

Masterplan Application of "WEST HOUSE II" in Middletown, Rhode Island 02842

REGISTRY USE ONLY

DATE: October 20, 2021

INDEX OF DRAWINGS

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1.	COVER SHEET
2.	SITE CONTEXT MAP
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5.	GRADING DRAINAGE & UTILITY PLAN
6.	EROSION & SEDIMENT CONTROL PLAN
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8.	DETAIL SHEET (2 OF 2)

GENERAL NOTES:

- LOT SHOWN IS DESIGNATED AS LOT 6 ON MIDDLETOWN ASSESSORS MAP 113
- ZONING DISTRICT: OB - OFFICE BUSINESS
- OWNER OF RECORD: - WEST HOUSE CORPORATION
C/O PHOENIX PROP MGMT INC.
WARWICK RI, 02886
BOOK 0398 PAGE 234
- SITE IS NOT LOCATED IN FEMA FLOOD ZONE (AREA OF MINIMAL FLOOD HAZARD) AS SHOWN ON FIRM PANEL 44.005C 0093 J EFFECTIVE ON SEPTEMBER 4, 2013.

DIMENSIONAL ZONING REQUIREMENTS:

OFFICE BUSINESS - OB - ZONING DISTRICT - MULTIFAMILY DWELLING STRUCTURE

	REQUIRED
MINIMUM AREA	= 40,000 S.F.
MINIMUM FRONTAGE	= 150'
MINIMUM FRONT YARD SETBACK	= 25'
MINIMUM SIDE YARD SETBACK	= 25'
MINIMUM REAR YARD SETBACK	= 40'
MAXIMUM BUILDING HEIGHT	= 35'

CERTIFICATION:

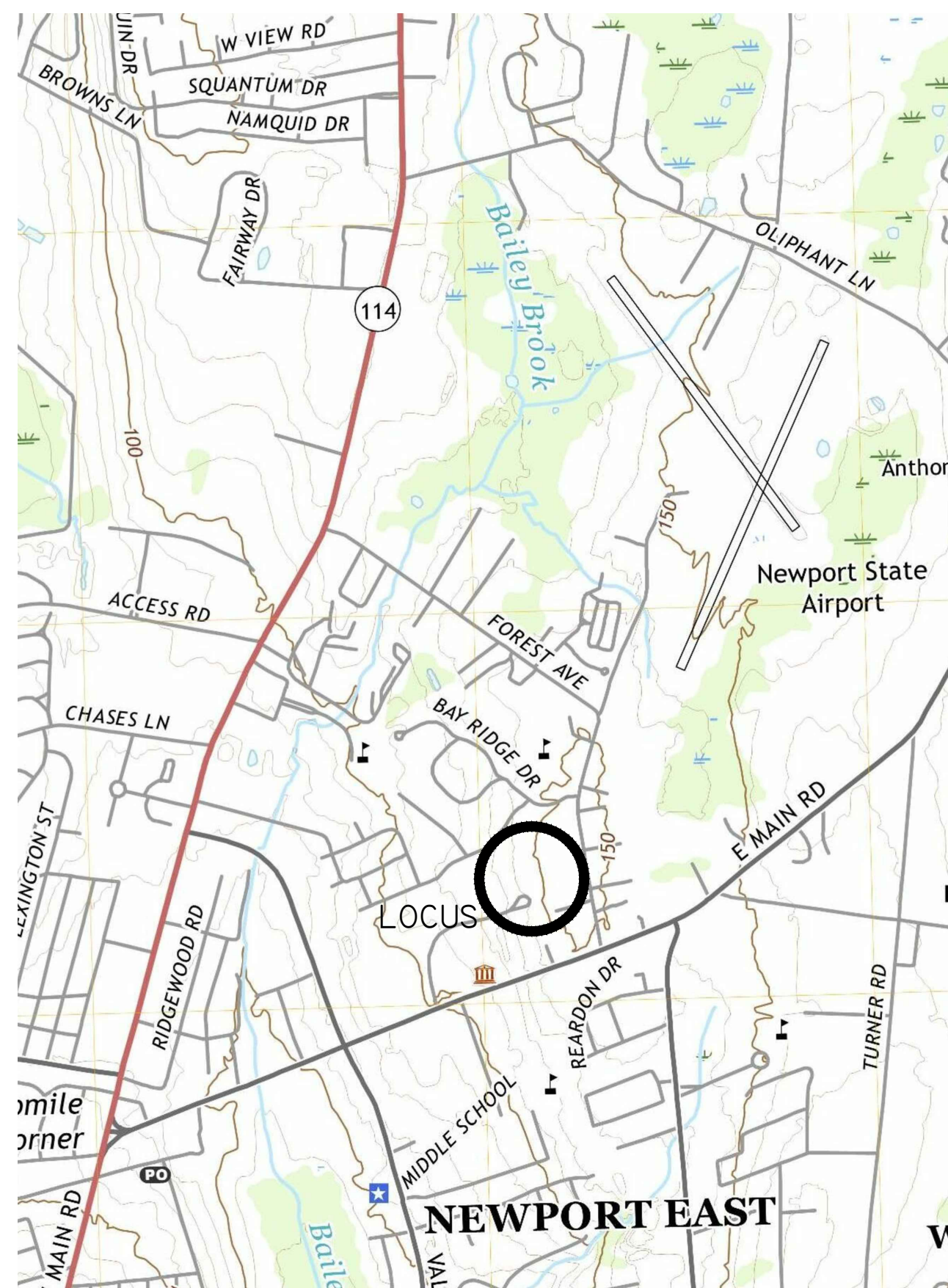
THIS SURVEY HAS BEEN CONDUCTED AND THE PLAN PREPARED PURSUANT TO SECTION 9 OF THE RULES AND REGULATIONS ADOPTED BY THE RHODE ISLAND BOARD OF REGISTRATION FOR PROFESSIONAL LAND SURVEYORS ON NOVEMBER 25, 2015 AS FOLLOWS:

TYPE OF SURVEY: COMPREHENSIVE BOUNDARY MEASUREMENT SPECIFICATION: CLASS I
 TYPE OF SURVEY: DATA ACCUMULATION SURVEY MEASUREMENT SPECIFICATION: CLASS III
 VERTICAL MEASUREMENT SPECIFICATION: V-3 TOPOGRAPHIC ACCURACY CLASS: T-2

THE PURPOSE FOR THE CONDUCT OF THE SURVEY AND FOR PREPARATION OF THE PLAT IS AS FOLLOWS:

- TO REPORT A PROFESSIONAL OPINION REGARDING THE LOCATION OF PROPERTY BOUNDARIES.
- TO DEPICT AND REPORT THE RELATIVE POSITIONS OF EXISTING PHYSICAL OBJECTS AND EXISTING SITE CONDITIONS.
- TO CREATE AN EXISTING CONDITIONS BASE PLAN FOR CONTEMPLATION OF DESIGNED CONSTRUCTION OR OTHER IMPROVEMENTS TO THE SITE.

Marc Nyberg
 MARC NYBERG, PLS REGISTERED PROFESSIONAL LAND SURVEYOR 10/20/2021 DATE
 RHODE ISLAND PLS NO: 1797 RHODE ISLAND C.O.A. NO.: LS.000468.COA



LOCATION MAP

N.T.S.



SITE MAP

SCALE 1"= 100'

SUBJECT TO A COVENANT DULY EXECUTED DATED THE _____ DAY OF _____ RUNNING WITH THE LAND, TO BE DULY RECORDED BY OR FOR THE OWNER OF RECORD. THIS PLAN IS SUBJECT TO ALL CONDITIONS OF THE MIDDLETOWN PLANNING BOARD CERTIFICATE OF ACTION DATED _____ FILED WITH THE MIDDLETOWN TOWN CLERK ON _____ AND HEREWITH RECORDED AS A PART OF THIS PLAN.

I HEREBY CERTIFY THAT THERE HAS BEEN NO APPEAL TAKEN TO THIS PLANNING BOARD ACTION DURING THE 20 DAY STATUTORY APPEAL PERIOD.
 DATE: _____
 TOWN CLERK, TOWN OF MIDDLETOWN _____

REVISION	DATE	COMMENTS
0	OCT. 20, 2021	MASTERPLAN APPLICATION
1	OCT. 22, 2021	ADDRESSING APPLICATION INCOMPLETE LETTER

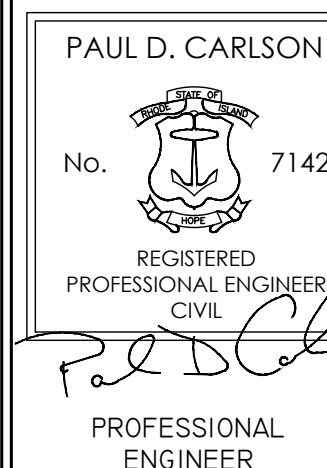
MIDDLETOWN PLANNING BOARD

"I CERTIFY THAT THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE RHODE ISLAND BOARD OF REGISTRATION OF PROFESSIONAL LAND SURVEYORS STANDARDS

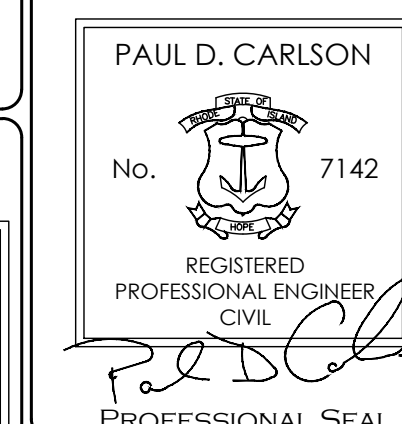
"I CERTIFY THAT THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE RULES AND REGULATIONS OF THE REGISTERS OF DEEDS." THE CERTIFICATION SHOWN HEREON IS INTENDED TO MEET REGISTRY OF DEEDS REQUIREMENTS AND IS NOT A CERTIFICATION TO THE TITLE OR OWNERSHIP OF THE LAND SHOWN.

"I HEREBY CERTIFY THAT THE ACTUAL SURVEY WAS MADE ON THE GROUND IN ACCORDANCE WITH TOWN OF MIDDLETOWN PLANNING BOARD AND STATE STANDARDS.

