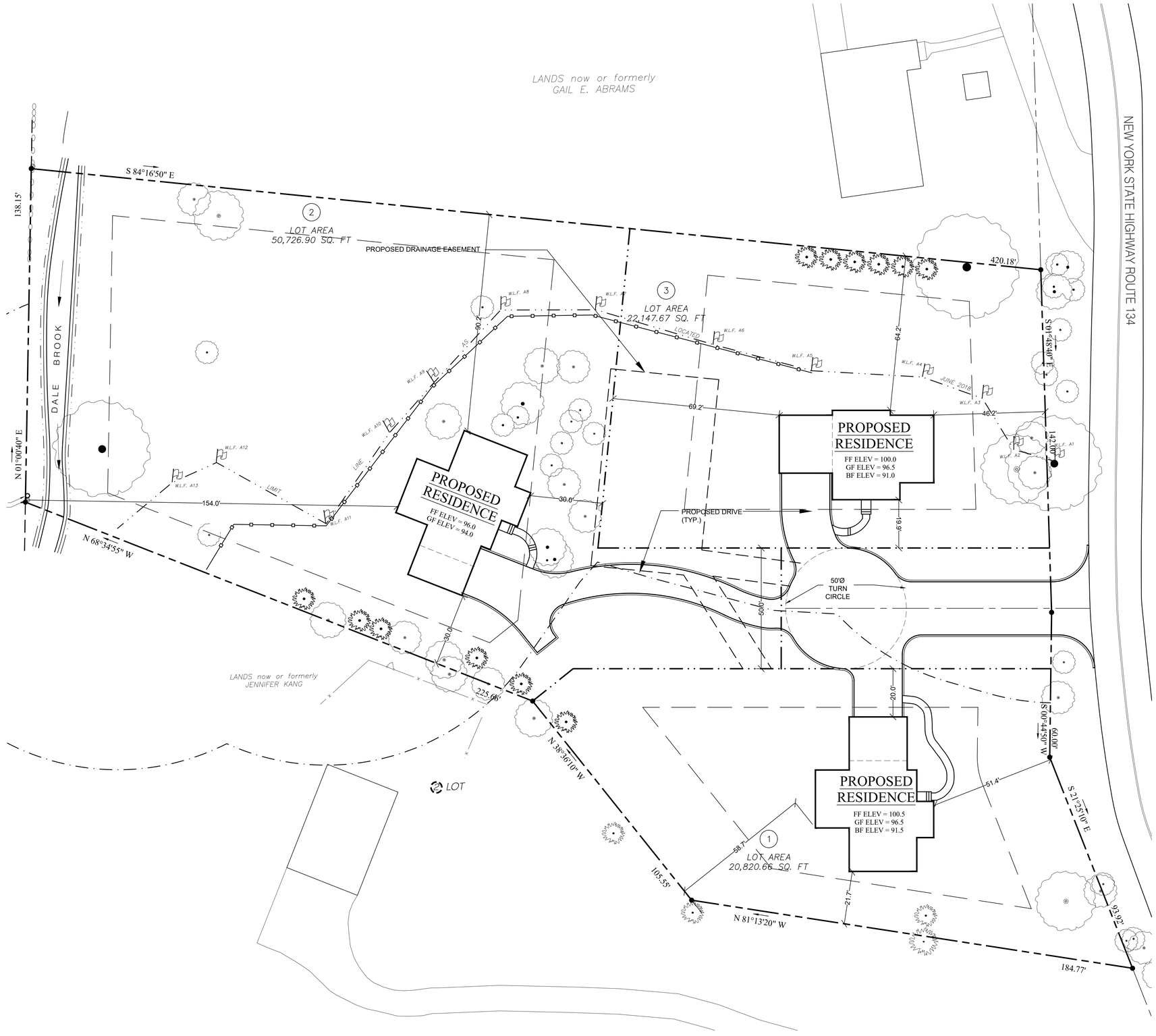
SITE DATA:

OWNER / DEVELOPER:	MGM DESIGN & CONSTRUCTION GROUP, LLC 317 ELWOOD AVENUE HAWTHORNE, NY 10532
PROJECT LOCATION:	5 HAWKES AVENUE OSSINING, NY 10562
EXISTING TOWN ZONING:	R-20, ONE-FAMILY RESIDENTIAL
PROPOSED USE:	R-20, ONE-FAMILY RESIDENTIAL
TOWN TAX MAP DATA:	SECTION 2, BLOCK 4, LOT 26
SITE AREA :	2.15 ACRES (90,695.23 SF)
SEWAGE FACILITIES:	PUBLIC SEWERS
WATER FACILITIES:	PUBLIC WATER FACILITIES

ZONING SCHEDULE:

ZONING DISTRICT:	R-20, ONE FAMILY RESIDENTIAL				
DIMENSIONAL REGULATIONS:	REQUIRED	LOT 1	LOT 2	LOT 3	VARIANCE REQUIRED
MINIMUM SIZE OF LOT:					
MINIMUM LOT AREA:	20,000 SF.	20,820 SF.	50,726 SF.	22,147 SF.	NONE
MINIMUM LOT WIDTH:	90 FT.	112 FT.	138 FT.	115 FT.	NONE
MINIMUM LOT DEPTH:	130 FT.	182 FT.	249 FT.	180 FT.	NONE
MINIMUM YARD DIMENSIONS:					
PRINCIPAL BUILDING:					
FRONT YARD SETBACK:	30 FT.	51.4 FT.	30 FT.	46.2 FT.	NONE
REAR YARD SETBACK:	34 FT.	58.7 FT.	154 FT.	79.6 FT.	NONE
ONE SIDE YARD SETBACK:	16 FT.	20 FT.	30 FT.	19.9 FT.	NONE
COMBINED SIDE YARD SETBACK:	34 FT.	21.7 FT.	120.2 FT.	38.4 FT.	NONE
MAXIMUM % OF LOT TO BE OCCUPIED:					
LOT COVERAGE:	SEE NOTE 1	2,389 SF	4,493 SF	2,401 SF	NONE
BUILDING COVERAGE:	22%	10.3%	4.2%	8.8%	NONE
MAXIMUM HEIGHT:					
PRINCIPAL BUILDING - FEET:	35 FEET	30 FEET	30 FEET	30 FEET	NONE
PRINCIPAL BUILDING - STORIES:	2 1/2	2 1/2	2 1/2	2 1/2	NONE

ZONING REGULATION NOTES:
1. MAX IMPERVIOUS COVERAGE SHALL BE PER SECTION 200-21(B).



NOTES:
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Site Design Consultants
Civil Engineers • Land Planners
251 F Underhill Avenue, Yorktown Heights, NY 10598
(914) 962-4488 - Fax (914) 962-7386
email sdc@cloud9.net

Engineer: Joseph C. Riina, P.E.
NYS Lic. No. 64431

Revisions:

No.	Date	Comments: Plan Revisions
1	2/5/19	

SCALE: 1" = 30' | DRAWN BY: TK | DATE: 1/23/18

TOWN TAX MAP DATA:
SECTION: 2
BLOCK: 4
26
LOT AREA: 2.15 ACRES

EROSION & SEDIMENT CONTROL PLAN
PREPARED FOR
MGM DESIGN & CONSTRUCTION GROUP, LLC
5 Hawkes Avenue Town of Ossining Westchester Co., New York

Sheet 1 of 8

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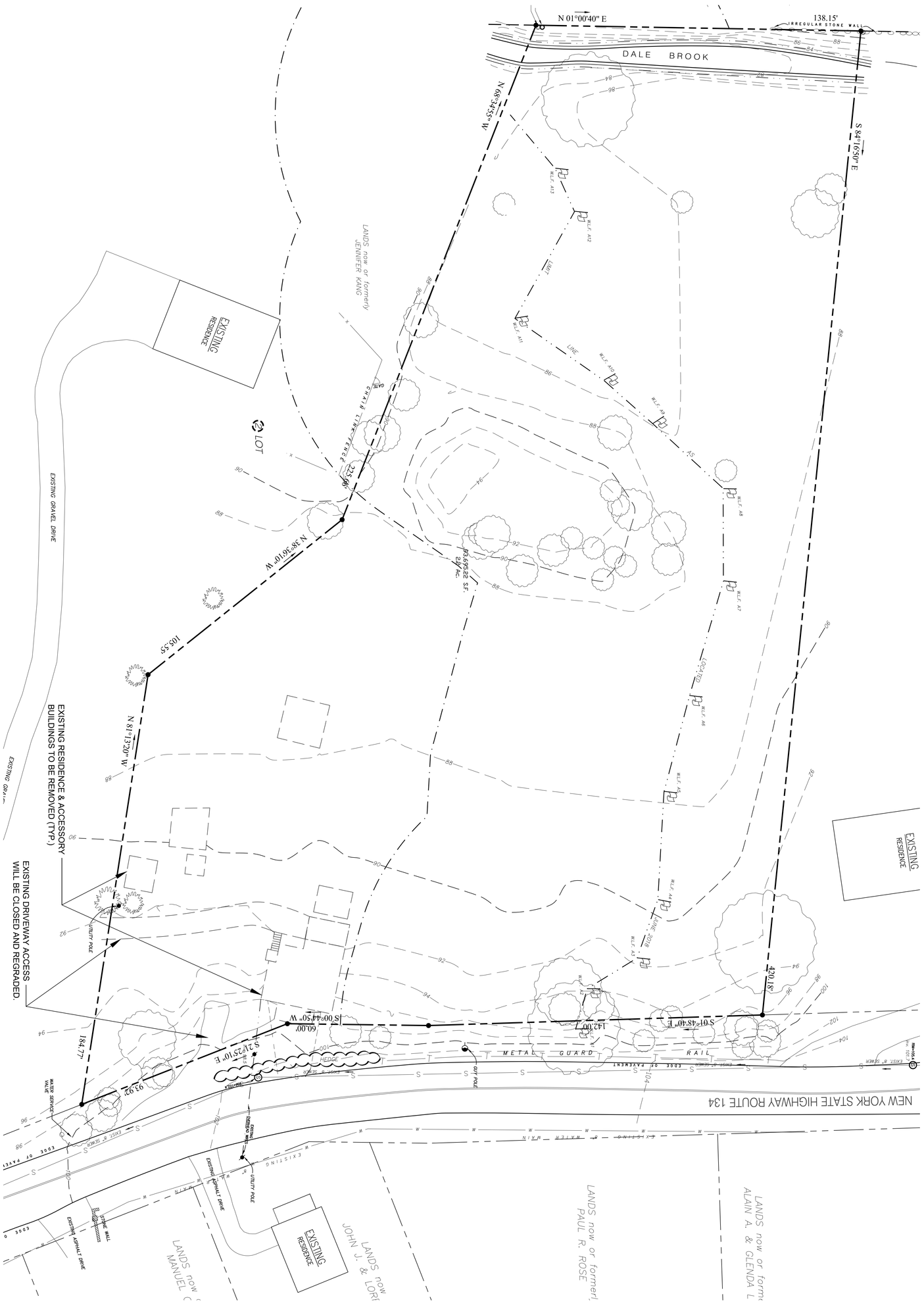

