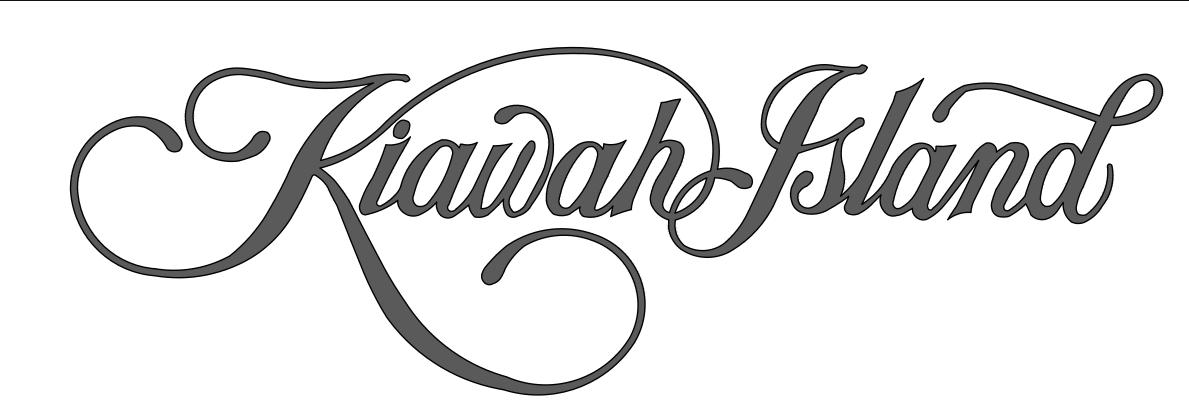
Submitted for Site Plan Review



# SITE DEVELOPMENT OF OCEAN PINES

KIAWAH ISLAND, SOUTH CAROLINA

PREPARED FOR:

KRA, LP

KIAWAH ISLAND PARKWAY

KIAWAH ISLAND, SC 29455

(843) 768-3418

TM# 207-05-00-118

NOVEMBER 8, 2022

J-25854.0000

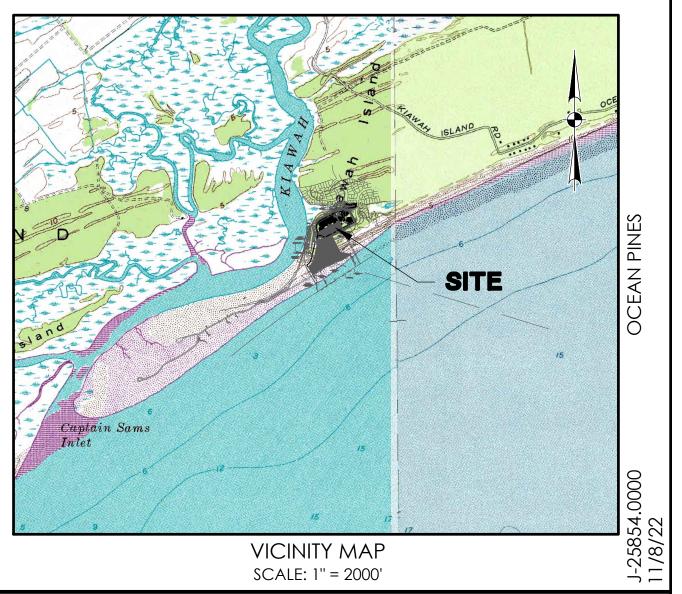
PREPARED BY:





J	THOMAS	S	HUT	TON
	Engineering   Surveying			

	REVISION HISTORY				
REV. NO.	REVISION	BY	DATE		



Sheet List Table				
Sheet Number Sheet Title				
C0	Cover Sheet			
G0.1	General Notes and Project Map			
G0.2	Master Plan			
G0.3	Existing Conditions			
G1.1	Water and Sewer Master Plan			
Hart Howerton	Site Coverage Exhibit			
EC0.1	SWPPP - Notes			
EC0.2	SWPPP - Notes and Details			
EC1.1	SWPPP - Initial Land Disturbance Phase			
EC1.2	SWPPP - Initial Land Disturbance Phase			
EC2.1	SWPPP - Construction Phase			
EC2.2	SWPPP - Construction Phase			
EC3.1	SWPPP - Stabilization Phase			
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EC4.1	SWPPP - Details			
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C3.1	Site Development Plan			
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C3.3	Drainage Profiles			
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C5.4	Sewer Details			

SUBMITTAL HISTOR	Υ
SUBMITTED TO TOKI	9-8-202
SUBMITTED TO TOKI	8-8-202
SUBMITTED TO TOKI	5-26-202
SUBMITTED TO DHEC	4-24-202
SUBMITTED TO DHEC/OCRM	11-8-202
SUBMITTED TO	DATE





682 Johnnie Dodds Boulevard • Suite 100 Mt. Pleasant, SC 29464 p.843.849.0200 f.843.849.0203

www.thomasandhutton.com

	er Review	PARKING SPACES REQUIRED					
<del>Submitted</del> JILDING	d for Site Plan Review <u>USEAGE</u>	PARKING REQUIREMENT	CA	LCULATIO	<u>N</u>	<u>SPACES</u>	
Α	MULTIPLE FAMILY	1.75 OR 2 SPACES PER BEDROOM TYPE	2 BDRM 9XI.75=I5.75	3 BDRM 3X2=6	4 BDRM 2X2=4	26	
В	MULTIPLE FAMILY	1.75 OR 2 SPACES PER BEDROOM TYPE	9XI.75=I5.75	3X2=6	2X2=4	26	
С	MULTIPLE FAMILY	1.75 OR 2 SPACES PER BEDROOM TYPE	4XI.75=7	4X2=8	-	15	
D	MULTIPLE FAMILY	1.75 OR 2 SPACES PER BEDROOM TYPE	4XI.75=7	4X2=8	-	15	
E	MULTIPLE FAMILY	1.75 OR 2 SPACES PER BEDROOM TYPE	4XI.75=7	4X2=8	-	15	
F	MULTIPLE FAMILY	1.75 OR 2 SPACES PER BEDROOM TYPE	4XI.75=7	4X2=8	-	15	
G	MULTIPLE FAMILY	1.75 OR 2 SPACES PER BEDROOM TYPE	3XI.75=5.25	5X2=I0	-	16	
Н	MULTIPLE FAMILY	1.75 OR 2 SPACES PER BEDROOM TYPE	3XI.75=5.25	5X2=I0	-	16	
J	MULTIPLE FAMILY	1.75 OR 2 SPACES PER BEDROOM TYPE	3XI.75=5.25	5X2=I0	-	16	
				TOTAL SPA	ACES REQUIRED:	160	
ACCESSIBLE SPACES REQUIRED: 160/25						7	
		PARKING SPACES PROVIDED					
ITEM PROPOSED LOCATION ACCESSIBLE SPACES				ACES_	SPACES*		
A	SPACES PR	OVIDED WITHIN BUILDING FOOTPRINT	2			25	
В	SPACES PR	OVIDED WITHIN BUILDING FOOTPRINT		2		25	
С	SPACES PR	OVIDED WITHIN BUILDING FOOTPRINT	2			13	
D	SPACES PR	OVIDED WITHIN BUILDING FOOTPRINT	2			13	
E	SPACES PR	OVIDED WITHIN BUILDING FOOTPRINT	2			13	
	SPACES PR	OVIDED WITHIN BUILDING FOOTPRINT	2			13	
F	SPACES PROVIDED WITHIN BUILDING FOOTPRINT			2			
F G	SPACES PR	SPACES PROVIDED WITHIN BUILDING FOOTPRINT			2		
		OVIDED WITHIN BUILDING FOOTPRINT		2			
G	SPACES PR	OVIDED WITHIN BUILDING FOOTPRINT OVIDED WITHIN BUILDING FOOTPRINT		2		14	
G H	SPACES PR			2		14 31	

«★ON SITE SPACES PROVIDED TO MEET SUPPLEMENTARY PARKING REQUIREMENTS FOR THE CAPE, INCLUDING IO SPACES FOR THE RESTAURANT IN THE CLUB AND 4 SPACES FOR TWO SINGLE-FAMILY COTTAGES.

<u>SEWER LEGEND</u>					
DESCRIPTION	<u>EXISTING</u>	PROPOSED			
GRAVITY PIPE	ss	-			
SINGLE SERVICE LATERAL					
DOUBLE SERVICE LATERAL	<u> </u>	<del></del>			
MANHOLE		•			
CLEANOUT	O₁	<b>•</b> +			

<u>WATER LEGEND</u>				
DESCRIPTION	EXISTING	PROPOSED		
WATER MAIN	10"W			
SINGLE SERVICE LATERAL				
DOUBLE SERVICE LATERAL	<u>&gt;</u>	>		
VALVE AND BOX	$\otimes$	•		
FIRE HYDRANT W/VALVE & BOX	$\otimes$ - $\varphi$ -	ۥ		
POST HYDRANT	) H	<b>&gt;</b>		
REDUCER		•		
BACKFLOW PREVENTOR				
CROSS	I_I	1_1		
TEE		1-1		
90° BEND - HORIZONTAL	_	_		
45° BEND - HORIZONTAL	/	/1		
22-½° BEND - HORIZONTAL	/	/		
I-¼° BEND - HORIZONTAL	/	1 1		
BEND - VERTICAL	11	1.1		
CAP				

	<u>ABBREVIATIONS</u>				
HDPE	HIGH DENSITY POLYETHELENE	LF	LINEAR FEET	SF	SQUARE FEET
вот	воттом	MAX	MAXIMUM	ss	SANITARY SEWER
CI	CURB INLET	MIN	MINIMUM	тс	TOP OF CURB
СРР	CORRUGATED PLASTIC PIPE	мн	MANHOLE	TG	TOP OF GUTTER
DIP	DUCTILE IRON PIPE	ос	ON CENTER	TP	TOP OF PAVEMENT
EL	ELEVATION	PC	POINT OF CURVE	TW	TOP OF WALK
FG	FINISH GRADE	PH	POST HYDRANT	TYP	TYPICAL
FH	FIRE HYDRANT	PT	POINT OF TANGENT	w	WATER
FM	FORCE MAIN (SANITARY SEWER)	PVC	POLYVINYL CHLORIDE	w/	WITH
FR	FRAME	RCP	REINFORCED CONCRETE PIPE	wv	WATER VALVE
GI	GRATE INLET	RJP	RESTRAINED JOINT PIPE	YI	YARD INLET
GV	GATE VALVE	R/W	RIGHT-OF-WAY		
INV	INVERT ELEVATION	SD	STORM DRAINAGE		
JB	JUNCTION BOX	SDMH	STORM DRAINAGE MANHOLE		

DRAINAGE LEGEND					
DESCRIPTION	EXISTING	PROPOSED			
PIPE					
DITCH					
CURB INLET	0	•			
GRATE INLET					
JUNCTION BOX	0	•			
OUTLET STRUCTURE					

ABBREVIATIONS				
HIGH DENSITY POLYETHELENE	LF	LINEAR FEET	SF	SQUARE FEET
воттом	MAX	MAXIMUM	ss	SANITARY SEWER
CURB INLET	MIN	MINIMUM	тс	TOP OF CURB
CORRUGATED PLASTIC PIPE	МН	MANHOLE	TG	TOP OF GUTTER
DUCTILE IRON PIPE	ос	ON CENTER	ТР	TOP OF PAVEMENT
ELEVATION	PC	POINT OF CURVE	TW	TOP OF WALK
FINISH GRADE	PH	POST HYDRANT	TYP	TYPICAL
FIRE HYDRANT	PT	POINT OF TANGENT	w	WATER
FORCE MAIN (SANITARY SEWER)	PVC	POLYVINYL CHLORIDE	w/	WITH
FRAME	RCP	REINFORCED CONCRETE PIPE	wv	WATER VALVE
GRATE INLET	RJP	RESTRAINED JOINT PIPE	YI	YARD INLET
GATE VALVE	R/W	RIGHT-OF-WAY		
INVERT ELEVATION	SD	STORM DRAINAGE		
JUNCTION BOX	SDMH	STORM DRAINAGE MANHOLE		
	HIGH DENSITY POLYETHELENE BOTTOM  CURB INLET  CORRUGATED PLASTIC PIPE  DUCTILE IRON PIPE  ELEVATION  FINISH GRADE  FIRE HYDRANT  FORCE MAIN (SANITARY SEWER)  FRAME  GRATE INLET  GATE VALVE  INVERT ELEVATION	HIGH DENSITY POLYETHELENE  BOTTOM  CURB INLET  CORRUGATED PLASTIC PIPE  MH  DUCTILE IRON PIPE  CELEVATION  FINISH GRADE  FIRE HYDRANT  FORCE MAIN (SANITARY SEWER)  FRAME  GRATE INLET  GATE VALVE  INVERT ELEVATION  LF  MAX  MAX  MAX  EF  CF  MH  PC  PC  FMH  PC  FRAME  RCP  RCP  RCP  R/W  INVERT ELEVATION  SD	HIGH DENSITY POLYETHELENE  BOTTOM  CURB INLET  MIN MINIMUM  CORRUGATED PLASTIC PIPE  MH MANHOLE  DUCTILE IRON PIPE  COC ON CENTER  ELEVATION  PC POINT OF CURVE  FINISH GRADE  FIRE HYDRANT  FORCE MAIN (SANITARY SEWER)  FRAME  GRATE INLET  GATE VALVE  INVERT ELEVATION  LF LINEAR FEET  MAX  MAXIMUM  MINIMUM  MANHOLE  ON CENTER  PP POINT OF TANGENT  POINT OF TANGENT  PVC POLYVINYL CHLORIDE  RCP REINFORCED CONCRETE PIPE  R/W RIGHT-OF-WAY  INVERT ELEVATION  SD STORM DRAINAGE	HIGH DENSITY POLYETHELENE  BOTTOM  MAX  MAXIMUM  SS  CURB INLET  MIN  MINIMIMUM  TC  CORRUGATED PLASTIC PIPE  MH  MANHOLE  TG  DUCTILE IRON PIPE  OC  ON CENTER  TP  ELEVATION  PC  POINT OF CURVE  TW  FINISH GRADE  PH  POST HYDRANT  TYP  FIRE HYDRANT  PT  POINT OF TANGENT  W  FORCE MAIN (SANITARY SEWER)  PVC  POLYVINYL CHLORIDE  W/  FRAME  RCP  REINFORCED CONCRETE PIPE  WV  GRATE INLET  RJP  RESTRAINED JOINT PIPE  YI  GATE VALVE  INVERT ELEVATION  SD  STORM DRAINAGE

# OTHER UTILITIES LEGEND

DESCRIPTION	EXISTING
NATURAL GAS	UGG UGG
TELEPHONE	——— ОНТ ——— ОНТ ———
UNDERGROUND TELEPHONE	UTL UTL
ELECTRICITY	——————————————————————————————————————
UNDERGROUND ELECTRICITY	——————————————————————————————————————

DESCRIPTION	EXISTING
NATURAL GAS	UGG UGG
TELEPHONE	——————————————————————————————————————
UNDERGROUND TELEPHONE	UTL UTL
ELECTRICITY	——————————————————————————————————————
UNDERGROUND ELECTRICITY	——————————————————————————————————————

#### <u>OWNER:</u> KRA, LP CHARLESTON COUNTY TOWN TOWN OF KIAWAH ISLAND (843) 768-3418 R2 ZONING ZONING DISTRICT 207-05-00-118 TMS

THOMAS & HUTTON (843) 849-0200

- II. CONTRACTOR SHALL GRADE AREAS TO DRAIN FOR POSITIVE FLOW PRIOR TO FINAL APPROVAL.
- 12. ALL TRAFFIC CONTROL SIGNS AND PAVEMENT MARKINGS SHALL BE IN ACCORDANCE WITH THE MANUAL ON "UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS" AND "SOUTH CAROLINA MANUAL ON

9. THE CONTRACTOR SHALL INSTALL ALL EROSION CONTROL AND PREVENTION STRUCTURES SHOWN ON THE

IO. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IF UNSUITABLE MATERIAL IS DISCOVERED PRIOR TO BEGINNING ANY REMOVAL OPERATION.

UNIFORM TRAFFIC CONTROL DEVICES" BOTH CURRENT EDITIONS.

13. ALL DRAINAGE WILL BE MADE FUNCTIONAL DAILY AS WORK PROGRESSES.

14. ALL MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH TOWN OF KIAWAH ISLAND ROAD CODE.

KRA, LP 1 KIAWAH ISLAND PARKWAY KIAWAH ISLAND, SC 29455 (843) 768-3418

> SURVEYOR: SOUTHEASTERN LAND SURVEYING, LLC 1035-B JENKINS ROAD CHARLESTON, SC 29407 (843) 795-9330

PREPARED FOR:

**ARCHITECT:** HART HOWERTON IO EAST 40TH STREET NEW YORK, NY 10016 (212) 683-5631

DRAWN: LMD DESIGNED: LMD

ES A

SCALE: AS SHOWN

REVIEWED: DJJ

APPROVED: DJJ

SCALE: I" = 400'

PROJECT MAP

GENERAL NOTES

I. SURVEYING AND BOUNDARY INFORMATION BY SOUTHEASTERN LAND SURVEYING, LLC. 2. ALL ELEVATIONS SHOWN ARE BASED ON NGVD 1929.

3. TOPOGRAPHIC SURVEY BY SOUTHEASTERN LAND SURVEYING, LLC. 4. CONTRACTOR IS TO VERIFY ACCURACY OF ANY TEMPORARY BENCHMARKS SHOWN PRIOR TO UTILIZING THEM

5. THE EXISTING UNDERGROUND UTILITIES SHOWN HEREON ARE BASED UPON AVAILABLE INFORMATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE EXACT LOCATION OF ALL UTILITIES OTHER THAN THOSE SHOWN ARE ENCOUNTERED DURING CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY AND TAKE STEPS TO PROTECT THE LINE(S) AND ENSURE CONTINUED SERVICE. DAMAGE CAUSED TO EXISTING UTILITIES BY THE CONTRACTOR SHALL BE REPAIRED BY THE CONTRACTOR. ADDITIONALLY, THE CONTRACTOR SHALL CONFIRM THE CONNECTION POINTS OF NEW UTILITIES TO EXISTING UTILITIES PRIOR TO BEGINNING NEW CONSTRUCTION.

6. IF WORK IS SUSPENDED OR DELAYED FOR 14 DAYS, THE CONTRACTOR SHALL TEMPORARILY STABILIZE THE DISTURBED AREA AT NO ADDITIONAL COST TO THE OWNER.

7. THE CONTRACTOR SHALL INSTALL ANY BARRICADES PRIOR TO BEGINNING CONSTRUCTION

8. THE FOLLOWING NOTES ARE SPECIFIED BY THE KICA AND ARE TO BE EXECUTED BY THE CONTRACTOR FOR STREETS IN THE PROJECT WHICH ARE TO BE DEEDED TO KICA:

ANY DAMAGE TO EXISTING PAVEMENT MUST BE REPAIRED AT CONTRACTORS EXPENSE AND TO THE SATISFACTION OF KICA AND THE PROJECT ENGINEER. ALL RIGHT-OF-WAY AND DRAINAGE EASEMENT CONSTRUCTION SHALL MEET TOWN OF KIAWAH ISLAND STANDARD SPECIFICATIONS UNLESS SPECIFIED ELSEWHERE AND APPROVED IN WRITING BY THE TOWN.

WHERE FIELD INSPECTIONS ARE REQUIRED BY THE TOWN, THE CONTRACTOR SHALL NOTIFY THE ENGINEERING DIVISION A MINIMUM OF 48 HOURS IN ADVANCE TO SCHEDULE SUCH INSPECTIONS. d. A COMPLETE SET OF APPROVED DRAWINGS AND SPECIFICATIONS MUST BE MAINTAINED ON SITE AT ALL TIMES THAT THE CONTRACTOR IS PERFORMING WORK. THESE DRAWINGS SHALL BE MADE AVAILABLE

ANY REVISIONS DURING CONSTRUCTION WHICH ALTER THE ROAD LAYOUT, CONSTRUCTION METHODS, RIGHT-OF-WAY LOCATION OR DRAINAGE MUST BE SUBMITTED AND APPROVED IN WRITING BY THE

THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL CONSTRUCTION PERMITS NECESSARY FROM OTHER RESPONSIBLE AGENCIES.

ALL TREES SHOWING DISTURBANCE WITHIN THE PROTECTED ROOT ZONE SHALL BE PRUNED AND FERTILIZED BY A CERTIFIED ARBORIST PRIOR TO RECEIVING FINAL PLAT APPROVAL (THIS WORK WILL BE DONE BY THE OWNER OUTSIDE OF THE CONTRACT.)

h. LAKE CONTOURS SHOWN HEREIN WILL PROVIDE A DEPTH ONE FOOT GREATER THAN NECESSARY FOR STORM WATER MANAGEMENT. THIS IS TO PROVIDE FOR ONE FOOT OF SILT BUILDUP DURING CONSTRUCTION OF ANY AREA OF ANY POND WHICH SILTS MORE THAN ONE FOOT ABOVE DESIGNED BOTTOM ELEVATION SHALL BE RESTORED TO THE MINIMUM ACCEPTABLE DEPTH OF ONE FOOT LESS

FLOOD

THAN ORIGINAL CONSTRUCTED DEPTH. ALL ABOVE GROUND UTILITIES ARE TO BE OUTSIDE OF THE R/W AND ALL AT GRADE UTILITIES ARE TO BE OUT OF THE CURB LINE.

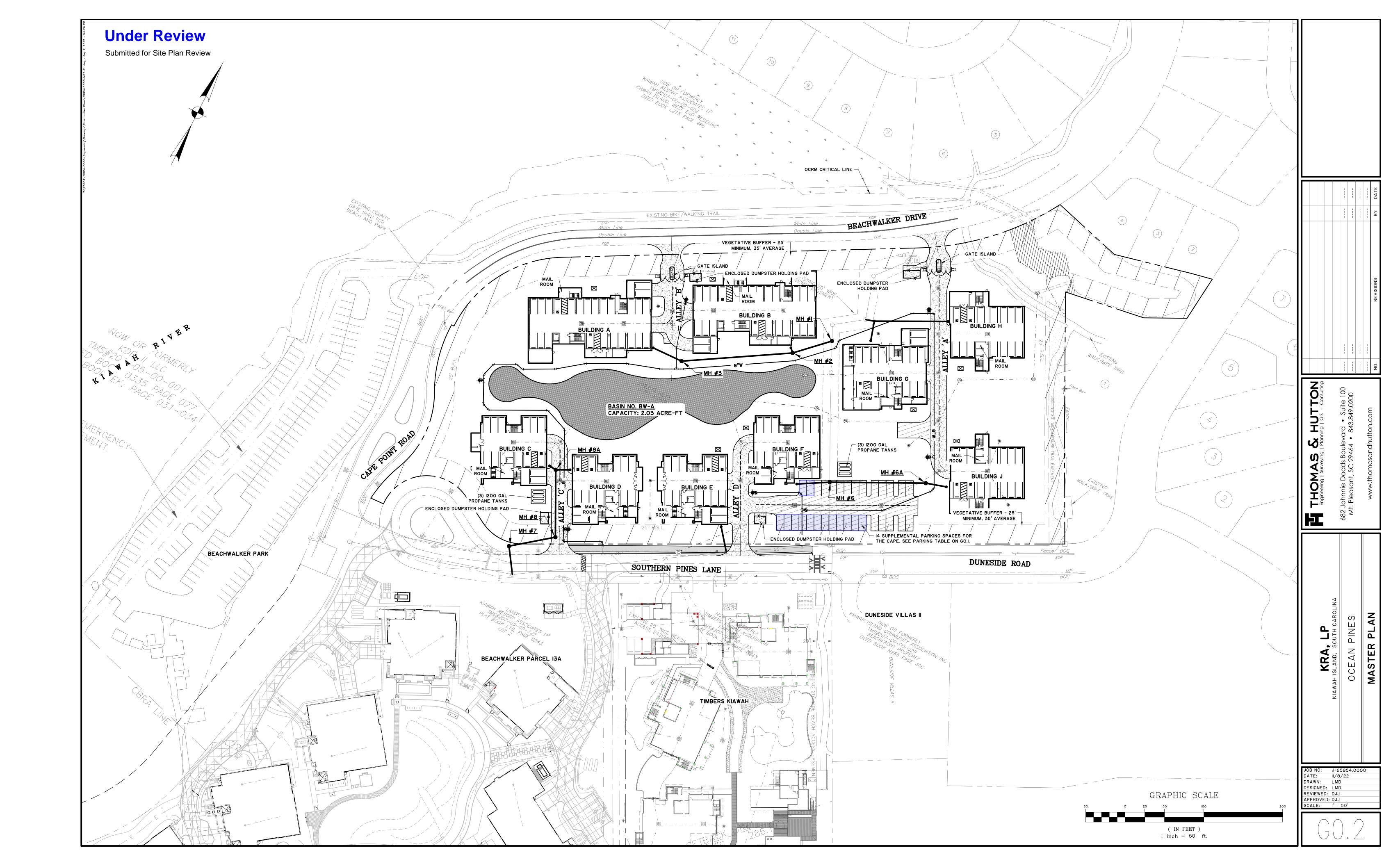
ZONE AE

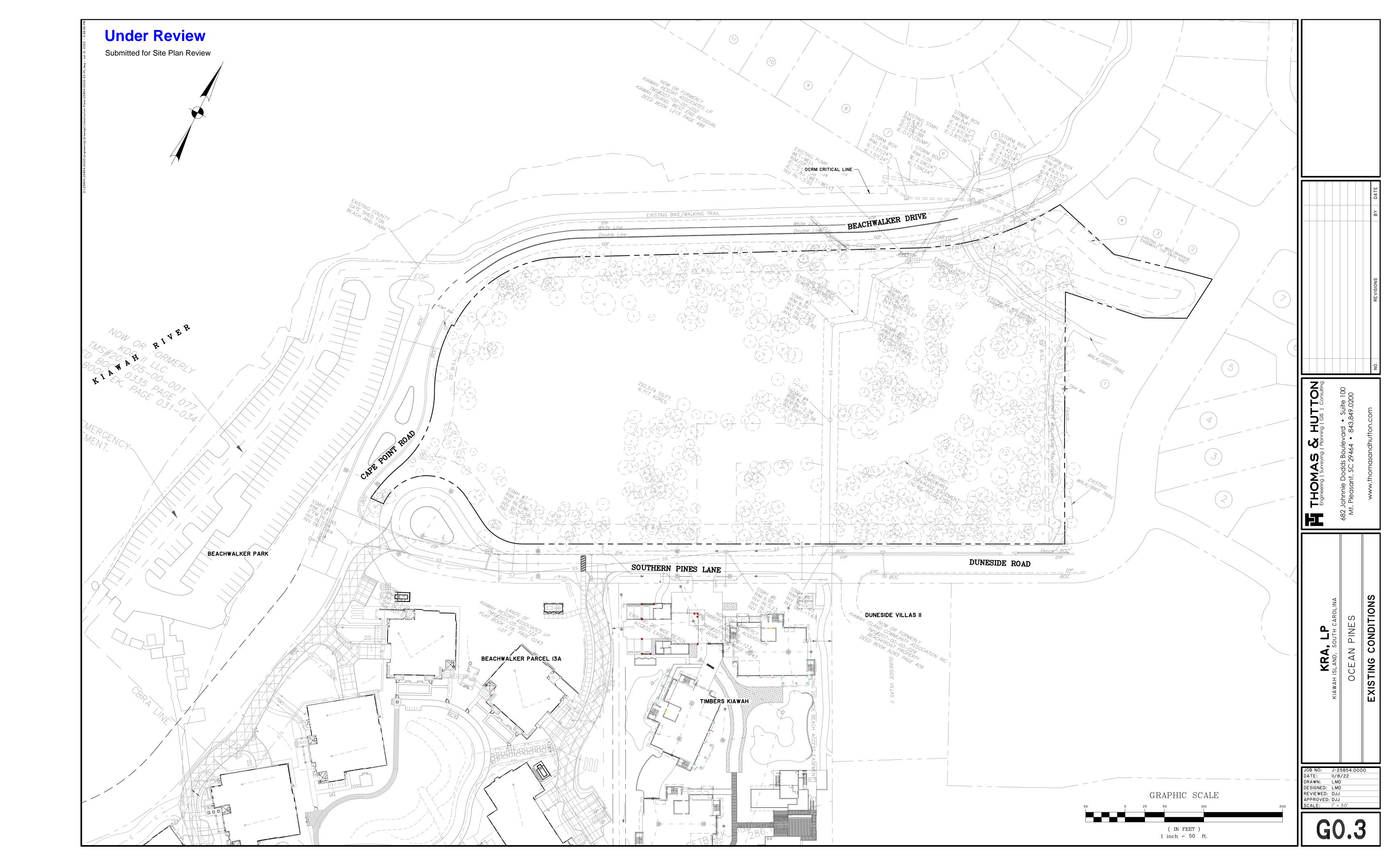
ELEV. 10

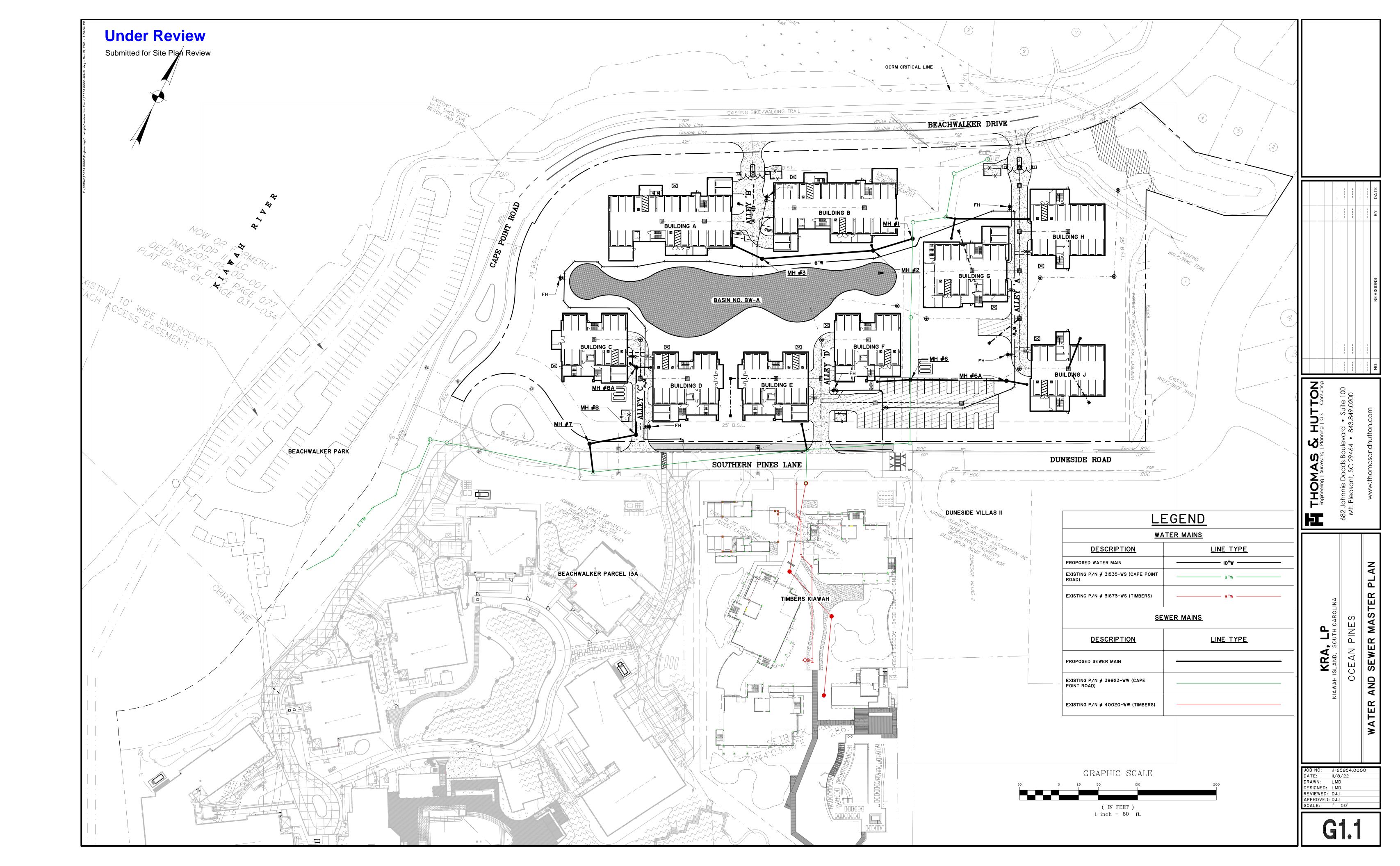
GENERAL INFORMATION

I KIAWAH ISLAND PARKWAY KIAWAH ISLAND, SC 29455

682 JOHNNIE DODDS BLVD. MT. PLEASANT, SC 29464

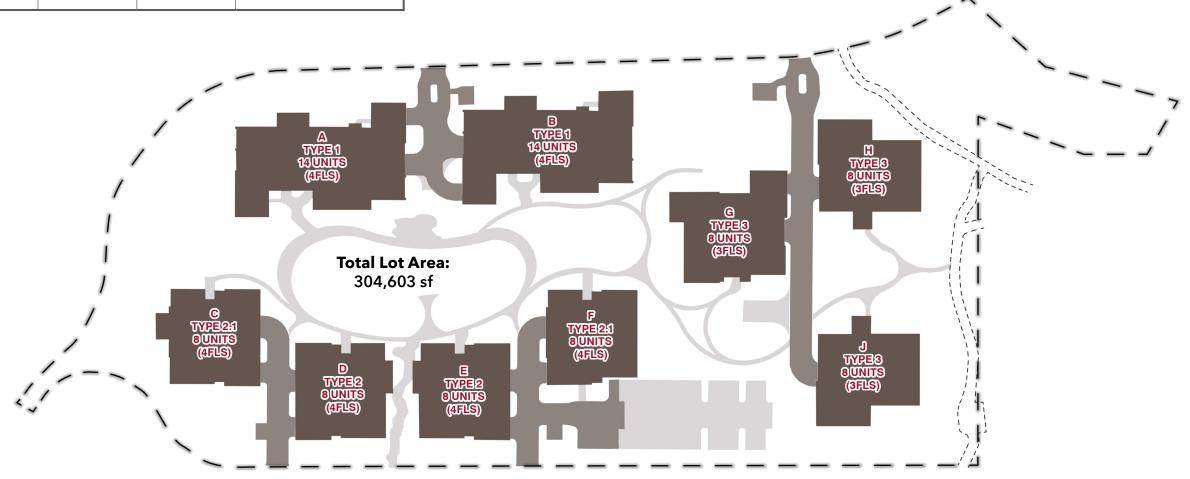


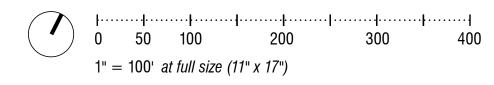




COVERAGE AREA TOTALS						
Total Lot Area: 304,603 SF	Coverage in Square Feet	Coverage as % of Lot Area	Pervious Coverage in Square Feet			
Building Footprints & Occupied Overhangs	+/- 77,106 SF	25.31%	0 SF			
Drive Alleys, Dumpster Holding Pads & Exterior Parking	+/- 20,226 SF	6.64%	+/- 1,965 SF			
al Primary Coverage ot to exceed 33% of Lot Area)	+/- 97,332 SF	31.95%	+/- 1,965 SF (2.06% of Primary Cov.)			
Secondary Elements	+/- 22,404 SF	7.38%	+/- 19,087 SF (85.19% of Secondary Cov.)			
al Primary and Secondary Lot Coverage ot to exceed 39.67% of Lot Area)	+/- 119,736 SF	39.31%	+/- 21,052 SF (17.58% of Combined Cov.)			

Submitted for Site Plan Review





\*KICA leisure trail shown for reference only

Subfritte of the Plan Review

A.1. PROJECT AREA 20.79 (BEACHWALKER EAST) 13.79 (PARCEL 13A) 7.0 (PARCEL 13B) A.2. AREA DISTURBED 12.91 (BEACHWALKER EAST) 6.41 (PARCEL 13A) 6.5 (PARCEL 13B)

B. DESCRIPTION OF CONSTRUCTION ACTIVITY WORK CONSISTS OF WATER DISTRIBUTION AND WASTEWATER COLLECTION SYSTEMS, STORMWATER MANAGEMENT AND ROAD CONSTRUCTION.

C. RUNOFF DATA

C.1. SOIL CLASSIFICATIONS:

C.2. LAND USE(S): RESIDENTIAL D. RECEIVING WATERS

D.1. CLOSEST RECEIVING WATERS: KIAWAH RIVER D.2. ULTIMATE RECEIVING WATERS: ATLANTIC OCEAN

E.1. FEMA FLOOD ZONE(S): AE (13&14) E.2. FEMA FLOOD INSURANCE MAP(S): 4519C0785K 1/29/21

#### . CONTROL MEASURES

1. EROSION AND SEDIMENT CONTROLS

PRIOR TO START OF CONSTRUCTION, ALL EXTERIOR SILT FENCE WILL BE INSTALLED AS SHOWN ON THE PLANS.

BEACHES

#### 1.1. CLEARING

1.1.1. AS CLEARING IS COMPLETED, ADDITIONAL SILT FENCE WILL BE INSTALLED WHERE NECESSARY, SUCH AS POINTS WHERE FLOWS BECOME CHANNELIZED, AND OTHER POINTS WHERE EXCESSIVE RUNOFF VELOCITIES MAY OCCUR.

1.1.2. INSTALL CONSTRUCTION ENTRANCES / EXITS BEFORE BEGINNING CLEARING 1.1.3. CONSTRUCTION DELAYS IN ANY ONE AREA GREATER THAN 14 DAYS PRIOR TO START OF

ROUGH GRADING WILL MANDATE STABILIZATION PROCEDURES. ACCEPTABLE METHODS OF STABILIZATION INCLUDE MULCHING AND TEMPORARY SEEDING 1.1.4. MAINTAIN EXISTING VEGETATION WHENEVER POSSIBLE AND MINIMIZE THE AREA OF DISTURBANCE. RETAIN AND PROTECT TREES TO ENHANCE FUTURE LANDSCAPING EFFORTS

AND REDUCE RAINDROP IMPACT 1.1.5. INSTALL ALL SEDIMENT CONTROL PRACTICES PRIOR TO ANY UP-SLOPE SOIL DISTURBING

ACTIVITIES. 1.1.6. PHASE CONSTRUCTION ACTIVITIES TO MINIMIZE THE AREAS DISTURBED AT ONE TIME. THIS WILL ALSO ALLOW COMPLETED AREAS TO BE STABILIZED AND RE-VEGETATED BEFORE DISTURBING ADJACENT SITES. THE NEED FOR TEMPORARY EROSION CONTROL MEASURES MAY BE AVOIDED BY COMPLETING A PHASE AND INSTALLING PERMANENT EROSION

CONTROL MEASURES WHEN THE FINAL GRADE IS ATTAINED 1.1.7 MAINTAIN AND PROTECT ALL NATURAL WATERWAYS. RETAIN AT LEAST A 35-FOOT UNDISTURBED BUFFER OF NATURAL VEGETATION ALONG ALL WATERWAYS TO FILTER OUT SEDIMENT AND OTHER POLLUTANTS. MAINTAIN A 45-FOOT UNDISTURBED BUFFER AROUND SENSITIVE WATERS.

1.1.8. INSTALL SILT FENCE (OR BIO ROLLS/ROCK SOCK PRODUCTS) ON THE DOWN-SLOPE PERIMETER OF ALL DISTURBED AREAS PRIOR TO ANY SOIL DISTURBING ACTIVITIES (INCLUDING CLEARING AND GRUBBING). SILT FENCE CAN TREAT A MAXIMUM OF 100 SQUARE FEET PER LINEAL FOOT OF FENCE. INSTALL SILT FENCE IN SHORTER REACHES ON THE CONTOUR WITH EACH END TURNED UP-SLOPE . SWALES AND SHORELAND AREAS SHOULD ALSO BE PROTECTED WITH SILT FENCE, BIO ROLLS, OR ROCK SOCKS.

1.1.9. IN AREAS OF CONCENTRATED FLOW INSTALL STRAW BALE CHECKS, ROCK CHECK DAMS, TRIANGULAR DIKES, BIO ROLL BLANKETS, OR ROCK SOCKS TO SLOW RUNOFF AND TRAP SEDIMENT

1.1.10. USE TEMPORARY SLOPE DRAINS OR ROCK CHUTES TO MOVE WATER DOWN STEEP SLOPES.

#### 1.1.11. CONSTRUCT SEDIMENT BASINS FOR DRAINAGE AREAS GREATER THAN 10 ACRES

#### 1.2. ROUGH GRADING

1.2.1. ALL EXISTING CONTROLS WILL BE MAINTAINED DURING ROUGH GRADING, DELAYS OF GREATER THAN 14 DAYS PRIOR TO START OF NEXT ACTIVITY WILL MANDATE STABILIZATION PROCEDURES. ACCEPTABLE METHODS OF STABILIZATION INCLUDE MULCHING AND TEMPORARY SEEDING.

1.2.2. ALL AREAS NOT SUBJECT TO FURTHER CONSTRUCTION (DRAINAGE, SANITARY SEWER. ROADS, WATER DISTRIBUTION SYSTEMS, OR STORM WATER FACILITIES) SHALL BE GRASSED WITH A PERMANENT COVER.

1.2.3. COVER ANY STOCK PILED TOPSOIL WITH PLASTIC (OR OTHER IMPERVIOUS COVERING) OR USE A TEMPORARY SEED MIX. USE STOCKPILED TOPSOIL AS EARTHEN BERMS TO SERVE AS TEMPORARY SEDIMENT BASINS.

1.3.1. ALL EXISTING CONTROLS WILL BE MAINTAINED DURING DRAINAGE INSTALLATION.

1.3.2. CONSTRUCTION DRAINAGE WILL BE ROUTED THROUGH LAKES, WHICH WILL ACT AS SEDIMENT BASINS OR OTHER ACCEPTABLE SEDIMENT BASINS/TRAPS.

1.3.3. STORM DRAIN INLET PROTECTION AS SHOWN ON DETAIL SHEET SHALL BE INSTALLED ON ALL CURB INLETS, STORM DRAIN MANHOLES, JUNCTION BOXES, AND GRATE INLETS. 1.3.4. DELAYS OF GREATER THAN 14 DAYS PRIOR TO START OF THE NEXT CONSTRUCTION

SEQUENCE WILL MANDATE STABILIZATION PROCEDURES. ACCEPTABLE METHODS OF

STABILIZATION INCLUDE MULCHING AND TEMPORARY SEEDING. 1.3.5. ALL STORM LINES NOT IN STREETS OR OTHER PAVED AREAS ARE TO BE MULCHED AND SEEDED WITHIN 5 DAYS AFTER BACKFILL.

#### 1.4. WATER DISTRIBUTION SYSTEM INSTALLATION

1.4.1. ALL EXISTING CONTROLS WILL BE MAINTAINED DURING INSTALLATION OF THE WATER DISTRIBUTION SYSTEM

1.4.2. DELAYS OF GREATER THAN 14 DAYS PRIOR TO START OF NEXT ACTIVITY WILL MANDATE STABILIZATION PROCEDURES. ACCEPTABLE METHODS OF STABILIZATION INCLUDE MULCHING AND TEMPORARY SEEDING.

