

REGIONAL MAP NO SCALE



PRELIMINARY AND FINAL SITE PLAN

FOR MARMALADE RESTAURANT

LOTS 58-60 & 68-70 IN BLOCK 6301

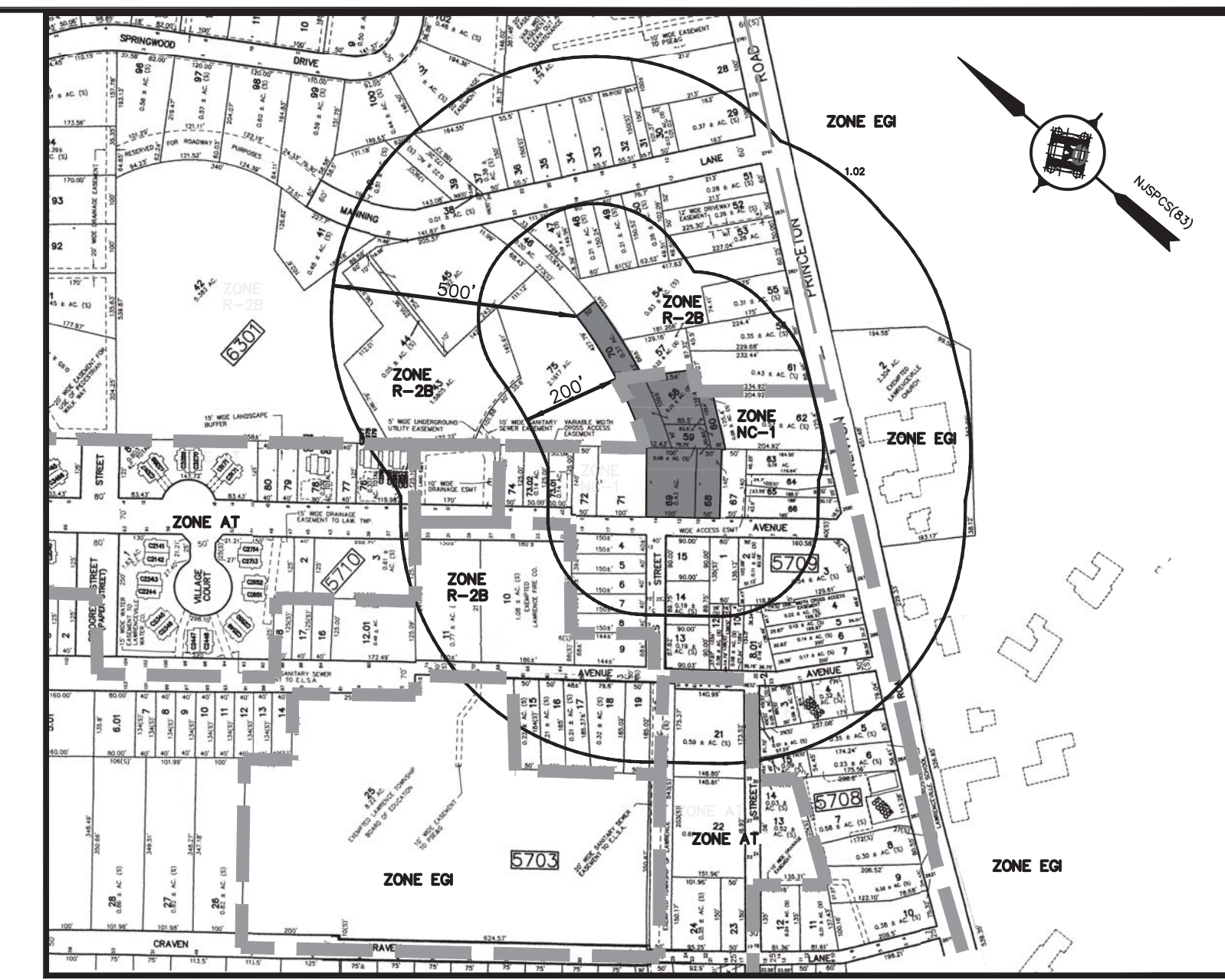
SITUATE IN

LAWRENCE TOWNSHIP MERCER COUNTY, NEW JERSEY

PREPARED BY
HOPEWELL VALLEY ENGINEERING, P.C.
1600 REED ROAD, SUITE A
PO BOX 710
PENNINGTON, N.J. 08534-3613

OWNER/APPLICANT

HULLFISH REAL ESTATE COMPANY, LLC
16 GORDON AVENUE
LAWRENCEVILLE, NJ, 08648



KEY MAP SCALE: 1"=300'

REQUIRED REGULATORY PERMITS AND APPROVALS

- LAWRENCE TOWNSHIP PLANNING BOARD PRELIMINARY AND FINAL SITE PLAN
- MERCER COUNTY PLANNING BOARD
- LAWRENCE TOWNSHIP SOIL DISTURBANCE
- DELAWARE AND RARITAN CANAL COMMISSION ZONE 'B' CERTIFICATION
- EWING LAWRENCE SEWERAGE AUTHORITY

PROPERTY OWNERS LIST HULLFISH REAL ESTATE CO., LLC (LAWRENCE WATER) WITHIN 200' OF: Block 6301, Lots 58 - 60, 68 - 70

July 19, 2021 LIST OBTAINED FROM TOWNSHIP OF LAWRENCE

| BLOCK | LOT | OWNER NAME | ADDRESS | CITY, STATE, ZIP |
|-------|-------|---------------------------------------|-------------------------|-----------------------------|
| 5709 | 1 | HULLFISH REAL ESTATE COMP, LLC | 35 CRAVEN LN | LAWRENCEVILLE, NJ 08648 |
| 5709 | 2 | LSH ASSOCIATES, LLC | 7 GORDON AVENUE | LAWRENCEVILLE, NJ 08648 |
| 5709 | 3 | 2673 MAIN ST OWNER II, (M DVIR) | 5-11 47TH AVE, APT 65 | LONG ISLAND CITY NY 11101 |
| 5709 | 4 | BEARSNOUT LLC CO CHAMBERS WALK CAFE | 974 LAWRENCEVILLE RD | PRINCETON, NJ 08540 |
| 5709 | 8,01 | BEARSNOUT LLC | 974 LAWRENCEVILLE RD | PRINCETON, NJ 08540 |
| 5709 | 10 | PACHUCKI STANLEY & JOAN | 40 PHILIPS AVE | LAWRENCEVILLE, NJ 08648 |
| 5709 | 11 | PACHUCKI STANLEY & JOAN | 40 PHILIPS AVE | LAWRENCEVILLE, NJ 08648 |
| 5709 | 12 | PACHUCKI STANLEY & JOAN | 40 PHILIPS AVE | LAWRENCEVILLE, NJ 08648 |
| 5709 | 14 | HULLFISH REAL ESTATE CO., LLC | 35 CRAVEN LANE | LAWRENCEVILLE, NJ 08648 |
| 5709 | 15 | HULLFISH REAL ESTATE CO., LLC | 35 CRAVEN LANE | LAWRENCEVILLE, NJ 08648 |
| 5710 | 4 | HULLFISH REAL ESTATE CO LLC | 35 CRAVEN LANE | LAWRENCEVILLE, NJ 08648 |
| 5710 | 5 | HULLFISH REAL ESTATE CO LLC | 35 CRAVEN LANE | LAWRENCEVILLE, NJ 08648 |
| 5710 | 6 | HULLFISH REAL ESTATE CO LLC | 35 CRAVEN LANE | LAWRENCEVILLE, NJ 08648 |
| 5710 | 7 | CARLUCCI, W H & ELIZABETH D WOODFIELD | 5 JAMES STREET | LAWRENCEVILLE, NJ 08648 |
| 5710 | 8 | CARLUCCI, W H & ELIZABETH D WOODFIELD | 5 JAMES STREET | LAWRENCEVILLE, NJ 08648 |
| 5710 | 10 | TOWNSHIP OF LAWRENCE | 2207 LAWRENCEVILLE RD | LAWRENCEVILLE, NJ 08648 |
| 6301 | 43 | JORDAN, R CURTIS TRUSTEE | 35 MANNING LANE | LAWRENCEVILLE, NJ 08648 |
| 6301 | 45 | SIMON, MITCHELL & MARISA | 29 MANNING LANE | LAWRENCEVILLE, NJ 08648 |
| 6301 | 46 | BECKER, PAUL A & ELIZABETH B | 2581 MAIN STREET | LAWRENCEVILLE, NJ 08648 |
| 6301 | 47 | BECKER, PAUL A & ELIZABETH B | 2581 MAIN STREET | LAWRENCEVILLE, NJ 08648 |
| 6301 | 48 | TONA, ANDREW & KATLYN | 19 MANNING LANE | LAWRENCEVILLE, NJ 08648 |
| 6301 | 49 | YEOMAN, SARAH | 17 MANNING LANE | LAWRENCEVILLE, NJ 08648 |
| 6301 | 50 | SCARDINO, P L & THERESA A TRUSTEES | 1008 REGENCY CIRCLE | PENNSYLVANIA 19422 |
| 6301 | 52 | PLAYA 39 LLC | 500 7TH AVE 7TH FL | NEW YORK, NY 10018 |
| 6301 | 53 | WINELL, MARVIN & DALE F | 670 JERSEY AVE | JERSEY CITY, NJ 07302 |
| 6301 | 54 | STEWART, RICHARD & LAUREN | 2721 MAIN STREET | LAWRENCE TOWNSHIP, NJ 08648 |
| 6301 | 55 | TROWBRIDGE, MARK & SYLMARIE | 2719 MAIN STREET | LAWRENCE TOWNSHIP, NJ 08648 |
| 6301 | 56 | LEONARDI, CHARLES A & CATHANNE | 2711 MAIN ST | LAWRENCEVILLE, NJ 08648 |
| 6301 | 57 | ESTATE OF PETER SEITONIK C/O LOUIS | 855 WEST END AVE APT 6C | NEW YORK, NY 10025 |
| 6301 | 61 | BROWN, MATTHEW & JOANNE, ET AL | 2705 MAIN STREET | LAWRENCEVILLE, NJ 08648 |
| 6301 | 62 | HUCKEL, KIRK D ET UX | 91 HUN RD | PRINCETON, NJ 08540 |
| 6301 | 63 | 2691 MAIN STREET HOLDINGS, LLC | 2691 MAIN ST | LAWRENCE TOWNSHIP, NJ 08648 |
| 6301 | 64 | GULDALIAN, JACK ETUX | 15 BRIANNA RD | SOUTHAMPTON, PA 18966 |
| 6301 | 65 | HULLFISH REAL ESTATE CO., LLC | 35 CRAVEN LANE | LAWRENCEVILLE, NJ 08648 |
| 6301 | 66 | HULLFISH REAL ESTATE CO., LLC | 35 CRAVEN LANE | LAWRENCEVILLE, NJ 08648 |
| 6301 | 67 | HULLFISH REAL ESTATE CO., LLC | 35 CRAVEN LANE | LAWRENCEVILLE, NJ 08648 |
| 6301 | 71 | HULLFISH, GARY | 35 CRAVEN LANE | LAWRENCEVILLE, NJ 08648 |
| 6301 | 72 | HULLFISH, GARY | 35 CRAVEN LANE | LAWRENCEVILLE, NJ 08648 |
| 6301 | 73.01 | ALBERTS, ELIZABETH | P O BOX 6573 | LAWRENCEVILLE, NJ 08648 |
| 6301 | 73.02 | VU, SEAN & CYNTHIA | 24 GORDON AVENUE | LAWRENCEVILLE, NJ 08648 |
| 6301 | 75 | GORDON AVE, LLC | 30 GORDON AVE | LAWRENCEVILLE, NJ 08648 |

ISSUANCE DATED: 09/20/21
LAST REVISED: 10/12/21

INDEX OF DRAWINGS

- COVER SHEET
- LAYOUT CONTROL PLAN
- GRADING AND UTILITY PLAN
- LANDSCAPING AND TREE PROTECTION PLAN
- LIGHTING PLAN
- CONSTRUCTION DETAILS
- CIRCULATION PLANS

LEGEND

| ITEM | EXISTING | PROPOSED |
|-----------------------------------|-----------|-----------|
| SIGN | □ | ◻ |
| GUY POLE | ○ | ● |
| UTILITY POLE | ○ | ● |
| SANITARY SEWER | — | — |
| STORM SEWER | — | — |
| INLET SQ. | A B C D E | A B C D E |
| MANHOLE | ○ | ⊗ |
| FIRE HYDRANT | + | + |
| UTILITY VALVE | ○ | ⊗ |
| CABLE LINE | — | — |
| WATER LINE | — | — |
| GAS LINE | — | — |
| ELECTRIC LINE | — | — |
| TELEPHONE LINE | — | — |
| ELECTRIC, TELEPHONE & CABLE LINES | — | — |
| CONTOUR LINES | — | — |
| GRADE ELEVATION | x100.0 | x100.000 |
| CURB | — | — |
| OVERHEAD WIRE | — | — |

APPROVAL SIGNATURES

OWNER/APPLICANT:
HULLFISH REAL ESTATE COMPANY, LLC
16 GORDON AVENUE
LAWRENCEVILLE, NJ, 08648

I/WE OWN THE PROPERTY AS DESIGNATED AND SHOWN HEREON, AND HEREBY APPROVE OF THIS PLAN.

OWNER/APPLICANT: *Guy R. Hullfish* DATE: 9/15/21

PLANNING BOARD CHAIRMAN: _____ DATE: _____

PLANNING BOARD SECRETARY: _____ DATE: _____

TOWNSHIP ENGINEER: _____ DATE: _____

I HEREBY CERTIFY THAT I HAVE PREPARED THIS PLAN AND THAT TO THE BEST OF MY KNOWLEDGE ALL DIMENSIONS AND INFORMATION ARE CORRECT.

Russell M. Smith
RUSSELL M. SMITH N.J. PROFESSIONAL ENGINEER NO. 33065

GRAPHIC SCALE: FEET
0 30' 60'

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HOPEWELL VALLEY ENGINEERING, PC
ENGINEERS, PLANNERS & LAND SURVEYORS

1600 Reed Road, Suite A
Pennington, NJ 08534-5002
Tel: 609-745-5800
Fax: 609-745-5807
www.hopewellvalleyengineering.com

DATE: 09/20/21
SCALE: 1" = 30'
PROJECT: AWS [Redacted] RMS
SHEET: 1 OF 7
NO. 101570A - REV 7.48
NO. SPO1570A - REV 1

COVER SHEET
FOR
MARMALADE RESTAURANT
BLOCK 6301 LOTS 58-60 & 68-70
SITUATE IN
LAWRENCE TOWNSHIP, MERCER COUNTY, NEW JERSEY

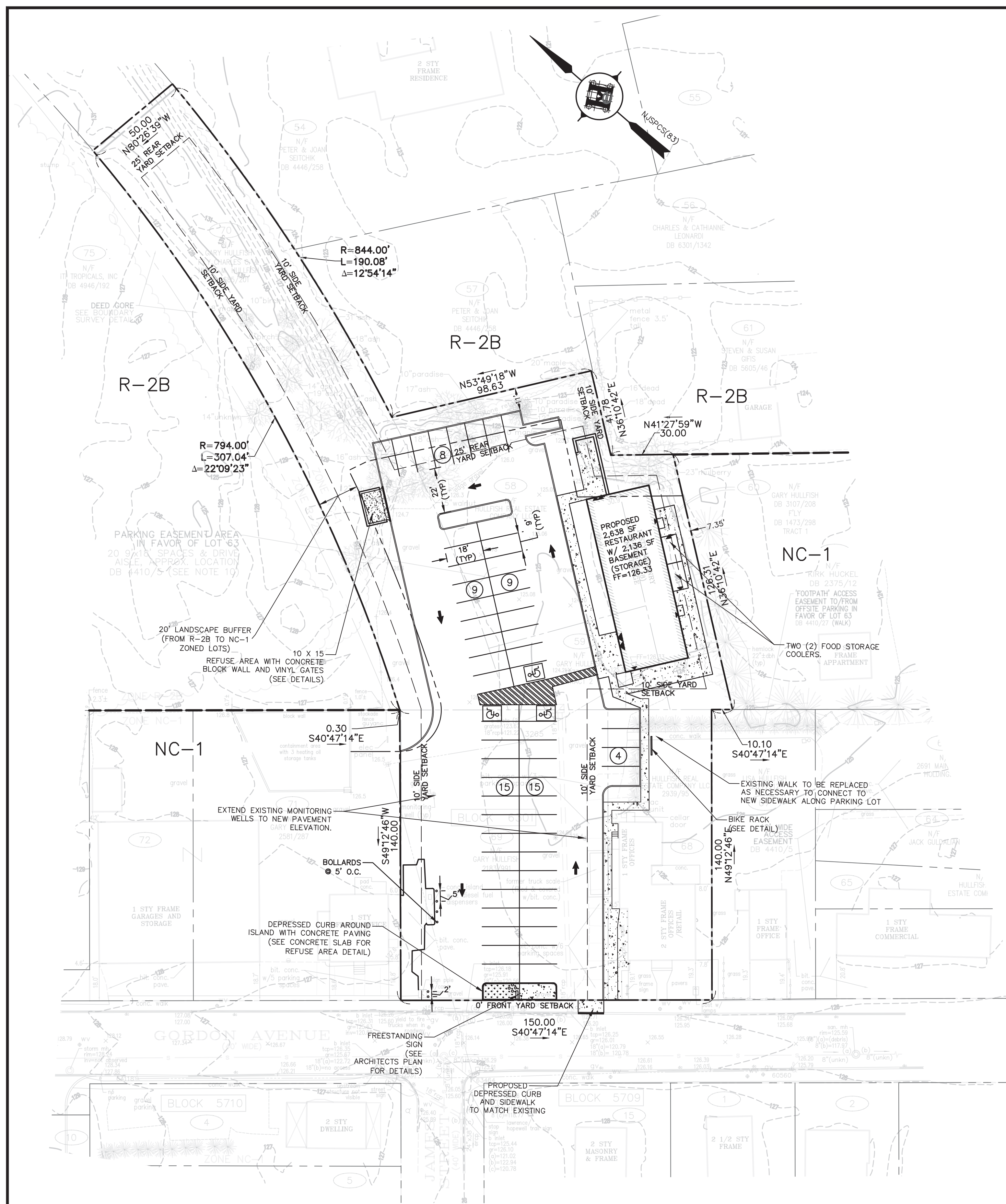
Digitally signed by
Russell M Smith
Date: 2021.10.20
11:36:46 -0400

RUSSELL M. SMITH
N.J. PROFESSIONAL ENGINEER NO. 33065

Sheet 1 of 7

| NO. | DATE | REVISION | BY | CHK'D |
|-----|----------|---|-----|-------|
| 1 | 10/12/21 | REVISE PLAN TO ADDRESS COMMENTS IN 10/05/21 LAWRENCE TOWNSHIP REVIEW LETTER | AMS | RMS |
| | | DESCRIPTION OF REVISION | | |

FILED: DATE 10/20/21 11:03:30 AM FILE # 101570A - REV 7.48 USER: Admin 2018



| ZONING REQUIREMENTS | | | |
|------------------------------------|----------|----------|------------------|
| NEIGHBORHOOD CENTER 1 (NC-1) | | | |
| A RESTAURANT IS A PERMITTED USE | | | |
| | REQUIRED | EXISTING | PROPOSED |
| MIN. LOT AREA (SF) | 5,000 | 54,358 | 54,358 |
| MIN. LOT FRONTAGE (FT) | 50 | 150 | 150 |
| MIN. LOT WIDTH (FT) | 50 | 150 | 150 |
| MIN. LOT DEPTH (FT) | 90 | 480 | 480 |
| BUILDING SETBACK (FT) | | | |
| FRONT YARD SETBACK (FT) | 0 | > 0 | > 0 |
| SIDE YARD, DETACHED BLDG (FT) | 10 | 14.8 | 14.8 |
| REAR YARD (FT) | 25 | 60 | 60 |
| ACCESSORY USE (FT) | 5 | N/A | 7.35 (COOLER) |
| MAX. IMPERVIOUS SURFACE RATIO | 0.80 | 0.61 | 0.67 |
| MAX. FLOOR AREA RATIO | 0.20 | 0.08 | 0.09 |
| MAX. BUILDING HEIGHT (FT) | | | |
| PRINCIPAL USE (RESTAURANT) | 35 | < 35 | < 35 |
| ACCESSORY USES | 15 | < 15 | < 15 |
| MAX. BUILDING SIZE (SF) | 10,000 | 2,638 | 2,638 |
| MAX. GROSS FLOOR AREA (SF) | 5,000 | 2,638 | 2,848 |
| MIN. GROSS FLOOR AREA (SF) (REHAB) | 400 | 2,638 | 2,848 |
| LANDSCAPE BUFFER (FT) | 20 | 0 | 5 ⁽¹⁾ |

⁽¹⁾ A DESIGN WAIVER IS REQUIRED FROM 525 H. 1, d. TO PERMIT BUILDING (PREEXISTING CONDITION), TRASH ENCLOSURE, SIDE PATIO, SITTING WALL AND PARKING WITHIN THE REQUIRED 20' WIDE LANDSCAPE BUFFER.

- SIGN VARIANCES REQUIRED:**
- A VARIANCE WILL BE REQUIRED FROM 535 W. 2 AND 535 T. 1, b. AS ONLY ONE FREESTANDING SIGN IS ALLOWED PER PROPERTY BUT THE SITE WILL HAVE 3 (1 PROPOSED AND 2 EXISTING).
 - A VARIANCE WILL BE REQUIRED FROM 535 E. 8 AS THE FREESTANDING SIGN WILL BE WITHIN 10' OF THE FRONT PROPERTY LINE.
 - A VARIANCE WILL BE REQUIRED FROM 535 L. 4, a. AS THE ARCHITECT PROPOSES A FACADE SIGN ABOVE THE LOWEST ROOF LEVEL.
 - A VARIANCE WILL BE REQUIRED FROM 535 T. 1, g. AS THE ARCHITECT PROPOSES 2 FACADE SIGNS.

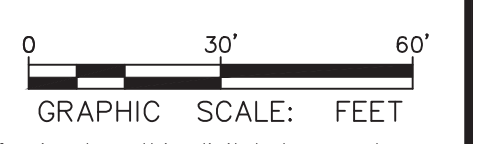
- DESIGN AND SUBMISSION WAIVERS:**
- SECTION #522 E. 4 REQUIRES SOIL TESTING FOR INFILTRATION BASINS AND DRYWELLS. IT IS OUR OPINION THAT THIS SECTION DOES NOT APPLY SINCE THE PROJECT DOES NOT MEET THE "MAJOR DEVELOPMENT" DEFINITION IN NJAC 7:8 AND DOES NOT INCREASE THE 100 YEAR STORM FLOW BY 1 CFS OR MORE (7.52 CFS EXISTING VS 8.21 CFS PROPOSED). WE HAVE ASKED FOR THIS WAIVER SINCE IT WAS LISTED IN THE 10/05/21 TOWNSHIP REVIEW LETTER. GROUNDWATER RECHARGE IS NOT PROPOSED. SOIL TESTING IS SIGNED BY A NJ LICENSED ENGINEER AND WAS PERFORMED (NOT WITNESSED BY THE TOWNSHIP) IN OCTOBER 2019 AND SHOWED THAT SOIL PERMEABILITY DID NOT MEET THE RECOMMENDED RATES NEEDED FOR GROUNDWATER RECHARGE.
 - A SUBMISSION WAIVER IS REQUESTED FROM SECTION 812 WHICH REQUIRES AN ENVIRONMENTAL IMPACT STATEMENT.
 - A SUBMISSION WAIVER IS REQUESTED FROM SECTION 814 WHICH REQUIRES A CIRCULATION IMPACT STUDY.

