

Block	Lot	Qualifier	Location	Owner	Owner Address
82.01	1		RIDGE ROAD	SETON HALL PREPARATORY SCHOOL	120 NORTHFIELD AVENUE
82.01	7.04		652 PROSPECT AVENUE	FRIENDLY SONS OF THE SHILLELAGH FOU	652 PROSPECT AVE
82.01	7.07		654 PROSPECT AVENUE	BARU, NANDKSHORE K-NADIGER,PANKAJA	654 PROSPECT AVE
82.01	7.08		658 PROSPECT AVENUE	DELMONICO, DINA & FRANK POZAR	658 PROSPECT AVE
82.01	7.09		662 PROSPECT AVENUE	MALDONADO-CORTES,JAFUJTON, STEFANI	662 PROSPECT AVENUE
82.01	7.10		666 PROSPECT AVENUE	LEHMERT, ELAINE	666 PROSPECT AVE
82.01	7.11		670 PROSPECT AVENUE	LEMMA, THOMAS & ARIAS-AVILES,M	670 PROSPECT AVENUE
82.01	7.12		674 PROSPECT AVENUE	CAMACHO, LIONEL A	674 PROSPECT AVENUE
82.01	7.13		PROSPECT AVENUE	DAVIS,RUTH TRUST/EST BERSTECHER,LON	66 MAIN STREET
82.02	13		614 PROSPECT AVENUE	ANTIOCH PRESBYTERIAN CHURCH OF NJ	614-616 PROSPECT AVE
82.02	13.09		600 PROSPECT AVENUE	NAJERA, MARK S. & LUCY	600 PROSPECT AVE
82.03	1		598 PROSPECT AVENUE	APPEL, STEVEN M & WOLF, SHARON	598 PROSPECT AVENUE
82.03	3		596 PROSPECT AVENUE	ALMANZAR, SAMUEL & END	596 PROSPECT AVE
82.03	9		37 RIDGE ROAD	THE ECCLESIAJ, CESTONE RES. TRUST	37 RIDGE ROAD
82.03	14		RIDGE ROAD	MOUNTAIN RESOURCES CORP.	PO BOX 1874
82.03	17		27 RIDGE ROAD	CANDYLAND LAND, LLC.	27 RIDGE ROAD
82.03	27		510-520 PROSPECT AVE.	BREA W O EMERITUS,LLC%ECOVA 3349	PO BOX 2447
83	5.01		303 MT. PLEASANT AVENUE	GISJ PROPERTIES, LLC.	3 BUCKINGHAM ROAD
155	26		375 MT. PLEASANT AVENUE	375 MT. PLEASANT AVE CONDO ASSOC	375 MT. PLEASANT AVE
155	26.01		325 MT. PLEASANT AVENUE	P.S. ELECTRIC & GAS CO 124A TAX DEP	150 CIRCLE AVENUE
155	27		MARION DRIVE	ESSEX GREEN VILLAS	MARION DRIVE
155	27	C0101	101 MARION DRIVE	CLARK, BARBARA	101 MARION DRIVE
155	27	C0102	102 MARION DRIVE	CESTONE, SUZANNE	102 MARION DRIVE
155	27	C0103	103 MARION DRIVE	BANARES, IRENE	103 MARION DRIVE
155	27	C0104	104 MARION DRIVE	POMBRIANT, JOSEPH	104 MARION DRIVE
155	29		347 MT. PLEASANT AVENUE	MORRIS UNION HOLDING LLC	1240 HIXQUART PLZ&8TH FLE
155.01	1.01		403 MT. PLEASANT AVENUE	PIERRE, JEAN JARROT	403 MT. PLEASANT AVENUE
155.01	35		401 MT. PLEASANT AVENUE	SIMMONS, NIGEL	401 MT. PLEASANT AVE
155.01	36		3 WEDGEWOOD DRIVE	VENKATRAMAN, GUHA & SURYA	3 WEDGEWOOD DRIVE
155.20	60		2 WEDGEWOOD DRIVE	GONZALEZ MORALES, MIREYA A	2 WEDGEWOOD DR
155.20	61		4 WEDGEWOOD DRIVE	THE ARC OF ESSEX COUNTY, INC	7 REGENT STREET
156	1		PROSPECT & MT PLEASANT	ESSEX COUNTY COUNTRY CLUB	350 MT. PLEASANT AVENUE
156	19.01		33 OLD INDIAN ROAD	BENNETT, SAHIL R & MICHAELA	35 OLD INDIAN RD
156	19.02		29 OLD INDIAN ROAD	PICCIANO, NATACHA & LOUIS	29 OLD INDIAN RD
156	19.03		41 OLD INDIAN ROAD	SARAC, AMILA & MINCY, WILLIAM	41 OLD INDIAN RD
156	19.04		31 OLD INDIAN ROAD	GRAHAM,ALAN + DONNA	31 OLD INDIAN ROAD
156	19.05		39 OLD INDIAN ROAD	CAMPBELL, SUSAN	39 OLD INDIAN RD
156	19.06		37 OLD INDIAN ROAD	BYUN, ALEXANDRA & DENNIS	37 OLD INDIAN RD
156	29		57 OLD INDIAN ROAD	BERRY, CHERISSE	57 OLD INDIAN ROAD
156	29.01		3 MARGULIS COURT	ADDERLEY, NATHANIEL E & ANGELAC	3 MARGULIS CT & ANGELAC
156	29.02		7 MARGULIS COURT	SIMPkins, DY SHAWN	7 MARGULIS COURT
156	29.03		8 MARGULIS COURT	MOORE, MATTHEW PAUL	8 MARGULIS COURT
156	29.04		4 MARGULIS COURT	SNYDER, JASON & TALIA	4 MARGULIS CT
156	35		97-105 OLD INDIAN ROAD	OLD INDIAN PROPERTIES LLC	4 DABRY CT
156	35.01		109-115 OLD INDIAN ROAD	OLD INDIAN PROPERTIES LLC	4 DABRY CT
157.01	11		MT. PLEASANT AVENUE	COUNTY OF ESSEX	115 CLIFTON AVENUE
158	22		1 RIDGEWAY AVENUE	MICHELET, CHARLES & HORNE, ELLEN	1 RIDGEWAY AVENUE
158	27		5 RIDGEWAY AVENUE	WILLIAMS, GREGORY & SARAH R	5 RIDGEWAY AVE
158.01	40		681 PROSPECT AVENUE	THE CHURCH OF HOLY INNOCENTS	681 PROSPECT AVENUE
158.01	41		12 OLD INDIAN ROAD	MOUNTAIN TOP LEAGUE, C/O GUARINO	10 BELGRADE TERRACE
158.01	43		6 RIDGEWAY AVENUE	ST CLOUD PRESBYTERIAN CHURCH	20 OLD INDIAN ROAD
158.21	10		20 GAVIN ROAD	JENSEN, VERONICA M	20 GAVIN RD
158.21	11.01		88 OLD INDIAN ROAD	KADEL, WILLIAM J. & DANIELLE N.	88 OLD INDIAN ROAD
158.21	11.02		92 OLD INDIAN ROAD	DISHPANKAR, ASHAY A & NADUVILAKATILA	92 OLD INDIAN ROAD
158.21	11.03		96 OLD INDIAN ROAD	McCLAMMY, JAMES & MADELYN	96 OLD INDIAN ROAD
158.21	15		100 OLD INDIAN ROAD	HAWKINS, BARBARA K	100 OLD INDIAN ROAD

APPLICANT/OWNER

ESSEX COUNTY COUNTRY CLUB
350 MT. PLEASANT AVE
WEST ORANGE, NJ 07052

LEGEND

BOUNDARY LINE
LOT LINE
LOT NUMBER
BLOCK LIMIT
BLOCK NUMBER
ZONE BOUNDARY
ZONE DESIGNATION
MUNICIPAL BOUNDARY
200' ADJOINER LINE
PROPOSED SITE

- GENERAL NOTES:
- SITE IS KNOWN AND DESIGNATED AS BLOCK 156, LOT 1 OF THE TOWNSHIP OF WEST ORANGE, ESSEX COUNTY, NEW JERSEY TAX MAP DATED AUGUST 1986 AND LAST REVISED ON JANUARY 14, 2002, AND ON SHEET 39, 39.01, 39.02 AND 39.03 OF THE TOWNSHIP OF WEST ORANGE, ESSEX COUNTY, NEW JERSEY.
 - SUBJECT SITE PRIVATE GOLF COUNTY CLUB, LOCATED WITHIN THE R-2 SINGLE FAMILY RESIDENTIAL ZONE DISTRICT AS PER THE TOWNSHIP OF WEST ORANGE ZONING MAPS. ACCORDING TO THE TOWNSHIP OF WEST ORANGE ZONING ORDINANCE, SECTION 25-7.1, A GOLF COURSE AND GOLF CLUB HOUSES ARE PERMITTED USE IN R-2 DISTRICT.
 - THIS PROJECT INCLUDES THE ABOVE REFERENCED LOTS AND ENCOMPASSES 176.832 ACRES.
 - BOUNDARY INFORMATION FOR THE SUBJECT SITE IS BASED UPON MAP ENTITLED "SURVEY OF EAST COURSE ESSEX COUNTRY CLUB, TOWN OF WEST ORANGE, ESSEX COUNTY, NJ," PREPARED BY GC STEWART, INC.
 - THE PROPOSED SITE IS PRIVATE GOLF CLUB IN R-2 RESIDENTIAL ZONE AREA. THE PROPOSED PROJECT IS TO EXPAND AND REMODEL THE EXISTING GOLF CLUB HOUSE PARKING LOT, AND ADDITIONS OF GOLF CART STORAGE BUILDING AND GOLF COURSE REST ROOM BUILDING.
 - HORIZONTAL (NAD 83) AND VERTICAL DATUM (NAVD1988) BASED ON MAPS ENTITLED "ASBUILT" DATED SEPTEMBER 29, 2015 & "PARTIAL TOPOGRAPHIC SURVEY" DATED MAY 26, 2022; PREPARED BY MATRIX NEW WORLD ENGINEERING, INC.
 - THIS PLAN SET CONSISTS OF 18 SHEETS. INDIVIDUAL PAGES SHALL NOT BE UTILIZED FOR CONSTRUCTION ON THEIR OWN AS NOTES AND INFORMATION PROVIDED ON OTHER SHEETS MAY IMPACT WORK REQUIREMENTS. CONTRACTOR SHALL REVIEW AND UTILIZE ENTIRE PLAN SET FOR CONSTRUCTION.
 - THESE PLANS HAVE BEEN PREPARED FOR THE PURPOSE OF PRELIMINARY AND FINAL MUNICIPAL AND AGENCY REVIEW AND APPROVAL. THE PLANS SHALL NOT BE UTILIZED AS CONSTRUCTION DOCUMENTS UNTIL ALL FINAL APPROVALS HAVE BEEN OBTAINED AND ALL CONDITIONS OF THE APPROVALS HAVE BEEN SATISFIED.
 - A KNOX BOX SPECIFIC MODEL AND LOCATION IS TO BE COORDINATED WITH THE LOCAL FIRE OFFICIAL.
 - A BACKFLOW DEVICE WILL BE INCLUDED IN THE BUILDING CONSTRUCTION DRAWING.
 - SEE ZONING TABLE ON OVERALL LOCATION PLAN SHEET 3 OF 18.

- WAIVER REQUEST
- BOUNDARY SURVEY BY GC STEWART IS OLDER THAN 5 YEARS, WHICH DOES NOT COMPLY WITH THE TOWNSHIP REQUIREMENT
 - PROPOSED SITE PLAN DOES NOT PROVIDE ALL EXISTING STREET, WATER COURSES, FLOOD PLAINS, WETLAND OR OTHER ENVIRONMENTALLY SENSITIVE AREAS ON AND WITHIN 200FT OF THE SITE.
 - PROPOSED SITE PLAN DOES NOT PROVIDE EXISTING RIGHT-OF-WAY AND/OR EASEMENT ON AND WITHIN 200FT OF TRACT.
 - THE PLAN DOES NOT PROVIDE BOUNDARY, LIMITS, NATURE AND EXTENT OF WOODED AREAS, SPECIMEN TREES AND OTHER SIGNIFICANT PHYSICAL FEATURE.
 - THE SITE PLAN APPLICATION DOES NOT PROVIDE SOLID WASTE MANAGEMENT PLAN. THE PROPOSED CLUB ADDITION WILL UTILIZE THE EXISTING SOLID WASTE MANAGEMENT PLAN.
- VARIANCE REQUESTS
- PARKING REQUIREMENT PER ORDINANCE 25-12.2.b.1 REQUIRES ONE PARKING SPACE FOR EACH 45 SQUARE FEET OF GROSS FLOOR AREA. WITH TOTAL EXISTING CLUB HOUSE GROSS FLOOR AREA OF 29,584 SQUARE FEET, 658 PARKING SPACES ARE REQUIRED. EXISTING SITE PROVIDES TOTAL OF 203 PARKING SPACES. THE PROPOSED SITE IMPROVEMENTS PROVIDE AN ADDITIONAL 33 PARKING SPACES FOR A TOTAL OF 236 PARKING SPACES.

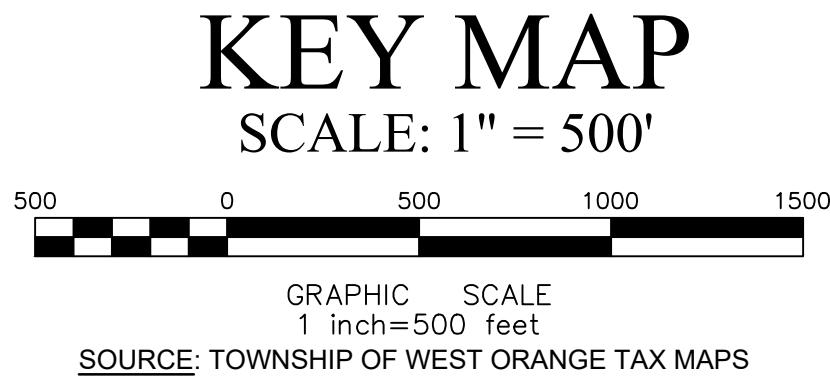
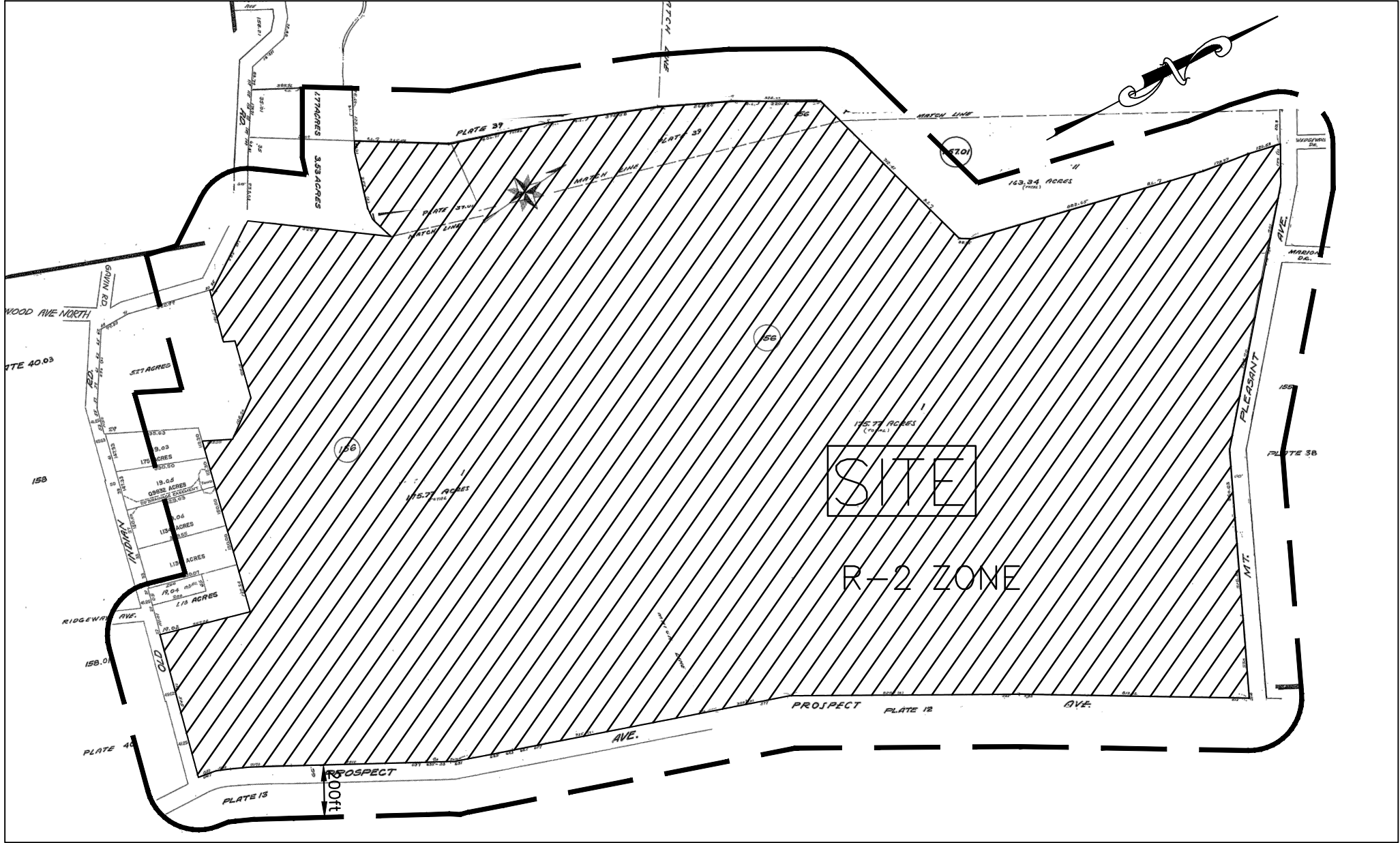
SITE PLAN

ESSEX COUNTY COUNTRY CLUB

BLOCK 156, LOTS 1

TOWNSHIP OF WEST ORANGE

ESSEX COUNTY, NEW JERSEY

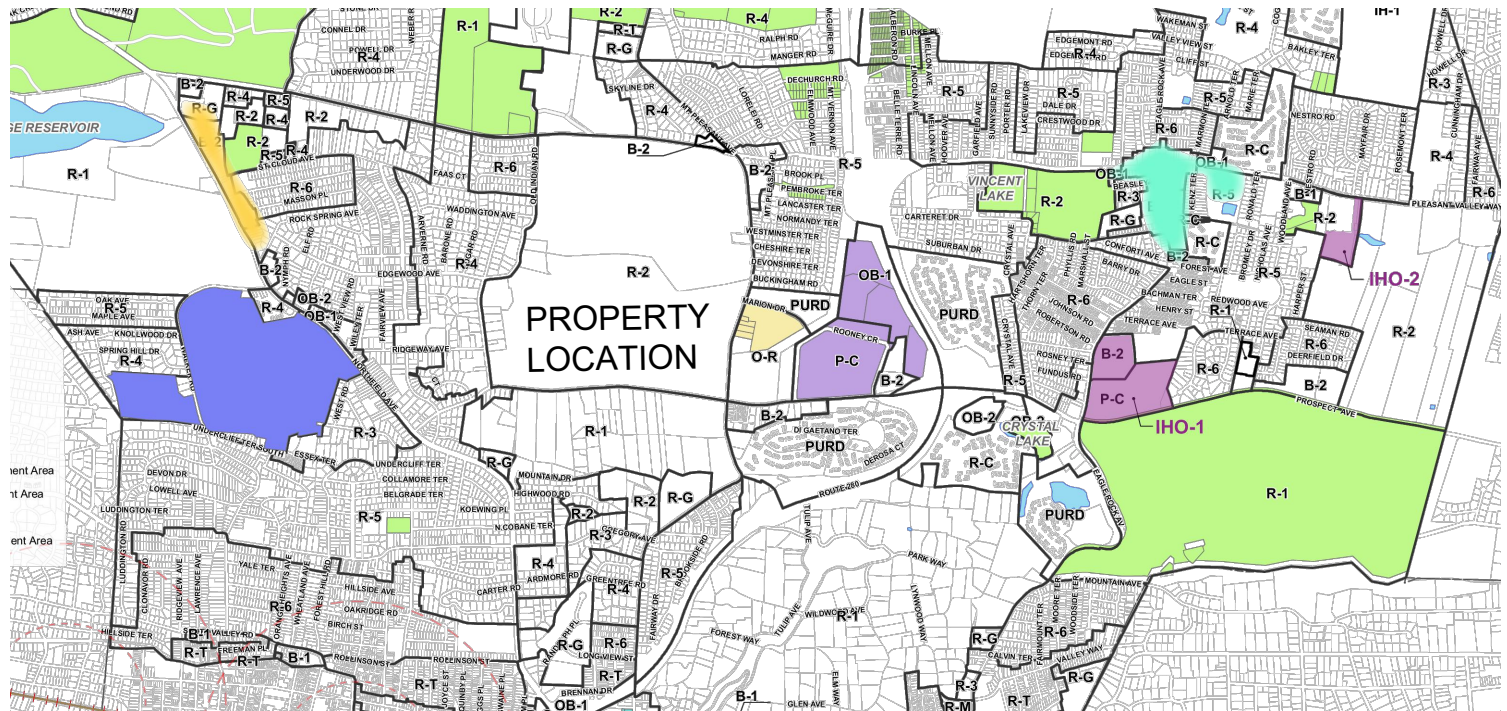


DRAWING INDEX		
Sheet No.	Title	Revision Date
1	TITLE SHEET	11/10/2023
2	EXISTING CONDITIONS & DEMOLITION PLAN	11/10/2023
3	OVERALL LOCATION PLAN	11/10/2023
4	SITE PLAN	11/10/2023
5	RESTROOM PLAN	11/10/2023
6	CART STORAGE BUILDING PLAN	11/10/2023
7	GRADING PLAN	11/10/2023
8	LIGHTING PLAN-1	11/10/2023
9	LIGHTING PLAN-2	11/10/2023
10	SOIL EROSION & SEDIMENT CONTROL PLAN-1	11/10/2023
11	SOIL EROSION & SEDIMENT CONTROL PLAN-2	11/10/2023
12	SOIL EROSION & SEDIMENT CONTROL PLAN-3	11/10/2023
13	SOIL EROSION & SEDIMENT CONTROL PLAN-4	11/10/2023
14	LANDSCAPE PLAN	11/10/2023
15	ELECTRICAL SERVICE PLAN	11/10/2023
16	CONSTRUCTION DETAILS-1	11/10/2023
17	CONSTRUCTION DETAILS-2	11/10/2023
18	SOIL EROSION & SEDIMENT CONTROL DETAILS	11/10/2023
1 OF 3	GOLF COURSE PLAN	
2 OF 3	GOLF COURSE DISRUPTION PLAN	
3 OF 3	GOLF COURSE GRASSING PLAN	
1 OF 2	SOIL EROSION & SEDIMENT CONTROL PLAN	09/06/2023
2 OF 2	SOIL EROSION & SEDIMENT CONTROL DETAILS	09/06/2023

NOTICE TO CONTRACTOR

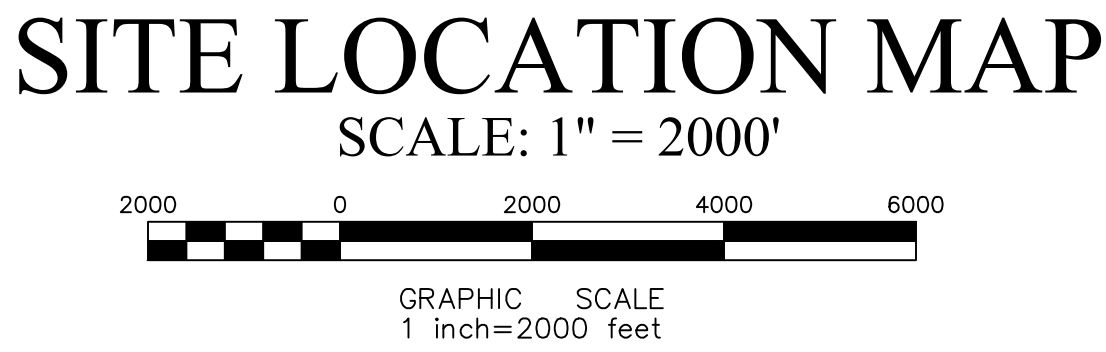
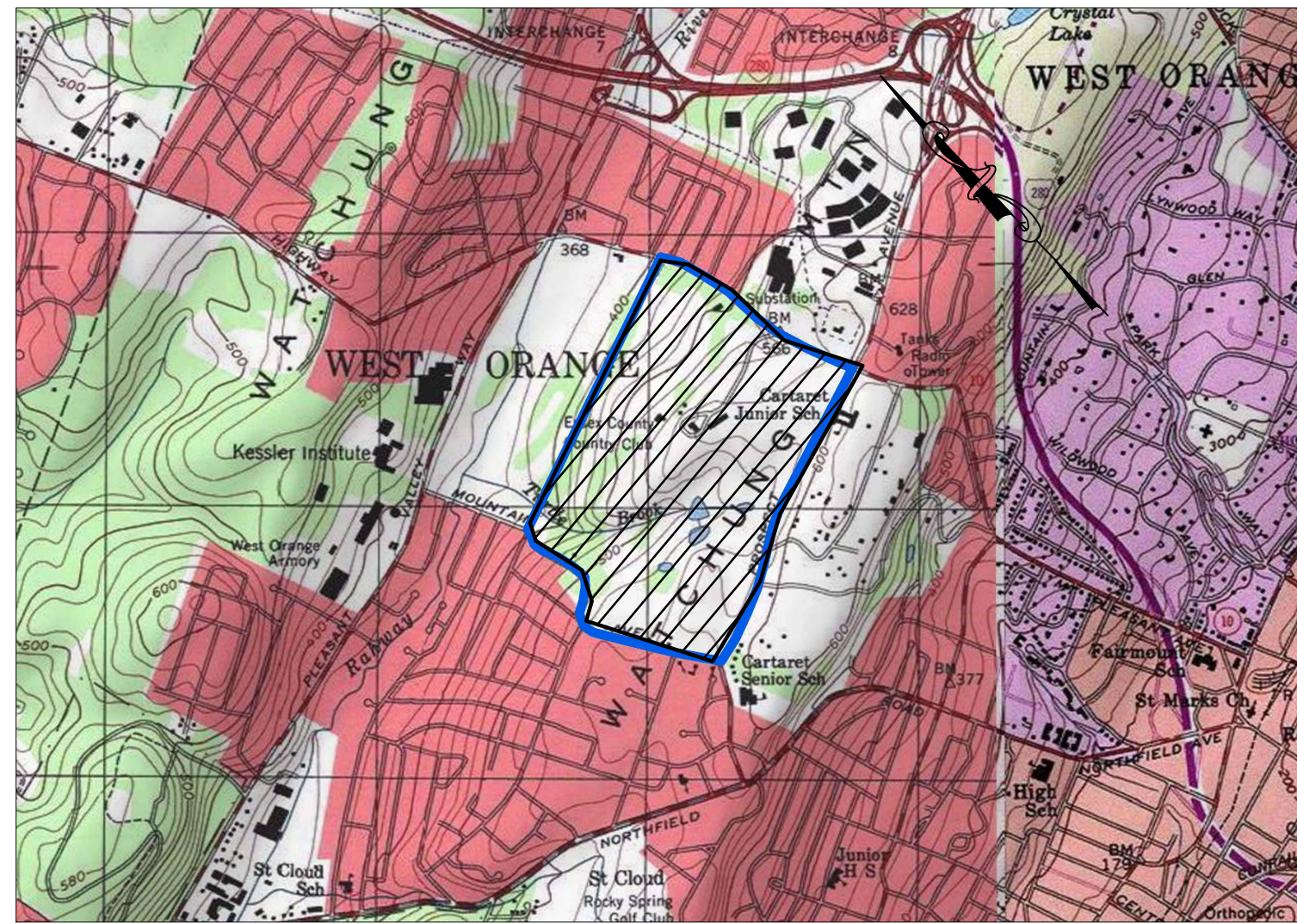
ATTENTION OF THE CONTRACTOR IS DIRECTED TO THE FACT THAT THE APPROXIMATE LOCATIONS OF KNOWN UTILITY STRUCTURES AND FACILITIES THAT MAY BE ENCOUNTERED WITHIN AND ADJACENT TO THE LIMITS OF WORK AREA ARE SHOWN ON THE PLANS. THE ACCURACY AND COMPLETENESS OF THIS INFORMATION IS NOT GUARANTEED BY THE ENGINEER, 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.



