

This value was confirmed within the U.S. Department of Transportation Federal Highway Administration "Gravel Roads Maintenance and Design Manual - Appendix A within the manual provides various Gravel Road Thickness Design Methods. A simplified method, known as the South Dakota Catalog Design Method, is based on the below table.

Estimated Daily Number of Heavy Trucks	Subgrade Support Condition		Recommended Minimum Gravel Layer Thickness (inches)	
	Low	High	Low	High
0 to 5	140	140	140	140
6 to 10	150	150	150	150
11 to 25	160	160	160	160
26 to 50	170	170	170	170
51 to 100	180	180	180	180
101 to 200	190	190	190	190
201 to 400	200	200	200	200
401 to 800	210	210	210	210

Note: Minimum aggregate support CSR is 4 percent. High aggregate support CSR is 6 percent.

The subject site does not anticipate more than 0.5 heavy truck loads per day and the gravel layer thickness is required to be 6.5 inches at most.

The 8-inch thick gravel road proposed for the above referenced project meets this requirement. ✓

One more design catalog was checked, also found within the above referenced Gravel Roads Maintenance and Design Manual, to confirm that the proposed 8-inch gravel roadway is adequate. Below is a table to determine aggregate thickness based upon United States Department of Transportation design procedures. The design level will be low (significantly lower than the values shown) and it is understood that the existing soil is in fair to good condition. Therefore, based on the below table, the required gravel road thickness will range from 4-inches to 6-inches.

The 8-inch thick gravel road proposed for the above referenced project meets this requirement. ✓

When not enough detailed information is available, the design catalog approach is recommended to design aggregate surface thickness that may be used for the design of roadways of 18 ft U.S. applications of traffic levels (TV).

Roadway Type	Traffic Level (ADT)	Subgrade Strength (CBR)		Required Gravel Thickness (inches)	
		Low	High	Low	High
Major Road	1000-2000	4	6	4	6
	2000-5000	4	6	4	6
Minor Road	1000-2000	4	6	4	6
	2000-5000	4	6	4	6

Matrix New World Engineering has observed the use of gravel roads, which are typically 6-inches in thickness, be utilized to support heavy vehicle loads that are comparable to that of a typical fire truck and are confident that the proposed 8-inch aggregate road to be constructed for this project will adequately support fire truck loads. The calculations and design catalog discussed in this report support the statement. Ultimately, proper construction construction methods and materials are to be in accordance with New Jersey Department of Transportation (NJDOT) requirements and specifications.

N:\Matrix\LAN\150\Osborn Sea Bay\LD14-160 - Camp Osborn Ocean Station\Report\Gravel Road Thickness Calculations.docx

March 30, 2020
RE: OSBORN SEA-BAY CONDOMINIUM ASSOCIATION
OCEAN CITY LOTS 13, 18, 22 & 24
BRICK TOWNSHIP, OCEAN COUNTY, NEW JERSEY
GRAVEL ROAD THICKNESS CALCULATIONS

The applicant for the above referenced project is proposing to construct an 8-inch thick gravel road on the above referenced site. The road will consist of a 4-inch thick gravel subgrade and a 4-inch thick gravel aggregate (OGA) and 2-inch thick gravel surface. The Brick Township Bureau of Fire Safety has requested calculations that prove that the 8-inch thick gravel road will be strong enough to support a heavy fire apparatus.

Matrix New World Engineering, P.C., utilized the design tools that are made available by Pavement Interactive to Matrix New World Engineering, P.C.'s request. The structural thickness of the gravel road is dependent on the strength of the underlying soils (subgrade). Pavement Interactive provided a list of typical California Bearing Ratio (CBR) values for various materials, which is essentially a measure of subgrade strength, as follows:

Material (USG given where appropriate)	CBR	R Value (Basic or Resilient Modulus (psi))
Concrete	-	170,000,000
Steel	-	50,000,000
Aluminum	-	10,000,000
Wood	-	1 - 2,000,000
Crushed Stone (GV, GF, GM)	20 - 100 (S) - 50	10,000 - 40,000
Sandy Stone (SW, SF, SM, SS)	5 - 40	7 - 40
Silty Stone (SL, ML, MH)	3 - 15	3 - 20
Clay Stone (CL, CH)	1 - 10	1 - 10
Organic Soil (OM, OL, OF)	1 - 2	0.5 - 0.05

Table 1: Typical CBR and Modulus of Elasticity Values for Various Materials

The soils that exist on site are considered sandy soils which typically have a CBR value that ranges from 5 - 40. This information is inputted into the Structural Thickness calculation as follows:

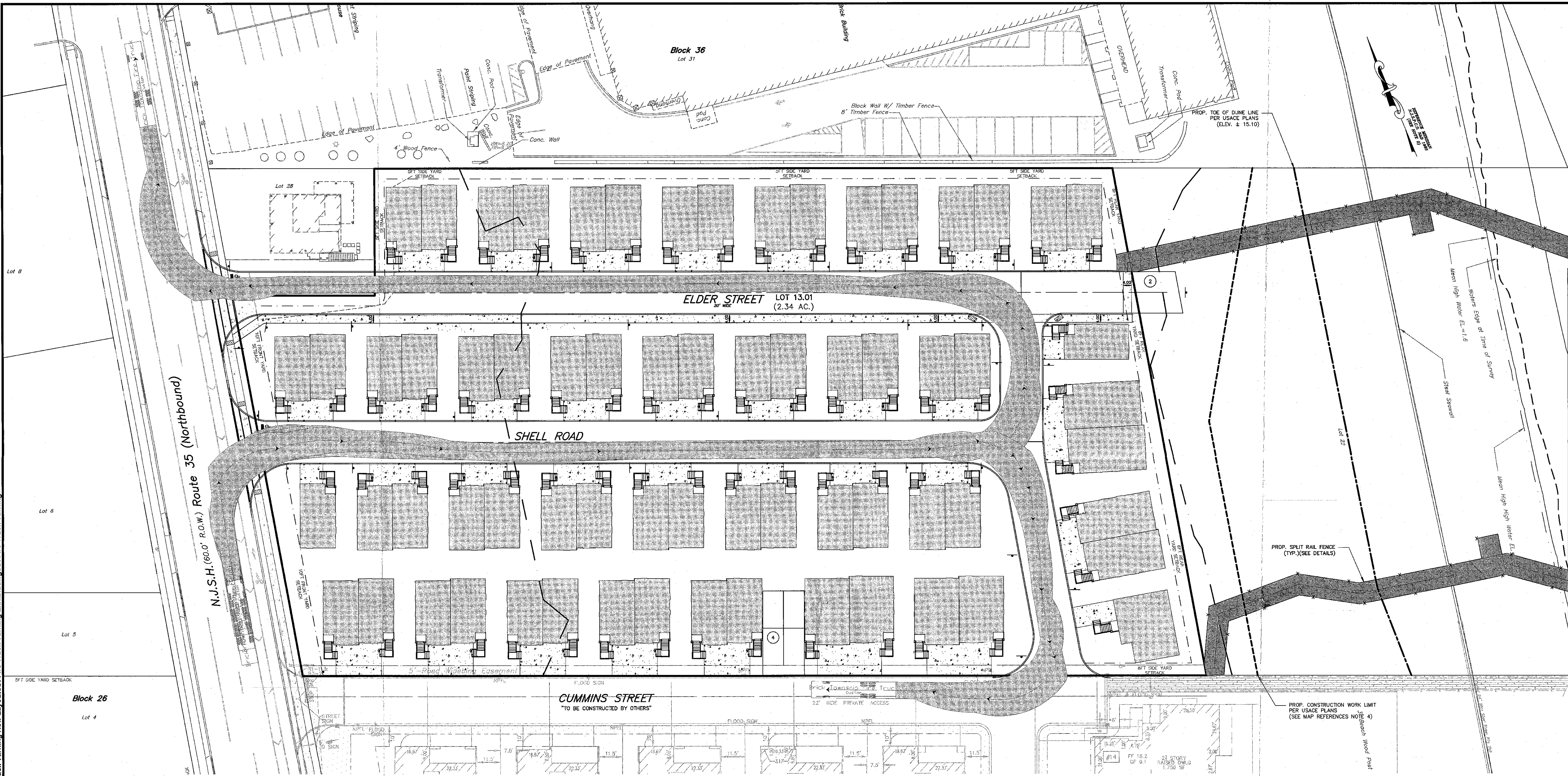
$$\log h = \frac{10(CBR)^{0.625}}{199} - 0.24$$

where; N = No. of 18,000 lb axles (2)
h = thickness of granular material (thickness available to be solved)
CBR = in-situ CBR (40)

Based on the above, it is determined that the required thickness of granular material = 7.5-inches

The 8-inch thick gravel road proposed for the above referenced project meets this requirement. ✓

Plotted: 3/30/2020 3:21 PM. By: Tori Massara
 © MATRIXNEWORLD.M:Matrix.LDS\jbs\Osborn Sea-Bay\LD14-160 - Camp Osborn Ocean Shell\DWG\Misc\2020-03-23 Fire Truck Turning New Layout\XX-Fire Truck Turning



- MAP REFERENCES**
- BOUNDARY AND TOPOGRAPHIC INFORMATION SHOWN HEREON IS BASED UPON A SURVEY ENTITLED, "BOUNDARY AND TOPOGRAPHIC SURVEY, CAMP OSBORN OCEAN SITE, TAX LOT 13, 18 & 24 - BLOCK 36, SITUATED IN TOWNSHIP OF BRICK, OCEAN COUNTY, NEW JERSEY," DATED JULY 31, 2017 AND PREPARED BY MATRIX NEW WORLD ENGINEERING.
 - BOUNDARY INFORMATION FOR LOT 22 SHOWN HEREON IS BASED ON TAX MAP SHEET NO. 603 OF THE TOWNSHIP OF BRICK, OCEAN COUNTY, NEW JERSEY TAX MAP DATED OCTOBER 1, 1950.
 - "STATE OF NEW JERSEY DEPARTMENT OF TRANSPORTATION PLANS OF ROUTE 35 RESTORATION (SANDY RESTORATION) TOWNSHIP OF BRICK, OCEAN COUNTY, NEW JERSEY FROM MP4.00 TO MP 5.07 CONTRACT NO. 044950321 PAVING DRAINAGE & STRUCTURES," DATED APRIL 2013.
 - "BEACHFILL INITIAL CONSTRUCTION, MANASQUAN INLET TO BARNEGAT INLET, OCEAN COUNTY, NEW JERSEY, IFR NO. W8128U-16-B-0014," AS PREPARED BY U.S. ARMY CORPS OF ENGINEERS DATED SEPTEMBER 2016.
 - PROPOSED IMPROVEMENTS FOR ADJACENT TAX LOT 12 - BLOCK 36 BASED UPON SITE PLANS TITLED "PRELIMINARY MAJOR SUBDIVISION FOR OSBORN ESTATES, LOT 12, BLOCK 36, TOWNSHIP OF BRICK, OCEAN COUNTY, NJ," AS PREPARED BY LINDSTROM, DESIGNER & CMR, P.C., DATED 5/11/17, LAST REVISED 7/10/19.

FEMA FLOOD NOTES

THE SUBJECT PROPERTY RECEIVED A LETTER OF MAP REVISION (LOMR MAP NO. 34028C2218F) ON MAY 30, 2017 WHICH REVISED THE FLOOD INSURANCE RATE MAP SUCH THAT ONLY THE FOLLOWING FLOOD ZONES EXIST ON LOTS 13, 18, AND 24:

FLOOD ZONE AE - BASE FLOOD ELEVATION DETERMINED. (EL. 8.0 FT.) N.A.V.D. 1988

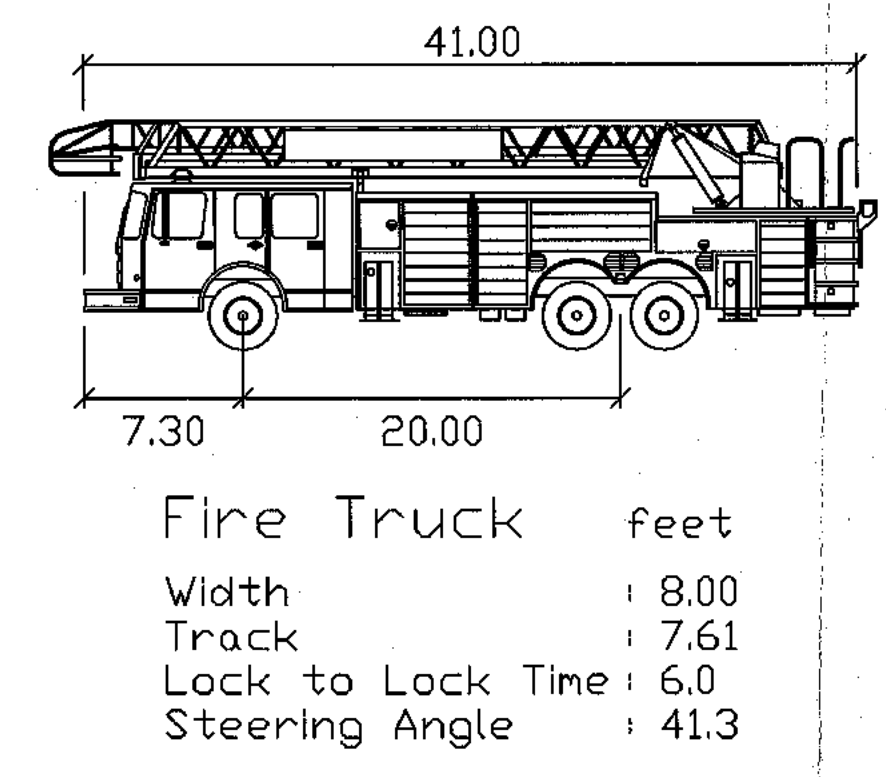
FLOOD ZONE AO - BASE FLOOD ELEVATION DETERMINED. (EL. 3.0 FT.) N.A.V.D. 1988

FLOOD ZONE VE - BASE FLOOD ELEVATION DETERMINED. (EL. 14.0 FT.) N.A.V.D. 1988 IS CONTAINED ENTIRELY WITHIN LOT 22

NOTICE TO CONTRACTOR

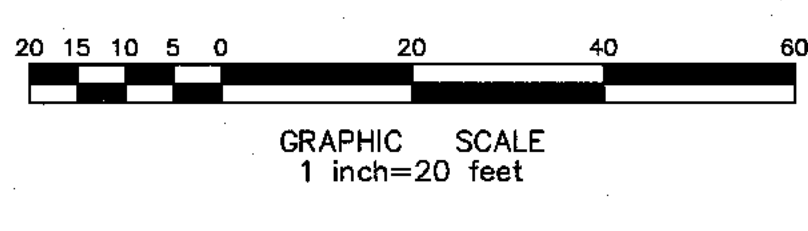
ATTENTION OF THE CONTRACTOR IS DIRECTED TO THE FACT THAT THE APPROXIMATE LOCATIONS OF KNOWN UTILITY STRUCTURES AND FACILITIES THAT MAY BE ENCOUNTERED WITHIN AND ADJACENT TO THE LIMITS OF WORK AREA ARE SHOWN ON THE PLANS. THE ACCURACY AND COMPLETENESS OF THIS INFORMATION IS NOT GUARANTEED BY THE ENGINEER, AND THE CONTRACTOR IS ADVISED TO VERIFY, IN THE FIELD, ALL THE FACTS CONCERNING THE LOCATION OF THESE UTILITIES AND OTHER CONSTRUCTION OBSTACLES PRIOR TO THE START OF CONSTRUCTION. FURTHER, THE CONTRACTOR SHALL NOTIFY THE ENGINEER, IN WRITING, PRIOR TO THE START OF CONSTRUCTION, OF ANY DISCREPANCIES WHICH MAY EFFECT THE PROJECT DESIGN.

THE CONTRACTOR SHALL CONTACT NEW JERSEY ONE CALL (1-800-272-1000 OR LATEST NUMBER) FOR UTILITY MARKOUT PRIOR TO THE START OF CONSTRUCTION.



LEGEND

EXISTING	PROPOSED
BOUNDARY LINE	BOUNDARY LINE
LOT LINE	LOT LINE
SETBACK LINE	SETBACK LINE
CURB LINE	CURB LINE
DEPRESSED CURB	DEPRESSED CURB
EDGE OF PAVEMENT	EDGE OF PAVEMENT
PANT LINE	PANT LINE
CONCRETE	CONCRETE
FENCE	FENCE
PARKING COUNT	PARKING COUNT
RETAINING WALL/BULKHEAD	RETAINING WALL/BULKHEAD
CURB RADIUS R10'	CURB RADIUS R10'
POST SIGN	POST SIGN
FLOOD LIMIT	FLOOD LIMIT
MEAN HIGH WATER LINE	MEAN HIGH WATER LINE
EASEMENTS	EASEMENTS
DRAINAGE	DRAINAGE
UTILITY	UTILITY
WATER	WATER
ACCESS	ACCESS
PROPOSED CRUSHED SHELL ROADWAY	PROPOSED CRUSHED SHELL ROADWAY
PROPOSED DUNE CROSSOVER	PROPOSED DUNE CROSSOVER
PROPOSED BUILDING	PROPOSED BUILDING



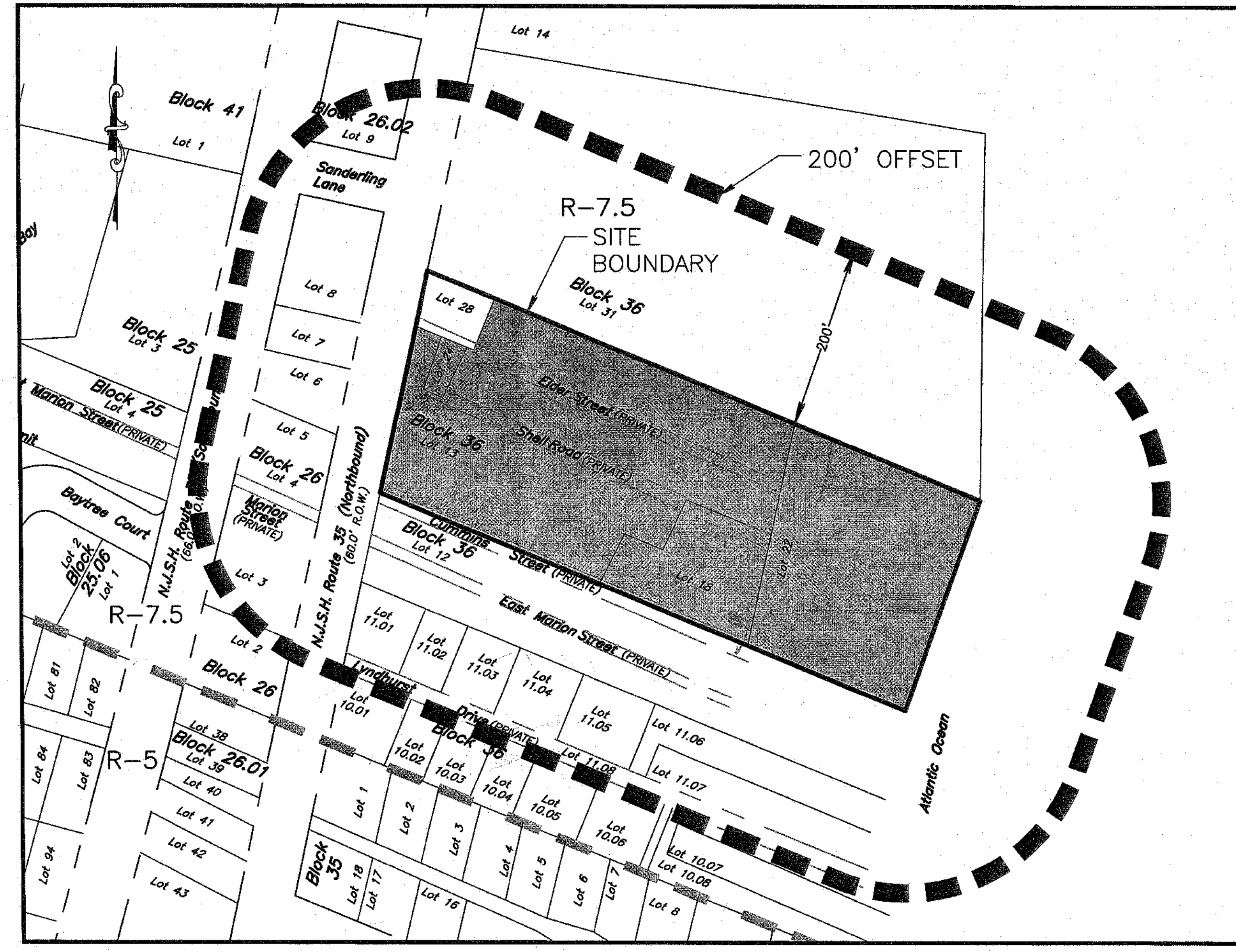
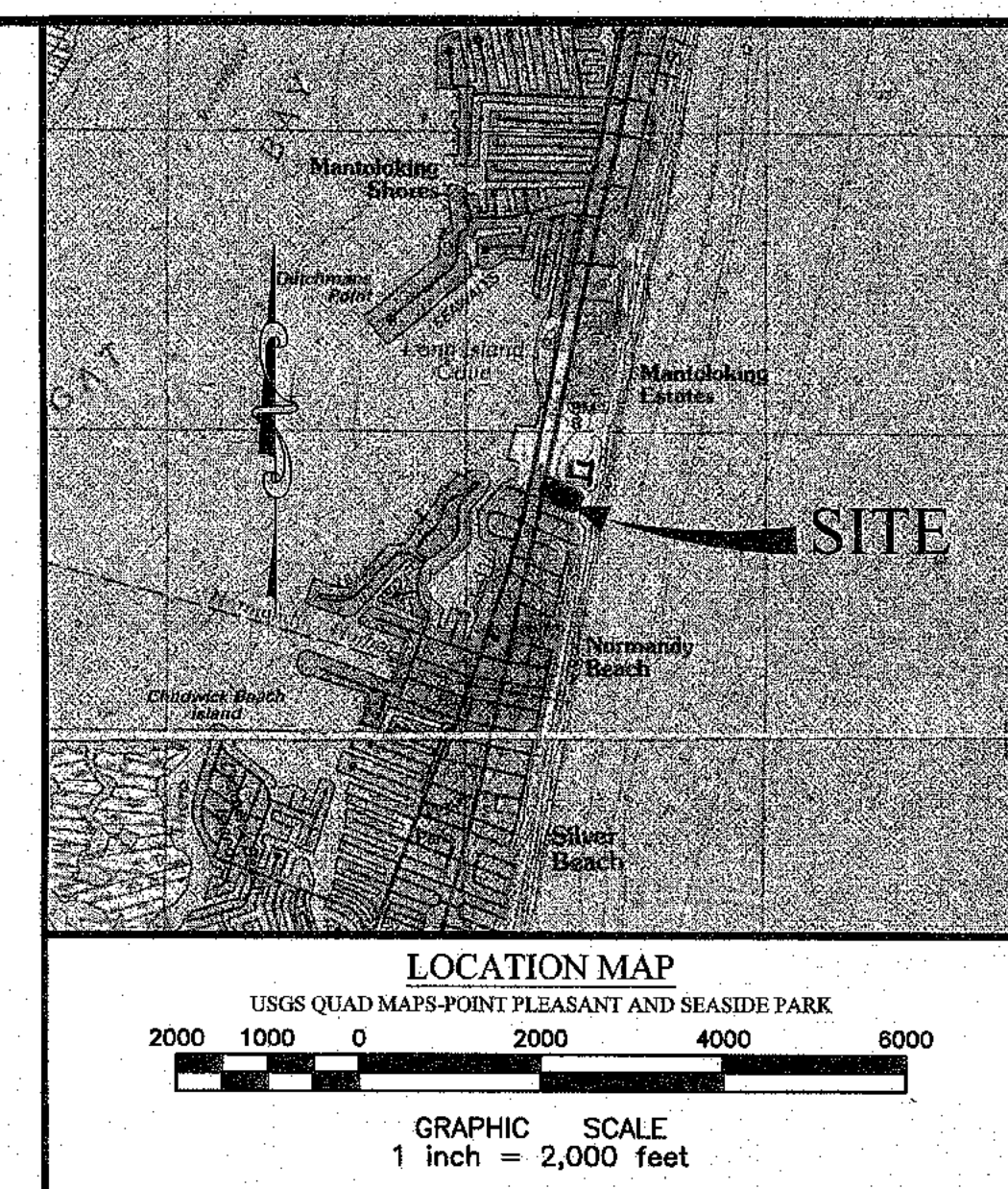
<p>MATRIXNEWORLD Engineering Progress and Landscape Architecture, P.C. 442 State Route 35, Second Floor Edgewater, New Jersey 07724 Tel: 732-886-2999 Fax: 973-261-1016 www.matrixnewworld.com NEW JERSEY CERTIFICATE OF AUTHORIZATION NO. 34CA27662800</p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>NO.</th> <th>DESCRIPTION</th> <th>DATE</th> <th>REV.</th> <th>REL.</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	NO.	DESCRIPTION	DATE	REV.	REL.					
NO.	DESCRIPTION	DATE	REV.	REL.							
<p>FIRE TRUCK TURNING EXHIBIT</p>	<p>CAMP OSBORN OCEAN SITE BLOCK 36, LOTS 13, 18, 22 & 24</p>										
<p>PROJECT NUMBER: LD14-160</p>											
<p>DATE: 03/30/2020</p>											
<p>SCALE: 1"=20'</p>											
<p>SHEET 1 OF 1</p>											

PROPERTY OWNERS WITHIN 200'
(PER OFFICE OF TAX ASSESSOR AS OF 02/04/20)

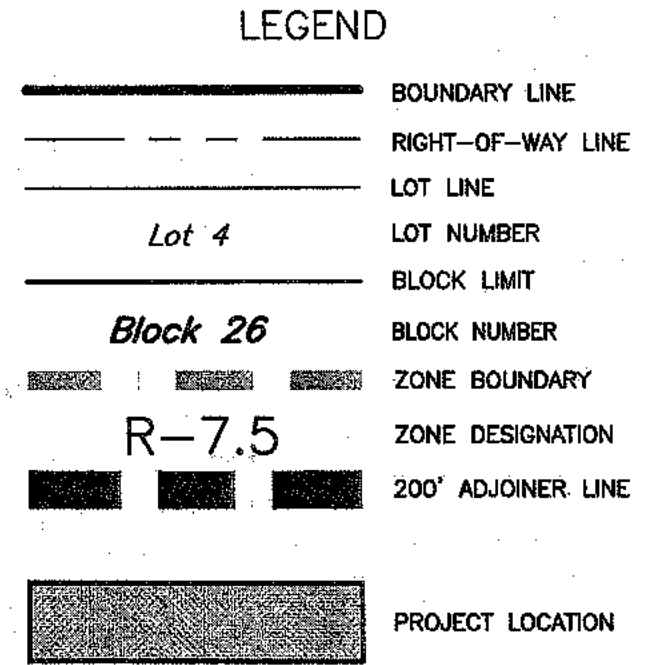
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36	22	...	36	24	...
36	1	...	36	2	...
36	3	...	36	4	...
36	5	...	36	6	...
36	7	...	36	8	...
36	9	...	36	10	...
36	11	...	36	12	...
36	14	...	36	15	...
36	16	...	36	17	...
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36	95	...	36	96	...
36	97	...	36	98	...
36	99	...	36	100	...

PRELIMINARY AND FINAL MAJOR SITE PLAN CAMP OSBORN OCEAN SITE

BLOCK 36, LOTS 13, 18, 22 & 24 TOWNSHIP OF BRICK, OCEAN COUNTY, NEW JERSEY



- GENERAL NOTES:**
- THE SUBJECT SITE IS KNOWN AND DESIGNATED AS LOTS 13, 18, 22 & 24 IN BLOCK 36 AS SHOWN ON SHEET 9.03 OF THE TOWNSHIP OF BRICK, OCEAN COUNTY, NEW JERSEY TAX MAP DATED OCTOBER 1, 1950.
 - THE SUBJECT SITE IS LOCATED WITHIN THE RESIDENTIAL ZONE DISTRICT (R-7.5) AS SHOWN ON TOWNSHIP OF BRICK, OCEAN COUNTY NEW JERSEY ZONING MAP DATED DECEMBER 19, 1976, LAST AMENDED OCTOBER 10, 1980.
 - THE SUBJECT SITE WAS A BEACH COTTAGE COMMUNITY WHERE (67) PRINCIPAL STRUCTURES WERE SITUATED WITHIN THREE EXISTING LOTS PRIOR TO SUPER STORM SANDY. OF THE EXISTING STRUCTURES, (54) WERE PART OF OSBORN SEA-BAY CONDO ASSOCIATION AND (13) WERE PART OF CAMP OSBORN CONDO ASSOCIATION. THE PROPOSED (67) UNITS WILL BE PART OF ONE APPLICATION. BEACH COTTAGES ARE A CONDITIONAL USE WITHIN THE R-7.5 DISTRICT. THE PROPOSED SITE CONSISTS OF 64 TOTAL DUPLEX DWELLING UNITS AND (3) DETACHED SINGLE DWELLING UNITS, TOTALING TO (67) UNITS. ALL UNITS SHALL CONSIST OF UP TO THREE (3) BEDROOMS.
 - THE MINIMUM TYPICAL SECTION REQUIRED AT THIS LOCATION ALONG NEW JERSEY STATE HIGHWAY 35 IS 114 FEET (DTS 44). THE RIGHT-OF-WAY AT THIS LOCATION MEASURES 120 FEET WHEN COMBINING BOTH THE NORTHBOUND AND SOUTHBOUND TRAVEL WAYS. THEREFORE THIS SITE COMPLIES WITH MINIMUM DESIRABLE TYPICAL SECTION REGULATIONS.
 - TOTAL AREA OF SITE, LOTS 13, 18, 22 & 24, BLOCK 36 - 151,936.79 SF (3.49 ACRES). IT IS PROPOSED TO CONSOLIDATE LOTS 13, 18, AND 24 INTO ONE LOT.
 - BOUNDARY AND TOPOGRAPHIC INFORMATION SHOWN HEREON IS BASED UPON A SURVEY ENTITLED, "BOUNDARY AND TOPOGRAPHIC SURVEY, CAMP OSBORN OCEAN SITE, TAX LOT 13, 18 & 24 - BLOCK 36, SITUATED IN TOWNSHIP OF BRICK, OCEAN COUNTY, NEW JERSEY, DATED JULY 31, 2017 AND PREPARED BY MATRIX NEW WORLD ENGINEERING, INC.
 - BOUNDARY INFORMATION FOR LOT 22 SHOWN HEREON IS BASED ON TAX MAP SHEET NO. 9.03 OF THE TOWNSHIP OF BRICK, OCEAN COUNTY, NEW JERSEY TAX MAP DATED OCTOBER 1, 1950.
 - HORIZONTAL DATUM NAD83; VERTICAL DATUM NAVD83
 - TO CONVERT FROM NAVD83 TO NGVD29 +1.14'; TO CONVERT FROM NGVD29 TO NAVD83 -1.14'.
 - CENTER OF SITE COORDINATES 427990 N 615815 E
 - INDIVIDUAL PAGES FROM THIS PLAN SET SHALL NOT BE UTILIZED FOR CONSTRUCTION ON THEIR OWN AS NOTES AND INFORMATION PROVIDED ON OTHER SHEETS MAY IMPACT WORK REQUIREMENTS. THE CONTRACTOR SHALL REVIEW AND UTILIZE THE ENTIRE PLAN SET FOR CONSTRUCTION.
 - PLANS ARE NOT VALID UNLESS EMBOSSED WITH THE SEAL OF THE SIGNED PROFESSIONAL.
 - THESE PLANS HAVE BEEN PREPARED FOR MUNICIPAL AND AGENCY REVIEW AND APPROVAL. THE PLANS SHALL NOT BE UTILIZED AS CONSTRUCTION DOCUMENTS UNTIL ALL APPROVALS HAVE BEEN OBTAINED AND ALL CONDITIONS OF THE APPROVALS HAVE BEEN SATISFIED.
 - APPLICANT/OWNER: OSBORN SEA-BAY CONDO ASSOCIATION, P.O. BOX 927, NORMANDY BEACH, NJ 08753; CAMP OSBORN CONDOMINIUM ASSOCIATION, 41 HILL STREET, RANDOLPH, NJ 07869



THIS IS TO CERTIFY THAT THE WATER AND SEWER DESIGN CONFORMS WITH THE RULES AND REGULATIONS OF THE BRICK TOWNSHIP MUNICIPAL UTILITIES AUTHORITY.

STEPHEN T. SPECHT, P.E.
DEPUTY EXECUTIVE DIRECTOR & DIRECTOR OF ENGINEERING/OPERATIONS

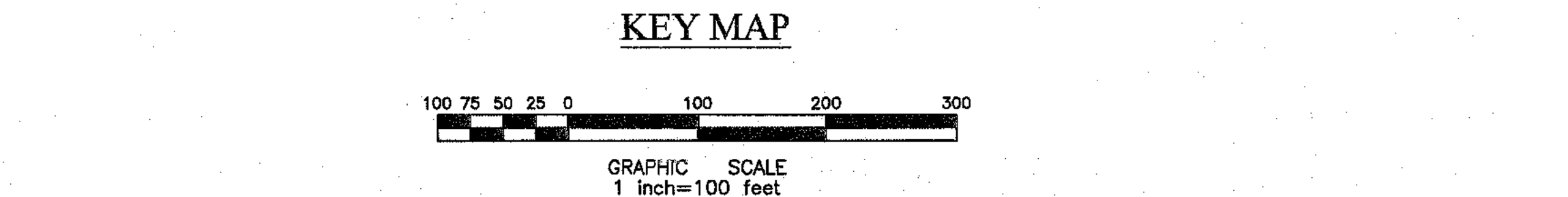
APPROVED BY THE
BRICK TOWNSHIP
PLANNING BOARD

CHAIRPERSON _____ DATE _____
SECRETARY _____ DATE _____
PLANNING BOARD ENGINEER _____ DATE _____

FEMA FLOOD NOTES:
THE SUBJECT PROPERTY RECEIVED A LETTER OF MAP REVISION (LOMR MAP NO. 34029C0218F) ON MAY 30, 2017 WHICH REVISED THE FLOOD INSURANCE RATE MAP SUCH THAT ONLY THE FOLLOWING FLOOD ZONES EXIST ON LOTS 13, 18, AND 24:
FLOOD ZONE AE - BASE FLOOD ELEVATION DETERMINED. (EL. 8.0 FT.) N.A.V.D. 1988
FLOOD ZONE AD - BASE FLOOD ELEVATION DETERMINED. (EL. 3.0 FT.) N.A.V.D. 1988
FLOOD ZONE VE - BASE FLOOD ELEVATION DETERMINED. (EL. 14.0 FT.) N.A.V.D. 1988 IS CONTAINED ENTIRELY WITHIN LOT 22

ADDITIONAL UTILITY CONTACTS
(PER OFFICE OF TAX ASSESSOR AS OF 02/04/20)

- STATE OF NJ - DOT, 1035 PARKWAY AVENUE, TRENTON, NJ 08618
- COMCAST CABLE COMMUNICATIONS INC., 751 BRICK BLVD, BRICK, NJ 08723, ATTN: TERRY CLARK
- NEW JERSEY AMERICAN WATER, 1025 LAUREL OAK ROAD, VOORHEES, NJ 08043
- BRICK TOWNSHIP MUNICIPAL UTILITIES AUTHORITY, 1851 NEWMAN RD WEST, BRICK TOWNSHIP, NJ 08724
- JP&P, 331 NEWMAN SPRING ROAD, BLDG 3, SITE 325, RED BANK, NJ 07701
- NEW JERSEY NATURAL GAS, 1415 WYCKOFF ROAD, MILL, NJ 07719



SCHEDULE OF AREA, YARD AND BUILDING REQUIREMENTS - RESIDENTIAL ZONE DISTRICT R-7.5

REQUIREMENT	PERMITTED (R-7.5)	PERMITTED (CONDITIONAL USE)	PRE-SUPER STORM SANDY CONDITIONS*	PROPOSED
MIN. LOT AREA	7,500 SF	N/A	151,936.79 SF	151,936.79 SF
MIN. LOT WIDTH	75 FT	N/A	183.65 FT	183.65 FT
MIN. LOT DEPTH	90 FT	N/A	621.75 FT	621.75 FT
MAX. LOT COVERAGE BY BUILDING	30%	N/A	37.71% ◇	25.60%
MIN. FRONT YARD SETBACK TO ROUTE 35 - DUPLEX UNITS	N/A	10 FT	0 FT ◇	10.00 FT.
TO INTERIOR ROADWAYS	N/A	10 FT	0 FT ◇	10.00 FT.
TO EGRESS POINT	N/A	3 FT	0 FT ◇	3.02 FT.
MIN. SIDE YARD SETBACK SINGLE FAMILY	N/A	6 FT	0.37 FT ◇	6.00 FT
DUPLEX UNITS	N/A	5 FT	N/A	5.85 FT
MIN. REAR YARD SETBACK	N/A	6 FT	N/A	6.02 FT
MAX. HEIGHT OF STRUCTURE** TO RIDGELINE	N/A	38 FT	UNKNOWN	<38 FT
TO MEAN	N/A	35 FT	UNKNOWN	<35 FT
TO EAVES	N/A	28 FT	UNKNOWN	<28 FT
BUILDING SEPARATION SIDE TO SIDE	N/A	10 FT	N/A	10.50 FT
REAR TO REAR - DUPLEX UNITS	N/A	13 FT	N/A	13.89 FT
ACCESSORY BUILDING SIDE YARD	5 FT	PROHIBITED	N/A	N/A
ACCESSORY BUILDING REAR YARD	5 FT	PROHIBITED	N/A	N/A
MAX. IMPERVIOUS COVERAGE	N/A	N/A	50.16%	48.43%

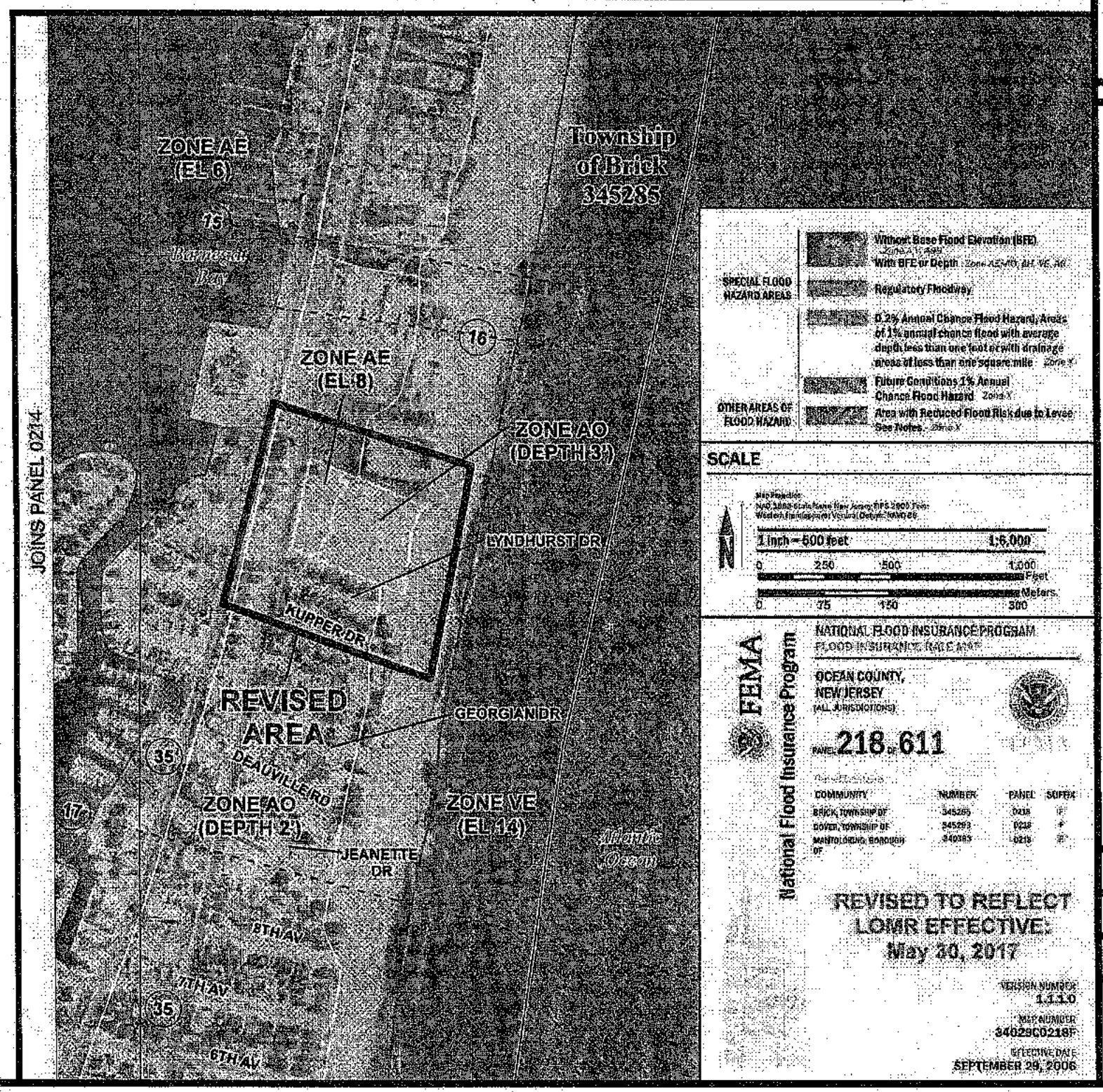
* PRE-SUPERSTORM SANDY CONDITIONS BASED UPON INFORMATION FROM SURVEY ENTITLED, "BOUNDARY AND TOPOGRAPHIC SURVEY, CAMP OSBORN CONDOMINIUMS, TAX MAP LOT 4, BLOCK 25, LOT 4, BLOCK 26, LOTS 12, 13, 18, 24, SITUATED IN TOWNSHIP OF BRICK, OCEAN COUNTY, NEW JERSEY" DATED JUNE 28, 2011, AND PREPARED BY BIRDSELL SERVICES GROUP, INC.
** BUILDING HEIGHT MEASURED FROM THE AVERAGE FINISHED GRADE AT A DISTANCE OF 6' FROM THE BUILDING
◇ PRE-EXISTING NONCONFORMITY

- WAIVERS REQUESTED:**
- SECTION 245-356(K) - STREET INTERSECTION CORNERS SHALL NOT BE LESS THAN 20-FOOT RADIUS.
 - SECTION 245-410 - IN ALL SUBDIVISIONS, STREET TREES SHALL BE INSTALLED ON BOTH SIDES OF ALL STREETS.
 - SECTION 245-410 - IN ALL SINGLE-FAMILY RESIDENTIAL ZONES, ONE SHADE TREE IS REQUIRED PER 2,000 SF OF LOT AREA.
 - SECTION 245-39.1 - SIDEWALKS AND CURBING ARE REQUIRED AS PART OF ANY SUBDIVISION OR SITE PLAN APPLICATION.