PARKING CALCULATIONS

- MARMALADE RESTAURANT
60 INTERIOR AND 20 EXTERIOR SEATS = 80 SEATS @ 1 SPACE PER 3 SEATS = 26.7 SAY 27 SPACES
 - BAKERY (BY AGREEMENT)
10 SPACES REQUIRED
 - LOT 68
504 SF OF RETAIL @ 1 SPACE PER 200 SF = 2.5 SPACES
1,322 SF OF OFFICE @ 4.5 SPACES PER 1,000 SF = 5.9 SPACES
A ONE BEDROOM APARTMENT @ 1.8 SPACES PER BEDROOM = 1.8 SPACES
TOTAL REQUIRED SPACES FOR LOT 68 = 10.2 SPACES (SAY 11)
- TOTAL REQUIRED SPACES: 27 + 10 + 11 = 48
TOTAL PROPOSED SPACES: 60 (3 HANDICAP SPACES PROVIDED PER ADA REGULATIONS)

GENERAL NOTES:

- REFERENCE PLANS:
 - TAX MAP OF LAWRENCE TOWNSHIP, SHEET 63.
 - PLAN ENTITLED "BOUNDARY AND TOPOGRAPHIC SURVEY FOR HULLFISH REAL ESTATE COMPANY, LOTS 58, 59, 60, 68, 69 & 70, BLOCK 6301" PREPARED BY HOPEWELL VALLEY ENGINEERING DATED 03/15/19 AND LAST REVISED 10/06/21.
- ALL WORK IS TO BE DONE IN ACCORDANCE WITH THE N.J.D.O.T. "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION", EDITION 2007 (THE GREEN BOOK).
- ANY CONVEYANCE OF THIS PROJECT PRIOR TO ITS COMPLETION WILL TRANSFER FULL RESPONSIBILITY FOR COMPLIANCE WITH THE CERTIFIED PLANS TO ANY SUBSEQUENT OWNERS.
- THIS SET OF PLANS HAS BEEN PREPARED FOR PURPOSES OF MUNICIPAL AND AGENCY REVIEW AND APPROVAL. THIS SET OF PLANS SHALL NOT BE UTILIZED AS CONSTRUCTION DOCUMENTS UNTIL ALL CONDITIONS OF APPROVAL HAVE BEEN SATISFIED ON THE DRAWINGS AND EACH DRAWING HAS BEEN REVISED TO INDICATE "ISSUED FOR CONSTRUCTION."
- ALL TRAFFIC CONTROL SIGNS AND PAVEMENT MARKINGS SHALL BE IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES AND/OR THE UNIFORM CONSTRUCTION CODE.
- SEE ARCHITECTURAL PLANS PREPARED BY JOSHUA ZINDER ARCHITECTURE + DESIGN FOR ELEVATIONS AND FLOOR PLANS FOR THE BUILDING.
- THE DEVELOPER SHALL REPAIR OR REPLACE ANY PUBLIC IMPROVEMENTS THAT ARE DAMAGED DURING THE CONSTRUCTION OF THIS PROJECT.
- ALL SUBGRADE SHALL BE APPROVED BY THE TOWNSHIP ENGINEER PRIOR TO INSTALLATION OF ANY SITE IMPROVEMENTS INCLUDING, PAVEMENT, CURBS, SIDEWALKS, ETC.
- FINAL ARCHITECTURAL PLANS AND ANY FIELD CHANGES SHALL BE REVIEWED AND APPROVED BY THE DESIGN ENGINEER PRIOR TO INSTALLATION.
- ALL SITE FEATURES SHALL BE ADA COMPLIANT.
- ELECTRICAL AND MECHANICAL PLAN SHALL BE PREPARED BY OTHERS.



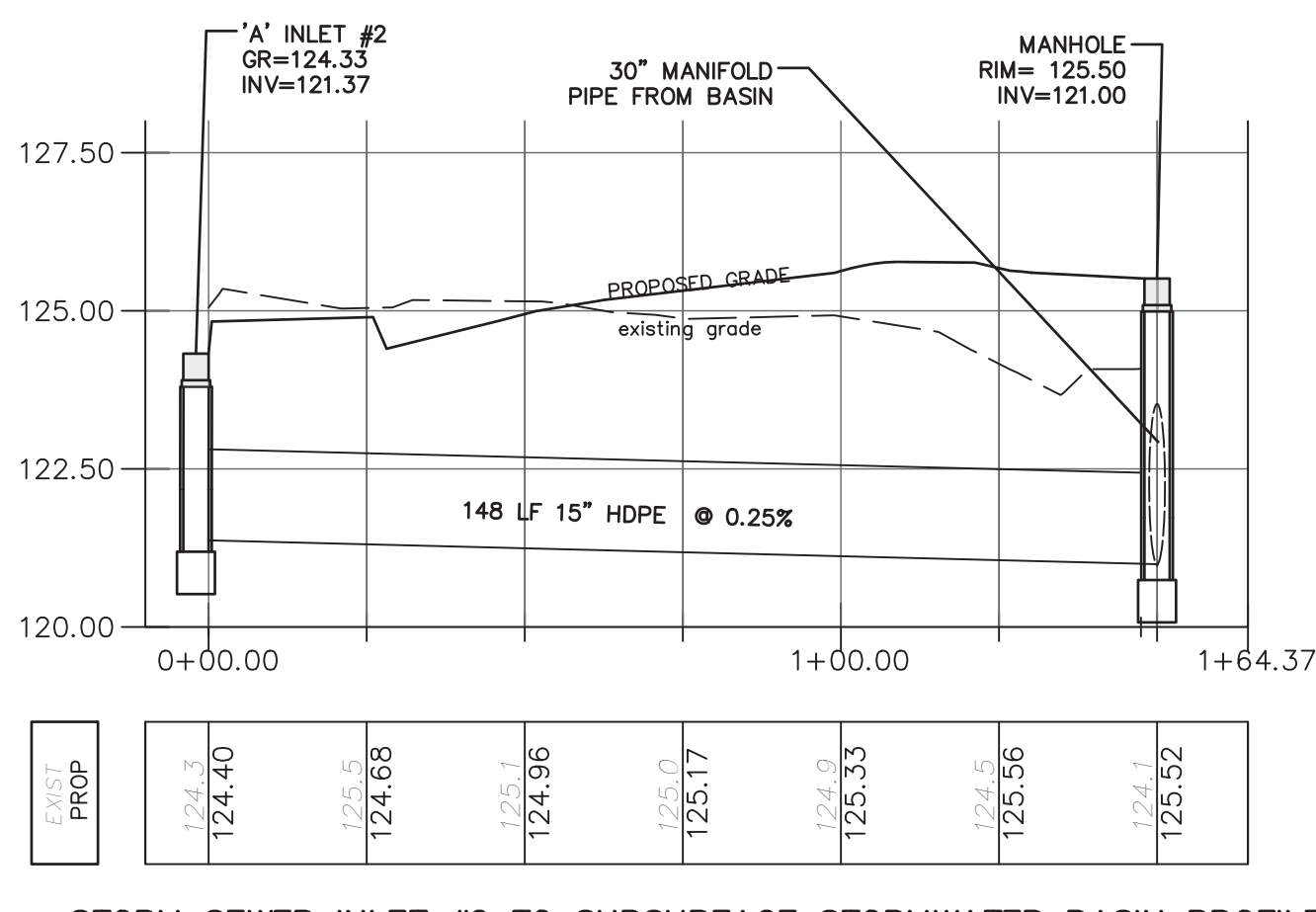
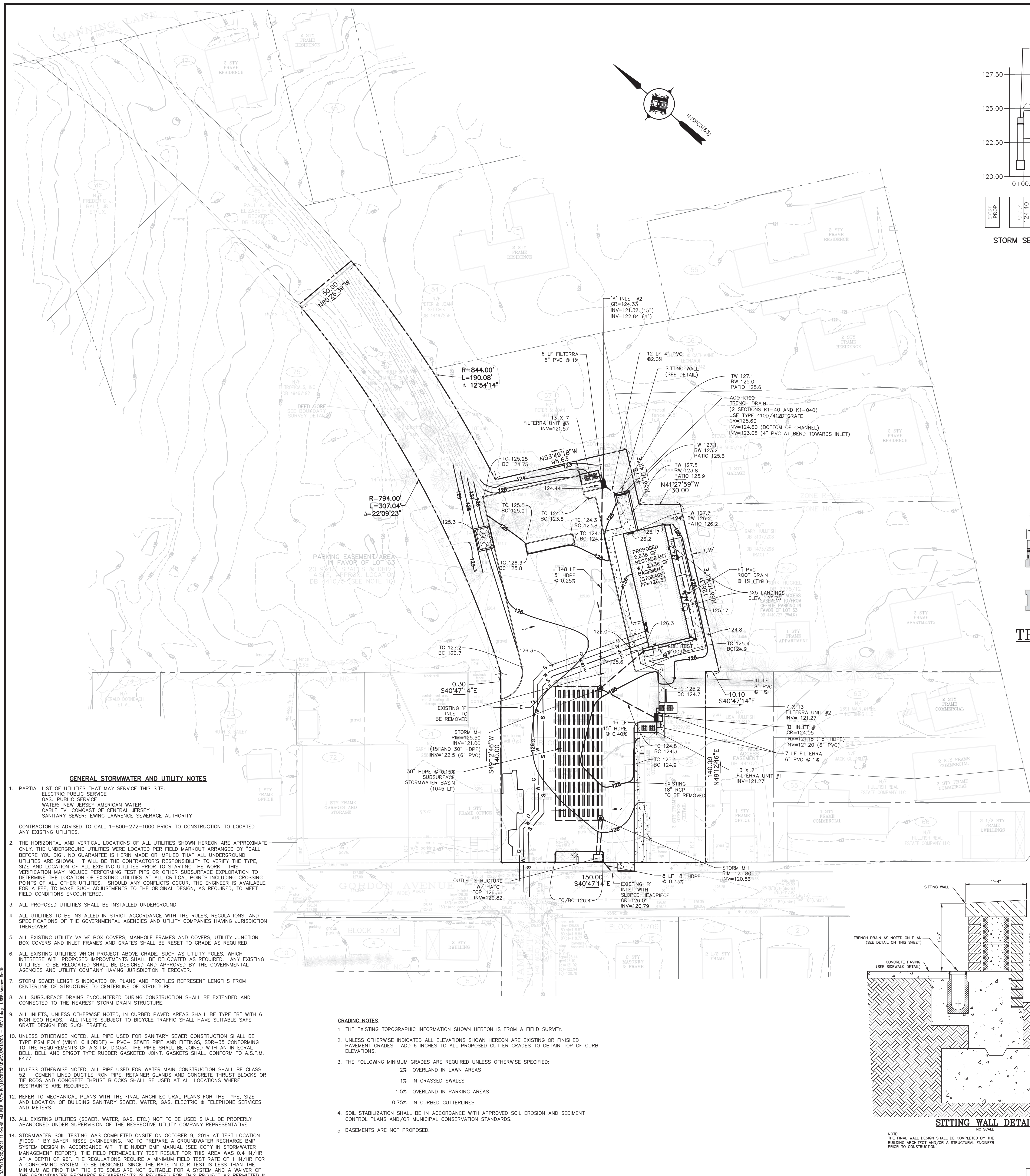
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HOPEWELL VALLEY ENGINEERING, PC
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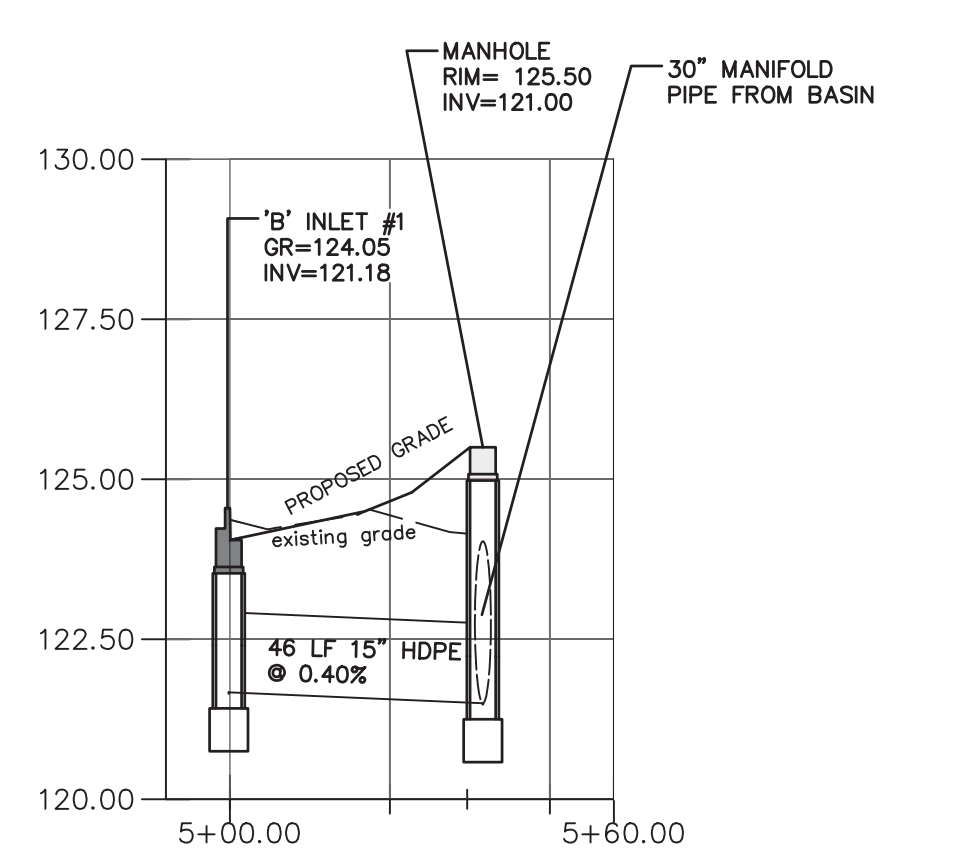
LAYOUT CONTROL PLAN
FOR
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SITUATE IN
LAWRENCE TOWNSHIP, MERCER COUNTY, NEW JERSEY

Digitally signed by
Russell M Smith
Date: 2021.10.20 11:35:01 -0400
RUSSELL M. SMITH
N.J. PROFESSIONAL ENGINEER, NO. 33065

| NO. | DATE | DESCRIPTION OF REVISION | AWG | RMS |
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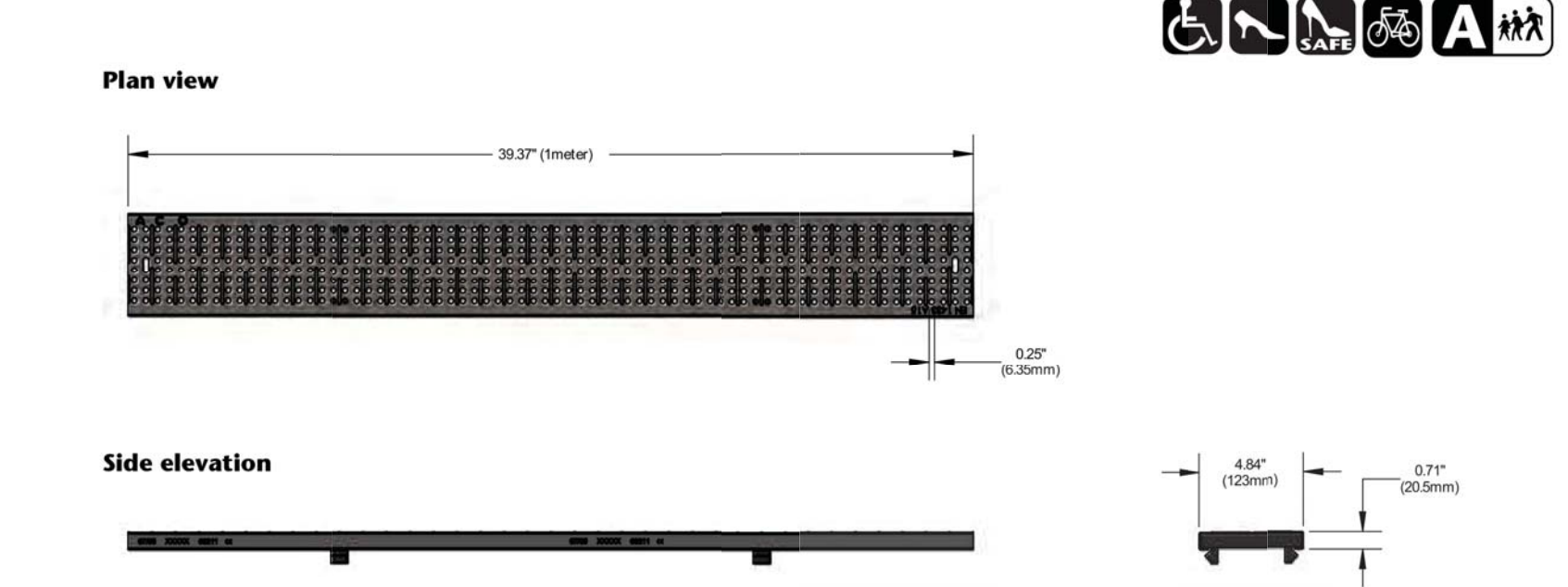


STORM SEWER INLET #2 TO SUBSURFACE STORMWATER BASIN PROFILE

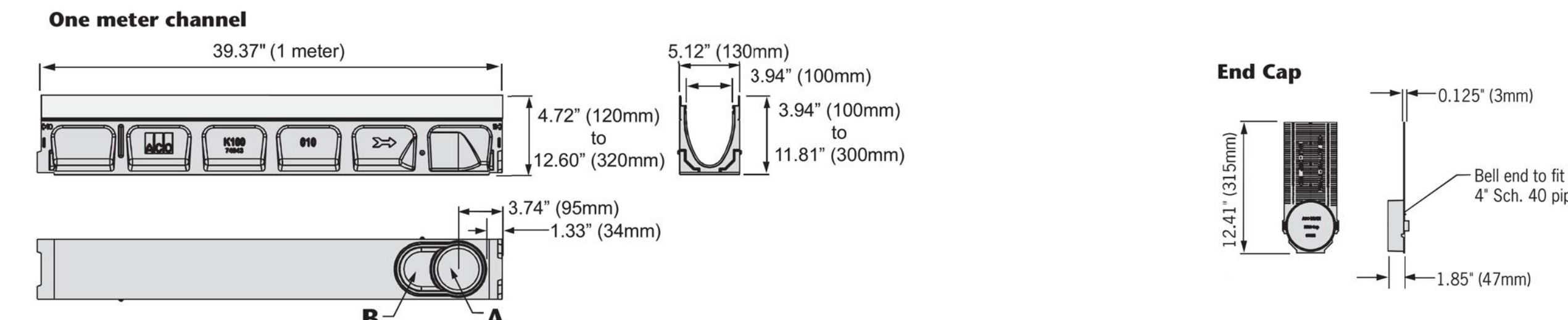


STORM SEWER INLET #1 TO SUBSURFACE STORMWATER BASIN PROFILE

Type 410D/412D Perforated galvanized steel grate (ADA)