#### 1.5. WASTEWATER COLLECTION SYSTEM INSTALLATION

1.5.1. ALL EXISTING CONTROLS WILL BE MAINTAINED DURING INSTALLATION OF THE WASTEWATER

1.5.2. DELAYS OF GREATER THAN 14 DAYS PRIOR TO START OF NEXT ACTIVITY WILL MANDATE STABILIZATION PROCEDURES. ACCEPTABLE METHODS OF STABILIZATION INCLUDE MULCHING AND TEMPORARY SEEDING.

#### 1.6. CONSTRUCTION OF ROADS

1.6.1. ALL EXISTING CONTROLS WILL BE MAINTAINED DURING ROAD CONSTRUCTION. 1.6.2. DELAYS OF GREATER THAN 14 DAYS PRIOR TO START OF NEXT ACTIVITY WILL MANDATE STABILIZATION PROCEDURES. ACCEPTABLE METHODS OF STABILIZATION INCLUDE

#### MULCHING AND TEMPORARY SEEDING. 1.7. GRASSING

1.7.1. ALL EXISTING CONTROLS WILL BE MAINTAINED UNTIL GRASSING IS ESTABLISHED 1.7.2. ANY AREAS THAT ERODE OR WHERE GRASS DOES NOT ESTABLISH ITSELF SHALL BE RE-GRADED AND RE-GRASSED.

2. STORM WATER MANAGEMENT

RUNOFF FROM THIS PROJECT WILL DISCHARGE INTO A STORM WATER MANAGEMENT SYSTEM. TREATMENT WILL OCCUR IN STORM WATER DETENTION PONDS.

#### 3. OTHER CONTROLS 3.1. WASTE DISPOSAL

3.1.1. NO SOLID MATERIALS, INCLUDING BUILDING MATERIALS, SHALL BE DISCHARGED TO ANY

RECEIVING WATERS

3.1.2. OFFSITE VEHICLE TRACKING OF SEDIMENTS AND THE GENERATION OF DUST SHALL BE

3.1.3. THIS PLAN SHALL COMPLY WITH STATE AND/OR LOCAL WASTE DISPOSAL, SANITARY SEWER

#### OR SEPTIC SYSTEM REGULATIONS

3.1.4. DUST CONTROL ON DISTURBED AREAS - CONTROLLING SURFACE AND AIR MOVEMENT OF DUST ON CONSTRUCTION SITE AND HAUL ROUTES. THE PURPOSE OF THE MEASURE IS TO REDUCE THE PRESENCE OF AIRBORNE SUBSTANCES, WHICH MAY BE HARMFUL OR INJURIOUS TO HUMAN HEALTH, WELFARE OR SAFETY, OR TO ANIMALS OR PLANT LIFE.

#### III. MAINTENANCE

#### MAINTENANCE PROGRAM

1.1. THE SITE SUPERINTENDENT, OR HIS/HER REPRESENTATIVE, SHALL MAKE VISUAL INSPECTIONS OF ALL MECHANICAL CONTROLS AND NEWLY STABILIZED AREAS (I.E. SEEDED AND MULCHED AND/OR SODDED AREAS) ON A DAILY BASIS: ESPECIALLY AFTER HEAVY RAINFALL EVENT TO INSURE THAT ALL CONTROLS ARE MAINTAINED AND PROPERLY FUNCTIONING. ANY DAMAGED CONTROLS SHALL BE REPAIRED PRIOR TO THE END OF THE WORK DAY INCLUDING RE-SEEDING AND MULCHING OR RE-SODDING IF NECESSARY.

1.2. EROSION CONTROL MEASURES WILL BE MAINTAINED AT ALL TIMES. IF FULL IMPLEMENTATION OF THE APPROVED PLAN DOES NOT PROVIDE FOR EFFECTIVE EROSION CONTROL, ADDITIONAL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE IMPLEMENTED TO CONTROL OR TREAT THE SEDIMENT SOURCE. ALL DRAINAGE SWALES. POCKETS. DEPRESSION. LOW LINES. AND OUTLET DITCHES SHALL DRAIN EFFECTIVELY AT ALL TIMES. SETTLEMENT OR WASHING THAT MAY OCCUR SHALL BE REPAIRED BY THE CONTRACTOR. SEDIMENT WILL BE REMOVED FROM BEHIND THE SEDIMENT FENCE WHEN IT REACHES 1/3 THE HEIGHT OF THE FENCE. THE SEDIMENT FENCE WILL BE REPAIRED AS NECESSARY TO MAINTAIN AN EFFECTIVE BARRIER MAINTAIN THE CONSTRUCTION EXIT IN A CONDITION TO PREVENT MUD OR SEDIMENT FROM LEAVING THE SITE. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE. IMMEDIATELY REMOVE ALL OBJECTIONABLE MATERIALS SPILLED, WASHED, OR TACKED ONTO PUBLIC ROADWAYS. RESEED AND MULCH AREA WHERE SEEDING EMERGENCE IS POOR, OR WHERE EROSION OCCURS, PROTECT FROM TRAFFIC AS MUCH AS POSSIBLE, INSPECT ALL MULCHES PERIODICALLY, AND AFTER RAINSTORMS TO CHECK FOR EROSION, DISLOCATION OR FAILURE. IF WASHOUT OCCURS, REPAIR THE SLOPE GRADE, RESEED AND REINSTALL MULCH. FOLLOW THE CONSTRUCTION SEQUENCE THROUGHOUT THE PROJECT DEVELOPMENT. WHEN CHANGES IN CONSTRUCTION ACTIVITIES ARE NEEDED. AMEND THE SEQUENCE SCHEDULE IN ADVANCE TO MAINTAIN MANAGEMENT CONTROL. IF MAJOR CHANGES ARE NECESSARY, SEND A COPY OF THE MODIFIED SCHEDULE TO THE ENGINEER. SEDIMENT AND EROSION CONTROL MEASURES WILL REMAIN IN PLACE AND BE MAINTAINED UNTIL THE DISTURBED AREAS ARE STABILIZED

#### SILT FENCE

SILT FENCES WILL BE MONITORED DURING CONSTRUCTION. ANY SILT FENCE WHICH IS NOT FUNCTIONING PROPERLY WILL BE PROMPTLY REPAIRED. CLEAN OUT THE SILT FENCE WHEN IT REACHES 1/3 THE HEIGHT OF THE FENCE OR REPLACE WITH FUNCTIONAL SILT FENCE WITHIN 24 HOURS. USE OF HOSES AND WATER TO FLUSH THE SEDIMENT INTO THE STORM INLETS IS UNACCEPTABLE

3. SEDIMENTATION BASINS

SEDIMENTATION BASINS WHICH ARE AT 50% USED CAPACITY OR APPROACHING SUCH CAPACITY SHALL BE RE-EXCAVATED TO ORIGINAL DIMENSIONS AND THE SILT PROPERLY DISPOSED OF.

SEDIMENT LOGS/ROLLS OR OTHER CONTROL MEASURES WHICH BEGIN TO DISINTEGRATE OR FUNCTION INEFFECTIVELY SHALL BE PROMPTLY REPLACED.

VEGETATION COVER ANY VEGETATION COVER SERVING TO STABILIZE DISTURBED SOILS WHICH IS ITSELF DISTURBED

SHALL IMMEDIATELY BE REPLACED. 6. CONSTRUCTION ENTRANCE

SEDIMENT LOGS/ROLLS

MAINTAIN ROCK CONSTRUCTION ENTRANCE AND CLEAN ADJACENT ROADS OF ANY MUD

#### IV. INSPECTIONS

QUALIFIED PERSONNEL WILL INSPECT DISTURBED AREAS OF THE CONSTRUCTION SITE, AREAS USED FOR STORAGE OF MATERIALS THAT ARE EXPOSED TO PRECIPITATION THAT HAVE NOT BEEN FINALLY STABILIZED, STRUCTURAL CONTROL MEASURES, AND LOCATIONS WHERE VEHICLES ENTER OR EXIT THE SITE AT LEAST ONCE EVERY SEVEN CALENDAR DAYS. WHERE SITES HAVE BEEN FINALLY STABILIZED SUCH INSPECTIONS SHALL BE CONDUCTED AT LEAST ONCE EVERY MONTH DURING THE WARRANTY PERIOD.

2. DISTURBED AREAS AND AREAS USED FOR STORAGE OF MATERIALS THAT ARE EXPOSED TO PRECIPITATION SHALL BE INSPECTED FOR EVIDENCE OF, OR THE POTENTIAL FOR POLLUTANTS ENTERING THE DRAINAGE SYSTEM. EROSION AND SEDIMENT CONTROL MEASURES IDENTIFIED IN THE PLAN SHALL BE OBSERVED TO ENSURE THAT THEY ARE OPERATING CORRECTLY. WHERE DISCHARGE LOCATIONS OR POINTS ARE ACCESSIBLE, THEY SHALL BE INSPECTED TO ASCERTAIN WHETHER EROSION CONTROL MEASURES ARE EFFECTIVE IN PREVENTING SIGNIFICANT IMPACTS TO RECEIVING WATERS. LOCATIONS WHERE VEHICLES ENTER OR EXIT THE SITE SHALL BE INSPECTED FOR EVIDENCE OF OFFSITE SEDIMENT TRACKING.

3. A WRITTEN REPORT SUMMARIZING THE SCOPE OF THE INSPECTION, NAME(S) AND QUALIFICATIONS OF PERSONNEL MAKING THE INSPECTION, THE DATE(S) OF THE INSPECTION, WEATHER INFORMATION FOR THE PERIOD SINCE THE LAST INSPECTION (OR SINCE COMMENCEMENT OF CONSTRUCTION ACTIVITY) INCLUDING A BEST ESTIMATE OF THE BEGINNING OF EACH STORM EVENT. DURATION OF EACH STORM EVENT. APPROXIMATE AMOUNT OF RAINFALL FOR EACH STORM EVENT (IN INCHES) AND WHETHER ANY DISCHARGES OCCURRED. LOCATION(S) OF DISCHARGES OF SEDIMENT OR OTHER POLLUTANTS FROM THE SITE, LOCATION(S) OF BMP'S THAT NEED MAINTENANCE, LOCATION(S) OF BMP'S THAT FAILED TO OPERATE AS DESIGNED OR PROVED INADEQUATE FOR A PARTICULAR LOCATION LOCATION(S) WHERE ADDITIONAL BMP'S ARE NEEDED. THAT DID NOT EXIST AT THE TIME OF INSPECTION AND ANY CORRECTIVE ACTION REQUIRED INCLUDING ANY CHANGES TO SWPPP NECESSARY AND IMPLEMENTATION DATES.

4. THE REPORT SHALL BE MAINTAINED AT LEAST THREE YEARS FROM THE DATE THE SITE IS FINALLY STABILIZED. THE REPORT MUST BE SIGNED AND SHALL CONTAIN A CERTIFICATION THAT THE FACILITY IS IN COMPLIANCE WITH THE STORM WATER POLLUTION PREVENTION PLAN AND THE NPDES PERMIT REFERENCED ABOVE. THE CONTRACTOR SHALL MAINTAIN THIS REPORT. THE REPORT SHALL BE SUBMITTED TO THE ENGINEER AND OWNER.

# V. LONG TERM MAINTENANCE OF DRAINAGE AND STORM WATER

THE ROADS AND DRAINAGE SYSTEM WILL BE OWNED AND MAINTAINED BY KIAWAH RESORT ASSOCIATES, LP AFTER CONSTRUCTION IS COMPLETE AND UNTIL SUCH TIME AS THE OWNERSHIP IS TURNED OVER TO A SUBSEQUENT NEW ENTITY.

#### VI. SC DHEC STANDARD NOTES

IF NECESSARY, SLOPES WHICH EXCEED EIGHT (8) VERTICAL FEET SHOULD BE STABILIZED WITH SYNTHETIC OR VEGETATIVE MATS. IN ADDITION TO GRASSING / HYDROSEEDING. IT MAY BE NECESSARY TO INSTALL TEMPORARY SLOPE DRAINS DURING CONSTRUCTION. TEMPORARY BERMS MAY BE NEEDED UNTIL THE SLOPE IS BROUGHT TO GRADE.

2. STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED, BUT IN NO CASE MORE THAN FOURTEEN (14) DAYS AFTER WORK HAS CEASED, EXCEPT AS STATED

2.1. WHERE STABILIZATION BY THE 14TH DAY IS PRECLUDED BY SNOW COVER OR FROZEN GROUND CONDITIONS STABILIZATION MEASURES MUST BE INITIATED AS SOON AS PRACTICABLE. 2.2. WHERE CONSTRUCTION ACTIVITY ON A PORTION OF THE SITE IS TEMPORARILY CEASED, AND

EARTH-DISTURBING ACTIVITIES WILL BE RESUMED WITHIN 14 DAYS, TEMPORARY

3. ALL SEDIMENT AND EROSION CONTROL DEVICES SHALL BE INSPECTED ONCE EVERY CALENDAR WEEK. IF PERIODIC INSPECTION OR OTHER INFORMATION INDICATES THAT A BMP HAS BEEN INAPPROPRIATELY OR INCORRECTLY INSTALLED, THE PERMITTEE MUST ADDRESS THE NECESSARY REPLACEMENT OR MODIFICATION REQUIRED TO CORRECT THE BMP WITHIN 48 HOURS OF

STABILIZATION MEASURES DO NOT HAVE TO BE INITIATED ON THAT PORTION OF THE SITE.

4. PROVIDE SILT FENCE AND/OR OTHER CONTROL DEVICES, AS MAY BE REQUIRED, TO CONTROL SOIL EROSION DURING UTILITY CONSTRUCTION. ALL DISTURBED AREAS SHALL BE CLEANED. GRADED AND STABILIZED WITH GRASSING IMMEDIATELY AFTER THE UTILITY INSTALLATION. FILL, COVER, AND TEMPORARY SEEDING AT THE END OF EACH DAY ARE RECOMMENDED. IF WATER IS ENCOUNTERED WHILE TRENCHING, THE WATER SHOULD BE FILTERED TO REMOVE ANY SEDIMENTS BEFORE BEING PUMPED INTO ANY WATERS OF THE STATE

5. ALL EROSION CONTROL DEVICES SHALL BE PROPERLY MAINTAINED DURING ALL PHASES OF CONSTRUCTION UNTIL THE COMPLETION OF ALL CONSTRUCTION ACTIVITIES AND ALL DISTURBED AREAS HAVE BEEN STABILIZED. ADDITIONAL CONTROL DEVICES MAY BE REQUIRED DURING CONSTRUCTION IN ORDER TO CONTROL EROSION AND/OR OFFSITE SEDIMENTATION. ALL TEMPORARY CONTROL DEVICES SHALL BE REMOVED ONCE CONSTRUCTION IS COMPLETE AND

#### STORMWATER POLLUTION PREVENTION PLAN

THE CONTRACTOR MUST TAKE NECESSARY ACTION TO MINIMIZE THE TRACKING OF MUD ONTO THE PAVED ROADWAY FROM CONSTRUCTION AREAS AND THE GENERATION OF DUST. THE CONTRACTOR SHALL DAILY REMOVE MUD/SOIL FROM PAVEMENT AS MAY BE REQUIRED.

7. RESIDENTIAL SUBDIVISIONS REQUIRE EROSION CONTROL FEATURES FOR INFRASTRUCTURE AS WELL AS FOR INDIVIDUAL LOT CONSTRUCTION. INDIVIDUAL PROPERTY OWNERS SHALL FOLLOW THESE PLANS DURING CONSTRUCTION OR OBTAIN APPROVAL OF AN INDIVIDUAL PLAN IN

ACCORDANCE WITH S.C. REG. 72-300 AND SCR100000. TEMPORARY DIVERSION BERMS AND/OR DITCHES WILL BE PROVIDED AS NEEDED DURING CONSTRUCTION TO PROTECT WORK AREAS FROM UPSLOPE RUNOFF AND/OR TO DIVERT SEDIMENT LADEN WATER TO APPROPRIATE TRAPS OR STABLE OUTLETS.

ALL WATERS OF THE STATE (WOS), INCLUDING WETLANDS, ARE TO BE FLAGGED OR OTHERWISE CLEARLY MARKED IN THE FIELD. A DOLIBLE ROW OF SILT FENCE IS TO BE INSTALLED IN ALL AREAS WHERE A 50-FOOT BUFFER CAN NOT BE MAINTAINED BETWEEN THE DISTURBED AREA AND ALL WOS. A 10-FOOT BUFFER SHOULD BE MAINTAINED BETWEEN THE LAST ROW OF SILT FENCE AND

10. LITTER, CONSTRUCTION DEBRIS, OILS, FUELS, AND BUILDING PRODUCTS WITH SIGNIFICANT POTENTIAL FOR IMPACT (SUCH AS STOCKPILES OF FRESHLY TREATED LUMBER) AND CONSTRUCTION CHEMICALS THAT COULD BE EXPOSED TO STORM WATER MUST BE PREVENTED FROM BECOMING A POLLUTANT SOURCE IN STORM WATER DISCHARGES.

11. A COPY OF THE SWPPP, INSPECTION RECORDS AND RAINFALL DATA MUST BE RETAINED AT THE CONSTRUCTION SITE OR A NEARBY LOCATION EASILY ACCESSIBLE DURING NORMAL BUSINESS HOURS, FROM THE DATE OF COMMENCEMENT OF CONSTRUCTION ACTIVITIES TO THE DATE THAT FINAL STABILIZATION IS REACHED.

12. INITIATE STABILIZATION MEASURES ON ANY EXPOSED STEEP SLOPE (3H:1V OR GREATER) WHERE LAND DISTURBING ACTIVITIES HAVE PERMANENTLY OR TEMPORARILY CEASED, AND WILL NOT RESUME FOR A PERIOD OF 7 CALENDAR DAYS.

13. MINIMIZE SOIL COMPACTION IN AREAS NOT UNDER PAVEMENTS AND /OR STRUCTURES AND, UNLESS INFEASIBLE, PRESERVE TOPSOIL.

14. MINIMIZE THE DISCHARGE OF POLLUTANTS FROM EQUIPMENT AND VEHICLE WASHING, WHEEL WASH WATER AND OTHER WASH WATERS. WASH WATERS MUST BE TREATED IN A SEDIMENT BASIN OR ALTERNATIVE CONTROL THAT PROVIDES EQUAL OR BETTER TREATMENT PRIOR TO DISCHARGE.

15. MINIMIZE THE DISCHARGE OF POLLUTANTS FROM DEWATERING OF TRENCHES AND EXCAVATED AREAS. THESE DISCHARGES ARE TO BE ROUTED THROUGH APPROPRIATE BMPS (SEDIMENT BASIN,

#### 16. THE FOLLOWING DISCHARGES ARE PROHIBITED:

16.1. WASTEWATER FROM WASHOUT OF CONCRETE, UNLESS MANAGED BY AN APPROPRIATE CONTROL:

16.2. WASTEWATER FROM WASHOUT AND CLEANOUT OF OF STUCCO, PAINT, FORM RELEASE OILS, CURING COMPOUNDS AND OTHER CONSTRUCTION MATERIALS: 16.3. FUELS, OILS OR OTHER POLLUTANTS USED IN VEHICLE AND EQUIPMENT OPERATION AND

MAINTENANCE: AND 16.4. SOAPS OR SOLVENTS USED IN VEHICLE AND EQUIPMENT WASHING.

17. AFTER CONSTRUCTION ACTIVITIES BEGIN, INSPECTIONS MUST BE CONDUCTED AT A MINIMUM OF AT LEAST ONCE EVERY CALENDAR WEEK AND MUST BE CONDUCTED UNTIL FINAL STABILIZATION IS REACHED ON ALL AREAS OF THE CONSTRUCTION SITE.

18. IF EXISTING BMPS NEED TO BE MODIFIED OR IF ADDITIONAL BMPS ARE NECESSARY TO COMPLY WITH THE REQUIREMENTS OF PERMIT SCR100000 AND/OR SC'S WATER QUALITY STANDARDS. IMPLEMENTATION MUST BE COMPLETED BEFORE THE NEXT STORM EVENT WHENEVER PRACTICABLE. IF IMPLEMENTATION BEFORE THE NEXT STORM EVENT IS IMPRACTICABLE, THE SITUATION MUST BE DOCUMENTED IN THE SWPPP AND ALTERNATIVE BMPS MUST BE IMPLEMENTED AS SOON AS REASONABLY POSSIBLE

19. A PRE-CONSTRUCTION CONFERENCE MUST BE HELD FOR EACH CONSTRUCTION SITE WITH AN APPROVED ON-SITE SWPPP PRIOR TO THE IMPLEMENTATION OF CONSTRUCTION ACTIVITIES. FOR NON-LINEAR PROJECTS THAT DISTURB 10 ACRES OR MORE, THIS CONFERENCE MUST BE HELD ON-SITE UNLESS THE DEPARTMENT HAS APPROVED OTHERWISE

#### VII. EROSION. SEDIMENTATION & POLLUTION CONTROL NOTES

THE IMPLEMENTATION OF THESE EROSION SEDIMENT CONTROL (ESC) PLANS AND THE CONSTRUCTION, MAINTENANCE, REPLACEMENT, AND UPGRADING OF THESE ESC FACILITIES IS THE RESPONSIBILITY OF THE CONTRACTOR UNTIL ALL CONSTRUCTION IS COMPLETED AND APPROVED AND VEGETATION/LANDSCAPING IS ESTABLISHED

SEDIMENT LADEN WATER DO NOT ENTER THE DRAINAGE SYSTEM, ROADWAYS, OR VIOLATE APPLICABLE WATER STANDARDS THE ESC FACILITIES SHOWN ON THIS PLAN ARE THE MINIMUM REQUIREMENTS FOR ANTICIPATED SITE CONDITIONS. DURING THE CONSTRUCTION PERIOD, THESE ESC FACILITIES SHALL BE

THE ESC FACILITIES SHOWN ON THIS PLAN MUST BE CONSTRUCTED IN CONJUNCTION WITH ALL

CLEARING AND GRADING ACTIVITIES, AND IN SUCH A MANNER AS TO INSURE THAT SEDIMENT AND

UPGRADED AS NEEDED FOR UNEXPECTED STORM EVENTS AND TO ENSURE THAT SEDIMENT AND SEDIMENT LADEN WATER DO NOT LEAVE THE SITE.

4. THE ESC FACILITIES SHALL BE INSPECTED DAILY BY THE CONTRACTOR AND MAINTAINED AS NECESSARY TO ENSURE THEIR CONTINUED FUNCTIONING.

5. THE ESC FACILITIES ON INACTIVE SITES SHALL BE INSPECTED AND MAINTAINED A MINIMUM OF ONCE A MONTH OR WITHIN THE 24 HOURS FOLLOWING A MAJOR STORM EVENT.

6. AT NO TIME SHALL MORE THAN ONE FOOT OF SEDIMENT BE ALLOWED TO ACCUMULATE WITHIN A CATCH BASIN. ALL CATCH BASINS AND CONVEYANCE LINES SHALL BE CLEANED PRIOR TO PAVING AND PRIOR TO FINAL INSPECTION. THE CLEANING OPERATION SHALL NOT FLUSH SEDIMENT LADEN WATER INTO THE DOWNSTREAM SYSTEM.

7. STABILIZED CONSTRUCTION ENTRANCES SHALL BE INSTALLED AT THE BEGINNING OF CONSTRUCTION AND MAINTAINED FOR THE DURATION OF THE PROJECT. ADDITIONAL MEASURES MAY BE REQUIRED TO INSURE THAT ALL PAVED AREAS ARE KEPT CLEAN FOR THE DURATION OF

8. BEFORE COMMENCING ANY LAND DISTURBING ACTIVITY, THE EXISTING STORM WATER INLET(S) THAT RECEIVING RUNOFF FROM THE PROPOSED WORK AREA SHALL BE PROTECTED. THE TEMPORARY INLET PROTECTION MUST REMAIN IN PLACE UNTIL THE CONSTRUCTION ACTIVITY IS COMPLETED. THE STREET HAS BEEN SWEPT AND ANY EXPOSED SOILS ARE STABILIZED. THE CONTRACTOR IS ALSO RESPONSIBLE FOR REMOVING ANY TEMPORARY INLET PROTECTION INSTALLED; AFTER ALL DISTURBED AREAS ARE STABILIZED. TEMPORARY PROTECTION OF THE INLETS MAY BE ACCOMPLISHED BY ONE OR MORE OF THE FOLLOWING:

8.1. USE OF GRAVEL BAGS TO FILTER THE SEDIMENT FROM ANY RUNOFF. TO MAKE A GRAVEL BAG, USE A BAG MADE OF GEOTEXTILE FABRIC (NOT BURLAP) AND FILL WITH EITHER 3/4 INCH ROCK OR 1/4 INCH PEA GRAVEL

8.2. USE OF SEDIMENT LOGS TO FILTER THE SEDIMENT FROM ANY RUNOFF (AVAILABLE THROUGH LOCAL EROSION CONTROL SUPPLIERS). 8.3. USE OF ABOVE OR UNDER-GRATE FILTER BAGS OR DEVICES TO FILTER THE SEDIMENT FROM ANY RUNOFF (AVAILABLE THROUGH EROSION CONTROL SUPPLIERS).

9. WATER MAY NOT BE DISCHARGED IN A MANNER THAT CAUSES EROSION, SEDIMENTATION, OR FLOODING ON THE SITE, ON DOWNSTREAM PROPERTIES, IN THE RECEIVING CHANNELS, OR IN ANY

STORM WATER INLET. WHEN SITE DEWATERING, WATER PUMPED FROM THE SITE, INCLUDING TRENCHES, SHALL BE TREATED BY ONE OF THE FOLLOWING:

9.1. TEMPORARY SEDIMENTATION BASINS

9.2. SEDIMENT FILTERING BAGS

10. THE CONTRACTOR SHALL VERIFY THE SIZE AND LOCATION OF ALL EXISTING UTILITIES. EXISTING UTILITIES ARE ALL UTILITIES THAT EXIST ON THE PROJECT IN AN ORIGINAL, RELOCATED OR NEWLY INSTALLED POSITION. THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR THE COST OF REPAIRS TO DAMAGED UNDERGROUND OR OVERHEAD FACILITIES, EVEN IF THE UTILITY IS NOT SHOWN ON THE SITE DEVELOPMENT PLANS. THE CONTRACTOR SHALL CONTACT THE LOCAL UTILITIES PROTECTION CENTER TO COORDINATE THE MARKING OF EXISTING UTILITY LINES A MINIMUM OF 96 HOURS PRIOR TO COMMENCEMENT OF ANY WORK.

11. THE CONTRACTOR SHALL FLUSH ALL INLETS AND PIPE AT THE COMPLETION OF CONSTRUCTION TO REMOVE SILT AND DEBRIS. THE CLEANING AND FLUSHING OF INLETS AND PIPE (EXISTING AND PROPOSED) SHALL BE CONSIDERED PART OF THE COST FOR THE PROJECT.

12. EGRESS FROM THE SITE SHALL BE CONTROLLED SUCH THAT VEHICLES LEAVING THE SITE MUST

TRAVERSE CONSTRUCTION EXITS TO REMOVE MUD FROM TIRES. 13. SCHEDULE CONSTRUCTION ACTIVITIES TO MINIMIZE THE EXPOSED AREA AND DURATION OF EXPOSURE. IN SCHEDULING, TAKE INTO ACCOUNT THE SEASON AND THE WEATHER FORECAST

14. EROSION CONTROL MEASURES ARE THE MINIMUM REQUIRED. THE CONTRACTOR SHALL PROVIDE ADDITIONAL CONTROL MEASURES AS DICTATED BY ACTUAL FIELD CONDITIONS AT THE TIME OF CONSTRUCTION IN ORDER TO PREVENT EROSION AND CONTROL SEDIMENT. EROSION AND SEDIMENT CONTROL MEASURES WILL REMAIN IN PLACE AND BE MAINTAINED UNTIL THE ENTIRE PROJECT IS TERMINATED OR SUSPENDED FOR AND INDEFINITE LENGTH OF TIME, ALL DISTURBED AREAS SHALL BE PLANTED WITH PERMANENT VEGETATION.

15. THE DATA, TOGETHER WITH ALL OTHER INFORMATION SHOWN ON THESE PLANS, OR IN ANY WAY INDICATED THEREBY, WHETHER BY DRAWINGS OR NOTES, OR IN ANY OTHER MANNER, IS BASED UPON FIELD INVESTIGATIONS AND IS BELIEVED TO BE INDICATIVE OF ACTUAL CONDITIONS. HOWEVER. THE SAME IS SHOWN AS INFORMATION ONLY. IS NOT GUARANTEED AND DOES NOT BIND THOMAS & HUTTON, OR THE OWNER IN ANY WAY.

16. CONTRACTOR SHALL MAINTAIN SITE ON A DAILY BASIS TO PROVIDE FOR POSITIVE DRAINAGE. CONTRACTOR, AT HIS COST, SHALL GRADE SITE AND PROVIDE NECESSARY TEMPORARY DRAINAGE

SWALES TO INSURE STORM WATER DOES NOT POND ON SITE. 17. SITE DRAINAGE SHALL BE ESTABLISHED TO PREVENT ANY PONDED WATER CONDITIONS WITHIN

THE CONSTRUCTION AREA AND TO FACILITATE STORM WATER DISCHARGE.

18. THE ESCAPE OF SEDIMENT FROM THE SITE SHALL BE PREVENTED BY THE INSTALLATION OF EROSION AND SEDIMENT CONTROL MEASURES AND PRACTICES PRIOR TO, OR CONCURRENT WITH, LAND DISTURBING ACTIVITIES.

#### 19. LIME RATES AND ANALYSIS:

19.1. AGRICULTURAL LIME SHALL BE APPLIED AT THE RATE SHOWN IN THE SEEDING SECTION UNLESS SOIL TESTS INDICATE OTHERWISE. GRADED AREAS REQUIRE LIME APPLICATION. IF LIME IS APPLIED WITHIN SIX MONTHS OF PLANTING PERMANENT PERENNIAL VEGETATION, ADDITIONAL LIME IS NOT REQUIRED. AGRICULTURAL LIME APPLICATION SHALL BE WITHIN THE SPECIFICATIONS OF THE SOUTH CAROLINA DEPARTMENT OF AGRICULTURE.

#### 20. MULCHING:

MUI CHING IS REQUIRED FOR ALL PERMANENT VEGETATION APPLICATIONS. MUI CH APPLIED TO SEEDED AREAS SHALL ACHIEVE 75% SOIL COVER. SELECT THE MULCHING MATERIAL FROM THE FOLLOWING AND APPLY AS INDICATED:

20.1. DRY STRAW OR DRY HAY OF GOOD QUALITY AND FREE OF WEED SEEDS CAN BE USED. DRY STRAW SHALL BE APPLIED AT THE RATE OF TWO TONS PER ACRE. DRY HAY SHALL BE APPLIED AT THE RATE OF 2 1/2 TONS PER ACRE

20.2. WOOD CELLULOSE MULCH OR WOOD PULP FIBER SHALL BE USED WITH HYDRAULIC SEEDING. IT SHALL BE APPLIED AT A RATE OF 500 POUNDS PER ACRE. DRY STRAW OR DRY HAY SHALL BE APPLIED (AT THE RATE INDICATED ABOVE) AFTER HYDRAULIC SEEDING. 20.3. ONE THOUSAND POUNDS OF WOOD CELLULOSE OR WOOD PULP FIBER, WHICH INCLUDES A

TACKIFIER. SHALL BE USED WITH HYDRAULIC SEEDING ON SLOPES 3/4:1 OR STEEPER. 20.4. SERICEA LESPEDEZA HAY CONTAINING MATURE SEED SHALL BE APPLIED AT A RATE OF 3 TONS PER ACRE 20.5. PINE STRAW OR PINE BARK SHALL BE APPLIED AT A THICKNESS OF 3 INCHES FOR BEDDING

SEEDED AREAS. 20.6. WHEN USING TEMPORARY EROSION CONTROL BLANKETS OR BLACK SOD, MULCH IS NOT

20.7. ON SLOPES GREATER THAN 10 FEET IN LENGTH AND 4:1 OR STEEPER, USE THE FOLLOWING EROSION CONTROL BLANKETS THAT HAVE BEEN PROPERLY ANCHORED TO THE SLOPE ACCORDING TO THE MANUFACTURER'S INSTRUCTIONS:

PURPOSES. OTHER SUITABLE MATERIALS IN SUFFICIENT QUANTITY MAY BE USED WHERE

ORNAMENTALS OR OTHER GROUND COVERS ARE PLANTED. THIS IS NOT APPROPRIATE FOR

• 2:1 SLOPES OR STEEPER: - STRAW/COCONUT BLANKET OR HIGH VELOCITY WOOD BLANKET

• 3:1 SLOPES OR STEEPER: - WOOD OR STRAW BLANKET WITH NET ON BOTH SIDES • 4:1 SLOPES OR FLATTER: - WOOD OR STRAW MULCH BLANKET WITH NET ON ONE SIDE

#### VIII. HOUSEKEEPING

REQUIRED.

THESE PERFORMANCE STANDARDS APPLY TO ALL SITES.

1. PETROLEUM PRODUCTS: INCLUDING OIL, GASOLINE, LUBRICANTS AND ASPHALTIC SUBSTANCES.

1.1. HAVE EQUIPMENT TO CONTAIN AND CLEAN UP PETROLEUM SPILLS IN FUEL STORAGE AREAS

OR ON MAINTENANCE AND FUELING VEHICLES 1.2. STORE IN COVERED AREAS PROTECTED WITH DIKES

2. SPILLS: PREVENTION AND RESPONSE.

2.1. STORE AND HANDLE MATERIALS TO PREVENT SPILLS 2.2. TIGHTLY SEALED CONTAINERS, NEAT AND SECURE STACKING, ETC. 2.3. REDUCE STORM WATER CONTACT IF SPILL OCCURS

2.3.1. CLEANUP PROCEDURES SHOULD BE CLEARLY POSTED 2.3.2. CLEANUP MATERIALS SHOULD BE READILY AVAILABLE

2.3.3. STOP THE SOURCE

3. NON-STORM WATER DISCHARGES

THE FOLLOWING NON-STORMWATER DISCHARGES MUST BE PROTECTED FROM CAUSING POLLUTION OR EROSION:

3.1. DISCHARGES FROM FIRE-FIGHTING ACTIVITIES 3.2 FIRF HYDRANT FLUSHINGS 3.3. WATERS USED TO WASH VEHICLES WHERE DETERGENTS ARE NOT USED

3.4. WATER USED TO CONTROL DUST 3.5. POTABLE WATER INCLUDING UNCONTAMINATED WATER LINE FLUSHINGS 3.6. ROUTINE EXTERNAL BUILDING WASH DOWN THAT DOES NOT USE DETERGENTS

HAVE NOT OCCURRED (UNLESS ALL SPILLED MATERIAL HAS BEEN REMOVED) AND WHERE DETERGENTS ARE NOT USED

3.8. UNCONTAMINATED AIR CONDITIONING OR COMPRESSOR CONDENSATE 3.9. UNCONTAMINATED GROUND WATER OR SPRING WATER 3.10. FOUNDATION OR FOOTING DRAINS WHERE FLOWS ARE NOT CONTAMINATED WITH PROCESS

3.7. PAVEMENT WASH WATERS WHERE SPILLS OR LEAKS OF TOXIC OR HAZARDOUS MATERIALS

MATERIALS SUCH AS SOLVENTS 3.11. UNCONTAMINATED EXCAVATION DEWATERING 3 12 LANDSCAPE IRRIGATION

3.13. DECHLORINATED SWIMMING POOL DISCHARGES. 4. CONSTRUCTION WASTES: DEMOLITION RUBBLE, PACKAGING MATERIALS, SCRAP BUILDING

4.1. SELECT A DESIGNATED WASTE COLLECTION AREA

4.2. PROVIDE LIDS FOR WASTE CONTAINERS 4.3. WHEN POSSIBLE LOCATE CONTAINERS IN COVERED AREA

4.4. MAINTAIN CONSISTENT REMOVAL SCHEDULE FOR WASTE 5. PESTICIDES: REDUCE THE AMOUNT OF PESTICIDES AVAILABLE FOR CONTACT WITH STORM WATER.

5.1. STORE IN A DRY COVERED AREA 5.2. INSTALL CURBS OR DIKES AROUND STORAGE AREA TO PROTECT AGAINST SPILLS 5.3. STRICTLY FOLLOW RECOMMENDED APPLICATION RATES

6. FERTILIZERS AND DETERGENTS: REDUCE THE AMOUNT OF FERTILIZERS AND DETERGENTS

6.2. APPLY MORE FREQUENTLY BUT AT LOWER APPLICATION RATES

6.6. APPLY ACCORDING TO SOIL TEST RECOMMENDATIONS PRIOR TO SEEDING.

6.1. LIMIT APPLICATION OF FERTILIZERS TO THE MINIMUM NEEDED

6.3. LIMIT USE OF DETERGENTS ON-SITE 6.4. DO NOT DISCHARGE WASH WATER INTO STORM WATER SYSTEM 6.5. MAINTAIN STRUCTURAL AND VEGETATIVE BMP'S

AVAILABLE FOR CONTACT WITH STORM WATER.

#### IX. GRASSING NOTES

ALL SOD SHALL BE NURSERY GROWN AS CLASSIFIED IN THE ASPS GSS. MACHINE CUT SOD AT A UNIFORM THICKENS OF 3/4" WITHIN A TOLERANCE OF 1/4". EXCLUDING TOP GROWTH AND THATCH. EACH INDIVIDUAL SOD PIECE SHALL BE STRONG ENOUGH TO SUPPORT ITS OWN WEIGHT WHEN LIFTED BY THE ENDS. BROKEN PODS. IRREGULARLY SHAPED PIECES. AND TORN OR UNEVEN ENDS WILL BE REJECTED. WOOD PEGS AND / OR WIRE STAPLES SHALL REPLACE SOD WITH AN EQUAL SOD COMPOSITION AS THAT WHICH IS EXISTING. IF NO SOD TYPE EXIST. THEN THE FOLLOWING SOD COMPOSITION SHALL BE USED.

#### SODDING SCHEDULE:

LAY SOD FROM MAY 1 TO SEPTEMBER 15 FOR SPRING PLANTING AND FROM SEPTEMBER 15 TO NOVEMBER 1 FOR FALL PLANTING.

ALL SEED SHALL CONFORM TO ALL STATE LAWS AND TO ALL REQUIREMENTS AND REGULATIONS OF THE SOUTH CAROLINA DEPARTMENT OF AGRICULTURE. THE SEVERAL VARIETIES OF SEED SHALL BE INDIVIDUALLY PACKAGED OR BAGGED, AND TAGGED TO SHOW NAME OF SEED, NET WEIGHT, ORIGIN, GERMINATION, LOT NUMBER, AND OTHER INFORMATION REQUIRED BY THE DEPARTMENT OF AGRICULTURE.

3.1. PENNISETUM GLAUCIUM (BROWNTOP MILLET): TESTING 98 PERCENT PURITY AND 85 PERCENT GERMINATION.

BERMUDA COMMON: TESTING 98 PERCENT PURITY AND 85 PERCENT GERMINATION. 3.3. DOMESTIC ITALIAN RYE: TESTING 98 PERCENT PURITY AND 90 PERCENT GERMINATION.

#### MISCELLANEOUS:

10 SF.

4.1. PERMANENT SEEDING SHALL COVER ALL DISTURBED AREA NOT TO BE COVERED BY

LANDSCAPE PLANTING BEDS, STRUCTURE, OR PAVEMENT. SEED ALL DISTURBED AREAS WITHIN SEVEN DAYS OF FINAL GRADING AND TEMPORARY

SEED/MULCH ALL AREAS THAT WILL BE LEFT INACTIVE FOR MORE THAN FOURTEEN (14) DAYS. 4.3. ALL PERMANENT GRASS PLANTINGS SHALL BE MULCHED 4.4. CENTIPEDE SOD CAN BE USED AS PERMANENT COVER ANYTIME EXCEPT JUNE THRU OCTOBER

4.5. IF GRASSING OCCURS DURING A MONTH REQUIRING TEMPORARY COVER, THE CONTRACTOR

### X. PERMANENT STABILIZATION

NEWLY SEEDED OR SODDED AREAS MUST BE PROTECTED FROM VEHICLE TRAFFIC.EXCESSIVE PEDESTRIAN TRAFFIC. AND CONCENTRATED RUNOFF UNTIL THE VEGETATION IS WELL ESTABLISHED. II NECESSARY, AREAS MUST BE RE-WORKED AND RE-STABILIZED IF GERMINATION IS SPARSE, PLANT COVERAGE IS SPOTTY ,OR TOPSOIL EROSION IS EVIDENT. ONE OR MORE OF THE FOLLOWING MAY APPLY TO THE SITE.

#### 4.1. SEEDED AREAS

FOR SEEDED AREAS, PERMANENT STABILIZATION MEANS A 90% COVER OF THE DISTURBED AREA WITH MATURE, HEALTHY PLANTS WITH NO EVIDENCE OF WASHING OR RILLING OF THE TOPSOIL.

FOR SODDED AREAS, PERMANENT STABILIZATION MEANS THE COMPLETE BINDING OF THE SO

ROOTS INTO THE APPROVED MULCH MATERIAL.

4.3. PERMANENT MULCH

4.2. SODDED AREAS

FOR MULCHED AREAS, PERMANENT MULCHING MEANS TOTAL COVERAGE OF THE EXPOSED AREA WITH AN APPROVED MULCH MATERIAL

FOR AREAS STABILIZED WITH RIPRAP. PERMANENT STABILIZATION MEANS THAT SLOPES STABILIZED WITH RIPRAP HAVE AN APPROPRIATE BACKING OF AN APPROVED GEOTEXTILE.

PREVENT SOIL MOVEMENT FROM BEHIND THE RIPRAP.

4.5. DITCHES, CHANNELS, AND SWALES FOR OPEN CHANNELS. PERMANENT STABILIZATION MEANS THE CHANNEL IS STABILIZED WITH MATURE VEGETATION AT LEAST THREE INCHES IN HEIGHT, WITH WELL-GRADED RIPRAP LINING, OR WITH ANOTHER NON-EROSIVE LINING CAPABLE OF WITHSTANDING THE ANTICIPATED FLOW VELOCITIES AND FLOW DEPTHS WITHOUT RELIANCE ON CHECK DAMS TO SLOW FLOW. THEI

MUST BE NO EVIDENCE OF SLUMPING OF THE LINING, UNDERCUTTING OF THE BANKS, OR

#### DOWN CUTTING OF THE CHANNEL.

## XI. FERTILIZER REQUIREMENTS

 TEMPORARY SEEDING FERTILIZER APPLY A MINIMUM OF 500 LBS PER ACRE OF A COMPLETE 10-10-10 FERTILIZER (11.5 POUNDS PER 1000 SQUARE FEET) OR EQUIVALENT DURING TEMPORARY SEEDING OF GRASSES UNLESS A SOIL TEST INDICATES A DIFFERENT REQUIREMENT. INCORPORATE FERTILIZER AND LIME (IF USED) INTO THE TOP 4-6 INCHES OF THE SOIL BY DISKING OR OTHER MEANS WHERE CONDITIONS ALLOW. LIME IS NOT REQUIRED FOR TEMPORARY SEEDING UNLESS A SOIL TEST SHOWS THAT THE SOIL PH IS BELOW 5.0. IT IS DESIRABLE TO APPLY LIME DURING THE TEMPORARY SEEDING OPERATION TO BENEFIT THE LONG-TERM PERMANENT SEEDING. APPLY A MINIMUM OF 1.5 TONS OF LIME / ACRE

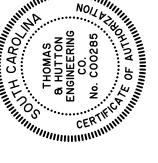
(70LBS. / 1000 SQ. FT.).