ZONING MAP

NTS



APPROVED BY THE
TOWNSHIP OF WEST ORANGE
PLANNING BOARD

CHAIRPERSON DATE

SECRETARY DATE

TOWNSHIP ENGINEER DATE

UTILITY CONTACTS

JOINT MEETING ESSEX & UNION
500 SOUTH FIRST STREET, ELIZABETH, NJ, 07202

NEW JERSEY AMERICAN WATER COMPANY
1025 LAUREL OAK ROAD, VORHEES, NJ 08043
1-800-652-6987

PUBLIC SERVICE ELECTRIC AND GAS
2000 FRANK E RODGERS BLVD S, HARRISON, NJ, 07029
1-800-436-7734

DESIGNED BY:	REVIEWED BY:	RELEASED BY:	PLANNING BOARD COMMENTS #1:	NO.	DATE:	REVISIONS
PAUL T. CALABRESE, P.E. NEW JERSEY PROFESSIONAL ENGINEER LICENSE NO. 24GE0448050						
DATE: 08/07/2023						
PROJECT NUMBER:						
DATE: 08/07/2023						
SCALE: AS SHOWN						
SHEET 1 OF 18						



LEGEND

	BOUNDARY LINE		TOP OF WALL
	BLOCK LINE		BOTTOM OF WALL
	EXISTING ROW		STREAM BANK TOP
	LOT LINE		STREAM BANK BOTTOM
	CURB LINE		SPOT ELEVATION
	DEPRESSED CURB		BOTTOM OF CURB
	EDGE OF PAVEMENT		TOP OF CURB
	FENCE		GRATE ELEVATION
	STORM DRAIN		MAIL BOX
	SANITARY SEWER		FIRE HYDRANT
	GUIDE RAIL		WATER VALVE
	UNDERGROUND ELECTRIC LINE		WATER METER
	OVER HEAD WIRE		MONITOR WELL
	UNDERGROUND TELEPHONE		GAS VALVE
	UNDERGROUND CABLE TELEVISION		GAS METER
	GAS LINE		SANITARY CLEAN OUT
	WATER LINE		MANHOLE
	TREE LINE		STORM DRAINAGE INLET
	CONTOURS MINOR		HEADWALL
	CONTOURS MAJOR		UTILITY POLE
	DECIDUOUS TREE		GUY ANCHOR
	EVERGREEN TREE		LIGHT POLE
	TO BE DEMOLISHED/REMOVED		SINGLE HEAD LAMP

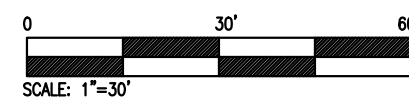


EXISTING CONDITIONS NOTES:

- SITE IS KNOWN AND DESIGNATED AS BLOCK 156, LOT 1 OF THE TOWNSHIP OF WEST ORANGE, ESSEX COUNTY, NEW JERSEY TAX MAP DATED AUGUST 1986 AND LAST REVISED ON JANUARY 14, 2002, AND ON SHEET 39 AND 39.01 OF THE TOWNSHIP OF WEST ORANGE, ESSEX COUNTY, NEW JERSEY.
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- UTILITIES HAVE BEEN SHOWN FROM EVIDENCE LOCATED ON THE SURFACE ONLY. THE SURVEYOR MAKES NO GUARANTEES THAT THE UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES

DEMOLITION NOTES:

- ALL STREET APPURTENANCES (INCLUDING SIGNS, POLES, TREES AND FENCING) WITHIN THE LIMITS SHOWN ARE TO BE REMOVED AND DISPOSED OFF-SITE UNLESS OTHERWISE NOTED.
- EXISTING LIGHTING AND UTILITY POLE REMOVALS ARE TO BE PERFORMED BY THE UTILITY COMPANY.
- ALL UNDERGROUND UTILITIES, LINES, PIPING, STRUCTURES, FOUNDATIONS, VAULTS AND BUILDING FRAGMENTS ASSOCIATED WITH FORMER BUILDINGS TO BE REMOVED, 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 STRUCTURES (CURBS, SIDEWALKS, PATIO, RETAINING WALL, FENCES, ASPHALT, CONCRETE, ETC.) TO BE REMOVED SHALL BE DISPOSED OF OFF-SITE AT AN APPROPRIATE FACILITY.
- ALL DEBRIS, TREES, STUMPS, VEGETATION, DIRT PILES, CONSTRUCTION DEBRIS, ETC WITHIN THE PROJECT'S BOUNDARY SHALL BE REMOVED AS PART OF THIS PROJECT AND BE DISPOSED OF OFF-SITE UNLESS OTHERWISE STATED OR APPROVED.
- 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 DEMOLITION DEBRIS SHALL BE REMOVED FROM THE SITE AND PROPERLY DISPOSED OF BY THE CONTRACTOR. CONTRACTOR IS RESPONSIBLE FOR BACKFILL AND COMPACTION CERTIFICATION. BACKFILL MATERIAL IS TO BE APPROVED BY THE ENGINEER. PLACEMENT OF MATERIAL TO BE APPROVED BY THE PROJECT GEOTECHNICAL ENGINEER.
- 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.
- ALL UTILITY CONNECTIONS TO ADJACENT BUILDINGS MUST STAY ACTIVE.
- 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 SILT 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 3MM CLEAR PLASTIC. MATERIAL TO BE CRUSHED TO SPECIFICATION PROVIDED BY GEOTECHNICAL ENGINEER FOR STRUCTURAL FILL.
- CONTRACTOR TO REMOVE AND SALVAGE EXISTING PATIO, SIDEWALK AND DRIVEWAY PAVERS FOR OWNER REUSE.
- EXISTING DOMESTIC AND FIRE SPRINKLER WATER LINE SURVEY INFORMATION FOR THE SUBJECT SITE IS BASED UPON CONTRACTOR FIELD INVESTIGATION MARKUP PROVIDED ON DECEMBER 10, 2014.



EXISTING CONDITIONS & DEMOLITION PLAN

ESSEX COUNTY COUNTRY CLUB
IMPROVEMENTS

CITY OF WEST ORANGE, ESSEX COUNTY, NEW JERSEY

PROJECT NUMBER:

DATE: 08/07/2023

SCALE: AS SHOWN

SHEET 2 OF 18

DESIGNED BY:
PAUL T. CALABRESE, P.E.
NEW JERSEY PROFESSIONAL ENGINEER
LICENSE NO. 24GE0448050

REVIEWED BY:

RELEASED BY:

DATE: 08/07/2023

PLANNING BOARD COMMENTS #1:

DESCRIPTION

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RELEASED BY:

DATE:

PLANNING BOARD COMMENTS #1:

DESCRIPTION

NO.

DATE:

DESIGNED BY:

REVIEWED BY:

RELEASED BY:

DATE:

PLANNING BOARD COMMENTS #1:

DESCRIPTION

NO.

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DESCRIPTION

NO.

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RELEASED BY:

DATE:

PLANNING BOARD COMMENTS #1:

DESCRIPTION

NO.

DATE:

DESIGNED BY:

REVIEWED BY:

RELEASED BY:

DATE:

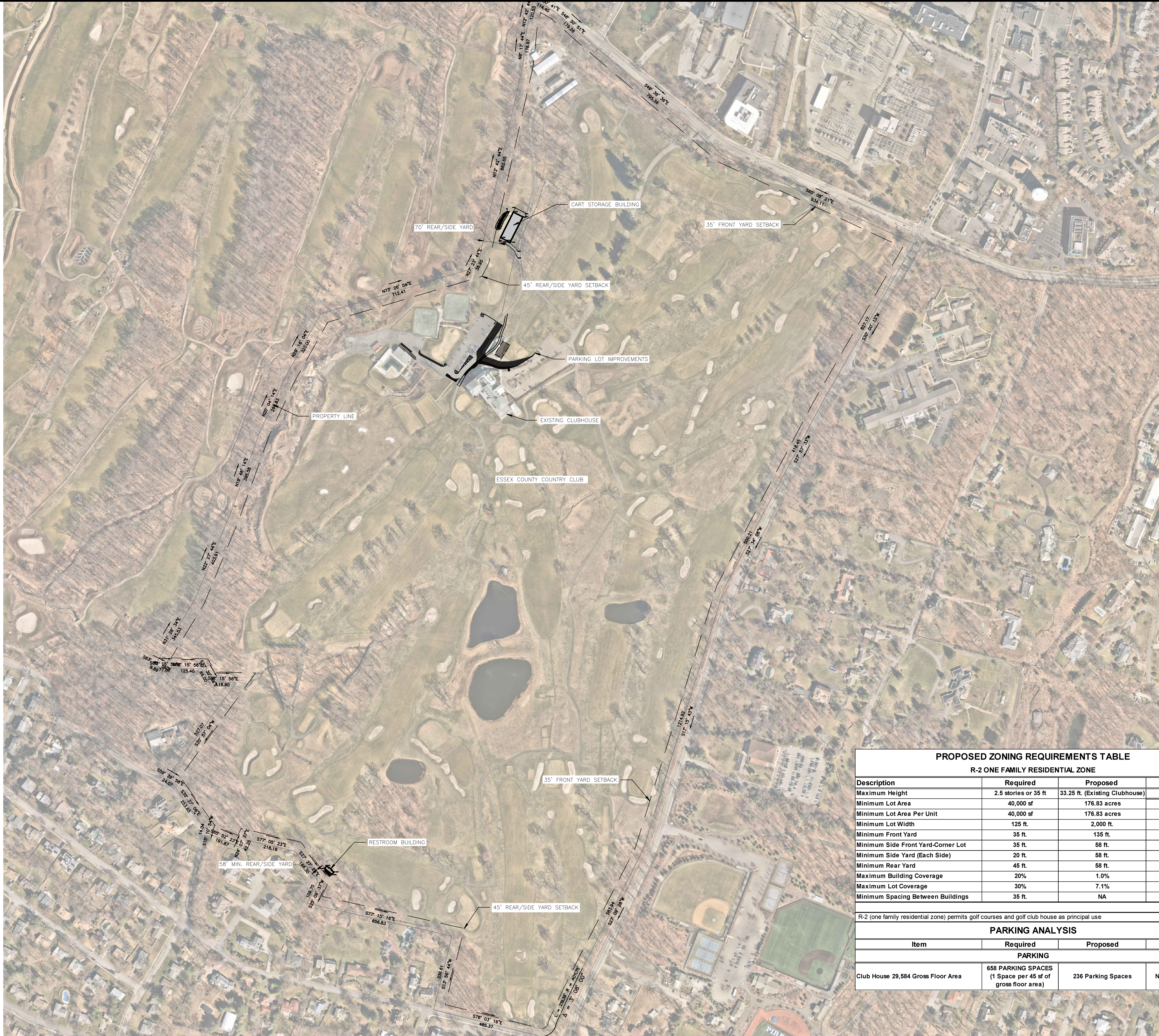
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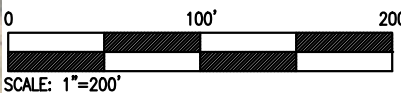
NO.

DATE:

DESIGNED BY:



PROPOSED ZONING REQUIREMENTS TABLE			
R-2 ONE FAMILY RESIDENTIAL ZONE			
Description	Required	Proposed	Comment
Maximum Height	2.5 stories or 35 ft	33.25 ft. (Existing Clubhouse)	Conforming
Minimum Lot Area	40,000 sf	176.83 acres	Conforming
Minimum Lot Area Per Unit	40,000 sf	176.83 acres	Conforming
Minimum Lot Width	125 ft.	2,000 ft.	Conforming
Minimum Front Yard	35 ft.	135 ft.	Conforming
Minimum Side Front Yard-Corner Lot	35 ft.	58 ft.	Conforming
Minimum Side Yard (Each Side)	20 ft.	58 ft.	Conforming
Minimum Rear Yard	45 ft.	58 ft.	Conforming
Maximum Building Coverage	20%	1.0%	Conforming
Maximum Lot Coverage	30%	7.1%	Conforming
Minimum Spacing Between Buildings	35 ft.	NA	Conforming
R-2 (one family residential zone) permits golf courses and golf club house as principal use			
PARKING ANALYSIS			
Item	Required	Proposed	Comment
PARKING			
Club House 29,584 Gross Floor Area	658 PARKING SPACES (1 Space per 45 sf of gross floor area)	236 Parking Spaces	Not Conforming



OVERALL LOCATION PLAN

ESSEX COUNTY COUNTRY CLUB
IMPROVEMENTS

PROJECT NUMBER:
DATE: 08/07/2023
SCALE: AS SHOWN

DESIGNED BY:
REVIEWED BY:
RELEASED BY:

PAUL T. CALABRESE, P.E.
NEW JERSEY PROFESSIONAL ENGINEER
LICENSE NO. 24GE04480500

NO. 1
PLANNING BOARD COMMENTS #1:
DESCRIPTION
DATE: 08/07/2023
REV: 1
REL: 1

3107 ATLANTIC AVENUE
ALLENWOOD, NJ 08720

WATERMEN LLC

NO Certificate of Authorization #14613825-0000
Tel: 908-225-6303

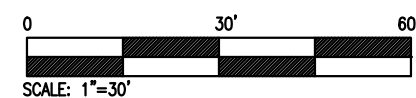
CITY OF WEST ORANGE, ESSEX COUNTY, NEW JERSEY

SHEET 3 OF 18

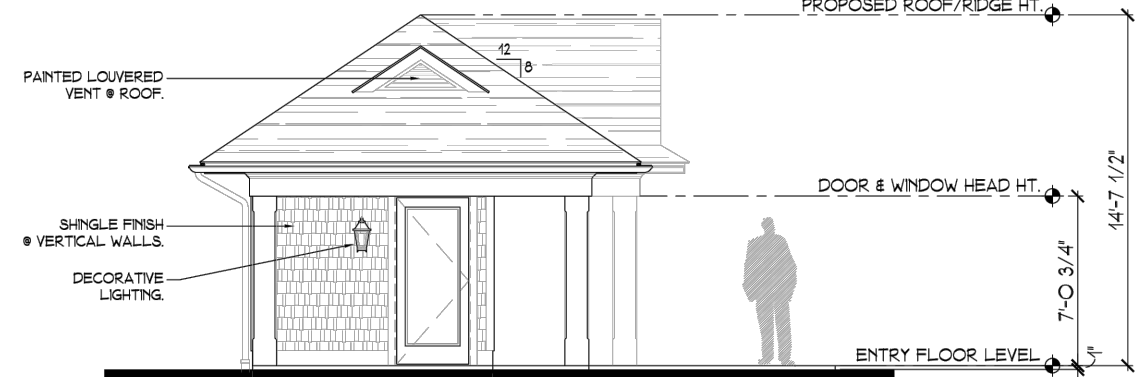
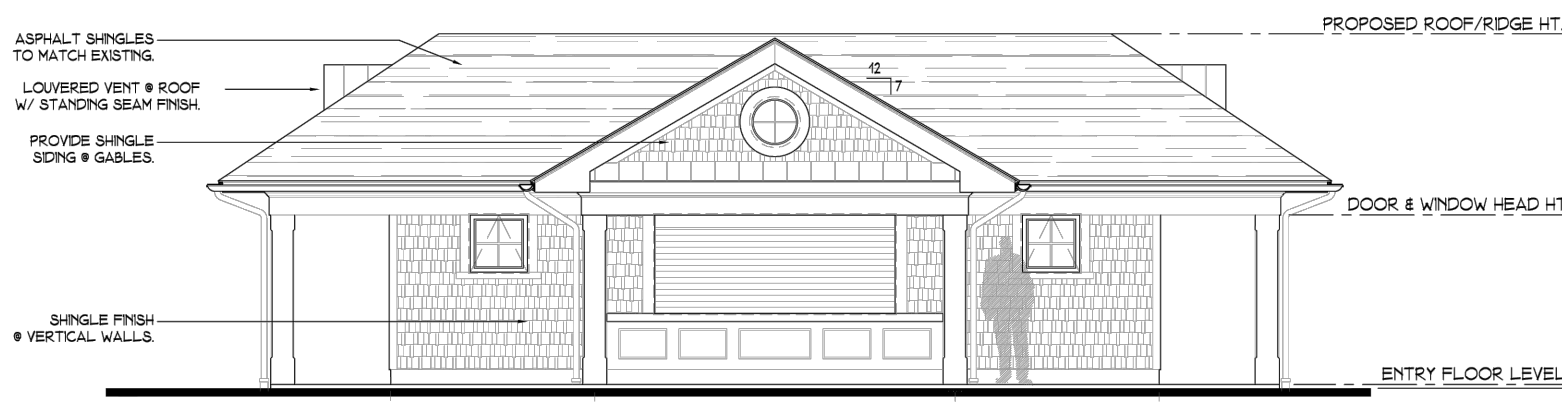
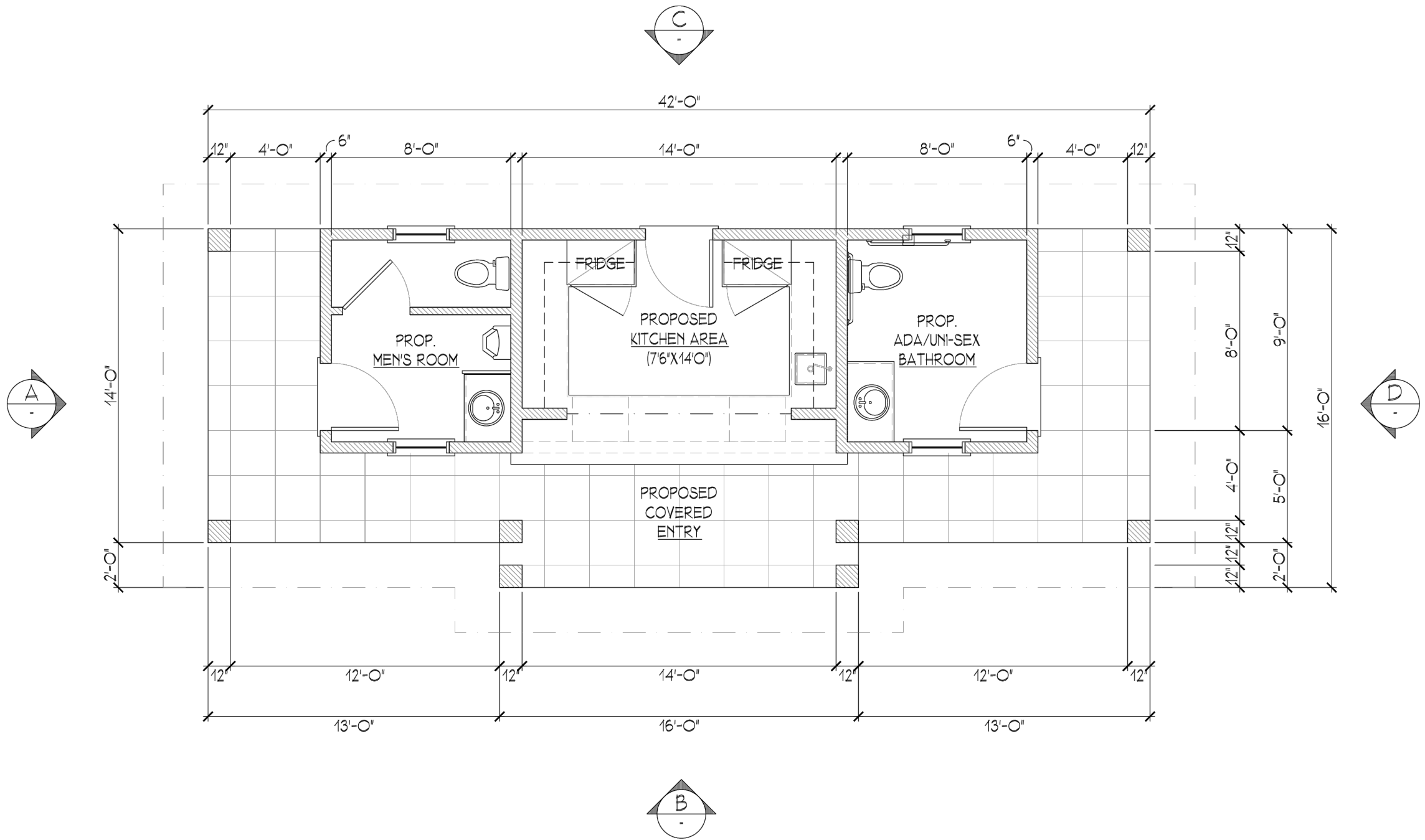


	BOUNDARY LINE		TOP OF WALL		EXISTING PARKING LOT REPAVEMENT
	BLOCK LINE		BOTTOM OF WALL		6" TOPSOIL, FERTILIZER & SEEDING
	EXISTING ROW		STREAM BANK TOP		PARKING LOT ISLAND SUMP
	LOT LINE		STREAM BANK BOTTOM		STONE PAVER WALKWAY
	CURB LINE		SPOT ELEVATION		ASPHALT CART PATH
	DEPRESSED CURB		BOTTOM OF CURB		NEW ASPHALT PARKING LOT
	EDGE OF PAVEMENT		TOP OF CURB		
	FENCE		GRATE ELEVATION		
	STORM DRAIN		GENERAL SIGN		
	SANITARY SEWER		STREET SIGN		
	GUIDE RAIL		MAIL BOX		
	UNDERGROUND ELECTRIC LINE		FIRE HYDRANT		
	OVER HEAD WIRE		WATER VALVE		
	UNDERGROUND TELEPHONE		WATER METER		
	UNDERGROUND CABLE TELEVISION		MONITOR WELL		
	GAS LINE		GAS VALVE		
	WATER LINE		GAS METER		
	TREE LINE		SANITARY CLEAN OUT		
	CONTOURS MINOR		MANHOLE		
	CONTOURS MAJOR		STORM DRAINAGE INLET		
	DECIDUOUS TREE		HEADWALL		
	EVERGREEN TREE		UTILITY POLE		
			GUY ANCHOR		
			LIGHT POLE		
			SINGLE HEAD LAMP		

- SITE NOTES:**
- ALL SIGNAGE TO BE POSTED IN ACCORDANCE WITH THE UNITED STATES DEPARTMENT OF TRANSPORTATION-FEDERAL HIGHWAY ADMINISTRATION, "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREET AND HIGHWAYS (MUTCD), LATEST EDITION.
 - ALL CURB AND SIDEWALKS SHALL CONFORM TO STATE AND FEDERAL BARRIER FREE DESIGN STANDARDS.
 - ALL PROPOSED ON-SITE CURBING TO BE BELGIUM BLOCK.
 - ALL CONNECTIONS WITH EXISTING PAVEMENTS, CURBS, SIDEWALKS, ETC SHALL BE SAW CUT.
 - SIDEWALK/WALKWAY RISERS MUST BE GREATER THAN 4" AND LESS THAN 8".
 - ALL CONTRACTORS MUST CALL THE NEW JERSEY ONE CALL SYSTEM (800-272-4000) IN ACCORDANCE WITH THE UNDERGROUND FACILITIES CONTROL ACT LAW PRIOR TO ANY SUBSURFACE ACTIVITY.
 - SEE ARCHITECT'S PLANS FOR BUILDING ELEVATIONS, AND FLOOR PLANS.
 - EXISTING PARKING SPACE MARKERS SHALL BE REMOVED TO SHOW THE PROPOSED PARKING SPACE AND ADA PARKING SPACE MARKERS

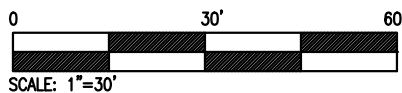


DESIGNED BY:	REVIEWED BY:	RELEASED BY:	PLANNING BOARD COMMENTS #1:	NO.	DATE:	REVISIONS
PAUL T. CALABRESE, P.E. NEW JERSEY PROFESSIONAL ENGINEER LICENSE NO. 24GE0448050						
			DATE: 08/07/2023			
			3107 ATLANTIC AVENUE ALLENWOOD, NJ 08720			
SITE PLAN			ESSEX COUNTY COUNTRY CLUB IMPROVEMENTS			
			SITuated IN CITY OF WEST ORANGE, ESSEX COUNTY, NEW JERSEY			
PROJECT NUMBER:			DATE: 08/07/2023			
SCALE: AS SHOWN						
SHEET 4 OF 18						



NOTES:

1. EXISTING CONDITIONS SHOWN ARE BASED UPON 2014 USGS CMGP LIDAR: POST SANDY(NEW JERSEY) CONTOURS PROVIDED BY THE NATIONAL OCEANIC ATMOSPHERE ADMINISTRATION (NOAA).



DESIGNED BY:				REVIEWED BY:				RELEASED BY:			
PAUL T. CALABRESE, P.E.				PAUL T. CALABRESE, P.E.				PAUL T. CALABRESE, P.E.			
NEW JERSEY PROFESSIONAL ENGINEER				NEW JERSEY PROFESSIONAL ENGINEER				NEW JERSEY PROFESSIONAL ENGINEER			
LICENSE NO. 2460448050				LICENSE NO. 2460448050				LICENSE NO. 2460448050			
DATE: 08/07/2023				DATE: 08/07/2023				DATE: 08/07/2023			
DESCRIPTION				DESCRIPTION				DESCRIPTION			
PLANNING BOARD COMMENTS #1.				PLANNING BOARD COMMENTS #1.				PLANNING BOARD COMMENTS #1.			
NO.				NO.				NO.			
REV.				REV.				REV.			
REL.				REL.				REL.			