TRENCH DRAIN GRATE DETAIL



TRENCH DRAIN DETAIL

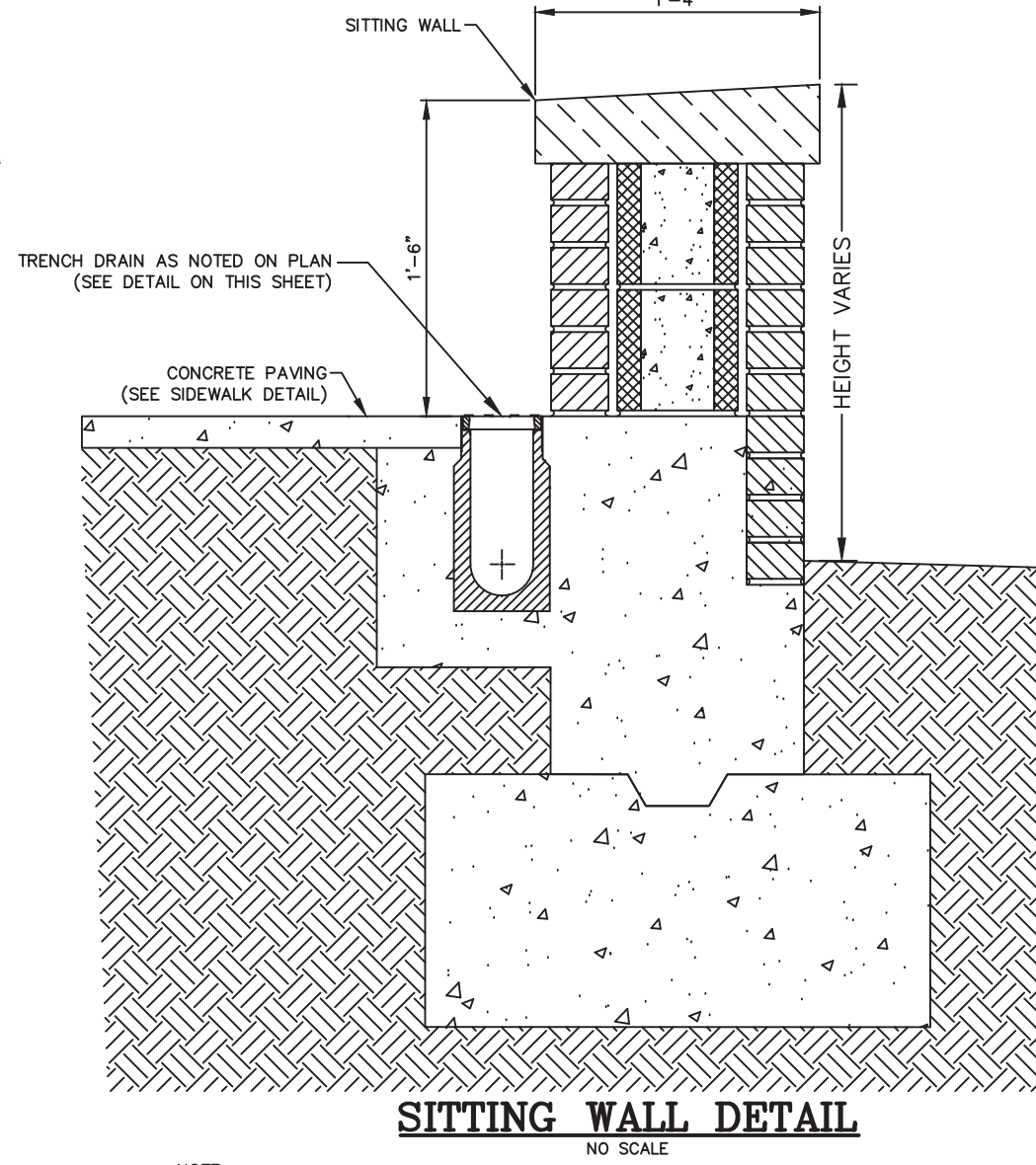
TRENCH DRAIN ENDCAP DETAIL

GENERAL STORMWATER AND UTILITY NOTES

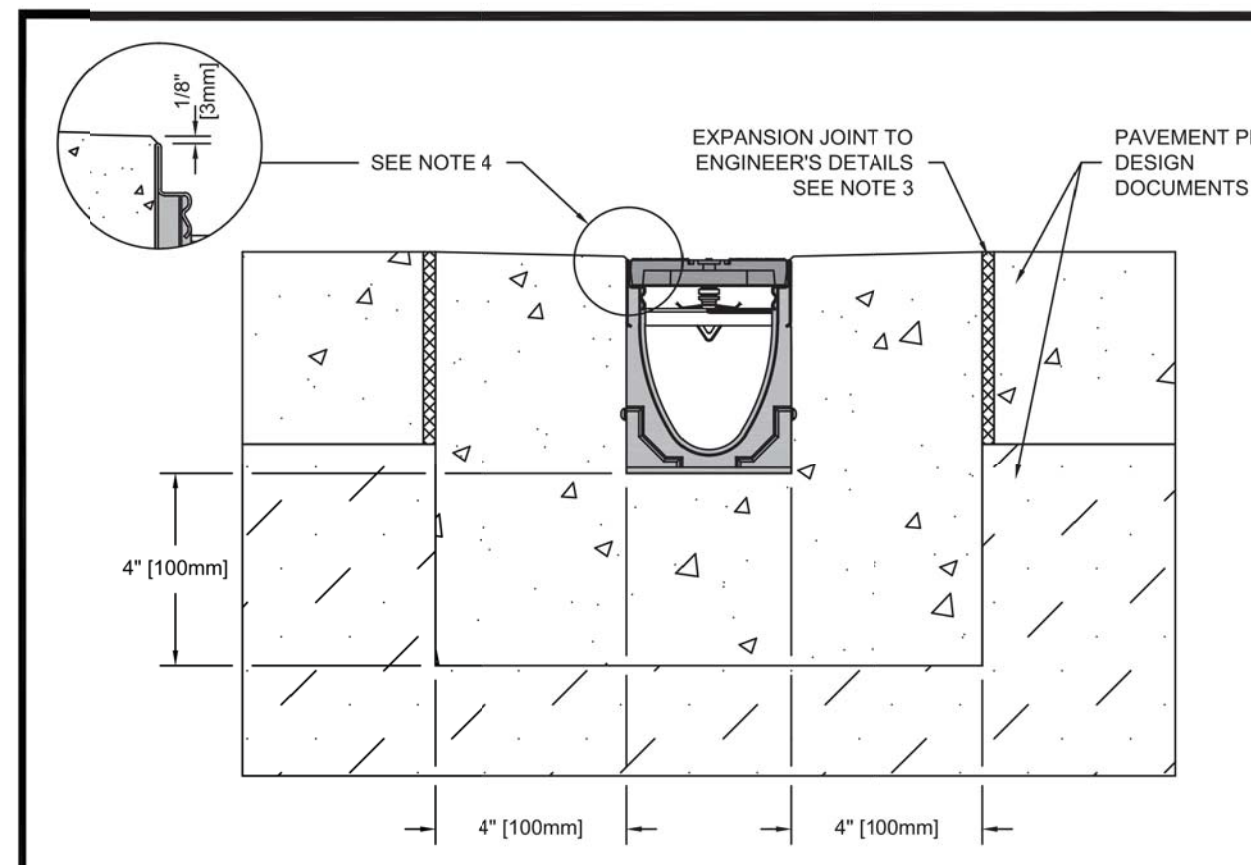
- PARTIAL LIST OF UTILITIES THAT MAY SERVICE THIS SITE:
GAS: PUBLIC SERVICE
ELECTRIC: PUBLIC SERVICE
CABLE TV: COMCAST OF CENTRAL JERSEY II
SANITARY SEWER: EWING LAWRENCE SEWERAGE AUTHORITY
CONTRACTOR IS ADVISED TO CALL 1-800-272-1000 PRIOR TO CONSTRUCTION TO LOCATED ANY EXISTING UTILITIES.
- THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL UTILITIES SHOWN HEREON ARE APPROXIMATE ONLY. THE UNDERGROUND UTILITIES WERE LOCATED PER FIELD MARKOUT ARRANGED BY "CALL BEFORE YOU DIG". NO GUARANTEE IS HERIN MADE OR IMPLIED THAT ALL UNDERGROUND UTILITIES ARE SHOWN. IT WILL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE TYPE, SIZE AND LOCATION OF ALL EXISTING UTILITIES PRIOR TO STARTING THE WORK. THIS VERIFICATION MAY INCLUDE PERFORMING TEST PITS OR OTHER SUBSURFACE EXPLORATION TO DETERMINE THE LOCATION OF EXISTING UTILITIES AT ALL CRITICAL POINTS INCLUDING CROSSING POINTS OF ALL OTHER UTILITIES. SHOULD ANY CONFLICTS OCCUR, THE ENGINEER IS AVAILABLE, FOR A FEE, TO MAKE SUCH ADJUSTMENTS TO THE ORIGINAL DESIGN, AS REQUIRED, TO MEET FIELD CONDITIONS ENCOUNTERED.
- ALL PROPOSED UTILITIES SHALL BE INSTALLED UNDERGROUND.
- ALL UTILITIES TO BE INSTALLED IN STRICT ACCORDANCE WITH THE RULES, REGULATIONS, AND SPECIFICATIONS OF THE GOVERNMENTAL AGENCIES AND UTILITY COMPANIES HAVING JURISDICTION THEREOVER.
- ALL EXISTING UTILITY VALVE BOX COVERS, MANHOLE FRAMES AND COVERS, UTILITY JUNCTION BOX COVERS AND INLET FRAMES AND GRATES SHALL BE RESET TO GRADE AS REQUIRED.
- ALL EXISTING UTILITIES WHICH PROJECT ABOVE GRADE, SUCH AS UTILITY POLES, WHICH INTERFERE WITH PROPOSED IMPROVEMENTS SHALL BE RELOCATED AS REQUIRED. ANY EXISTING UTILITIES TO BE RELOCATED SHALL BE DESIGNED AND APPROVED BY THE GOVERNMENTAL AGENCIES AND UTILITY COMPANY HAVING JURISDICTION THEREOVER.
- STORM SEWER LENGTHS INDICATED ON PLANS AND PROFILES REPRESENT LENGTHS FROM CENTERLINE OF STRUCTURE TO CENTERLINE OF STRUCTURE.
- ALL SUBSURFACE DRAINS ENCOUNTERED DURING CONSTRUCTION SHALL BE EXTENDED AND CONNECTED TO THE NEAREST STORM DRAIN STRUCTURE.
- ALL INLETS, UNLESS OTHERWISE NOTED, IN CURBED PAVED AREAS SHALL BE TYPE "B" WITH 6 INCH ECO HEADS. ALL INLETS SUBJECT TO BICYCLE TRAFFIC SHALL HAVE SUITABLE SAFE GRATE DESIGN FOR SUCH TRAFFIC.
- UNLESS OTHERWISE NOTED, ALL PIPE USED FOR SANITARY SEWER CONSTRUCTION SHALL BE TYPE PSM POLY (VINYL CHLORIDE) - PVC - SEWER PIPE AND FITTINGS. SDR-35 CONFORMING TO THE REQUIREMENTS OF A.S.T.M. D3034. THE PIPE SHALL BE JOINED WITH AN INTEGRAL BELL, BELL AND SPOGOT TYPE RUBBER GASKETED JOINT. GASKETS SHALL CONFORM TO A.S.T.M. F477.
- UNLESS OTHERWISE NOTED, ALL PIPE USED FOR WATER MAIN CONSTRUCTION SHALL BE CLASS 52 - CEMENT LINED DUCTILE IRON PIPE. RETAINER GLANDS AND CONCRETE THRUST BLOCKS OR TIE RODS AND CONCRETE THRUST BLOCKS SHALL BE USED AT ALL LOCATIONS WHERE RESTRAINTS ARE REQUIRED.
- REFER TO MECHANICAL PLANS WITH THE FINAL ARCHITECTURAL PLANS FOR THE TYPE, SIZE AND LOCATION OF BUILDING SANITARY SEWER, WATER, GAS, ELECTRIC & TELEPHONE SERVICES AND METERS.
- ALL EXISTING UTILITIES (SEWER, WATER, GAS, ETC.) NOT TO BE USED SHALL BE PROPERLY ABANDONED UNDER SUPERVISION OF THE RESPECTIVE UTILITY COMPANY REPRESENTATIVE.
- STORMWATER SOIL TESTING WAS COMPLETED ON SITE ON OCTOBER 9, 2019 AT TEST LOCATION #1009-1 BY BAYER-RISSE ENGINEERING, INC TO PREPARE A GROUNDWATER RECHARGE BMP SYSTEM DESIGN IN ACCORDANCE WITH THE NJDEP BMP MANUAL. (SEE COPY IN STORMWATER MANAGEMENT REPORT). THE FIELD PERMEABILITY TEST RESULT FOR THIS AREA WAS 0.4 IN/HR AT A DEPTH OF 96". THE REGULATIONS REQUIRE A MINIMUM FIELD TEST RATE OF 1 IN/HR FOR A CONFORMING SYSTEM TO BE DESIGNED. SINCE THE RATE IN OUR TEST IS LESS THAN THE MINIMUM WE FIND THAT THE SITE SOILS ARE NOT SUITABLE FOR A SYSTEM AND A WAIVER OF THE GROUNDWATER RECHARGE REQUIREMENTS IS REQUIRED FOR THIS PROJECT AS PERMITTED IN 7-8-5.4 (g) 2. iv.

GRADING NOTES

- THE EXISTING TOPOGRAPHIC INFORMATION SHOWN HEREON IS FROM A FIELD SURVEY.
- UNLESS OTHERWISE INDICATED ALL ELEVATIONS SHOWN HEREON ARE EXISTING OR FINISHED PAVEMENT GRADES. ADD 6 INCHES TO ALL PROPOSED OUTER GRADES TO OBTAIN TOP OF CURB ELEVATIONS.
- THE FOLLOWING MINIMUM GRADES ARE REQUIRED UNLESS OTHERWISE SPECIFIED:
2% OVERLAND IN LAWN AREAS
1% IN GRASSED SWALES
1.5% OVERLAND IN PARKING AREAS
0.75% IN CURBED GUTTERLINES
- SOIL STABILIZATION SHALL BE IN ACCORDANCE WITH APPROVED SOIL EROSION AND SEDIMENT CONTROL PLANS AND/OR MUNICIPAL CONSERVATION STANDARDS.
- BASEMENTS ARE NOT PROPOSED.



SITTING WALL DETAIL



TRENCH DRAIN INSTALLATION DETAIL

| | | | |
|--|---|--|---|
| | K100 - KLASSIKDRAIN - LOAD CLASS: A Exposed Concrete Pavement INSTALLATION DRAWING - ACO DRAIN | ACO, Inc. 855 W. Woodcroft St Chardon, OH 44024 Tel: 520-421-9988 Fax: 520-421-9899 | P.O. Box 245 Chardon, OH 44024 Tel: 800-543-4764 Fax: 800-285-1063 |
| | Arizona Tel: 888-490-9552 e-mail: sales@acousa.com Ohio Tel: 800-543-4764 www.acousa.com South Carolina Tel: 800-622-2377 | | |

SPECIFICATION CLAUSE

K100 - KLASSIKDRAIN - LOAD CLASS A

GENERAL
THE SURFACE DRAINAGE SYSTEM SHALL BE POLYMER CONCRETE K100 CHANNEL SYSTEM WITH GALVANIZED STEEL EDGE RAILS AS MANUFACTURED BY ACO, INC.

MATERIALS
CHANNELS SHALL BE MANUFACTURED FROM POLYESTER RESIN POLYMER CONCRETE WITH AN INTEGRALLY CAST GALVANIZED STEEL EDGE RAIL. MINIMUM PROPERTIES OF POLYMER CONCRETE WILL BE AS FOLLOWS:
 COMPRESSIVE STRENGTH: 14,000 PSI
 FLEXURAL STRENGTH: 4,000 PSI
 TENSILE STRENGTH: 1,500 PSI
 WATER ABSORPTION: 0.07%
 FROST PROOF: YES
 SULFURIC ACID AND ALKALI RESISTANT: YES
 8:17 SALT SPRAY TEST COMPLIANT: YES

THE SYSTEM SHALL BE 4" (100mm) NOMINAL INTERNAL WIDTH WITH A 5.1" (130mm) OVERALL WIDTH AND A BUILT-IN SLOPE OF 0.3%. CHANNEL INVERT SHALL HAVE DEVELOPED "V" SHAPE. ALL CHANNELS SHALL BE INTERLOCKING WITH A MALE/FEMALE JOINT.

THE COMPLETE DRAINAGE SYSTEM SHALL BE BY ACO, INC. ANY DEVIATION OR PARTIAL SYSTEM DESIGN AND/OR IMPROPER INSTALLATION WILL VOID ANY AND ALL WARRANTIES PROVIDED BY ACO, INC.

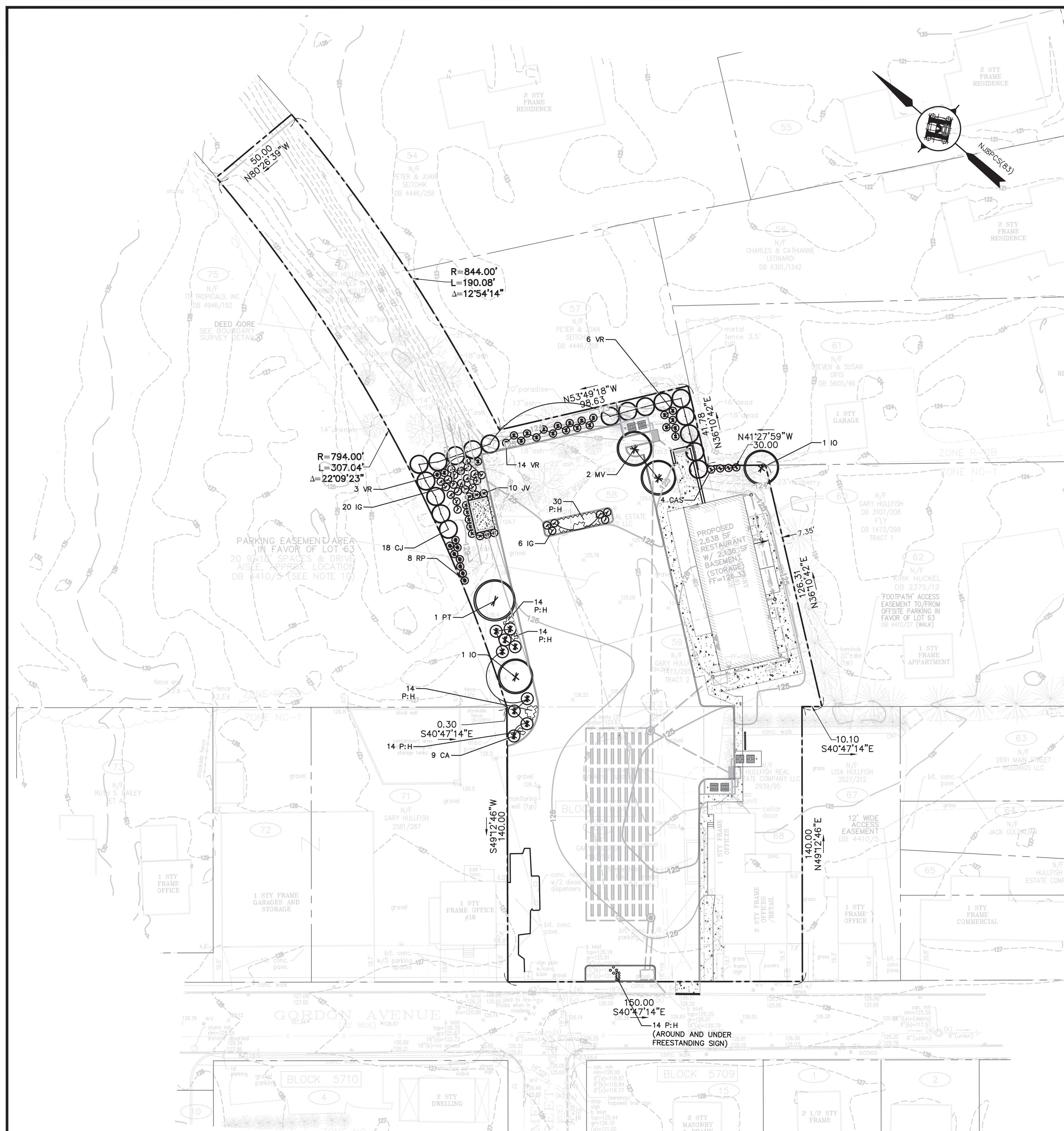
NOTES
 1. IT IS NECESSARY TO ENSURE MINIMUM DIMENSIONS SHOWN ARE SUITABLE FOR EXISTING GROUND CONDITIONS. ENGINEERING ADVICE MAY BE REQUIRED.
 2. MINIMUM CONCRETE STRENGTH OF 4,000 PSI IS RECOMMENDED. CONCRETE SHOULD BE VIBRATED TO ELIMINATE AIR POCKETS.
 3. EXPANSION AND CONTRACTION CONTROL JOINTS AND REINFORCEMENT ARE RECOMMENDED TO PROTECT CHANNEL AND CONCRETE SURROUND. ENGINEERING ADVICE MAY BE REQUIRED.
 4. THE FINISHED LEVEL OF THE CONCRETE SURROUND MUST BE APPROX. 1/8" (3mm) ABOVE THE TOP OF THE CHANNEL EDGE.
 5. CONCRETE BASE THICKNESS SHOULD MATCH SLAB THICKNESS. ENGINEERING ADVICE MAY BE REQUIRED TO DETERMINE PROPER LOAD CLASS.
 6. REFER TO ACO'S LATEST INSTALLATION INSTRUCTIONS FOR FURTHER DETAILS.

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 www.hopewellvalleyengineering.com

GRADING AND UTILITY PLAN
 FOR
MARMALADE RESTAURANT
 BLOCK 6301 LOTS 58- & 68-70
 SITUATE IN
 LAWRENCE TOWNSHIP, MERCER COUNTY, NEW JERSEY

Digitally signed by
 Russell M. Smith
 Date: 2021.10.20
 N.J. PROFESSIONAL ENGINEER NO. 33065

| | | | | | |
|-----|----------|---|-------------------------|-----|-------|
| NO. | DATE | REVISION | DESCRIPTION OF REVISION | BY | CHK'D |
| 1 | 10/12/21 | REVISE PLAN TO ADDRESS COMMENTS IN 10/05/21 LAWRENCE TOWNSHIP REVIEW LETTER | | AMS | RMS |



| MARMALADE RESTAURANT | | | | | |
|----------------------|------|---------------------------------------|----------------------------------|--------|---------|
| Plant List | | | | | |
| TREES AND SHRUBS | | COMMON NAME | SIZE | ROOT | COMMENT |
| SYM | QUAN | BOTANICAL NAME | | | |
| CA | 9 | Cornus alba 'Sibirica' | Tatarian Dogwood | 3'-4" | B&B |
| CAS | 4 | Clethra alnifolia 'Ruby Spice' | Ruby Spice Summersweet | 18-24" | Cont. |
| CJ | 18 | Cryptomeria japonica 'Yoshino' | Yoshino Japanese Cedar | 5'-6" | B&B |
| IG | 26 | Ilex glabra 'Densa' | Densa Inkberry Holly | 18-24" | Cont. 1 |
| IO | 2 | Ilex opaca 'Greenleaf' | Greenleaf American Holly | 6'-7" | B&B |
| JV | 10 | Juniperus virginiana 'Cortocor' | Cortocor Eastern Red Cedar | 6'-7" | B&B |
| MV | 2 | Magnolia virginiana 'Henry Hicks' | Henry Hicks Sweetbay Magnolia | 6'-8" | B&B |
| PT | 1 | Pinus thunbergiana | Japanese Black Pine | 5'-6" | B&B |
| RP | 8 | Rhododendron 'PJM' | PJM Rhododendron | 18-24" | Cont. 1 |
| VR | 23 | Viburnum rhytidophyllum 'Green Trump' | Green Trump Leatherleaf Viburnum | 5'-6" | B&B 1 |
| HERBACEOUS | | | | | |
| P.H. | 100 | Hemerocallis 'Happy Returns' | Happy Returns Daylily | #1 | Cont. |

NOTE: 1 Do not shear into balls or squares

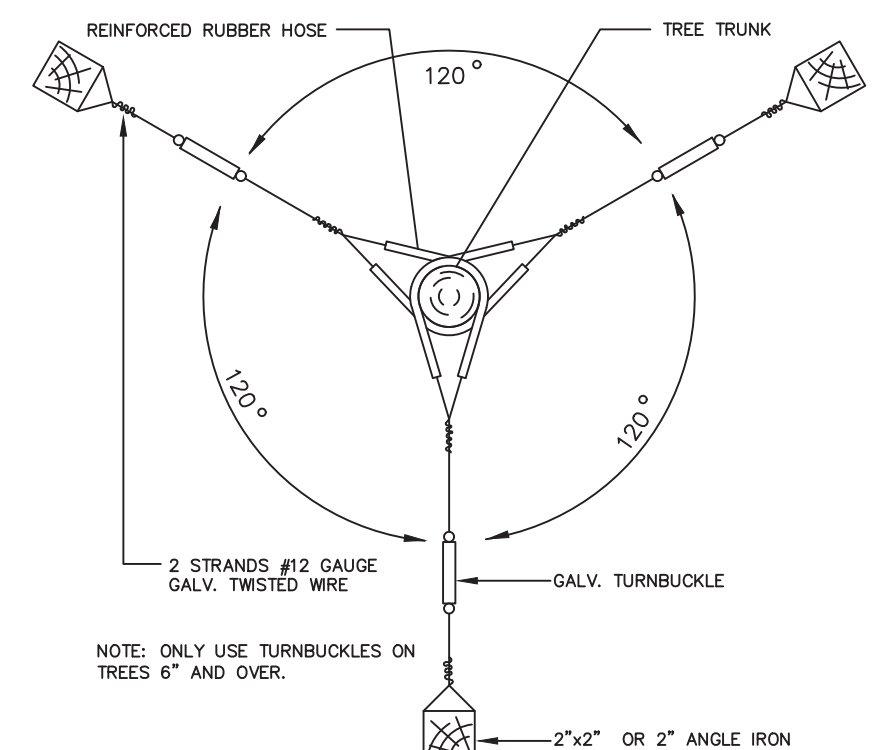
LAWRENCE TOWNSHIP TREE DENSITY CALCULATIONS:
 REQUIRED TREE DENSITY (RTD) = GROSS LOT AREA X 15 = 1.25 X 15 = 18.75 TREE UNITS (TU).
 WE PROPOSE TO PLANT:
 NINETEEN (19) 6 TO 8 FOOT TALL TREES WHICH ARE EQUAL TO 15.2 TU AND
 FOURTEEN (14) 6 TO 8 FOOT TALL TREES WHICH ARE EQUAL TO 14.0 TU.
 THIS GIVES US A TOTAL OF 29.2 TU
 29.2 > 18.75 THEREFORE WE COMPLY WITH THE REQUIRED AMOUNT OF REPLACEMENT TREES.

- PLANTING NOTES:**
- THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS IN THE FIELD AND NOTIFY THE ENGINEER IF ANY DISCREPANCIES ARE ENCOUNTERED.
 - TOPSOIL TO MEET THE STANDARDS SET FORTH IN THE "SOIL EROSION AND SEDIMENT CONTROL IN NEW JERSEY STANDARDS".
 - COMPACTED SUBGRADE SHALL BE LOOSENEED BEFORE SPREADING NEW TOPSOIL. NEW TOPSOIL SHALL BE SPREAD TO MEET PROPOSED GRADE LINES.
 - BEFORE PLANTING, CONTRACTOR SHALL TEST TOPSOIL FOR PH, FERTILIZER SALTS AND BULK DENSITY. DEPENDING ON TEST RESULTS, SOIL SHALL BE AMENDED WITH LIMESTONE, FERTILIZER, AND PEAT MOSS TO CREATE OPTIMUM GROWING CONDITIONS FOR SPECIFIED PLANTS.
 - TREES, SHRUBS, AND GROUND COVERS SHALL BE AS INDICATED ON THE PLANT LIST. ALL TREES, SHRUBS, AND GROUND COVERS SHALL BE PLANTED, STAKED, AND MULCHED IN ACCORDANCE WITH THE PLANTING DETAIL DRAWINGS.
 - PLANTS SHALL BE TYPICAL OF THEIR SPECIES AND VARIETY. HAVE NORMAL GROWTH HABITS, WELL DEVELOPED, SYMMETRICAL OR BALANCED BRANCHES AND HABIT. VIGOROUS ROOT SYSTEMS AND BE FREE FROM DEFECTS OR INJURIES. UNLESS OTHERWISE SPECIFIED, TREES SHALL HAVE A SINGLE TRUNK WITH UNICUT SINGLE LEADER. TREES WITH A CUT LEADER WILL BE REJECTED.
 - QUALITY AND SIZE OF PLANTS, INCLUDING ROOT SIZE, SHALL BE IN ACCORDANCE WITH THE AMERICAN STANDARD FOR NURSERY STOCK (ANSI 260.1) AS PUBLISHED BY THE AMERICAN ASSOCIATION OF NURSERYMEN.
 - PLANTS SHALL BE PRUNED OF DEAD, DAMAGED, OR DISEASED BRANCHES PRIOR TO DELIVERY. PRUNING SHALL MAINTAIN THE NATURAL FORM OR HABIT OF THE PLANT UNLESS A FORMAL HEDGE HAS BEEN SPECIFIED BY THE LANDSCAPE ARCHITECT. FLOWERING SHRUBS/TREES TO BE PRUNED AFTER FLOWERING. A CLEAN CUT SHALL BE MADE PERPENDICULAR TO THE BRANCH WITH A SHARP IMPLEMENT.
 - ALL INJURED ROOTS SHALL BE PRUNED PRIOR TO PLANTING. A CLEAN CUT SHALL BE MADE PERPENDICULAR TO THE ROOT WITH A SHARP IMPLEMENT.
 - ALL PLANTS SHALL BE THOROUGHLY WATERED IN THE FIRST 24 HOURS AFTER PLANTING.
 - BALLED AND BURLAP-ED PLANTS SHALL BE SUPPORTED FROM THE BOTTOM OF THE ROOT BALL. PLANTS WITH BROKEN, SPLIT, OR DAMAGED ROOT BALLS SHALL BE REJECTED.
 - THE CONTRACTOR SHALL GUARANTEE ALL PLANTS FOR A MINIMUM OF ONE YEAR, TO BE ALIVE AND IN VIGOROUS GROWING CONDITION DURING AND AT THE END OF THE GUARANTEE PERIOD. REMOVE UNSATISFACTORY AND DEAD PLANTS EVERY MONTH DURING THE GUARANTEE PERIOD AND REPLACE WITH PLANTS OF THE SAME KIND, QUALITY, AND SIZE AS SPECIFIED. CONTRACTOR SHALL ENSURE PLANTS ARE ADEQUATELY WATERED DURING THE ONE YEAR GUARANTEE PERIOD.
 - ALL CLEARED GROUND NOT INDICATED FOR PLANTING OF GROUND COVERS SHALL BE SEED AS PER LAWN SEEDING NOTES.
 - ALL SEEDED AREAS TO BE MULCHED IN ACCORDANCE WITH THE "STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL IN NEW JERSEY".
 - LANDSCAPE PLAN IS TO BE USED FOR PLANTING PURPOSES ONLY. SEE ENGINEER'S DRAWINGS FOR CONSTRUCTION DOCUMENTATION.

