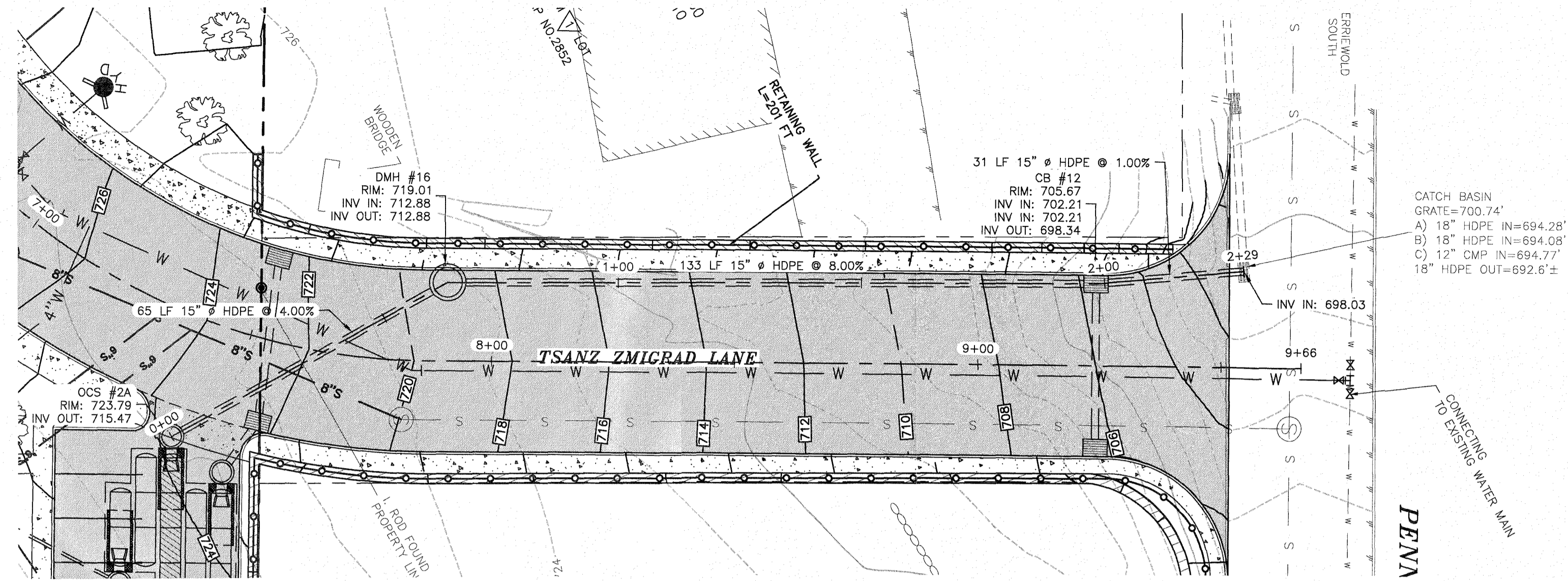
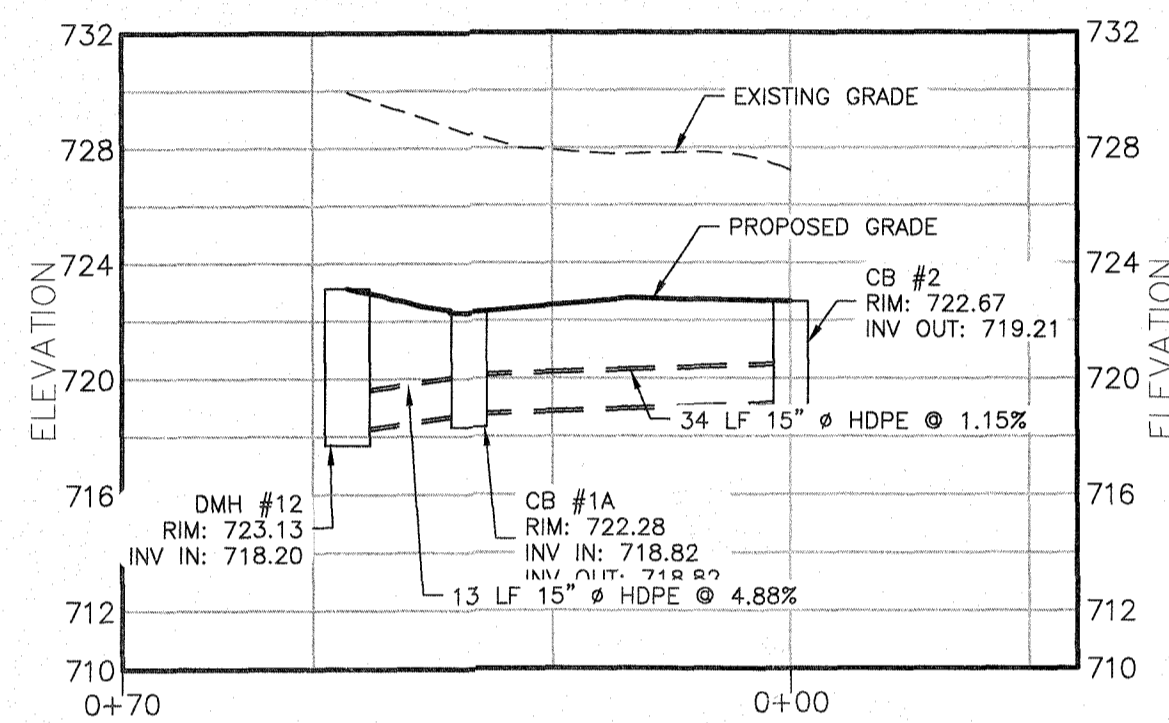


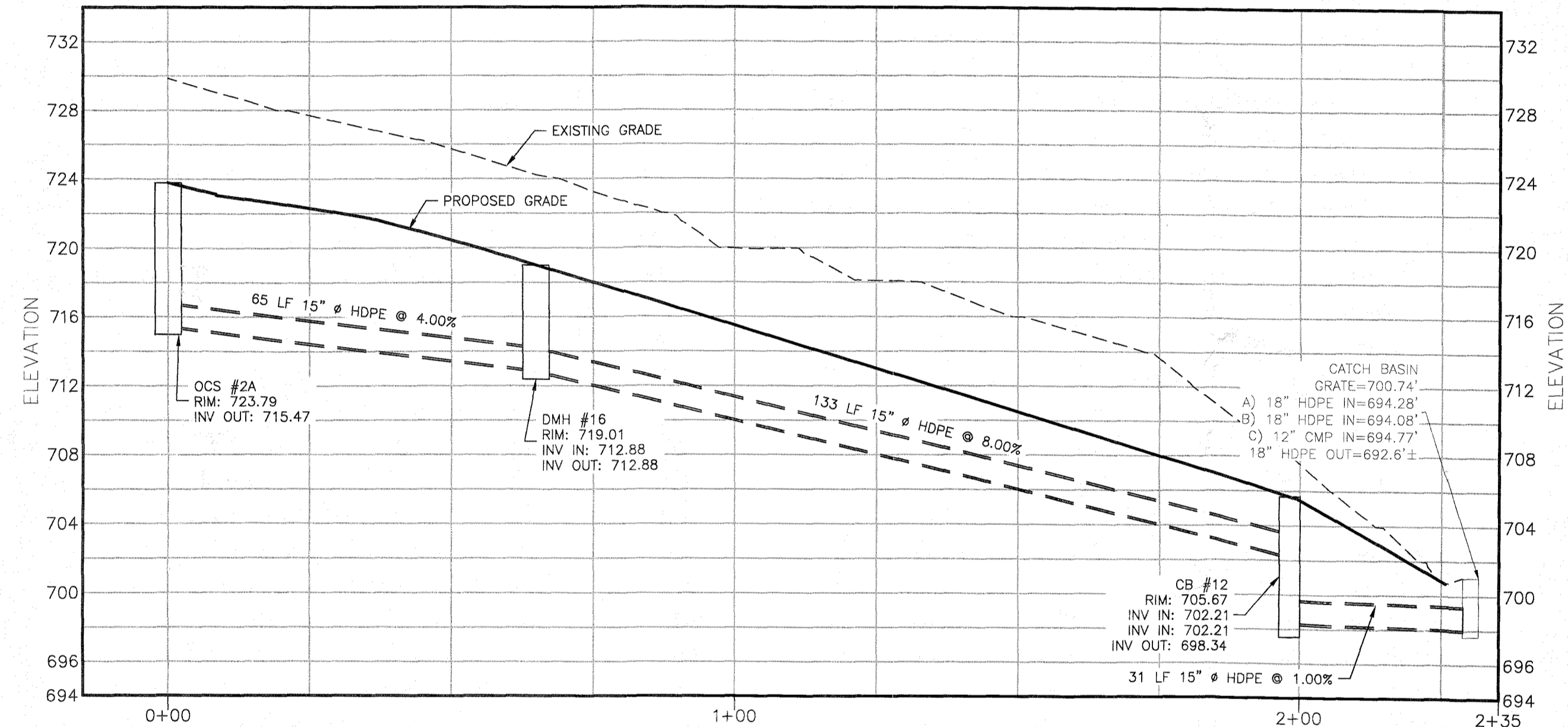
DRAINAGE PLAN-10
SCALE: 1"=20'



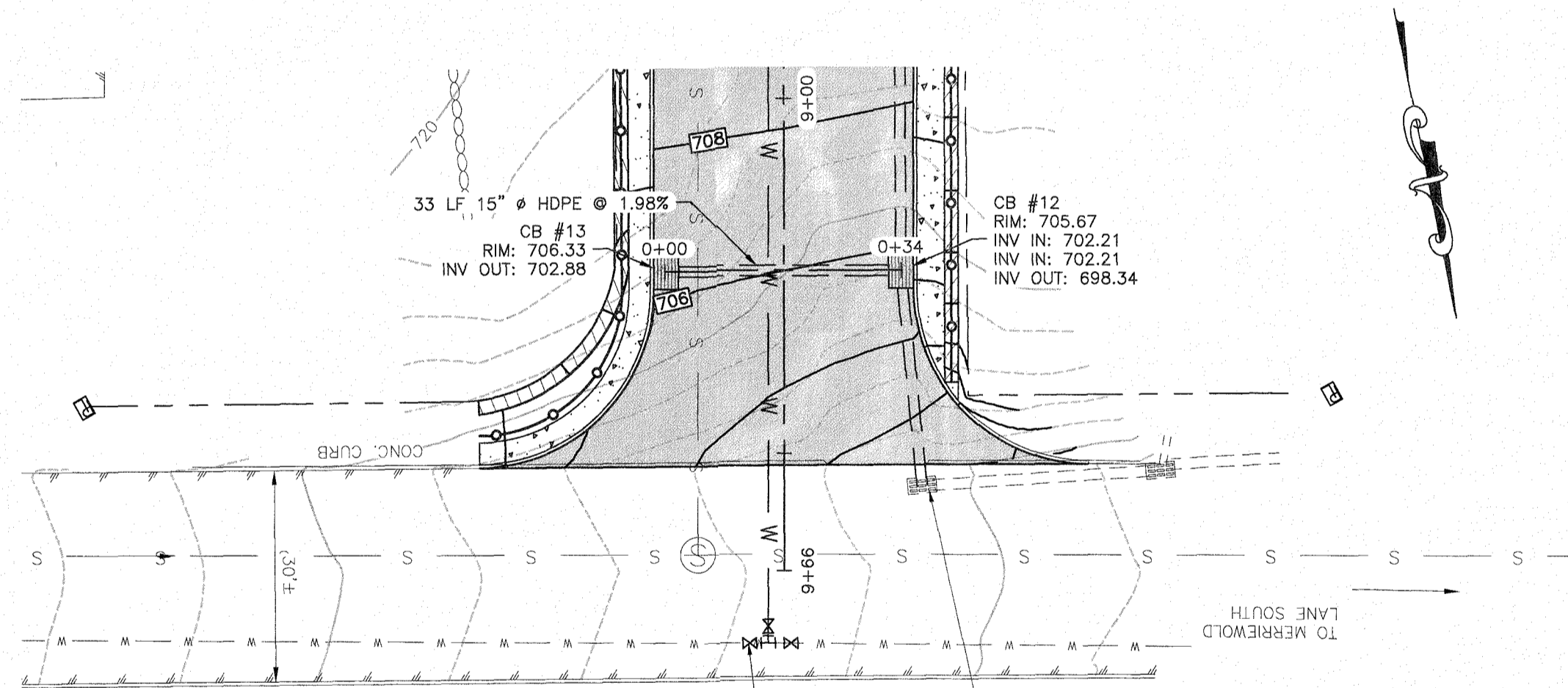
DRAINAGE PLAN-11
SCALE: 1"=20'



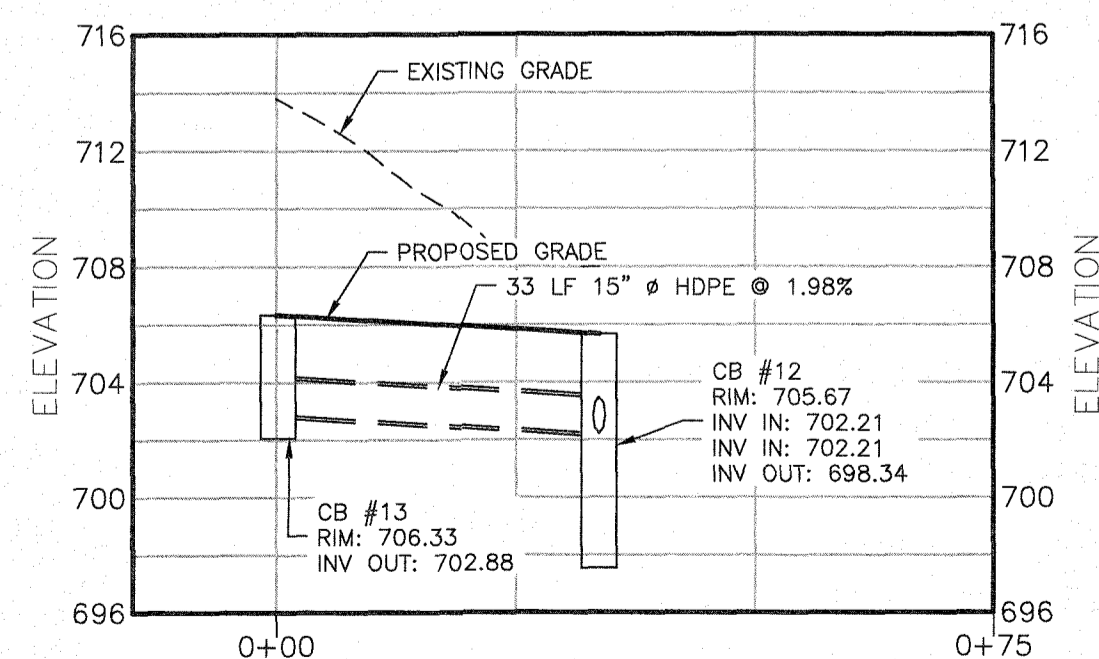
DRAINAGE PROFILE-10
HORIZONTAL SCALE: 1"=20'
VERTICAL SCALE: 1"=2'



DRAINAGE PROFILE-11
HORIZONTAL SCALE: 1"=20'
VERTICAL SCALE: 1"=2'

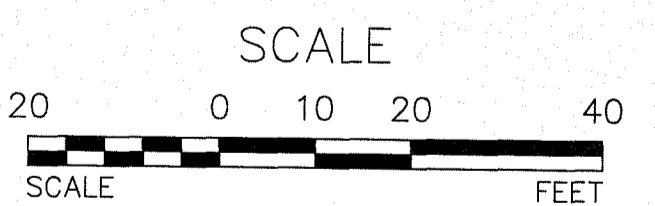


DRAINAGE PLAN-12
SCALE: 1"=20'



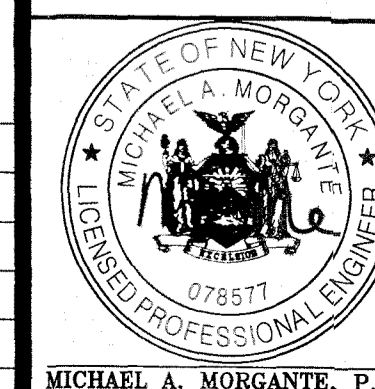
DRAINAGE PROFILE-12
HORIZONTAL SCALE: 1"=20'
VERTICAL SCALE: 1"=2'

Village of South Blooming Grove
APPROVED
Planning Board
Chairperson
SEP 30 2025
Date



FOR PLANNING BOARD APPROVAL ONLY

ARDEN CONSULTING ENGINEERS, PLLC
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SITE PLAN PREPARED FOR
55 MANGIN ROAD
VILLAGE OF SOUTH BLOOMING GROVE,
ORANGE COUNTY, NEW YORK

55 MANGIN ROAD

JOB#: 25-020
SCALE: AS NOTED
DATE: 09-29-25
DRAWN: MM
CHECKED: MM
SHEET NO. 11 OF 20

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REV.	BY	DATE	DESCRIPTION
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BEST MANAGEMENT PRACTICES FOR SITE FACILITY MAINTENANCE

THE OWNER WILL BE RESPONSIBLE FOR THE MAINTENANCE AND OPERATION OF ALL SITE RELATED FACILITIES, INCLUDING THE STORM WATER SEDIMENT AND DETENTION BASINS AND THE FOLLOWING MEASURES AND/OR STRUCTURES, AS APPLICABLE AND SHOWN ON THE PLANS:

WATER QUALITY INLETS

1. WATER QUALITY INLETS SHALL BE CLEANED OUT AT LEAST TWICE A YEAR TO REMOVE POLLUTANTS. REMOVED MATERIAL SHOULD BE TAKEN TO A TREATMENT PLANT OR APPROVED LANDFILL FOR DISPOSAL.
2. STORM WATER INLETS THROUGHOUT THE SITE SHALL BE INSPECTED ANNUALLY FOR ACCUMULATED SEDIMENT OR OTHER PROBLEMS AND REPAIRED AS NECESSARY.

PARKING AND ROADWAY PAVEMENTS

1. PARKING AREA AND ROADWAY PAVEMENTS SHALL BE SWEEPED ON A REGULAR BASIS TO REMOVE ACCUMULATED SEDIMENT. COLLECTED SEDIMENT SHALL BE REMOVED TO AN APPROVED DISPOSAL SITE WHICH WILL NOT ALLOW THE RE-ENTRANCE OF SILT INTO THE STORM WATER DRAINAGE SYSTEM.

VEGETATIVE STABILIZATION

1. ALL VEGETATIVE PLANTING ON AREAS WHICH HAVE BEEN DISTURBED AND ARE FINISH GRADED SHALL BE INSPECTED AFTER EACH RAIN EVENT. PLANTING (OR SEEDING) SHALL BE MAINTAINED IN A VIABLE CONDITION TO STABILIZE THE SOIL AND TO PREVENT SOIL EROSION. RESTORE ALL SITE PLANTING AND/OR SEEDING WHICH HAS BEEN DAMAGED TO A VIABLE CONDITION.
2. IF VEGETATIVE STABILIZATION HAS BEEN DAMAGED FROM STORM WATER EROSION, CORRECT UPSTREAM CONDITIONS WHICH CAUSED THE EROSION. CHECK DAMS MAY BE REQUIRED IN DRAINAGE WAYS, AND STONE OUTFALL APRONS MAY BE REQUIRED TO BE REPAIRED AT STORM WATER OUTLETS.

CONSTRUCTION ACTIVITY

1. CONSTRUCTION ACTIVITIES WILL OCCUR DURING WEEKDAYS COMMENCING AT 7:00 AM AND TERMINATING AT 6:00 PM

EROSION AND SILTATION CONTROL NOTES:

1. GRADED AREAS - UPPER ELEVATIONS: PROVIDE TEMPORARY DRAINAGE SWALES, 1% GRADE MIN., TO DIRECT RUNOFF AWAY FROM CONSTRUCTION SITES. DISCHARGE AREAS AND ENERGY DISPERSION REQUIREMENTS TO BE ACCEPTABLE TO OWNER.
2. GRADED AREAS - LOWER ELEVATIONS: PROVIDE DRAINAGE SWALES, 1% MIN. GRADES, WITH STAKED AND SECURED HAY BALE BERMS TO PREVENT DOWN STREAM AND DOWN GRADIENT SILTATION.

SEDIMENT & EROSION CONTROL NOTES & CONSTRUCTION SEQUENCING

1. CONSTRUCT STABILIZED CONSTRUCTION ENTRANCES FOR ALL ROAD AND DRIVE ENTRANCES. STREETS SHALL BE CLEANED DAILY.
2. INSTALL SEDIMENT BARRIERS/SWALES/DITCHES/DIKES AT DOWN SLOPE AREAS FROM ALL PROPOSED GRADING OPERATIONS, AND INSTALL OTHER SEDIMENTATION AND EROSION CONTROL STRUCTURES OR MEASURES AS SHOWN ON THE DRAWINGS.
3. LAND DISTURBANCE SHALL BE LIMITED TO ONLY THAT AREA NECESSARY FOR DEVELOPMENT. NO MORE THAN FIVE (5) ACRES OF UNPROTECTED SOIL SHALL BE DISTURBED AT ONE TIME. PREVIOUS EARTHWORK SHALL BE STABILIZED AS SPECIFIED BEFORE ADDITIONAL AREA IS EXPOSED. EXISTING DWELLINGS AND STRUCTURES SHALL BE REMOVED PRIOR TO ANY SITE CLEARING AND SOIL DISTURBANCE.
4. CLEAR EXISTING TREES AND VEGETATION FROM AREAS TO BE EXCAVATED OR FILLED, THEN STRIP AND STOCKPILE TOPSOIL FROM ALL AREAS TO BE DISTURBED. SEED STOCKPILED TOPSOIL WITH TEMPORARY RYEGRASS COVER AS SPECIFIED BELOW (SEE NOTE B), AND ERECT A SILT FENCE AROUND THE STOCKPILE.
5. PROTECT ALL TREES WHICH ARE TO REMAIN AND WHICH ARE IN OR NEAR CONSTRUCTION AREAS.
6. PERFORM NECESSARY EXCAVATION OR FILL OPERATIONS TO BRING SITE TO DESIRED SUBGRADE.
7. INSTALL SEDIMENT BARRIERS AROUND ALL STORM DRAIN INLETS, OR MODIFY SEDIMENT CONTROL MEASURES INSTALLED IN #2 ABOVE AND MAINTAIN UNTIL ALL DISTURBED AREAS ARE STABILIZED WITH VEGETATION AND ALL PAVEMENTS ARE PAVED WITH A BASE COURSE.
8. TEMPORARILY SEED ALL DISTURBED AREAS WHICH WILL REMAIN UNDISTURBED FOR A PERIOD OF 15 DAYS OR MORE AND WHICH WILL NOT BE UNDER CONSTRUCTION WITHIN 30 DAYS IN ACCORDANCE WITH SPECIFICATION FOR VEGETATIVE ESTABLISHMENT.
9. IF CONSTRUCTION IS SUSPENDED OR COMPLETED, ALL DISTURBED AREAS SHALL BE SEED AND MULCHED IMMEDIATELY. ALL SLOPES STEEPER THAN ONE ON THREE (1/3) AND PERIMETER TRENCHES AND TRAP EMBANKMENTS SHALL, ON COMPLETION, BE IMMEDIATELY STABILIZED WITH TEMPORARY SEEDING AND MULCHING.
10. AFTER COMPLETION OF SITE CONSTRUCTION, FINE GRADE AND SPREAD TOPSOIL ON ALL LAWN AREAS AND SEED WITH PERMANENT LAWN MIX AS DISCUSSED ON THE SPECIFICATIONS FOR VEGETATIVE ESTABLISHMENT ON THIS SHEET.
11. DURING THE PROGRESS OF CONSTRUCTION, MAINTAIN ALL SEDIMENT TRAPS, BARRIERS, AND FILTERS AS NECESSARY TO PREVENT THEIR BEING CLOGGED UP WITH SEDIMENT.
12. AFTER PAVEMENTS ARE INSTALLED AND PERMANENT VEGETATIVE COVER AND PLANTINGS ARE ESTABLISHED, REMOVE SEDIMENT BARRIERS AND SEED THOSE DISTURBED AREAS.
13. MAINTAIN ALL SEED AND PLANTED AREAS TO INSURE A VIABLE STABILIZED VEGETATIVE COVER.
14. STRUCTURAL MEASURES MUST BE MAINTAINED TO BE EFFECTIVE. IN GENERAL, THESE MEASURES MUST BE PERIODICALLY INSPECTED TO INSURE STRUCTURAL INTEGRITY, TO DETECT VANDALISM DAMAGE, AND FOR CLEANING AND REPAIR WHENEVER NECESSARY.
15. DURING CONSTRUCTION, ALL STRUCTURES SHOULD BE INSPECTED WEEKLY AND AFTER EVERY RAIN. REMOVE ACCUMULATED SEDIMENT AND STOCKPILE AND STABILIZE IN AN AREA NOT SUBJECT TO FURTHER EROSION.
16. AFTER CONSTRUCTION IS COMPLETED, PERMANENT SEDIMENT OR EROSION CONTROL STRUCTURES SHOULD BE INSPECTED AT LEAST SEMI-ANNUALLY AND AFTER EVERY RAIN.

