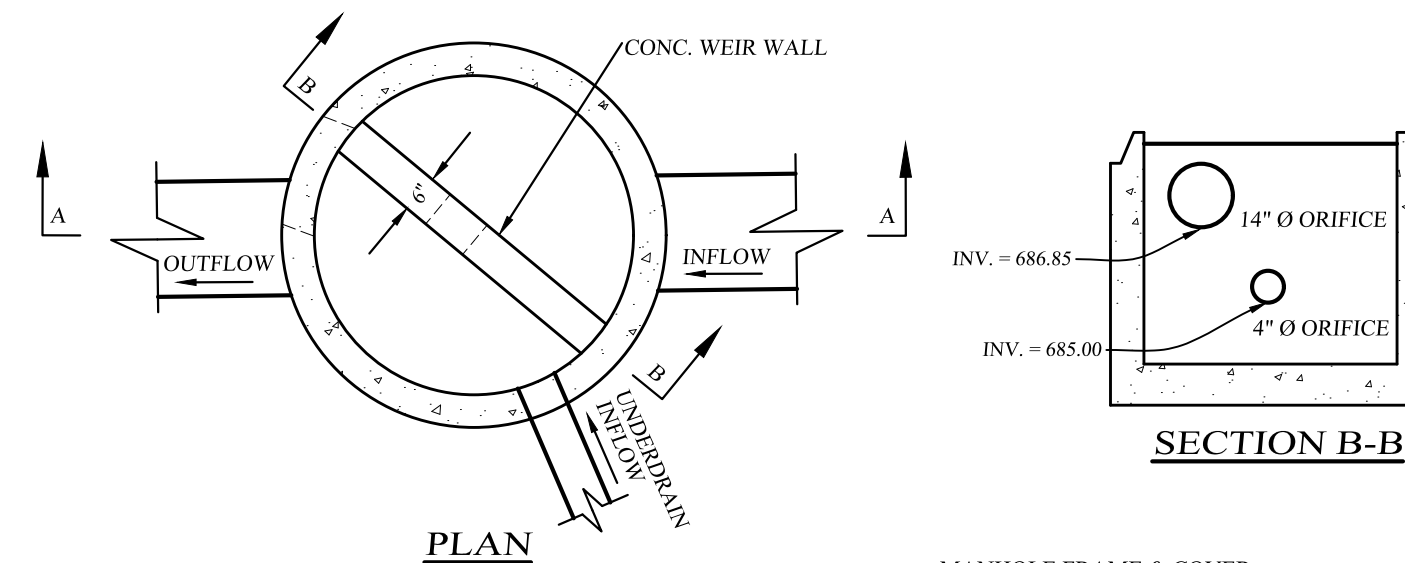
UNAUTHORIZED ALTERATIONS OR ADDITIONS TO A DOCUMENT BEARING THE SEAL OF A LICENSED PROFESSIONAL ENGINEER IS A VIOLATION OF SECTION 7209, SUBDIVISION 2 OF THE NEW YORK STATE EDUCATION LAW. REPRODUCTIONS OF THIS PLAN WHICH DO NOT BEAR THE ORIGINAL SEAL OF A LICENSED PROFESSIONAL ENGINEER SHALL BE CONSIDERED INVALID.

D.O.T. SHEET #	D.E.C. SHEET #	O.C.H.D. SHEET #	SHEET #
N.A.	N.A.	N.A.	11 OF 12
CAD #	PROJECT #	SCALE	
20129 SP	20129.0	AS SHOWN	