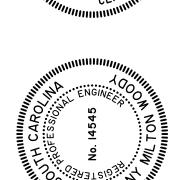
PERMANENT SEEDING FERTILIZER APPLY A MINIMUM OF 1000 LBS PER ACRE OF A COMPLETE 10-10-10 FERTILIZER (23 POLINDS PER 1000 SQUARE FEET) OR EQUIVALENT DURING PERMANENT SEEDING OF GRADES UNLESS A SOIL TEST INDICATES A DIFFERENT REQUIREMENT. INCORPORATE FERTILIZER AND LIME (IF USED) INTO THE TOP 4-6 INCHES OF THE SOIL BY DISKING OR OTHER MEANS WHERE CONDITIONS ALLOW. DO NOT MIX THE LIME AND THE FERTILIZER PRIOR TO THE FIELD APPLICATION. UNLESS A SPECIFIC SOIL TEST INDICATES OTHERWISE, APPLY 1 & 1/2 TONS OF GROUND COARSE TEXTURED

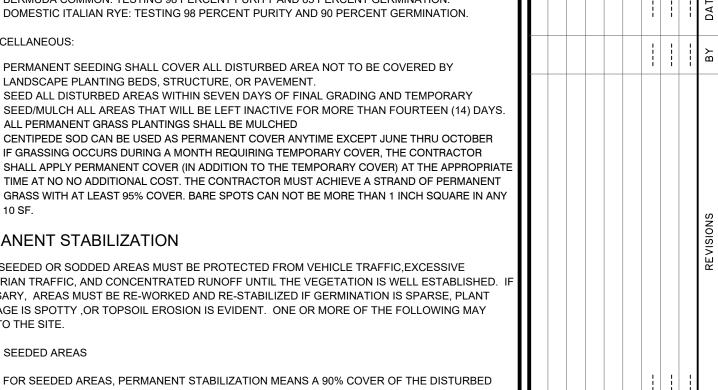
#### XII. SWPP PREPARER CERTIFICATION

AGRICULTURAL LIMESTONE PER ACRE (70 LBS. / 1000 SQ.FT.).

I HAVE PLACED MY SIGNATURE AND SEAL ON THE DESIGN DOCUMENTS SUBMITTED SIGNIFYING THAT I ACCEPT RESPONSIBILITY FOR THE DESIGN OF THE SYSTEM. FURTHER, I CERTIFY TO THE BEST OF MY KNOWLEDGE AND BELIEF THAT THE DESIGN IS CONSISTENT WITH THE REQUIREMENTS OF TITLE 48, CHAPTER 14 OF THE CODE OF LAWS OF SC, 1976 AS AMENDED, PURSUANT TO REGULATION 72-300 ET SEQ. (IF APPLICABLE), AND IN ACCORDANCE WITH THE TERMS AND CONDITIONS OF SCR100000.

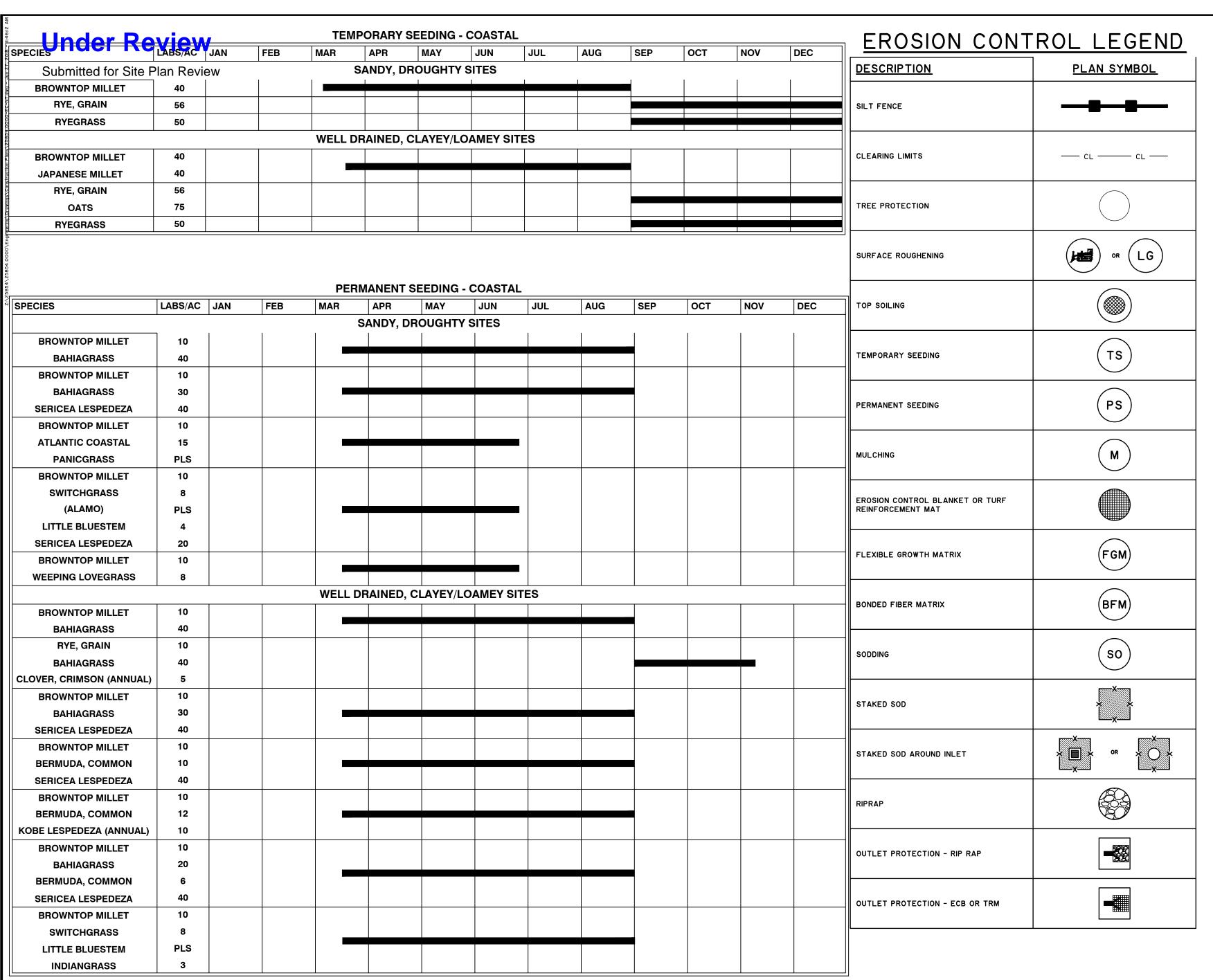






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11/8/22 DRAWN: DESIGNED: LMD REVIEWED: DJJ APPROVED: DJJ CALE: NOT TO SCALE



## FROSION CONTROL LEGEND

DESCRIPTION	ROL LEGEND
DESCRIPTION	PLAN SYMBOL
ROCK SEDIMENT DIKE	
SEDIMENT TUBE	
ROCK CHECK DAM	OR
STABILIZED CONSTRUCTION ENTRANCE	
CONCRETE WASHOUT	
STORM DRAIN INLET PROTECTION - TYPE A FILTER FABRIC	A
STORM DRAIN INLET PROTECTION - TYPE A SEDIMENT TUBE	A
STORM DRAIN INLET PROTECTION - TYPE B HARDWARE FABRIC AND STONE	B
STORM DRAIN INLET PROTECTION - TYPE C BLOCK AND GRAVEL	:C:
STORM DRAIN INLET PROTECTION - TYPE D RIGID INLET FILTER	
STORM DRAIN INLET PROTECTION - TYPE E SURFACE COURSE CURB INLET FILTER	E
STORM DRAIN INLET PROTECTION - TYPE F INLET TUBE	F
SILT SAC	G

ARE STABILIZED.

19 PERFORM FINAL MAINTENANCE TO SEDIMENT BASINS.

SOIL CONSERVATION SERVICE

TURF REINFORCEMENT MAT

VEGETATED FILTER STRIP

STORMWATER POLLUTION PREVENTION PROGRAM

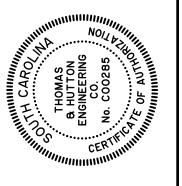
NG	PS	STORM DRAIN INLE SEDIMENT TUBE	T PROTECTION - TYPE A	A		
	M	STORM DRAIN INLE HARDWARE FABRIC	ET PROTECTION - TYPE B C AND STONE	B		
BLANKET OR TUF AT	RF	STORM DRAIN INLE BLOCK AND GRAVE	ET PROTECTION - TYPE C	:C:		
MATRIX	FGM	STORM DRAIN INLE	ET PROTECTION - TYPE D R	D		
FRIX	BFM		T PROTECTION - TYPE E CURB INLET FILTER	E		
	so	STORM DRAIN INLE	ET PROTECTION - TYPE F	F		
		SILT SAC				
ND INLET	OR X					
					CONSTRUCTI	ON SEQUENCE
				CONSTRUCTION ACTIVITY		SCHEDULE CONSIDERATION
			1 OBTAIN COPIES	OF ALL PLAN APPROVALS AND OTHER AP	PLICABLE PERMITS.	CONTRACTOR TO MAINTAIN OS-SWPP AT ALL TIMES DURING CONSTRUCTION.
					INITIAL PHA	
ON - RIP RAP			2 FLAG THE CLEARING LIMITS, MARK TREES TO BE PROTECTED, AND MARK BUFFER LIMITS FOR PROTECTION.			REVIEW TREE PROTECTION (BARRICADE) WITH OWNER. TAKE PICTURES OF ALL PROTECTED TREES AND LOCATIONS WHERE SITE WORK TIES INTO EXISTING INFRASTRUCTURE TO DOCUMENT PREDEVELOPMENT PROCEDURES.
ON - ECB OR TRM			CONSTRUCTION NECESSARY FO	STRUCTION CONFERENCE AT LEAST ONE V N. HOLD ADDITIONAL PRE CONSTRUCTION R FUTURE WORK.	CONFERENCES AS	PRE CONSTRUCTION CONFERNECE IN PERSON AND EXECUTE A CONTRACTOR CERTIFICATION.
				RUCTION ACCESS PER THE INITIAL LAND IT MANAGEMENT PLAN.	DISTURBANCE PHASE	STABILIZE BARE AREAS IMMEDIATELY AND INSTALL CONSTRUCTION EXITS / ENTRANCES.
				CLEARING, GRADING, AND INITIAL INSTALI ROL BMPS INCLUDING SILT FENCE, SEDIM		BEGIN MINOR CLEARING AND GRADING AS NEEDED FOR INSTALLATION PERIMETER EROSION CONTROL BMPS.
			6 CONSTRUCT PE	AMS PER THE INITIAL LAND DISTURBANCE	•	INSTALL ALL PERIMETER EROSION CONTROL BMPS PRIOR TO ANY MAJOR CLEARING AND GRADING ACTIVITIES. INSTALL ADDITIONAL TRAPS AND BARRIERS AS NEEDED DURING GRADING.
				IOFF CONTROLS - DIVERSIONS, PERIMETER ER THE INITIAL LAND DISTURBANCE PHASI PLAN.		INSTALL KEY PRACTICES AFTER PRINCIPAL SEDIMENT TRAPS AND BEFORE LAND GRADING. INSTALL ADDITIONAL RUNOFF-CONTROL MEASURES DURING GRADING.
LIST OF M	CRONYMS FOR SEDIMENT AND EROS				CONSTRUCTION	PHASE
	MERICAN ASSOCIATION OF STATE HIGHWAY AND TRANS	_		N AND INSTALLATION OF POND 'A' OUTFAI		MAINTAIN STORM-WATER FLOW FROM ADJACENT EXISTING OUTFALL STRUCTURE.
AAGUTA	FICIALS	. omanon	9 THE STORMWA	ATER BASINS ARE TO BE CONSTRUCTIED PR	IOR TO OTHER SITE ITEMS.	BEGIN EXCAVATION AND SHAPING OF THE STORMWATER BASINS AFTER RUNOFF CONTROLS HAVE BEEN INSTALLED.
вғм во	CRYLAMIDE POLYMER  DINDED FIBER MATRIX		SEDIMENTATIO	G AND GRADING -SITE PREPARATION CUT ON TRAPS, BARRIERS, DIVERSIONS, DRAINS CTION AND STABILIZATION PHASE SWPPP.	•	BEGIN MAJOR CLEARING AND GRADING AFTER PRINCIPAL SEDIMENT AND KEY RUNOFF-CONTROL MEASURES ARE INSTALLED. CLEAR AREAS ONLY AS NEEDED. INSTALL ADDITIONAL CONTROL MEASURES AS GRADING PROGRESSES.
CFS CU	IST MANAGEMENT PRACTICE(S)  JBIC FEET PER SECOND  DRRUGATED METAL PIPE  EPARTMENT OF HEATH AND ENVIRONMENTAL CONTROL		AND CHANNEL	FF CONVEYANCE SYSTEM - INSTALL STORM S. INSTALL STORM DRAIN INLET PROTECTI TALL IN THE EXISTING DITCH FIRST BEFORI	ON AS SOON AS INLET IS	WHERE NECESSARY, STABILIZE BANKS AS EARLY AS POSSIBLE. INSTALL PRINCIPAL RUNOFF CONVEYANCE SYSTEM WITH RUNOFF CONTROL MEASURES. INSTALL REMAINDER OF SYSTEM AFTER GRADING. DIRECT ALL TRENCHING AND OTHER DEWATERING OPERATIONS THROUGH A DEWATERING BAG OR SIMILAR BMP PRIOR TO DISCHARGING. OUTFALL DITHC OR PIPING TO BE IN OPERATION.
ECB ER	COSION CONTROL BLANKET  IITED STATES ENVIRONMENTAL PROTECTION AGENCY  COSION PREVENTION AND SEDIMENTATION CONTROL	12 CONSTRUCTION TO CONNECTION TO SYSTEMS.	CONNECTION OF UNDERGROUND DETENTION SYSTEM TO EXISTING BOX IS TO OCCUR ONLY AFTER OUTFALL PATHWAY TO POND 'A' IS COMPLETED.  APPLY TEMPORARY OR PERMANENT STABILIZATION MEASURES IMMEDIATELY ON ALL DISTURBED AREAS WHERE WORK IS DELAYED OR COMPLETE. DIRECT ALL TRENCHING			
	IITED STATES FOOD AND DRUG ADMINISTRATION EXIBLE GROWTH MATRIX		14 INITIATE BUILD	ING CONSTRUCTION AS MARKET CONDITION	DNS DICTATE- CONNECT	AND OTHER DEWATERING OPERATIONS THROUGH A DEWATERING BAG OR SIMILAR BMP PRIOR TO DISCHARGING.  INSTALL NECESSARY EROSION AND SEDIMENTATION CONTROL PRACTICES PER
	GH DENSITY POLYETHYLENE JNICIPAL SEPARATE STORM SEWER SYSTEM			E, INSTALL DRIVEWAY, CONSTRUCT BUILD ILIZATION -TEMPORARY AND PERMANENT RAP	· · · · · · · · · · · · · · · · · · ·	OS-SWPPP.  APPLY TEMPORARY OR PERMANENT STABILIZATION MEASURES IMMEDIATELY ON ALL DISTURBED AREAS WHERE WORK IS DELAYED OR COMPLETE.
	ATERIAL SAFETY DATA SHEETS ATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM	ı	·	AVEMENTS ARE INSTALLED, CHANGE INLE	F PROTECITON OT TYPE G.	INSTALL SEDIMENT CONTROL BMPS AS THE INLET BOXES BECOME AVAILABLE ON A BOX BY BOX PROCESS.
PAM PO	DLYACRYLAMIDE OR POLYMER				STABILIZATION	
RCP RE	INFORCED CONCRETE PIPE			AND FINAL STABILIZATION - TOPSOILING, SEEDING, MULCHING, SODDING, RIP RAP.	TREES AND SHRUBS,	STABILIZE ALL OPEN AREAS, INCLUDING BORROW AND SPOIL AREAS. REMOVE AND STABILIZE ALL TEMPORARY CONTROL MEASURES.
scs so	DIL CONSERVATION SERVICE			ODARY SEDIMENT AND EROSION CONTRO	L DAADC AC ADIACENT AREAC	DEMOVE SEDIMENT AND EDOSION CONTROL PARE ON A CASE BY CASE BASING AND

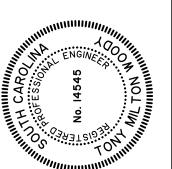
18 REMOVE TEMPORARY SEDIMENT AND EROSION CONTROL BMPS AS ADJACENT AREAS REMOVE SEDIMENT AND EROSION CONTROL BMPS ON A CASE BY CASE BASINS AND

ONLY AFTER ALL UPSTREAM CONTRIBUTING AREA IS STABILZED.

FINAL STABILIZATION FOR ALL DRY INFILTRATION PONDS

ONCE ALL AREAS HAVE BEEN STABILIZED, REMOVE SEDIMENT DEPOSITS AND PERFORM

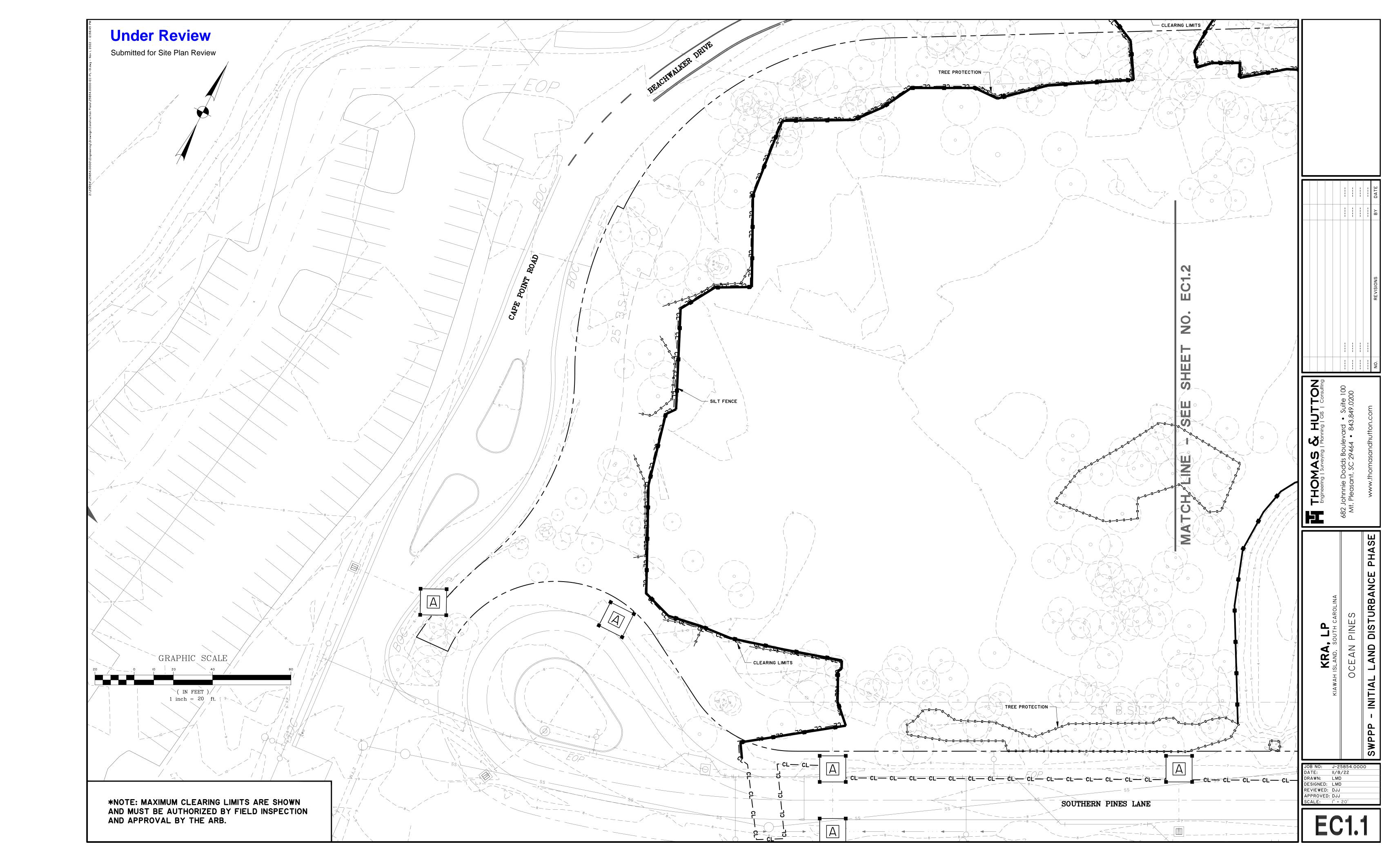


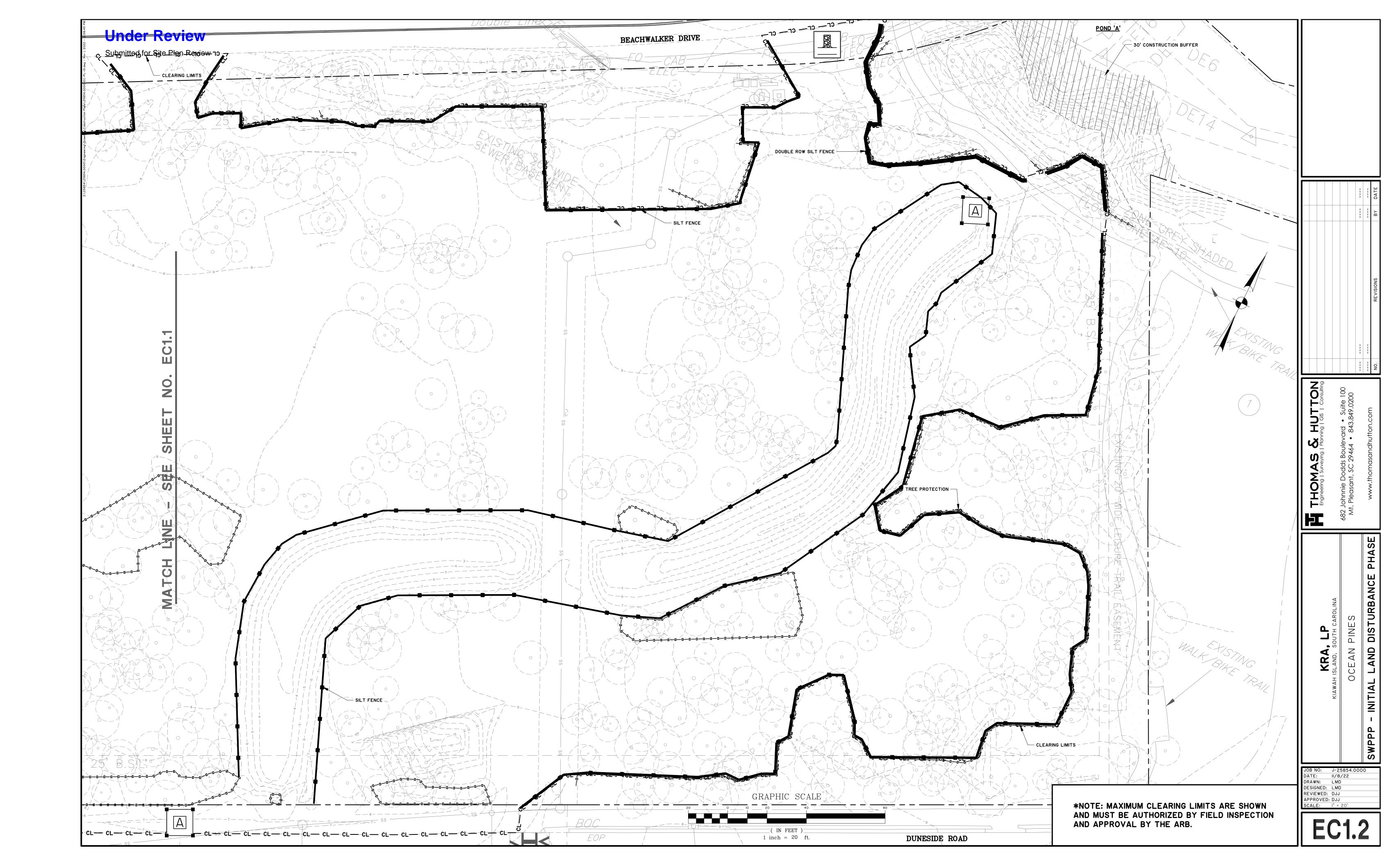


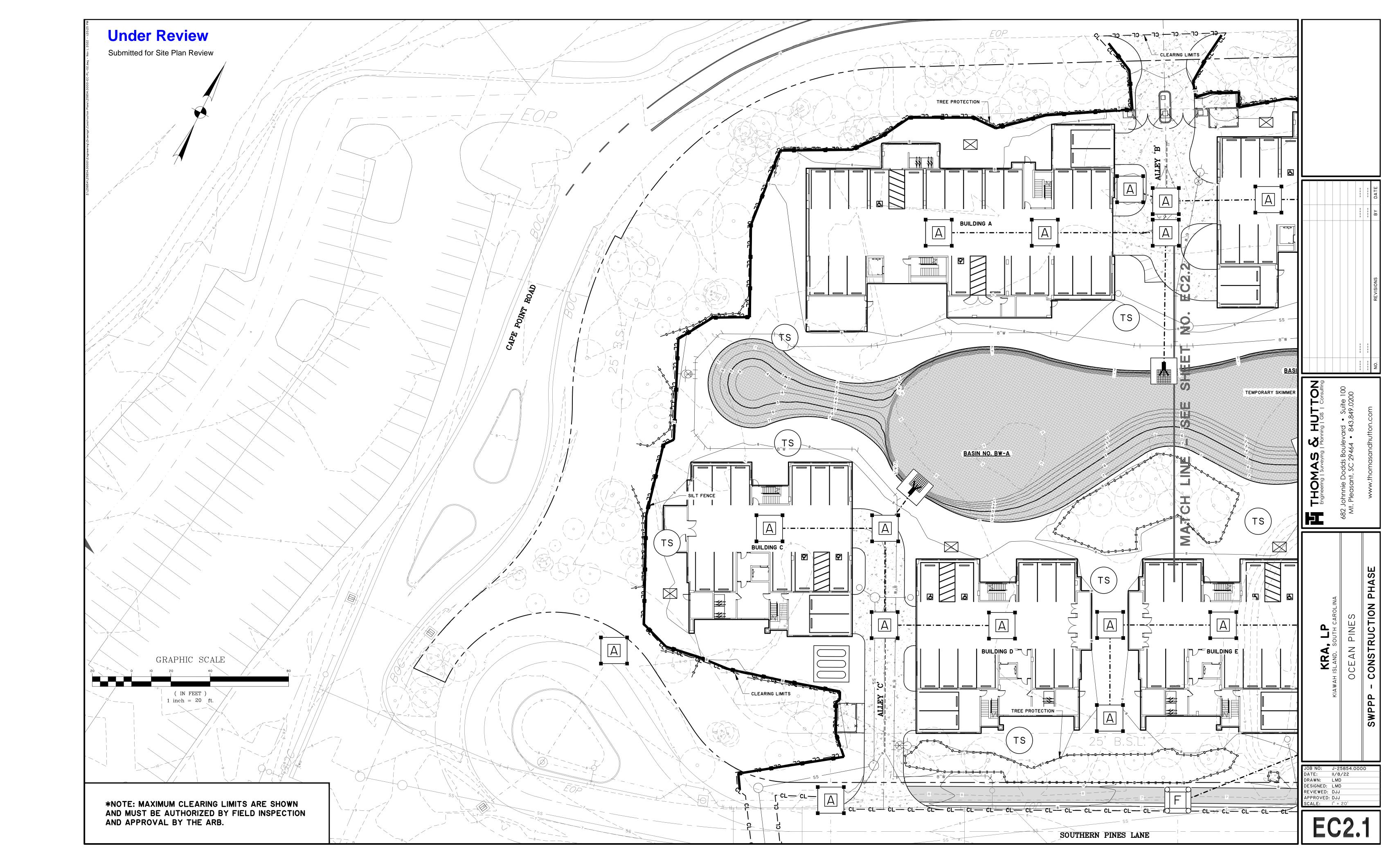
EAN OTES

DRAWN: LMD DESIGNED: LMD REVIEWED: DJJ APPROVED: DJJ

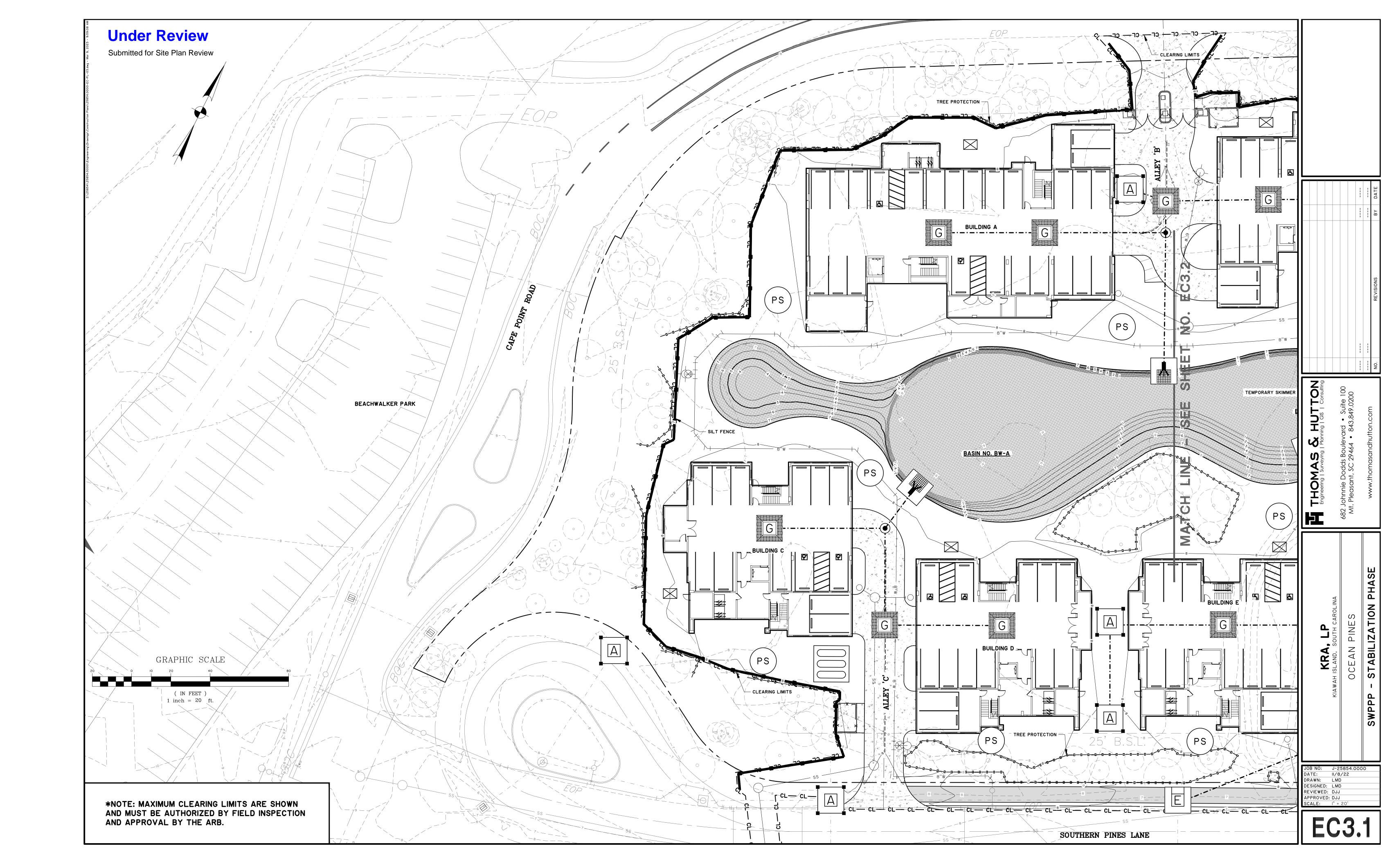
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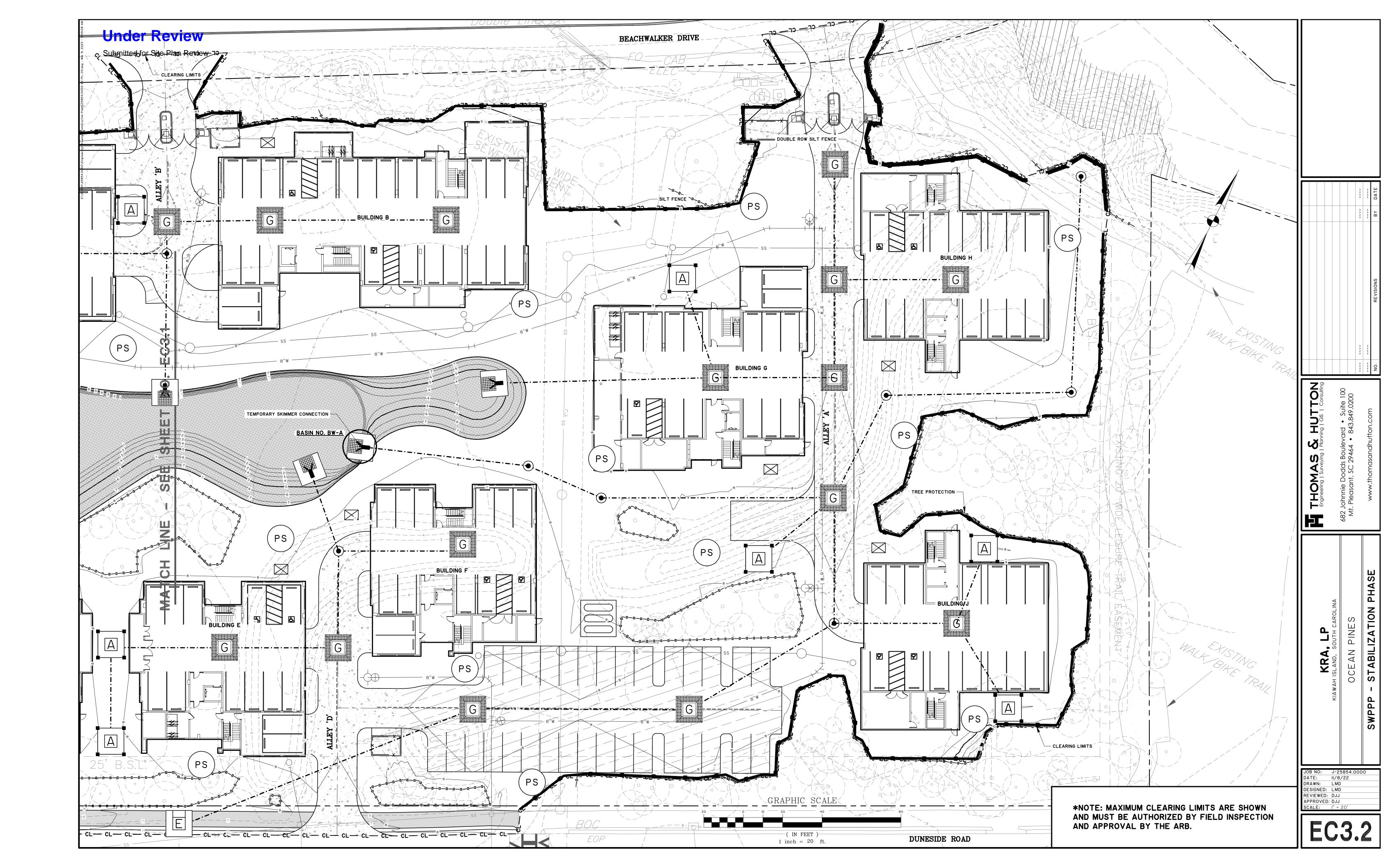












BURY MINIMUM OF 12-IN.

FILTER FABRIC BURIAL DETAIL

USE FILTER FABRIC THAT CONFORMS TO SCDOT STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION (LATEST EDITION).

USE STEEL POSTS THAT MEET THE FOLLOWING MINIMUM PHYSICAL REQUIREMENTS: BE COMPOSED OF HIGH STRENGTH STEEL WITH MINIMUM YIELD STRENGTH OF 50.000 PSI.

HAVE A STANDARD "T" SECTION WITH A NOMINAL FACE WIDTH OF 1.38-INCHES AND NOMINAL "T" LENGTH OF 1.48-INCHES.

WEIGH 1.25 POUNDS PER FOOT (± 8%). BE PAINTED WITH A WATER BASED BAKED ENAMEL PAINT.

**POST INSTALLATION DETAIL** 

EXCAVATE A TRENCH 6-INCHES WIDE AND 6-INCHES DEEP AROUND THE OUTSIDE PERIMETER OF THE INLET UNLESS THE FABRIC IS PNEUMATICALLY INSTALLED.

EXTEND THE FILTER FABRIC A MINIMUM OF 12-INCHES INTO THE TRENCH. BACKFILL THE TRENCH WITH SOIL OR CRUSHED STONE AND COMPACT OVER THE FILTER FABRIC UNLESS THE FABRIC IS PNEUMATICALLY INSTALLED.

FILTER FABRIC

USE STEEL POSTS WITH A MINIMUM POST LENGTH OF 60-INCHES CONSISTING OF STANDARD "T" SECTIONS WITH A WEIGHT OF 1.25 POUNDS PER FOOT (±8%). INSTALL THE FILTER FABRIC TO A MINIMUM HEIGHT OF 24-INCHES ABOVE GRADE. SPACE THE STEEL POSTS AROUND THE PERIMETER OF THE INLET A MAXIMUM OF 3-FEET APART AND DRIVE THEM INTO THE GROUND A MINIMUM OF 24-INCHES. CUT THE FILTER FABRIC FROM A CONTINUOUS ROLL TO THE LENGTH OF THE PROTECTED AREA TO AVOID THE USE OF JOINTS. WHEN JOINTS ARE NECESSARY, WRAP FILTER FABRIC TOGETHER ONLY AT A SUPPORT POST WITH BOTH ENDS SECURELY FASTENED TO THE POST, WITH A MINIMUM 6-INCH OVERLAP.

ATTACH FABRIC TO STEEL POSTS WITH HEAVY-DUTY PLASTIC TIES.

ATTACH AT LEAST FOUR (4) EVENLY SPACED TIES IN A MANNER TO PREVENT SAGGING OR TEARING OF THE FABRIC. IN ALL CASES, AFFIX TIES IN NO LESS THAN FOUR (4) PLACES.

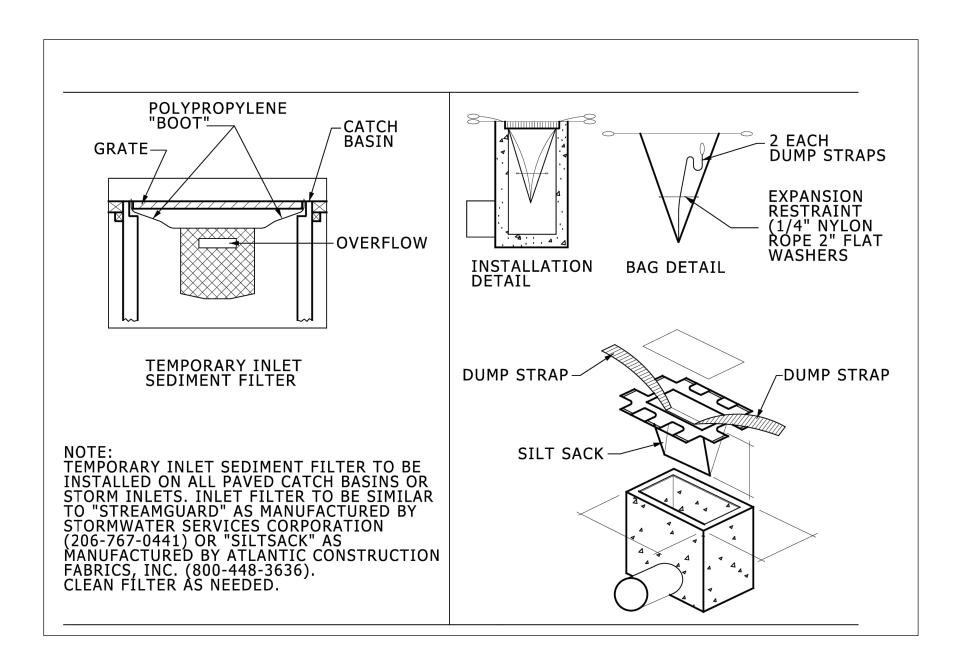
INSPECTION AND MAINTENANCE:

SEDIMENT SHOULD BE REMOVED WHEN IT REACHES APPROXIMATELY 1/3 THE HEIGHT OF THE FENCE. TAKE CARE NOT TO DAMAGE OR UNDERCUT FABRIC WHEN REMOVING SEDIMENT. IF A SUMP IS USED, SEDIMENT SHOULD BE REMOVED WHEN IT FILLS APPROXIMATELY 1/3 THE DEPTH OF THE HOLE. MAINTAIN THE POOL AREA, ALWAYS PROVIDING ADEQUATE SEDIMENT STORAGE VOLUME FOR THE NEXT STORM.

STORM DRAIN INLET PROTECTION STRUCTURES SHOULD BE REMOVED ONLY AFTER THE DISTURBED AREAS ARE PERMANENTLY STABILIZED. REMOVE ALL CONSTRUCTION MATERIAL AND SEDIMENT, AND DISPOSE OF THEM PROPERLY. GRADE THE DISTURBED AREA TO THE ELEVATION OF THE DROP INLET STRUCTURE CREST. USE APPROPRIATE PERMANENT STABILIZATION METHODS TO STABILIZE BARE AREAS AROUND THE INLET.

