

PRELIMINARY & FINAL SITE PLAN
FOR
87-89 ASHLAND AVENUE
TAX LOTS 44 & 45 - BLOCK 61
TOWNSHIP OF WEST ORANGE, ESSEX COUNTY, NEW JERSEY

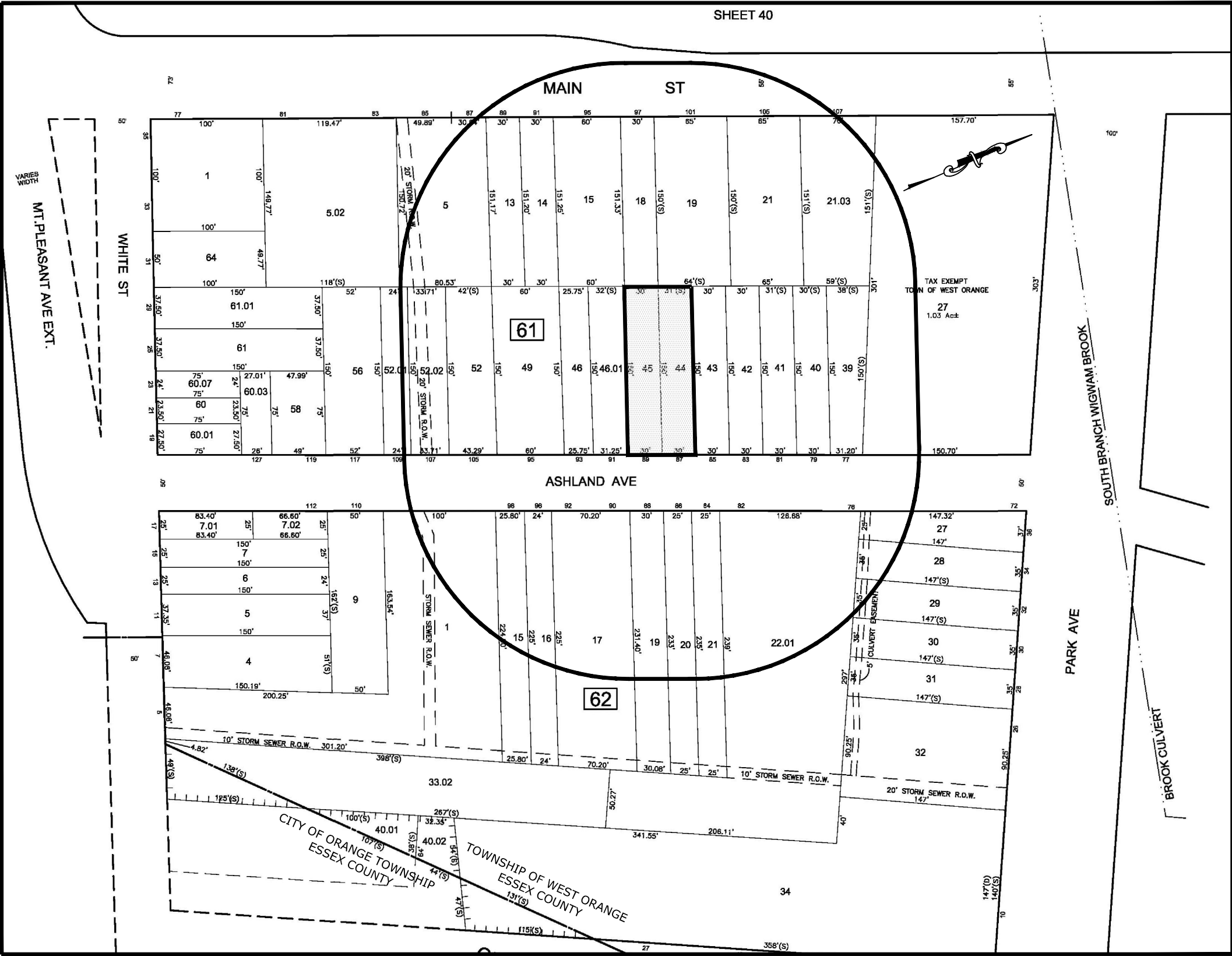
LIST OF PROPERTY OWNERS WITHIN 200 FT:

THE TOWNSHIP OF WEST ORANGE Office of the Assessor 66 Main Street West Orange, New Jersey 07052 Telephone: (973) 325-6660 Facsimile: (973) 669-4859							
Highlighted feature(s)							
Subject Property(s) (D)							
Town	Block	Lot	Qualifier	Location	Owner	Owner Address	Owner City/State
West Orange Township	61	44		87 ASHLAND AVENUE	ENCHI FRANKS JR.	15 HILLTOP CIRCLE	WHIPPANY, NJ 07981
West Orange Township	61	45		89 ASHLAND AVENUE	89 ASHLAND AVENUE, LLC	89 ASHLAND AVENUE	WEST ORANGE, NJ 07052

List of adjoining feature(s) that intersect 200 foot buffer from Subject Property(s).

Adjoining Property (S)							
Town	Block	Lot	Qualifier	Location	Owner	Owner Address	Owner City/State
West Orange Township	61	5		8547 MAIN STREET	ALAM INVESTMENT LLC	28 BLOOMFIELD AVE. ST. 301	PINE BROOK, NJ 07068
West Orange Township	61	13		89 MAIN STREET	RAHURAJ FAMILY LLC	3 SHERWOOD COURT	LIVINGSTON, NJ 07039
West Orange Township	61	14		91 MAIN STREET	RAHURAJ FAMILY LLC	3 SHERWOOD COURT	LIVINGSTON, NJ 07039
West Orange Township	61	15		95 MAIN STREET	RAHURAJ FAMILY LIMITED PARTNERSHIP	3 SHERWOOD COURT	LIVINGSTON, NJ 07039
West Orange Township	61	18		97 MAIN STREET	BECHTOLD, LOIS MARY	97 MAIN ST.	WEST ORANGE, NJ 07052
West Orange Township	61	19		101 MAIN STREET	EUTSEY, DEBBICK	71 SOUTH ORANGE AVE. F41	SOUTH ORANGE, NEW JERSEY 07079
West Orange Township	61	21		105 MAIN STREET	105 MAIN ST EQUITIES, LLC	2 E RUCKINGHAM ROAD	WEST ORANGE, NJ 07052
West Orange Township	61	21.03		107 MAIN STREET	PADOVANO, MARGARET E	107 MAIN STREET	WEST ORANGE, NJ 07052
West Orange Township	61	27		MAIN STREET & PARK AVENUE	TOWNSHIP OF WEST ORANGE	66 MAIN ST	WEST ORANGE, NJ 07052
West Orange Township	61	39		77 ASHLAND AVENUE	77 ASHLAND HOLDINGS, LLC	1113 NEW YORK AVENUE	LUNCON CITY, NJ 07087
West Orange Township	61	40		79 ASHLAND AVENUE	VANKNOTS, KOSTAS	43 DARTMOUTH AVENUE	ROSELAND, N.J. 07068
West Orange Township	61	41		81 ASHLAND AVENUE	POLIT, KRISTINA M	81 ASHLAND AVENUE	WEST ORANGE, NJ 07052

Town	Block	Lot	Qualifier	Location	Owner	Owner Address	Owner City/State
West Orange Township	61	42		83 ASHLAND AVENUE	SPAL, LLC	4 HEATHER DRIVE	LIVINGSTON, NJ 07039
West Orange Township	61	43		85 ASHLAND AVENUE	380 NORTH LLC	702 PROSPECT AVE	WEST ORANGE, NJ 07052
West Orange Township	61	44		87 ASHLAND AVENUE	ENCHI FRANKS JR.	15 HILLTOP CIRCLE	WHIPPANY, NJ 07981
West Orange Township	61	45		89 ASHLAND AVENUE	89 ASHLAND AVENUE, LLC	89 ASHLAND AVENUE	WEST ORANGE, NJ 07052
West Orange Township	61	46		93 ASHLAND AVENUE	PISERCHIA, GIUSEPPE & PASQUALE	221 EAST MCKINLEY AVENUE	LIVINGSTON, N. J. 07039
West Orange Township	61	46.01		91 ASHLAND AVENUE	91 ASHLAND AVE LLC	36 FRANKLIN AVE	WEST ORANGE, NJ 07052
West Orange Township	61	49		95 ASHLAND AVENUE	MASINI, PASQUALE & GRACE	120 MCKINLEY AVENUE	EAST HANOVER, NJ 07936
West Orange Township	61	52		105 ASHLAND AVENUE	CAMP, LOUIS V	20 YORKTOWN TERRACE	LIVINGSTON, N.J. 07039
West Orange Township	61	52.01		109 ASHLAND AVENUE	IMPERIAL PROPERTIES, LLC	109 ASHLAND AVE	WEST ORANGE, NJ 07052
West Orange Township	61	52.02		107 ASHLAND AVENUE	NIGRINI, LEANDRO & KARLA	107 ASHLAND AVE	WEST ORANGE, NJ 07052
West Orange Township	62	1		5 WHITE STREET	CHARAL, LLC	6 BROOK WAY	WEST ORANGE, NJ 07052
West Orange Township	62	15		96 ASHLAND AVENUE	ENCHI FRANKS III & CAMILLE	16 HILLTOP CIRCLE	WHIPPANY, NJ 07981
West Orange Township	62	16		96 ASHLAND AVENUE	DE SANTIS, CARMEN RESCO	96 ASHLAND AVE	WEST ORANGE, NJ 07052
West Orange Township	62	17		96 ASHLAND AVENUE	ENCHI FRANK	16 HILLTOP CIRCLE	WHIPPANY, NJ 07981
West Orange Township	62	19		88 ASHLAND AVENUE	MASINI, PASQUALE	120 MCKINLEY AVENUE	EAST HANOVER, NJ 07936
West Orange Township	62	20		86 ASHLAND AVENUE	ASHLAND PROPERTIES LLC	5 JENNIE COURT	WEST ORANGE, NJ 07052
West Orange Township	62	21		84 ASHLAND AVENUE	ENCHI FRANK	84 ASHLAND AVENUE	WEST ORANGE, NEW JERSEY 07052
West Orange Township	62	22.01		7642 ASHLAND AVENUE	ENCHI FRANK	49 ASHLAND AVENUE	WEST ORANGE, N. J. 07052
West Orange Township	62	27		36 PARK AVENUE	MASINI, PASQUALE & JOSEPH A	120 MCKINLEY AVENUE	EAST HANOVER, NJ 07936
West Orange Township	62	28		34 PARK AVENUE	MASINI, PASQUALE & GRACE	120 MCKINLEY AVENUE	EAST HANOVER, NJ 07936
West Orange Township	62	29		32 PARK AVENUE	MASINI, PASQUALE & GRACE	120 MCKINLEY AVENUE	EAST HANOVER, NJ 07936



SITE LOCATION MAP

SCALE: 1" = 100'

NOTES:

- THERE ARE NO KNOWN EXISTING OR PROPOSED DEED RESTRICTIONS OR COVENANTS FOR THE SUBJECT PROPERTY.
- LIST OF REQUIRED REGULATORY AGENCY APPROVALS.
 - WEST ORANGE ZONING BOARD APPROVAL FOR SITE PLAN.
 - HUDSON-ESSEX-PASSAIC (H.E.P.) SOIL CONSERVATION DISTRICT (SCD) CERTIFICATION.
 - TOWNSHIP OF WEST ORANGE BUILDING PERMITS.
- SOLID WASTE MANAGEMENT PLAN FOR THE PROPOSED APPLICATION SHALL BE HANDLED SIMILARLY TO THE EXISTING BUILDING. WASTE FROM THE APARTMENTS WILL BE CONTAINED WITHIN A NEW ENCLOSURE SHOWN ON THE PLANS AND PLACED CURBSIDE ON COLLECTION DAYS AS PART OF THE MUNICIPAL WASTE COLLECTION.