Sheet 2 of 8	EXISTING CONDITIONS PLAN PREPARED FOR MGM DESIGN & CONSTRUCTION GROUP, LLC 5 Hawkes Avenue Town of Ossining Westchester Co., New York	TOWN TAX MAP DATA: SECTION: 2 BLOCK: 4 26 LOT AREA: 2.15 ACRES	SCALE: 1" = 20' DRAWN BY: TK DATE: 3/23/18	Revisions: No. Date Comments: 1 2/5/19 Plan Revisions	Engineer: Joseph C. Rinna, P.E. NYS Lic. No. 64431	Site Design Consultants Civil Engineers • Land Planners 251 F Underhill Avenue, Yorktown Heights, NY 10598 (914) 962-4488 - Fax (914) 962-7386 email sdc@cloud9.net	

GENERAL NOTES:

1. THE LOCATIONS AND ORIENTATIONS OF THE PROPOSED RESIDENCES, INCLUDING GARAGES, SHALL BE CONSTRUCTED AS SHOWN ON THESE PLANS UNLESS MODIFICATIONS THEREOF HAVE BEEN APPROVED BY THE PLANNING BOARD OF THE TOWN OF OSSINING.
2. ALL PROPOSED UTILITIES INCLUDING ELECTRIC LINES, TELEPHONE LINES, CABLE TELEVISION LINES, ETC.. SHALL BE LOCATED UNDERGROUND.
3. AS INDICATED IN CORRESPONDENCE FROM THE VILLAGE OF OSSINING, DATED 6/20/06, AND FROM THE TOWN CONSULTING ENGINEER, DATED 11/16/06; THE VILLAGE OF OSSINING IS WILLING AND ABLE, AND HAS ADEQUATE PRESSURE AND VOLUME, TO SERVE THIS SUBDIVISION.

LOT AREA 50,726.90 SQ. FT

LOT AREA 22,147.67 SQ. FT

LOT AREA 20,820.66 SQ. FT

ROOF DRAIN DISCHARGE (TYP)

PROPOSED DRAINAGE EASEMENT

OUTLET CONTROL STRUCTURE (SEE DETAIL)

12" HDPE N-12 OUTLET PIPE W/ END SECTION OUTLET

3' WIDE GRASS LEVEL-LIP SPREADER AT DISCHARGE

WETLAND CONSERVATION EASEMENT AREA FOR LOTS 2 AND 3 TO BE MAINTAINED IN EXISTING NATURAL CONDITION

4 FT HIGH SPLIT-RAIL FENCE ALONG WETLAND LINE TO DELINEATE CONSERVATION EASEMENT AREA. FENCE SHALL BE PERMANENTLY MAINTAINED IN GOOD CONDITION.

END SECTION WITH RIP-RAP APRON (TYP)

4' WIDE RIP RAP SWALE @ 1.0%

36" HDPE N-12 PIPE L=170' S=2.90%

DALE BROOK

IRREGULAR STONE WALL

PROPOSED RESIDENCE
FF ELEV = 96.0
GF ELEV = 94.0

SUBSURFACE STORMWATER MANAGEMENT SYSTEM
CULTEC RECHARGER 330 SYSTEM
6 ROWS @ 11 UNITS EACH
INV. @ ELEV 88.00

PROPOSED/ RESIDENCE
FF ELEV = 100.0
GF ELEV = 96.5
BF ELEV = 91.0

PROPOSED RESIDENCE
FF ELEV = 100.5
GF ELEV = 96.5
BF ELEV = 91.5

PROP. CB #1 (24" SUMP)
RIM ELEV. 96.0
INV. ELEV. 93.0

12" HDPE NB-12 PIPE L=40' S= 9.5%

10' MIN. SEPARATION

PROP. CB #2 (24" SUMP)
RIM ELEV. 93.5
INV. ELEV. 89.06
W/ 12" HDPE N-12 PIPE CONNECTION L=3' S=1.0%

SANITARY CLEAN OUT AT MIN 50 FT OR CHANGE IN HORIZONTAL DIRECTION (TYP)

PROPOSED FIRE HYDRANT AND VALVE - OPEN RIGHT

ROOF DRAIN DISCHARGE (TYP)

MAINTAIN MINIMUM 18" SEWER AND WATER VERTICAL SEPARATION PER WEST. CNTY. DEPT OF HEALTH (TYP)

PROPOSED 1 ½"Ø PVC SDR-21 SANITARY FORCE MAIN (TYP)

1000 GAL. P/C OVERFLOW STORAGE TANK (TYP)

PROPOSED SEWER EJECTOR (TYP)

GRASS LINED SWALE @ ±1.5% SLOPE (SEE DETAIL)

EXISTING RESIDENCE & ACCESSORY BUILDINGS TO BE REMOVED (TYP.)

EXISTING DRIVEWAY ACCESS WILL BE CLOSED AND REGRADED.

EXISTING GRAVEL DRIVE

EXISTING RESIDENCE

EXISTING ASPHALT DRIVE

EXISTING STONE WALL

EXISTING CHAIN LINK FENCE

EXISTING WOOD FENCE

EXISTING OVERHEAD WIRES

UTILITY POLE

WATER SERVICE VALVE

EDGE OF PAVEMENT

1-1/2"Ø TYPE-K COPPER WATER SERVICE MAINTAIN MIN. 4 FT COVER (TYP)

CURB BOX SET FLUSH WITH GRADE (TYP)

LIMITS OF COMMON ACCESS & UTILITY EASEMENT

22 FT WIDE PRIVATE COMMON DRIVEWAY

6" ASPHALT CURB WHERE SHOWN

(3) - 4"Ø LATERALS FROM SEWER MAIN TO PROPERTY LINE. CONNECT FORCE MAIN TO LATERALS WITH CLEAN OUT AT PROPERTY LINE. SEE DETAIL.

PROP. 140 LF - 8" CL 54 DIP WATERMAIN MAINTAIN MIN. 4 FT COVER

8" x 8" TAPPING SLEEVE AND VALVE - OPEN RIGHT (SEE DETAIL)

APPROXIMATE LOCATION OF EXISTING SANITARY AND WATER SERVICES TO BE ABANDONED IN ACCORDANCE WITH WESTCHESTER COUNTY HEALTH DEPARTMENT REGULATIONS.

EXISTING UTILITY POLE. ELECTRIC SERVICE TO BE INSTALLED AND CONTINUED UNDERGROUND THROUGH UTILITY EASEMENT FROM THIS POINT.

PVI STA = 0+30
PVI ELEV = 101
A.D. = -2.00
K = 25.00

50.00' VC

BVCS: 0+05
BVCE: 102
EVCS: 0+55
EVCE: 100

HAWKES AVE.

EXISTING 8"Ø SANITARY SEWER

MAINTAIN MIN. 5 FT COVER

FINISH GRADE

EXISTING 8"Ø WATER MAIN WITH PROPOSED 8" x 8" TAPPING SLEEVE AND VALVE. SEE DETAIL.

PROPOSED 8" PLUG AND TAP FOR WATER SERVICE CONNECTION TO LOT 2

PROPOSED FIRE HYDRANT SEE DETAIL

-3%

-5%

PROPOSED 140 LF - 8"Ø CL 54 DIP WATER MAIN. MAINTAIN MIN. 18" SEPARATION WITH EXIST. 8" SANITARY SEWER (SEE DETAIL)

APPROXIMATE EXISTING GRADE

PROPERTY LINE

WATER SERVICE LOT 1

WATER SERVICE LOT 3

LPSS CROSSING LOT 1 MAINTAIN MIN. 18" VERTICAL SEPARATION

END OF CUL-DE-SAC

DATUM ELEV 80

	102.00	102.00	91.48	100.09	89.01	97.60	88.10	96.40

100
90

0+00 1+00

SCALE: VERT. 1"=4'
HORZ. 1"=20'

ON DRIVE AND UTILITY PROFILE

LEGEND

- EXISTING TOPOGRAPHY (340)
- PROPOSED TOPOGRAPHY (340)
- EXISTING BUILDINGS
- PROPOSED HOUSE AND DRIVE
- PROPOSED PROPERTY LINES
- PROPOSED EASEMENTS
- EXISTING SANITARY SEWER & MANHOLE
- PROPOSED SANITARY MANHOLE/CLEANOUT AND 1 1/2" PVC SDR-21 FORCE MAIN
- EXISTING CATCH BASIN
- PROPOSED CATCH BASIN & H.D.P.E. DRAINAGE PIPE
- PROPOSED HEADWALL WITH RIP RAP
- SW — PROPOSED SWALE
- W — PROPOSED 8"Ø DIP WATERMAIN
- S — PROPOSED 1-1/2" PVC SDR-21 LOW PRESSURE SANITARY FORCE MAIN AND CLEAN OUT MANHOLE
- WS — PROPOSED 1 1/2" COPPER WATER SERVICE AND CURB BOX
- HYD — PROPOSED FIRE HYDRANT
- LOCATION OF WATER MAIN CROSSING