#### FILTER FABRIC INLET PROTECTION (TYPE A)

NOT TO SCALE





SILT SAC DETAIL

NOT TO SCALE

LIST OF ACRONYMS FOR SEDIMENT AND EROSION CONTROL

AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS

ACRYLAMIDE POLYMER AMD BFM **BONDED FIBER MATRIX** BMP(S)

BEST MANAGEMENT PRACTICE(S) CFS **CUBIC FEET PER SECOND** CMP CORRUGATED METAL PIPE

DHEC DEPARTMENT OF HEATH AND ENVIRONMENTAL CONTROL ECB **EROSION CONTROL BLANKET** EPA UNITED STATES ENVIRONMENTAL PROTECTION AGENCY **EPSC EROSION PREVENTION AND SEDIMENTATION CONTROL** 

FDA UNITED STATES FOOD AND DRUG ADMINISTRATION FGM FLEXIBLE GROWTH MATRIX

HDPE HIGH DENSITY POLYETHYLENE MUNICIPAL SEPARATE STORM SEWER SYSTEM MS4 MSDS MATERIAL SAFETY DATA SHEETS

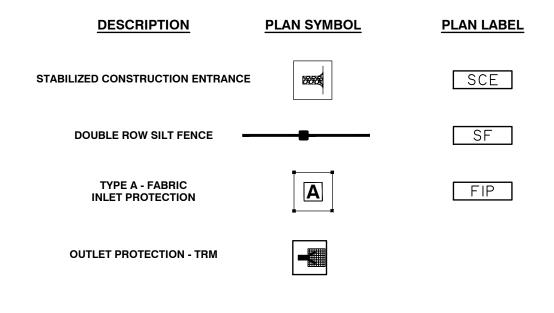
**NPDES** NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM POLYACRYLAMIDE OR POLYMER PAM REINFORCED CONCRETE PIPE RCP

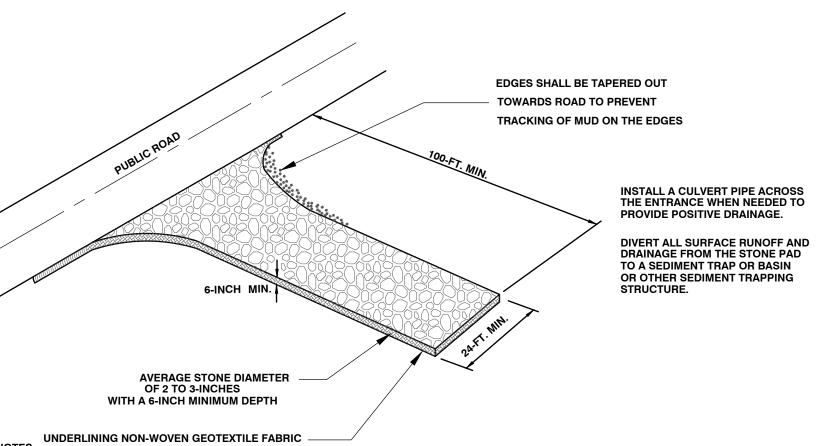
SCS SOIL CONSERVATION SERVICE SWPPP STORMWATER POLLUTION PREVENTION PROGRAM

> TURF REINFORCEMENT MAT **VEGETATED FILTER STRIP**

TRM

#### **EROSION CONTROL SYMBOL LEGEND**





WHEN AND WHERE TO USE IT:

STABILIZED CONSTRUCTION ENTRANCES SHOULD BE USED AT ALL POINTS WHERE TRAFFIC WILL BE LEAVING A CONSTRUCTION SITE AND

**IMPORTANT CONSIDERATIONS:** 

IF WASHING IS USED, PROVISIONS MUST BE MADE TO INTERCEPT THE WASH WATER AND TRAP THE SEDIMENT BEFORE IT IS CARRIED OFFSITE. WASHDOWN FACILITIES SHALL BE REQUIRED AS DIRECTED BY SCOHEC AS NEEDED. WASHDOWN AREAS IN GENERAL MUST BE ESTABLISHED WITH CRUSHED GRAVEL AND DRAIN INTO A SEDIMENT TRAP OR SEDIMENT BASIN.

CONSTRUCTION ENTRANCES SHOULD BE USED IN CONJUNCTION WITH THE STABILIZATION OF CONSTRUCTION ROADS TO REDUCE THE AMOUNT OF MUD PICKED UP BY VEHICLES.

REMOVE ALL VEGETATION AND ANY OBJECTIONABLE MATERIAL FROM THE FOUNDATION AREA

DIVERT ALL SURFACE RUNOFF AND DRAINAGE FROM STONES TO A SEDIMENT TRAP OR BASIN.

INSTALL A NON-WOVEN GEOTEXTILE FABRIC PRIOR TO PLACING ANY STONE.

INSTALL A CULVERT PIPE ACROSS THE ENTRANCE WHEN NEEDED TO PROVIDE POSITIVE DRAINAGE.

THE ENTRANCE SHALL CONSIST OF 1-INCH TO 3-INCH D50 STONE PLACED AT A MINIMUM DEPTH OF 6-INCHES.

SITE CONSTRAINTS. THE EDGES OF THE ENTRANCE SHALL BE TAPERED OUT TOWARDS THE ROAD TO PREVENT TRACKING OF MUD AT THE EDGE OF THE ENTRANCE.

INSPECTION AND MAINTENANCE:

INSPECT CONSTRUCTION ENTRANCES EVERY SEVEN (7) CALENDAR DAYS AND WITHIN 24-HOURS AFTER EACH RAINFALL EVENT THAT PRODUCES 1/2-INCHES OR MORE OF PRECIPITATION, OR AFTER HEAVY USE. CHECK FOR MUD AND SEDIMENT BUILDUP AND PAD INTEGRITY. MAKE DAILY INSPECTIONS DURING PERIODS OF WET WEATHER. MAINTENANCE IS REQUIRED MORE FREQUENTLY IN WET WEATHER CONDITIONS. RESHAPE THE STONE PAD AS NEEDED FOR DRAINAGE AND RUNOFF CONTROL.

MINIMUM DIMENSIONS OF THE ENTRANCE SHALL BE 24-FEET WIDE BY 100-FEET LONG, AND MAY BE MODIFIED AS NECESSARY TO ACCOMMODATE

WASH OR REPLACE STONES AS NEEDED. THE STONE IN THE ENTRANCE SHOULD BE WASHED OR REPLACED WHENEVER THE ENTRANCE FAILS TO REDUCE MUD BEING CARRIED OFF-SITE BY VEHICLES.

FREQUENT WASHING WILL EXTEND THE USEFUL LIFE OF STONE.

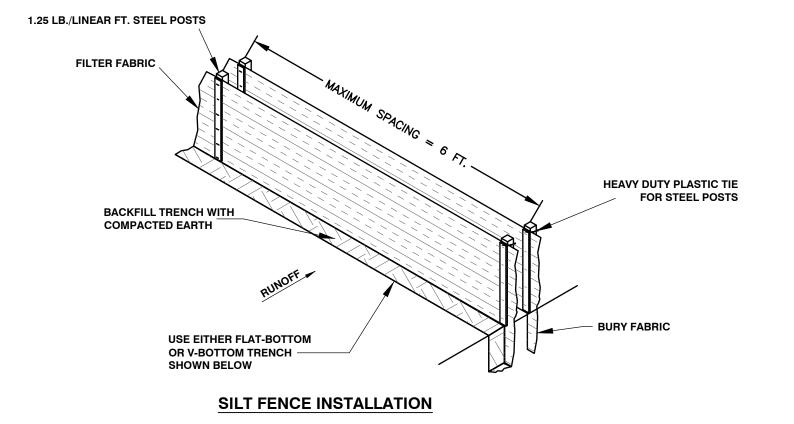
IMMEDIATELY REMOVE MUD AND SEDIMENT TRACKED OR WASHED ONTO PUBLIC ROADS BY BRUSHING OR SWEEPING. FLUSHING SHOULD ONLY BE USED WHEN THE WATER CAN BE DISCHARGED TO A SEDIMENT TRAP OR BASIN.

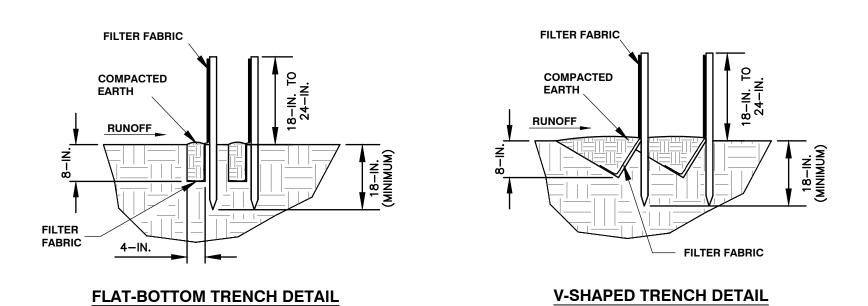
REPAIR ANY BROKEN PAVEMENT IMMEDIATELY.

#### STABILIZED CONSTRUCTION ENTRANCE

NOT TO SCALE







NOTES:

WHEN AND WHERE TO USE IT: SILT FENCE IS APPLICABLE IN AREAS:

WHERE THE MAXIMUM SHEET OR OVERLAND FLOW PATH LENGTH TO THE FENCE IS 100-FEET. WHERE THE MAXIMUM SLOPE STEEPNESS (NORMAL [PERPENDICULAR] TO FENCE LINE) IS 2H:1V. THAT DO NOT RECEIVE CONCENTRATED FLOWS GREATER THAN 0.5 CFS.

<u>DO NOT PLACE SILT FENCE ACROSS CHANNELS OR USE IT AS A VELOCITY CONTROL BMP.</u>

MATERIALS:

STEEL POSTS

USE 48-INCH LONG STEEL POSTS THAT MEET THE FOLLOWING MINIMUM PHYSICAL REQUIREMENTS: COMPOSED OF HIGH STRENGTH STEEL WITH MINIMUM YIELD STRENGTH OF 50,000 PSI.

HAVE A STANDARD "T" SECTION WITH A NOMINAL FACE WIDTH OF 1.38-INCHES AND NOMINAL "T" LENGTH OF 1.48-INCHES. WEIGH 1.25 POUNDS PER FOOT (± 8%).

HAVE A SOIL STABILIZATION PLATE WITH A MINIMUM CROSS SECTION AREA OF 17-SQUARE INCHES ATTACHED TO THE STEEL POSTS.

USE STEEL POSTS WITH A MINIMUM LENGTH OF 4-FEET, WEIGHING 1.25 POUNDS PER LINEAR FOOT (± 8%) WITH PROJECTIONS TO AID IN FASTENING THE FABRIC. EXCEPT WHEN HEAVY CLAY SOILS ARE PRESENT ON SITE, STEEL POSTS WILL HAVE A METAL SOIL STABILIZATION PLATE WELDED NEAR THE BOTTOM SUCH THAT WHEN THE POST IS DRIVEN TO THE PROPER DEPTH, THE PLATE WILL BE BELOW THE GROUND LEVEL FOR ADDED STABILITY.

THE SOIL PLATES SHOULD HAVE THE FOLLOWING CHARACTERISTICS: BE COMPOSED OF MINIMUM 15 GAUGE STEEL.

HAVE A MINIMUM CROSS SECTION AREA OF 17-SQUARE INCHES.

FILTER FABRIC IS: COMPOSED OF FIBERS CONSISTING OF LONG CHAIN SYNTHETIC POLYMERS COMPOSED OF AT LEAST 85% BY WEIGHT OF POLYOLEFINS,

POLYESTERS, OR POLYAMIDES. FORMED INTO A NETWORK SUCH THAT THE FILAMENTS OR YARNS RETAIN DIMENSIONAL STABILITY RELATIVE TO EACH OTHER. FREE OF ANY TREATMENT OR COATING WHICH MIGHT ADVERSELY ALTER ITS PHYSICAL PROPERTIES AFTER INSTALLATION. FREE OF DEFECTS OR FLAWS THAT SIGNIFICANTLY AFFECT ITS PHYSICAL AND/OR FILTERING PROPERTIES.

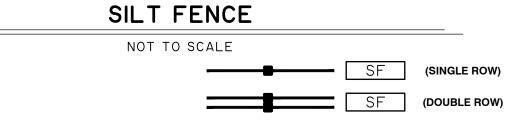
CUT TO A MINIMUM WIDTH OF 36 INCHES.

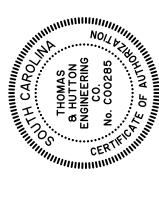
USE ONLY FABRIC APPEARING ON SCDOT APPROVAL SHEET #34 MEETING THE REQUIREMENTS OF THE MOST CURRENT EDITION OF THE SCDOT STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION.

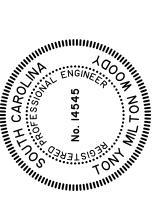
EXCAVATE A TRENCH APPROXIMATELY 6-INCHES WIDE AND 6-INCHES DEEP WHEN PLACING FABRIC BY HAND. PLACE 12-INCHES OF GEOTEXTILE FABRIC INTO THE 6-INCH DEEP TRENCH, EXTENDING THE REMAINING 6-INCHES TOWARDS THE UPSLOPE SIDE OF THE TRENCH. BACKFILL THE TRENCH WITH SOIL OR GRAVEL AND COMPACT. BURY 12-INCHES OF FABRIC INTO THE GROUND WHEN PNEUMATICALLY INSTALLING SILT FENCE WITH A SLICING METHOD. PURCHASE FABRIC IN CONTINUOUS ROLLS AND CUT TO THE LENGTH OF THE BARRIER TO AVOID JOINTS. WHEN JOINTS ARE NECESSARY, WRAPPED THE FABRIC TOGETHER AT A SUPPORT POST WITH BOTH ENDS FASTENED TO THE POST, WITH A 6-INCH MINIMUM OVERLAP. INSTALL POSTS TO A MINIMUM DEPTH OF 24-INCHES. INSTALL POSTS A MINIMUM OF 1- TO 2- INCHES ABOVE THE FABRIC. WITH NO MORE THAN 3-FEET OF THE POST ABOVE THE GROUND. SPACE POSTS TO MAXIMUM 6-FEET CENTERS. ATTACH FABRIC TO WOOD POSTS USING STAPLES MADE OF HEAVY-DUTY WIRE AT LEAST 1-1/2-INCH LONG, SPACED A MAXIMUM OF 6-INCHES APART. STAPLE A 2-INCH WIDE LATHE OVER THE FILTER FABRIC TO SECURELY FASTEN IT TO THE UPSLOPE SIDE OF WOODEN POSTS. ATTACH FABRIC TO THE STEEL POSTS USING HEAVY-DUTY PLASTIC TIES THAT ARE EVENLY SPACED AND PLACED IN A MANNER TO PREVENT SAGGING OR TEARING OF THE FABRIC. IN CALL CASES, TIES SHOULD BE AFFIXED IN NO LESS THAN 4 PLACES. INSTALL THE FABRIC A MINIMUM OF 24-INCHES ABOVE THE GROUND. WHEN NECESSARY, THE HEIGHT OF THE FENCE ABOVE GROUND MAY BE GREATER THAN 24-INCHES. IN TIDAL AREAS, EXTRA SILT FENCE HEIGHT MAY BE REQUIRED. THE POST HEIGHT WILL BE TWICE THE EXPOSED POST HEIGHT. POST SPACING WILL REMAIN THE SAME AND EXTRA HEIGHT FABRIC WILL BE 4-, 5-, OR 6-FEET TALL. LOCATE SILT FENCE CHECKS EVERY 100 FEET MAXIMUM AND AT LOW POINTS. INSTALL THE FENCE PERPENDICULAR TO THE DIRECTION OF FLOW AND PLACE THE FENCE THE PROPER DISTANCE FROM THE TOE OF STEEP SLOPES TO PROVIDE SEDIMENT STORAGE AND ACCESS FOR MAINTENANCE AND

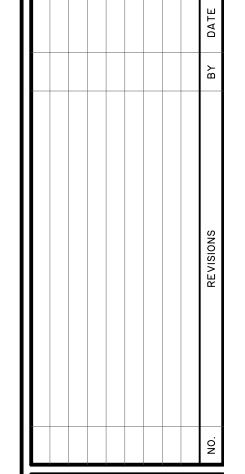
**INSPECTION AND MAINTENANCE** 

INSPECT EVERY SEVEN CALENDAR DAYS AND WITHIN 24-HOURS AFTER EACH RAINFALL EVENT THAT PRODUCES 1/2-INCHES OR MORE OF PRECIPITATION. CHECK FOR SEDIMENT BUILDUP AND FENCE INTEGRITY. CHECK WHERE RUNOFF HAS ERODED A CHANNEL BENEATH THE FENCE, OR WHERE THE FENCE HAS SAGGED OR COLLAPSED BY FENCE OVERTOPPING. IF THE FENCE FABRIC TEARS, BEGINS TO DECOMPOSE, OR IN ANY WAY BECOMES INEFFECTIVE. REPLACE THE SECTION OF FENCE IMMEDIATELY, REMOVE SEDIMENT ACCUMULATED ALONG THE FENCE WHEN IT REACHES 1/3 THE HEIGHT OF THE FENCE, ESPECIALLY IF HEAVY RAINS ARE EXPECTED. REMOVE TRAPPED SEDIMENT FROM THE SITE OR STABILIZE IT ON SITE. REMOVE SILT FENCE WITHIN 30 DAYS AFTER FINAL STABILIZATION IS ACHIEVED OR AFTER TEMPORARY BEST MANAGEMENT PRACTICES (BMPS) ARE NO LONGER NEEDED. PERMANENTLY STABILIZE DISTURBED AREAS RESULTING FROM FENCE REMOVAL.





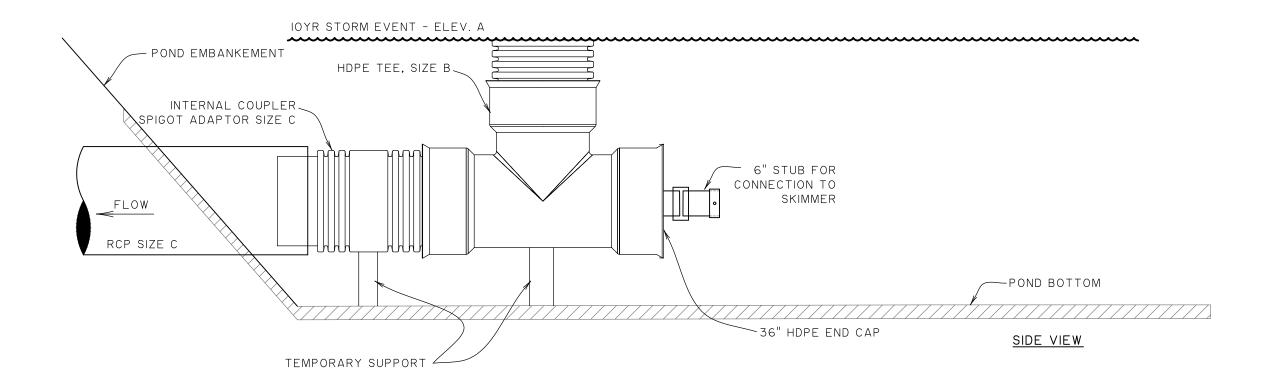




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DRAWN: ESIGNED: LMD REVIEWED: DJJ APPROVED: DJJ CALE: NOT TO SCALE

Submitted for Site Plan Review



POND NUMBER	POND OUTLET PIPE INVERT	А	В	С	SKIMMER SIZE	DEWATERING TIME
BW-A	1.0'	5.68	36" X 36"	36"	6"	3 DAYS

### SKIMMER TEMPORARY CONNECTION DETAIL

NOT TO SCALE

NOTE: FLOAT SKIMMER AND HDPE TEE CONNECTION TO BE REMOVED AFTER FINAL STABILIZATION

#### SKIMMER MAINTENANCE

**WARNING!** THE SKIMMER IS MADE TO WITHSTAND NORMAL HANDLING AND THE FILLING AND DRAINING OF THE SEDIMENT BASIN BUT IT CANNOT WITHSTAND BEING YANKED AROUND A BACKHOE. USE THE ROPE TO CAREFULLY, MANUALLY POSITION THE SKIMMER OR MOVE IT OUT OF THE WAY OF HEAVY EQUIPMENT FOR EXCAVATION.

SEDIMENT REMOVAL

EROSION CONTROL (TEMPORARY AND PERMANENT STABILIZATION) AND CONTROLLING RUNOFF WITHIN THE CATCHMENT IS ESSENTIAL TO PREVENT SEDIMENT GENERATION, PREVENT POLLUTION, AND REDUCE BASIN MAINTENANCE. WHEN THE SEDIMENT STORAGE IN THE BASINS FILLS MAINTENANCE IS REQUIRED TO RESTORE THE TREATMENT VOLUME IN ORDER TO MAINTAIN BASIN EFFICIENCY.

SEDIMENT REMOVAL IS NEEDED BEFORE SEDIMENT ACCUMULATES UP TO THE CREST OF THE WEIR IN THE FIRST BAFFLE.

EXCAVATE THE SEDIMENT FROM THE ENTIRE BASIN TO RESTORE THE ORIGINAL SEDIMENT STORAGE VOLUME.

WHEN SEDIMENT ACCUMULATES AROUND THE SKIMMER TO THE POINT IT CANNOT SETTLE LOW ENOUGH TO DRAIN THE ENTIRE BASIN SEDIMENT REMOVAL IS REQUIRED.

PULL THE SKIMMER TO ONE SIDE SO THE SEDIMENT UNDERNEATH IT CAN BE EXCAVATED.

EXCAVATE THE ENTIRE CELL FORMED BY THE BAFFLE, NOT JUST AROUND THE SKIMMER.

#### BAFFLES

MAKE REPAIRS IF DAMAGED, THE POSTS ARE LAID OVER, WATER IS FLOWING UNDERNEATH, OR THE FABRIC HAS FALLEN. IF WATER OR SEDIMENT IS ESCAPING AROUND THE ENDS TIE THE ENDS INTO THE SIDE OF THE BASIN.

#### SKIMMED

TRASH. IF THE SKIMMER IS CLOGGED WITH TRASH AND THERE IS WATER IN THE BASIN, USUALLY A FEW JERKS ON THE ROPE TO MAKE THE SKIMMER BOB UP AND DOWN WILL DISLODGE THE DEBRIS AND RESTORE FLOW. IF THIS DOES NOT WORK PULL THE SKIMMER OVER TO THE SIDE (IT'S EASIEST TO DO WHEN THE BASIN IS PARTIALLY FULL) AND REMOVE THE DEBRIS. ALSO CHECK THE ORIFICE INSIDE THE SKIMMER TO SEE IF IT IS CLOGGED; IF SO REMOVE THE DEBRIS.

SEDIMENT UNDER THE SKIMMER. IF SEDIMENT ACCUMULATES TO THE POINT THE SKIMMER CANNOT SETTLE LOW ENOUGH TO DRAIN THE ENTIRE BASIN PULL THE SKIMMER OVER TO ONE SIDE AND EXCAVATE THE SEDIMENT WITH A BACKHOE.

CLOGGED BARREL OR PIPE THROUGH THE DAM. IF THE SKIMMER IS CLOGGED DESPITE REMOVING DEBRIS AND IT APPEARS THAT EITHER THE BARREL BETWEEN THE ORIFICE AND THE FLEXIBLE JOINT OR THE PIPE THROUGH THE DAM IS CLOGGED TAKE THE FOLLOWING STEPS TO CLEAR THE BLOCKAGE (SEDIMENT WILL SOMETIMES ACCUMULATE IN THE PIPE).

PULL THE SKIMMER OVER TO THE SIDE.

REMOVE THE PIN AND OPEN THE DOOR TO ACCESS THE ORIFICE.

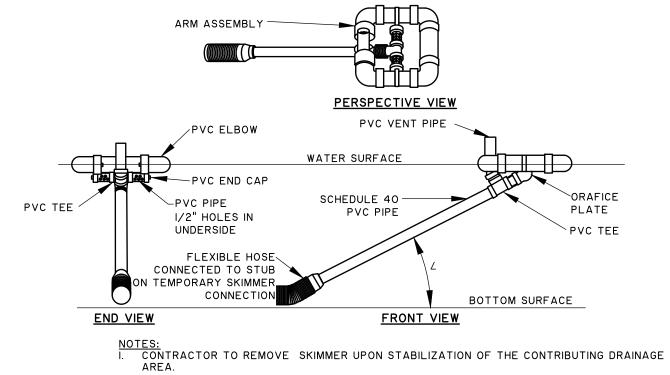
REMOVE THE ORIFICE PLUG OR CAP.

RAISE THE INLET AS HIGH AS PRACTICAL.

FILL THE BARREL WITH WATER (USE A BUCKET AND FUNNEL OR A PUMP) TO REMOVE THE CLOG USING THE WATER AND PRESSURE.

AFTER THE OBSTRUCTION IS REMOVED CONTINUE POURING WATER INTO THE BARREL TO FLUSH OUT ACCUMULATED DEBRIS AND SEDIMENT TO PREVENT FUTURE CLOGGING.

A PLUMBERS SNAKE CAN BE USED BUT FLUSHING OUT THE SEDIMENT AND DEBRIS ACCUMULATION IS RECOMMENDED FIRST.



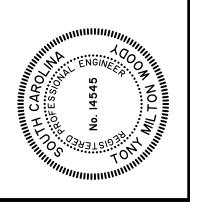
DESIGN CRITERIA:

POND SKIMMER ORFICE
SIZE (IN) SADDLE

SKIMMER DETAIL

NOT TO SCALE

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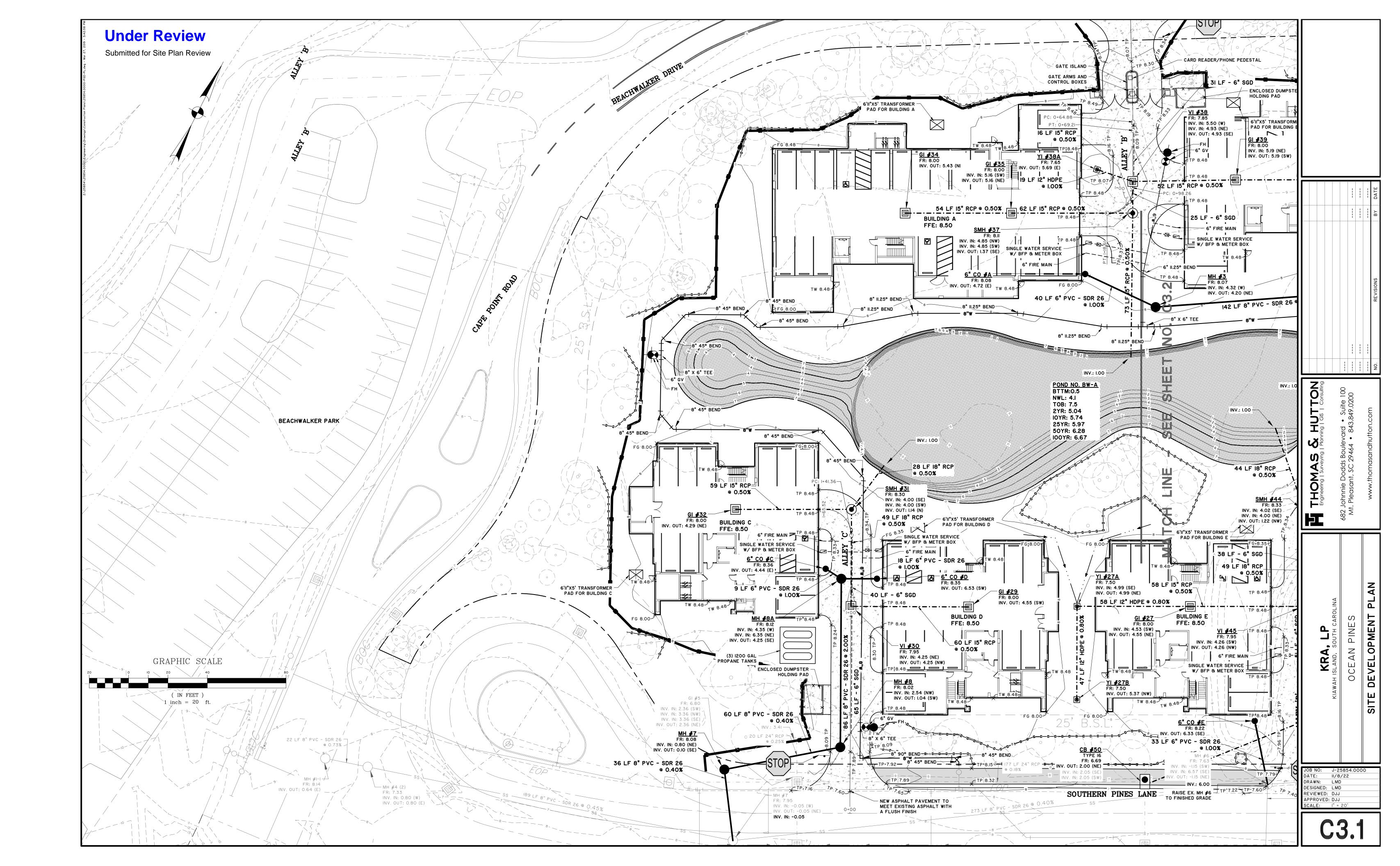
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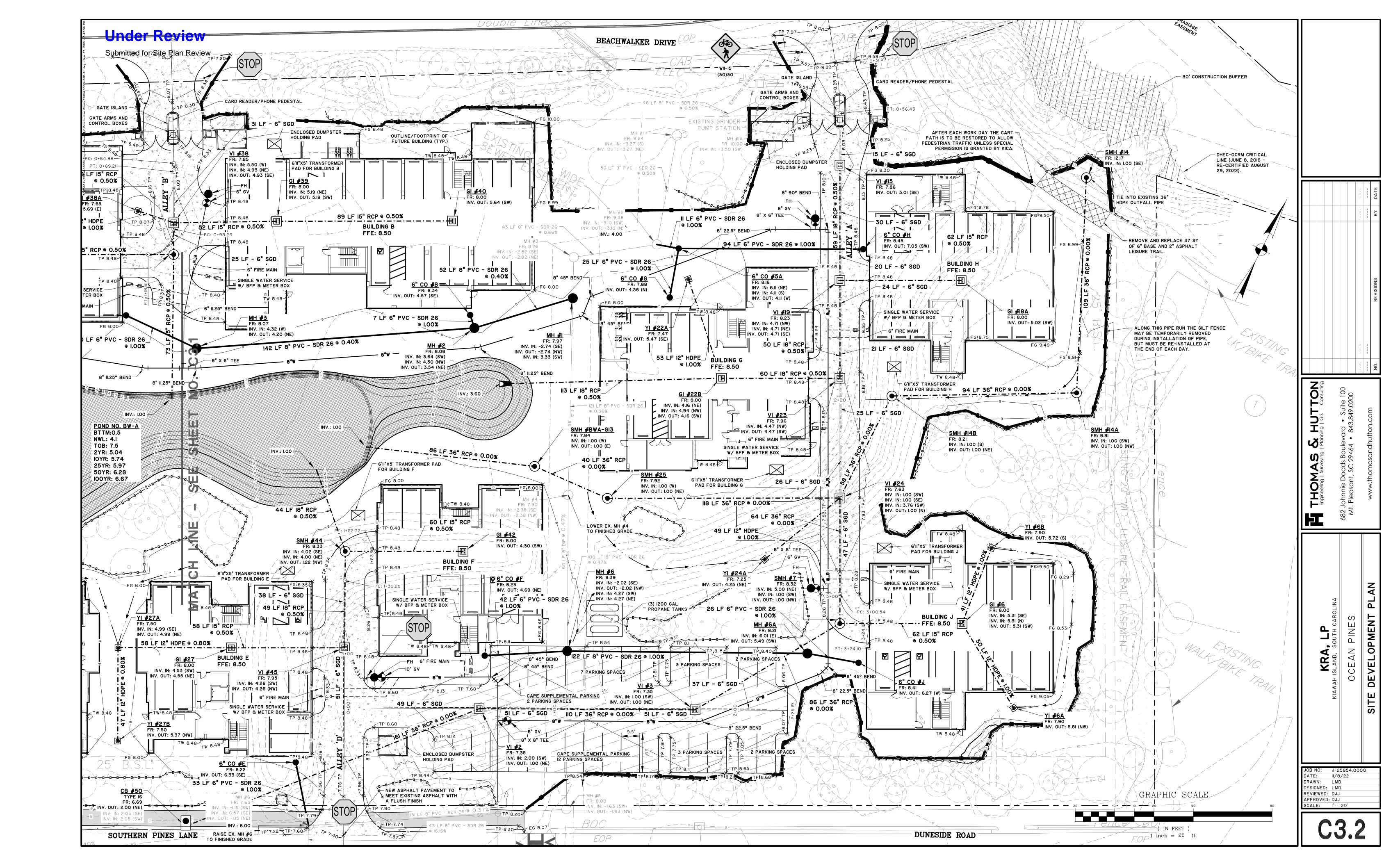
Engineering | Surveying | Planning | GIS | Consulting | Subhunite | Dodds Boulevard • Suite 100 | Mt. Pleasant, SC 29464 • 843.849.0200

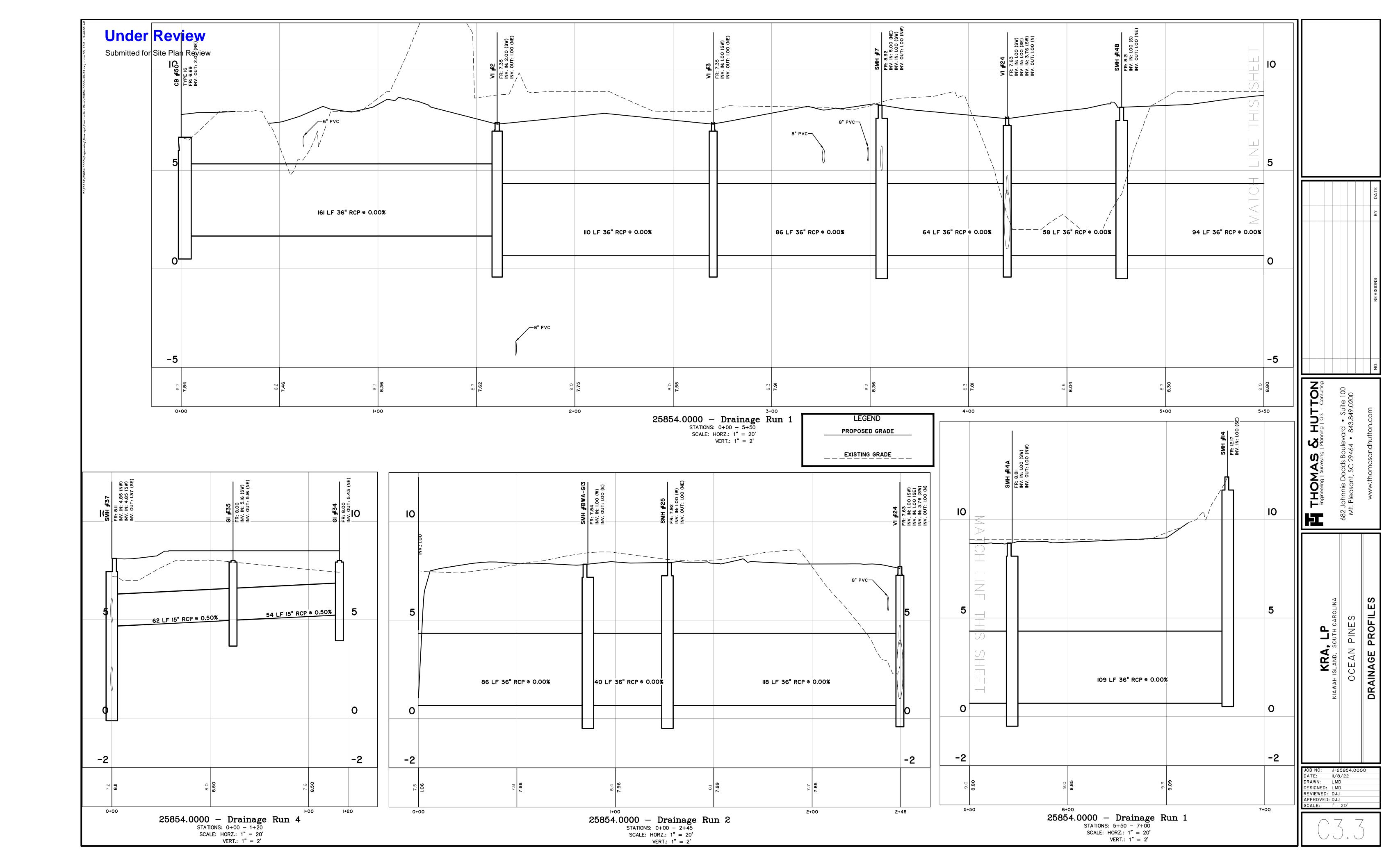
WAH ISLAND, SOUTH CAROLINA
OCEAN PINES

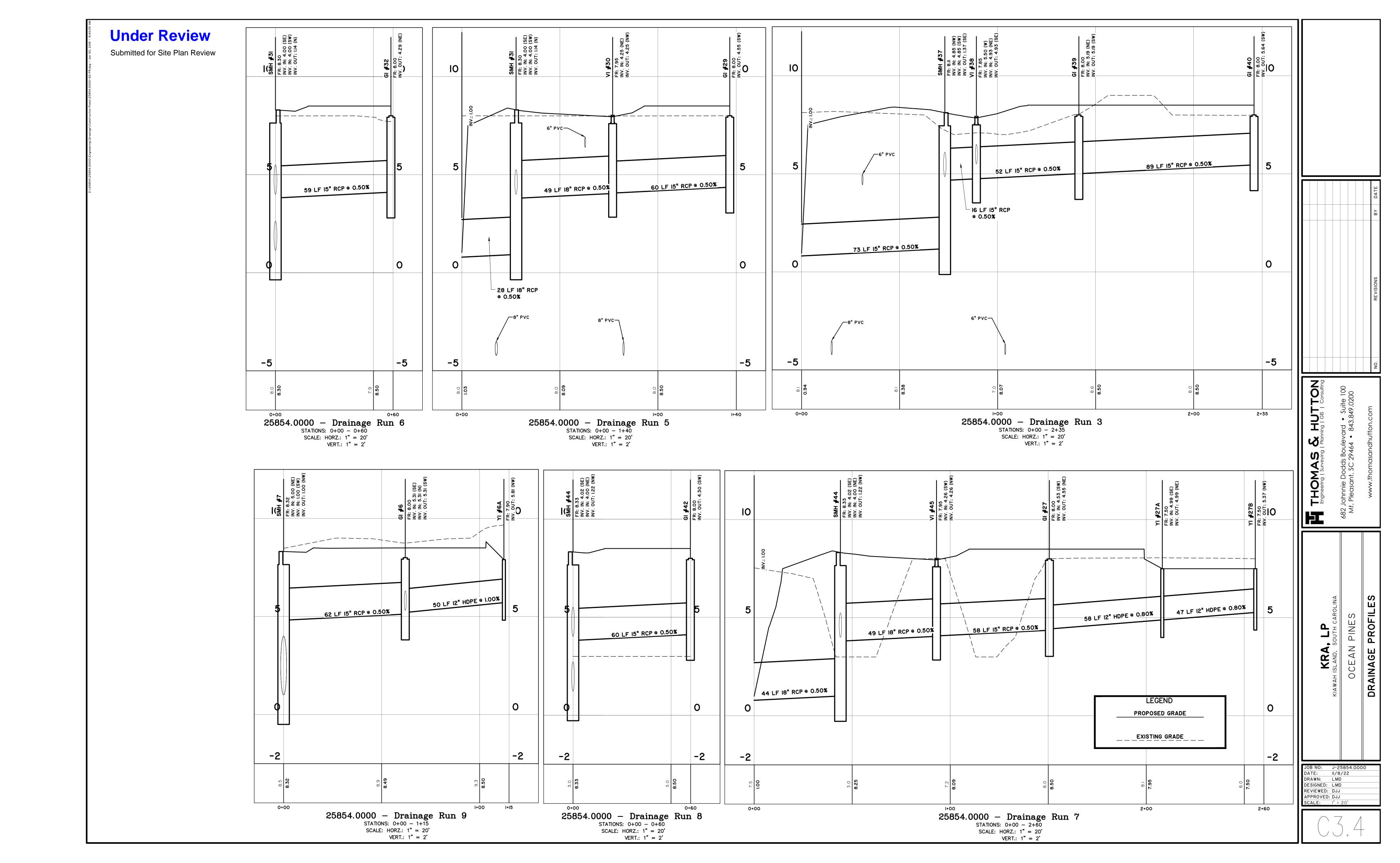
JOB NO: J-25854.0000
DATE: II/8/22
DRAWN: LMD
DESIGNED: LMD
REVIEWED: DJJ
APPROVED: DJJ
SCALE: NOT TO SCALE

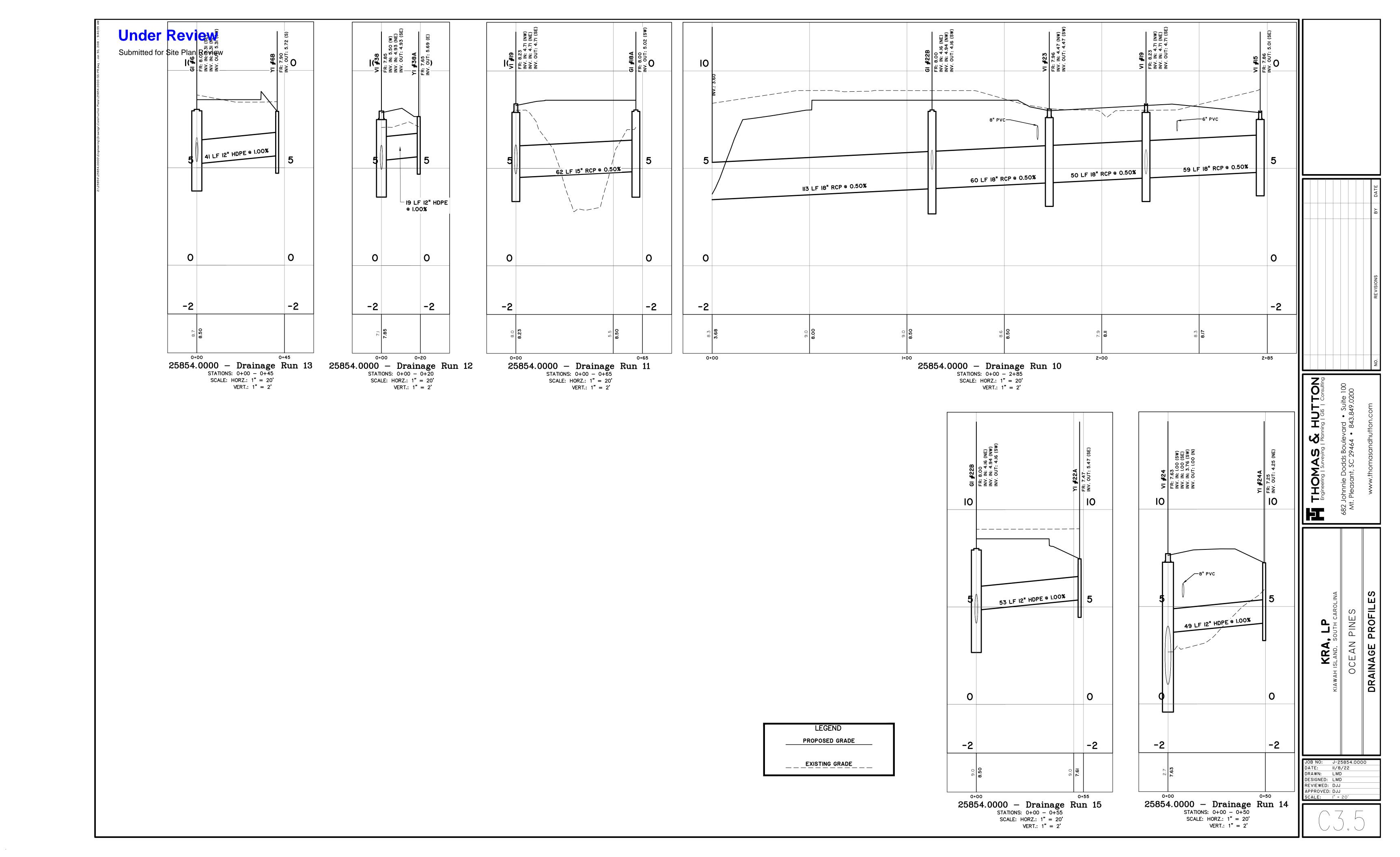
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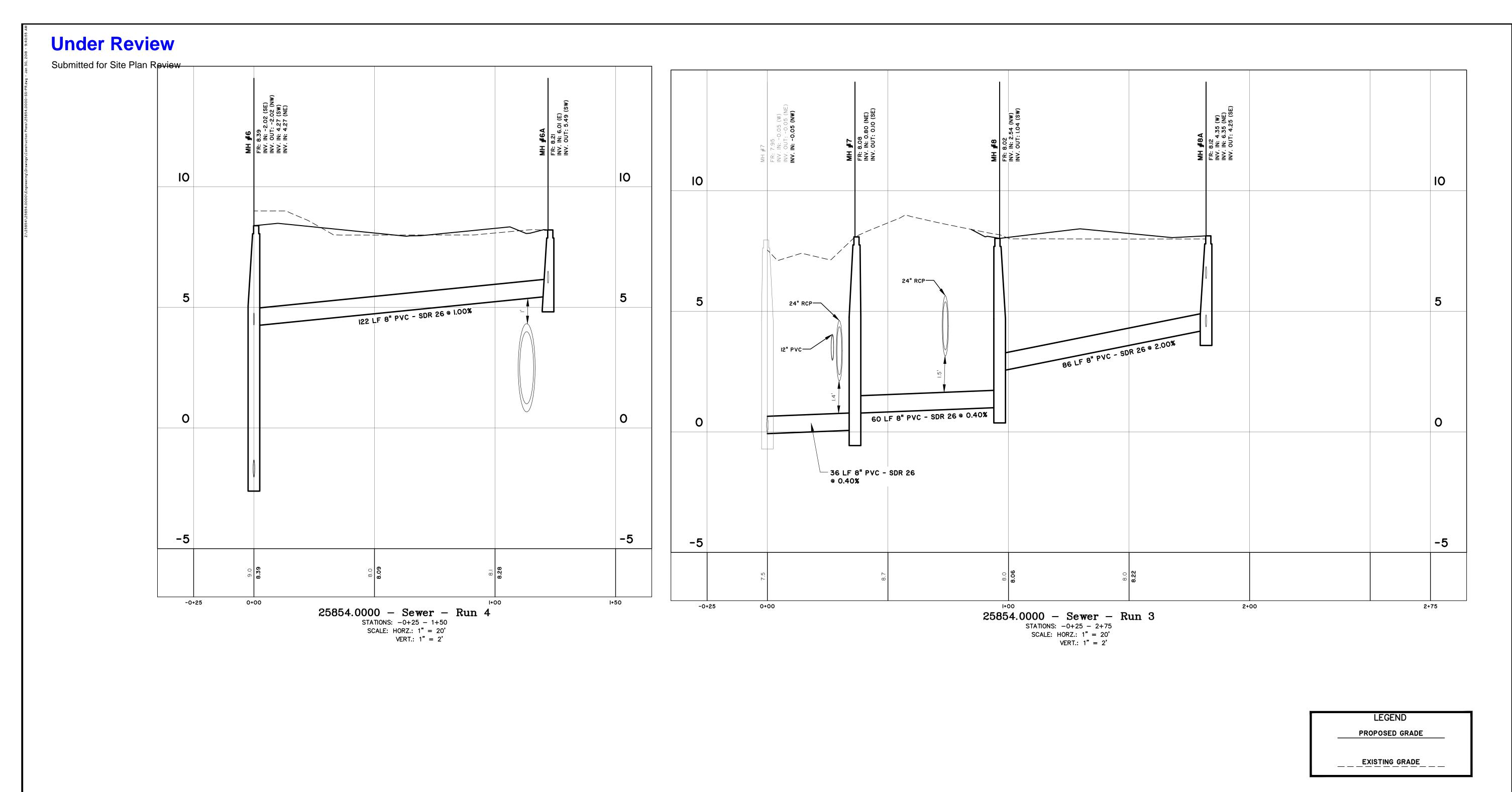