GENERAL NOTES:

- THE PROPERTY IS KNOWN AND DESIGNATED AS TAX LOTS 44 & 45 WITHIN BLOCK 61. AS SHOWN ON THE TAX MAP OF THE TOWNSHIP OF WEST ORANGE, SHEET NO. 41, AND CONTAINING APPROXIMATELY 0.212 ACRES (9,220.7 SF). THE SUBJECT PROPERTY IS SITUATED WITHIN THE I, INDUSTRIAL ZONE DISTRICT.
- THE PROPOSED APPLICATION IS AN EXPANSION TO AN EXISTING 6-UNIT MULTI-FAMILY BUILDING. REFER TO ARCHITECTURAL PLANS FOR FLOOR PLANS AND ELEVATIONS OF THE BUILDING ADDITIONS/MODIFICATIONS.
- THE PLANS HAVE BEEN PREPARED FOR PURPOSES OF PROVIDING SITE IMPROVEMENTS AS IT RELATES TO OVERALL VEHICULAR ACCESS, PEDESTRIAN ACCESS, ADA ACCESSIBILITY, LIGHTING, LANDSCAPING, ETC.
- THERE ARE NO PROPOSED BUILDING SERVICES PROPOSED WITH THIS APPLICATION. THE EXISTING BUILDING UTILITY SERVICES WILL BE RE-USED FROM THE EXISTING BUILDING. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PROTECT AND MAINTAIN ALL EXISTING BUILDING SERVICE LATERALS. ANY UPGRADES OR REPLACEMENT OF SERVICES WILL NEED TO BE COORDINATED WITH THE UTILITY PROVIDERS AS NECESSARY.
- THE APPLICANT/CONTRACTOR WILL BE REQUIRED TO OBTAIN ALL ROAD OPENING PERMITS, BUILDING PERMITS, TREE REMOVAL PERMITS, UTILITY PERMITS, ETC. AS DEEMED NECESSARY BY THE JURISDICTIONAL AGENCIES THAT MAY INCLUDE BUT NOT LIMITED TO THE TOWNSHIP OF WEST ORANGE, THE COUNTY OF ESSEX, THE HUDSON-ESSEX-PASSAIC SOIL CONSERVATION DISTRICT, AND ANY/ALL UTILITY PROVIDERS.
- IT IS THE CONTRACTORS RESPONSIBILITY TO CALL MARUCCI ENGINEERING ASSOCIATES, LLC AND CONFIRM THAT THE DOCUMENTS BEING USED FOR CONSTRUCTION ARE THE LATEST SET OF REVISED PLANS.
- THE PROJECT REQUIRES A SOIL EROSION & SEDIMENT CONTROL PLAN CERTIFICATION FROM THE HUDSON-ESSEX-PASSAIC (HEP) SOIL CONSERVATION DISTRICT (SCD). THE APPLICANT/CONTRACTOR IS REQUIRED TO OBTAIN SCD CERTIFICATION PRIOR TO ISSUANCE OF ANY BUILDING PERMITS. A COPY OF THE HEP SCD CERTIFICATION SHALL BE SUBMITTED TO THE TOWNSHIP ENGINEERING DEPARTMENT AND BUILDING DEPARTMENT AS PART OF THE CONSTRUCTION BUILDING PERMIT PACKAGE.

OWNER/APPLICANT:

FRANK S. ENCH JR. &
89 ASHLAND AVENUE, LLC
WEST ORANGE, NEW JERSEY 07052

ZONING BOARD APPROVAL

APPROVED AT A MEETING OF THE WEST ORANGE ZONING BOARD HELD ON _____

CHAIRMAN	DATE
SECRETARY	DATE
ENGINEER	DATE

ZONING COMPLIANCE:

ZONE DATA

ZONE: I, INDUSTRY ZONE DISTRICT

PERMITTED USES:	OFFICE, WAREHOUSE, WHOLESALE BUSINESS, AUTO SERVICE & REPAIR, MACHINE SHOP
EXISTING USE:	SIX (6) UNIT RESIDENTIAL APARTMENTS
PROPOSED USE:	EIGHT (8) UNIT RESIDENTIAL APARTMENTS (ADDITION TO EXISTING BUILDING) CLASS (D-2) USE VARIANCE REQUIRED FOR EXPANSION OF NON-CONFORMING USE

	REQUIRED	EXISTING	PROPOSED
MIN. LOT AREA	10,000 SF	9,220.7 SF	NO CHANGE
MIN. LOT WIDTH	NO MINIMUM (N/A)	60.0 FT	NO CHANGE
MIN. FRONT YARD	NO MINIMUM (N/A)	9.9 FT	9.9 FT
MIN. REAR YARD	30 FT	90.2 FT	73.3 FT
MIN. SIDE YARD	NO MINIMUM (N/A)	0 FT	0-FT
MAX. BLDG. COVERAGE	6-FT WHEN PROVIDED 10-FT ADJACENT TO RESIDENCE	14.8% (1,361.3 SF)	33.8% (3,118.2 SF)
MAX. IMPROVEMENT COVERAGE	60.0% (5,532.4 SF)	73.0% (6,730.0 SF)	90.8% (8,376.2 SF) (PV)
MAX. HEIGHT	65 FT	<65 FT	<65 FT
(EV) EXISTING VARIANCE			
(PV) PROPOSED VARIANCE			

PARKING REQUIREMENT:

GARDEN APARTMENT	
1.8 SPACE PER 1-BEDROOM UNIT	
6 (SIX) UNITS X 1.8	= 10.8 SPACE
2.1 SPACE PER 3-BEDROOM UNIT	
2 (TWO) UNITS X 2.1	= 4.2 SPACES
	15 TOTAL PARKING SPACES

PARKING EXISTING:

= 6 TOTAL PARKING SPACES (UNSTRIPED)

PARKING PROVIDED:

8 STANDARD PARKING SPACES	
1 VAN HANDICAP ACCESSIBLE SPACE	= 9 TOTAL PARKING SPACES

DRIVEWAY WIDTH:

REQUIRED:	24-FT (2-WAY TRAFFIC)
EXISTING:	16-FT (2-WAY TRAFFIC)
PROPOSED:	20-FT (2-WAY TRAFFIC)

IMPERVIOUS LOT COVERAGE BREAKDOWN TABLE

	EXISTING	PROPOSED
PRINCIPAL BUILDING COVERAGE	1,361.3 SF	3,118.2 SF
DRIVEWAY/PARKING AREAS	4,720.0 SF	4,013.9 SF
WALKWAYS/SOOPS/PATIOS	648.7 SF	1,244.1 SF
TOTAL IMPERVIOUS COVERAGE	6,730.0 SF	8,376.2 SF (+ 1,646.2 SF)

MARUCCI ENGINEERING
ASSOCIATES, LLC

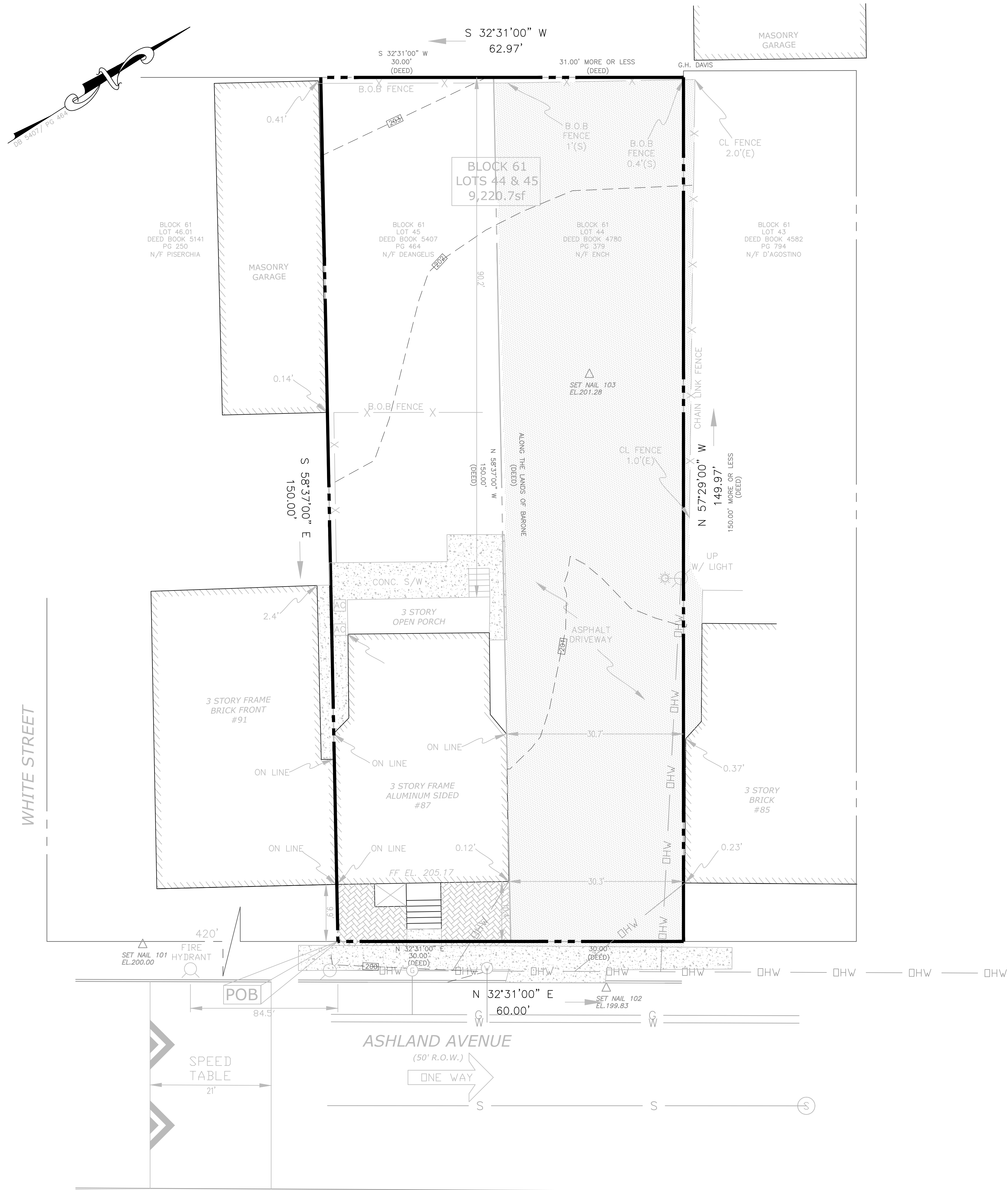
ENGINEERS-SURVEYORS-PLANNERS

POST OFFICE BOX 509
CEDAR KNOLLS, NEW JERSEY 07927
TEL./FAX: (973) 887-3066

NEW JERSEY STATE BOARD OF PROFESSIONAL ENGINEERS & LAND SURVEYORS
CERTIFICATE OF AUTHORIZATION: No. 24GA28082400

PRELIMINARY & FINAL SITE PLAN
COVER SHEET
87-89 ASHLAND AVENUE
TAX MAP BLOCK 61 - LOTS 44 & 45

TOWNSHIP OF WEST ORANGE	ESSEX COUNTY	NEW JERSEY
		PROJECT NO. 20-02 DATE 08/15/2022
ANTHONY MARUCCI		DRAWN BY RM DESIGNED BY RM
PROFESSIONAL ENGINEER & LAND SURVEYOR, N.J. LIC. No. 25573		CHECKED BY AM
PROFESSIONAL PLANNER, N.J. LIC. No. 2124		SHEET NO. 1 of 7



REFERENCES:

1. SURVEY OF LANDS, BLOCK 61, LOT 46.01, PREPARED BY ANTHONY MARUCCI, PE/PLS, DATED MAY 20, 1995.
2. SURVEY OF LANDS, BLOCK 61, LOT 43, PREPARED BY ANTHONY MARUCCI, PE/PLS, DATED DECEMBER 21, 1996.
3. DEED BOOK 5141/ PAGE 250 (BLOCK 61, LOT 46.01)
4. DEED BOOK 5407/ PAGE 464 (BLOCK 61, LOT 45)
5. DEED BOOK 4780/ PAGE 379 (BLOCK 61, LOT 44)
6. DEED BOOK 4582/ PAGE 794 (BLOCK 61, LOT 43)

GENERAL NOTES:

1. CONDITIONS SHOWN AS OF DATE OF FIELD SURVEY PERFORMED BY MARUCCI ENGINEERING ASSOCIATES, LLC ON FEBRUARY 1, 2020 AND APRIL 23, 2022.
2. TOPOGRAPHIC CONTOURS SHOWN ARE BASED ON AN ASSUMED VERTICAL DATUM. BENCHMARK IS MAG NAIL SET IN SIDEWALK JOINT AT ELEVATION 200.00'.
3. THIS MAP IS INTENDED FOR USE BY ONLY THOSE PARTIES TO WHOM IT IS CERTIFIED AND SHALL BE DEEMED INVALID UNLESS AFFIXED WITH A RAISED SEAL.
4. THIS SURVEY WAS PREPARED USING DOCUMENTS SUPPLIED BY THE HOME OWNER WITHOUT THE BENEFIT OF A FULL AND ACCURATE TITLE SEARCH. SURVEY IS SUBJECT TO ANY EASEMENTS AND/OR RESTRICTIONS THAT A FULL AND ACCURATE TITLE SEARCH MAY FIND.
5. PROPERTY CORNERS TO BE SET AT A LATER DATE.