SPECIFICATIONS FOR VEGETATIVE ESTABLISHMENT:

1. PERMANENT SEEDING:
 - A. SEEDBED PREPARATION: AREA TO BE SEED SHALL BE LOOSE AND FRABLE TO A DEPTH OF AT LEAST 3 INCHES. THE TOP LAYER SHALL BE LOOSENED BY RAKING, DISKING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING OCCURS. FOR SITES LESS THAN 5 ACRES, APPLY 100 POUNDS OF DOLOMITIC LIMESTONE AND 21 POUNDS OF 10-20-20 FERTILIZER PER 1,000 SF. HARROW OR DISK LIME AND FERTILIZER INTO THE SOIL TO A DEPTH OF AT LEAST 3 INCHES ON SLOPES FLATTER THAN 3:1.
 - B. SEEDING: APPLY 5-6 POUNDS PER 1,000 SF OF SEED MIX BETWEEN FEBRUARY 1 AND MAY 15 OR BETWEEN AUGUST 15 AND OCTOBER 31. APPLY SEED UNIFORMLY ON A MOIST FIRM SEEDBED WITH A CYCLONE SEEDER DRILL, CULTIPACK SEEDER OR HYDROSEEDER (SLURRY INCLUDES SEEDS AND FERTILIZER, RECOMMENDED ON STEEP SLOPES ONLY). MAXIMUM SEED DEPTH SHOULD BE 1/4 INCH IN CLAYEY SOILS AND 1/2 INCH IN SANDY SOILS WHEN USING OTHER THAN THE HYDROSEEDER METHOD. IRRIGATE IF SOIL MOISTURE IS DEFICIENT TO SUPPORT ADEQUATE GROWTH UNTIL VEGETATION IS FIRMLY ESTABLISHED. SELECT SEED MIXTURES FROM SECTION 3, NYS GUIDELINES FOR URBAN EROSION & SEDIMENT CONTROL.
 - C. MULCHING: MULCH SHALL BE APPLIED TO ALL SEEDED AREAS IMMEDIATELY AFTER SEEDING. DURING THE TIME PERIODS WHEN SEEDING IS NOT PERMITTED, MULCH SHALL BE APPLIED IMMEDIATELY AFTER GRADING. MULCH SHALL BE UNROTATED, UNCHOPPED, SMALL GRAIN STRAW APPLIED AT A RATE OF 2 TONS PER ACRE OR 90 POUNDS PER 1,000 SQUARE FEET (2 BALES). IF A MULCH ANCHORING TOOL IS USED, APPLY 2.5 TONS PER ACRE. MULCH MATERIALS SHALL BE RELATIVELY FREE OF ALL KINDS OF WEEDS AND COMPLETELY FREE OF PROHIBITED NOXIOUS WEEDS. SPREAD MULCH UNIFORMLY, MECHANICALLY, OR BY HAND TO A DEPTH OF 1-2 INCHES.
 - D. SECURING STRAW MULCH: STRAW MULCH SHALL BE SECURED IMMEDIATELY FOLLOWING MULCH APPLICATIONS TO MINIMIZE MOVEMENT OF WIND OR WATER. THE FOLLOWING METHODS ARE PERMITTED:
 - i. USE A MULCH ANCHORING TOOL WHICH IS DESIGNED TO PUNCH AND ANCHOR FABRIC TYPE MULCH INTO THE SOIL SURFACE TO A MINIMUM DEPTH OF 2 INCHES. THIS IS THE MOST EFFECTIVE METHOD FOR SECURING MULCH. HOWEVER, IT IS LIMITED TO RELATIVELY FLAT AREAS WHERE EQUIPMENT CAN OPERATE SAFELY.
 - ii. WOOD CELLULOSE FIBER MAY BE USED FOR ANCHORING STRAW. APPLY THE FIBER BINDER AT A NET DRY WEIGHT OF 750 POUNDS PER ACRE. IF MIXED WITH WATER, USE 50 POUNDS OF WOOD CELLULOSE FIBER PER 100 GALLONS OF WATER.
 - iii. LIQUID BINDERS MAY BE USED AND APPLIED HEAVIER AT THE EDGES WHERE WIND CATCHES MULCH, SUCH AS IN VALLEYS AND ON CRESTS OF SLOPES. THE REMAINDER OF THE AREA SHOULD APPEAR UNIFORM AFTER BINDER APPLICATION.
 - iv. LIGHTWEIGHT NETTING, MAY BE USED TO SECURE MULCH. THE NETTING WILL BE STAPLED TO THE GROUND ACCORDING TO MANUFACTURERS' RECOMMENDATIONS.
2. TEMPORARY SEEDING:
 - LIME: 100 POUNDS OF DOLOMITIC LIMESTONE PER 1,000 SF
 - FERTILIZER: 15 POUNDS OF 10-10-10 PER 1,000 SF
 - SEED: PERENNIAL RYE--0.92 POUNDS PER 1,000 SF
3. FILL:
 - NO FILLS MAY BE PLACED ON FROZEN GROUND. ALL FILL TO BE PLACED IN APPROXIMATELY HORIZONTAL LAYERS, EACH LAYER HAVING A LOOSE THICKNESS OF NOT MORE THAN 8 INCHES. ALL FILL IN ROADWAYS AND PARKING AREAS IS TO BE CLASSIFIED TYPE 2 COMPACTED TO 90% DENSITY; COMPACTION TO BE DETERMINED BY ASTM D-1557-66T (MODIFIED PROCTOR). ANY FILL WITHIN THE BUILDING AREA IS TO BE COMPACTED TO A MINIMUM OF 95% AS DETERMINED BY METHODS PREVIOUSLY MENTIONED. FILLS FOR POND EMBANKMENTS SHALL BE COMPACTED AS PER THE PROJECT ENGINEER'S SPECIFICATIONS. ALL OTHER FILLS SHALL BE COMPACTED SUFFICIENTLY SO AS TO BE STABLE AND PREVENT EROSION AND SLIPPAE.
4. PERMANENT SOD:
 - INSTALLATION OF SOD SHOULD FOLLOW THE PERMANENT SEEDING DATES. PERMANENT SOD IS TO BE STATE APPROVED SOD; LIME AND FERTILIZER PER PERMANENT SEEDING SPECIFICATIONS AND LIGHTLY IRRIGATE SOIL PRIOR TO LAYING SOD. SOD IS TO BE LAID ON THE CONTOUR WITH ALL ENDS TIGHTLY ABUTTING. JOINTS ARE TO BE STAGGERED BETWEEN ROWS. WATER AND ROLL OR TAMP SOD TO INSURE POSITIVE ROOT CONTACT WITH THE SOIL. ALL SLOPES STEEPER THAN 3:1, AS SHOWN, ARE TO BE PERMANENTLY SODDED OR PROTECTED WITH APPROVED EROSION CONTROL NETTING. ADDITIONAL WATERING FOR ESTABLISHMENT MAY BE REQUIRED. SOD IS NOT TO BE APPLIED ON FROZEN GROUND. SOD SHALL NOT BE HARVESTED OR TRANSPLANTED WHEN MOISTURE CONTENT (DRY OR WET) AND/OR EXTREME TEMPERATURE MAY ADVERSELY AFFECT ITS SURVIVAL. IN THE ABSENCE OF ADEQUATE RAINFALL, IRRIGATION SHOULD BE PERFORMED TO INSURE ESTABLISHED SOD.

SLOPE STABILIZATION, SEEDING METHOD & MULCHING

SLOPES OR 4:1 OR GREATER (HORIZONTAL : VERTICAL)

SLOPES SHALL BE HYDROSEEDED WITH THE MIXTURES AND RATES INDICATED IN THE PERMANENT SEEDING MIXTURE SCHEDULE. STRAW OR HAY MULCH SHALL BE APPLIED AT A RATE OF 2,000 LBS./ACRE. STRAW OR HAY MULCH SHALL BE ANCHORED WITH BioD-Mesh60 NETTING AS MANUFACTURED BY ROLANKA INTERNATIONAL OR APPROVED EQUIVALENT. NETTING TO BE INSTALLED PER MANUFACTURER SPECIFICATIONS.

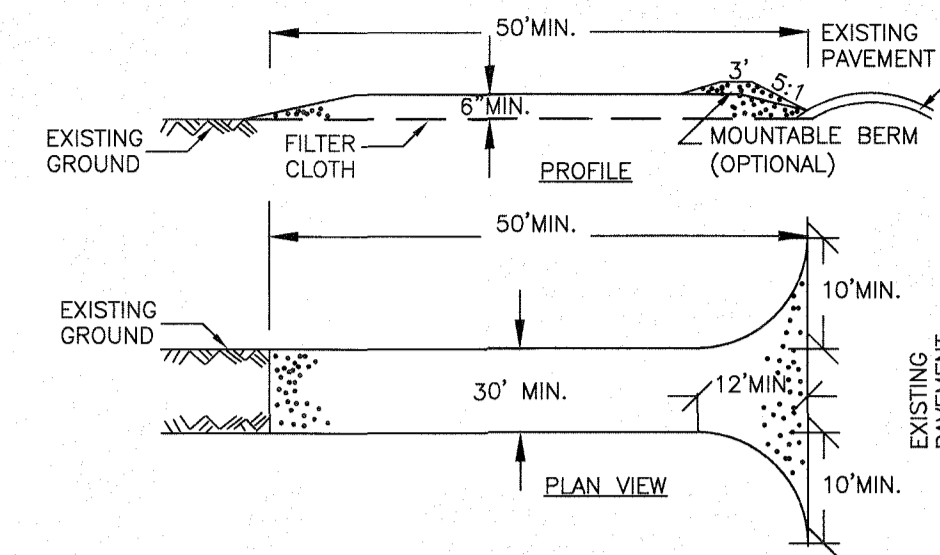
GENTLE SLOPE AND FLAT AREAS

AREA SHALL BE SEED BY HYDROSEEDING OR BROADCASTING WITH THE MIXTURES AND RATES INDICATED ON THE PERMANENT SEEDING MIXTURE SCHEDULE. HYDROSEEDED AREAS SHALL BE MULCHED WITH A WOOD FIBER MULCH APPLIED AT A RATE OF 500 LBS./ACRE. BROADCAST AREAS SHALL BE MULCHED WITH HAY OR STRAW AT A RATE OF 2,000 LBS./ACRE. AREAS SEED BY BROADCASTING SHALL BE LIGHTLY RAKED AND PACED PRIOR TO PLACING MULCH.

AREAS REMAINING DISTURBED FOR 20 DAYS OR MORE SHALL BE STABILIZED AS FOLLOWS:

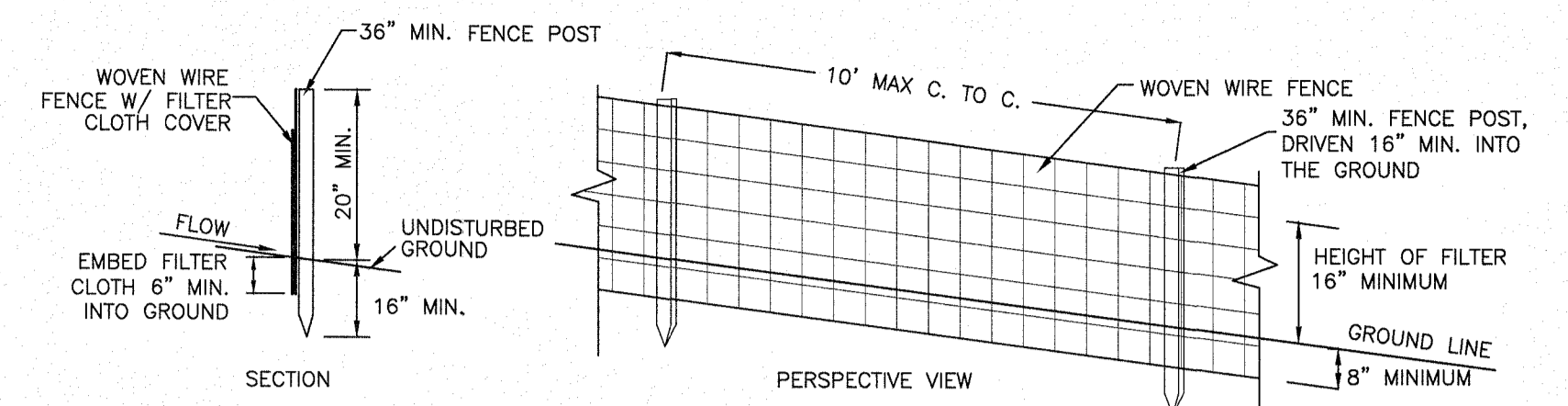
SCARIFY SOILS IF COMPACTED, LIME TO pH OF 6.0 IF REQUIRED, FERTILIZE WITH 600 LBS./ACRE. 5-10-10 FERTILIZER IF REQUIRED. SEED WITH SPECIES AND RATE SHOWN BELOW. MULCH WITH HAY OR STRAW AT A RATE OF 2,000 LBS./ACRE. ANCHOR MULCH WITH NETTING OF WOOD FIBER OR JUTE IF STEEP SLOPE OR HIGH POTENTIAL FOR EROSION.

SPECIES	APPLICATION RATE
RYEGRASS (ANNUAL OR PERENNIAL) (USE WINTER RYE IF SEEDING IN OCT./NOV.)	30 LBS./ACRE (0.7 LBS./1,000 SF)



CONSTRUCTION SPECIFICATIONS

1. STONE SIZE - USE 2" STONE, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
2. LENGTH - NOT LESS THAN 50 FEET (EXCEPT ON A SINGLE RESIDENCE LOT WHERE A 30 FOOT MINIMUM LENGTH WOULD APPLY).
3. THICKNESS - NOT LESS THAN SIX (6) INCHES.
4. WIDTH - TWELVE (12) FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS. TWENTY-FOUR (24) FOOT IF SINGLE ENTRANCE TO SITE.
5. FILTER CLOTH - WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE.
6. SURFACE WATER - ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED ACROSS THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTAINABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED.
7. MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.
8. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON A AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
9. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.

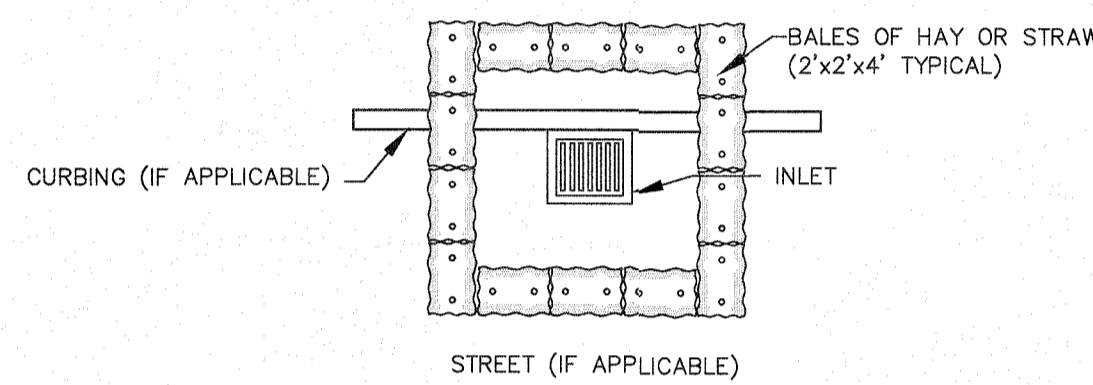


CONSTRUCTION NOTES FOR FABRICATED SILT FENCE

1. WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POST WITH WIRE TIES OR STAPLES.
 2. FILTER CLOTH TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION.
 3. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED BY 6" AND FOLDED.
 4. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN 'BULGES' DEVELOP IN THE SILT FENCE.
- POST: STEEL EITHER 'I' OR 'U' TYPE OR 2" HARDWOOD
FENCE: WOVEN WIRE, 14 1/2 GA. 6" MAX. MESH OPENING
FILTER CLOTH: FILER X, MIRAFI TOX, STABILINKA T140N OR APPROVED EQUAL
PREFABRICATED UNIT: GEOFAB, ENVIROFENCE, OR APPROVED EQUAL.

SILT FENCE DETAIL

NOT TO SCALE



NOTE: INSPECTION OF BALES SHALL BE FREQUENT AND REPAIR AND REPLACEMENT SHALL BE MADE PROMPTLY AS NECESSARY.

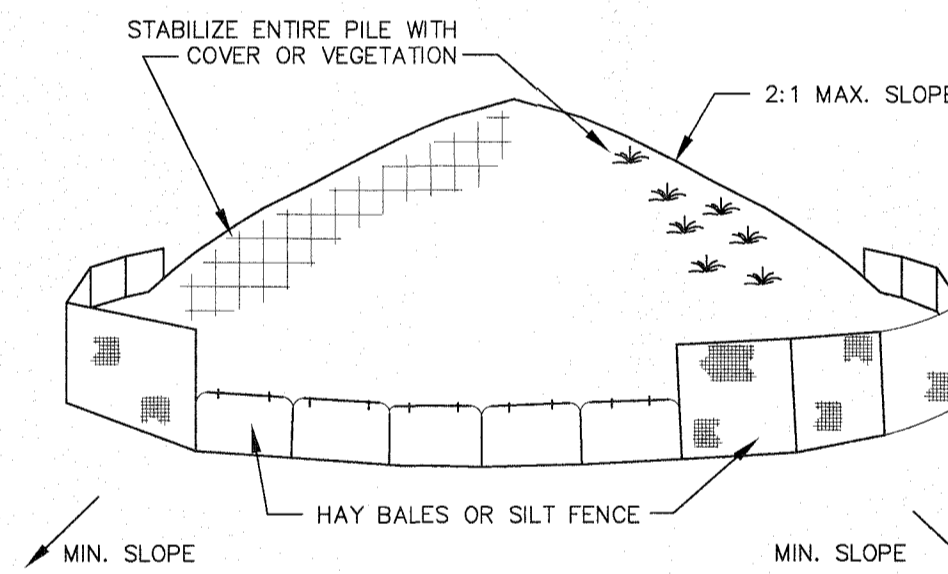
INLET PROTECTION DETAIL

NOT TO SCALE

STABILIZED CONSTRUCTION ENTRANCE

NOT TO SCALE

FOR CONSTRUCTION SPECIFICATIONS REFER TO "NY GUIDELINES FOR URBAN EROSION AND SEDIMENT CONTROL"

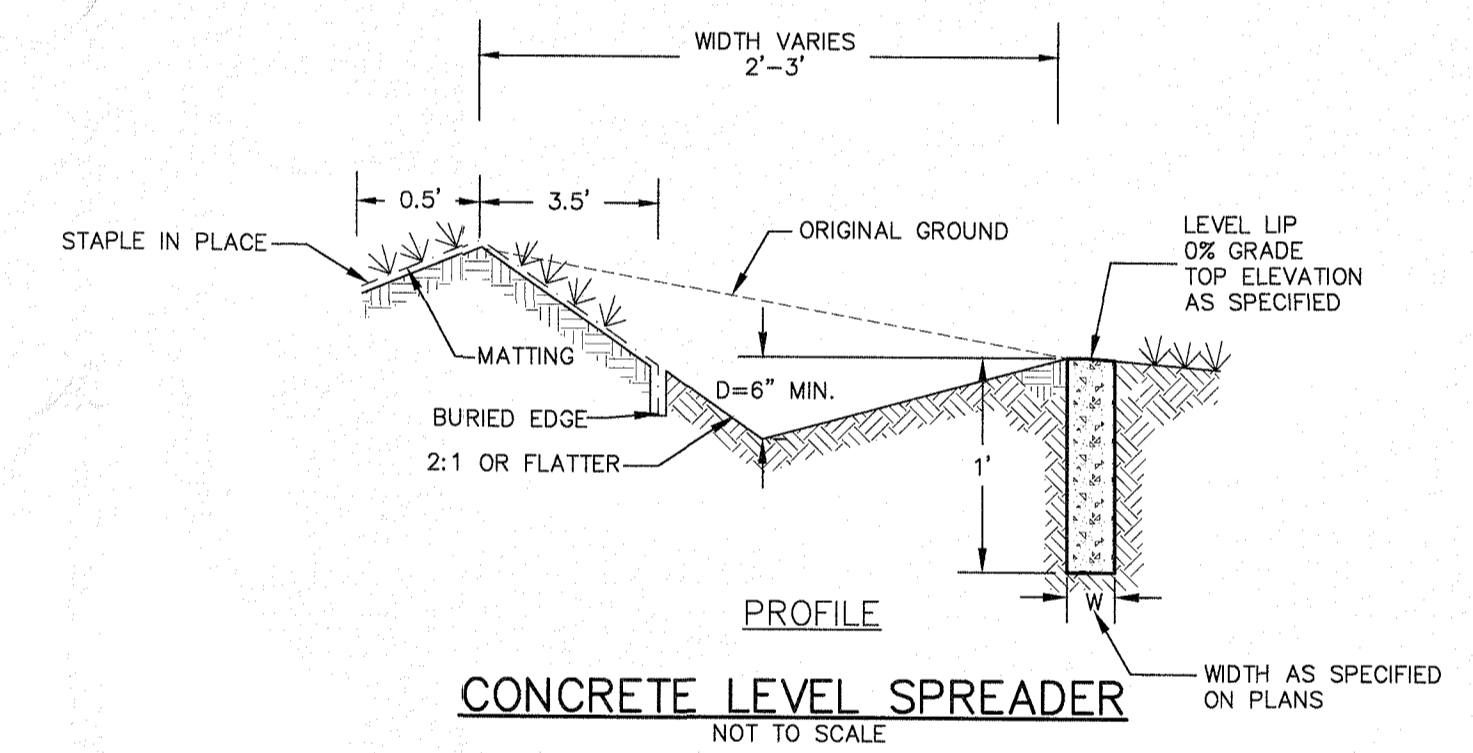


INSTALLATION NOTES:

1. AREA CHOSEN FOR STOCKPILING OPERATIONS SHALL BE DRY AND STABLE
2. MAXIMUM SLOPE OF STOCKPILES SHALL BE 2:1.
3. UPON COMPLETION OF SOIL STOCKPIILING EACH PILE SHALL BE SURROUNDED WITH EITHER SILT FENCING OR HAY BALES, THEN STABILIZED WITH VEGETATION OR COVERED.
4. SEE SPECIFICATIONS FOR INSTALLATION OF SILT FENCE.

SOIL STOCKPILE DETAIL

NOT TO SCALE



CONCRETE LEVEL SPREADER

NOT TO SCALE

Q (cfs)	E.W. (ft)	D (ft)	LENGTH (ft)
0-5	10	0.5	10
5-10	16	0.6	20
10-15	24	0.7	30

E.W. = ENTRANCE WIDTH
D = DEPTH

1. THE MATTING SHOULD BE A MINIMUM OF 4FT. WIDE EXTENDING 6 INCHES OVER THE LIP AND BURIED 6 INCHES DEEP IN A VERTICAL TRENCH ON THE LOWER EDGE. THE UPPER EDGE SHOULD BUTT AGAINST SMOOTHLY CUT SOD AND BE SECURELY HELD IN PLACE WITH CLOSELY SPACED HEAVY DUTY WIRE STAPLES AT LEAST 12 INCHES IN LENGTH.
2. ENSURE THAT THE LIP IS LEVEL TO UNIFORMLY SPREAD DISCHARGE.
3. THE LIP SHALL BE CONSTRUCTED ON UNDISTURBED SOIL NOT FILL.
4. A 20' TRANSITION SECTION WILL BE CONSTRUCTED FROM THE DIVERSION CHANNEL TO THE SPREADER TO SMOOTHLY BLEND THE DIFFERENT DIMENSION AND GRADES.
5. THE RUNOFF DISCHARGE WILL BE OUTLETED ONTO A STABILIZED VEGETATED SLOPE NOT EXCEEDING 10%.
6. SEED AND MULCH THE DISTURBED AREA IMMEDIATELY AFTER CONSTRUCTION.

Village of South Blooming Grove
APPROVED
Planning Board
Chairperson
SEP 3 0 2025
Date

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TREE CLEARING NOTE:

NO TREE REMOVAL SHALL BE REMOVED FROM APRIL 1st TO OCTOBER 31st TO MITIGATE POTENTIAL HARMFUL IMPACTS TO INDIANA BAT.

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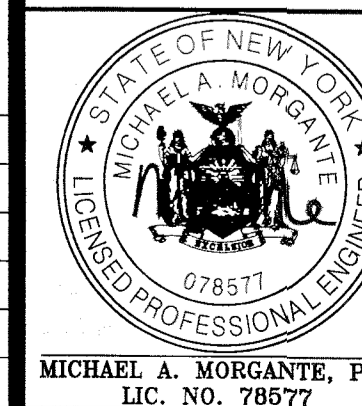
REV.	BY	DATE	DESCRIPTION
1	MM	9-29-25	PREPARATION OF PLANNING BOARD PLANS FOR SIGNATURE

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SITE PLAN PREPARED FOR
55 MANGIN ROAD
VILLAGE OF SOUTH BLOOMING GROVE,
ORANGE COUNTY, NEW YORK

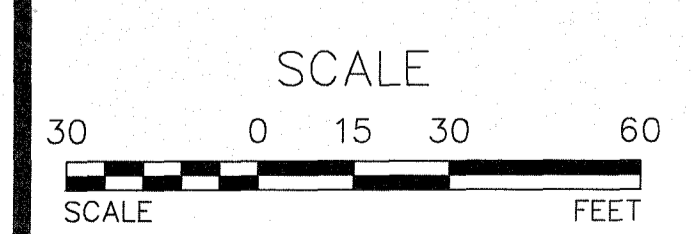
EROSION & SEDIMENT CONTROL DETAILS

JOB#: 25-020
SCALE: AS NOTED
DATE: 02-20-25
DRAWN: MM
CHECKED: MM
SHEET NO: 09 OF 20



- LEGEND:**
- EXISTING EDGE OF PAVEMENT
 - EXISTING PROPERTY LINE
 - EXISTING ADJACENT PROPERTY LINE
 - EXISTING STONE WALL
 - EXISTING OVERHEAD LINE
 - EXISTING WATER LINE
 - EXISTING SEWER LINE
 - EXISTING DRAINAGE PIPE
 - EXISTING POLE
 - EXISTING SEWER MANHOLE
 - EXISTING FIRE HYDRANT
 - EXISTING WATER VALVE
 - EXISTING CATCH BASIN
 - PROPOSED PAVEMENT
 - PROPOSED SIDEWALK
 - PROPOSED RETAINING WALL
 - PROPOSED OVERHEAD LINE
 - PROPOSED SPLIT RAIL FENCE
 - PROPOSED SWALE
 - PROPOSED UTILITY POLE
 - PROPOSED GARBAGE CAN PAD

Village of South Blooming Grove
APPROVED
 Planning Board
 3 0 2025
 Date



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TREE CLEARING NOTE:
 NO TREE REMOVAL SHALL OCCUR FROM APRIL 1 TO OCTOBER 31 TO MITIGATE POTENTIAL IMPACTS ON INDIANA BAT & NORTHERN LONG-EARED BAT.

UDIG NY MUST BE CONTACTED PRIOR TO ANY EXCAVATION OR DEMOLITION

MANGIN
 L. 14447 P. 927
 217 - 1 - 4
 FM 1/2 LOT
 MAP NO.6363

ORTHOIMAGERY
 SCALE: 1"=30'

BRACH&MANN
BM
 ASSOCIATES
 PO Box 622 Monroe, NY 10949
 T. (845) 782-9014
 F. (845) 782-9015
 mail@brachmann.com

MANGIN LLC
 L. 12575 P. 566
 217 - 1 - 5

REV.	BY	DATE	DESCRIPTION
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FOR PLANNING BOARD APPROVAL ONLY

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 P.O. BOX 340 MONROE, N.Y.
 TEL: (845) 782-8114
 WWW.ARDENCONSULTING.NET

SITE PLAN PREPARED FOR
55 MANGIN ROAD
 VILLAGE OF SOUTH BLOOMING GROVE,
 ORANGE COUNTY, NEW YORK

ORTHOMAGERY

STATE OF NEW YORK
 MICHAEL A. MORGANTE
 LICENSED PROFESSIONAL ENGINEER
 078571

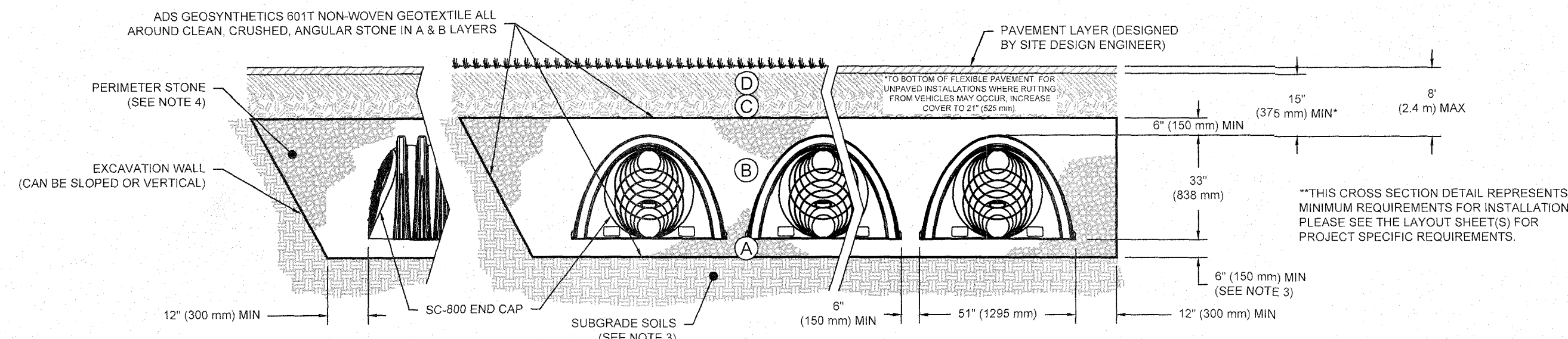
MICHAEL A. MORGANTE, P.E.
 LIC. NO. 78577

JOB#: 25-020
 SCALE: AS NOTED
 DATE: 09-29-25
 DRAWN: MM
 CHECKED: MM
 SHEET NO. 10 OF 20

ACCEPTABLE FILL MATERIALS: STORMTECH SC-800 CHAMBER SYSTEMS

MATERIAL LOCATION	DESCRIPTION	AASHTO MATERIAL CLASSIFICATIONS	COMPACTION / DENSITY REQUIREMENT
D	FINAL FILL: FILL MATERIAL FOR LAYER 'D' STARTS FROM THE TOP OF THE 'C' LAYER TO THE BOTTOM OF FLEXIBLE PAVEMENT OR UNPAVED FINISHED GRADE ABOVE. NOTE THAT PAVEMENT SUBBASE MAY BE PART OF THE 'D' LAYER.	N/A	PREPARE PER SITE DESIGN ENGINEER'S PLANS. PAVED INSTALLATIONS MAY HAVE STRINGENT MATERIAL AND PREPARATION REQUIREMENTS.
C	INITIAL FILL: FILL MATERIAL FOR LAYER 'C' STARTS FROM THE TOP OF THE EMBEDMENT STONE (B LAYER) TO 15" (375 mm) ABOVE THE TOP OF THE CHAMBER. NOTE THAT PAVEMENT SUBBASE MAY BE A PART OF THE 'C' LAYER.	AASHTO M145 ¹ A-1, A-2.4, A-3 OR AASHTO M43 ¹ 3, 357, 4, 467, 5, 56, 57, 6, 67, 68, 7, 78, 8, 89, 9, 10	BEGIN COMPACTIONS AFTER 12" (300 mm) OF MATERIAL OVER THE CHAMBERS IS REACHED. COMPACT ADDITIONAL LAYERS IN 6" (150 mm) MAX LIFTS TO A MIN. 95% PROCTOR DENSITY FOR WELL GRADED MATERIAL AND 90% RELATIVE DENSITY FOR PROCESSED AGGREGATE MATERIALS. ROLLER GROSS VEHICLE WEIGHT NOT TO EXCEED 12 000 lbs (53 kN). DYNAMIC FORCE NOT TO EXCEED 20,000 lbs (89 kN).
B	EMBEDMENT STONE: FILL SURROUNDING THE CHAMBERS FROM THE FOUNDATION STONE (A LAYER) TO THE 'C' LAYER ABOVE.	AASHTO M43 ¹ 3, 357, 4, 467, 5, 56, 57	NO COMPACTION REQUIRED.
A	FOUNDATION STONE: FILL BELOW CHAMBERS FROM THE SUBGRADE UP TO THE FOOT (BOTTOM) OF THE CHAMBER.	AASHTO M43 ¹ 3, 357, 4, 467, 5, 56, 57	PLATE COMPACT OR ROLL TO ACHIEVE A FLAT SURFACE. ^{3,4}

- PLEASE NOTE:
- THE LISTED AASHTO DESIGNATIONS ARE FOR GRADATIONS ONLY. THE STONE MUST ALSO BE CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR NO. 4 (AASHTO M43) STONE".
 - STORMTECH COMPACTION REQUIREMENTS ARE MET FOR 'A' LOCATION MATERIALS WHEN PLACED AND COMPACTED IN 6" (150 mm) MAX LIFTS USING TWO FULL COVERS WITH A VIBRATORY COMPACTOR.
 - WHERE INFILTRATION SURFACES MAY BE COMPROMISED BY COMPACTION, FOR STANDARD DESIGN LOAD CONDITIONS, A FLAT SURFACE MAY BE ACHIEVED BY RAKING OR DRAGGING WITHOUT COMPACTION EQUIPMENT. FOR SPECIAL LOAD DESIGNS, CONTACT STORMTECH FOR COMPACTION REQUIREMENTS.
 - 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.
 - WHERE RECYCLED CONCRETE AGGREGATE IS USED IN LAYERS 'A' OR 'B' THE MATERIAL SHOULD ALSO MEET THE ACCEPTABILITY CRITERIA OUTLINED IN TECHNICAL NOTE 6.20 "RECYCLED CONCRETE STRUCTURAL BACKFILL".