# **Under Review** Submitted for Site Plan Review MH #2 FR: 7.80 INV. IN: 3.64 (SW) INV. IN: 4.50 (NW) INV. OUT: 3.54 (NE) MH #I FR: 7.97 INV. IN: -2.74 (SE) INV. OUT: -2.74 (NW INV. IN: 3.33 (SW) 10 10 142 LF 8" PVC - SDR 26 @ 0.40% - 52 LF 8" PVC - SDR 26 @ 0.40% 0 OMAS & HUTTON sering | Surveying | Planning | GIS | Consulting -5 -5 25854.0000 - Sewer - Run 1 STATIONS: -0+25 - 2+55 SCALE: HORZ.: 1" = 20' VERT.: 1" = 2' 2+00 -0+25 LEGEND PROPOSED GRADE \_\_\_EXISTING GRADE\_\_\_\_

KRA, LP
KIAWAH ISLAND, SOUTH CAROLINA
OCEAN PINES
SEWER PROFILES JOB NO: J-25854.0000
DATE: II/8/22
DRAWN: LMD
DESIGNED: LMD
REVIEWED: DJJ
APPROVED: DJJ
SCALE: I" = 20'



KRA, LP

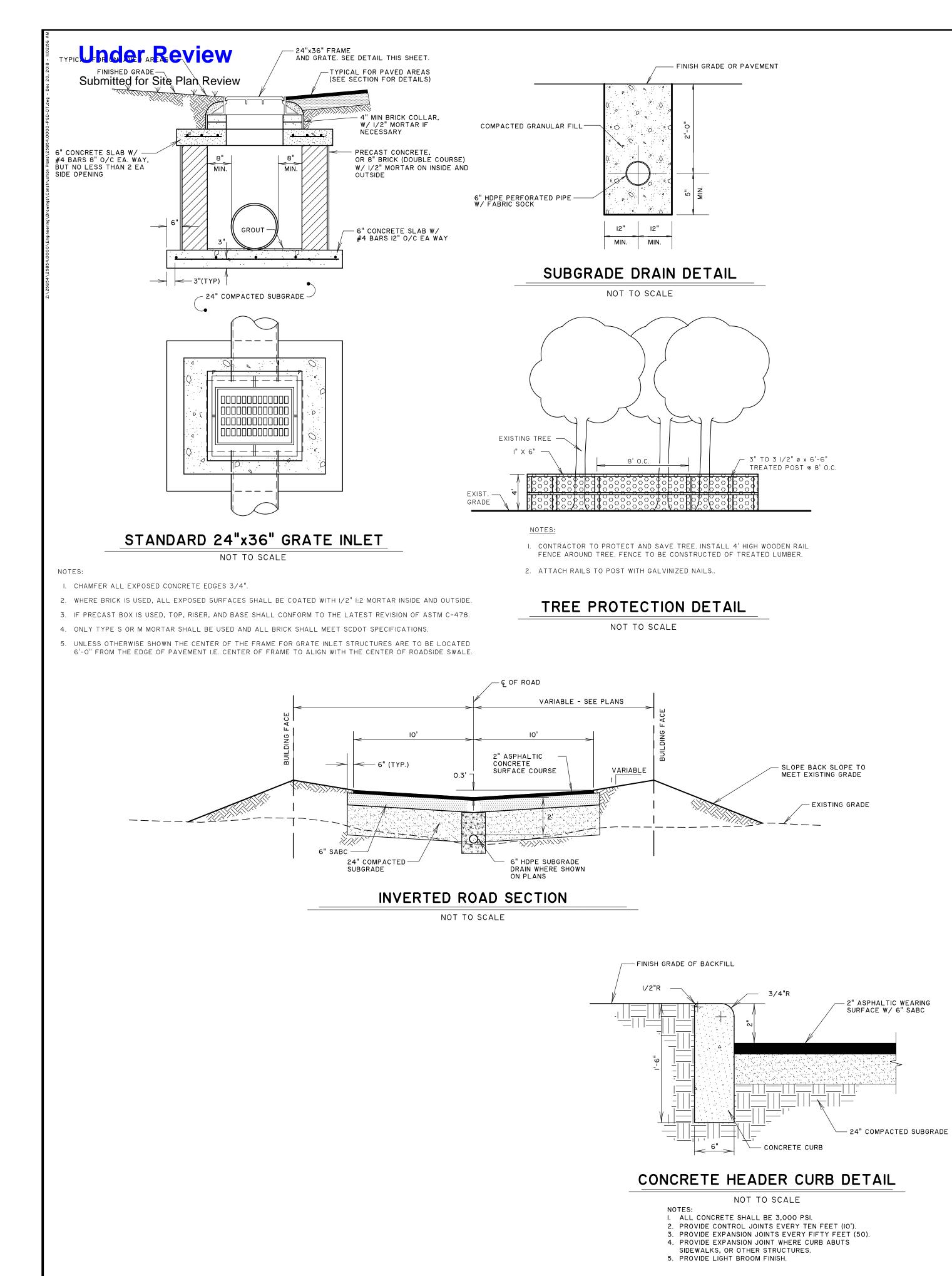
KIAWAH ISLAND, SOUTH CAROLINA

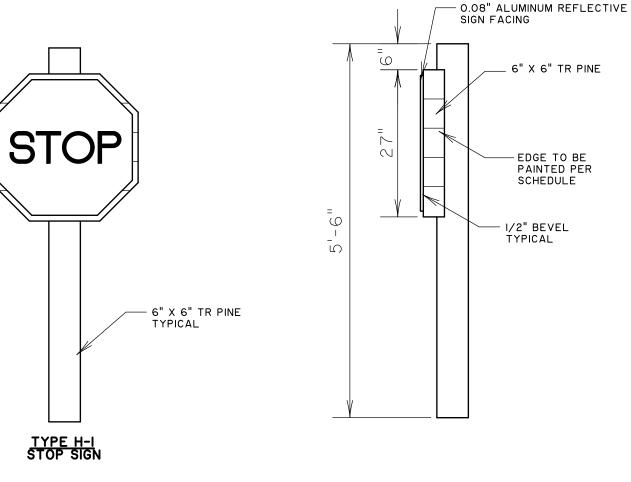
OCEAN PINES

SEWER PROFILES

**M** 

JOB NO: J-25854.0000
DATE: II/8/22
DRAWN: LMD
DESIGNED: LMD
REVIEWED: DJJ
APPROVED: DJJ
SCALE: I" = 20'





BASED ON SOUTH CAROLINA'S TRAFFIC LAWS AND MUTCD CURRENT ADDITIONS.

2. PRIMARY MATERIAL FOR THE SIGN POST AND FACE SHOULD BE 6" X 6" TREATED YELLOW PINE. OVERALL POST LENGTH IS 9'-0". SPECIAL HARDWARE INCLUDES 2 1/2" COUNTERSUNK OGEE WASHERS USED ON BOLTS HOLDING THE FACE PANEL TO POST. ALL OTHER HARDWARE IS STANDARD.

I. USED WHEREVER VEHICULAR TRAFFIC CONTROL IS NEEDED. GUIDELINES FOR USE SHOULD BE

3. SIGN SHAPES AND SYMBOLS SHOULD BE BASED ON STANDARDS AS USED BY THE SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION AND MUTCD.

4. THE SIGN POST SHOULD BE STAINED CABOT'S CREOSOTE STAIN 0247. THE SIGN FACE FOR ALL REGULATORY SIGNS SHOULD BE 0.08 INCH ALUMINUM CONFORMING TO ASTM B 209. FINISHED SIGN SHALL BE CLEAR CUT AND THE LINES OF ALL LETTERS SHALL BE TRUE, REGULAR AND FREE OF UNEVENNESS. THE SIGN FACE SHALL BE IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

5. CARE SHOULD BE TAKEN TO MAKE SURE POSTS ARE PROPERLY TREATED TO PREVENT DECAY OR ATTACK FROM TERMITES.

6. THE FRONT, BACK AND EDGES OF THE SIGN BACKING SHALL BE 'PAINTED ACCORDING TO THE FOLLOWING SCHEDULE: STOP SIGN RED

#### TRAFFIC SIGNAGE

MINIMUM 12"

BOTTOM SLAB

STONE BEDDING

RING AND COVER

NOT SHOWN FOR CLARITY

2. TOP, RISER, AND BASE SHALL CONFORM TO THE LATEST REVISION

5. REINFORCING IN TOP SLAB, VERTICAL WALLS (RISERS), AND BOTTOM

3. USE GRADE 60 REINFORCING STEEL.4. PROVIDE AT LEAST 3 INCHES OF COVER ON REINFORCING STEEL.

STORM DRAIN MANHOLE

30" PIPE AND SMALLER

NOT TO SCALE

SLAB SHALL BE #4 BARS AT 12" O.C. EACH WAY.

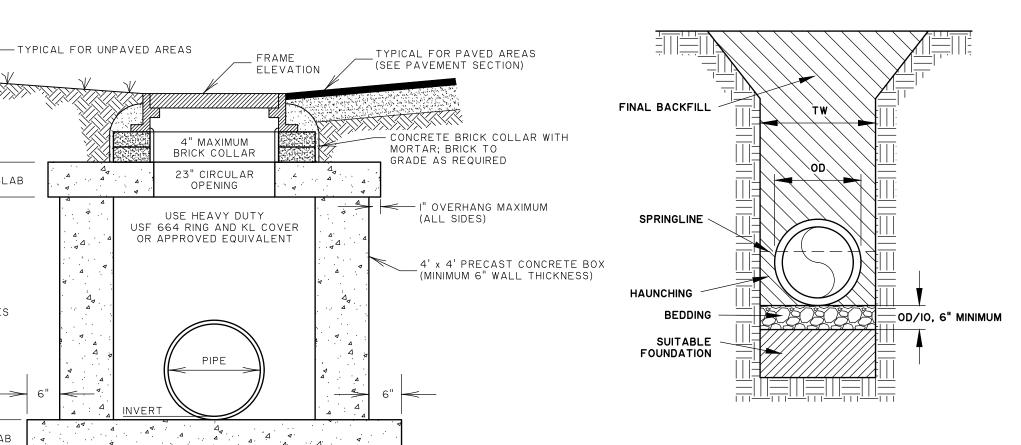
6. CHAMFER ALL EXPOSED CONCRETE EDGES 3/4".

I. DO NOT USE KNOCKOUT BOXES.

NOT TO SCALE

6" SLAB

VARIES



MARKER TAPE

UNDISTURBED SOIL-

I. TW SHALL BE LESS THAN OR EQUAL TO OD + 2

FINISH GRADE OR PAVEMENT (SEE PLANS)

- COMPACTED GRANULAR BACKFILL COMPACTED TO 95% MODIFIED PROCTOR UNDER NON-PAVED AREAS

AND 98% MODIFIED PROCTOR UNDER

PAVED AREAS.

- 2 - 4" PVC CONDUITS

**ROAD CROSSING** 

CONDUIT DETAIL

NOT TO SCALE

2. TRENCH SHALL BE DEWATERED BEFORE BEDDING MATERIAL IS PLACED. 3. EACH JOINT SHALL BE WRAPPED WITH FILTER

4. SEE ASTM D232I, TABLE I FOR MATERIAL CLASSIFICATIONS.

5. SEE ASTM D698 FOR COMPACTION METHOD.

MATERIAL REQUIREMENTS FOUNDATION - IF NATIVE MATERIAL IS UNSUITABLE, COORDINATE WITH ENGINEER TO DETERMINE AMOUNT OF MATERIAL TO REMOVE AND SUITABLE MATERIAL WITH WHICH TO REPLACE IT. BEDDING - CLASS IB OR CLASS II.

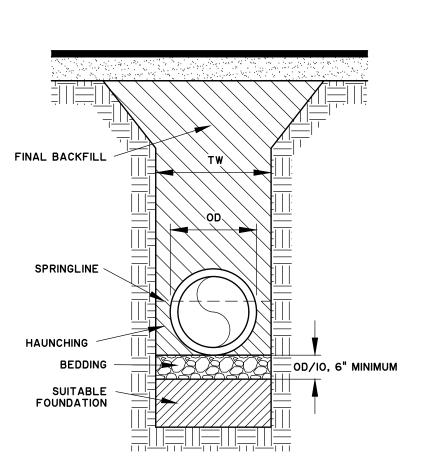
HAUNCHING - CLASS II OR CLASS III. FINAL BACKFILL - CLASS II, CLASS III, OR CLASS IVA.

COMPACTION REQUIREMENTS BEDDING - LOOSELY PLACE BEDDING UNDER MIDDLE 1/3 OF PIPE, FOR REST OF BEDDING, COMPACT CLASS IB AND CLASS II MATERIAL TO 95% HAUNCHING - COMPACT CLASS II AND CLASS III MATERIAL TO 95% IN 6" LIFTS

FINAL BACKFILL - COMPACT CLASS II, CLASS III, OR CLASS IVA MATERIAL TO 90% IN 6" LIFTS.

#### RCP BEDDING **UNPAVED AREAS**

NOT TO SCALE



I. TW SHALL BE LESS THAN OR EQUAL TO OD + 2

2. TRENCH SHALL BE DEWATERED BEFORE BEDDING

MATERIAL IS PLACED. 3. EACH JOINT SHALL BE WRAPPED WITH FILTER

4. SEE ASTM D232I, TABLE I FOR MATERIAL CLASSIFICATIONS.

5. SEE ASTM D698 FOR COMPACTION METHOD.

MATERIAL REQUIREMENTS FOUNDATION - IF NATIVE MATERIAL IS UNSUITABLE, COORDINATE WITH ENGINEER TO DETERMINE AMOUNT OF MATERIAL TO REMOVE AND SUITABLE MATERIAL WITH WHICH TO REPLACE IT. **BEDDING** - CLASS IB OR CLASS II.

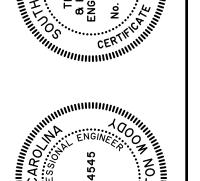
HAUNCHING - CLASS II OR CLASS III. FINAL BACKFILL - CLASS II OR CLASS III. COMPACTION REQUIREMENTS BEDDING - LOOSELY PLACE BEDDING UNDER MIDDLE 1/3 OF PIPE, FOR REST OF BEDDING, COMPACT CLASS IB AND CLASS II MATERIAL TO 95% HAUNCHING - COMPACT CLASS II AND CLASS III MATERIAL TO 95% IN 6" LIFTS

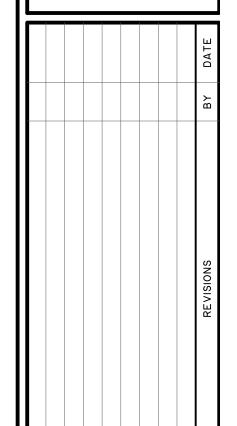
FINAL BACKFILL - COMPACT CLASS II OR CLASS III MATERIAL TO 95% IN 6" LIFTS

RCP BEDDING PAVED AREAS

NOT TO SCALE







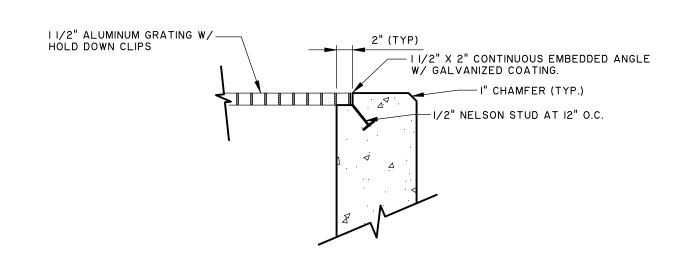
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11/8/22 DRAWN: LMD DESIGNED: LMD REVIEWED: DJJ APPROVED: DJJ SCALE: |" = |



Submitted for Site Plan Review



#### GRATING AND EMBEDDED ANGLE DETAIL

NOT TO SCALE

- I. ALL ATTACHMENT HARDWARE TO BE A-304 STAINLESS STEEL
- 2. ALUMINUM GRATING TO HAVE A MAXIMUM LIVE LOAD OF 100 PSF AND A MAXIMUM DEFLECTION OF 1/4"

#### GENERAL NOTES:

LENGTH.)

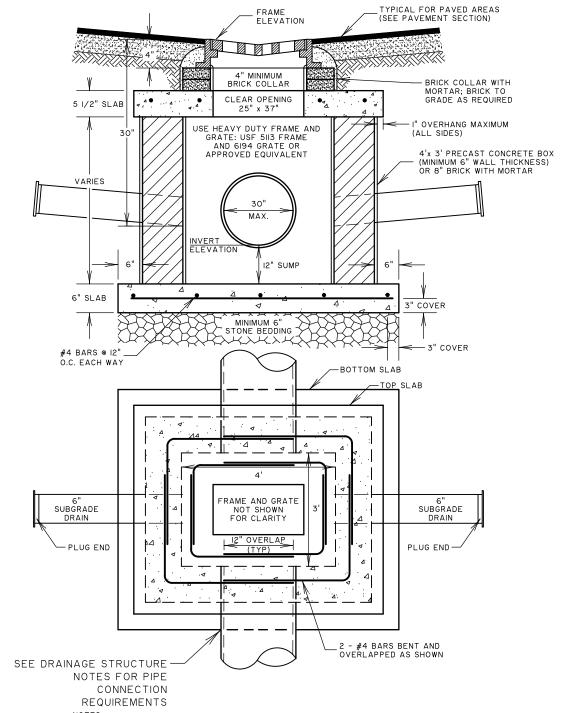
OTHERWISE.

- I. ALL ELEVATIONS SHOWN ARE BASED ON M.S.L. DATUM 2. ALL CAST IN PLACE CONCRETE SHALL DEVELOP A MINIMUM COMPRESSIVE
- STRENGTH OF 4,000 P.S.I. IN 28 DAYS UNLESS NOTED OTHERWISE.
- 3. ALL REINFORCING STEEL SHALL BE DEFORMED BARS CONFORMING TO ASTM A615, GRADE 60.
- 4. ALL DETAILING, FABRICATION, AND PLACING OF REINFORCING STEEL SHALL CONFORM TO "ACI DETAILING MANUAL", ACI SP-66. 5. CHAMFER ALL EXPOSED EXTERNAL CORNERS OF CONCRETE WITH A 45 DEGREE CHAMFER AS FOLLOWS:
- CONCRETE WALLS: I" 6. ALL BAR SPLICES SHALL BE CLASS "B" TENSION LAP SPLICES (20" MINIMUM
- 7. SPLICE TOP BARS AND SIDE BARS AT MID-SPAN, AND BOTTOM BARS AT THE SUPPORT.
- 8. STAGGER SPLICES OF ADJACENT BARS WHEN BAR SPACING IS LESS THAN 4 1/2". 9. PROVIDE 3" MINIMUM OF CONCRETE COVER FOR REINFORCING STEEL WHEN THE
- CONCRETE IS PLACED DIRECTLY ON THE GROUND.
- IO. CONCRETE KEYS SHALL BE 2" X 4", UNLESS NOTED OTHERWISE. II. CONSTRUCTION JOINTS WILL NOT BE ALLOWED IN WALLS EXCEPT AS LOCATED AND
- DETAILED ON THE DRAWINGS. 12. ALL MISCELLANEOUS METALS INCLUDING BOLTS, WASHERS, NUTS, SLEEVES,
- ANGLES, INSERTS, PLATES, ETC. EITHER ATTACHED TO OR EMBEDDED IN THE
- CONCRETE SHALL BE STAINLESS STEEL, UNLESS NOTED OTHERWISE. 13. ALL STRUCTURAL STEEL SHALL CONFORM TO ASTM A36, UNLESS NOTED
- 14. ALL ALUMINUM GRATING EDGES SHALL BE BANDED.

REGULAR WALL REINF.

TYPICAL WALL OPENING REINFORCING

NOT TO SCALE

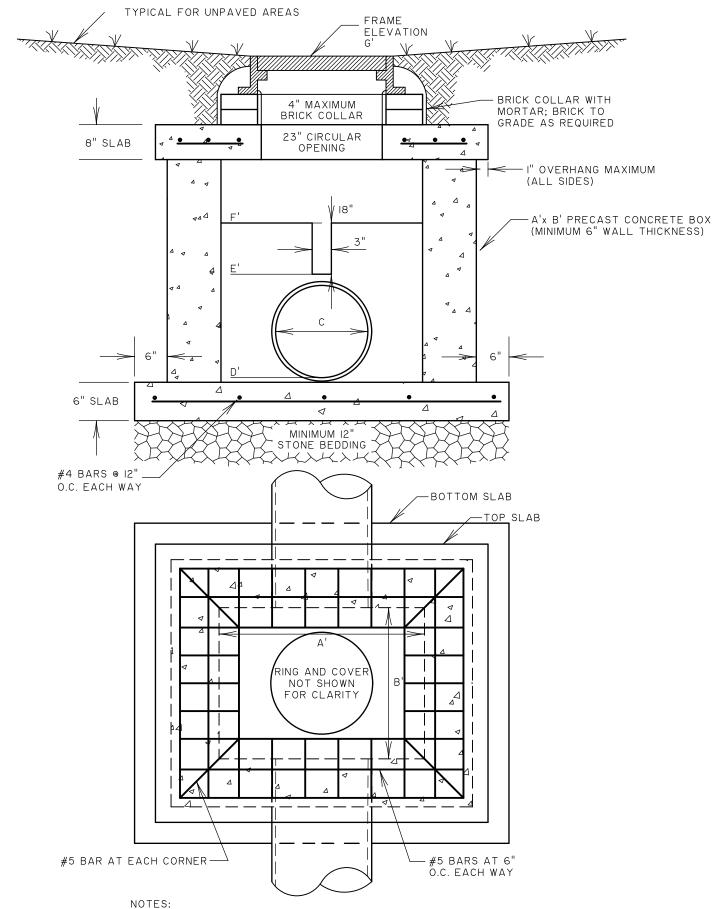


I. ORIENT GRATE SUCH THAT 36" DIMENSION IS PARALLEL TO THE DIRECTION OF TRAFFIC FLOW. 2. FOR GRATE INLETS NOT IN PAVEMENT, INSTALL IO LF OF SUBGRADE DRAIN STUBBED OUT AND

3. USE VALLEY INLET DETAIL FOR ALL GRATE INLETS IN PAVEMENT AREA.

# VALLEY INLET DETAIL

NOT TO SCALE

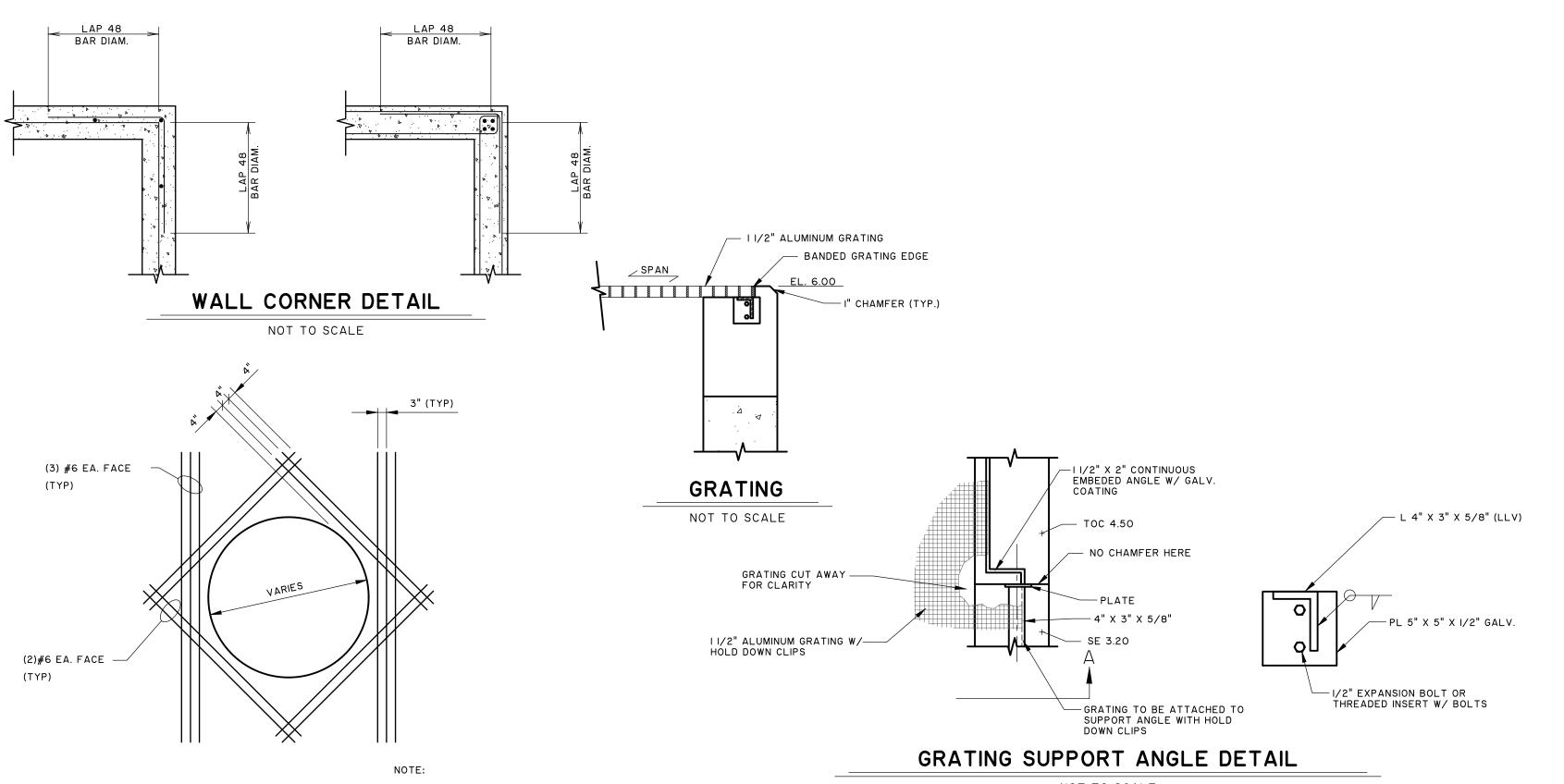


- I. DO NOT USE KNOCKOUT BOXES.
  2. TOP, RISER, AND BASE SHALL CONFORM TO THE LATEST REVISION OF ASTM C913.
- 3. USE GRADE 60 REINFORCING STEEL.
- 4. PROVIDE AT LEAST 3 INCHES OF COVER ON REINFORCING STEEL. 5. REINFORCING IN VERTICAL WALLS (RISERS) SHALL BE #4 BARS
- AT 12" O.C. EACH WAY. 6. CHAMFER ALL EXPOSED CONCRETE EDGES 3/4".
- 7. ALL MANHOLE COVERS SHALL CONTAIN LABEL STATING "NO DUMPING - DRAINS TO WATERWAYS"

	Α	В	С	D	Е	F	G
SMH #BWA-GI3	4.0'	4.0'	36"	1.00'	4.00'	5.50'	7.84

SMH #BWA-GI3 CONTROL STRUCTURE

NOT TO SCALE



NOT TO SCALE

I. ALL ATTACHMENT HARDWARE TO BE A-304 STAINLESS STEEL

2. ALUMINUM GRATING TO HAVE A MAXIMUM LIVE LOAD OF 100 PSF AND A MAXIMUM DEFLECTION OF 1/4"

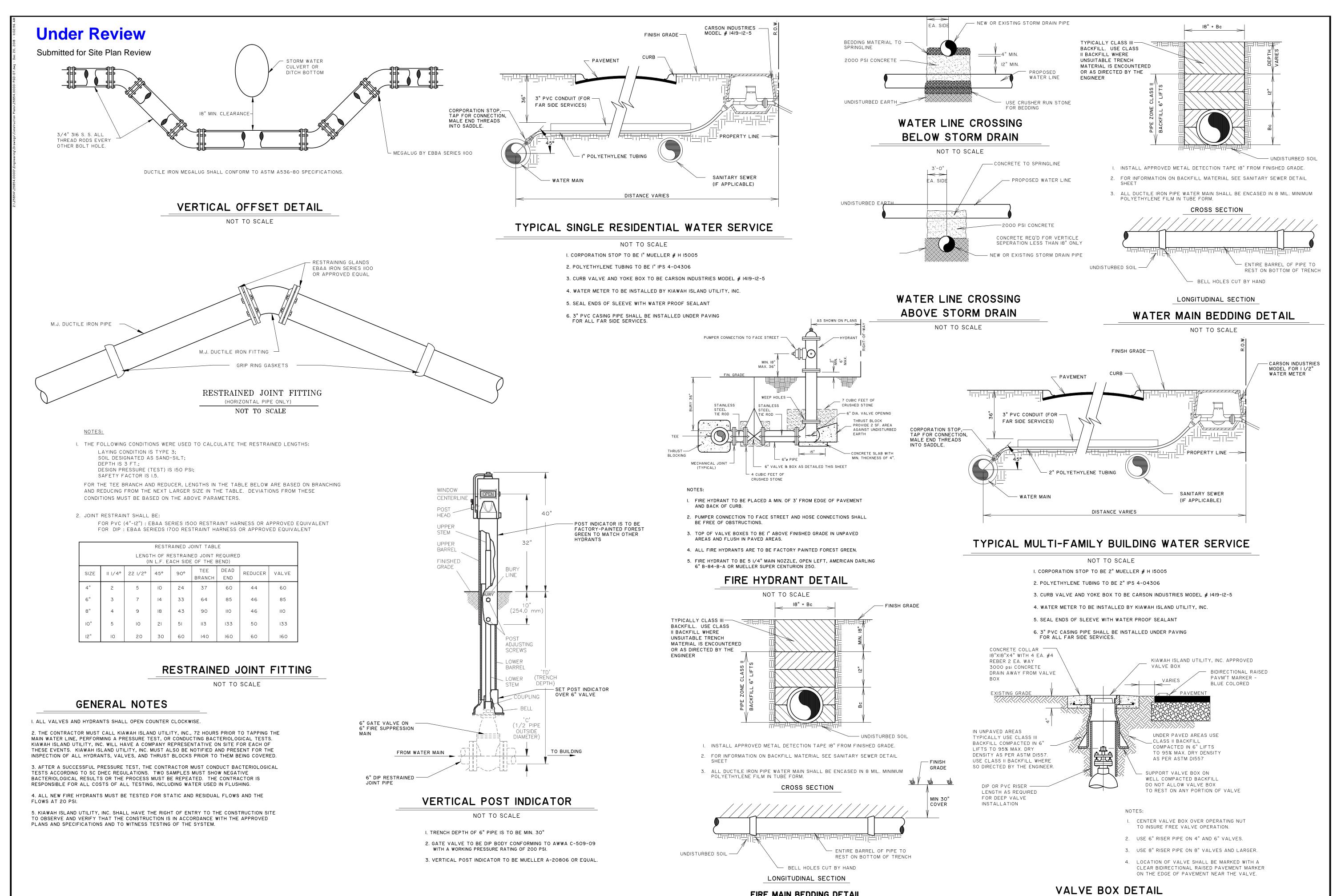
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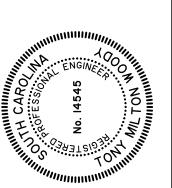
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DETAILS

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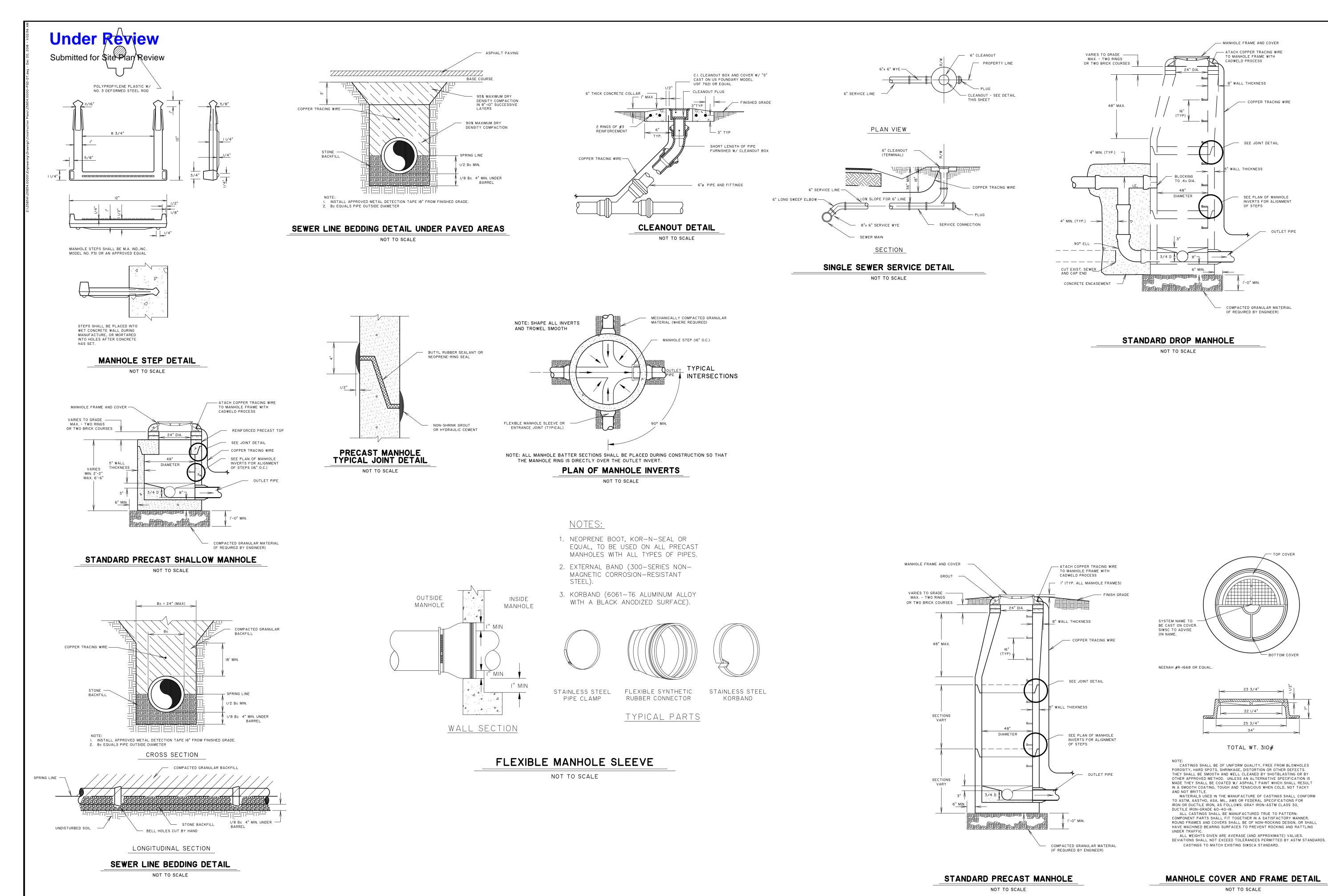


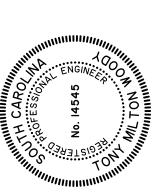
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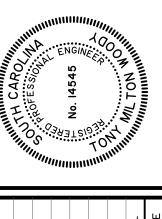
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APPROVED: DJJ

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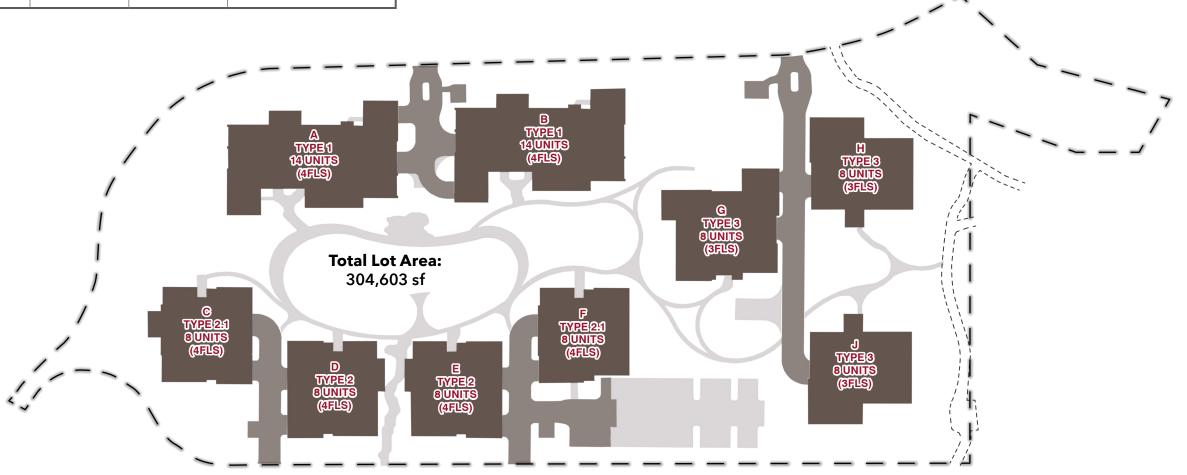
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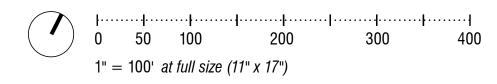
11/8/22 DRAWN: LMD DESIGNED: LMD REVIEWED: DJJ

APPROVED: DJJ

COVERAGE AREA TOTALS						
Total Lot Area: 304,603 SF	Coverage in Square Feet	Coverage as % of Lot Area	Pervious Coverage in Square Feet			
Building Footprints & Occupied Overhangs	+/- 77,106 SF	25.31%	0 SF			
Drive Alleys, Dumpster Holding Pads & Exterior Parking	+/- 20,226 SF	6.64%	+/- 1,965 SF			
cal Primary Coverage ot to exceed 33% of Lot Area)	+/- 97,332 SF	31.95%	+/- 1,965 SF (2.06% of Primary Cov.)			
Secondary Elements	+/- 22,404 SF	7.38%	+/- 19,087 SF (85.19% of Secondary Cov.)			
al Primary and Secondary Lot Coverage ot to exceed 39.67% of Lot Area)	+/- 119,736 SF	39.31%	+/- 21,052 SF (17.58% of Combined Cov.)			