CERTIFIED TO:

- FRANK ENCH

MARUCCI ENGINEERING
ASSOCIATES, LLC

ENGINEERS-SURVEYORS-PLANNERS

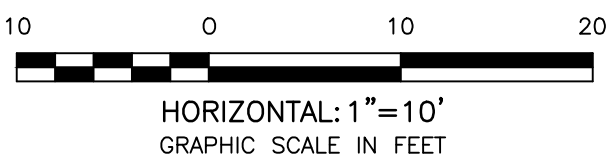
POST OFFICE BOX 509
CEDAR KNOLLS, NEW JERSEY 07927
TEL./FAX: (973) 887-3066

NEW JERSEY STATE BOARD OF PROFESSIONAL ENGINEERS & LAND SURVEYORS
CERTIFICATE OF AUTHORIZATION: No. 24GA28082400

PRELIMINARY & FINAL SITE PLAN
BOUNDARY & TOPOGRAPHIC SURVEY
87-89 ASHLAND AVENUE
TAX MAP BLOCK 66 - LOTS 44 & 45

TOWNSHIP OF WEST ORANGE ESSEX COUNTY NEW JERSEY

NOTICE—
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REVISION NO.	DATE	REVISION
1	11/11/2022	REVISED PER SITE PLAN REVIEW ADVISORY BOARD & COMPLETENESS COMMENTS

ANTHONY MARUCCI		PROJECT NO 20-02	DATE 08/15/2022
PROFESSIONAL ENGINEER & LAND SURVEYOR, N.J. LIC. No. 25573		DRAWN BY RM	DESIGNED BY RM
PROFESSIONAL PLANNER, N.J. LIC. No. 2124		SCALE 1"=10'	CHECKED BY AM
		SHEET NO. 2	of 7

GENERAL NOTES:

- INLETS SHALL BE CONSTRUCTED OF 6 INCH-THICK NJDOT CLASS B PRECAST CONCRETE. INLET FOUNDATIONS AND INVERTS SHALL BE CLASS B CONCRETE.
- EXCEPT FOR INLETS TYPE A AND C, FOUNDATIONS AND INVERTS SHALL BE CONSTRUCTED IN TWO STAGES, AND THE BOTTOM OF THE FOOTINGS SHALL BE 8 INCHES BELOW THE OUTER WALL OF THE LOWEST PIPE IN THE INLET.
- INLET FOUNDATIONS WHICH ARE PRECAST SHALL BE PLACED ON A 6 INCH-THICK BED OF COMPACTED COARSE AGGREGATE #57. THE COARSE AGGREGATE SHALL EXTEND 6 INCHES BEYOND THE HORIZONTAL LIMITS OF THE INLET FOUNDATION.
- CASTINGS FOR PRECAST INLETS SHALL BE ADJUSTED TO GRADE WITH COURSES OF BRICK, AS REQUIRED, 12 INCHES MAXIMUM. FRAMES SHALL BE EMBEDDED IN NON-SHRINK GROUT.
- WHEN THE DEPTH OF A PRECAST INLET EXCEEDS 10 FEET AS MEASURED FROM TOP OF GRATE TO INVERT, THE FOUNDATION SHALL BE INCREASED TO 12 INCHES THICK. WHEN ROCK IS ENCOUNTERED, THE DEPTH OF THE FOUNDATION SHALL NOT BE INCREASED.
- MINIMUM WALL REINFORCEMENT FOR PRECAST INLETS TYPES A, B, C, E, D-1, AND B MODIFIED:

DEPTH BELOW TOP OF GRATE	HORIZONTAL REINF.	VERTICAL REINF.	WALL THK.
0' TO 10'-0"	#4 @ 10" C.C.	#4 @ 18" C.C.	6"
10'-1" TO 15'-0"	#4 @ 8" C.C.	#4 @ 18" C.C.	6"
15'-1" TO 20'-0"	#4 @ 6" C.C.	#4 @ 18" C.C.	6"

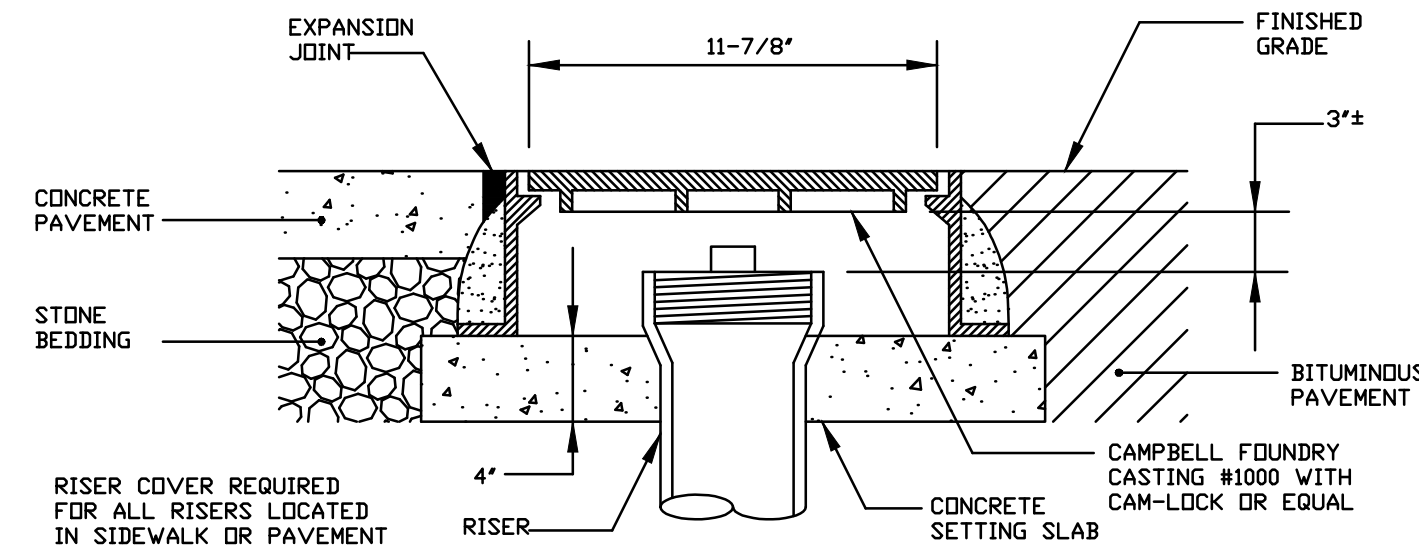
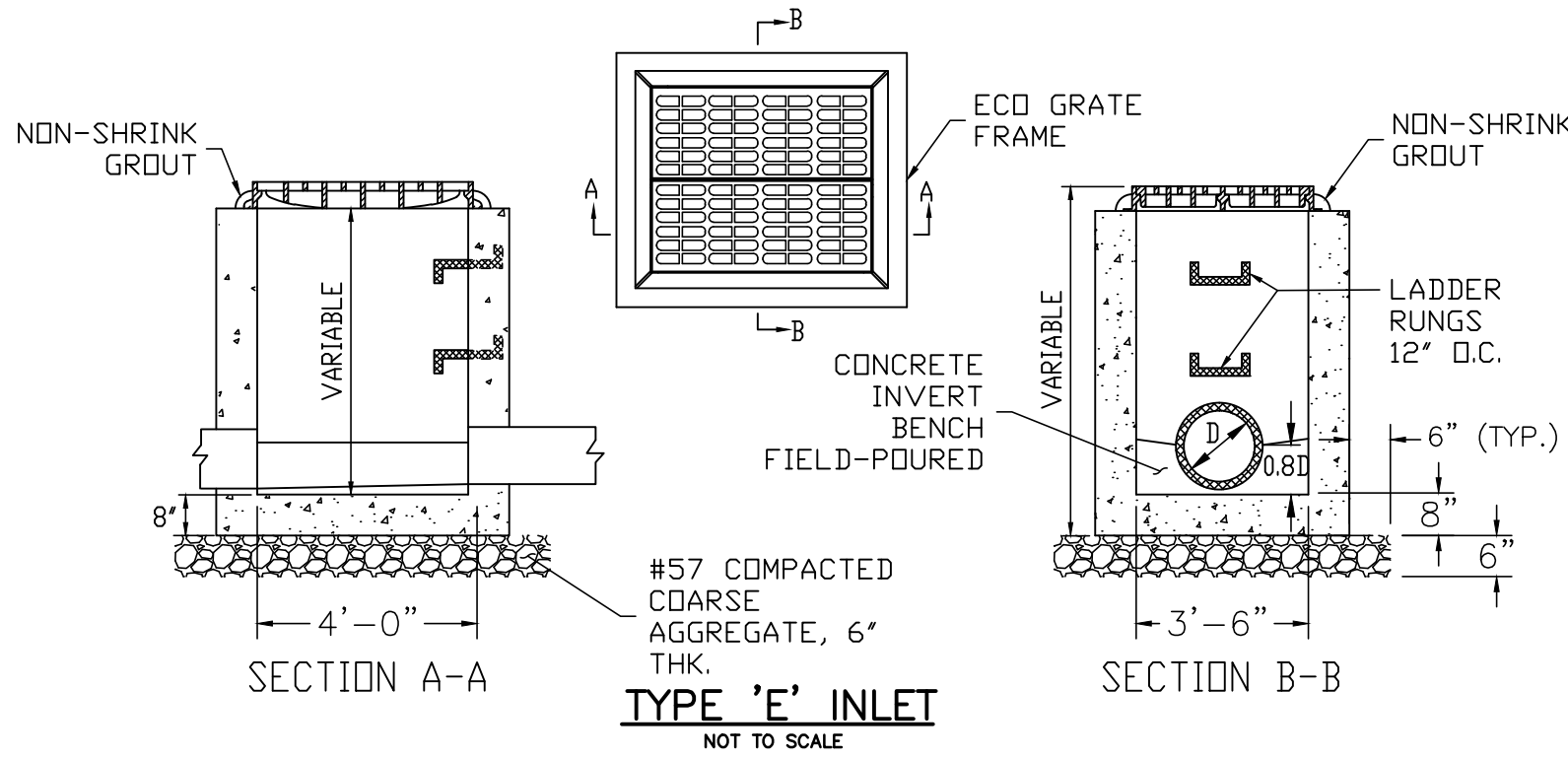
NOTE: REINFORCING SHOWN FOR PRECAST INLETS IS THE MINIMUM REQUIRED. ADDITIONAL REINFORCING FOR HANDLING IS THE RESPONSIBILITY OF THE CONTRACTOR. SHOP DRAWINGS SHALL BE SUBMITTED FOR EACH STRUCTURE TO VERIFY REINFORCEMENT/DESIGN MEETS STANDARD REQUIREMENTS.

ALTERNATE REINFORCEMENT

DEPTH BELOW TOP OF GRATE

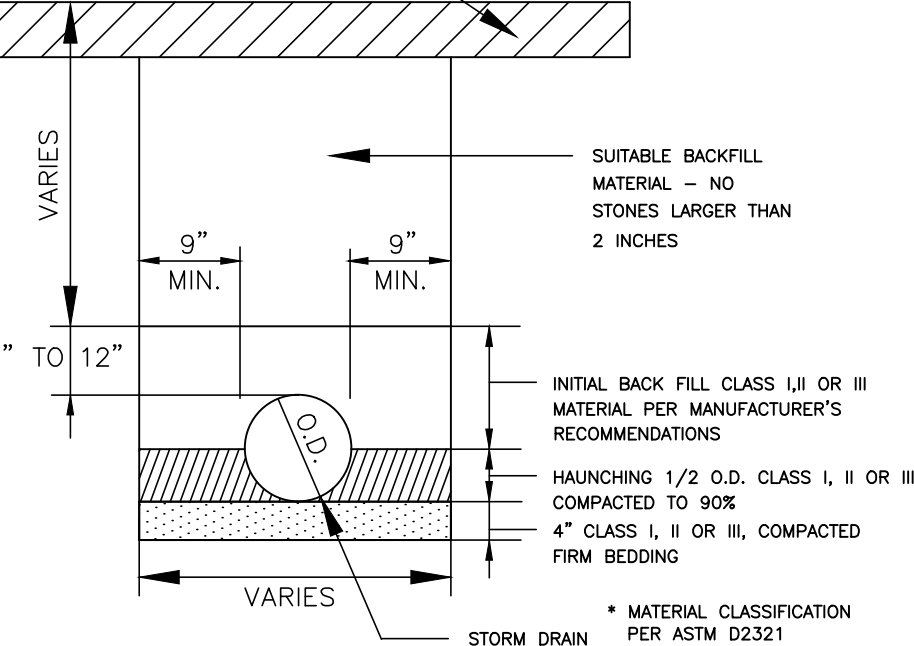
0' TO 10'-0"	WWF 3 x 6 W6 WIRES SPACED @ 3 INCHES TO RUN HORIZONTAL IN ALL CASES
10'-1" TO 15'-0"	WWF 3 x 6 W6 ADD #10 REINFORCEMENT STEEL @ 18 INCHES HORIZONTAL.
15'-1" TO 20'-0"	WWF 3 x 9 W6 ADD #10 REINFORCEMENT STEEL @ 9 INCHES HORIZONTAL OR ADD #4 REINFORCEMENT STEEL @ 15 INCHES HORIZONTAL.