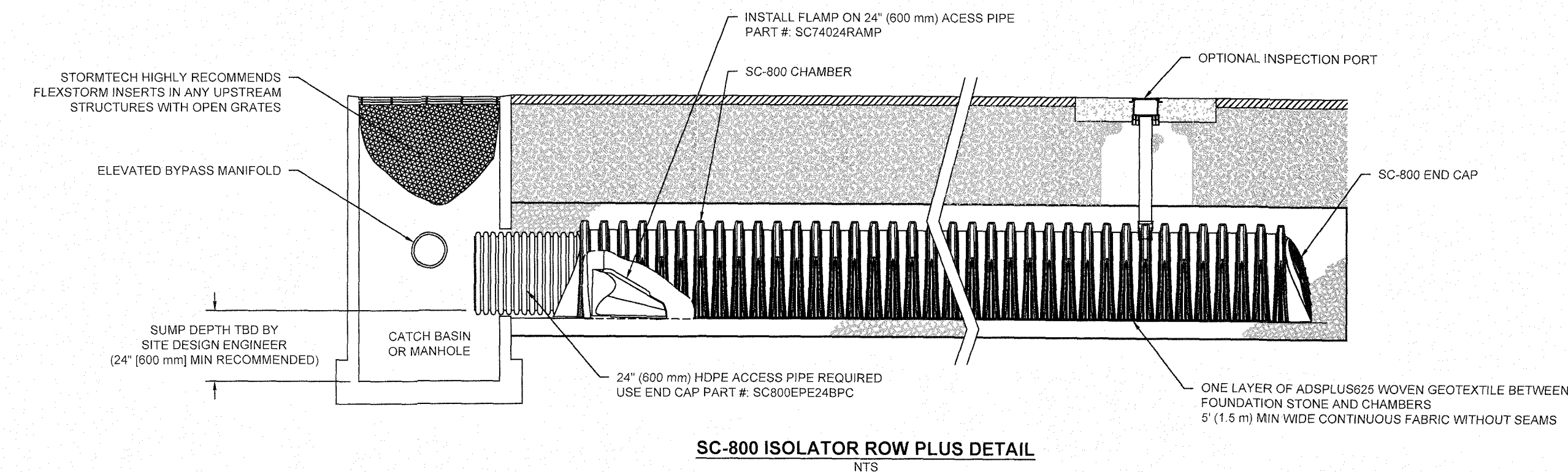


NOTES:

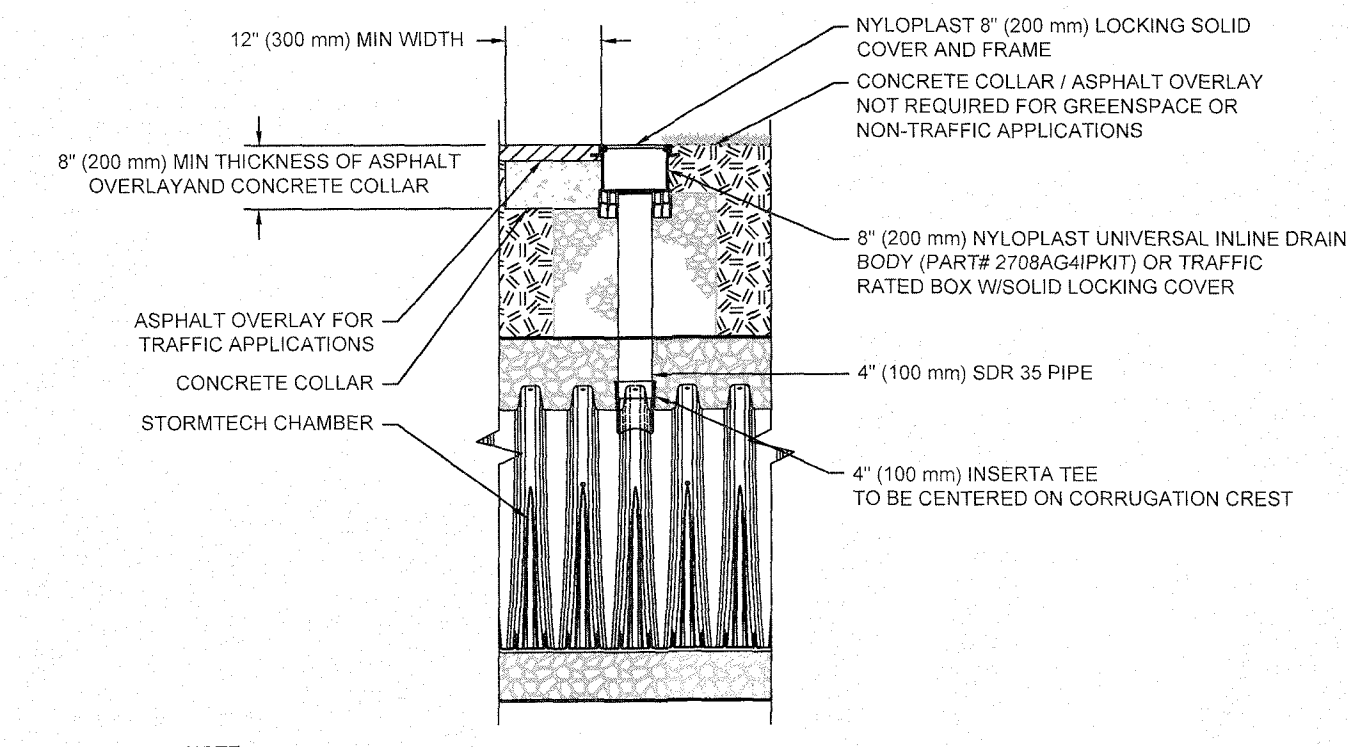
- CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2418, "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
- SC-800 CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
- 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. REFERENCE STORMTECH DESIGN MANUAL FOR BEARING CAPACITY GUIDANCE.
- PERIMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS.
- REQUIREMENTS FOR HANDLING AND INSTALLATION:
 - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
 - TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 2".
 - TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, a) THE ARCH STIFFNESS CONSTANT AS DEFINED IN SECTION 6.2.8 OF ASTM F2418 SHALL BE GREATER THAN OR EQUAL TO 750 LBS/FT². AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.

1 SC-800 CROSS SECTION DETAIL

3 SC-800 ISOLATOR ROW PLUS DETAIL

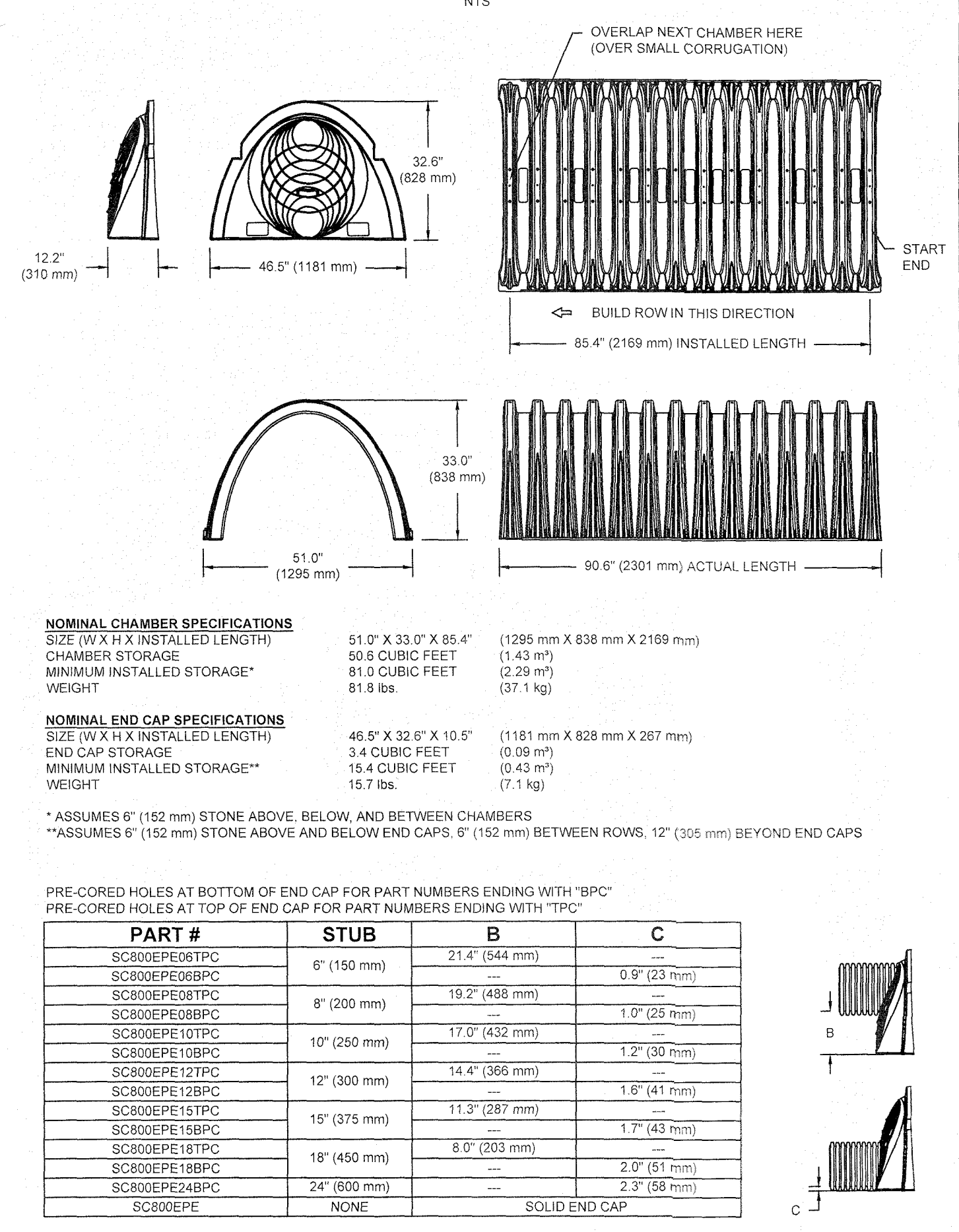


3



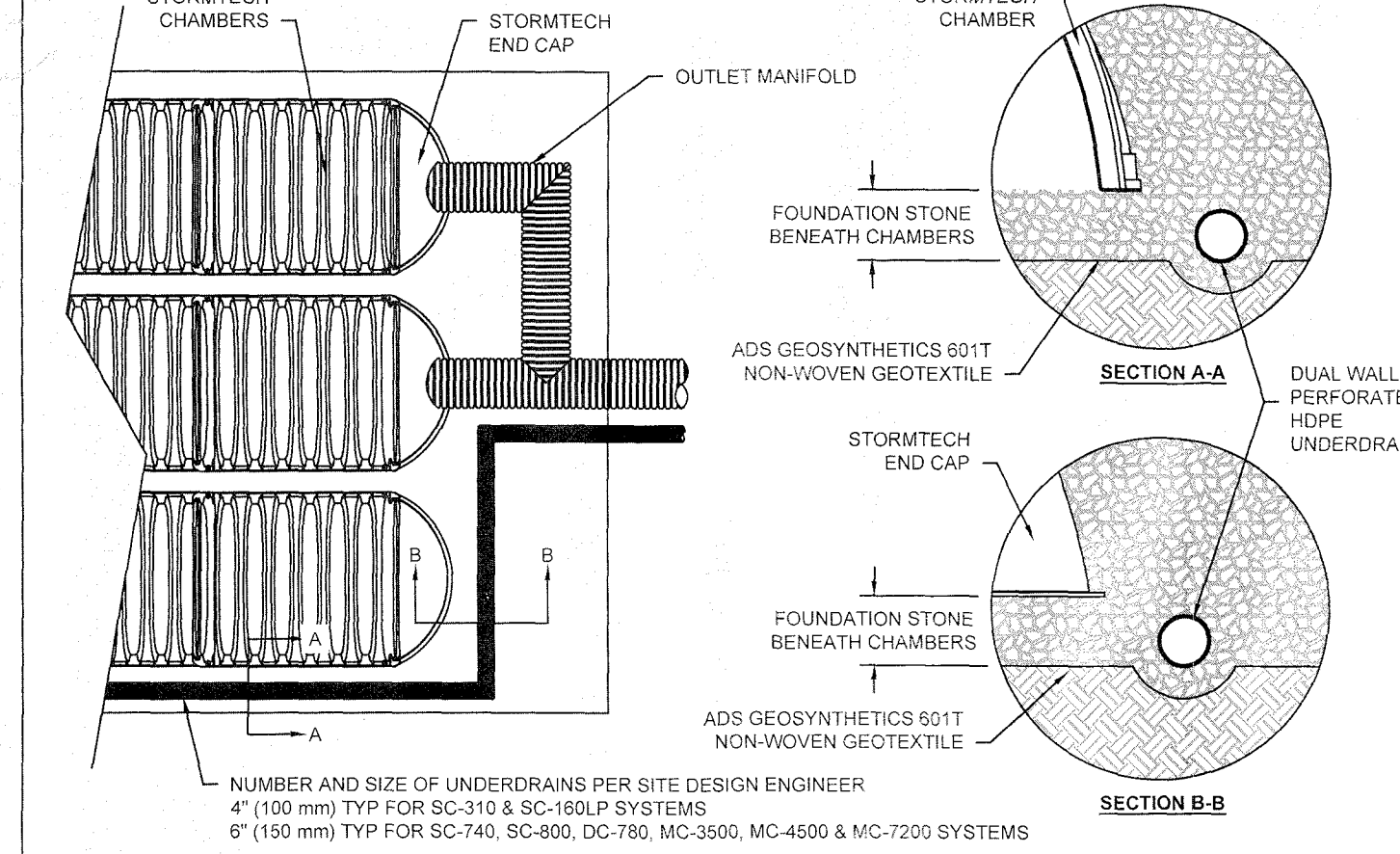
4 4" PVC INSPECTION PORT DETAIL (SC SERIES CHAMBER)

2 SC-800 TECHNICAL SPECIFICATION



2 SC-800 TECHNICAL SPECIFICATIONS

5 UNDERDRAIN DETAIL



5 UNDERDRAIN DETAIL

TREE CLEARING NOTE:
NO TREE REMOVAL SHALL BE REMOVED FROM APRIL 1st TO OCTOBER 31st TO MITIGATE POTENTIAL HARMFUL IMPACTS TO INDIANA BAT.

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BM
ASSOCIATES
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REV.	BY	DATE	DESCRIPTION

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SITE PLAN PREPARED FOR
55 MANGIN ROAD
VILLAGE OF SOUTH BLOOMING GROVE,
ORANGE COUNTY, NEW YORK

STORMWATER DETAILS

JOB#: 25-020
SCALE:
AS NOTED
DATE: 09-29-25
DRAWN: MM
CHECKED: MM
SHEET NO. 15 OF 20

Village of South Blooming Grove
APPROVED
Planning Board
Chairperson
SEP 30 2025
Signature: _____ Date: _____

SC-800 STORMTECH CHAMBER SPECIFICATIONS

- CHAMBERS SHALL BE ARCH-SHAPED AND SHALL BE MANUFACTURED FROM VIRGIN, IMPACT-MODIFIED POLYPROPYLENE COPOLYMERS.
- CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2418, "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
- CHAMBER ROWS SHALL PROVIDE CONTINUOUS, UNOBSTRUCTED INTERNAL SPACE WITH NO INTERNAL SUPPORTS THAT WOULD IMPEDE FLOW OR LIMIT ACCESS FOR INSPECTION.
- THE STRUCTURAL DESIGN OF THE CHAMBERS, THE STRUCTURAL BACKFILL, AND THE INSTALLATION REQUIREMENTS SHALL ENSURE THAT THE LOAD FACTORS SPECIFIED IN THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, SECTION 12.12, ARE MET FOR: 1) LONG-DURATION DEAD LOADS AND 2) SHORT-DURATION LIVE LOADS, BASED ON THE AASHTO DESIGN TRUCK WITH CONSIDERATION FOR IMPACT AND MULTIPLE VEHICLE PRESENCES.
- CHAMBERS SHALL BE DESIGNED AND ALLOWABLE LOAD CONFIGURATIONS DETERMINED IN ACCORDANCE WITH ASTM F2787, "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS". LOAD CONFIGURATIONS SHALL INCLUDE: 1) INSTANTANEOUS (<1 MIN) AASHTO DESIGN TRUCK LIVE LOAD ON MINIMUM COVER 2) MAXIMUM PERMANENT (75-YR) COVER LOAD AND 3) ALLOWABLE COVER WITH PARKED (1-WEEK) AASHTO DESIGN TRUCK.
- REQUIREMENTS FOR HANDLING AND INSTALLATION:
 - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
 - TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 2".
 - TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, a) THE ARCH STIFFNESS CONSTANT SHALL BE GREATER THAN OR EQUAL TO 750 LBS/FT². THE ASC IS DEFINED IN SECTION 6.2.8 OF ASTM F2418. AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.
- ONLY CHAMBERS THAT ARE APPROVED BY THE SITE DESIGN ENGINEER WILL BE ALLOWED. UPON REQUEST BY THE SITE DESIGN ENGINEER OR OWNER, THE CHAMBER MANUFACTURER SHALL SUBMIT A STRUCTURAL EVALUATION FOR APPROVAL BEFORE DELIVERING CHAMBERS TO THE PROJECT SITE AS FOLLOWS:
 - THE STRUCTURAL EVALUATION SHALL BE SEALED BY A REGISTERED PROFESSIONAL ENGINEER.
 - THE STRUCTURAL EVALUATION SHALL DEMONSTRATE THAT THE SAFETY FACTORS ARE GREATER THAN OR EQUAL TO 1.95 FOR DEAD LOAD AND 1.75 FOR LIVE LOAD, THE MINIMUM REQUIRED BY ASTM F2787 AND BY SECTIONS 3 AND 12.12 OF THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS FOR THERMOPLASTIC PIPE.
 - THE TEST DERIVED CREEP MODULUS AS SPECIFIED IN ASTM F2418 SHALL BE USED FOR PERMANENT DEAD LOAD DESIGN EXCEPT THAT IT SHALL BE THE 75-YEAR MODULUS USED FOR DESIGN.
- CHAMBERS AND END CAPS SHALL BE PRODUCED AT AN ISO 9001 CERTIFIED MANUFACTURING FACILITY.
- MANHOLE SIZE TO BE DETERMINED BY SITE DESIGN ENGINEER. SEE TECHNICAL NOTE 6.32 FOR MANHOLE SIZING GUIDANCE. DUE TO THE ADAPTATION OF THIS CHAMBER SYSTEM TO SPECIFIC SITE AND DESIGN CONSTRAINTS, IT MAY BE NECESSARY TO CUT AND COUPLE ADDITIONAL PIPE TO STANDARD MANHOLE COMPONENTS IN THE FIELD.
- ADS DOES NOT DESIGN OR PROVIDE MEMBRANE LINER SYSTEMS. TO MINIMIZE THE LEAKAGE POTENTIAL OF LINER SYSTEMS, THE MEMBRANE LINER SYSTEM SHOULD BE DESIGNED BY A KNOWLEDGEABLE GEOTEXTILE PROFESSIONAL AND INSTALLED BY A QUALIFIED CONTRACTOR.

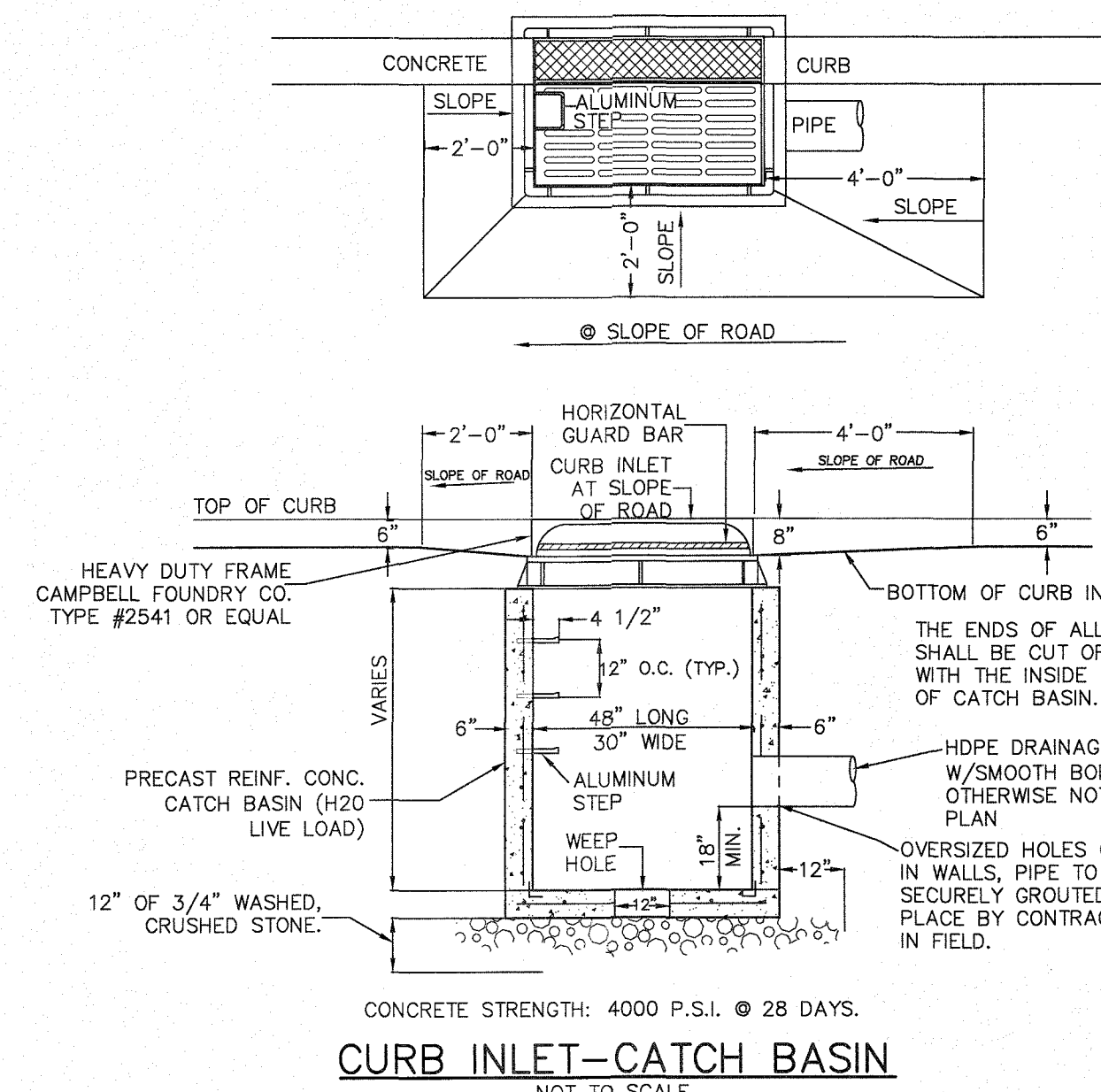
IMPORTANT - NOTES FOR THE BIDDING AND INSTALLATION OF THE SC-800 SYSTEM

- STORMTECH SC-800 CHAMBERS SHALL NOT BE INSTALLED UNTIL THE MANUFACTURER'S REPRESENTATIVE HAS COMPLETED A PRE-CONSTRUCTION MEETING WITH THE INSTALLERS.
- STORMTECH SC-800 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH SC-310/SC-740/SC-800/DC-780 CONSTRUCTION GUIDE".
- CHAMBERS ARE NOT TO BE BACKFILLED WITH A DOZER OR AN EXCAVATOR SITUATED OVER THE CHAMBERS. STORMTECH RECOMMENDS 3 BACKFILL METHODS:
 - STONES/ROCKS LOCATED OFF THE CHAMBER BED.
 - BACKFILL AS ROWS ARE BUILT USING AN EXCAVATOR ON THE FOUNDATION STONE OR SUBGRADE.
 - BACKFILL FROM OUTSIDE THE EXCAVATION USING A LONG BOOM HOE OR EXCAVATOR.
- THE FOUNDATION STONE SHALL BE LEVELLED AND COMPACTED PRIOR TO PLACING CHAMBERS.
- JOINTS BETWEEN CHAMBERS SHALL BE PROPERLY SEATED PRIOR TO PLACING STONE.
- MAINTAIN MINIMUM - 6" (150 mm) SPACING BETWEEN THE CHAMBER ROWS.
- EMBEDMENT STONE SURROUNDING CHAMBERS MUST BE A CLEAN, CRUSHED, ANGULAR STONE OR RECYCLED CONCRETE; AASHTO M43 #3, #57, 4, #67, 5, #4, OR #7.
- THE CONTRACTOR MUST REPORT ANY DISCREPANCIES WITH CHAMBER FOUNDATION MATERIALS BEARING CAPACITIES TO THE SITE DESIGN ENGINEER.
- ADS RECOMMENDS THE USE OF "FLEXSTORM CATCH IT" INSERTS DURING CONSTRUCTION FOR ALL INLETS TO PROTECT THE SUBSURFACE STORMWATER MANAGEMENT SYSTEM FROM CONSTRUCTION SITE RUNOFF.