Submitted for Site Plan Review





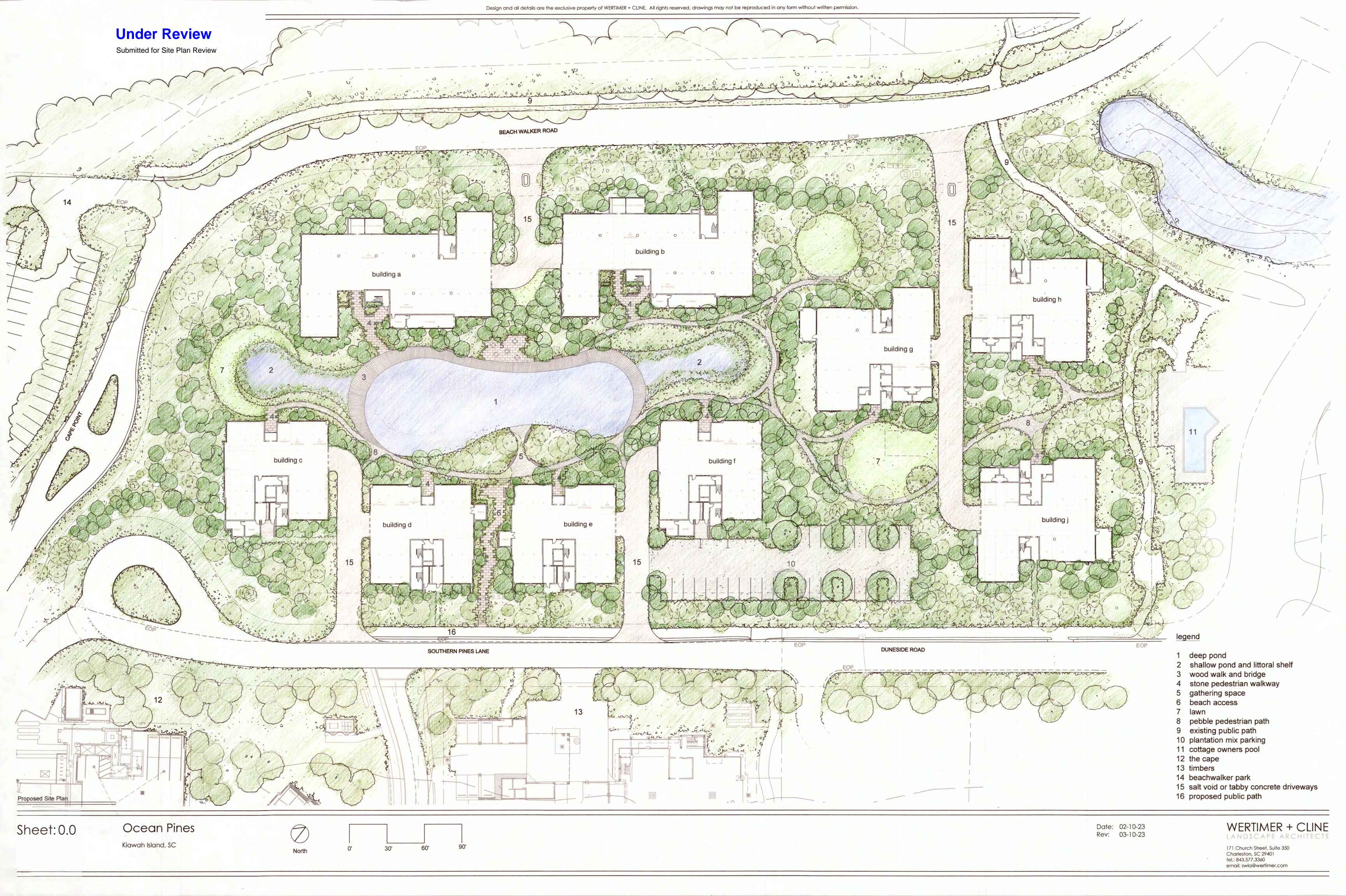
\*KICA leisure trail shown for reference only

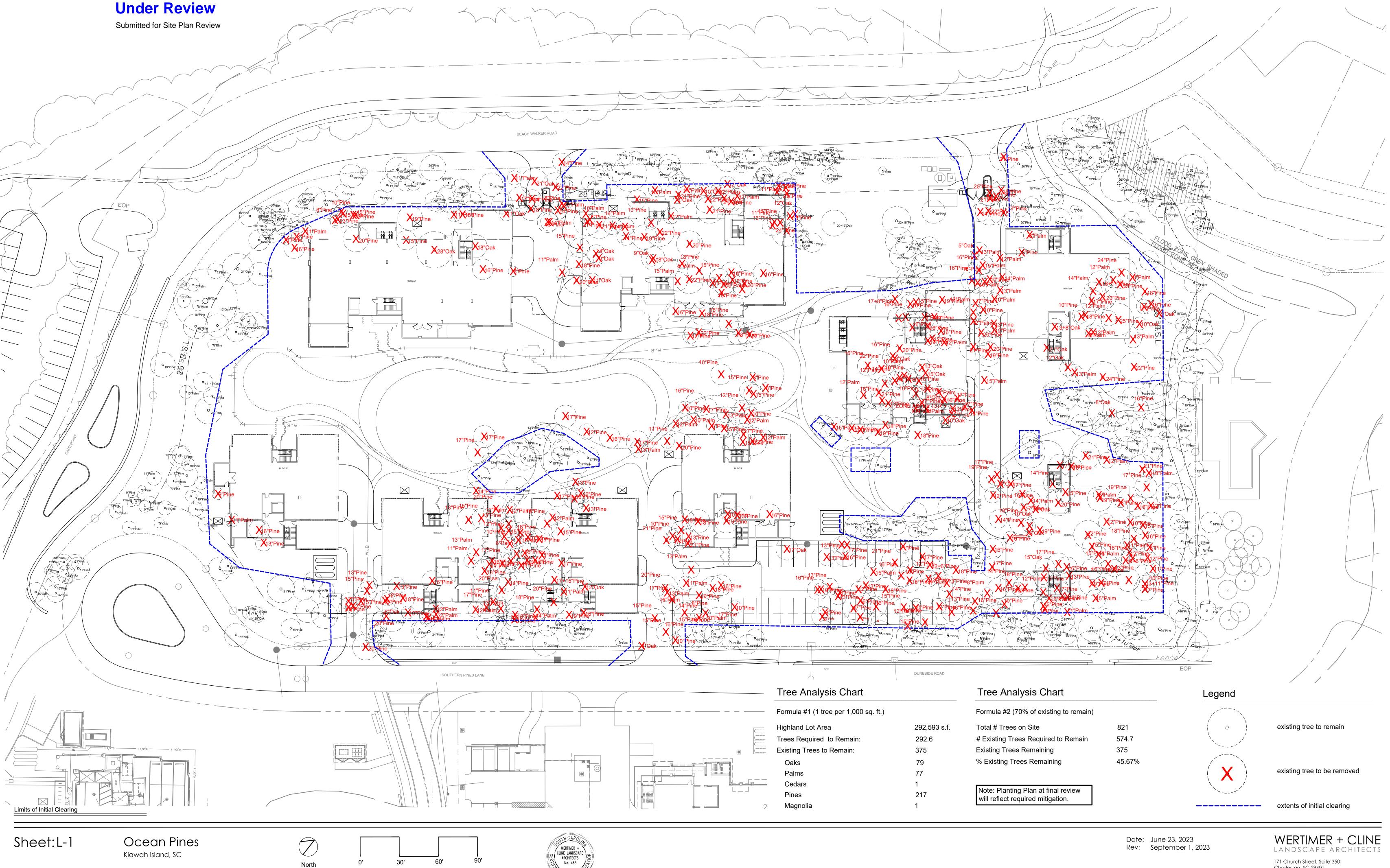
	LS3P Revised					
	Building	T&H Revised	W+C Revised			Submitted for Site Plan Review
	Footprints	Civil Site Plan	Landscape	Primary	Secondary	Submitted for Site Flam INeview
Description:	Coverage (SF)	Coverage (SF)	Coverage (SF)	Coverage (SF)	Coverage (SF)	Pervious & Impervious Coverage Areas
Building A	12,257.0	N/A	N/A	12,257.0	N/A	Impervious
Building B	12,236.0	N/A	N/A	12,236.0	N/A	Impervious
Building C	7,395.0	N/A	N/A	7,395.0	N/A	Impervious
Building D	7,266.0	N/A	N/A	7,266.0	N/A	Impervious
Building E	7,266.0	N/A	N/A	7,266.0	N/A	Impervious
Building F	6,822.0	N/A	N/A	6,822.0	N/A	Impervious
Building G	9,036.0	N/A	N/A	9,036.0	N/A	Impervious
Building H	7,414.0	N/A	N/A	7,414.0	N/A	Impervious
Building J	7,414.0	N/A	N/A	7,414.0	N/A	Impervious
Buildings Subtotal:	77,106.0	N/A	N/A	77,106.0	N/A	Pervious Area (Primary): 0 sf
Alley A (GHJ Driveway)	N/A	6,458.0	N/A	6,458.0	N/A	Impervious
Alley B (AB Driveway)	N/A	3,792.0	N/A	3,792.0	N/A	Impervious
Alley C (CD Driveway)	N/A	3,227.0	N/A	3,227.0	N/A	Impervious
Alley D (EF Driveway)	N/A	3,661.0	N/A	3,661.0	N/A	Impervious
Ext. Parking Lot (Primary)	N/A	1,965.0	N/A	1,965.0	N/A	Pervious Area (Primary): 1,965 sf
Alley/Driveway & Parking Subtot:	N/A	19,103.0	N/A	19,103.0	N/A	Pervious Area (Primary): 1,965 sf
Dumpster Pad (A/B)	N/A	150.0	N/A	150.0	N/A	Impervious
Dumpster Path (A/B)	N/A	135.0	N/A	135.0	N/A	Impervious
Dumpster Pad (C/D)	N/A	150.0	N/A	150.0	N/A	Impervious
Dumpster Path (C/D)	N/A	60.0	N/A	60.0	N/A	Impervious
Dumpster Pad (E/F)	N/A	150.0	N/A	150.0	N/A	Impervious
Dumpster Path (E/F)	N/A	60.0	N/A	60.0	N/A	Impervious
Dumpster Pad (G/H/J)	N/A	220.0	N/A	220.0	N/A	Impervious
Dumpster Path (G/H/J)	N/A	198.0	N/A	198.0	N/A	Impervious
Other Primary Areas Subtotal:	N/A	1,123.0	N/A	1,123.0	N/A	Pervious Area (Primary): 0 sf
Fire Access (near Bldg AB)	N/A	173.0	N/A	N/A	173.0	Pervious Area: 173 sf
Fire Access (near Bldg GJ)	N/A	947.0	N/A	N/A	947.0	Pervious Area: 947 sf
Ext. Parking Lot (Secondary)	N/A	8,540.0	N/A	N/A	8,540.0	Pervious Area: 8,540sf
Other Secondary Areas Subtotal:	N/A	9,660.0	N/A	N/A	9,660.0	Pervious Area (Secondary): 9,660 sf
Boardwalk	N/A	N/A	3,298.0	N/A	3,298.0	Pervious Area: 3,298 sf
Paths	N/A	N/A	6,129.0	N/A	6,129.0	Pervious Area: 6,129 sf
Hardscape at Garden/Pond Entries	N/A	N/A	1,990.0	N/A	1,990.0	Impervious
Other Hardscape Areas	N/A	N/A	1,327.0	N/A	1,327.0	Impervious
Landscape Secondary Subtotal:	N/A	N/A	12,744.0	N/A	12,744.0	Pervious Area (Secondary): 9,427 sf
			-			
Primary Coverage Subtotal:				97,332.0	N/A	Pervious Primary Coverage: 1,965 sf (2.01% of Primary Coverage)
Secondary Coverage Subtotal:				N/A	22,404.0	Pervious Secondary Coverage: 19,087 sf (85.19% of Secondary Coverage)
Combined Coverage Subtotal:					119,736.0	Pervious Combined Coverage: 21,052 sf (17.58% of Combined Coverage)
			Total Lot Area	(Highland Area):	304,603.0	Pervious Combined Coverage: 21,052 sf (6.91% of Total Lot Area)
		Primary Covera	ge (% of Highland /	Δrea) [May 33%]·	31.95%	
	Co	mbined Coverage	(% of Highland Are	a) [Max 39.67%]:	39.31%	
			Availa	able SF (Primary):	3,187.0	
			Availabl	e SF (Combined):	1,100.0	
			Max Co	verage (Primary):	100,519.0	
			Max Cover	rage (Combined):	120,836.0	

Submitted for Site Plan Review

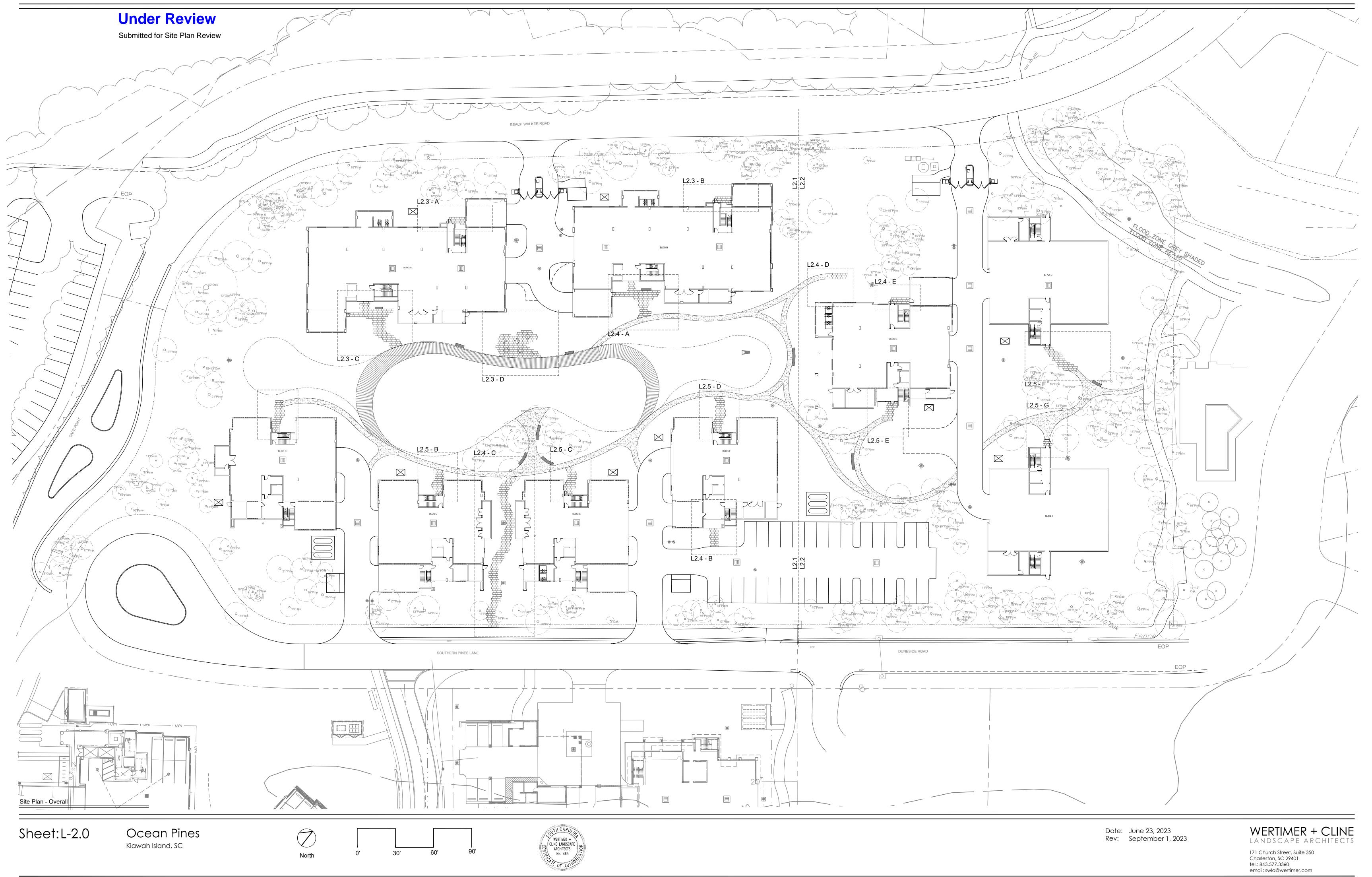
# Ocean Pines

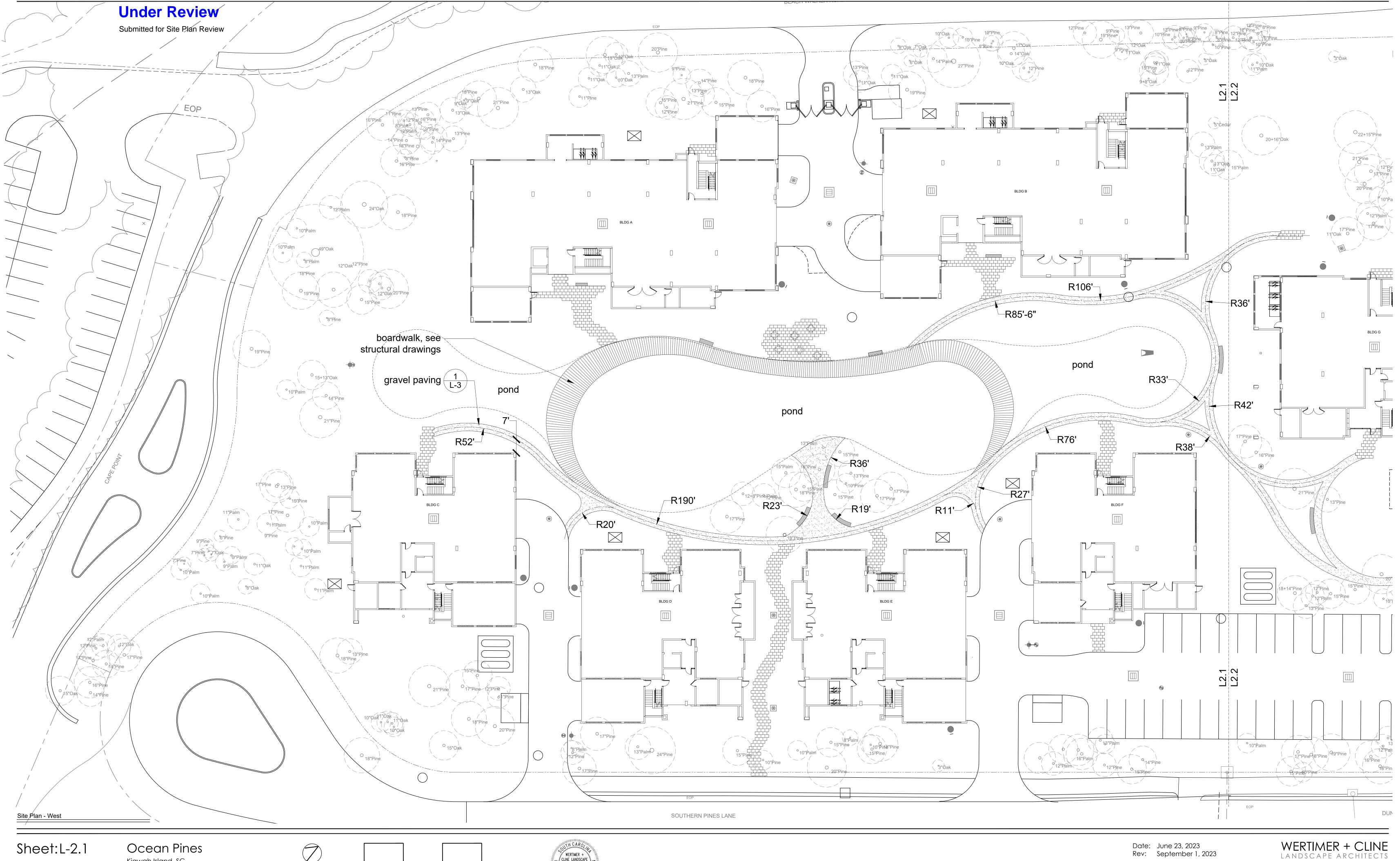
Sheet Ir	ndex
0.0	Illustrative Site Plan
1.0	Limits of Initial Clearing
2.0	Site Plan - Overall
2.1	Site Plan - West
2.2	Site Plan - East
2.3	Site Plan Enlargements
2.4	Site Plan Enlargements
2.5	Site Plan Enlargements
3.0	Site Details
4.0	Planting Plan - Overall
4.1	Planting and Lighting Plan - West Pond
4.2	Planting and Lighting Plan - East Pond
4.3	Planting and Lighting Plan - Building A
4.4	Planting and Lighting Plan - Building B
4.5	Planting and Lighting Plan - Building C
4.6	Planting and Lighting Plan - Buildings D + E
4.7	Planting and Lighting Plan - Building F + Parking
4.8	Planting and Lighting Plan - Building G
4.9	Planting and Lighting Plan - Building H
4.10	Planting and Lighting Plan - Building J
4.11	Planting and Lighting Plan - Retention Pond
5.0	Plant List and Details



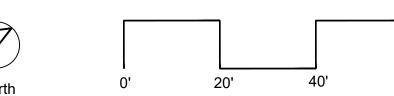


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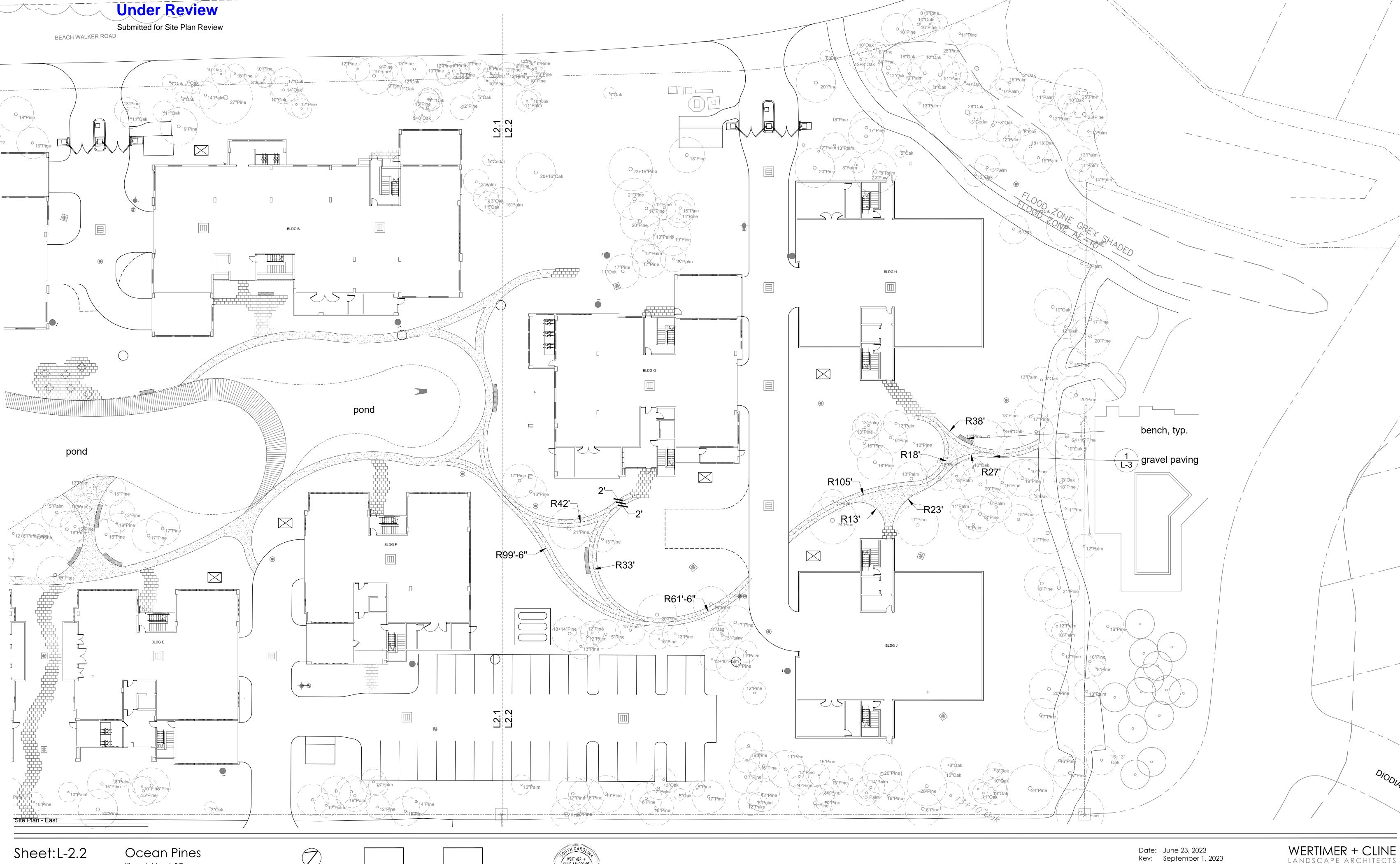


Kiawah Island, SC

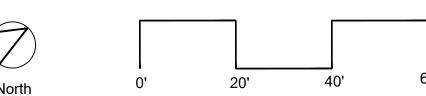




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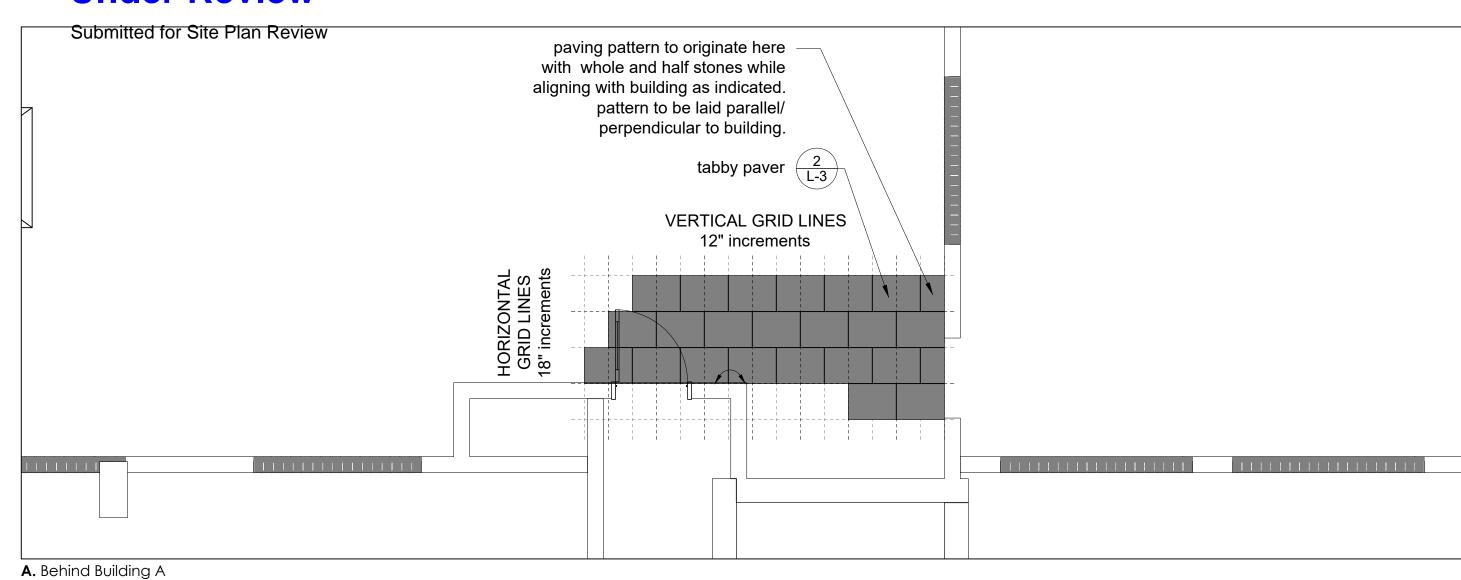
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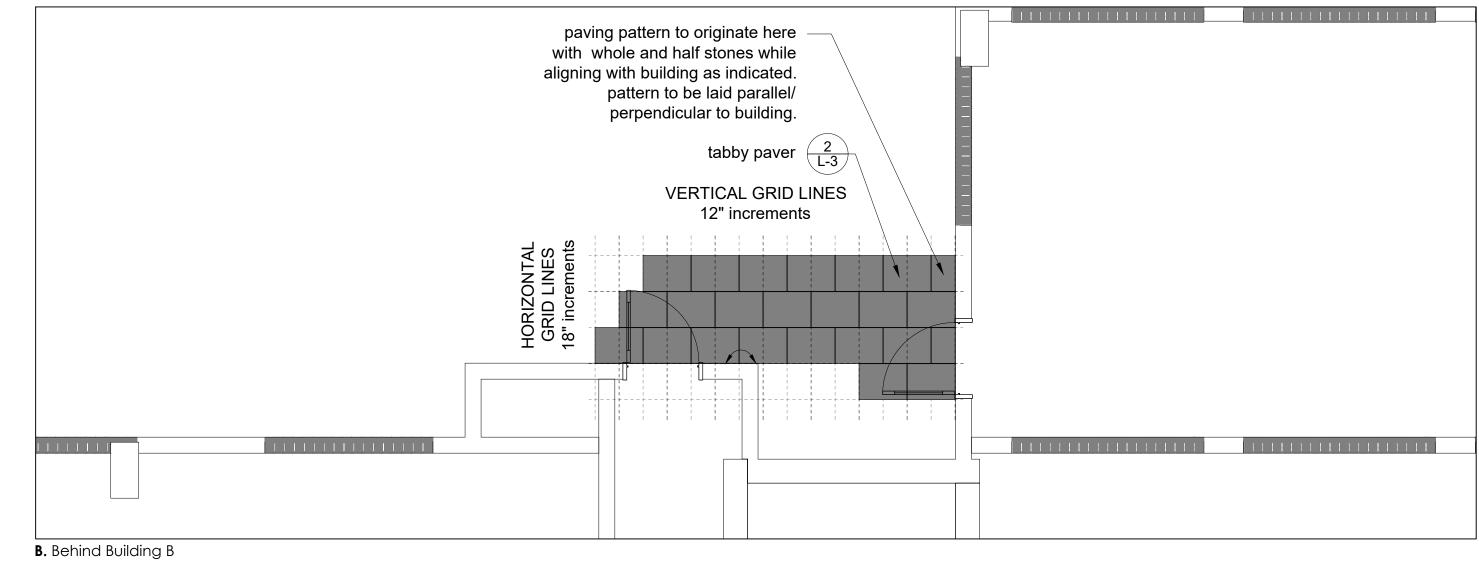


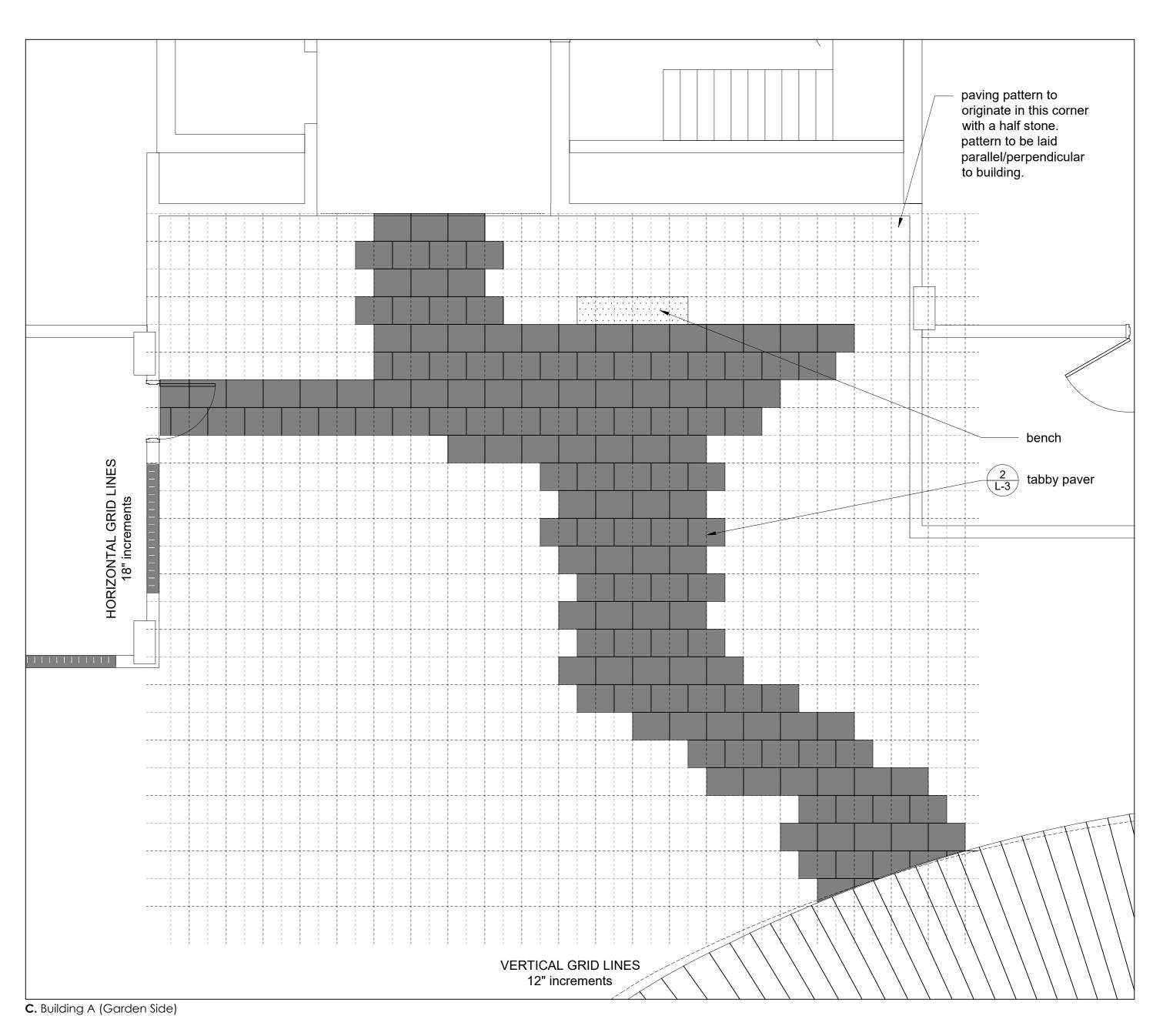


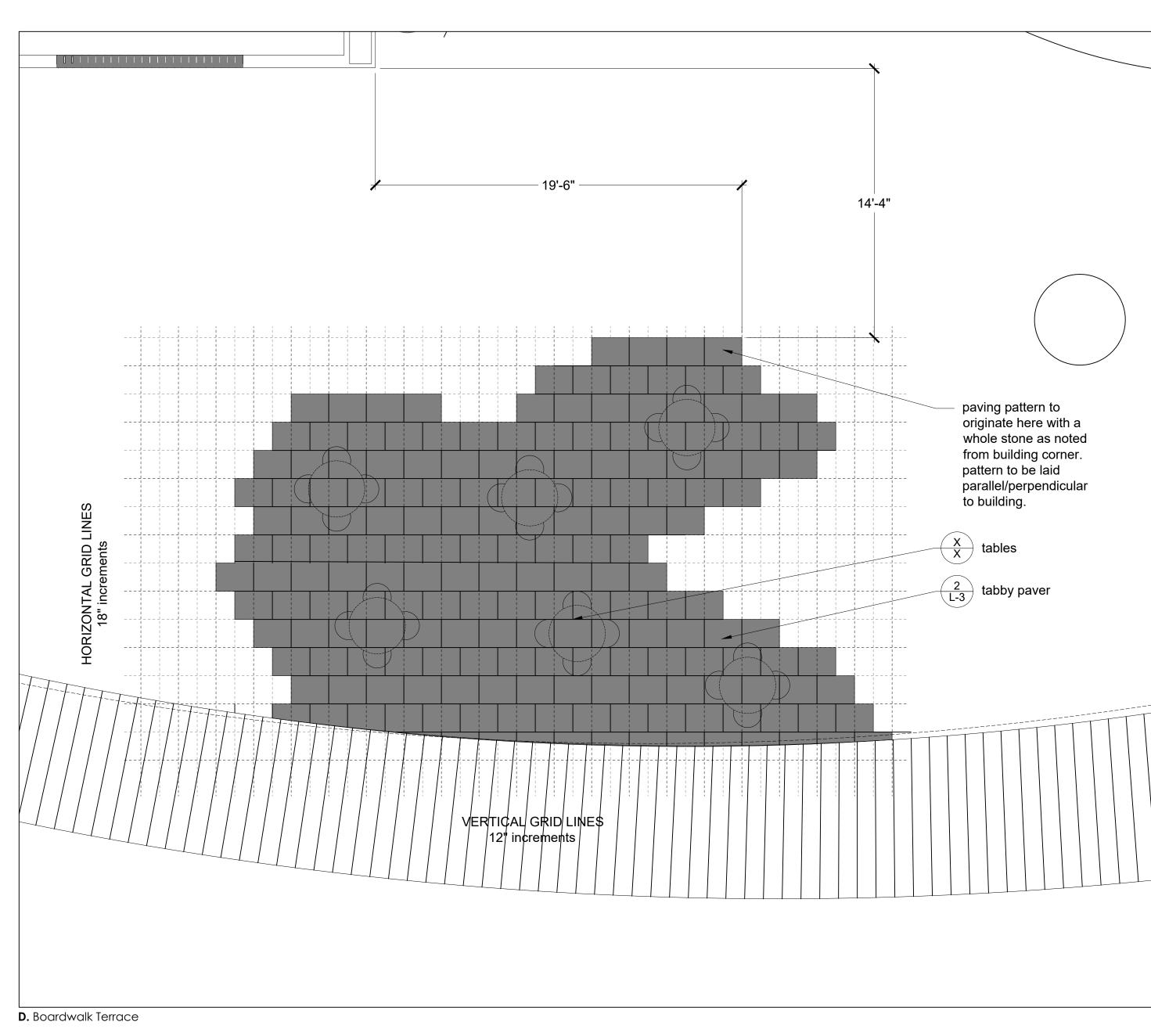
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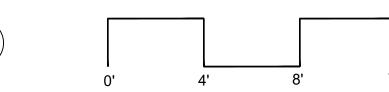




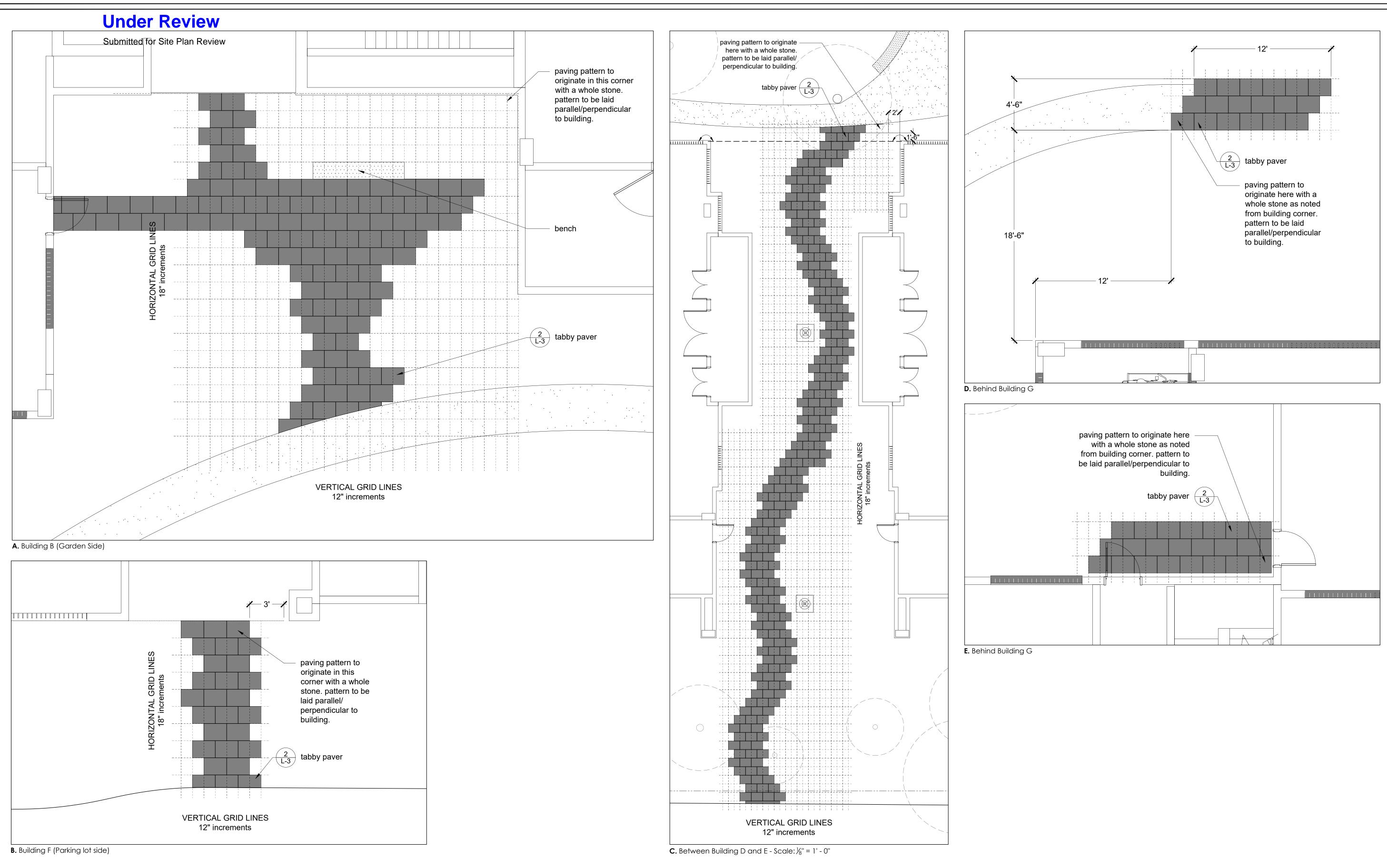


Site Plan Enlargements

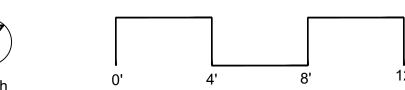




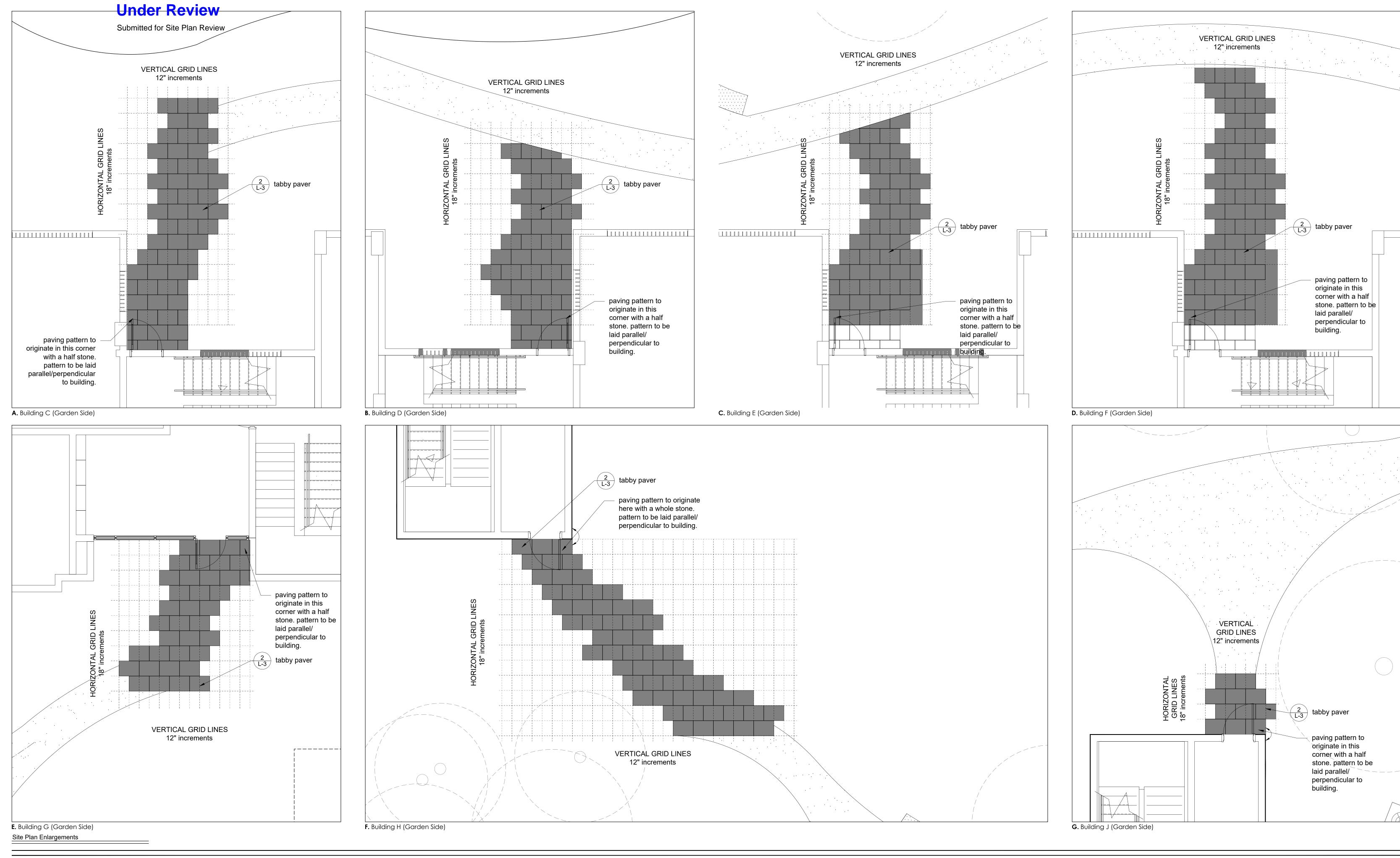




Site Plan Enlargements



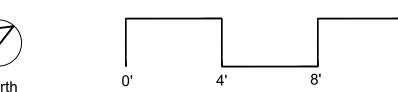




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Ocean Pines

Kiawah Island, SC



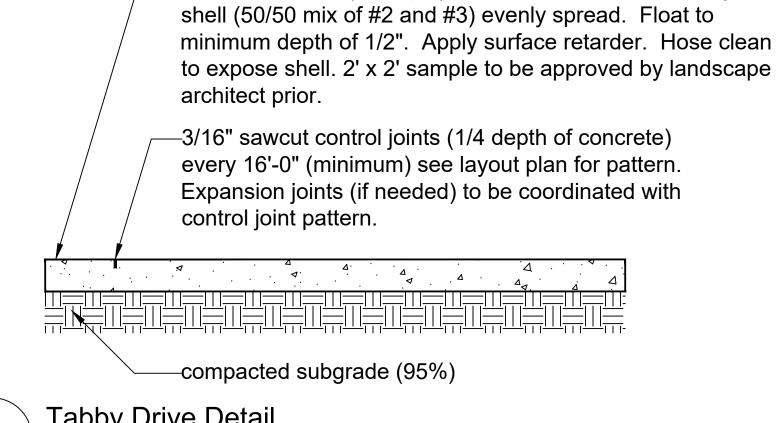


### **Under Review** Submitted for Site Plan Review 4" th. layer plantation mix gravel see layout plan for width-5" Border King metal edging $(\frac{1}{4}$ " th.) cross slope color to be black finish (0.5% min, 2.0% max) grade adjacent finish grade hold 1/2" below metal edging - compacted subgrade (95%) 1. Approximately 6,200 sf of gravel paving contractor to verify 2. Provide gravel sample for approval prior to installation **Gravel Paving**

1'-6" 1'-6" 1'-6" Old World Tabby 'White' pavers by Savannah Surfaces, 1" nominal thickness, set flat with 1/8" max. vertical tolerance. Butt joints with 1/16"-1/4" gap. Sweep gaps with sand/mortar (4:1) minimum of twice until all voids are filled. Mortar to be Type 200N, ivory buff color. Pattern to be 18" x 24" running bond 1" th. mortar leveling bed (type S) 4" concrete slab (3000 psi) w/ fiber reinforcing compacted subgrade (95% proctor)

1. Approximately 3,900 sf of stone paving - contractor to verify

2. Provide stone sample for approval prior to installation



-4" concrete slab (3500 psi) with fiber.1/2" of crushed oyster

**Tabby Drive Detail** L-3 / Scale 1" =1'-0"

Section

Note:

All pieces to be whole stones unless paving is abutting a building or boardwalk.