PAUL T. CALABRESE, P.E.
NEW JERSEY PROFESSIONAL ENGINEER
LICENSE NO. 2460448050
DATE: 08/07/2023

WATERMEN LLC
3107 ATLANTIC AVENUE
ALLENWOOD, NJ 08720
Tel: 908-225-6303
Fax: 908-225-6303

RESTROOM PLAN

ESSEX COUNTY COUNTRY CLUB
IMPROVEMENTS

SITUATED IN
CITY OF WEST ORANGE, ESSEX COUNTY, NEW JERSEY

PROJECT NUMBER:

DATE: 08/07/2023

SCALE: AS SHOWN

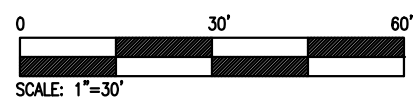
SHEET 5 OF 18



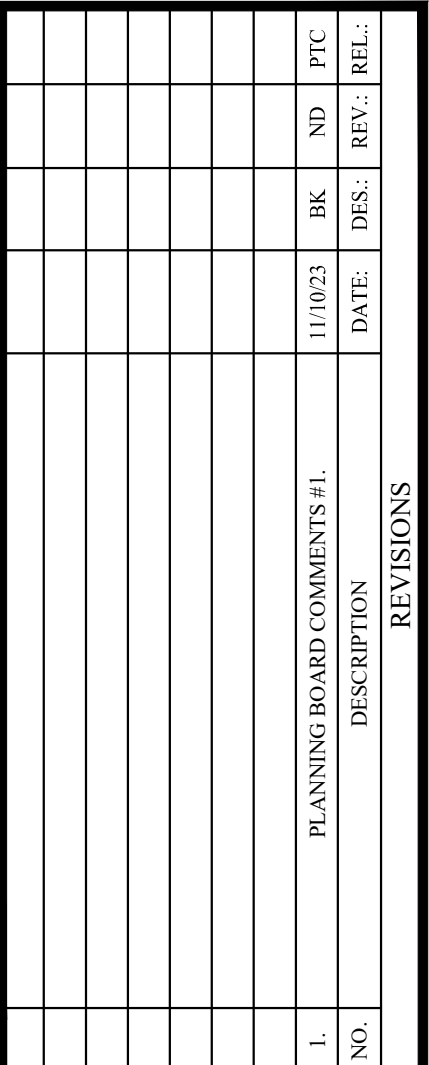
	BOUNDARY LINE		TW	TOP OF WALL		EXISTING PARKING LOT REPAVEMENT
	BLOCK LINE		BW	BOTTOM OF WALL		
	EXISTING ROW		TB	STREAM BANK TOP		6" TOPSOIL, FERTILIZER & SEEDING
	LOT LINE		BB	STREAM BANK BOTTOM		
	CURB LINE		x 56.00	SPOT ELEVATION		PARKING LOT ISLAND SUMP
	DEPRESSED CURB		G 56.00	BOTTOM OF CURB		
	EDGE OF PAVEMENT		TC 105.17	TOP OF CURB		STONE PAVER WALKWAY
	FENCE		GR 104.50	GRATE ELEVATION		
	STORM DRAIN			GENERAL SIGN		ASPHALT CART PATH
	SANITARY SEWER			STREET SIGN		
	GUIDE RAIL		MB 6	MAIL BOX		NEW ASPHALT PARKING LOT
	UNDERGROUND ELECTRIC LINE			FIRE HYDRANT		
	OVER HEAD WIRE			WATER VALVE		
	UNDERGROUND TELEPHONE			WATER METER		
	UNDERGROUND CABLE TELEVISION			MONITOR WELL		
	GAS LINE			GAS VALVE		
	WATER LINE			GAS METER		
	TREE LINE			SANITARY CLEAN OUT		
	CONTOURS MINOR			MANHOLE		
	CONTOURS MAJOR			STORM DRAINAGE INLET		
	DECIDUOUS TREE			HEADWALL		
	EVERGREEN TREE			UTILITY POLE		
				GUY ANCHOR		
				LIGHT POLE		
				SINGLE HEAD LAMP		

GRADING NOTES

1. ALL PROPOSED ON-SITE CURBING TO BE VERTICAL GRANITE BLOCK CURB WITH 6" REVEAL, UNLESS OTHERWISE STATED.
2. ALL CURBS SHALL BE DEBURSED AT CROSSWALKS AND CONFORM TO APPLICABLE STATE AND FEDERAL BARRIER FREE DESIGN STANDARDS.
3. ADA ENTRANCES ARE TO CONFORM TO THE ACCESSIBILITY STANDARDS SET FORTH IN THE AMERICANS WITH DISABILITIES ACT.
4. ALL CURBSWAYS TO HAVE A MAXIMUM CROSS SLOPE OF 2% AND RUNNING SLOPE OF 5% UNLESS OTHERWISE NOTED.
5. ALL GRADING WITHIN GRASSED AREAS TO BE A MINIMUM OF 2% AND A MAXIMUM OF 3:1 (3 HORIZONTAL, 1 VERTICAL) SLOPE UNLESS OTHERWISE NOTED.
6. ALL GRADING IN PAVEMENT AREAS SHALL BE GREATER THAN 1% UNLESS OTHERWISE NOTED.
7. POSITIVE DRAINAGE TO BE MAINTAINED FROM ALL BUILDINGS IN ACCORDANCE WITH APPLICABLE REGULATIONS AND BUILDING CODE.
8. 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 ONSITE.
9. ALL GRASSED AREAS TO HAVE A MINIMUM OF 4" CLEAN TOP SOIL, WHEN SOD IS BEING INSTALLED, OR 6" CLEAN TOP SOIL FOR SEEDING APPLICATIONS.
10. ALL CONTRACTORS MUST CALL THE NEW JERSEY ONE CALL SYSTEM (800-272-4000) IN ACCORDANCE WITH THE UNDERGROUND FACILITIES CONTROL ACT LAW PRIOR TO ANY SUBSURFACE ACTIVITY.

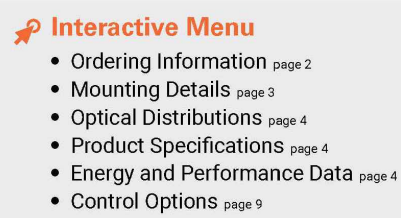
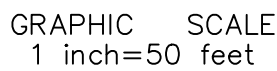


 WATERMEN LLC		3107 ATLANTIC AVENUE PO BOX 309 AULENWOOD, NJ 08870 NJ Certificate of Authorization #26KA38259600 Tel. 908.229.6503	
GRADING PLAN ESSEX COUNTY COUNTRY CLUB IMPROVEMENTS		SITUATED IN CITY OF WEST ORANGE,, ESSEX COUNTY, NEW JERSEY	
PROJECT NUMBER:			
DATE:		08/07/2023	
SCALE:		AS SHOWN	
SHEET 7 OF 18			



Parking Area	
1131 points at z=0, sp 10ft by 10ft	
HORIZONTAL FOOTCANDLES	
Average	1.7
Maximum	5.1
Minimum	0.5
Avg:Min	3.32
Max:Min	10.20
Coef Var	0.63
UnifGrad	4.56

Figure 1 consists of three diagrams labeled (a), (b), and (c). Diagram (a) shows a large, irregularly shaped domain Ω with a central, smaller, irregularly shaped obstacle Ω_0 . The boundary of Ω is labeled Γ . Diagram (b) is a zoomed-in view of the boundary Γ , showing its complex, irregular shape. Diagram (c) is a zoomed-in view of the obstacle Ω_0 , showing its complex, irregular shape.



Typical Applications
Outdoor • Parking Lots • Walkways • Roadways • Building Areas

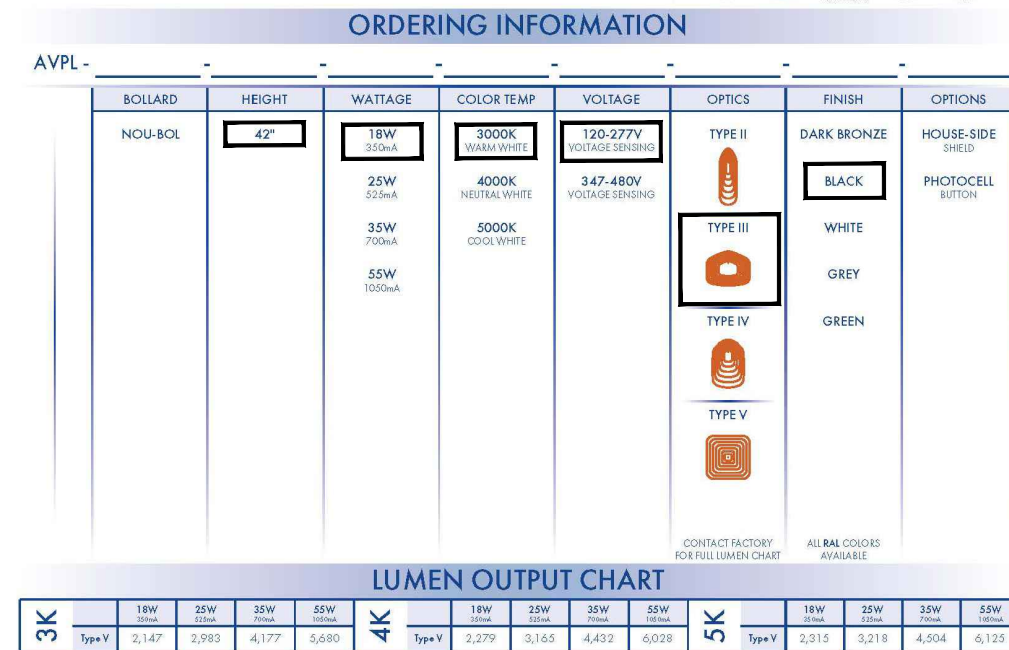
- Lumen packages range from 4,200 - 80,800 (34W - 640W)
- Efficacy up to 156 lumens per watt

NOTES:
For art selection requirements and additional line art, see Mounting Details section.

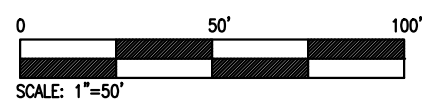
Ordering Information
SAMPLE NUMBER: GAN-SA4C-740-U-T4FT-GM

LIGHT FIXTURE 'A' AND 'C' DETAIL

NOT TO SCALE



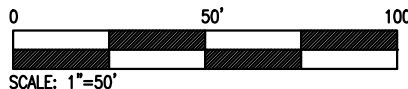
NOT TO SCALE





MATCH LINE — SHEET 8

LABEL	SYMBOL	QTY	DESCRIPTION	FILE	MOUNTING	LLF
A		22	COOPER LIGHTING STREETWORKS GAN GALLEON, 3 LIGHT SQUARES, TYPE 4 FT, BLACK	GAN-SA3A-730-U-14FT.IES	16' POLE MOUNTED	0.95
B		10	AV POLES AND LIGHTING NOUVEAU BOLLARD, TYPE 3, BLACK 3000K		3.5' HEIGHT	0.95
C		1	COOPER LIGHTING STREETWORKS GAN GALLEON, DUAL 3 LIGHT SQUARES, TYPE 4 FT, BLACK	GAN-SA1A-730-U-14FT.IES	16' POLE MOUNTED	0.95



Plotted: 11/10/2023 11:15 AM, By: Brian Kenney
C:\Users\blkenney\Dropbox\Essex County CCDWG\Construction Plan\Plot Sheet\Soil Erosion & Sediment Control Plan recover.dwg\24x36

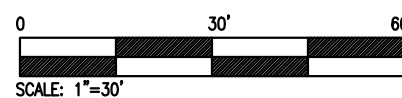


LEGEND

EXISTING	PROPOSED	EXISTING	PROPOSED
BOUNDARY LINE	LOT LINE	MANHOLE	RECONSTRUCT MANHOLE
SETBACK LINE	CURB LINE	RESET MANHOLE	HEADWALL
DEPRESSED CURB	EDGE OF PAVEMENT	FLARED END SECTION	CLEANOUT
PAINT LINE	CONCRETE	DOWNSPOUT	WATER MAIN
FENCE	GUIDE RAIL	WATER VALVE	WATER VALVE RESET
RETAINING WALL/BULKHEAD	TREE LINE	WATER METER	FIRE HYDRANT
CONTOURS	MINOR	GAS MAIN	GAS VALVE
MAJOR	SPOT ELEVATION	GAS VALVE RESET	GAS METER
HP 56.00	HP 56.50	UTILITY POLE	GUY ANCHOR
LP 55.50	LP 55.50	LIMIT OF DISTURBANCE	SILT FENCE
G 56.00	G 56.00	SNOW FENCE	INLET PROTECTION
TC 105.17	TC 105.17	CONSTRUCTION ENTRANCE	STOCK PILE
GR 104.50	GR 104.50	PROPOSED TREE PROTECTION	
RIM 100.00	RIM 100.00		
TW 100.00	TW 100.00		
BW 98.00	BW 98.00		
BB 95.00	BB 95.00		
FF 95.00	FF 95.00		
GF 95.00	GF 95.00		
DRAINAGE FLOW DIRECTION	STORM DRAIN		
INLET	DOUBLE INLETS		
RECONSTRUCT INLET	RESET INLET		

SOIL COMPACTION EXEMPTION NOTE

AS DETERMINED BY THE STATE POLICY MAP, THE PROJECT AREA FALLS WITHIN THE METROPOLITAN PLANNING AREA (PA1), UNDER EXISTING CONDITIONS, THE SITE IS NOT COVERED IN WOODY VEGETATION NOR REGROWTH. IN ACCORDANCE WITH NEW JERSEY STANDARD FOR LAND GRADING (REVISED 2017), NON WOODY VEGETATED PA1 AREAS FALL UNDER THE SOIL COMPACTION EXEMPTION LIST AS A "URBAN REDEVELOPMENT" AND IS DEFINED BY NJDEP AS "PREVIOUSLY DEVELOPED".



DESIGNED BY: PAUL T. CALABRESE, P.E.
NEW JERSEY PROFESSIONAL ENGINEER
LICENSE NO. 24GE0448050

REVIEWED BY: [Signature]
RELEASED BY: [Signature]

PLANNING BOARD COMMENTS #1:
NO. 1
DESCRIPTION
DATE: 08/07/2023
REV: 1
REL: 1

REVISIONS

WATERMEN LLC
3107 ATLANTIC AVENUE
ALLENWOOD, NJ 08820
NJ Certificate of Authorization #PA62-252-0600
Tel: 908-224-6303

SOIL EROSION & SEDIMENT CONTROL PLAN-1
ESSEX COUNTY COUNTRY CLUB
IMPROVEMENTS
SITUATED IN
CITY OF WEST ORANGE, ESSEX COUNTY, NEW JERSEY

PROJECT NUMBER:
DATE: 08/07/2023
SCALE: AS SHOWN
SHEET 10 OF 18



SOIL COMPACTION EXEMPTION NOTE

AS DETERMINED BY THE STATE POLICY MAP, THE PROJECT AREA FALLS WITHIN THE METROPOLITAN PLANNING AREA (PA1). UNDER EXISTING CONDITIONS, THE SITE IS NOT COVERED IN WOODY VEGETATION NOR REGROWTH. IN ACCORDANCE WITH NEW JERSEY STANDARD FOR LAND GRADING (REVISED 2017), NON WOODY VEGETATED PA1 AREAS FALL UNDER THE SOIL COMPACTION EXEMPTION LIST AS A "URBAN REDEVELOPMENT" AND IS DEFINED BY NJDEP AS "PREVIOUSLY DEVELOPED".

LEGEND	
EXISTING	PROPOSED
BOUNDARY LINE	LOT LINE
SETBACK LINE	CURB LINE
DEPRESSED CURB	EDGE OF PAVEMENT
PAINT LINE	CONCRETE
FENCE	GUIDE RAIL
RETAINING WALL/BULKHEAD	TREE LINE
CONTOURS	MINOR
MAJOR	SPOT ELEVATION
HIGH POINT ELEVATION	LOW POINT ELEVATION
GUTTER ELEVATION	TOP OF CURB ELEVATION
GRATE ELEVATION	RIM ELEVATION
TOP OF WALL	BOTTOM OF WALL
BOTTOM OF BLOCK	FINISHED FLOOR ELEV.
GARAGE FLOOR ELEV.	DRAINAGE FLOW DIRECTION
STORM DRAIN	DOUBLE INLETS
RECONSTRUCT INLET	RESET INLET
MANHOLE	RECONSTRUCT MANHOLE
RESET MANHOLE	HEADWALL
FLARED END SECTION	CLEANOUT
DOWNSPOUT	WATER MAIN
WATER VALVE	WATER VALVE RESET
WATER METER	FIRE HYDRANT
GAS MAIN	GAS VALVE
GAS VALVE RESET	GAS METER
UTILITY POLE	GUY ANCHOR
LIMIT OF DISTURBANCE	SILT FENCE
SNOW FENCE	INLET PROTECTION
CONSTRUCTION ENTRANCE	STOCK PILE
PROPOSED TREE PROTECTION	

SOIL EROSION & SEDIMENT CONTROL PLAN-2

ESSEX COUNTY COUNTRY CLUB IMPROVEMENTS

SITUATED IN
CITY OF WEST ORANGE, ESSEX COUNTY, NEW JERSEY

PROJECT NUMBER:

DATE: 08/07/2023

SCALE: AS SHOWN

SHEET 11 OF 18

DESIGNED BY: PAUL T. CALABRESE, P.E.
NEW JERSEY PROFESSIONAL ENGINEER
LICENSE NO. 24GE04480500

REVIEWED BY: [Signature]
RELEASED BY: [Signature]

PLANNING BOARD COMMENTS #1:
NO. 1
DESCRIPTION
DATE: 08/07/2023
REV. 1
REL. 1

REVISIONS

WATERMEN LLC

3107 ATLANTIC AVENUE
ALLENWOOD, NJ 08820
Tel: 908-225-6303

Plotted: 11/10/2023 11:17 AM By: Brian Kerney
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LEGEND

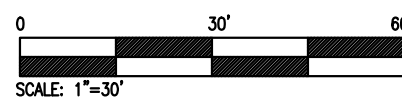
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BOUNDARY LINE	LOT LINE	MANHOLE	RECONSTRUCT MANHOLE
SETBACK LINE	CURB LINE	RESET MANHOLE	HEADWALL
DEPRESSED CURB	EDGE OF PAVEMENT	FLARED END SECTION	CLEANOUT
PAINT LINE	CONCRETE	DOWNSPOUT	WATER MAIN
FENCE	GUIDE RAIL	WATER VALVE	WATER VALVE RESET
RETAINING WALL/BULKHEAD	TREE LINE	WATER METER	FIRE HYDRANT
CONTOURS	MINOR	GAS MAIN	GAS VALVE
MAJOR	SPOT ELEVATION	GAS VALVE RESET	GAS METER
HP 56.00	HP 56.50	UTILITY POLE	GUY ANCHOR
LP 55.50	LP 55.50	LIMIT OF DISTURBANCE	SILT FENCE
G 56.00	G 56.00	SNOW FENCE	INLET PROTECTION
TC 105.17	TC 105.17	CONSTRUCTION ENTRANCE	STOCK PILE
GR 104.50	GR 104.50	PROPOSED TREE PROTECTION	
RIM 100.00	RIM ELEVATION		
TW 100.00	TOP OF WALL		
BW 98.00	BOTTOM OF WALL		
BB 95.00	BOTTOM OF BLOCK		
FF 95.00	FINISHED FLOOR ELEV.		
GF 95.00	GARAGE FLOOR ELEV.		
DRAINAGE FLOW DIRECTION	STORM DRAIN		
INLET	DOUBLE INLETS		
RECONSTRUCT INLET	RESET INLET		

SOIL COMPACTION EXEMPTION NOTE

AS DETERMINED BY THE STATE POLICY MAP, THE PROJECT AREA FALLS WITHIN THE METROPOLITAN PLANNING AREA (PA1). UNDER EXISTING CONDITIONS, THE SITE IS NOT COVERED IN WOODY VEGETATION NOR REGROWTH. IN ACCORDANCE WITH NEW JERSEY STANDARD FOR LAND GRADING (REVISED 2017), NON WOODY VEGETATED PA1 AREAS FALL UNDER THE SOIL COMPACTION EXEMPTION LIST AS A "URBAN REDEVELOPMENT" AND IS DEFINED BY NJDEP AS "PREVIOUSLY DEVELOPED".

NOTES:

- EXISTING CONDITIONS SHOWN ARE BASED UPON 2014 USGS CMGP LIDAR: POST SANDY(NEW JERSEY) CONTOURS PROVIDED BY THE NATIONAL OCEANIC ATMOSPHERE ADMINISTRATION (NOAA).



SOIL EROSION & SEDIMENT CONTROL PLAN-3

ESSEX COUNTY COUNTRY CLUB
IMPROVEMENTS

SITUATED IN
CITY OF WEST ORANGE, ESSEX COUNTY, NEW JERSEY

PROJECT NUMBER:

DATE: 08/07/2023

SCALE: AS SHOWN

SHEET 12 OF 18

DESIGNED BY:

REVIEWED BY:

RELEASED BY:

PAUL T. CALABRESE, P.E.

NEW JERSEY PROFESSIONAL ENGINEER

LICENSE NO. 24G0448050

08/07/2023

DATE

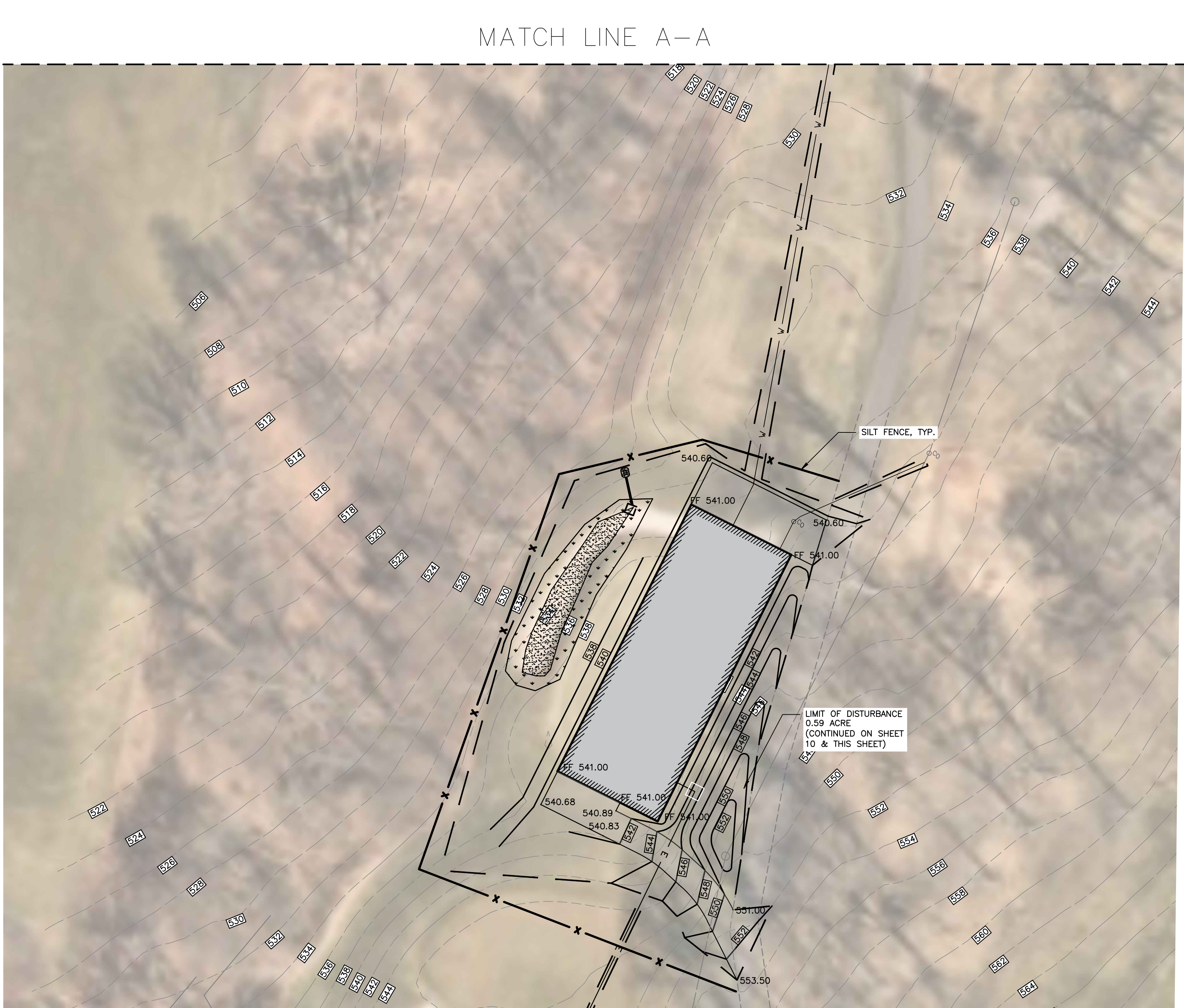
WATERMEN LLC

3107 ATLANTIC AVENUE
ALLENWOOD, NJ 08720

NY Certificate of Authorization #1462-252-0000

Tel: 908-224-6303

Plotted: 11/10/2023 11:18 AM By: Brian Kenney
C:\Users\blkenney\Dropbox\Essex County CCDWG\Construction Plan\Plot Sheet\Soil Erosion & Sediment Control Plan recover.dwg(24x36 (3))



LEGEND	
EXISTING	PROPOSED
BOUNDARY LINE	LOT LINE
SETBACK LINE	CURB LINE
DEPRESSED CURB	EDGE OF PAVEMENT
PAINT LINE	CONCRETE
FENCE	GUIDE RAIL
RETAINING WALL/BULKHEAD	TREE LINE
CONTOURS	MINOR
MAJOR	SPOT ELEVATION
HIGH POINT ELEVATION	HP
LOW POINT ELEVATION	LP
GUTTER ELEVATION	G
TOP OF CURB ELEVATION	TC
GRATE ELEVATION	GR
RIM ELEVATION	RIM
TOP OF WALL	TW
BOTTOM OF WALL	BW
BOTTOM OF BLOCK	BB
FINISHED FLOOR ELEV.	FF
GARAGE FLOOR ELEV	GF
DRAINAGE FLOW DIRECTION	STORM DRAIN
INLET	DOUBLE INLETS
RECONSTRUCT INLET	RESET INLET
MANHOLE	RECONSTRUCT MANHOLE
RESET MANHOLE	HEADWALL
FLARED END SECTION	CLEANOUT
DOWNSPOUT	WATER MAIN
WATER VALVE	WATER VALVE RESET
WATER METER	FIRE HYDRANT
GAS MAIN	GAS VALVE
GAS VALVE RESET	GAS METER
UTILITY POLE	GUY ANCHOR
LIMIT OF DISTURBANCE	SILT FENCE
SNOW FENCE	INLET PROTECTION
CONSTRUCTION ENTRANCE	STOCK PILE
PROPOSED TREE PROTECTION	

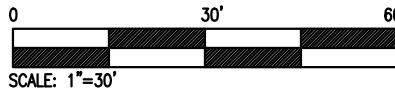


SOIL COMPACTION EXEMPTION NOTE

AS DETERMINED BY THE STATE POLICY MAP, THE PROJECT AREA FALLS WITHIN THE METROPOLITAN PLANNING AREA (PA1). UNDER EXISTING CONDITIONS, THE SITE IS NOT COVERED IN WOODY VEGETATION NOR REGROWTH IN ACCORDANCE WITH NEW JERSEY STANDARD FOR LAND GRADING (REVISED 2017). NON WOODY VEGETATED PA1 AREAS FALL UNDER THE SOIL COMPACTION EXEMPTION LIST AS A "URBAN REDEVELOPMENT" AND IS DEFINED BY NJDEP AS "PREVIOUSLY DEVELOPED".