Marc Nyberg
 PROFESSIONAL LAND SURVEYOR 10/20/2021 DATE



COVER SHEET



"WEST HOUSE II - AFFORDABLE SENIOR HOUSING"
 417 FOREST AVENUE, MIDDLETOWN RI, 02842
 ASSESSORS MAP 113 LOT 6

APPLICANT: THE WEST HOUSE CORPORATION
 C/O PHOENIX PROPERTY MGMT. INC. WARWICK, RI 02886

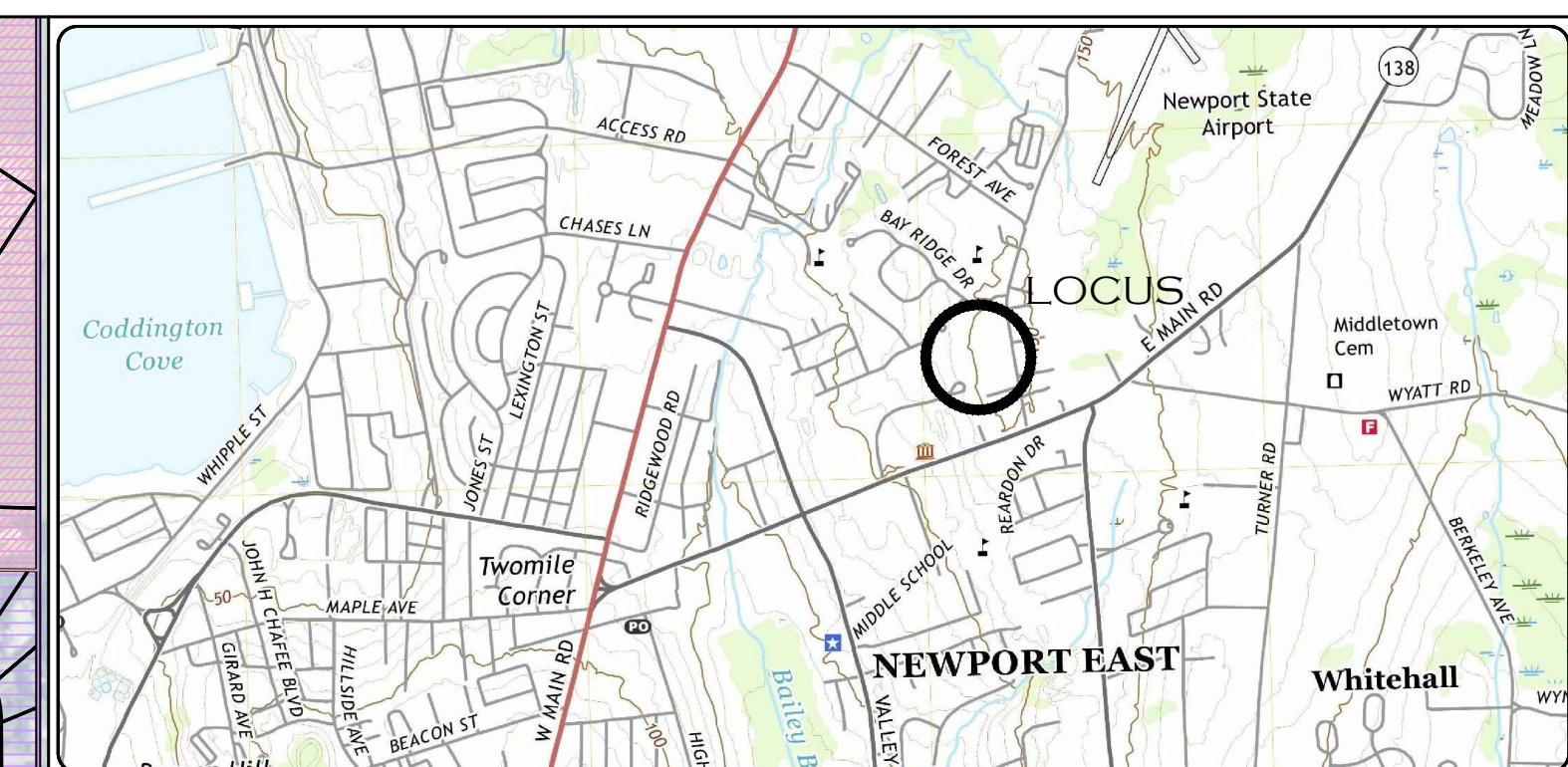
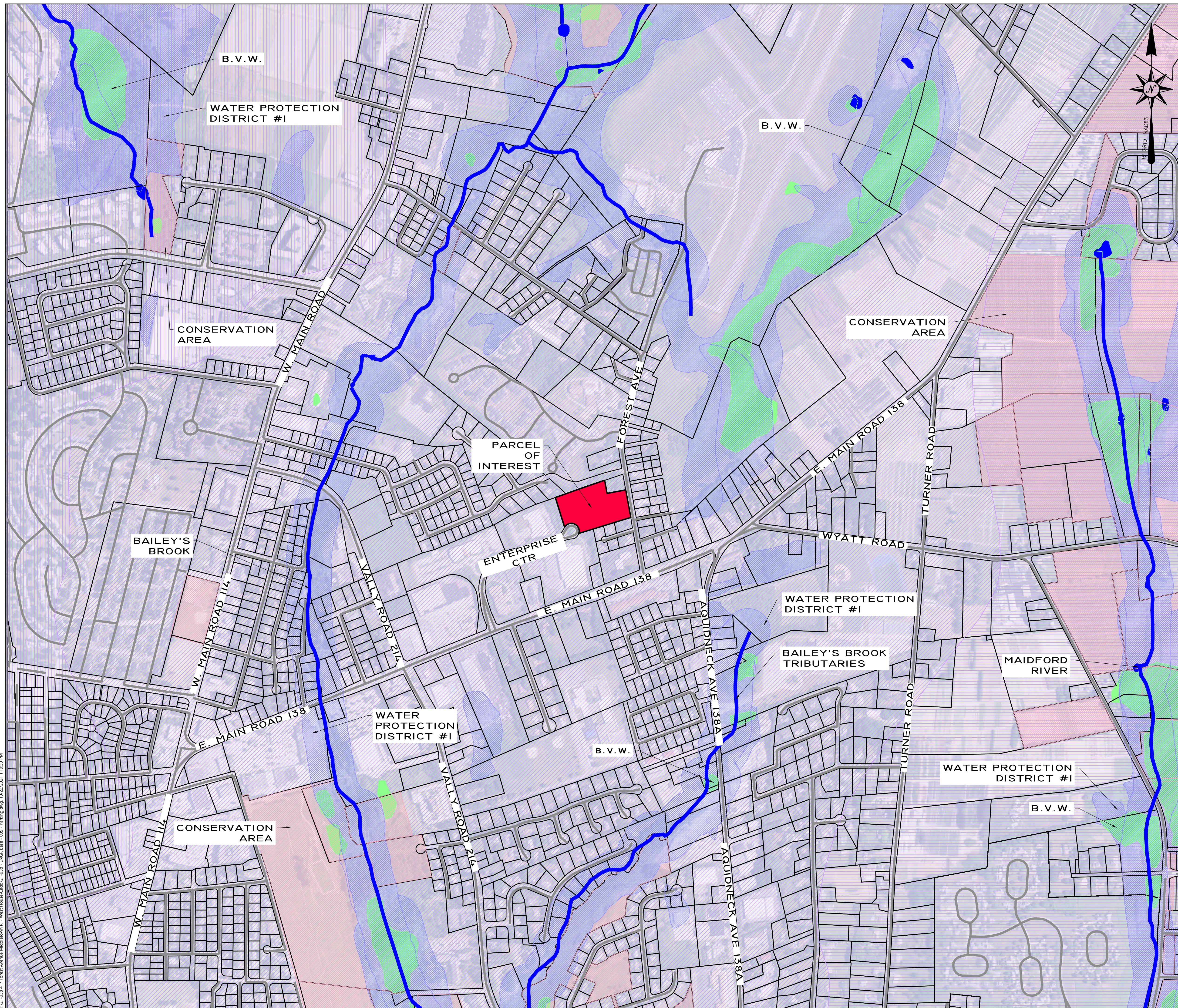
JOB # 21-038	SCALE: AS SHOWN	DRAWN BY: LJG	DATE: OCTOBER 20, 2021
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REVISED:



InSite Professional Complex, Suite 1
 1539 Fall River Avenue Seekonk, MA 02771
 Phone: (508) 336-4500 Fax: (508) 336-4558
 Web Address: InSiteEngineers.com

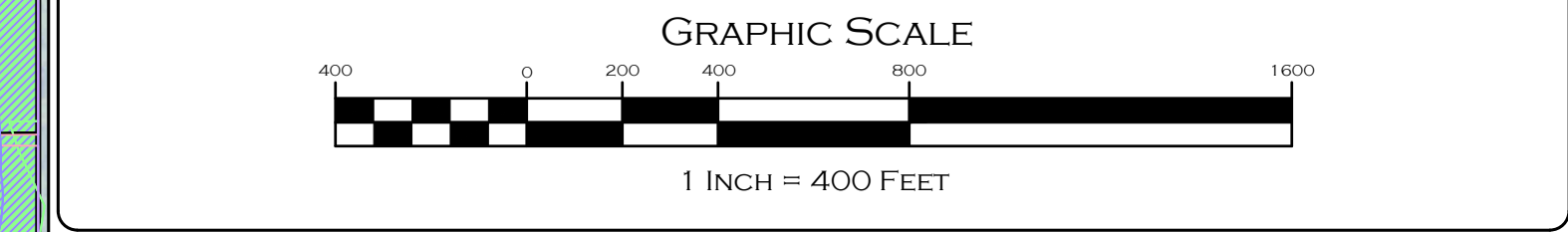
SHEET
1
OF 8



- GENERAL NOTES:**
- LOT SHOWN IS DESIGNATED AS LOT 6 ON MIDDLETOWN ASSESSORS MAP 113
 - ZONING DISTRICT: OB - OFFICE BUSINESS
 - OWNER OF RECORD: - WEST HOUSE CORPORATION
C/O PHOENIX PROP MGMT INC.
WARWICK RI, 02886
BOOK 0398 PAGE 234
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SITE CONTEXT MAP LEGEND:

PARCEL OF INTEREST:	
WETLANDS:	
SURFACE WATERS:	
WATER PROTECTION DISTRICT I:	
CONSERVATION LAND:	
ROADS:	
LOWEREAST PASSAGE WATERSHED:	
AQUIDNECK ISLAND - FRONTAL ATLANTIC OCEAN WATERSHED:	
SAKONNET RIVER WATERSHED:	



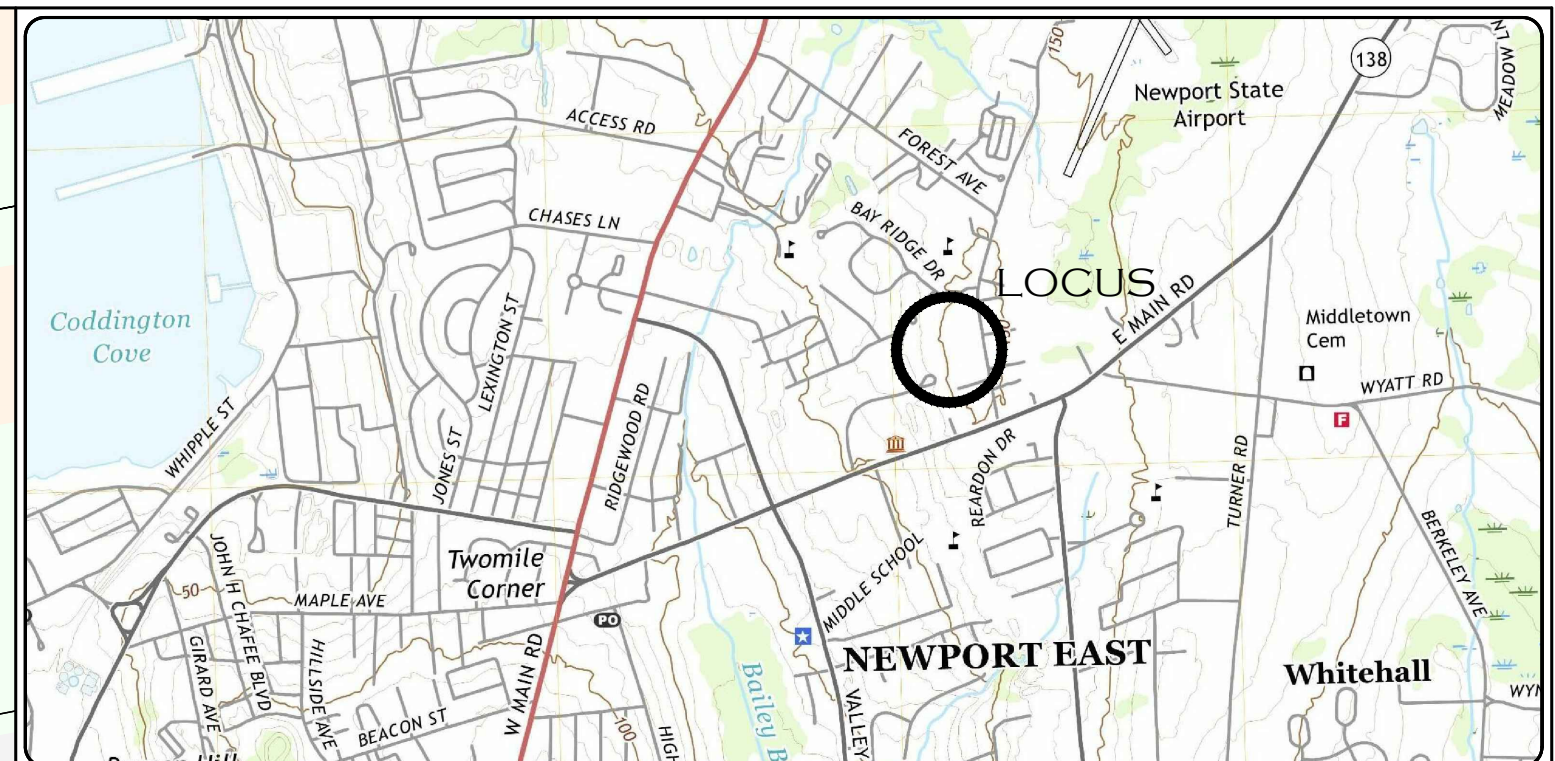
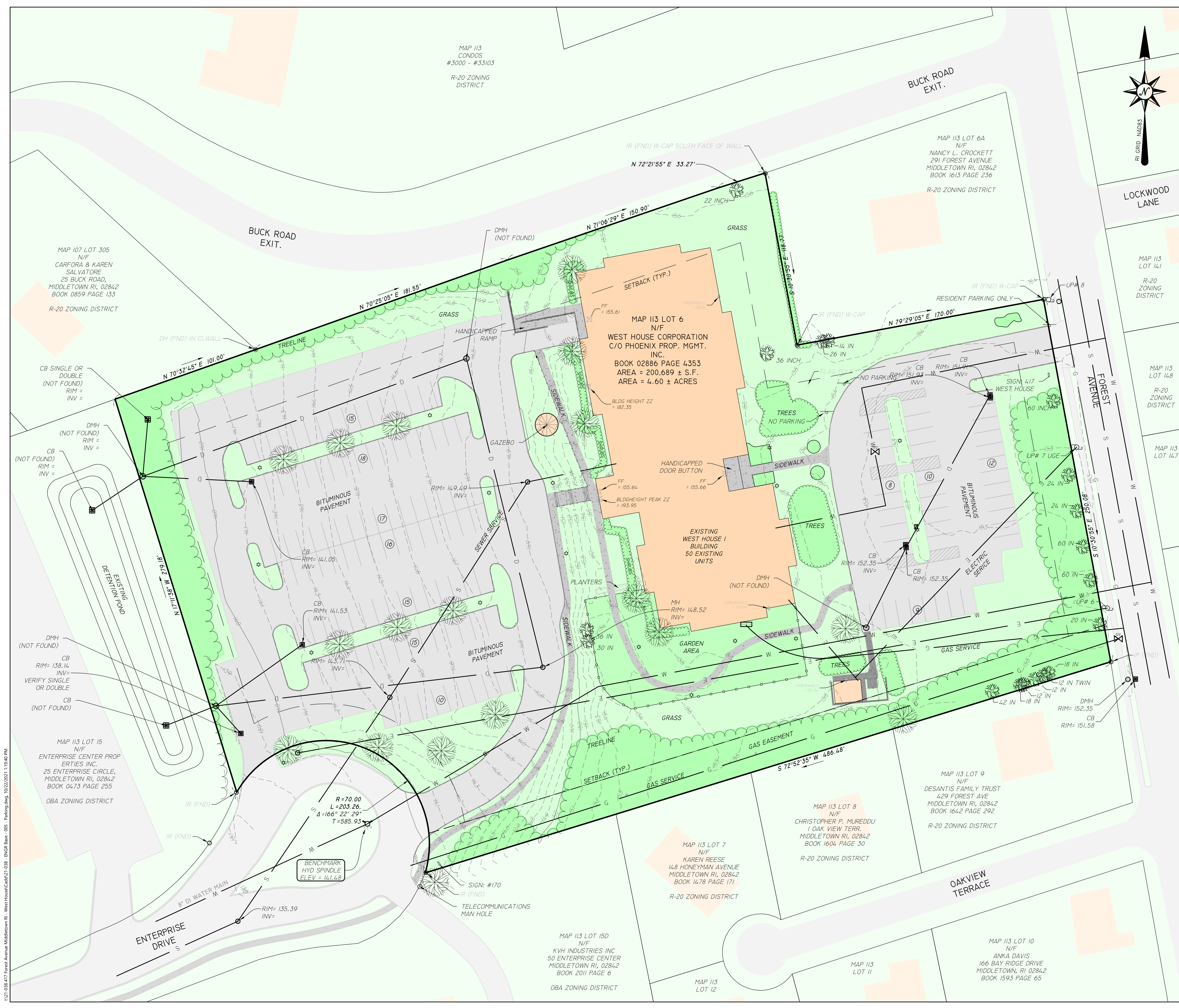
SITE CONTEXT MAP

	"WEST HOUSE II - AFFORDABLE SENIOR HOUSING" 417 FOREST AVENUE, MIDDLETOWN RI, 02842 ASSESSORS MAP 113 LOT 6			
	APPLICANT: THE WEST HOUSE CORPORATION C/O PHOENIX PROPERTY MGMT, INC. WARWICK, RI 02886			
	JOB # 21-038	SCALE: 1" = 400'	DRAWN BY: LJG	DATE: OCTOBER 20, 2021
	REVISED:			