Section

- whole and half stones only when abutting a building
- partial pieces allowed when abutting boardwalk - avoid small pieces and slivers.

**Tabby Pavers Paving** 

Scale 1" =1'-0"

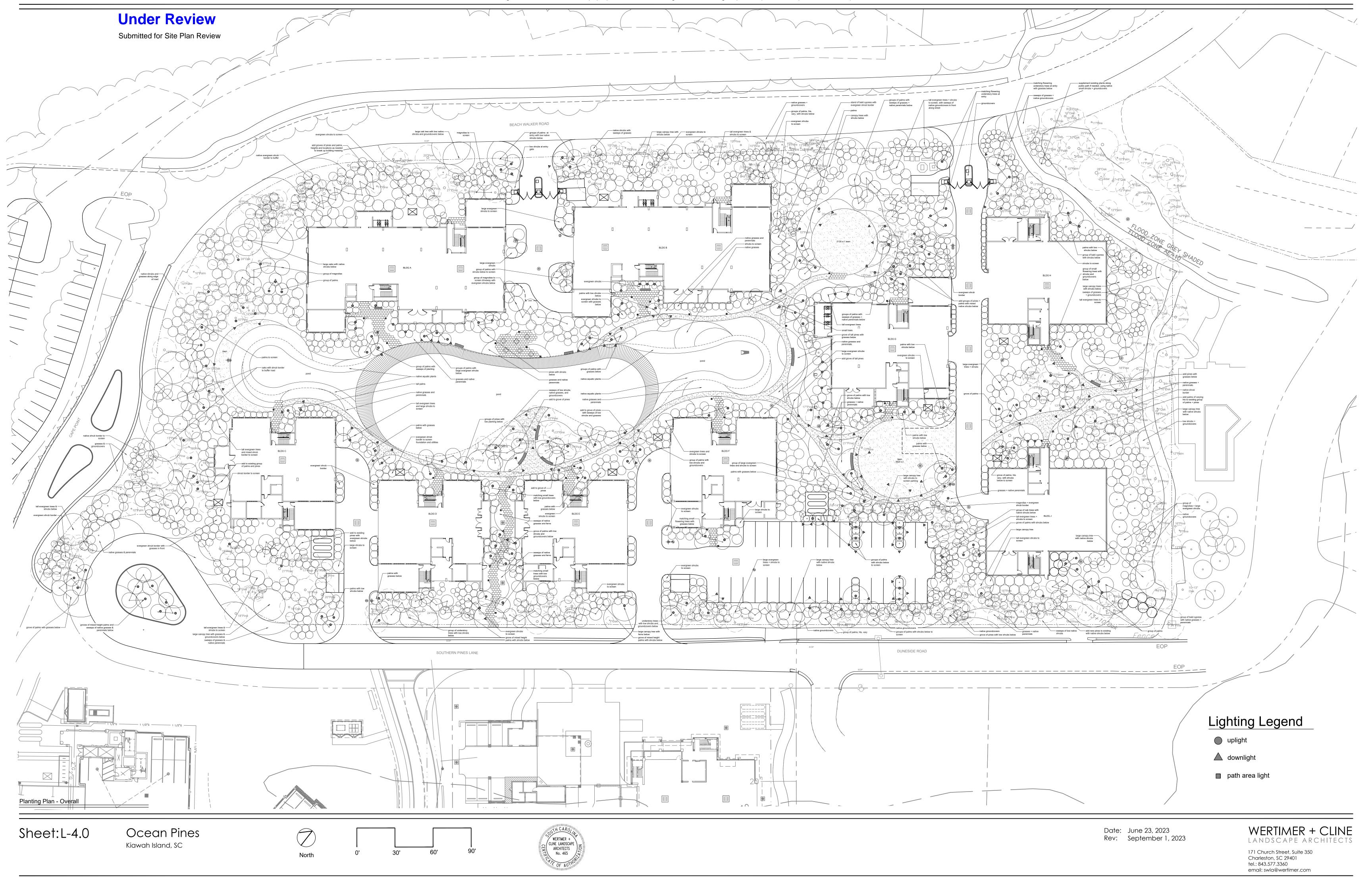
Section

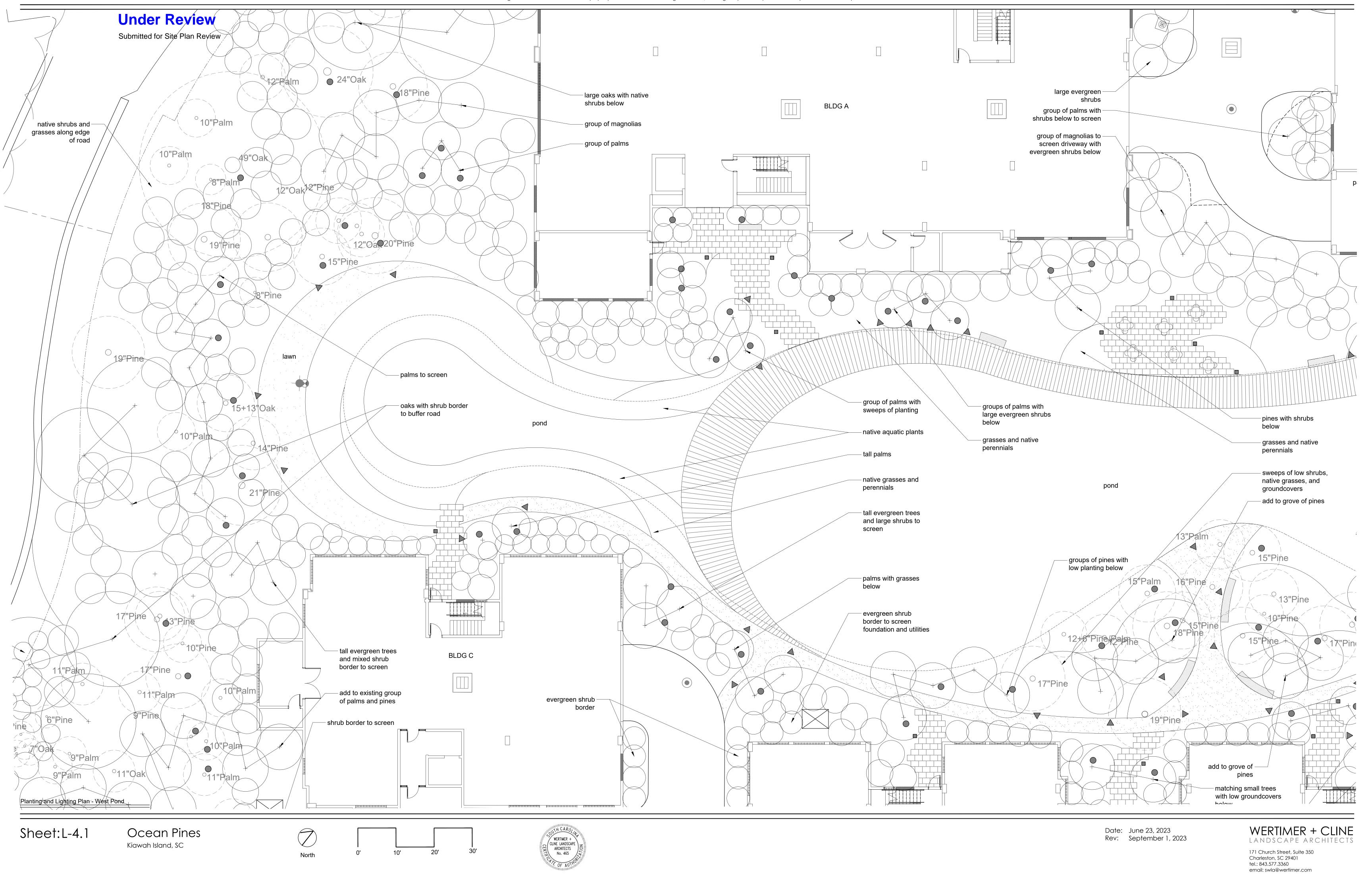
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CLINE LANDSCAPE
ARCHITECTS
No. 465

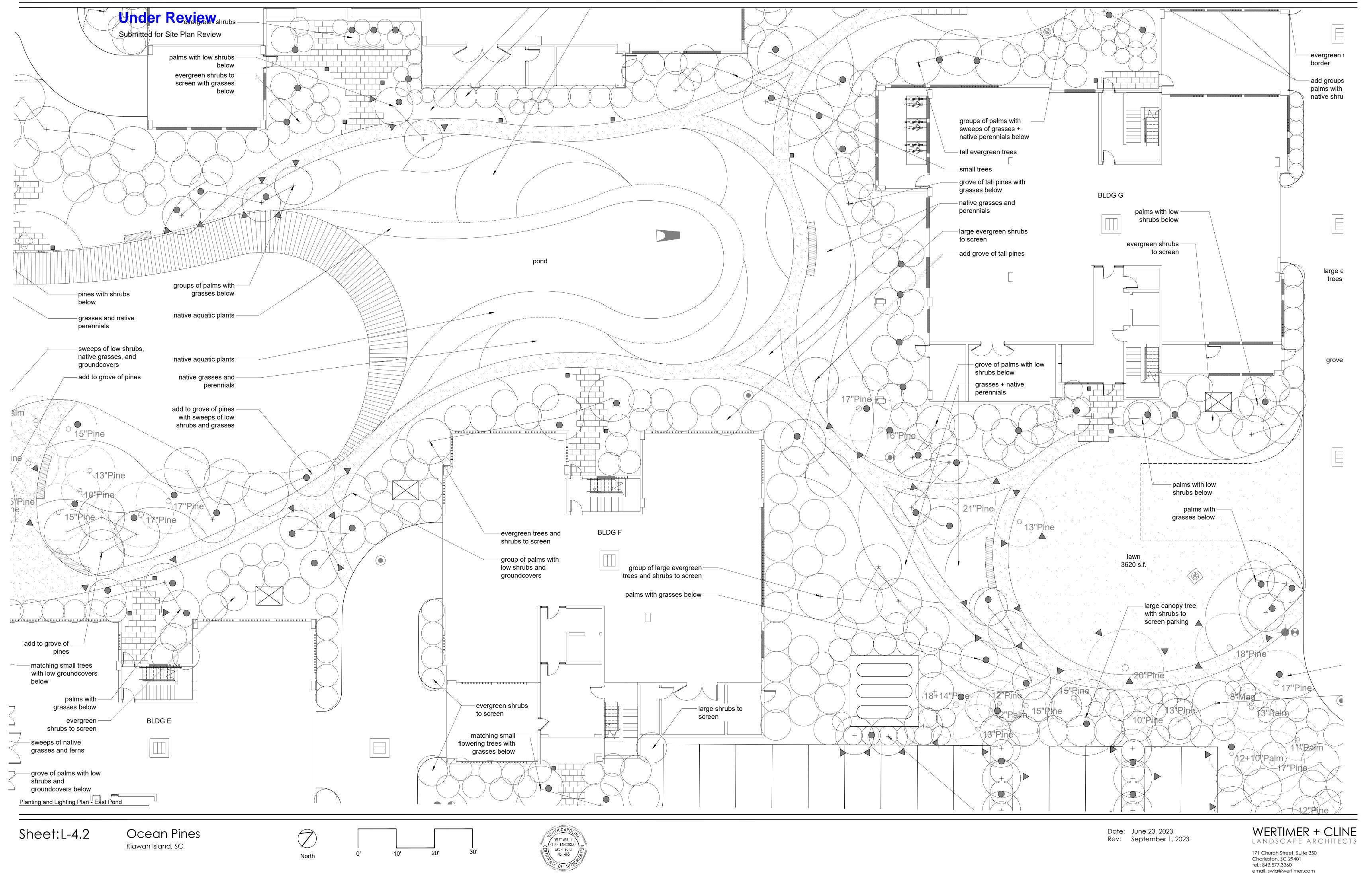
\ L-3 /

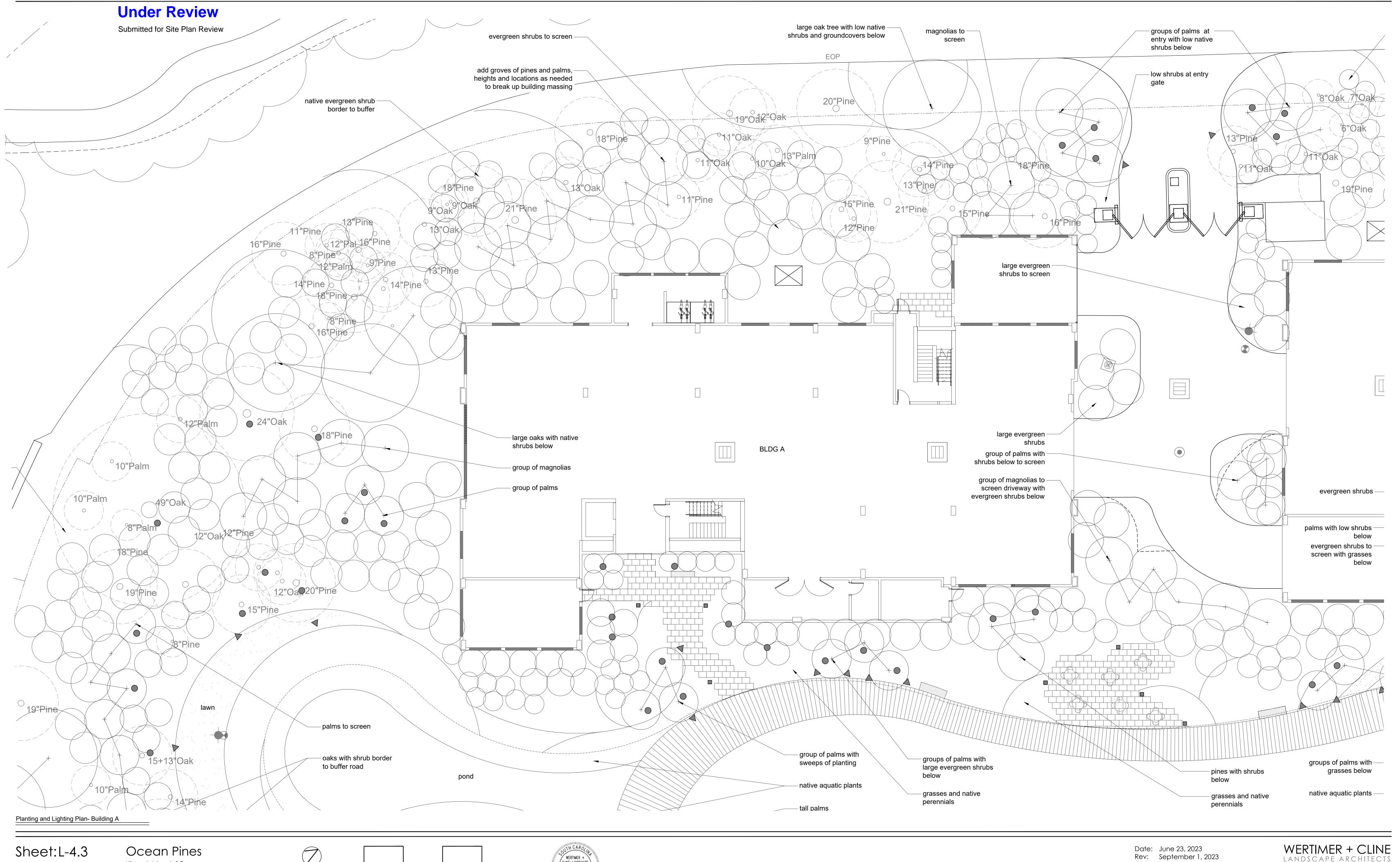
L-3

Scale 1" =1'-0"

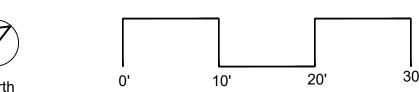






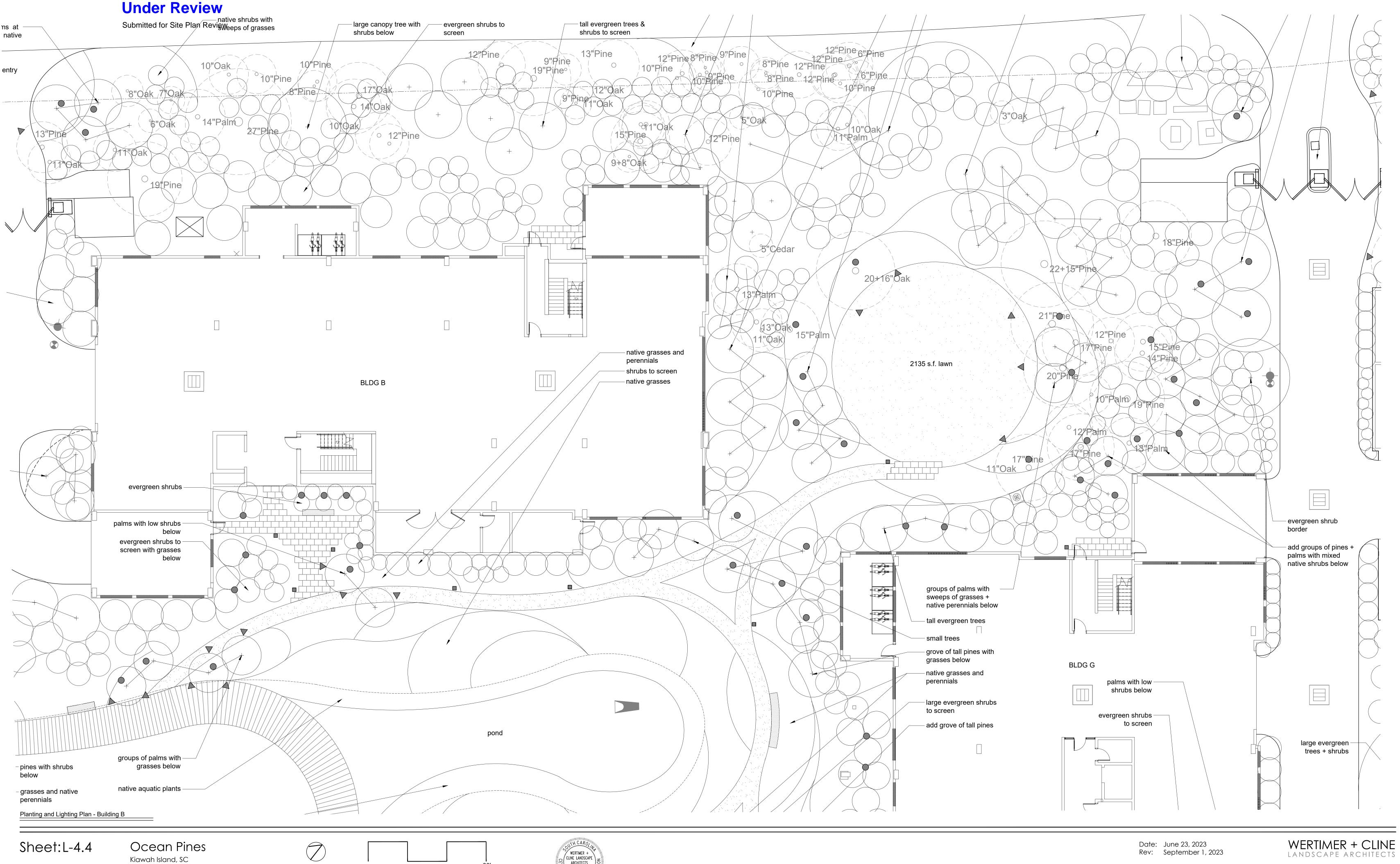


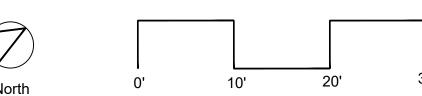
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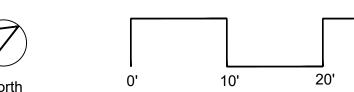






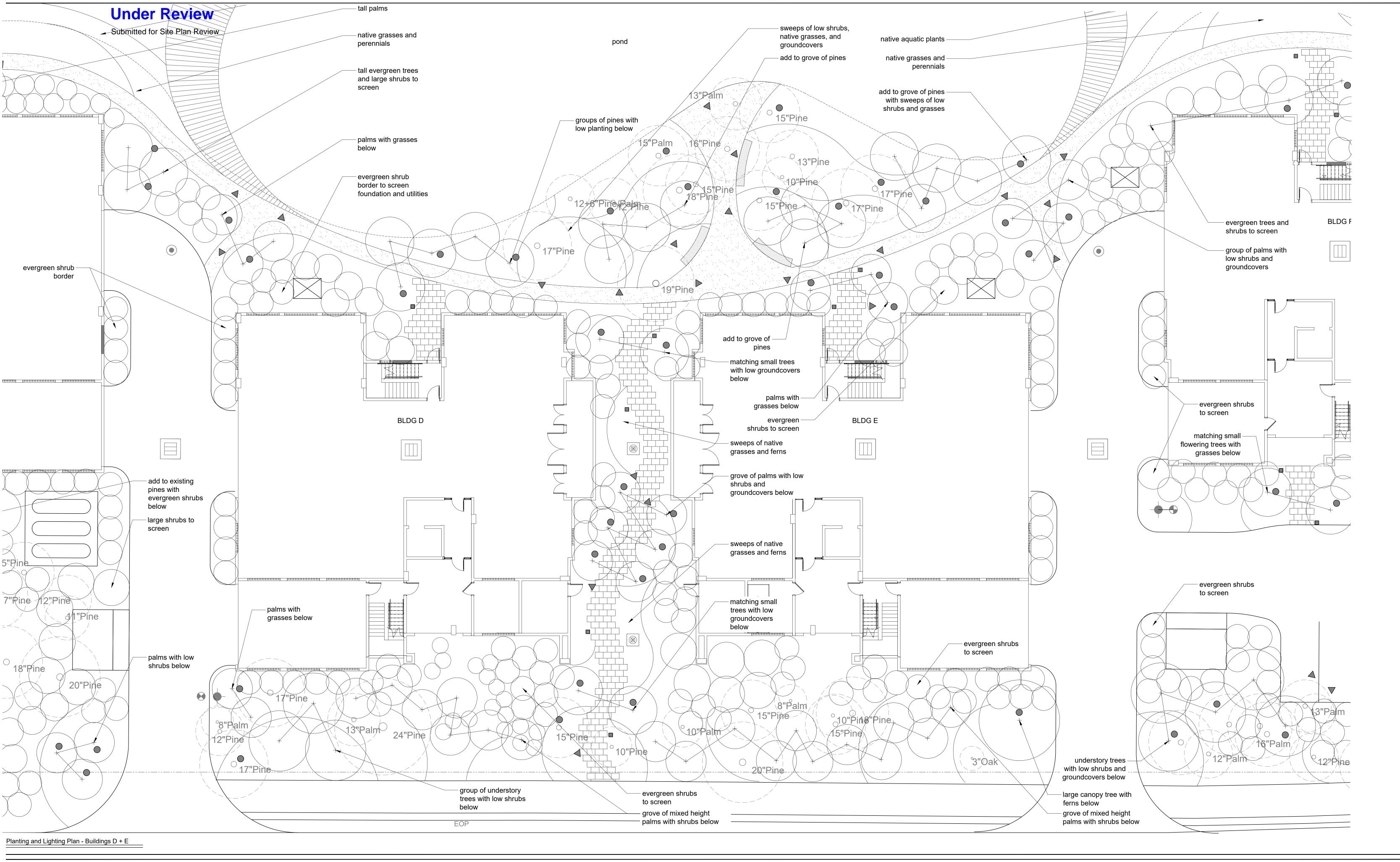
LANDSCAPE ARCHITECTS







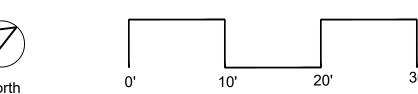
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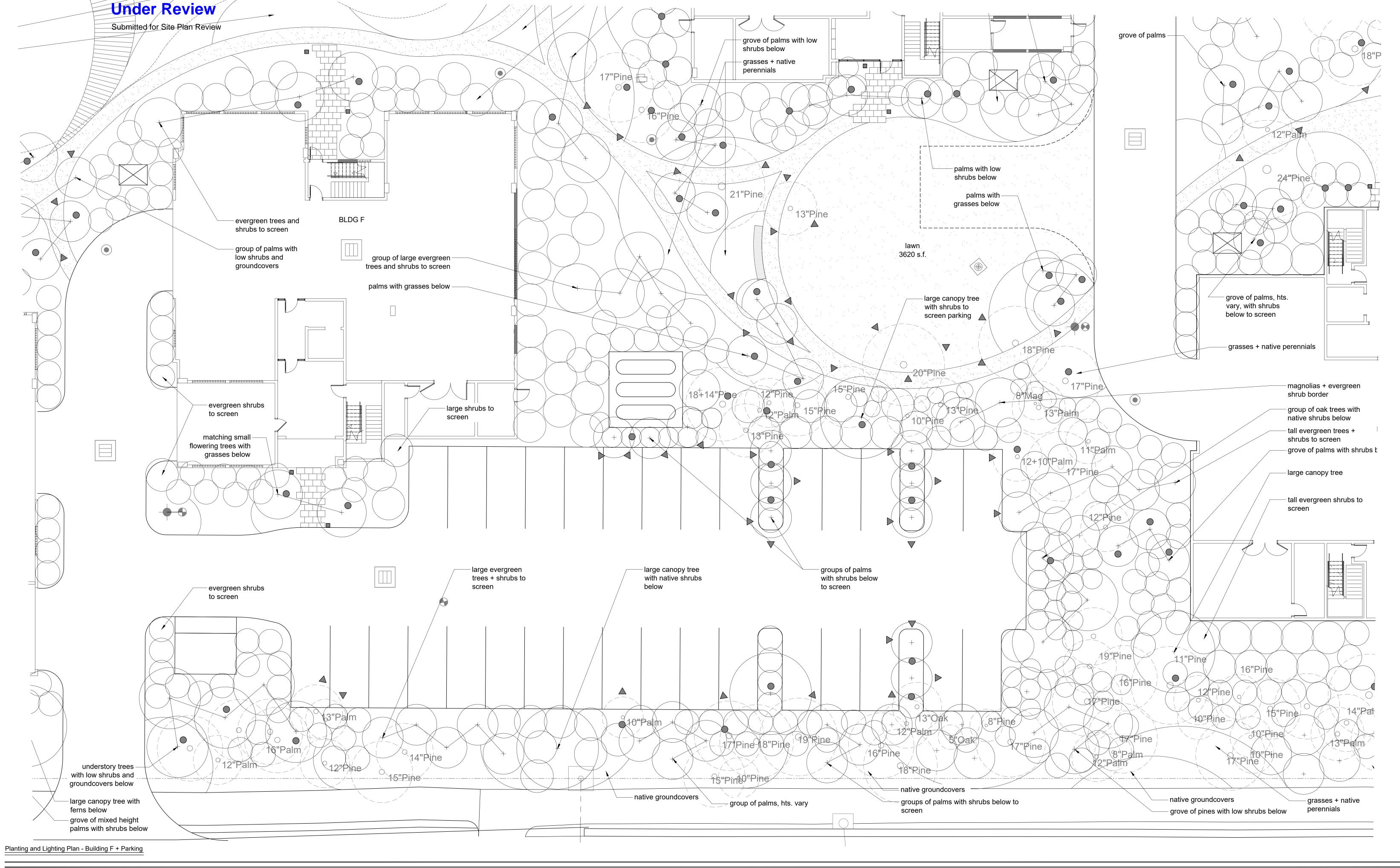
Ocean Pines

Kiawah Island, SC



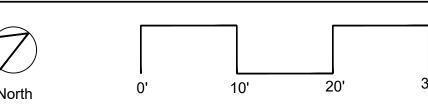


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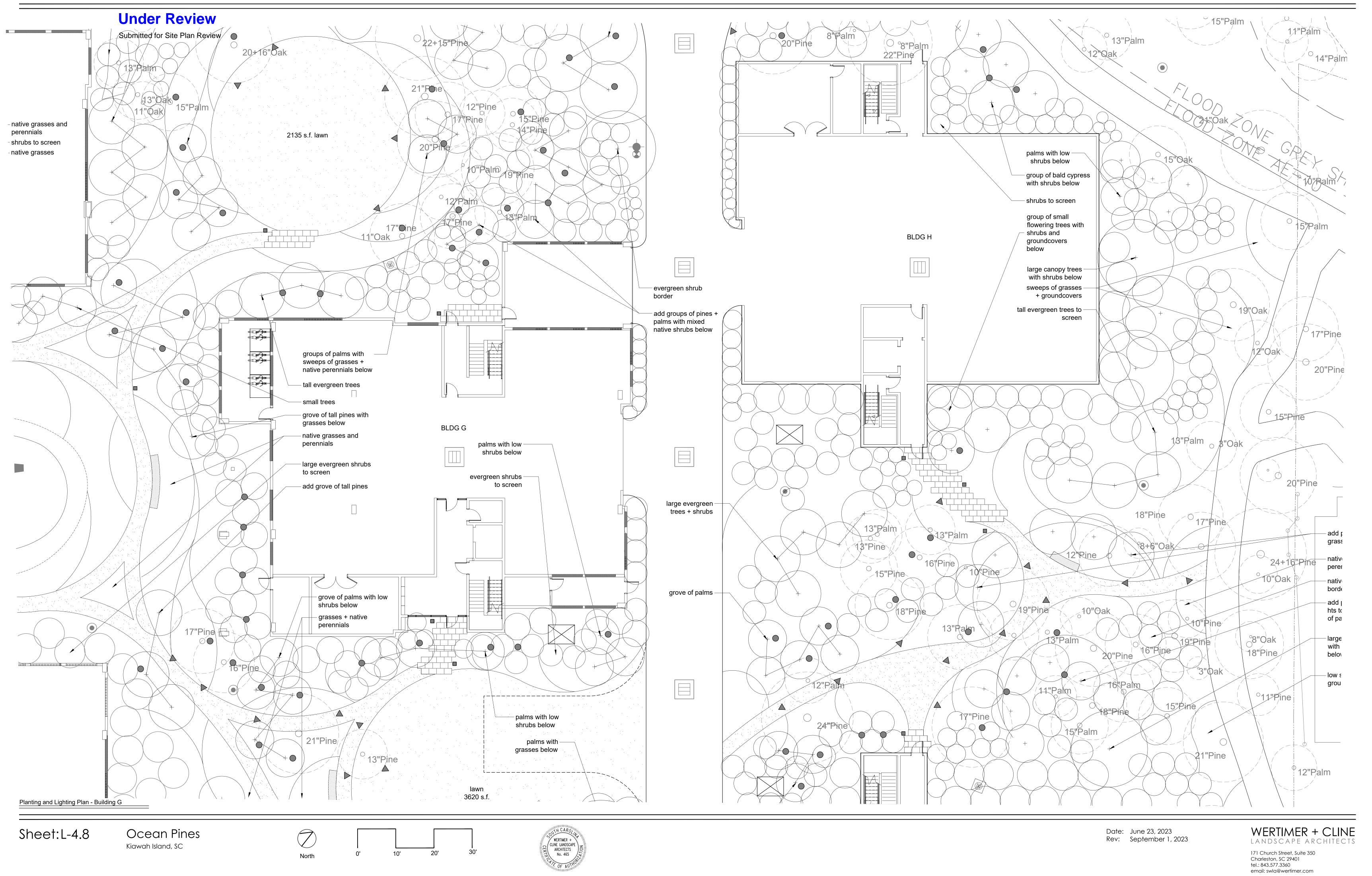
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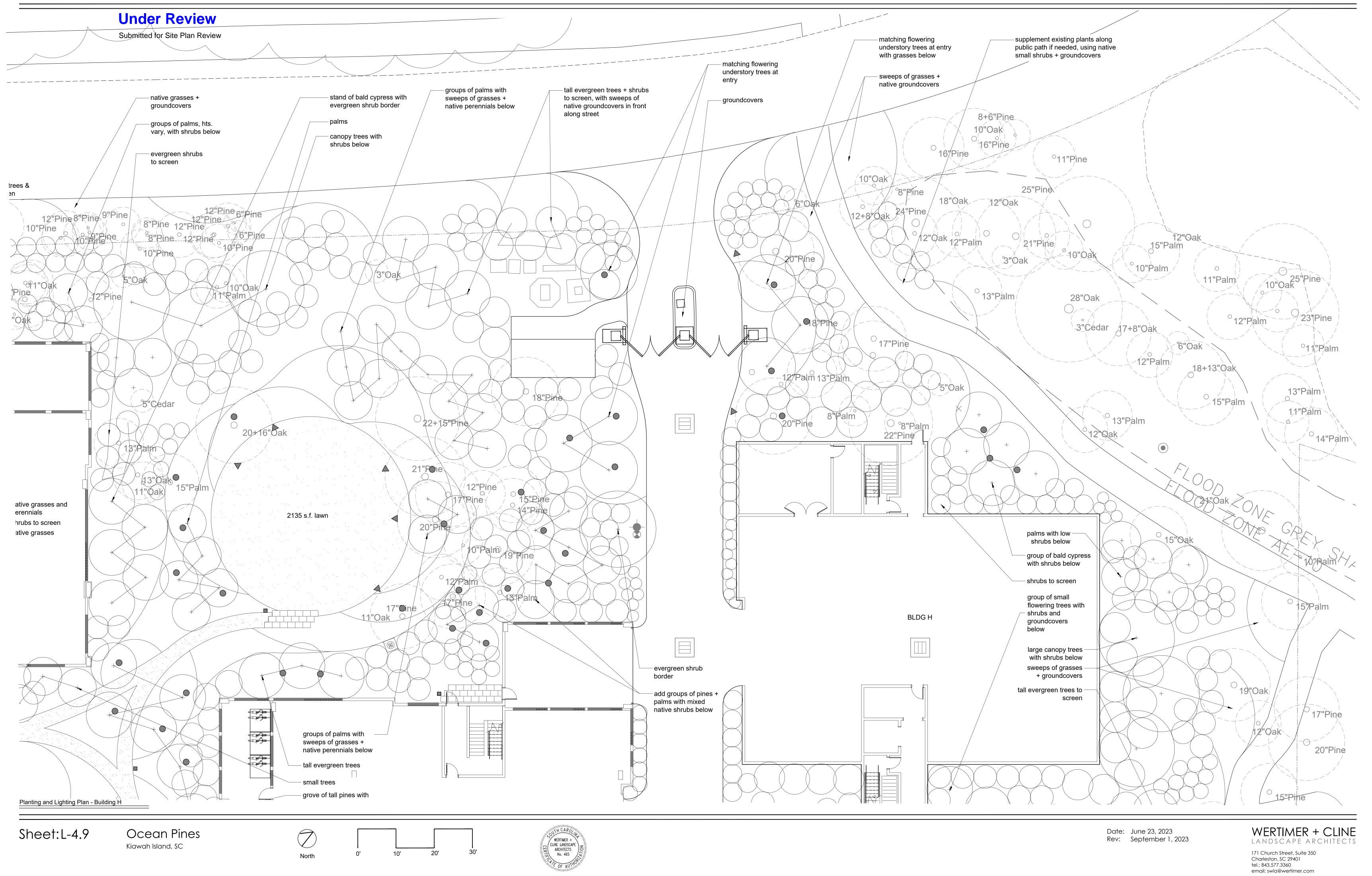
Ocean Pines
Kiawah Island, SC

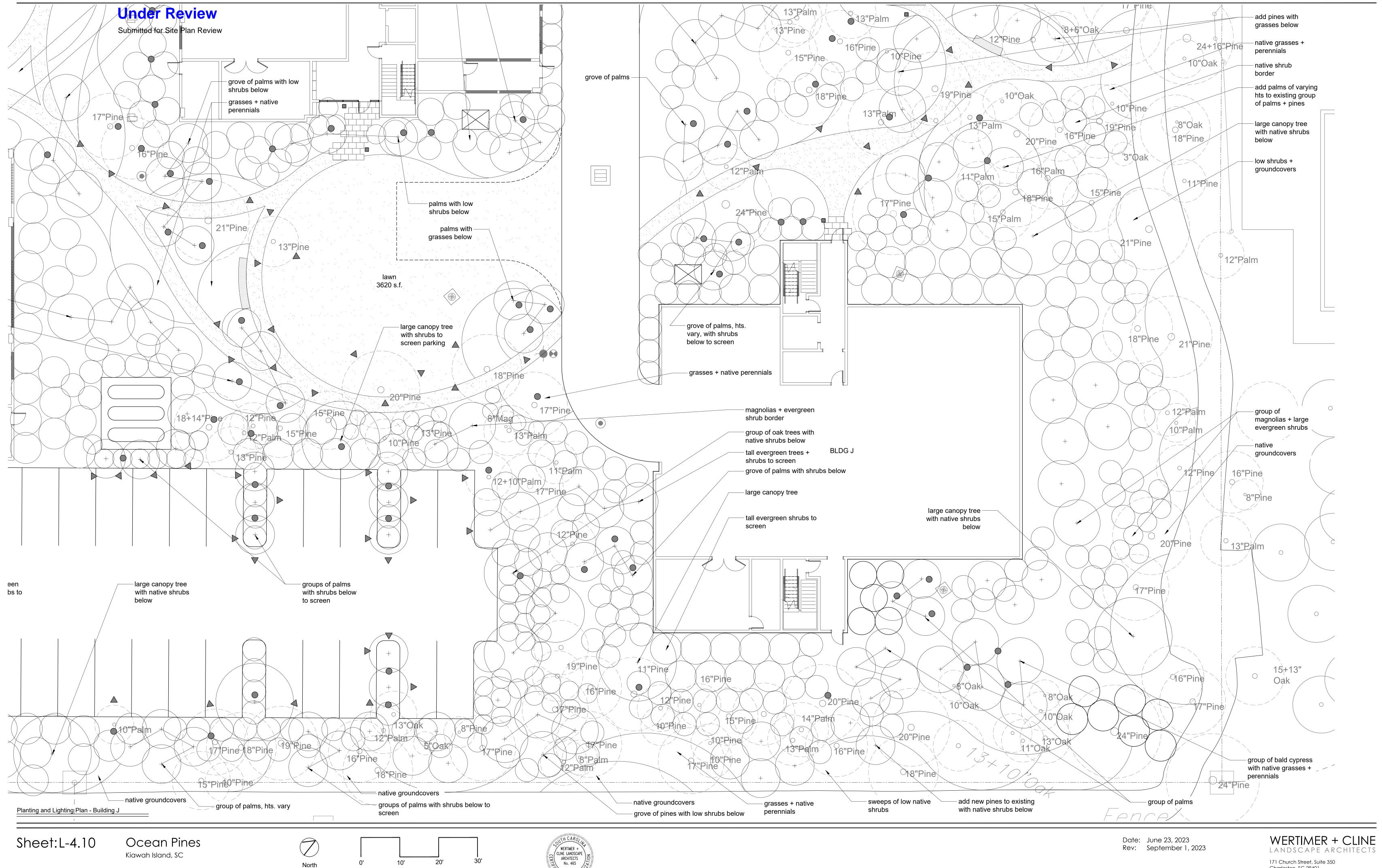


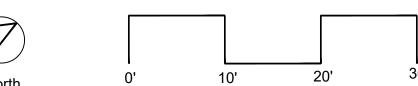


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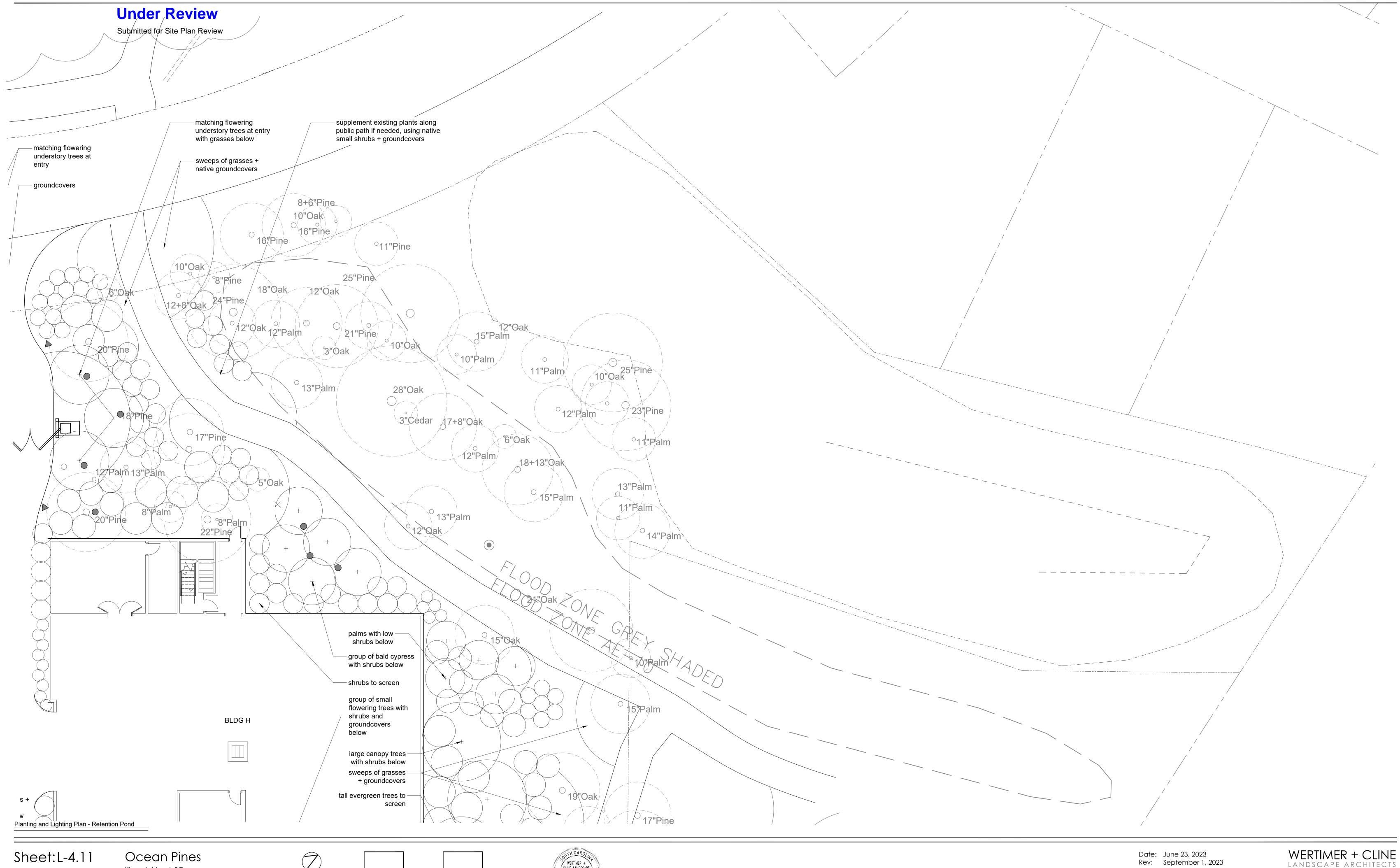