NOTES:

- EXISTING CONDITIONS SHOWN ARE BASED UPON 2014 USGS CMGP LIDAR; POST SANDY(NEW JERSEY) CONTOURS PROVIDED BY THE NATIONAL OCEANIC ATMOSPHERE ADMINISTRATION (NOAA).



SOIL EROSION & SEDIMENT CONTROL PLAN-4

ESSEX COUNTY COUNTRY CLUB
IMPROVEMENTS

SITUATED IN
CITY OF WEST ORANGE, ESSEX COUNTY, NEW JERSEY

PROJECT NUMBER:

DATE: 08/07/2023

SCALE: AS SHOWN

SHEET 13 OF 18

DESIGNED BY:

REVIEWED BY:

RELEASED BY:

PAUL T. CALABRESE, P.E.
NEW JERSEY PROFESSIONAL ENGINEER
LICENSE NO. 24G04480500

DATE: 08/07/2023

DATE: 08/07/2023



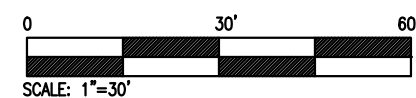
NO Certificate of Authorization #TACG-2325-0000
Tel: 908-225-6303

NO.	DESCRIPTION	DATE	REV.	REL.
1	PLANNING BOARD COMMENTS #1.	11/07/23	BK	ND
			ND	PTC
			REV.	REL.



LEGEND

	BOUNDARY LINE		TOP OF WALL		PROPOSED SUGAR MAPLE, 3" CALIPER
	BLOCK LINE		BOTTOM OF WALL		6" TOPSOIL, FERTILIZER & SEEDING
	EXISTING ROW		STREAM BANK TOP		PARKING LOT ISLAND SUMP
	LOT LINE		STREAM BANK BOTTOM		ILEX VERTICILLATA-WINTERBERRY HOLLY, 18"-24" HT. (7 TOTAL)
	CURB LINE		SPOT ELEVATION		VIBURNUM DENTATUM-ARROWOOD VIBURNUM, 24"-30" HT. (7 TOTAL)
	DEPRESSED CURB		BOTTOM OF CURB		MYRICA PENSYLVANICA-BAYBERRY, 18"-24" HT. (7 TOTAL)
	EDGE OF PAVEMENT		TOP OF CURB		NOTE: 1. LANDSCAPING TO BE LOCATED IN FIELD DURING CONSTRUCTION.
	FENCE		GRATE ELEVATION		
	STORM DRAIN		GENERAL SIGN		
	SANITARY SEWER		STREET SIGN		
	GUIDE RAIL		MAIL BOX		
	UNDERGROUND ELECTRIC LINE		FIRE HYDRANT		
	OVER HEAD WIRE		WATER VALVE		
	UNDERGROUND TELEPHONE		WATER METER		
	UNDERGROUND CABLE TELEVISION		MONITOR WELL		
	GAS LINE		GAS VALVE		
	WATER LINE		GAS METER		
	TREE LINE		SANITARY CLEAN OUT		
	CONTOURS MINOR		MANHOLE		
	CONTOURS MAJOR		STORM DRAINAGE INLET		
	DECIDUOUS TREE		HEADWALL		
	EVERGREEN TREE		UTILITY POLE		
			GUY ANCHOR		
			LIGHT POLE		
			SINGLE HEAD LAMP		



DESIGNED BY:		REVIEWED BY:		RELEASED BY:		PLANNING BOARD COMMENTS #1:		NO.		DATE:		REV:		REL.	
PAUL T. CALABRESE, P.E.		NEW JERSEY PROFESSIONAL ENGINEER		LICENSE NO. 24GE048050				1		11/07/23		BK		NYC	
PAUL T. CALABRESE, P.E.		NEW JERSEY PROFESSIONAL ENGINEER		LICENSE NO. 24GE048050				1		08/07/2023		DES.		REL.	
LANDSCAPE PLAN		ESSEX COUNTY COUNTRY CLUB IMPROVEMENTS		SITUATED IN CITY OF WEST ORANGE, ESSEX COUNTY, NEW JERSEY											
PROJECT NUMBER:		DATE:		08/07/2023											
SCALE:		AS SHOWN													
SHEET 14		OF		18											



NEW JERSEY STATE PLANE COORDINATE SYSTEM AND 83



DESIGNED BY:		REVIEWED BY:		RELEASED BY:	
PAUL T. CALABRESE, P.E.		[Signature]		[Signature]	
NEW JERSEY PROFESSIONAL ENGINEER		NEW JERSEY PROFESSIONAL ENGINEER		NEW JERSEY PROFESSIONAL ENGINEER	
LICENSE NO. 24GE04480500		LICENSE NO. 24GE04480500		LICENSE NO. 24GE04480500	
DATE: 08/07/2023		DATE: 08/07/2023		DATE: 08/07/2023	
PLANNING BOARD COMMENTS #1:		DESCRIPTION		REVISIONS	
1.		NO.		DES.	
11/0/23		BK		ND	
PVC		REL.		REL.	



WATERMEN LLC

3107 ATLANTIC AVENUE
ALLENWOOD, NJ 08720
Tel: 908-225-6303

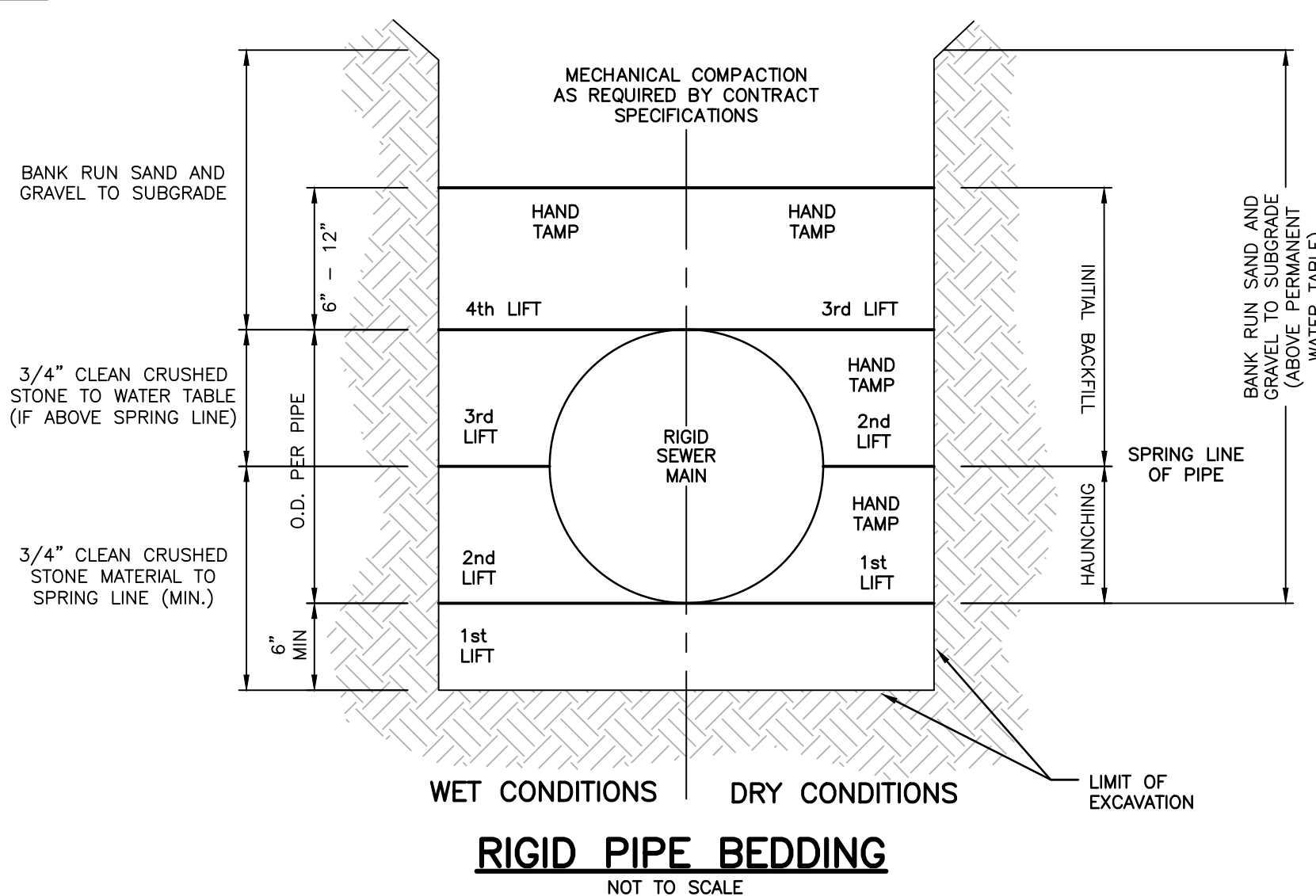
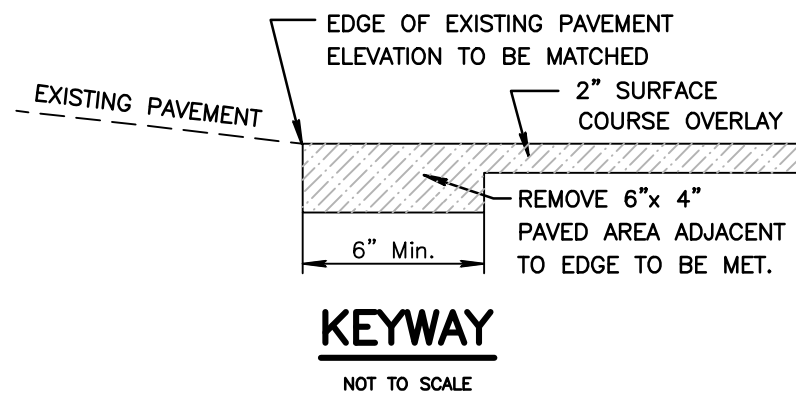
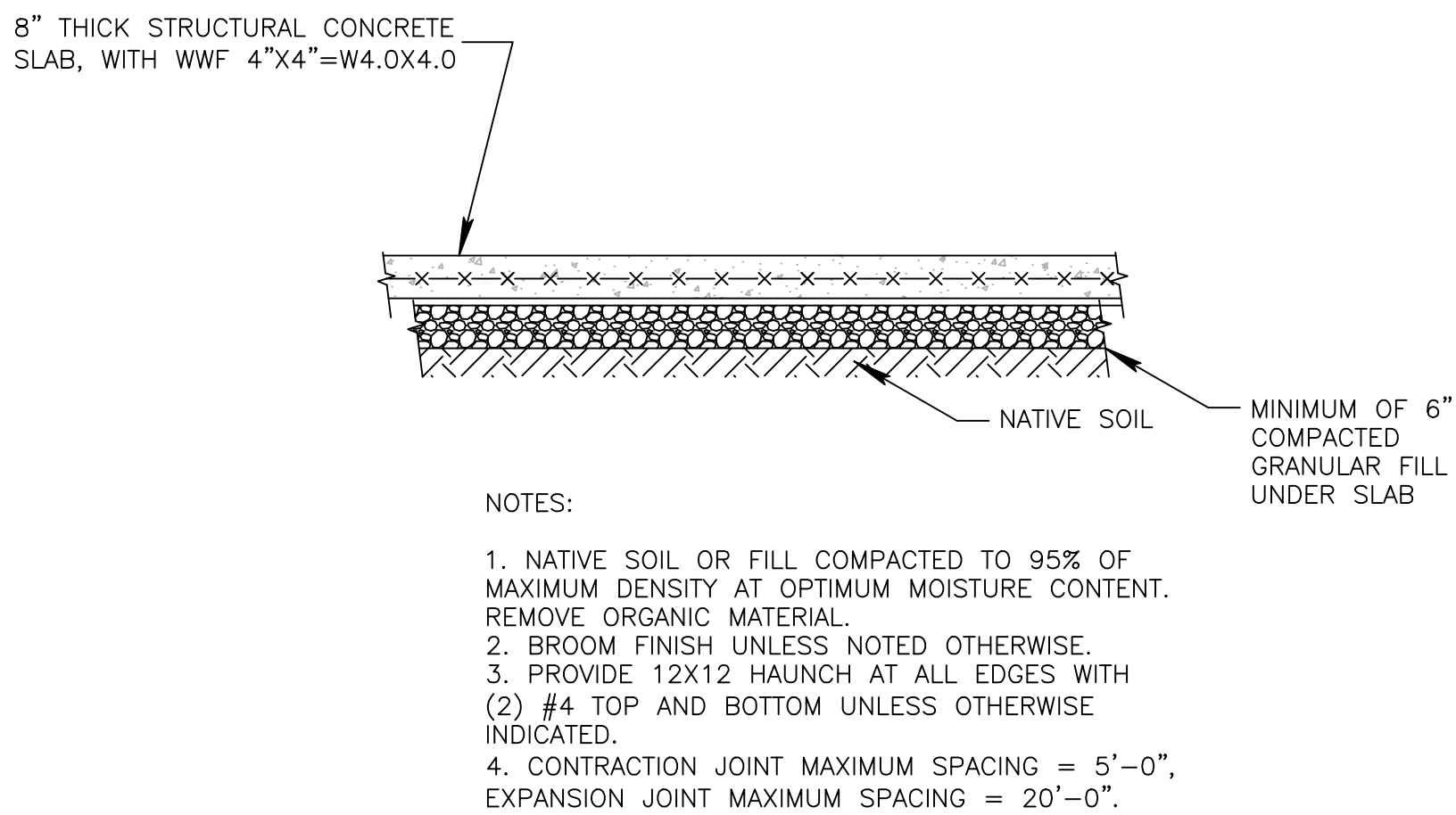
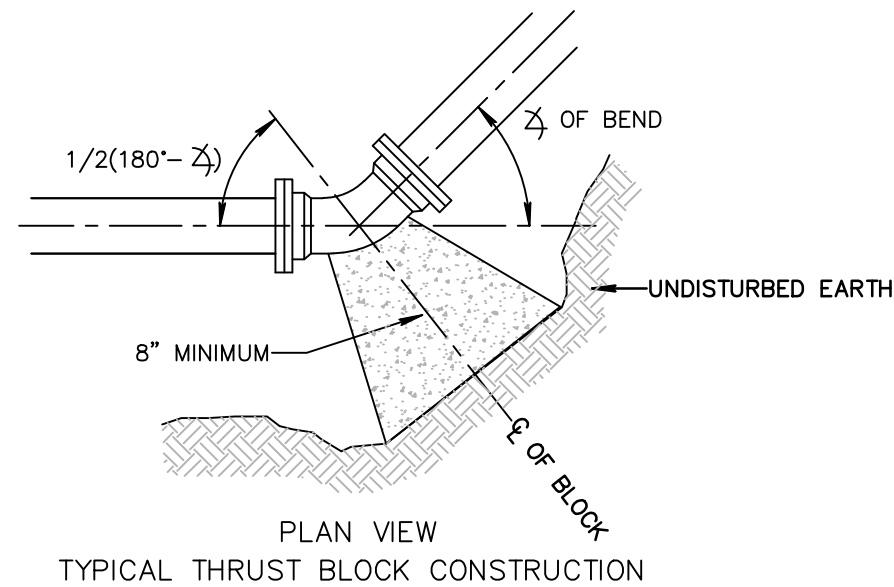
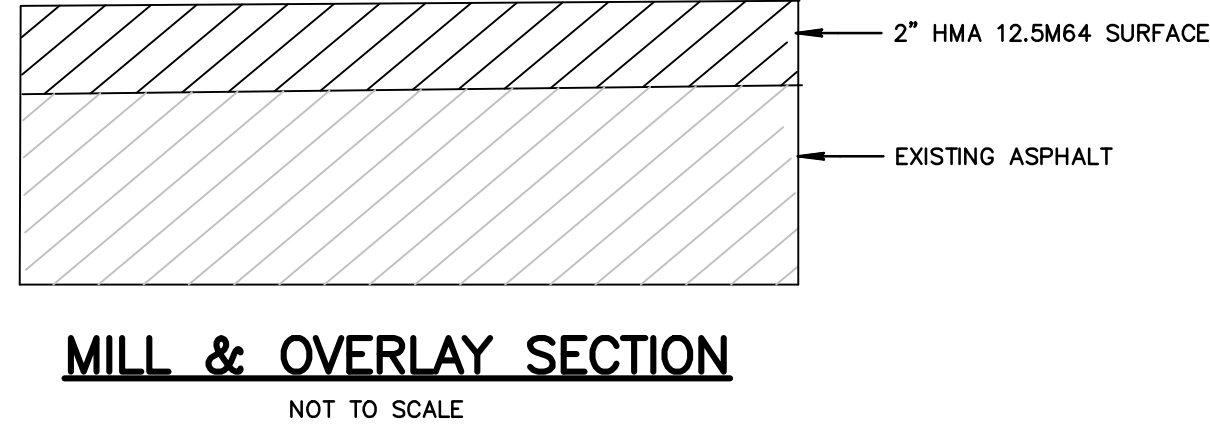
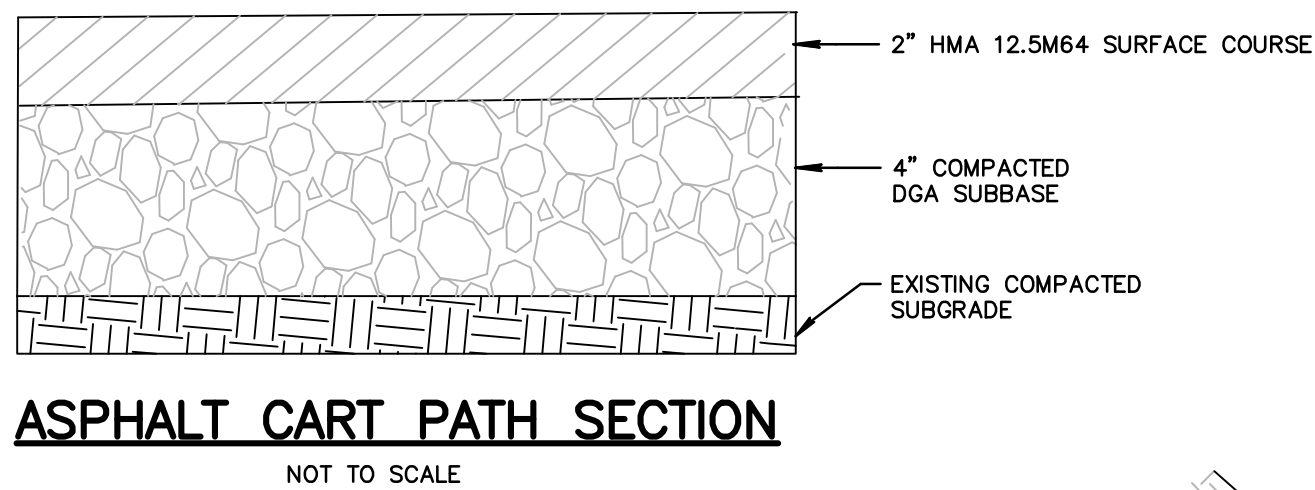
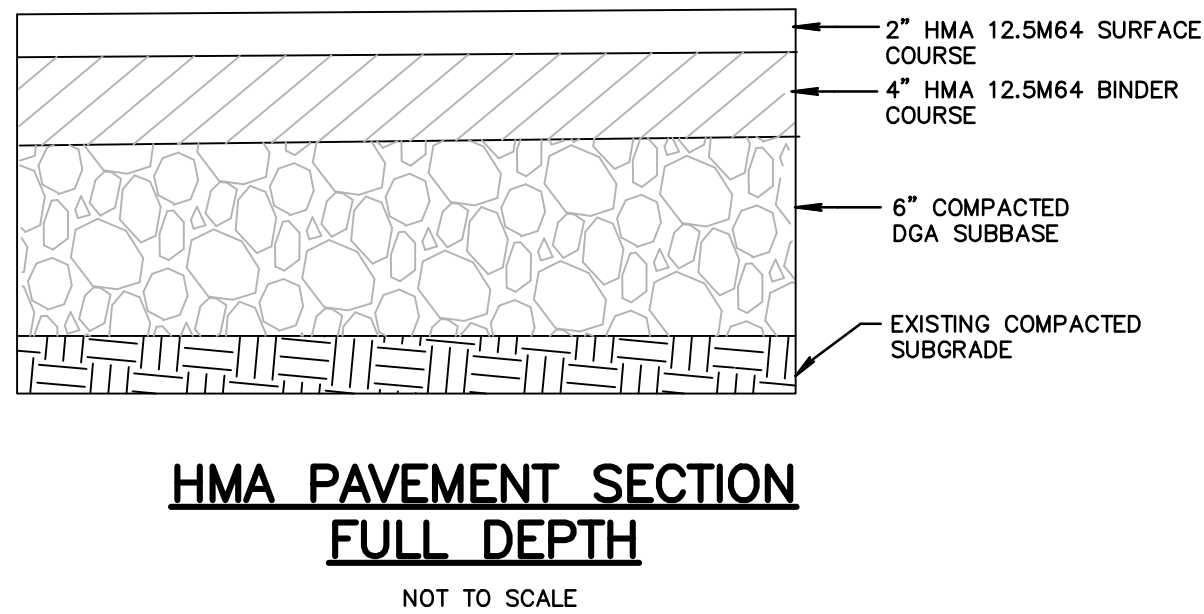
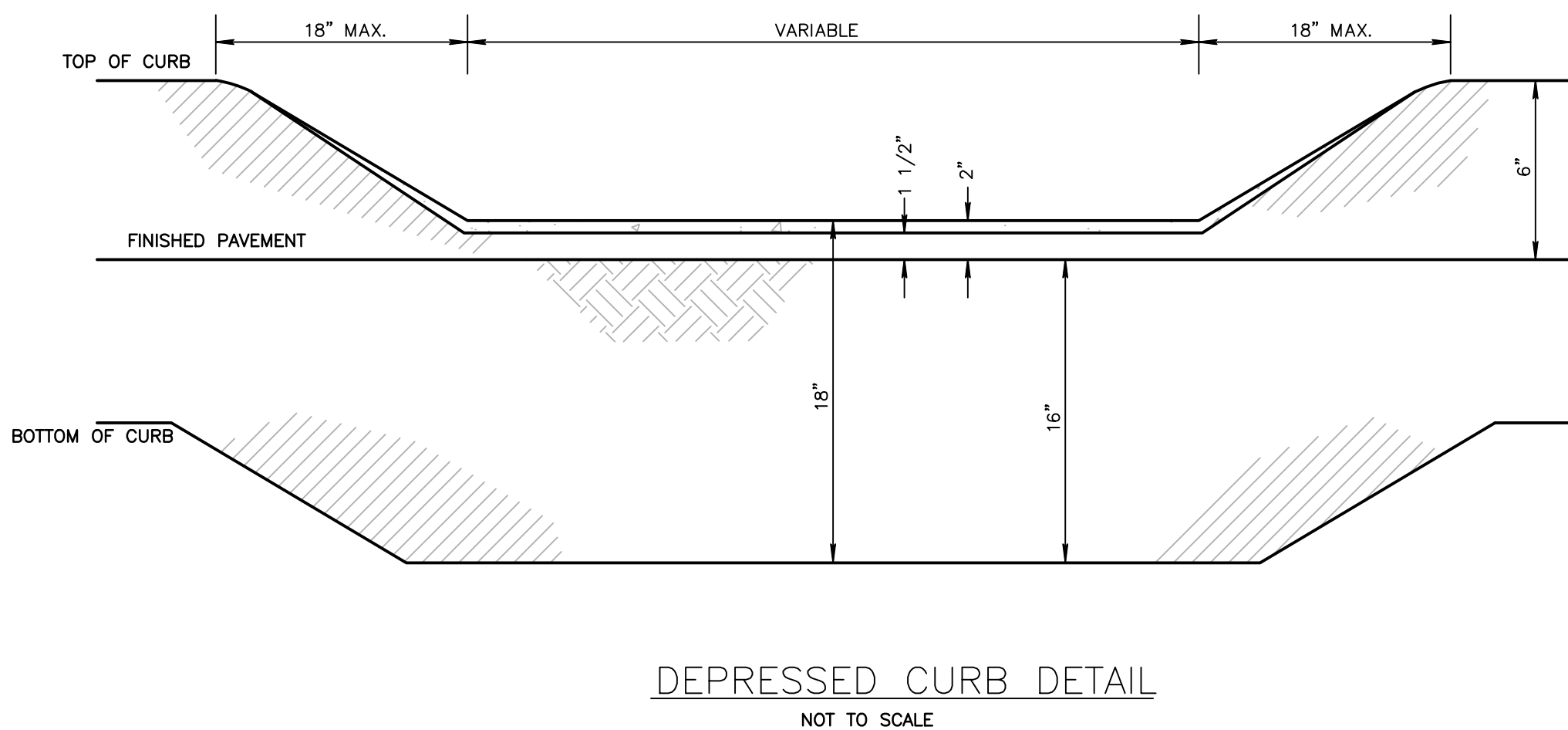
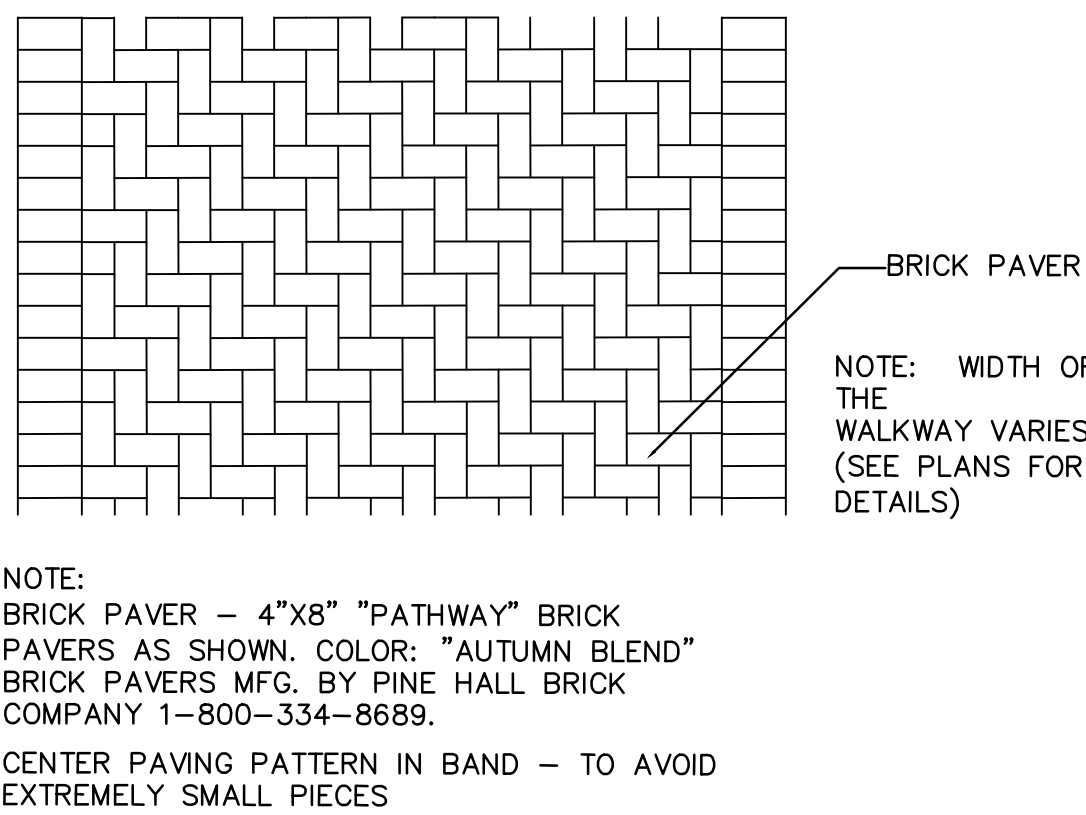
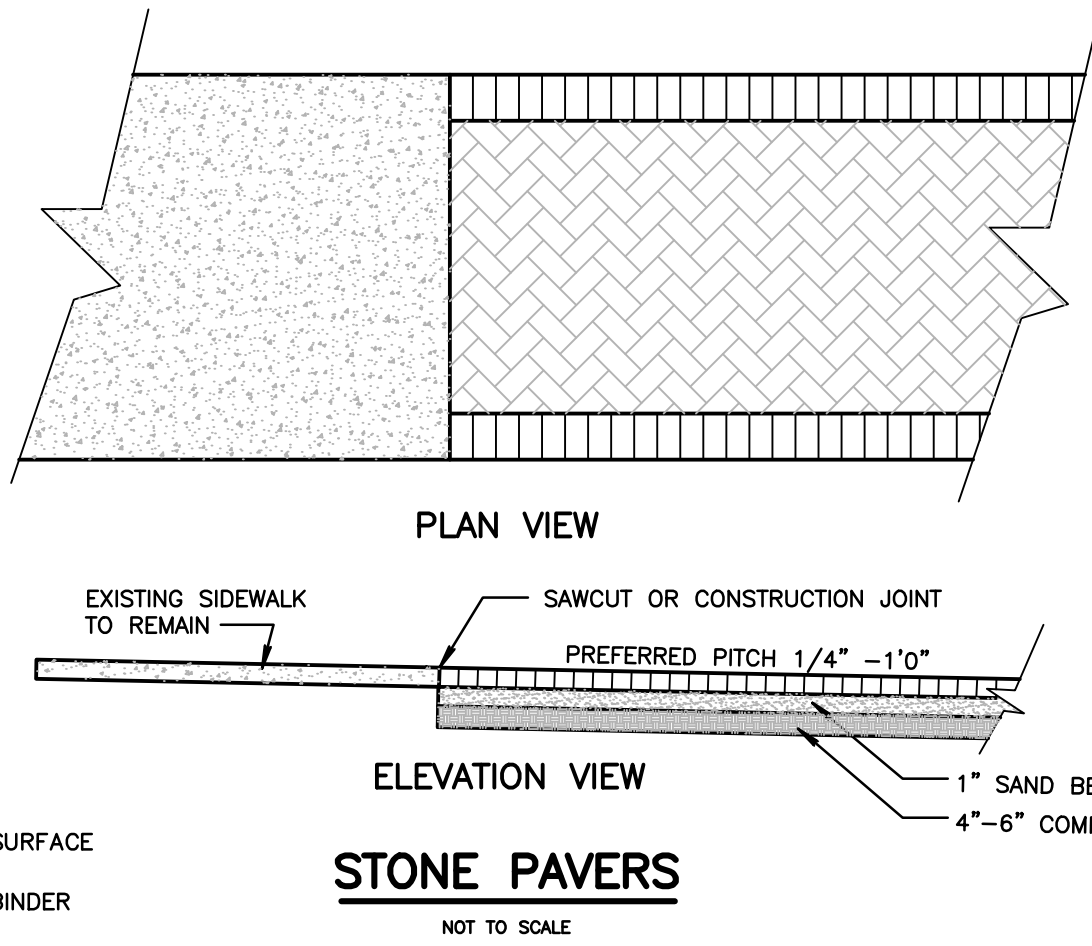
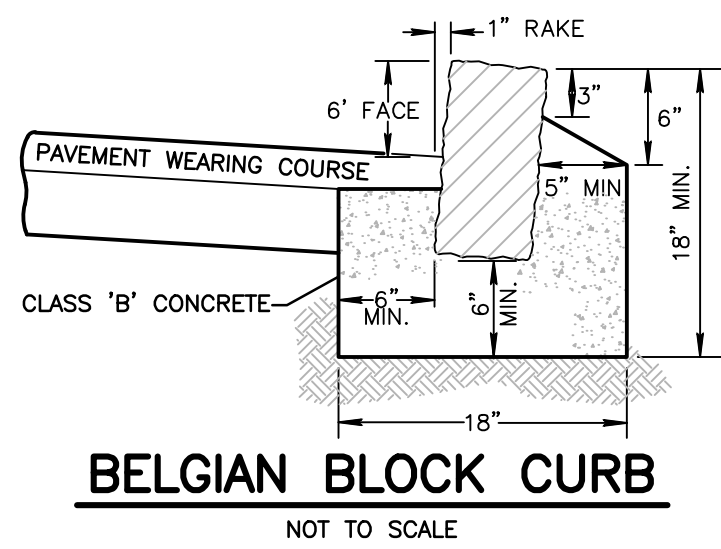
ELECTRICAL SERVICE PLAN