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SHEET 2 OF 8

I:\21-038-417 Forest Avenue Middletown RI - West House\Calldat1.DWG - ENCR Base - 005 - Parking.dwg, 10/22/2021 11:19:30 PM



LOCATION (NOT TO SCALE) MAP

- GENERAL NOTES:**
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 - ZONING DISTRICT: OB - OFFICE BUSINESS
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WARWICK RI, 02886
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DIMENSIONAL ZONING REQUIREMENTS:

OFFICE BUSINESS - OB - ZONING DISTRICT - MULTIFAMILY DWELLING STRUCTURE	REQUIRED	EXISTING
MINIMUM AREA	= 40,000 S.F.	200,689
MINIMUM FRONTAGE	= 150'	= 203.3'
MINIMUM FRONT YARD SETBACK	= 25'	= 199.9'
MINIMUM SIDE YARD SETBACK	= 25'	= 72.4'
MINIMUM REAR YARD SETBACK	= 40'	= 20.1'
MAXIMUM BUILDING HEIGHT	= 35'	= 38'
MAXIMUM % COVERAGE		
PRINCIPAL & ACCESSORY	= 30%	= 13%
IMPERVIOUS AREA	= N/A	= 57%

- PARKING BREAKDOWN:**
- SEC. 150A - MINIMUM AND MAXIMUM OFF-STREET PARKING REQUIREMENTS FOR "ELDERLY HOUSING": ONE SPACE FOR EACH DWELLING UNIT.
 - DWELLING UNITS: 50 (WEST HOUSE I)
 - CODE REQUIREMENTS:
 - 50 UNITS * 1 SPACE = 50 PARKING SPACES
 - REQUIRED: 50 PARKING SPACES
 - EXISTING: 45 PARKING SPACES
 - HANDICAPPED SPACE REQUIREMENTS:
 - 50 PARKING SPACES * 1 HANDICAPPED SPACE = 2 HANDICAPPED PARKING SPACE
 - REQUIRED: 2 HANDICAPPED PARKING SPACES
 - EXISTING: 12 HANDICAPPED PARKING SPACES

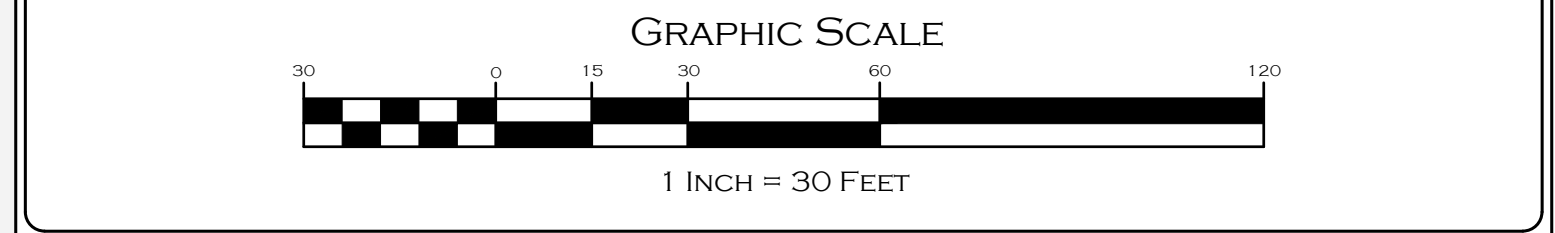
- NATURAL RESOURCE INVENTORY:**
- THE SITE IS CLASSIFIED UNDER THE RHODE ISLAND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT AS THE AQUIDNECK ISLAND-FRONTAL ATLANTIC OCEAN WATERSHED. THE GROUNDWATER IN THIS AREA IS CLASSIFIED AS GA, BAILEY BROOK (ID NUMBER RI007035R-01) LOCATED APPROXIMATELY 2,200 FEET AWAY. THIS IS A FRESHWATER CLASS AA BODY OF WATER. IMPAIRMENTS CATEGORY 5. IMPAIRMENTS ARE AS FOLLOWS: ENTEROCOCCUS, PHOSPHORUS, TOTAL LEAD. THE SITE IS LOCATED IN THE WATER PROTECTION DISTRICT 2.
 - THE SITE IS LOCATED APPROXIMATELY 0.5 MILES AWAY FROM THE NEAREST 100-YEAR FLOOD PLAIN.
 - THE SITE DOES NOT CONTAIN ANY NATURAL HERITAGE SITES, UNFRAGMENTED FOREST TRACTS, PRIME FARMLAND SOILS, LAND IN ACTIVE AGRICULTURAL USE, OR ANY STATE, REGIONAL, OR COMMUNITY GREENWAYS.

CERTIFICATION:
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Marc Nyberg
 MARC NYBERG, PLS REGISTERED PROFESSIONAL LAND SURVEYOR / DATE 10/20/2021
 RHODE ISLAND PLS NO: 1797 RHODE ISLAND C.O.A. NO.: LS.000A68.COA



EXISTING CONDITIONS PLAN

"WEST HOUSE II - AFFORDABLE SENIOR HOUSING"
 417 FOREST AVENUE, MIDDLETOWN RI, 02842
 ASSESSORS MAP 113 LOT 6

APPLICANT: THE WEST HOUSE CORPORATION
 C/O PHOENIX PROPERTY MGMT. INC. WARWICK, RI 02886

JOB # 21-038 SCALE: 1" = 30' DRAWN BY: LJJ DATE: OCTOBER 20, 2021

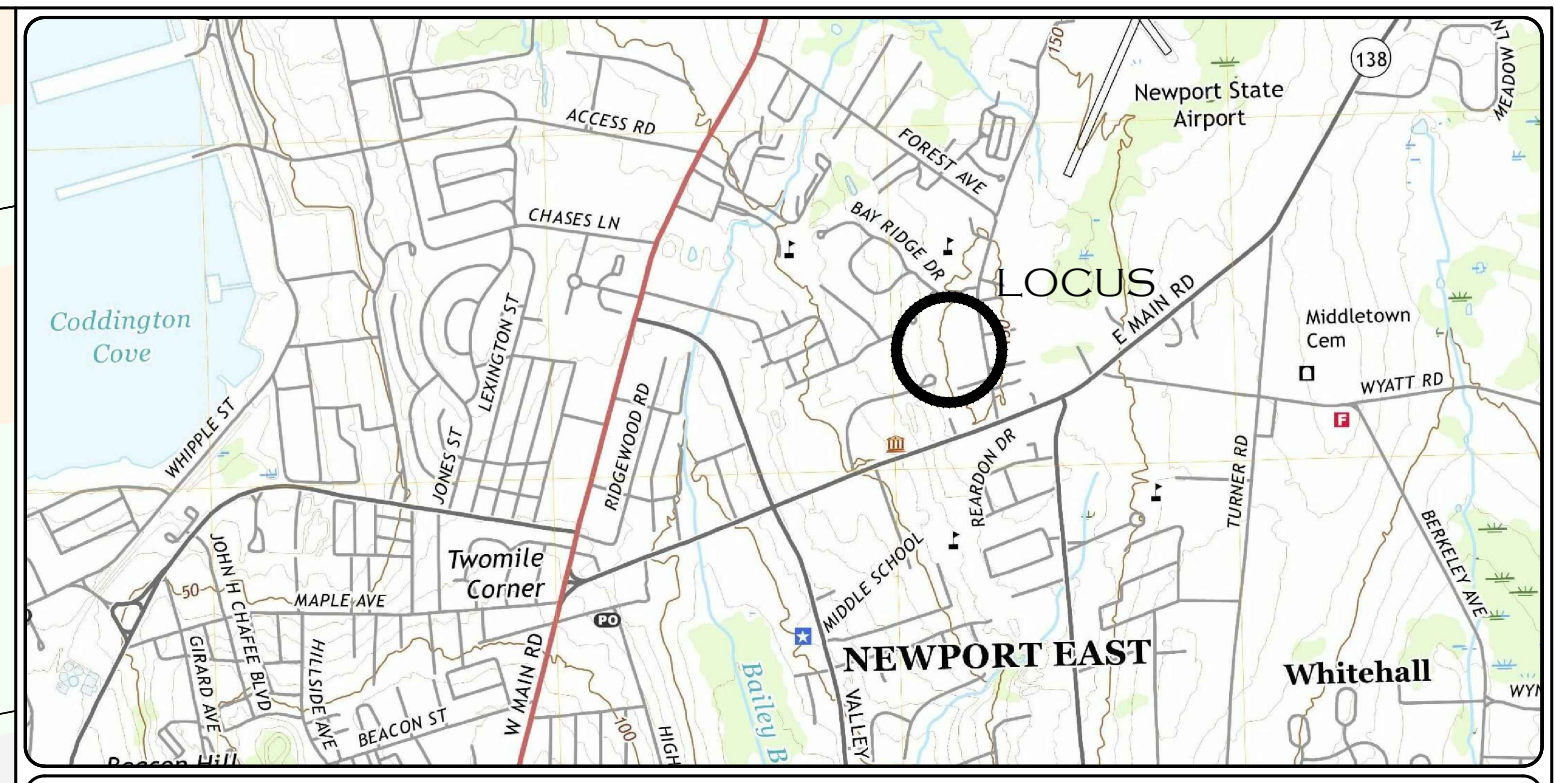
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INSITE Engineering Services, LLC
 PROFESSIONAL ENGINEERS | LAND SURVEYORS
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SHEET 3 OF 8

D:\21-038-417 Forest Avenue Middletown RI - West House\Calad\21-038 - ENCR Base - 005 - Parking.dwg, 10/22/2021 11:54:40 PM



LOCATION (NOT TO SCALE) MAP

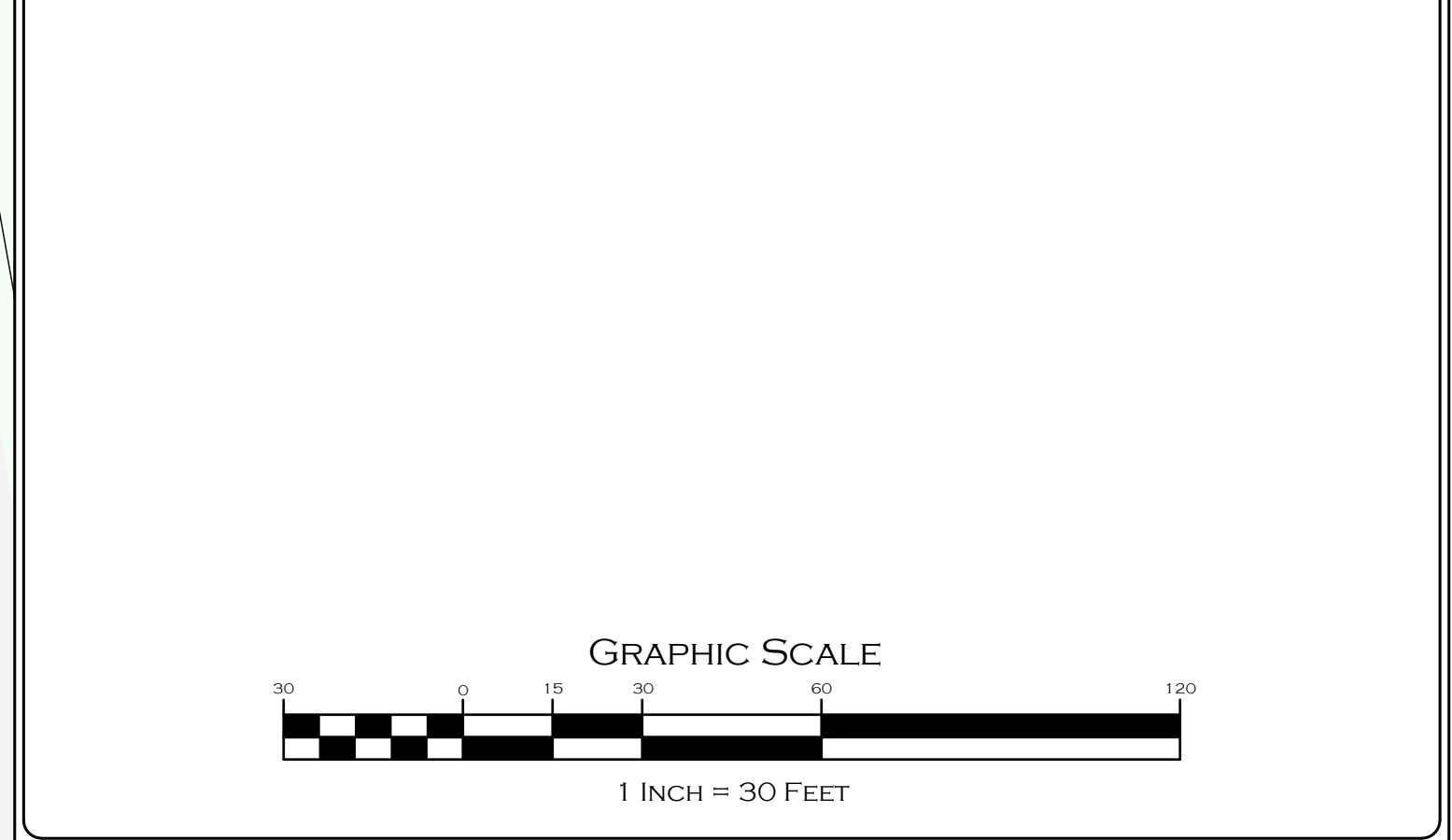
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DIMENSIONAL ZONING REQUIREMENTS:

OFFICE BUSINESS - OB - ZONING DISTRICT - MULTIFAMILY DWELLING STRUCTURE

	REQUIRED	PROPOSED
MINIMUM AREA	= 40,000 S.F.	200,689 S.F.
MINIMUM FRONTAGE	= 150'	203.26'
MINIMUM FRONT YARD SETBACK	= 25'	38.94'
MINIMUM SIDE YARD SETBACK	= 25'	52.73'
MINIMUM REAR YARD SETBACK	= 40'	99.37'
MAXIMUM BUILDING HEIGHT	= 35'	40'
MAXIMUM BUILDING COVERAGE	= 30%	21%