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Engineer: STATE OF NEW YORK — CARLO RUINA — JOSEPH — LICENSED PROFESSIONAL ENGINEER
Joseph Carlo Ruina, P.E.
NYS Lic. No. 64431

Revisions:		Comments:
No.	Date	
1	2/5/19	Plan Revisions

SCALE: 1" = 20'
DRAWN BY: TK
DATE: 3/21/18

TOWN TAX MAP DATA:
SECTION: 2
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26
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PROPOSED GRADING & UTILITY PLAN
PREPARED FOR
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Sheet 4 of 8

SLOPES GREATER THAN 2H:1V SHALL RECEIVE PERMANENT SEEDING AND PROTECTION WITH EROSION BLANKETS

NEW COLORADO SPRUCE 6'-8' HIGH @ ±10'-0" ON-CENTER (TYPICAL)

LOT AREA 50,726.90 SQ. FT

TEMPORARY SEDIMENT FENCE (TYP)

LIMIT OF DISTURBANCE (TYP)

TREE TO BE REMOVED (TYP)

TREE TO BE PROTECTED (TYP)

LOT AREA 22,147.67 SQ. FT

LOT AREA 20,820.66 SQ. FT

PROPOSED RESIDENCE
FF ELEV = 100.0
GF ELEV = 96.5
BF ELEV = 91.5

PROPOSED RESIDENCE
FF ELEV = 97.0
GF ELEV = 94.0

EXISTING RESIDENCE

EXISTING RESIDENCE

WETLAND AREA "B" TO BE REGRADED
TOTAL DISTURBANCE = 1,400 SF (0.03 AC)
NO TREE REMOVAL OR PLANTING PROPOSED

NEW COLORADO SPRUCE 6'-8' HIGH @ MIN.±10'-0" ON-CENTER (TYPICAL)

EXISTING TREE TO REMAIN (TYP)

INLET PROTECTION (TYP)

TEMPORARY SOIL STOCKPILE (TYP)

TEMPORARY DIVERSION / SWALE (TYP)

TEMPORARY SEDIMENT TRAP (TYP)

EXISTING RESIDENCE & ACCESSORY BUILDINGS TO BE REMOVED (TYP.)

EXISTING DRIVEWAY ACCESS WILL BE CLOSED AND REGRADED.

100 FT WETLAND BUFFER

STABILIZED CONSTRUCTION ENTRANCE

10' MIN.

10' MIN. SEPARATION

DALE BROOK

IRREGULAR STONE WALL

LANDS now or formerly ALAIN A. & GLENDA L

LANDS now or formerly PAUL R. ROSE

LANDS now or formerly JENNIFER KANG

LANDS now JOHN J. & LORI

LANDS now MANUEL C

EXISTING GRAVEL DRIVE

EXISTING ASPHALT DRIVE

STONE WALL

UTILITY POLE

WATER SERVICE VALVE

EDGE OF PAVED

EXISTING OVERHEAD WIRES

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EROSION & SEDIMENT CONTROL PLAN
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MGM DESIGN & CONSTRUCTION GROUP, LLC
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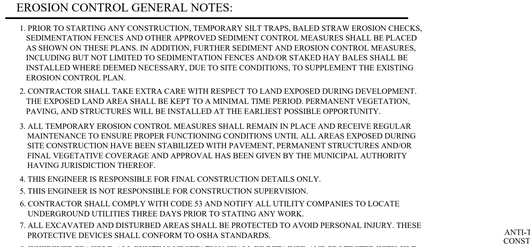
Sheet 3 of 8

EROSION CONTROL GENERAL NOTES:

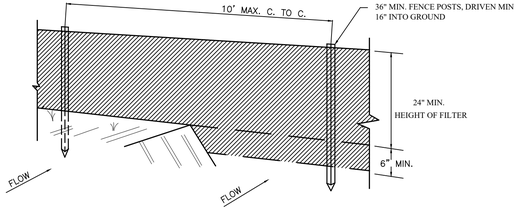
1. PRIOR TO STARTING ANY CONSTRUCTION, TEMPORARY SILT TRAPS, BALED STRAW EROSION CHECKS, SEDIMENTATION FENCES AND OTHER APPROVED SEDIMENT CONTROL MEASURES SHALL BE PLACED AS SHOWN ON THESE PLANS. IN ADDITION, FURTHER SEDIMENT AND EROSION CONTROL MEASURES, INCLUDING BUT NOT LIMITED TO SEDIMENTATION FENCES AND/OR STAKED HAY BALES SHALL BE INSTALLED WHERE DEEMED NECESSARY, DUE TO SITE CONDITIONS, TO SUPPLEMENT THE EXISTING EROSION CONTROL PLAN.
2. CONTRACTOR SHALL TAKE EXTRA CARE WITH RESPECT TO LAND EXPOSED DURING DEVELOPMENT. THE EXPOSED LAND AREA SHALL BE KEPT TO A MINIMAL TIME PERIOD. PERMANENT VEGETATION, PAVING, AND STRUCTURES WILL BE INSTALLED AT THE EARLIEST POSSIBLE OPPORTUNITY.
3. ALL TEMPORARY EROSION CONTROL MEASURES SHALL REMAIN IN PLACE AND RECEIVE REGULAR MAINTENANCE TO ENSURE PROPER FUNCTIONING CONDITIONS UNTIL ALL AREAS EXPOSED DURING SITE CONSTRUCTION HAVE BEEN STABILIZED WITH PAVEMENT, PERMANENT STRUCTURES AND/OR FINAL VEGETATIVE COVERAGE AND APPROVAL HAS BEEN GIVEN BY THE MUNICIPAL AUTHORITY HAVING JURISDICTION THEREOF.
4. THIS ENGINEER IS RESPONSIBLE FOR FINAL CONSTRUCTION DETAILS ONLY.
5. THIS ENGINEER IS NOT RESPONSIBLE FOR CONSTRUCTION SUPERVISION.
6. CONTRACTOR SHALL COMPLY WITH CODE 53 AND NOTIFY ALL UTILITY COMPANIES TO LOCATE UNDERGROUND UTILITIES THREE DAYS PRIOR TO STATING ANY WORK.
7. ALL EXCAVATED AND DISTURBED AREAS SHALL BE PROTECTED TO AVOID PERSONAL INJURY. THESE PROTECTIVE DEVICES SHALL CONFORM TO OSHA STANDARDS.
8. WHEREVER FEASIBLE, ALL EXISTING VEGETATION SHALL BE RETAINED AND PROTECTED WITH SILT FENCING. ALL TREES TO REMAIN SHALL BE PROTECTED WITH SILT FENCE PLACED AROUND THE DRIP LINE PRIOR TO BEGINNING CONSTRUCTION IN ITS PROXIMITY.
9. SILT TRAPS SHALL BE CLEANED OUT WHEN THE ACCUMULATED SEDIMENT HAS REDUCED THE CAPACITY OF THE TRAP BY APPROXIMATELY 50 PERCENT; SEDIMENT REMOVED FROM THE TRAP SHALL BE PROPERLY DISPOSED OF TO PREVENT ITS REENTRANCE TO THE DRAINAGE SWALE AND TRAP. SMALL QUALITIES OF SEDIMENT SHOULD BE PLACED BEHIND PROTECTIVE BERMS. LARGER QUALITIES OF SEDIMENT SHOULD BE STOCKPILED A SUITABLE DISTANCE AWAY FROM DRAINAGE COURSE AND CONTAINED BY PROTECTIVE BERMS AND VEGETATED.

CONSTRUCTION SPECIFICATIONS

1. BALES SHALL BE PLACED AT THE TOE OF A SLOPE OR ON THE CONTOUR AND IN A ROW WITH ENDS TIGHTLY ABUTTING THE ADJACENT BALES.
2. EACH BALE SHALL BE EMBEDDED IN THE SOIL A MINIMUM OF (4) INCHES, AND PLACED SO THE BINDINGS ARE HORIZONTAL.
3. BALES SHALL BE SECURELY ANCHORED IN PLACE BY EITHER TWO STAKES OR RE-BARS DRIVEN THROUGH THE BALE. THE FIRST STAKE IN EACH BALE SHALL BE DRIVEN TOWARD THE PREVIOUSLY LAID BALE AT AN ANGLE TO FORCE THE BALES TOGETHER. STAKES SHALL BE DRIVEN FLUSH WITH THE BALE.
4. INSPECTION SHALL BE FREQUENT AND REPAIR / REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED.
5. BALES SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFULNESS SO AS NOT TO BLOCK OR IMPEDE STORM FLOW OR DRAINAGE.



PERSPECTIVE VIEW



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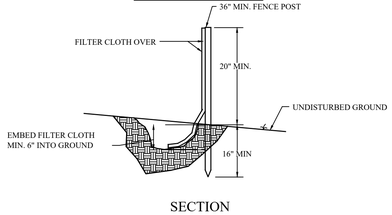
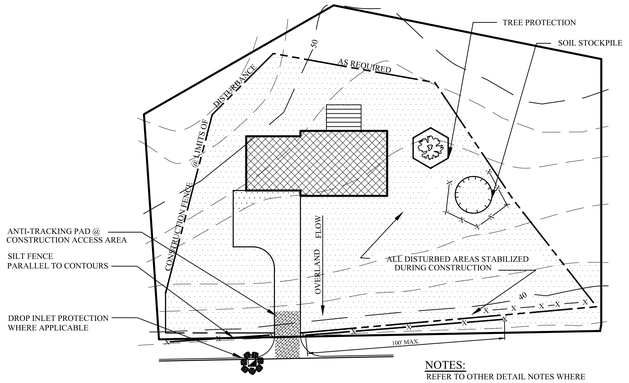


SECTION

HORSESHOE SILT FENCE

N.T.S.



STREET

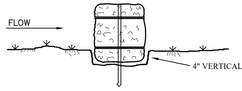
TYPICAL LOT SPECIFIC EROSION AND SEDIMENT CONTROL DETAIL

N.T.S.