ESSEX COUNTY COUNTRY CLUB IMPROVEMENTS

SITUATED IN
CITY OF WEST ORANGE, ESSEX COUNTY, NEW JERSEY

PROJECT NUMBER:	
DATE:	08/07/2023
SCALE:	AS SHOWN

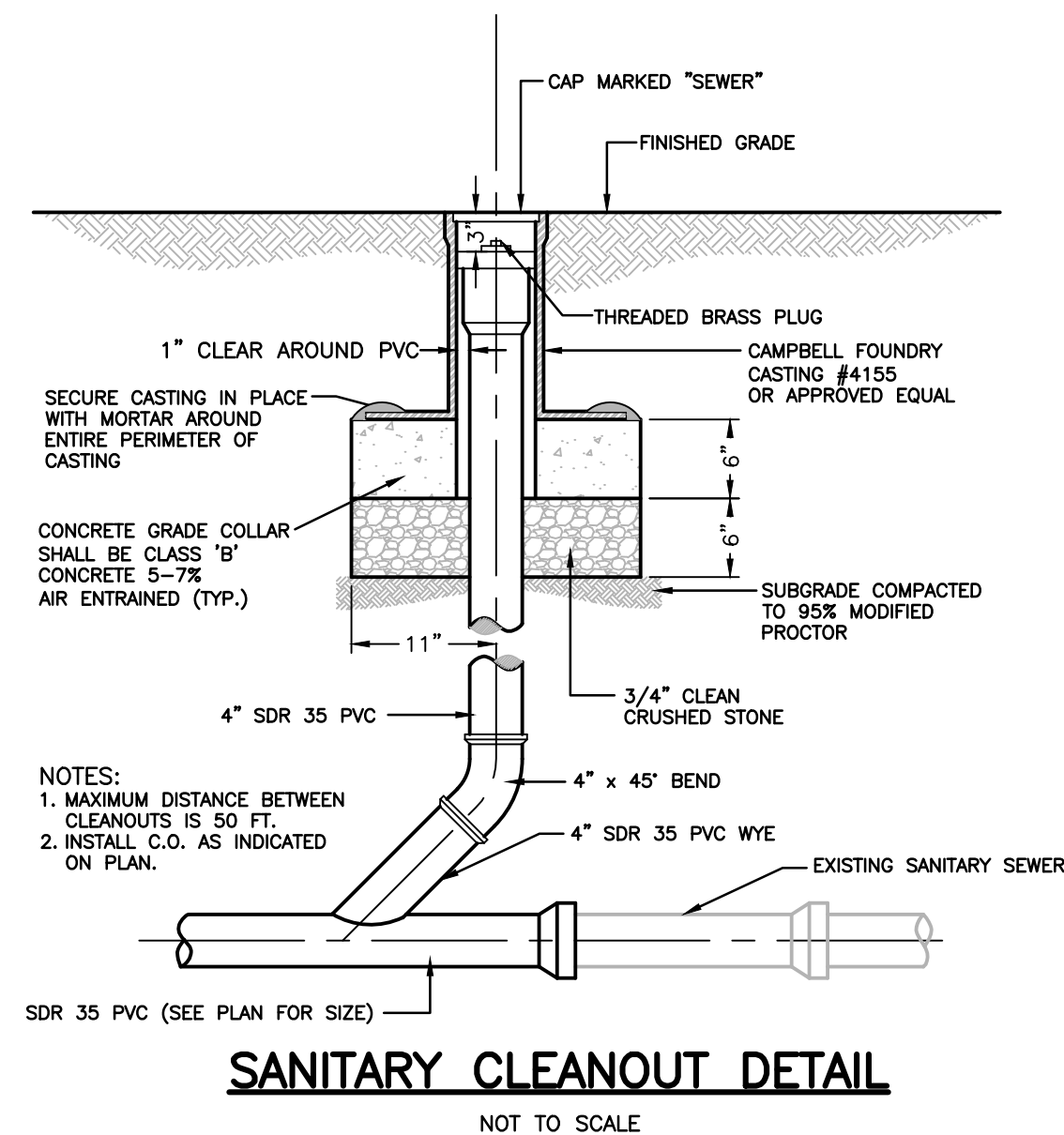
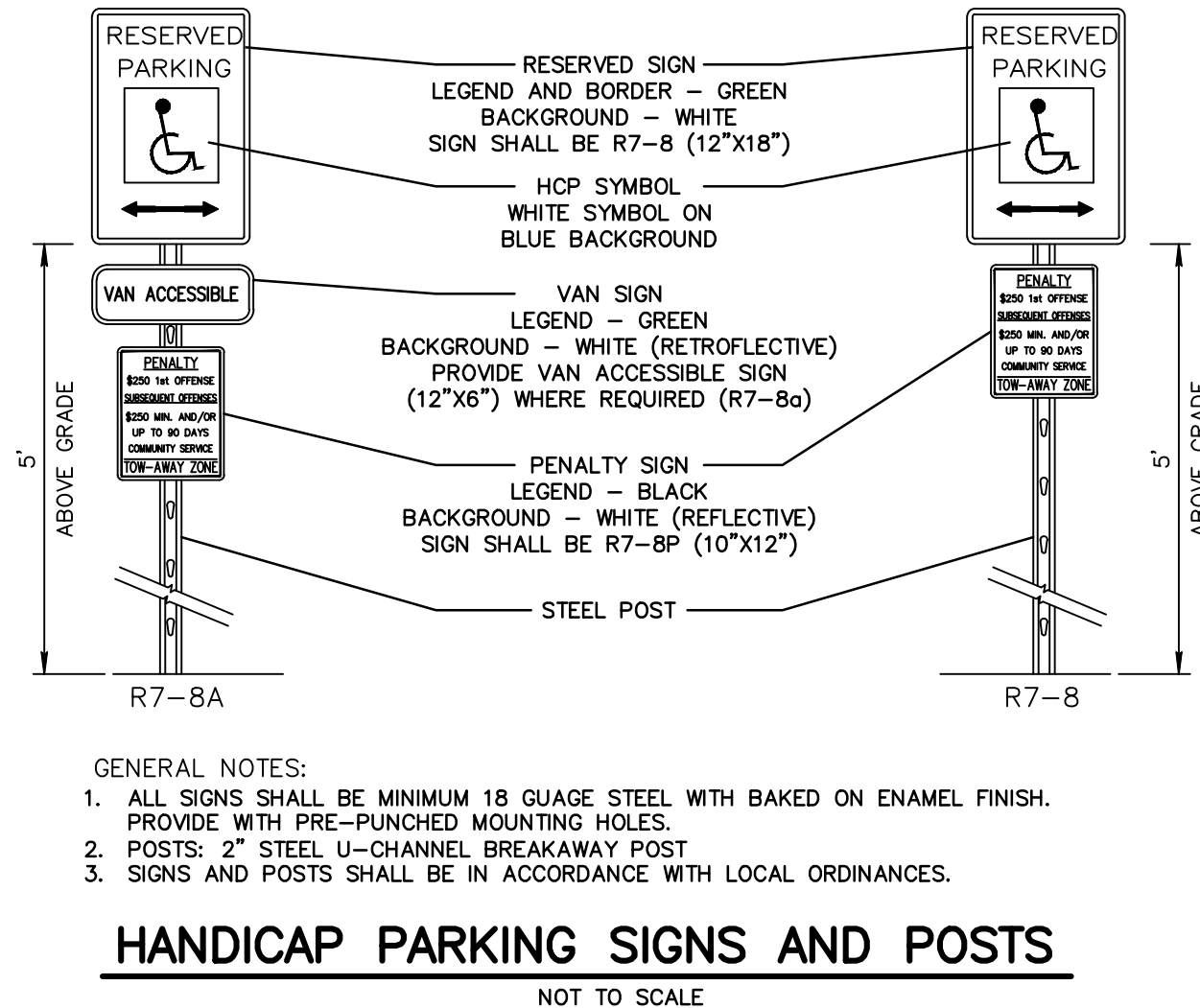
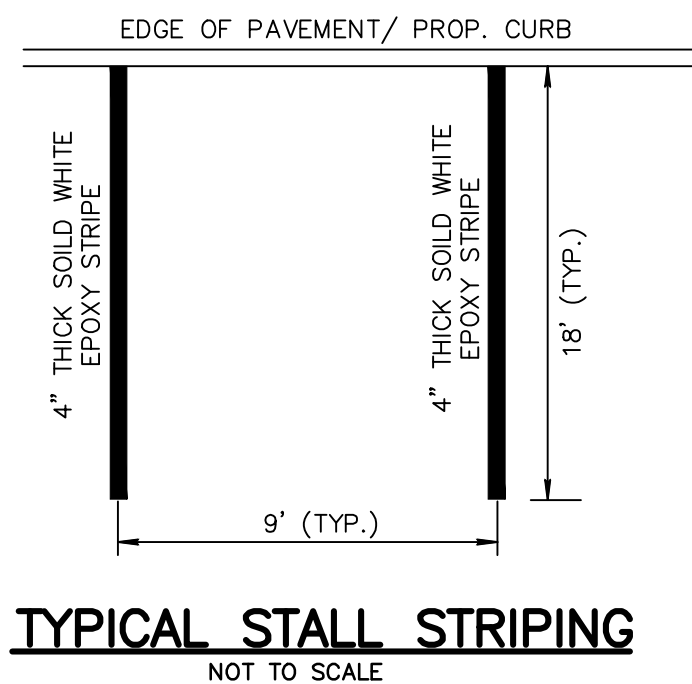
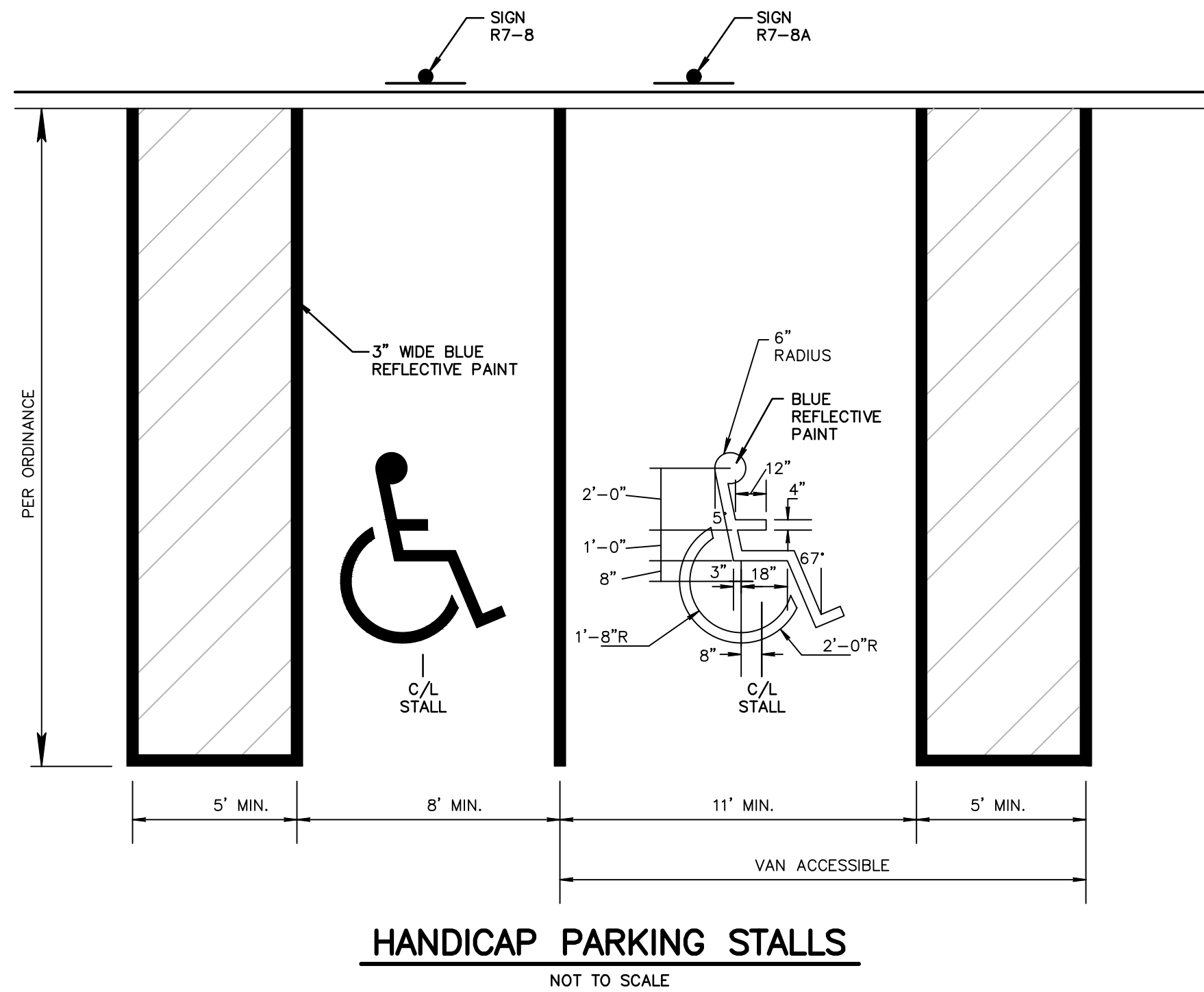
SHEET 15 OF 18



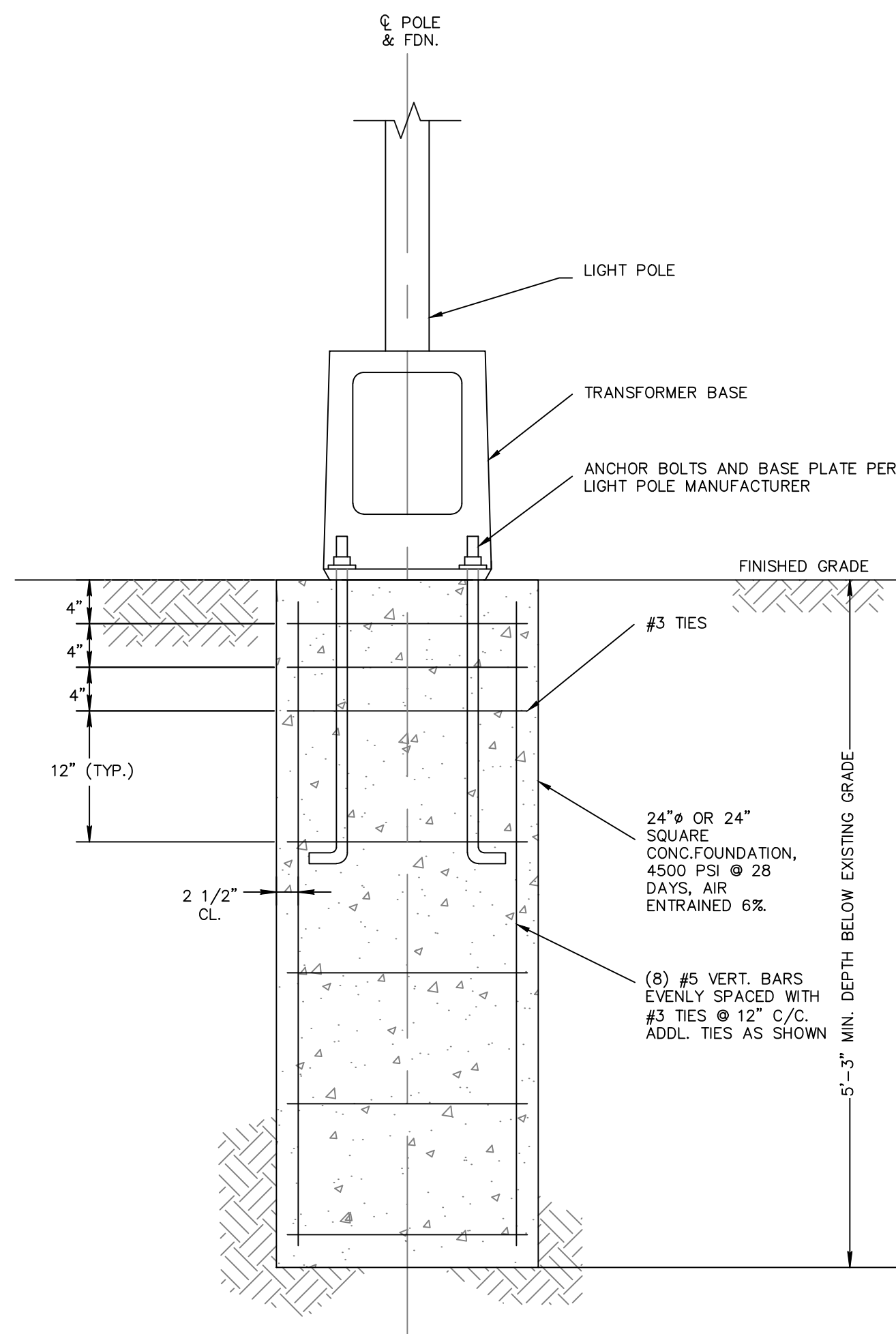
DIAMETER OF PIPE	5' TO 22'-1/2" BEND	23' TO 45' BEND	45' TO 90' BEND	TEE CONNECTION	PLUG
6"	1.1	2.1	4.0	2.9	2.9
8"	2.0	3.7	7.1	5.0	5.0
10"	3.1	5.8	11.1	7.9	7.9
12"	4.4	8.4	16.0	11.3	11.3

- A = CONTACT BEARING AREA OF THRUST BLOCK WITH EARTH, IN SQUARE FEET
- NOTES:
- BEARING AREAS ARE BASED ON AN INTERNAL PIPE PRESSURE OF UP TO 200 PSI AND UNDISTURBED SOIL WITH A BEARING CAPACITY OF 2000 PSF. FOR A GREATER INTERNAL PRESSURE OR A LESSER SOIL BEARING CAPACITY, THESE AREAS SHALL BE INCREASED ACCORDINGLY.
 - ALL CONCRETE THRUST BLOCKS SHALL BE CONSTRUCTED OF NJDOT CLASS C CONCRETE.
 - THRUST BLOCKS SHALL BE POURED AGAINST UNDISTURBED EARTH.
 - WIDTH OF THRUST BLOCK SHALL BE TWICE THE HEIGHT WHERE PRACTICAL.