NOTES FOR CONSTRUCTION EQUIPMENT

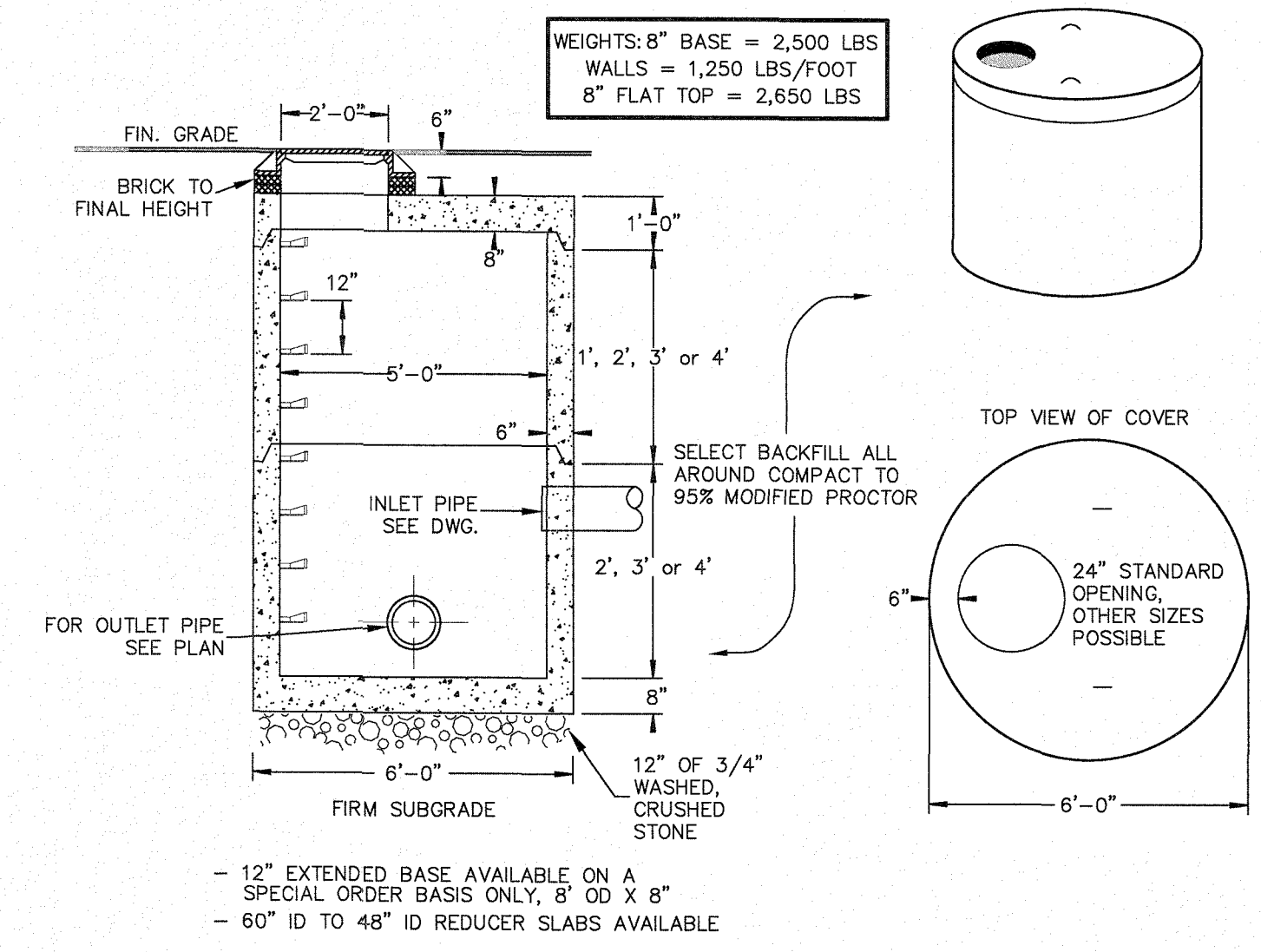
- STORMTECH SC-800 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH SC-310/SC-740/SC-800/DC-780 CONSTRUCTION GUIDE".
- THE USE OF CONSTRUCTION EQUIPMENT OVER SC-800 CHAMBERS IS LIMITED:
 - NO EQUIPMENT IS ALLOWED ON BARE CHAMBERS.
 - NO RUBBER Tired LOADERS, DUMP TRUCKS, OR EXCAVATORS ARE ALLOWED UNTIL PROPER FILL DEPTHS ARE REACHED IN ACCORDANCE WITH THE "STORMTECH SC-310/SC-740/SC-800/DC-780 CONSTRUCTION GUIDE".
 - WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT CAN BE FOUND IN THE "STORMTECH SC-310/SC-740/SC-800/DC-780 CONSTRUCTION GUIDE".
- FULL 36" (900 mm) OF STABILIZED COVER MATERIALS OVER THE CHAMBERS IS REQUIRED FOR DUMP TRUCK TRAVEL OR DUMPING. USE OF A DOZER TO PUSH EMBEDMENT STONE BETWEEN THE ROWS OF CHAMBERS MAY CAUSE DAMAGE TO THE CHAMBERS AND IS NOT AN ACCEPTABLE BACKFILL METHOD. ANY CHAMBERS DAMAGED BY THE "DUMP AND PUSH" METHOD ARE NOT COVERED UNDER THE STORMTECH STANDARD WARRANTY.

CONTACT STORMTECH AT 1-800-821-6710 WITH ANY QUESTIONS ON INSTALLATION REQUIREMENTS OR WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT.



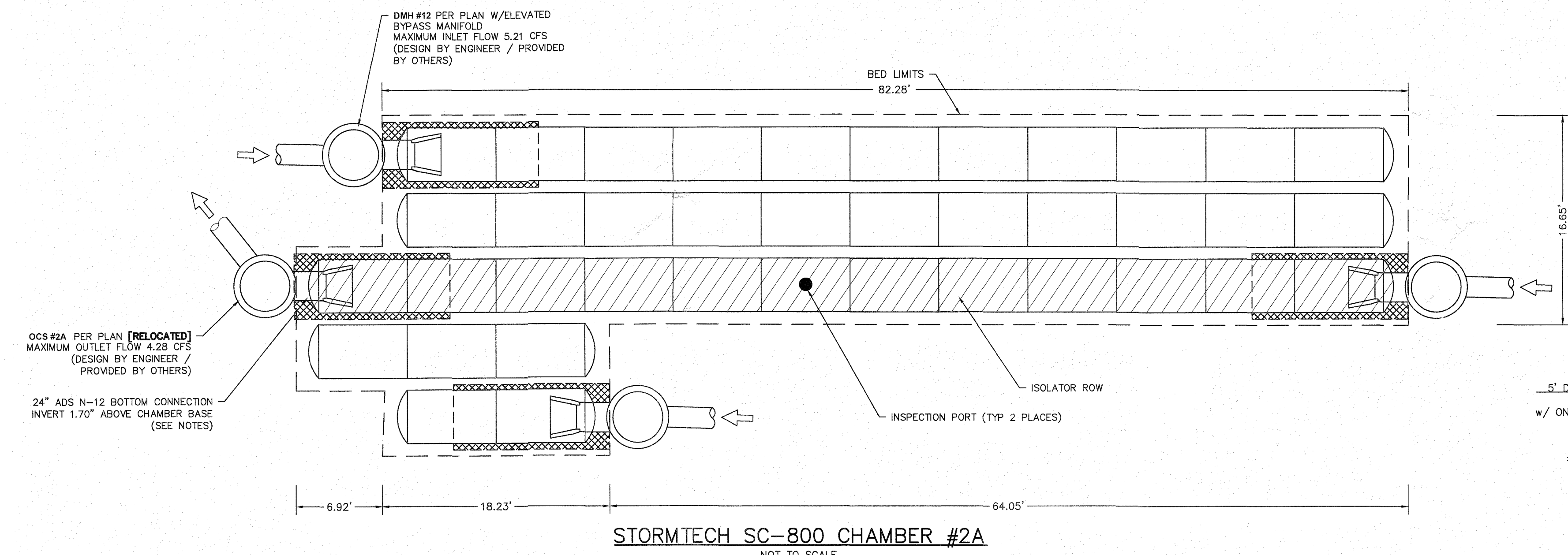
CURB INLET-CATCH BASIN
NOT TO SCALE

- CONCRETE STRENGTH: 4000 P.S.I. @ 28 DAYS.
- NOTES:**
- RETAINER GLANDS ARE REQUIRED ON ALL FITTINGS IN ADDITION TO THE RODS AND THRUST BLOCKS.
 - ALL UTILITY TRENCHES WITHIN PAVED AREAS SHALL BE BACKFILLED FULL DEPTH WITH RUN-OF-BANK GRAVEL. ALL UTILITIES TO BE DEDICATED TO THE VILLAGE SHALL MEET VILLAGE OF WALKILL SPECIFICATIONS.

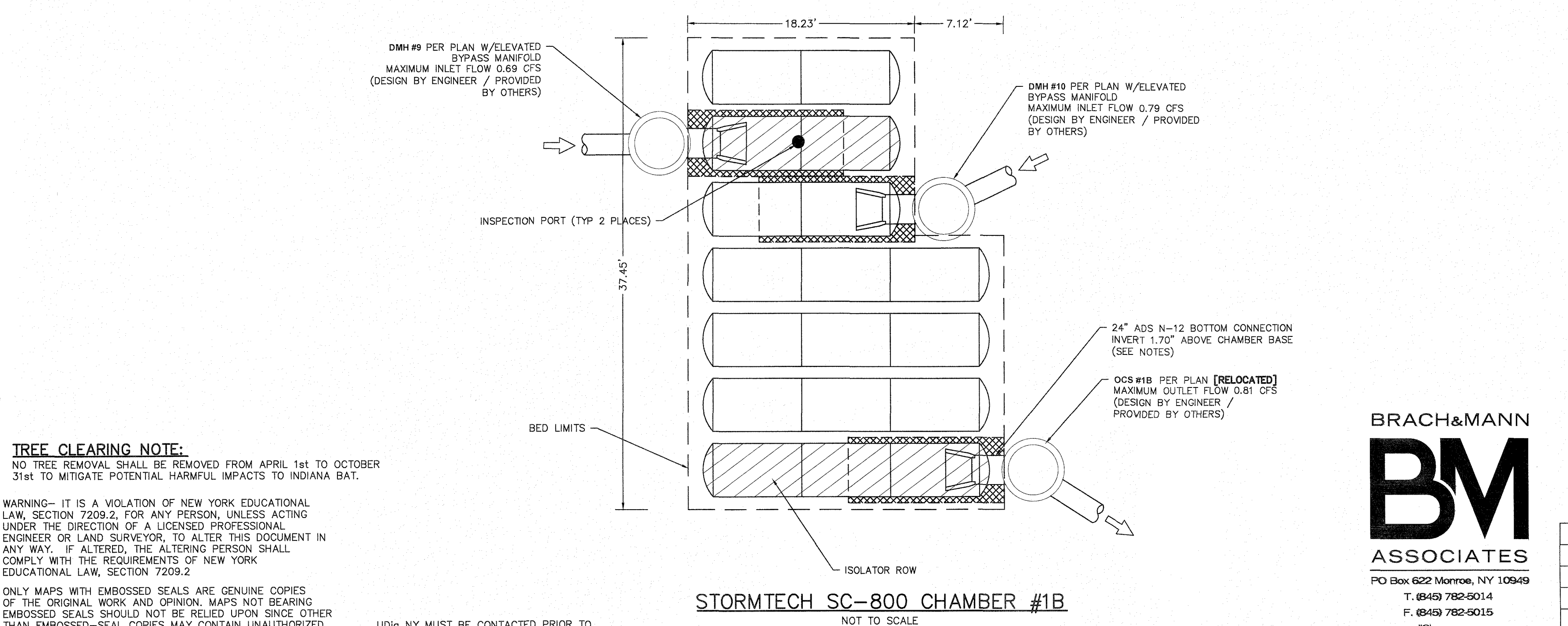


5' I.D. PRE-CAST DRAINAGE MANHOLE (DMH)
NOT TO SCALE

SPECIFICATIONS
CONCRETE MIN. STRENGTH: 4,000 PSI AT 28 DAYS REINFORCEMENT: 3x12 - W3 x W2.1 / ASTM C478 AIR ENTRAINMENT: 6%
CONSTRUCTION JOINT: BUTYL RUBBER SEALANT
PIPE CONNECTIONS: RUBBER BOOTS AVAILABLE
LOAD RATING: H20 + 30% / ASTM C857
PIPE PENETRATIONS SHALL BE WATER TIGHT
ALL JOINTS SHALL BE LEAK PROOF
AS MANUFACTURED BY WOODWARD'S CONCRETE PRODUCTS OR EQUAL



STORMTECH SC-800 CHAMBER #2A
NOT TO SCALE



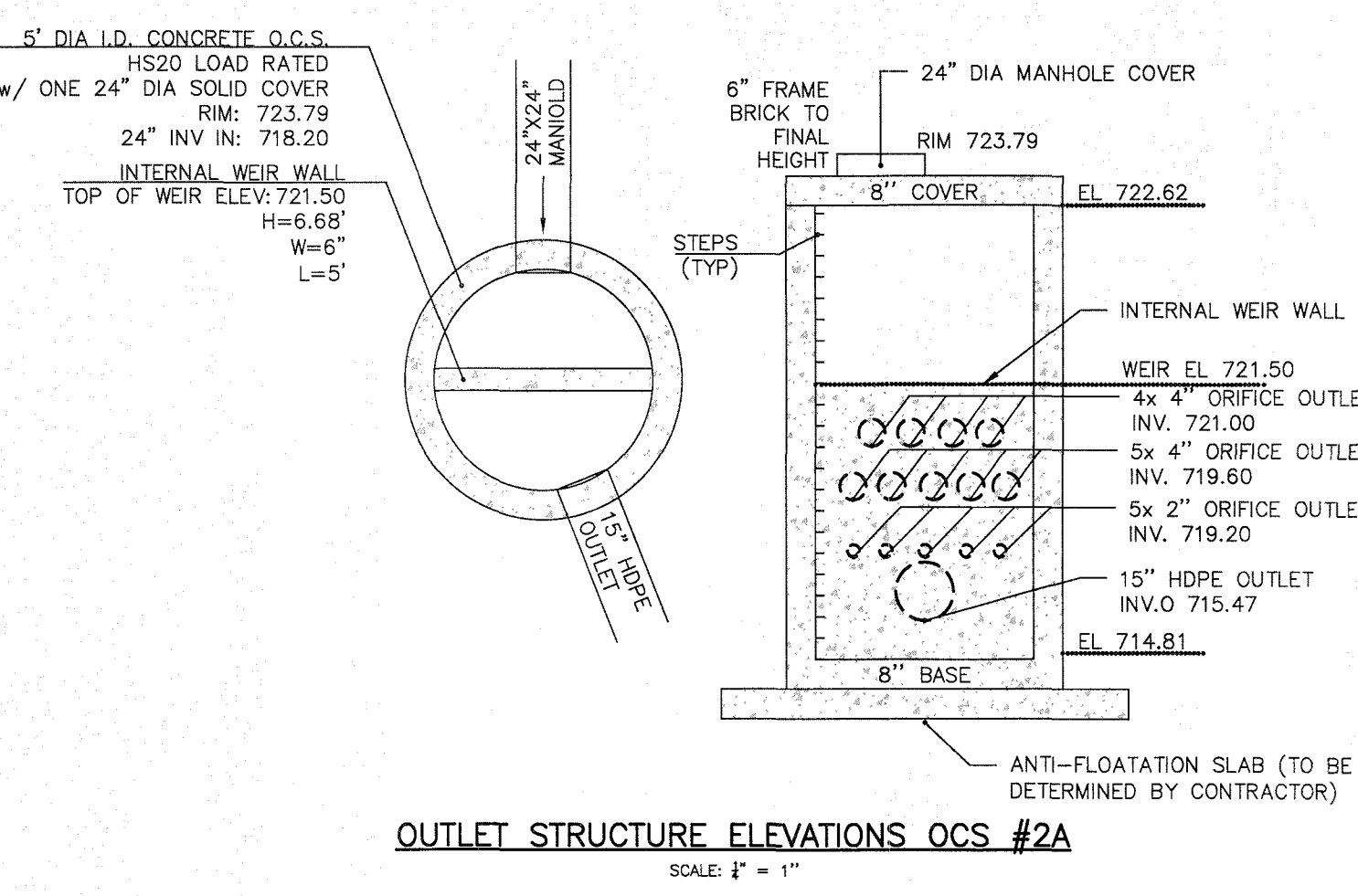
STORMTECH SC-800 CHAMBER #1B
NOT TO SCALE

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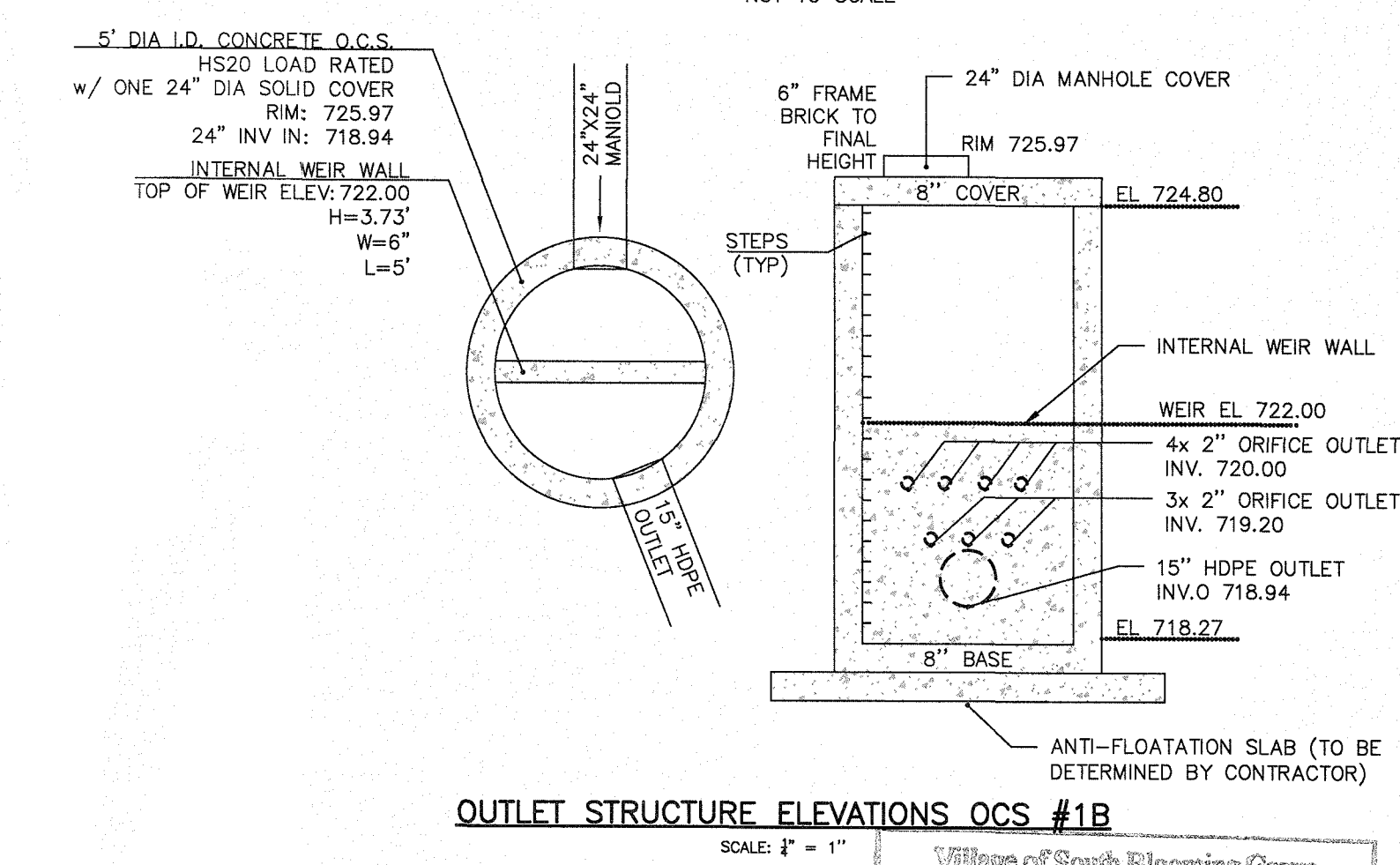
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Udig NY MUST BE CONTACTED PRIOR TO ANY EXCAVATION OR DEMOLITION



OUTLET STRUCTURE ELEVATIONS OCS #2A
SCALE: 1" = 1"



OUTLET STRUCTURE ELEVATIONS OCS #1B
SCALE: 1" = 1"

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BM
ASSOCIATES
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mail@brmassoc.com

REV.	BY	DATE	DESCRIPTION

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SITE PLAN PREPARED FOR
55 MANGIN ROAD
VILLAGE OF SOUTH BLOOMING GROVE,
ORANGE COUNTY, NEW YORK

STORMWATER DETAILS

APPROVED
Planning Board
Chairperson
SEP 30 2025

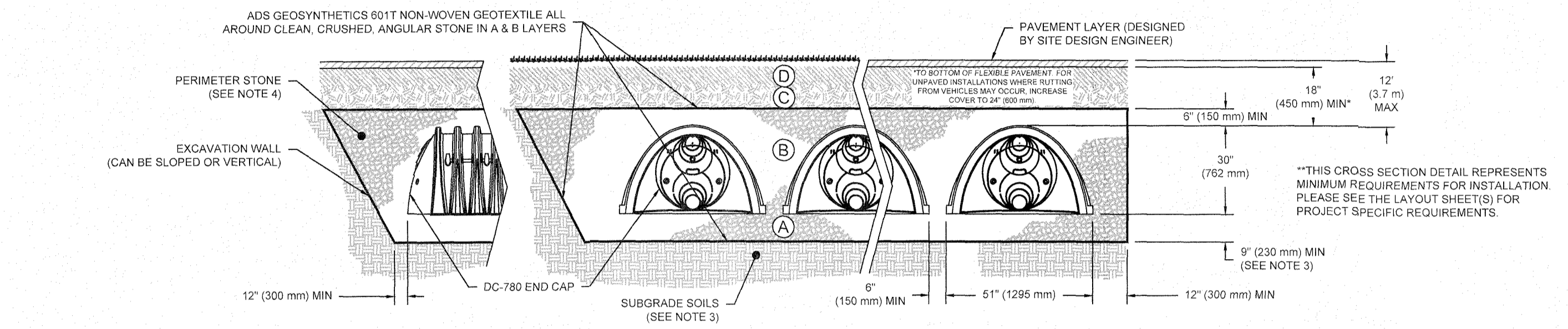
Michael A. Morgante, P.E.
Lic. No. 78577

JOB#: 25-020
SCALE: AS NOTED
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DRAWN: MM
CHECKED: MM
SHEET NO. 16 OF 20

ACCEPTABLE FILL MATERIALS: STORMTECH DC-780 CHAMBER SYSTEMS

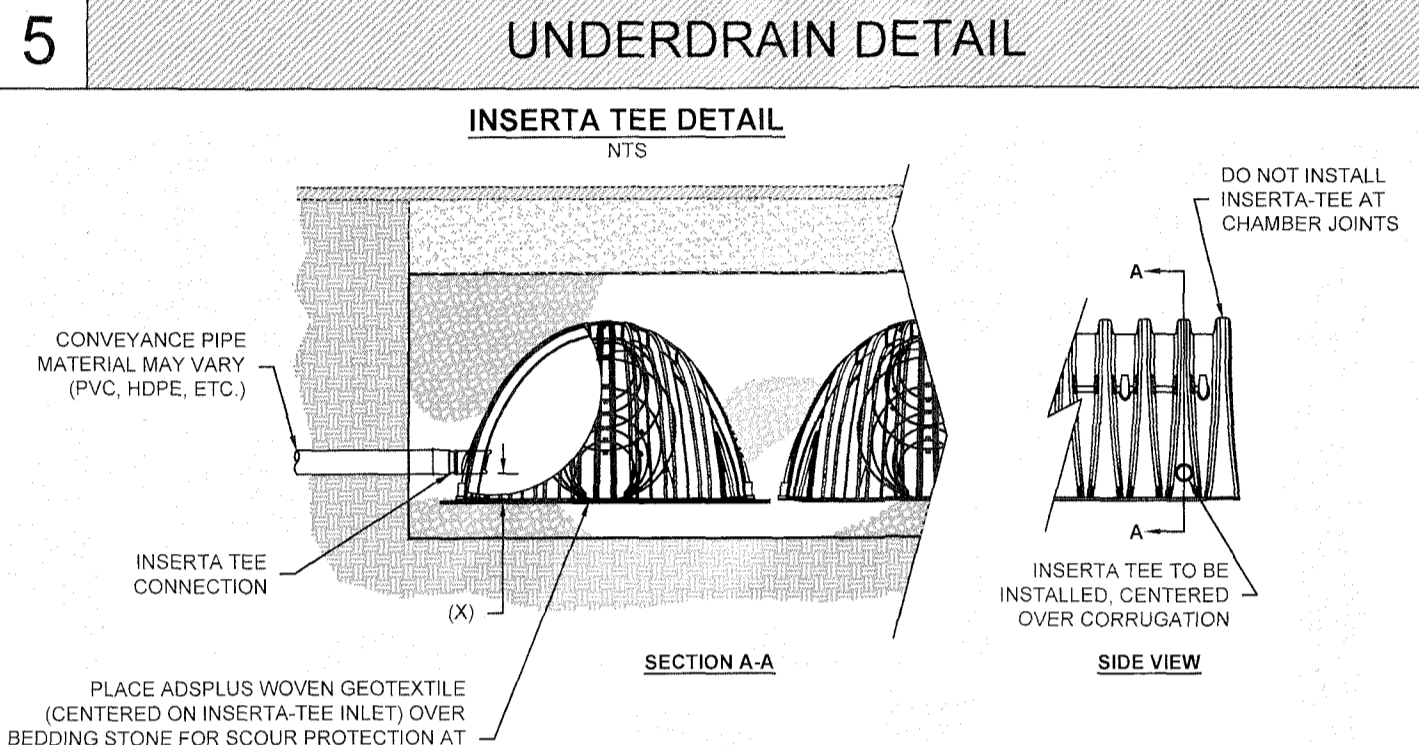
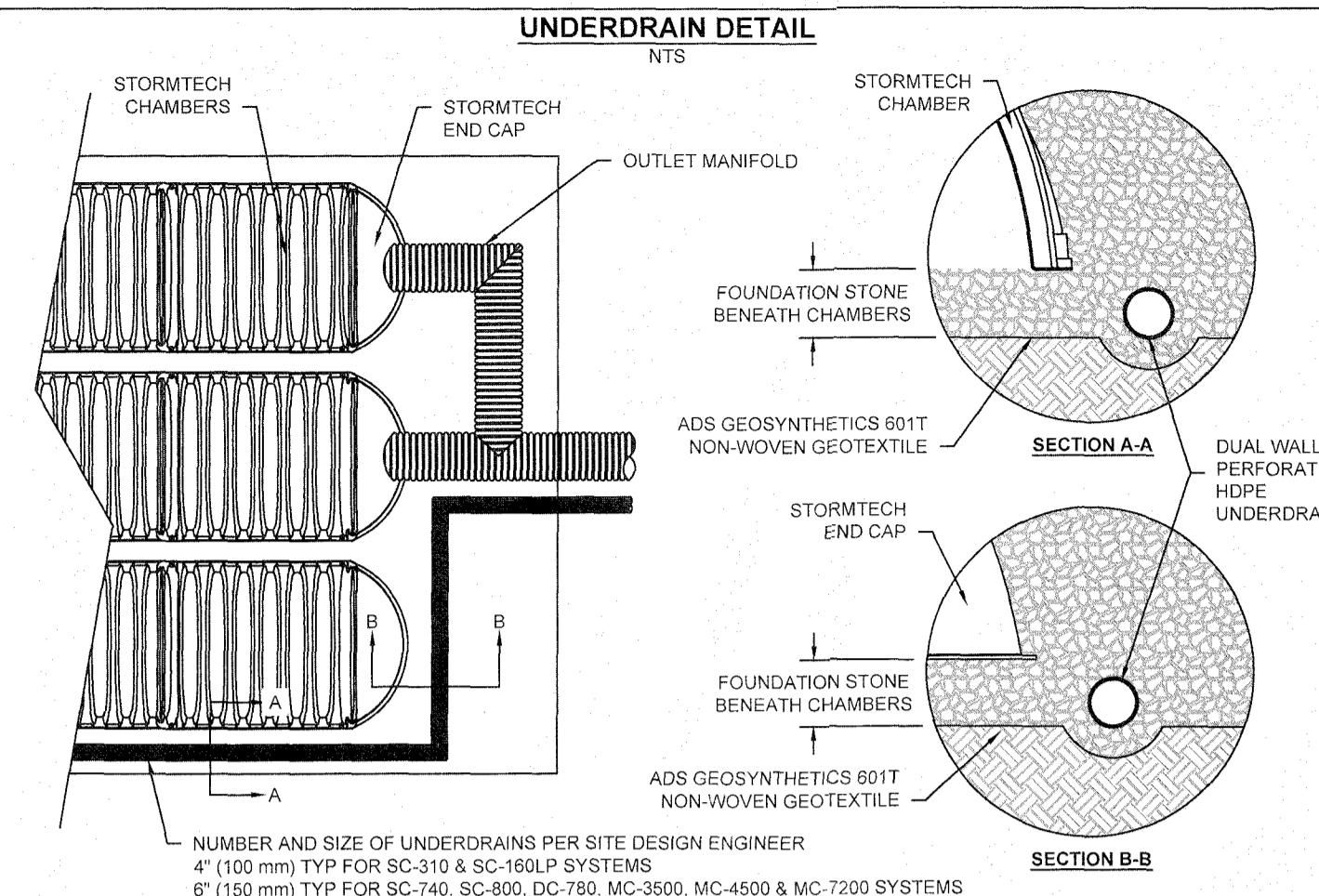
MATERIAL LOCATION	DESCRIPTION	AASHTO MATERIAL CLASSIFICATIONS	COMPACTION / DENSITY REQUIREMENT
D	FINAL FILL: FILL MATERIAL FOR LAYER 'D' STARTS FROM THE TOP OF THE 'C' LAYER TO THE BOTTOM OF FLEXIBLE PAVEMENT OR UNPAVED FINISHED GRADE ABOVE. NOTE THAT PAVEMENT SUBBASE MAY BE PART OF THE 'D' LAYER.	N/A	PREPARE PER SITE DESIGN ENGINEER'S PLANS. PAVED INSTALLATIONS MAY HAVE STRINGENT MATERIAL AND PREPARATION REQUIREMENTS.
C	INITIAL FILL: FILL MATERIAL FOR LAYER 'C' STARTS FROM THE TOP OF THE EMBEDMENT STONE ('B' LAYER) TO 18" (450 mm) ABOVE THE TOP OF THE CHAMBER. NOTE THAT PAVEMENT SUBBASE MAY BE A PART OF THE 'C' LAYER.	AASHTO M145 ¹ A-1, A-2.4, A-3 OR AASHTO M43 ² 3, 357, 4, 467, 5, 56, 57, 6, 67, 68, 7, 78, 8, 89, 9, 10	BEGIN COMPACTIONS AFTER 12" (300 mm) OF MATERIAL OVER THE CHAMBERS IS REACHED. COMPACT ADDITIONAL LAYERS IN 6" (150 mm) MAX LIFTS TO A MIN. 95% PROCTOR DENSITY FOR WELL GRADED MATERIAL AND 95% RELATIVE DENSITY FOR PROCESSED AGGREGATE MATERIALS. ROLLER GROSS VEHICLE WEIGHT NOT TO EXCEED 12,000 lbs (53 kN). DYNAMIC FORCE NOT TO EXCEED 20,000 lbs (89 kN).
B	EMBEDMENT STONE: FILL SURROUNDING THE CHAMBERS FROM THE FOUNDATION STONE ('A' LAYER) TO THE 'C' LAYER ABOVE.	AASHTO M43 ² 3, 357, 4, 467, 5, 56, 57	NO COMPACTION REQUIRED.
A	FOUNDATION STONE: FILL BELOW CHAMBERS FROM THE SUBGRADE UP TO THE FOOT (BOTTOM) OF THE CHAMBER.	AASHTO M43 ² 3, 357, 4, 467, 5, 56, 57	PLATE COMPACT OR ROLL TO ACHIEVE A FLAT SURFACE. ^{3,4}

PLEASE NOTE:
 1. THE LISTED AASHTO DESIGNATIONS ARE FOR GRADATIONS ONLY. THE STONE MUST ALSO BE CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR NO. 4 (AASHTO M43) STONE."
 2. STORMTECH COMPACTION REQUIREMENTS ARE MET FOR 'A' LOCATION MATERIALS WHEN PLACED AND COMPACTED IN 9" (230 mm) (MAX) LIFTS USING TWO FULL COVERS WITH A VIBRATORY COMPACTOR.
 3. WHERE INFILTRATION SURFACES MAY BE COMPROMISED BY COMPACTION, FOR STANDARD DESIGN LOAD CONDITIONS, A FLAT SURFACE MAY BE ACHIEVED BY RAKING OR DRAGGING WITHOUT COMPACTION EQUIPMENT. FOR SPECIAL LOAD DESIGNS, CONTACT STORMTECH FOR COMPACTION REQUIREMENTS.
 4. ONCE LAYER 'C' IS PLACED, ANY SOIL/MATERIAL CAN BE PLACED IN LAYER 'D' UP TO THE FINISHED GRADE. MOST PAVEMENT SUBBASE MATERIALS CAN BE USED TO REPLACE THE MATERIAL REQUIREMENTS OF LAYER 'C' OR 'D' AT THE SITE DESIGN ENGINEER'S DISCRETION.
 5. WHERE RECYCLED CONCRETE AGGREGATE IS USED IN LAYERS 'A' OR 'B' THE MATERIAL SHOULD ALSO MEET THE ACCEPTABILITY CRITERIA OUTLINED IN TECHNICAL NOTE 6.20 "RECYCLED CONCRETE STRUCTURAL BACKFILL".