IMPERVIOUS COVERAGE CALCULATIONS (LOTS 13, 18, 22 & 24)

DESCRIPTION	PRE-SUPERSTORM SANDY	POST-DEVELOPMENT
BUILDING COVERAGE	57,201 SF (1.32 AC)	38,908 SF (0.89 AC)
ROAD & DRIVEWAY COVERAGE	18,905 SF (0.43 AC)	28,260 SF (0.65 AC)
SIDEWALK COVERAGE	0 SF (0 AC)	1,622 SF (0.04 AC)
DUNE WALKOVER COVERAGE	0 SF (0 AC)	4,792 SF (0.11 AC)
TOTAL	76,206 SF (1.75 AC)	73,582 SF (1.69 AC)

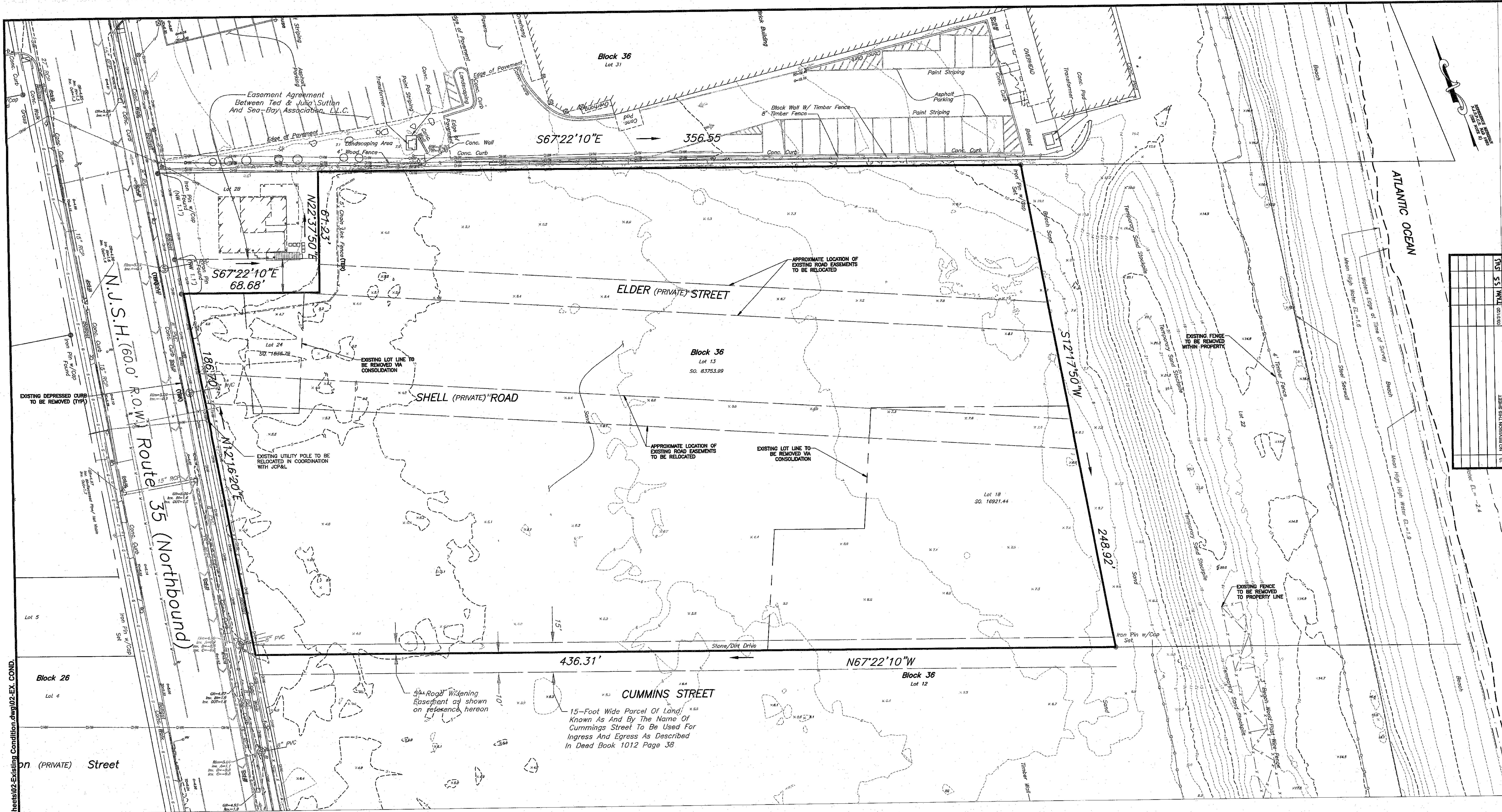
LETTER OF MAP REVISION (LOMR MAP No. 34029C0218F)



SEAN M. SAVAGE, P.E.
NEW JERSEY PROFESSIONAL ENGINEER
LICENSED 120045000

MATRIX NEW WORLD
Engineering Progress
Matrix New World Engineering, Land Surveying
and Landscape Architecture, P.C.
442 State Route 35, Second Floor
Eatontown, New Jersey 07724
WBE / DBE
NEW JERSEY CERTIFICATE OF AUTHORIZATION NO. 24602798200

TITLE SHEET
**PRELIMINARY AND FINAL MAJOR SITE PLAN
CAMP OSBORN OCEAN SITE
BLOCK 36, LOTS 13, 18, 22 & 24**
SITUATED IN
TOWNSHIP OF BRICK, OCEAN COUNTY, NEW JERSEY
PROJECT NUMBER: LD14-160
DATE: 9/11/2017
SCALE: AS SHOWN
SHEET 1 of 12



NO.	DATE	DESCRIPTION
1.	11/20/17	REVISED PER PLAN COMMENTS
2.	11/20/17	REVISED PER PLAN COMMENTS
3.	11/20/17	REVISED PER PLAN COMMENTS
4.	11/20/17	REVISED PER PLAN COMMENTS
5.	11/20/17	REVISED PER PLAN COMMENTS
6.	11/20/17	REVISED PER PLAN COMMENTS
7.	11/20/17	REVISED PER PLAN COMMENTS
8.	11/20/17	REVISED PER PLAN COMMENTS
9.	11/20/17	REVISED PER PLAN COMMENTS
10.	11/20/17	REVISED PER PLAN COMMENTS

SEAN M. SAVAGE, P.E.
 NEW JERSEY PROFESSIONAL ENGINEER
 LICENSE NO. 24064451000
 DATE: 11/20/17

MATRIXNEWORLD
 Engineering Progress
 Matrix New World Engineering, Land Surveying
 3800 Camp Osborn Road, Suite 305
 Eatontown, New Jersey 07724
 Tel: 732-588-2899
 Fax: 732-540-1818
 www.matrixnewworld.com
 NEW JERSEY CERTIFICATE OF AUTHORIZATION NO. 24602768200

FEMA FLOOD NOTES

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 FLOOD ZONE VE - BASE FLOOD ELEVATION DETERMINED. (EL. 14.0 FT.) N.A.V.D. 1988 IS CONTAINED ENTIRELY WITHIN LOT 22

NOTICE TO CONTRACTOR

ATTENTION OF THE CONTRACTOR IS DIRECTED TO THE FACT THAT THE APPROXIMATE LOCATIONS OF KNOWN UTILITY STRUCTURES AND FACILITIES THAT MAY BE ENCOUNTERED WITHIN AND ADJACENT TO THE LIMITS OF WORK AREA ARE SHOWN ON THE PLANS. THE ACCURACY AND COMPLETENESS OF THIS INFORMATION IS NOT GUARANTEED BY THE ENGINEER, AND THE CONTRACTOR IS ADVISED TO VERIFY, IN THE FIELD, ALL THE FACTS CONCERNING THE LOCATION OF THESE UTILITIES AND OTHER CONSTRUCTION OBSTACLES PRIOR TO THE START OF CONSTRUCTION. FURTHER, THE CONTRACTOR SHALL NOTIFY THE ENGINEER, IN WRITING, PRIOR TO CONSTRUCTION, OF ANY DISCREPANCIES WHICH MAY AFFECT THE PROJECT DESIGN.
 THE CONTRACTOR SHALL CONTACT NEW JERSEY ONE CALL (1-800-272-1000 OR LATEST NUMBER) FOR UTILITY MARKOUT PRIOR TO THE START OF CONSTRUCTION.

EXISTING CONDITIONS/DEMOLITION NOTES:

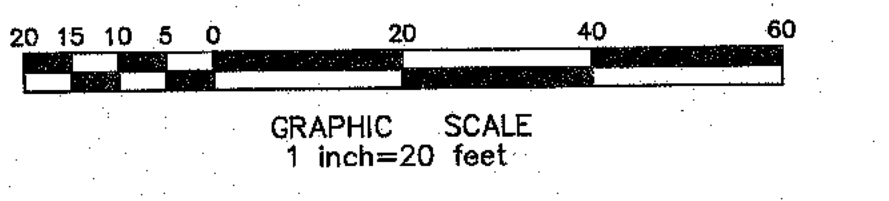
- PROJECT KNOWN AND DESIGNATED AS TAX MAP LOT(S) LOTS 13, 18, 22 & 24 IN BLOCK 36, AS SHOWN ON SHEET 9.03 OF THE TOWNSHIP OF BRICK, OCEAN COUNTY, NEW JERSEY TAX MAP DATED OCTOBER 1, 1920.
- HORIZONTAL DATUM: NAVD83; VERTICAL DATUM: NAVD83.
- TO CONVERT FROM NAVD83 TO NAD83, TO CONVERT FROM NAD83 TO NAD83 +1.14'.
- THE CONTRACTOR IS ADVISED TO THE FACT THAT THE APPROXIMATE LOCATIONS OF KNOWN UTILITY STRUCTURES AND FACILITIES (INCLUDING BUT NOT LIMITED TO SANITARY SEWERS, STORM SEWERS, POTABLE WATER LINES AND APPURTENANCES, NATURAL GAS LINES, ELECTRIC TELEPHONE AND CABLE LINES AND UNDERGROUND STORAGE TANKS) THAT MAY BE ENCOUNTERED WITHIN AND ADJACENT TO THE LIMITS OF THE WORK ARE SHOWN ON THE PLANS. THE ACCURACY AND COMPLETENESS OF THIS INFORMATION IS NOT GUARANTEED BY THE ENGINEER, AND THE CONTRACTOR IS ADVISED TO VERIFY, IN THE FIELD, ALL THE FACTS CONCERNING THE LOCATION AND ELEVATION OF THESE UTILITIES OR OTHER CONSTRUCTION OBSTACLES IMPACTED BY NEW CONSTRUCTION PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL NOTIFY THE ENGINEER, IN WRITING, PRIOR TO CONSTRUCTION, OF ANY DISCREPANCIES WHICH MAY AFFECT THE PROJECT DESIGN.
- ALL UNDERGROUND UTILITIES, LINES, PIPING, STRUCTURES, FOUNDATIONS, VAULTS AND BUILDING FRAGMENTS ASSOCIATED WITH FORMER BUILDINGS, WITHIN THE PROJECT BOUNDARY, ARE TO BE REMOVED AND DISPOSED OFF SITE.
- ALL DEMOLITION SHALL CONFORM TO ANY APPLICABLE FEDERAL, STATE OR LOCAL REGULATIONS. THE CONTRACTOR HAS SOLE RESPONSIBILITY FOR SITE SAFETY AND WILL CONFORM TO AND ABIDE BY ALL CURRENT OSHA STANDARDS OR REGULATIONS. SAFE CONSTRUCTION PRACTICES REMAIN THE OBLIGATION OF THE CONTRACTOR. THE CONTRACTOR SHALL OBTAIN ALL APPLICABLE FEDERAL, STATE AND LOCAL PERMITS PRIOR TO ABANDONMENT AND/OR DEMOLITION.
- ALL SANITARY SEWER AND STORM SEWER MAINS AND STRUCTURES, INCLUDING CLEANOUTS, SHOWN WITHIN THE PROJECT'S BOUNDARY SHALL BE REMOVED AND DISPOSED OF OFF-SITE AT AN APPROPRIATE DISPOSAL FACILITY.
- THE CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES THAT CONSTRUCTION OF THE WORK UNDER THIS PLAN WILL PASS THROUGH AREAS WHERE THEIR SERVICES EXIST. NOTIFICATION TO THE UTILITIES MUST BE MADE IN A SUFFICIENT AMOUNT OF TIME IN ADVANCE (MIN. 72 HOURS) PRIOR TO START OF ANY CONSTRUCTION WORK IN THE AFFECTED AREAS.
- ALL UTILITY SERVICES TO EXISTING RESIDENTIAL AND COMMERCIAL BUILDINGS ADJACENT TO THE PROJECT, THAT ARE TO REMAIN, WILL BE MAINTAINED DURING SITE CONSTRUCTION UNTIL THE REPLACEMENT UTILITIES ARE FULLY OPERATIONAL AND ACCEPTED BY THE APPROPRIATE AUTHORITY. THE CONTRACTOR SHALL PROVIDE ADVANCE NOTICE TO THE BUILDING OWNERS OF ANY TEMPORARY INTERRUPTIONS OF SERVICES. TEMPORARY INTERRUPTIONS MAY BE NEEDED TO CONNECT THE EXISTING SERVICES TO THE NEWLY CONSTRUCTED UTILITIES AND TO TEST THE NEW UTILITIES.
- THE CONTRACTOR IS RESPONSIBLE TO ENSURE SHUT OFF, DISCONNECT, AND/OR CAPPING OF ALL UTILITIES TO THE SITE INCLUDING, BUT NOT LIMITED TO, WATER, SEWER, ELECTRIC, CABLE, TELEPHONE, ETC. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL UTILITY SHUT OFFS AND LETTERS. OBTAINING ALL PERMITS TO COMPLETE ALL PHASES OF THE PROJECT AND TO PROVIDE PERIMETER CHAIN LINK FENCING (MIN. 6' HIGH) AND SELF FENCING (MIN. 3' HIGH) FOR THE DURATION OF THE DEMOLITION PROJECT. IN ADDITION, THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING A CONSTRUCTION ENTRANCE WITH A SOIL DECONTAMINATION STATION AND MAINTAINING SITE SECURITY. AN APPROVED SOIL EROSION & SEDIMENT CONTROL PLAN WILL BE PROVIDED UPON REQUEST.
- ALL SUITABLE MATERIAL SHALL BE CRUSHED AND STOCKPILED ON SITE. MATERIAL SHALL BE SEPARATED FROM SITE BY STOCKPILING ON 3M CLEAR PLASTIC. MATERIAL TO BE CRUSHED TO SPECIFICATION PROVIDED BY GEOTECHNICAL ENGINEER FOR STRUCTURAL, E.T.C.

LEGEND

- BOUNDARY LINE
- BLOCK LINE
- EXISTING ROW
- LOT LINE
- CURB LINE
- DEPRESSED CURB
- FACE OF CURB
- DEPRESSED CURB
- EDGE OF PAVEMENT
- FENCE
- STORM DRAIN
- SANITARY SEWER
- GUIDE RAIL
- UNDERGROUND ELECTRIC LINE
- OVER HEAD WIRE
- UNDERGROUND TELEPHONE
- UNDERGROUND CABLE TELEVISION
- GAS LINE
- WATER LINE
- TREE LINE
- CONTOURS MINOR
- CONTOURS MAJOR
- SPOT ELEVATION
- BOTTOM OF CURB
- TOP OF CURB
- GRATE ELEVATION
- GENERAL SIGN
- STREET SIGN
- MAIL BOX
- FIRE HYDRANT
- WATER VALVE
- WATER METER
- MONITOR WELL
- GAS VALVE
- GAS METER
- SANITARY CLEAN OUT
- MANHOLE
- STORM DRAINAGE INLET
- HEADWALL
- FLARED END SECTION
- UTILITY POLE
- GUY ANCHOR
- LIGHT POLE
- SINGLE HEAD LAMP
- UNKNOWN VALVE
- DEODUCOUS TREE
- EVERGREEN TREE
- PROPOSED CAPPED UTILITY
- TO BE ABANDONED
- TO BE REMOVED
- TO REMAIN

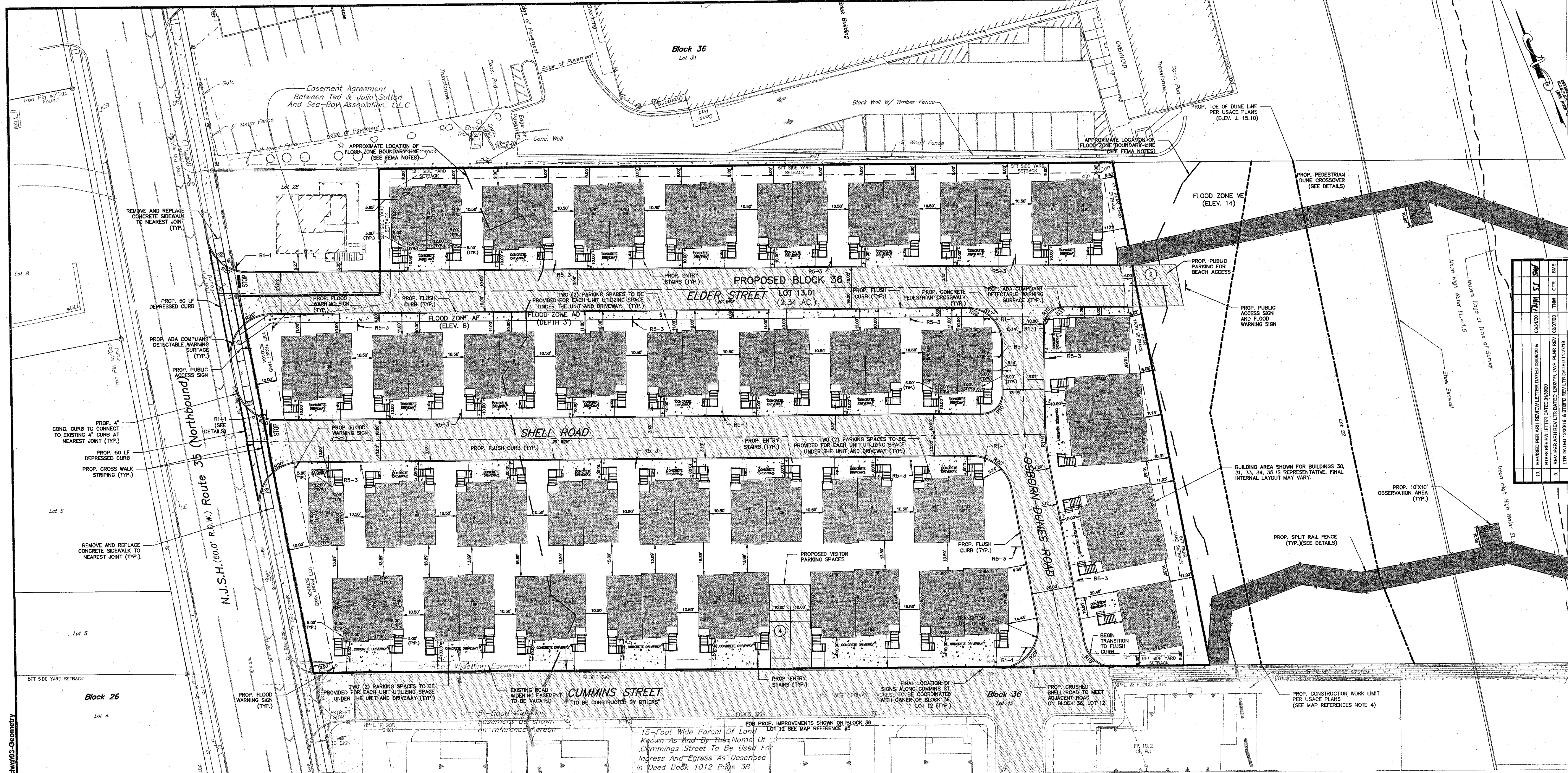
THIS IS TO CERTIFY THAT THE WATER AND SEWER DESIGN CONFORMS WITH THE RULES AND REGULATIONS OF THE BRICK TOWNSHIP MUNICIPAL UTILITIES AUTHORITY.

STEPHEN T. SPECHT, P.E.
 DEPUTY EXECUTIVE DIRECTOR & DIRECTOR OF ENGINEERING/OPERATIONS
 BRICK UTILITIES' FILE # _____
 DATE _____
 APPROVED BY THE BRICK TOWNSHIP PLANNING BOARD
 CHAIRPERSON _____ DATE _____
 SECRETARY _____ DATE _____
 PLANNING BOARD ENGINEER _____ DATE _____



EXISTING CONDITIONS & DEMOLITION PLAN
PRELIMINARY AND FINAL MAJOR SITE PLAN
CAMP OSBORN OCEAN SITE
BLOCK 36, LOTS 13, 18, 22 & 24
 TOWNSHIP OF BRICK, OCEAN COUNTY, NEW JERSEY
 PROJECT NUMBER: LD14-160
 DATE: 09/11/2017
 SCALE: 1"=20'
 SHEET 2 OF 12

Plotted: 4/12/2020 8:24 AM By: Sean Savage
 © MATRIXNEWORLD/MATRIXNEWORLD/Matrix LUS/John Osborn Sea-Bay/14-160 - Camp Osborn Ocean Site/Existing Conditions/Map/2-EX. COND.



Plotted: 3/31/2020 12:25 PM, By: Tori Massera
 © MATRIXNEWORLD D:\Matrix\LD14-160 - Camp Osborn Ocean Site\DWG\Plot Sheets\03-Site Plan.dwg\03-Geometry

FEMA FLOOD NOTES

THE SUBJECT PROPERTY RECEIVED A LETTER OF MAP REVISION (LOMR MAP NO. 34029C0218P) ON MAY 30, 2017 WHICH REVISED THE FLOOD INSURANCE RATE MAP SUCH THAT ONLY THE FOLLOWING FLOOD ZONES EXIST ON LOTS 13, 15, AND 24:

FLOOD ZONE AE - BASE FLOOD ELEVATION DETERMINED. (EL. 8.0 FT.) N.A.V.D. 1988

FLOOD ZONE AD - BASE FLOOD ELEVATION DETERMINED. (EL. 3.0 FT.) N.A.V.D. 1988

FLOOD ZONE VE - BASE FLOOD ELEVATION DETERMINED. (EL. 14.0 FT.) N.A.V.D. 1988 IS CONTAINED ENTIRELY WITHIN LOT 22

NOTICE TO CONTRACTOR

ATTENTION OF THE CONTRACTOR IS DIRECTED TO THE FACT THAT THE APPROXIMATE LOCATIONS OF KNOWN UTILITY STRUCTURES AND FACILITIES THAT MAY BE ENCOUNTERED WITHIN AND ADJACENT TO THE LIMITS OF WORK AREA ARE SHOWN ON THE PLANS. THE ACCURACY AND COMPLETENESS OF THIS INFORMATION IS NOT GUARANTEED BY THE ENGINEER, AND THE CONTRACTOR IS ADVISED TO VERIFY, IN THE FIELD, ALL THE FACTS CONCERNING THE LOCATION OF THESE UTILITIES AND OTHER CONSTRUCTION OBSTACLES PRIOR TO THE START OF CONSTRUCTION. FURTHER, THE CONTRACTOR SHALL NOTIFY THE ENGINEER, IN WRITING, PRIOR TO THE START OF CONSTRUCTION, OF ANY DISCREPANCIES WHICH MAY AFFECT THE PROJECT DESIGN.

THE CONTRACTOR SHALL CONTACT NEW JERSEY ONE CALL (1-800-272-1000 OR LATEST NUMBER) FOR UTILITY MARKOUT BEFORE THE START OF CONSTRUCTION.

MAP REFERENCES:

- BOUNDARY AND TOPOGRAPHIC INFORMATION SHOWN HEREON IS BASED UPON A SURVEY ENTITLED, "BOUNDARY AND TOPOGRAPHIC SURVEY, CAMP OSBORN OCEAN SITE, TAX LOT 13, 15 & 24 - BLOCK 36, SITUATED IN TOWNSHIP OF BRICK, OCEAN COUNTY, NEW JERSEY," DATED JULY 31, 2017 AND PREPARED BY MATRIX NEW WORLD ENGINEERING.
- BOUNDARY INFORMATION FOR LOT 22 SHOWN HEREON IS BASED ON TAX MAP SHEET NO. 9.03 OF THE TOWNSHIP OF BRICK, OCEAN COUNTY, NEW JERSEY TAX MAP DATED OCTOBER 1, 1950.
- "STATE OF NEW JERSEY DEPARTMENT OF TRANSPORTATION PLANS OF ROUTE 36 RESTORATION (SANDY RESTORATION) TOWNSHIP OF BRICK, OCEAN COUNTY, NEW JERSEY, PROJECT NO. 9.07 CONTRACT NO. OSBORN03 PARKING DRIVEWAYS & STRUCTURES" DATED APRIL 2015.
- "BEACHFILL, INITIAL CONSTRUCTION, MANASQUAN INLET TO BARNEDET INLET, OCEAN COUNTY, NEW JERSEY, FB NO. W9128U-16-B-001A," AS PREPARED BY U.S. ARMY CORPS OF ENGINEERS DATED SEPTEMBER 2016.
- PROPOSED IMPROVEMENTS FOR ADJACENT TAX LOT 12 - BLOCK 36 BASED UPON SITE PLANS TITLED "PRELIMINARY MAJOR SUBDIVISION FOR OSBORN ESTATES, LOT 12, BLOCK 36, TOWNSHIP OF BRICK, OCEAN COUNTY, N.J." AS PREPARED BY UNSTRON, DESIGNER & ARCH. P.C., DATED 5/11/17, LAST REVISED 7/10/19.

GEOMETRY NOTES:

- THE SUBJECT SITE IS KNOWN AND DESIGNATED AS BLOCK 36, LOTS 13, 15, 22 & 24 AS SHOWN ON SHEET 9.03 OF THE TOWNSHIP OF BRICK, OCEAN COUNTY, NEW JERSEY TAX MAP DATED OCTOBER 1, 1950.
- HORIZONTAL DATUM NAD 83; VERTICAL DATUM NAVD 88
- CONTRACTOR RESPONSIBLE FOR OBTAINING PERMITS FROM THE STATE AND ALL OTHER APPLICABLE PERMITS FROM AGENCIES HAVING JURISDICTION.
- THE CONTRACTOR SHALL OBTAIN ALL APPLICABLE FEDERAL, STATE AND LOCAL PERMITS PRIOR TO CONSTRUCTION.
- ALL CONSTRUCTION SHALL CONFORM WITH APPLICABLE FEDERAL, STATE AND LOCAL REGULATIONS. THE CONTRACTOR HAS SOLE RESPONSIBILITY FOR SITE SAFETY AND SHALL CONFORM TO AND ABIDE BY ALL CURRENT OSHA STANDARDS OR REGULATIONS. SAFE CONSTRUCTION PRACTICES ARE THE OBLIGATION OF THE CONTRACTOR.
- ALL PROPOSED HOUSES SHALL HAVE FINISHED FLOORS SET AT LEAST TWO (2) FEET ABOVE THE FLOOD ELEVATION AT THE HOME. ALL HOMES ON THIS TRACT ARE REQUIRED TO HAVE AT LEAST ONE (1) PARKING SPACE UNDERNEATH AT THE GARAGE FLOOR ELEVATIONS SHOWN, WHICH WILL REQUIRE THE FINISHED FLOOR TO BE NINE (9) FEET ABOVE THE GROUND SURFACE AND THEREFORE EXCEED THE MINIMUM ELEVATIONS SPECIFIED ABOVE, IN ACCORDANCE WITH ORDINANCE SECTION 245.
- PROPOSED LOT NUMBER TO BE APPROVED BY THE TOWNSHIP OF BRICK TAX ASSESSOR.
- NO BASEMENTS ARE PROPOSED AS PART OF THIS PROJECT.
- ALL FLOOR FLOORS ARE REQUIRED TO BE AT LEAST TWO (2) FEET ABOVE THE FLOOD HAZARD ELEVATION, IN ACCORDANCE WITH ORDINANCE SECTION 245.
- PROPOSED GARAGES AS WELL AS THE ENCLOSURES OTHER THAN GARAGES WILL BE CONSTRUCTED AS PER THE MINIMUM REQUIREMENTS SET FORTH AS PER N.J.A.C. 7:15-12.6(a), WITH PERMANENT FLOOD OPENINGS THAT MEET THE REQUIREMENTS OF THE UNIFORM CONSTRUCTION CODE AS PER N.J.A.C. 5:23.
- PROPOSED DWELLINGS MUST PROVIDE ONE (1) ENGINEERED FLOOD VENT FOR EVERY 200 SQUARE FEET OF ENCLOSED AREA. SEE ARCHITECTURAL PLANS FOR FINAL LOCATIONS.
- TITLE 39 TO APPLY TO ALL PRIVATE ROADS INCLUDING ELDER STREET, SHELL ROAD, AND OSBORN DUNES ROAD.
- NO PARKING, GATES OR BARRIAGES SHALL BE ALLOWED ON ANY PRIVATE ROADS AT ANY TIME.
- NO SIGNS TO BE IN ANY SETBACK AREAS AS DESIGNATED IN THE BEACH OUTAGE COMMUNITY ZONE.
- NO FENCES SHALL BE ALLOWED WITHIN THE FRONT YARD SETBACKS ALONG STATE HIGHWAY ROUTE 35, DUE TO THE LIMITED SIGHT DISTANCES.
- ALL ON-SITE CURBING TO BE FLUSH CURB UNLESS OTHERWISE INDICATED.
- ALL ACCESSORY USES ARE PROHIBITED, INCLUDING BUT NOT LIMITED TO DETACHED DECKS, SHED, FENCES, STORAGE BINS, POOLS AND ANY AND ALL OTHER ACCESSORY USES DEFINED IN PART 2 OF ORDINANCE SECTION 245-296.3 C.
- AT GRADE PATIOS, CONCRETE WALKS AND PAVERS ARE PERMITTED WITHIN SETBACK LIMITS (SEE ORDINANCE SECTION 245-296.3 D. (3) A & B)
- STORAGE IS PERMITTED UNDER STRUCTURES THAT HAVE BEEN ELEVATED TO MEET FLOODPLAIN ELEVATION; HOWEVER, THESE AREAS ARE REQUIRED TO BE SECURED AS TO PREVENT HAZARDOUS CONDITIONS DURING FLOODING AND MAY NOT IMPED REQUIRED PARKING AREAS.
- PER ORDINANCE SECTION 245-296.3 H. (2) THE AREA BENEATH THE MAIN STRUCTURE MAY ONLY BE UTILIZED FOR ACCESS TO THE STRUCTURE, STORAGE, AND VEHICULAR PARKING. ALL OTHER USES ARE PROHIBITED. STORAGE AREAS MAY NOT INTRUDE INTO THE VEHICULAR PARKING SECTION. ENCLOSURES AT GRADE LEVEL OF DUPLEX UNITS MAY NOT EXCEED 15% OF THE BUILDING FOOTPRINT AND MUST MEET THE REQUIREMENTS OF THE UNIFORM CONSTRUCTION CODE.
- GRILLING IS NOT PERMITTED UNDERNEATH STRUCTURES, GRILLS AND OTHER RECREATIONAL AMENITIES CAN BE STORED UNDER STRUCTURES AND ROLLED OUT INTO COMMON AREAS FOR USE.
- STAIRCASES, DECKS, PORCHES AND OTHER ATTACHED STRUCTURES SUCH AS AIR CONDITIONING CONDENSERS AND/OR GENERATORS SHALL NOT EXTEND OUTSIDE OF THE BUILDING STRUCTURE FOOTPRINT IF THE RESULT WOULD BE THE CREATION OF A SEPARATION OF LESS THAN 10 FEET BETWEEN STRUCTURES.

THIS IS TO CERTIFY THAT THE WATER AND SEWER DESIGN CONFORMS WITH THE RULES AND REGULATIONS OF THE BRICK TOWNSHIP MUNICIPAL UTILITIES AUTHORITY.