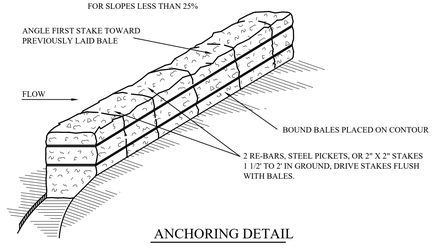
NOTES:
REFER TO OTHER DETAIL NOTES WHERE APPROPRIATE MEASURES ARE APPLICABLE TO CLEARING, EXCAVATION, CONSTRUCTION, AND STABILIZATION.

MAX SLOPE LENGTH MAY BE UP TO 200 FT. PER 1/2 ACRE TRIBUTARY TO EACH 100 FT. WIDTH OF SILT FENCE.

ANY ON SITE SWALES SHOULD ALSO BE STABILIZED WITH APPROPRIATE MEASURES SUCH AS JUTE NETTING, CHECK DAMS, AND SEDIMENT TRAPS.
IF THERE IS A SIGNIFICANT CHANGE TO THE APPROVED LOT CONCEPT (IE: HOUSE LOCATION, DRIVEWAY LOCATION ETC. THE NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION SHALL BE COPIED WITH THE INDIVIDUAL SITE PLANS THAT ARE BEING SUBMITTED FOR PLANNING BOARD REVIEW.



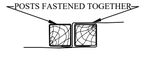
BEDDING DETAIL



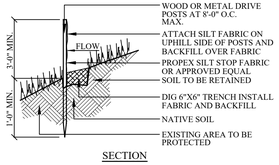
ANCHORING DETAIL

ANCHOR AND EROSION BEDDING DETAIL

N.T.S.



PLAN VIEW: JOINING SECTIONS

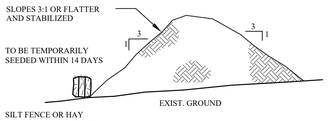


SECTION

INSTALLATION NOTES
1. EXCAVATE 6 INCH TRENCH ALONG THE LOWER PERIMETER OF THE SITE.
2. UNROLL A SECTION AT A TIME AND POSITION THE POST AGAINST THE BACK (DOWNSTREAM) WALL OF THE TRENCH (NET SIDE AWAY FROM DIRECTION OF FLOW).
3. DRIVE THE POST INTO THE GROUND UNTIL THE NETTING IS APPROXIMATELY 2 INCHES FROM THE TRENCH BOTTOM.
4. LAY THE TOE-IN FLAP OF FABRIC ONTO THE UNDISTURBED BOTTOM OF THE TRENCH, BACKFILL THE TRENCH AND TAMP THE SOIL. STEEPER SLOPES REQUIRE AN INTERCEPT TRENCH.
5. JOIN SECTIONS AS SHOWN ABOVE.

SILT FENCE

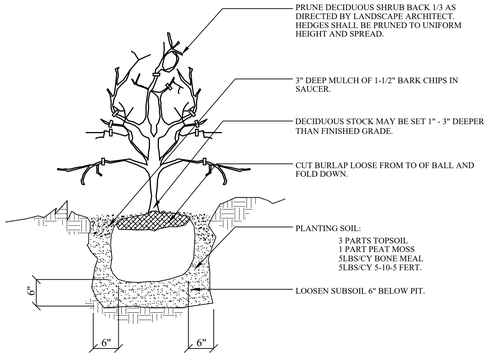
N.T.S.



INSTALLATION NOTES
1. AREA CHOSEN FOR STOCKPILING OPERATIONS SHALL BE DRY AND STABLE.
2. MAXIMUM SLOPE OF STOCKPILE SHALL BE 1:2.
3. UPON COMPLETION OF SOIL STOCKPILING, EACH PILE SHALL BE SURROUNDED WITH EITHER SILT FENCING OR STRAWBALES, THEN STABILIZED WITH VEGETATION OR COVERED.
4. SEE DETAIL, THIS SHEET, FOR INSTALLATION OF SILTFENCE.

SOIL STOCKPILING DETAIL

N.T.S.

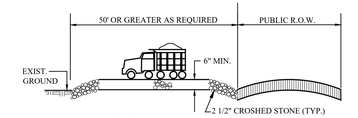


PIT TO BE 6" DEEPER & 12" WIDER THAN BALL OR WIDEST SPREAD OF BARE ROOTS. A SINGLE TRENCH SHALL BE DUG FOR ALL SHRUBS IN A BED OR HEDGE.

NOTE:
DO NOT ADD FERTILIZER TO PLANTING SOIL FOR FALL PLANTING.

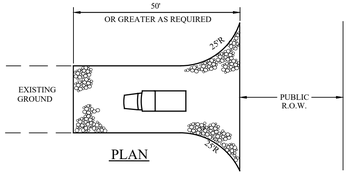
TYPICAL SHRUB PLANTING DETAIL

N.T.S.



PROFILE

PROVIDE APPROPRIATE TRANSITION BETWEEN STABILIZED CONSTRUCTION ENTRANCE AND PUBLIC R.O.W.

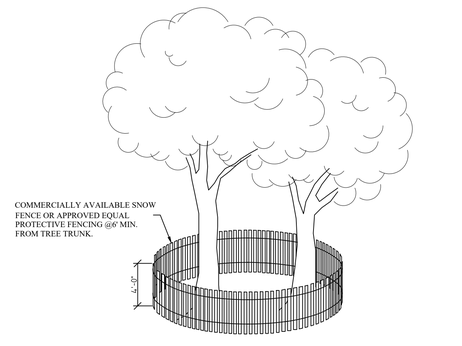


PLAN

INSTALLATION NOTES
1. STONE SIZE - USE 3" MIN. STONE, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
2. LENGTH - AS REQUIRED, BUT NOT LESS THAN 50 FEET (EXCEPT ON A SINGLE RESIDENCE LOT WHERE A 20 FOOT MINIMUM LENGTH WOULD APPLY.
3. THICKNESS - NOT LESS THAN SIX (6) INCHES.
4. WIDTH - 10 FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCUR.
5. SURFACE WATER - ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED ACROSS THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED.
6. MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT OF WAY THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHT OF WAY MUST BE REMOVED IMMEDIATELY.
7. WASHING - WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHT OF WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
8. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.

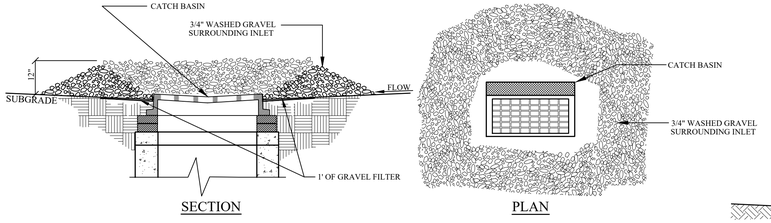
STABILIZED CONSTRUCTION ENTRANCE

N.T.S.



TREE PROTECTION DETAIL

N.T.S.

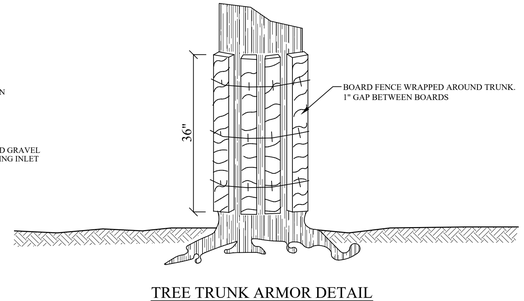


SECTION PLAN

NOTES:
1. USE CLEAN STONE OR GRAVEL 1/2-3/4" IN DIAMETER PLACED 2" BELOW THE TOP OF THE BLOCK ON A 2:1 SLOPE OR FLATTER.
2. A 1 FOOT THICK LAYER OF THE FILTER STONE WILL BE PLACED AGAINST THE 3" STONE AS SHOWN ON THE DETAIL.

INLET PROTECTION

N.T.S.



TREE TRUNK ARMOR DETAIL

N.T.S.

NOTES:
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Site Design Consultants
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Engineer: Joseph C. Carlo Riina P.E.
NYS Lic No. 64431

Revisions:

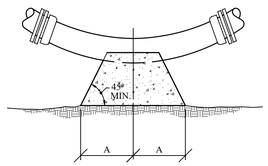
No.	Date	Comments: Plan Revisions
1	2/5/19	

SCALE: N.T.S. | DRAWN BY: TK | DATE: 3/23/18

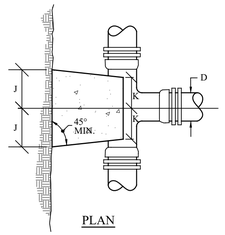
TOWN TAX MAP DATA:
SECTION: 8.4
BLOCK: 28
LOT: 4
LOT AREA: 1.87 AC

EROSION AND SEDIMENT CONTROL DETAILS
PREPARED FOR
MGM DESIGN & CONSTRUCTION GROUP, LLC
5 Hawkes Avenue Town of Ossining Westchester Co., New York

Sheet 5 of 8



PLAN



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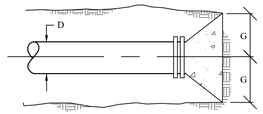
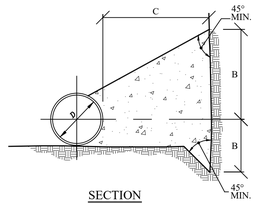
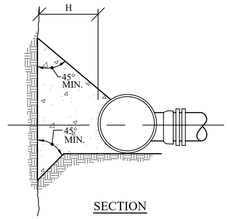


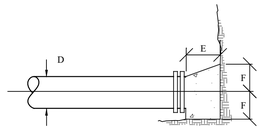
PLAN



SECTION



SECTION



SECTION

BEND	D	6"	8"	10"	12"
11-1/4°	A	6"	8"		
	B	12"	12"		
	C	12"	12"		
22-1/2°	A	8"	8"		
	B	12"	12"		
	C	12"	12"		
45°	A	8"	8"		
	B	12"	14"		
	C	8"	10"		
90°	A	13"	18"		
	B	13"	18"		
	C	8"	14"		

HORIZONTAL BEND

D	6"	8"	10"	12"
H	8"	18"		
I	12"	18"		
J	12"	14"		
D	8"	8"	8"	8"

TEE

D	6"	8"	10"	12"
E	6"	16"		
F	12"	20"		
G	12"	20"		

END

NOTES:

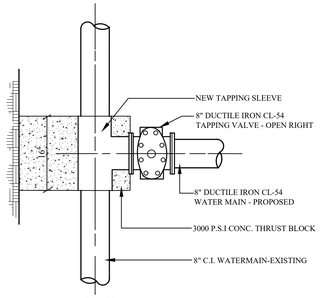
ALL CONCRETE SHALL BE 2500 PSI. (MIN.).