- ALL INLETS AND MANHOLES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CURRENT NJDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND ITS AMENDMENTS.
- CASTING SHALL BE CAMPBELL FOUNDRY No. 3425 BICYCLE-SAFE ECO GRATE OR APPROVED EQUAL.
- PROVIDE POLYPROPYLENE LADDER RUNGS @ 12 INCHES O.C. FACING TRAFFIC.
- PRECAST INLET RISER JOINTS SHALL BE GROUTED WITH MORTAR BY CONTRACTOR.
- STRUCTURE SHALL BE CONSTRUCTED TO MEET HS-20 LOADING.



STORM SEWER TRENCH

N.T.S.

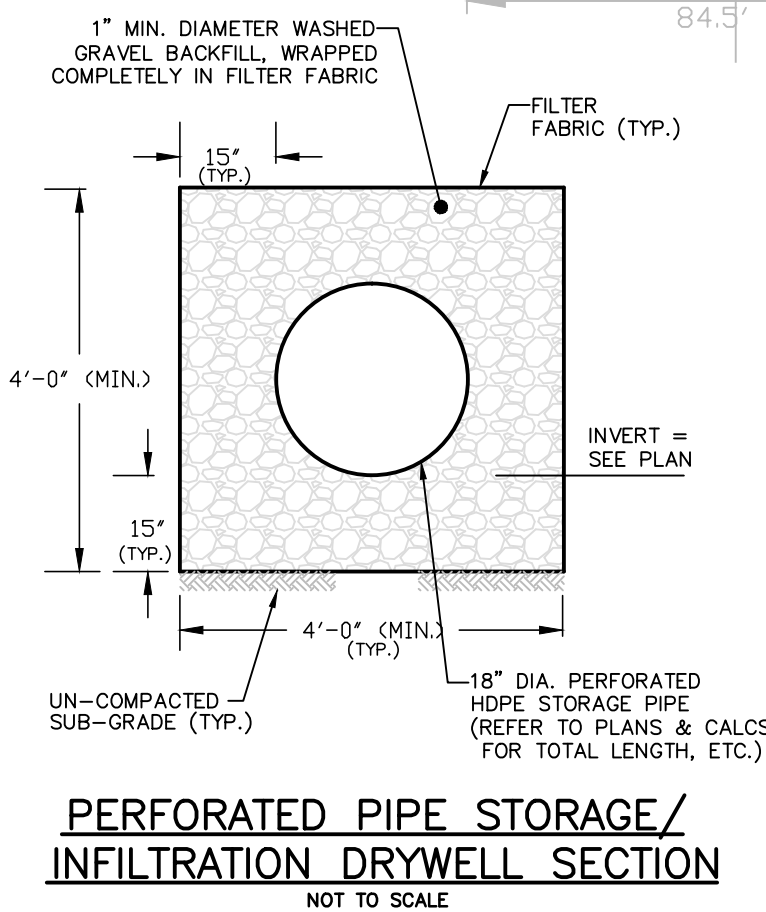


INFILTRATION/DRYWELL CALCULATION SUMMARY:

- NET IMPERVIOUS COVERAGE INCREASE: **1,646.2 SF** (SEE LOT COVERAGE BREAKDOWN TABLE)
- DETENTION STORAGE REQUIRED: 3.0" RAINFALL OVER NET INCREASE
 $3.0" (0.25') \times 1,646.2 \text{ SF} = 411.6 = \underline{412 \text{ CF}}$
- DETENTION STORAGE PROVIDED: **746 CF** (SEE STORAGE VOLUME CALCULATIONS)
- 746 CF** (STORAGE PROVIDED) > **412 CF** (STORAGE REQUIRED)

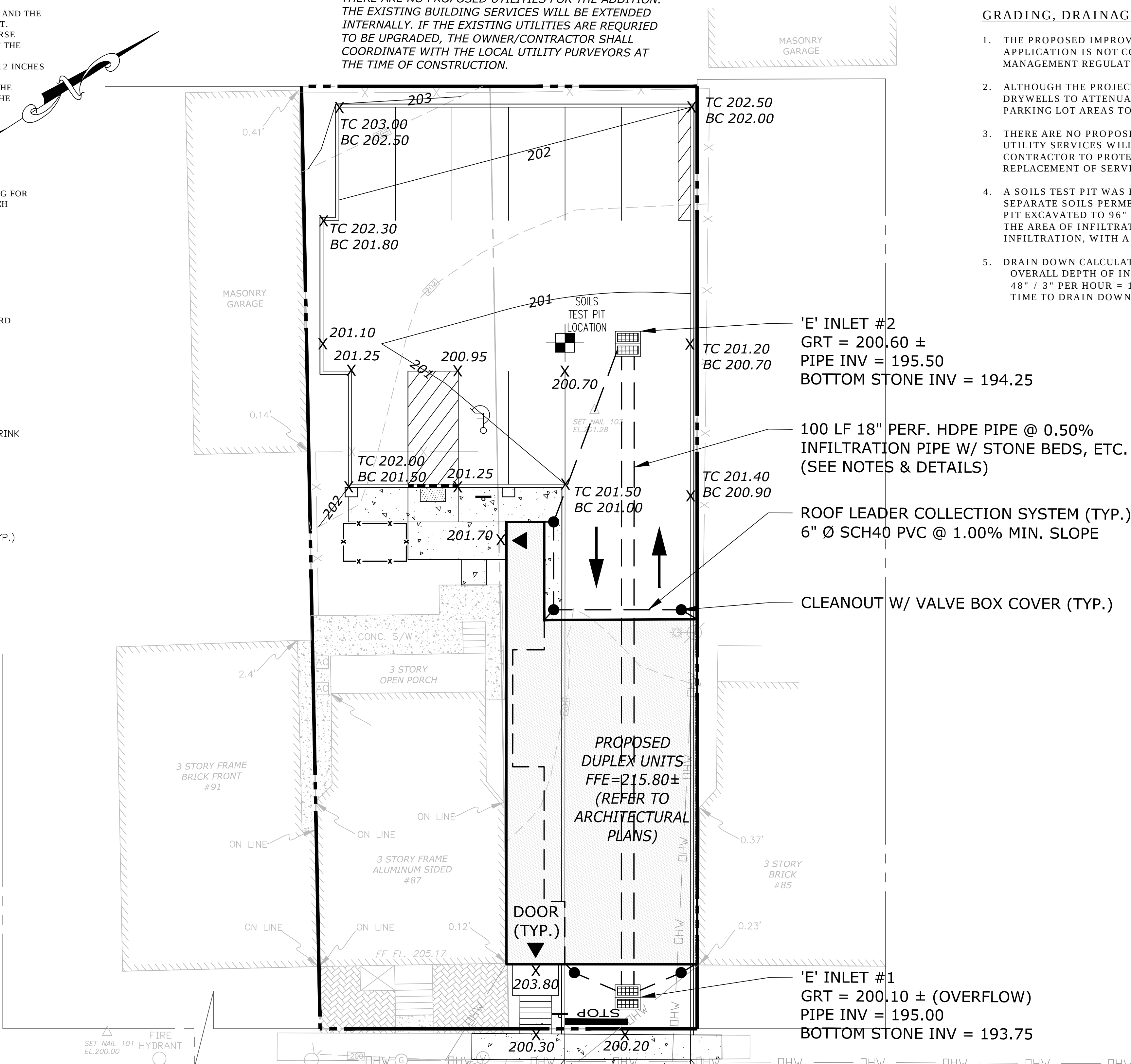
INFILTRATION/DRYWELL STORAGE VOLUME CALCULATIONS:

SECTION AREA 18" PIPE:	$\pi (0.75')^2 = \underline{1.77 \text{ SQ.FT.}}$
SECTION AREA STONE:	$4' \times 4' = 16.0 \text{ SQ.FT.}$ $16.0 \text{ SQ.FT.} - 1.77 \text{ SQ.FT.} = 14.23 \text{ SQ.FT.}$ $14.23 \times 0.40 \text{ (VOID RATIO)} = \underline{5.69 \text{ SQ.FT.}}$
SECTION TOTAL:	$1.77 \text{ SQ.FT.} + 5.69 \text{ SQ.FT.} = \underline{7.46 \text{ SQ.FT.}}$
VOLUME TOTAL:	$7.46 \text{ SQ.FT.} \times 100 \text{ FT (PIPE LENGTH)} = 746.0 = \underline{746 \text{ CF (PROVIDED)}}$



NOTE:

THERE ARE NO PROPOSED UTILITIES FOR THE ADDITION. THE EXISTING BUILDING SERVICES WILL BE EXTENDED INTERNALLY. IF THE EXISTING UTILITIES ARE REQUIRED TO BE UPGRADED, THE OWNER/CONTRACTOR SHALL COORDINATE WITH THE LOCAL UTILITY PURVEYORS AT THE TIME OF CONSTRUCTION.



'E' INLET #2
GRT = 200.60 ±
PIPE INV = 195.50
BOTTOM STONE INV = 194.25

100 LF 18" PERF. HDPE PIPE @ 0.50%
INFILTRATION PIPE W/ STONE BEDS, ETC.
(SEE NOTES & DETAILS)

ROOF LEADER COLLECTION SYSTEM (TYP.)
6" Ø SCH40 PVC @ 1.00% MIN. SLOPE

CLEANOUT W/ VALVE BOX COVER (TYP.)

'E' INLET #1
GRT = 200.10 ± (OVERFLOW)
PIPE INV = 195.00
BOTTOM STONE INV = 193.75

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GRADING, DRAINAGE, & UTILITY NOTES:

- THE PROPOSED IMPROVEMENTS PROVIDE **1,646.2 SF±** OF IMPERVIOUS SURFACES; THEREFORE THE PROPOSED APPLICATION IS NOT CONSIDERED A MAJOR DEVELOPMENT AS DEFINED BY THE N.J.A.C. 7:8 STORMWATER MANAGEMENT REGULATIONS SINCE IT IS LESS THAN 1 ACRE OF DISTURBANCE AND 1/4 ACRE OF NEW IMPERVIOUS.
- ALTHOUGH THE PROJECT IS NOT CONSIDERED A MAJOR DEVELOPMENT, THE APPLICATION IS PROVIDING DRYWELLS TO ATTENUATE & INFILTRATE A SMALL PORTION OF STORMWATER FLOWS FROM THE REAR/SIDE PARKING LOT AREAS TO BETTER FLOWS FROM THE SITE TO ADJACENT NEIGHBORING PROPERTIES.
- THERE ARE NO PROPOSED BUILDING SERVICES PROPOSED WITH THIS APPLICATION. THE EXISTING BUILDING UTILITY SERVICES WILL BE RE-USED FROM THE EXISTING BUILDING. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PROTECT AND MAINTAIN ALL EXISTING BUILDING SERVICE LATERALS. ANY UPGRADES OR REPLACEMENT OF SERVICES WILL NEED TO BE COORDINATED WITH THE UTILITY PROVIDERS AS NECESSARY.
- A SOILS TEST PIT WAS EXCAVATED AT THE LOCATION SHOWN ON THE PLAN ON OCTOBER 20, 2022. REFER TO THE SEPARATE SOILS PERMEABILITY AND ANALYSIS CONDUCTED, SUBMITTED AS PART OF THE SITE PLAN. THE TEST PIT EXCAVATED TO 96" AND NO GROUNDWATER WAS ENCOUNTERED. THE UNDERLYING SOILS DETERMINED THAT THE AREA OF INFILTRATION WILL HAVE A SOIL PERMEABILITY CLASS RATING K VALUE = K4, SUITABLE FOR INFILTRATION, WITH A MINIMUM INFILTRATION RATE OF 6 INCHES/HOUR.
- DRAIN DOWN CALCULATIONS WITH A FACTOR OF SAFETY SHALL BE 3 INCHES/HOUR. OVERALL DEPTH OF INFILTRATION SYSTEM = 48" 48" / 3" PER HOUR = 16 HOUR DRAIN DOWN TIME WHEN SYSTEM FULL TIME TO DRAIN DOWN OF 16 HOURS < 72 HOUR REQUIREMENT; THEREFORE IS ACCEPTABLE TO BMP STANDARDS.