STEPHEN T. SPICIT, P.E.
 DEPUTY EXECUTIVE DIRECTOR &
 DIRECTOR OF ENGINEERING/OPERATIONS

BRICK UTILITIES' FILE # _____

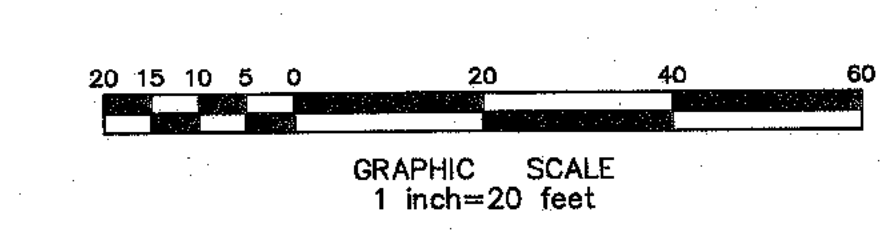
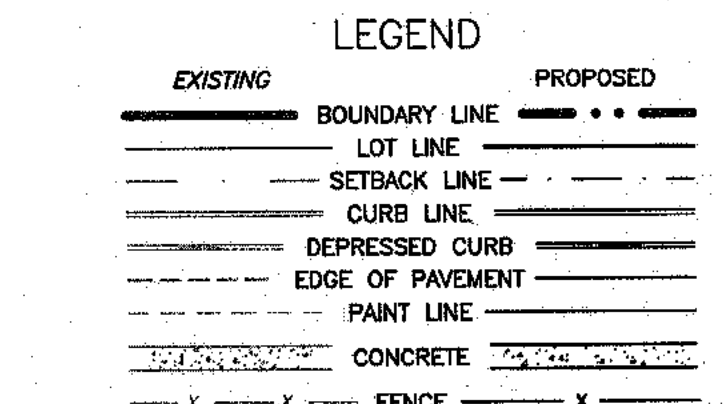
DATE _____

APPROVED BY THE
 BRICK TOWNSHIP
 PLANNING BOARD

CHAIRPERSON _____ DATE _____

SECRETARY _____ DATE _____

PLANNING BOARD ENGINEER _____ DATE _____



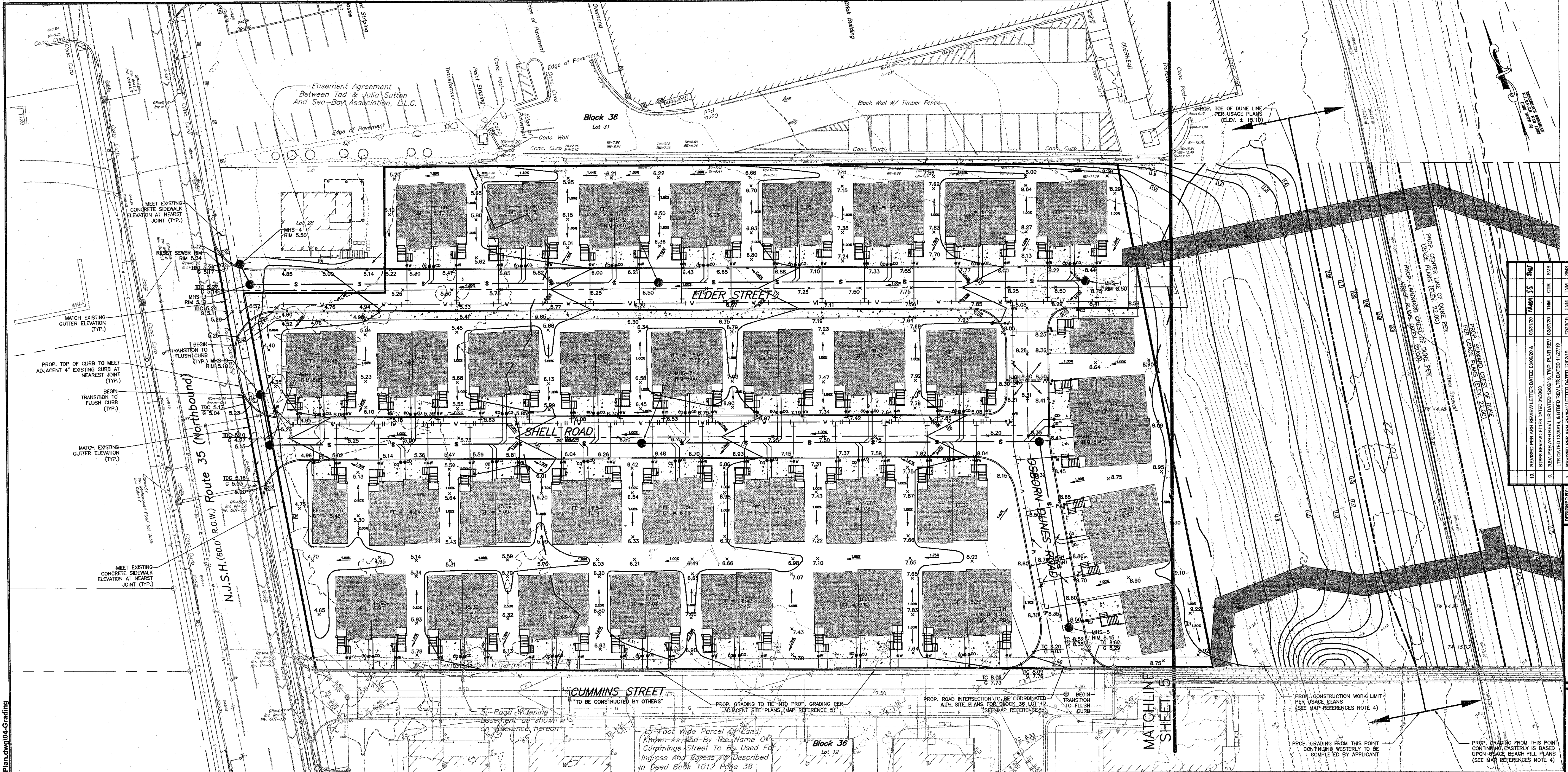
NO.	REVISION	DATE	DESCRIPTION
101	REVISED PER ANH REVISION LETTER DATED 03/09/20 & 03/10/20	03/09/20	REVISED PER ANH REVISION LETTER DATED 03/09/20 & 03/10/20
9	REVISED PER ANH REVISION LETTER DATED 12/02/19, TWP. PLAN REV. 15/07/20	12/02/19	REVISED PER ANH REVISION LETTER DATED 12/02/19, TWP. PLAN REV. 15/07/20
8	REVISED PER ANH REVISION LETTER DATED 11/27/19	11/27/19	REVISED PER ANH REVISION LETTER DATED 11/27/19
7	REVISED PER ANH REVISION LETTER DATED 10/27/19, 10/27/19	10/27/19	REVISED PER ANH REVISION LETTER DATED 10/27/19, 10/27/19
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1	REVISED PER ANH REVISION LETTER DATED 10/27/19, 10/27/19	10/27/19	REVISED PER ANH REVISION LETTER DATED 10/27/19, 10/27/19

SEAN M. SAVAGE, P.E.
 NEW JERSEY LICENSE NO. 34664651000
 4/12/20

MATRIXNEWORLD
 Engineering Progress
 Matrix New World Engineering, Land Surveying
 and Landscape Architecture, P.C.
 442 State Route 35, Second Floor
 Eatontown, New Jersey 07724
 Tel: 732-668-8888
 Fax: 877-344-6666
 WWW: www.matrixnewworld.com
 NEW JERSEY CERTIFICATE OF AUTHORIZATION NO. 24642792300

GEOMETRY PLAN
 PRELIMINARY AND FINAL MAJOR SITE PLAN
 CAMP OSBORN OCEAN SITE
 BLOCK 36, LOTS 13, 15, 22 & 24
 SITUATED IN
 TOWNSHIP OF BRICK, OCEAN COUNTY, NEW JERSEY

PROJECT NUMBER: LD14-160
 DATE: 08/11/2017
 SCALE: 1"=20'
 SHEET 3 of 12



NO.	DATE	DESCRIPTION	BY	CHKD
15	02/01/2020	REVISION PER ASH REVIEW LETTER DATED 02/02/2020	SMS	SMS
14	01/27/2020	REVISION PER ASH REVIEW LETTER DATED 01/27/2020	SMS	SMS
13	01/27/2020	REVISION PER ASH REVIEW LETTER DATED 01/27/2020	SMS	SMS
12	01/27/2020	REVISION PER ASH REVIEW LETTER DATED 01/27/2020	SMS	SMS
11	01/27/2020	REVISION PER ASH REVIEW LETTER DATED 01/27/2020	SMS	SMS
10	01/27/2020	REVISION PER ASH REVIEW LETTER DATED 01/27/2020	SMS	SMS
9	01/27/2020	REVISION PER ASH REVIEW LETTER DATED 01/27/2020	SMS	SMS
8	01/27/2020	REVISION PER ASH REVIEW LETTER DATED 01/27/2020	SMS	SMS
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1	01/27/2020	REVISION PER ASH REVIEW LETTER DATED 01/27/2020	SMS	SMS

SEAN M. SAVAGE, P.E.
 NEW JERSEY PROFESSIONAL ENGINEER
 LICENSE NO. 24862440100

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 and Landscape Architecture, P.C.
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 Eatontown, New Jersey 07724
 Tel: 732-588-2959
 Fax: 732-240-1818
 www.matrixnewworld.com
 NEW JERSEY CERTIFICATE OF AUTHORIZATION NO. 246501952630

THIS IS TO CERTIFY THAT THE WATER AND SEWER DESIGN CONFORMS WITH THE RULES AND REGULATIONS OF THE BRICK TOWNSHIP MUNICIPAL UTILITIES AUTHORITY.

STEPHEN T. SPECHT, P.E.
 DEPUTY EXECUTIVE DIRECTOR &
 DIRECTOR OF ENGINEERING/OPERATIONS

APPROVED BY THE
 BRICK TOWNSHIP
 PLANNING BOARD

CHAIRPERSON DATE
 SECRETARY DATE
 PLANNING BOARD ENGINEER DATE

NOTICE TO CONTRACTOR

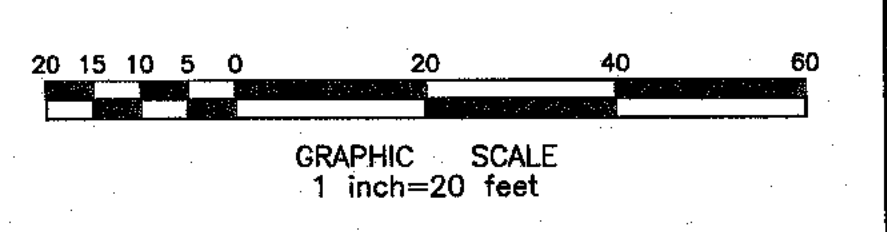
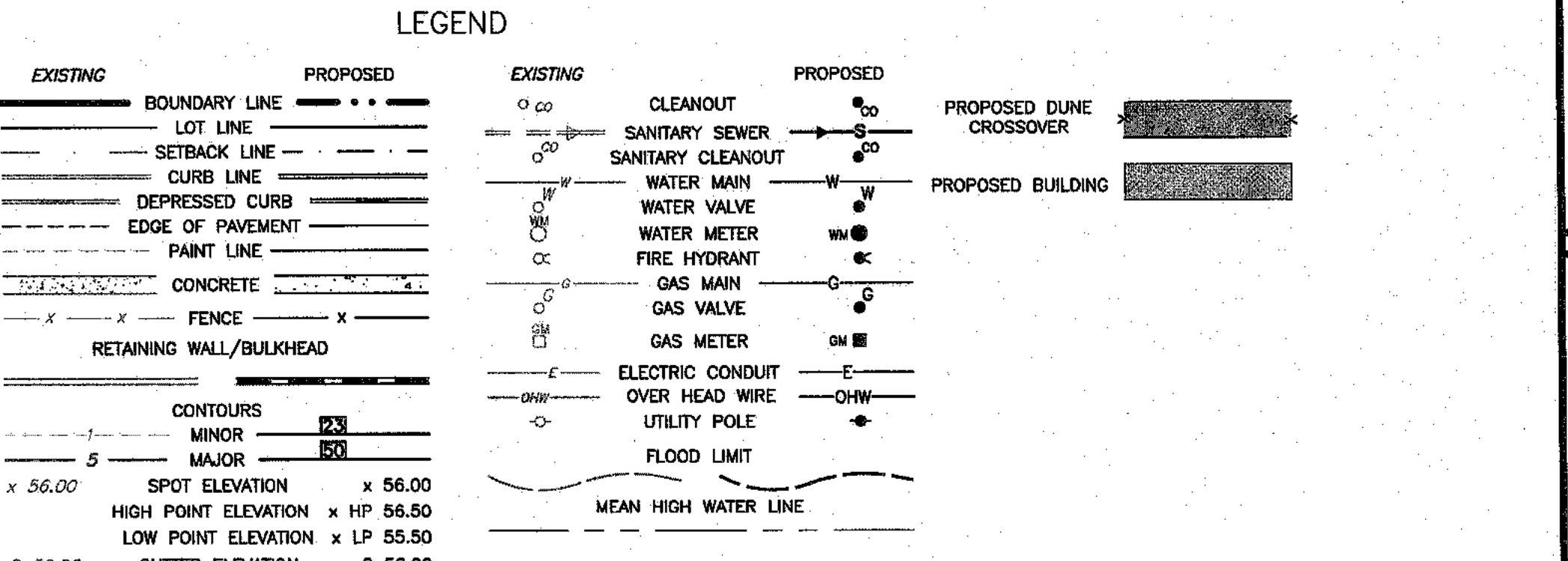
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THE CONTRACTOR SHALL CONTACT NEW JERSEY ONE CALL (1-800-272-1000 OR LATEST NUMBER) FOR UTILITY MARKOUT BEFORE THE START OF CONSTRUCTION.

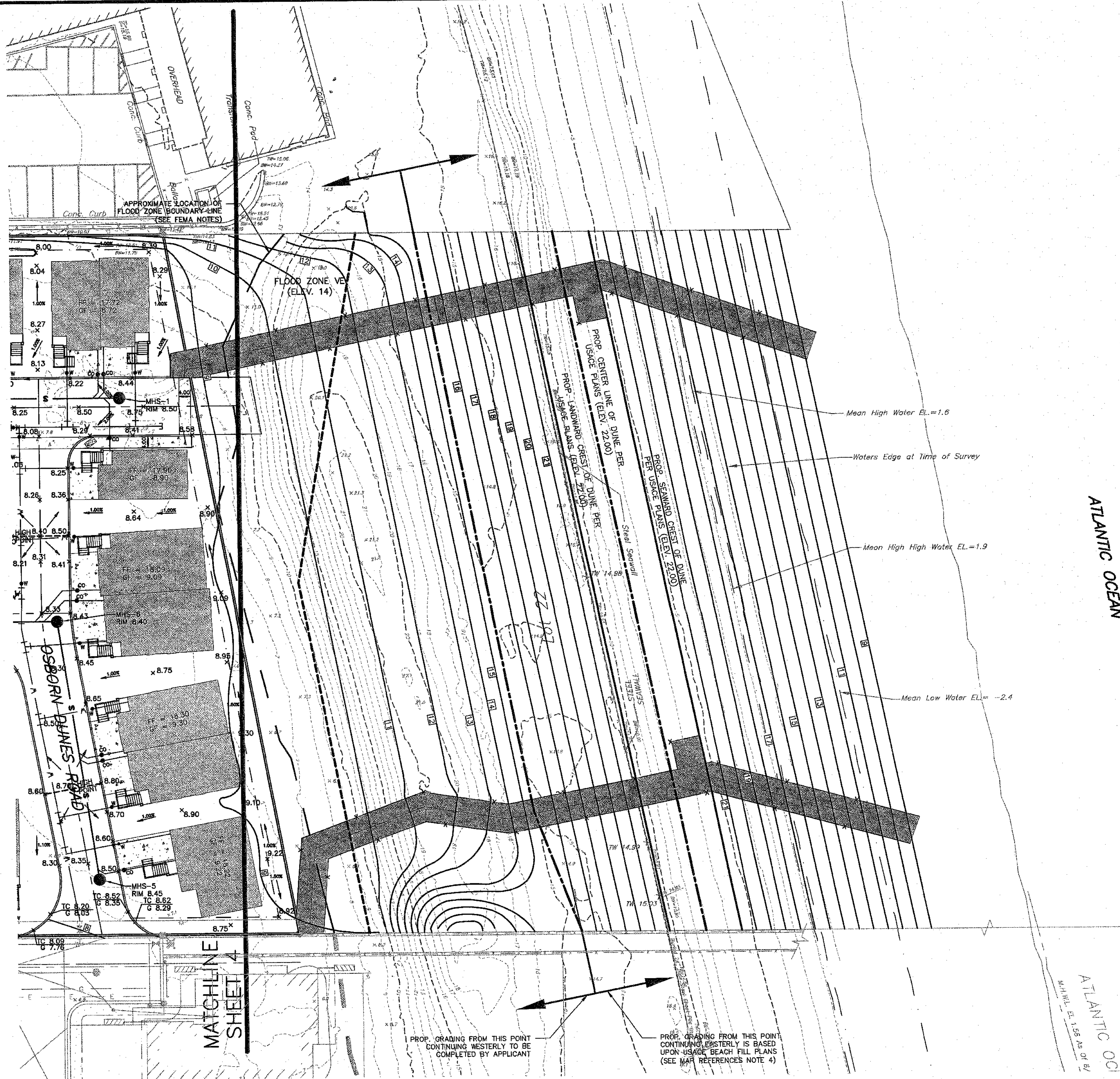
- MAP REFERENCES:**
- BOUNDARY AND TOPOGRAPHIC INFORMATION SHOWN HEREON IS BASED UPON A SURVEY ENTITLED, "BOUNDARY AND TOPOGRAPHIC SURVEY, CAMP OSBORN OCEAN SITE, TAX LOT 13, 18 & 24 - BLOCK 36, SITUATED IN TOWNSHIP OF BRICK, OCEAN COUNTY, NEW JERSEY," DATED JULY 31, 2017 AND PREPARED BY MATRIX NEW WORLD ENGINEERING.
 - BOUNDARY INFORMATION FOR LOT 22 SHOWN HEREON IS BASED ON TAX MAP SHEET NO. 9.03 OF THE TOWNSHIP OF BRICK, OCEAN COUNTY, NEW JERSEY TAX MAP DATED OCTOBER 1, 1950.
 - "STATE OF NEW JERSEY DEPARTMENT OF TRANSPORTATION PLANS OF ROUTE 35 RESTORATION (SANDY RESTORATION) TOWNSHIP OF BRICK TOWNSHIP TO MAINTAINING FROM MP 4.00 TO MP 9.07 CONTRACT NO. COMS0331 PAVING DRAINAGE & STRUCTURES," DATED APRIL 2013.
 - "BEACHFILL INITIAL CONSTRUCTION, MANASQUAN INLET TO BARNEGAT INLET, OCEAN COUNTY, NEW JERSEY, FBI NO. W912B1-16-9-0014," AS PREPARED BY U.S. ARMY CORPS OF ENGINEERS DATED SEPTEMBER 2016.
 - PROPOSED IMPROVEMENTS FOR ADJACENT TAX LOT 12 - BLOCK 36 BASED UPON SITE PLANS TITLED "PRELIMINARY MAJOR SUBDIVISION FOR OSBORN ESTATES, LOT 12, BLOCK 36, TOWNSHIP OF BRICK, OCEAN COUNTY, NJ," AS PREPARED BY UNDRISTON, DEISSNER & CARR, P.C., DATED 5/11/17, LAST REVISED 7/10/19.

- FEMA FLOOD NOTES**
- THE SUBJECT PROPERTY RECEIVED A LETTER OF MAP REVISION (LOMR MAP NO. 340220218P) ON MAY 30, 2017 WHICH REVISED THE FLOOD INSURANCE RATE MAP SUCH THAT ONLY THE FOLLOWING FLOOD ZONES EXIST ON LOTS 13, 18, AND 24:
- FLOOD ZONE AE - BASE FLOOD ELEVATION DETERMINED. (EL. 8.0 FT.) N.A.V.D. 1988
- FLOOD ZONE AO - BASE FLOOD ELEVATION DETERMINED. (EL. 3.0 FT.) N.A.V.D. 1988
- FLOOD ZONE VE - BASE FLOOD ELEVATION DETERMINED. (EL. 14.0 FT.) N.A.V.D. 1988 IS CONTAINED ENTIRELY WITHIN LOT 22

- GRADING NOTES:**
- PROJECT KNOWN AND DESIGNATED AS TAX MAP LOTS 13, 18, 22 & 24 IN BLOCK 36, AS SHOWN ON THE ON SHEET 9.03 OF TOWNSHIP OF BRICK, OCEAN COUNTY, NEW JERSEY TAX MAP DATED OCTOBER 1, 1950.
 - BLOCK, LOT, BOUNDARY, TOPOGRAPHIC AND UTILITY INFORMATION SHOWN HEREON IS BASED UPON THE BOUNDARY AND TOPOGRAPHIC SURVEY LISTED BELOW IN THE MAP REFERENCES, UNLESS OTHERWISE NOTED ON THIS PLAN.
 - HORIZONTAL DATUM: NAD83; VERTICAL DATUM: NAVD83.
 - TO CONVERT FROM NAVD83 TO NAVD29 +11.41'; TO CONVERT FROM NAVD29 TO NAVD83 -11.41'.
 - ALL GRADING OUTSIDE OF ROADWAY LIMITS TO BE A MAXIMUM OF 3:1 (3 HORIZONTAL, 1 VERTICAL) SLOPE UNLESS OTHERWISE NOTED.
 - ALL GRADING IN ROADWAY AREA SHALL BE GREATER THAN 0.5% UNLESS OTHERWISE NOTED.
 - WHILE IT IS ANTICIPATED THAT THIS SITE WILL INFILTRATE STORMWATER THROUGH THE PROPOSED GRAVEL/CRUSHED SHELL ROAD AND OPEN SPACES BETWEEN AND BEHIND HOUSES, IT SHALL BE ENSURED THAT THE EXISTING POSITIVE DRAINAGE PATH FROM EAST TO WEST IS MAINTAINED AS SHOWN. IN THE EVENT THAT OBSTRUCTIONS FORM BETWEEN HOUSES THAT COULD PREVENT THE EAST TO WEST FLOW DIRECTION AFTER CONSTRUCTION, POSITIVE DRAINAGE BETWEEN EACH HOUSE TOWARDS THE PROPOSED GRAVEL/CRUSHED SHELL ROAD SHALL BE PROVIDED AS SHOWN ON THIS PLAN. THE DESIGN INTENT IS FOR STORMWATER RUNOFF TO HAVE AN OVERLAND ESCAPE ROUTE AROUND ENCLOSED GARAGE AND/OR OTHER ENCLOSED GROUND FLOOR AREAS, WHICH IS A DETAIL THAT WILL BE PROVIDED AT THE TIME OF INDIVIDUAL PLOT PLAN PREPARATION.
 - FLOOR ELEVATIONS, ADJACENT GRADE, DOORWAY LOCATIONS AND ELEVATIONS SHALL BE CONFIRMED WITH ARCHITECTURAL PLANS PRIOR TO CONSTRUCTION BY THE CONTRACTOR.
 - NO SEDIMENT IS TO LEAVE THE PROPERTY UNLESS OTHERWISE AUTHORIZED BY THE TOWNSHIP. ALL EXCAVATED SOIL TO BE DISPOSED OF SHALL BE PROPERLY CLASSIFIED, HANDLED, AND DISPOSED OF OFF-SITE IN ACCORDANCE WITH ALL LOCAL, STATE, AND FEDERAL REGULATIONS.
 - ALL IMPORTED SOILS MUST BE CERTIFIED CLEAN FILL IN ACCORDANCE WITH THE NJDEP TECHNICAL REQUIREMENTS NJAC 7:26E. IMPORTED SOILS SHALL BE PLACED IN ACCORDANCE WITH THE GEOTECHNICAL SUBSURFACE INVESTIGATION REPORT. ALL IMPORTED MATERIAL REQUIRES APPROVAL BY OWNER PRIOR TO PLACEMENT ON-SITE.
 - ALL CONTRACTORS MUST CALL THE NEW JERSEY ONE CALL SYSTEM (800-272-1000) IN ACCORDANCE WITH THE UNDERGROUND FACILITIES CONTROL ACT LAW PRIOR TO ANY SUBSURFACE ACTIVITY.
 - CONTRACTOR SHALL OBTAIN ALL APPLICABLE FEDERAL, STATE AND LOCAL PERMITS PRIOR TO CONSTRUCTION.
 - CONSTRUCTION SHALL CONFORM TO ALL APPLICABLE FEDERAL, STATE AND LOCAL REGULATIONS. THE CONTRACTOR HAS SOLE RESPONSIBILITY FOR SITE SAFETY AND SHALL CONFORM TO AND ABIDE BY ALL CURRENT OSHA STANDARDS OR REGULATIONS. SAFE CONSTRUCTION PRACTICES ARE THE OBLIGATION OF THE CONTRACTOR.
 - ALL PROPOSED HOUSES SHALL HAVE FINISHED FLOORS SET AT LEAST TWO (2) FEET ABOVE THE FLOOD ELEVATION AT THE HOME. ALL HOMES ON THIS TRACT ARE REQUIRED TO HAVE AT LEAST ONE (1) PARKING SPACE UNDERNEATH AT THE GARAGE FLOOR ELEVATIONS SHOWN, WHICH WILL REQUIRE THE FINISHED FLOOR TO BE NINE (9) FEET ABOVE THE GROUND AND THEREFORE EXCEED THE MINIMUM ELEVATIONS SPECIFIED ABOVE, IN ACCORDANCE WITH ORDINANCE SECTION 245.
 - NO BASEMENTS ARE PROPOSED AS PART OF THIS PROJECT.
 - ALL FOYER GARAGES ARE REQUIRED TO BE AT LEAST TWO (2) FEET ABOVE THE FLOOD HAZARD ELEVATION, IN ACCORDANCE WITH ORDINANCE SECTION 245.
 - PROPOSED GARAGES AS WELL AS THE ENCLOSURES OTHER THAN GARAGES WILL BE CONSTRUCTED AS PER THE MINIMUM REQUIREMENTS SET FORTH AS PER N.J.A.C. 7:13-12.6(g), WITH PERMANENT FLOOD OPENINGS THAT MEET THE REQUIREMENTS OF THE UNIFORM CONSTRUCTION CODE AS PER N.J.A.C. 52:3.
 - PROPOSED DWELLINGS MUST PROVIDE ONE (1) ENGINEERED FLOOD VENT FOR EVERY 200 SQUARE FEET OF ENCLOSED AREA. SEE ARCHITECTURAL PLANS FOR FINAL LOCATION.
 - ALL WALKWAYS TO HAVE MAXIMUM CROSS SLOPES OF 2% AND RUNNING SLOPE OF 5% UNLESS OTHERWISE NOTED.
 - ALL ON-SITE CURBING TO BE FLUSH CURB UNLESS OTHERWISE INDICATED.



Plotted: 3/31/2020 12:27 PM, By: Tori Messera
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NO.	DESCRIPTION	DATE	DES.	REV.
10.	REVISED PER AMH REVIEW LETTER DATED 02/09/2018	02/09/2018	SS	01
9.	REV. PER AMH REVIEW LETTER DATED 01/09/2018	01/09/2018	SS	01
8.	REV. PER AMH REVIEW LETTER DATED 12/07/2017	12/07/2017	SS	01
7.	REV. PER AMH REVIEW LETTER DATED 11/07/2017	11/07/2017	SS	01
6.	REV. PER AMH REVIEW LETTER DATED 10/27/2017	10/27/2017	SS	01
5.	REV. PER AMH REVIEW LETTER DATED 10/27/2017	10/27/2017	SS	01
4.	REV. PER AMH REVIEW LETTER DATED 10/27/2017	10/27/2017	SS	01
3.	REV. PER AMH REVIEW LETTER DATED 10/27/2017	10/27/2017	SS	01
2.	REV. PER AMH REVIEW LETTER DATED 10/27/2017	10/27/2017	SS	01
1.	REVISED PER ADA COMMENTS	11/28/2017	SS	01

DESIGNED BY: CTD
 REVIEWED BY: CTD
 RELEASED BY: SMS

SEAN M. SAVAGE, P.E.
 NEW JERSEY LICENSE NO. 3442796200
 5/1/2022 DATE

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 and Landscaping Architecture, P.C.
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 Eatontown, New Jersey 07724
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 Fax: 732-586-2898
 www.matrixnewworld.com

GRADING PLAN
PRELIMINARY AND FINAL MAJOR SITE PLAN
CAMP OSBORN OCEAN SITE
BLOCK 36, LOTS 13, 16, 22 & 24
 SITUATED IN
 TOWNSHIP OF BRICK, OCEAN COUNTY, NEW JERSEY

PROJECT NUMBER: LD14-160
 DATE: 09/11/2017
 SCALE: 1"=20'
 SHEET 5 of 12

FEMA FLOOD NOTES

THE SUBJECT PROPERTY RECEIVED A LETTER OF MAP REVISION (LOMR MAP NO. 34429202187) ON MAY 30, 2017 WHICH REVISED THE FLOOD INSURANCE RATE MAP SUCH THAT ONLY THE FOLLOWING FLOOD ZONES EXIST ON LOTS 13, 16, AND 24:

FLOOD ZONE AE - BASE FLOOD ELEVATION DETERMINED. (EL. 8.0 FT.) N.A.V.D. 1988

FLOOD ZONE AO - BASE FLOOD ELEVATION DETERMINED. (EL. 3.0 FT.) N.A.V.D. 1988

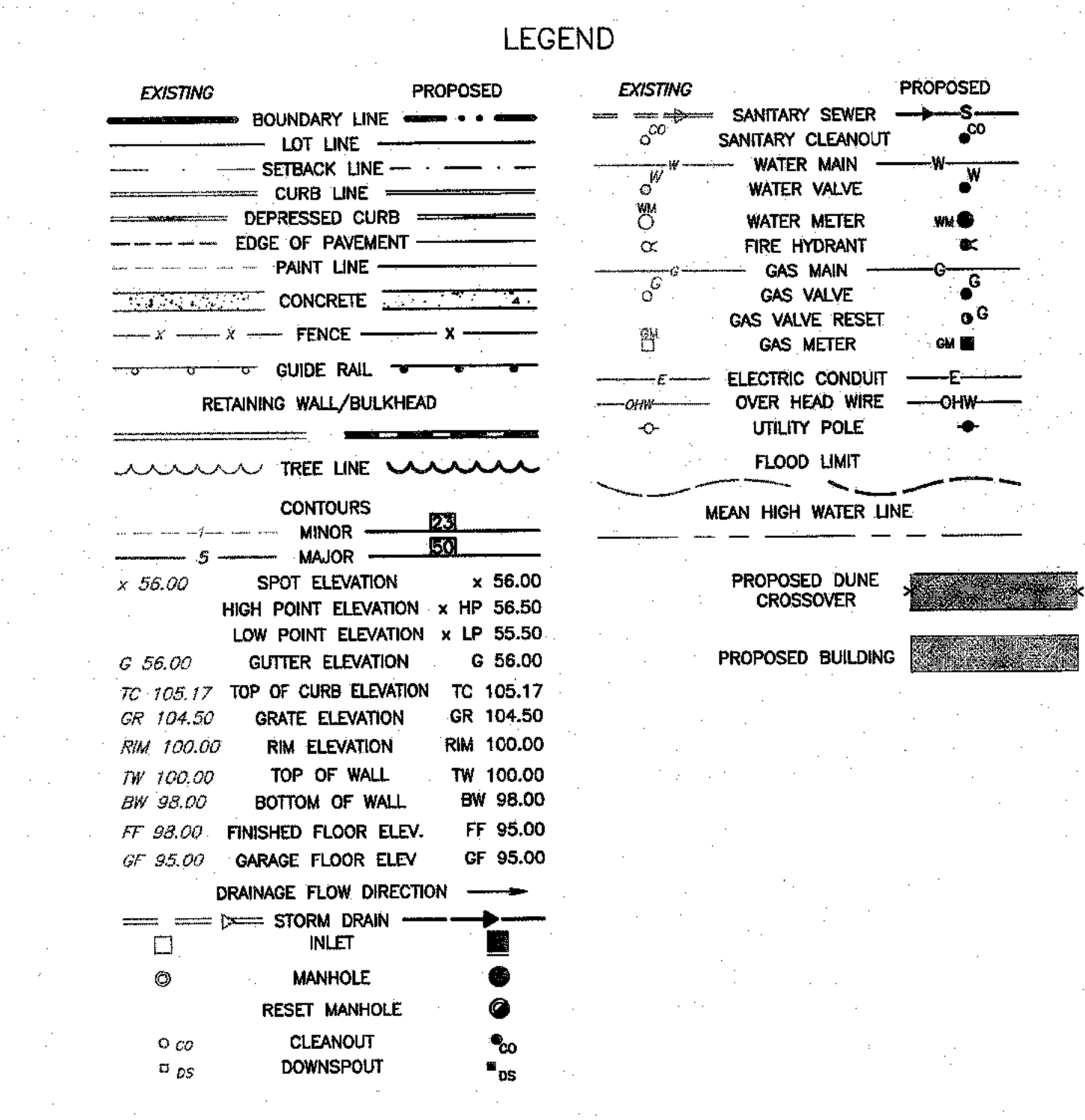
FLOOD ZONE VE - BASE FLOOD ELEVATION DETERMINED. (EL. 14.0 FT.) N.A.V.D. 1988 IS CONTAINED ENTIRELY WITHIN LOT 22

MAP REFERENCES:

- BOUNDARY AND TOPOGRAPHIC INFORMATION SHOWN HEREON IS BASED UPON A SURVEY ENTITLED, "BOUNDARY AND TOPOGRAPHIC SURVEY, CAMP OSBORN OCEAN SITE, LOT 13, 16 & 24 - BLOCK 36, SITUATED IN TOWNSHIP OF BRICK, OCEAN COUNTY, NEW JERSEY," DATED JULY 31, 2017 AND PREPARED BY MATRIX NEW WORLD ENGINEERING.
- BOUNDARY INFORMATION FOR LOT 22 SHOWN HEREON IS BASED ON TAX MAP SHEET NO. 8.03 OF THE TOWNSHIP OF BRICK, OCEAN COUNTY, NEW JERSEY TAX MAP DATED OCTOBER 1, 1950.
- "STATE OF NEW JERSEY DEPARTMENT OF TRANSPORTATION PLANS OF ROUTE 35 RESTORATION (SANDY RESTORATION) TOMS RIVER TOWNSHIP TO MANTELONING FROM MP4.00 TO MP 8.07 CONTRACT NO. 044850321 PAVING DRAGAGE & STRUCTURES" DATED APRIL 2013
- "BEACHFILL INITIAL CONSTRUCTION, MANASQUAN INLET TO BARNEGAT INLET, OCEAN COUNTY, NEW JERSEY, #2 NO. 99291-16-B-0014," AS PREPARED BY U.S. ARMY CORPS OF ENGINEERS DATED SEPTEMBER 2016.
- PROPOSED IMPROVEMENTS FOR ADJACENT TAX LOT 12 - BLOCK 36 BASED UPON SITE PLANS TITLED "PRELIMINARY MAJOR SUBDIVISION FOR OSBORN ESTATES, LOT 12, BLOCK 36, TOWNSHIP OF BRICK, OCEAN COUNTY, NJ," AS PREPARED BY LINDSTROM, DISSNER & CARR, P.C., DATED 5/11/17, LAST REVISED 7/10/18.

GRADING NOTES:

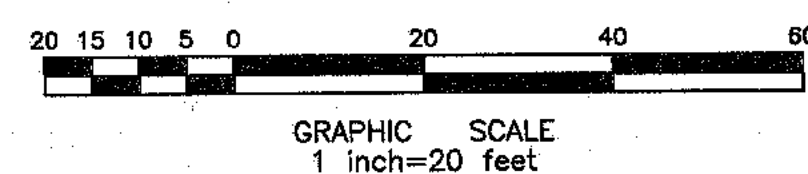
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- ALL CONTRACTORS MUST CALL THE NEW JERSEY ONE CALL SYSTEM (800-272-1000) IN ACCORDANCE WITH THE UNDERGROUND FACILITIES CONTROL ACT LAW PRIOR TO ANY SUBSURFACE ACTIVITY.
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- NO BASEMENTS ARE PROPOSED AS PART OF THIS PROJECT.
- ALL FLOOR FLOORS ARE REQUIRED TO BE AT LEAST TWO (2) FEET ABOVE THE FLOOD HAZARD ELEVATION, IN ACCORDANCE WITH ORDINANCE SECTION 245.
- PROPOSED GARAGES AS WELL AS THE ENCLOSURES OTHER THAN GARAGES WILL BE CONSTRUCTED AS PER THE MINIMUM REQUIREMENTS SET FORTH AS PER N.J.A.C. 7:13-12.5(a), WITH PERMANENT FLOOD OPENINGS THAT MEET THE REQUIREMENTS OF THE UNIFORM CONSTRUCTION CODE AS PER N.J.A.C. 5:23.
- PROPOSED DWELLINGS MUST PROVIDE ONE (1) ENGINEERED FLOOD VENT FOR EVERY 200 SQUARE FEET OF ENCLOSED AREA. SEE ARCHITECTURAL PLANS FOR FINAL LOCATION.
- ALL WALKWAYS TO HAVE MAXIMUM GROSS SLOPES OF 2% AND RUNNING SLOPE OF 5% UNLESS OTHERWISE NOTED.
- ALL ON-SITE CURBING TO BE FLUSH CURB UNLESS OTHERWISE INDICATED.