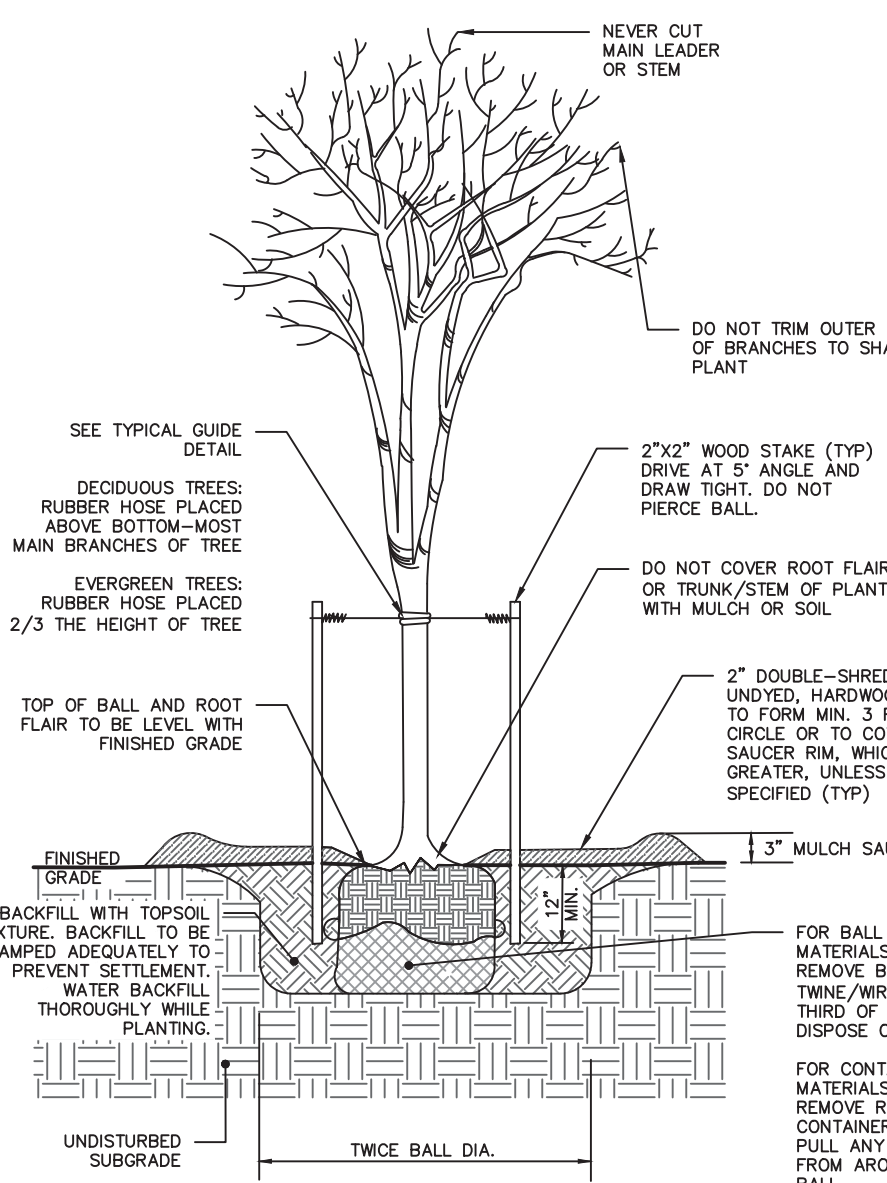
THIS PLAN IS FOR LANDSCAPING AND LIGHTING PURPOSES ONLY



TREE REMOVAL DETAIL
SCALE: 1" = 30'



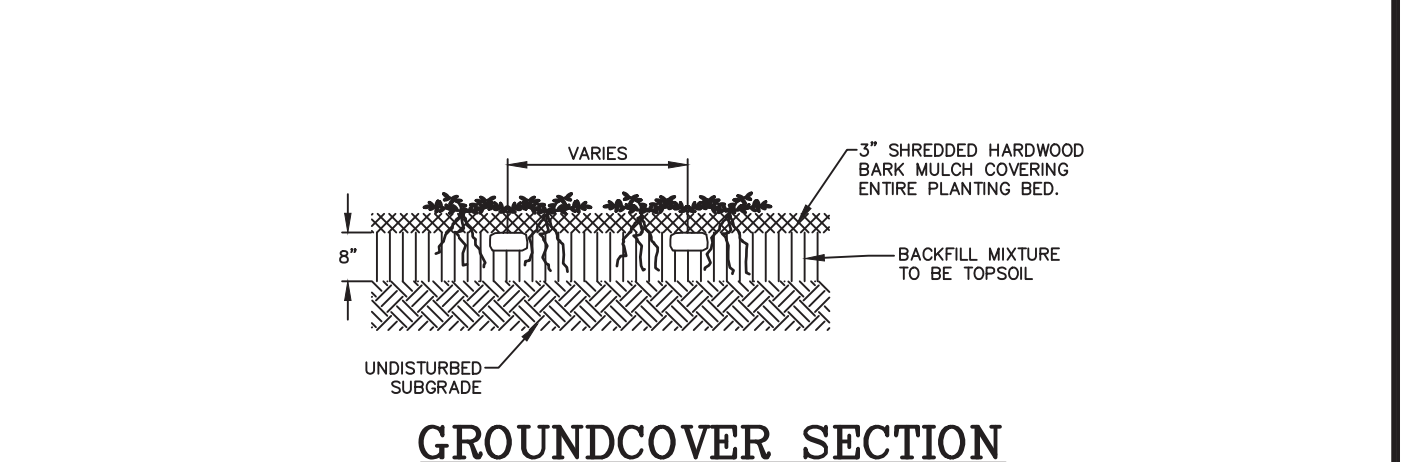
TREE GUYING
NOT TO SCALE



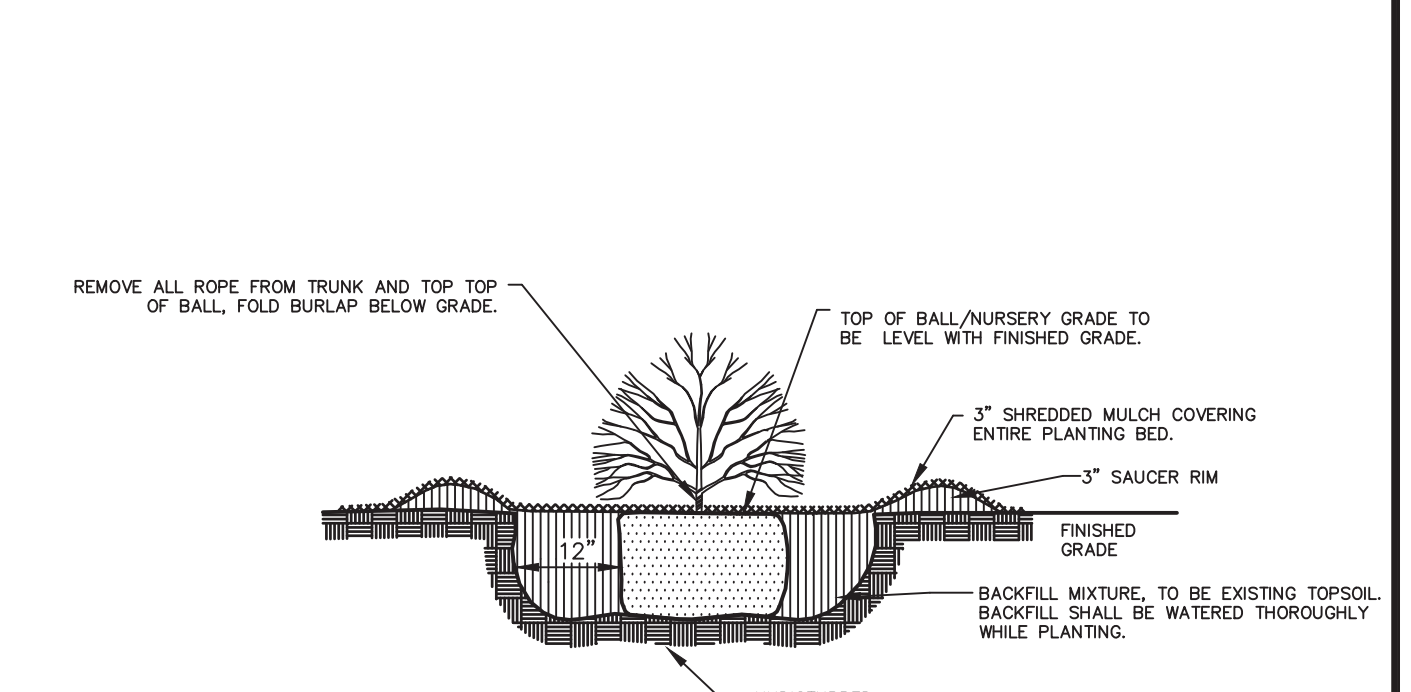
PLANTING TREE OR SHRUB
NO SCALE

- TREES, SHRUBS AND GROUNDCOVERS**
- PRUNING: PRUNE TREES TO REMOVE DEAD AND DISEASED WOOD AND TO IMPROVE OVERALL HABIT. PRUNE SHRUBS AS NEEDED, AFTER FLOWERING ONLY. PRUNE AT LEAST ONCE PER YEAR. PLANT MATERIAL SHOWN PLANTED IN A MASS OR TOUCHING EACH OTHER ARE TO BE ALLOWED TO GROW TOGETHER IN ORDER TO BE ABLE TO PERFORM AS A SCREEN OR HEDGE. PRUNE HEDGES WIDER AT BASE THAN TOP TO AVOID SHADE ON BOTTOM OF PLANT.
- FERTILIZER: RATIO 2:1:1 AT 2-3 LBS. ACTUAL NITROGEN PER 1,000 SQ. FT. FERTILIZE IN SPRING ONLY.
- PESTICIDE: APPLY PESTICIDES ONLY AS NEEDED FOR SPECIFIC DISEASES OR INSECT PESTS.
- WEED CONTROL: WEED ALL BEDS AS NEEDED TO KEEP WELL GROOMED AND RELATIVELY WEED FREE.
- WATER: WATER ALL NEW PLANT MATERIAL AS NEEDED THROUGHOUT FIRST AND SECOND GROWING SEASON. IF RAIN IS INSUFFICIENT, WATER ALL WOODY PLANTS THOROUGHLY TWO TIMES PER WEEK.
- MULCH: RENEW SHREDED BARK MULCH TO 3" DEPTH EVERY YEAR.
- LEAF REMOVAL: REMOVE LEAVES FROM ALL BEDS, TURF AREAS, PARKING AREAS, AND WALKS.
- REPLACEMENTS: REPLACE ALL DEAD SHRUBS AND TREES WITHIN NEXT PLANTING SEASON. (2/15 TO 5/15 OR 10/15 TO 12/30).
- TUBE
- RENEWAL PROCEDURES: OVER SEED THIN SPOTS IN SPRING AND FALL. THATCH AS NECESSARY. (4/1 TO 5/31 AND 8/16 TO 10/15).
- FERTILIZER: RATIO 3:1:2 AT 1 LB. NITROGEN PER 1,000 SQ. FT. FERTILIZE TWO TIMES PER YEAR.
- PESTICIDES: INSPECT AND APPLY AS NEEDED FOR DISEASES AND INSECTS.
- MOW: MAINTAIN A 2" HEIGHT. MOW AT LEAST ONCE PER WEEK. REMOVE CLIPPINGS FROM DETENTION BASIN.
- MANICURE: TRIM LAWN AND GROUND COVERS ALONG SIDEWALKS AND SHRUB BED EDGES. RAKE AS NEEDED.
- GENERAL MAINTENANCE**
- DETENTION BASIN: CLEAN OUT OUTLET STRUCTURES AFTER EVERY STORM EVENT.
- PAVEMENT: REPLACE ALL BROKEN OR MISSING PAVERS. REPAIR OR REPLACE ALL OTHER DAMAGED PAVING AS NECESSARY. REMOVE ALL STAINS.
- PLANTS SHALL BE TYPICAL OF THEIR SPECIES AND VARIETY, HAVE NORMAL GROWTH HABITS, WELL DEVELOPED BRANCHES, DENSELY FOLIATED, VIGOROUS ROOT SYSTEMS, AND BE FREE FROM DEFECTS AND INJURIES.
- QUALITY AND SIZE OF PLANTS, INCLUDING ROOT SIZE, SHALL BE IN ACCORDANCE WITH "AMERICAN STANDARDS FOR NURSERY STOCK" ANSI 260 (MOST RECENT EDITION) AS PUBLISHED BY THE AMERICAN ASSOCIATION OF NURSERYMEN.
- B&B PLANTS SHALL BE HANDLED FROM THE BOTTOM OF THE ROOT BALL ONLY. PLANT WITH BROKEN, SPLIT OR DAMAGED ROOT BALLS SHALL BE REJECTED.
- ALL BEDLINES SHALL BE CUT FOUR INCHES DEEP INTO A "Y" SHAPED GROOVE TO PROVIDE A WELL DEFINED EDGE. THE LAYOUT OF ALL BEDLINES SHALL BE APPROVED BY THE LANDSCAPE ARCHITECT ON-SITE PRIOR TO CUTTING.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL UTILITY MARK OUTS AND COMPLIANCE WITH ALL FEDERAL, STATE, OR LOCAL CODES, LAWFUL ORDERS, OR REGULATIONS GOVERNING UPON THIS WORK.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PLANTING AT CORRECT GRADES AND ALIGNMENT AS SHOWN ON THE PLANTING PLAN.
- THE CONTRACTOR SHALL REPORT ANY SOIL OR DRAINAGE CONDITIONS CONSIDERED DETRIMENTAL TO THE GROWTH OF THE PROPOSED PLANT MATERIAL.
- INSO FAR AS IT IS PRACTICABLE, PLANTING MATERIAL SHALL BE PLANTED ON THE DAY OF DELIVERY. IN THE EVENT THAT THIS IS NOT POSSIBLE, THE CONTRACTOR SHALL PROTECT ALL STOCK NOT PLANTED. PLANTS SHALL NOT REMAIN UNPLANTED FOR LONGER THAN A TWO (2) DAY PERIOD AFTER DELIVERY.
- PLANTING OPERATIONS SHALL BE PERFORMED DURING PERIODS WITHIN THE PLANTING SEASON WHEN WEATHER AND SOIL CONDITIONS ARE SUITABLE AND IN ACCORDANCE WITH TOWNSHIP ORDINANCES:
- FALL TREES: AUGUST 15 - DECEMBER 15 EVERGREEN DECEMBER 15
- SPRING TREES: MARCH 1 - MAY 15 ALL PLANTS

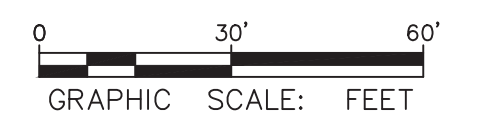
- GENERAL NOTES**
- ALL PLANTS TO CONFORM TO THE AMERICAN STANDARD FOR NURSERY STOCK, ANSA 260.1-1996, AS PUBLISHED BY THE AMERICAN ASSOCIATION OF NURSERYMEN. THIS STANDARD IS SET BY THE AMERICAN NATIONAL STANDARDS INSTITUTE.
 - PLANT MATERIALS MUST BE WARRANTED TO LIVE FOR ONE YEAR, FROM BILLING DATE, PROVIDED THEY ARE PROPERLY MAINTAINED BY THE OWNER.
 - THE LANDSCAPE CONTRACTOR MUST PROVIDE THE OWNER WITH WRITTEN MAINTENANCE INTERVENTIONS.
 - DETENTION BASIN TO BE SEED WITH 1/3 TALL FESCUE, 1/3 SPREADING FESCUE, 1/3 KENTUCKY BLUEGRASS AT THE RATE OF 4 LBS/1,000 S.F. IN ADDITION, SEED A WILD/FLOWER MIX AS SPECIFIED BY THE TOWNSHIP LANDSCAPE ARCHITECT.
 - ALL SHRUB MASSES TO BE MULCHED WITH AGED SHREDED MULCH, DARK BROWN COLOR, 3" DEEP.
 - GROUP BASIN TREES IN GROUPS OF 5, OF SAME VARIETY, MIX THE SIZES.
 - FINE LAWN SEED MIX TO BE 60% TURF TYPE FESCUE, 30% TURF TYPE PER. RYE, 10% KENTUCKY BLUEGRASS AT SEED RATE 5 LBS. PER 1,000 S.F.
 - ALL EXISTING TREES TO REMAIN UNMARKED WITH A RED "X".
 - FOR IRRIGATION DESIGN SEE PLAN ENTITLED "IRRIGATION PLAN, NEW JERSEY HOSPITAL ASSOC. WEST WINDSOR NJ" PREPARED BY ERIC'S NURSERY AND GARDEN CENTER AND DATED MARCH 12, 1999.



GROUNDCOVER SECTION
NO SCALE



SHRUB PLANTING DETAIL
NO SCALE



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 www.hopewellvalleyengineering.com

DATE: 09/20/21
 SCALE: 1" = 30'
 DESIGNED: AWS
 CHECKED: RMS
 DATE: 11/07/20A
 DATE: 11/07/20A
 PROJECT: SP01570A - REV 7.48
 PROJECT: SP01570A - REV 7.48

LANDSCAPING AND TREE PROTECTION PLAN
 FOR
MARMALADE RESTAURANT
 BLOCK 6301 LOTS 58-60 & 68-70
 SITUATE IN
 LAWRENCE TOWNSHIP, MERCER COUNTY, NEW JERSEY

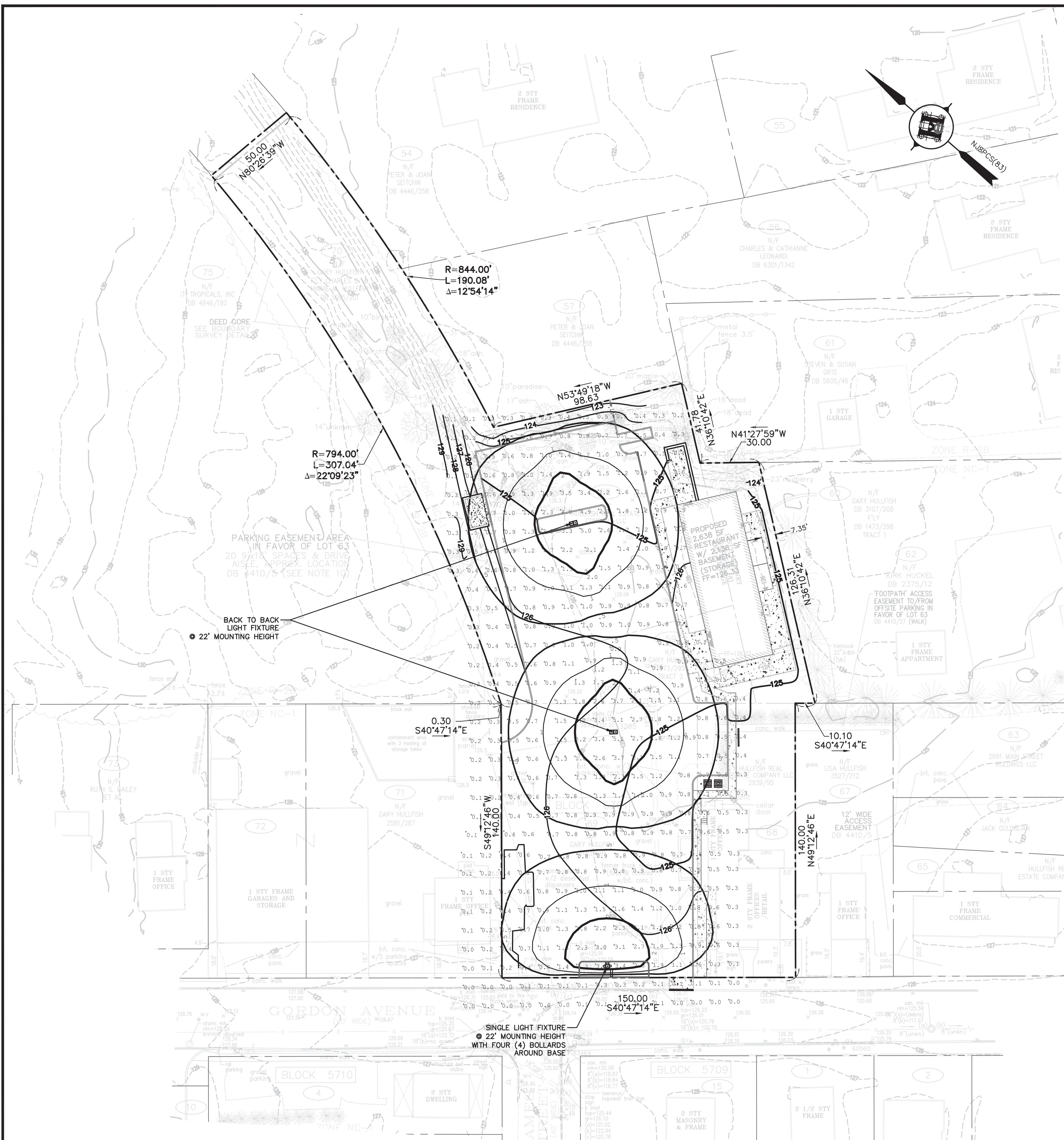
Digitally signed by
 Russell M Smith
 Date: 2021.10.20
 11:30:11-0400'