GRADING, DRAINAGE, & UTILITY PLAN NOTES:

- ALL IMPROVEMENTS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE TOWNSHIP OF HANOVER STANDARDS OR THE APPLICABLE REGULATORY AGENCY.
- UNDERGROUND UTILITIES SHOWN HEREON ARE APPROXIMATE, THEIR ACCURACY OR COMPLETENESS ARE NOT GUARANTEED BY THE ENGINEER. MARKETS FROM UTILITIES COMPANIES AND FIELD CONFIRMATION BY CONTRACTOR MUST BE MADE PRIOR TO CONSTRUCTION SO THAT DISTURBANCE OR DISRUPTION OF THESE UTILITIES MAY BE AVOIDED. IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE 1-800-ONE-CALL PRIOR TO ANY EXCAVATION.
- THE CONTRACTOR SHALL CONFIRM THE LOCATION AND DEPTH OF THE EXISTING UTILITY TO WHICH THE CONNECTION IS BEING MADE BEFORE LAYING PIPE, CONDUIT, AND ORDERING PRECAST STRUCTURES, ETC. AS NECESSARY. ANY DISCREPANCY SHALL BE REPORTED TO THE DESIGN ENGINEER. IN CASES WHERE THE CONSTRUCTION OF ITEMS MEET EXISTING STRUCTURES, SUCH AS CURB, PAVEMENT, SIDEWALK, UTILITIES, ETC. THE CONTRACTOR OR SURVEYOR STAKING SUCH ITEMS SHALL VERIFY THE ELEVATION & LOCATION OF THE EXISTING FEATURE PRIOR TO CONSTRUCTION. ANY AND ALL DISCREPANCIES OR QUESTIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER.
- EXCAVATED SOIL NOT USED FOR RE-GRADING AS SHOWN ON THE PLANS SHALL BE REMOVED AND DISPOSED OF OFF-SITE.
- ALL AREAS WHERE SOIL IS BEING SPREAD ACROSS THE YARD SHALL BE TOP-SOILED (4-INCH MINIMUM) AND SEEDED IMMEDIATELY FOLLOWING GRADING OPERATIONS.
- THERE WILL BE NO DEVIATION FROM THE PROPOSED GRADING PLAN WITHOUT APPROVAL, IN WRITING, FROM THE TOWNSHIP ENGINEER.
- AT THE DISCRETION OF THE TOWNSHIP ENGINEER, THE APPLICANT MAY BE REQUIRED TO FIELD STAKE A PROPERTY LIMIT IN THE INTEREST OF LIMITING THE DISTURBANCE TO THE SUBJECT PROPERTY.
- MARUCCI ENGINEERING ASSOCIATES, LLC CERTIFIES THAT THE GRADING CAN TIE INTO THE EXISTING TOPOGRAPHIC CONTOURS AND ADJOINING LOTS WITHOUT ADVERSE GRADING IMPACT OR DRAINAGE IMPACTS AND THAT ALL DISTURBANCE AND GRADING CAN BE LIMITED TO WITHIN THE PROPERTY IN QUESTION.
- THE APPLICANT SHALL, UPON NOTIFICATION FROM THE TOWNSHIP ENGINEER, FIELD STAKE WETLANDS AND/OR BUFFER AREA LIMITS PRIOR TO ANY LAND DISTURBANCE OR CLEARING (IF APPLICABLE).
- A FINAL AS-BUILT SURVEY DEPICTING THE AS-BUILT CONDITIONS OF THE IMPROVEMENTS PROPOSED AS PART OF THIS APPLICATION SHALL BE REQUIRED PRIOR TO THE ISSUANCE OF OCCUPANCY PERMITS. UPON COMPLETING ALL WORK AND SUBMITTING AN AS-BUILT SURVEY, OUR OFFICE WILL PERFORM A FINAL SITE INSPECTION TO ENSURE IMPROVEMENTS WERE CONSTRUCTED IN ACCORDANCE WITH THE APPROVED APPLICATION AND SUBMITTED AS-BUILT SURVEY. IT IS THE RESPONSIBILITY OF THE OWNER/APPLICANT TO COORDINATE THE INSPECTIONS AS PART OF CONSTRUCTION, FINAL SITE INSPECTIONS, AND AS-BUILT SURVEYS, ETC.
- THE PROPERTY OWNER IS AWARE THAT IF STORMWATER RUNOFF DRAINAGE PROBLEMS OCCUR ON THEIR PROPERTY AND/OR NEIGHBORING PROPERTIES AS A RESULT OF THE PROPOSED IMPROVEMENTS IT IS THE PROPERTY OWNER'S RESPONSIBILITY TO REMEDY THE DRAINAGE ISSUE.
- THE CONTRACTOR SHALL HAVE ALL UTILITY TRENCHES CLOSED AT THE END OF EACH WORK DAY. IN NO INSTANCES SHALL ANY EXCAVATIONS BE LEFT OPEN. ROADWAY AREAS SHALL ALL BE RESTORED IN ACCORDANCE WITH TOWNSHIP/COUNTY STANDARDS.
- THE SITE IS SUBJECT TO ANY AND ALL OTHER AGENCIES HAVING JURISDICTION.
- THE PROPOSED DRY WELLS ARE SUBJECT TO TEST PITS AND SOIL SAMPLING AS NEEDED. THE CONTRACTOR AND OWNER ARE REQUIRED TO CONSULT WITH AN ENGINEER AND SOILS LABORATORY TO OBTAIN SOIL LOG AND PERMEABILITY DATA FOR THE DRY WELL SYSTEM PRIOR TO INSTALLATION. THE CONTRACTOR AND OWNER SHALL CONTACT MARUCCI ENGINEERING ASSOCIATES, LLC AND/OR THE TOWNSHIP'S ENGINEERING DEPARTMENT WITH THE SOILS RESULTS TO CONFIRM THE DRAINAGE DESIGN AS SHOWN HEREIN. ADJUSTMENTS TO THE DRY WELL DESIGN OR ALTERNATIVE CONNECTIONS TO AVAILABLE TOWNSHIP STORMWATER SYSTEMS MAY BE REQUIRED AS A RESULT OF THE SOIL CONDITIONS. SOIL TEST PIT RESULTS SIGNED & SEALED BY A NEW JERSEY LICENSED PROFESSIONAL ENGINEER MAY BE REQUIRED AND SUBMITTED TO THE TOWNSHIP ENGINEER PRIOR TO COMMENCING CONSTRUCTION OF THE DRY WELL. THE SOIL TESTS SHALL DETERMINE THE DEPTH TO GROUNDWATER AND INCLUDE A CALCULATION TO ILLUSTRATE THE PROPOSED DRY WELL WILL DRAIN WITHIN 72 HOURS. IT IS THE RESPONSIBILITY OF THE OWNER/ CONTRACTOR TO CONTACT THE UNDERSIGNED IMMEDIATELY FOR ANY CONCERNS RELATED TO SOIL CONDITIONS ENCOUNTERED DURING EXCAVATION.

MARUCCI ENGINEERING ASSOCIATES, LLC

ENGINEERS-SURVEYORS-PLANNERS

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NEW JERSEY STATE BOARD OF PROFESSIONAL ENGINEERS & LAND SURVEYORS
CERTIFICATE OF AUTHORIZATION: No. 24GA28082400

PRELIMINARY & FINAL SITE PLAN
GRADING, DRAINAGE, & UTILITY PLAN
87-89 ASHLAND AVENUE
TAX MAP BLOCK 66 - LOTS 44 & 45

TOWNSHIP OF WEST ORANGE	ESSEX COUNTY	NEW JERSEY
ANTHONY MARUCCI		
PROFESSIONAL ENGINEER & LAND SURVEYOR, N.J. LIC. No. 25573 PROFESSIONAL PLANNER, N.J. LIC. No. 2124		
PROJECT NO 20-02	DATE 08/15/2022	
DRAWN BY RM	DESIGNED BY RM	
SCALE 1"=10'	CHECKED BY AM	
SHEET NO. 4	of 7	

HUDSON-ESSEX-PASSAIC (HEP) SOIL CONSERVATION DISTRICT
SOIL EROSION AND SEDIMENT CONTROL NOTES

SOIL EROSION AND SEDIMENT CONTROL NOTES
(To be included on the signed erosion control plan sheet)

- All soil erosion and sediment control practices on this plan will be constructed in accordance with the "New Jersey Standards for Soil Erosion and Sediment Control," 7th Edition last revised July 2017, effective December 2017. These measures will be installed prior to any major soil disturbance or in their proper sequence and maintained until permanent protection is established.
- Soil to be exposed or stockpiled for a period of greater than 14 days, and not under active construction, may be required to be temporarily mulched, and seeded with native seed mix or other vegetation cover as per Appendix A3. This temporary cover shall be maintained until such time whereby permanent revegetation is established.
- Seeding Dates:** The following seeding dates are recommended to best establish permanent vegetation cover within most locations in the HEPSCD: Spring - 3/1-5/15 and Fall - 8/15-10/1
- Sediment fences are to be properly trenched and maintained until permanent vegetation cover is established
- All storm drainage inlets shall be protected by one of the practices accepted in the Standards, and protection shall remain until permanent stabilization has been established. Storm drainage outlet points shall be protected as required before they become functional.
- Mulch materials shall be un-rotted small grain straw applied at the rate of 70 to 90 pounds per 1,000 square feet and anchored with a mulch anchoring tool, liquid mulch binders, or netting tie down. Other suitable materials may be used if approved by the Soil Conservation District.
- All erosion control devices shall be periodically inspected, maintained and corrected by the contractor. Any damage incurred by erosion shall be rectified immediately.
- The Hudson-Exeter-Passaic Soil Conservation District will be notified in writing at least 48 hours prior to any soil disturbing activities. Fax - (862) 333-4507 OR email - INFORMATION@HEPSCD.ORG
- The applicant must obtain a District issued Report of Compliance prior to applying for the Certificate of Occupancy or Temporary Certificate of Occupancy from the respective municipality, NJ-DECA or any other controlling agency.** Contact the District at 862-333-4505 to request a Final Inspection, giving advanced notice upon completion of the revegetation measures. A performance deposit may be posted with the District when winter weather or snow cover prohibits the proper application of seed, mulch, fertilizer or hydro-seed.
- Paved roadways must be kept clean at all times. Do not utilize a fire or garden hose to clean roads unless the runoff is directed to a properly designed and functioning sediment basin. Water pumped out of the excavated areas contains sediments that must be removed prior to discharging to receiving bodies of water using removable pumping stations, sump pits, portable sedimentation tanks and/or silt control bags.
- All surfaces having lawn or landscaping as final cover are to be provided topsoil prior to re-seeding, sodding or planting. A depth of 5.0 inches, firmed in place, is **required**, as per the Standards for Topsoiling and Land Grading, effective December 2017.
- All plan revisions must be submitted to the District for proper review and approval.
- A crushed stone wheel cleaning tracking-pad is to be installed at all site exits using 2 1/2 - 1" crushed angular stone (ASTM 2 or 3) to a minimum length of 50 feet and minimum depth of 6". All driveways must be provided with crushed stone until paving is complete.
- Steep slopes incurring disturbance may require additional stabilization measures. These "special" measures shall be designed by the applicant's engineer and be approved by the Soil Conservation District.
- The Hudson-Exeter-Passaic Soil Conservation District shall be notified, in writing, for the sale of any portion of the project or for the sale of individual lots. New owners' information shall be provided. Additional measures deemed necessary by District officials shall be implemented as conditions warrant.**

<http://hepscdnj.org>
HEPSCD21SESNOTES_7THEDREV2017.DOC

DUST CONTROL NOTES

The following methods should be considered for controlling dust:

Mulches - See Standard for Stabilization with Mulches Only (pg. 5-1)

Vegetative Cover - See Standard for Temporary Vegetative Cover (pg. 7-1), Permanent Vegetative Cover for Soil Stabilization (pg. 4-1), and Permanent Stabilization with Sod (pg. 6-1)

Spray-On Adhesives - On mineral soils (not effective on muck soils). Keep traffic off these areas.

Table 16-1: Dust Control Materials

MATERIAL	WATER DILUTION	TYPE OF NOZZLE	APPLY GALLONS/ACRE
Anionic asphalt emulsion	7:1	Coarse Spray	1200
Latex emulsion	12.5:1	Fine Spray	235
Resin in water	4:1	Fine Spray	300
Polyacrylamide (PAM) - spray on Polyacrylamide (PAM) - dry spray	Apply according to manufacturer's instructions. May also be used as an additive to sediment basins to flocculate and precipitate suspended colloids. See Sediment Basin standard (pg. 26-1)		
Acidulated Soy Bean Soap Stick	None	Coarse Spray	1200

Tillage - To roughen surface and bring clods to the surface. This is a temporary emergency measure which should be used before soil blowing starts. Begin plowing on windward side of site. Chisel-type plows spaced about 12 inches apart, and spring-toothed harrows are examples of equipment which may produce the desired effect.

Sprinkling - Site is sprinkled until the surface is wet.

Barriers - Solid board fences, snow fences, burlap fences, crate walls, bales of hay, and similar material can be used to control air currents and soil blowing.

Calcium Chloride - Shall be in the form of loose, dry granulates or flakes fine enough to feed through commonly used spreaders at a rate that will keep surface moist but not cause pollution or plant damage. If used on steeper slopes, then use other practices to prevent washing into streams, or accumulation around plants.

Stone - Cover surface with crushed stone or coarse gravel.