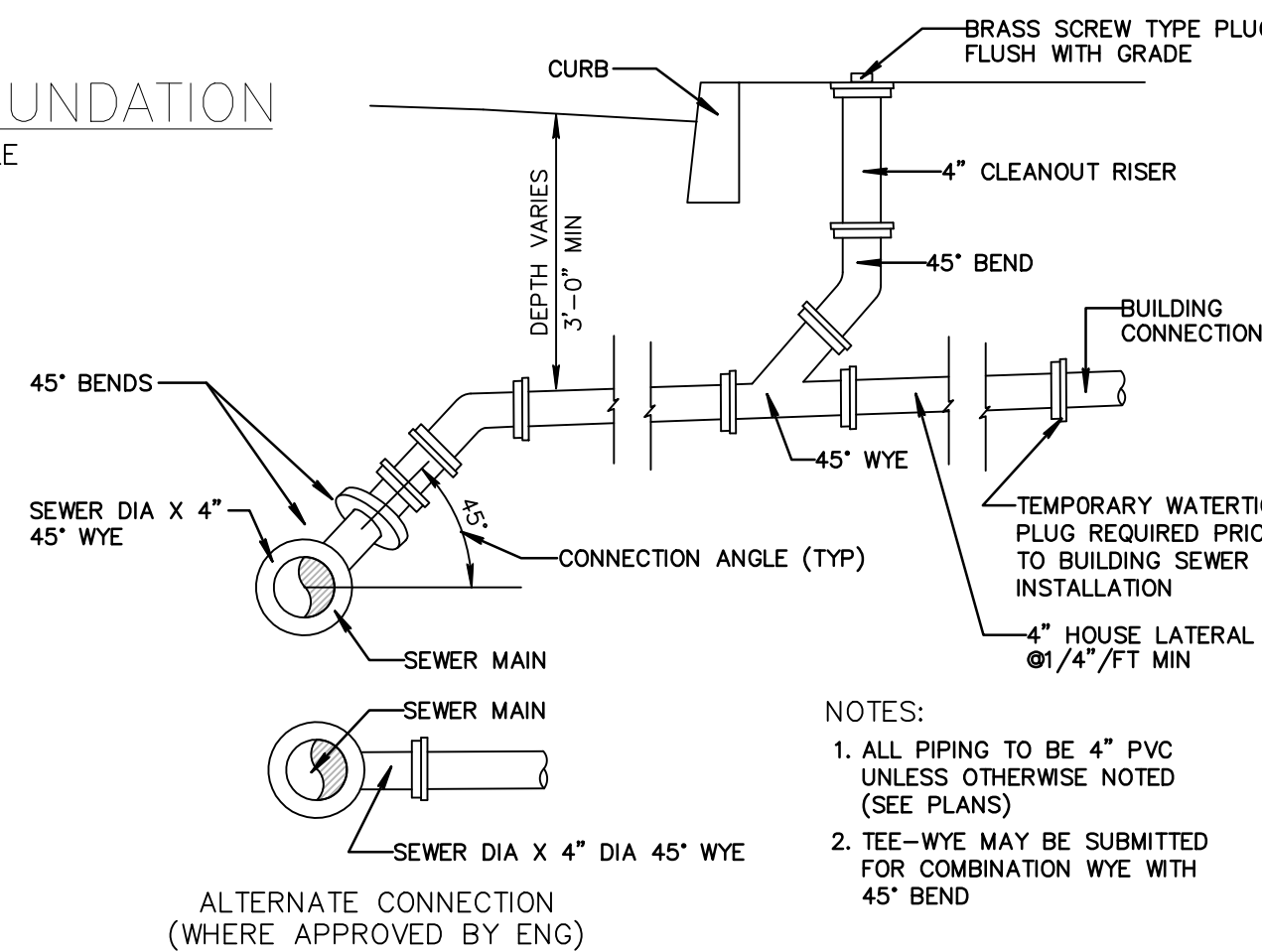
TABLE OF THRUST BLOCKS FOR HORIZONTAL BENDS
FOR PRESSURES UP TO 200 P.S.I.
NOT TO SCALE



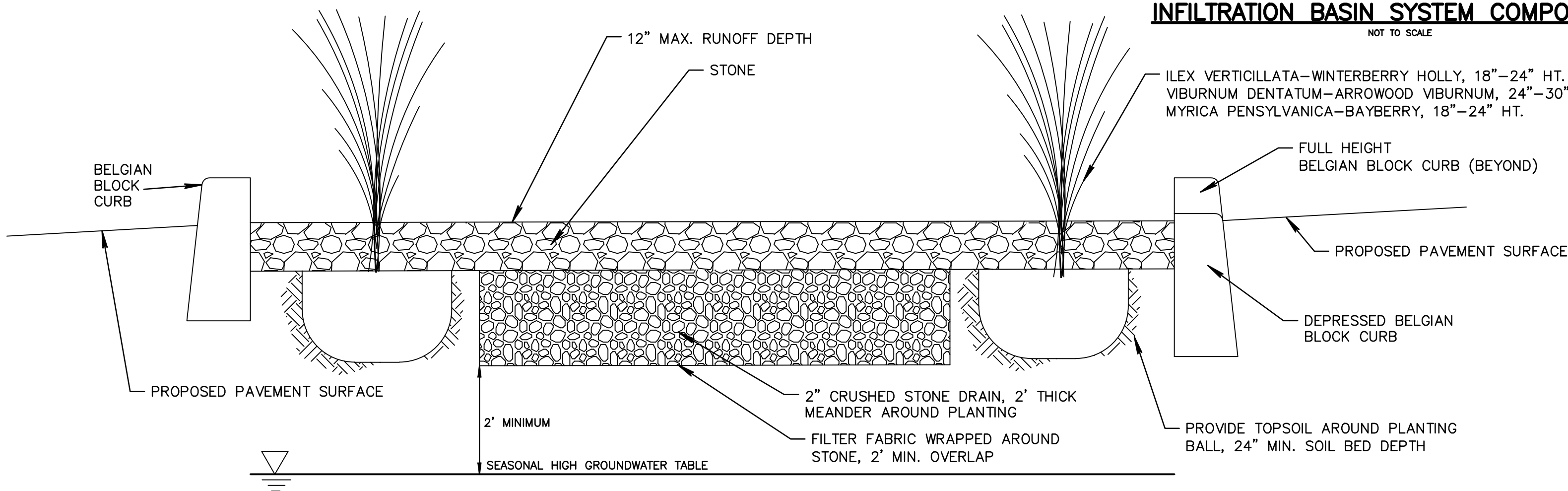
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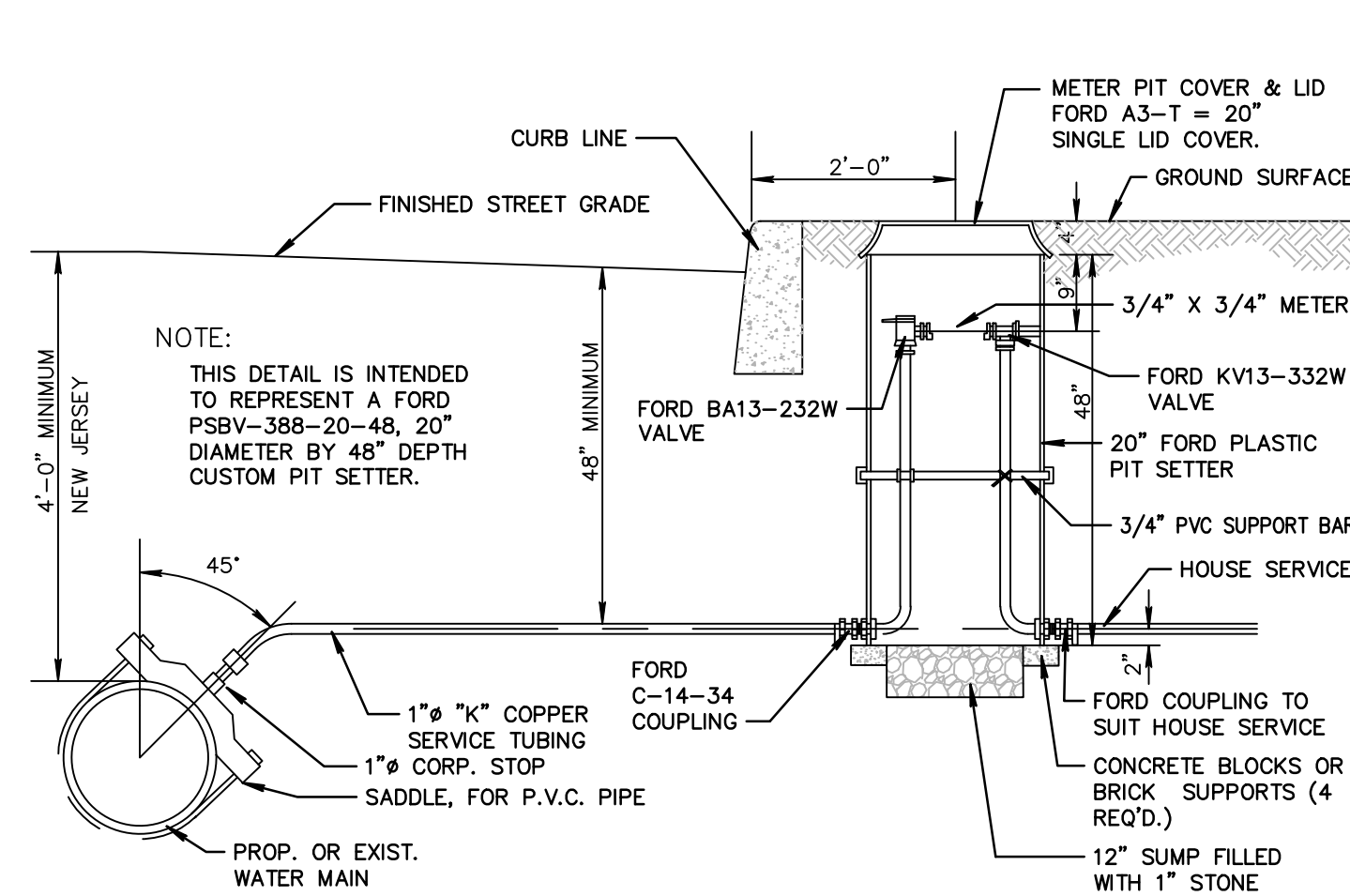
LIGHT POLE FOUNDATION
NOT TO SCALE



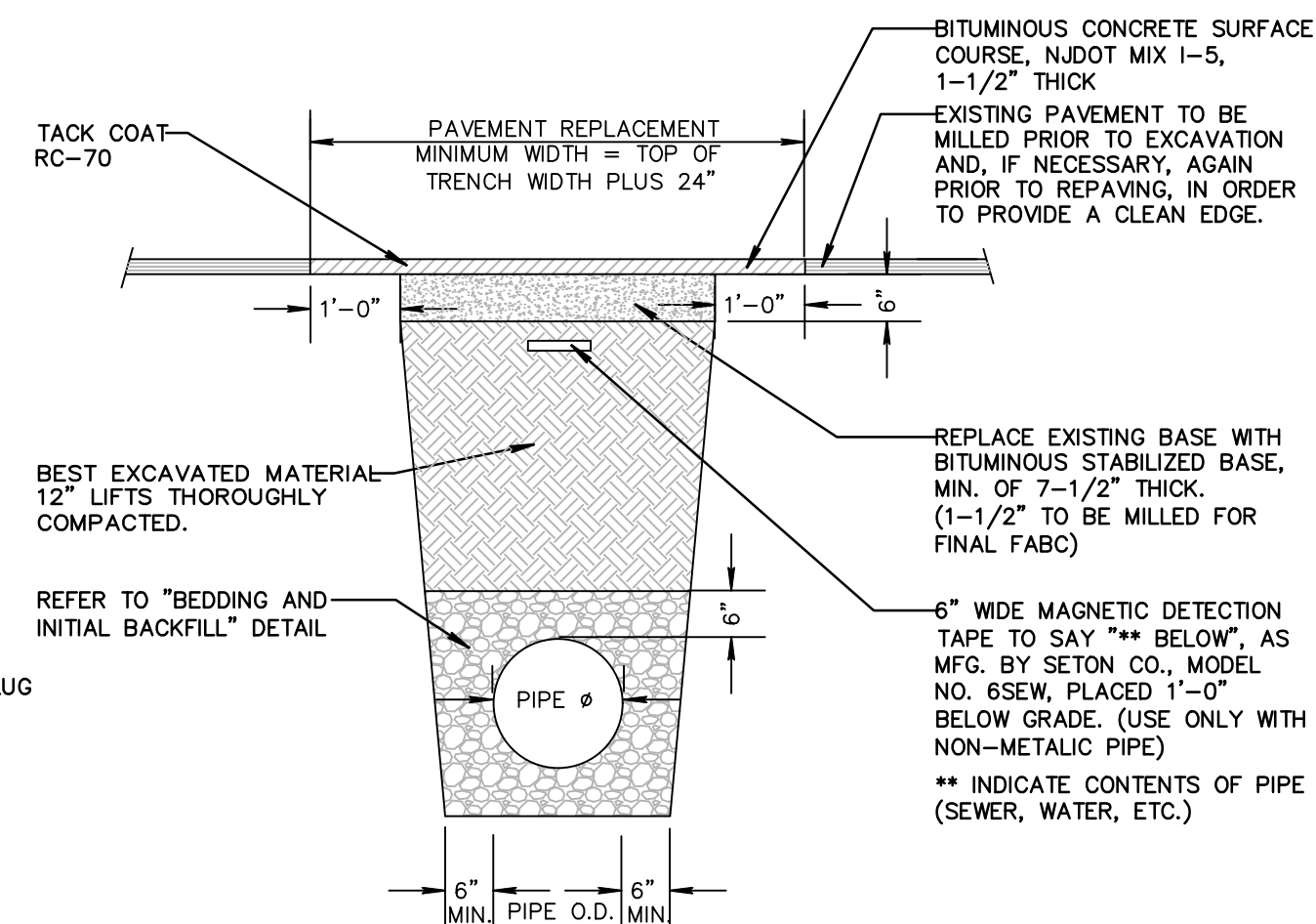
STANDARD SANITARY HOUSE LATERAL
NOT TO SCALE



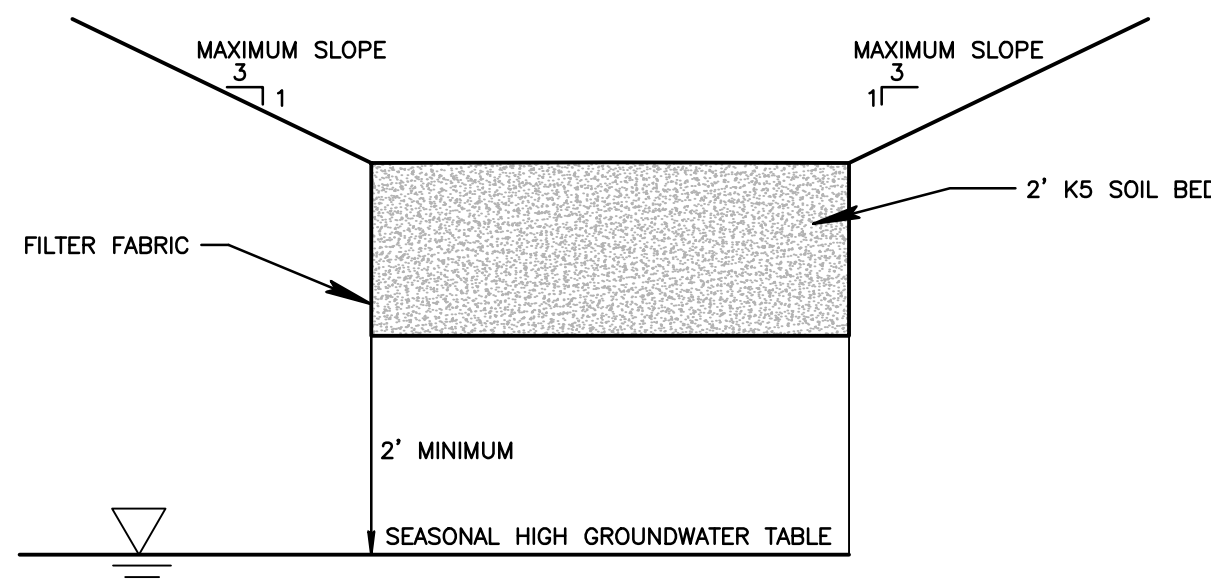
PARKING ISLAND SUMP/BIO-RETENTION DETAIL
NOT TO SCALE



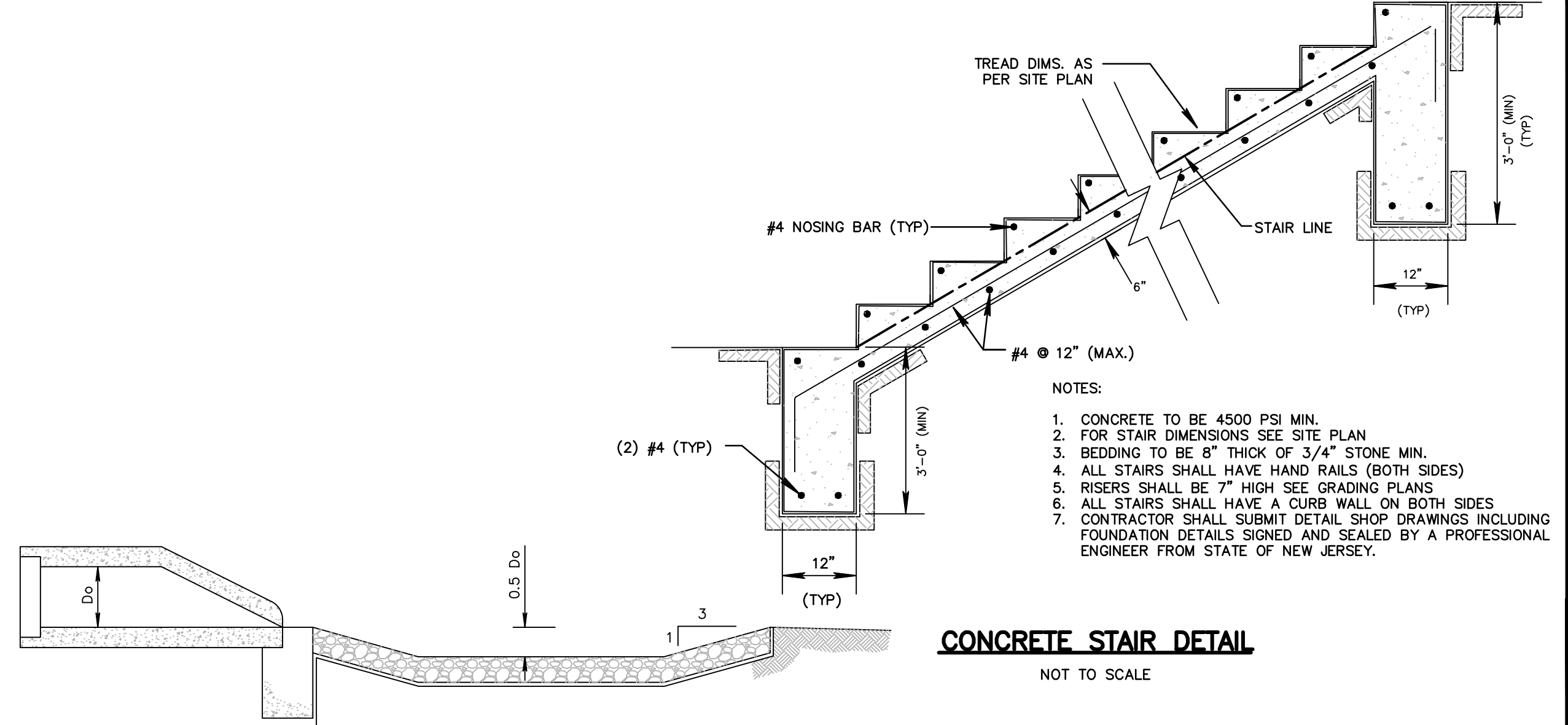
SERVICE CONNECTION WITH FORD METER PIT
NOT TO SCALE



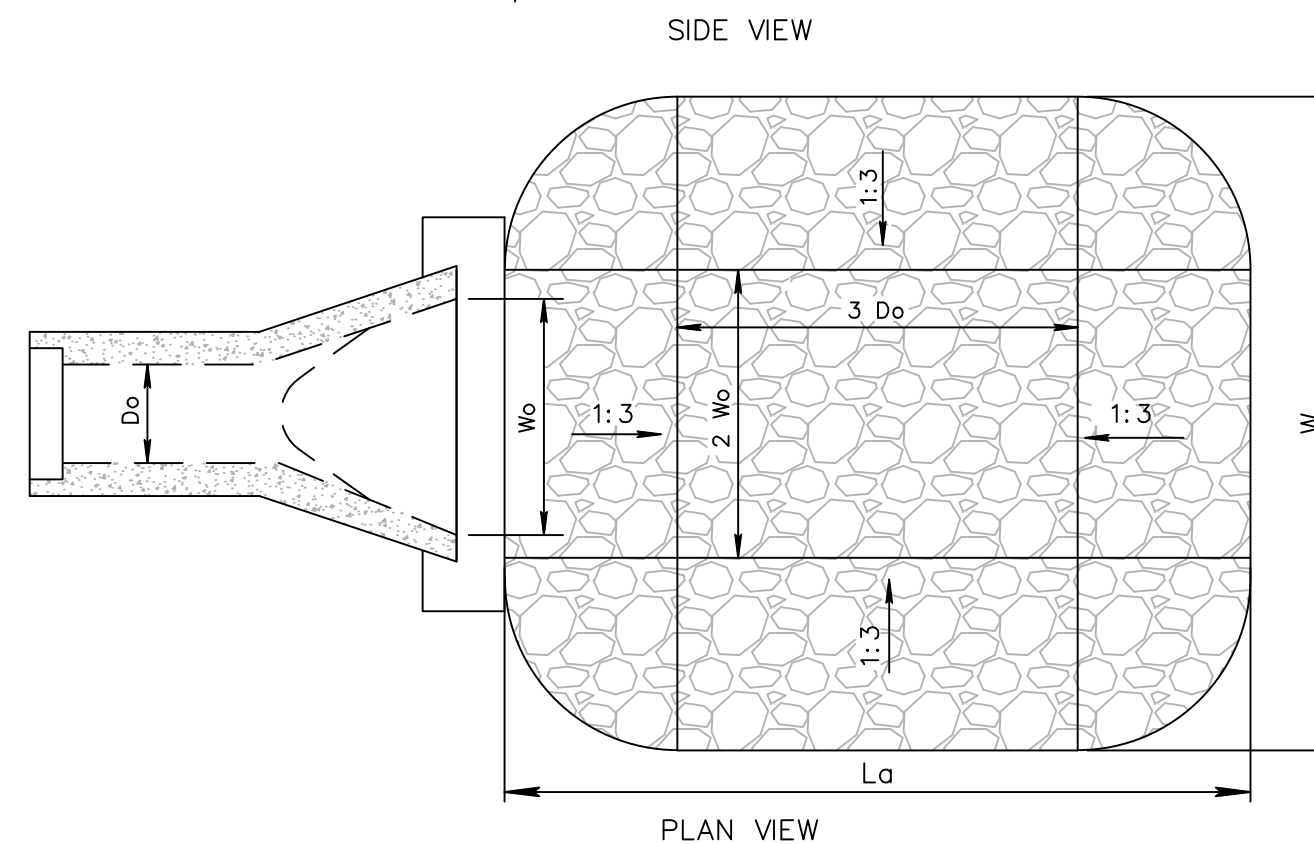
PIPE BEDDING, TRENCH BACKFILL & MUNICIPAL ROADWAY PAVEMENT REPAIR
NOT TO SCALE



INFILTRATION BASIN SYSTEM COMPONENTS
NOT TO SCALE



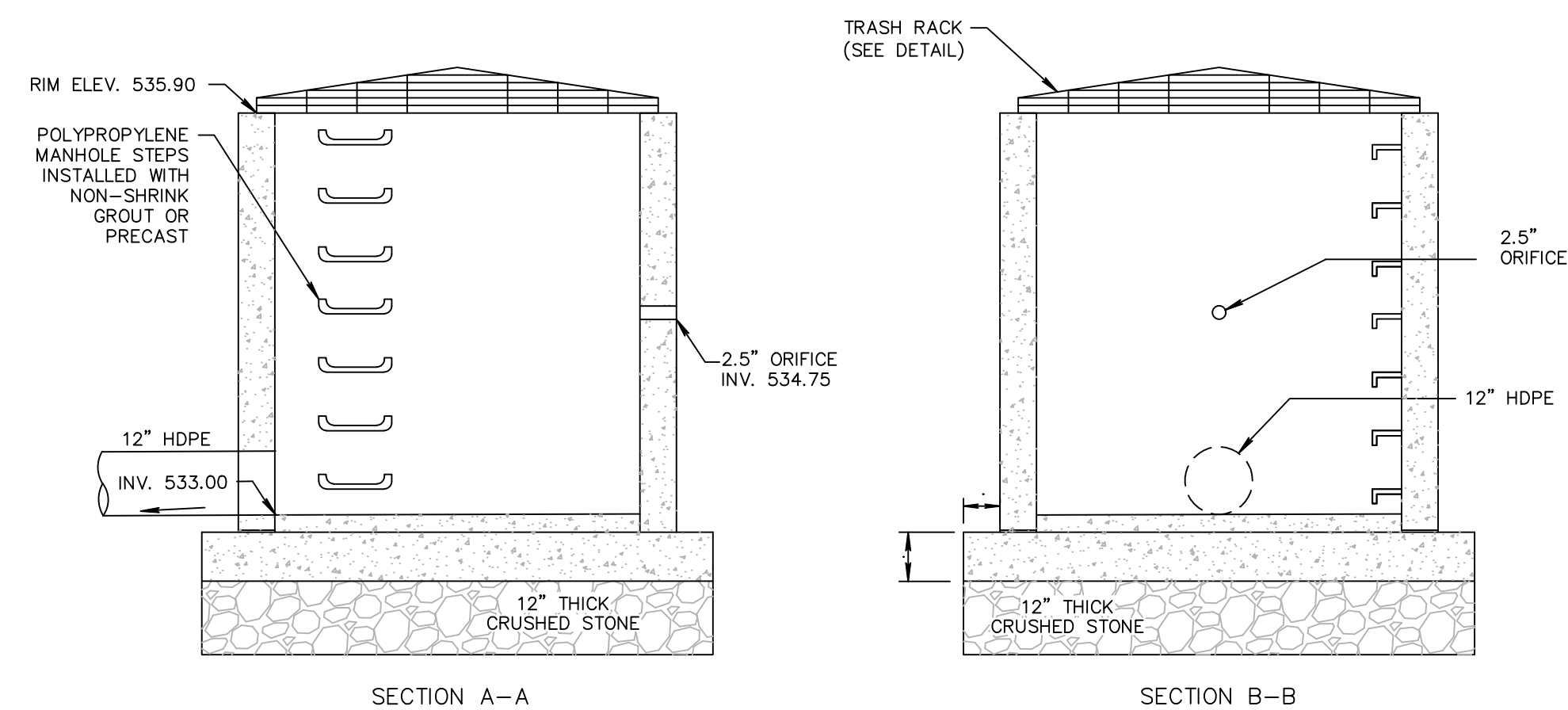
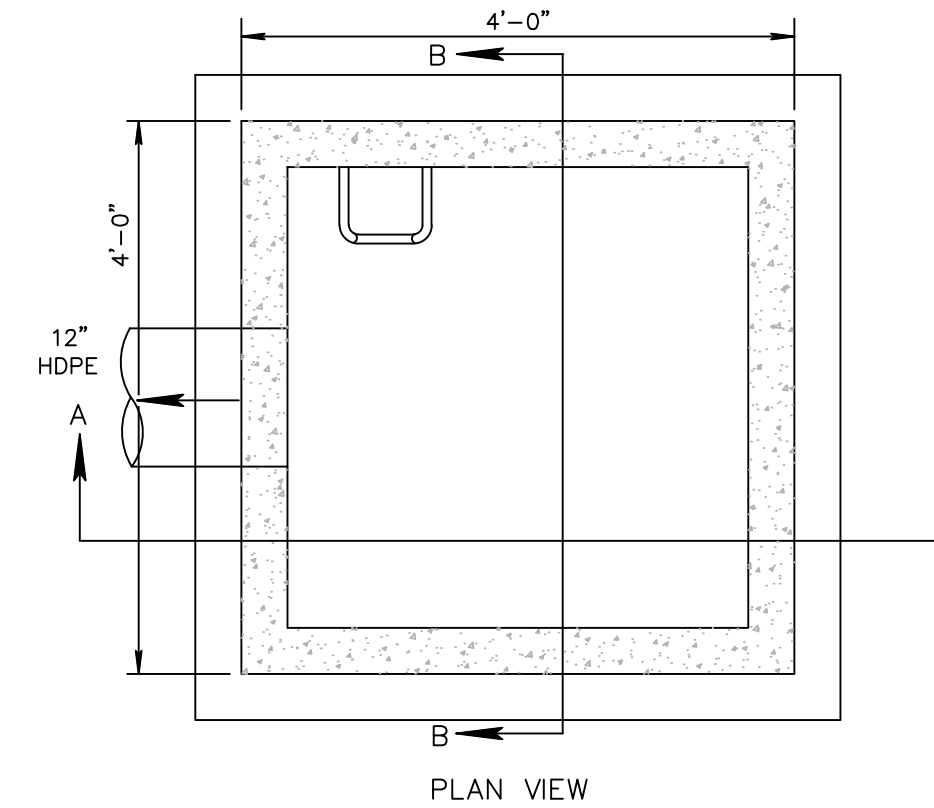
CONCRETE STAIR DETAIL
NOT TO SCALE