RUSSELL M. SMITH
 N.J. PROFESSIONAL ENGINEER, NO. 33065

Sheet 4 of 7

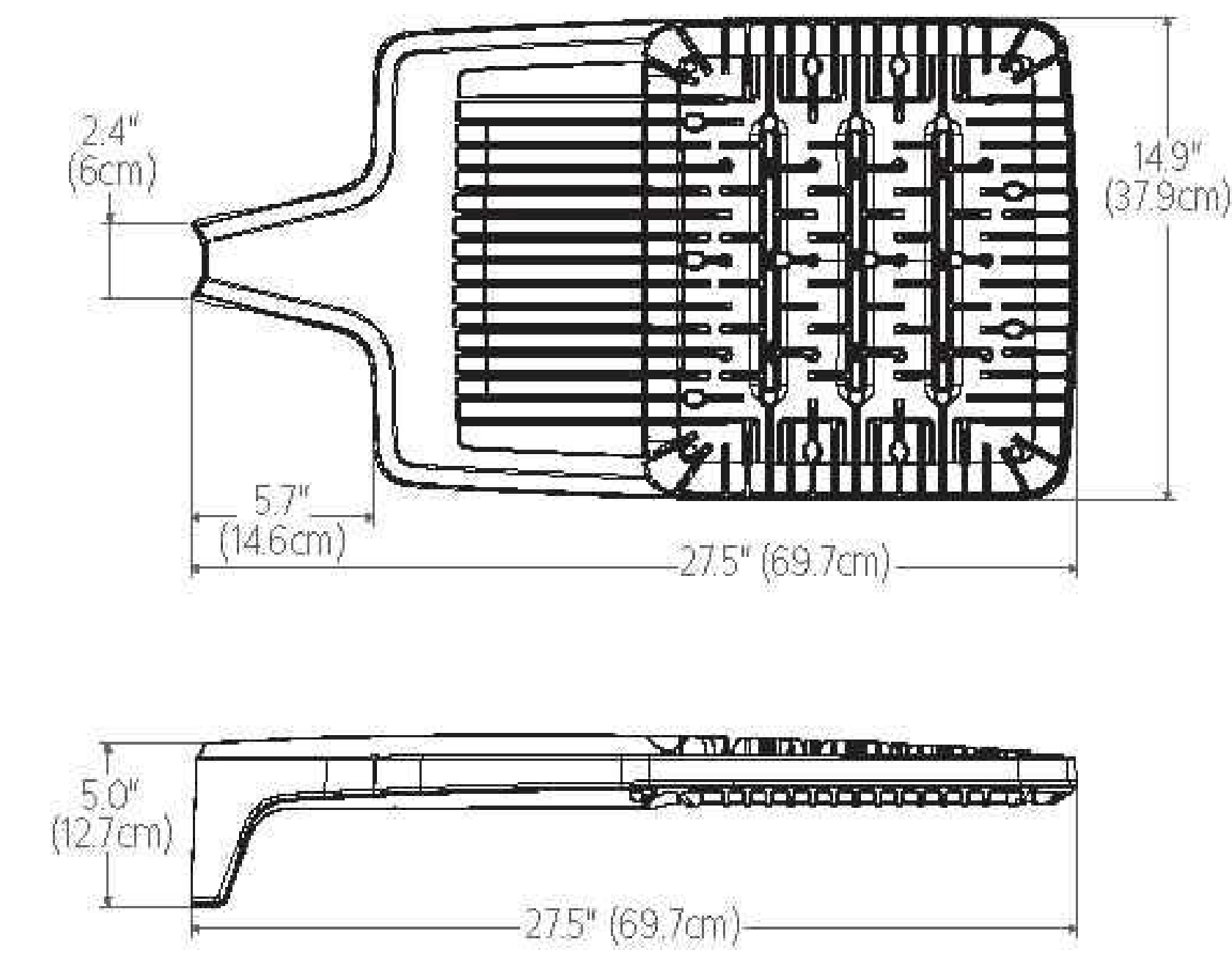
THE LANDSCAPE DESIGNS SHOWN ON THIS PLAN WERE PREPARED BY ANN R. FARNHAM CLA NJ #AS00682

| NO. | DATE | DESCRIPTION OF REVISION | BY | DWTS |
|-----|------|-------------------------|----|------|
| | | | | |
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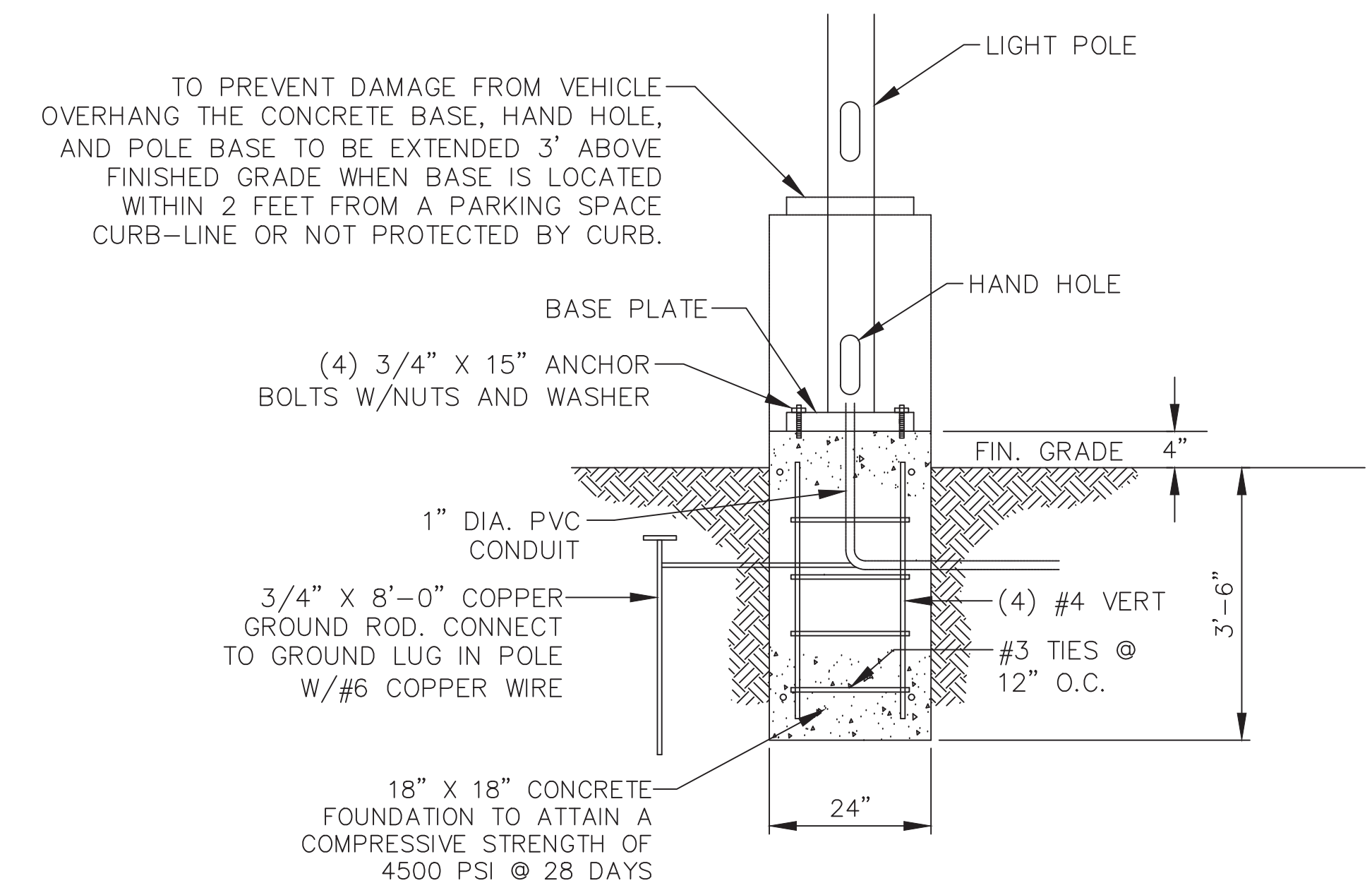
Standard Arm (AR)

Weight: 22 Lbs (9.9 Kg) EPA: 0.21ft² (0.19m²)



GARDCO ECF-S LIGHT HEAD DETAILS

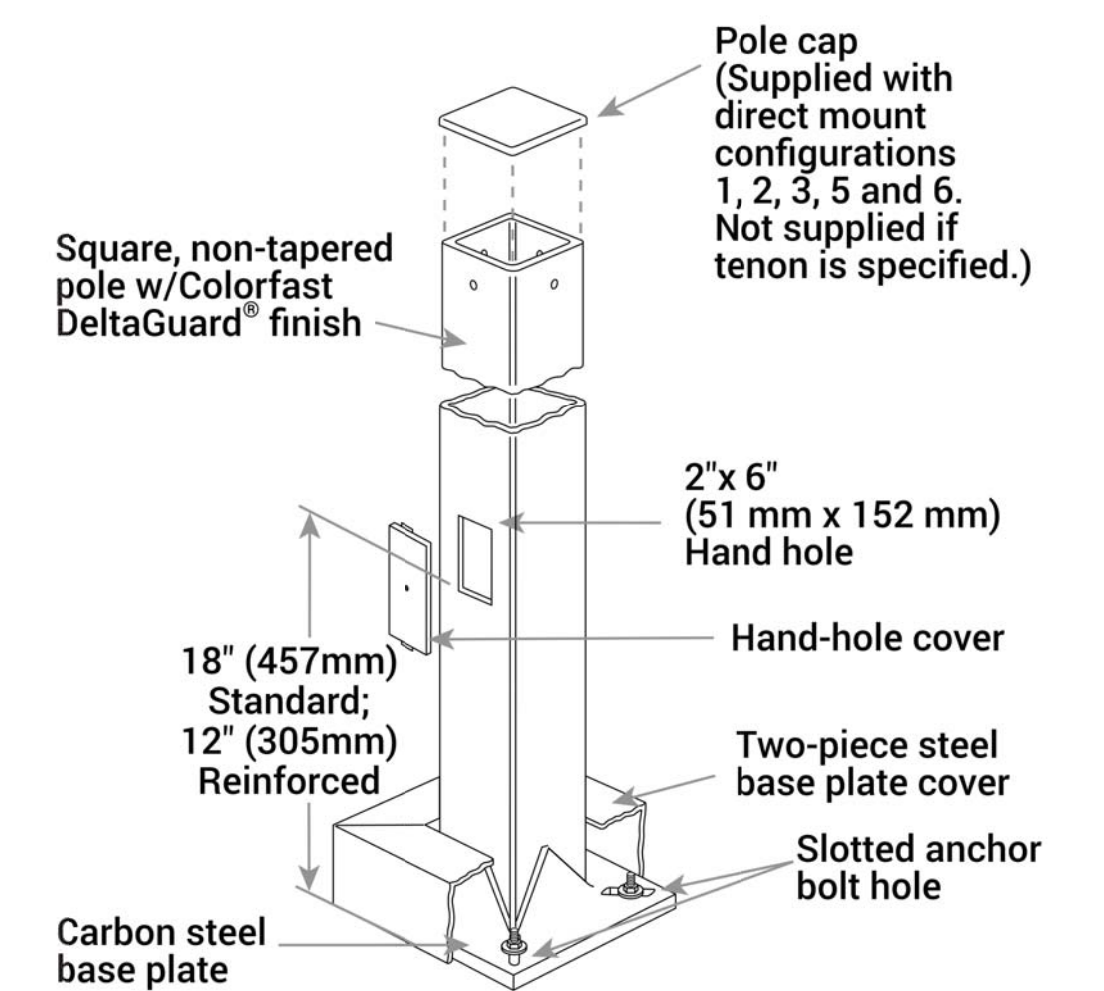
NO SCALE



POLE MOUNTED LIGHT BASE

NO SCALE

NOTE: THE CONTRACTOR SHALL PROVIDE STRUCTURAL CALCULATIONS SHOWING THAT THE LIGHT POLE AND FOUNDATION HAVE BEEN DESIGNED TO WITHSTAND 100 MPH WINDS PRIOR TO BUILDING PERMIT AND CONSTRUCTION.



4\"/>

NO SCALE

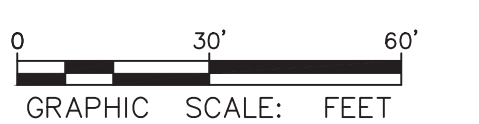
| Luminaire Schedule | | | | | | | |
|--------------------|-----|----------------------------|-------------|-----------------|-----------------------------------|------------|-------------|
| Symbol | Qty | Bulb Type | Arrangement | Mounting Height | Description | Lum. Watts | Lumens/Lamp |
| □ | 1 | LIGHT EMITTING DIODE (LED) | SINGLE | 22' | Gardco ECF-S-32L-1-2A-NW-G2-4-HIS | 121.6 | N.A. |
| □ | 2 | LIGHT EMITTING DIODE (LED) | BACK-BACK | 22' | Gardco ECF-S-32L-700-NW-G2-4 | 72.9 | N.A. |

| Calculation Summary | | | | | |
|---------------------|-------------|-------|------|-----|-----|
| Label | CalcType | Units | Avg | Max | Min |
| Calc Grid | Illuminance | Fc | 0.20 | 5.1 | 0.0 |
| Parking Lot | Illuminance | Fc | 1.38 | 5.1 | 0.5 |

LIGHTING NOTES

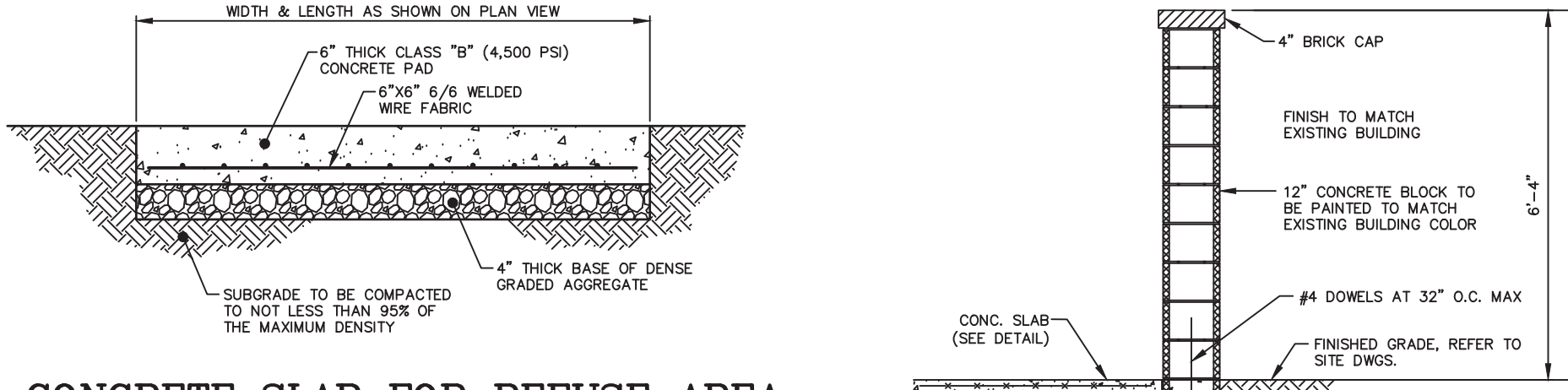
- THIS PLAN TO BE USED FOR PHOTOMETRIC INFORMATION ONLY. ELECTRICAL WIRING SHALL BE PER A WIRING PLAN BY OTHERS (IF PREPARED) AND/OR APPROPRIATE CONSTRUCTION CODES AND SPECIFICATIONS.
- A TIMING DEVICE SHALL BE INSTALLED ON THE PARKING LOT LIGHTS AND SET TO TURN ON AT DUSK AND OFF AT DAWN.

THE LIGHTING DESIGNS SHOWN ON THIS PLAN WERE PREPARED BY PENN LIGHTING.

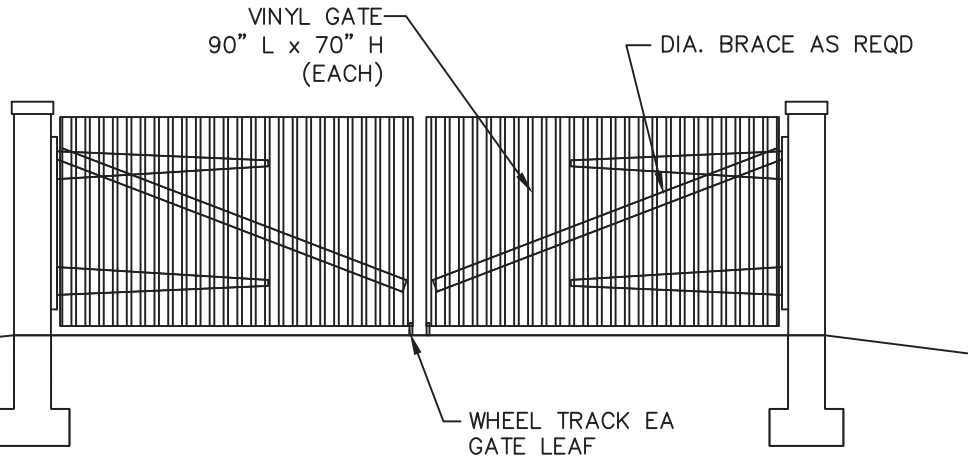


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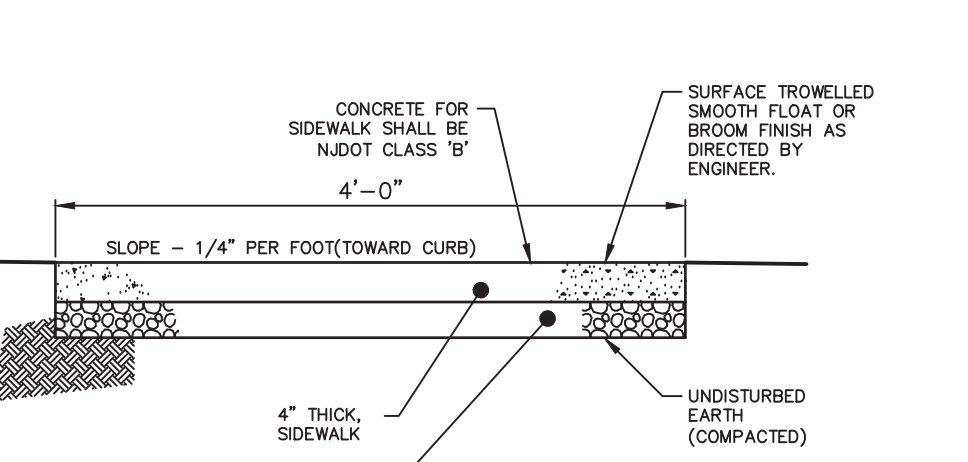
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|------------------------|---|---|
| | HOPEWELL VALLEY ENGINEERING, PC ENGINEERS, PLANNERS & LAND SURVEYORS | 1600 Reed Road, Suite A Pennington, NJ 08534-5002 Tel: 609-745-5800 Fax: 609-745-5807 www.hopewellvalleyengineering.com |
| | LIGHTING PLAN FOR MARMALADE RESTAURANT BLOCK 6301 LOTS 58-60 & 68-70 SITUATE IN LAWRENCE TOWNSHIP, MERCER COUNTY, NEW JERSEY | |
| 1 10/12/21 NO. DATE | REVISE PLAN TO ADDRESS COMMENTS IN 10/05/21 LAWRENCE TOWNSHIP REVIEW LETTER DESCRIPTION OF REVISION | Digitally signed by Russell M Smith Date: 2021.10.20 11:24:40 -04'00' |