SEQUENCE OF CONSTRUCTION

	TIME FRAME (DAYS)
1. INSTALL SOIL EROSION SILT FENCE, INLET PROTECTION, TREE PROTECTION, & STABILIZED CONSTRUCTION ENTRANCE AS PART OF THE S.E.S.C. MEASURES THROUGHOUT THE SITE AS SHOWN ON THE PLAN.	5
2. REMOVE LANDSCAPING/OVERGROWTH THROUGHOUT THE SITE FOR EXCAVATION PREP.	5
3. UTILIZE EXISTING BITUMINOUS DRIVEWAY AS CONSTRUCTION ENTRANCE. ROUGH-GRADE SITE & EXCAVATE FOR NEW FOUNDATION & FOOTINGS. (EXCESS SOIL TO BE REMOVED FROM SITE AS NECESSARY)	15
4. CONSTRUCT FOOTINGS, FOUNDATIONS, & BACKFILL. ROUGH GRADE SITE & DRIVEWAY/PARKING AREAS.	60
5. FRAME & CONSTRUCT BUILDING ADDITIONS.	150
6. INSTALL STORMWATER MANAGEMENT ROOF COLLECTION SYSTEM (AS NECESSARY).	15
7. BEGIN FINAL GRADING AROUND SITE. CONSTRUCT SIDEWALKS & ASPHALT DRIVEWAYS	30
8. PLANT LANDSCAPING AND GRASS SEED/SOD FOR FINAL STABILIZATION.	5
9. REMOVE TEMPORARY SOIL EROSION CONTROL MEASURES AFTER PERMANENT STABILIZATION HAS BEEN ACHIEVED.	5

NOTE: THE TIME-FRAMES FOR THE ABOVE LISTED SEQUENCE OF CONSTRUCTION COULD OVERLAP WITH OTHER ITEMS LISTED AND OCCUR SIMULTANEOUSLY AS PART OF THE OVERALL PROJECT SCHEDULE.

SOIL COMPACTION EXEMPTION NOTE:

AS DETERMINED BY THE STATE POLICY MAP, THE PROJECT AREA FALLS WITHIN THE METROPOLITAN PLANNING AREA (PA1). UNDER EXISTING CONDITIONS, THE SITE IS NOT COVERED IN WOODY VEGETATION FOR RE-GROWTH. IN ACCORDANCE WITH NEW JERSEY STANDARD FOR LAND GRADING (REVISED 2017), NON WOODY VEGETATED PA1 AREAS FALL UNDER THE SOIL COMPACTION EXEMPTION LIST AS AN 'URBAN DEVELOPMENT' AND IS DEFINED BY THE NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION (N.J.D.E.P.) AS 'PREVIOUSLY DEVELOPED'.



NOTICE - THIS DRAWING AND ALL INFORMATION CONTAINED HEREIN IS AUTHORIZED FOR USE ONLY BY THE PARTY FOR WHOM THE WORK WAS CONTRACTED OR TO WHOM IT IS CERTIFIED.

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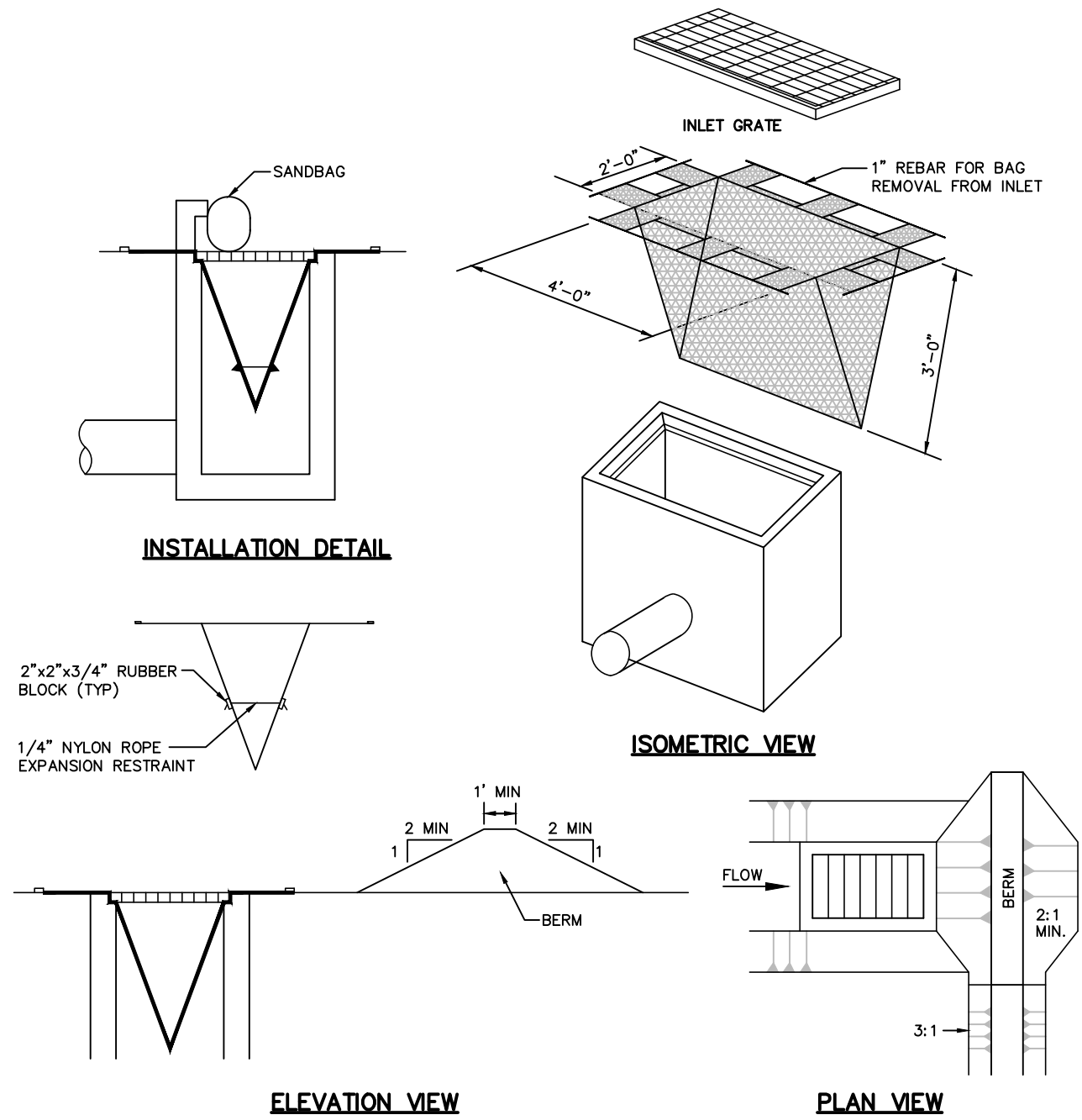
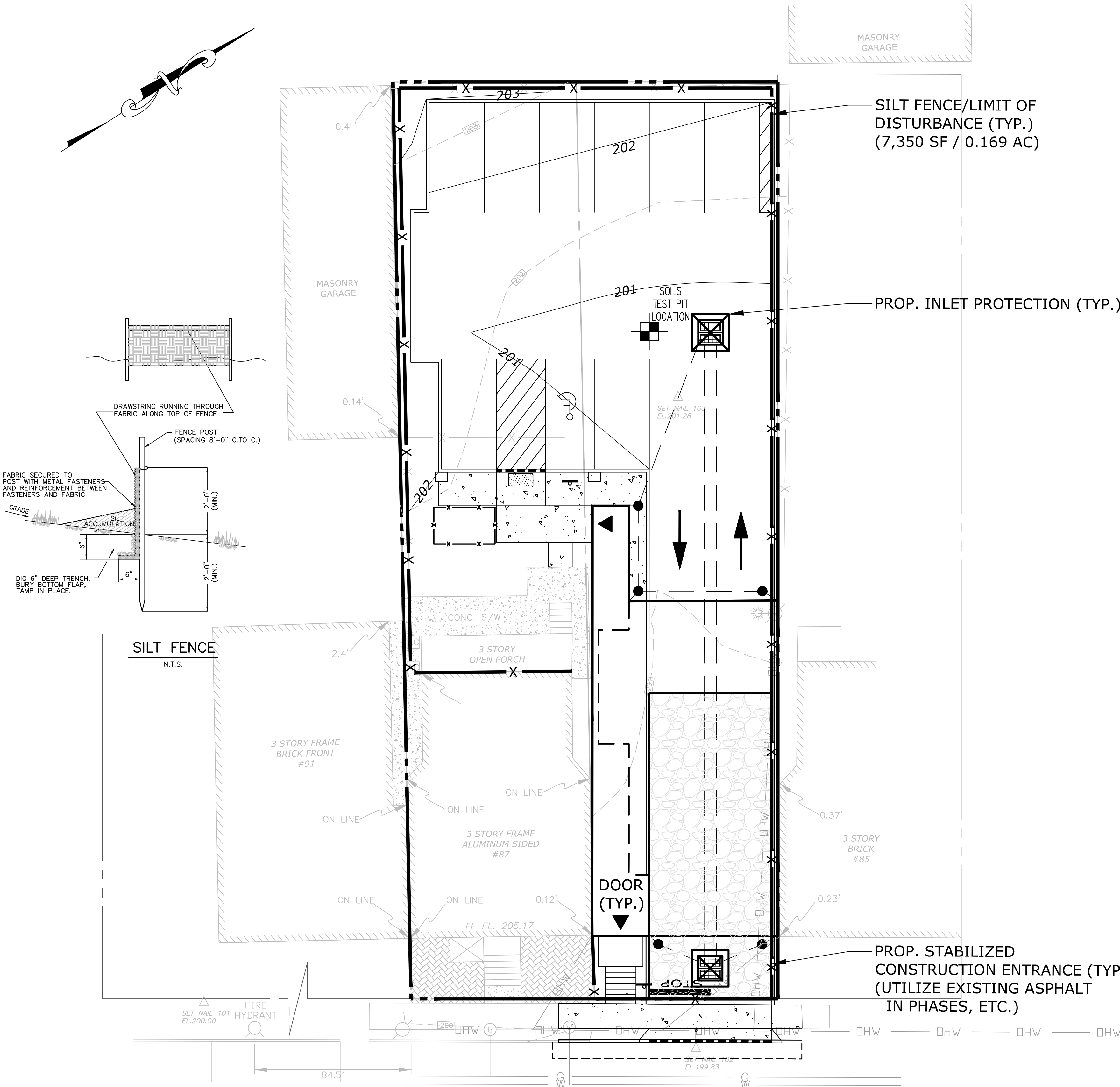
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10 0 10 20

HORIZONTAL: 1"=10'

GRAPHIC SCALE IN FEET

REVISION NO.	DATE	REVISION
1	11/11/2022	REVISED PER SITE PLAN REVIEW ADVISORY BOARD & COMPLETENESS COMMENTS



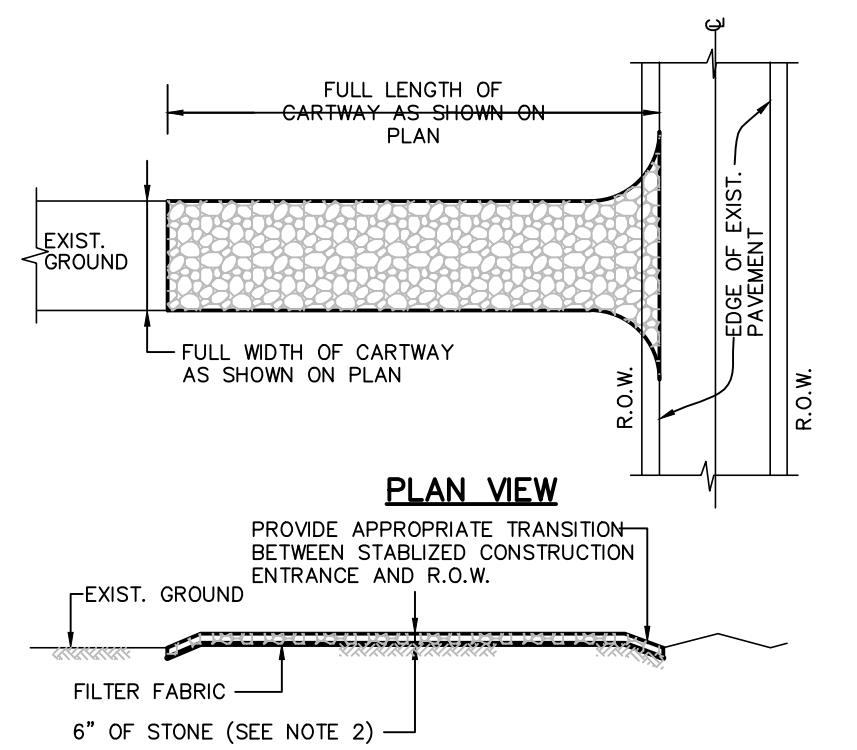
MAXIMUM DRAINAGE AREA = 1/2 ACRE.