ALL THRUST BLOCKS SHALL BE CARRIED TO UNDISTURBED EARTH:
MINIMUN BEARING AREA SHALL BE 4 SQ. FT.

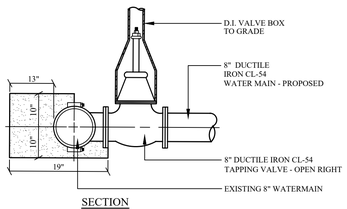
ALL DIMENSIONS SHOWN ARE MINIMUM.

ALL BOLTS SHALL BE COVERED WITH BURLAP BEFORE POURING CONCRETE.

THRUST BLOCK DETAILS
SCALE: N.T.S.

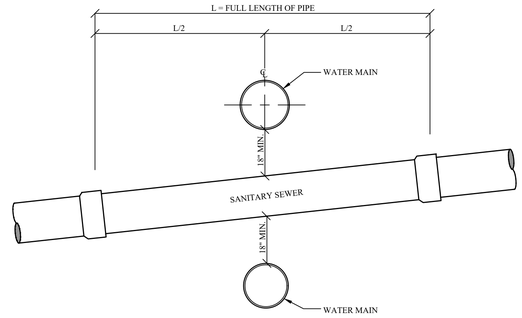


PLAN

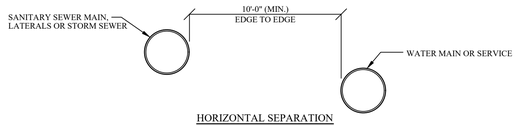


SECTION

TAPPING SLEEVE & GATE VALVE CONNECTION
NTS



VERTICAL SEPARATION



HORIZONTAL SEPARATION

NOTES:

1. WHERE THE SANITARY SEWER MAIN CROSSES THE WATER MAIN AN 18" MINIMUM VERTICAL SEPARATION SHALL BE MAINTAINED. THE DISTANCE SHALL BE MEASURED EDGE TO EDGE.
2. WHERE THE SANITARY SEWER MAIN RUNS PARALLEL TO AN EXISTING OR PROPOSED WATER MAIN A 10' MINIMUM HORIZONTAL SEPARATION SHALL BE MAINTAINED. THE DISTANCE SHALL BE MEASURED EDGE TO EDGE.
3. ANY DEVIATION FROM THE REQUIRED MINIMUM SEPARATIONS SHALL BE SUBJECT TO A REVIEW AND APPROVAL BY THE WESTCHESTER COUNTY DEPARTMENT OF HEALTH PRIOR TO CONSTRUCTION.
4. IF NON PRESSURE CAST IRON, VITRIFIED TILE OR ASBESTOS CEMENT SEWER PIPE PASSES BENEATH A WATER MAIN WITH A VERTICAL SEPARATION(S) OF LESS THAN 18" THEN THE SEWER LINE MUST BE INSTALLED AS FOLLOWS :
   a) THREE (3) LENGTHS OF EITHER CAST IRON OR ASBESTOS CEMENT PRESSURE PIPE MUST BE USED. THE MIDDLE LENGTHS SHALL BE PLACED SO THAT THE JOINTS ARE EQUIDISTANT FROM THE WATER MAIN (SEE DETAIL)
   b) THREE (3) LENGTHS OF PRESSURE PIPE MUST BE TESTED IN THE SAME MANNER AS REQUIRED FOR WATER MAINS. (SEE SPECIFICATIONS)
   c) IN THOSE CASES WHERE, DUE TO FIELD CONDITIONS THE SEWER MUST BE PLACE ABOVE THE WATER MAIN, THEN THE REQUIREMENTS AS STATED IN (A) & (B) MUST BE ADHERED TO.
   d) EACH VARIATION OF WATER-SEWER CROSSING FROM THAT SHOWN ON THIS DETAIL SHALL BE INDIVIDUALLY REVIEWED AND APPROVED BY THE HEALTH DEPT.

SEWER & WATERMAIN CROSSING
N.T.S.

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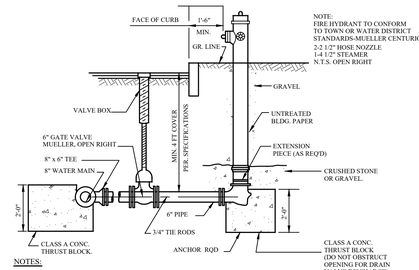


NOTES:

1. ALL CONCRETE BLOCKS TO BEAR UNDISTURBED GROUND
2. (4) 3/4" D BITUMINOUS COATED RODS WILL BE REQUIRED TYING HYDRANT TO VALVE TO WATER MAIN
3. WHERE THE WATER TABLE IS WITHIN 7 FEET OF THE HYDRANT DRAINS SHOULD BE PLUGGED. WHEN THE DRAINS ARE PLUGGED, THE BARRELS MUST BE PUMPED DRY AFTER USE DURING FREEZING WEATHER. WHERE HYDRANT DRAINS ARE NOT PLUGGED, A GRAVEL POCKET OR DRYWELL SHALL BE PROVIDED UNLESS THE NATURAL SOILS WILL PROVIDE ADEQUATE DRAINAGE. HYDRANT DRAINS SHALL NOT BE CONNECTED WITHIN 10 FEET OF SANITARY OR STORM DRAINS

TYPICAL HYDRANT
N.T.S.

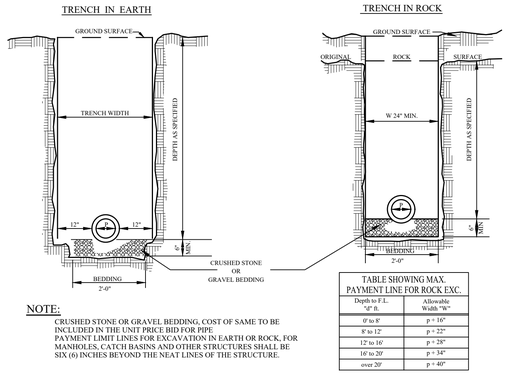
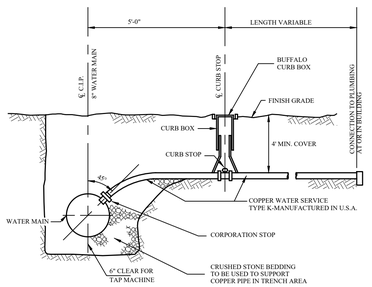


TABLE SHOWING MAX. PAYMENT LINE FOR ROCK EXC.

Depth to F.L. "d" ft.	Allowable Width "Wk"
0' to 8'	p + 16'
8' to 12'	p + 22"
12' to 16'	p + 28"
16' to 20'	p + 34"
over 20'	p + 40"

NOTE:
CRUSHED STONE OR GRAVEL BEDDING, COST OF SAME TO BE INCLUDED IN THE UNIT PRICE BID FOR PIPE
PAYMENT LIMIT LINES FOR EXCAVATION IN EARTH OR ROCK, FOR MANHOLES, CATCH BASINS AND OTHER STRUCTURES SHALL BE SIX (6) INCHES BEYOND THE NEAT LINES OF THE STRUCTURE.

TRENCH DETAIL
N.T.S.



NOTE: CURB STOP AND CORPORATION STOP TO BE MUELLER OR EQUAL.

TYPICAL HOUSE CONNECTION
N.T.S.

Water Main Notes:

1. Water mains crossing house sewers, storm sewers or sanitary sewers shall be laid to provide a vertical separation of a minimum of 18" between the bottom of water main and top of sewer.
2. Water mains passing under house sewers, in addition, shall be protected by providing a vertical separation of 18" minimum from the bottom of the sewer to the top of the water main and adequate structural support for the sewer to prevent excessive deflection of the joints and the sewer settling and breaking the water main. In addition the length of water pipe is to be centered at the point of crossing so that the joints will be equidistant and as far as possible from the sewer. No water main shall pass through or come in contact with any part of a sewer or sewer manhole.
3. The cover over the top of the water main shall be a minimum of 4 feet to a maximum of 5.5 ft.
4. Water mains to be ductile iron pipes (DIP) tyton joint type and fittings shall be factory cement lined class 54. All fittings shall have mechanical joints and shall be pressure rated at 250 psi. All necessary joint materials shall be furnished. Water mains shall be installed in accordance with AWWA standards latest revisions.
5. All gate valves shall be Mueller resilient wedge (turn right open) type and shall meet AWWA standards latest revision. All valves must be installed inside a standard manhole or in large valve box with support.
6. All service connections and small diameter extensions shall conform to AWWA C-151.
7. Retainer glands and concrete thrust blocks or rods shall be used at all locations where restraints exist.
8. Installation and testing of the water main shall be inspected by the Town Engineer.
9. Asbuilt drawings shall show dimensions between all valve turning nuts and finish grade.
10. Installation, disinfection and testing to be witnessed and certified by a licensed professional engineer or Town of Ossining Engineer.
11. All hydrants and valves shall be as manufactured by the Mueller Company.
12. All procedures and instructions set forth under the regulations of Industrial Code 53 shall be followed prior to starting any construction or excavation.
13. The Contractor is advised that before he connects to the existing water system, he must advise and coordinate his operations with the Town of Ossining Water Department's Superintendent.
14. The Contractor is to maintain constant pressure in all water mains at all time. If the need should arise that water service is to be interrupted for a short period, it must be coordinated with the Engineer and the Superintendent of Water.
15. If, during construction, it is found that the required separation of water mains, sanitary sewers, storm sewers, and building sewers cannot be met, the developer or his authorized representative shall contact the Westchester County Department of Health.
16. All types of installed pipe shall be pressure tested and leakage tested in accordance with the latest edition of AWWA Standard C-600.
17. All new, cleaned or repaired water mains shall be disinfected and bacteriological testing performed in accordance with the latest edition of AWWA Standard C-651-99(except for Section 4.4.2 which is not approvable). The specifications include detailed procedures for the adequate flushing, disinfection, and micro biological testing of all water mains.
18. The Westchester County Department of Health shall be given 48 hours notice prior to any pressure/leakage tests and/or disinfection and bacteriological tests performed on the proposed water main.
19. Road openings shall be done in accordance with conditions of permit, and coordinated with the Town of Ossining.