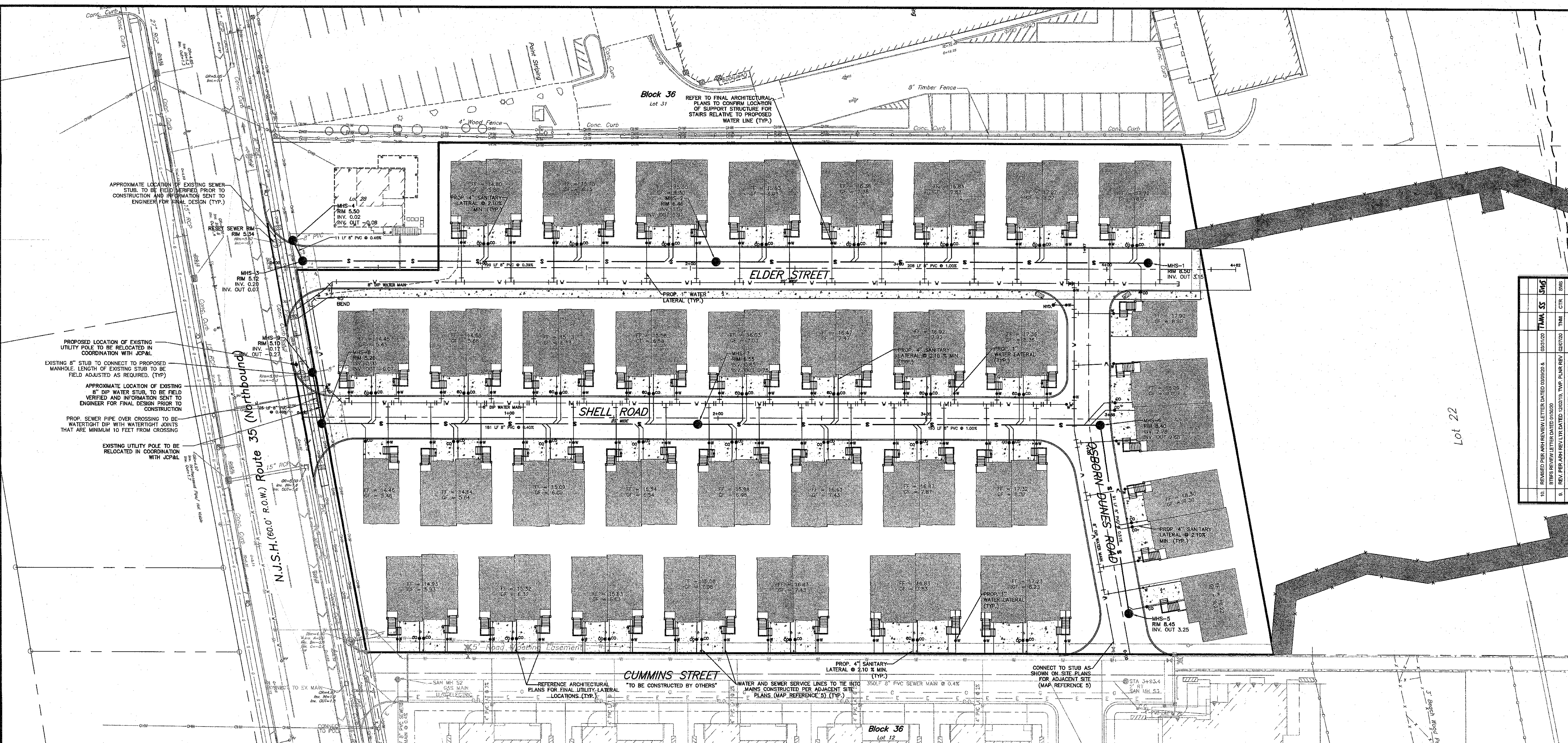
NOTICE TO CONTRACTOR

ATTENTION OF THE CONTRACTOR IS DIRECTED TO THE FACT THAT THE APPROXIMATE LOCATIONS OF KNOWN UTILITY STRUCTURES AND FACILITIES THAT MAY BE ENCOUNTERED WITHIN AND ADJACENT TO THE LIMITS OF WORK AREA ARE SHOWN ON THE PLANS. THE ACCURACY AND COMPLETENESS OF THIS INFORMATION IS NOT GUARANTEED BY THE ENGINEER, AND THE CONTRACTOR IS ADVISED TO VERIFY, IN THE FIELD, ALL THE FACTS CONCERNING THE LOCATION OF THESE UTILITIES AND OTHER CONSTRUCTION OBSTACLES PRIOR TO THE START OF CONSTRUCTION. FURTHER, THE CONTRACTOR SHALL NOTIFY THE ENGINEER, IN WRITING, PRIOR TO THE START OF CONSTRUCTION, OF ANY DISCREPANCIES WHICH MAY EFFECT THE PROJECT DESIGN.

THE CONTRACTOR SHALL CONTACT NEW JERSEY ONE CALL (1-800-272-1000 OR LATEST NUMBER) FOR UTILITY MARKOUT PRIOR TO THE START OF CONSTRUCTION.



Plotfile: 3/31/2020 12:28 PM By: Tori Messara
 © MATRIXNEWORLD\Matrix LDC\Osborn Sea-Bay\LD14-160 - Camp Osborn Ocean Site\DWG\Plot Sheets\05-Utility Plan.dwg\06-Utility



MAP REFERENCES:

- BOUNDARY AND TOPOGRAPHIC INFORMATION SHOWN HEREON IS BASED UPON A SURVEY ENTITLED, "BOUNDARY AND TOPOGRAPHIC SURVEY, CAMP OSBORN OCEAN SITE, TAX LOT 13, 18 & 24 - BLOCK 36, SITUATED IN TOWNSHIP OF BRICK, OCEAN COUNTY, NEW JERSEY," DATED JULY 31, 2017 AND PREPARED BY MATRIX NEW WORLD ENGINEERING.
- BOUNDARY INFORMATION FOR LOT 22 SHOWN HEREON IS BASED ON TAX MAP SHEET NO. 9.03 OF THE TOWNSHIP OF BRICK, OCEAN COUNTY, NEW JERSEY TAX MAP DATED OCTOBER 1, 1990.
- "STATE OF NEW JERSEY DEPARTMENT OF TRANSPORTATION PLANS OF ROUTE 35 RESTORATION (SANDY RESTORATION) TONS RIVER TOWNSHIP TO MANHOLE FROM MP4.00 TO MP 8.07 CONTRACT NO. 04055251 PAVING DRAINAGE & STRUCTURES," DATED APRIL 2013.
- "SEACHOFF INITIAL CONSTRUCTION, MANHOLE INLET TO BUSINESS INLET, OCEAN COUNTY, NEW JERSEY, IFS NO. W91201-16-B-0014," AS PREPARED BY U.S. ARMY CORPS OF ENGINEERS DATED SEPTEMBER 2016.
- PROPOSED IMPROVEMENTS FOR ADJACENT TAX LOT 12 - BLOCK 36 BASED UPON SITE PLANS TITLED "PRELIMINARY MAJOR SUBDIVISION FOR OSBORN ESTATES, LOT 12, BLOCK 36, TOWNSHIP OF BRICK, OCEAN COUNTY, N.J." AS PREPARED BY LINDSTROM, DISSNER & CARR, P.C., DATED 5/11/17, LAST REVISED 7/10/19.

UTILITY NOTES:

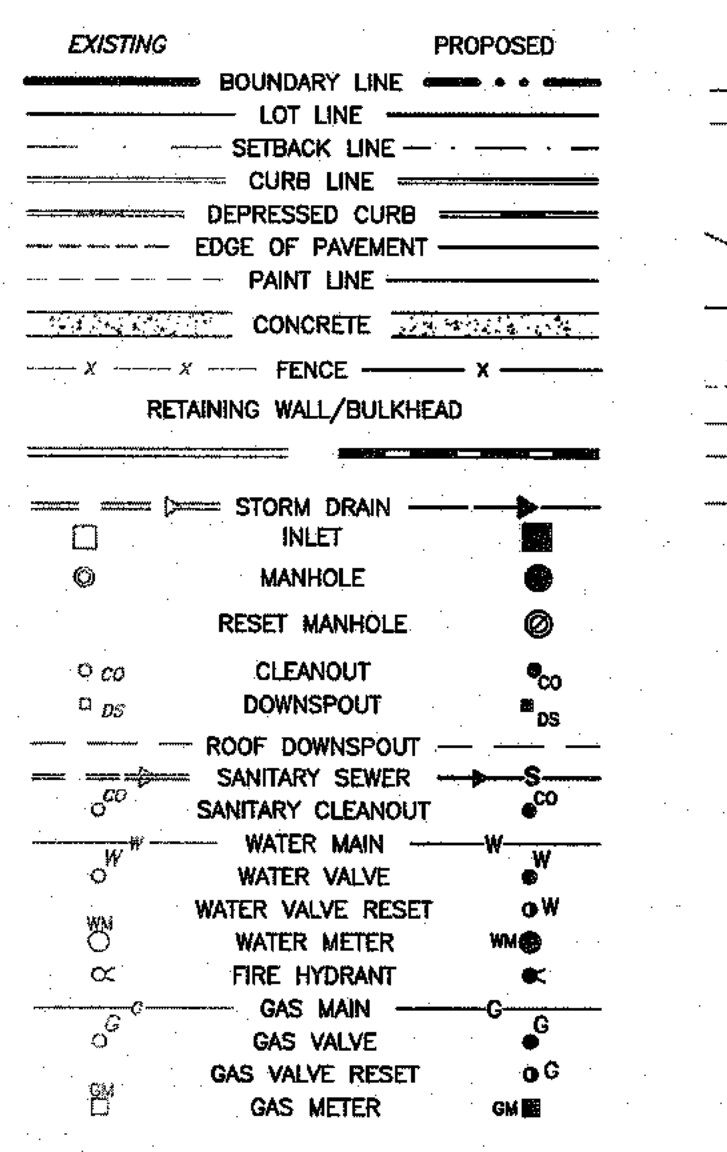
- CONTRACTOR TO PERFORM TEST PITS TO VERIFY EXISTING UTILITY DEPTHS, SIZES AND LOCATIONS PRIOR TO CONNECTING PROPOSED SEWER AND WATER MAINS TO EXISTING SEWER AND WATER MAINS. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IN WRITING OF ANY CONFLICTS SO THAT DESIGN MODIFICATIONS CAN BE MADE IF NECESSARY.
- ALL CONSTRUCTION SHALL CONFORM TO ANY APPLICABLE FEDERAL, STATE AND LOCAL REGULATIONS. CONTRACTOR HAS SOLE RESPONSIBILITY FOR SITE SAFETY AND TO CONFORM TO AND ABIDE BY ALL CURRENT OSHA STANDARDS OR REGULATIONS. SAFE CONSTRUCTION PRACTICES REMAIN THE OBLIGATION OF THE CONTRACTOR. THE CONTRACTOR SHALL OBTAIN ALL APPLICABLE FEDERAL, STATE AND LOCAL PERMITS PRIOR TO CONSTRUCTION.
- ALL CONSTRUCTION IN ROADWAYS TO CONFORM TO THE BRICK TOWNSHIP MUNICIPAL AUTHORITY CONSTRUCTION GUIDELINES FOR STREET OPENINGS AND STANDARDS FOR ROADWAY CONSTRUCTION, LATEST EDITION.
- PIPE LENGTHS INDICATED ARE MEASURED CENTER TO CENTER OF EACH STRUCTURE.
- PROPOSED BUILDINGS SHALL BE SERVICED BY EXISTING POTABLE WATER FROM NEW JERSEY AMERICAN WATER AND SANITARY SEWER FROM THE BRICK TOWNSHIP MUA.
- CONTRACTOR TO COORDINATE WITH ARCHITECT AND APPROPRIATE UTILITY COMPANIES REGARDING ROUTING FOR GAS, CABLE, ELECTRIC, ETC.
- HOUSE MOUNTED LIGHTING TO BE SPECIFIED BY ARCHITECTS AND PROVIDED BY CONTRACTOR.
- ALL SANITARY SEWER MAINS, SEWER LATERALS, AND APPURTENANCES SHALL BE CONSTRUCTED AND TESTED IN ACCORDANCE WITH BRICK TOWNSHIP MUA AND NJDEP REQUIREMENTS. (TV, PRESSURE RATED, AND MARKUP TESTED)
- SHOW DIMENSIONS AND PRODUCT CATALOG INFORMATION FOR ALL WATER, SANITARY SEWER AND STORM SEWER STRUCTURES, CONDUITS, MATERIALS, AND APPURTENANCES, TO BE PROVIDED TO THE PROJECT ENGINEER FOR REVIEW AND APPROVAL PRIOR TO PURCHASING.
- ANY DAMAGE CAUSED TO THE SEWERAGE AUTHORITY'S SANITARY SEWER SYSTEM AS A RESULT OF CONSTRUCTION ACTIVITIES (TO BE DETERMINED BY THE AUTHORITY) SHALL BE REPAIRED BY THE CONTRACTOR, AT THE COST OF THE CONTRACTOR AND TO THE AUTHORITY'S SATISFACTION.
- PRIOR TO ACCEPTANCE, AS-BUILT PLANS FOR THE SANITARY SEWER SYSTEM SHALL BE SUBMITTED AND APPROVED.
- PRIOR TO ACCEPTANCE, THE SANITARY SEWER SYSTEM SHALL BE TESTED IN ACCORDANCE WITH BRICK TOWNSHIP MUNICIPAL AUTHORITY RULES AND REGULATIONS, AND WITNESSED AND APPROVED BY THE AUTHORITY ENGINEER.
- GREASE TRAPS MUST BE CONSTRUCTED IN CONFORMANCE WITH THE REQUIREMENTS OF THE NATIONAL STANDARD PLUMBING CODE AND THE BRICK TOWNSHIP MUNICIPAL AUTHORITY BUILDING DEPT., IF APPLICABLE.
- CIRCULAR HOLE SAWS WHICH ARE APPROPRIATELY SIZED OR HAND DRILLS MUST BE USED TO MAKE OPENINGS IN EXISTING SEWERS TO RECEIVE LATERALS, JACKHAMMERS, SLIDEGAMMERS AND OTHER UNSUITABLE TOOLS OR MACHINERY WHICH MAY DAMAGE THE SEWER MAIN ARE NOT ALLOWED TO BE USED TO MAKE LATERAL OPENINGS. ALL DEBRIS MUST BE REMOVED AND NOT ALLOWED TO FALL INTO THE PIPE.
- REFER TO TECHNICAL SPECIFICATIONS FOR WATER AND SANITARY SEWER FOR MATERIAL, INSTALLATION SPECIFICATIONS AND TESTING REQUIREMENTS.
- ALL WATER MAINS, WATER SERVICES AND APPURTENANCES SHALL BE CONSTRUCTED, TESTED AND DISINFECTED IN ACCORDANCE WITH NEW JERSEY AMERICAN WATER AND NJDEP REQUIREMENTS.
- ALL WATER SERVICES TO BE INSTALLED IN CONFORMANCE WITH THE REQUIREMENTS OF THE PLUMBING SUBCODE PROMULGATED BY THE NEW JERSEY DEPARTMENT OF COMMUNITY AFFAIRS PURSUANT TO THE STATE UNIFORM CONSTRUCTION CODE ACT (N.J.A.C. 5:23-3.13).
- ALL NEW WATER MAINS SHALL BE LAID WITH A MINIMUM OF 4 FEET OF COVER OVER THE PIPE TO PREVENT FREEZING.
- SPACING AND LOCATIONS OF HYDRANTS SHALL COMPLY WITH THE FIRE PREVENTION STANDARDS OF THE WATER PURVEYOR AND FIRE OFFICIAL.
- IN ACCORDANCE WITH N.J.A.C. 7:10-11.10(b), ALL WATER MAINS AND SANITARY SEWER LINES SHALL BE SEPARATED BY A HORIZONTAL DISTANCE OF 10 FEET. IF SUCH LATERAL SEPARATION IS NOT POSSIBLE, THE WATER AND SEWER LINES SHALL BE IN SEPARATE TRENCHES (SEEP TRENCHES ARE PROHIBITED) WITH THE TOP OF THE SEWER LINE AT LEAST 18 INCHES BELOW THE BOTTOM OF THE WATER MAIN OR WITH SUCH OTHER SEPARATION EXPRESSLY APPROVED BY THE NJDEP. AT CROSSINGS OF SEWER LINES AND WATER MAINS, THE TOP OF THE SEWER LINES SHALL BE AT LEAST 18 INCHES BELOW THE BOTTOM OF THE WATER MAIN (SEWER SERVICE LATERALS ARE NOT SUBJECT TO THIS REQUIREMENT). IF SUCH VERTICAL SEPARATION IS NOT POSSIBLE, THE SEWER LINE SHALL BE OF WATER-TIGHT CONSTRUCTION (DUCTILE IRON), WITH WATER-TIGHT JOINTS THAT ARE A MINIMUM OF 10 FEET FROM THE WATER MAIN.
- UNLESS OTHERWISE INDICATED:
 - DIP WATER MAIN SHALL BE CLASS PR3500 CEMENT LINED DUCTILE IRON PIPE (POLYETHYLENE ENCASEMENT)
 - SANITARY SEWER MAINS SHALL BE PVC SDR-35
- MARKER STAKE PROTRUDING A MINIMUM OF FOUR FEET ABOVE THE GROUND SURFACE SHALL BE PLACED TO INDICATE THE END OF THE CONSTRUCTION STUBS FOR BUILDING CONNECTIONS, OR STUBS SHALL BE TURNED AND EXTENDED ABOVE GROUND BY FOUR FEET AND CAPPED.
- ALL SANITARY SEWER MANHOLE COVERS SHALL BE WATER-TIGHT.
- ALL ON-SITE UTILITIES TO BE UNDERGROUND.

NOTICE TO CONTRACTOR

ATTENTION OF THE CONTRACTOR IS DIRECTED TO THE FACT THAT THE APPROXIMATE LOCATIONS OF KNOWN UTILITY STRUCTURES AND FACILITIES THAT MAY BE ENCOUNTERED WITHIN AND ADJACENT TO THE LIMITS OF WORK AREA ARE SHOWN ON THE PLANS. THE ACCURACY AND COMPLETENESS OF THIS INFORMATION IS NOT GUARANTEED BY THE ENGINEER, AND THE CONTRACTOR IS ADVISED TO VERIFY, IN THE FIELD, ALL THE FACTS CONCERNING THE LOCATION OF THESE UTILITIES AND OTHER CONSTRUCTION OBSTACLES PRIOR TO THE START OF CONSTRUCTION. FURTHER, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IN WRITING, PRIOR TO THE START OF CONSTRUCTION, OF ANY DISCREPANCIES WHICH MAY EXIST TO THE PROJECT DESIGN.

THE CONTRACTOR SHALL CONTACT NEW JERSEY ONE CALL (1-800-272-1000 OR LATEST NUMBER) FOR UTILITY MARKOUT PRIOR TO THE START OF CONSTRUCTION.

LEGEND



THIS IS TO CERTIFY THAT THE WATER AND SEWER DESIGN CONFORMS WITH THE RULES AND REGULATIONS OF THE BRICK TOWNSHIP MUNICIPAL UTILITIES AUTHORITY.

STEPHEN T. SPECHT, P.E. DATE
 DEPUTY EXECUTIVE DIRECTOR &
 DIRECTOR OF ENGINEERING/OPERATIONS

BRICK UTILITIES' FILE # _____

APPROVED BY THE
 BRICK TOWNSHIP
 PLANNING BOARD

CHAIRPERSON _____ DATE _____

SECRETARY _____ DATE _____

PLANNING BOARD ENGINEER _____ DATE _____

GRAPHIC SCALE
 1 inch=20 feet

NO.	DESCRIPTION	DATE	BY	CHKD.	APP'D.
1.	REVISED PER MUA COMMENTS	11/20/17	CTD	SMS	
2.	REVISED PER BRICK MUA COMMENTS DATES 12/20/17	12/19/18	CTD	SMS	
3.	REVISED PER APPLICANT COMMENTS	06/07/19	CTD	SMS	
4.	REV. PER TYP COMMENTS AND ADDITIONAL COMMENTS	02/07/18	CTD	SMS	
5.	REV. LAYOUTS PER APPLICANT COMMENTS	06/07/19	CTD	SMS	
6.	REV. PER APPLICANT COMMENTS DATES 02/07/19	02/07/19	CTD	SMS	
7.	REV. PER APPLICANT COMMENTS DATES 02/07/19	02/07/19	CTD	SMS	
8.	REVISED PER APPLICANT COMMENTS DATES 02/07/19	02/07/19	CTD	SMS	
9.	REVISED PER APPLICANT COMMENTS DATES 02/07/19	02/07/19	CTD	SMS	
10.	REVISED PER APPLICANT COMMENTS DATES 02/07/19	02/07/19	CTD	SMS	

MATRIXNEWORLD
 Engineering Progress
 Land Surveying

Matrix New World Engineering, Land Surveying and Landscape Architecture, P.C.
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 Fax: 878-240-1818
 www.matrixnewworld.com

SEAN M. SAVAGE, P.E.
 NEW JERSEY PROFESSIONAL ENGINEER
 LICENSE NO. 34069487000

(Signature)
 4/1/2020

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NEW JERSEY CERTIFICATE OF AUTHORIZATION No. 24629782200

UTILITY PLAN

PRELIMINARY AND FINAL MAJOR SITE PLAN
 CAMP OSBORN OCEAN SITE
 BLOCK 36, LOTS 13, 18, 22 & 24

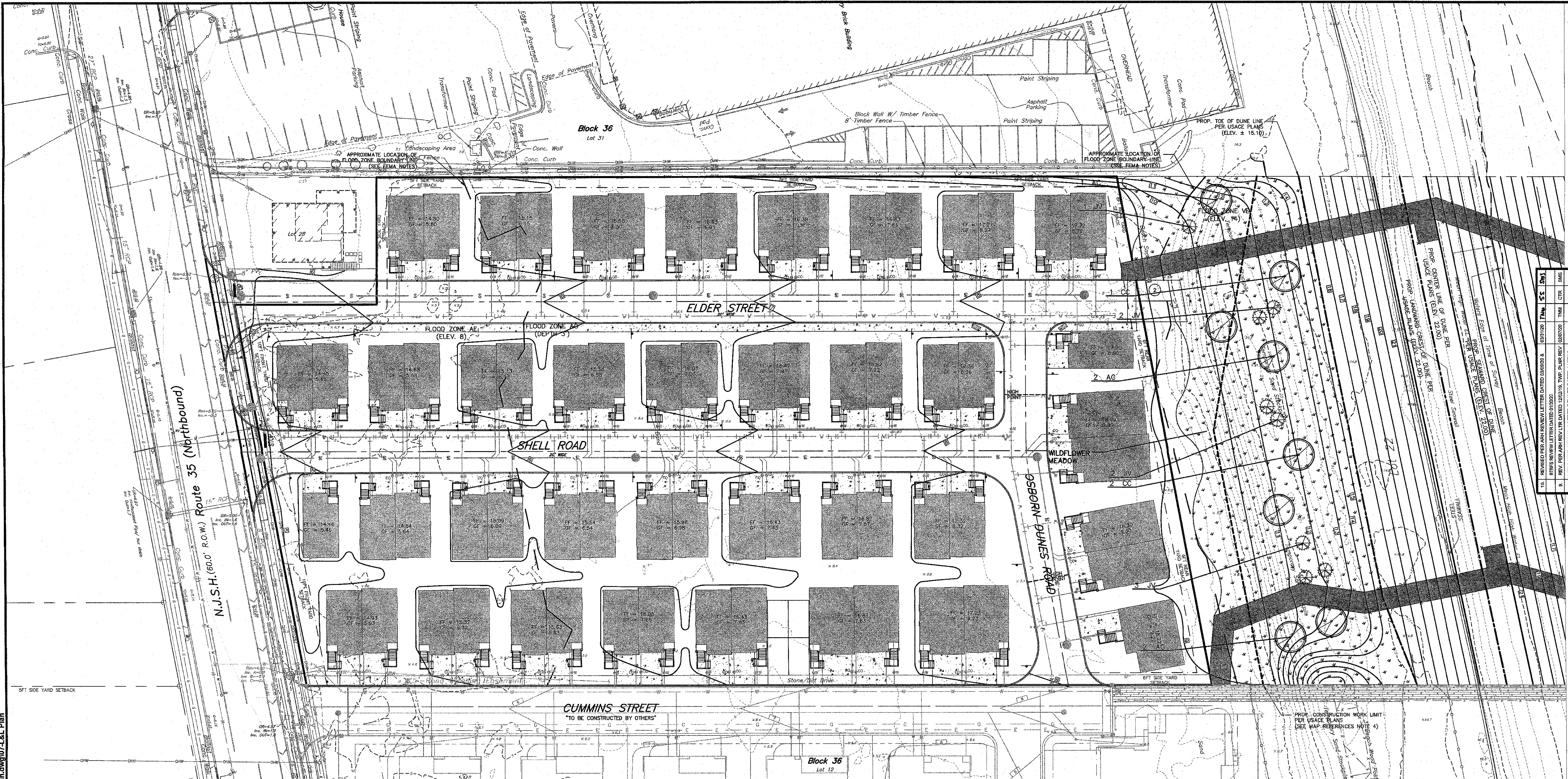
TOWNSHIP OF BRICK, OCEAN COUNTY, NEW JERSEY

PROJECT NUMBER: LD14-160

DATE: 9/11/2017

SCALE: 1"=20'

SHEET 6 OF 12



NO.	REVISION	DATE	BY	CHK.
1	REVISED PER COMMENTS FROM TOWNSHIP ENGINEERING	02/12/20	T.M.	W.R.
2	REVISED PER COMMENTS FROM TOWNSHIP ENGINEERING	02/12/20	T.M.	W.R.
3	REVISED PER COMMENTS FROM TOWNSHIP ENGINEERING	02/12/20	T.M.	W.R.
4	REVISED PER COMMENTS FROM TOWNSHIP ENGINEERING	02/12/20	T.M.	W.R.
5	REVISED PER COMMENTS FROM TOWNSHIP ENGINEERING	02/12/20	T.M.	W.R.
6	REVISED PER COMMENTS FROM TOWNSHIP ENGINEERING	02/12/20	T.M.	W.R.
7	REVISED PER COMMENTS FROM TOWNSHIP ENGINEERING	02/12/20	T.M.	W.R.
8	REVISED PER COMMENTS FROM TOWNSHIP ENGINEERING	02/12/20	T.M.	W.R.
9	REVISED PER COMMENTS FROM TOWNSHIP ENGINEERING	02/12/20	T.M.	W.R.
10	REVISED PER COMMENTS FROM TOWNSHIP ENGINEERING	02/12/20	T.M.	W.R.

WILLIAM D. REIMER, L.L.A.
 NEW JERSEY LICENSED LANDSCAPE ARCHITECT
 LICENSE NO. 145992200
 303/920-7000
 DATE: 3/1/2020

MATRIX NEW WORLD
 Engineering & Progress
 Land Surveying
 442 State Route 36, Second Floor
 Eatontown, New Jersey 07724
 Tel: 732-888-2989
 Fax: 973-245-1818
 www.matrixnewworld.com
 NEW JERSEY CERTIFICATE OF AUTHORIZATION NO. 24G42792320

- LANDSCAPE NOTES:**
- THIS PLAN SHALL BE USED FOR LANDSCAPE PLANTING PURPOSES ONLY. EXAMINE ALL ENGINEERING DRAWINGS AND FIELD CONDITIONS FOR SPECIFIC LOCATIONS OF UTILITIES, STRUCTURES, ETC. AND NOTIFY THE LANDSCAPE ARCHITECT IN REFERENCE TO ANY DISCREPANCIES OR LOCATION CONFLICTS PRIOR TO PLANTING INSTALLATION.
 - ALL PLANT MATERIAL SHALL CONFORM TO THE STANDARDS OF THE AMERICAN ASSOCIATION OF NURSERYMEN (LATEST EDITION).
 - PLANT SUBSTITUTIONS SHALL BE PERMITTED ONLY WITH WRITTEN PERMISSION OF THE LANDSCAPE ARCHITECT. ALL PLANT MATERIAL SHALL BE IDENTIFIED BY SPECIES, VARIETY, AND SIZE AND BE CERTIFIED DISEASE AND INSECT FREE. WRITTEN PROOF OF PLANT MATERIAL UNAVAILABILITY MUST BE DOCUMENTED.
 - LOCATION AND SPACING FOR PROPOSED VEGETATION IS AS SHOWN ON LANDSCAPE PLANS. ALL PLANTS SHALL BE ADJUSTED IN THE FIELD TO MEET SITE CONDITIONS AS APPROVED BY THE LANDSCAPE ARCHITECT / OWNER.
 - THE PLANTING PLAN SHALL TAKE PRECEDENCE OVER THE PLANT LIST SHOULD ANY PLANT QUANTITY DISCREPANCIES OCCUR.
 - ALL PLANT MATERIAL SHALL BE PROPERLY GROWN, STAKED, WRAPPED AND PLANTED IN CONFORMANCE WITH THE TYPICAL PLANTING DETAILS. PROVIDE THREE TREE STAKES PER TREE UNLESS NOTED OTHERWISE. INSTALL ALL PLANT MATERIAL ON UNDISTURBED GRADE. PROVIDE BURLAP WRAPPING WITH A BOX OVERLAP. CUT AND REMOVE BURLAP FROM TOP ONE-THIRD OF THE ROOT BALL.
 - THE CONTRACTOR SHALL COMPLETELY REMOVE ALL TREE SUPPORTS AFTER ONE (1) YEAR.
 - NEWLY INSTALLED PLANT MATERIAL SHALL BE WATERED AT THE TIME OF INSTALLATION. REGULAR WATERING SHALL BE PROVIDED TO ENSURE THE ESTABLISHMENT, GROWTH AND SURVIVAL OF PLANTS DURING THE GUARANTEE PERIOD. SEE SPECS FOR ADDITIONAL INFORMATION.
 - COMMERCIAL FERTILIZER TO BE USED SHALL BE A COMPLETE FERTILIZER AND SHALL BE A STANDARD PRODUCT COMPLYING WITH STATE AND FEDERAL FERTILIZER LAWS. TOPSOIL SHALL BE GUARANTEED FOR ONE (1) YEAR AFTER THE DATE OF FINAL ACCEPTANCE BY THE LANDSCAPE ARCHITECT.
 - ALL PLANTING BEDS SHALL RECEIVE (3) INCHES OF SHREDED HARDWOOD MULCH.
 - TOPSOIL AND SEED ALL AREAS DISTURBED AS A RESULT OF ANY AND ALL CONSTRUCTION DISTURBANCES AND STORAGE OF EQUIPMENT, WHETHER SUCH AREAS ARE SHOWN ON THE PLANS OR NOT. CONTRACTOR SHALL FIELD VERIFY AREAS OF SEED AND SOO PRIOR TO SUBMITTING A BID.
 - ALL AREAS, WHICH ARE TO BE SEEDDED/PLANTED, SHALL RECEIVE 18 INCHES OF TOPSOIL PRIOR TO SEEDING/PLANTING. PRIOR TO TOPSOIL PLACEMENT THE EXISTING SOIL SHALL BE RAKED CLEAN OF WEEDS, VEGETATION AND EXTRANEOUS MATERIALS SUCH AS WOOD, STONES, ROCKS, CONSTRUCTION DEBRIS, ETC. LARGER THAN (2) INCHES IN ANY DIMENSION. TOPSOIL SHALL BE SANDY LOAM FREE FROM SUBSOIL. STONES LARGER THAN (1) INCH, OR ANY UNDESIRABLE MATERIAL CONTAINING ORGANIC MATTER, 6.0 TO 6.5 PH. TOPSOIL SHALL NOT BE WORKED IN MOIST OR WET CONDITIONS.
 - TREES SCHEDULED TO BE PLANTED WITHIN 5' OF PAVEMENT SURFACE SHALL HAVE ROOT BARRIER INSTALLED (SEE TREE PLANTING WITH ROOT BARRIER DETAIL).

WILDFLOWER MEADOW SEED MIXTURE

MIX %	BOTANICAL NAME	COMMON NAME
10%	LOLIUM MULTIFLORUM	ANNUAL RYEGRASS
15%	ANDRPOOON SCOPARIUS, CAMPER	CAMPER LITTLE BLUESTEM
10%	BOUTELLOIA CURTIPENDULA, BUTTE	BUTTE SIDE OATS GRAMA
10%	ELYMUS VILLOSIUS	SILK WILD RYE
10%	SORGHASTRUM NUTANS, TOMAHAWK	TOMAHAWK INDIAN GRASS
8%	CHAMAECRISTA FASCICULATA	PATRIDGE PEAR
5%	ANDRPOOON GERARDII, NIAGRA	NIAGRA BIG BLUESTEM
5%	ASCLEPIAS SYRIACA	COMMON MILKWEED
5%	HELIPSEUS HELIANTHOIDES	COX EYE SUNFLOWER
4%	LAIATRIS SPICATA	SPIKED GAYFEATHER
4%	SENNA HEBCARPA	WILD SENNA
3%	LUPINUS PERENNIS	WILD BLUE LUPINE
3%	PENSTEMON DIGITALIS	TALL WHITE BEARD TONGUE
2%	HYPERICUM PYRAMIDATUM	GREAT ST. JOHN'S WORT
2%	BAPTISIA AUSTRALIS	WILD FALSE INDIGO
2%	MONARDA FISTULOSA	BLUE BERGAMOT
2%	PENSTEMON LAEVIGATUS	APPALACHIAN BEARD TONGUE
2%	ZIZEA AUREA	GOLDEN ALEXANDER
1%	RUBROCKA HIRTA	BLACK EYED SUSAN
1%	ASTER LAEVIS	SMOOTH BLUE ASTER
1%	ASTER NOVAE-ANGLIAE	NEW ENGLAND ASTER
1%	RUBROCKA TRILOBATA	BROWN EYED SUSAN
1%	SOLIDAGO JUNCEA	EARLY GOLDENROD
1%	SOLIDAGO MEMORIALIS	OHIO GOLDENROD
1%	TRADESCANTIA OHIENSIS	GREY SPIDERWORT
0.50%	ASCLEPIAS TUBEROSA	BUTTERFLY MILKWEED
0.50%	LESPEDEZA CAPITATA	ROUND HEAD LESPEDEZA

PROPOSED PLANT SCHEDULE

KEY	QTY	LATIN NAME	COMMON NAME	SIZE	NOTES
AC	5	AMELANCHIER CANADENSIS	SHADLOW SERVICEBERRY	5-6' HT BAB	MULTISTEM
CC	3	CERCIS CANADENSIS	EASTERN REDBUD	5-6' HT BAB	MULTISTEM
IV	B	JUNIPERUS VIRGINIANA	RED CEDAR	4-5' HT BAB	FULL TO GROUND

- MAP REFERENCES:**
- BOUNDARY AND TOPOGRAPHIC INFORMATION SHOWN HEREON IS BASED UPON A SURVEY ENTITLED, "BOUNDARY AND TOPOGRAPHIC SURVEY, CAMP OSBORN OCEAN SITE, TAX LOT 13, 18 & 24 - BLOCK 36, SITUATED IN TOWNSHIP OF BRICK, OCEAN COUNTY, NEW JERSEY," DATED JULY 31, 2017 AND PREPARED BY MATRIX NEW WORLD ENGINEERING.
 - BOUNDARY AND TOPOGRAPHIC SURVEY, CAMP OSBORN OCEAN SITE, TAX LOT 13, 18 & 24 - BLOCK 36, SITUATED IN TOWNSHIP OF BRICK, OCEAN COUNTY, NEW JERSEY TAX MAP DATED OCTOBER 1, 1950.
 - "STATE OF NEW JERSEY DEPARTMENT OF TRANSPORTATION PLANS OF ROUTE 35 RESTORATION (SANDY RESTORATION) TOMS RIVER TOWNSHIP TO MANTOLONGING FROM MP 4.00 TO MP 9.07 CONTRACT NO. C0000288 "PAVING DRAINAGE & STRUCTURES" DATED APRIL 2013.
 - "REACHFIELD INITIAL CONSTRUCTION, MANASQUAN INLET TO BARNEGET INLET, OCEAN COUNTY, NEW JERSEY, #B NO. W012BU-16-0-0014," AS PREPARED BY U.S. ARMY CORPS OF ENGINEERS DATED SEPTEMBER 2016.
 - PROPOSED IMPROVEMENTS FOR ADJACENT TAX LOT 12 - BLOCK 36 BASED UPON SITE PLANS TITLED "PRELIMINARY MAJOR SUBDIVISION FOR OSBORN ESTATES, LOT 12, BLOCK 36, TOWNSHIP OF BRICK, OCEAN COUNTY, N.J." AS PREPARED BY LANDSTROM, DISSNER & CARR, P.C., DATED 5/11/17, LATEST REVISED 7/10/18.

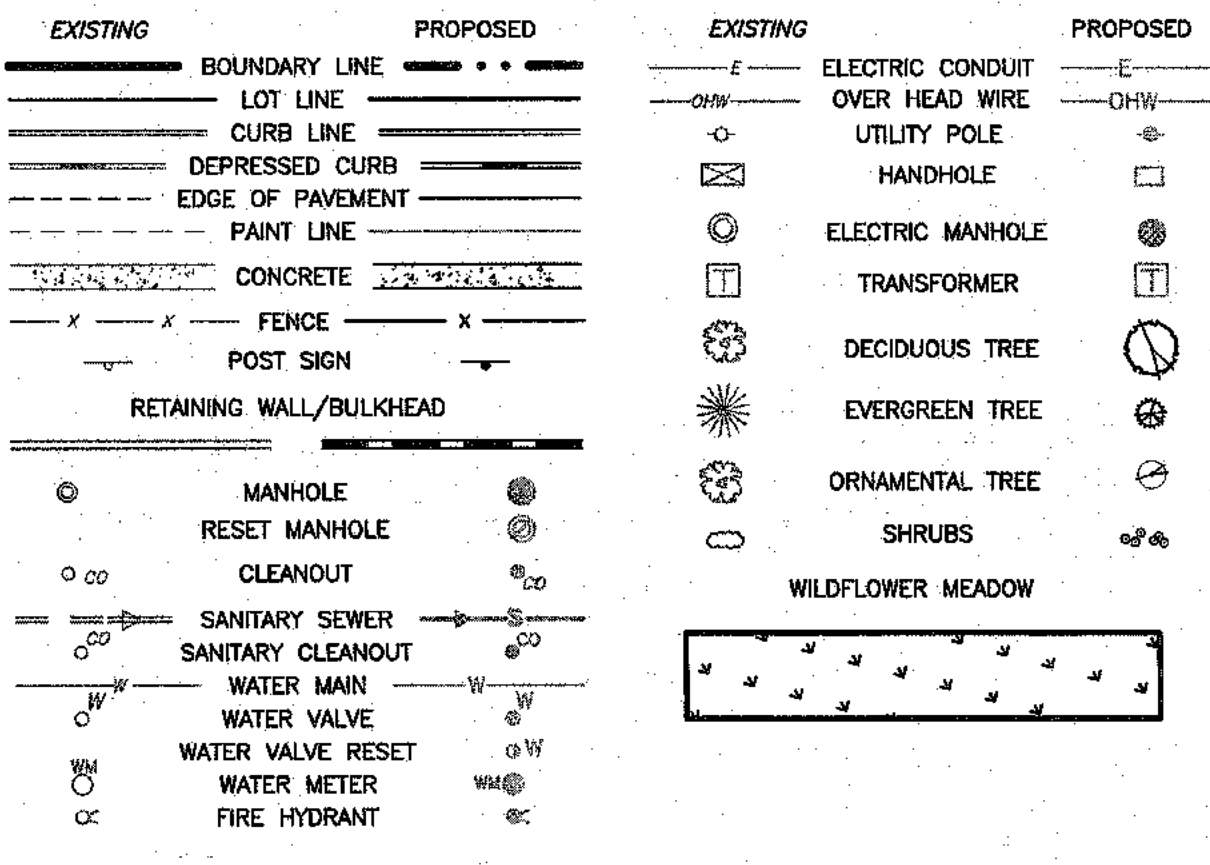
FEMA FLOOD NOTES:

THE SUBJECT PROPERTY RECEIVED A LETTER OF MAP REVISION (LOMR MAP NO. 34029C0219F) ON MAY 30, 2017 WHICH REVISED THE FLOOD INSURANCE RATE MAP SUCH THAT ONLY THE FOLLOWING FLOOD ZONES EXIST ON LOTS 13, 18, AND 24:

FLOOD ZONE AE - BASE FLOOD ELEVATION DETERMINED, (EL. 8.0 FT.) N.A.V.D. 1988

FLOOD ZONE AD - BASE FLOOD ELEVATION DETERMINED, (EL. 3.0 FT.) N.A.V.D. 1988

FLOOD ZONE VE - BASE FLOOD ELEVATION DETERMINED, (EL. 14.0 FT.) N.A.V.D. 1988 IS CONTAINED ENTIRELY WITHIN LOT 22



THIS IS TO CERTIFY THAT THE WATER AND SEWER DESIGN CONFORMS WITH THE RULES AND REGULATIONS OF THE BRICK TOWNSHIP MUNICIPAL UTILITIES AUTHORITY.