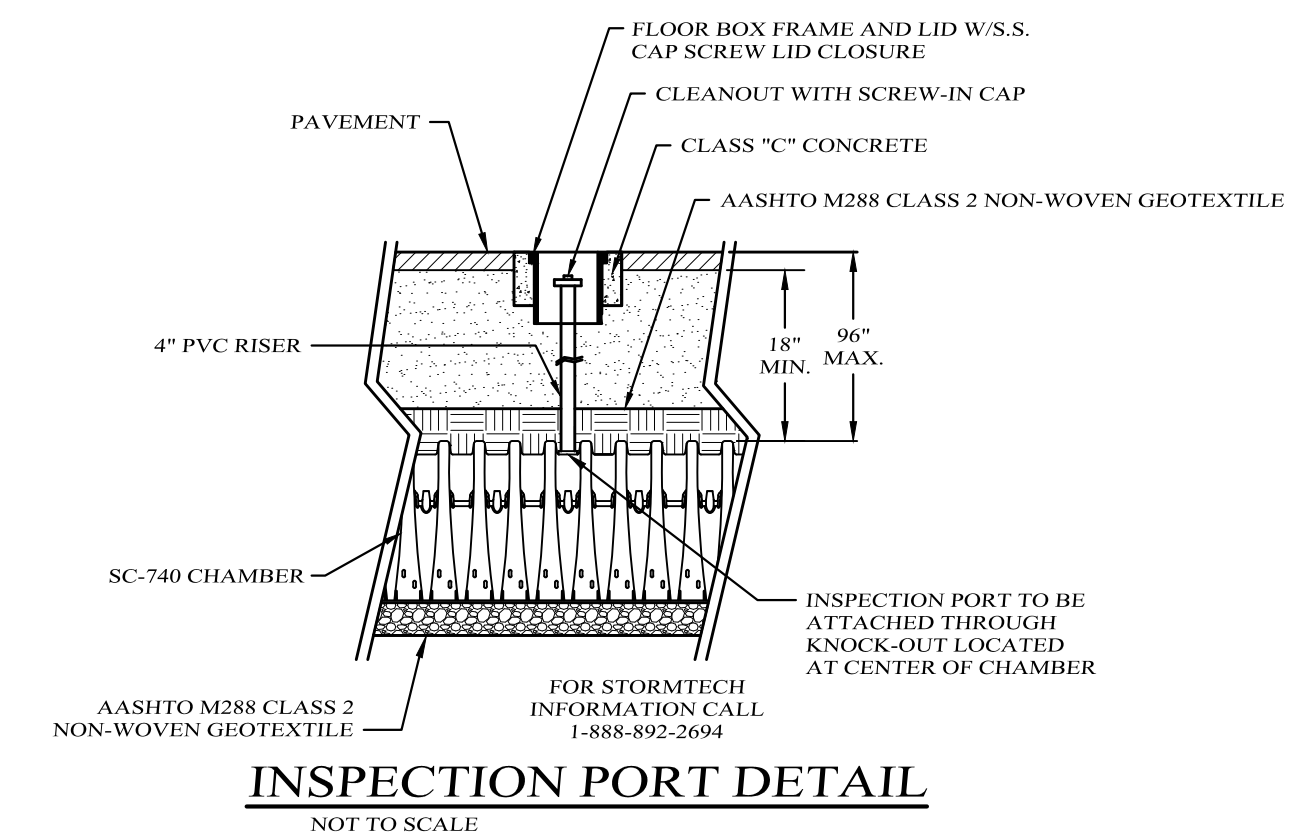
MANHOLES SHALL BE PLACED DIRECTLY ON UNDISTURBED NATURAL SOIL OR A MAXIMUM OF 1' OF SAND IF NEEDED TO ACHIEVE PROPER ELEVATION.  
 PRECAST CONCRETE MANHOLE, MFG. BY MODERN CONCRETE SEPTIC TANK CO. OR APPROVED EQUAL