#1	Do	Q100	La	W	d50
	12" HDPE	0.16 CFS	6.00 FT.	5.00 FT.	d50= 6" 12" THICK*

* OVER FILTER FABRIC

PRE-FORMED SCOUR HOLE
NOT TO SCALE



OUTLET STRUCTURE
NOT TO SCALE

DESIGNED BY:	REVIEWED BY:	RELEASED BY:	PLANNING BOARD COMMENTS #1:	DESCRIPTION	NO.	DATE	REV.	REL.
PAUL T. CALABRESE, P.E. NEW JERSEY PROFESSIONAL ENGINEER LICENSE NO. 24GE0448050								
DATE: 08/07/2023			REVISIONS					
PROJECT NUMBER:			DATE: 08/07/2023					
SCALE: AS SHOWN			SHEET 17 OF 18					

CONSTRUCTION DETAILS-2

ESSEX COUNTY COUNTRY CLUB IMPROVEMENTS

SITUATED IN CITY OF WEST ORANGE, ESSEX COUNTY, NEW JERSEY

WATERMEN LLC

3107 ATLANTIC AVENUE
ALLENWOOD, NJ 08720

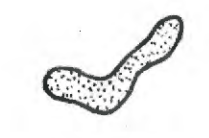
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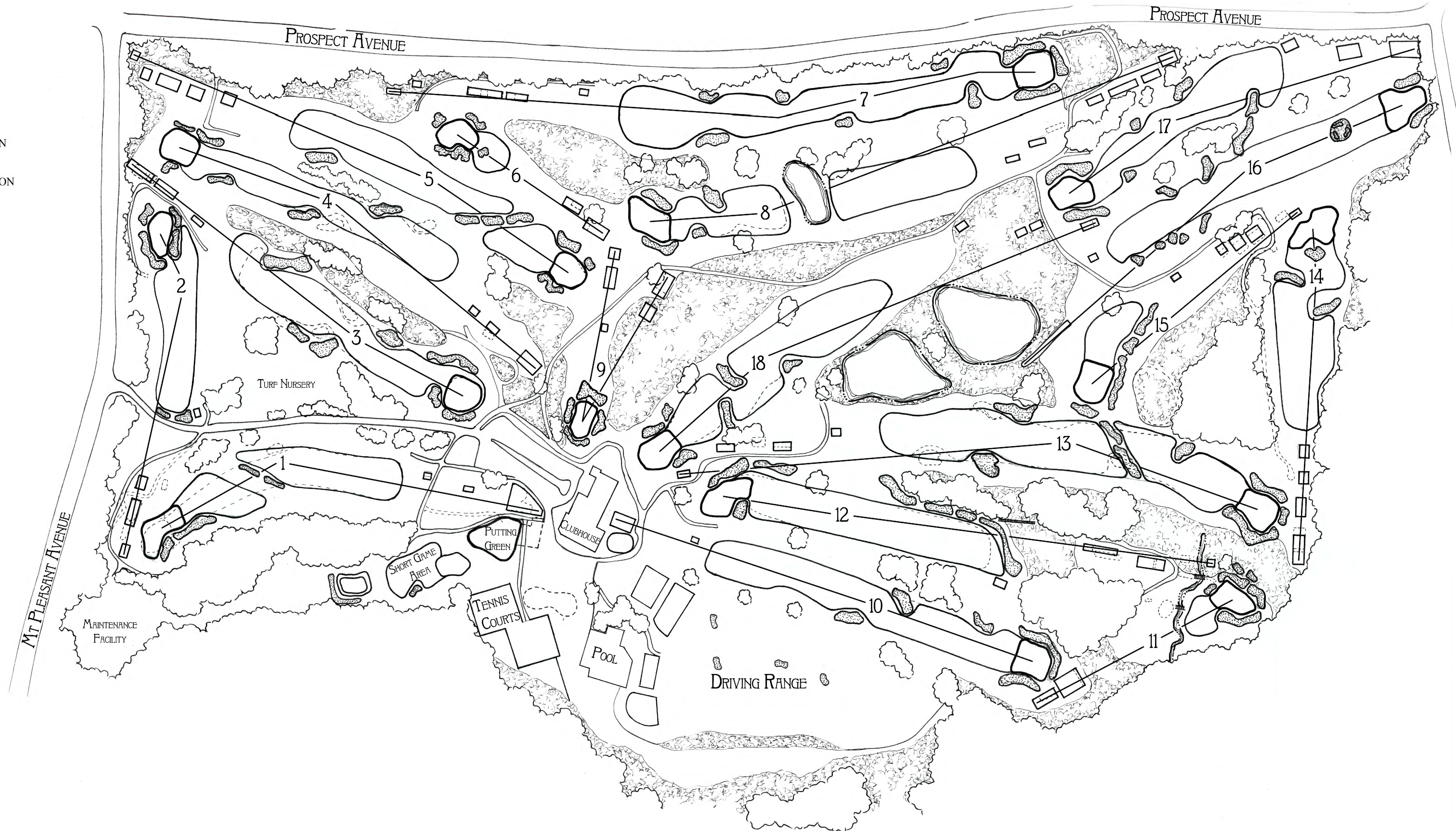
GOLF COURSE PLAN

ECCC, WEST ORANGE, NJ

SHEET
1
OF 3

LEGEND

-  BUNKER
-  POND / CREEK
-  TREE / VEGETATION
-  EXISTING CONDITION
-  NATIVE AREA



SCALE - 1" = 150'

HANSE GOLF COURSE DESIGN, INC.
MALVERN, PA



DISTRUPTION PLAN

ECCC, WEST ORANGE, NJ

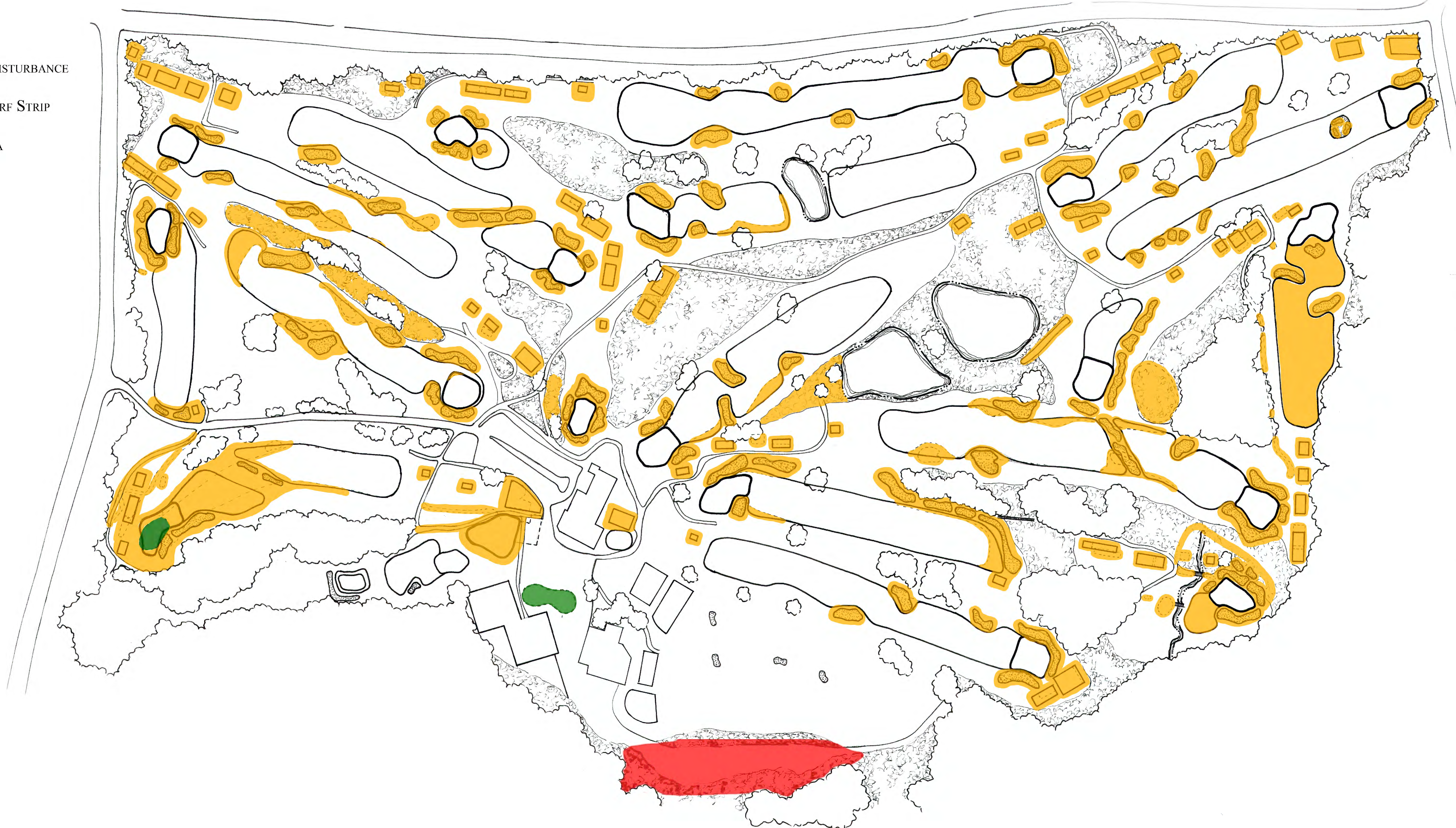
SHEET

2

OF 3

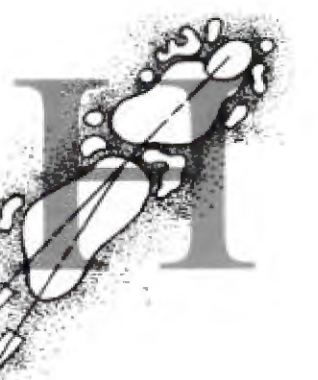
LEGEND

-  AREA OF DISTURBANCE
-  GREENS TURF STRIP
-  DUMP AREA



SCALE - 1" = 150'

HANSE GOLF COURSE DESIGN, INC.
MALVERN, PA



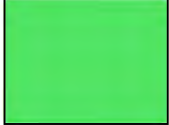
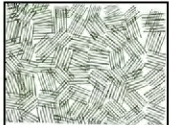
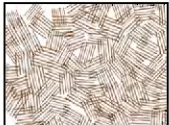
GRASSING PLAN ECCC, WEST ORANGE, NJ

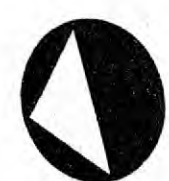
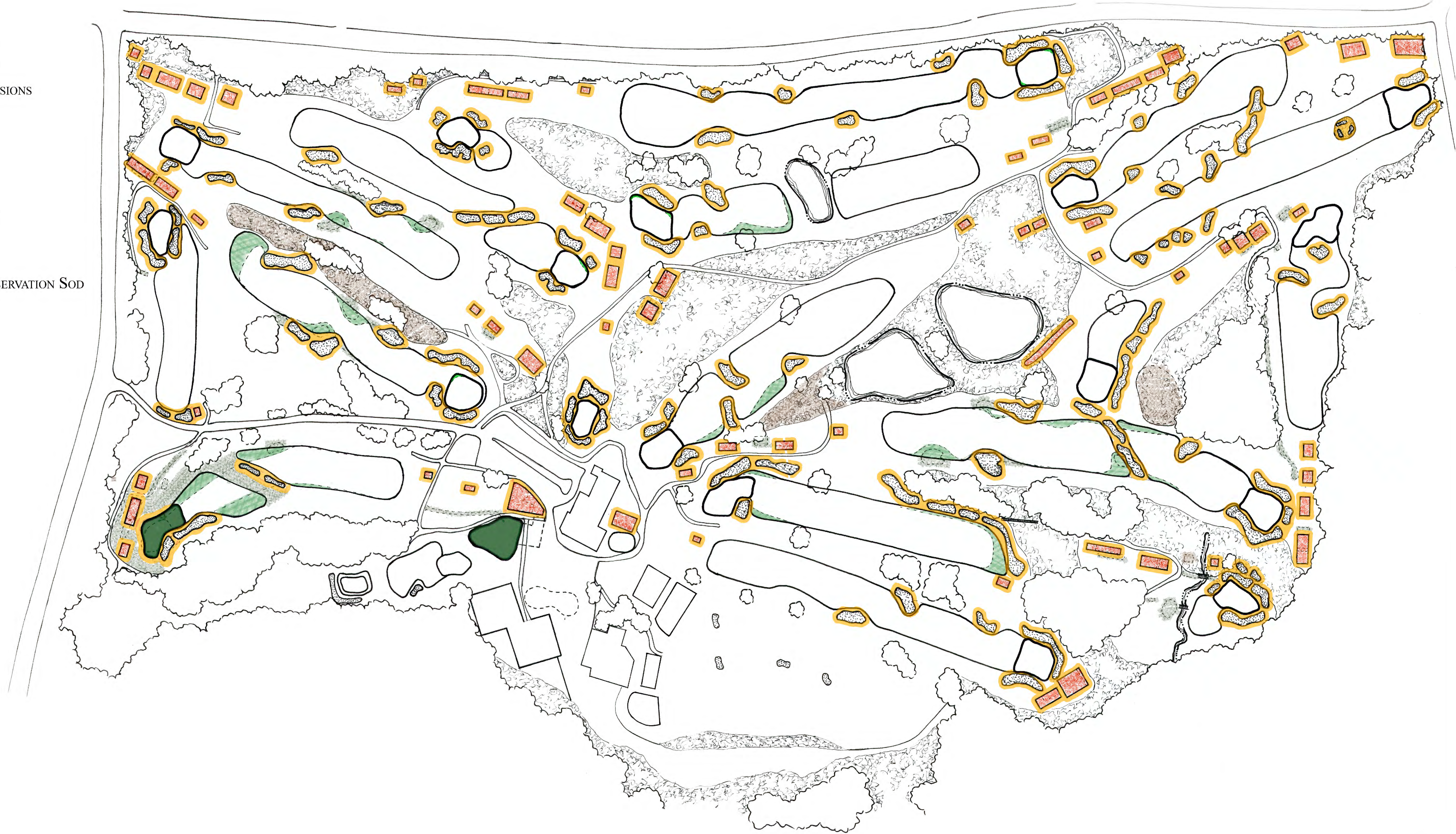
SHEET

3

OF 3

LEGEND

-  NEW GREENS
-  GREEN EXPANSIONS
-  TEES
-  ROUGH
-  NATIVE AREA
-  FAIRWAYS
-  FEATURE PRESERVATION SOD



SCALE - 1" = 150'

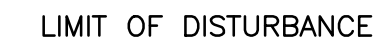
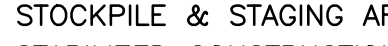
HANSE GOLF COURSE DESIGN, INC.
MALVERN, PA

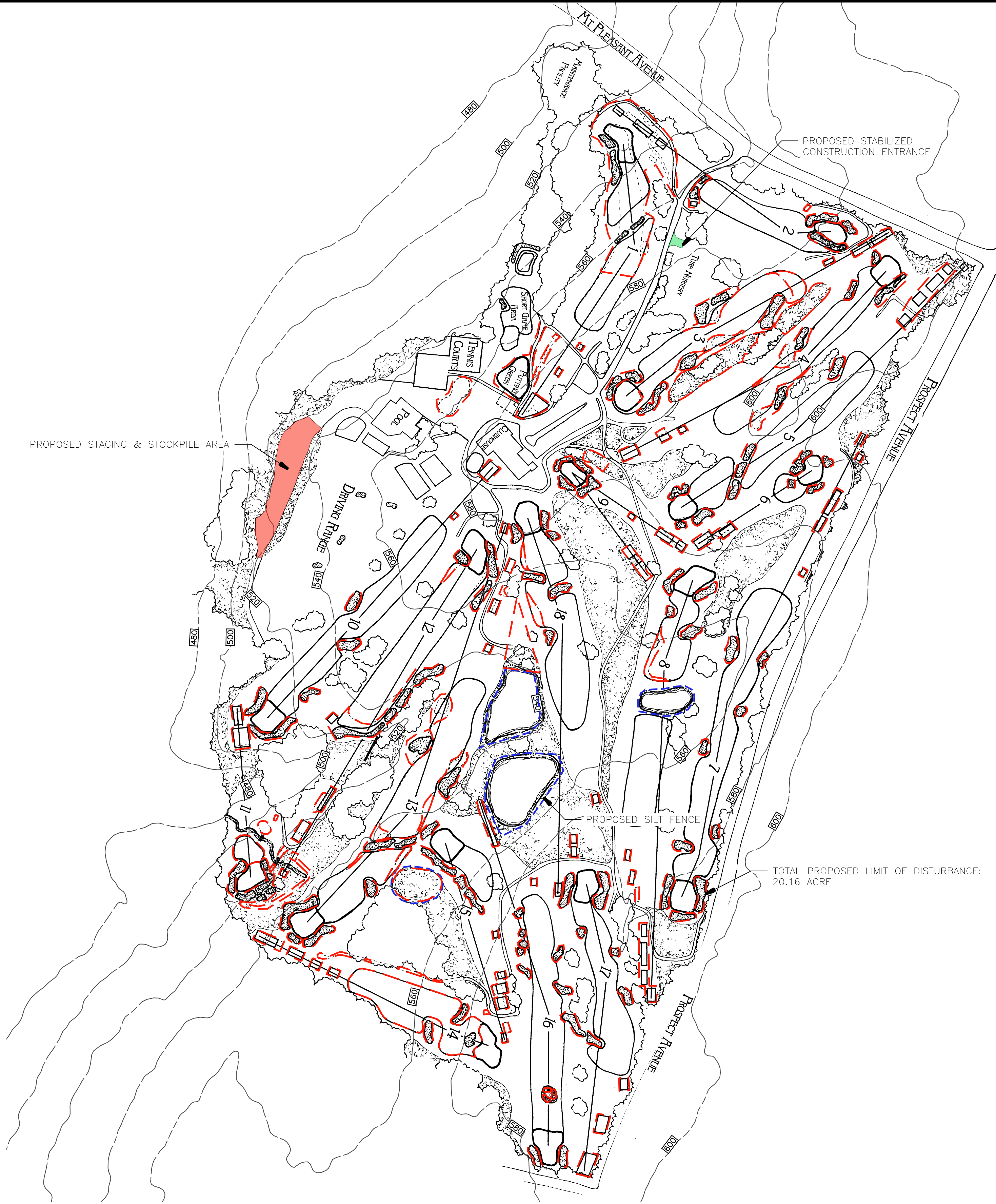


GOLF COURSE LEGEND

-  BUNKER
-  POND / CREEK
-  TREE / VEGETATION
-  EXISTING CONDITION
-  NATIVE AREA

SOIL EROSION & SEDIMENT CONTROL LEGEND

-  LIMIT OF DISTURBANCE
-  SILT FENCE
-  STOCKPILE & STAGING AREA
-  STABILIZED CONSTRUCTION ENTRANCE

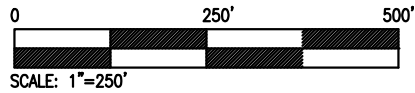


SOIL COMPACTION EXEMPTION NOTE

AS DETERMINED BY THE STATE POLICY MAP, THE PROJECT AREA FALLS WITHIN THE METROPOLITAN PLANNING AREA (PA1). UNDER EXISTING CONDITIONS, THE SITE IS NOT COVERED IN WOODY VEGETATION NOR REGROWTH. IN ACCORDANCE WITH NEW JERSEY STANDARD FOR LAND GRADING (REVISED 2017), NON WOODY VEGETATED PA1 AREAS FALL UNDER THE SOIL COMPACTION EXEMPTION LIST AS A "URBAN REDEVELOPMENT" AND IS DEFINED BY NJDEP AS "PREVIOUSLY DEVELOPED".

NOTES:

1. EXISTING CONDITIONS SHOWN ARE BASED UPON 2014 USGS CMGP LIDAR; POST SANDY(NEW JERSEY) CONTOURS PROVIDED BY THE NATIONAL OCEANIC ATMOSPHERE ADMINISTRATION (NOAA).



SOIL EROSION & SEDIMENT CONTROL PLAN

ESSEX COUNTY COUNTRY CLUB
IMPROVEMENTS

SITUATED IN
CITY OF WEST ORANGE, ESSEX COUNTY, NEW JERSEY

PROJECT NUMBER:

DATE: 08/10/2023

SCALE: AS SHOWN

SHEET 1 OF 2

PAUL T. CALABRESE, P.E.
NEW JERSEY PROFESSIONAL ENGINEER
LICENSE NO. 24GE04480500



3107 ATLANTIC AVENUE
ALLENWOOD, NJ 08720
Tel: 908-225-6303
NJ Certificate of Authorization #TAG-1252-0000

DESIGNED BY:

REVIEWED BY:

RELEASED BY:

DATE:

NO.

DESCRIPTION

REVISIONS

DES: BK

REV: PTC

REL: PTC

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

- ALL SOIL EROSION AND SEDIMENT CONTROL PRACTICES WILL BE INSTALLED IN ACCORDANCE WITH THE "NEW JERSEY STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL," 7TH EDITION LAST REVISED JULY 2017. THESE MEASURES WILL BE INSTALLED PRIOR TO ANY MAJOR SOIL DISTURBANCE OR IN THEIR PROPER SEQUENCE AND MAINTAINED UNTIL PERMANENT PROTECTION IS ESTABLISHED.
- ALL SOIL TO BE EXPOSED OR STOCKPILED FOR A PERIOD OF GREATER THAN 14 DAYS, AND NOT UNDER ACTIVE CONSTRUCTION, WILL BE TEMPORARILY SEEDED AND HAY MULCHED OR OTHERWISE PROVIDED WITH VEGETATIVE COVER. THIS TEMPORARY COVER SHALL BE MAINTAINED UNTIL SUCH TIME WHEREBY PERMANENT RESTABILIZATION IS ESTABLISHED.
- SEEDING DATES: THE FOLLOWING SEEDING DATES ARE BEST RECOMMENDED TO ESTABLISH PERMANENT VEGETATIVE COVER WITHIN MOST LOCATIONS IN THE HEPSCD: **SPRING - 3/15-5/15** AND **FALL - 8/15-10/1**.
- SEDIMENT FENCES ARE TO BE PROPERLY TRENCHED AND MAINTAINED UNTIL PERMANENT VEGETATIVE COVER IS ESTABLISHED.
- ALL STORM DRAINAGE INLETS SHALL BE PROTECTED BY ONE OF THE PRACTICES ACCEPTED IN THE STANDARDS, AND PROTECTION SHALL REMAIN UNTIL PERMANENT STABILIZATION HAS BEEN ESTABLISHED. STORM DRAINAGE OUTLET POINTS SHALL BE PROTECTED AS REQUIRED BEFORE THEY BECOME FUNCTIONAL.
- MULCH MATERIALS SHALL BE UN-ROTTED SMALL GRAIN STRAW APPLIED AT THE RATE OF 70 TO 90 POUNDS PER 1,000 SQUARE FEET AND ANCHORED WITH A MULCH ANCHORING TOOL, LIQUID MULCH BINDERS, OR NETTING TIE DOWN. OTHER SUITABLE MATERIALS MAY BE USED IF APPROVED BY THE SOIL CONSERVATION DISTRICT.
- ALL EROSION CONTROL DEVICES SHALL BE PERIODICALLY INSPECTED, MAINTAINED AND CORRECTED BY THE CONTRACTOR. ANY DAMAGE INCURRED BY EROSION SHALL BE RECTIFIED IMMEDIATELY.
- THE HUDSON-ESSEX-PASSAIC SOIL CONSERVATION DISTRICT WILL BE NOTIFIED IN WRITING AT LEAST 48 HOURS PRIOR TO ANY SOIL DISTURBING ACTIVITIES. FAX: (973) 364-0784 OR EMAIL: INFORMATION@HEPSCD.ORG.
- THE APPLICANT MUST OBTAIN A DISTRICT ISSUED REPORT-OF-COMPLIANCE PRIOR TO APPLYING FOR THE CERTIFICATE OF OCCUPANCY OR TEMPORARY CERTIFICATE OF OCCUPANCY FROM THE RESPECTIVE MUNICIPALITY, NJ-DOA OR ANY OTHER CONTROLLING AGENCY. CONTACT THE DISTRICT AT 973-364-0786 TO REQUEST A FINAL INSPECTION GIVING ADVANCED NOTICE UPON COMPLETION OF THE RESTABILIZATION MEASURES. A PERFORMANCE DEPOSIT MAY BE POSTED WITH THE DISTRICT WHEN WINTER WEATHER OR SNOW COVER PROHIBITS THE PROPER APPLICATION OF SEED, MULCH, FERTILIZER OR HYDRO-SEED.
- PAVED ROADWAYS MUST BE KEPT CLEAN AT ALL TIMES. DO NOT ALLOW A FIRE OR GARDEN HOSE TO CLEAN ROADS WHILE THE RUNOFF IS DIRECTED TO A PROPERLY DESIGNED AND FUNCTIONING SEDIMENT BASIN. WATER PUMPED OUT OF THE EXCAVATED AREAS CONTAINS SEDIMENTS THAT MUST BE REMOVED PRIOR TO DISCHARGING TO RECEIVING BODIES OF WATER USING REMOVABLE PUMPING STATIONS, SUMP PITS, PORTABLE SEDIMENTATION TANKS AND/OR SILT CONTROL BAGS.
- ALL SURFACES HAVING LAWN OR LANDSCAPING AS FINAL COVER ARE TO BE PROVIDED TOPSOIL PRIOR TO RE-SEEDING, SODDING OR PLANTING. A DEPTH OF 5 INCHES (UNSETTLED) IS RECOMMENDED.
- ALL PLAN REVISIONS MUST BE SUBMITTED TO THE DISTRICT FOR PROPER REVIEW AND APPROVAL.
- A CRUSHED STONE WHEEL CLEANING TRACKING-PAD IS TO BE INSTALLED AT ALL SITE EXITS USING 1"-2 1/2" CRUSHED ANGULAR STONE (ASTM 2 OR 3) TO A MINIMUM LENGTH OF 50 FEET AND MINIMUM DEPTH OF 6". ALL DRIVEWAYS MUST BE PROVIDED WITH CRUSHED STONE UNTIL PAVING IS COMPLETE.
- STEEP SLOPES INCURRING DISTURBANCE MAY REQUIRE ADDITIONAL STABILIZATION MEASURES. THESE "SPECIAL" MEASURES SHALL BE DESIGNED BY THE APPLICANT'S ENGINEER AND BE APPROVED BY THE SOIL CONSERVATION DISTRICT.
- THE HUDSON-ESSEX-PASSAIC SOIL CONSERVATION DISTRICT SHALL BE NOTIFIED IN WRITING FOR THE SALE OF ANY PORTION OF THE PROJECT OR FOR THE SALE OF INDIVIDUAL LOTS. NEW OWNERS' INFORMATION SHALL BE PROVIDED. ADDITIONAL MEASURES DEEMED NECESSARY BY DISTRICT OFFICIALS SHALL BE IMPLEMENTED AS CONDITIONS WARRANT.