STEPHEN T. SPECHT, P.E.
 DEPUTY EXECUTIVE DIRECTOR &
 DIRECTOR OF ENGINEERING/OPERATIONS

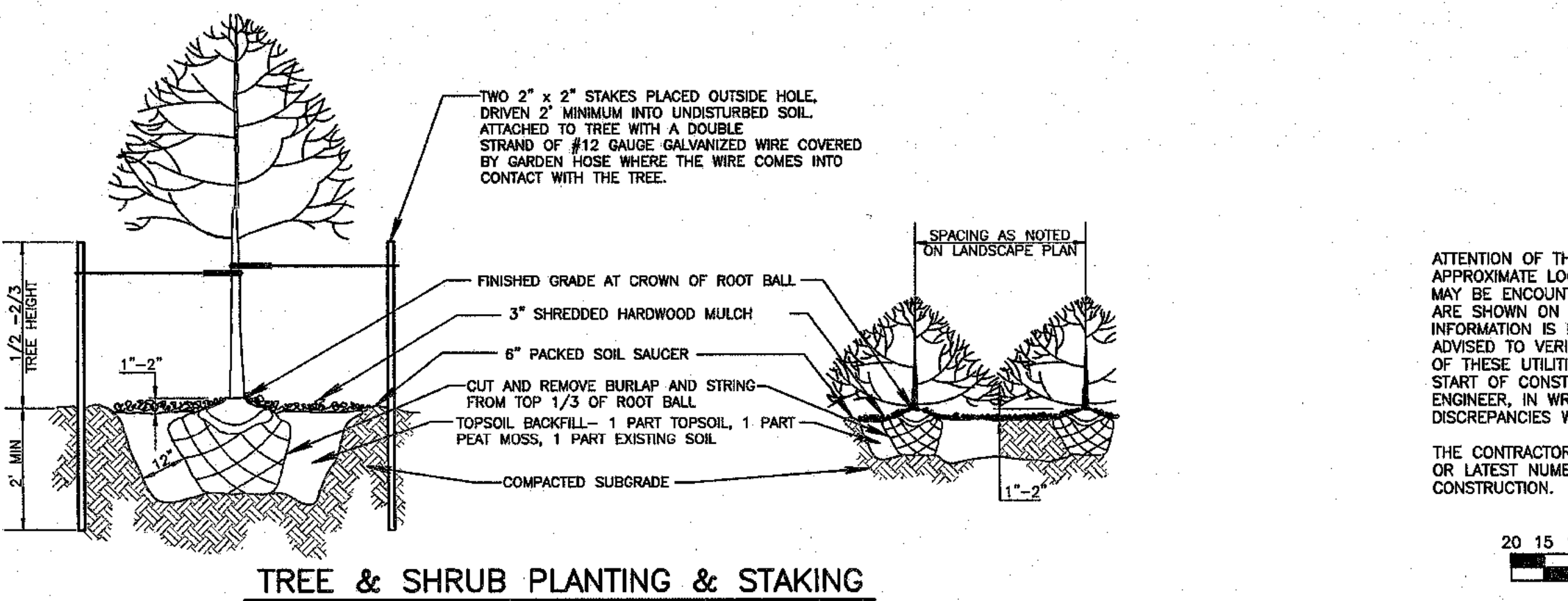
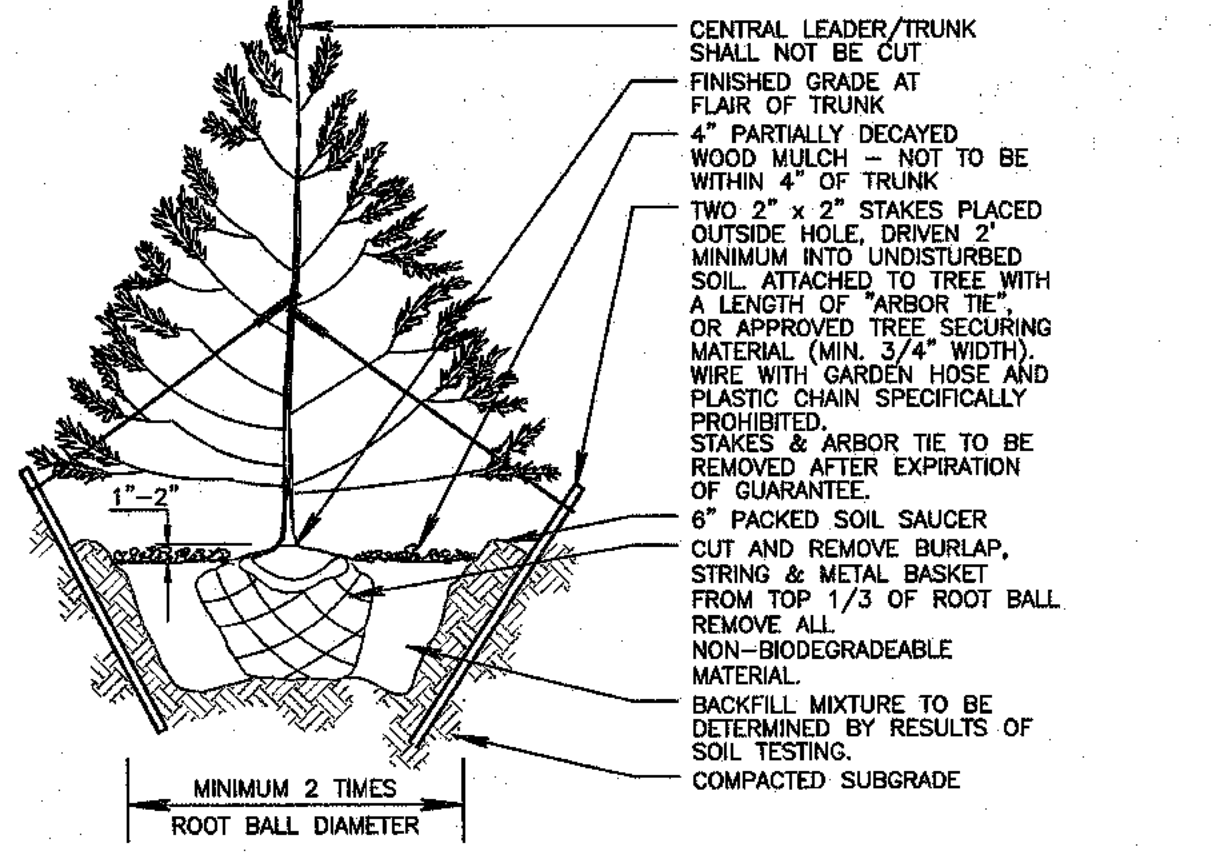
BRICK UTILITIES' FILE # _____ DATE _____

APPROVED BY THE
 BRICK TOWNSHIP
 PLANNING BOARD

CHAIRPERSON _____ DATE _____

SECRETARY _____ DATE _____

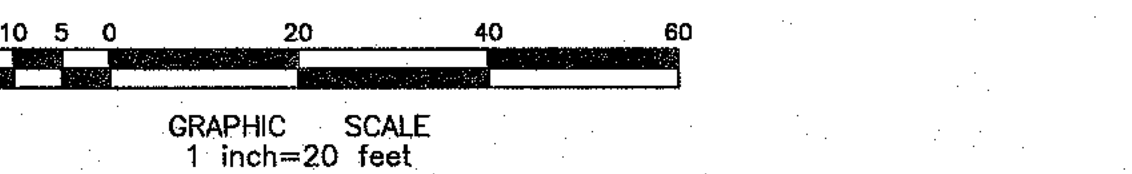
PLANNING BOARD ENGINEER _____ DATE _____

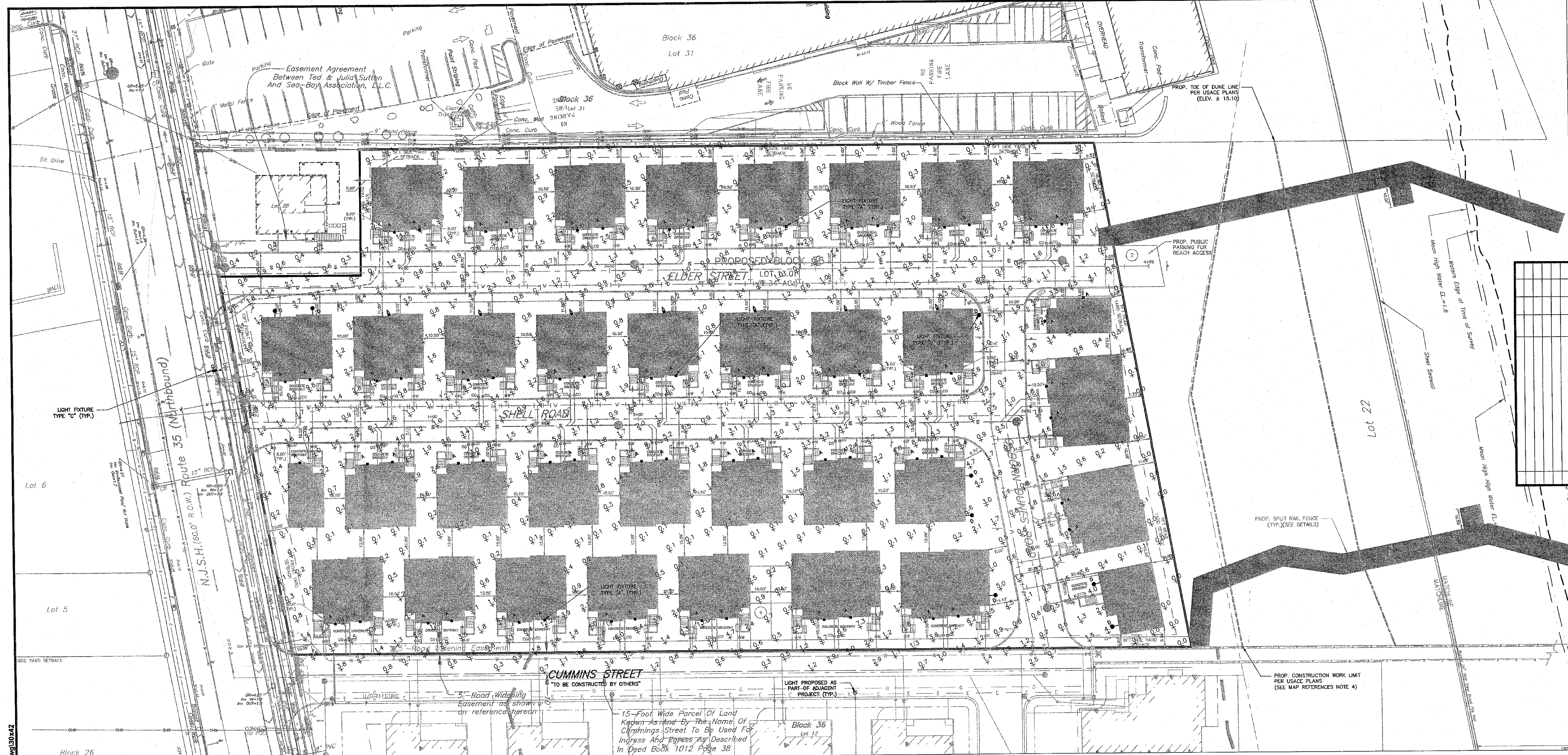


NOTICE TO CONTRACTOR

ATTENTION OF THE CONTRACTOR IS DIRECTED TO THE FACT THAT THE APPROXIMATE LOCATIONS OF KNOWN UTILITY STRUCTURES AND FACILITIES THAT MAY BE ENCOUNTERED WITHIN AND ADJACENT TO THE LIMITS OF WORK AREA ARE SHOWN ON THE PLANS. THE ACCURACY AND COMPLETENESS OF THIS INFORMATION IS NOT GUARANTEED BY THE ENGINEER, AND THE CONTRACTOR IS ADVISED TO VERIFY IN THE FIELD. ALL THE FACTS CONCERNING THE LOCATION OF THESE UTILITIES AND OTHER CONSTRUCTION OBSTACLES PRIOR TO THE START OF CONSTRUCTION. FURTHER, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IN WRITING, PRIOR TO THE START OF CONSTRUCTION, OF ANY DISCREPANCIES WHICH MAY AFFECT THE PROJECT DESIGN.

THE CONTRACTOR SHALL CONTACT NEW JERSEY ONE CALL (1-800-272-1000 OR LATEST NUMBER) FOR UTILITY MARKOUT PRIOR TO THE START OF CONSTRUCTION.





LUMINAIRE SCHEDULE

Symbol	Label	Quantity	Height	DESCRIPTION	File	LLF
■	A	74	10FT.	TRITON LED 35.0 51K	TRITON LED 35.0 51K.IES	0.95
■	C	1	20FT.	GE ROADWAY LIGHT M-400	ge456373_tcm201-62482.IES	0.95
■	D	8	10FT.	WDGE2 LED 35K VF	WDGE2_LED_P1_35K_BOCLR_VF.IES	0.95

LIGHTING PLAN NOTES:

1. LIGHTING FIXTURE TYPE "C" TO BE GE ROADWAY LIGHTING M-400 CORNBREAD OR APPROVED EQUAL FIXTURE TO BE IN ACCORDANCE WITH ADA.

MAP REFERENCES:

- BOUNDARY AND TOPOGRAPHIC INFORMATION SHOWN HEREON IS BASED UPON A SURVEY ENTITLED, "BOUNDARY AND TOPOGRAPHIC SURVEY, CAMP OSBORN OCEAN SITE, TAX LOT 13, 18 & 24 - BLOCK 36, SITUATED IN TOWNSHIP OF BRICK, OCEAN COUNTY, NEW JERSEY," DATED JULY 31, 2017 AND PREPARED BY MATRIX NEW WORLD ENGINEERING.
- BOUNDARY INFORMATION FOR LOT 22 SHOWN HEREON IS BASED ON TAX MAP SHEET NO. 9.03 OF THE TOWNSHIP OF BRICK, OCEAN COUNTY, NEW JERSEY TAX MAP DATED OCTOBER 1, 1950.
- "STATE OF NEW JERSEY DEPARTMENT OF TRANSPORTATION PLANS OF ROUTE 35 RESTORATION (GANDY RESTORATION) TOWNSHIP OF BRICK, OCEAN COUNTY, NEW JERSEY, FROM MP4.00 TO MP 9.07 CONTRACT NO. C0952321 PAVING, DRAINAGE & STRUCTURES," DATED APRIL, 2013
- "BEACHILL INITIAL CONSTRUCTION, MANASQUAN INLET TO BARNEGAT INLET, OCEAN COUNTY, NEW JERSEY, IFS NO. W0128U-16-B-0014," AS PREPARED BY U.S. ARMY CORPS OF ENGINEERS DATED SEPTEMBER 2016.
- PROPOSED IMPROVEMENTS FOR ADJACENT TAX LOT 12 - BLOCK 36 BASED UPON SITE PLANS TITLED "PRELIMINARY MAJOR SUBDIVISION FOR OSBORN ESTATES, LOT 12, BLOCK 36, TOWNSHIP OF BRICK, OCEAN COUNTY, NJ," AS PREPARED BY LINDSTROM, DRESSNER & CARR, P.C., DATED 5/11/17, LAST REVISED 7/16/19.

TRITON LED
Architectural Outdoor

FEATURES:

- Aluminum Housing w/ Reinforced Drives Polyester Powder Coat Finish
- Aluminum Reflector
- Clear Tempered Glass Lens
- Clear Lens Location For Wall Mounting Down Light Only
- Dark Sky Compliant
- Fully Enclosed
- Emergency Battery Available
- ADA Light Fixture
- Moves Direct to Flat Surface by Two #8 Wall Anchors (Not Included)
- Burge Protector

FINISHES:

Antique Copper	Antique Silver	Brass	Matte Black	Matte Silver	Sand	Sealoff Black
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LIGHTING FIXTURE A DETAIL
NOT TO SCALE

WDGE2 LED
Architectural Wall Sconce

Specifications:

- Depth: 7"
- Height: 11"
- Width: 11.5"
- Weight: 12.5 lbs

Introduction: The WDGE2 family is designed to meet specific energy and performance lighting needs in architectural applications. The clean, outdoor design offers a variety of finishes and mounting options. The sconce is designed to provide 1,500 to 2,000 lumens, providing a bright, wide area of illumination. The WDGE2 family provides additional energy savings and code compliance.

WDGE2 offers up to 8,000 lumens with a built-in dimming feature, creating a highly comfortable environment. When combined with the built-in emergency battery backup option, the WDGE2 provides the best performance lighting solution for a wide range of applications in any environment.

Model	Finish	Height	Width	Depth	Weight	Warranty
WDGE2-10	Antique Copper	11"	11.5"	7"	12.5 lbs	5 Year
WDGE2-10	Antique Silver	11"	11.5"	7"	12.5 lbs	5 Year
WDGE2-10	Brass	11"	11.5"	7"	12.5 lbs	5 Year
WDGE2-10	Matte Black	11"	11.5"	7"	12.5 lbs	5 Year
WDGE2-10	Matte Silver	11"	11.5"	7"	12.5 lbs	5 Year
WDGE2-10	Sand	11"	11.5"	7"	12.5 lbs	5 Year
WDGE2-10	Sealoff Black	11"	11.5"	7"	12.5 lbs	5 Year

LIGHTING FIXTURE D DETAIL
NOT TO SCALE

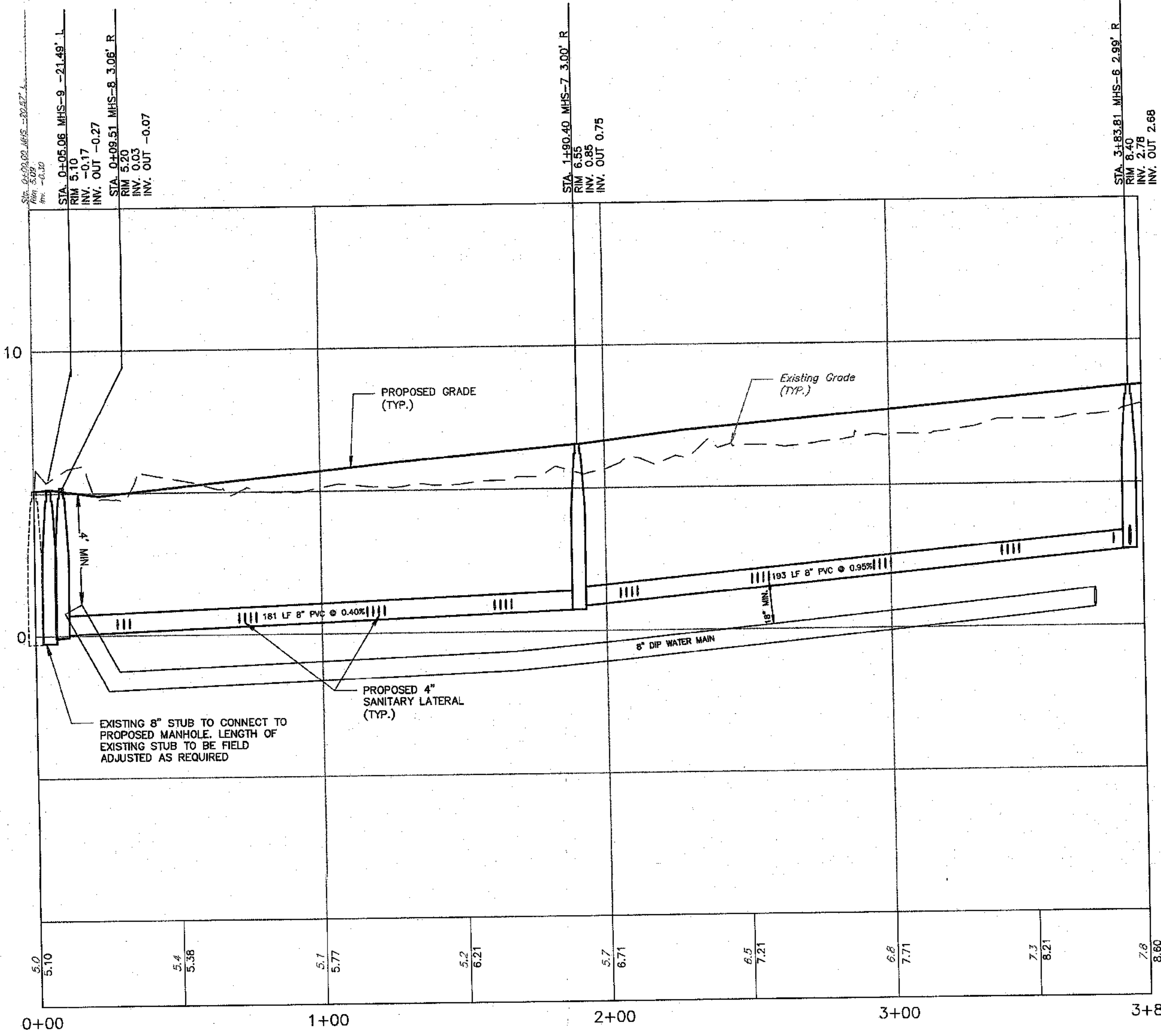
NO.	DATE	DESCRIPTION	REVISIONS
10.	02/07/20	REVISED PER AIR REVIEW LETTER DATED 03/03/20	TRM
9.	02/07/20	REVISED PER AIR REVIEW LETTER DATED 01/20/20	CTR
8.		THIS SHEET ADDED	SMS

SEAN M. SAVAGE, P.E.
NEW JERSEY PROFESSIONAL ENGINEER
LICENSE NO. 246627000

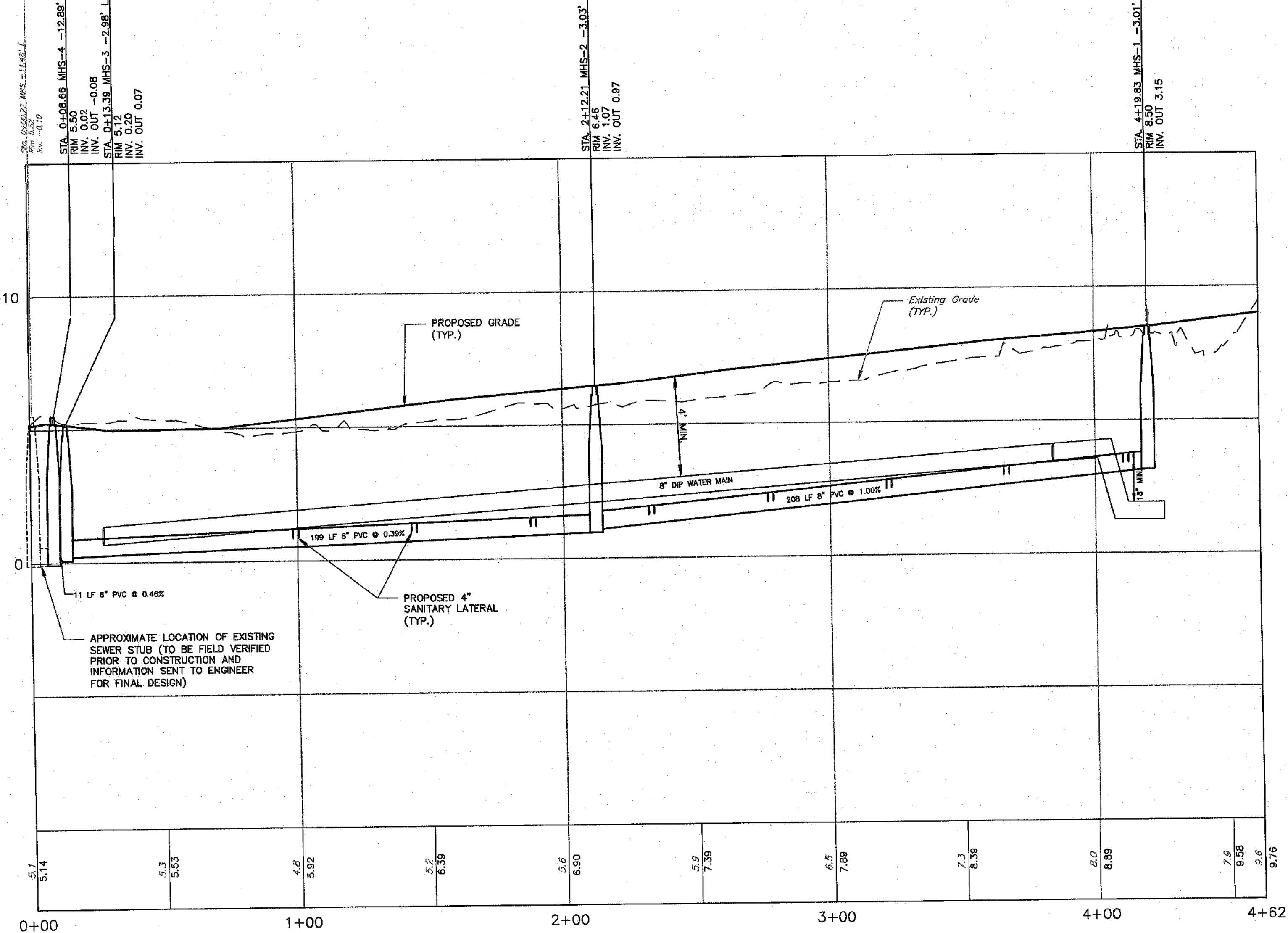
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NEW JERSEY CERTIFICATE OF AUTHORIZATION NO. 246627000000

LIGHTING PLAN
PRELIMINARY AND FINAL MAJOR SITE PLAN
CAMP OSBORN OCEAN SITE
BLOCK 36, LOTS 13, 18, 22 & 24
SITUATED IN
TOWNSHIP OF BRICK, OCEAN COUNTY, NEW JERSEY

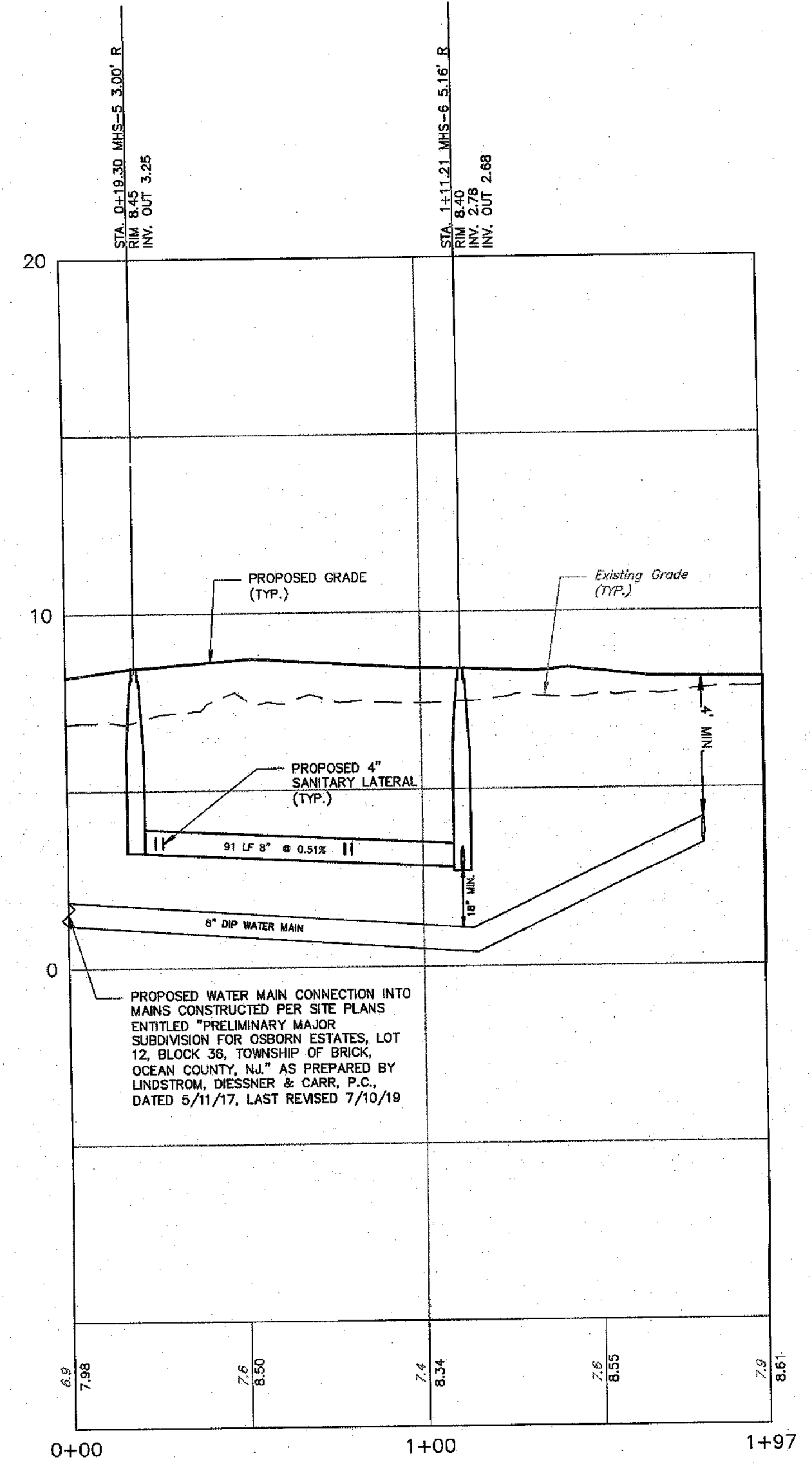
PROJECT NUMBER: LD14-160
DATE: 02/06/20
SCALE: 1"=20'
SHEET 8 OF 12



SHELL ROAD
 HORIZONTAL SCALE: 1"=30'
 VERTICAL SCALE: 1"=3'



ELDER STREET
 HORIZONTAL SCALE: 1"=30'
 VERTICAL SCALE: 1"=3'



OSBORN DUNES ROAD
 HORIZONTAL SCALE: 1"=30'
 VERTICAL SCALE: 1"=3'

THIS IS TO CERTIFY THAT THE WATER AND SEWER DESIGN CONFORMS WITH THE RULES AND REGULATIONS OF THE BRICK TOWNSHIP MUNICIPAL UTILITIES AUTHORITY.

STEPHEN Y. SPECHT, P.E. DATE
 DEPUTY EXECUTIVE DIRECTOR &
 DIRECTOR OF ENGINEERING/OPERATIONS

BRICK UTILITIES' FILE # _____

APPROVED BY THE
 BRICK TOWNSHIP
 PLANNING BOARD

CHAIRPERSON DATE

SECRETARY DATE

PLANNING BOARD ENGINEER DATE

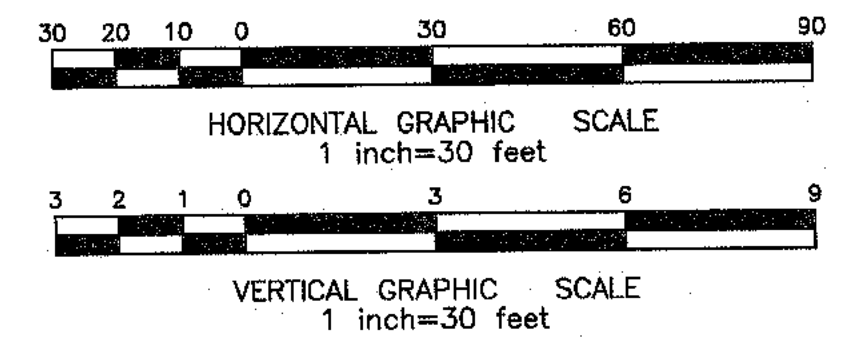
- PROFILE NOTES:**
- CONTRACTOR TO PERFORM TEST PITS TO VERIFY EXISTING UTILITY DEPTHS, SIZES AND LOCATIONS PRIOR TO CONNECTING PROPOSED SEWER AND WATER MAINS TO EXISTING SEWER AND WATER MAINS. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IN WRITING OF ANY CONFLICTS SO THAT DESIGN MODIFICATIONS CAN BE MADE IF NECESSARY.
 - ALL CONSTRUCTION SHALL CONFORM TO ANY APPLICABLE FEDERAL, STATE AND LOCAL REGULATIONS. CONTRACTOR HAS SOLE RESPONSIBILITY FOR SITE SAFETY AND TO CONFORM TO AND ABIDE BY ALL CURRENT OSHA STANDARDS OR REGULATIONS. SAFE CONSTRUCTION PRACTICES REMAIN THE OBLIGATION OF THE CONTRACTOR. THE CONTRACTOR SHALL OBTAIN ALL APPLICABLE FEDERAL, STATE AND LOCAL PERMITS PRIOR TO CONSTRUCTION.
 - PIPE LENGTHS INDICATED ARE MEASURED CENTER TO CENTER OF EACH STRUCTURE.
 - ALL SANITARY SEWER MAINS, SEWER LATERALS, AND APPURTENANCES SHALL BE CONSTRUCTED AND TESTED IN ACCORDANCE WITH BRICK TOWNSHIP MUA AND NJDEP REQUIREMENTS. (CYD, PRESSURE RATED, AND MARKUP TESTED).
 - ALL WATER SERVICES TO BE INSTALLED IN CONFORMANCE WITH THE REQUIREMENTS OF THE PLUMBING SUBCODE PROMULGATED BY THE NEW JERSEY DEPARTMENT OF COMMUNITY AFFAIRS PURSUANT TO THE STATE UNIFORM CONSTRUCTION CODE ACT (N.J.A.C. 5:23-3.15).
 - ALL NEW WATER MAINS SHALL BE LAID WITH A MINIMUM OF 4 FEET OF COVER OVER THE PIPE TO PREVENT FREEZING.
 - IN ACCORDANCE WITH N.J.A.C. 7:10-11.10(c)(5), ALL WATER MAINS AND SANITARY SEWER LINES SHALL BE SEPARATED BY A HORIZONTAL DISTANCE OF 10 FEET. IF SUCH LATERAL SEPARATION IS NOT POSSIBLE, THE WATER AND SEWER LINES SHALL BE IN SEPARATE TRENCHES (DEEP TRENCHES ARE PROHIBITED) WITH THE TOP OF THE SEWER LINE AT LEAST 18 INCHES BELOW THE BOTTOM OF THE WATER MAIN OR WITH SUCH OTHER SEPARATION EXPRESSLY APPROVED BY THE NJDEP. AT CROSSINGS OF SEWER LINES AND WATER MAINS, THE TOP OF THE SEWER LINES SHALL BE AT LEAST 18 INCHES BELOW THE BOTTOM OF THE WATER MAIN (SEWER SERVICE LATERALS ARE NOT SUBJECT TO THIS REQUIREMENT). IF SUCH VERTICAL SEPARATION IS NOT POSSIBLE, THE SEWER LINE SHALL BE OF WATER-TIGHT CONSTRUCTION (DUCTILE IRON), WITH WATER-TIGHT JOINTS THAT ARE A MINIMUM OF 10 FEET FROM THE WATER MAIN.
 - UNLESS OTHERWISE INDICATED:
 A. 8" DIP WATER MAIN SHALL BE GLASS FIBER REINFORCED CONCRETE LINED DUCTILE IRON PIPE (POLYETHYLENE ENCASEMENT)
 B. SANITARY SEWER MAINS SHALL BE PVC SDR-35

NOTICE TO CONTRACTOR

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THE CONTRACTOR SHALL CONTACT NEW JERSEY ONE CALL (1-800-272-1000 OR LATEST NUMBER) FOR UTILITY MARKOUT PRIOR TO THE START OF CONSTRUCTION.