INLET PROTECTION IS NOT REQUIRED FOR INLET TRIBUTARY TO SEDIMENT BASIN OR TRAP. BERMS REQUIRED FOR ALL INSTALLATIONS.

EARTHEN BERM IN ROADWAY SHALL BE MAINTAINED UNTIL ROADWAY IS STONED. ROAD SUBBASE BERM ON ROADWAY SHALL BE MAINTAINED UNTIL ROADWAY IS PAVED. EARTHEN BERM IN CHANNEL SHALL BE MAINTAINED UNTIL PERMANENT STABILIZATION IS COMPLETED OR TO REMAIN PERMANENTLY.

DO NOT USE ON MAJOR PAVED ROADWAYS WHERE PONDING MAY CAUSE TRAFFIC HAZARDS.

FILTER BAG INLET PROTECTION
NOT TO SCALE



NOTES:

- PLACE STABILIZED CONSTRUCTION ENTRANCE AT LOCATION(S) AS SHOWN ON THE SOIL EROSION AND SEDIMENT CONTROL PLAN.
- STONE SIZE SHALL BE ASTM C-33, SIZE No. 2 OR 3, CRUSHED STONE.
- THE THICKNESS OF THE STABILIZED CONSTRUCTION ENTRANCE SHALL NOT BE LESS THAN 6\".
- THE WIDTH AT THE EXIST. PAVEMENT SHALL NOT BE LESS THAN THE FULL WIDTH OF POINTS OF INGRESS AND EGRESS.
- THE STABILIZED CONSTRUCTION ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO THE R.O.W./PAVEMENT. THIS REQUIRES PERIODIC TOP DRESSING WITH ADDITIONAL STONE OR ADDITIONAL LENGTH AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURE USED TO TRAP SEDIMENT.
- ALL SEDIMENT SPILLED, DROPPED, WASHED, OR TRACKED ONTO THE PUBLIC ROADWAY MUST BE REMOVED IMMEDIATELY.

STABILIZED CONSTRUCTION
ENTRANCE
NOT TO SCALE

MARUCCI ENGINEERING
ASSOCIATES, LLC
ENGINEERS-SURVEYORS-PLANNERS

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NEW JERSEY STATE BOARD OF PROFESSIONAL ENGINEERS & LAND SURVEYORS
CERTIFICATE OF AUTHORIZATION: No. 24GA28082400

PRELIMINARY & FINAL SITE PLAN
SOIL EROSION & SEDIMENT CONTROL PLAN
87-89 ASHLAND AVENUE
TAX MAP BLOCK 66 - LOTS 44 & 45

TOWNSHIP OF WEST ORANGE

ESSEX COUNTY

NEW JERSEY

Anthony Marucci

ANTHONY MARUCCI
PROFESSIONAL ENGINEER & LAND SURVEYOR, N.J. LIC. No. 25573
PROFESSIONAL PLANNER, N.J. LIC. No. 2124

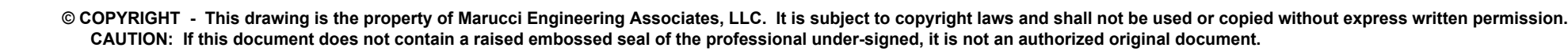
PROJECT NO.	DATE
20-02	08/15/2022
DRAWN BY	DESIGNED BY
RM	RM
CHECKED BY	
AM	
SHEET NO.	5 of 7

ILLUMINATING™			DATE: _____		LOCATION: _____			
ALTA			TIME: _____		PROJECT: _____			
UNIVERSITY OF ALABAMA			COURSE/CD: _____					
DELIVERED VOLUMES (CONTINUED)								
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REVIEW		REVIEW		REVIEW				
Letter	Page	Letter	Page	Letter	Page			
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65	165	65</						

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		SL1 LED Site Lightings model: 30301-1 & 30301-2 (not shown)	
Type: job:		Page: 3 of 4	
		Optional Features	
Battery Backup Cat. No. ☐ EM ☐ No Option		Internal battery pack provides 40 minutes of supplemental light at 25% of initial lamp lumens.  battery backup	
Optional Features Receptor Cat. No. ☐ GR ☐ No Option		Mounted 1/4" from bottom of dial with a gasket/WaterSeal cover with locking tab. Painted to match housing. GR weather proof duplex receptacle and 20A, 125V GR-CH weather proof duplex receptacle with ground fault circuit interrupter 20A, 125V	

		SL1 LED Site Lightings width 100mm x 100mm x 100mm						
Type: add:	Page: 4 of 4							
								
Lumen Data								
Electrical Data								
Electrical Data								
Options								
100W - 40 120W - 40 150W - 40 200W - 40	100W - 40 120W - 40 150W - 40 200W - 40	100W - 40 120W - 40 150W - 40 200W - 40	100W - 40 120W - 40 150W - 40 200W - 40					
SL1 LED Rating for 100W								
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SL1 LED Rating for 200W								
200W - 40								
200W - 40								
200W - 40								
200W - 40								



- PROPOSED POLE MOUNTED
1 LIGHT FIXTURE
(TOTAL; SEE NOTES/DETAILS; TYP.)
- PROPOSED BOLLARD
1 LIGHT FIXTURE
(TOTAL; SEE NOTES/DETAILS; TYP.)

1. THE PROPOSED LIGHT FIXTURES (2 TOTAL; POLE MOUNTED) SHALL BE A KIM LIGHTING ARCHITECTURE AREA/SITE LIGHT POLE, ALTITUDE, ALT1-281-60-3K7-4 (ALT1 FIXTURE SIZE, ARCHITECTURAL AREA/SITE ALTITUDE LED), OR APPROVED EQUIV. DOWN MOUNTED LIGHTING, 3K COLOR TEMP, TYPE 4 DISTRIBUTION, 15-FT MOUNTING HEIGHT (BLACK POLE & FIXTURE FINISHES). THE LIGHTING ANALYSIS IS APPROXIMATE AND PERFORMED THROUGH HUBBELL LIGHTING, INC. LITE PRO DESIGN, AND ALSO BASED ON SIMILAR FIXTURES ON APPLICATIONS WITH SIMILAR HEIGHTS & WATTAGE. THE OVERALL SITE LIGHTING SHALL BE FIELD VERIFIED AT THE TIME OF CONSTRUCTION TO ENSURE ADEQUATE LIGHTING LEVELS ARE ACHIEVED THROUGHOUT THE FACILITY, AND ARE ACCEPTABLE TO THE APPLICANT'S USE AND COMPLY WITH THE TOWNSHIP LIGHTING REGULATIONS.
2. ADDITIONAL WALL-MOUNT FIXTURES SHALL BE PROVIDED AT ALL DOOR LOCATIONS AND SPECIFIED BY THE OWNER/ARCHITECT. THESE LIGHT FIXTURES AT ALL DOORS HAVE NOT BEEN ACCOUNTED FOR IN THE SITE LIGHTING ANALYSIS. ADDITIONALLY, ANY EXISTING UTILITY POLE MOUNTED LIGHT FIXTURES ON THE EXISTING ROADWAY SHALL NOT BE REMOVED & THIS LIGHTING ANALYSIS HAS ACCOUNTED FOR ANY EXISTING LIGHT FIXTURES WITHIN THE P.O.W.
3. THE UNDERSIGNED CERTIFIES THAT THIS LIGHTING PLAN COMPLIES WITH THE TOWNSHIP LIGHTING ORDINANCE AS IT RELATES TO THE STANDARDS OF MINIMUM AVERAGE MAXIMUM ILLUMINATION AT INTERSECTIONS, AND THE MAXIMUM ILLUMINATION AT THE PROPERTY LINE, AS SHOWN ON THE PLAN. ADDITIONALLY, AT THE TIME OF CONSTRUCTION & INSTALLATION OF LIGHTS, THE APPLICANT AND THE APPLICANT'S ENGINEER WILL INSPECT TO CONFIRM LIGHTING MEETS THE TOWNSHIP ORDINANCE AND THE APPLICANT'S USE.
4. THE PROPOSED WALKWAY SHALL CONTAIN BOLLARD LIGHT FIXTURE (1 TOTAL), WHICH SHALL BE A KIM S1 LED SITE LIGHTFORMS; SL1-XL-18LED-4200K, OR APPROVED EQUIV, 4K COLOR TEMP, TYPE 1 DISTRIBUTION, 42" HEIGHT, 375' LUMEN CENTER HEIGHT (BLACK FIXTURE FINISH).
5. THE PROPOSED LIGHTING SHALL BE SET ON A DAWN TO DUSK TIMER. THE LIGHTING LEVELS SHALL BE SPECIFIC TO THE OWNER'S OF OPERATION, AND CAN BE ADJUSTED TO A SECURITY LEVEL WITH REDUCED LIGHTING LEVELS OUTSIDE OF NORMAL HOURS AND THROUGH THE OWNER'S ABILITY TO ADJUST AS NEEDED.

1. ADDITIONAL AREAS THROUGHOUT THE SITE MAY BE LANDSCAPED WITH SEASONAL COLOR AND PERENNIALS AS DETERMINED BY THE APPLICANT/LANDSCAPE CONTRACTOR AT THE TIME OF INSTALLATION. ALL PLANTS ARE NATIVE TO NEW JERSEY, AND THE PLANTING AREAS SHALL BE MULCH BEDS, WITH THE REMAINING UN-LANDSCAPED AREAS TO BE LAWN.
2. THE OWNER/APPLICANT SHALL SUBMIT AN APPLICATION FOR A TREE REMOVAL PERMIT FROM THE TOWNSHIP PRIOR TO ANY TREE REMOVALS AS PART OF THE CONSTRUCTION ACTIVITIES FOR THE SUBJECT PROPERTY.

KEY	QTY	BOTANICAL NAME	COMMON NAME	SPACING (FT.)	SIZE	ROOT BALL	REMARKS
CONIFER TREES							
JUS	11	JUNIPERUS SCOPULORUM 'WICHTA BLUE'	ROCKY MOUNTAIN JUNIPER	8	6-8 FT.	B&B	
EVERGREEN SHRUBS							
BUS	18	BUXUS SEMPERVIRENS 'SUFFRUTICOSA'	DWARF ENGLISH BOXWOOD	6	24"-30"	CONT.	

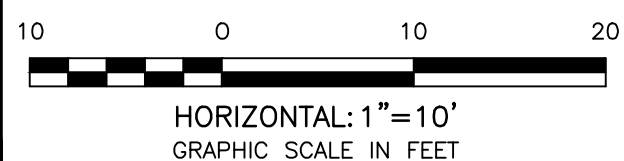
TOWNSHIP OF WEST ORANGE		ESSEX COUNTY		NEW JERSEY	
 ANTHONY MARUCCI PROFESSIONAL ENGINEER & LAND SURVEYOR, N.J. LIC. No. 25573 PROFESSIONAL PLANNER, N.J. LIC. No. 2124		PROJECT NO	DATE		
		20-02	08/15/2022		
		DRAWN BY	DESIGNED BY		
		RM	RM		
		SCALE	CHECKED BY		
1"=10'	AM				
SHEET NO	6	of	7		