- PARKING BREAKDOWN:**
- SEC. 1304 - MINIMUM AND MAXIMUM OFF-STREET PARKING REQUIREMENTS FOR 'ELDERLY HOUSING': ONE SPACE FOR EACH DWELLING UNIT.
 - DWELLING UNITS: 50 (WEST HOUSE 1) + 54 (WEST HOUSE 2) = 104 UNITS TOTAL
 - CODE REQUIREMENTS:
 - 104 UNITS * 1 SPACE / UNIT = 104 PARKING SPACES
 - REQUIRED: 104 PARKING SPACES
 - PROPOSED: 61 PARKING SPACES
 - HANDICAPPED SPACE REQUIREMENTS:
 - 104 PARKING SPACES * 1 HANDICAPPED SPACE / 25 PARKING SPACES = 5 HANDICAPPED PARKING SPACE
 - REQUIRED: 5 HANDICAPPED PARKING SPACES
 - PROPOSED: 22 HANDICAPPED PARKING SPACE



LAYOUT PLAN

"WEST HOUSE II - AFFORDABLE SENIOR HOUSING"
417 FOREST AVENUE, MIDDLETOWN RI, 02842
ASSESSORS MAP 113 LOT 6

APPLICANT: THE WEST HOUSE CORPORATION
C/O PHOENIX PROPERTY MGMT. INC. WARWICK, RI 02886

JOB # 21-038 SCALE: 1" = 30' DRAWN BY: LJJ DATE: OCTOBER 20, 2021

REVISED:

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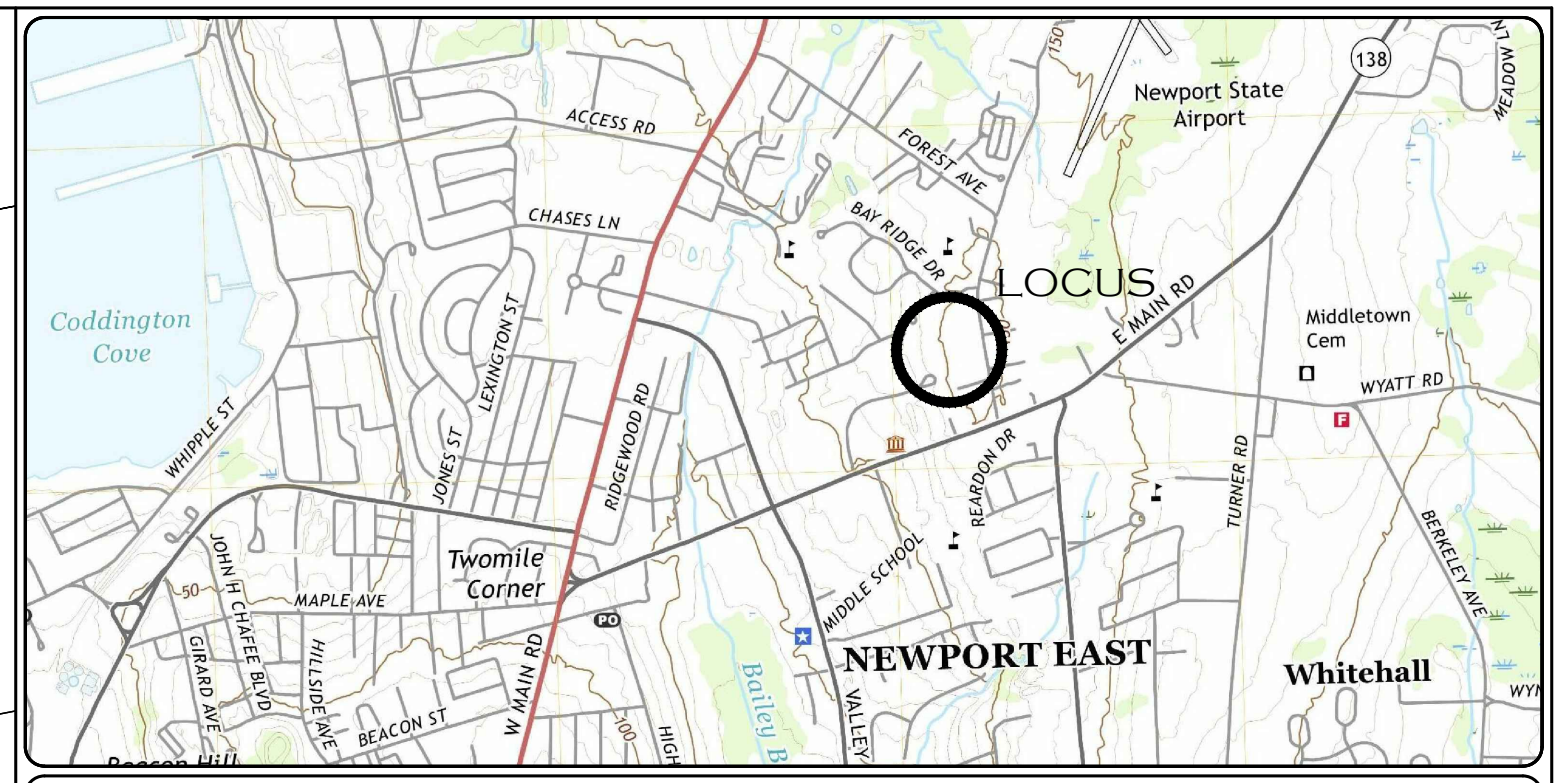
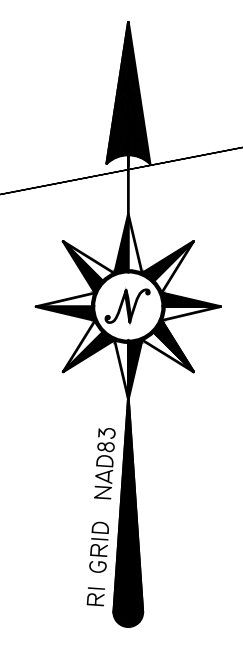
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SHEET 4 OF 8

1/27/2021 11:34:44 AM - West House II - Affordable Senior Housing - ENCR Base - 005 - Parking.dwg, 10/22/2021 11:34:44 AM

DISCLAIMER:
ELEVATIONS ASSOCIATED WITH ALL CULTEC UNITS, STORMCEPTORS, CATCH BASINS, MAN HOLES, AND OTHER DRAINAGE RELATED STRUCTURES ARE SUBJECT TO CHANGE AFTER THE COMPLETION OF A ON SITE SOIL ANALYSIS.

MAP 113
CONDOS
#3000 - #33103
R-20 ZONING DISTRICT



LOCATION (NOT TO SCALE) MAP

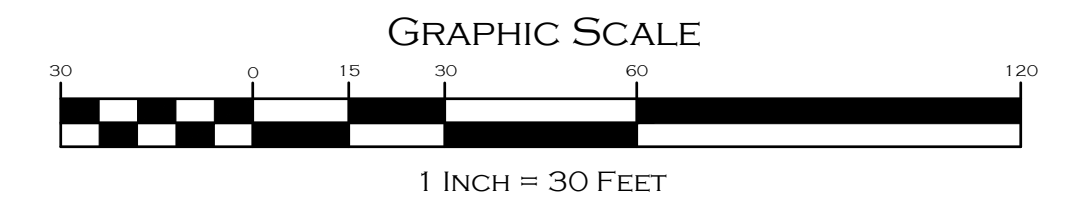
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DIMENSIONAL ZONING REQUIREMENTS:

OFFICE BUSINESS - OB - ZONING DISTRICT - MULTIFAMILY DWELLING STRUCTURE

	REQUIRED	PROPOSED
MINIMUM AREA	= 40,000 S.F.	200,689 S.F.
MINIMUM FRONTAGE	= 150'	203.26'
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MINIMUM SIDE YARD SETBACK	= 25'	52.73'
MINIMUM REAR YARD SETBACK	= 40'	99.37'
MAXIMUM BUILDING HEIGHT	= 35'	40'
MAXIMUM BUILDING COVERAGE	= 30%	21%

DISCLAIMER:
ELEVATIONS ASSOCIATED WITH ALL CULTEC UNITS, STORMCEPTORS, CATCH BASINS, MAN HOLES, AND OTHER DRAINAGE RELATED STRUCTURES ARE SUBJECT TO CHANGE AFTER THE COMPLETION OF A ON SITE SOIL ANALYSIS.



GRADING DRAINAGE & UTILITY PLAN

"WEST HOUSE II - AFFORDABLE SENIOR HOUSING"
417 FOREST AVENUE, MIDDLETOWN RI, 02842
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C/O PHOENIX PROPERTY MGMT. INC. WARWICK, RI 02886

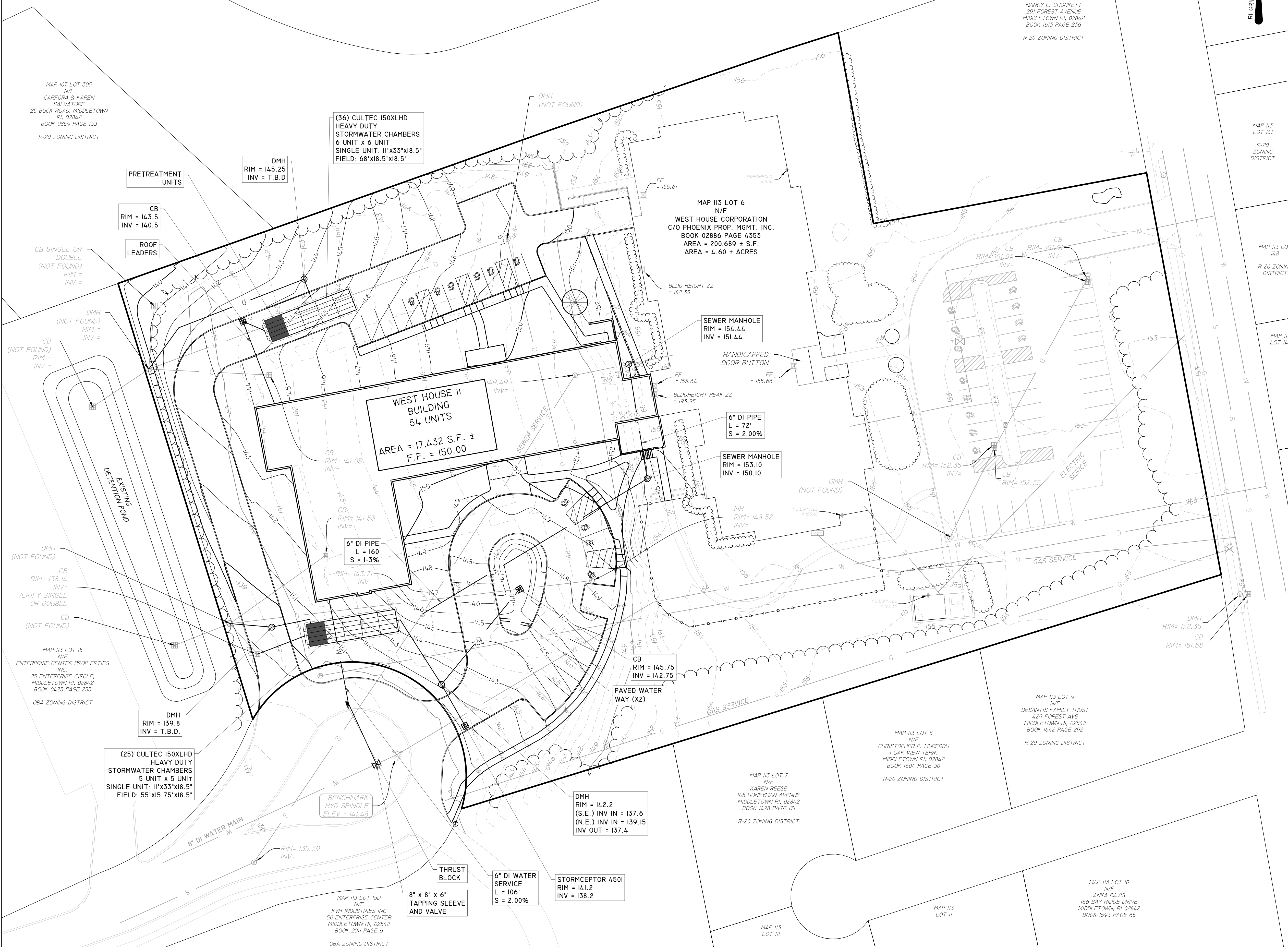
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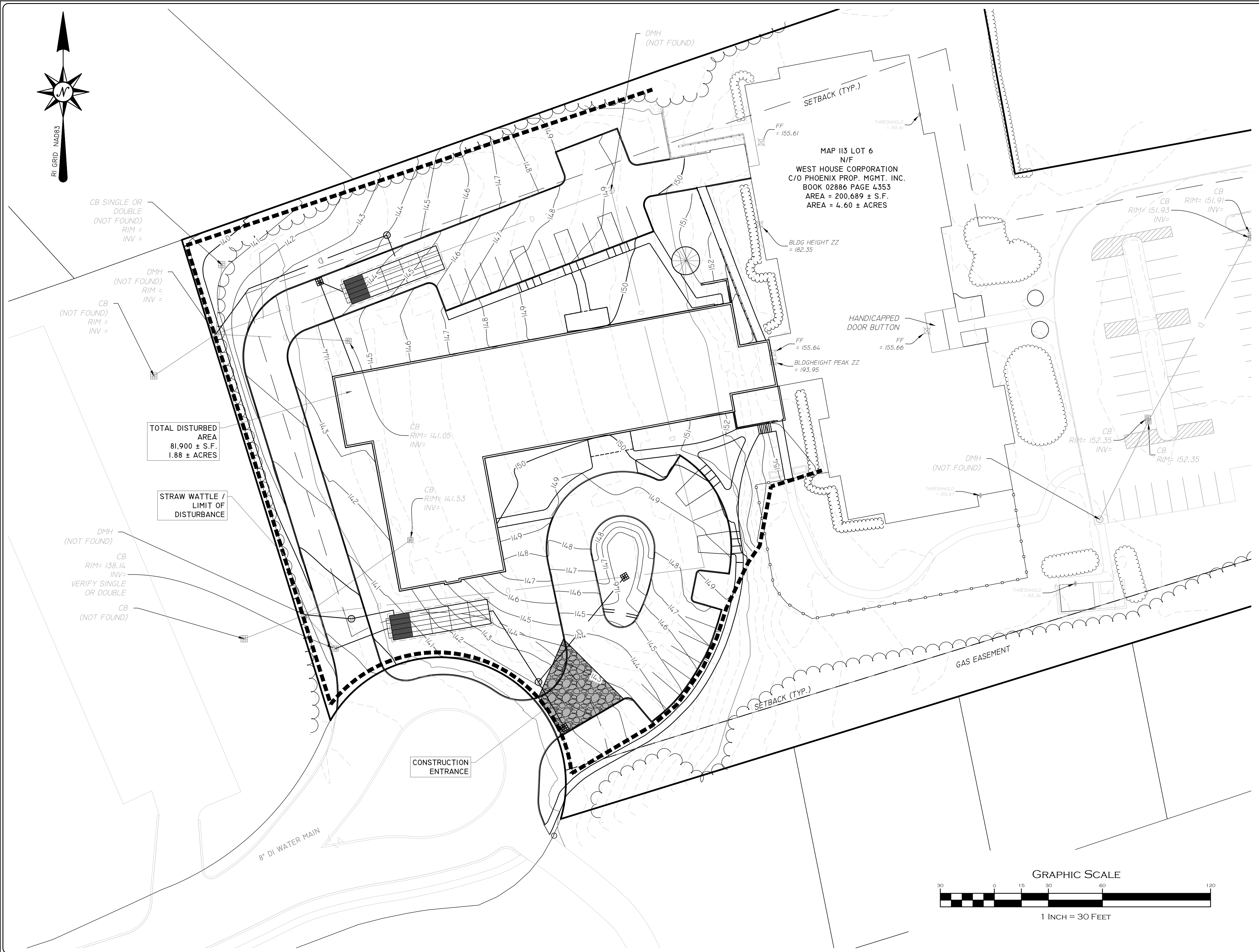
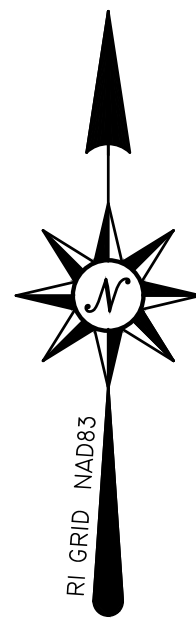
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Web Address: InSiteEngineers.com