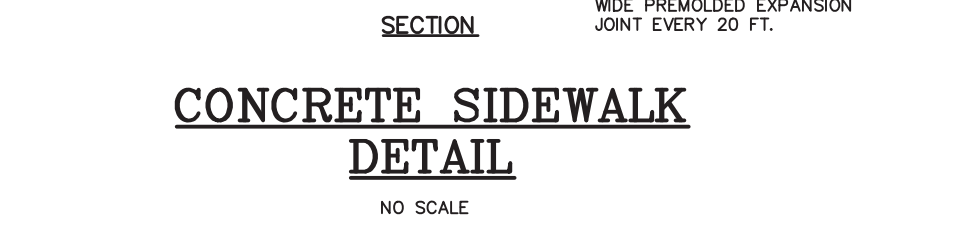
CONCRETE SLAB FOR REFUSE AREA



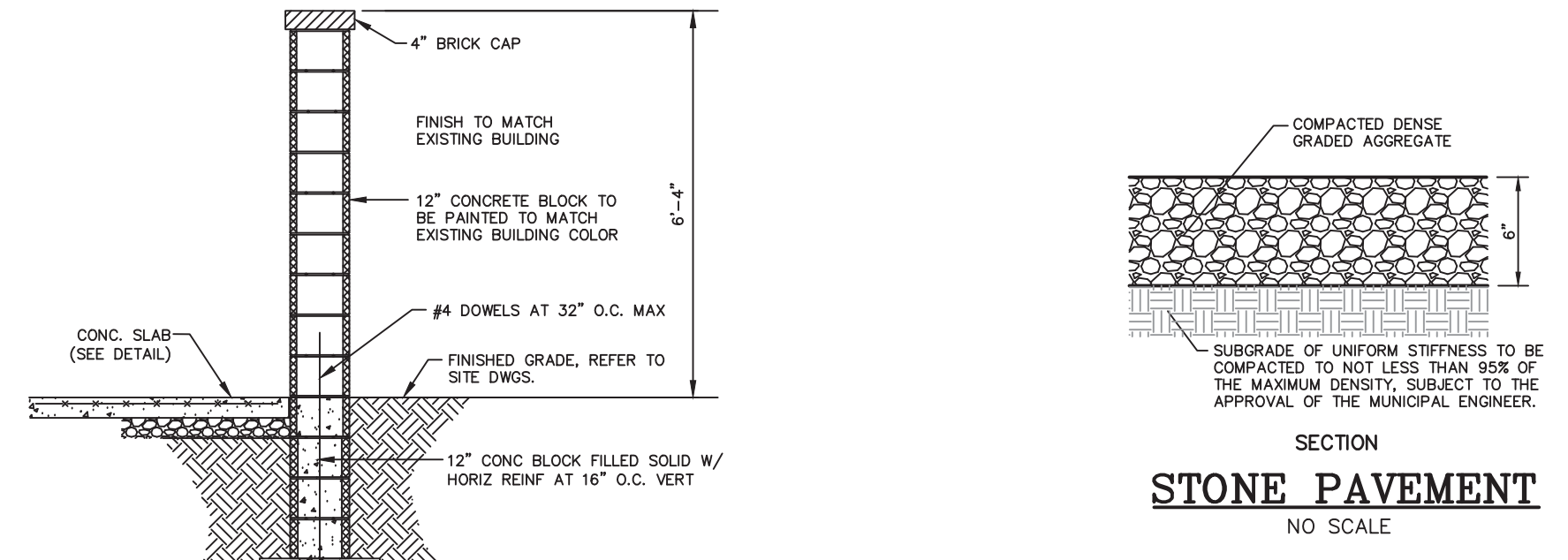
REFUSE AREA ENCLOSURE WALL SECTION



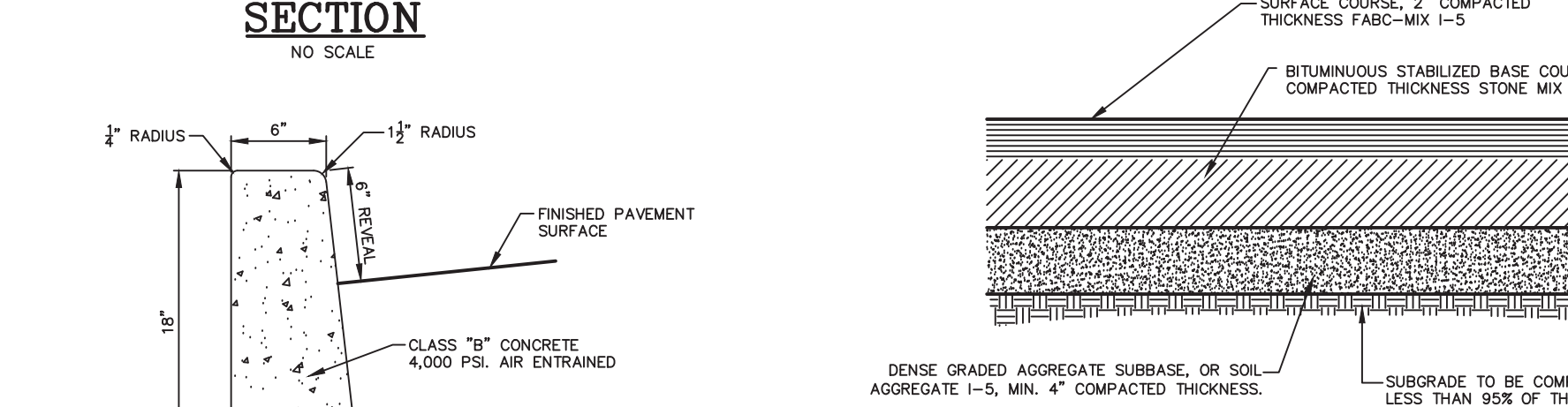
REFUSE AREA ENCLOSURE GATE DETAIL



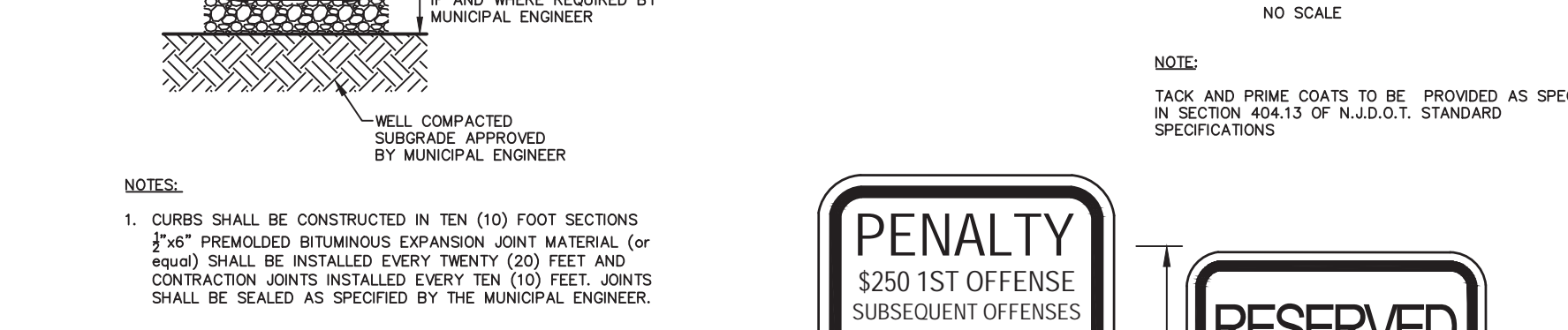
CONCRETE SIDEWALK DETAIL



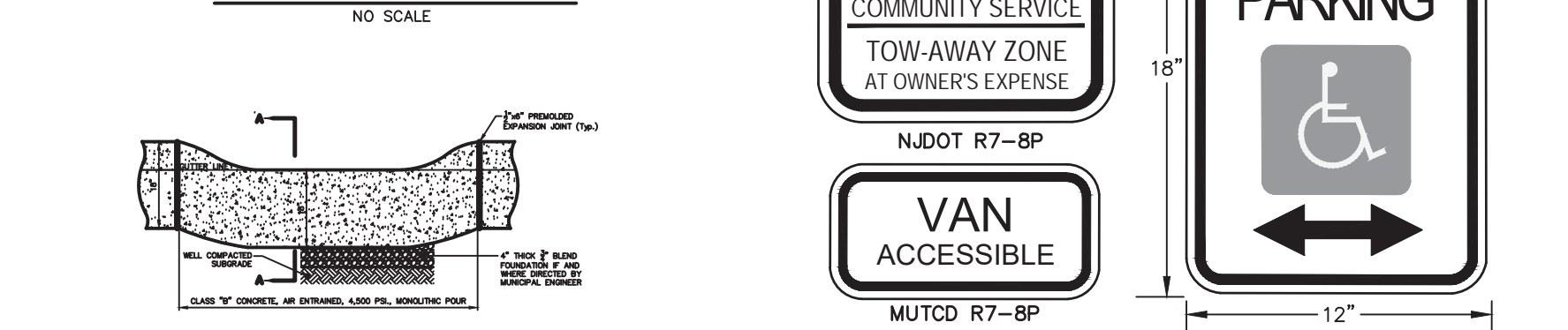
STONE PAVEMENT SECTION



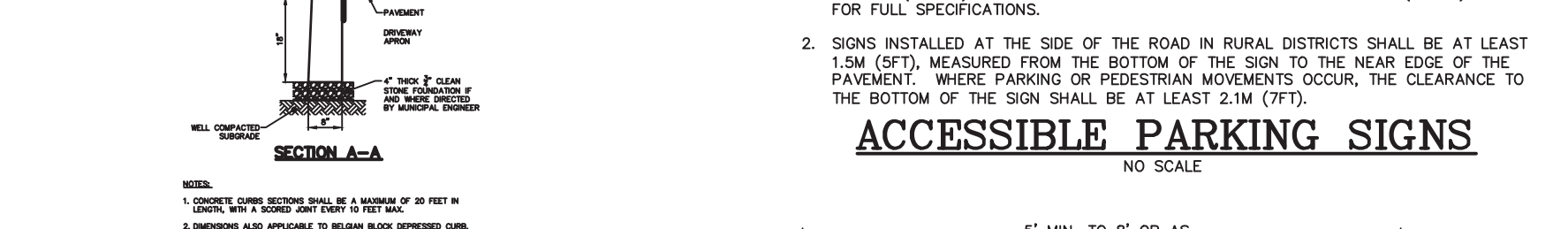
PARKING LOT PAVEMENT SECTION



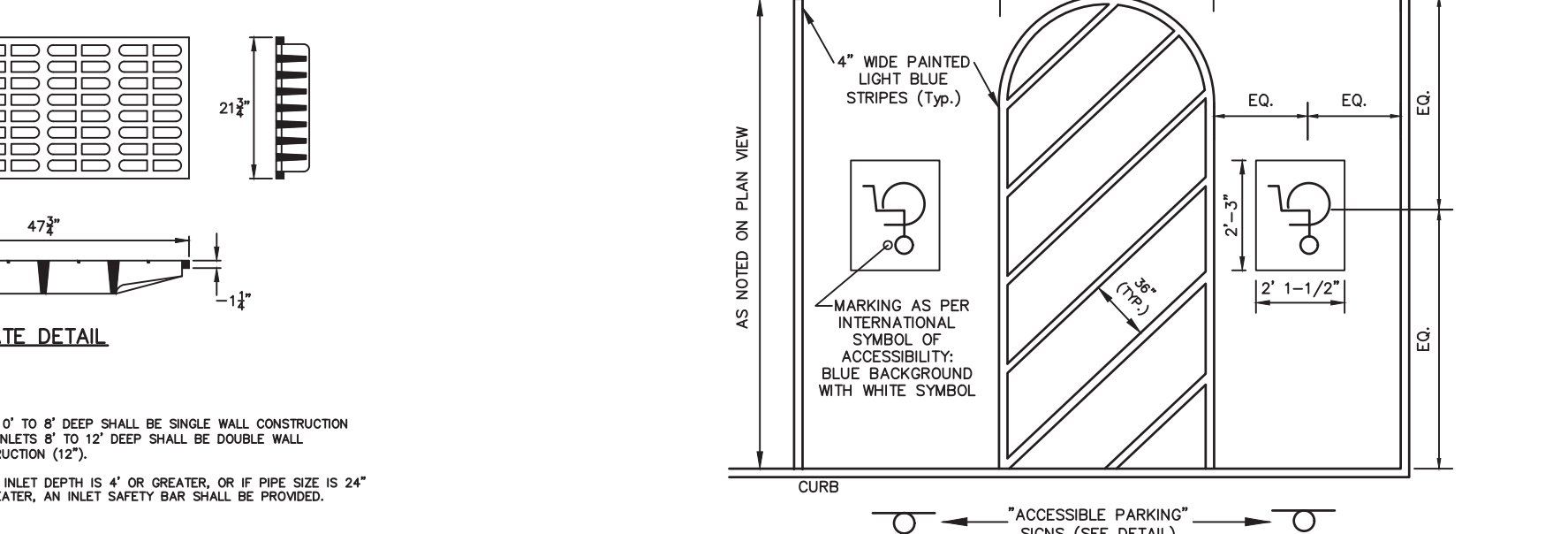
LAWRENCE TOWNSHIP CONCRETE CURB SECTION



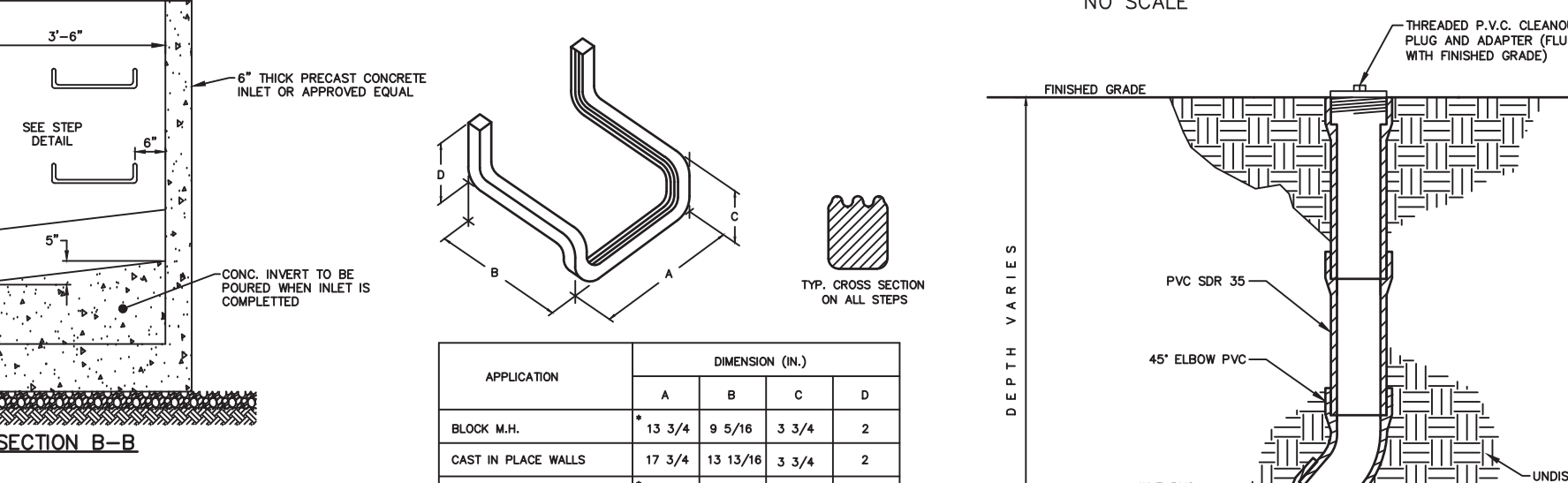
ACCESSIBLE PARKING SIGNS



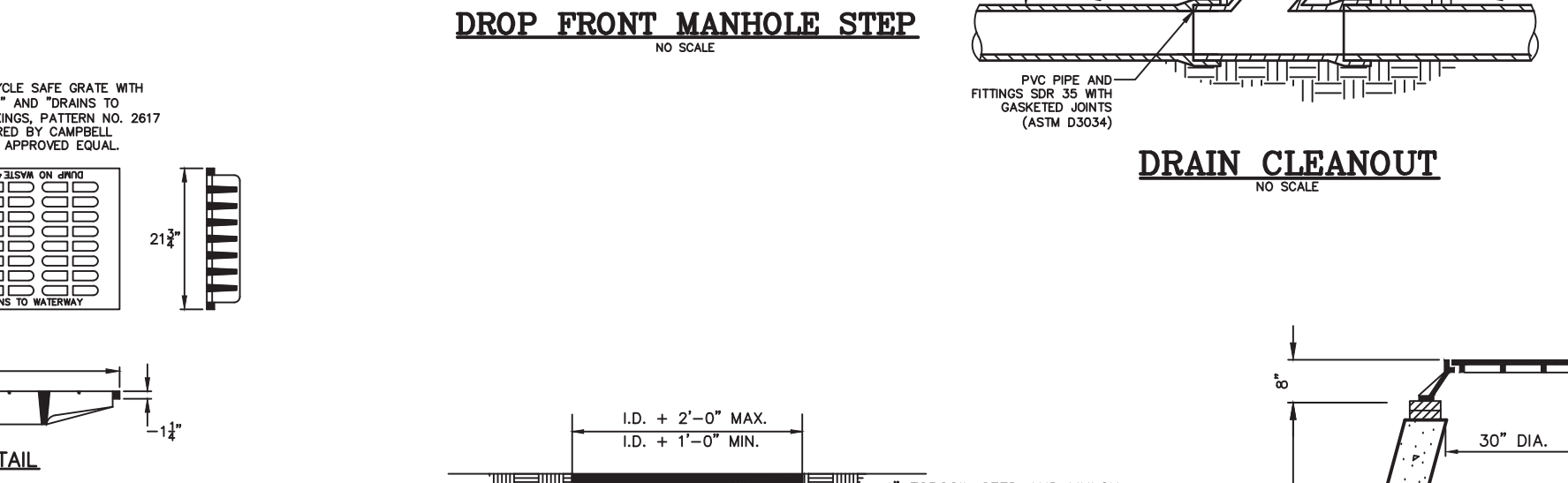
DEPRESSED CURB SECTION



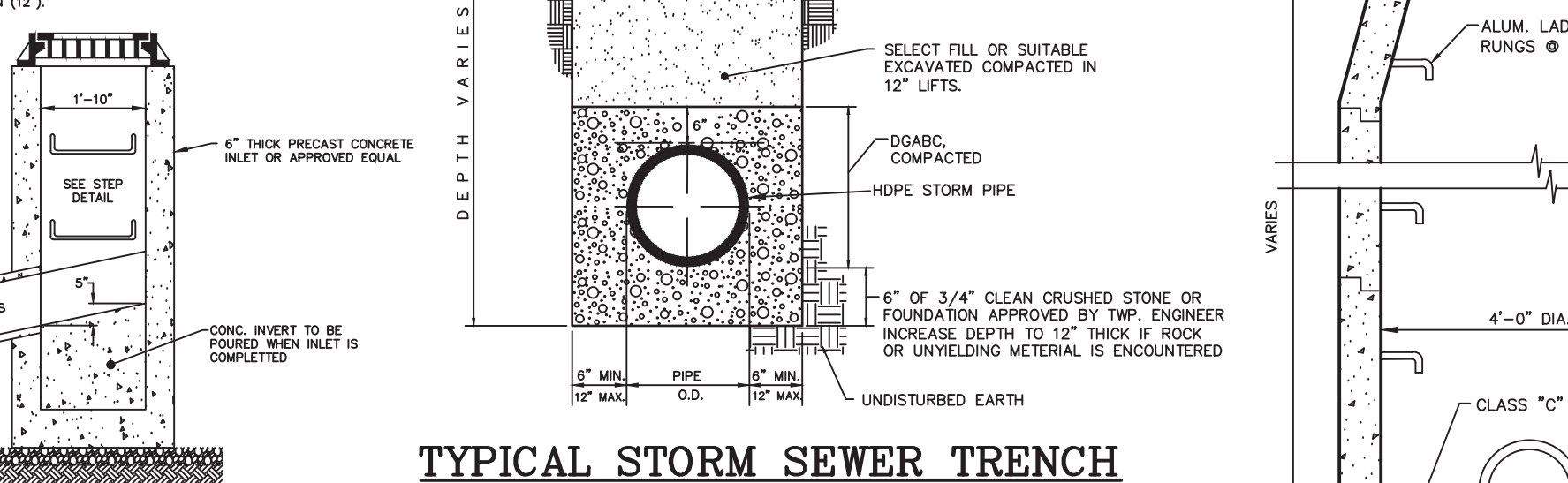
ACCESSIBLE PARKING STRIPING



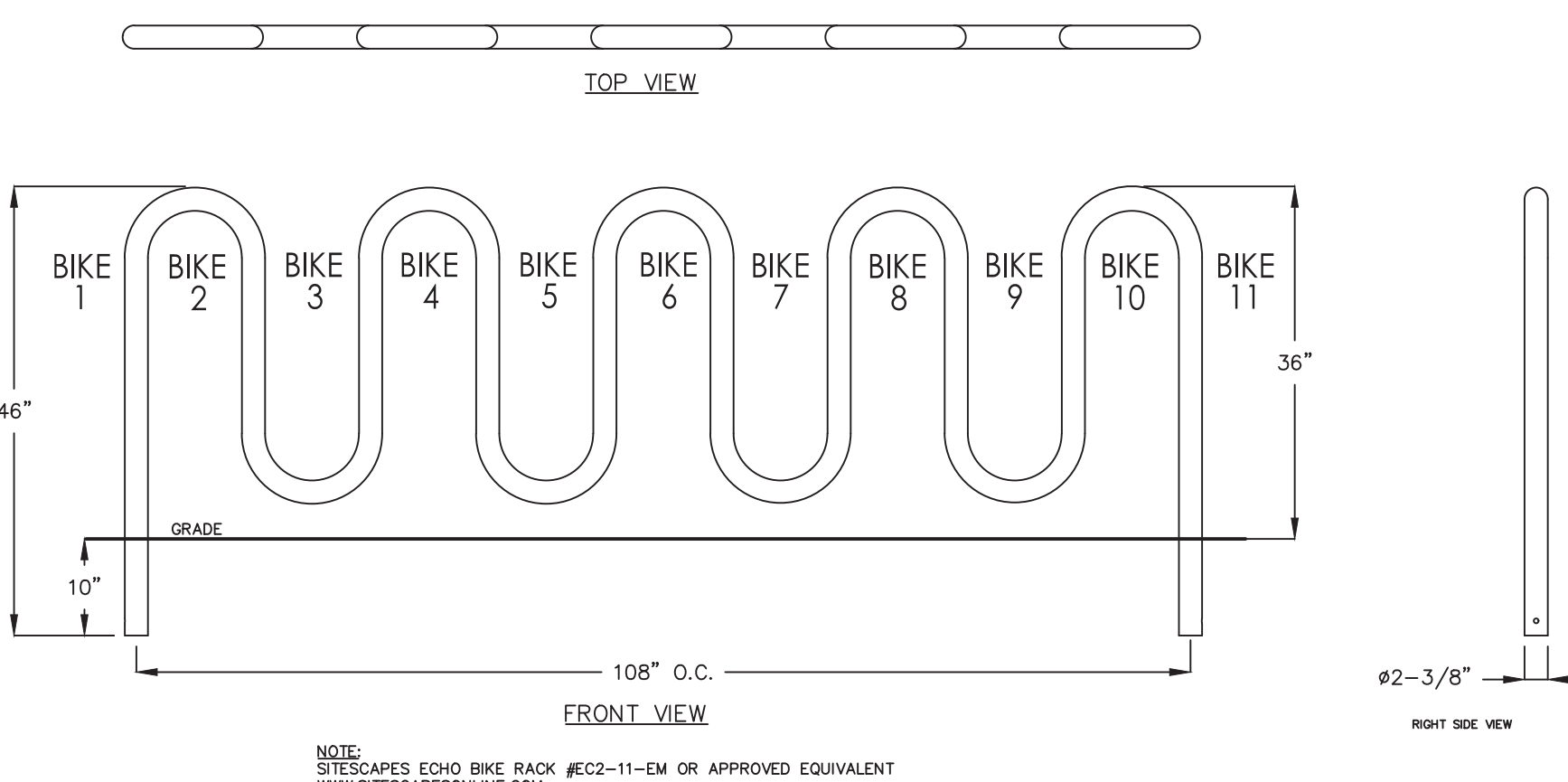
TYPE 'B' INLET



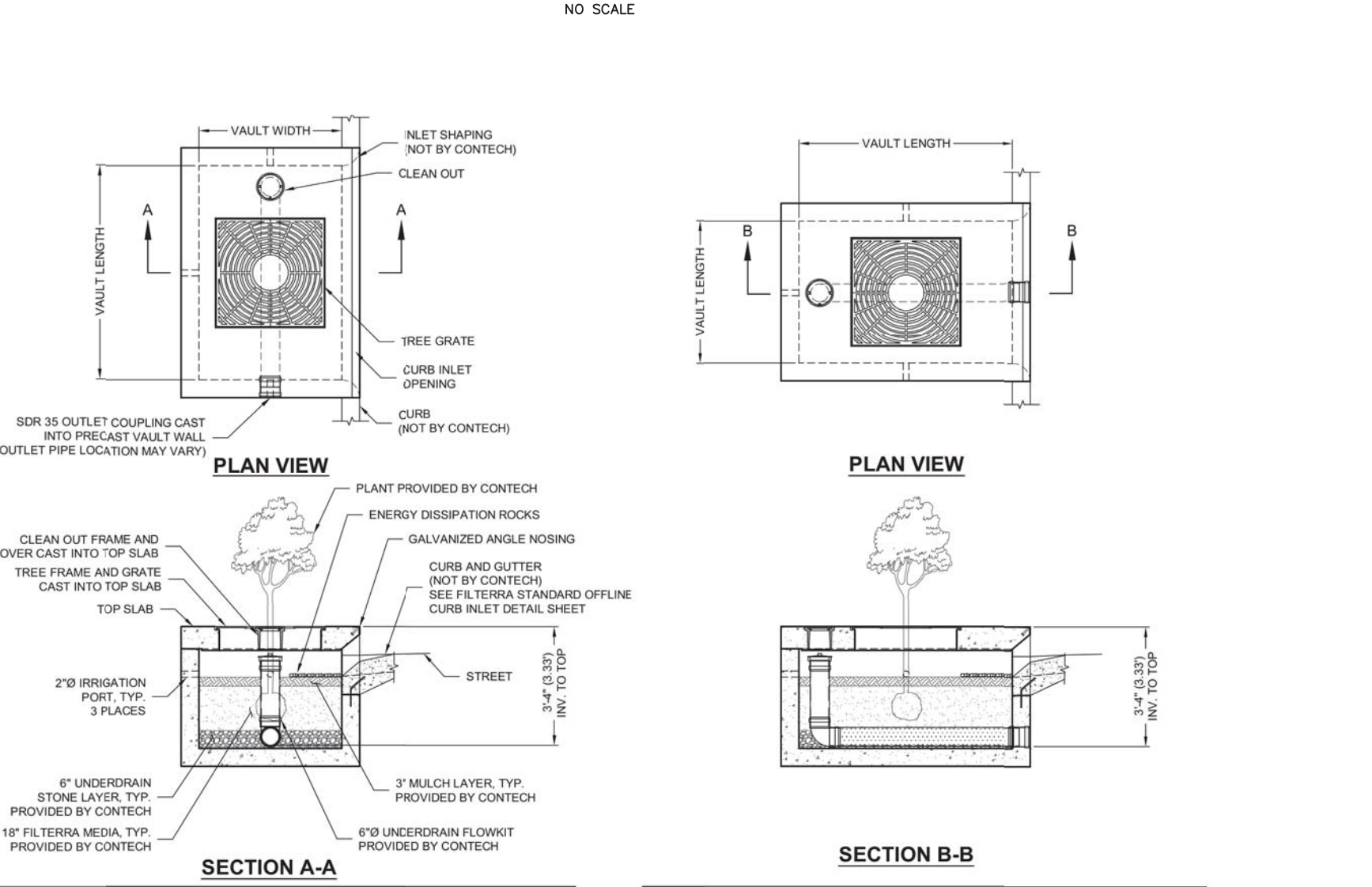
TYPE 'A' INLET



TYPICAL STORM SEWER TRENCH LAWN OR EASEMENT AREA



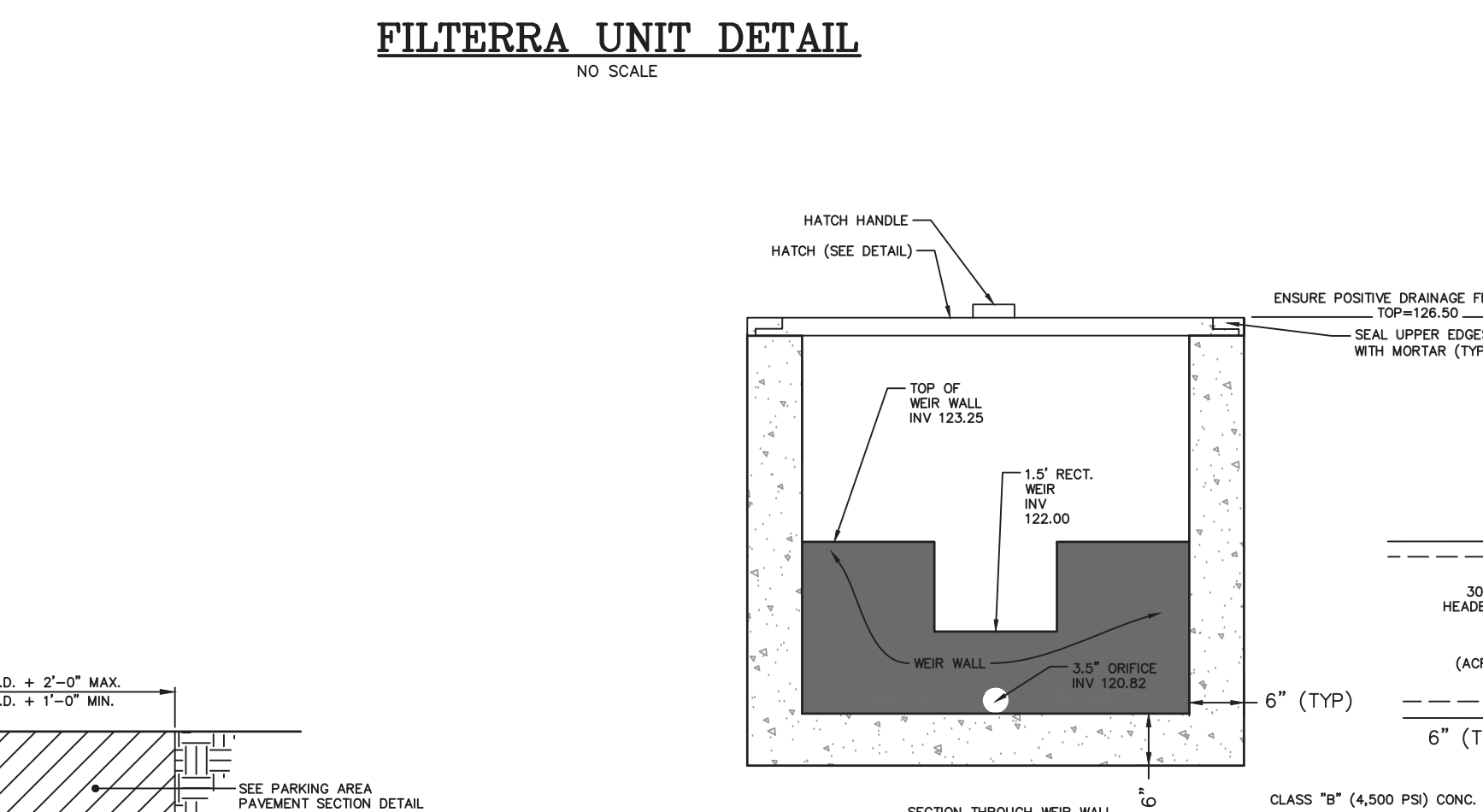
ECHO 11-SPACE BICYCLE RACK



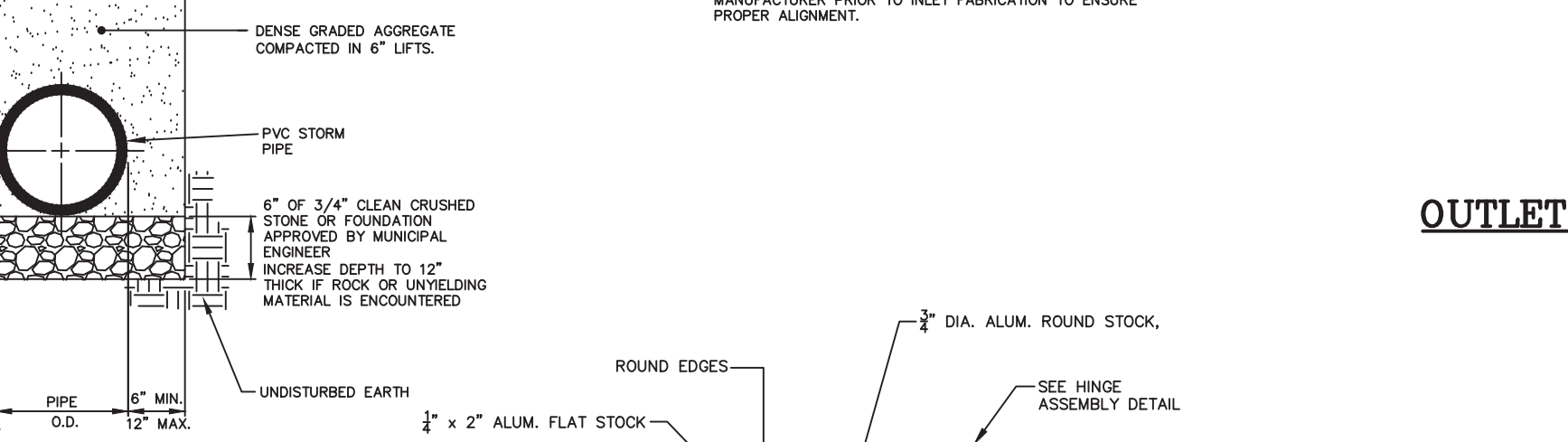
FILTRRA UNIT DETAIL

| DESIGNATION | AVAILABILITY | MEDIA BAY SIZE | VAULT SIZE (W x V) | OUTLET PIPE DIA | TREE GRATE QTY & SIZE |
|-------------|-------------------------------|----------------|--------------------|-----------------|-----------------------|
| FT300HC | N.A. CA ONLY | 8.4 | 8.4 | 8" SDR 35 | (1) 2' x 2' |
| FT300HC | CA ONLY | 8.4 | 8.4 | 8" SDR 35 | (1) 2' x 2' |
| FT300HC | PA, VA, WA ONLY | 7.83 x 4.5 | 7.83 x 4.5 | 8" SDR 35 | (1) 2' x 2' |
| FT300HC | SEE NOTES FOR PA, VA, WA ONLY | 8.4 | 8.4 | 8" SDR 35 | (1) 2' x 2' |
| FT300HC | ALL | 8.4 | 8.4 | 8" SDR 35 | (1) 2' x 2' |
| FT300HC | ALL | 10.8 | 10.8 | 8" SDR 35 | (1) 2' x 2' |
| FT300HC | ALL | 12.6 | 12.6 | 8" SDR 35 | (1) 2' x 2' |
| FT300HC | ALL | 13.7 | 13.7 | 8" SDR 35 | (1) 2' x 2' |
| FT300HC | CALL CONTRACTOR | 13.8 | 13.8 | 8" SDR 35 | (1) 2' x 2' |
| FT300HC | CALL CONTRACTOR | 15.9 | 15.9 | 8" SDR 35 | (1) 2' x 2' |
| FT300HC | CALL CONTRACTOR | 16.8 | 16.8 | 8" SDR 35 | (1) 2' x 2' |
| FT300HC | CALL CONTRACTOR | 18.8 | 18.8 | 8" SDR 35 | (1) 2' x 2' |
| FT300HC | CALL CONTRACTOR | 20.8 | 20.8 | 8" SDR 35 | (1) 2' x 2' |
| FT300HC | CALL CONTRACTOR | 22.8 | 22.8 | 8" SDR 35 | (1) 2' x 2' |