CONSTRUCTION SEQUENCE

EXACT TIMING FOR DEVELOPMENT OF THIS PROJECT IS NOT KNOWN AT THIS TIME. ITEMS AND DURATIONS OF CONSTRUCTION WILL OCCUR APPROXIMATELY AS FOLLOWS:

PHASE	DURATION
1. TEMPORARY SOIL EROSION FACILITIES	IMMEDIATELY
2. CONSTRUCT STABILIZED CONSTRUCTION ENTRANCE	IMMEDIATELY
3. INSTALL SILT FENCE	IMMEDIATELY
4. ROUGH CLEARING AND GRADING	3 WEEKS
5. TEMPORARY SEEDING *	IMMEDIATELY
6. SLOPE & EMBANKMENT PROTECTION	IMMEDIATELY
7. MAINTENANCE OF TEMPORARY EROSION CONTROL MEASURES	CONTINUOUSLY
8. FINAL SEEDING AND LANDSCAPING	4 MONTHS 2 WEEKS

*TEMPORARY SEEDING SHALL ALSO BE PERFORMED WHEN NECESSARY IN ACCORDANCE WITH NOTE NO. 2 OF THE SOIL EROSION AND SEDIMENT CONTROL NOTES.

SPPP REQUIRED INSPECTIONS AND REPORTS

- ROUTINE INSPECTIONS
 - THE PERMITTEE SHALL CONDUCT AND DOCUMENT ROUTINE INSPECTIONS OF THE FACILITY TO IDENTIFY AREAS CONTRIBUTING TO THE STORMWATER DISCHARGE AUTHORIZED BY THIS PERMIT AND EVALUATE WHETHER THE STORMWATER POLLUTION PREVENTION PLAN (SPPP) IDENTIFIED UNDER § 1.1 OF THE 563-CONSTRUCTION ACTIVITY STORMWATER (GP) PART 1 NARRATIVE REQUIREMENTS INCLUDING THIS SOIL EROSION AND SEDIMENT CONTROL PLAN IS BEING PROPERLY IMPLEMENTED AND MAINTAINED, OR WHETHER ADDITIONAL MEASURES ARE NEEDED TO IMPLEMENT THE SPPPP. (ROUTINE INSPECTIONS MINIMUM WEEKLY).
 - HIGH ACID PRODUCING SOILS WITH A pH OF 4 OR LESS, OR CONTAINING IRON SULFIDE, (INCLUDING BORROW FROM CUTS) SHALL BE ULTIMATELY PLACED OR BURIED WITH LIMESTONE APPLIED AT A RATE OF 6 TONS PER ACRE (OR 275 POUNDS PER 1,000 SQUARE FEET OF SURFACE AREA) AND COVERED WITH A MINIMUM OF 12 INCHES OF SETTLED SOIL WITH A pH OF 5 OR MORE EXCEPT AS FOLLOWS:
HIGH ACID PRODUCING SOILS WITH A pH OF 4 OR LESS, OR CONTAINING IRON SULFIDE, (INCLUDING BORROW FROM CUTS) SHALL BE ULTIMATELY PLACED OR BURIED WITH LIMESTONE APPLIED AT A RATE OF 6 TONS PER ACRE (OR 275 POUNDS PER 1,000 SQUARE FEET OF SURFACE AREA) AND COVERED WITH A MINIMUM OF 12 INCHES OF SETTLED SOIL WITH A pH OF 5 OR MORE EXCEPT AS FOLLOWS:
OTHER RECORD-KEEPING REQUIREMENTS
 - THE CONTRACTOR SHALL KEEP THE FOLLOWING RECORDS RELATED TO CONSTRUCTION ACTIVITIES AT THE SITE:
 - DATES WHEN MAJOR GRADING ACTIVITIES OCCUR AND THE AREAS WHICH WERE GRADED
 - DATES AND DETAILS CONCERNING THE INSTALLATION OF STRUCTURAL CONTROLS
 - DATES WHEN CONSTRUCTION ACTIVITIES CEASE IN AN AREA
 - DATES WHEN AN AREA IS STABILIZED, EITHER TEMPORARILY OR PERMANENTLY
 - DATES OF RAINFALL AND THE AMOUNT OF RAINFALL
 - DATES AND DESCRIPTIONS OF THE CHARACTER AND AMOUNT OF ANY SPILLS OF HAZARDOUS MATERIALS
 - RECORDS OF REPORTS FILED WITH REGULATORY AGENCIES IF REPORTABLE QUANTITIES OF HAZARDOUS MATERIALS SPILLED
 - A VISIBLE SIGN SHALL BE POSTED ON THE SITE TO IDENTIFY THE LOCATION OF SPPPP
 - ANNUAL REPORTS AND CERTIFICATIONS.
 - THE PERMITTEE SHALL PREPARE AN ANNUAL REPORT SUMMARIZING EACH INSPECTION PERFORMED UNDER THIS REPORT SHALL BE SUBMITTED BY AN ANNUAL CERTIFICATION, ON A FORM PROVIDED BY THE NJDEP THAT THE FACILITY IS IN COMPLIANCE WITH THIS SPPPP AND THIS PERMIT, EXCEPT THAT IF THERE ARE ANY INCIDENTS OF NONCOMPLIANCE, THOSE INCIDENTS SHALL BE IDENTIFIED IN THE CERTIFICATION. IF THERE ARE INCIDENTS OF NONCOMPLIANCE, THE REPORT SHALL IDENTIFY THE STEPS BEING TAKEN TO REMEDY THE NONCOMPLIANCE. THE REPORT SHALL BE SIGNED AND DATED BY THE PERMITTEE IN ACCORDANCE WITH N.J.A.C. 7:14A-4.3, AND SHALL BE MAINTAINED FOR A PERIOD OF AT LEAST FIVE YEARS ALONG WITH COPIES OF ALL OTHER REPORTS AND RECORD KEEPING. THIS PERIOD MAY BE EXTENDED BY WRITTEN REQUEST FROM THE DEPARTMENT AT ANY TIME (SEE N.J.A.C. 7:14A-6.6)
 - REPORTS OF NONCOMPLIANCE
 - ALL INSTANCES OF NONCOMPLIANCE NOT REPORTED UNDER N.J.A.C. 7:140A-6.10 SHALL BE REPORTED TO THE DEPARTMENT ANNUALLY.
 - NOTIFICATION OF COMPLETION
 - THE SOIL CONSERVATION DISTRICT WILL PROVIDE THE DEPARTMENT A COPY OF THE REPORT OF COMPLIANCE ISSUED UNDER N.J.A.C. 2:30-1 FOR COMPLETED CONSTRUCTION ACTIVITIES, EXCEPT SINGLE FAMILY HOME CONSTRUCTION UNDER 2,000 SQ. FT. BELOW. THE REPORT OF COMPLIANCE SHALL SERVE AS THE NOTIFICATION OF COMPLETION.
 - THE BUILDER OF A SINGLE FAMILY HOME THAT IS AUTHORIZED UNDER THIS PERMIT, BUT NOT WITHIN THE DEFINITION OF "PROJECT" AT N.J.S.A. 42A-41G, SHALL SEND A COPY OF THE FINAL REPORT OF COMPLIANCE TO THE SOIL CONSERVATION DISTRICT. THE SOIL CONSERVATION DISTRICT WILL PROVIDE A COPY OF THE FINAL CERTIFICATE OF OCCUPANCY TO THE DEPARTMENT, WHICH WILL SERVE AS NOTIFICATION OF COMPLETION.
 - THE DOT SHALL PROVIDE WRITTEN NOTIFICATION TO THE DEPARTMENT WHEN DOT CERTIFIED PROJECTS ARE COMPLETED.

MITIGATION NOTES FOR ACIDIC SOIL

- LIMIT THE EXCAVATION AREA AND EXPOSURE TIME WHEN HIGH ACID PRODUCING SOILS ARE ENCOUNTERED.
- TOPSOIL, STRIPPED FROM THE SITE SHALL BE STORED SEPARATELY FROM TEMPORARILY STOCKPILED HIGH ACID PRODUCING SOILS.
- STOCKPILES OF HIGH ACID PRODUCING SOIL SHOULD BE LOCATED ON LEVEL LAND TO MINIMIZE ITS MOVEMENT, ESPECIALLY WHEN THIS MATERIAL HAS A HIGH CLAY CONTENT.
- TEMPORARILY STOCKPILED HIGH ACID PRODUCING SOIL MATERIAL TO BE EXPOSED MORE THAN 30 DAYS SHOULD BE COVERED WITH PROPERLY ANCHORED, HEAVY GRADE SHEETS OF POLYETHYLENE WHERE POSSIBLE. IF NOT POSSIBLE, STOCKPILES SHALL BE COVERED WITH A MINIMUM OF 3 TO 6 INCHES OF WOOD CHIPS TO MINIMIZE EROSION OF THE STOCKPILE. SILT FENCE SHALL BE INSTALLED AT THE TOE OF SLOPE TO CONTAIN MOVEMENT OF THE STOCKPILED MATERIAL. TOPSOIL SHALL NOT BE APPLIED TO THE STOCKPILES TO PREVENT TOPSOIL CONTAMINATION WITH HIGH ACID PRODUCING SOIL.
- HIGH ACID PRODUCING SOILS WITH A pH OF 4 OR LESS, OR CONTAINING IRON SULFIDE, (INCLUDING BORROW FROM CUTS) SHALL BE ULTIMATELY PLACED OR BURIED WITH LIMESTONE APPLIED AT A RATE OF 6 TONS PER ACRE (OR 275 POUNDS PER 1,000 SQUARE FEET OF SURFACE AREA) AND COVERED WITH A MINIMUM OF 12 INCHES OF SETTLED SOIL WITH A pH OF 5 OR MORE EXCEPT AS FOLLOWS:
 - AREAS WHERE TREES OR SHRUBS ARE TO BE PLANTED SHALL BE COVERED WITH A MINIMUM OF 24 INCHES OF SOIL WITH A pH OF 5 OR MORE.
 - DISPOSAL AREAS SHALL NOT BE LOCATED WITHIN 24 INCHES OF ANY SURFACE OF A SLOPE OR BANK, SUCH AS BERMS, STREAM BANKS, DITCHES AND OTHERS TO PREVENT POTENTIAL LATERAL LEACHING DAMAGES.
- EQUIPMENT USED FOR MOVEMENT OF HIGH ACID PRODUCING SOILS SHOULD BE CLEANED AT THE END OF EACH DAY TO PREVENT SPREADING OF HIGH ACID SOIL MATERIALS TO OTHER PARTS OF THE SITE, INTO STREAMS, OR STORMWATER CONVEYANCES AND TO PROTECT MACHINERY FROM ACCELERATED RUSTING.
- NON VEGETATIVE EROSION CONTROL PRACTICES (STONE TRACKING PADS, STRATEGICALLY PLACED LIMESTONE CHECK DAM, SILT FENCE, WOOD CHIPS) SHOULD BE INSTALLED TO LIMIT THE MOVEMENT OF HIGH ACID PRODUCING SOILS FROM AROUND OR OFF THE SITE.
- FOLLOWING BURIAL OR REMOVAL OF HIGH ACID PRODUCING SOIL, TOPSOILING AND SEEDING OF THE SITE, (SEE TEMPORARY VEGETATIVE COVER FOR SOIL STABILIZATION, PG. 7-1, PERMANENT VEGETATIVE COVER FOR SOIL STABILIZATION, PG. 4-1 AND STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL IN NEW LATEST EDITION). MONITORING SHOULD CONTINUE FOR APPROXIMATELY 6 TO 12 MONTHS TO ASSURE THERE IS ADEQUATE STABILIZATION AND THAT NO HIGH ACID SOIL PROBLEMS EMERGE. IF PROBLEMS STILL EXIST THE AFFECTED AREA MUST BE TREATED AS INDICATED ABOVE TO CORRECT THE PROBLEM.
- MONITORING OF AREAS WHERE HIGH ACID PRODUCING SOIL HAS BEEN PLACED OR BURIED SHOULD BE PERFORMED FOR AT LEAST 2 YEARS OR LONGER IF PROBLEMS OCCUR, TO ASSURE THERE IS NO MIGRATION OF POTENTIAL ACID LEACHATE.

CONSTRUCTION SITE WASTE CONTROL COMPONENT OF THE STORMWATER POLLUTION PREVENTION PLAN (SPPP)

(THIS IS FOR CONSTRUCTION WASTE ONLY)

- THE CONSTRUCTION SITE WASTE CONTROL COMPONENT OF THE SPPPP CONSISTS OF THE REQUIREMENTS UNDER 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 839, 840, 841, 842, 843, 844, 845, 846, 847, 848, 849, 850, 851, 852, 853, 854, 855, 856, 857, 858, 859, 860, 861, 862, 863, 864, 865, 866, 867, 868, 869, 870, 871, 872, 873, 874, 875, 876, 877, 878, 879, 880, 881, 882, 883, 884, 885, 886, 887, 888, 889, 890, 891, 892, 893, 894, 895, 896, 897, 898, 899, 900, 901, 902, 903, 904, 905, 906, 907, 908, 909, 910, 911, 912, 913, 914, 915, 916, 917, 918, 919, 920, 921, 922, 923, 924, 925, 926, 927, 928, 929, 930, 931, 932, 933, 934, 935, 936, 937, 938, 939, 940, 941, 942, 943, 944, 945, 946, 947, 948, 949, 950, 951, 952, 953, 954, 955, 956, 957, 958, 959, 960, 961, 962, 963, 964, 965, 966, 967, 968, 969, 970, 971, 972, 973, 974, 975, 976, 977, 978, 979, 980, 981, 982, 983, 984, 985, 986, 987, 988, 989, 990, 991, 992, 993, 994, 995, 996, 997, 998, 999, 1000.

STANDARD FOR STABILIZATION WITH MULCH ONLY

- DEFINITION
- STABILIZING EXPOSED SOILS WITH NON-VEGETATIVE MATERIALS.
- PURPOSE
- TO PROTECT EXPOSED SOIL SURFACES FROM EROSION DAMAGE AND TO REDUCE OFFSITE ENVIRONMENTAL DAMAGE.
- CONDITIONS WHERE PRACTICE APPLIES
- THIS PRACTICE IS APPLICABLE TO AREAS SUBJECT TO EROSION, WHERE THE SEASON AND OTHER CONDITIONS MAY NOT BE SUITABLE FOR GROWING AN EROSION-RESISTANT COVER OR WHERE STABILIZATION IS NEEDED FOR A SHORT PERIOD UNTIL MORE SUITABLE PROTECTION CAN BE APPLIED. SUCH CONDITIONS INCLUDE AREAS WHERE FLOWING WATER COULD WASH THEM.

METHODS AND MATERIALS

- SITE PREPARATION
 - GRADE, AS NEEDED AND FEASIBLE, TO PERMIT THE USE OF CONVENTIONAL EQUIPMENT FOR APPLYING AND ANCHORING MULCH. ALL GRADING SHOULD BE DONE IN ACCORDANCE WITH STANDARD FOR LAND GRADING, PAGE 19.1.
 - EMPLOY NEEDED EROSION CONTROL PRACTICES SUCH AS DIVERSIONS, GRADE STABILIZATION STRUCTURES, CHANNEL STABILIZATION STRUCTURES, SEDIMENT BASINS AND WATERWAYS. SEE STANDARDS 11 THROUGH 42.
- PROTECTIVE MATERIALS
 - UNROTTED SMALL-GRAIN STRAW, HAY OR SALT HAY AT 2.0 TO 2.5 TONS PER ACRE, APPLIED UNIFORMLY AT 80 TO 115 POUNDS PER 1,000 SQUARE FEET AND ANCHORED WITH A MULCH ANCHORING TOOL, LIQUID MULCH BINDERS OR NETTING TIEDOWN. OTHER SUITABLE MATERIALS MAY BE USED IF APPROVED BY THE SOIL CONSERVATION DISTRICT.
 - ASPHALT EMULSION OR OUTBACK ASPHALT IS RECOMMENDED AT THE RATE OF 600 TO 1,200 GALLONS PER ACRE. THIS IS SUITABLE FOR A LIMITED PERIOD OF TIME WHERE TRAVEL BY PEOPLE, ANIMALS OR MACHINES IS NOT A PROBLEM.
 - SYNTHETIC OR ORGANIC SOIL STABILIZERS MAY BE USED - UNDER SUITABLE CONDITIONS AND IN SUFFICIENT QUANTITIES.
 - WOOD-FIBER OR PAPER-FIBER MULCH AT A RATE OF 1,500 POUNDS PER ACRE MAY BE APPLIED BY A HYDROSEEDER OR HYDROMULCHING.
 - MULCH NETTING, SUCH AS PAPER JUTE, EXCELSDUR, COTTON OR PLASTIC, MAY BE USED.
 - WOODCHIPS APPLIED UNIFORMLY TO A MINIMUM DEPTH OF 2 INCHES MAY BE USED.
 - GRAVEL, CRUSHED STONE OR SLAG AT THE RATE OF 9 CUBIC YARDS PER 1,000 SQ. FT. APPLIED UNIFORMLY TO A MINIMUM DEPTH OF 3 INCHES MAY BE USED. SIZE 2 OR 3 (ASTM C-33) IS RECOMMENDED.
- MULCH ANCHORING
 - MULCH ANCHORING SHOULD BE ACCOMPLISHED IMMEDIATELY AFTER PLACEMENT OF HAY OR STRAW TO MINIMIZE LOSS BY WIND OR WATER. THIS MAY BE DONE BY ONE OF THE FOLLOWING METHODS, DEPENDING UPON THE SIZE OF THE AREA AND STEEPNESS OF SLOPES.
 - PEG AND TWINE - DRIVE 8 TO 10 INCH WOODEN PEGS TO WITHIN 2 TO 3 INCHES OF THE SOIL SURFACE EVERY 4 FEET IN ALL DIRECTIONS. STAKES MAY BE DRIVEN BEFORE OR AFTER APPLYING MULCH. SECURE MULCH TO SOIL SURFACE BY STRETCHING TWINE BETWEEN PEGS IN A CROSS-CROSS AND A SQUARE PATTERN. SECURE TWINE AROUND EACH PEG WITH TWO OR MORE ROUND TURNS.
 - MULCH NETTINGS - STAPLE PAPER, COTTON, OR PLASTIC NETTINGS OVER HAY OR STRAW MULCH. USE A DEGRADABLE NETTING IN AREAS TO BE MOVED. NETTING IS USUALLY AVAILABLE IN ROLLS 4 FEET WIDE AND UP TO 300 FEET LONG.
 - MULCH ANCHORING TOOL - A TRACTOR-DRAWN IMPLEMENT ESPECIALLY DESIGNED TO PUNCH AND ANCHOR MULCH INTO THE SOIL SURFACE. THIS PRACTICE AFFORDS MAXIMUM EROSION CONTROL, BUT ITS USE IS LIMITED TO THOSE SLOPES UPON WHICH THE TRACTOR CAN OPERATE SAFELY. TOOL PENETRATION SHOULD BE ABOUT 3 TO 4 INCHES. ON SLOPING LAND, THE OPERATION SHOULD BE DONE ON THE CONTOUR.
 - E. LIQUID MULCH-BINDERS
 - APPLICATIONS SHOULD BE HEAVIER AT EDGES WHERE WIND CATCHES THE MULCH, IN VALLEYS AND AT CRESTS OF BANKS. REMAINDER OF AREA SHOULD BE UNIFORM IN APPEARANCE.
 - USE OF ONE OF THE FOLLOWING:
 - EMULSIFIED ASPHALT - (SS-1, CSS-1, CMS-2, MS-2, RS-1, RS-2, CRS-1 AND CRS-2).
 - APPLY 0.04 GAL/SQ.YD. OR 184 GAL/ACRE ON FLAT SLOPES AND SLOPES LESS THAN 8 FEET HIGH. ON SLOPES 8 FEET OR MORE HIGH USE 0.075 GAL/SQ. YD. OR 363 GAL/ACRE.
 - ORGANIC AND VEGETABLE BASED BINDERS - NATURALLY OCCURRING, POWDER BASED, HYDROPHILIC MATERIALS. VEGETABLE BASED GELS SHALL BE APPLIED AT RATES AND WEATHER CONDITIONS RECOMMENDED BY THE MANUFACTURER.
 - SYNTHETIC OR ORGANIC BINDERS - BINDERS SUCH AS CURASOL, DCA-70, PETRO-SET AND TERRA-TACK MAY BE USED AT RATES RECOMMENDED BY THE MANUFACTURER TO ANCHOR MULCH MATERIALS. NOTE: ALL NAMES GIVEN ABOVE ARE REGISTERED TRADE NAMES. THIS DOES NOT CONSTITUTE A RECOMMENDATION OF THESE PRODUCTS TO THE EXCLUSION OF OTHER PRODUCTS.

STANDARD FOR SEEDING SPECIFICATIONS

- TEMPORARY SEEDING
- TEMPORARY VEGETATIVE COVER SHALL CONSIST OF PERENNIAL RYEGRASS APPLIED UNIFORMLY AT A RATE OF 1.0 POUND PER 1,000 SQ. FT. (40 lbs/Ac.), IN ACCORDANCE WITH TABLE 7-2, PAGE 7-3.
- LIMESTONE (PULVERIZED DOLOMITIC EQUIVALENT TO 50 PERCENT CALCIUM PLUS MAGNESIUM OXIDES) SHALL BE APPLIED AT THE RATE OF 45 lbs/1,000 SQ. FT. (1 TON/AC.) IN ACCORDANCE WITH TABLE 7-1, PAGE 7.2.
- FERTILIZER (10-20-10 OR EQUIVALENT) AT THE RATE OF 11 lbs/1,000 SQ. FT. (500 lbs/Ac.) OR EQUIVALENT WITH 50% WATER INSOLUBLE NITROGEN, IN ACCORDANCE WITH PARAGRAPH 24, PAGE 7-1.
- MULCHING IS REQUIRED ON ALL SEEDING AND SHALL BE ACCOMPLISHED AS FOLLOWS:
- MULCH MATERIALS SHOULD BE UNROTTED SALT HAY, HAY, OR SMALL GRAIN STRAW AT A RATE OF 1-1/2 TO 2 TONS PER ACRE, OR 70 TO 90 POUNDS PER 1,000 SQUARE FOOT. MULCH BLOWERS SHOULD NOT GRIND OR CHOP THE MATERIAL.
 - SEED UNIFORMLY BY HAND OR MECHANICALLY SO THAT APPROXIMATELY 85 PERCENT OF THE SOIL SURFACE WILL BE COVERED. FOR UNIFORM DISTRIBUTION OF HAND SPREAD MULCH, DIVIDE AREA INTO APPROXIMATELY 1,000 SQUARE FOOT SECTIONS AND DISTRIBUTE 70 TO 90 POUNDS WITHIN EACH SECTION.
 - MULCH ANCHORING SHALL BE ACCOMPLISHED USING EITHER PEG AND TWINE, MULCH NETTING, MULCH-ANCHORING COLLIER TOOL OR LIQUID MULCH-BINDERS, PER THE ACCOMPANYING "STABILIZATION WITH MULCH ONLY" SPECIFICATION.
 - * OPTIMUM SEEDING DATES: 3/1 - 5/15 AND 8/15 - 10/1

PERMANENT SEEDING

- TOPSOIL TO BE PLACED TO A DEPTH OF 4 INCHES ON EXPOSED SOILS UPON COMPLETION OF FINAL GRADING.
- SEED IS TO BE UNIFORMLY APPLIED TO THE NORMAL DEPTH OF 1/4 INCH TO 1/2 INCH (EXCEPT HYDRO SEEDING) ZONE 6B SEED MIXTURE 17, AS SHOWN ON PAGE 4-12 IN THE SOIL EROSION STANDARDS. THE SEEDING RATE SHALL BE:

SEED MIXTURE	PLANTING RATE LBS PER ACRE	LBS PER 1,000 SQ. FT.
HARD FESCUE	120	2.7
CREeping FESCUE	30	0.7
PERENNIAL RYEGRASS	10	0.25

 - * OPTIMAL SEEDING DATES: 3/1 - 4/30 AND 8/15 - 10/15
- MULCHING WILL BE ACCOMPLISHED PER THE BELOW TEMPORARY SEEDING SPECIFICATION.
 - * MAY BE PLANTED THROUGHOUT SUMMER IF SOIL MOISTURE IS ADEQUATE OR SOIL CAN BE IRRIGATED.

SOIL PREPARATION

SUITABLE EQUIPMENT WILL BE USED TO PREPARE A REASONABLE, UNIFORM, FINE SEED BED TO A MINIMUM DEPTH OF 4 INCHES.

APPLY GRADUAL LIMESTONE AND FERTILIZER ACCORDING TO SOIL TEST RECOMMENDATIONS. FERTILIZER SHALL BE APPLIED AT THE RATE OF 400 POUNDS PER ACRE OR 11 POUNDS PER 1,000 SQUARE FEET USING 10-20-10 OR EQUIVALENT WITH 50% WATER INSOLUBLE NITROGEN UNLESS A SOIL TEST INDICATES OTHERWISE. LIME SHALL BE PULVERIZED DOLOMITIC LIMESTONE. CALCIUM CARBONATE IS THE EQUIVALENT AND STANDARD FOR MEASURING THE ABILITY OF LIMING MATERIALS TO NEUTRALIZE SOIL ACIDITY AND SUPPLY CALCIUM AND MAGNESIUM TO GRASSES AND LEGUMES. THE FOLLOWING TABLE IS A GENERAL GUIDELINE FOR LIMESTONE APPLICATION RATES:

SOIL TEXTURE	TONS/ACRE	LBS./1000 SQ. FT.
CLAY, CLAY LOAM, & HEAVY ORGANIC SOIL	3	135
SANDY LOAM, LOAM, SILT LOAM	2	90
LOAMY SAND, SAND	1	45

WORK LIME AND FERTILIZER INTO THE TOPSOIL AS NEARLY AS PRACTICAL TO A DEPTH OF 4 INCHES WITH A DISC,