SHEET 5 OF 8



1/21/21 03:47 PM Forest Avenue Middletown RI - West House/Caladri/DOB - ENCR Base - 005 - Parking.dwg 10/22/2021 11:54:47 PM



OPERATION & MAINTENANCE PLAN NOTES:

THIS PLAN SHOULD BE USED IN CONJUNCTION WITH SEPARATE OPERATIONS AND MAINTENANCE PLAN DOCUMENT FOR "WEST HOUSE II - AFFORDABLE SENIOR HOUSING" DATE: TBD.

THIS PLAN SHOULD BE USED IN CONJUNCTION WITH SEPARATE STORMWATER POLLUTION PREVENTION PLAN DOCUMENT FOR "WEST HOUSE II - AFFORDABLE SENIOR HOUSING" DATE: TBD.

THE MAINTENANCE AND UPKEEP ON THE EXISTING ROADWAY WILL INCLUDE THE FOLLOWING ELEMENTS:

CONSTRUCTION VEHICLES SHALL BE LIMITED TO ONE ACCESS POINT ON EACH LOT WHERE A CRUSHED-STONE CONSTRUCTION PAD ENTRANCE SHALL BE INSTALLED IN THE AREA OF THE PERMANENT DRIVEWAY TO ENSURE THAT MUD AND DEBRIS ARE NOT TRACKED ONTO THE ROADWAY. IF MUD IS INADVERTENTLY TRACKED ONTO THE ROAD, IT SHOULD BE REMOVED PROMPTLY.

GENERAL MAINTENANCE OF EROSION CONTROL ELEMENTS INCLUDING REGRADING, REVEGETATION, REPLACING RIPRAP, ETC., ON AN AS NEEDED BASIS.

STORMCEPTER, INFILTRATION FACILITY AND CATCH BASINS WILL BE INSPECTED SEMI-ANNUALLY BY THE OWNER AND WILL BE MAINTAINED AS REQUIRED.

BUILD UP OF SEDIMENTATION AND DEBRIS SHALL BE MONITORED AND REMOVED ON A SEMI-ANNUAL BASIS IN ORDER TO KEEP THE DISCHARGES AND FLOWS INTO THE INFILTRATION FACILITY FUNCTIONING PROPERLY.

ALL STORMWATER MANAGEMENT SYSTEMS MUST HAVE AN OPERATION AND MAINTENANCE PLAN TO ENSURE THAT SYSTEMS FUNCTION AS DESIGNED.

THE OWNER WILL BE RESPONSIBLE FOR THE OPERATION AND MAINTENANCE OF THE STORMWATER MANAGEMENT SYSTEM AND ALL OF ITS APPURTENANCES. THE FOLLOWING MAINTENANCE PROGRAM SHALL BE IMPLEMENTED:

A. WATER QUALITY INLETS (STORMCEPTOR) - WQI

- 1. THE WQI'S SHALL BE INSPECTED MONTHLY TO ASSURE THEY ARE FUNCTIONING PROPERLY, AND CLEANED BY REMOVING SEDIMENT AND DEBRIS FOR TIMES PER YEAR. CLEANING SHALL BE PERFORMED BY USE OF A VACUUM TRUCK OR OTHER METHOD AS RECOMMENDED BY THE WQI MANUFACTURER.
- 2. ALL SEDIMENT AND HYDROCARBONS (PETROLEUM PRODUCTS) SHALL BE PROPERLY HANDLED AND DISPOSED IN ACCORDANCE WITH APPLICABLE GUIDELINES SIMILAR TO CATCH BASIN SEDIMENTS.
- 3. ALL DRAINAGE SYSTEM OUTLETS SHALL ALSO BE INSPECTED FOR DEBRIS AND MAINTAINED ACCORDINGLY. INSPECTION AND MAINTENANCE SHALL OCCUR IN MAY AND DECEMBER OF EACH YEAR.
- 4. ALL INSPECTIONS AND MAINTENANCE SHALL BE PERFORMED BY QUALIFIED INDIVIDUALS. RECORDS OF THE INSPECTIONS AND MAINTENANCE SHALL BE KEPT FOR A PERIOD OF FIVE (5) YEARS AND SHALL BE MADE AVAILABLE UPON REQUEST.

B. UNDERGROUND INFILTRATION SYSTEM

- 1. THE INFILTRATION SYSTEMS SHALL BE INSPECTED AT LEAST EVERY SIX MONTHS AND AFTER EVERY MAJOR STORM DURING THE FIRST YEAR TO ASSURE THEY ARE FUNCTIONING PROPERLY.
- 2. ANY NECESSARY REPAIRS SHOULD BE MADE IMMEDIATELY.
- 3. CLEANING SHALL BE PERFORMED BY USE OF A VACUUM TRUCK OR OTHER METHOD AS RECOMMENDED BY THE PIPING MANUFACTURE.
- 4. ALL DRAINAGE SYSTEM OUTLETS SHALL ALSO BE INSPECTED FOR DEBRIS AND MAINTAINED ACCORDINGLY. INSPECTION AND MAINTENANCE SHALL OCCUR IN MAY AND DECEMBER OF EACH YEAR.
- 5. IF THE INFILTRATION FACILITY FAILS TO DRAIN WITHIN 72 HOURS THEN A QUALIFIED PROFESSIONAL SHOULD ACCESS THE DEVICES AND PROVIDE RECOMMENDATIONS FOR CORRECTIVE ACTIONS, AND THE OWNER SHOULD TAKE IMMEDIATE ACTION TO IMPLEMENT THESE RECOMMENDATIONS TO RESTORE THE INFILTRATION FUNCTION.
- 6. ALL INSPECTIONS AND MAINTENANCE SHALL BE PERFORMED BY QUALIFIED INDIVIDUALS. RECORDS OF THE INSPECTIONS AND MAINTENANCE SHALL BE KEPT FOR A PERIOD OF FIVE (5) YEARS AND SHALL BE MADE AVAILABLE UPON REQUEST.

THE OWNER SHALL KEEP A WRITTEN RECORD OF INSPECTION DATES AND FINDINGS, MAINTENANCE OPERATIONS, AND ALL REPAIRS. AN INSPECTION/MAINTENANCE CHECKLIST SHALL BE USED IN THE SPECIFIED INSPECTIONS. RECORDS OF INSPECTIONS AND MAINTENANCE SHALL BE KEPT FOR AT LEAST THREE YEARS, AND AVAILABLE ON REASONABLE NOTICE FOR INSPECTION BY THE APPROPRIATE TOWN AGENCY.

EROSION & SEDIMENT CONTROL NOTES:

- 1. EROSION AND SEDIMENT CONTROL MEASURES WILL BE INSTALLED PRIOR TO THE START OF CONSTRUCTION. GRAVEL CONSTRUCTION ENTRANCE WILL BE INSTALLED BEFORE CONSTRUCTION TRAFFIC INTO AND OUT OF PROJECT AREA BEGINS. STABILIZATION OF ALL REGRADED AND SOIL STOCKPILE AREAS WILL BE INITIATED AND MAINTAINED DURING ALL PHASES OF CONSTRUCTION.
- 2. ALL EROSION AND SEDIMENT CONTROL MEASURES WILL BE CONSTRUCTED IN ACCORDANCE WITH THE TOWN OF MIDDLETOWN REGULATIONS. ALL EROSION CONTROL MEASURES ARE TO BE MAINTAINED AND UPGRADED AS REQUIRED TO ACHIEVE PROPER SEDIMENT CONTROL DURING CONSTRUCTION.
- 3. ADDITIONAL CONTROL MEASURES WILL BE INSTALLED DURING CONSTRUCTION PERIOD, IF DEEMED NECESSARY BY THE ENGINEER OR TOWN AGENCIES.
- 4. THE LOT SHALL BE REQUIRED TO MAINTAIN EROSION AND SEDIMENT CONTROLS DURING CONSTRUCTION. ADDITIONAL MEASURES WILL BE REQUIRED TO PREVENT SEDIMENT DISCHARGE INTO THE STREET, AND DRAINAGE SYSTEMS.
- 5. SEEDING MIXTURE FOR FINISHED GRASSED AREAS WILL BE AS FOLLOWS:
 - KENTUCKY BLUE GRASS = 45
 - CREeping RED FESCUE = 45
 - PERENNIAL RYE GRASS = 10SEED TO APPLIED AT A RATE OF 4 LBS / 1000 S.F. FERTILIZER SHALL BE APPLIED AT A RATE OF 2 LBS / 1000 S.F. PLANTING SEASON SHALL BE APRIL 1 TO OCTOBER 15. AFTER OCTOBER 15 AREAS NOT SEEDED SHALL BE STABILIZED WITH STRAW WATTLES, HAY BALE CHECK DAMS, FILTER FABRIC OR WOODEN MULCH AS REQUIRED TO CONTROL EROSION.
- 6. AREAS LEFT BARE BEFORE FINISH GRADING AND SEEDING IS ACHIEVED, SHALL RECEIVE A TEMPORARY SEEDING OF PERENNIAL RYE GRASS APPLIED TO A RATE OF 2 LBS / 1000 S.F. AT A DEPTH OF 1/2" LESTONE (EQUIVALENT TO BE 50 % CALCIUM PULVER MAGNESIUM OXIDE) SHALL BE APPLIED AS SEEDBED PREPARATION AT A RATE OF 80 LBS / 1000 S.F. WHERE GRASS PREDOMINATES, FERTILIZE ACCORDING TO A SOIL TEST AT A MINIMUM APPLICATION RATE OF 1 LB OF NITROGEN PER 1000 S.F. AREAS TO BE LEFT BARE BEFORE FINISH GRADING AND SEEDING OUTSIDE OF PLANTING SEASONS SHALL RECEIVE AN AIR-DRIED WOOD CHIP MULCH, FREE OF COURSE MATTER, TREATED WITH 12 LBS NITROGEN PER TON, APPLIED AT A RATE OF 185-275 LBS / 1000 S.F.
- 7. CONTRACTOR SHALL BE ASSIGNED THE RESPONSIBILITY FOR IMPLEMENTING THIS EROSION AND SEDIMENT CONTROL PLAN. THIS RESPONSIBILITY INCLUDES THE INSTALLATION AND MAINTENANCE OF CONTROL MEASURES, INFORMING ALL PARTIES ENGAGED ON THE CONSTRUCTION SITE OF THE REQUIREMENTS AND OBJECTIVES OF THE PLAN, AND NOTIFY THE PROPER TOWN AGENCY OF ANY TRANSFER OF THIS RESPONSIBILITY. THE OWNER SHALL BE RESPONSIBLE FOR CONVEYING A COPY OF THE EROSION AND SEDIMENT CONTROL PLAN IF THE TITLE TO THE LAND IS TRANSFERRED.
- 8. THE CONTRACTOR SHALL REQUEST THE APPROPRIATE TOWNS AGENCIES TO INSPECT AND APPROVE THE INSTALLATION OF ALL EROSION CONTROL MEASURES PRIOR TO THE START OF CONSTRUCTION. PERIODIC INSPECTIONS OF EROSION CONTROL MEASURES MAY BE PERFORMED BY THE AGENCIES. THE CONTRACTOR SHALL REPAIR, UPGRADE OR REPAIR ANY MEASURES THE AGENT MAY FEEL ARE IN NEED OF SUCH.
- 9. STOCKPILES OF SOIL SHALL BE SURROUNDED BY A SEDIMENT BARRIER. SOIL STOCKPILES TO BE LEFT BARE FOR MORE THAN FIFTEEN (15) DAYS SHALL BE STABILIZED WITH TEMPORARY VEGETATION OR MULCH, IF STOCKPILES ARE TO REMAIN FOR MORE THAN SIXTY (60) DAYS, FILTER FABRIC SHALL BE USED IN PLACE OF HAY BALES. SIDE SLOPES SHALL NOT EXCEED 2:1.
- 10. THE CONTRACTOR SHALL BE RESPONSIBLE TO CONTROL DUST AND WIND EROSION THROUGHOUT THE LIFE OF HIS CONTRACT. DUST CONTROL SHALL INCLUDE BUT NOT LIMITED TO SPRINKLING WATER ON EXPOSED SOILS AND HAUL ROADS; CONTRACTOR SHALL CONTROL DUST TO PREVENT A HAZARD TO TRAFFIC ON ADJACENT ROADWAYS.
- 11. SEDIMENT SHALL BE REMOVED ONCE THE VOLUME REACHES 1/4 TO 1/2 THE HEIGHT OF THE SILT FENCE OR HAY BALE, OR SILT SOCK.
- 12. ALL STOCKPILES SHALL BE SURROUNDED BY SEDIMENT CONTROLS.
- 13. DISTURBED AREAS REMAINING IDLE FOR MORE THAN 14 DAYS SHALL BE STABILIZED.
- 14. ALL FACILITIES USED AS TEMPORARY MEASURES SHALL BE CLEANED PRIOR TO BEING PUT INTO FINAL OPERATION.
- 15. PER THE MADEP, BMP'S ARE NOT TO BE USED FOR TEMPORARY STORMWATER RUNOFF COLLECTION DURING THE PROJECTS CONSTRUCTION.