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Engineer: Joseph C. Riina, P.E.
NYS Lic. No. 64431

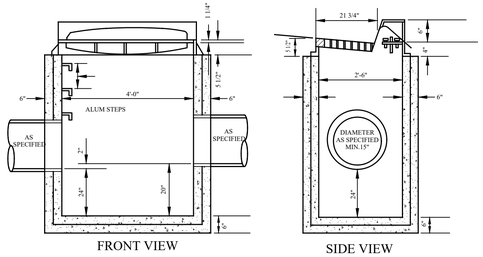
Revisions:		Comments:
No.	Date:	Plan Revisions
1	2/5/19	

SCALE: N.T.S. | DRAWN BY: TK | DATE: 3/23/18

TOWN TAX MAP DATA:
SECTION: 8.4
BLOCK: 28
LOT: 4
LOT AREA: 1.87 AC

WATER SUPPLY DETAILS
PREPARED FOR
MGM DESIGN & CONSTRUCTION GROUP, LLC
5 Hawkes Avenue Town of Ossining Westchester Co., New York

Sheet 6 of 8

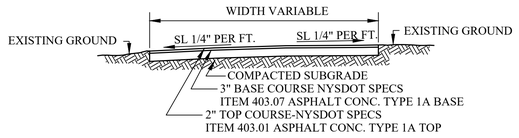


FRONT VIEW SIDE VIEW

NOTE:

TYPE A CATCH BASIN AS SHOWN HERE ON WILL BE UTILIZED WHERE THE NEED FOR A DROP INLET EXISTS. THE CURB TYPE CASTING SHALL BE SUBSTITUTED WITH CAMPBELL FOUNDARY FRAME AND GRATE NO.3433 OR EQUAL.

TYPICAL CATCH BASIN
N.T.S.



NOTE:

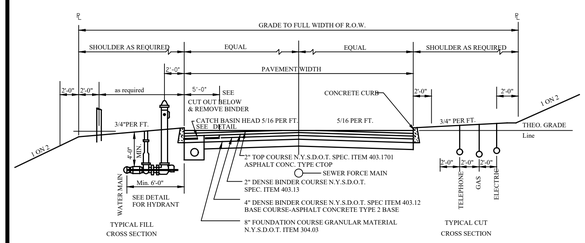
3" CRUSHED STONE MAY BE USED ON SINGLE DRIVEWAYS SERVING ONE HOUSE. 3" BINDER PAINT MIX MUST BE USED FOR DRIVEWAYS SERVING 2 OF MORE HOUSES.

IF DRIVEWAY GRADE EXCEEDS 10%, THEN 2 OFF STREET PARKING AT DRIVEWAY ENTRANCE MUST BE PROVIDED.

THE WIDTH OF THE DRIVEWAY GIVING ACCESS TO POTENTIAL BUILDING LOTS SHALL BE A FUNCTION OF THE INTENSITY OF ITS USE AND SHALL CONSTRUCTED ACCORDANCE WITH THE FOLLOWING TABLE:

NO. OF POTENTIAL DWELLINGS	PAVEMENT WIDTH	RIGHT-OF-WAY WIDTH
1	12'	15'
2	16'	20'
3	18'	25'
4 OR MORE	24'	50'

TYPICAL DRIVEWAY DETAIL
N.T.S.



NOTE:

1. ALL SHOULDERS AND SLOPES TO BE FINE GRADED AND SEEDED WITH APPROVED GRASS SEED AT THE RATE OF 1/2LB PER 100 SQ. FT. AFTER 4" OF TOPSOIL HAS BEEN PLACED.
2. SHOULD ROCK BE ENCOUNTERED IN THE ROAD BED IT MUST BE REMOVED TO THE DEPTH OF THE FINISHED SUBGRADE.
3. INSTALL ALL CURB TYPE CATCH BASINS SUCH THAT THE TOP OF THE CURB INLET CASTING IS AT THE ELEVATION OF THE TOP OF THE CONCRETE CURB AND THE TOP OF THE GRATE IS AT THE ELEVATION OF THE TOP OF THE BINDER COURSE. USE 8" INCH CURB INLET CASTINGS WITH 6" INCH CONCRETE CURBS. PRIOR TO INSTALLATION OF THE TOP WEARING COURSE, CUT OUT THE 2" INCH BINDER COURSE FOR A DISTANCE OF 3 FEET ALL AROUND. BLEVEL THE 2" INCH THICK WEARING COURSE TO THE ELEVATION OF THE CATCH BASIN GRATE.
4. INSTALL ALL MANHOLE FRAMES AND COVERS TO THE GRADE OF THE 2" INCH BINDER COURSE. IMMEDIATELY PRIOR TO PLACING THE 2" INCH TOP WEARING COURSE, RAISE ALL MANHOLE FRAMES AND COVERS USING BRICKS AND MORTAR UNDER THE FRAME.
5. GUIDERAILS SHALL BE INSTALLED SO AS NOT TO INTERFERE WITH UNDERGROUND UTILITIES.

TYPICAL 18 FT WIDE COMMON DRIVEWAY SECTION
N.T.S.

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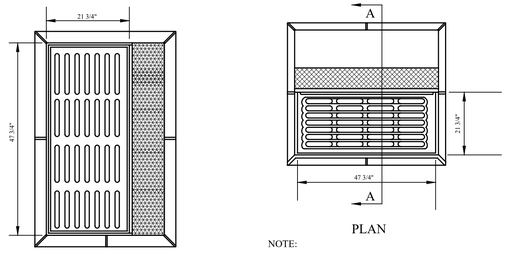


NOTE:

HIGHWAY CATCH BASIN HEAD CURB TYPE "STREAMFLOW GRATING" CAMPBELL FOUNDARY NO.2541 OR EQUAL.

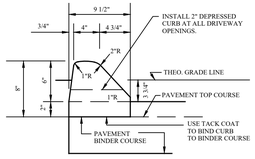
NOTE:

"STORM FLOW GRATING" CURB TYPE CATCH BASIN IN FRAME AND GRATE CAMPBELL FOUNDRY NO. 234B OR EQUAL.

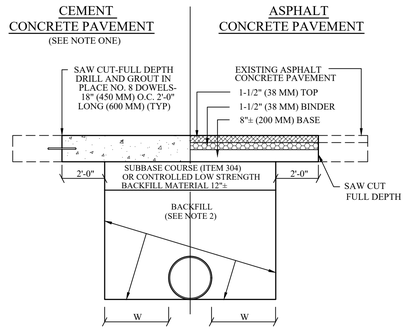
PLAN

ELEVATION SECTION A-A

TYPICAL FRAME AND GRATE
N.T.S.



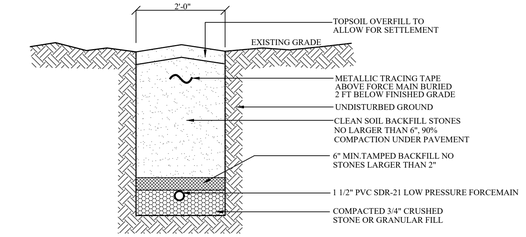
TYPICAL ASPHALT CURB DETAIL
N.T.S.



NOTES:

1. WHEN CONCRETE IS USED, IT SHALL BE REINFORCED PORTLAND CEMENT CONCRETE WITH DOWELS INSTALLED AT THE REQUIRED SPACING. WHEN ASPHALT CONCRETE IS USED. IT SHALL CONSIST OF BASE,BINDER, AND TOP COURSES. THE TOTAL PAVEMENT THICKNESS SHALL MATCH EXISTING, UNLESS OTHERWISE REQUIRED BY THE REGION.
2. WHEN "W" IS LESS THAN 18" (450 MM), CONTROLLED LOW STRENGTH BACKFILL MATERIAL SHALL BE USED. WHEN "W" IS 18" (450 MM) OR MORE, BACKFILL SHALL BE WITH SELECT GRANULAR MATERIAL FROM THE BOTTOM OF THE TRENCH TO SECTION 200, EARTHWORK OF THE NEW YORK STATE DEPARTMENT OF TRANSPORTATION CURRENT SPECIFICATIONS AND ADDENDA.

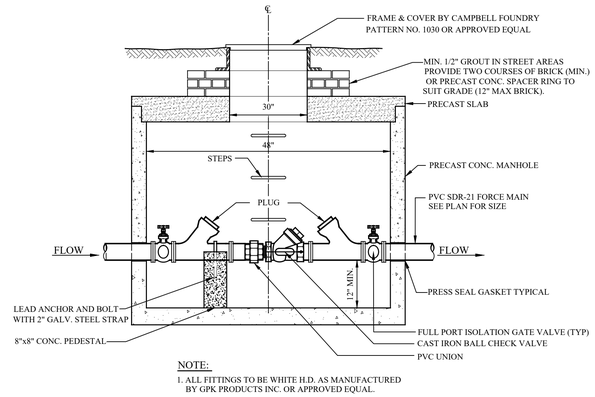
NYS DOT
PAVEMENT REPLACEMENT DETAIL
NTS



NOTES:

1. WHIEN FORCEMAIN IS INSTALLED IN FILL SECTION, COMPACTED CRUSHED STONE, GRAVEL, OR APPROVED STRUCTURAL FILL TO BE INSTALLED.
2. FORCEMAIN TO BE INSTALLED TO ALL APPLICABLE STANDARDS, AND SHALL BE TESTED TO WITHSTAND 2.5 TIMES THE MAXIMUM OPERATING PRESSURE OR A MIN. 50 PSI TEST PRESSURE FOR 2 HOURS.