NO.	REVISIONS	DATE	BY	CHKD.
10.	NO REVISION THIS SHEET			
9.	LTR DATED 02/07/19, 8/17/19 REV LTR DATED 11/27/19			
8.	REV PER ARI REV LTR DATED 12/07/18, 8/17/19 REV LTR DATED 11/27/19			
7.	REV PER ARI REV LTR DATED 10/07/18, 8/17/19 REV LTR DATED 11/27/19			
6.	REV PER ARI REV LTR DATED 10/07/18, 8/17/19 REV LTR DATED 11/27/19			
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4.	REV PER ARI REV LTR DATED 10/07/18, 8/17/19 REV LTR DATED 11/27/19			
3.	REV PER ARI REV LTR DATED 10/07/18, 8/17/19 REV LTR DATED 11/27/19			
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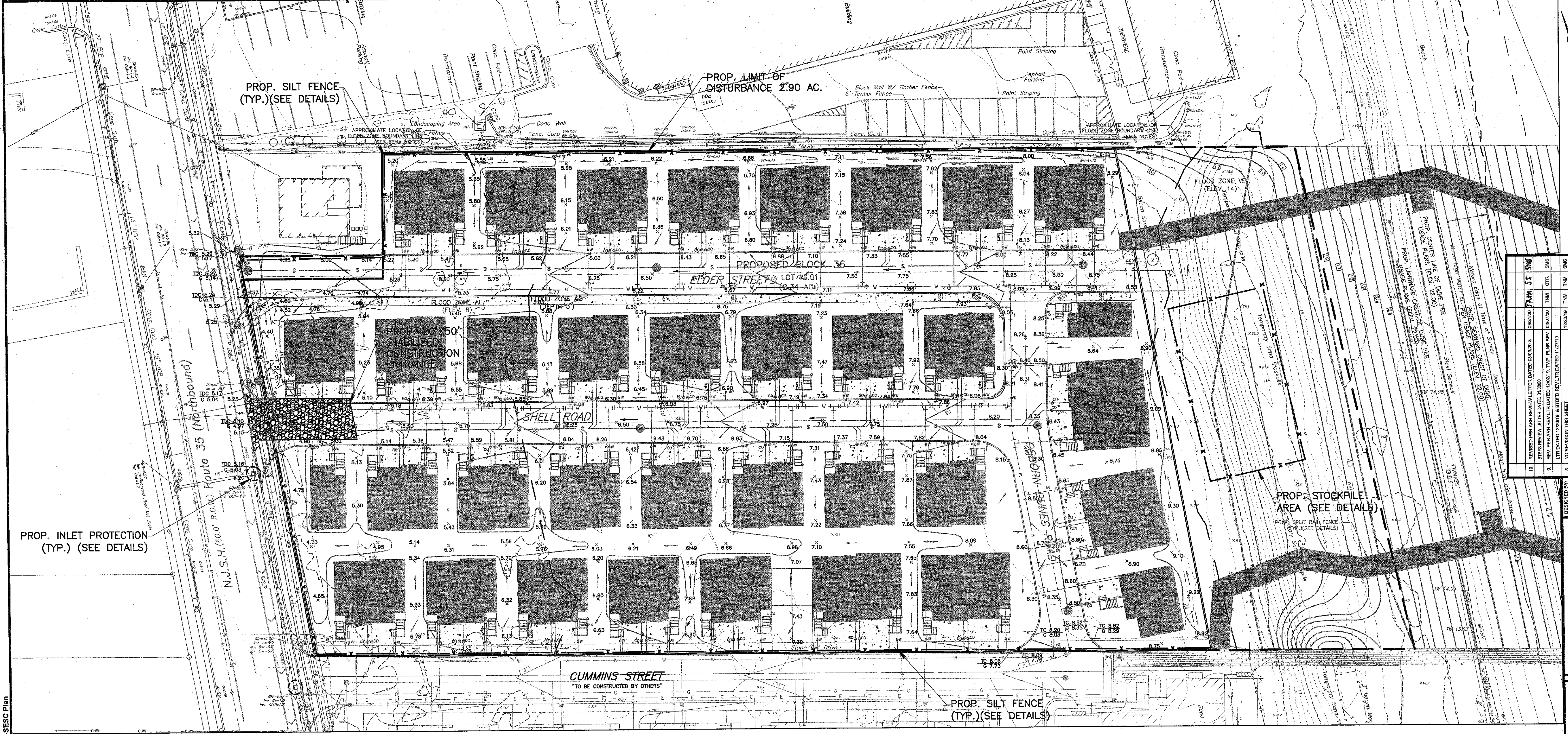


SEAN M. SAVAGE, P.E.
 NEW JERSEY PROFESSIONAL ENGINEER
 LICENSE NO. 24068451000
 DATE: 4/1/2020

MATRIXNEWORLD
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 and Landscape Architecture, P.C.
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 NEW JERSEY CERTIFICATE OF AUTHORIZATION NO. 24G42792300

PROFILES
 PRELIMINARY AND FINAL MAJOR SITE PLAN
 CAMP OSBORN OCEAN SITE
 BLOCK 36, LOTS 13, 15, 22 & 24
 SITUATED IN
 TOWNSHIP OF BRICK, OCEAN COUNTY, NEW JERSEY

PROJECT NUMBER: LD14-160
 DATE: 9/11/2017
 SCALE: AS SHOWN
 SHEET 9 OF 12



NO.	DESCRIPTION	DATE	BY	REVISIONS
10.	REVISED PER ARI REVIEW LETTER DATED 03/09/2018	03/09/2018	SMG	
9.	REVISED PER ARI REVIEW LETTER DATED 04/30/2018	04/30/2018	SMG	
8.	REVISED PER ARI REVIEW LETTER DATED 04/30/2018	04/30/2018	SMG	
7.	REVISED PER ARI REVIEW LETTER DATED 04/30/2018	04/30/2018	SMG	
6.	REVISED PER ARI REVIEW LETTER DATED 04/30/2018	04/30/2018	SMG	
5.	REVISED PER ARI REVIEW LETTER DATED 04/30/2018	04/30/2018	SMG	
4.	REVISED PER ARI REVIEW LETTER DATED 04/30/2018	04/30/2018	SMG	
3.	REVISED PER ARI REVIEW LETTER DATED 04/30/2018	04/30/2018	SMG	
2.	REVISED PER ARI REVIEW LETTER DATED 04/30/2018	04/30/2018	SMG	
1.	REVISED PER ARI REVIEW LETTER DATED 04/30/2018	04/30/2018	SMG	

SEAN M. SAVAGE, P.E.
 NEW JERSEY PROFESSIONAL ENGINEER
 LICENSE NO. 36044-0000
 4/1/2018

MATRIX NEW WORLD
 Engineering Progress
 Matrix New World Engineering, Land Surveying
 and Landscape Architecture, P.C.
 442 Siskia Route 35, Second Floor
 Eatontown, New Jersey 07724
 Tel: 732-588-2989
 Fax: 973-440-1818
 www.matrixnewworld.com
 NEW JERSEY CERTIFICATE OF AUTHORIZATION NO. Z652792220

SOIL EROSION & SEDIMENT CONTROL PLAN
 PRELIMINARY AND FINAL MAJOR SITE PLAN
 CAMP OSBORN OCEAN SITE
 BLOCK 36, LOTS 13, 14, 15, 22 & 24
 TOWNSHIP OF BRICK, OCEAN COUNTY, NEW JERSEY

PROJECT NUMBER: L14-160
 DATE: 09/11/17
 SCALE: 1"=20'
 SHEET 10 OF 12

- MAP REFERENCES:**
- BOUNDARY AND TOPOGRAPHIC INFORMATION SHOWN HEREON IS BASED UPON A SURVEY ENTITLED, "BOUNDARY AND TOPOGRAPHIC SURVEY, OMBP OSBORN OCEAN SITE, TAX LOT 13, 14 & 24 - BLOCK 36, SITUATED IN TOWNSHIP OF BRICK, OCEAN COUNTY, NEW JERSEY, DATED JULY 31, 2017 AND PREPARED BY MATRIX NEW WORLD ENGINEERING.
 - BOUNDARY INFORMATION FOR LOT 22 SHOWN HEREON IS BASED ON TAX MAP SHEET NO. 9.03 OF THE TOWNSHIP OF BRICK, OCEAN COUNTY, NEW JERSEY TAX MAP DATED OCTOBER 1, 1950.
 - "STATE OF NEW JERSEY DEPARTMENT OF TRANSPORTATION PLANS OF ROUTE 35 RESTORATION (SANDY RESTORATION) TOWNSHIP OF BRICK, OCEAN COUNTY, NEW JERSEY, FROM MP 4.00 TO MP 9.07 CONTRACT NO. COM405331 PAVING DRAINAGE & STRUCTURES," DATED APRIL 2013.
 - "BEACHFILL INITIAL CONSTRUCTION, MANASQUAN INLET TO BARNEGAT INLET, OCEAN COUNTY, NEW JERSEY, F.B. NO. W9128U-18-B-0014," AS PREPARED BY U.S. ARMY CORPS OF ENGINEERS DATED SEPTEMBER 2016.
 - PROPOSED IMPROVEMENTS FOR ADJACENT TAX LOT 12 - BLOCK 36 BASED UPON SITE PLANS TITLED "PRELIMINARY MAJOR SUBDIVISION FOR OSBORN ESTATES, LOT 12, BLOCK 36, TOWNSHIP OF BRICK, OCEAN COUNTY, NJ," AS PREPARED BY LINDSTROM, DESIGNER & GARR, P.C., DATED 5/11/17, LAST REVISED 7/10/18.
- SOIL EROSION AND SEDIMENT CONTROL NOTES:**
- PROJECT KNOWN AND DESCRIBED AS TAX MAP LOTS 13, 14, 22 & 24 IN BLOCK 36, AS SHOWN ON THE ON SHEET 9.03 OF TOWNSHIP OF BRICK, OCEAN COUNTY, NEW JERSEY TAX MAP DATED OCTOBER 1, 1950.
 - BLOCK, LOT, BOUNDARY, TOPOGRAPHIC AND UTILITY INFORMATION SHOWN HEREON IS BASED UPON THE BOUNDARY AND TOPOGRAPHIC SURVEY LISTED BELOW IN THE MAP REFERENCES, UNLESS OTHERWISE NOTED ON THIS PLAN.
 - HORIZONTAL DATUM: NAVD83; VERTICAL DATUM: NAVD83.
 - TO CONVERT FROM NAVD83 TO NAD83 TO CONVERT FROM NAD83 TO NAVD83 -1.14'.
 - ALL CONSTRUCTION TRAFFIC TO ENTER/EXIT VIA ENTRANCE ALONG N.J.S.H. ROUTE 35 NORTHBOUND.
 - TRACKING PADS TO BE INSTALLED IN ACCORDANCE WITH THE APPROVED SESC PLAN. A MINIMUM OF (1) TRACKING PAD(S) MUST BE IN OPERATION AT ALL TIMES. ADDITIONAL TRACKING PADS, CONFORMING TO SESC STANDARDS MAY BE ADDED AS THE CONTRACTOR DEEMS NECESSARY.
 - SOIL STOCKPILES TO BE PLACED AS REQUIRED WITHIN THE PROJECT SITE AND SILT FENCE LIMITS WITH SILT FENCE PLACED AROUND THE PERIMETER IN ACCORDANCE WITH THE SOIL EROSION AND SEDIMENT CONTROL DETAILS.
 - SHOULD ADDITIONAL STOCKPILE AREA BE NEEDED, THE CONTRACTOR SHALL CONFORM TO THE STATE STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL.
 - ALL CONTRACTORS MUST CALL THE NEW JERSEY ONE CALL SYSTEM (800-272-1000) IN ACCORDANCE WITH THE UNDERGROUND FACILITIES CONTROL ACT LAW PRIOR TO ANY SUBSURFACE ACTIVITY.
 - TRUCK WHEELS WILL BE WASHED AS NECESSARY ON THE TRACKING PAD.
 - SITE NOT SUBJECT TO SOIL RESTORATION REQUIREMENTS.

FEMA FLOOD NOTES

THE SUBJECT PROPERTY RECEIVED A LETTER OF MAP REVISION (LOMR MAP NO. 34022C007HP) ON MAY 30, 2017 WHICH RECALCULATED THE FLOOD INSURANCE RATE MAP SUCH THAT ONLY THE FOLLOWING FLOOD ZONES EXIST ON LOTS 13, 14, AND 24:

FLOOD ZONE AE - BASE FLOOD ELEVATION DETERMINED. (EL. 8.0 FT.) N.A.V.D. 1988

FLOOD ZONE AO - BASE FLOOD ELEVATION DETERMINED. (EL. 3.0 FT.) N.A.V.D. 1988

FLOOD ZONE VE - BASE FLOOD ELEVATION DETERMINED. (EL. 14.0 FT.) N.A.V.D. 1988 IS CONTAINED ENTIRELY WITHIN LOT 22

NOTICE TO CONTRACTOR

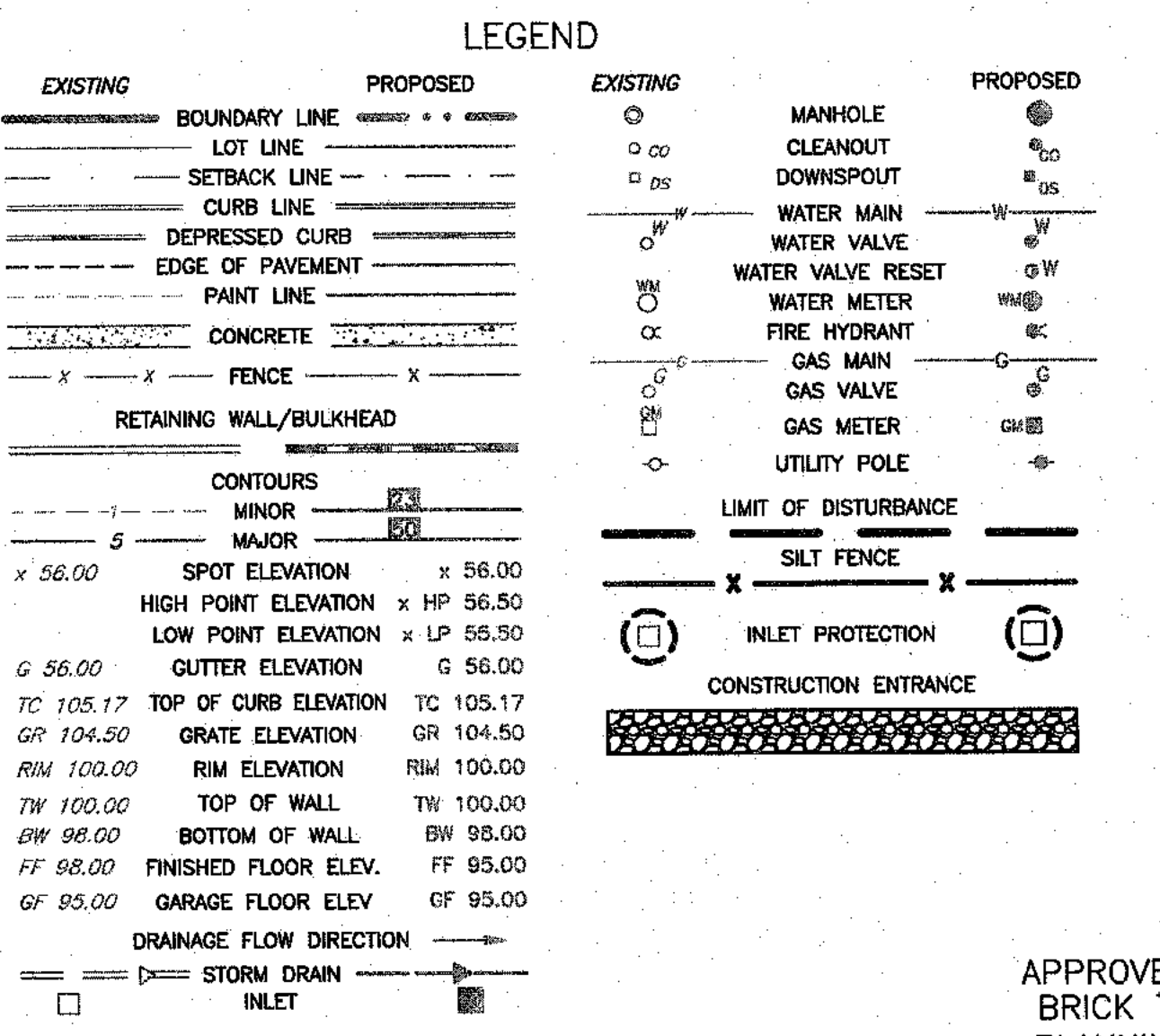
ATTENTION OF THE CONTRACTOR IS DIRECTED TO THE FACT THAT THE APPROXIMATE LOCATIONS OF KNOWN UTILITY STRUCTURES AND FACILITIES THAT MAY BE ENCOUNTERED WITHIN AND ADJACENT TO THE LIMITS OF WORK AREA ARE SHOWN ON THE PLANS. THE ACCURACY AND COMPLETENESS OF THIS INFORMATION IS NOT GUARANTEED BY THE ENGINEER, AND THE CONTRACTOR IS ADVISED TO VERIFY IN THE FIELD ALL THE FACTS CONCERNING THE LOCATION OF THESE UTILITIES AND OTHER CONSTRUCTION OBSTACLES PRIOR TO THE START OF CONSTRUCTION. FURTHER, THE CONTRACTOR SHALL NOTIFY THE ENGINEER, IN WRITING, PRIOR TO THE START OF CONSTRUCTION, OF ANY DISCREPANCIES WHICH MAY AFFECT THE PROJECT DESIGN.

THE CONTRACTOR SHALL CONTACT NEW JERSEY ONE CALL (1-800-272-1000 OR LATEST NUMBER) FOR UTILITY MARKOUT PRIOR TO THE START OF CONSTRUCTION.

CONSTRUCTION NOTE

THIS PLAN IS FOR SOIL EROSION AND SEDIMENT CONTROL MEASURES ONLY. THIS PLAN IS NOT TO BE USED FOR SITE CONSTRUCTION.

THIS PLAN PREPARED TO ADDRESS EROSION AND SEDIMENT CONTROL COMPONENT OF THE STORMWATER POLLUTION PREVENTION PLAN (SPPP) AT TIME OF DESIGN. ALL OTHER COMPONENTS OF THE SPPP AND GENERAL STORMWATER PERMIT NO. NJG0088323 TO BE RESPONSIBILITY OF THE DEVELOPER AND/OR SITE CONTRACTOR.

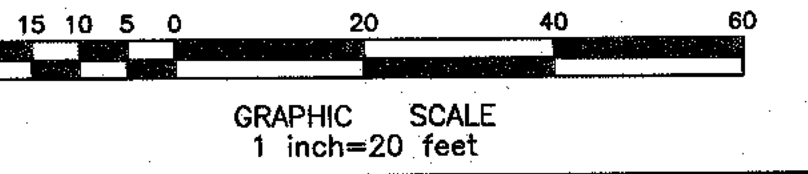


APPROVED BY THE
 BRICK TOWNSHIP
 PLANNING BOARD

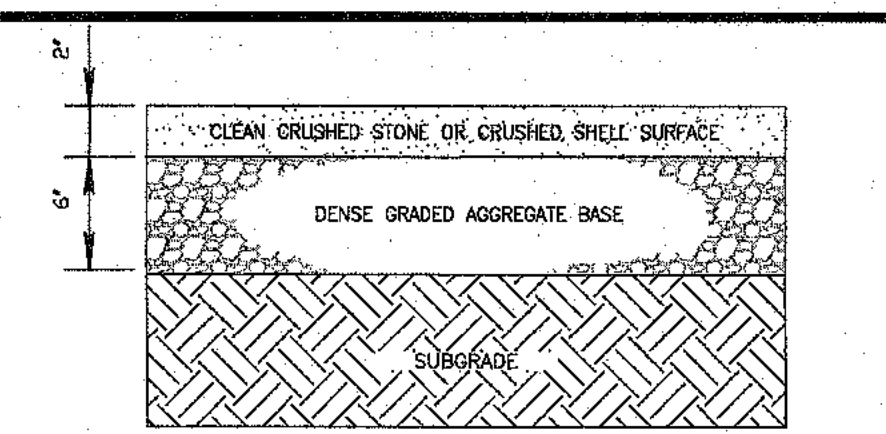
CHAIRPERSON _____ DATE _____

SECRETARY _____ DATE _____

PLANNING BOARD ENGINEER _____ DATE _____

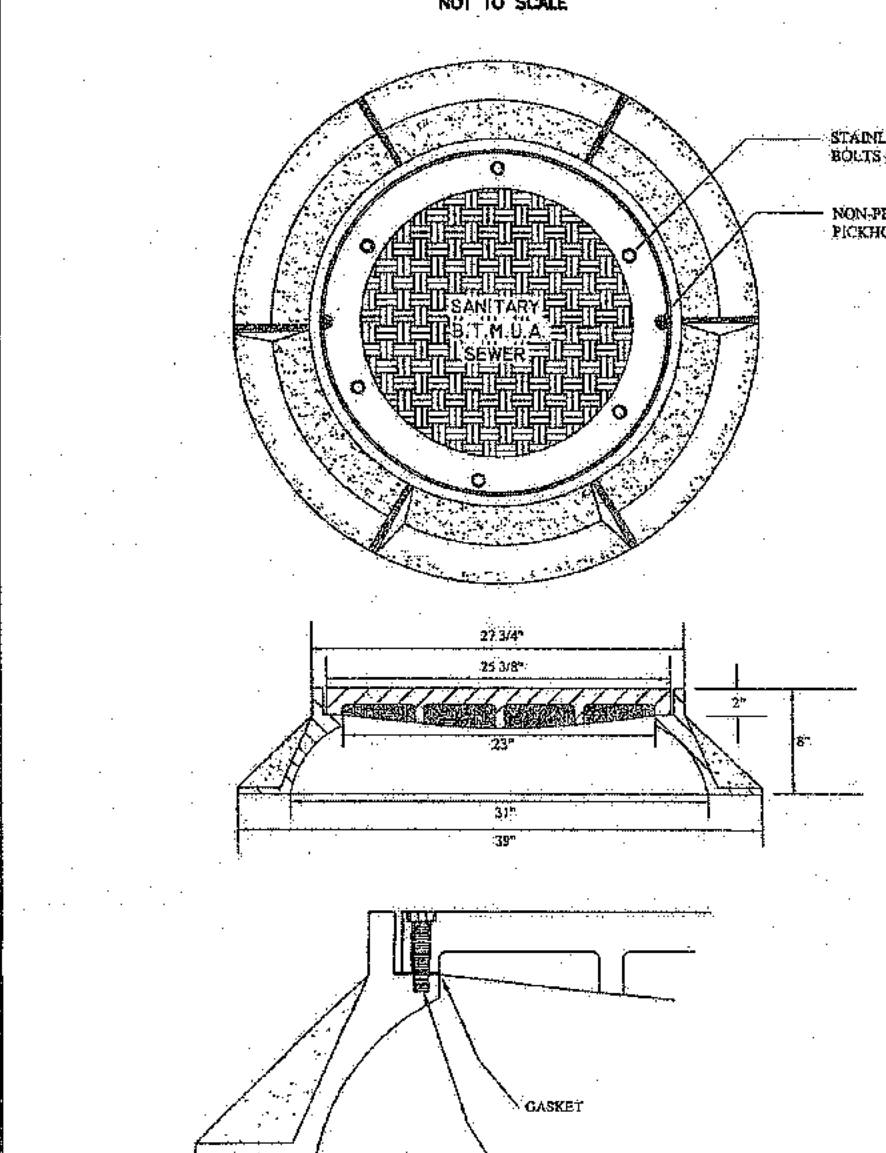


Plotted: 3/31/2020 12:33 PM By: Tori Massera
 © MATRIXNEWORLD\DWI\Matrix LDI\Jobs\Osborn Sea-Bay\LD14-160 - Camp Osborn Ocean Site\DWG\Plot Sheets\10-SESC Plan.dwg(09-SESC Plan

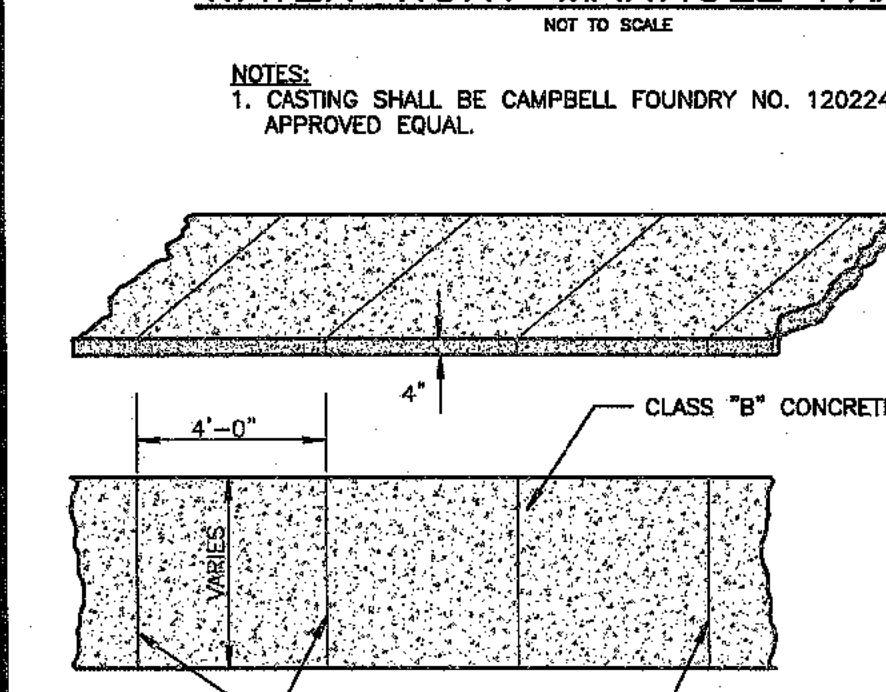


- NOTES:**
1. THE CONTRACTOR SHALL PREPARE THE EXISTING SURFACE AND SUBGRADE BY REMOVING DEBRIS AND VEGETATION, AND ADJUSTING MANHOLES AND WATER BOXES, ALL TO THE SATISFACTION OF THE TOWNSHIP.
 2. THE CONTRACTOR SHALL CONSTRUCT THE DRIVEWAY IN ACCORDANCE WITH NJDOT SPECIFICATIONS AND CONSTRUCTION REQUIREMENTS WHICH INCLUDES BUT IS NOT LIMITED TO SUBGRADE PREPARATION AND COMPACTION, DRIVEWAY MATERIAL SPREADING AND GRADING AND DRIVEWAY MATERIAL COMPACTION. GRADATION OF DRIVEWAY MATERIALS SHALL ALSO MEET NJDOT REQUIREMENTS AND SPECIFICATIONS.
 3. ALTERNATE ROADWAY SECTIONS WILL BE PERMITTED IF DETERMINED TO BE AN APPROVED EQUAL BY THE APPLICANT'S ENGINEER AND THE TOWNSHIP.
 4. THE PROPOSED GRAVEL CRUSHED SHELL DRIVEWAY SHALL BE ABLE TO SUPPORT HEAVY FIRE APPARATUS AND AT LEAST 35 TONS AS A STABILIZED ROAD BASE.

PRIVATE DRIVEWAY SECTION
ELDER ST., SHELL RD., & OSBORN DUNES RD.

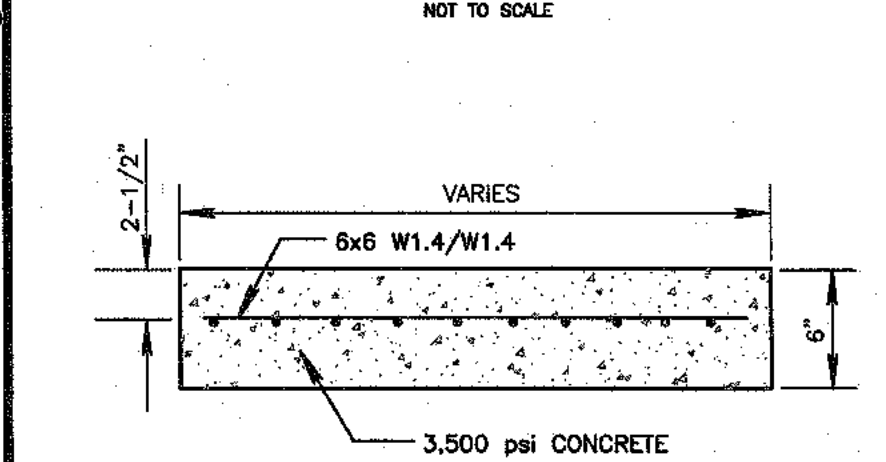


WATER TIGHT MANHOLE FRAME

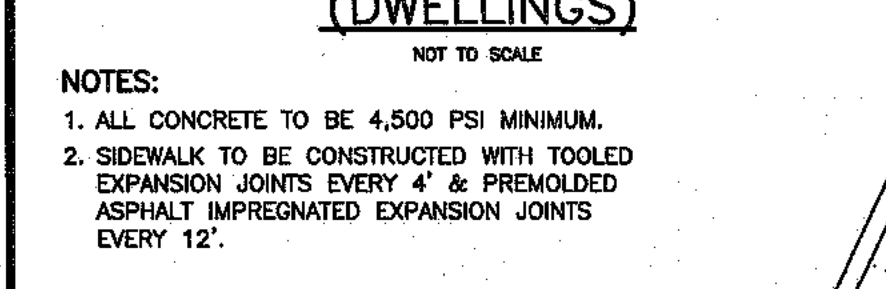


- NOTES:**
1. PREFORMED BITUMINOUS EXPANSION JOINTS, 1/2" THICK SHALL BE INSTALLED EVERY 20 FEET. CONTRACTION JOINTS SHALL BE INSTALLED EVERY 4 FEET.
 2. CONCRETE SHALL BE CLASS "B" PORTLAND CEMENT HAVING A 28 DAY STRENGTH OF 4000 PSI.
 3. HANDICAP RAMPS SHALL HAVE A LIGHT BROOM FINISH WITH THE STRIPATIONS PERPENDICULAR TO TRAFFIC.

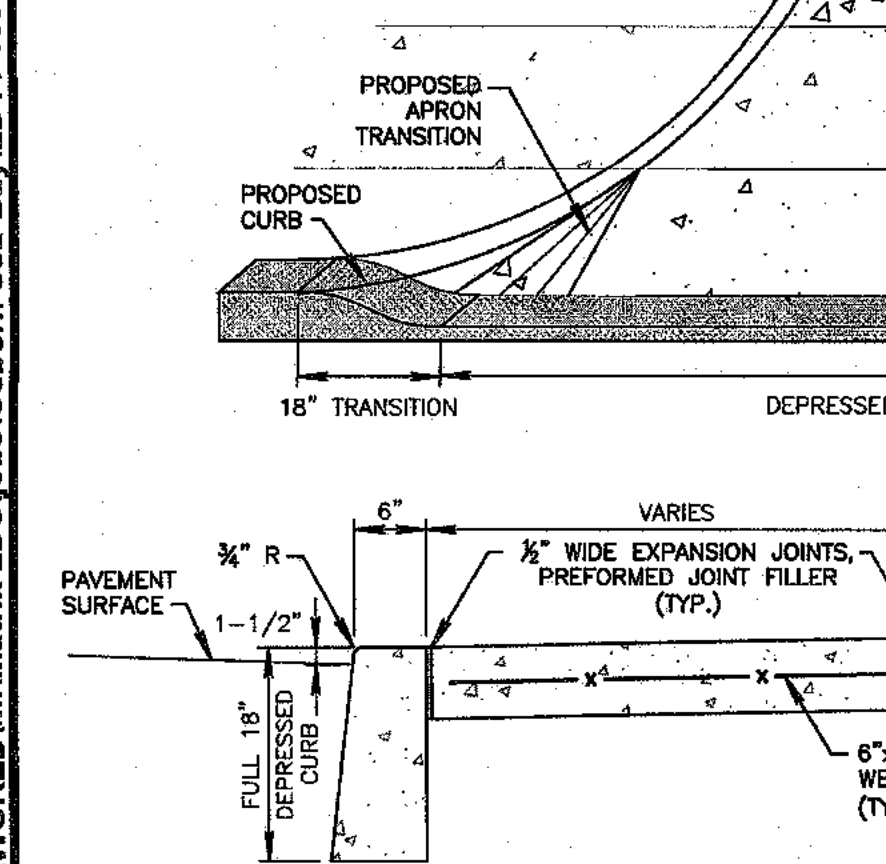
CONCRETE SIDEWALK



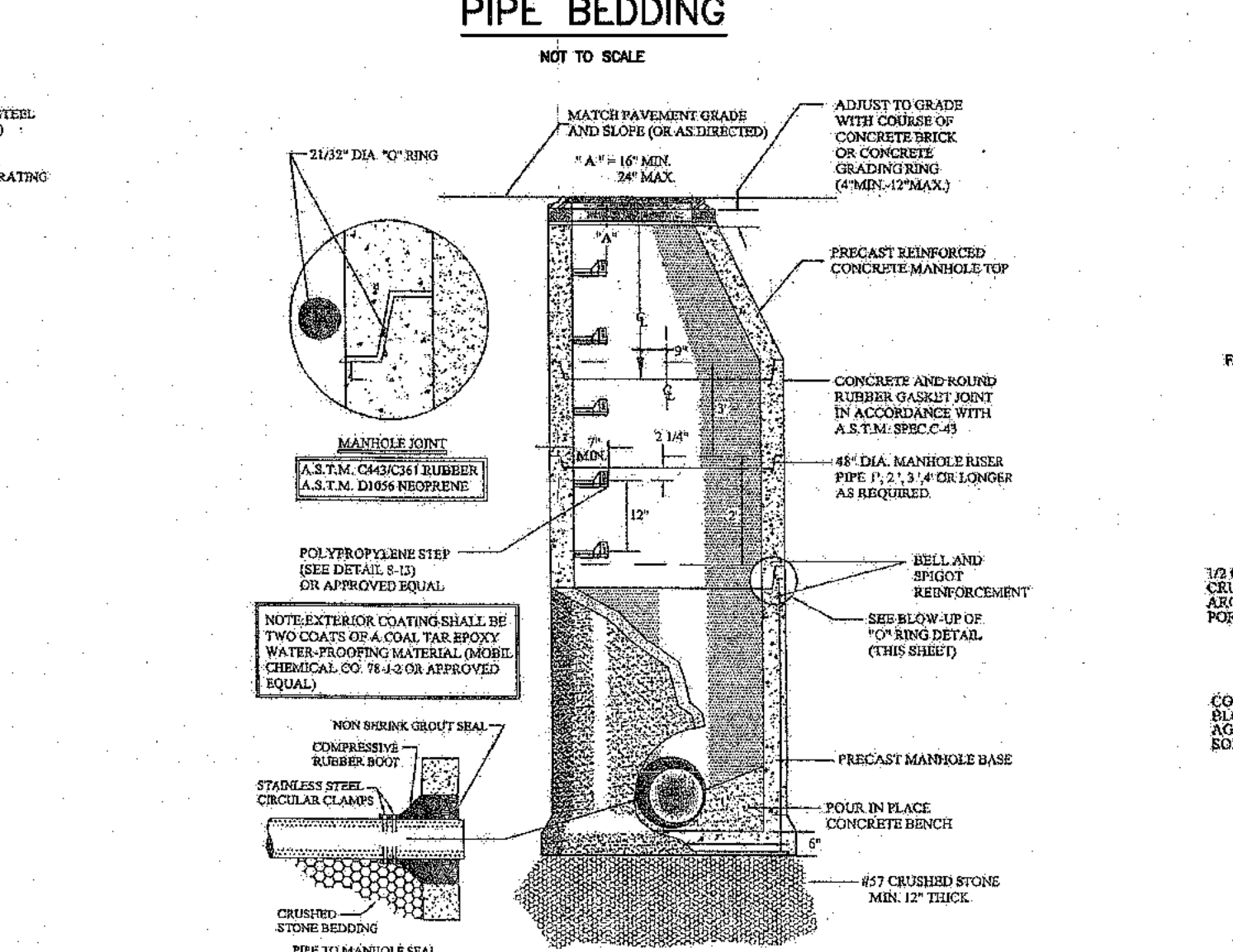
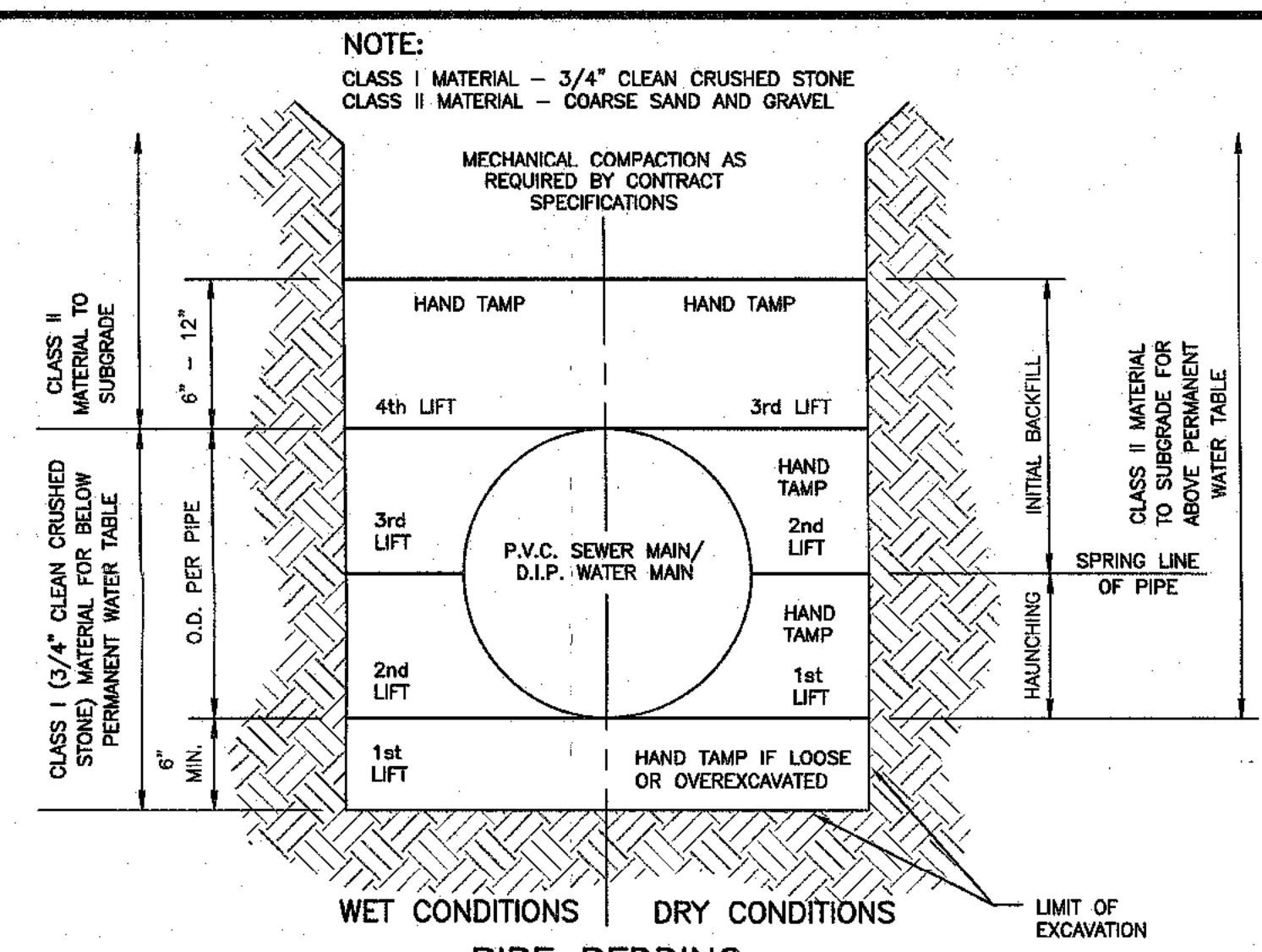
CONCRETE DRIVEWAY PAVEMENT (DWELLINGS)



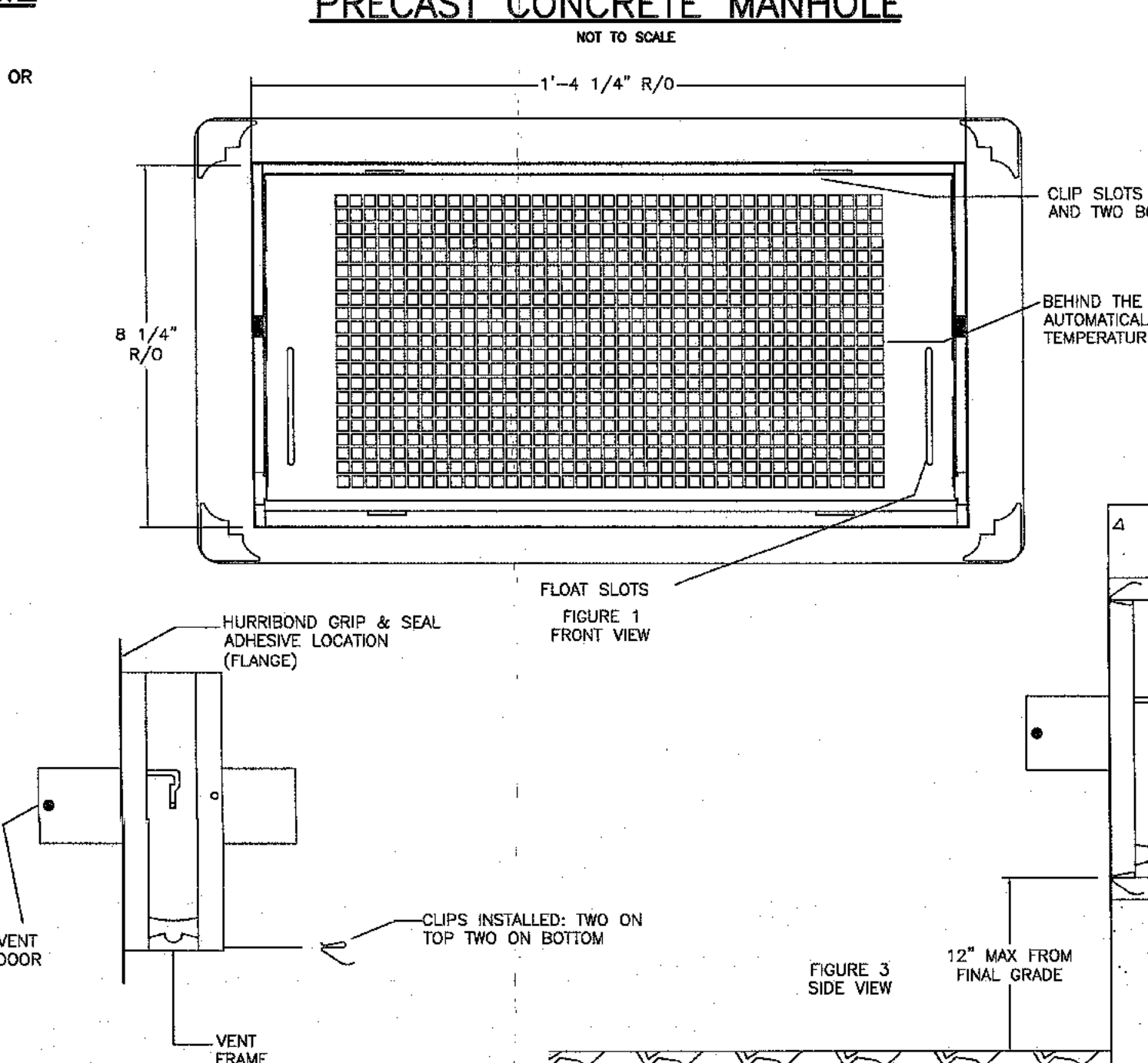
- NOTES:**
1. ALL CONCRETE TO BE 4,500 PSI MINIMUM.
 2. SIDEWALK TO BE CONSTRUCTED WITH TOoled EXPANSION JOINTS EVERY 4' & PREFORMED ASPHALT IMPREGNATED ASPHALT JOINTS EVERY 12'.