- CONSTRUCTION PROCEDURES AND SEQUENCING**
- THE ENGINEER SHALL HAVE THE SOLE RESPONSIBILITY FOR THE DESIGN IMPLEMENTATION. HE SHALL BE RESPONSIBLE FOR ENSURING THAT ALL CONTRACTORS AND SUBCONTRACTORS ARE AWARE OF THE PROVISIONS ON THE PLANS.
 - THE CONTRACTOR SHALL ORGANIZE SITE CONSTRUCTION IN A MANNER WHICH WILL ENSURE THE IMMEDIATE STABILIZATION OF SURFACES. PERIMETER CONTROLS EQUAL APPROVED PROJECT LIMITS.
 - PRIOR TO ANY CONSTRUCTION ON SITE, THE CONTRACTOR SHALL SETUP PRE-CONSTRUCTION MEETING WITH OWNER, ENGINEER, TOWN PLANNING AND DPW PERSONAL.
 - PRIOR TO THE COMMENCEMENT OF CONSTRUCTION, A LINE STRAW WATTLES, WILL BE PLACED AT ALL CONSTRUCTION TOE OF SLOPES IN THE AREA OF ROADWAY, PONDS, LANDSCAPED AREAS, AND ALONG PERIMETER OF PROJECT LIMIT OF DISTURBANCE WHERE INDICATED ON PROJECT PLANS.
 - RESERVE EROSION CONTROL DEVICES SHALL BE STOCKPILED ON SITE IN THE EVENT OF EMERGENCIES, AND SHALL BE LOCATED 100' FROM REGULATED WETLAND RESOURCE AREAS.
 - THE CONTRACTOR SHALL MAKE ALL NECESSARY PROVISIONS FOR THE PROPER STORAGE AND/OR REMOVAL OF DEBRIS ON SITE TO AVOID UNNECESSARY ACCUMULATION ON SITE.
 - DRAINAGE STRUCTURES SHALL BE CONSTRUCTED FROM DOWNSTREAM UP AND CONSTRUCTION SHALL INCLUDE THE PLACEMENT OF STONE AT THE FLARED PIPE ENDS AND OUTLET STRUCTURE

- INLETS AND OUTLETS AS SHOWN ON PROJECT PLANS.
- IN STREAM CONTROLS SUCH AS HAY BALE CHECK DAMS SHALL BE ESTABLISHED PRIOR TO CONSTRUCTION IF NEEDED.
- INFILTRATION SURFACE PROTECTION**
TO PROTECT THE INFILTRATION SURFACES (BENEATH AND ADJACENT TO THE RECHARGE SYSTEMS) FROM DEGRADATION BY CONSTRUCTION ACTIVITIES INCLUDE:
- 1. PROVIDE DEEP ROTOTILLING OF VAIN FLOOR IMMEDIATELY PRIOR TO SEEDING WITH NO SUBSEQUENT TRAFFIC ON SURFACE.
 - 2. PREVENTION OF CONTAMINATION OF THE EXPOSED SUBGRADE BY CONSTRUCTION VEHICLES.
 - 3. PREVENTION OF EXCESSIVE COMPACTION BY CONSTRUCTION VEHICLES.
 - 4. PREVENTION OF THE DISCHARGE OF WATER FROM CONSTRUCTION DEWATERING ACTIVITIES INTO THESE FACILITIES.
 - 5. PREVENTION OF DISCHARGE OF STORMWATER INTO THESE FACILITIES UNTIL THE CONTRIBUTING AREAS ARE STABILIZED, UNLESS SPECIFIC MEASURES ARE PROVIDED FOR PROTECTING AND RESTORING THE INFILTRATION SURFACE.

CONSTRUCTION INSPECTION
THE ENGINEER SHALL BE CALLED ON SITE DURING THE CONSTRUCTION OF THE INFILTRATION BASIN. THE ENGINEER SHALL BE ON SITE DURING THE CONSTRUCTION AND LAYOUT OF ALL OUTLET STRUCTURES.

THE ENGINEER SHALL PERFORM FREQUENT INSPECTION OF THE STORMWATER SYSTEM DURING CONSTRUCTION, WITH CLEANING AND MAINTENANCE AS WARRANTED. DURING ACTIVE CONSTRUCTION PERIODS, WEEKLY INSPECTION IS REQUIRED.

IF CONSTRUCTION IS SUSPENDED (E.G., OVER THE WINTER), THEN MONTHLY INSPECTIONS ARE REQUIRED. IN ADDITION, THE SYSTEM SHOULD BE CHECKED AFTER ANY SIGNIFICANT RAINFALL, TO INSURE IT IS FUNCTIONING CORRECTLY AND TO MONITOR SEDIMENT ACCUMULATION FROM THE DISTURBED AREAS OF THE SITE.

ROUGH GRADING
DURING GRADING, THE POTENTIAL FOR EROSION IS HIGH. DURING GRADING OPERATIONS, DISTURBED SLOPES WILL BE MULCHED AND VEGETATION ESTABLISHED TO PREVENT SEDIMENT EROSION TO THE SATISFACTION OF THE ENGINEER.

EROSION & SEDIMENT CONTROL PLAN

"WEST HOUSE II - AFFORDABLE SENIOR HOUSING"
417 FOREST AVENUE, MIDDLETOWN RI, 02842
ASSESSORS MAP 113 LOT 6

APPLICANT: THE WEST HOUSE CORPORATION
C/O PHOENIX PROPERTY MGMT. INC. WARWICK, RI 02886

Job # 21-038 SCALE: 1" = 30' DRAWN BY: L.J.G. DATE: OCTOBER 20, 2021

REVISED:

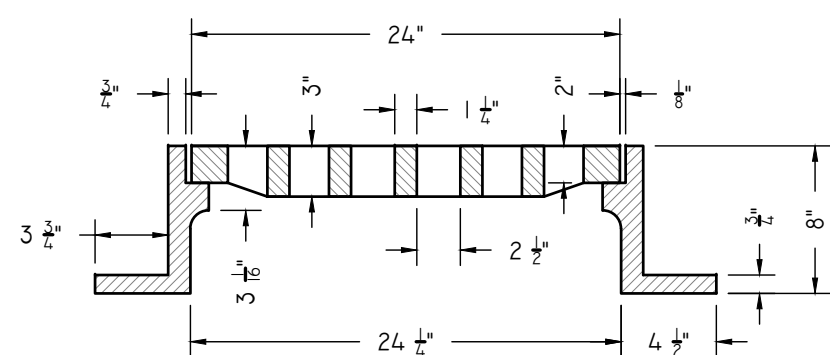
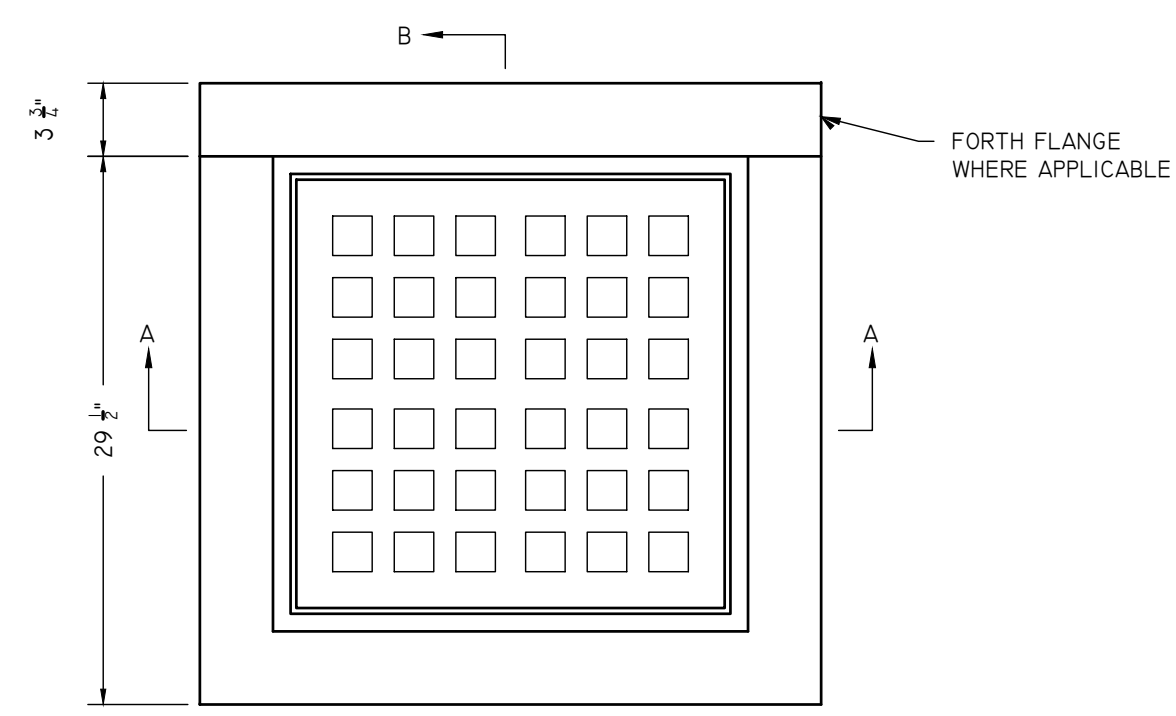
PAUL D. CARLSON
No. 7142
REGISTERED PROFESSIONAL ENGINEER
CIVIL
PROFESSIONAL SEAL

INSITE Engineering Services, LLC
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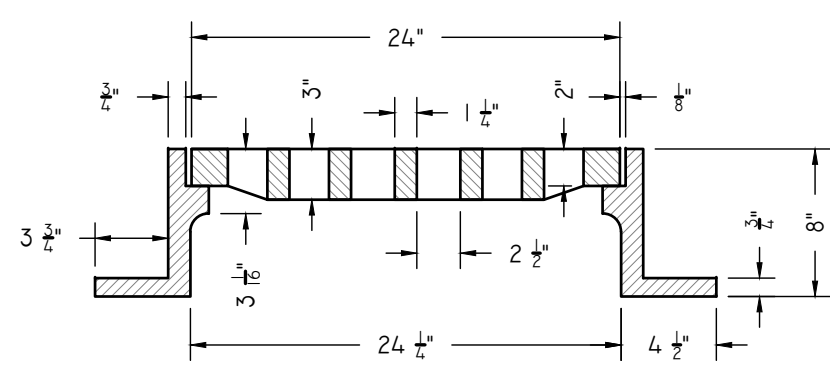
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SHEET 6 OF 8

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SECTION A-A



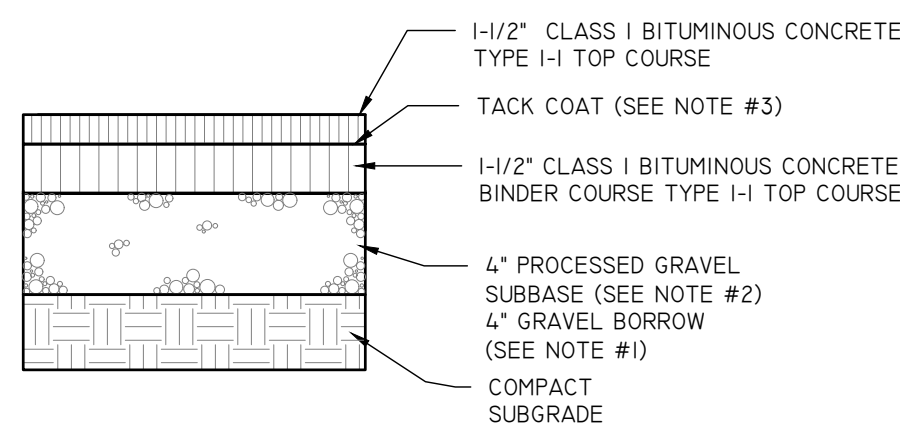
SECTION B-B

SQUARE CATCH BASIN FRAME & GRATE

NOT TO SCALE

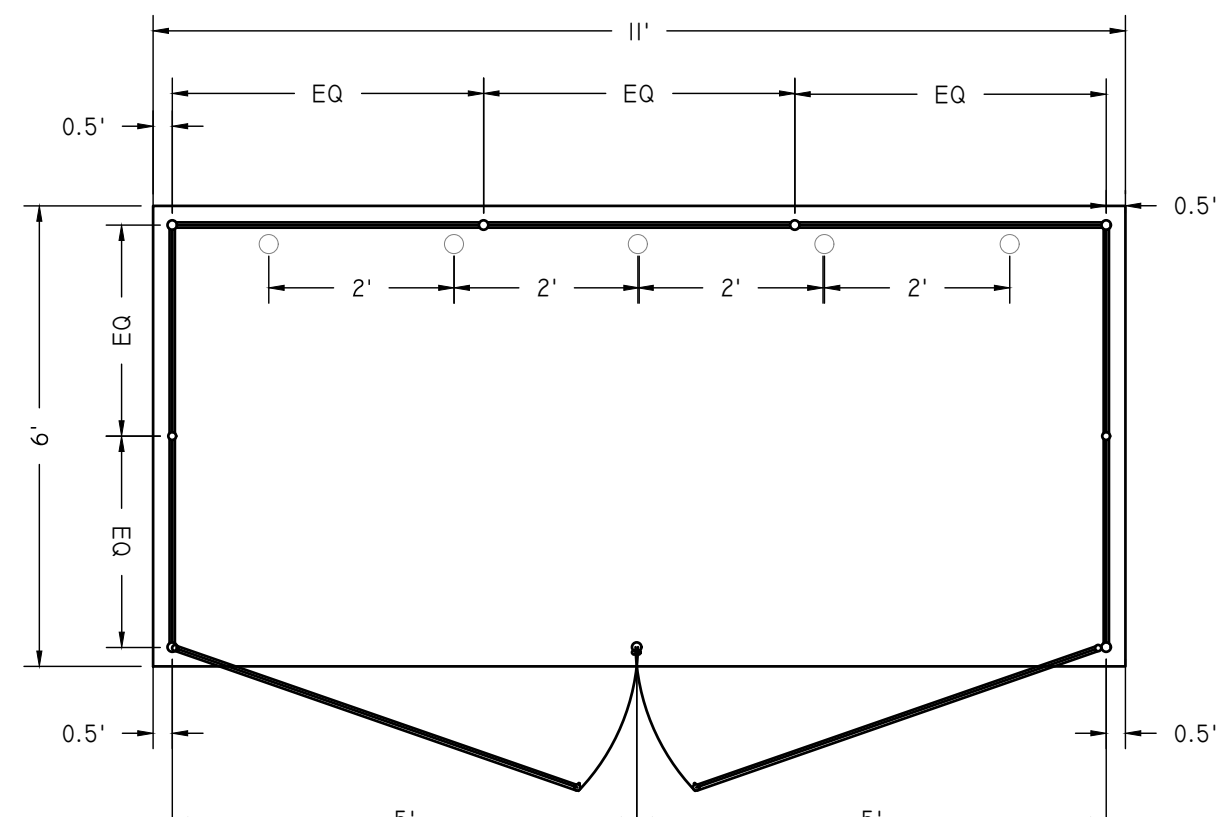
NOTES:

- GRAVEL BORROW SHALL CONFORM TO MADDOT STD. SPECIFICATION MATERIALS SECTION
- PROCESSED GRAVEL FOR SUBBASE COURSE SHALL CONFORM TO RIDOT STD. SPECIFICATION MATERIALS SECTION
- MACHINE APPLIED TACK COAT SHALL BE APPLIED ON TOP OF BINDER COURSE BEFORE FINAL PAVEMENT. TACK COAT SHALL CONFORM TO RIDOT STD. SPECIFICATIONS MATERIALS SECTION



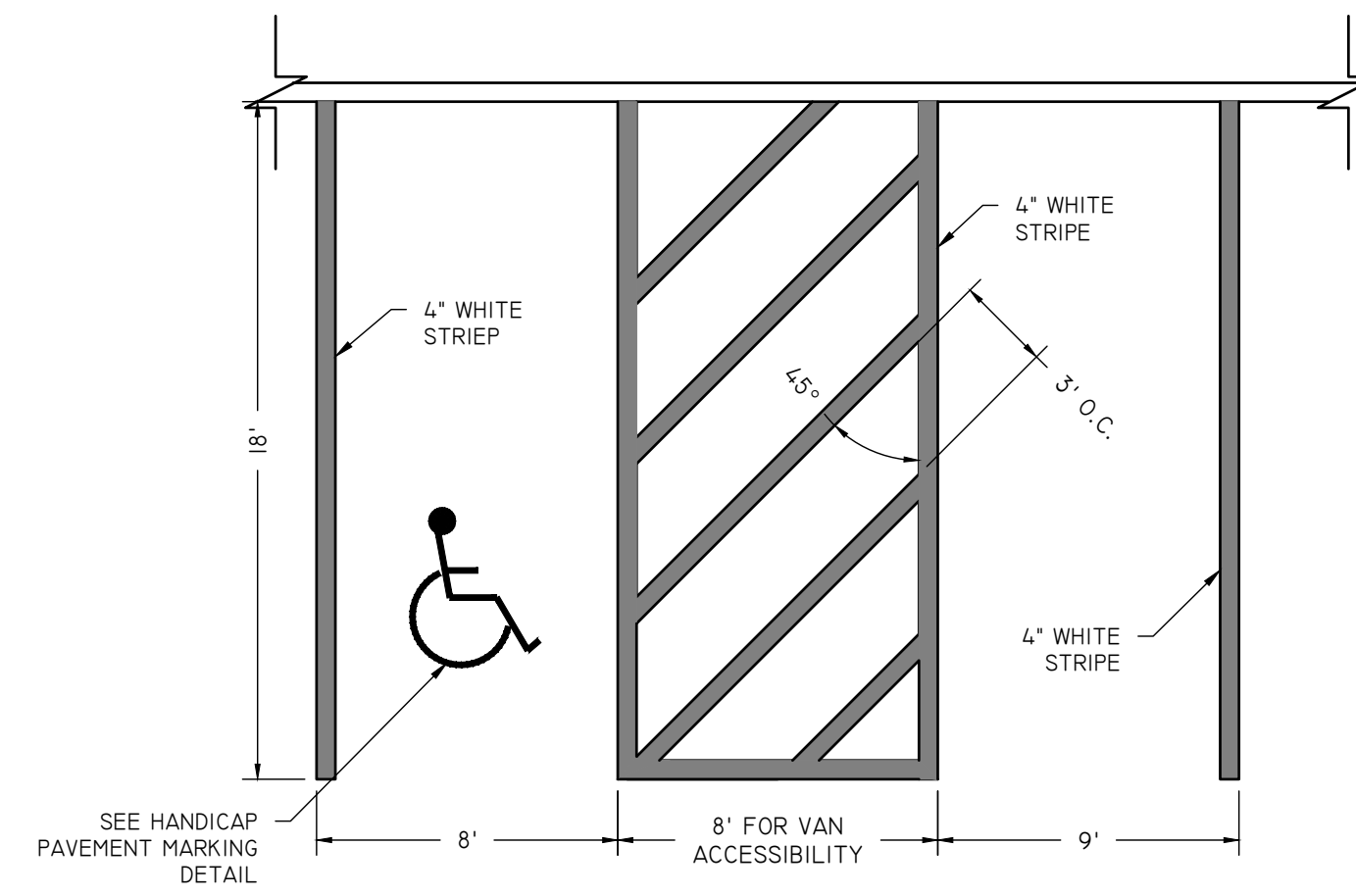
BITUMINOUS CONCRETE PAVEMENT DETAIL

NOT TO SCALE



DUMPSTER PAD AND ENCLOSURE DETAIL

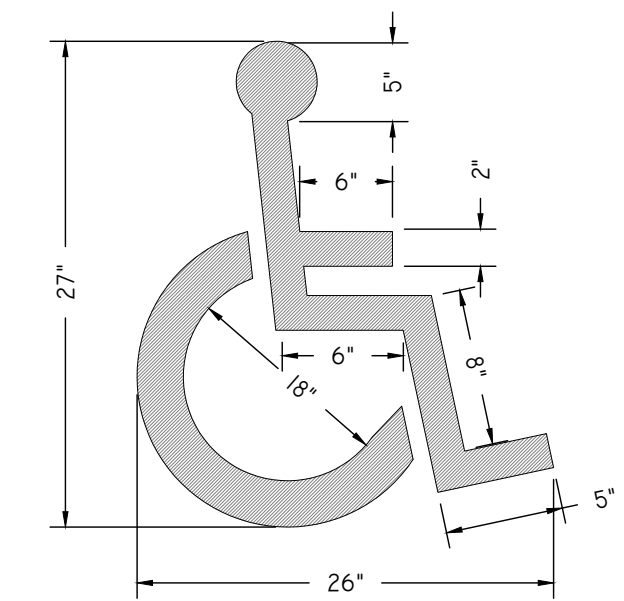
NOT TO SCALE



- NOTES:
- WHERE STALLS ABUT SIDEWALK, PARKING SIGNS SHOULD BE PLACED AT BACK EDGE OF SIDEWALK.

HANDICAP PARKING AND STANDARD STALLS

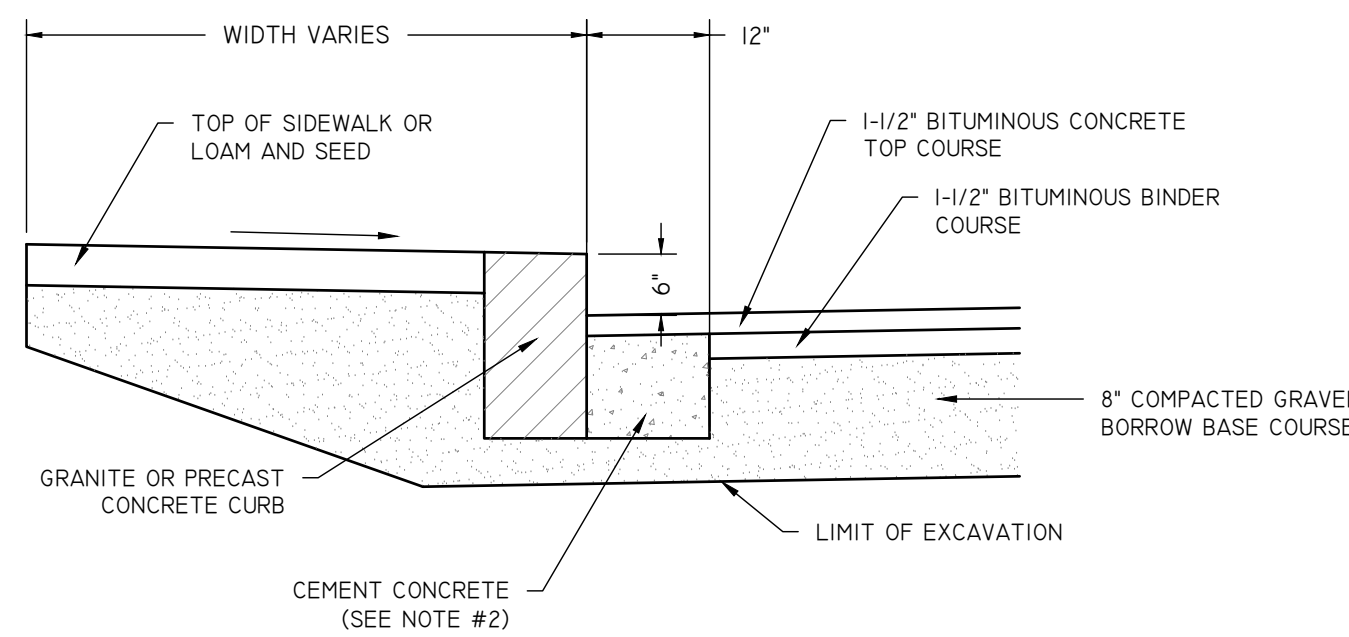
NOT TO SCALE



- NOTES:
- ALL HANDICAP PARKING AND SIGNALS SHALL BE IN CONFORMANCE WITH THE RULES AND REGULATIONS OF THE ARCHITECTURAL BARRIERS BOARD

HANDICAP PAVEMENT MARKING

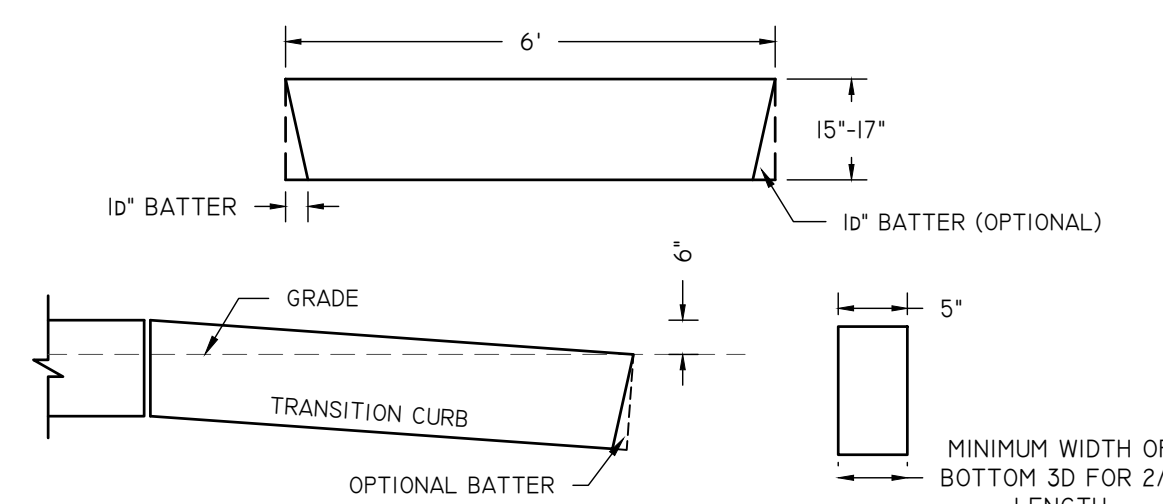
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- NOTES:
- SAW CUT 1/2" FROM CURB LINE AND REMOVE BINDER, BASE AND STONE. REPLACE WITH CEMENT CONCRETE.
 - CEMENT CONCRETE THAT IS ACCEPTABLE TO THE DEPT. UNDER SECTION M4 OF THE 1995 STANDARD SPECIFICATIONS; ALL TEST REQUIREMENTS ARE WAIVED, BITUMINOUS CONCRETE IS NOT TO BE USED AS A SUBSTITUTE.
 - USE CEMENT CONCRETE ONLY WHEN BITUMINOUS BINDER COURSE HAS BEEN PLACED BEFORE EITHER TYPE OF VERTICAL CURB HAS BEEN INSTALLED.

METHOD OF SETTING VERTICAL CURB

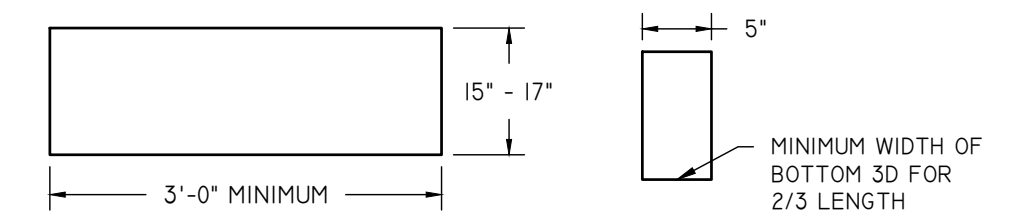
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- NOTES:
- TOP SURFACE TO BE DRESSED BY SAW OR TOOL.