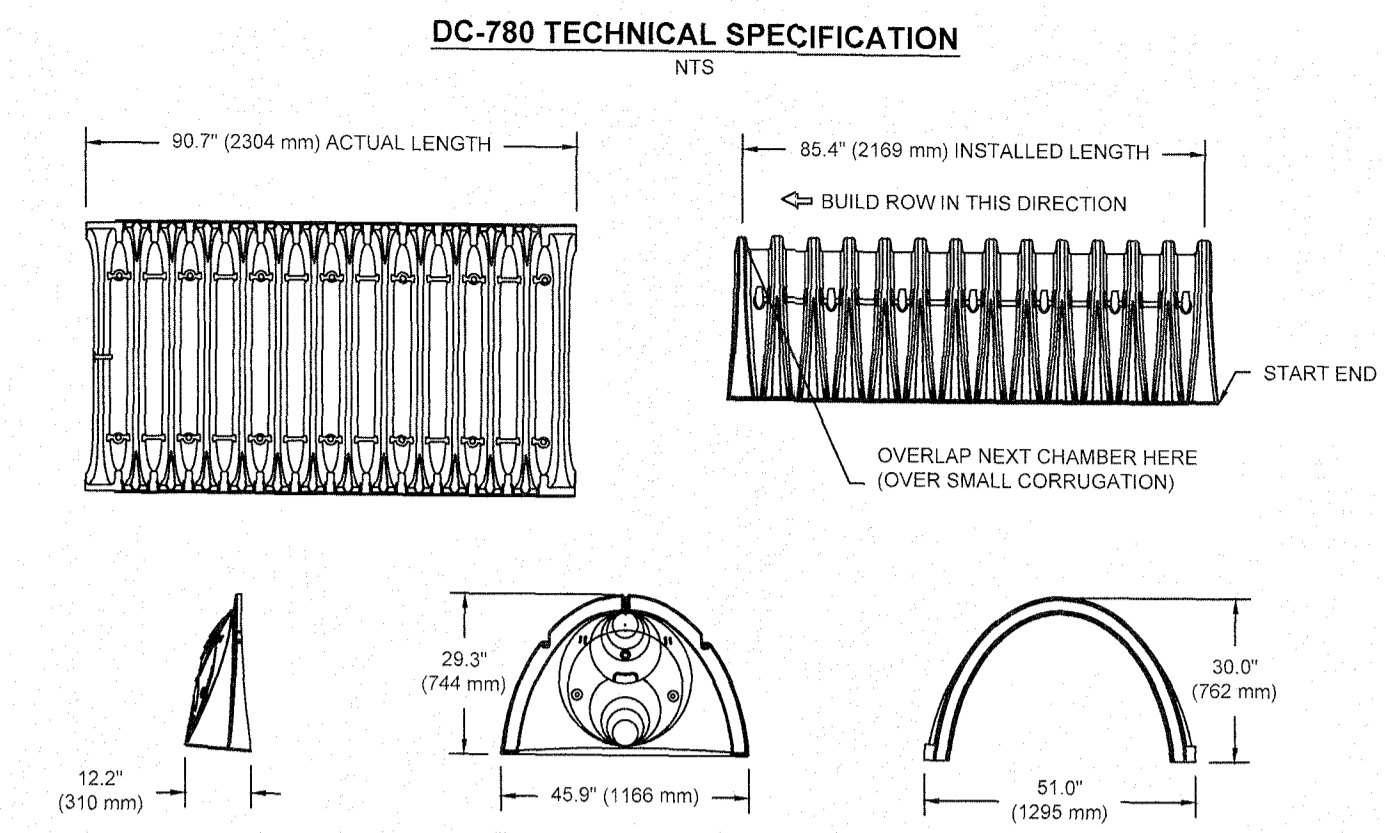
- NOTES:**
- CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2418, "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
 - DC-780 CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
 - 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. REFERENCE STORMTECH DESIGN MANUAL FOR BEARING CAPACITY GUIDANCE.
 - PERIMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS.
 - REQUIREMENTS FOR HANDLING AND INSTALLATION:
 - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
 - TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 2" (50 mm).
 - TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, THE ARCH STIFFNESS CONSTANT AS DEFINED IN SECTION 6.2.8 OF ASTM F2418 SHALL BE GREATER THAN OR EQUAL TO 500 LBS/FT³. (AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73°F / 23°C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.

DC-780 CROSS SECTION DETAIL



CHAMBER	MAX DIAMETER OF INSERTA TEE	HEIGHT FROM BASE OF CHAMBER (A)
SC-310	6" (150 mm)	4" (100 mm)
SC-800	10" (250 mm)	4" (100 mm)
DC-780	10" (250 mm)	4" (100 mm)
MC-3500	12" (300 mm)	6" (150 mm)
MC-4500	12" (300 mm)	6" (150 mm)
MC-7200	12" (300 mm)	6" (150 mm)

INSERTA-TEE SIDE INLET DETAIL



NOMINAL CHAMBER SPECIFICATIONS

SIZE (W X H X INSTALLED LENGTH)	CHAMBER STORAGE	MINIMUM INSTALLED STORAGE*	WEIGHT
51.0" X 30.0" X 85.4"	46.2 CUBIC FEET (1,300 m ³)	78.4 CUBIC FEET (2,200 m ³)	75.0 lbs. (33.6 kg)

NOMINAL END CAP SPECIFICATIONS

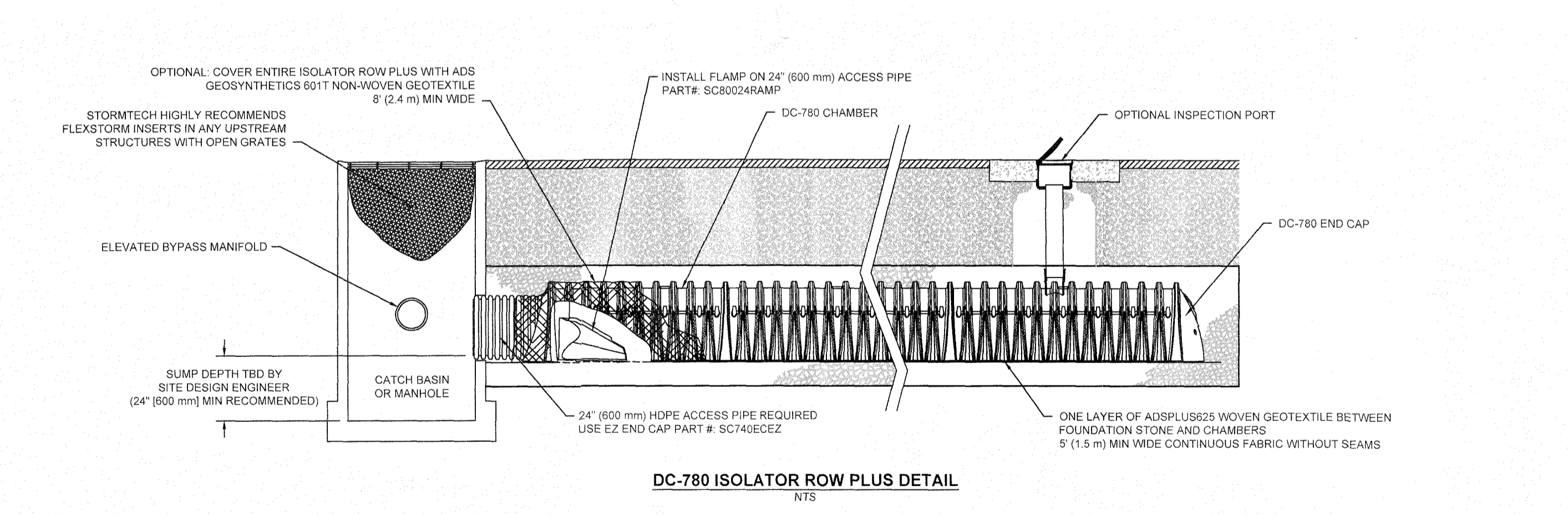
SIZE (W X H X INSTALLED LENGTH)	END CAP STORAGE	MINIMUM INSTALLED STORAGE*	WEIGHT
45.9" X 28.3" X 9.6"	2.9 CUBIC FEET (0.40 m ³)	14.4 CUBIC FEET (5.3 m ³)	11.7 lbs. (5.3 kg)

* ASSUMES 6" (152 mm) STONE ABOVE, 9" (229 mm) BELOW, AND 6" (152 mm) BETWEEN CHAMBERS
 ** ASSUMES 6" (152 mm) STONE ABOVE, 9" (229 mm) BELOW END CAPS, 6" (152 mm) BETWEEN ROWS, 12" (305 mm) BEYOND END CAPS

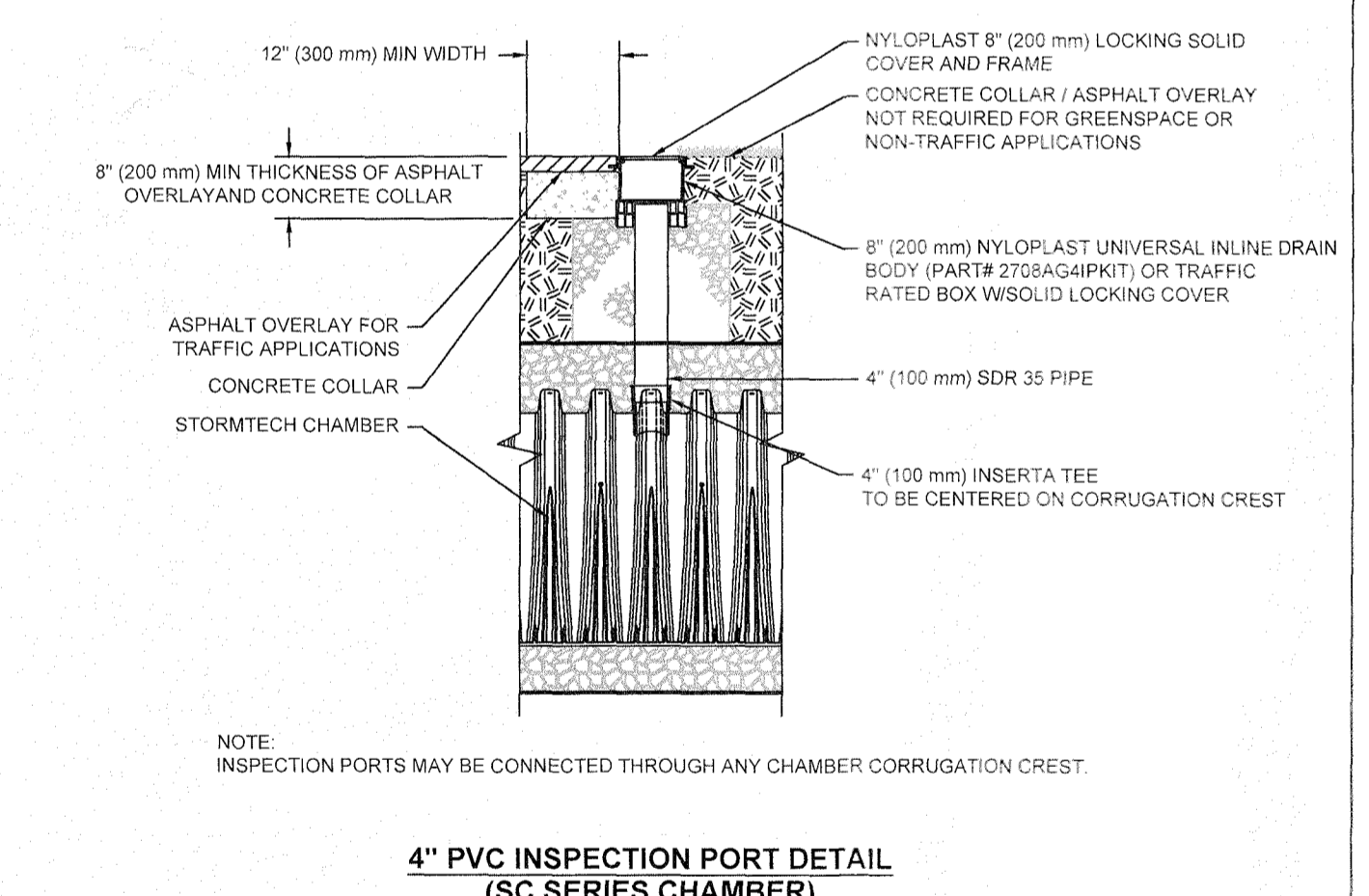
PART #	STUB	B	C
SC740EP08TPC	6" (150 mm)	18.5" (470 mm)	0.5" (13 mm)
SC740EP08BPC	6" (150 mm)	16.5" (419 mm)	0.5" (13 mm)
SC740EP08TPC	8" (200 mm)	16.5" (419 mm)	0.6" (15 mm)
SC740EP08BPC	8" (200 mm)	14.5" (368 mm)	0.7" (18 mm)
SC740EP10TPC	10" (250 mm)	12.5" (318 mm)	1.2" (30 mm)
SC740EP10BPC	10" (250 mm)	12.5" (318 mm)	1.2" (30 mm)
SC740EP12TPC	12" (300 mm)	9.0" (229 mm)	1.3" (33 mm)
SC740EP12BPC	12" (300 mm)	9.0" (229 mm)	1.3" (33 mm)
SC740EP15TPC	15" (375 mm)	5.0" (127 mm)	1.5" (41 mm)
SC740EP15BPC	15" (375 mm)	5.0" (127 mm)	1.5" (41 mm)
SC740EP18TPC	18" (450 mm)	5.0" (127 mm)	1.5" (41 mm)
SC740EP18BPC	18" (450 mm)	5.0" (127 mm)	1.5" (41 mm)
SC740ECEZ*	24" (600 mm)	---	0.1" (3 mm)

ALL STUBS, EXCEPT FOR THE SC740ECEZ ARE PLACED AT BOTTOM OF END CAP SUCH THAT THE OUTSIDE DIAMETER OF THE STUB IS FLUSH WITH THE BOTTOM OF THE END CAP. FOR ADDITIONAL INFORMATION CONTACT STORMTECH AT 1-888-892-2694.
 * FOR THE SC740ECEZ THE 24" (600 mm) STUB LIES BELOW THE BOTTOM OF THE END CAP APPROXIMATELY 1.75" (44 mm). BACKFILL MATERIAL SHOULD BE REMOVED FROM BELOW THE N-12 STUB SO THAT THE FITTING SITS LEVEL.
 NOTE: ALL DIMENSIONS ARE NOMINAL. PRE-CORED END CAPS END WITH "PC".

DC-780 TECHNICAL SPECIFICATIONS



DC-780 ISOLATOR ROW PLUS DETAIL



4" PVC INSPECTION PORT DETAIL (SC SERIES CHAMBER)

- INSPECTION & MAINTENANCE**
- STEP 1) INSPECT ISOLATOR ROW PLUS FOR SEDIMENT
- INSPECTION PORTS (IF PRESENT)
 - REMOVE OPEN LID ON NYLOPLAST INLINE DRAIN
 - REMOVE AND CLEAN FLEXSTORM FILTER IF INSTALLED
 - USING A FLASHLIGHT AND STADIA ROD, MEASURE DEPTH OF SEDIMENT AND RECORD ON MAINTENANCE LOG
 - LOWER A CAMERA INTO ISOLATOR ROW PLUS FOR VISUAL INSPECTION OF SEDIMENT LEVELS (OPTIONAL)
 - IF SEDIMENT IS AT OR ABOVE 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.
 - ALL ISOLATOR PLUS ROWS
 - REMOVE COVER FROM STRUCTURE AT UPSTREAM END OF ISOLATOR ROW PLUS
 - USING A FLASHLIGHT, INSPECT DOWN THE ISOLATOR ROW PLUS THROUGH OUTLET PIPE
 - MIRRORS ON POLES OR CAMERAS MAY BE USED TO AVOID A CONFINED SPACE ENTRY
 - FOLLOW OSHA REGULATIONS FOR CONFINED SPACE ENTRY IF ENTERING MANHOLE
 - IF SEDIMENT IS AT OR ABOVE 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.
- STEP 2) CLEAN OUT ISOLATOR ROW PLUS USING THE JETVAC PROCESS
- A FIXED QUILITY CLEANING NOZZLE WITH REAR FACING SPREAD OF 45° (1.1 m) OR MORE IS PREFERRED
 - APPLY MULTIPLE PASSES OF JETVAC UNTIL BACKFLUSH WATER IS CLEAN
 - VACUUM STRUCTURE SUMP AS REQUIRED
- STEP 3) REPLACE ALL COVERS, GRATES, FILTERS, AND LIDS; RECORD OBSERVATIONS AND ACTIONS
- STEP 4) INSPECT AND CLEAN BASINS AND MANHOLES UPSTREAM OF THE STORMTECH SYSTEM
- NOTES**
- INSPECT EVERY 6 MONTHS DURING THE FIRST YEAR OF OPERATION. ADJUST THE INSPECTION INTERVAL BASED ON PREVIOUS OBSERVATIONS OF SEDIMENT ACCUMULATION AND HIGH WATER ELEVATIONS.
 - CONDUCT JETTING AND VACTORING ANNUALLY OR WHEN INSPECTION SHOWS THAT MAINTENANCE IS NECESSARY.

TREE CLEARING NOTE:
 NO TREE REMOVAL SHALL BE REMOVED FROM APRIL 1st TO OCTOBER 31st TO MITIGATE POTENTIAL HARMFUL IMPACTS TO INDIANA BAT.

WARNING- IT IS A VIOLATION OF NEW YORK EDUCATIONAL LAW, SECTION 7209.2, FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATIONAL LAW, SECTION 7209.2

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REV.	BY	DATE	DESCRIPTION

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SITE PLAN PREPARED FOR
 55 SOUTH ROAD
 VILLAGE OF SOUTH BLOOMING GROVE,
 ORANGE COUNTY, NEW YORK

STORMWATER DETAILS

MICHAEL A. MORGANTE, P.E.
 LIC. NO. 78577

Village of South Blooming Grove
 APPROVED
 Planning Board
 DATE: 09-29-25
 SEP 30 2025
 Signature: _____ Date: _____

JOB#: 25-020
 SCALE: AS NOTED
 DATE: 09-29-25
 DRAWN: MM
 CHECKED: MM
 SHEET NO. 17 OF 20

DC-780 STORMTECH CHAMBER SPECIFICATIONS

- CHAMBERS SHALL BE STORMTECH DC-780.
- CHAMBERS SHALL BE ARCH-SHAPED AND SHALL BE MANUFACTURED FROM VIRGIN, IMPACT-MODIFIED POLYPROPYLENE COPOLYMERS.
- CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2418, "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
- CHAMBER ROWS SHALL PROVIDE CONTINUOUS, UNOBSTRUCTED INTERNAL SPACE WITH NO INTERNAL SUPPORTS THAT WOULD IMPEDE FLOW OR LIMIT ACCESS FOR INSPECTION.
- THE STRUCTURAL DESIGN OF THE CHAMBERS, THE STRUCTURAL BACKFILL, AND THE INSTALLATION REQUIREMENTS SHALL ENSURE THAT THE LOAD FACTORS SPECIFIED IN THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, SECTION 12.12, ARE MET FOR: 1) LONG-DURATION DEAD LOADS AND 2) SHORT-DURATION LIVE LOADS, BASED ON THE AASHTO DESIGN TRUCK WITH CONSIDERATION FOR IMPACT AND MULTIPLE VEHICLE PRESENCES.
- CHAMBERS SHALL BE DESIGNED, TESTED AND ALLOWABLE LOAD CONFIGURATIONS DETERMINED IN ACCORDANCE WITH ASTM F2787, "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS". LOAD CONFIGURATIONS SHALL INCLUDE: 1) INSTANTANEOUS (<1 MIN) AASHTO DESIGN TRUCK LIVE LOAD ON MINIMUM COVER 2) MAXIMUM PERMANENT (75-YR) COVER LOAD AND 3) ALLOWABLE COVER WITH PARKED (1-WEEK) AASHTO DESIGN TRUCK.
- REQUIREMENTS FOR HANDLING AND INSTALLATION:
 - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
 - TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 2".
 - TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, a) THE ARCH STIFFNESS CONSTANT SHALL BE GREATER THAN OR EQUAL TO 500 LBS/FT². THE ASC IS DEFINED IN SECTION 6.2.8 OF ASTM F2418. AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.
- ONLY CHAMBERS THAT ARE APPROVED BY THE SITE DESIGN ENGINEER WILL BE ALLOWED. UPON REQUEST BY THE SITE DESIGN ENGINEER OR OWNER, THE CHAMBER MANUFACTURER SHALL SUBMIT A STRUCTURAL EVALUATION FOR APPROVAL BEFORE DELIVERING CHAMBERS TO THE PROJECT SITE AS FOLLOWS:
 - THE STRUCTURAL EVALUATION SHALL BE SEALED BY A REGISTERED PROFESSIONAL ENGINEER.
 - THE STRUCTURAL EVALUATION SHALL DEMONSTRATE THAT THE SAFETY FACTORS ARE GREATER THAN OR EQUAL TO 1.95 FOR DEAD LOAD AND 1.75 FOR LIVE LOAD, THE MINIMUM REQUIRED BY ASTM F2787 AND BY SECTIONS 3 AND 12.12 OF THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS FOR THERMOPLASTIC PIPE.
 - THE TEST DERIVED CREEP MODULUS AS SPECIFIED IN ASTM F2418 SHALL BE USED FOR PERMANENT DEAD LOAD DESIGN EXCEPT THAT IT SHALL BE THE 75-YEAR MODULUS USED FOR DESIGN.
- CHAMBERS AND END CAPS SHALL BE PRODUCED AT AN ISO 9001 CERTIFIED MANUFACTURING FACILITY.
- MANIFOLD SIZE TO BE DETERMINED BY SITE DESIGN ENGINEER. SEE TECHNICAL NOTE 6.32 FOR MANIFOLD SIZING GUIDANCE. DUE TO THE ADAPTATION OF THIS CHAMBER SYSTEM TO SPECIFIC SITE AND DESIGN CONSTRAINTS, IT MAY BE NECESSARY TO CUT AND COUPLE ADDITIONAL PIPE TO STANDARD MANIFOLD COMPONENTS IN THE FIELD.
- ADS DOES NOT DESIGN OR PROVIDE MEMBRANE LINER SYSTEMS. TO MINIMIZE THE LEAKAGE POTENTIAL OF LINER SYSTEMS, THE MEMBRANE LINER SYSTEM SHOULD BE DESIGNED BY A KNOWLEDGEABLE GEOTECHNICAL PROFESSIONAL AND INSTALLED BY A QUALIFIED CONTRACTOR.

IMPORTANT - NOTES FOR THE BIDDING AND INSTALLATION OF THE DC-780 CHAMBER SYSTEM

- STORMTECH DC-780 CHAMBERS SHALL NOT BE INSTALLED UNTIL THE MANUFACTURER'S REPRESENTATIVE HAS COMPLETED A PRE-CONSTRUCTION MEETING WITH THE INSTALLERS.
- STORMTECH DC-780 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH INSTALLATION GUIDE SC-310/DC-780/SC-800".
- CHAMBERS ARE NOT TO BE BACKFILLED WITH A DOZER OR AN EXCAVATOR SITUATED OVER THE CHAMBERS. STORMTECH RECOMMENDS 3 BACKFILL METHODS:
 - STONESHOOTER LOCATED OFF THE CHAMBER BED.
 - BACKFILL AS ROWS ARE BUILT USING AN EXCAVATOR ON THE FOUNDATION STONE OR SUBGRADE.
 - BACKFILL FROM OUTSIDE THE EXCAVATION USING A LONG BOOM HOE OR EXCAVATOR.
- THE FOUNDATION STONE SHALL BE LEVELED AND COMPACTED PRIOR TO PLACING CHAMBERS.
- JOINTS BETWEEN CHAMBERS SHALL BE PROPERLY SEATED PRIOR TO PLACING STONE.
- MAINTAIN MINIMUM - SPACING BETWEEN THE CHAMBER ROWS.
- EMBEDMENT STONE SURROUNDING CHAMBERS MUST BE A CLEAN, CRUSHED, ANGULAR STONE OR RECYCLED CONCRETE; AASHTO M43 #3, 357, 4, 467, 5, 56, OR 57.
- THE CONTRACTOR MUST REPORT ANY DISCREPANCIES WITH CHAMBER FOUNDATION MATERIALS BEARING CAPACITIES TO THE SITE DESIGN ENGINEER.
- ADS RECOMMENDS THE USE OF "FLEXSTORM CATCH IT" INSERTS DURING CONSTRUCTION FOR ALL INLETS TO PROTECT THE SUBSURFACE STORMWATER MANAGEMENT SYSTEM FROM CONSTRUCTION SITE RUNOFF.