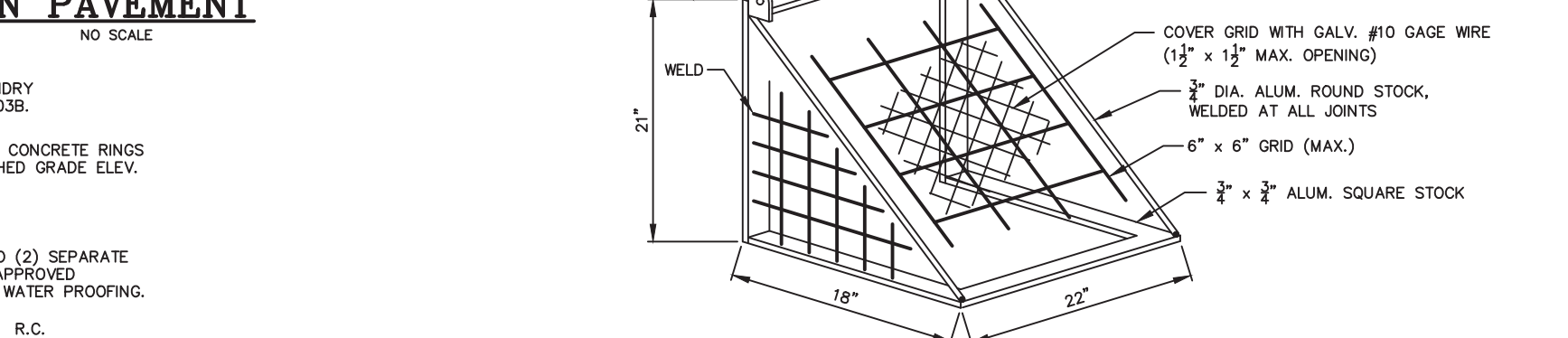
| DESIGNATION | AVAILABILITY | MEDIA BAY SIZE | VAULT SIZE (W x V) | OUTLET PIPE DIA | TREE GRATE QTY & SIZE |
|-------------|-------------------------------|----------------|--------------------|-----------------|-----------------------|
| FT300HC | N.A. CA ONLY | 4.8 | 4.8 | 8" SDR 35 | (1) 2' x 2' |
| FT300HC | CA ONLY | 4.8 | 4.8 | 8" SDR 35 | (1) 2' x 2' |
| FT300HC | PA, VA, WA ONLY | 4.8 | 4.8 | 8" SDR 35 | (1) 2' x 2' |
| FT300HC | SEE NOTES FOR PA, VA, WA ONLY | 4.8 | 4.8 | 8" SDR 35 | (1) 2' x 2' |
| FT300HC | ALL | 4.8 | 4.8 | 8" SDR 35 | (1) 2' x 2' |
| FT300HC | ALL | 6.3 | 6.3 | 8" SDR 35 | (1) 2' x 2' |
| FT300HC | ALL | 8.4 | 8.4 | 8" SDR 35 | (1) 2' x 2' |
| FT300HC | ALL | 8.4 | 8.4 | 8" SDR 35 | (1) 2' x 2' |
| FT300HC | ALL | 7.13 | 7.13 | 8" SDR 35 | (1) 2' x 2' |