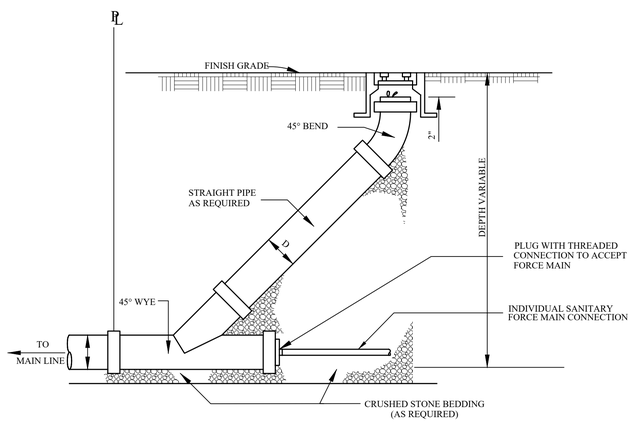
FORCE-MAIN DETAIL
NTS



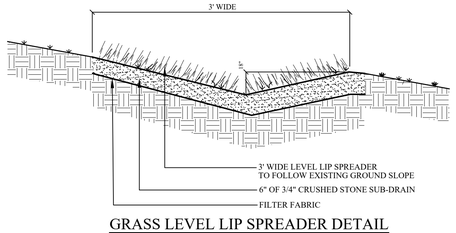
NOTE:

1. ALL FITTINGS TO BE WHITE H.D. AS MANUFACTURED BY GPK PRODUCTS INC. OR APPROVED EQUAL.

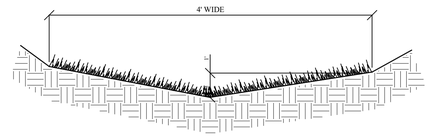
FORCE MAIN CLEAN OUT MANHOLE DETAIL
N.T.S.



TYPICAL SEWER LINE CLEANOUT
N.T.S.



GRASS LEVEL LIP SPREADER DETAIL
SCALE: N.T.S.



GRASS SWALE DETAIL
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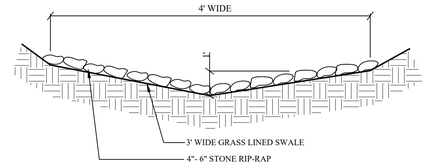

RIP-RAP SWALE DETAIL
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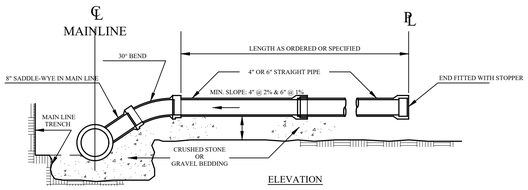

ELEVATION

PLAN

TYPICAL SEWER TO HOUSE CONNECTION
N.T.S.

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Engineer: Joseph C. Riina, P.E.
NYS Lic. No. 64431

Revisions:

No.	Date	Comments: Plan Revisions
1	2/5/19	

SCALE: N.T.S. | DRAWN BY: TK | DATE: 3/23/18

TOWN TAX MAP DATA:
SECTION: 8.4
BLOCK: 28
LOT: 4
LOT AREA: 1.87 AC

SANITARY SEWER AND STORM SYSTEM DETAILS
PREPARED FOR
MGM DESIGN & CONSTRUCTION GROUP, LLC
5 Hawkes Avenue Town of Ossining Westchester Co., New York

Sheet 7 of 8

ENGINEERING SPECIFICATIONS FOR CULTEC CHAMBERS

SCOPE

CULTEC CONTACTOR® AND RECHARGER™ POLYETHYLENE CHAMBERS ARE DESIGNED FOR UNDERGROUND STORMWATER AND/OR ON-SITE WASTEWATER MANAGEMENT. THE CHAMBERS MAY BE USED FOR RETENTION, RECHARGING, DETENTION, OR CONTROLLING THE FLOW OF ON-SITE STORMWATER RUNOFF.

MATERIAL PROPERTIES

UNITS ARE MANUFACTURED FROM HIGH MOLECULAR WEIGHT HIGH DENSITY POLYETHYLENE (HMWHDPE).

CHAMBER REQUIREMENTS

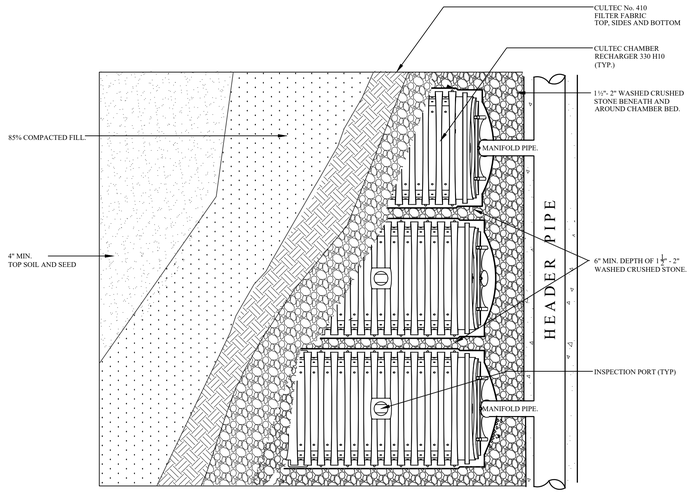
1. THE CHAMBERS WILL BE MANUFACTURED BY CULTEC, INC. OF BROOKFIELD, CT (203-775-4416).
2. CHAMBERS ARE MANUFACTURED WITH AN OPEN BOTTOM, INTEGRALLY FORMED END WALLS AND PERFORATED SIDEWALLS.
3. THE CHAMBERS MUST HAVE ACHIEVED A MINIMUM OF 5 YEARS INSTALLATION HISTORY WITHOUT STRUCTURAL DEFICIENCIES.
4. CONTACTOR® AND RECHARGER™ CHAMBERS WILL BE JOINED USING AN INTERLOCKING OVERLAPPING RIB METHOD. CONNECTIONS MUST BE FULLY SHOULDERED OVERLAPPING RIB, HAVING NO SEPARATE COUPLINGS OR SEPARATE END WALLS.
5. THE CHAMBERS MUST NOT UTILIZE SEPARATE END PLATES OR SEPARATE END WALLS. THE CHAMBER'S END WALL WILL BE AN INTEGRAL PART OF THE CONTINUOUSLY FORMED UNIT.
6. THE STARTER CHAMBER UNIT MUST BE UNIFORMLY FORMED AS A WHOLE PART OF THE ELONGATED CHAMBER UNIT HAVING TWO FULLY FORMED INTEGRAL END WALLS, AND HAVING NO SEPARATE END PLATES OR SEPARATE END WALLS.
7. INTERMEDIATE UNITS MUST BE UNIFORMLY FORMED AS A WHOLE PART OF THE ELONGATED CHAMBER UNIT HAVING AT LEAST ONE FULLY FORMED INTEGRAL END WALL, AND HAVING NO SEPARATE END PLATES OR SEPARATE END WALLS.
8. THE END CHAMBER UNIT MUST BE UNIFORMLY FORMED AS A WHOLE PART OF THE ELONGATED CHAMBER UNIT HAVING ONE FULLY FORMED INTEGRAL END WALL, AND HAVING NO SEPARATE END PLATES OR SEPARATE END WALLS.
9. ALL CHAMBERS WILL BE ARCHED IN SHAPE AND HAVE 3/4" OR 7/8" ROUND DISCHARGE HOLES BORED INTO THE SIDES OF EACH UNIT FOR WATER INFILTRATION OR EXFILTRATION.
10. CHAMBERS MUST HAVE HORIZONTAL STIFFENING FLEX REDUCTION STEPS BETWEEN RIBS AS DETAILED.
11. H-10 UNITS ARE DESIGNED ACCORDING TO AASHTO (AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRAFFIC OFFICIALS) LOAD RATING OF 16,000 LBS./AXLE WITH 6" OF COMPACTED COVER.
12. H-20 UNITS ARE DESIGNED ACCORDING TO AASHTO LOAD RATING OF 32,000 LBS./AXLE WITH12"-14" OF COMPACTED COVER UNDER THE PAVEMENT WHEN USING CONTACTOR® HD HEAVY DUTY CHAMBERS AND 14" - 18" OF COMPACTED COVER WHEN USING RECHARGER™ HD HEAVY DUTY CHAMBERS. H-20 UNITS WILL BE FORMED WITH A COLORED STRIPE SO THEY CAN BE EASILY IDENTIFIED AS AN H-20 UNIT. HEAVY DUTY HD H-20 UNITS MUST MEET LOAD TESTING TO 20,000 LBS./SQ. FT. BENEATH ONE FOOT OF 85% COMPACTED FILL, WHICH EXCEEDS AASHTO H-20 RATING.
13. POLYETHYLENE CHAMBERS MUST HAVE THE ABILITY TO ACCEPT AND CARRY UP TO 4" PIPE THROUGH ITS INTEGRALLY FORMED VERTICAL SUPPORT WALL.
14. SEPARATE INLET OR END PLATES CANNOT BE USED WITH THIS UNIT.
15. UNITS WILL HAVE AN OPTIONAL RAISED INSPECTION PORT AT THE TOP OF THE ARCH IN THE CENTER OF EACH UNIT.
16. REPEATING SUPPORTING END WALLS AND SUPPORTING STRUTS ON END WALLS OF ELONGATED CHAMBER SHALL BE SPACED EVERY SO MANY FEET AS FOLLOWS:

Model	feet	Model	feet
~~Contactor® Field Drain™ C-1~~	~~8.00~~	~~Contactor® 100~~	~~7.50~~
~~Contactor® Field Drain™ C-2~~	~~8.00~~	~~Contactor® 125~~	~~6.25~~
~~Contactor® Field Drain™ C-3~~	~~8.00~~	~~Recharger™ 180~~	~~6.33~~
~~Contactor® Field Drain™ C-4~~	~~8.00~~	~~Recharger™ 280~~	~~7.00~~
~~Contactor® EZ-24~~	~~8.00~~	~~Recharger™ 330~~	~~6.25~~
~~Contactor® 75~~	~~6.25~~	~~Recharger™ 400~~	~~6.17~~