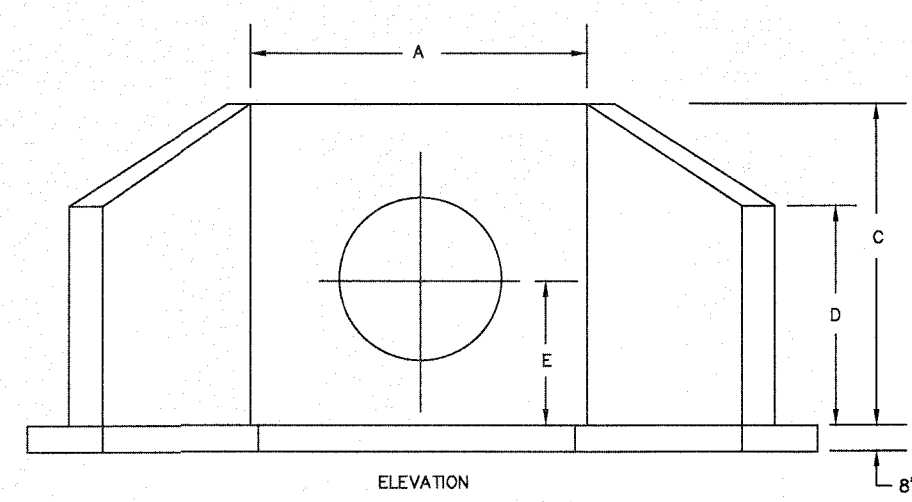
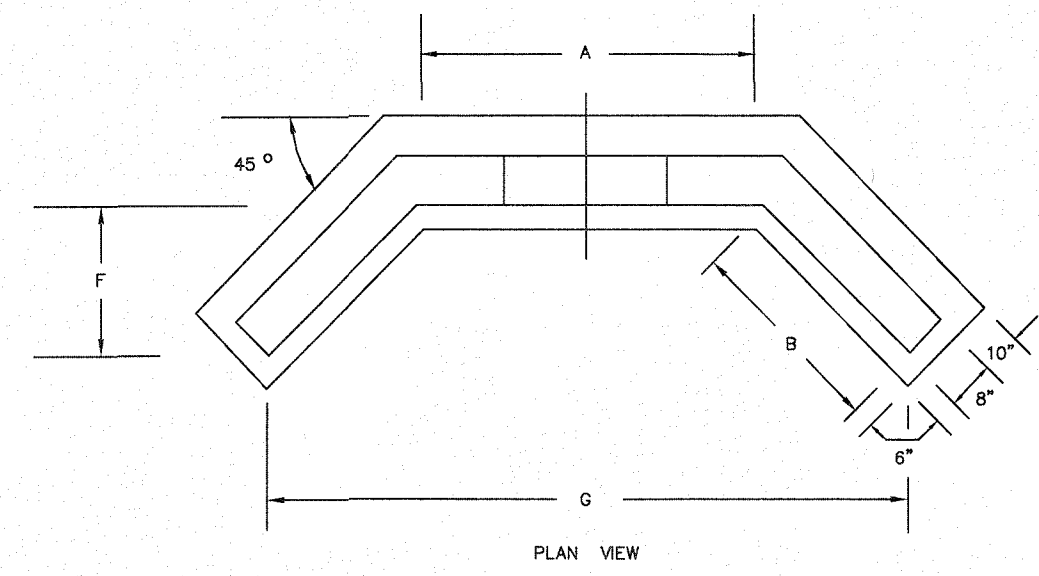
NOTES FOR CONSTRUCTION EQUIPMENT

- STORMTECH DC-780 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH INSTALLATION GUIDE SC-310/DC-780/SC-800".
- THE USE OF CONSTRUCTION EQUIPMENT OVER DC-780 CHAMBERS IS LIMITED:
 - NO EQUIPMENT IS ALLOWED ON BARE CHAMBERS.
 - NO RUBBER Tired LOADERS, DUMP TRUCKS, OR EXCAVATORS ARE ALLOWED UNTIL PROPER FILL DEPTHS ARE REACHED IN ACCORDANCE WITH THE "STORMTECH INSTALLATION GUIDE SC-310/DC-780/SC-800".
 - WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT CAN BE FOUND IN THE "STORMTECH INSTALLATION GUIDE SC-310/DC-780/SC-800".
- FULL 36" (900 mm) OF STABILIZED COVER MATERIALS OVER THE CHAMBERS IS REQUIRED FOR DUMP TRUCK TRAVEL OR DUMPING. USE OF A DOZER TO PUSH EMBEDMENT STONE BETWEEN THE ROWS OF CHAMBERS MAY CAUSE DAMAGE TO THE CHAMBERS AND IS NOT AN ACCEPTABLE BACKFILL METHOD. ANY CHAMBERS DAMAGED BY THE "DUMP AND PUSH" METHOD ARE NOT COVERED UNDER THE STORMTECH STANDARD WARRANTY.

CONTACT STORMTECH AT 1-800-821-6710 WITH ANY QUESTIONS ON INSTALLATION REQUIREMENTS OR WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT.

PIPE DIA.	DIMENSION SCHEDULE										APPROX. WEIGHT
	A	B	C	D	E	F	G	H	I	J	
12"	36"	30"	54"	40"	36"	22"	78"	78"	5445	LBS.	
15"	48"	30"	60"	45"	37.5"	22"	92"	92"	6400	LBS.	
18"	48"	30"	60"	45"	39"	22"	92"	92"	6400	LBS.	
24"	60"	36"	64"	48"	42"	26"	112"	112"	7230	LBS.	
30"	72"	36"	72"	54"	45"	26"	124"	124"	9276	LBS.	
36"	78"	48"	78"	60"	48"	35"	144"	144"	11623	LBS.	
48"	84"	48"	90"	60"	54"	35"	150"	150"	12402	LBS.	

SPECIAL SIZES NOT LISTED CAN BE MFG. UPON REQUEST



CONCRETE HEADWALL

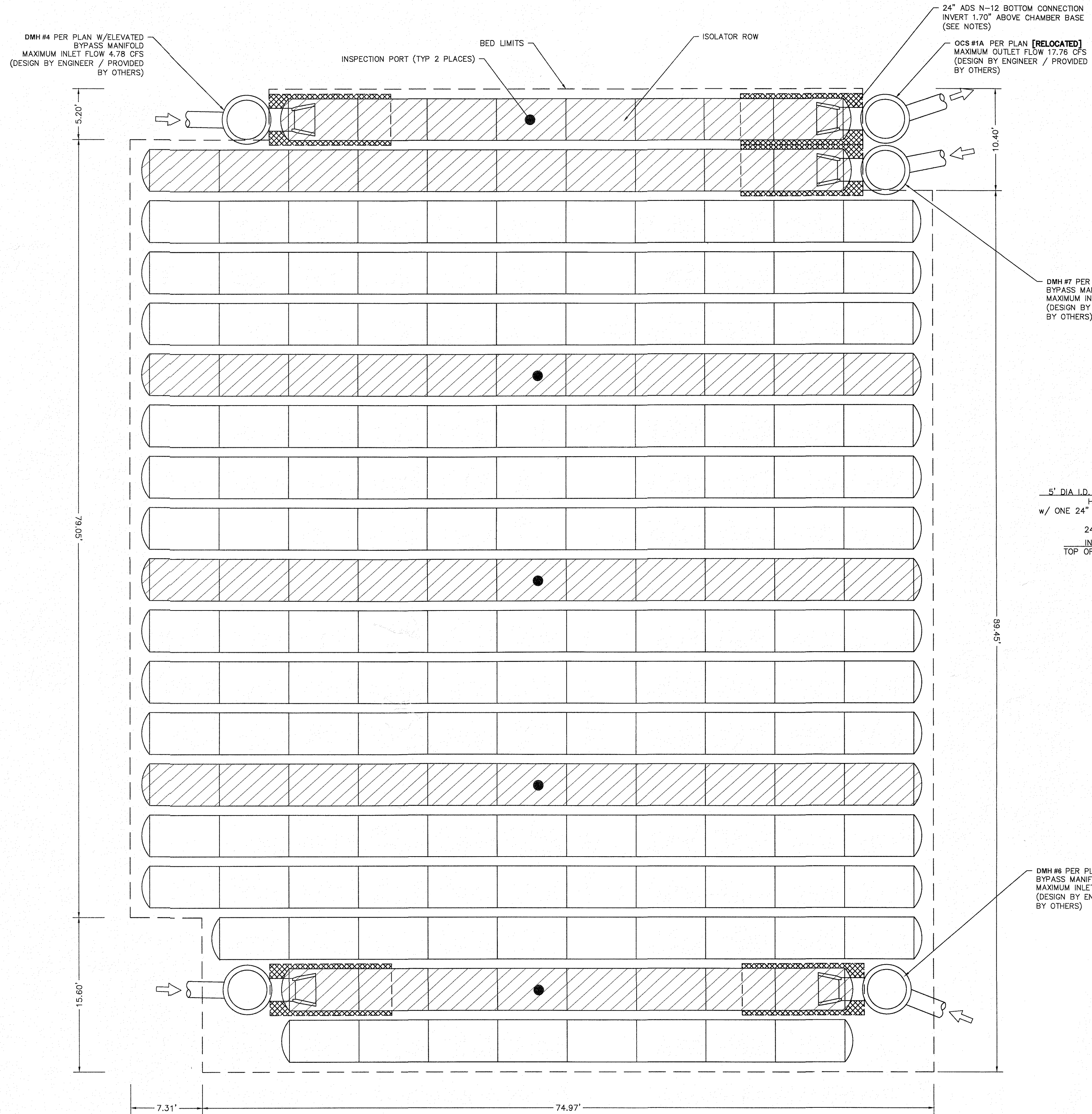
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TREE CLEARING NOTE:
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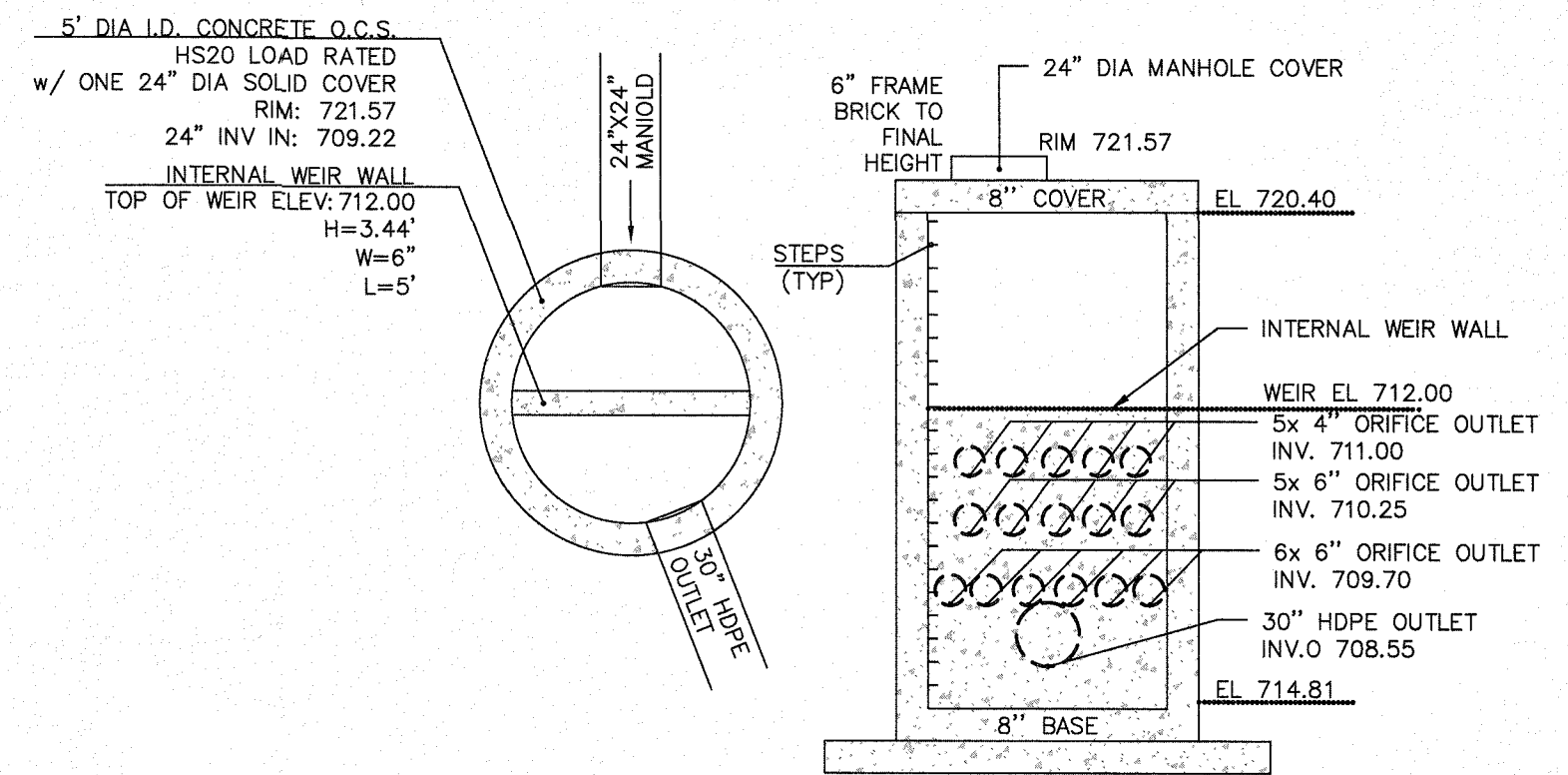
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STORMTECH DC-780 CHAMBER #1A

NOT TO SCALE



OUTLET STRUCTURE ELEVATIONS OCS #2A

SCALE: 1" = 1'

DMH #6 PER PLAN W/ELEVATED BYPASS MANIFOLD
MAXIMUM INLET FLOW 0.99 CFS
(DESIGN BY ENGINEER / PROVIDED BY OTHERS)

BRACH&MANN
BM
ASSOCIATES
PO Box 622 Monroe, NY 10949
T. (845) 782-5014
F. (845) 782-5015
m@bmassoc.com

REV.	BY	DATE	DESCRIPTION

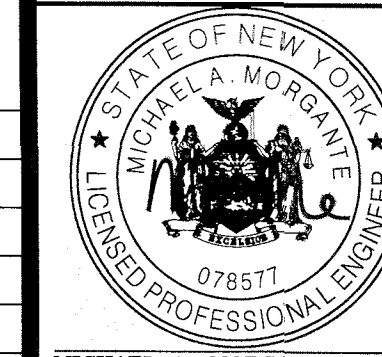
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Village of South Blooming Grove
APPROVED
Planning Board
Chairperson
Signature: _____ Date: SEP 30 2025

FOR PLANNING BOARD APPROVAL ONLY

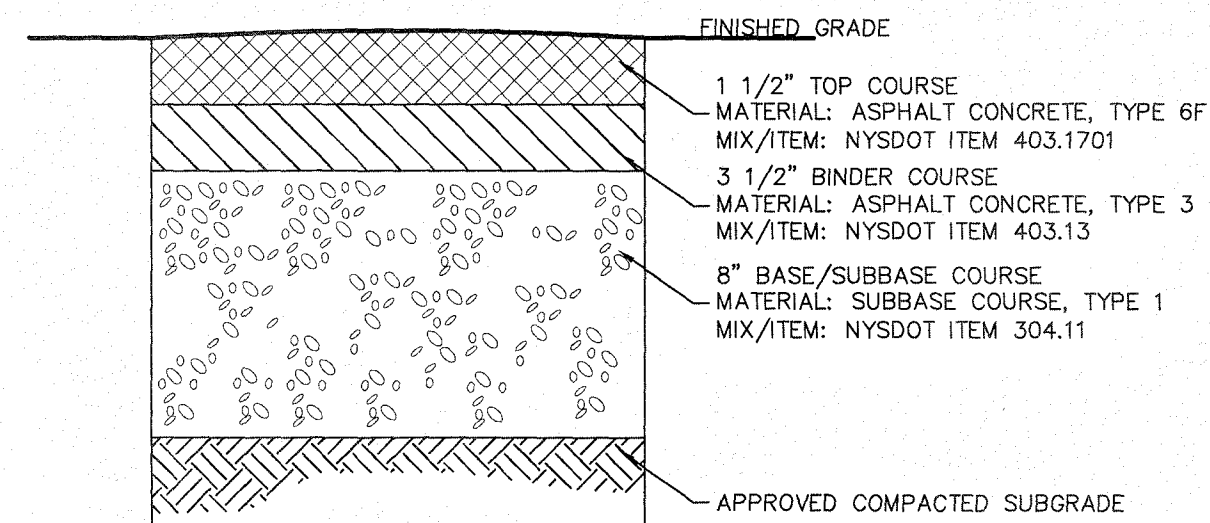
ARDEN CONSULTING ENGINEERS, PLLC
P.O. BOX 340 MONROE, N.Y.
TEL: (845) 782-8114
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SITE PLAN PREPARED FOR
55 MANGIN ROAD
VILLAGE OF SOUTH BLOOMING GROVE,
ORANGE COUNTY, NEW YORK

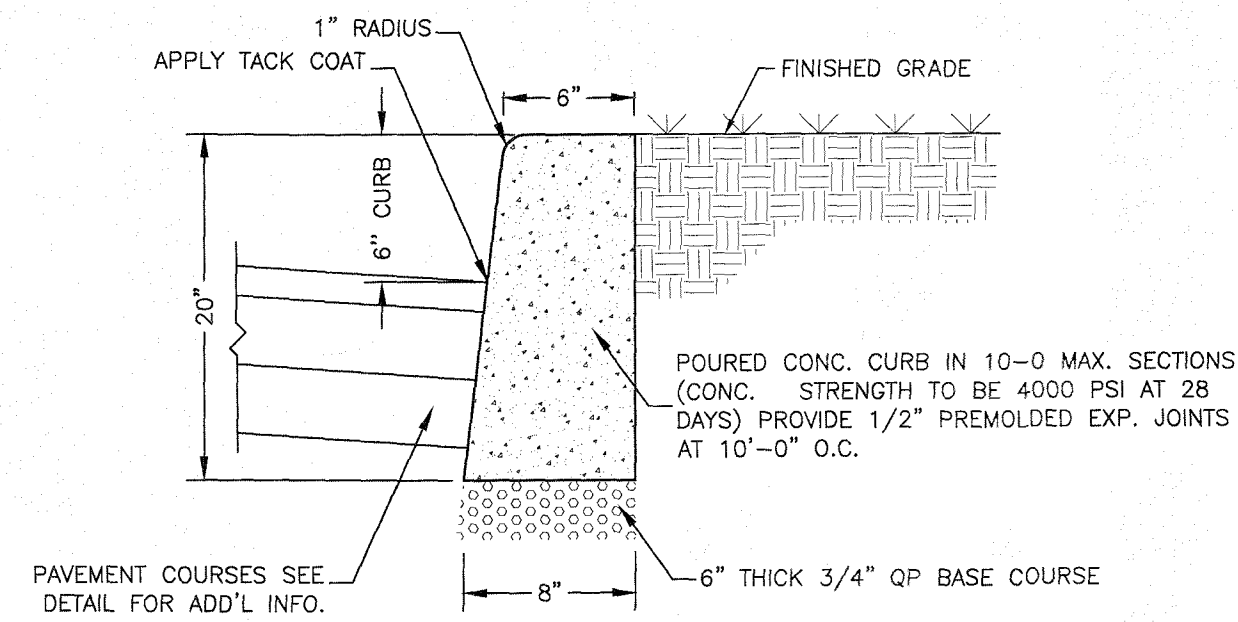
STORMWATER DETAILS

JOB#: 25-020
SCALE: AS NOTED
DATE: 09-29-25
DRAWN: MM
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SHEET NO. 18 OF 20

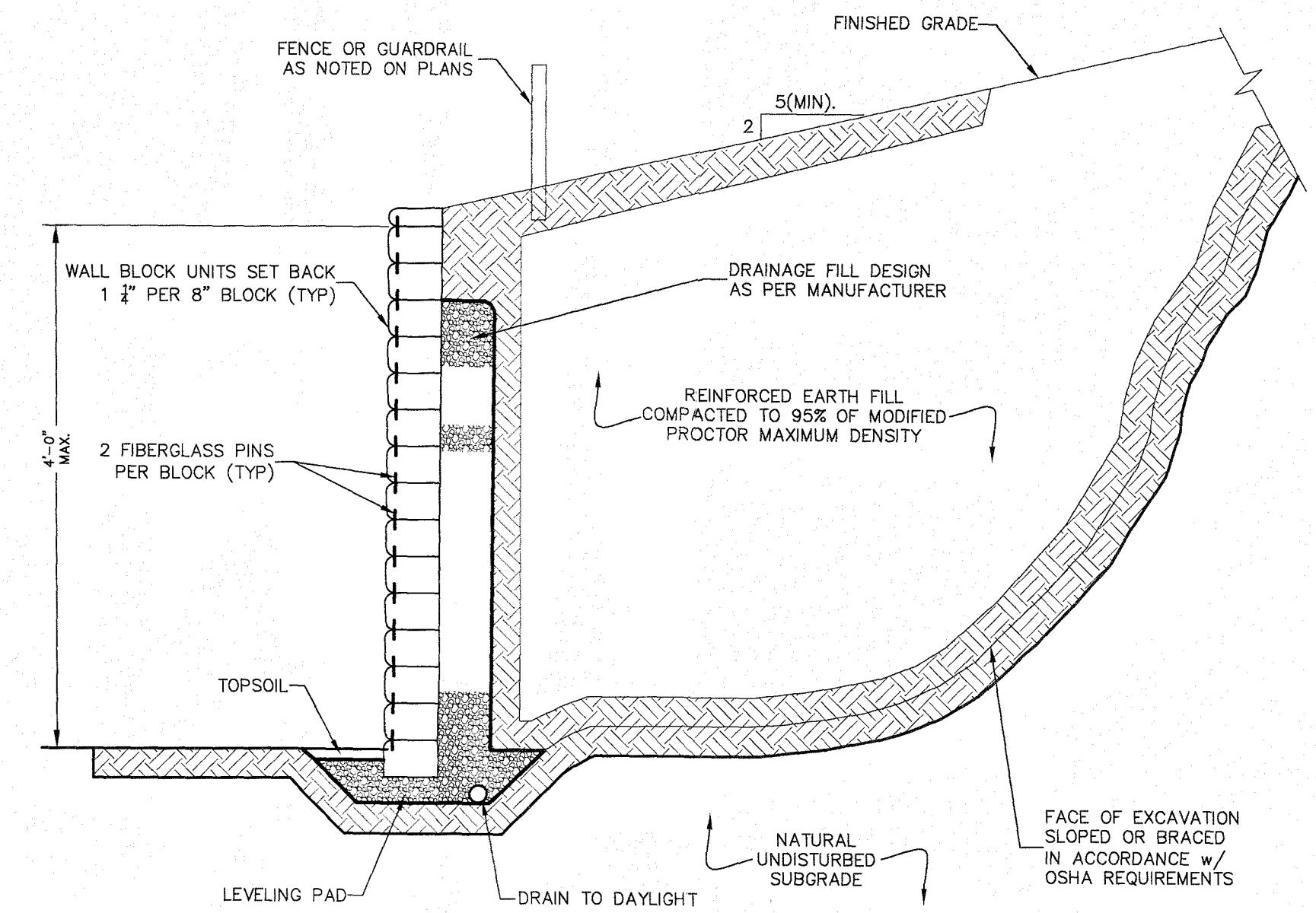


- NOTES:**
1. MATERIALS AND METHODS OF CONSTRUCTION SHALL BE IN CONFORMANCE WITH THE NEW YORK STATE DEPARTMENT OF TRANSPORTATION (NYSDOT) STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MATERIALS, LATEST EDITION, AND ALL ADDENDA THERETO.
 2. SUBBASE MATERIAL SHALL CONFORM WITH SECTION 204 - SUBBASE COURSE OF THE ABOVE REFERENCED NYSDOT STANDARD SPECIFICATIONS AND THE TYPE CALLED OUT IN THESE DRAWINGS.
 3. HOT MIX ASPHALT (HMA) PAVEMENT SHALL CONFORM WITH SECTION 400 HOT MIX ASPHALT OF THE ABOVE REFERENCED NYSDOT STANDARD SPECIFICATIONS AND THE TYPE CALLED OUT IN THESE DRAWINGS. ALTHOUGH SECTION 400 IN ITS ENTIRETY IS REFERENCED, THE HOT MIX ASPHALT (HMA) PAVEMENT(S) SPECIFIED FOR TL-US CONTRACT SHALL BE AS SPECIFIED UNDER SECTION 402-HOT MIX ASPHALT (HMA) PAVEMENTS.
 4. TACK COAT SPECIFIED OR CALLED OUT IN THESE DRAWINGS OR REQUIRED BY THE REFERENCED SPECIFICATIONS SHALL CONFORM WITH SECTION 407-TACK COAT OF THE ABOVE REFERENCED NYSDOT STANDARD SPECIFICATIONS.
 5. WHERE IT IS NECESSARY TO PLACE FILL FOR PURPOSES OF BRINGING THE SUBGRADE ELEVATION UP TO A SPECIFIED GRADE, THE FILL MATERIAL PLACED SHALL BE IN CONFORMANCE WITH SECTION 203-EXCAVATION AND EMBANKMENT OF THE ABOVE REFERENCED NYSDOT STANDARD SPECIFICATIONS.
 6. THICKNESS INDICATED REFER TO COMPACTED MEASURE.