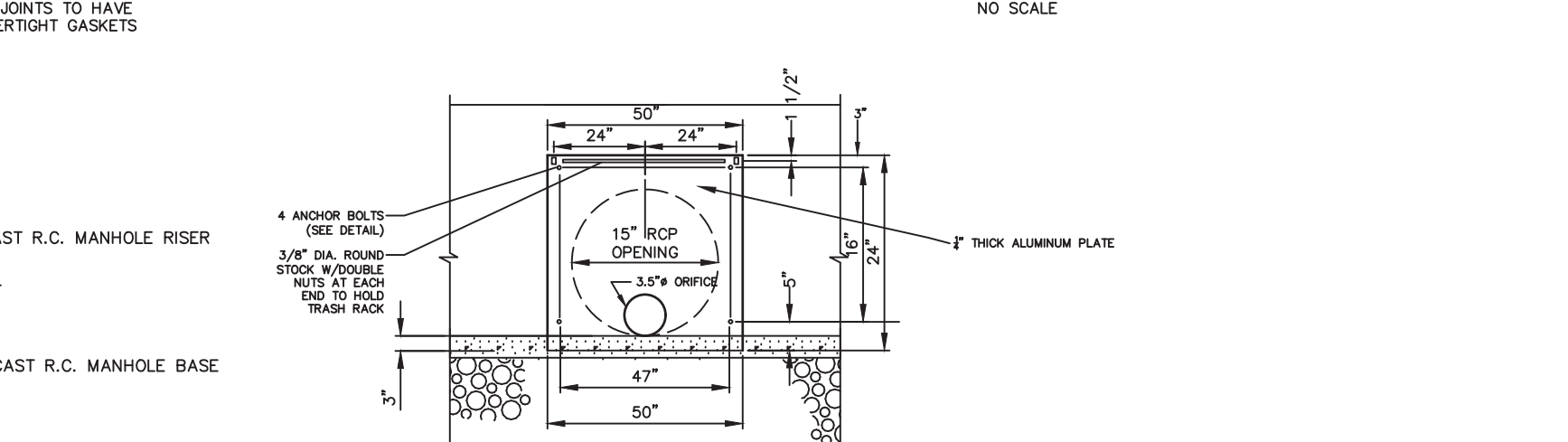
OUTLET STRUCTURE HATCH DETAIL



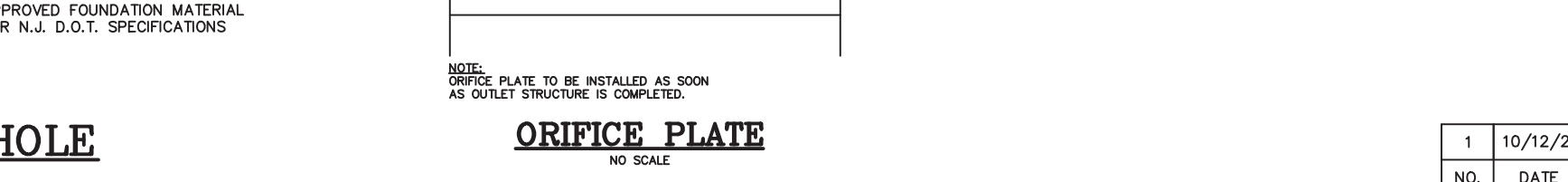
OUTLET CONTROL STRUCTURE



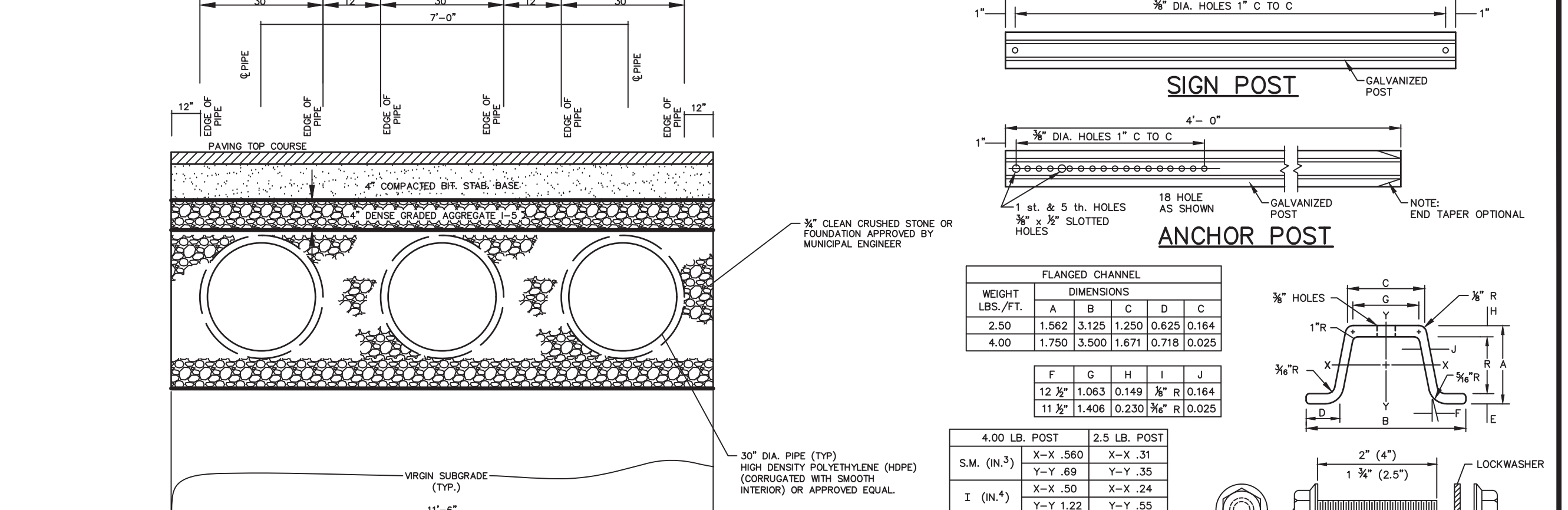
TRASH RACK FOR ORIFICE



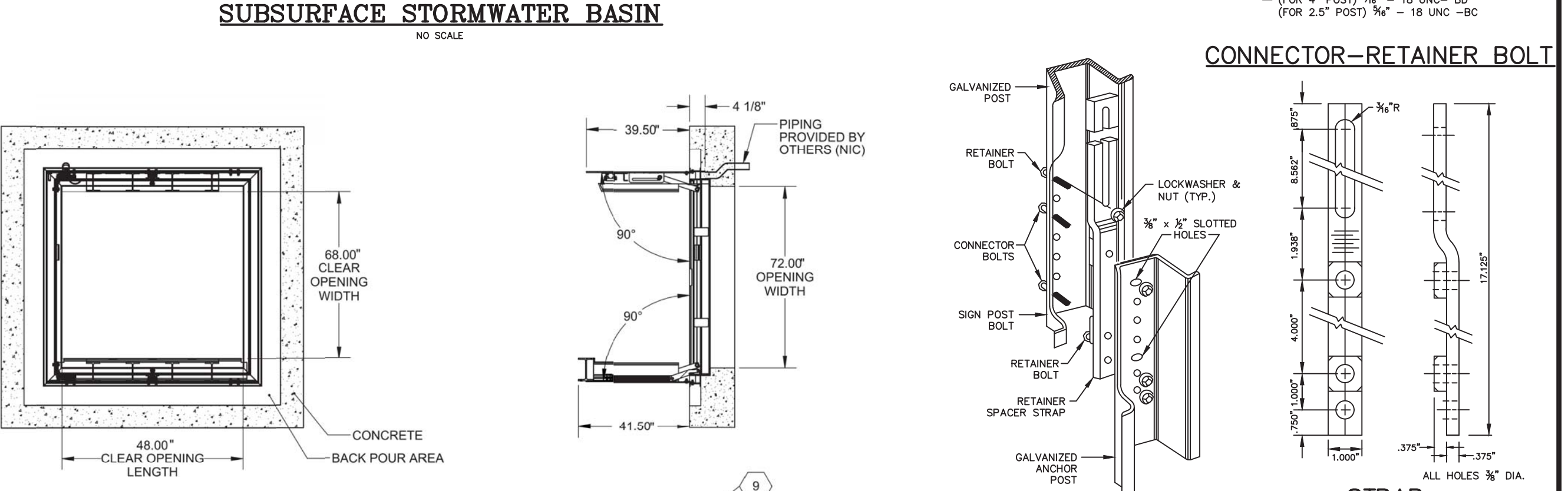
STORM SEWER MANHOLE



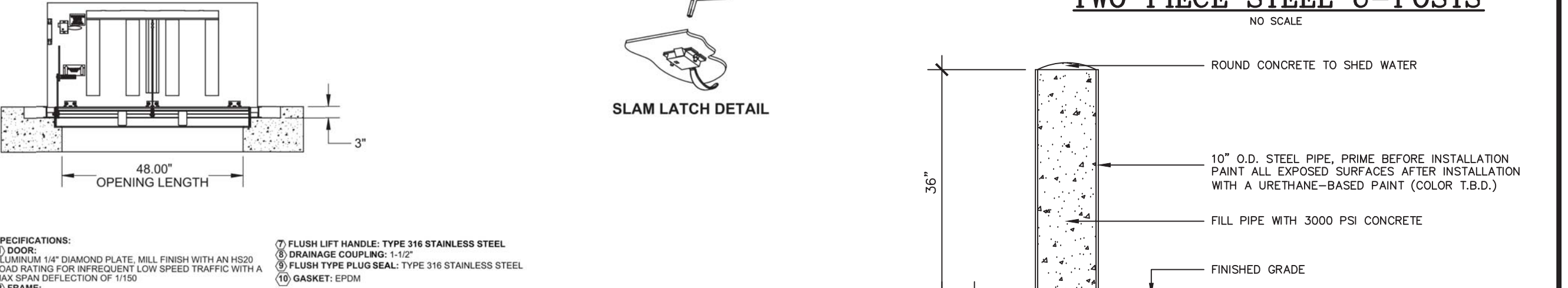
ORIFICE PLATE



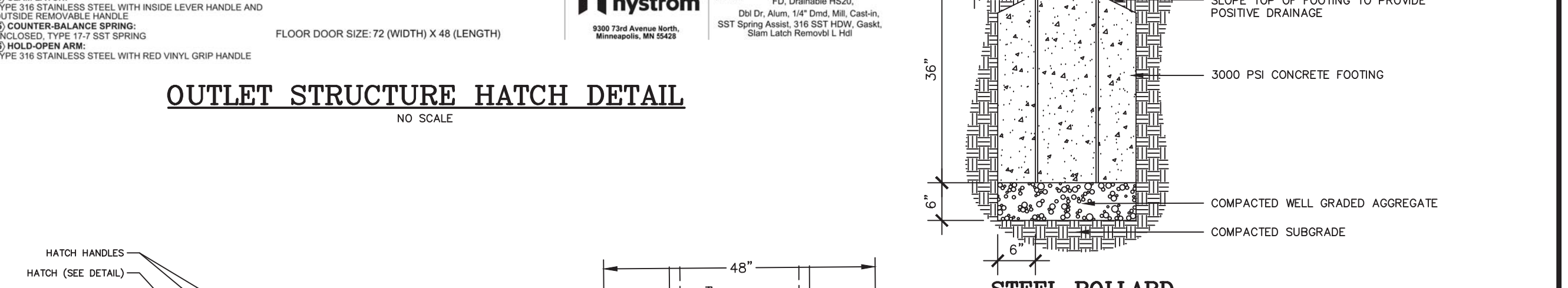
SIGN POST AND ANCHOR POST



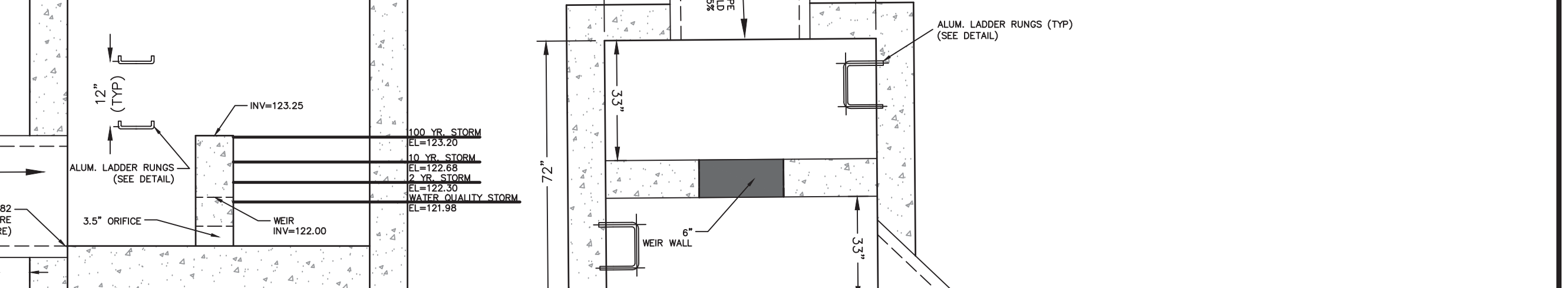
TYPICAL SECTION THRU SUBSURFACE STORMWATER BASIN



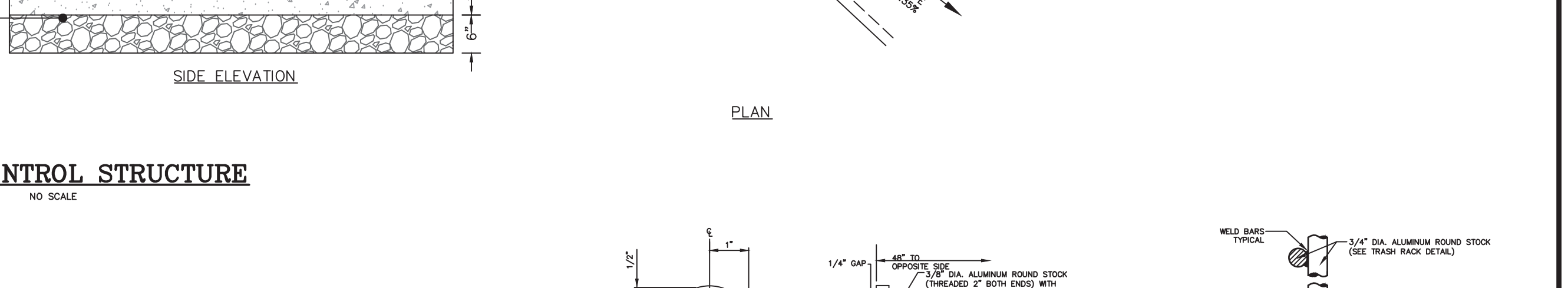
CONNECTOR-RETAINER BOLT AND STRAP



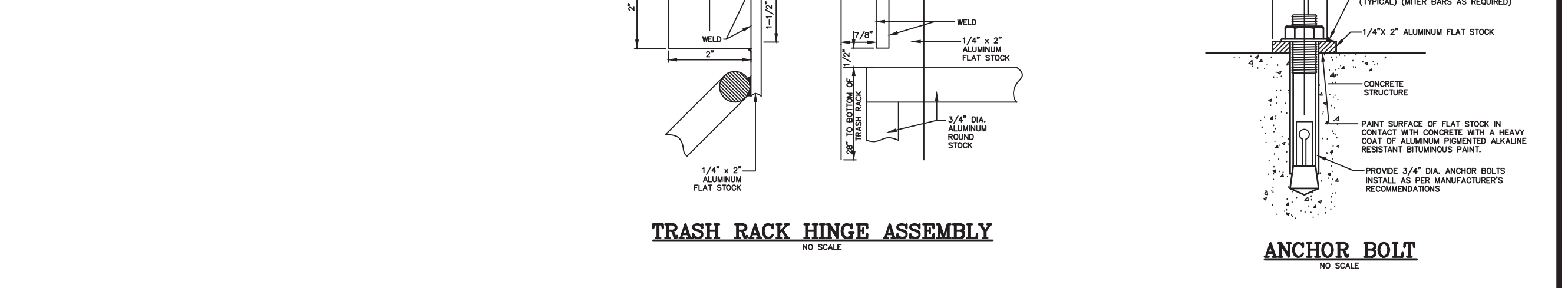
SLAM LATCH DETAIL



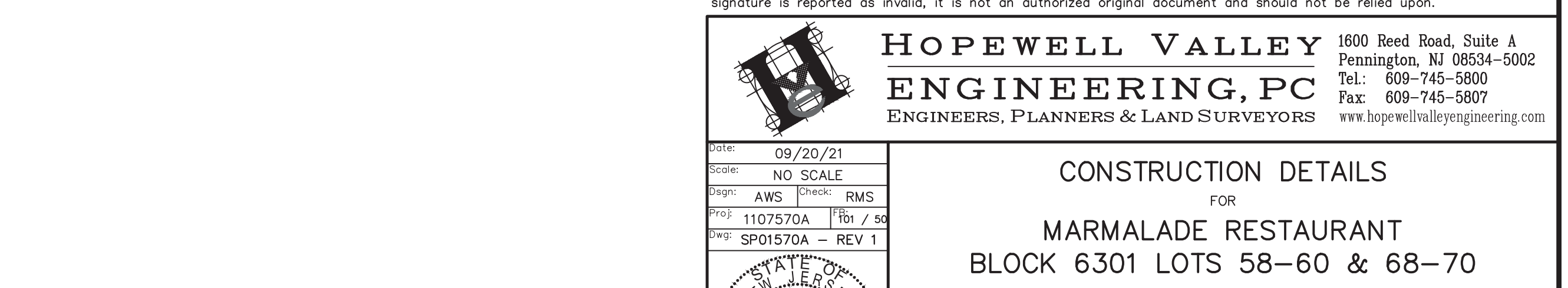
TWO PIECE STEEL U-POSTS



STEEL BOLLARD DETAIL



TRASH RACK HINGE ASSEMBLY



ANCHOR BOLT

HOPEWELL VALLEY ENGINEERING, PC
ENGINEERS, PLANNERS & LAND SURVEYORS

1600 Reed Road, Suite A
Pennington, NJ 08534-5002
Tel: 609-745-5800
Fax: 609-745-5807
www.hopewellvalleyengineering.com

09/20/21
NO SCALE
AWS
11/07/2024
SP01570A - REV 7-28

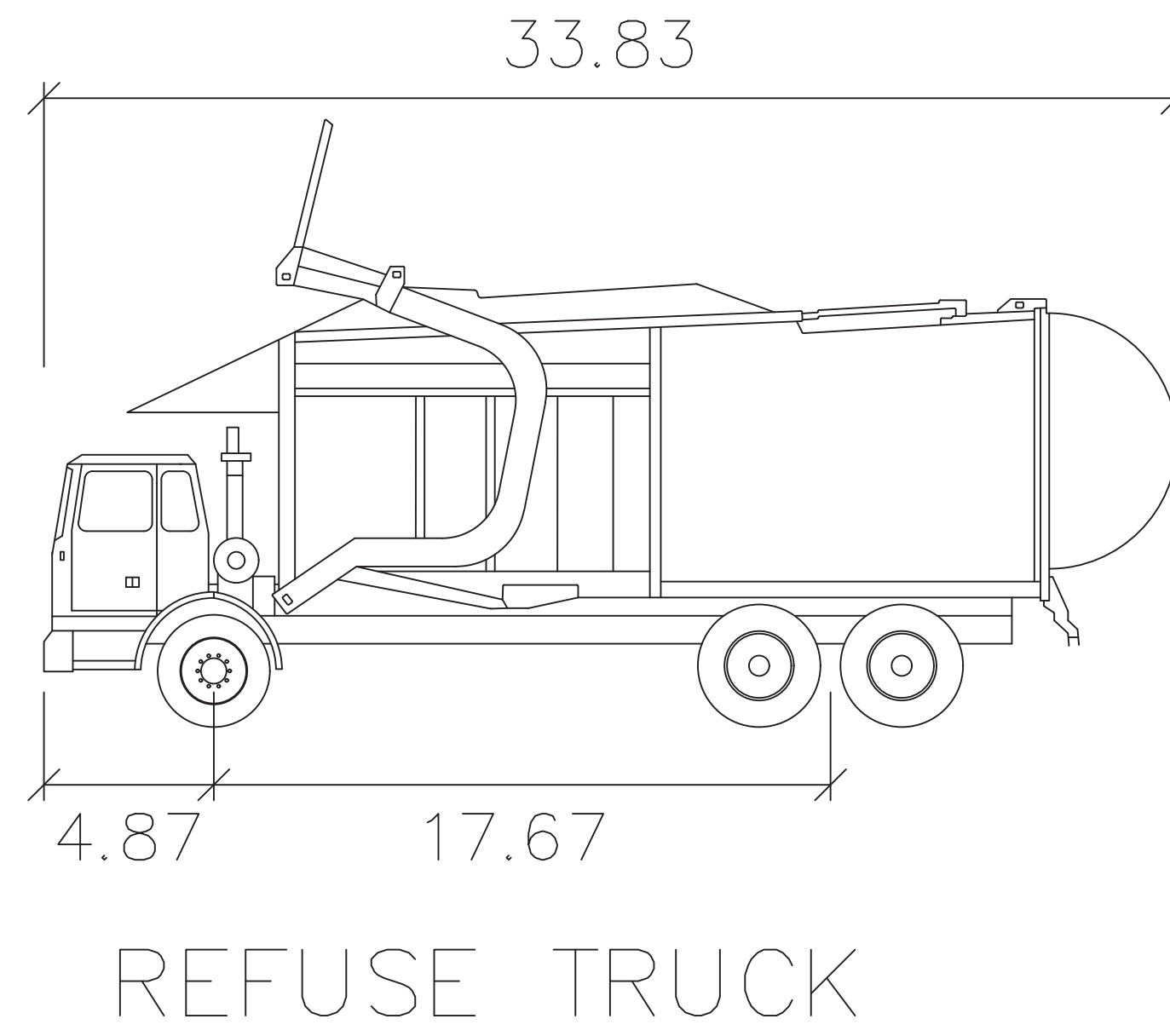
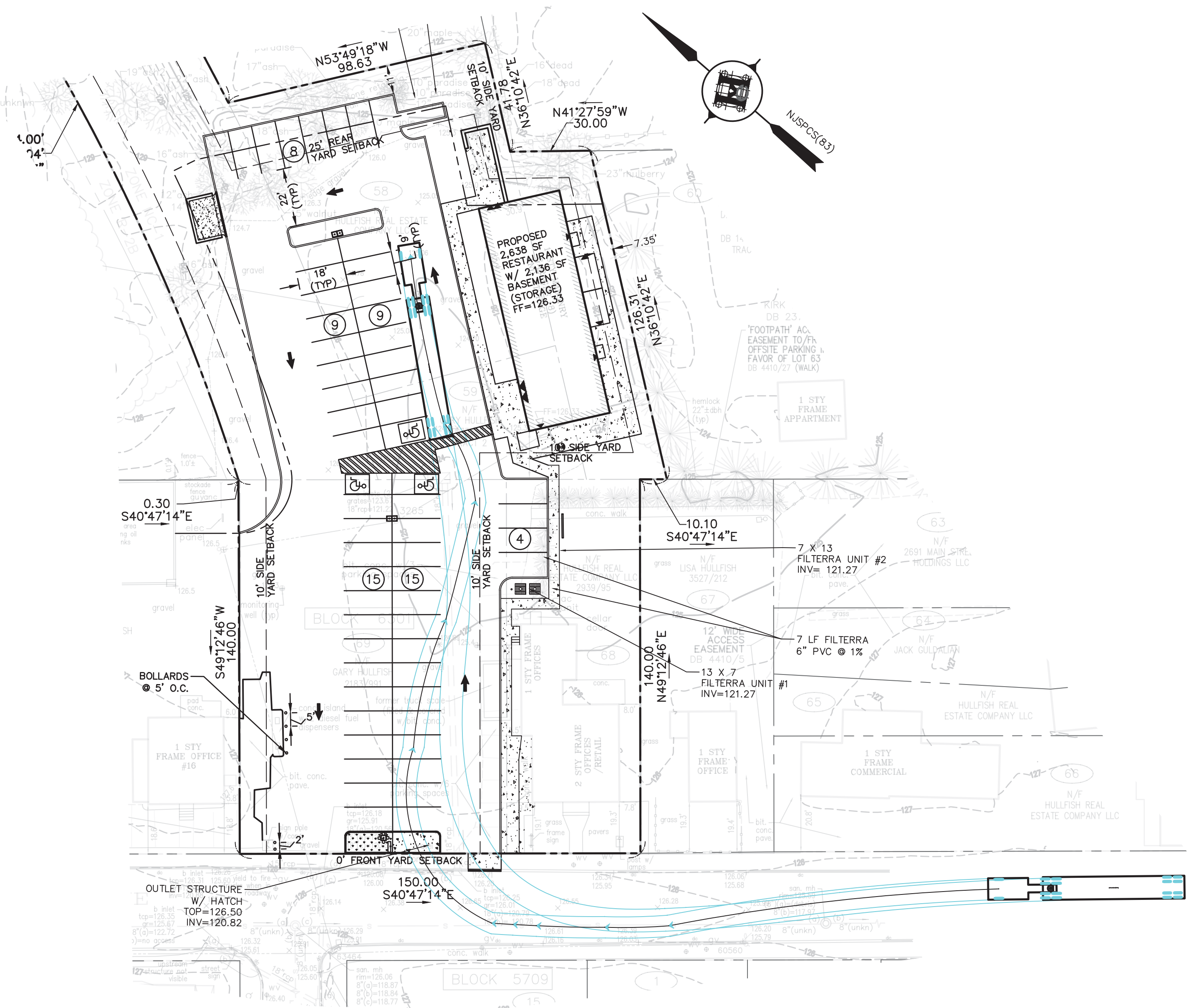
CONSTRUCTION DETAILS
FOR
MARMALADE RESTAURANT
BLOCK 6301 LOTS 58-60 & 68-70
SITUATE IN
LAWRENCE TOWNSHIP, MERCER COUNTY, NEW JERSEY

Digitally signed by
Russell M Smith
Date: 2021.10.20
11:22:56 -0400

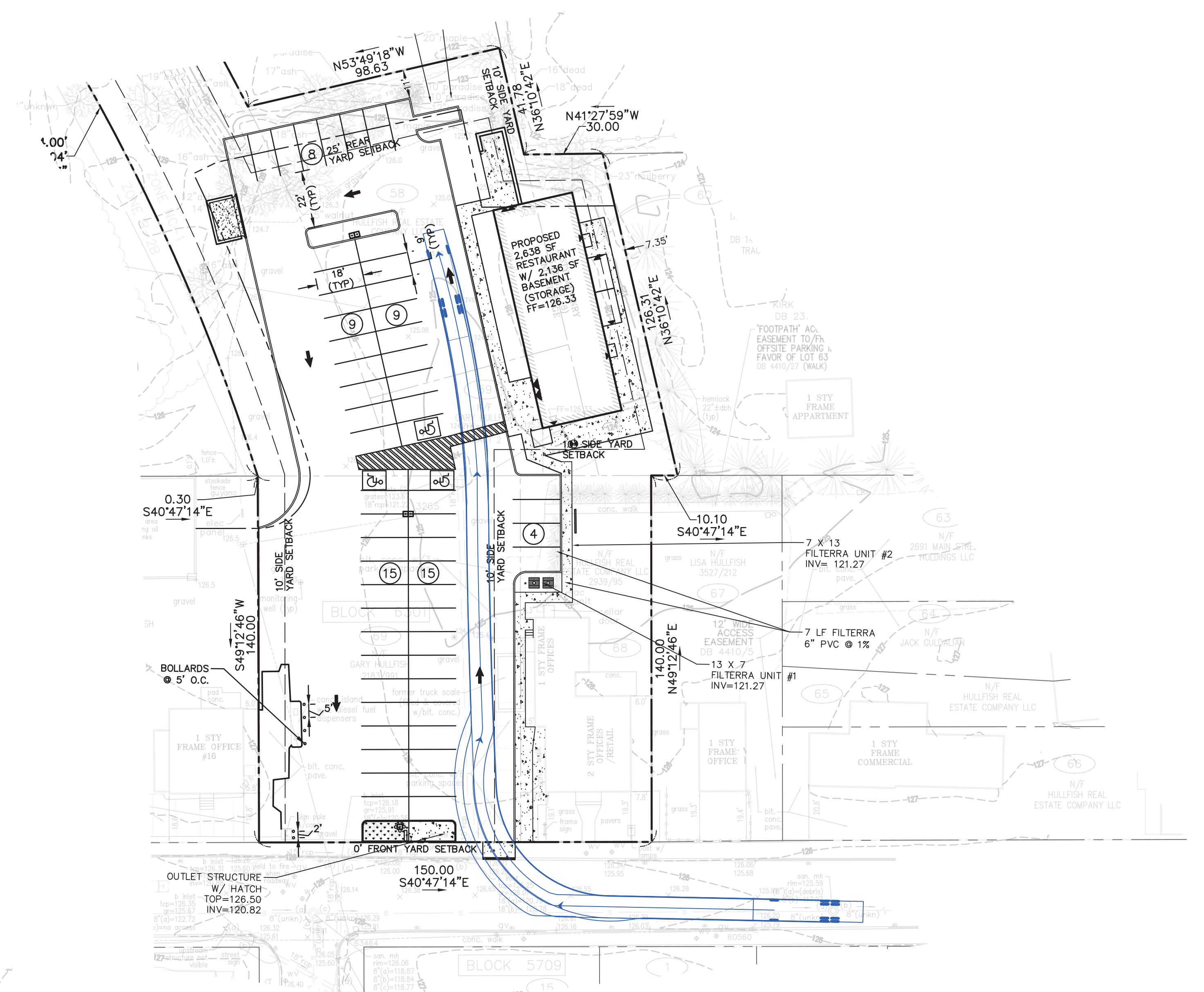
RUSSELL M. SMITH
N.J. PROFESSIONAL ENGINEER NO. 33065

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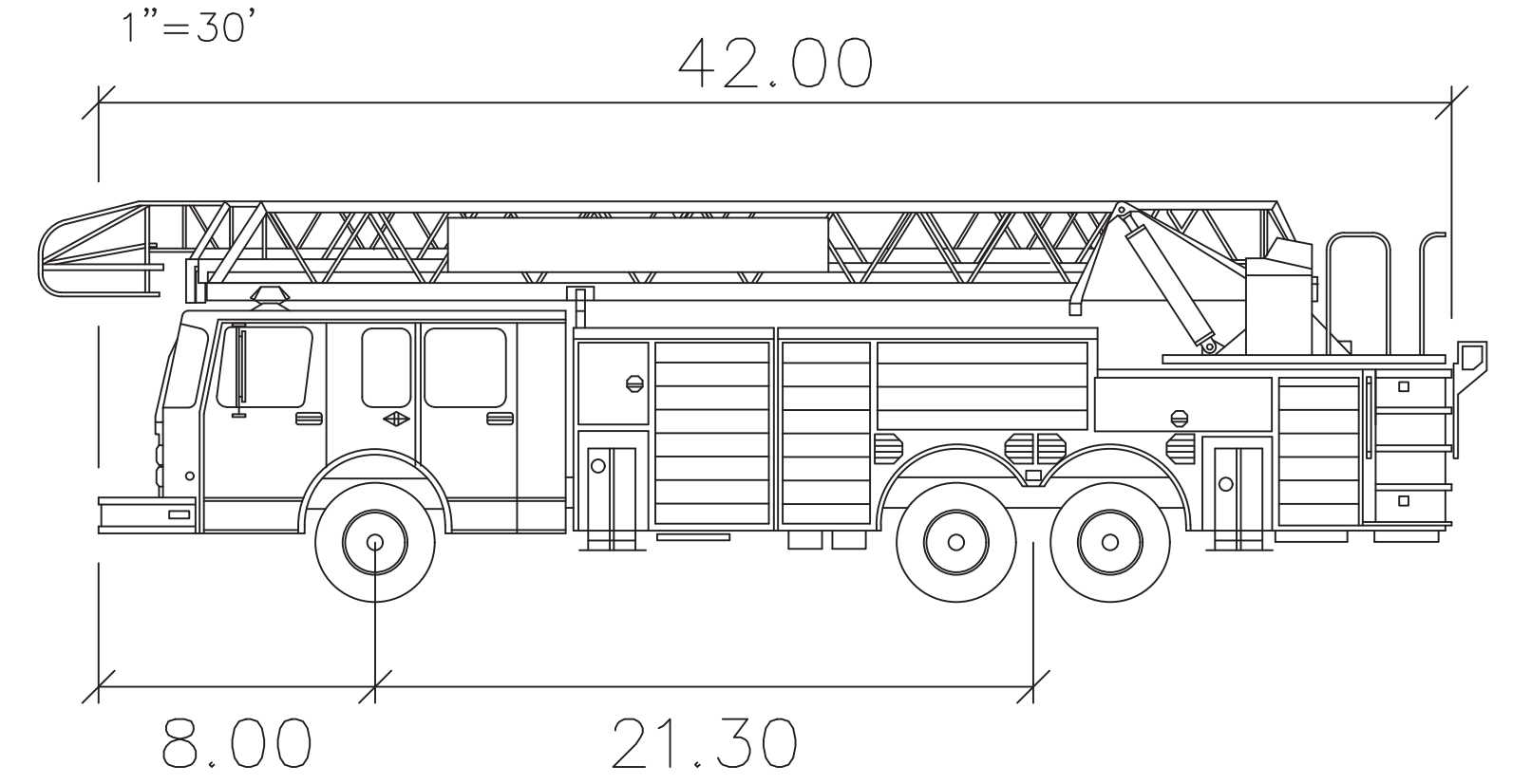
1 10/12/21
NO. DATE DESCRIPTION OF REVISION
BY: OMS



Width : 8.46 ft
Track : 8.00 ft
Lock to Lock Time : 6.0 sec
Steering Angle : 45.0°



FIRE TRUCK TURNING PLAN

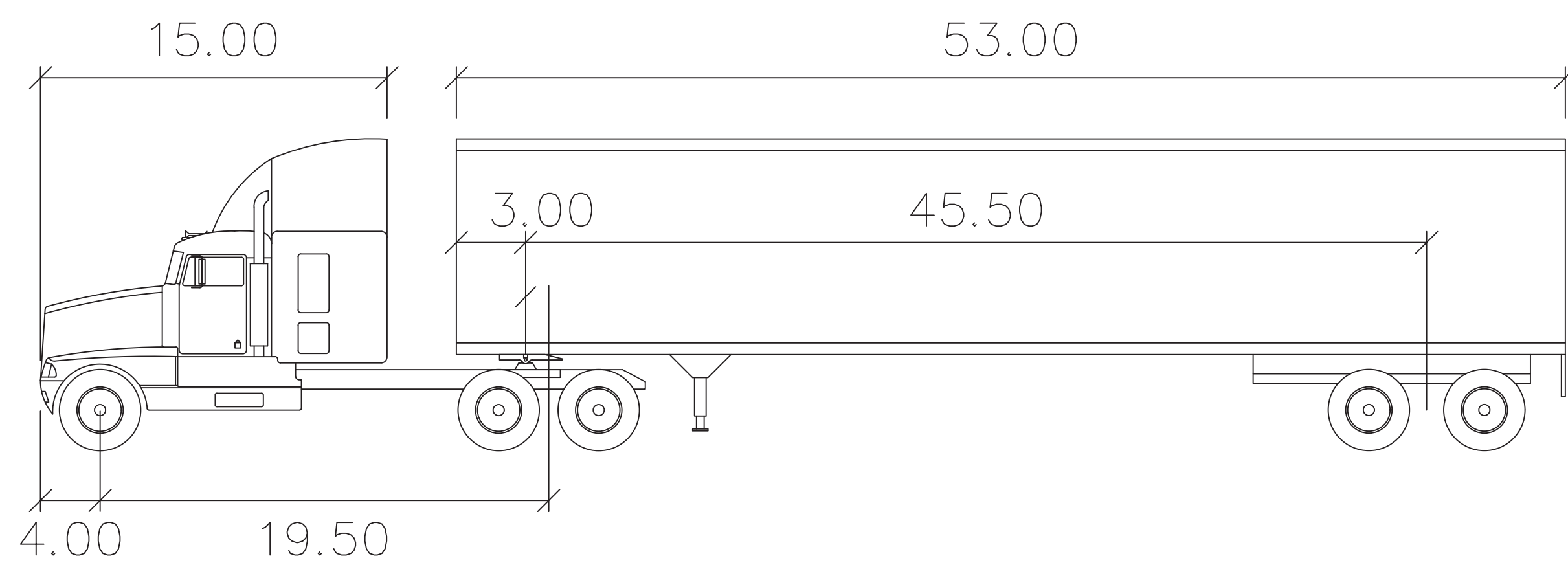


LAWRENCE TOWNSHIP FIRE TRUCK

Width : 8.00 ft
Track : 8.50 ft
Lock to Lock Time : 6.0 sec
Steering Angle : 24.1°

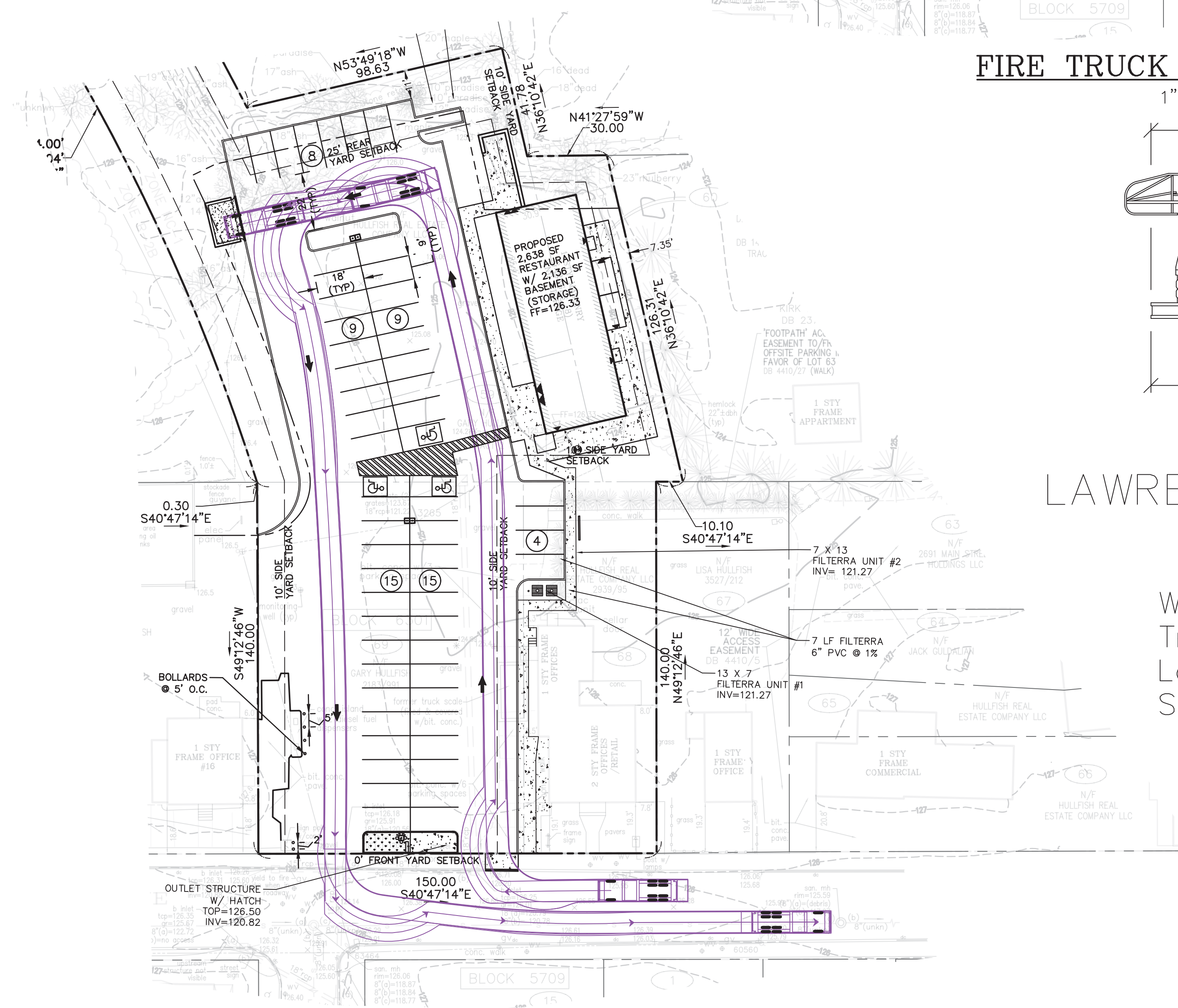
DELIVERY TRUCK TURNING PLAN

NOTE: 1"=30'
DELIVERY TRUCK COMES 2 TIMES A WEEK IN THE EARLY MORNING. SINCE NONE OF THE SURROUNDING BUSINESSES WILL BE OPEN IT WILL HAVE THE WHOLE LOT TO MANEUVER.



WB-67 DELIVERY TRUCK

Tractor Width : 8.00 ft
Trailer Width : 8.50 ft
Tractor Track : 8.00 ft
Trailer Track : 8.50 ft
Lock to Lock Time : 6.0 sec
Steering Angle : 28.4°
Articulating Angle : 75.0°



REFUSE TRUCK TURNING PLAN

1"=30'

GRAPHIC SCALE: FEET
0 30' 60'

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| | | |
|---|---|---|
| | | HOPEWELL VALLEY ENGINEERING, PC ENGINEERS, PLANNERS & LAND SURVEYORS 1600 Reed Road, Suite A Pennington, NJ 08534-5002 Tel: 609-745-5800 Fax: 609-745-5807 www.hopewellvalleyengineering.com |
| DATE: 09/20/21 SCALE: 1" = 30' DRAWN BY: AWS CHECKED BY: RMS DATE: 11/07/20A REV: 7.148 PROJECT: SP01570A - REV | CIRCULATION PLANS FOR MARMALADE RESTAURANT BLOCK 6301 LOTS 58-60 & 68-70 SITUATE IN LAWRENCE TOWNSHIP, MERCER COUNTY, NEW JERSEY | |
| 1 10/12/21 NO. DATE REVISION: REVISE PLAN TO ADDRESS COMMENTS IN 10/05/21 LAWRENCE TOWNSHIP REVIEW LETTER | DESIGNED BY: AWS CHECKED BY: RMS DATE: 2021.10.20 11:20:02-04'00" | Digitally signed by Russell M Smith Date: 2021.10.20 11:20:02-04'00" RUSSELL M. SMITH N.J. PROFESSIONAL ENGINEER NO. 33065 |