**O.C.S. DRAINAGE MANHOLE 1**  
 NOT TO SCALE

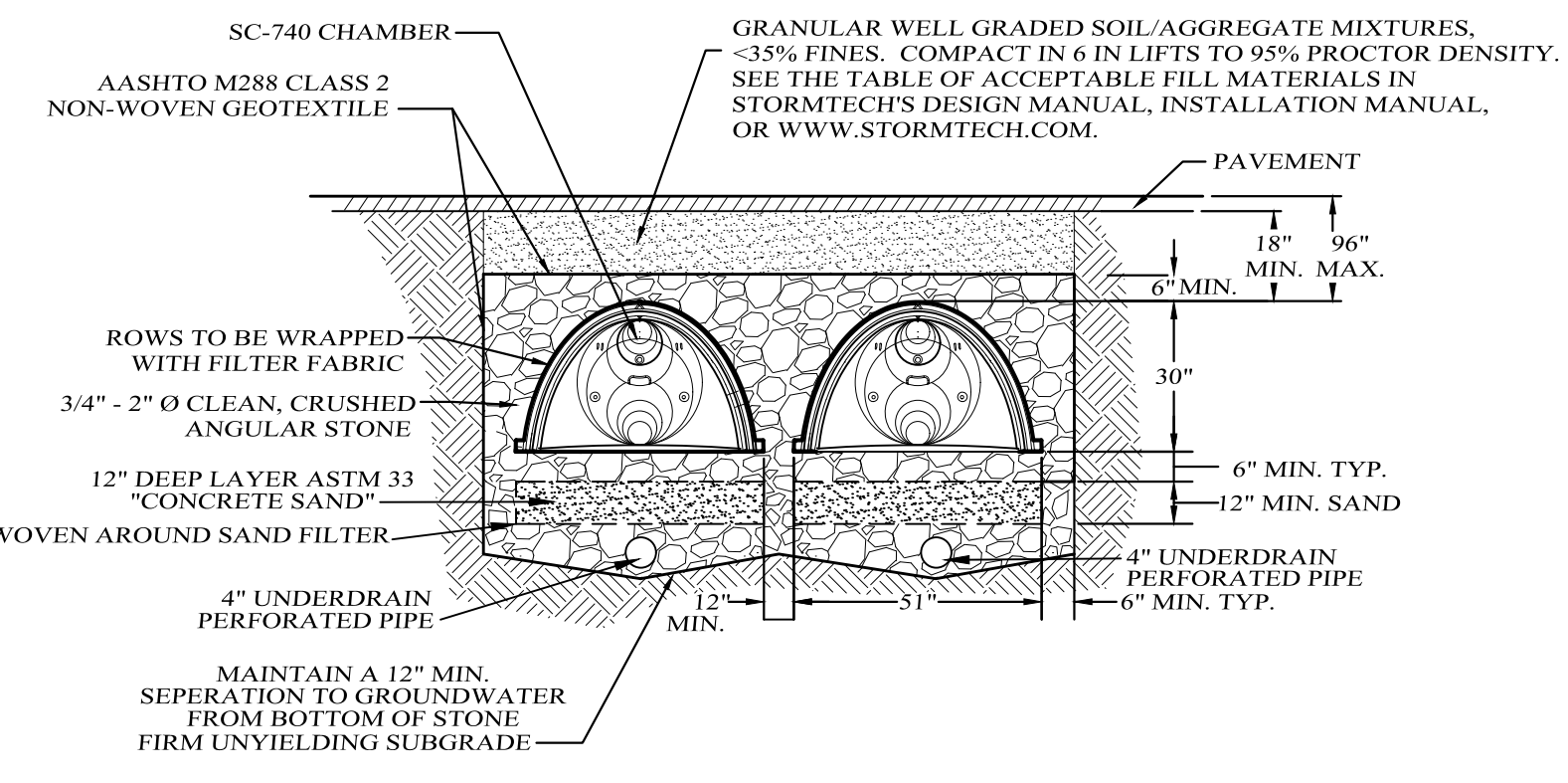


MANHOLES SHALL BE PLACED DIRECTLY ON UNDISTURBED NATURAL SOIL OR A MAXIMUM OF 1' OF SAND IF NEEDED TO ACHIEVE PROPER ELEVATION.  
 PRECAST CONCRETE MANHOLE, MFG. BY MODERN CONCRETE SEPTIC TANK CO. OR APPROVED EQUAL

**O.C.S. DRAINAGE MANHOLE 2**  
 NOT TO SCALE



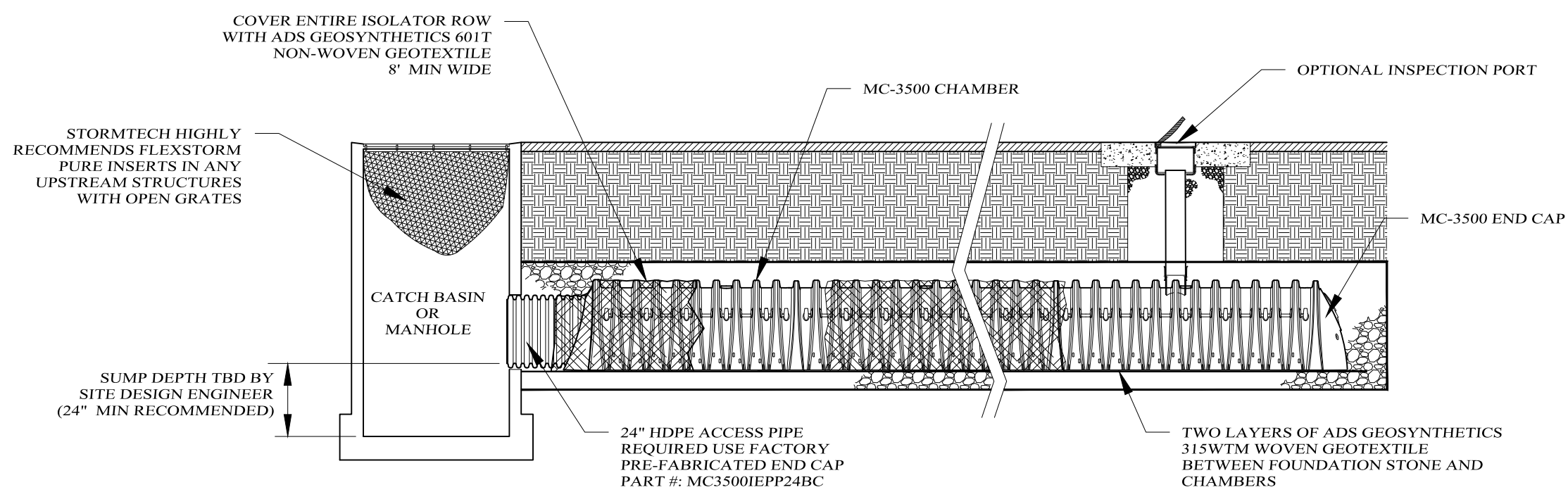
**INSPECTION PORT DETAIL**  
 NOT TO SCALE