TYPICAL ASPHALT DETAIL FOR DRIVEWAY & PARKING AREAS
NOT TO SCALE

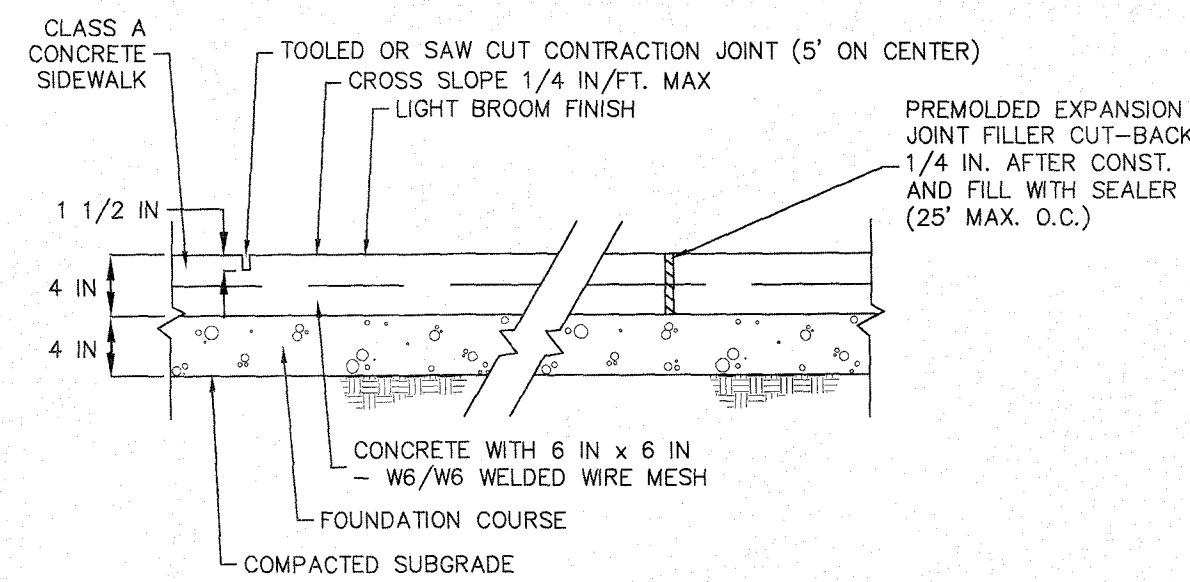


CONCRETE CURB DETAIL
NOT TO SCALE

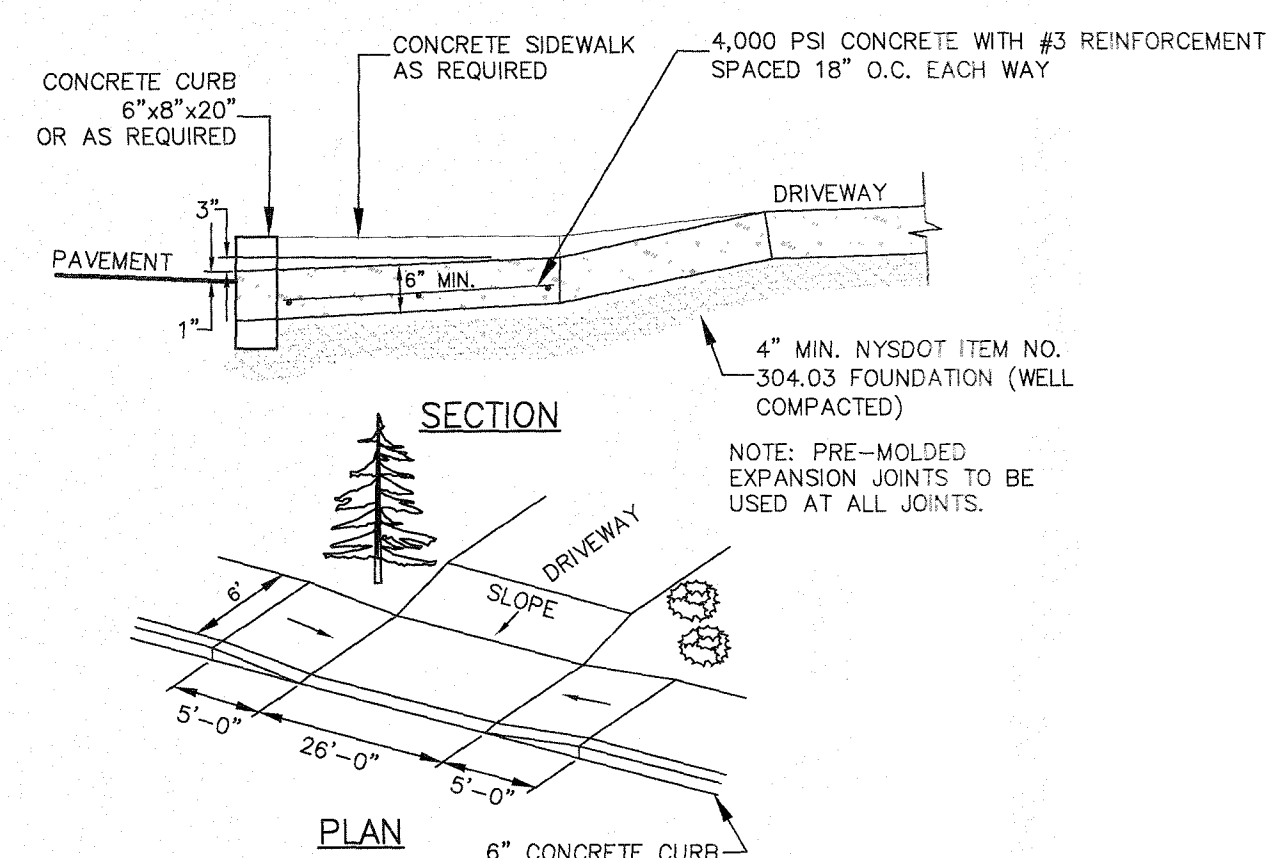


- NOTES:**
1. PROPOSED KEYSTONE KS HALF CENTURY RETAINING WALL SHALL BE DESIGNED AS PER THE MANUFACTURER.
 2. FENCING SHALL BE INSTALLED AS SHOWN ON THE PLANS, IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
 3. COLORS TO MATCH FOUNDATION STONE.
 4. FOR WALLS OVER 4'-0" HEIGHT SEE SPECIFIC ENGINEERED WALL DETAILS PREPARED BY OTHERS.

TYPICAL MSE RETAINING WALL
NOT TO SCALE

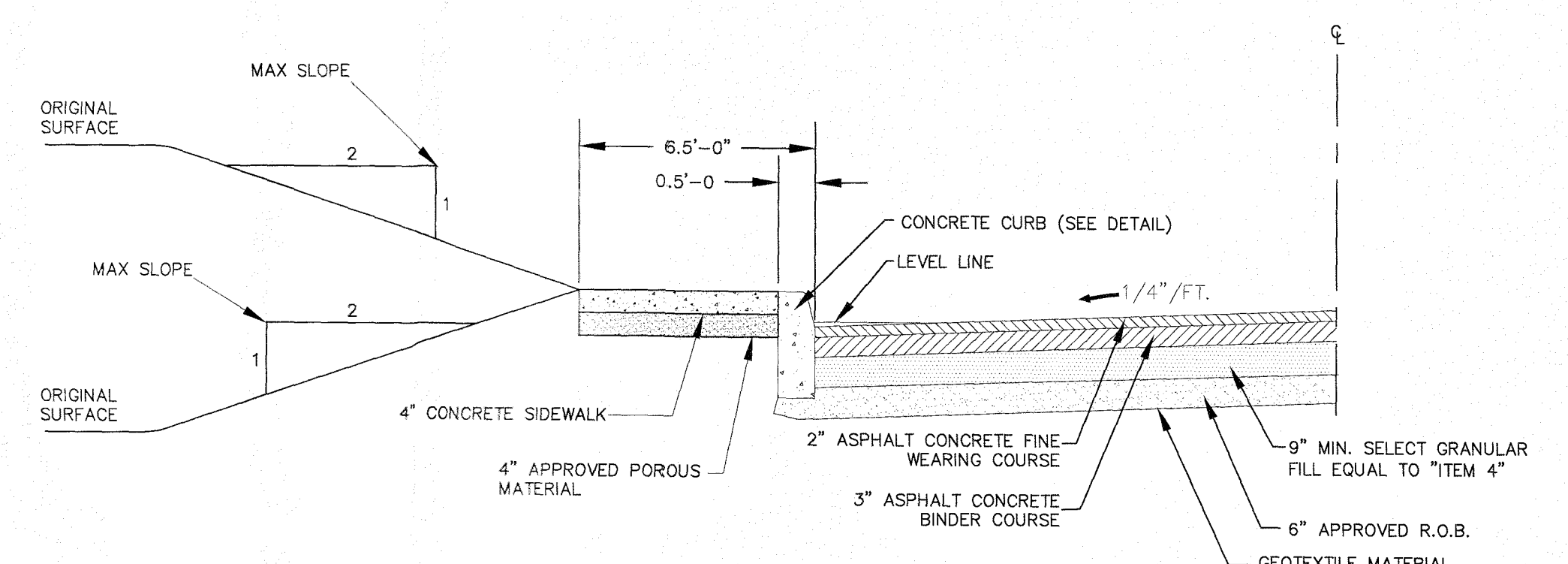


TYPICAL SIDEWALK SECTION
NOT TO SCALE



DRIVEWAY ENTRANCE DETAIL
NOT TO SCALE

NOTE: SEE PLAN SHEET FOR ACTUAL SIDEWALK & DRIVEWAY WIDTH

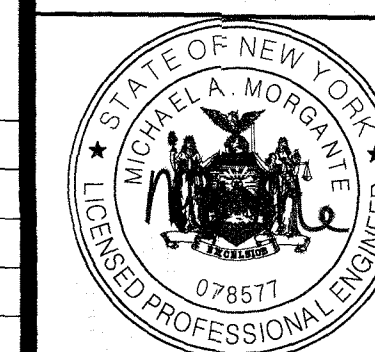


VILLAGE STREET WITH SIDEWALK
NOT TO SCALE

Village of South Blooming Grove
APPROVED
Planning Board
Chairman
Date: 02-20-25

FOR PLANNING BOARD APPROVAL ONLY

ARDEN CONSULTING ENGINEERS, PLLC
P.O. BOX 340 MONROE, N.Y.
TEL: (845) 782-8114
WWW.ARDENCONSULTING.NET



SITE PLAN PREPARED FOR
55 MANGIN ROAD
VILLAGE OF SOUTH BLOOMING GROVE,
ORANGE COUNTY, NEW YORK

CONSTRUCTION DETAILS

JOB#: 25-020
SCALE: AS NOTED
DATE: 02-20-25
DRAWN: MM
CHECKED: MM
SHEET NO. 10 OF 20

BRACH&MANN
BM
ASSOCIATES
PO Box 622 Monroe, NY 10949
T. (845) 782-5014
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mail@brachsmann.com

REV.	BY	DATE	DESCRIPTION
1	MM	9-29-25	PREPARATION OF PLANNING BOARD PLANS FOR SIGNATURE

THIS SHEET IS NOT VALID WITHOUT ALL OF THE SHEETS THAT COMPRISE THE SET

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WARNING- IT IS A VIOLATION OF NEW YORK EDUCATIONAL LAW, SECTION 7209.2, FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATIONAL LAW, SECTION 7209.2

ONLY MAPS WITH EMBOSSED SEALS ARE GENUINE COPIES OF THE ORIGINAL WORK AND OPINION. MAPS NOT BEARING EMBOSSED SEALS SHOULD NOT BE RELIED UPON SINCE OTHER THAN EMBOSSED-SEAL COPIES MAY CONTAIN UNAUTHORIZED AND UNDETECTABLE MODIFICATIONS, DELETIONS, ADDITIONS AND CHANGES.

udig NY MUST BE CONTACTED PRIOR TO ANY EXCAVATION OR DEMOLITION

TREE CLEARING NOTE:
NO TREE REMOVAL SHALL BE REMOVED FROM APRIL 1st TO OCTOBER 31st TO MITIGATE POTENTIAL HARMFUL IMPACTS TO INDIANA BAT.

EXISTING CONDITIONS & SURVEY NOTES:

- 1. SURVEYED WITHOUT THE BENEFIT OF A TITLE SEARCH, SUBJECT TO COVENANTS, EASEMENTS, RESTRICTIONS, CONDITIONS AND AGREEMENTS OF RECORD.
2. CONTOUR LINES INDICATED HEREON ARE STONY. THIS SURVEY WAS PREPARED IN ACCORDANCE WITH THE EXISTING CODE OF PRACTICE FOR PROFESSIONAL LAND SURVEYORS AS ADOPTED BY THE NEW YORK STATE ASSOCIATION OF PROFESSIONAL LAND SURVEYORS. SAID CERTIFICATIONS SHALL RUN ONLY TO THE PERSON SO NOTED.
3. CERTIFICATIONS ARE NOT TRANSFERABLE TO ADDITIONAL INSTITUTIONS, THEIR SUCCESSORS AND/OR ASSIGNS, OR SUBSEQUENT OWNERS.
4. SUBSURFACE STRUCTURES NOT VISIBLE OR READILY APPARENT ARE NOT SHOWN AND THEIR LOCATION AND EXTENT ARE NOT DETERMINED. THE LOCATION OF UNDERGROUND IMPROVEMENTS OR ENCROACHMENTS ARE NOT ALWAYS KNOWN AND OFTEN MUST BE ESTIMATED, IF ANY UNDERGROUND IMPROVEMENTS OR ENCROACHMENTS EXIST OR ARE SHOWN, THE IMPROVEMENTS OR ENCROACHMENTS ARE NOT COVERED BY THIS CERTIFICATE.
5. THE CONTRACTOR SHALL COMPLY WITH NEW YORK STATE INDUSTRIAL CODE RULE 753 - 48 HOURS PRIOR TO DIGGING CALL UDIG NY TO HAVE PUBLIC UTILITY LOCATIONS PAINTED.
6. ONLY TITLE SURVEYS BEARING THE MAKERS EMBOSSED SEAL SHOULD BE RELIED UPON SINCE OTHER THAN EMBOSSED-SEAL COPIES MAY CONTAIN UNAUTHORIZED AND UNDETECTABLE MODIFICATIONS, DELETIONS, ADDITIONS, AND CHANGES.
7. BOUNDARY LINES SHOWN HEREON ARE APPROXIMATE AND ARE SUBJECT TO WHATEVER STATE OF FACTS THAT AN ACCURATE BOUNDARY SURVEY MAY REVEAL.

GRADING NOTES:

- 1. PRIOR TO SITE DISTURBANCE, CONTRACTOR TO INSTALL EROSION & SEDIMENT CONTROL MEASURES.
2. IF ROCK IS ENCOUNTERED DURING CONSTRUCTION & REMOVAL BY BLASTING IS REQUIRED, THE CONTRACTOR SHALL OBTAIN ALL NECESSARY APPROVALS AND PERMITS REQUIRED BY THE AUTHORITY HAVING JURISDICTION.
3. ALL BLASTING OPERATIONS WILL ADHERE TO NEW YORK STATE AND LOCAL AUTHORITY ORDINANCES GOVERNING THE USE OF EXPLOSIVES. THE STATE REGULATIONS ARE CONTAINED IN 12 NYCRR 39 AND INDUSTRIAL CODE RULE 753.
4. STRIP ALL TOPSOIL PRIOR TO COMMENCING EARTHWORK OPERATIONS. TOPSOIL MAY BE STORED AND REUSED IN LAWN AND PLANTING AREAS ONLY. TOPSOIL AND SEED ALL AREAS DISTURBED BY CONSTRUCTION THAT ARE TO REMAIN GREEN.
5. BOX ALL TREES AND HOUSE ALL SHRUBS AND HEDGES BEFORE PLACING EARTH AGAINST OR NEAR THEM. ORNAMENTAL TREES, SHRUBS AND HEDGES WHICH MUST BE REMOVED DURING CONSTRUCTION SHALL BE HEALED IN AND RE-PLANTED IN AS GOOD A CONDITION AS THEY WERE BEFORE THEIR REMOVAL. ANY DAMAGED TREES, SHRUBS, AND/OR HEDGES SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
6. ALL EARTH-WORK SHALL BE SMOOTHLY AND EVENLY BLENDED INTO EXISTING CONDITIONS. NO WORK, STORAGE OR TRESPASS SHALL BE PERMITTED BEYOND THE BOUNDARIES OF ANY EASEMENT OR PROPERTY LINE.
7. REMOVE ALL VEGETATION, TREES, STUMPS, GRASSES, ORGANIC SOILS, DEBRIS AND DELETERIOUS MATERIALS WITHIN THE AREAS SLATED FOR CONSTRUCTION.
8. IF PREVIOUSLY UNKNOWN CULTURAL ARCHEOLOGICAL, OR HISTORIC REMAINS OR ARTIFACTS ARE DISCOVERED IN THE COURSE OF CONSTRUCTION OF THIS PROJECT, THE PROJECT SPONSORS SHALL SUSPEND CONSTRUCTION OPERATIONS IN THE PERTINENT AREA AND SHALL NOTIFY THE PROJECT ENGINEER.

DEMOLITION NOTES:

- 1. REFER TO REQUIREMENTS OUTLINED IN THE EROSION & SEDIMENTS CONTROL PLANS & NOTES PRIOR TO COMMENCEMENT OF WORK.
2. EXISTING STRUCTURES ARE TO BE REMOVED PRIOR TO CONSTRUCTION OF NEW IMPROVEMENTS.
3. BUILDING(S)/STRUCTURE(S) TO BE DEMOLISHED ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE NOT TO BE DEMOLISHED AS PART OF THIS WORK. PRIOR TO DEMOLISHING ANY BUILDINGS/STRUCTURES, THE CONTRACTOR SHALL PERFORM A PRE-DEMOLITION SURVEY IN ACCORDANCE WITH STATE AND FEDERAL REGULATIONS GOVERNING THE DISPOSAL OF SOLID WASTE. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS AND APPROVALS BY THE AUTHORITY HAVING JURISDICTION.
4. CONFORM TO APPLICABLE CODE FOR DEMOLITION OF STRUCTURES, SAFETY OF ADJACENT STRUCTURES, DUST CONTROL, RUNOFF CONTROL, AND HAULING, DISPOSAL AND STORAGE OF DEBRIS.
5. PROVIDE, ERECT, AND MAINTAIN TEMPORARY BARRIERS AND SECURITY DEVICES.
6. MAINTAIN EXISTING UTILITIES TO REMAIN IN SERVICE AND PROTECT THEM AGAINST DAMAGE DURING SELECTIVE DEMOLITION OPERATIONS. DO NOT INTERRUPT EXISTING UTILITIES SERVING OPERATING FACILITIES, EXCEPT WHEN AUTHORIZED IN WRITING BY OWNER AND AUTHORITIES HAVING JURISDICTION.
7. NOTIFY ADJACENT OWNERS OF WORK THAT MAY AFFECT THEIR PROPERTY, POTENTIAL NOISE, UTILITY OUTAGE, OR DISRUPTION. COORDINATE WITH OWNER.
8. PREVENT MOVEMENT OR SETTLEMENT OF ADJACENT STRUCTURES. PROVIDE BRACING AND SHORING.
9. LOCATE AND IDENTIFY ALL EXISTING UTILITIES WITHIN THE CONSTRUCTION AREA. DISCONNECT AND SEAL OR CAP OFF UTILITY SERVICES THAT WILL BE AFFECTED BY THIS PROJECT. NOTIFY AFFECTED UTILITY COMPANIES BEFORE STARTING WORK AND COMPLY WITH THEIR REQUIREMENTS. VERIFY THAT UTILITIES HAVE BEEN DISCONNECTED AND CAPPED.
10. DEMOLISH AND REMOVE COMPONENTS IN AN ORDERLY AND CAREFUL MANNER.
11. PROTECT EXISTING FEATURES THAT ARE NOT TO BE DEMOLISHED.
12. CONDUCT OPERATIONS WITH MINIMUM INTERFERENCE TO PUBLIC OR PRIVATE ACCESSSES.
13. MAINTAIN EGRESS AND ACCESS AT ALL TIMES. DO NOT CLOSE OR OBSTRUCT ROADWAYS, OR SIDEWALKS WITHOUT PERMITS. COORDINATE WITH AUTHORITY HAVING JURISDICTION.
14. CEASE OPERATIONS IMMEDIATELY IF ADJACENT STRUCTURES APPEAR TO BE IN DANGER. NOTIFY AUTHORITY HAVING JURISDICTION.
15. ROUGH GRADE AND COMPACT AREAS AFFECTED BY DEMOLITION TO MAINTAIN SITE GRADES AND CONTOURS.
16. FIELD VERIFY EXISTING CONDITIONS AND CORRELATE WITH REQUIREMENTS INDICATED ON DEMOLITION PLAN TO DETERMINE EXTENT OF SELECTIVE DEMOLITION REQUIRED.
17. CONDUCT DEMOLITION OPERATIONS AND REMOVE DEBRIS TO ENSURE MINIMUM INTERFERENCE WITH SELECTIVE DEMOLITION OPERATIONS.
18. CONDUCT DEMOLITION OPERATIONS TO PREVENT INJURY TO PEOPLE AND DAMAGE TO ADJACENT BUILDINGS AND FACILITIES TO REMAIN. ENSURE SAFE PASSAGE OF PEOPLE AROUND SELECTIVE DEMOLITION AREA.
19. USE WATER MIST, TEMPORARY ENCLOSURES AND OTHER SUITABLE METHODS TO LIMIT THE SPREAD OF DUST AND DIRT. COMPLY WITH GOVERNING ENVIRONMENTAL PROTECTION REGULATIONS. DO NOT USE WATER WHEN IT MAY DAMAGE EXISTING CONSTRUCTION, SUCH AS CAUSING ICING, FLOODING, AND TRANSPORTING POLLUTANTS.
20. REMOVE AND TRANSPORT DEBRIS IN A MANNER THAT WILL PREVENT SPILLAGE ON ADJACENT SURFACES AND AREAS.
21. CLEAN ADJACENT STRUCTURES AND IMPROVEMENTS OF DUST, DIRT AND DEBRIS CAUSED BY SELECTIVE DEMOLITION OPERATIONS. RETURN ADJACENT AREAS TO CONDITION EXISTING BEFORE START OF SELECTIVE DEMOLITION.
22. PROMPTLY DISPOSE OF DEMOLISHED MATERIALS. ALL DEBRIS RESULTING FROM DEMOLITION ACTIVITIES SHALL BE DISPOSED OF OFF-SITE AT A FACILITY APPROVED TO RECEIVE THE DEBRIS. DO NOT ALLOW DEMOLISHED MATERIALS TO ACCUMULATE ON-SITE. DO NOT BURN DEMOLISHED MATERIALS ON-SITE.

GENERAL CONSTRUCTION:

- 1. THE CONTRACTOR SHALL PROTECT EXISTING PROPERTY LINE MONUMENTATION. ANY MONUMENTATION DISTURBED OR DESTROYED, AS JUDGED BY THE ENGINEER OR OWNER, SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE AND UNDER THE SUPERVISION OF A NEW YORK STATE LICENSED LAND SURVEYOR.
2. ALL PAVEMENT RESTORATION SHALL MEET AND MATCH EXISTING GRADES.
3. ALL SAWCUT LINES SHALL BE PARALLEL AND CURVILINEAR TO EXISTING OR PROPOSED CURBING AND SHALL BE A CONSTANT DISTANCE OF 18" MIN AWAY.
4. ALL ARCHITECTURE IS SUBJECT TO PLANNING BOARD REVIEW.
5. NOTIFY ENGINEER 48 HOURS PRIOR TO INITIALIZATION OF ANY WORK ON SITE.
6. THE ENGINEER SHALL BE NOTIFIED IN WRITING OF ANY CONDITIONS THAT VARY FROM THOSE SHOWN ON THE PLANS. THE CONTRACTOR'S WORK SHALL NOT VARY FROM THE PLANS WITHOUT PRIOR REVIEW FROM THE ENGINEER.
7. CONTRACTOR IS RESPONSIBLE FOR EMPLOYING AND MAINTAINING ALL TRAFFIC CONTROL AND SAFETY MEASURES DURING CONSTRUCTION.
8. CONTRACTOR IS RESPONSIBLE FOR PROPERLY & SAFELY MAINTAINING AREA BETWEEN ALL ADJOINING PROPERTIES.
9. NO WORK, STORAGE OR TRESPASS SHALL BE PERMITTED BEYOND THE SITE PROPERTY LINES OR PUBLIC RIGHT-OF-WAY.
10. ALL EXISTING LAWN AREA, CURBING, PAVING, SIDEWALKS, CULVERTS OR OTHER PUBLIC OR PRIVATE PROPERTY DAMAGED BY TRENCHING OR EXCAVATION OPERATIONS SHALL BE REPLACED OR REPAIRED TO A CONDITION EQUAL TO EXISTING, AS DESCRIBED IN CONTRACT DOCUMENTS OR AS ORDERED BY ENGINEER (AOBE). MAILBOXES, SIGN POSTS, ETC. SHALL BE PROTECTED OR REMOVED AND REPLACED EXACTLY AS THEY WERE BEFORE BEING DISTURBED. REMOVE AND REPLACE AFFECTED CURBING AND SIDEWALK TO NEAREST JOINT. REMOVE PAVEMENT AND REPLACE TO SAW CUT LINE. SAW CUT IN STRAIGHT LINE TO POINT NEEDED TO BLEND GRADE, REMOVE LAWN AND REPLACE TO MINIMUM LIMIT OF EXCAVATION.
11. NO SITE PREPARATION OR CONSTRUCTION SHALL COMMENCE UNTIL ALL REQUIRED PERMITTING AND APPROVALS HAVE BEEN OBTAINED.
12. MATERIALS, WORKMANSHIP, AND CONSTRUCTION FOR THE SITE IMPROVEMENTS SHOWN HEREON SHALL BE IN ACCORDANCE WITH:
A. NEW YORK STATE DEPARTMENT OF TRANSPORTATION " STANDARD SPECIFICATIONS", 2008; AS SUPPLEMENTED BY THE FOLLOWING:
B. CURRENT PREVAILING MUNICIPAL, COUNTY, AND/OR STATE AGENCY SPECIFICATIONS, STANDARDS, CONDITIONS, AND REQUIREMENTS.
C. CURRENT PREVAILING UTILITY COMPANY/AUTHORITY SPECIFICATIONS, STANDARDS, AND REQUIREMENTS.
D. CURRENT MANUFACTURER SPECIFICATIONS, STANDARDS, AND REQUIREMENTS.

PAVING:

- 1. NO VEHICULAR TRAFFIC OF ANY SORT SHALL BE PERMITTED ON THE SURFACE OF SUBBASE COURSE MATERIAL ONCE IT HAS BEEN FINE GRADED, COMPACTED, AND READY FOR PAVING. SUBBASE MATERIAL SO PREPARED FOR PAVING SHALL BE PAVED WITHIN THREE DAYS OF PREPARATION.
2. SUBBASE MATERIAL AND THE VARIOUS ASPHALT CONCRETE MATERIALS CALLED FOR IN THESE DRAWINGS SHALL BE REFERENCED TO SECTIONS OF THE NEW YORK STATE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MATERIALS, DATED MAY 1, 2008. CONSTRUCTION SHALL BE AS FURTHER SET FORTH IN THOSE SPECIFICATIONS AND AS OTHERWISE PROVIDED FOR IN THESE DRAWINGS.
3. PLACE ASPHALT CONCRETE MIXTURE ON PREPARED SURFACE, SPREAD AND STRIKE-OFF USING A SELF-PROPELLED PAVING MACHINE WITH VIBRATING SCREED. PLACEMENT IN INACCESSIBLE AND SMALL AREAS MAY BE BY HAND.
4. PROVIDE JOINTS BETWEEN OLD AND NEW PAVEMENTS OR BETWEEN SUCCESSIVE DAYS WORK.
5. TACK COAT MEANS SPECIFIED OR CALLED OUT ON THE DRAWINGS OR REQUIRED BY THE REFERENCED SPECIFICATION SHALL CONFORM WITH THE FOLLOWING:
A. TACK COAT SHALL MEET THE MATERIAL REQUIREMENTS OF 702-90 ASPHALT EMULSION FOR TACK COAT OF THE NEW YORK STATE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MATERIALS, DATED MAY 1, 2008, SHALL BE APPLIED IN ACCORDANCE WITH SECTION 407. TACK COAT SHALL BE IN ACCORDANCE WITH THOSE SPECIFICATIONS AND AS OTHERWISE PROVIDED FOR IN THESE DRAWINGS.
B. REMOVE LOOSE AND FOREIGN MATERIAL FROM ASPHALT SURFACE BEFORE PAVING NEXT COURSE. USE POWER BROOMS, BLOWERS OR HAND BROOM.
C. APPLY TACK COAT TO ASPHALT PAVEMENT SURFACES & SURFACES OF CURBS, GUTTERS, MANHOLES, AND OTHER STRUCTURES PROJECTING INTO OR ABUTTING PAVEMENT. DRY TO A "TACKY" CONSISTENCY BEFORE PAVING.
D. TACK COAT ENTIRE VERTICAL SURFACE OF ABUTTING EXISTING PAVEMENT.
6. AFTER COMPLETION OF PAVING AND SURFACING OPERATIONS, CLEAN SURFACES OF EXCESS OR SPILLED ASPHALT, GRAVEL OR STONE MATERIALS TO THE SATISFACTION OF THE ENGINEER.
7. ALL CURBING SHALL BE CONCRETE.

STRIPING:

- 1. STRIPE PAVEMENT AS INDICATED ON THE PLANS AND/OR IN ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE AND FEDERAL REQUIREMENTS.
2. COLOR: DRIVE LANE DIVIDERS-WHITE OR AOE; NO PARKING ZONE WARNINGS-WHITE OR AOE; PARKING DIVIDERS-WHITE OR AOE; WALKING LINES-WHITE OR AOE; HANDICAP PARKING LINES & SYMBOL-BLUE.

SITE PLAN MAP NOTES:

- 1. NO BUILDING PERMIT FOR A BUILDING SUBJECT TO SITE PLAN APPROVAL SHALL BE ISSUED BY THE BUILDING INSPECTOR EXCEPT UPON AUTHORIZATION OF AND IN CONFORMITY WITH THE SITE PLAN APPROVED BY THE PLANNING BOARD.
2. ALL TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH THE NEW YORK STATE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.