NOTICE—

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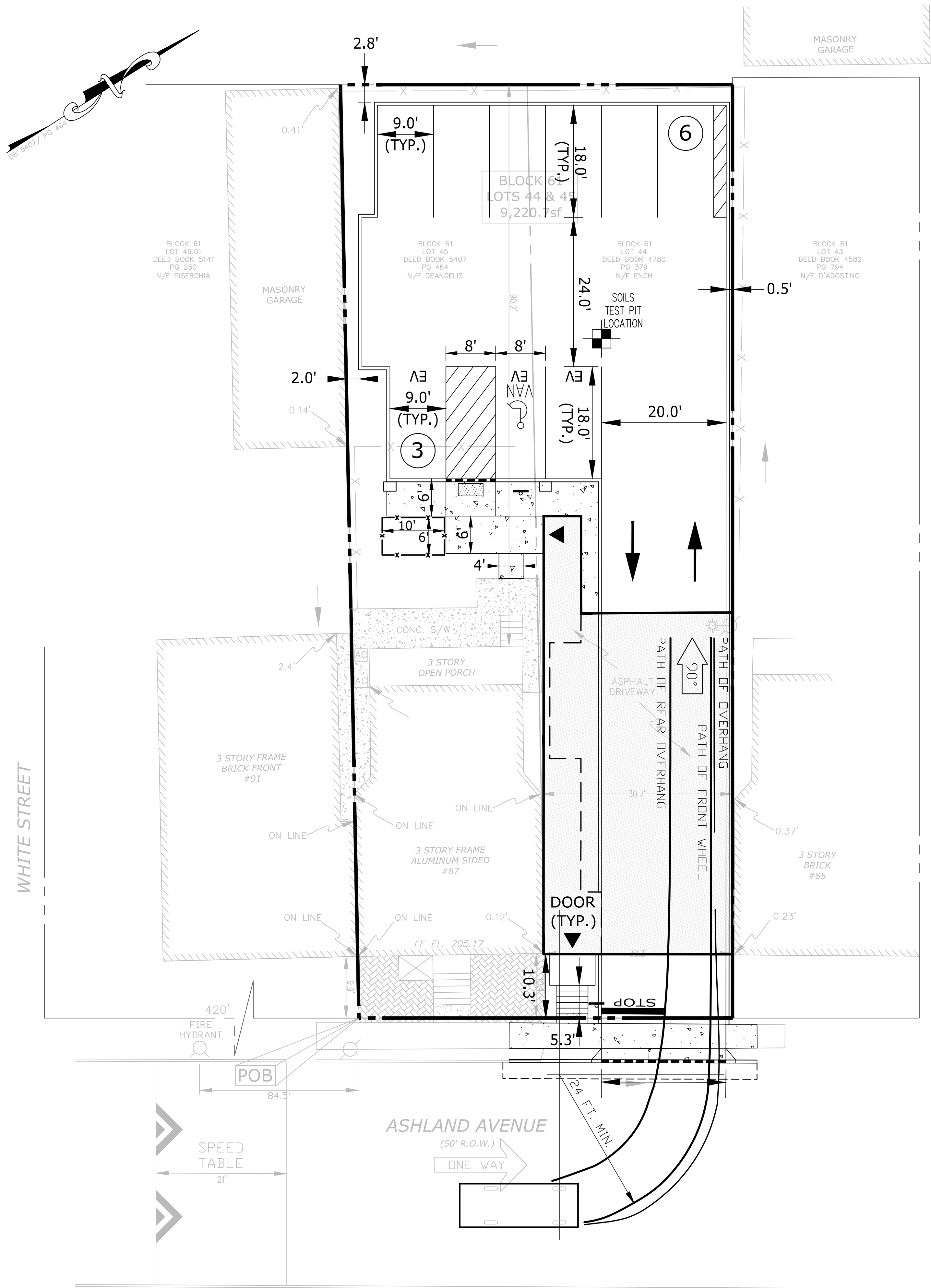
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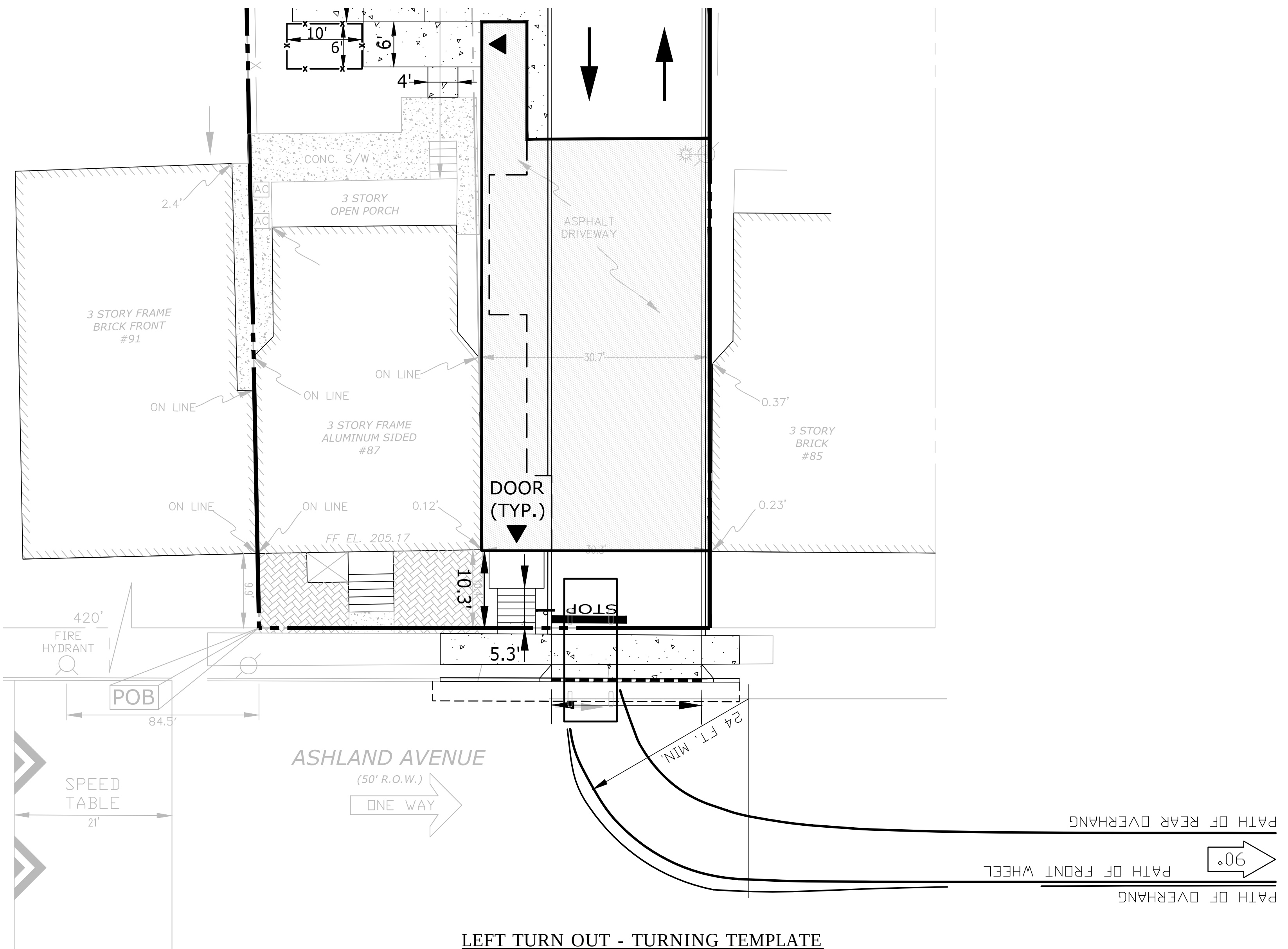


1	11/11/2022	REVISED PER SITE PLAN REVIEW ADVISORY BOARD & COMPLETENESS COMMENTS
REVISION NO.	DATE	REVISION

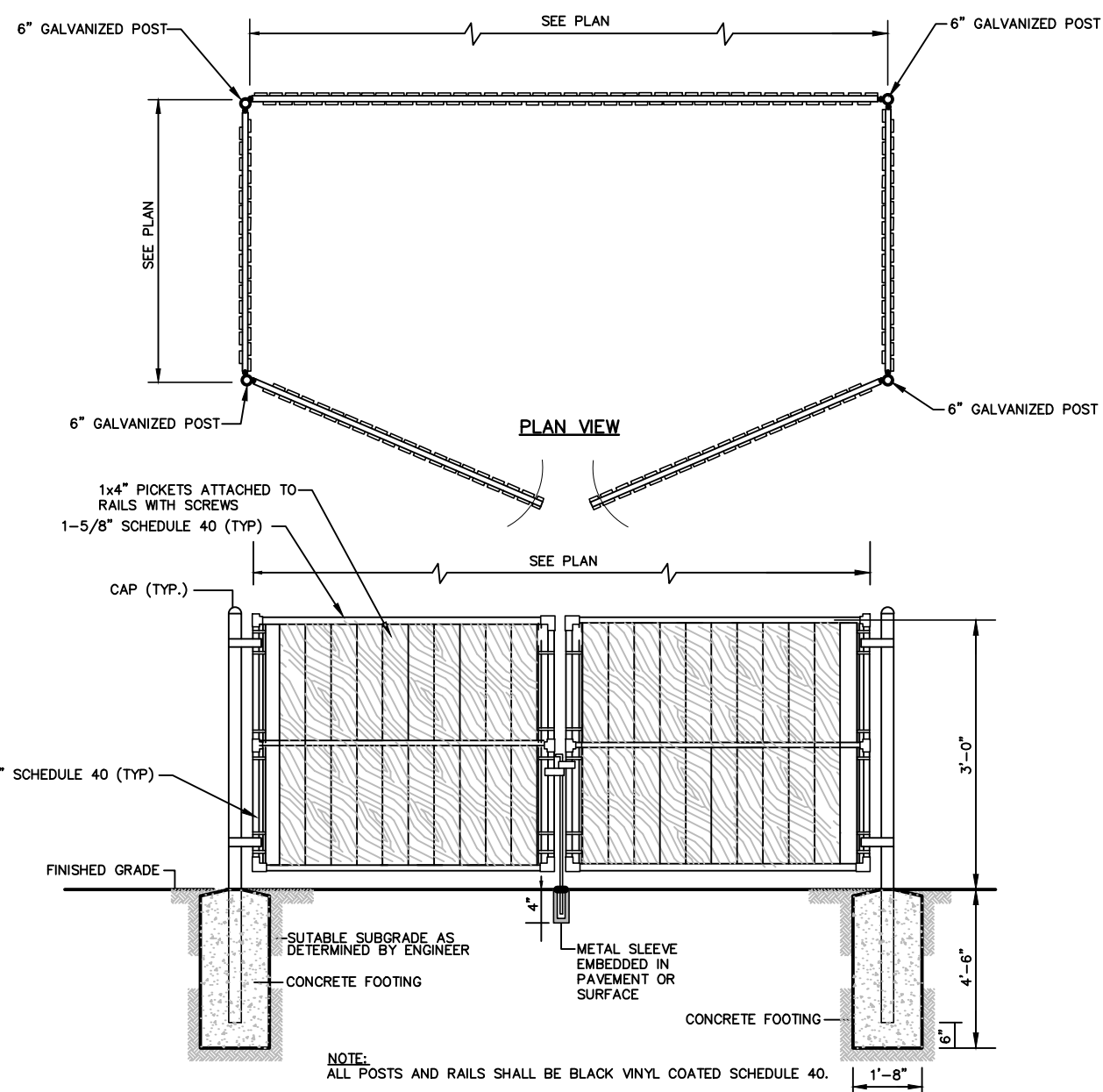
PROJECT NO. 20-02	DATE 08/15/2022
DRAWN BY RM	DESIGNED BY RM
SCALE 1"=10'	CHECKED BY AM
SHEET NO. 6 of 7	



LEFT TURN IN - TURNING TEMPLATE
SCALE: 1" = 10'



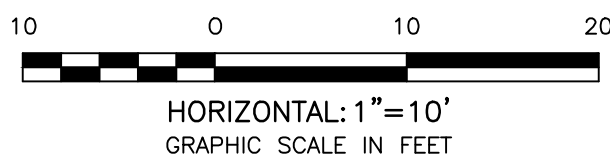
LEFT TURN OUT - TURNING TEMPLATE
SCALE: 1" = 10'



GENERAL NOTES:
1. THE DISTANCE BETWEEN OPPOSITE BOARDS SEPARATED BY A RAIL/BEAM SHALL NOT EXCEED TWO (2) INCHES FOR A BOARD ON BOARD FENCE ENCLOSURE.
2. A ONE (1) INCH OVERLAP OF OPPOSITE BOARDS SHALL BE PROVIDED.
3. THE ENTIRE TRASH ENCLOSURE SHALL NOT EXCEED A SIX (6) INCH FOOT HEIGHT.
4. ALL BOARDS TO BE EITHER CEDAR OR BLACK LOCUST OR PRESURE TREATED.
5. ALL HARDWARE IS TO BE EITHER GALVANIZED OR STAINLESS STEEL.
6. TRASH ENCLOSURE FENCE AND GATES SHALL BE SPECIFIED AND SUPPLIED BY ABATE, INC FENCE SUPPLIER OR APPROVED EQUAL.

TRASH ENCLOSURE DETAIL
NOT TO SCALE

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REVISION NO.	DATE	REVISION
1	11/11/2022	SHEET ADDED TO SET OF PLANS

MARUCCI ENGINEERING ASSOCIATES, LLC

ENGINEERS-SURVEYORS-PLANNERS

POST OFFICE BOX 509
CEDAR KNOLLS, NEW JERSEY 07927
TEL./FAX: (973) 887-3066

NEW JERSEY STATE BOARD OF PROFESSIONAL ENGINEERS & LAND SURVEYORS
CERTIFICATE OF AUTHORIZATION: No. 24GA28082400

PRELIMINARY & FINAL SITE PLAN

VEHICULAR TURNING TEMPLATE & CONSTRUCTION DETAILS PLAN

87-89 ASHLAND AVENUE

TAX MAP BLOCK 66 - LOTS 44 & 45

TOWNSHIP OF WEST ORANGE

ESSEX COUNTY

NEW JERSEY

ANTHONY MARUCCI

PROFESSIONAL ENGINEER & LAND SURVEYOR, N.J. LIC. No. 25573

PROFESSIONAL PLANNER, N.J. LIC. No. 2124

PROJECT NO
20-02

DATE
11/11/2022

DRAWN BY
RM

DESIGNED BY
RM

CHECKED BY
AM

SHEET NO.
7

of
7