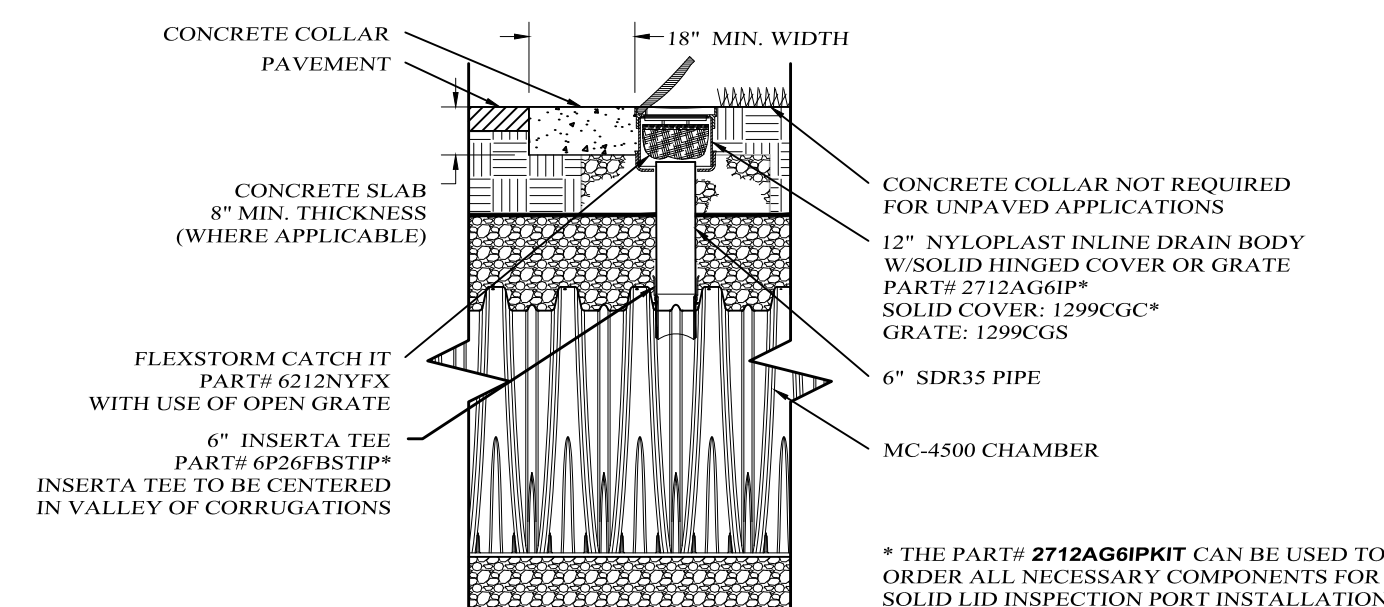
**TYPICAL SECTION**

- NOTES:**
- REFER TO STORMTECH'S DESIGN MANUAL AND INSTALLATION MANUAL FOR DETAILED INSTALLATION INSTRUCTIONS.
  - CHAMBERS SHALL BE INSTALLED AT 0.00% SLOPE AND END CAPPED.
  - STONE SHALL BE 3/4" TO 2" DIAMETER CLEAN, CRUSHED STONE.