CONCRETE DRIVEWAY & CURB SECTION (HIGHWAY 35 INTERSECTIONS)

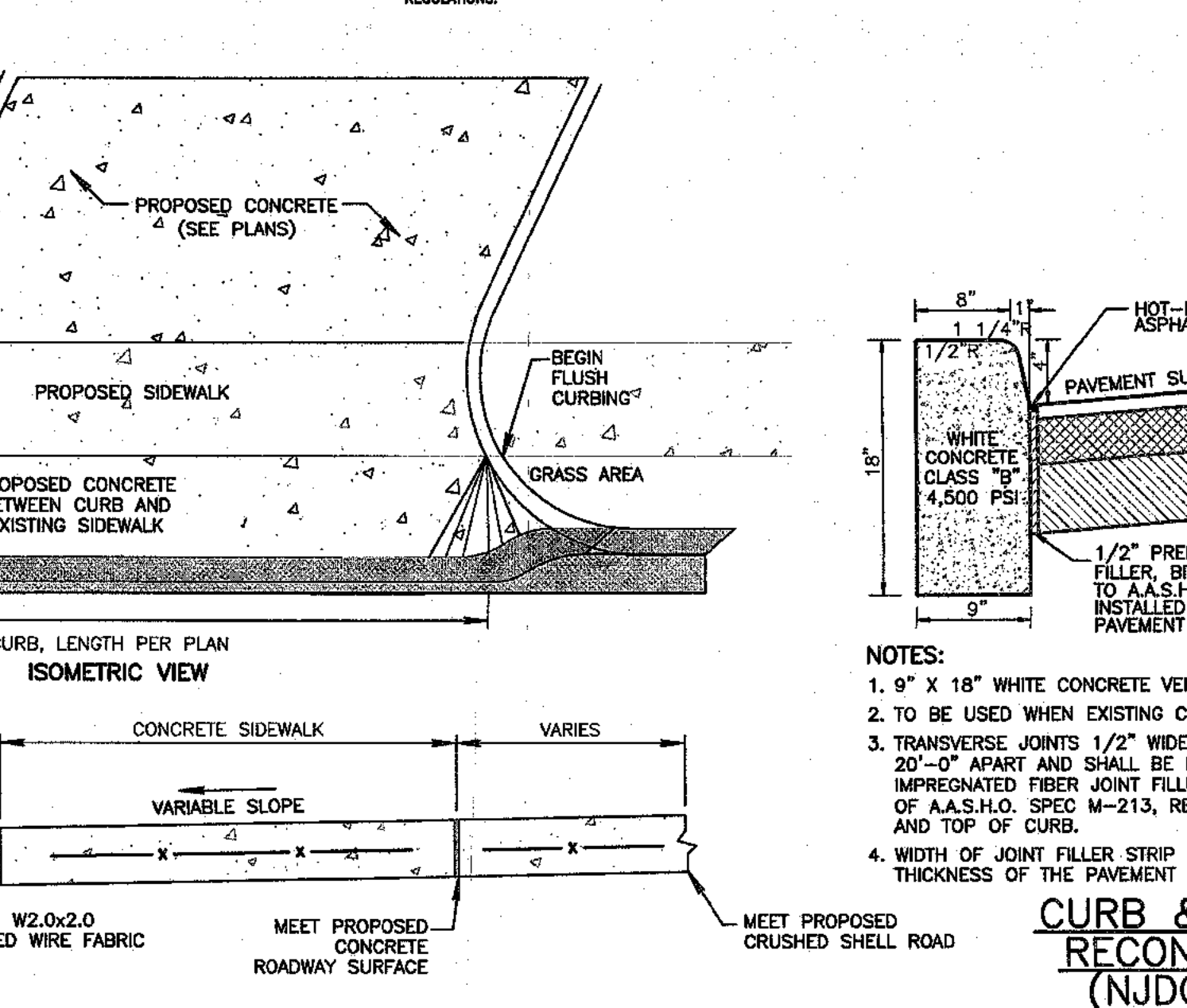


PRECAST CONCRETE MANHOLE

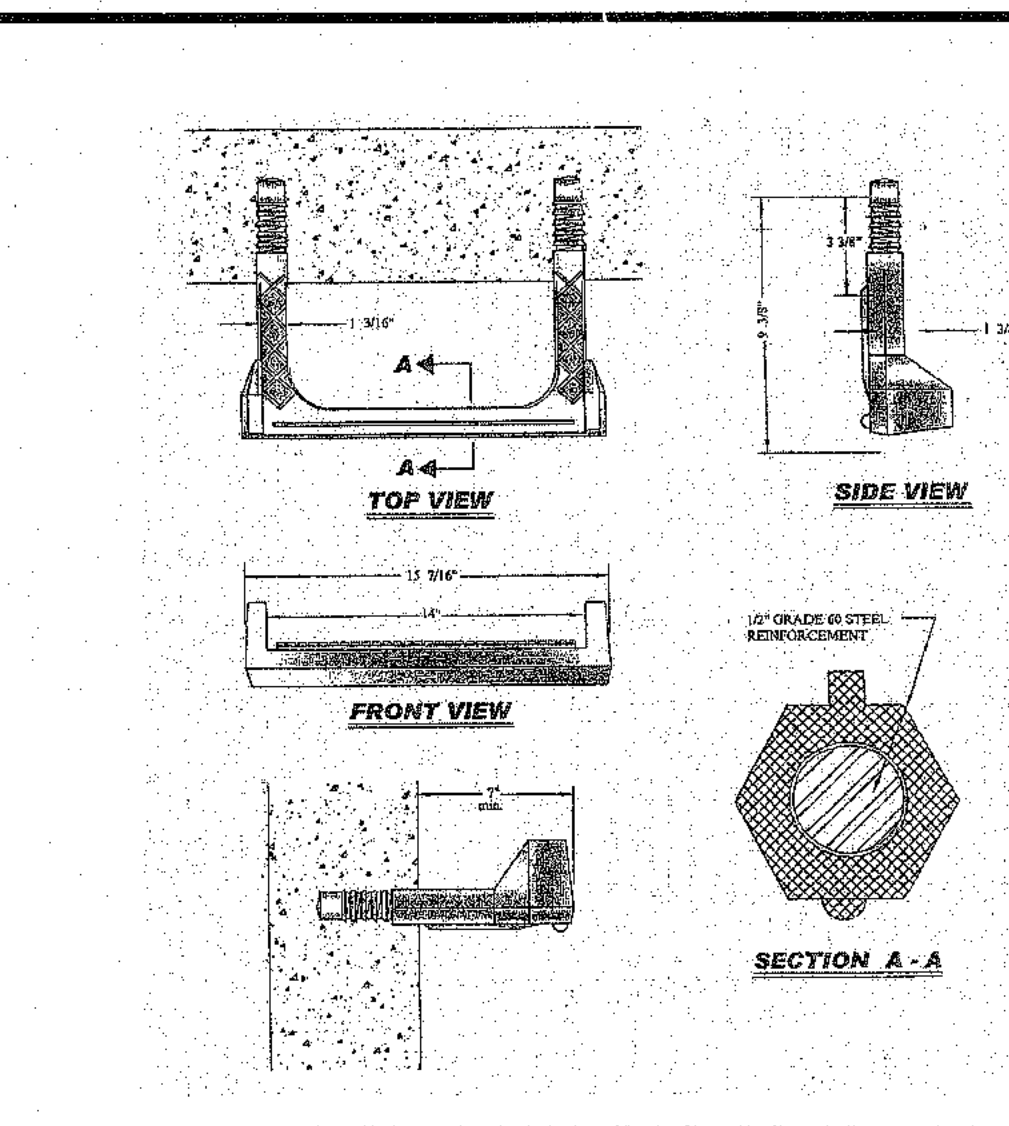


FLOOD VENT DETAIL

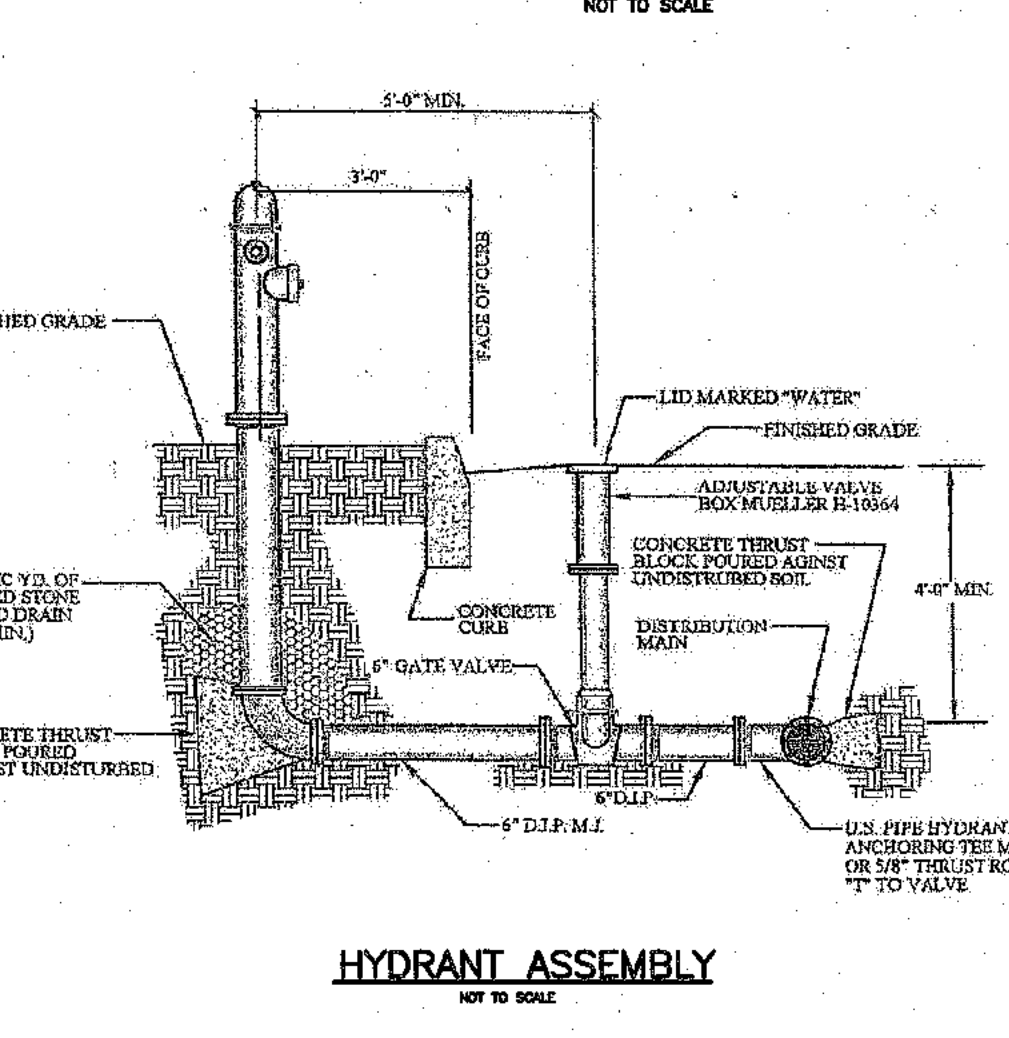
- NOTES:**
1. ENGINEERED FLOOD VENTS SHALL BE INSTALLED ONE (1) PER EVERY 200 SF OF UNCOVERED AREA REFER TO MECHANICAL PLAN FOR FINAL LOCATIONS.
 2. FLOOD VENT TO BE 18" DIA. VENT MODEL 1560-510 OR APPROVED EQUAL.
 3. CONTRACTOR TO INSTALL PER MANUFACTURER STANDARDS AND REGULATIONS.



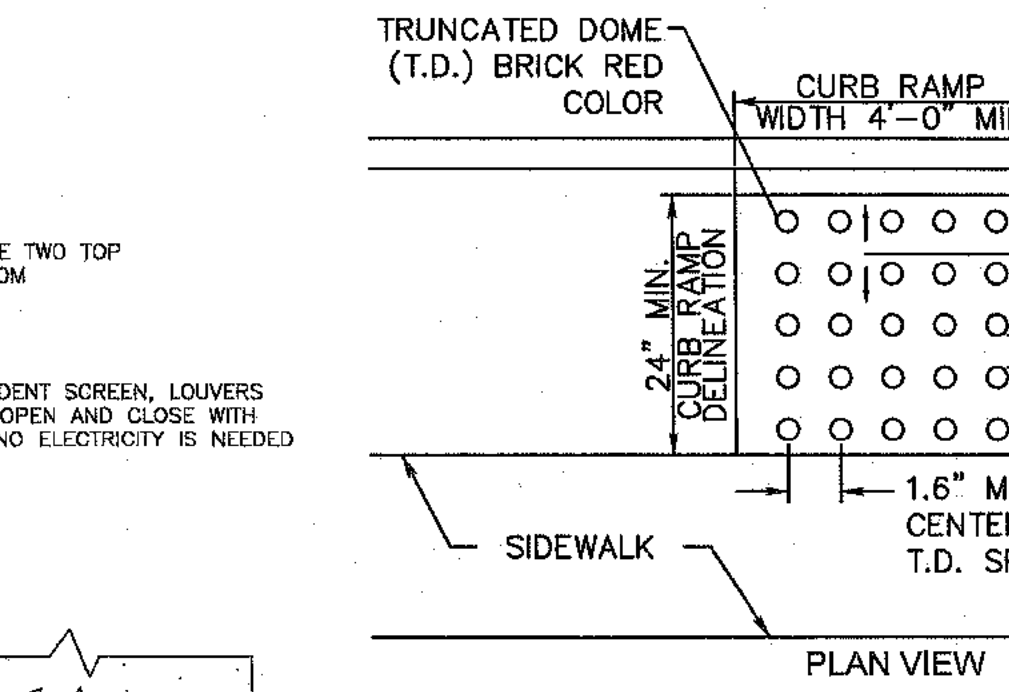
FLUSH CONCRETE CURB



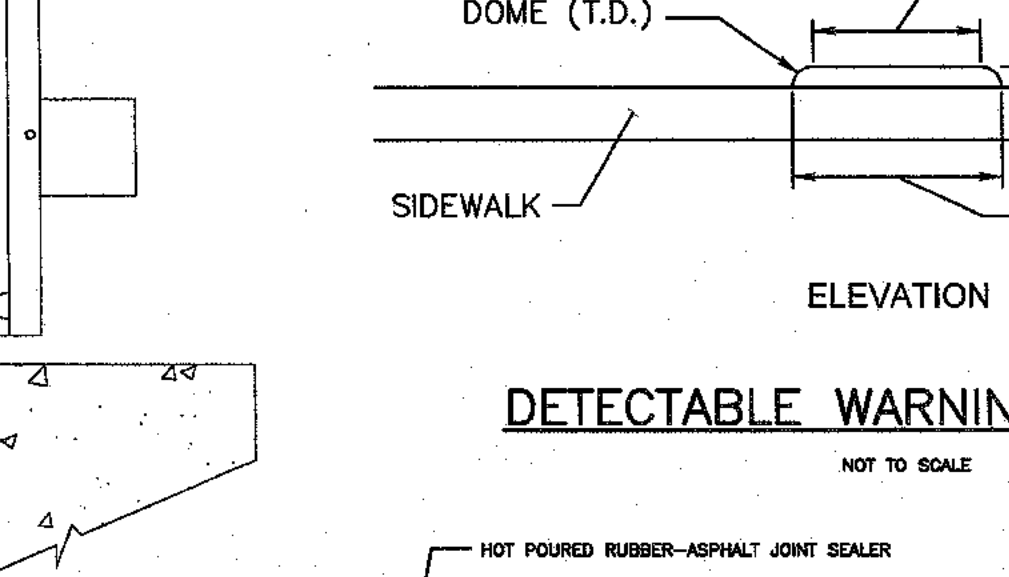
COPOLYMER POLYPROPYLENE PLASTIC MANHOLE STEPS



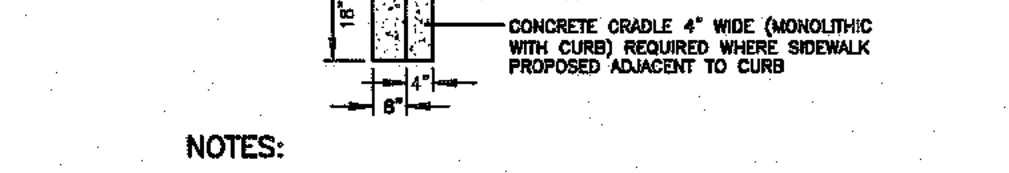
HYDRANT ASSEMBLY



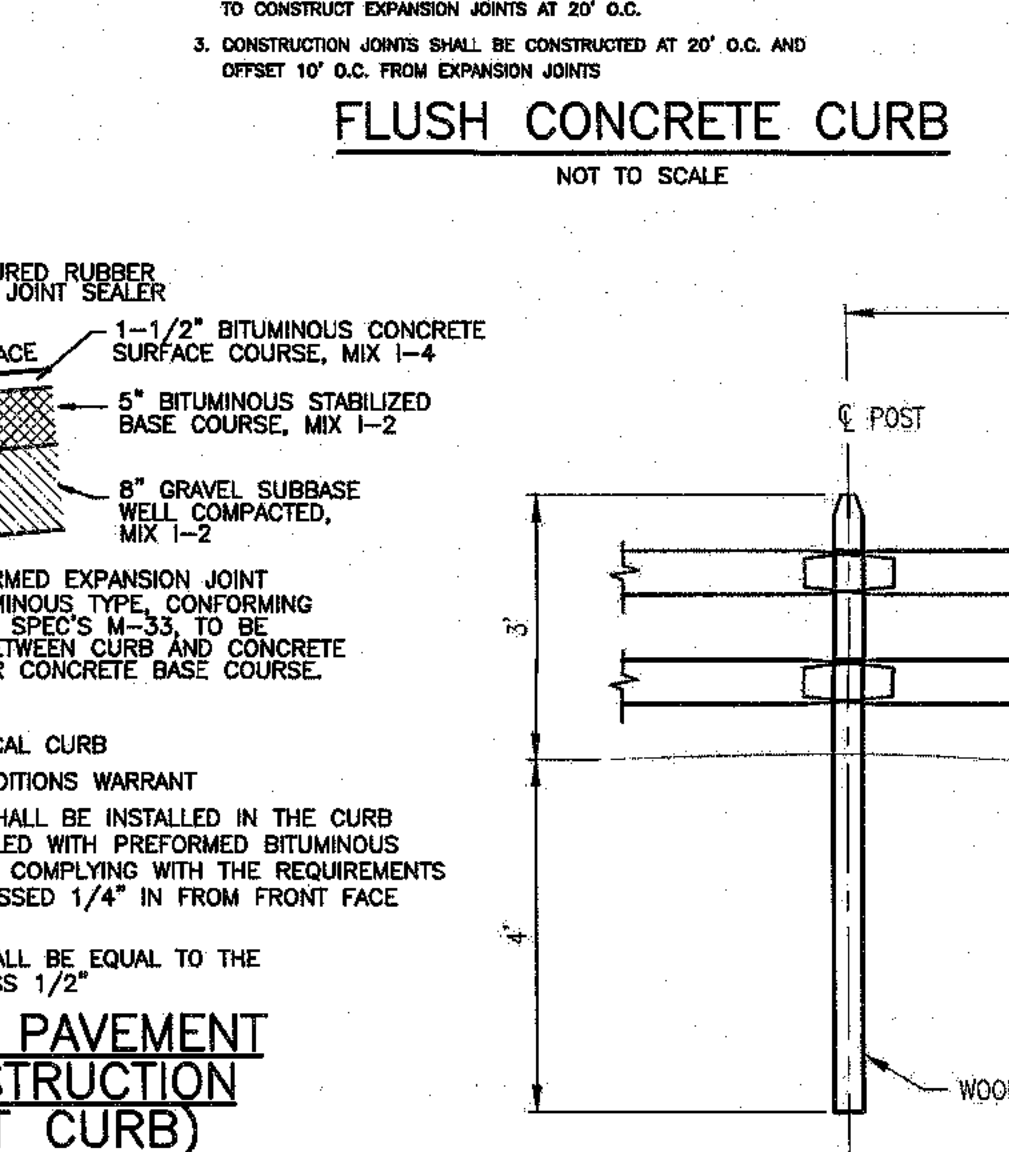
DETECTABLE WARNING SURFACE



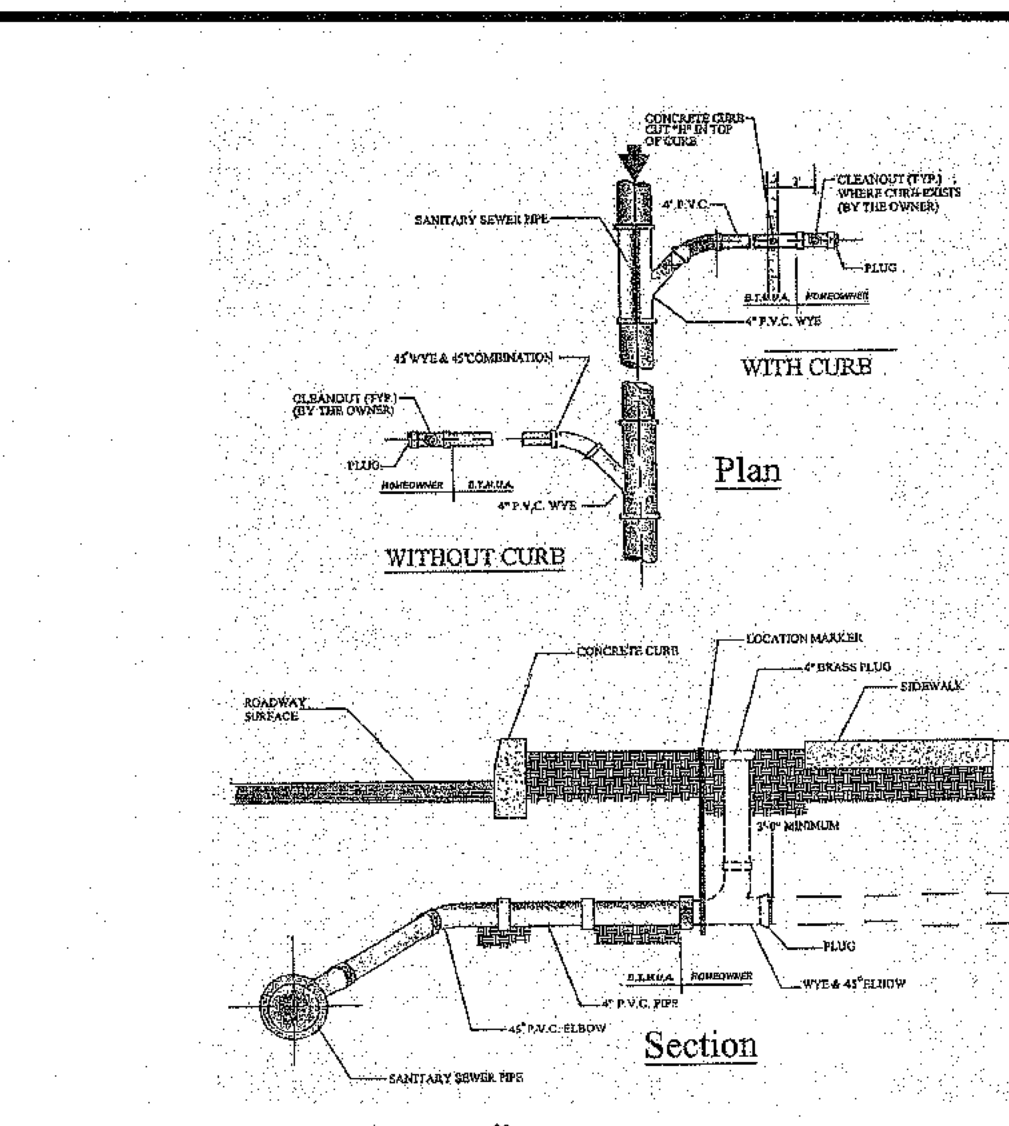
TYPICAL SWALE CROSS SECTION



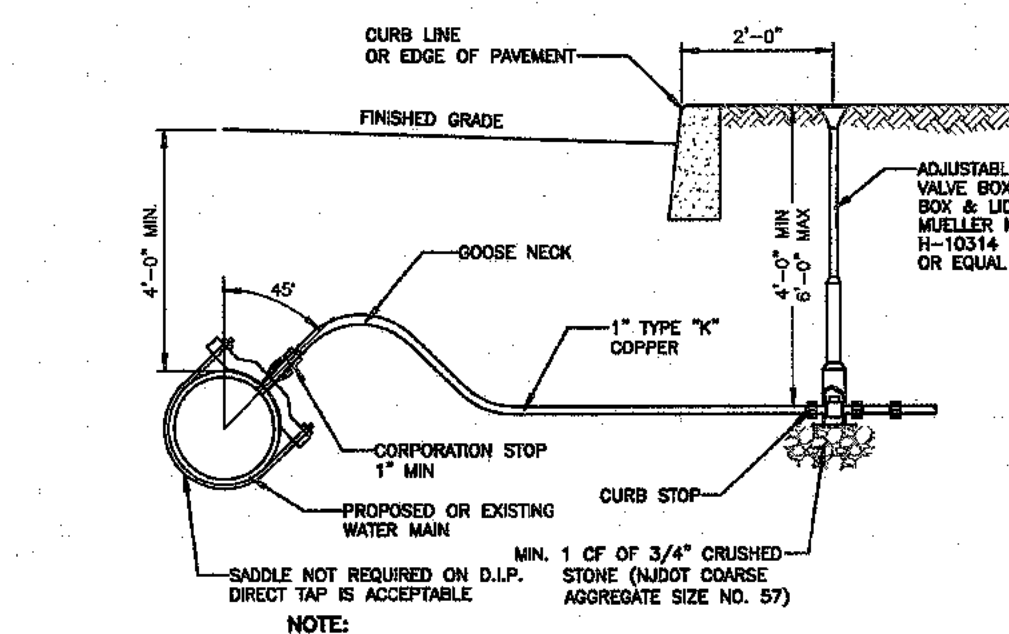
4" MOUNTABLE CONCRETE CURB (CUMMINS STREET)