Model	Length Feet	Lay-up Length Feet	Width Inches	Heigth Inches	Invert heigth Inches	Effective Base Area ft²/ft	Storage Capacity ft³/ft	# of Ribs	# of Perforations	Max Inlet Opening Inches
~~Contactor® Field Drain C-1~~	~~8.50~~	~~8.00~~	~~12~~	~~8.50~~	~~3.00~~	~~0.875~~	~~0.42~~	~~25~~	~~20~~	~~4.5~~
~~Contactor® Field Drain C-2~~	~~8.50~~	~~8.00~~	~~24~~	~~8.50~~	~~3.00~~	~~1.750~~	~~0.84~~	~~50~~	~~40~~	~~4.5~~
~~Contactor® Field Drain C-3~~	~~8.50~~	~~8.00~~	~~36~~	~~8.50~~	~~3.00~~	~~2.625~~	~~1.26~~	~~75~~	~~60~~	~~4.5~~
~~Contactor® Field Drain C-4~~	~~8.50~~	~~8.00~~	~~48~~	~~8.50~~	~~3.00~~	~~3.500~~	~~1.68~~	~~100~~	~~80~~	~~4.5~~
~~Contactor® EZ-24~~	~~8.50~~	~~8.00~~	~~16~~	~~12.50~~	~~6.00~~	~~1.150~~	~~0.82~~	~~10~~	~~36~~	~~6~~
~~Contactor® 75~~	~~7.20~~	~~6.25~~	~~30~~	~~12.38~~	~~5.50~~	~~2.200~~	~~1.60~~	~~15~~	~~56~~	~~10~~
~~Contactor® 100~~	~~8.00~~	~~7.50~~	~~36~~	~~12.50~~	~~6.00~~	~~2.700~~	~~1.86~~	~~16~~	~~56~~	~~10~~
~~Contactor® 125~~	~~7.50~~	~~6.25~~	~~30~~	~~18.00~~	~~11.50~~	~~2.200~~	~~2.22~~	~~15~~	~~52~~	~~12~~
~~Recharger™180~~	~~7.33~~	~~6.33~~	~~36~~	~~20.50~~	~~14.00~~	~~2.700~~	~~3.45~~	~~14~~	~~78~~	~~15~~
~~Recharger™280~~	~~8.00~~	~~7.00~~	~~47~~	~~26.50~~	~~20.50~~	~~3.620~~	~~6.08~~	~~15~~	~~92~~	~~18~~
Recharger™330	7.50	6.25	52	30.50	24.00	4.000	7.44	min. 14	min. 72	24
~~Recharger™400~~	~~7.50~~	~~6.17~~	~~52~~	~~32.50~~	~~25.00~~	~~3.810~~	~~7.96~~	~~14~~	~~78~~	~~24~~

CHAMBER INSTALLATION

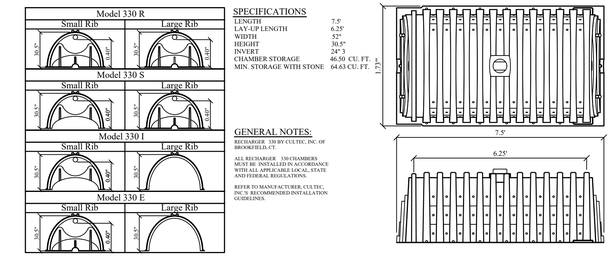
1. CULTEC NO. 410™ FILTER FABRIC SHALL BE USED AS INDICATED IN THE INSTALLATION REQUIREMENTS.
2. ALL REQUIRED STONE MUST BE CLEAN WASHED 1 ½ INCH TO 2-INCH DIAMETER STONE.
3. OVERLAPPING INTERLOCKING RIBS WILL CONNECT UNITS.
4. INSTALLATION SHALL BE IN ACCORDANCE WITH CULTEC INSTALLATION INSTRUCTIONS AND THOSE ISSUED BY THE LOCAL HEALTH DEPARTMENT. MANUFACTURING PROCESS CHAMBERS WILL BE MANUFACTURED USING VACUUM THERMFORMING.



CULTEC CHAMBER SYSTEM - H10 INSTALLATION UNPAVED

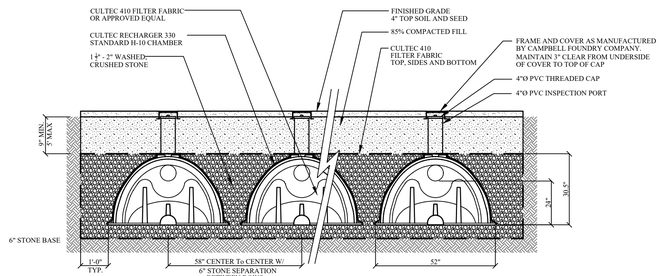
PLAN VIEW DETAIL

N.T.S.



RECHARGER™330 SECTION VIEW

N.T.S.

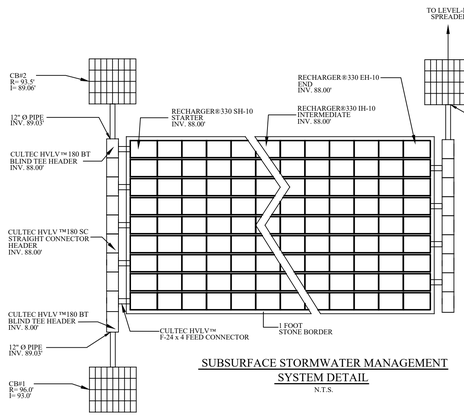


TYPICAL CROSS SECTION RECHARGER 330

UNPAVED H-10 CULTEC CHAMBER SYSTEM

(10.35 CF./ LF.)

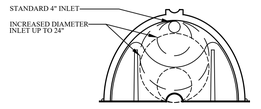
N.T.S.



SUBSURFACE STORMWATER MANAGEMENT

SYSTEM DETAIL

N.T.S.



EXAMPLE OF INLET SIZE CHANGE

FOR RECHARGER™ 330

N.T.S.

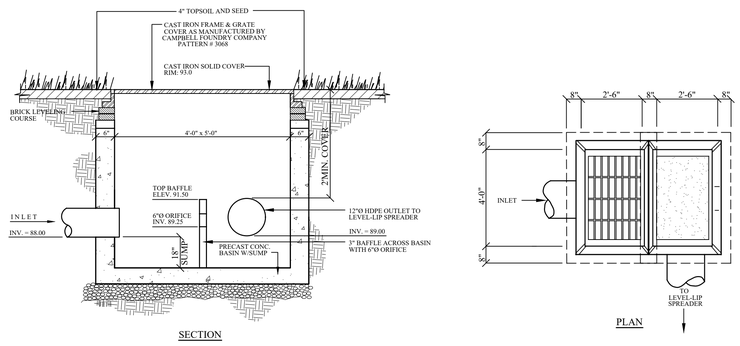
DESIGN NOTES: RECHARGER 330

RECHARGER 330 IS 6.25' X 52" X 30.5"

- DESIGN UNIT BASED ON RECOMMENDED METHOD OF INSTALLATION.
- CAPACITY OF VOID PROVIDED BY STONE IS CALCULATED @ 40% OF TOTAL VOLUME.*
- CAPACITY OF RECHARGER 330: 7.44 CUBIC FEET PER LINEAR FOOT.
- DESIGN UNIT CAPACITY IS: 10.35 CUBIC FEET PER LINEAR FOOT.
- TOTAL STONE REQUIRED PER UNIT: 45.33 CUBIC FEET.
- TOTAL AREA PER UNIT: 30.19 SF.
- DEPTH OF INSTALLATION TO TOP OF CHAMBER IS 3.05'
- 1' STONE BORDER IS REQUIRED AROUND THE CHAMBER BED.

MANUFACTURED BY CULTEC INC. OF 878 FEDERAL ROAD BROOKFIELD, CT 06804 USA 203-775-4416

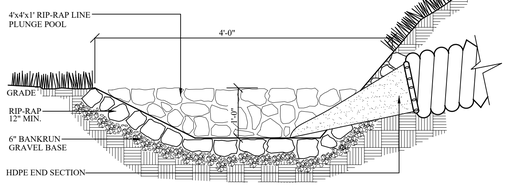
* STONE USED FOR BACKFILL OF CHAMBER SHOULD BE ANALYZED FOR TRUE CAPACITY AND PERCENTAGE OF VARIATION SHOULD BE TAKEN INTO ACCOUNT.



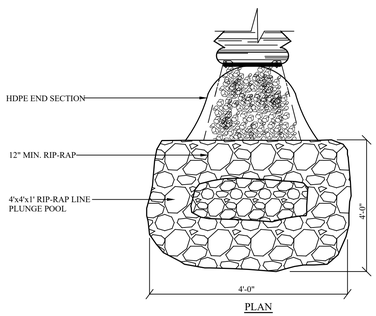
SECTION PLAN

OUTLET CONTROL STRUCTURE

N.T.S



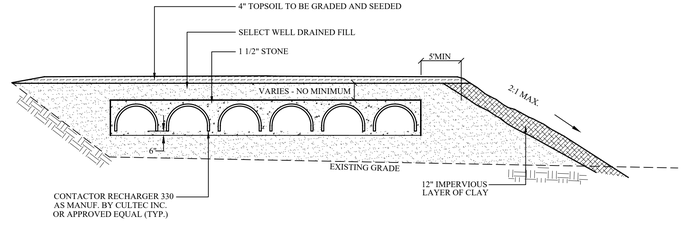
SECTION



PLAN

END SECTION W/PLUNGE POOL DETAIL

N.T.S.



TYPICAL RECHARGER BED SECTION

N.T.S.

NOTES:

1. UNAUTHORIZED ALTERATIONS OR ADDITIONS TO THIS DRAWING IS A VIOLATION OF SECTION 7209 (2) OF THE NEW YORK STATE EDUCATION LAW.

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STORMWATER MANAGEMENT DETAILS
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Sheet 8 of 8