6" PRECAST TRANSITION CURB

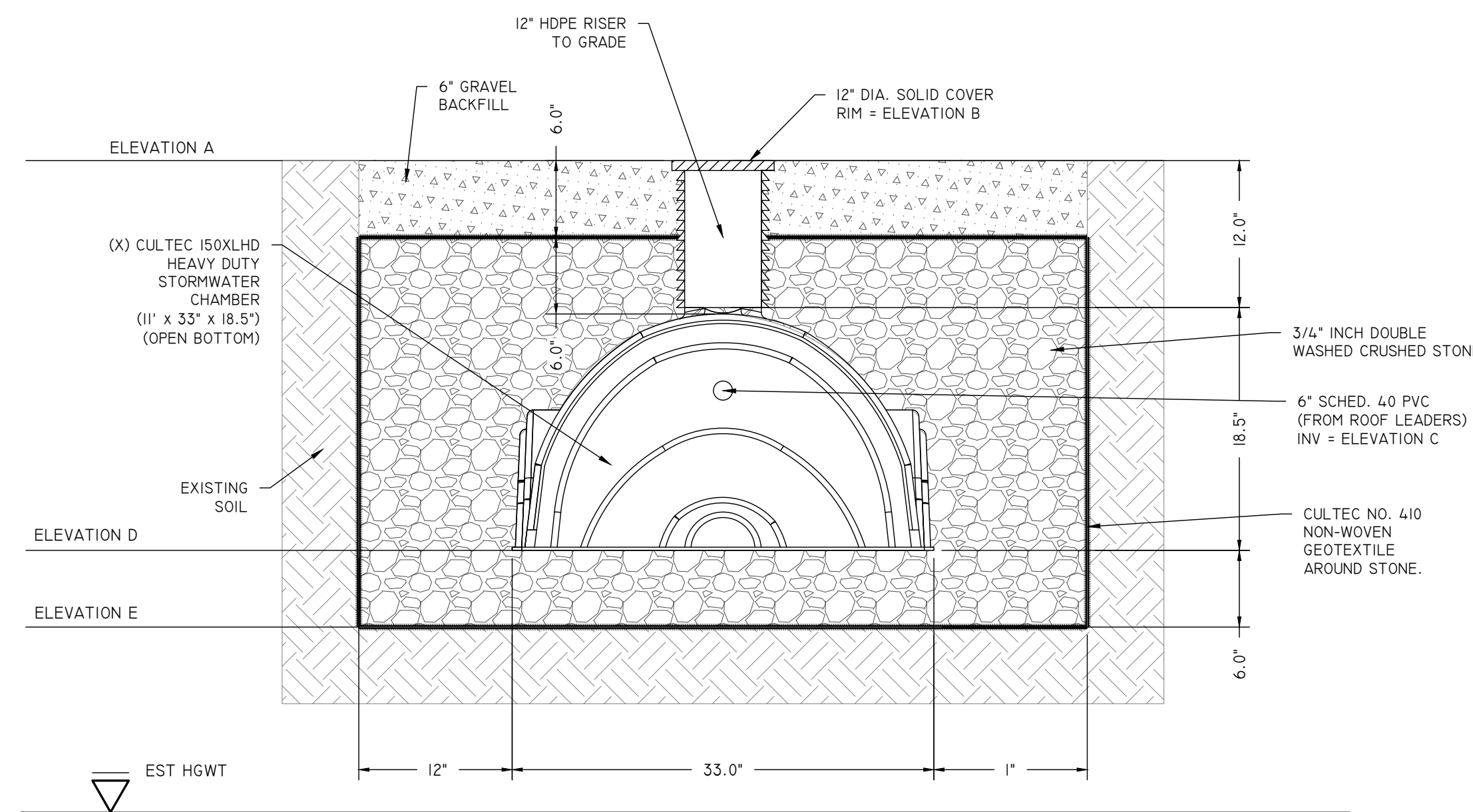
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- NOTES:
- MAXIMUM LENGTHS USING 8' & 10' RADII, WITH 90° ANGLE, ARE 4'-2" AND 5'-3" RESPECTIVELY.
 - MINIMUM LENGTH OF STRAIGHT OR CIRCULAR FILLER PIECES TO BE 3'-0".
 - TOP SURFACE TO BE DRESSED BY SAW.
 - CIRCULAR CURB IS REQUIRED ON CURVES WITH RADII OF 100' OR LESS. STRAIGHT CURB TO BE USED ON CURVES OF MORE THAN 100' RADII.

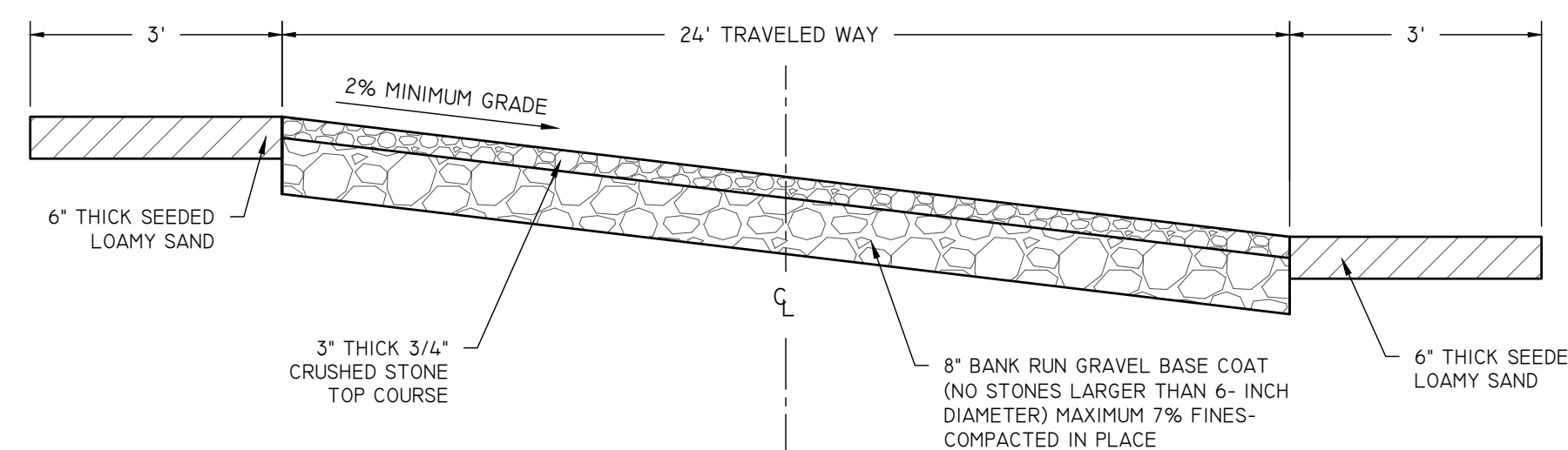
PRECAST CONCRETE CURB

NOT TO SCALE



INFILTRATION SYSTEM CROSS SECTION

NOT TO SCALE



SUPERELEVATED DRIVEWAY CROSS SECTION

NOT TO SCALE

DETAIL SHEET (2 OF 2)

PAUL D. CARLSON
No. 7142
REGISTERED PROFESSIONAL ENGINEER
CIVIL
PROFESSIONAL SEAL

"WEST HOUSE II - AFFORDABLE SENIOR HOUSING"
417 FOREST AVENUE, MIDDLETOWN RI, 02842
ASSESSORS MAP 113 LOT 6

APPLICANT: THE WEST HOUSE CORPORATION
C/O PHOENIX PROPERTY MGMT. INC. WARWICK, RI 02886

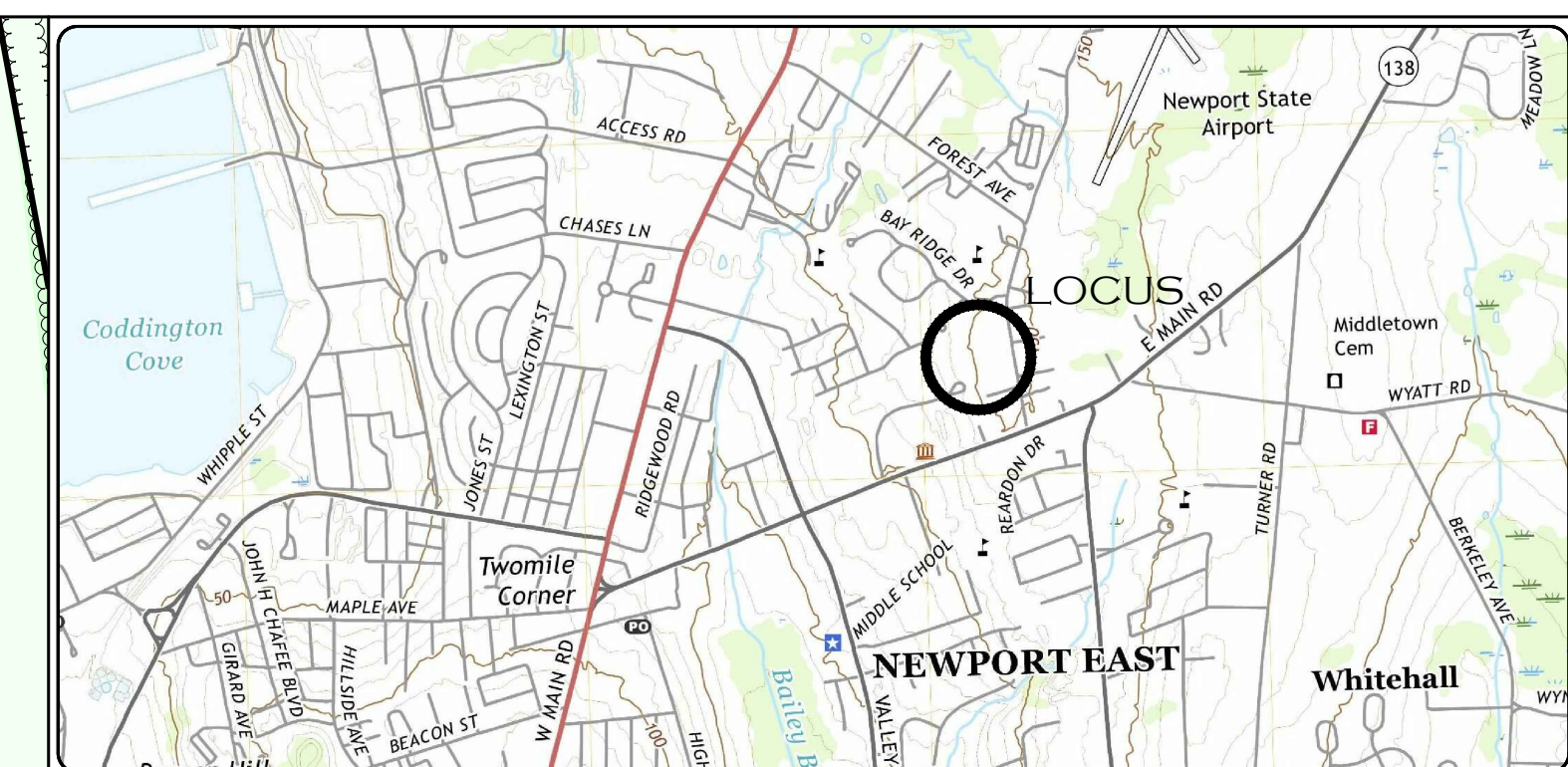
JOB # 21-038 SCALE: N.T.S. DRAWN BY: L.J.G. DATE: OCTOBER 20, 2021

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SHEET 8 OF 8



WATERSHED ANALYSIS LEGEND:

- PRE WATERSHED AREA:
- POST WATERSHED AREA:
- SOIL GROUPS:
- TIME OF CONCENTRATION:
- FORESTED AREA:
- GRASS AREA:
- PAVEMENT AREA:
- BUILDING AREA:

WATERSHED CALCULATIONS:

Post Watershed Analysis				
	Roof	Pavement	Total (s.f.)	Total (acres)
Post 1	16,769	11,688	28,457	0.653282828
Post 2	9,226	4,689	13,915	0.319444444
UC 1	2,990	13,867	16,857	0.386983471
Total	28,985.00	30,244.00	59,229.00	1.35971

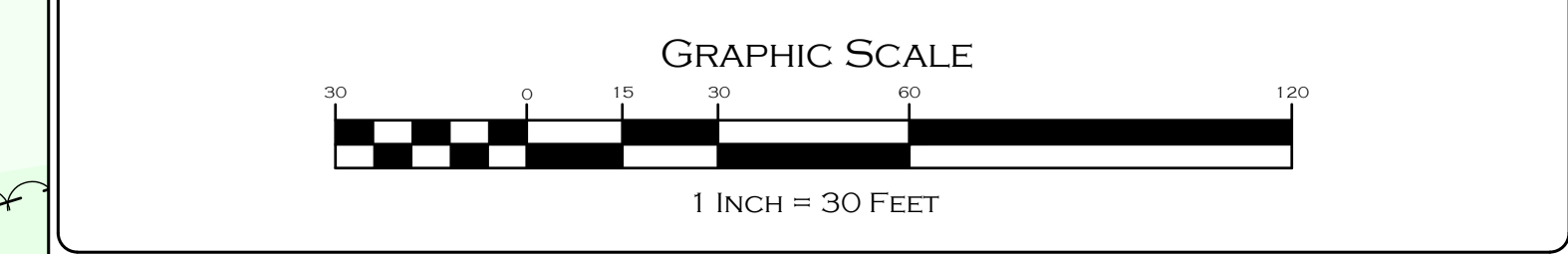
Change in Impervious Area (S.F.)				
	Pre Totals (S.F.)	Post Totals (S.F.)	Difference:	% Change
Area 1	37,251	28,457	8,794	23.61% Reduction
Area 2	30,173	13,915	16,258	53.88% Reduction
UC	7,871	16,857	8,986	214.17% Increase
Total	75,295	59,229	16,066	21.34% Reduction

Water Quality: WQv = 1" (I/12) [Feet³]

	I (Ft ²)	WQv (Ft ³)	Additional Treatment Needed	WQv Req (Ft ³)
Post 1	37,251	3104.25	26.39%	819.29
Post 2	30,173	2514.42	-3.88%	-97.63
UC 1	12,922	1076.79	100.00%	1076.79
Total	75,295.00	6274.58	28.66%	1798.46

Recharge: Rev = 1" F (I/12) [Feet³]

	I (Ft ²)	Rev (Ft ³)	Additional Treatment	Rev Req (Ft ³)
Post 1	37,251	776.06	26.39%	204.82
Post 2	30,173	628.60	-3.88%	-24.41
UC 1	12,922	269.20	100.00%	269.20
Total	75,295.00	1568.65	28.66%	449.61



POST WATERSHED ANALYSIS MAP

	"WEST HOUSE II - AFFORDABLE SENIOR HOUSING" 417 FOREST AVENUE, MIDDLETOWN RI, 02842 ASSESSORS MAP 113 LOT 6		
	APPLICANT: THE WEST HOUSE CORPORATION C/O PHOENIX PROPERTY MGMT. INC. WARWICK, RI 02886		
JOB # 21-038	SCALE: 1" = 30'	DRAWN BY: LJG	DATE: OCTOBER 20, 2021
REVISED:			

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