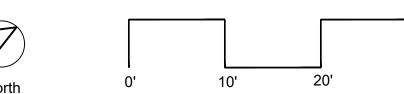








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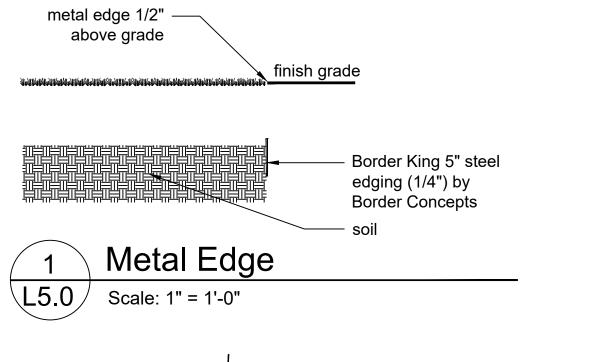
WERTIMER + CLINE
LANDSCAPE ARCHITECTS

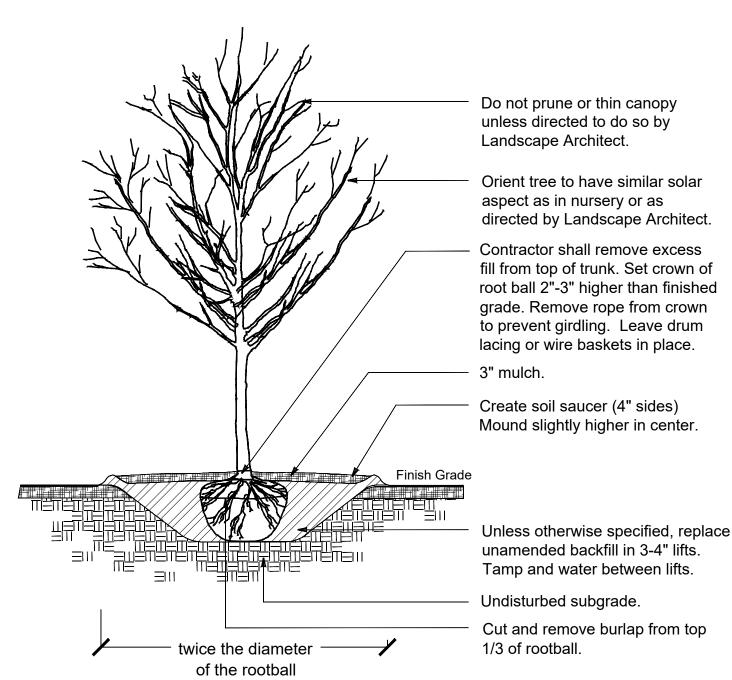
## **Under Review**

Submitted for Site Plan Review

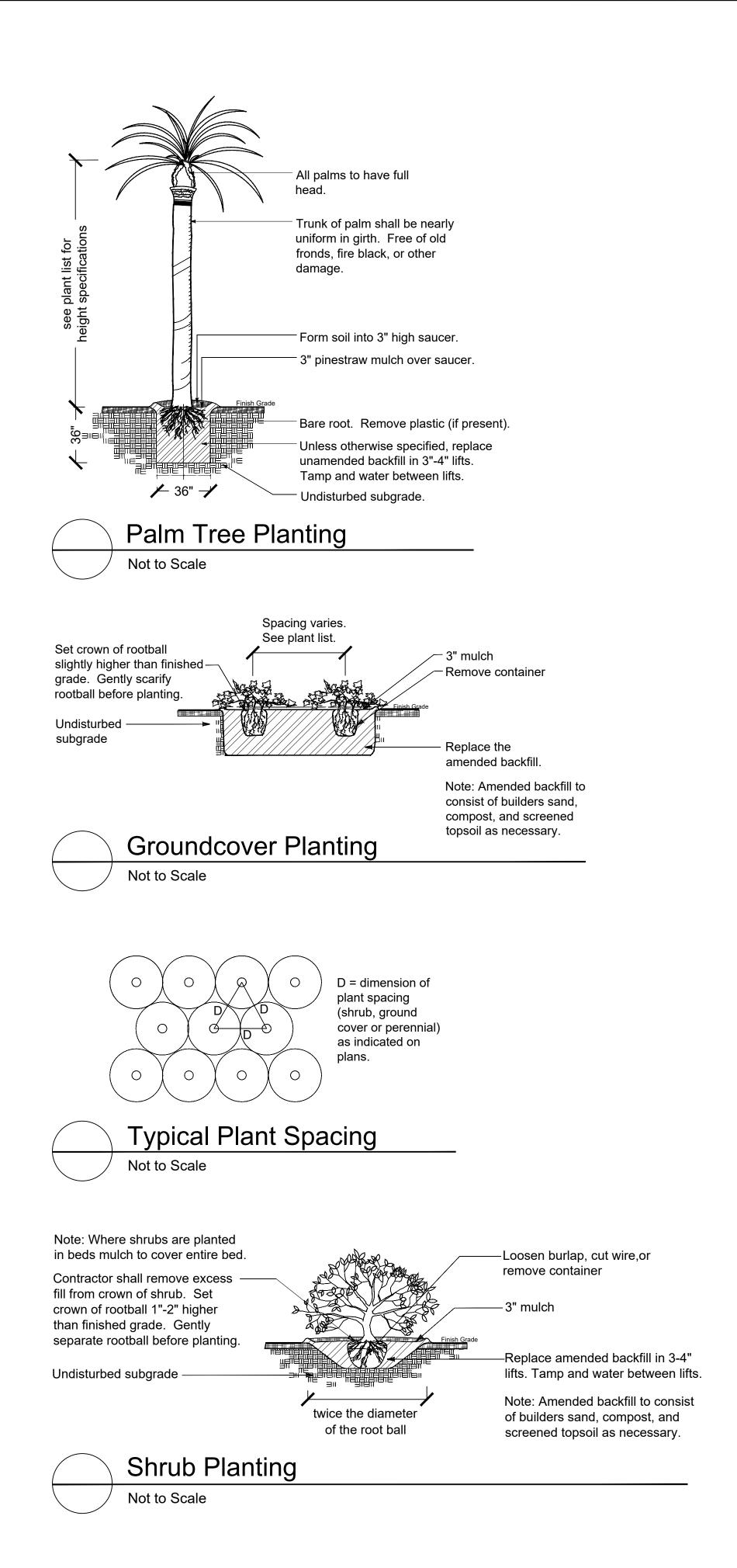
#### **PLANTING NOTES**

- 1. The Landscape Contractor is responsible for contacting the utility locator service, NO CUTS (1.800.922.0983), to locate all existing underground electrical and telephone utilities. Contractor to make this contact prior to beginning construction.
- Landscape Contractor shall verify plans in the field and notify Landscape Architect of any discrepancies prior to construction.
- Tree plantings and bed lines shall be staked by Landscape Contractor for Landscape Architect's approval prior to installation. The Landscape Architect reserves the right to make adjustments to planting locations as needed.
- Base bid items include all indicated graded swales, berms, plantings, mulching, irrigation system, and backflow preventer. Irrigation system to provide 100% coverage to all plant beds on site and to include a minimum of two hose bibs, and a rain gauge
- Add fine pine bark mulch to all beds at 3 inch depth, unless otherwise noted.
- Landscape Contractor is responsible for maintaining all plants & work during the
- course of the project until final acceptance by Landscape Architect. Landscape Contractor to guarantee plant material for (1) one year from the date
- of final acceptance by Landscape Architect.
- The Landscape Contractor shall exercise extreme caution in areas where additional suspected underground utilities may exist. The Landscape Contractor shall be responsible for all damage to existing utilities, both known and unknown. Also, he shall exercise industry standard safety practices while working near vehicular traffic.
- Landscape Contractor shall make all arrangements for temporary irrigation system services, permits and fees as needed.
- Landscape Contractor to provide 3" Bee's Ferry compost or approved equal to all beds and fine grade to provide smooth transition into existing grades. Grade to prevent ponding.
- 11. Plant material list is prepared for estimating purposes only. Contractors shall make their own quantity takeoffs using drawings to determine quantities to their satisfaction. Contractor shall report any discrepancies which may affect bidding to Landscape Architect.
- 12. If seasonal conditions necessitate the need for container grown stock when balled and burlapped plant material is specified, contractor shall contact Landscape Architect for approval prior to substitution.
- 13. If present, Landscape Contractor to include all pumps and filters suitable for aquatic plant culture in pools.
- 14. Contractor must do a soil test and provide results to Landscape Architect and verify that existing soil conditions are adequate before any planting commences.









## Ocean Pines - Preliminary Plant List

#### **Trees**

Shrubs

Datania al Nava	Carrage and Marine a	<b>C:</b>	Dool	D a ma anul sa
Botanical Name	Common Name	Size	Root	Remarks
Butia capitata	Pindo Palm	hts. tbd	b&b	
Chionanthus virginicus	American Fringetree	45 gal.	cont.	multi-stem
Magnolia grandiflora	Southern Magnolia	8'-10' ht.	cont.	
Magnolia virginiana	Sweetbay Magnolia	8'-10' 10'-12' ht.	cont.	
Pinus palustris Pinus taeda	Longleaf Pine Loblolly Pine	10-12 m. 10'-12' ht.	cont. cont.	variety tbd, multi-stem, specimen
Quercus virginiana	Live Oak	6"-8" cal.	cont.	
Sabal palmetto	Palmetto	hts. tbd	b&b	full heads
Taxodium distichum	Bald Cypress	10'-12' ht.	cont.	
Vitex agnus-castus	Vitex	45 gal.	cont.	multi-stem
Botanical Name	Common Name	Size	Root	Remarks
Callicarpa americana	Beautyberry	7 gal.	cont.	
Cyperus alternifolius	Umbrella Plant	3 gal.	cont.	
llex vomitoria	Yaupon Holly	15 gal.	cont.	

15 gal.

7 gal.

15 gal.

7 gal.

7 gal.

7 gal.

30 gal.

cont.

cont.

cont.

cont.

cont.

cont.

cont.

#### Perennials, Groundcover, Grasses, and Vines

Serenoa repens 'Cinerea'

Virburnum odoratissimum

Illicium parviflorum

Livistona chinensis

Myrica cerifera

Serenoa repens

Sabal minor

Anise

Wax Myrtle

Chinese Fan Palm

Silver Saw Palmetto

Dwarf Palmetto

Sweet Viburnum

Saw Palmetto

### **Water Plants**

Botanical Name	Common Name	Size	Root	Remarks
Acorus americanus Iris virginica Juncus effusus Juncus inflexis Nymphoides aquatica Pontederia cordata Sagittaria lancifolia Saururus cernuus	Sweetflag Iris Southern Blue Flag Iris Soft Rush Blue Arrow Rush Banana Lily Pickerelweed Lanceleaf Arrowhead Lizard's Tail	1 gal. 1 gal. 1 gal. 1 gal. 1 gal. 1 gal. 1 gal.	cont. cont. cont. cont. cont. cont. cont. cont. cont.	

Sheet:L-5.0

Planting List and Details



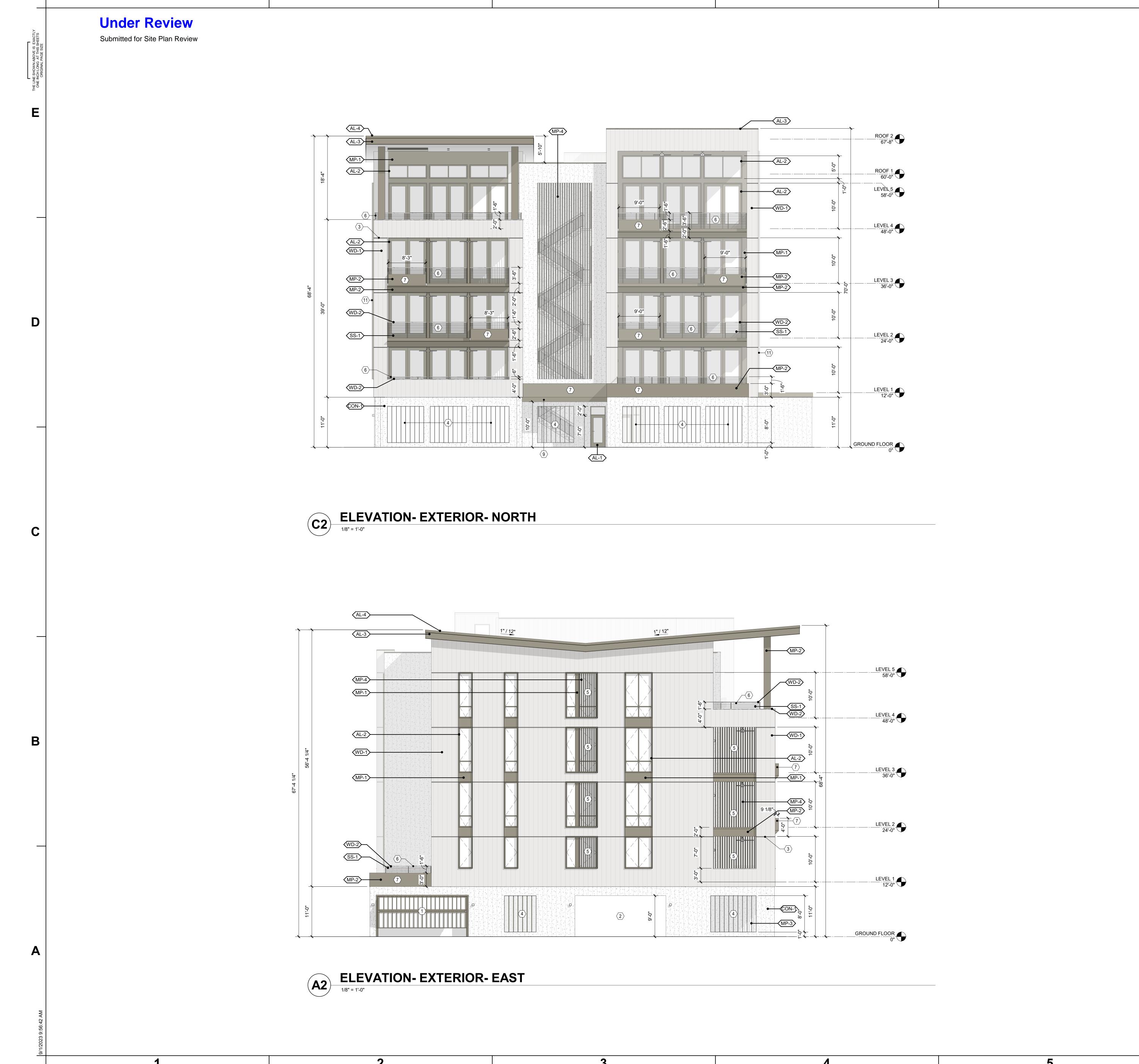
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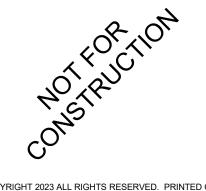


## **BUILDING ELEVATION SHEET NOTES**

- EXTERIOR DIMENSIONS AT MASONRY VENEER ARE COURSING, NOT ACTUAL AND ARE TO FACE OF MASONRY.
- ALL PENETRATIONS, INCLUDING MECHANICAL DUCTS, ELECTRICAL LINES, WINDOWS AND DOORS, SHALL BE SEALED TO THE PRIMARY MOISTURE
- PROVIDE METAL FLASHING AT ALL HORIZONTAL TRANSITIONS AND MIN. 3/8"
  SEALANT JOINTS AT ALL TRANSITIONS BETWEEN DISSIMILAR MATERIALS AND PER MANUFACTURER'S REQUIREMENTS.
- PROVIDE SELF-ADHERING BUTYL MEMBRANE OVER SHEATHING AT ALL INSIDE /
  OUTSIDE CORNERS.
- SEALANT SHALL BE INSTALLED BETWEEN THE TOP OF FLASHING AND
  MOISTURE BARRIER. PROVIDE SEALANT END DAMS AT ENDS OF FLASHING.
- ALL EXPOSED STEEL SHALL BE GALVANIZED AND PAINTED UNLESS COMPONENTS ARE FACTORY-FINISHED.



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# ELEVATION NOTES BY NUMBER

NUMBER NOTE

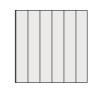
1 LOUVERED OVERHEAD GARAGE DOOR, BRONZE FINISH
2 OPENING TO PARKING GARAGE BEYOND
3 TYP. ALUMINUM REVEAL, BRONZE FINISH
4 ALUMINUM FIXED LOUVER SYSTEM, 1 5/8" x 6" x 12" O.C. VERTICAL, PERIMETER NAILER AND METAL FASCIA @ EACH OPENING. FINISH TO MATCH AL-3
5 ALUMINUM FIXED LOUVER SYSTEM, 1 5/8" x 4" x 5" O.C. VERTICAL, FINISH TO MATCH AL-3
6 STAINLESS STEEL CABLE RAILING WITH WOOD CAP; CAP TO MATCH PORCH DECKING SYSTEM. BALUSTERS TO MATCH AL-3
7 METAL BALCONY PLANTER/KNIFE EDGE DETAIL, FINISH TO MATCH AL-3
8 NOT USED
9 ALUMINUM TRELLIS, FINISH TO MATCH AL-3. 1 1/2"x12" DEEP LOUVERS @ 12" O.C.
10 NOT USED
11 4" DEEP ALUMINUM RAINSCREEN FIN @ PUNCHED OPENINGS, FINISH TO MATCH AL-3

OCEAN PINES BUILDING C
4401 + 4101 SOUTHERN PINES LANE

Δ DATE DESCRIPTION

KEY PLAN:

# ELEVATION MATERIAL LEGEND



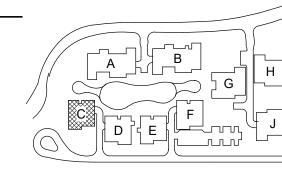
WD-1 WOOD VERTICAL SIDING BOARD



CON-1 BOARD-FORMED CONCRETE



MP-X, AL-X METAL, FACTORY/ PAINT FINISH

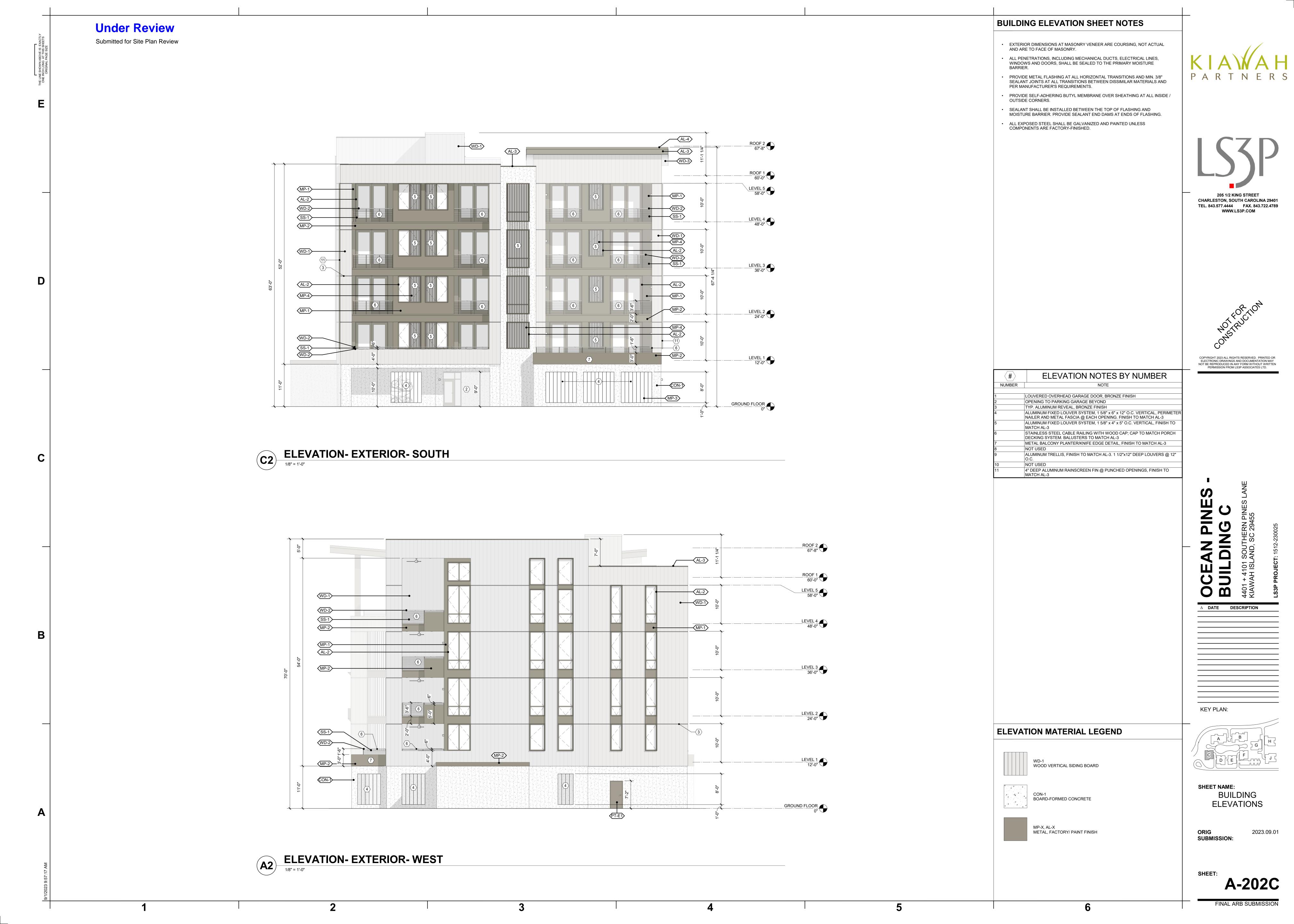


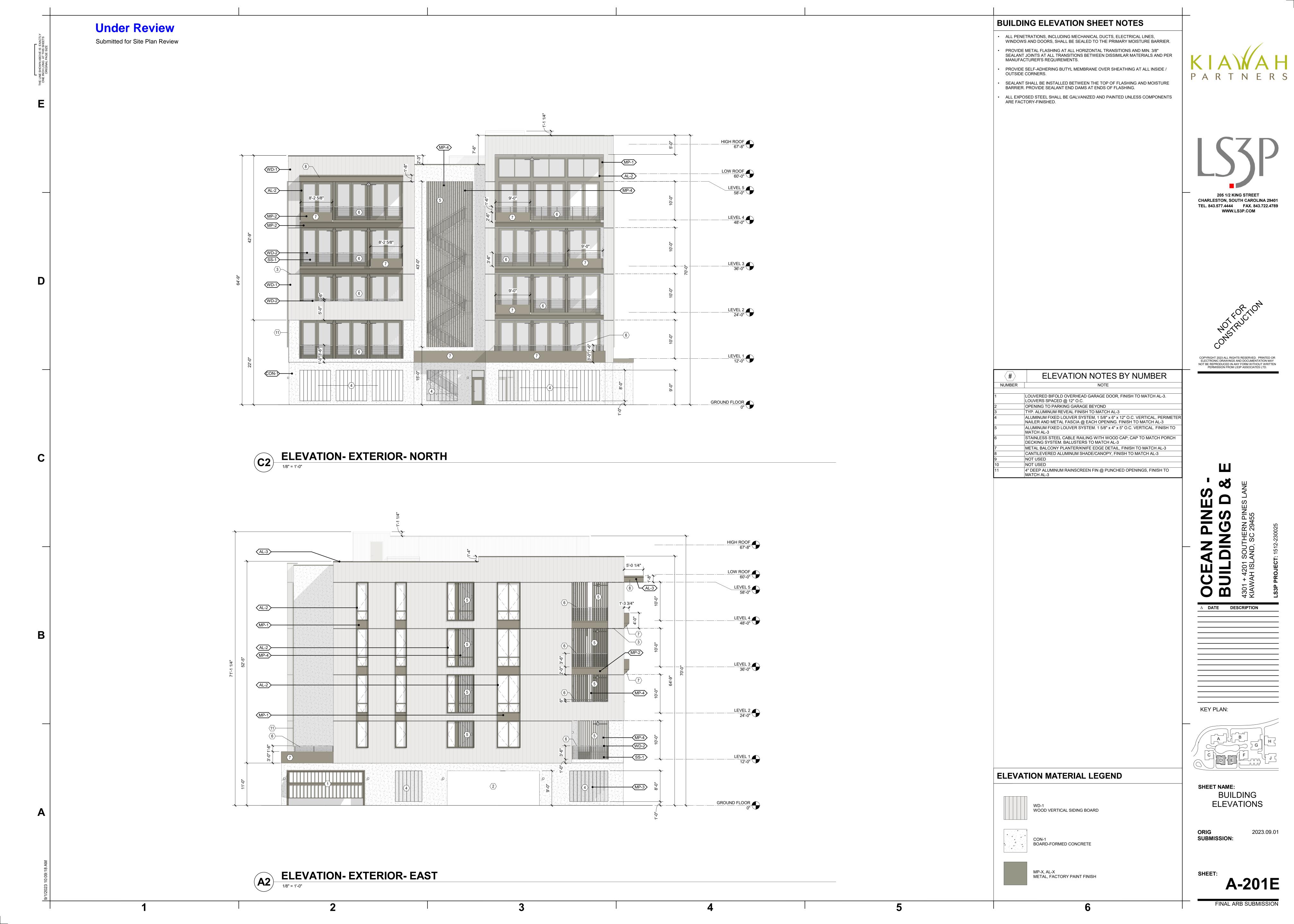
SHEET NAME:
BUILDING
ELEVATIONS

ORIG SUBMISSION:

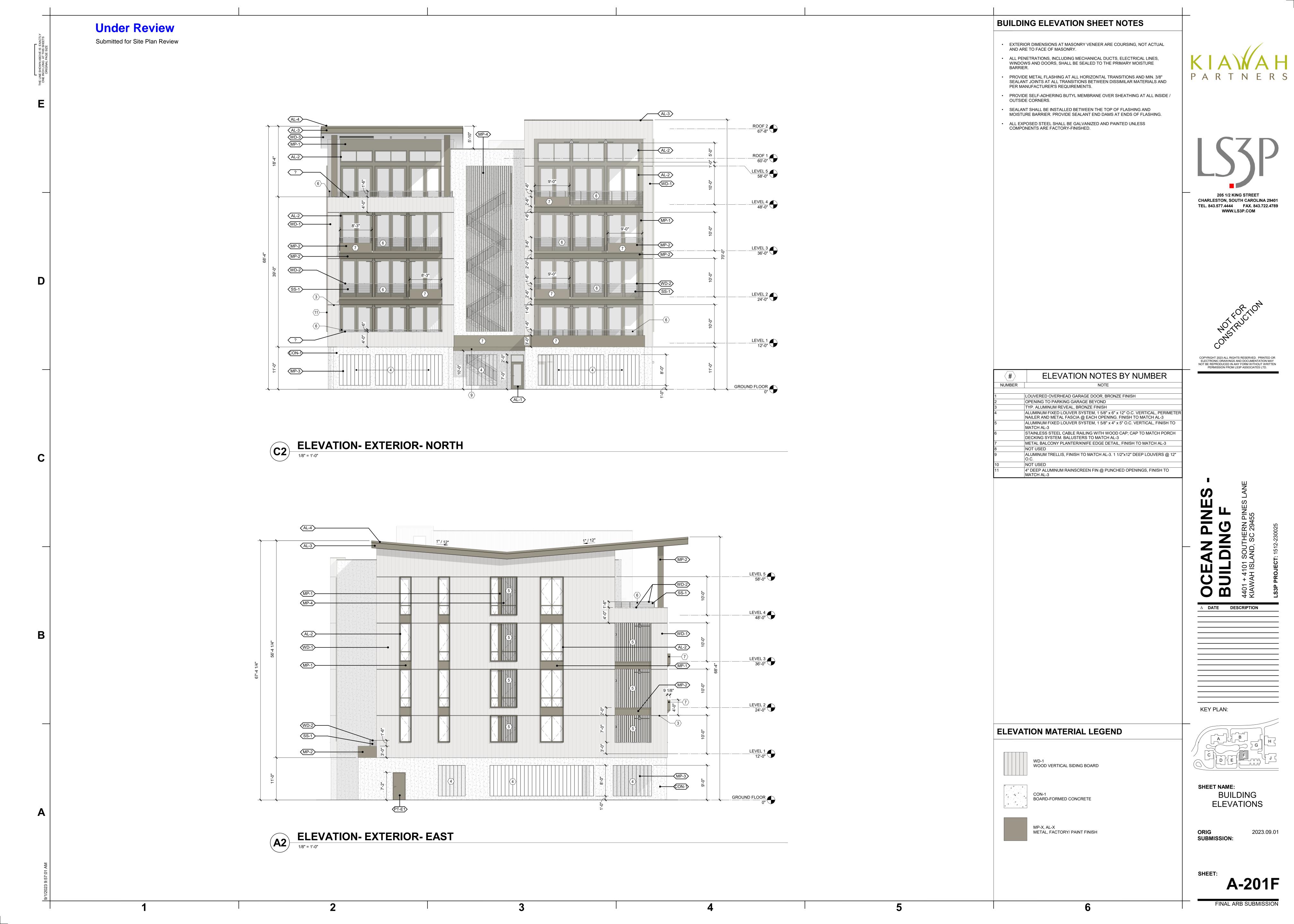
A-201C

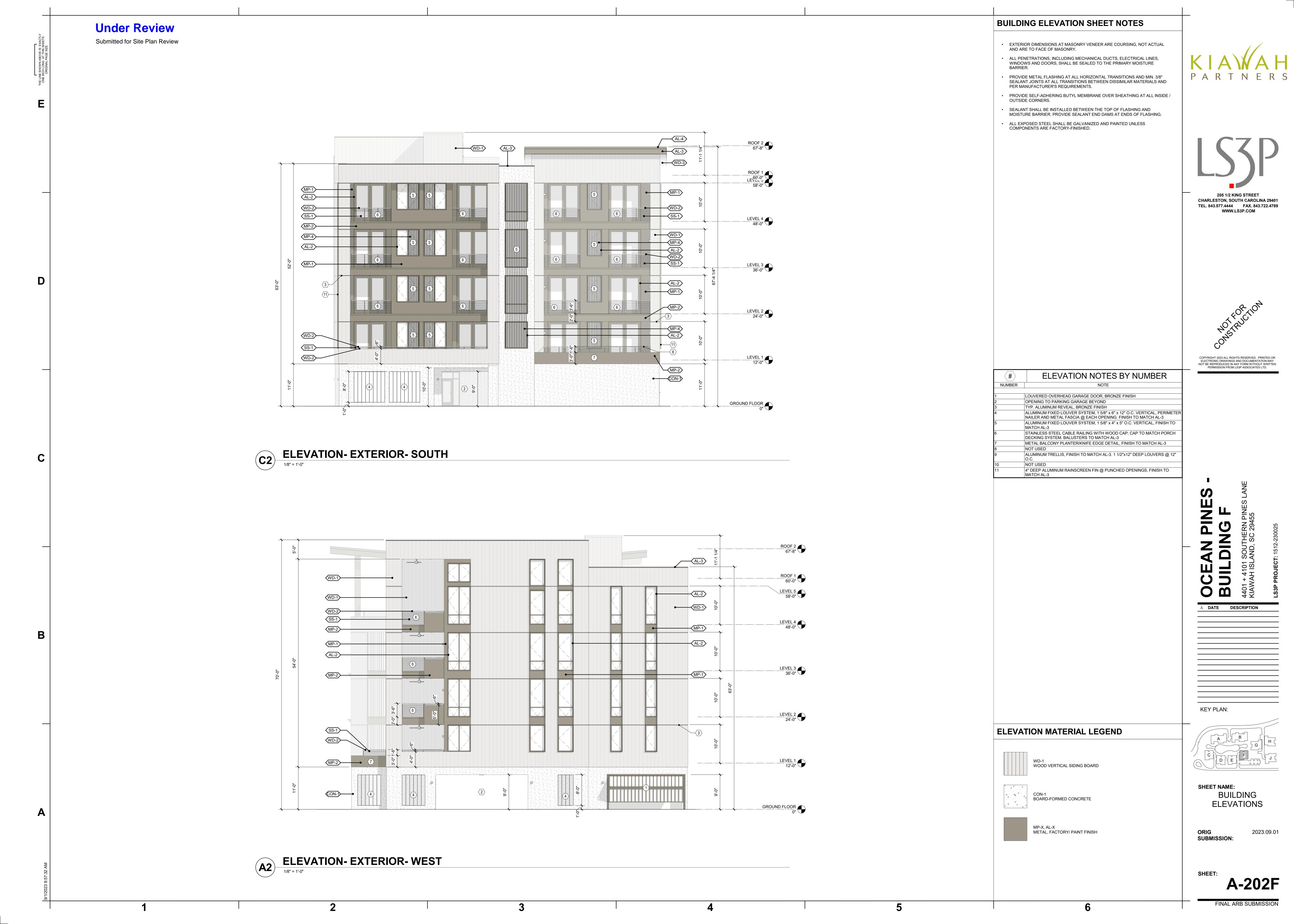
FINAL ARB SUBMISSION



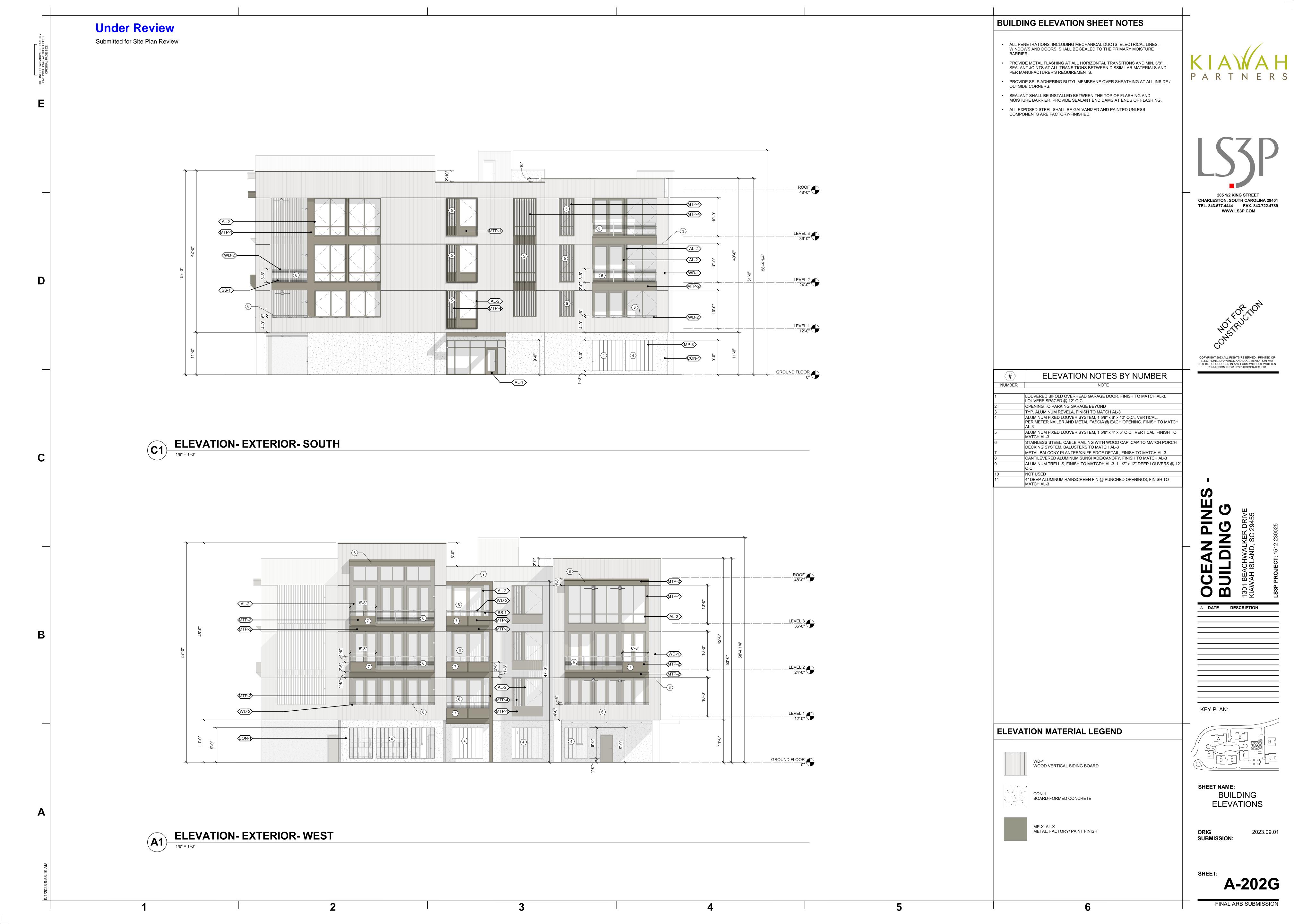


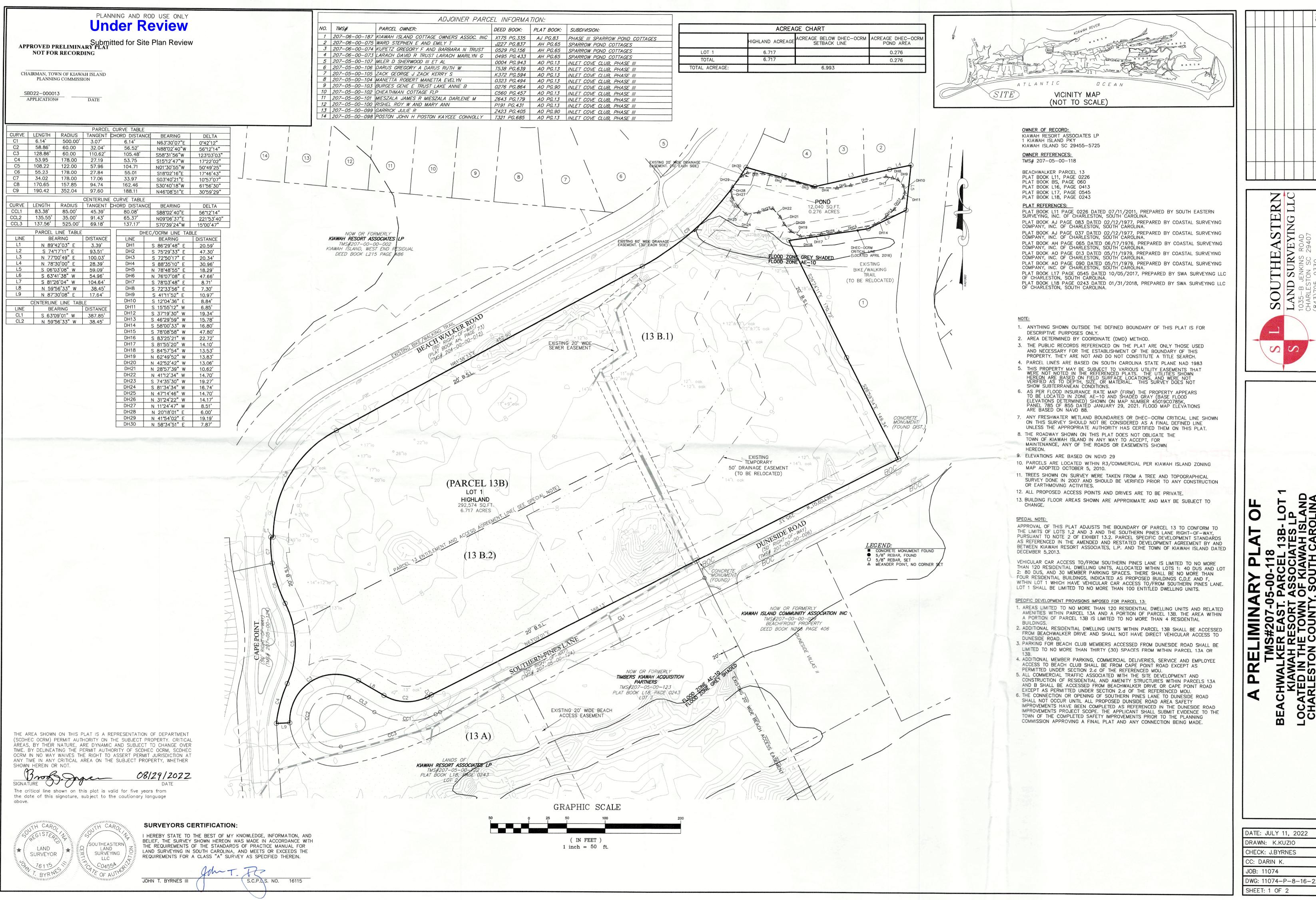












NHA NHE (0000 AR SS SF K NA NST. ELIMIP TMS#207 KER EAS AH RESOI THE TOW ON COUN

DATE: JULY 11, 2022 DRAWN: K.KUZIO CHECK: J.BYRNES

CC: DARIN K. JOB: 11074