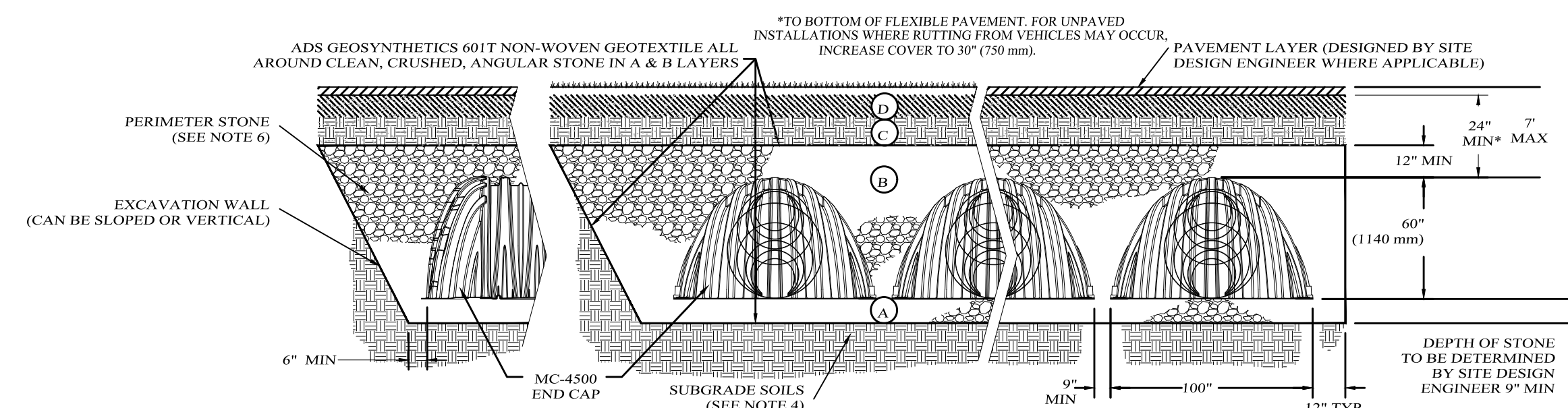
**STORMTECH SC-740**  
**SUBSURFACE STORMWATER MANAGEMENT CHAMBERS**  
**WITH SANDFILTER**  
**DETAIL**  
 NOT TO SCALE



**MC-4500 ISOLATOR ROW DETAIL**  
 NOT TO SCALE



**MC-4500 6" INSPECTION PORT DETAIL**  
 NOT TO SCALE



**STORMTECH MC-4500 CHAMBER SYSTEMS**

\*FOR COVER DEPTHS GREATER THAN 7.0' PLEASE CONTACT STORMTECH

- NOTES:**
- MC-4500 CHAMBERS SHALL CONFORM TO THE REQUIREMENTS OF ASTM F2418 "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
  - MC-4500 CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
  - "ACCEPTABLE FILL MATERIALS" TABLE ABOVE PROVIDES MATERIAL LOCATIONS, DESCRIPTIONS, GRADATIONS, AND COMPACTION REQUIREMENTS FOR FOUNDATION, EMBEDMENT, AND FILL MATERIALS.
  - THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR ASSESSING THE BEARING RESISTANCE (ALLOWABLE BEARING CAPACITY) OF THE SUBGRADE SOILS AND THE DEPTH OF FOUNDATION STONE WITH CONSIDERATION FOR THE RANGE OF EXPECTED SOIL MOISTURE CONDITIONS.
  - PERIMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS.
  - ONCE LAYER 'C' IS PLACED, ANY SOIL MATERIAL CAN BE PLACED IN LAYER 'D' UP TO THE FINISHED GRADE. MOST PAVEMENT SUBBASE SOILS CAN BE USED TO REPLACE THE MATERIAL REQUIREMENTS OF LAYER 'C' OR 'D' AT THE SITE DESIGN ENGINEER'S DISCRETION.

**SOUTHGROVE**

VILLAGE OF SOUTH BLOOMING GROVE,  
 ORANGE COUNTY, NEW YORK

**STORMWATER**  
**MANAGEMENT**  
**DETAILS**

DRAWING TITLE

**KIRK ROTHER, P.E.**

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04-17-24	REV. LAYOUT, GRADING & UTILITY DESIGN	KIRK ROTHER, P.E.	NY S.L.D. NO. 678053	DATE
08-17-22	INITIAL PREPARATION			
D.O.T. SHEET #	D.E.C. SHEET #	O.C.H.D. SHEET #	SHEET #	
N.A.	N.A.	N.A.	12 OF 12	
CAD #	PROJECT #	SCALE		
20129 SP	20129.0	AS SHOWN		