UTILITY PLAN NOTES:

- 1. ALL UNDERGROUND UTILITIES ARE SHOWN IN THEIR RELATIVE POSITION AND ARE FOR INFORMATIONAL PURPOSES ONLY. CONTRACTOR TO VERIFY THEIR ACTUAL LOCATION IN THE FIELD PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
2. ANY CONDITION ENCOUNTERED IN THE FIELD DIFFERING FROM THOSE SHOWN HEREON, SHALL BE REPORTED TO THE DESIGN ENGINEER BEFORE CONSTRUCTION IS TO PROCEED.
3. SEWER MAINS IN RELATION TO WATER MAINS: WHERE POSSIBLE, SEWERS SHALL BE LAID AT LEAST 10 (TEN) FEET HORIZONTALLY FROM ANY EXISTING OR PROPOSED WATER MAIN. VERTICAL SEPARATION SHALL BE MAINTAINED TO PROVIDE 18 (EIGHTEEN) INCHES BETWEEN TOP OF SEWER AND BOTTOM OF THE WATER MAIN AT UTILITY CROSSINGS. WHEN NOT POSSIBLE TO OBTAIN THE PROPER VERTICAL SEPARATION, SEWER PIPE SHALL BE PRESSURE RATED AND TESTED @ 150psi, 10 (TEN) FEET ON EACH SIDE OF THE WATER MAIN BEING CROSSED.
4. ALL PROPOSED UTILITIES SHALL BE COORDINATED WITH BUILDING PLANS FOR ANY CONNECTIONS.
5. ALL STORM SEWER SHALL BE SMOOTH INTERIOR HDPE UNLESS OTHERWISE SPECIFIED.
6. ALL GRAVITY SANITARY SEWER SHALL BE SDR 35 PVC, CONFORMING TO ASTM SPECIFICATION D-3034. MINIMUM PIPE STIFFNESS (F/Y) AT 5% DEFLECTION SHALL BE 46 PSI WHEN TESTED IN ACCORDANCE WITH ASTM SPECIFICATION D-2412. ALL JOINTS AND CONNECTIONS SHALL BE MADE WATERTIGHT.
7. CONTRACTOR TO VERIFY STATUS OF ALL UTILITY SERVICES PRIOR TO INTERRUPTION.
8. EXPLORATORY EXCAVATIONS SHALL BE PERFORMED BY THE CONTRACTOR AT ALL UTILITY CONNECTION LOCATIONS AND AS NEEDED TO VERIFY EXISTING CONDITIONS PRIOR TO PERFORMING WORK.
9. BEFORE CONSTRUCTING LINES TO CONNECT TO EXISTING UTILITIES, VERIFY EXISTING UTILITY INVERTS AND NOTIFY THE ENGINEER IF ANY VARIATION FROM THE PLAN IS REQUIRED.
10. THE CONTRACTOR SHALL MAINTAIN ALL EXISTING UTILITIES IN SERVICE FOR THE DURATION OF THE WORK.
11. THE CONTRACTOR SHALL COMPLY WITH ALL REQUIRED PERMITS AND ASSOCIATED CONDITIONS. CONTRACTOR SHALL BE RESPONSIBLE FOR Dewatering UTILITY TRENCHES AND EXCAVATIONS AND FOR THE MAINTENANCE OF SURFACE DRAINAGE DURING THE COURSE OF THE WORK.
13. ALL PROPOSED UTILITIES SHALL TERMINATE 5 FEET FROM ANY PROPOSED BUILDING FACE. CONTRACTOR TO COORDINATE WITH BUILDING PLANS FOR ANY CONNECTIONS.
14. A NEW YORK STATE LICENSED PROFESSIONAL ENGINEER SHALL INSPECT THE SANITARY FACILITIES (WATER DISTRIBUTION, ANY WATER TREATMENT, AND SEWAGE FACILITIES) AT THE TIME OF CONSTRUCTION. PRIOR TO OCCUPANCY OF THE DWELLING(S), THE ENGINEER SHALL CERTIFY TO THE LOCAL CODE ENFORCEMENT OFFICER THAT THE FACILITIES HAVE BEEN INSTALLED IN ACCORDANCE WITH THE APPROVED PLANS.
16. TELEPHONE, ELECTRIC, AND GAS LINES SHALL BE INSTALLED UNDERGROUND. CROSSINGS OF PROPOSED PAVEMENTS SHALL BE INSTALLED PRIOR TO THE CONSTRUCTION OF PAVEMENT TOP COURSE.

TREE CLEARING NOTE:

NO TREE REMOVAL SHALL BE REMOVED FROM APRIL 1st to OCTOBER 31st to MITIGATE POTENTIAL HARMFUL IMPACTS TO INDIANA BAT.

GENERAL NOTES:

- 1. UNDERGROUND FACILITIES AND STRUCTURES SHOWN HEREON WERE TAKEN FROM DATA OBTAINED FROM PREVIOUS MAPS AND RECORD DRAWINGS. ALL ABOVE GROUND STRUCTURES AND SURFACE FEATURES SHOWN HEREON ARE THE RESULT OF A FIELD SURVEY UNLESS OTHERWISE NOTED. THERE MAY BE OTHER UNDERGROUND UTILITIES, THE EXISTENCE OF WHICH ARE NOT KNOWN OR CERTIFIED BY THE UNDERSIGNED. SIZE AND LOCATION OF ALL UNDERGROUND UTILITIES AND STRUCTURES MUST BE VERIFIED BY THE APPROPRIATE AUTHORITIES. THE UNDERGROUND FACILITIES PROTECTIVE ORGANIZATION MUST BE NOTIFIED PRIOR TO CONDUCTING TEST BORINGS, EXCAVATION AND CONSTRUCTION.
2. THE UNDERGROUND UTILITIES SHOWN HEREON HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION AND EXISTING DRAWINGS. THE SURVEYOR MAKES NO GUARANTEES THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA. EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH THE SURVEYOR DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES.
3. CONTRACTOR SHALL FIELD VERIFY EXISTING GRADES, EXISTING STRUCTURE LOCATIONS AND OTHER EXISTING CONDITIONS PRIOR TO CONSTRUCTION AND SHALL REPORT ANY DISCREPANCIES TO THE OWNER'S REPRESENTATIVE FOR FURTHER RESOLUTION. SUCH CONDITIONS COULD RENDER THE DESIGNS HEREON INAPPROPRIATE OR INEFFECTIVE.
4. THE CONTRACTOR'S ATTENTION IS DIRECTED TO THE FACT THAT OTHER CONTRACTORS MAY BE WORKING IN THE AREA ON OTHER CONSTRUCTION AT THE SAME TIME THAT WORK IS PERFORMED UNDER THIS CONTRACT. THE CONTRACTOR SHALL BE AWARE OF THE NATURE AND EXTENT OF THIS OTHER WORK AND SHALL SCHEDULE AND CONDUCT HIS OWN OPERATION SO THAT THERE WILL BE NO CONFLICT IN OPERATIONS.
5. SINCE THIS PROJECT INVOLVES CONSTRUCTION WITHIN AN ACTIVE ROADWAY, IT IS IMPERATIVE THAT THE CONSTRUCTION BE CARRIED FORTH IN SUCH A MANNER AS TO INSURE THAT PROPER TRAFFIC FLOW IS MAINTAINED DURING CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE MAINTENANCE AND PROTECTION OF TRAFFIC IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AND STANDARD SPECIFICATIONS.
6. THE CONTRACTOR SHALL VERIFY ALL FIELD CONDITIONS AND DIMENSIONS AND SHALL BE RESPONSIBLE FOR FIELD FIT FINISH AND QUALITY OF WORK AND MATERIALS USED IN THE CONSTRUCTION. NO ALLOWANCE SHALL BE MADE ON BEHALF OF THE CONTRACTOR FOR ANY ERROR OR NEGLECT ON HIS PART.
7. THE CONTRACTOR IS RESPONSIBLE FOR THE REPLACEMENT AND RESTORATION OF ALL NATURAL AND MANMADE FEATURES WHETHER SHOWN ON THE PLANS OR ENCOUNTERED IN THE FIELD. IT IS THE INTENTION OF THE PLANS TO SHOW ONLY MAJOR FEATURES TO BE PROTECTED, RESTORED OR REPLACED.
8. PROTECTION AND RESTORATION OF PROPERTY SHALL BE IN ACCORDANCE WITH THE NYS DOT STANDARD SPECIFICATIONS.
9. TOPSOIL SHALL BE PLACED AND AREAS SHALL BE SEEDED AS SOON AS FINAL GRADES ARE ESTABLISHED ON PERMANENT SLOPES. SLOPES SHALL ALSO BE MULCHED.
10. THE CONTRACTOR SHALL CONTACT ALL THE APPROPRIATE PARTIES WITH JURISDICTION OVER THE UTILITIES ENTERING ON OR NEAR THE PROJECT AREA PRIOR TO INITIATION OF CONSTRUCTION ACTIVITIES AND PROVIDE THOSE AGENCIES 72 HOURS NOTIFICATION.
11. THE CONTRACTOR SHALL VERIFY THE LOCATION OF AND SHALL BE RESPONSIBLE FOR THE PRESERVATION OF ALL PUBLIC AND PRIVATE UNDERGROUND AND SURFACE UTILITIES AND STRUCTURES AT OR ADJACENT TO THE SITE OF CONSTRUCTION, IN SO FAR AS THEY MAY BE ENDANGERED BY HIS OPERATIONS. THIS SHALL HOLD TRUE WHETHER OR NOT THEY ARE SHOWN ON THE CONTRACT DRAWINGS. IF THEY ARE SHOWN ON THE DRAWINGS, THEIR LOCATIONS ARE NOT GUARANTEED EVEN THOUGH THE INFORMATION WAS OBTAINED FROM THE BEST AVAILABLE SOURCES, AND IN ANY EVENT, OTHER UTILITIES NOT SHOWN ON THESE PLANS MAY BE ENCOUNTERED IN THE FIELD. THE CONTRACTOR SHALL, AT HIS OWN EXPENSE, REPAIR OR REPLACE ANY STRUCTURES OR UTILITIES THAT HE DAMAGES, AND SHALL CONSTANTLY PROCEED WITH CAUTION TO PREVENT UNDUE INTERRUPTION TO UTILITY SERVICES.
12. IF TEMPORARY UTILITY SERVICES ARE REQUIRED, THE CONTRACTOR SHALL SEE TO IT THAT THEY ARE PROVIDED, AT NO ADDITIONAL COST TO THE OWNER, AND IT SHALL BE HIS RESPONSIBILITY TO MAINTAIN SUCH TEMPORARY FACILITIES FOR THE DURATION OF THE PROJECT AS NECESSARY.
13. ALL EPOXY PAVEMENT MARKINGS AND ALL SIGNS SHALL BE IN CONFORMANCE WITH THE NYS DOT MUTCD.
14. ALL SIGNING WILL BE IN ACCORDANCE WITH THE NATIONAL MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES WITH NYS SUPPLEMENT, MOST RECENT VERSION.
15. PRIOR TO LEAVING THE WORK SITE EACH DAY, THE CONTRACTOR SHALL REMOVE OR PROTECT ANY PART OF THE WORK SITE THAT IS CONSIDERED HAZARDOUS TO THE TRAVELING PUBLIC, BY THE VILLAGE ENGINEER OR POLICE DEPARTMENT.
16. DURING ALL CONSTRUCTION OPERATIONS THE CONTRACTOR SHALL MAINTAIN ACCESS TO EACH ADJACENT SITE. IF CONDITIONS REQUIRE THAT ACCESS BE TEMPORARILY CLOSED, THE CONTRACTOR SHALL NOTIFY THE OWNER AT LEAST 24 HOURS IN ADVANCE. ALL ACCESS DRIVES WILL BE OPEN FOR SAFE USE AT THE END OF EACH WORK DAY.
17. AREAS DISTURBED NOT RECEIVING PAVEMENT OR CONCRETE SHALL BE TOPSOILED, SEEDED, AND MULCHED IN ACCORDANCE WITH SPECIFICATIONS ON ATTACHED SHEETS.
18. THE CONTRACTOR IS RESPONSIBLE FOR PROJECT SAFETY, INCLUDING PROVISION OF ALL APPROPRIATE SAFETY DEVICES AND TRAINING REQUIRED.
19. ARDEN CONSULTING ENGINEERS, PLLC WILL REVIEW AND APPROVE OR TAKE OTHER APPROPRIATE ACTION ON THE CONTRACTOR'S SUBMITTALS, SUCH AS SHOP DRAWING, PRODUCT DATA, SAMPLES, AND OTHER DATA, WHICH THE CONTRACTOR IS REQUIRED TO SUBMIT, BUT ONLY FOR THE LIMITED PURPOSE OF CHECKING FOR CONFORMANCE WITH THE DESIGN INTENT AND THE INFORMATION SHOWN IN THE CONSTRUCTION CONTRACT DOCUMENTS. CONSTRUCTION MEANS AND/OR METHODS, COORDINATION OF THE WORK WITH OTHER TRADES, AND CONSTRUCTION SAFETY PRECAUTIONS ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR. ARDEN CONSULTING ENGINEERS, PLLC SHOP DRAWING REVIEW SHALL BE CONDUCTED WITH REASONABLE PROMPTNESS WHILE ALLOWING SUFFICIENT TIME TO PERMIT ADEQUATE REVIEW. REVIEW OF A SPECIFIC ITEM SHALL NOT INDICATE THAT ARDEN CONSULTING ENGINEERS, PLLC HAS REVIEWED THE ENTIRE ASSEMBLY OF WHICH THE ITEM IS A COMPONENT. ARDEN CONSULTING ENGINEERS, PLLC WILL NOT BE RESPONSIBLE FOR ANY DEVIATIONS FROM THE CONSTRUCTION DOCUMENTS NOT BROUGHT TO ITS ATTENTION, IN WRITING, BY THE CONTRACTOR. ARDEN CONSULTING ENGINEERS, PLLC WILL NOT BE REQUIRED TO REVIEW PARTIAL SUBMISSIONS OF CORRELATED ITEMS NOT RECEIVED.
20. NEITHER THE PROFESSIONAL ACTIVITIES OF ARDEN CONSULTING ENGINEERS, PLLC, NOR THE PRESENCE OF ARDEN CONSULTING ENGINEERS, PLLC OR ITS EMPLOYEES AND SUB-CONSULTANTS AT CONSTRUCTION/PROJECT SITE, SHALL RELIEVE THE GENERAL CONTRACTOR OF HIS OBLIGATIONS, DUTIES AND RESPONSIBILITIES INCLUDING, BUT NOT LIMITED TO, CONSTRUCTION MEANS, METHODS, SEQUENCE, TECHNIQUES OR PROCEDURES NECESSARY FOR PERFORMING, SUPERINTENDING AND COORDINATING THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AND ANY HEALTH AND SAFETY PRECAUTIONS REQUIRED BY ANY REGULATORY AGENCIES. ARDEN CONSULTING ENGINEERS, PLLC AND ITS PERSONNEL HAVE NO AUTHORITY TO EXERCISE ANY CONTROL OVER ANY CONSTRUCTION CONTRACTOR OR ITS EMPLOYEES IN CONNECTION WITH THE WORK OR ANY HEALTH AND SAFETY PROGRAMS OR PROCEDURES. THE GENERAL CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR JOB SITE SAFETY. ARDEN CONSULTING ENGINEERS, PLLC SHALL BE INDEMNIFIED BY THE GENERAL CONTRACTOR AND SHALL BE NAMED AN ADDITIONAL INSURED UNDER THE GENERAL CONTRACTOR'S POLICIES OF GENERAL LIABILITY INSURANCE.
21. IF THE CONTRACTOR DEVIATES FROM THE PLANS AND SPECIFICATIONS, INCLUDING THE NOTES CONTAINED HEREIN, WITHOUT FIRST OBTAINING THE PRIOR WRITTEN AUTHORIZATION OF THE DESIGN ENGINEER AND MUNICIPAL BUILDING DEPARTMENT AND/OR MUNICIPAL ENGINEER, SUCH DEVIATIONS, CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR THE PAYMENT OF ALL COSTS INCURRED IN CORRECTING ANY WORK DONE WHICH DEVIATES FROM THE PLANS, ALL FINES AND/OR PENAL TIES ASSESSED WITH RESPECT THERETO AND ALL COMPENSATORY OR PUNITIVE DAMAGES RESULTING THEREFROM. THE CONTRACTOR SHALL INDEMNIFY AND HOLD THE OWNER, ENGINEER, AND MUNICIPALITY HARMLESS FROM ALL SUCH COSTS RELATED TO SAME.
22. THESE NOTES SHALL APPLY TO ALL SHEETS IN THIS SET.



LAYOUT:

- 1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL FIELD LAYOUT. THE CONTRACTOR SHALL TAKE TIES TO ALL UTILITY CONNECTIONS AND PROVIDE MARKED-UP AS BUILT PLANS FOR ALL UTILITIES SHOWING TIES TO CONNECTIONS, BENDS, VALVES, LENGTHS OF LINES AND INVERTS. AS-BUILT PLANS SHALL BE REVIEWED BY THE OWNER AND THE ENGINEER AND THE CONTRACTOR SHALL PROVIDE ANY CORRECTION OR ADDITIONS TO THE SATISFACTION OF THE OWNER OR THE ENGINEER BEFORE UTILITIES WILL BE ACCEPTED.
2. THE CONTRACTOR SHALL PROTECT EXISTING PROPERTY MONUMENTATION, ANY MONUMENTATION DISTURBED OR DESTROYED, AS JUDGED BY THE ENGINEER OR OWNER, SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE AND UNDER THE SUPERVISION OF A NEW YORK STATE LICENSED LAND SURVEYOR.
3. THE ENGINEER SHALL BE NOTIFIED IN WRITING OF ANY CONDITIONS THAT VARY FROM THOSE SHOWN ON THE PLANS. THE CONTRACTOR'S WORK SHALL NOT VARY FROM THE PLANS WITHOUT PRIOR REVIEW BY THE ENGINEER.
4. BUILDING DIMENSIONS TO BE TAKEN FROM ARCHITECTURAL BUILDING PLANS. NOTIFY THE ENGINEER OF ANY DEVIATION FROM CONDITIONS SHOWN ON THIS PLAN.
5. ALL HORIZONTAL AND VERTICAL CONTROL DATA ON THE PROJECT SHALL BE PROVIDED BY A LICENSED SURVEYOR.

TRENCHING & INSTALLATION NOTES:

- 1. ALL AREAS DISTURBED DURING TRENCHING AND WORK OPERATIONS MUST BE STABILIZED WITHIN 14 DAYS.
2. ALL TRENCHING IN PAVEMENT SHOULD BE SAW-CUT PRIOR TO TRENCHING. PAVEMENT RESTORATIONS MAY REQUIRE ADDITIONAL CUTBACKS AFTER TRENCHING OPERATIONS HAVE BEEN COMPLETED.
3. ALL PAVED AREAS MUST BE RESTORED WITH A MINIMUM OF 4" TEMPORARY PAVING AT THE CLOSE OF EACH DAY'S WORK OPERATIONS.
4. PERMANENT PAVING MUST BE COMPLETED AT AMBIENT TEMPERATURES OF 40 DEGREES AND RISING. ANY PAVING OPERATIONS COMPLETED BELOW 40 DEGREES SHALL BE CONSIDERED TEMPORARY.
5. ALL SIGNS REMOVED FOR CONSTRUCTION MUST BE RESET USING TYPE A POSTS.

ROCK REMOVAL NOTES:

- 1. ALL RECOMMENDED SAFETY REQUIREMENTS AND STANDARDS REFERENCED AND ANY LOCAL RESTRICTIONS SHALL BE APPLIED AS REQUIRED FOR SAFETY, SECURITY, AND SPECIFICALLY RELATED DETAILS FOR BLASTING PROCEDURES, AT ALL TIMES. FEDERAL, STATE, AND LOCAL LAWS AND ORDINANCES WILL BE FOLLOWED CONCERNING THE TRANSPORTATION AND STORAGE OF EXPLOSIVES.
2. A MINIMUM OF FOUR (4) WEEKS PRIOR TO COMMENCEMENT OF THE INITIAL BLASTING OPERATIONS, THE CONTRACTOR SHALL NOTIFY THE FOLLOWING AGENCIES AS APPROPRIATE: POLICE AGENCIES, GAS AND ELECTRIC SERVICE COMPANIES, TELEPHONE AND CABLE OPERATING COMPANIES, TOWN WATER AND SEWER DEPARTMENTS, NYS DOT, AND LOCAL FIRE, RESCUE, AND AMBULANCE SERVICES.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DAMAGE RESULTING FROM THE USE OF EXPLOSIVES. EXPLOSIVES SHALL BE STORED IN A SECURE MANNER IN COMPLIANCE WITH FEDERAL, STATE, AND LOCAL LAWS AND ORDINANCES.
4. THE CONTRACTOR SHALL NOTIFY EACH PROPERTY AND UTILITY OWNER HAVING A BUILDING, STRUCTURE, OR OTHER INSTALLATION ABOVE OR BELOW GROUND IN PROXIMITY TO THE SITE OF THE WORK OF HIS INTENTION TO USE EXPLOSIVES. NOTICE SHALL BE GIVEN SUFFICIENTLY IN ADVANCE TO ENABLE THE OWNERS TO TAKE STEPS TO PROTECT THEIR PROPERTY. NOTICE SHALL NOT RELIEVE THE CONTRACTOR OF RESPONSIBILITY FOR DAMAGE RESULTING FROM HIS BLASTING OPERATIONS.
5. THE CONTRACTOR SHALL SCHEDULE AND CONDUCT PRE-BLAST SURVEYS WITH PROPERTY OWNERS LOCATED IN THE AREA POTENTIALLY AFFECTED BY AIRBLAST OVERPRESSURE AND GROUND VIBRATION OR AS REQUIRED.
6. THE CONTRACTOR SHALL IMPLEMENT ENGINEERING MEASURES IN ORDER TO MINIMIZE THE POTENTIAL IMPACTS OF DUST, NOISE AND GROUND VIBRATION. BLAST VIBRATION CONTROL WILL BE ACHIEVED BY LIMITING THE CHARGE PER DELAY SO THAT THE PEAK PARTICLE VELOCITY REMAINS BELOW THE SPECIFIED LEVELS.
7. AN APPROPRIATELY QUALIFIED, LICENSED BLASTING SPECIALIST, WITH EXPERIENCE SHALL BE ON-SITE AND SUPERVISE BLASTING OPERATIONS. AT ALL TIMES, THE BLASTING AREA SHALL BE RESTRICTED TO BLASTING OPERATIONS AND AUTHORIZED PERSONNEL ONLY.
8. PROTECTIVE MEASURES INCLUDING INSTALLATION OF SIGNAGE, NOTIFICATION OF NEARBY RESIDENTS, TRAFFIC CONTROL AS NECESSARY ALONG NEARBY ROADS, AUDIBLE PRE-BLAST WARNINGS, AND USE OF BLAST MATS SHALL BE IMPLEMENTED.
9. DELIVERY AND TRANSPORT OF EXPLOSIVES FROM THE POWDER MAGAZINES TO THE BLAST AREA WILL BE BY VEHICLES SPECIFICALLY DESIGNED FOR THIS USE BY THE CRITERIA OUTLINED IN THE SAFETY REQUIREMENTS. ONLY AUTHORIZED PERSONS WILL TRANSPORT AND HANDLE THE EXPLOSIVES AS DESIGNATED BY THE ISSUING AUTHORITY OF THOSE LICENSES FOR THIS PURPOSE.
10. MONITORING OF PEAK PARTICLE VELOCITY (INCHES/SECOND) AND PEAK AIRBLAST OVERPRESSURE (PSI) SHALL BE PERFORMED DURING ALL BLASTS.

SPECIAL NOTES:

- 1. MAINTENANCE AND PROTECTION OF TRAFFIC IS THE RESPONSIBILITY OF THE PERMITTEE: ANY SUBCONTRACTORS WORKING FOR THE PERMITTEE MUST HAVE A COPY OF THE HIGHWAY WORK PERMIT ON THE SITE AND MUST BE FAMILIAR WITH THE TRAFFIC CONTROL REQUIREMENTS. IT IS STRONGLY ADVISED THAT A "TALCATE" SAFETY MEETING WITH EACH WORK CREW BE INITIATED BEFORE THE START OF WORK.
2. TRAFFIC CONTROL SCHEMES MUST BE IN PLACE, AND MAINTAINED, THROUGHOUT THE DURATION OF WORK.
3. ALL MAINTENANCE AND PROTECTION OF TRAFFIC TO BE IN ACCORDANCE WITH THE NATIONAL MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES AND THE NYS SUPPLEMENT.
4. ANYONE WORKING WITHIN THE HIGHWAY RIGHT-OF-WAY SHALL WEAR HIGH-VISIBILITY APPAREL MEETING THE ANSI 107-2004 CLASS II STANDARDS AND A HARD HAT.
5. AT THE START OF WORK ON THE PROJECT, ALL WORK ZONE TRAFFIC CONTROL DEVICES SHALL APPEAR IN "ACCEPTABLE" CONDITION. THESE DEVICES SHALL NOT BE ALLOWED TO FALL BELOW THE "MARGINAL" CONDITION AT ANY TIME DURING THE LIFE OF THE PROJECT. FADED AND DETERIORATED PANELS AND NON-STANDARD LEGENDS ARE NOT ACCEPTABLE.
6. FLAGGER SIGNS ARE TO BE USED ONLY WHEN A FLAGGER IS ACTUALLY PRESENT AND VISIBLE TO THE MOTORIST. THEY SHALL BE COVERED OR REMOVED AT ALL OTHER TIMES. STOP/SLOW PADDLES ARE REQUIRED.
7. NO LOW-MOUNTED SIGNS SHALL BE PERMITTED, EXCEPT FOR FLEXIBLE PANELS MEETING THE CURRENT SPECIFICATION REQUIREMENTS.

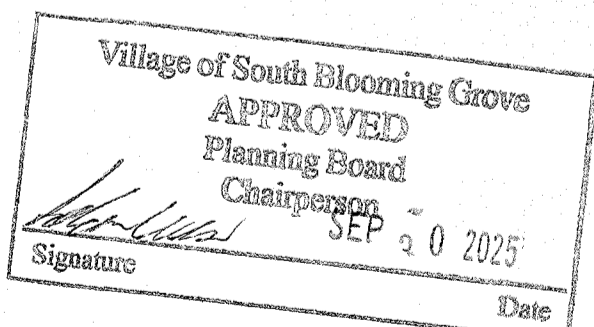
WINTER WORK:

SNOW PLOWING REQUIREMENTS:

- DUE TO POSSIBLE SNOW FALL AND HENCE SNOW PLOWING OPERATIONS, ANY STEEL PLATES USED TO COVER AN EXCAVATION SHALL BE:
1. RECESSED INTO THE PAVEMENT AND PINNED.
OR
2. PINNED WITH ASPHALT RAMPS PLACED ALONG ALL EDGES. RAMPS SHALL BE SLOPED AT 1 INCH RISE PER 6 FEET RUN MAXIMUM. "RAISE PLOW" SIGNS SUPPLEMENTED WITH TYPE A FLASHING LIGHTS MUST BE ERECTED AN APPROPRIATE DISTANCE BEFORE THE EXCAVATION; SIGNS AND LIGHTS MUST MEET NYS DOT MUTCD SPECIFICATIONS.

WINTER TIME EARTHWORK REQUIREMENTS:

- ALL PERMIT WORK UNDER CONSTRUCTION BETWEEN THE DATES OF NOVEMBER 1 THROUGH MAY 1 SHALL CONFORM TO THE FOLLOWING REQUIREMENTS:
1. GRANULAR OR OTHER FROST SUSCEPTIBLE MATERIAL SHALL NOT BE PLACED WHEN THE TEMPERATURE IS BELOW 32 DEGREES FAHRENHEIT.
2. FROZEN MATERIAL SHALL NOT BE INCORPORATED INTO EMBANKMENTS OR BACKFILLS.
3. MATERIAL SHALL NOT BE PLACED ON FROZEN GROUND.
4. THE MATERIAL SHALL BE COMPACTED IN ACCORDANCE WITH HIGHWAY DESIGN MANUAL CHAPTER 13 APPENDIX 13C REQUIREMENTS FOR NEW DESIGN AND CONSTRUCTION OF UNDERGROUND UTILITY INSTALLATIONS WITHIN THE STATE HIGHWAY RIGHT-OF-WAY. LATEST REVISION, AND/OR 004-015 (ENGINEERING INSTRUCTION).
5. ANY SPECIAL CONDITIONS AND RESTRICTIONS AS MAY BE IMPOSED BY THE DESIGN ENGINEER OR THE VILLAGE ENGINEER.



FOR PLANNING BOARD APPROVAL ONLY

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SITE PLAN PREPARED FOR
55 MANGIN ROAD
VILLAGE OF SOUTH BLOOMING GROVE,
ORANGE COUNTY, NEW YORK
CONSTRUCTION SPECIFICATIONS
JOB#: 25-020
SCALE: AS NOTED
DATE: 02-20-25
DRAWN: MM
CHECKED: MM
SCALE NO. 11 OF 20

Table with 3 columns: REV., BY, DATE, DESCRIPTION. Row 1: 1, MM, 9-29-25, PREPARATION OF PLANNING BOARD PLANS FOR SIGNATURE. Below table: THIS SHEET IS NOT VALID WITHOUT ALL OF THE SHEETS THAT COMPRISE THE SET. COPYRIGHT 2025, ARDEN CONSULTING ENGINEERS, P.L.L.C. - ALL RIGHTS RESERVED

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Udig NY MUST BE CONTACTED PRIOR TO ANY EXCAVATION OR DEMOLITION