SPLIT RAIL FENCE



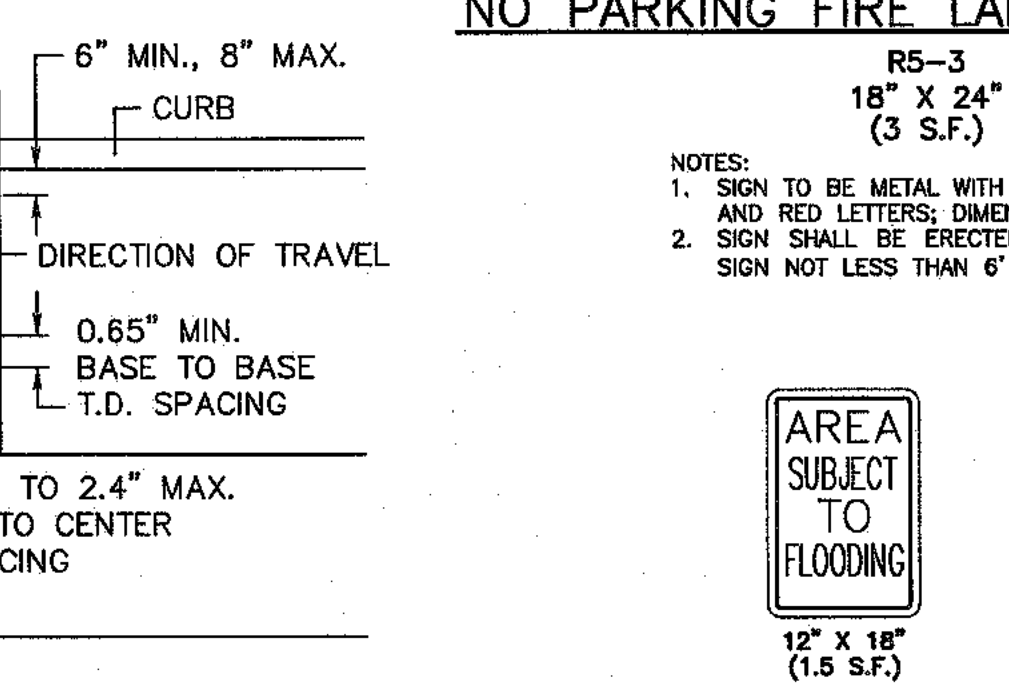
TYPICAL 4" HOUSE CONNECTION



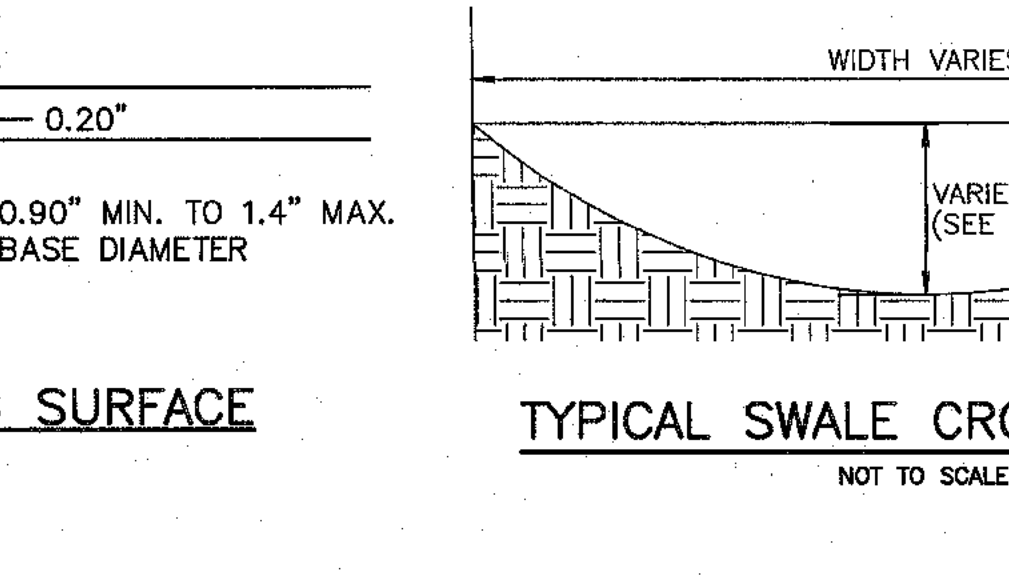
WATER SERVICE CONNECTION AND LATERAL



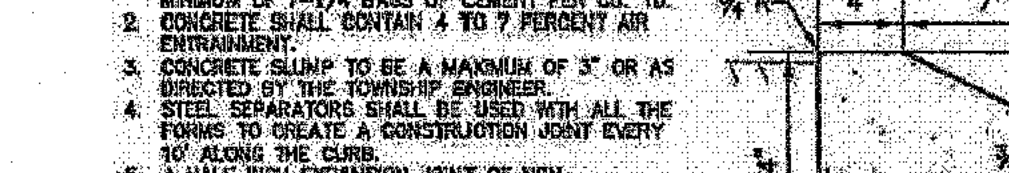
CLEANOUT PROTECTION BOX



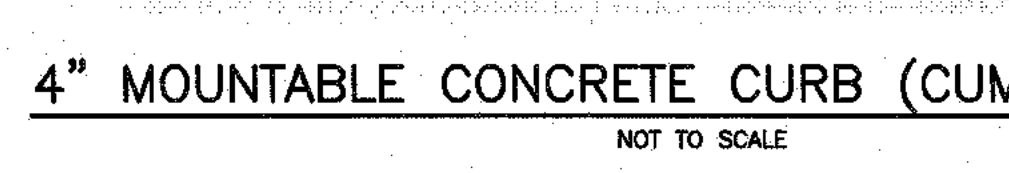
NO PARKING FIRE LANE SIGN DETAIL



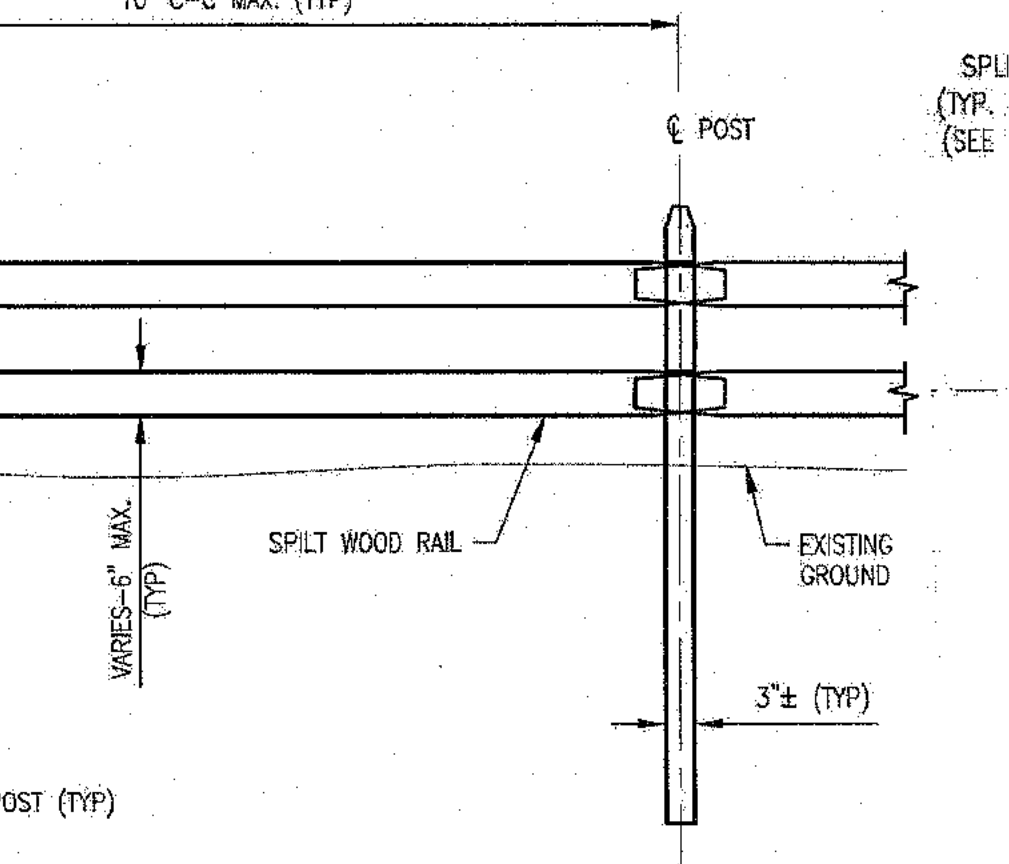
FLOOD SIGN DETAIL



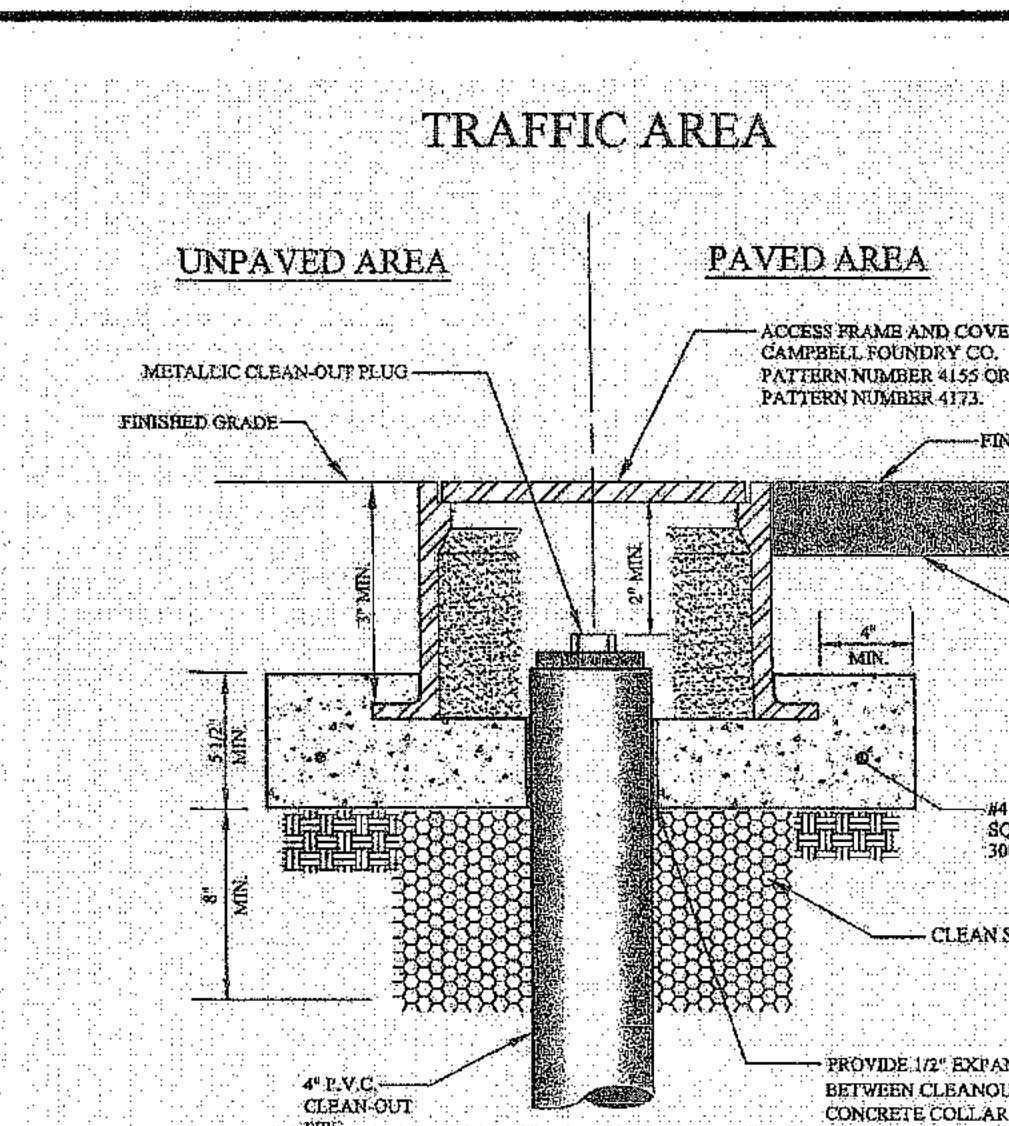
TYPICAL ELDER STREET/SHELL ROAD CROSS SECTION



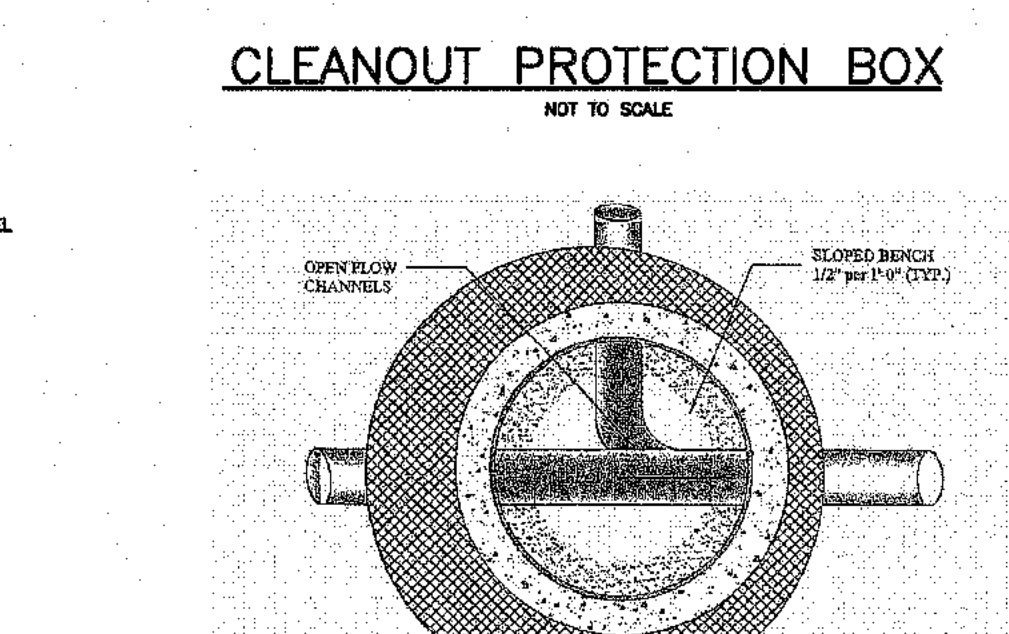
TRANSITION FROM MOUNTABLE CURB TO FLUSH CURB



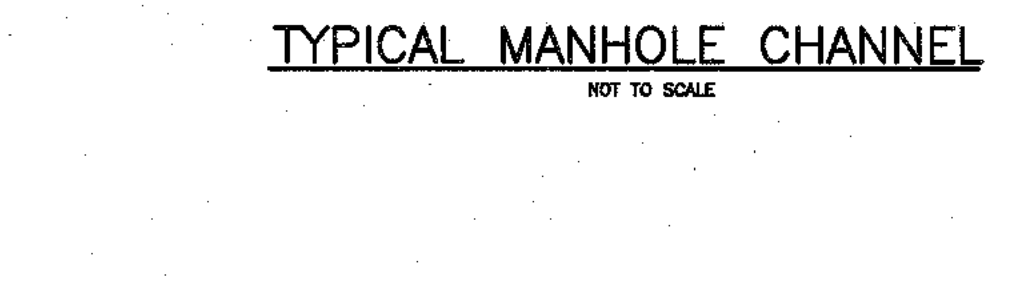
TYPICAL DUNE CROSSING CROSS SECTION



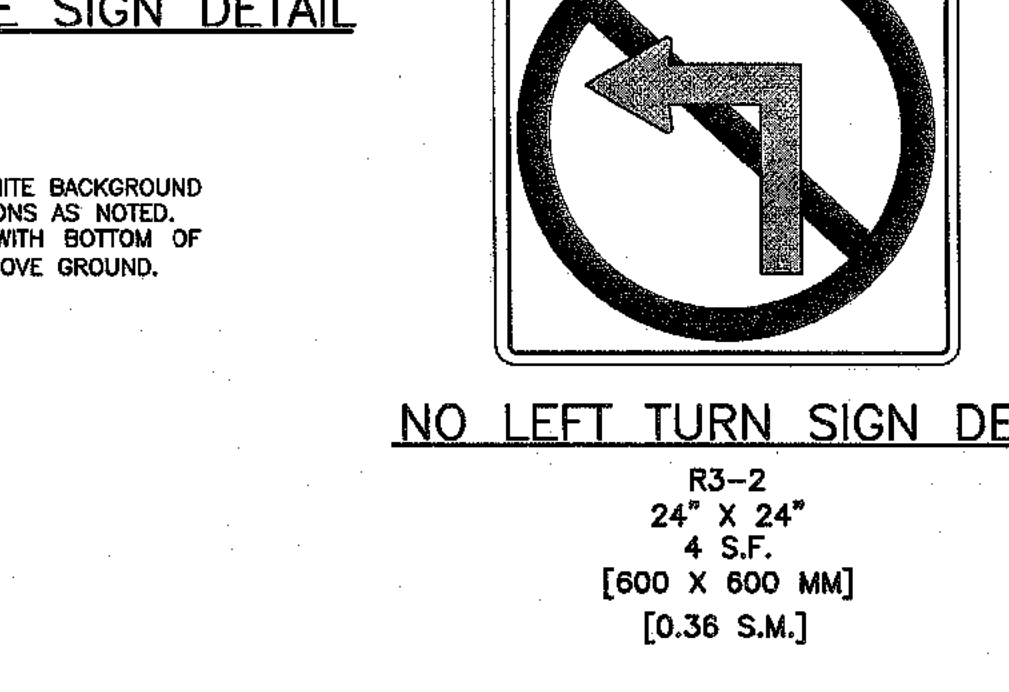
TRAFFIC AREA



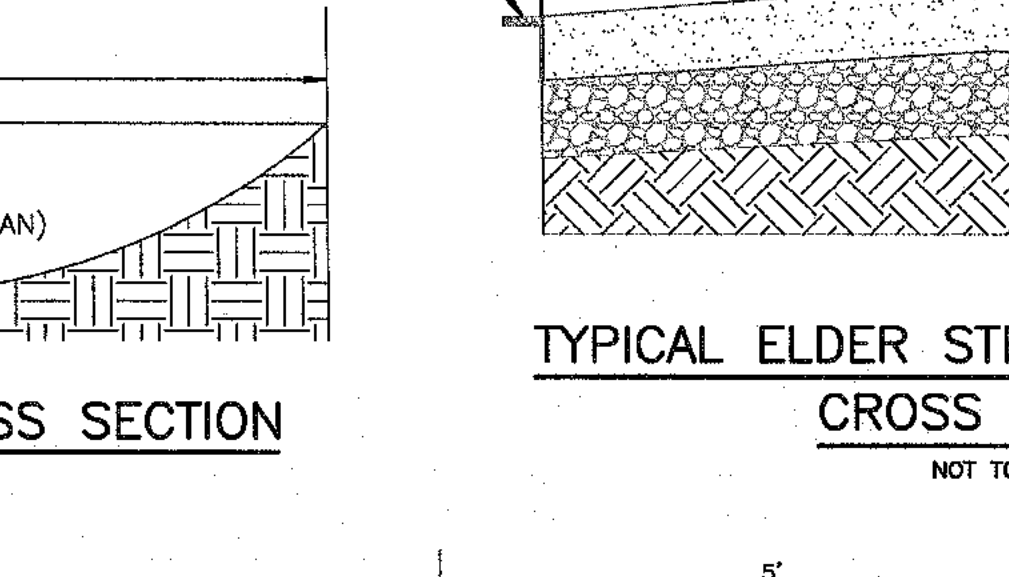
CLEANOUT ACCESS FRAME & COVER



TYPICAL MANHOLE CHANNEL



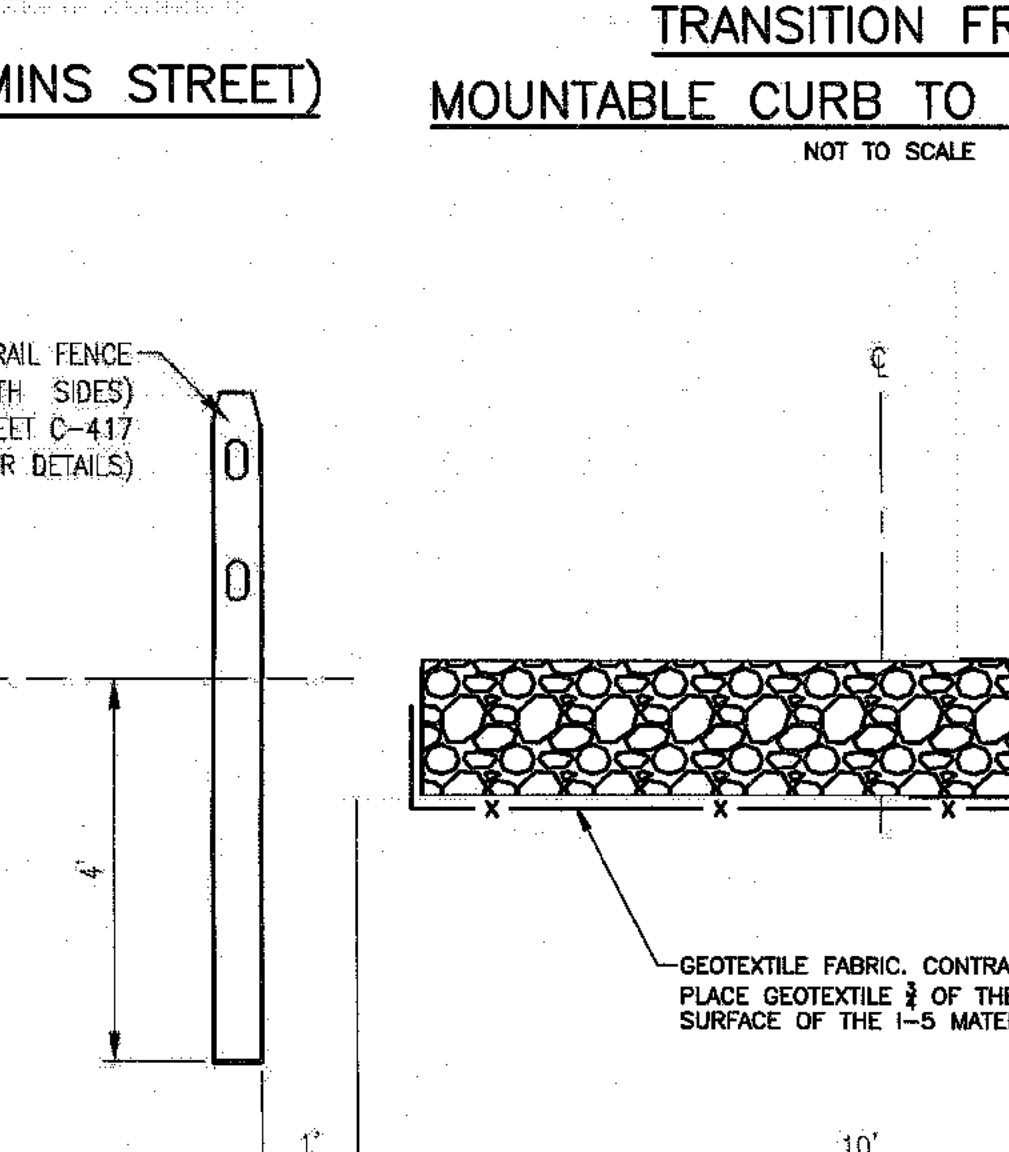
NO LEFT TURN SIGN DETAIL



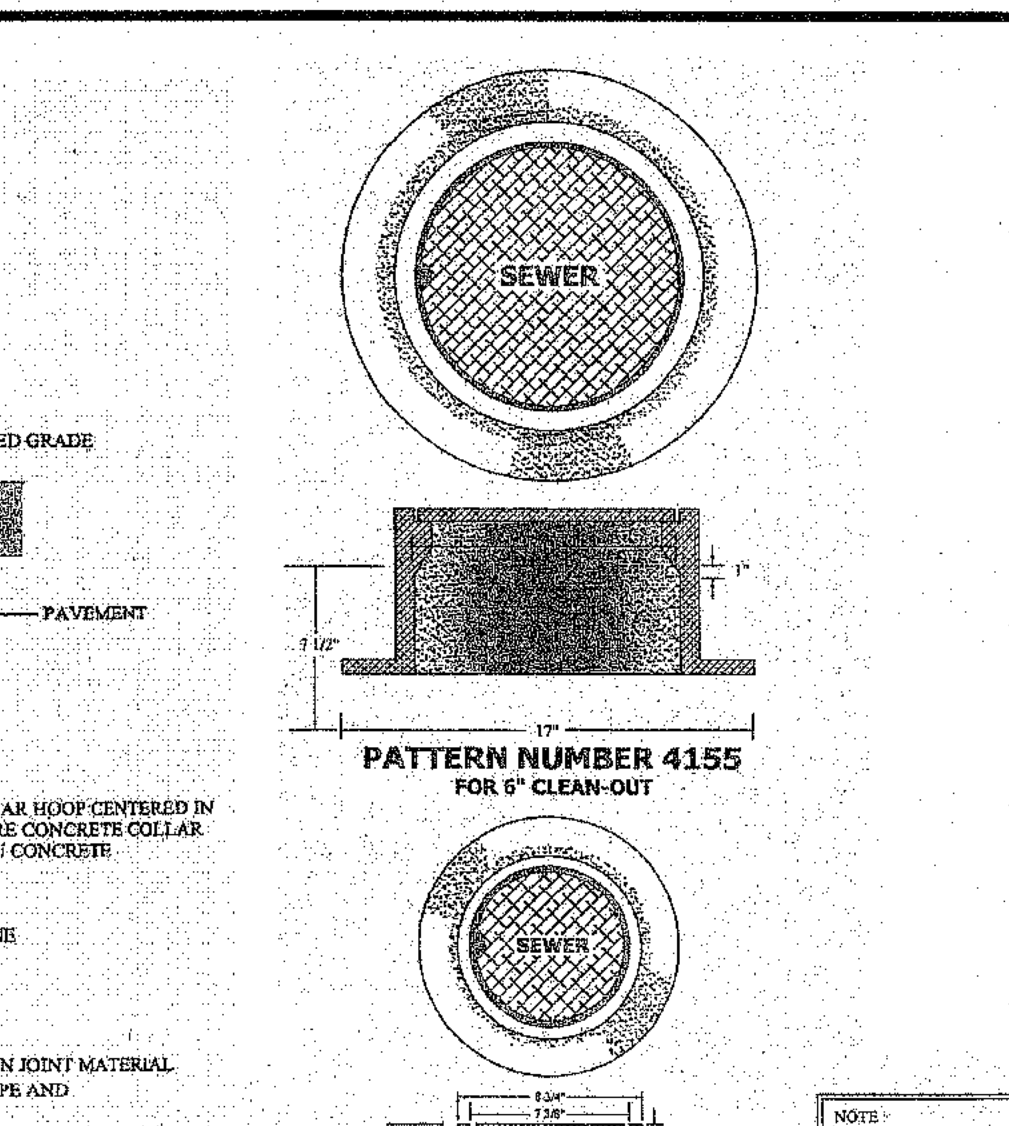
TYPICAL SWALE CROSS SECTION



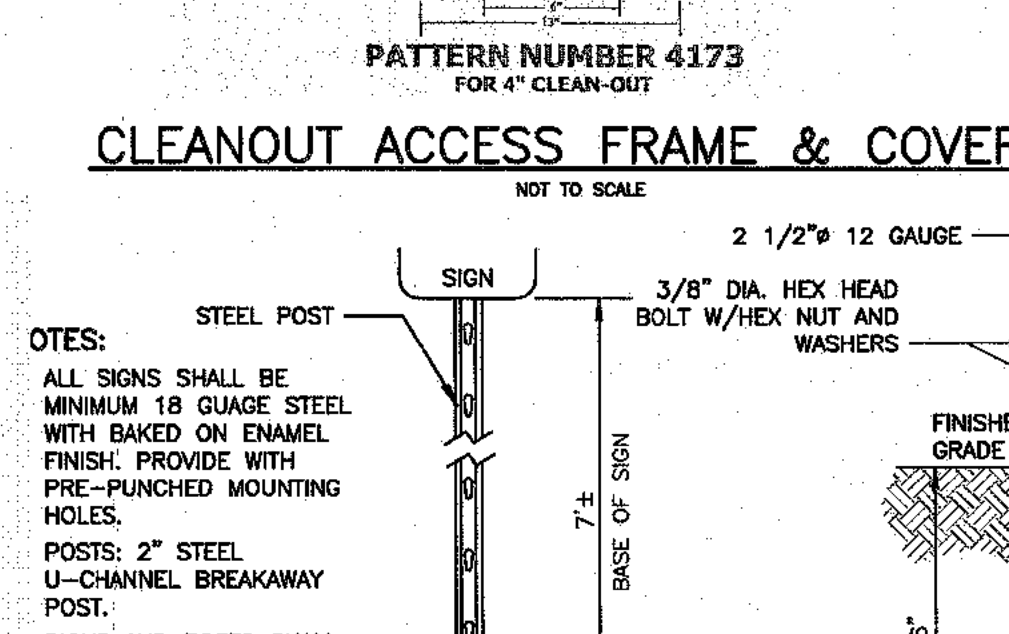
TRANSITION FROM MOUNTABLE CURB TO FLUSH CURB



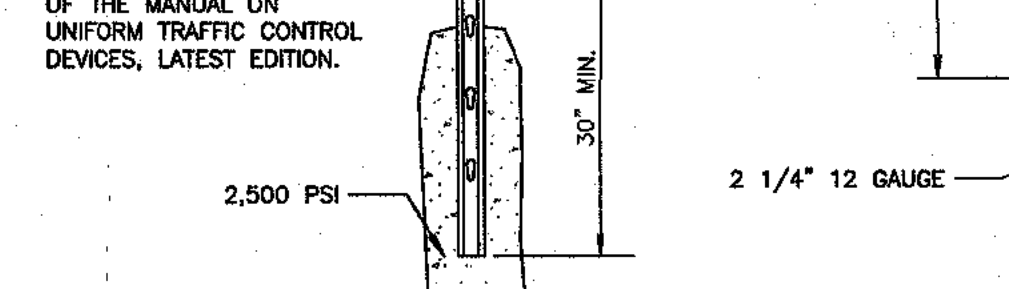
WATER MAIN SWEEP



SEWER



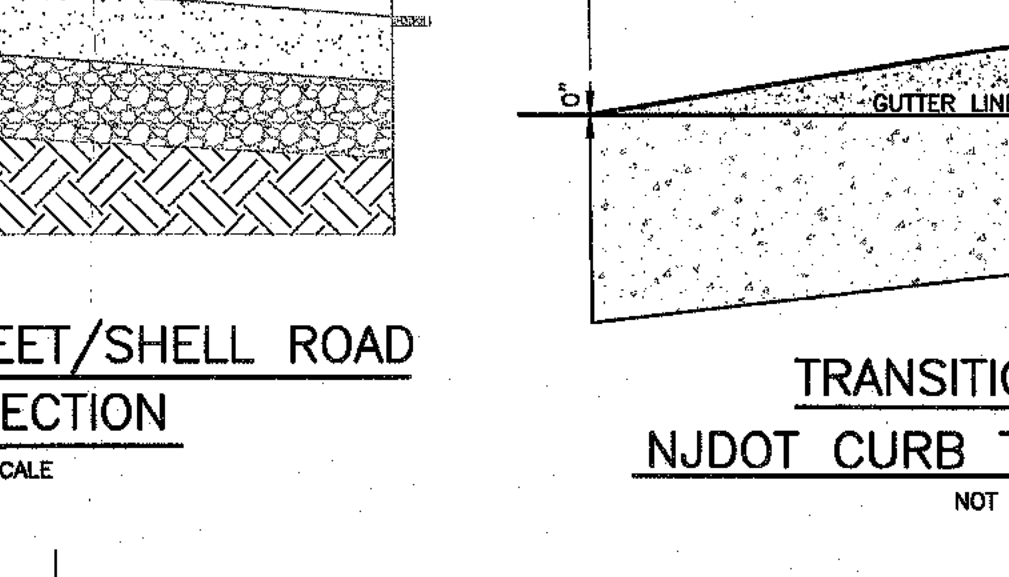
CLEANOUT ACCESS FRAME & COVER



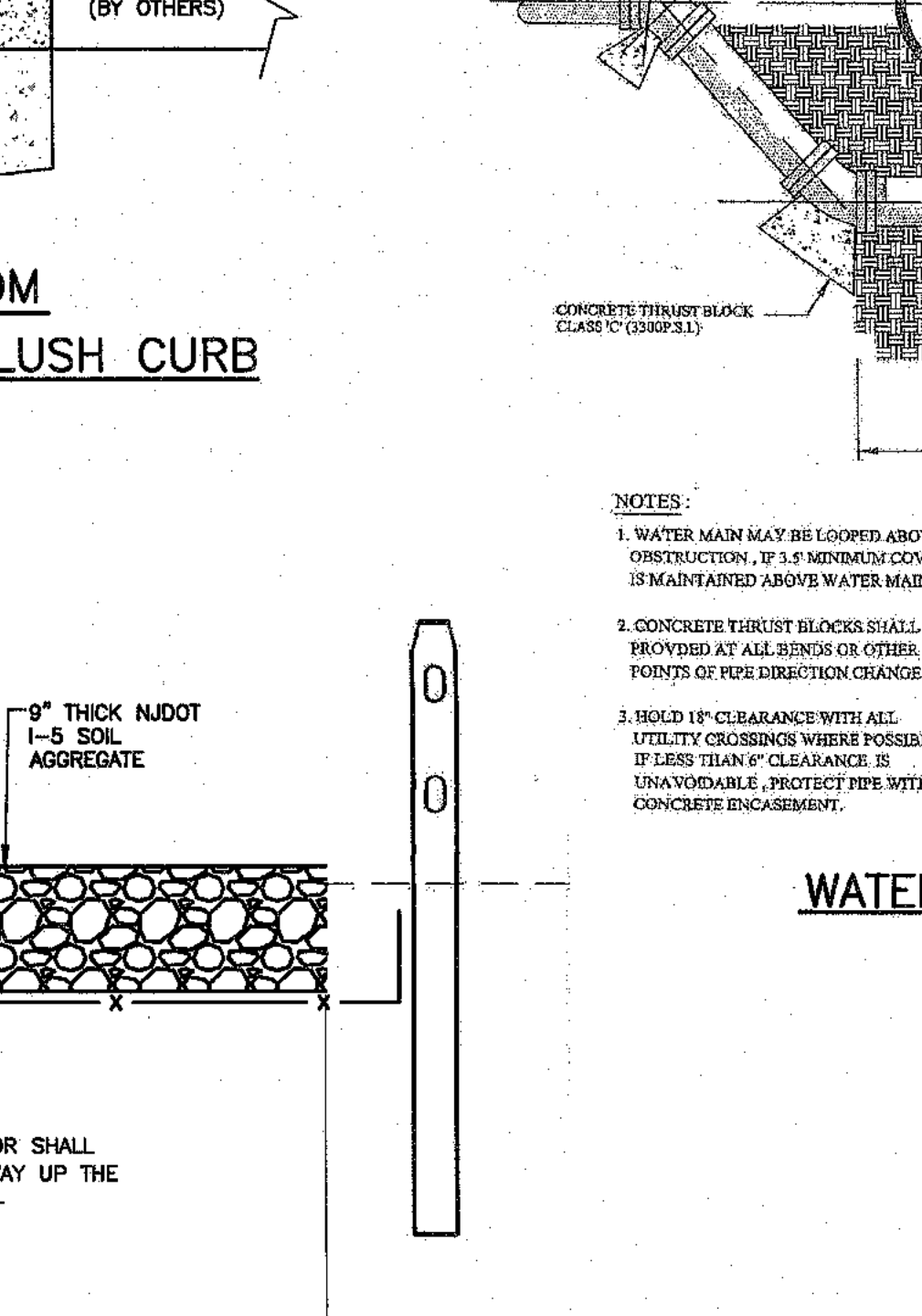
SIGN POST



STOP SIGN DETAIL (R1-1)



TRANSITION FROM NJDOT CURB TO FLUSH CURB



WATER MAIN SWEEP

THIS IS TO CERTIFY THAT THE WATER AND SEWER DESIGN CONFORMS WITH THE RULES AND REGULATIONS OF THE BRICK TOWNSHIP MUNICIPAL UTILITIES AUTHORITY.

STEPHEN T. SPEDIC, P.E.
DEPUTY EXECUTIVE DIRECTOR & DIRECTOR OF ENGINEERING/OPERATIONS

BRICK UTILITIES' FILE # _____

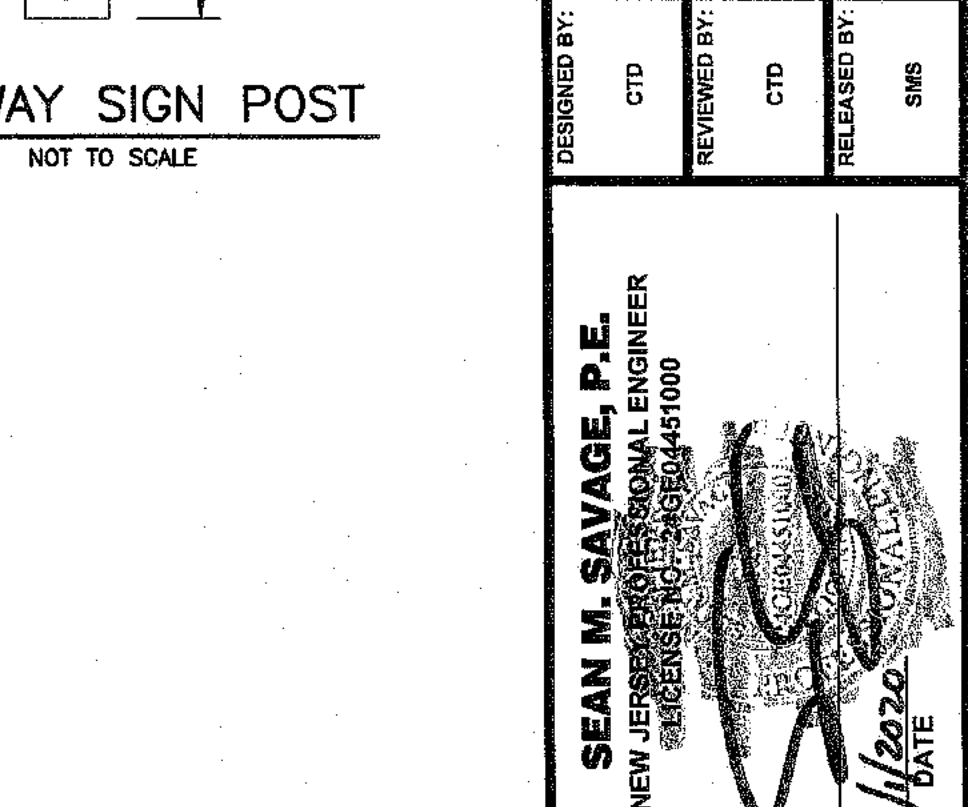
APPROVED BY THE
BRICK TOWNSHIP
PLANNING BOARD

CHAIRPERSON _____ DATE _____

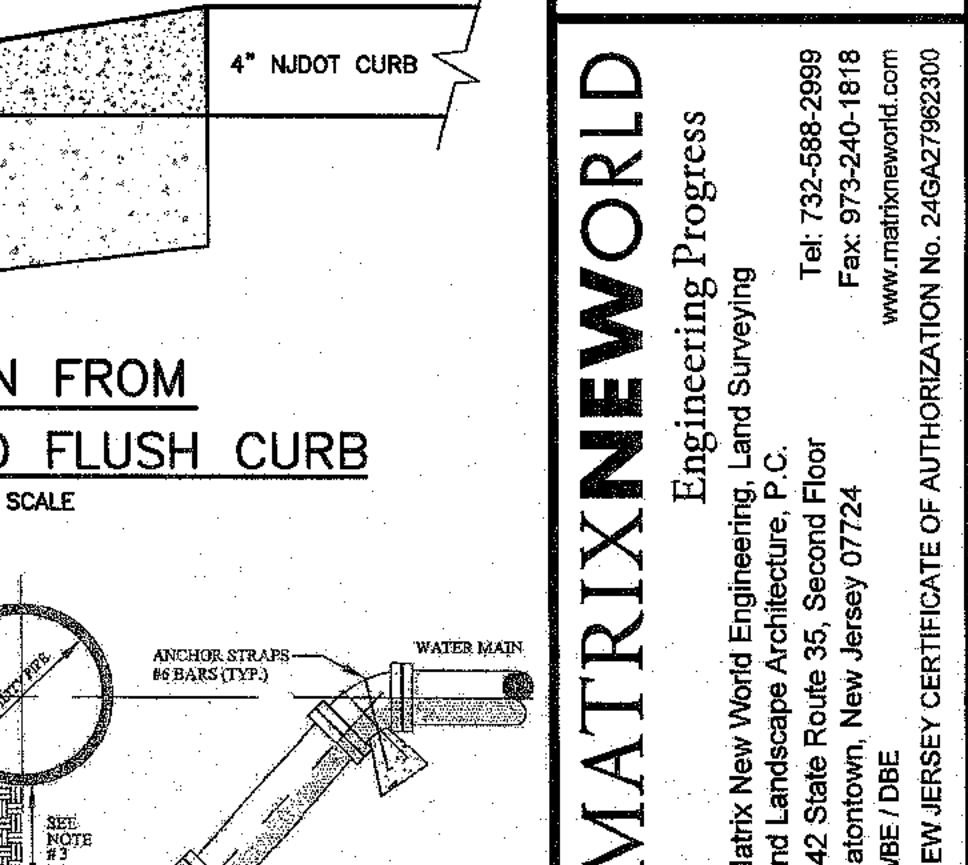
SECRETARY _____ DATE _____

PLANNING BOARD ENGINEER _____ DATE _____

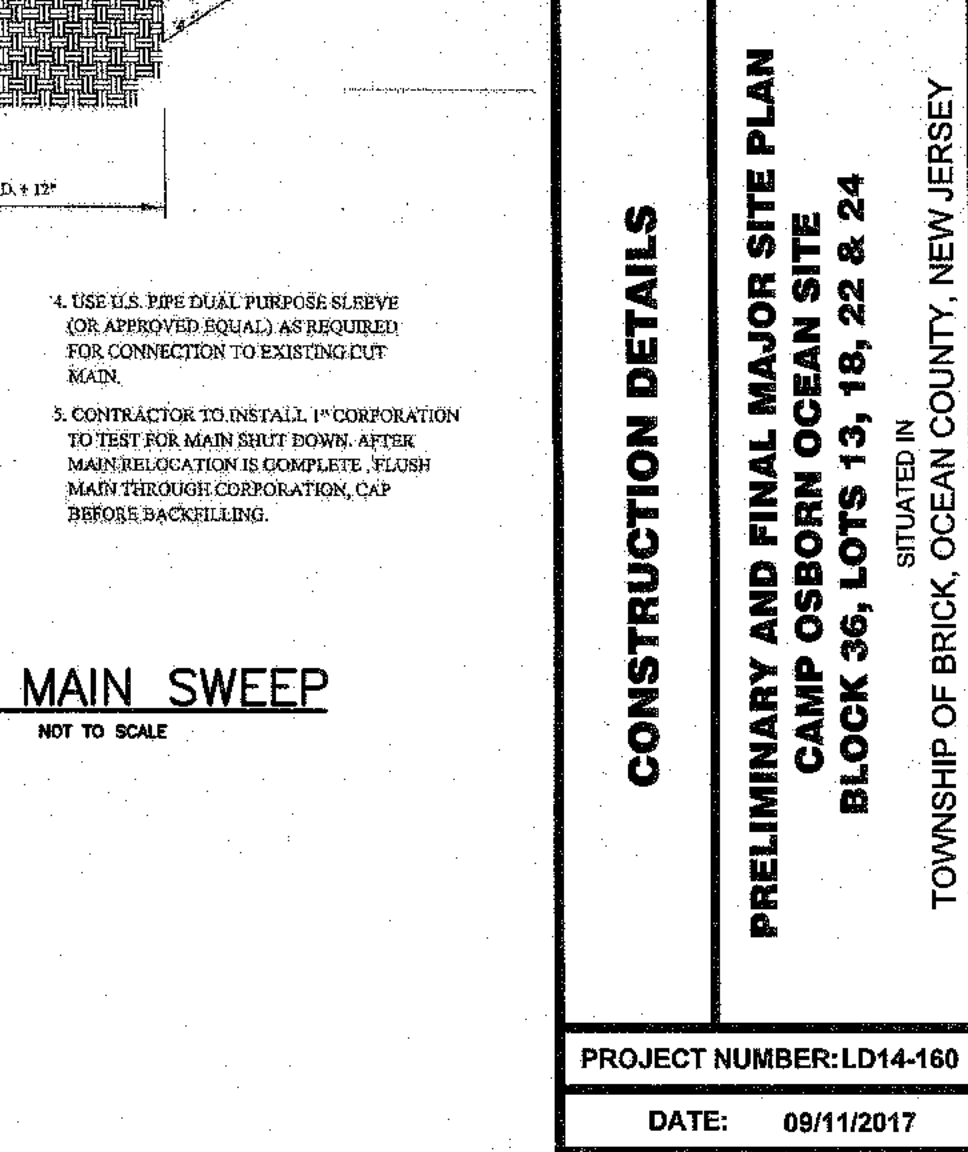
NO.	REVISION	DATE	DESCRIPTION	REV. BY	REV. DATE
10	REVISED PER PLAN REVIEW LETTER DATED 03/20/24	03/21/24	SMG	SMG	
9	REVISED PER PLAN REVIEW LETTER DATED 03/20/24	03/21/24	SMG	SMG	
8	REVISED PER PLAN REVIEW LETTER DATED 03/20/24	03/21/24	SMG	SMG	
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1	REVISED PER PLAN REVIEW LETTER DATED 03/20/24	03/21/24	SMG	SMG	



BREAKAWAY SIGN POST



CONCRETE DRIVEWAY & CURB SECTION (HIGHWAY 35 INTERSECTIONS)



SPLIT RAIL FENCE

MATRIX NEW WORLD
Engineering Progress
Land Surveying

Sean M. Savage, P.E.
New Jersey Professional Engineer
No. 12022440

PROJECT NUMBER: LD14-160
DATE: 09/11/2017
SCALE: AS SHOWN

CONSTRUCTION DETAILS

PRELIMINARY AND FINAL MAJOR SITE PLAN
CAMP OSBORN OCEAN SITE
BLOCK 36, LOTS 18, 22 & 24

TOWNSHIP OF BRICK, OCEAN COUNTY, NEW JERSEY

SHEET 12 OF 12