

PARCEL II PARKING TABLE

PARKING SPACES REQUIRED					
BUILDING **	USAGE	PARKING REQUIREMENT	CALCULATION		SPACES
1	MULTIPLE FAMILY	1.75 OR 2 SPACES PER BEDROOM TYPE	2 BDRM 1X1.75+1.75	3 BDRM 6X2+12	14
2	MULTIPLE FAMILY	1.75 OR 2 SPACES PER BEDROOM TYPE	1X1.75+1.75	6X2+12	14
3	MULTIPLE FAMILY	1.75 OR 2 SPACES PER BEDROOM TYPE	1X1.75+1.75	6X2+12	14
4	MULTIPLE FAMILY	1.75 OR 2 SPACES PER BEDROOM TYPE	1X1.75+1.75	6X2+12	14
5	MULTIPLE FAMILY	1.75 OR 2 SPACES PER BEDROOM TYPE	1X1.75+1.75	6X2+12	14
6	MULTIPLE FAMILY	1.75 OR 2 SPACES PER BEDROOM TYPE	1X1.75+1.75	6X2+12	14
7	MULTIPLE FAMILY	1.75 OR 2 SPACES PER BEDROOM TYPE	1X1.75+1.75	6X2+12	14
8	MULTIPLE FAMILY	1.75 OR 2 SPACES PER BEDROOM TYPE	1X1.75+1.75	6X2+12	14
TOTAL SPACES REQUIRED:					112
ACCESSIBLE SPACES REQUIRED:			112/25	5	
PARKING SPACES PROVIDED					
ITEM	PROPOSED LOCATION	ACCESSIBLE SPACES	SPACES*		
1	SPACES PROVIDED WITHIN BUILDING FOOTPRINT	1	15		
2	SPACES PROVIDED WITHIN BUILDING FOOTPRINT	1	15		
3	SPACES PROVIDED WITHIN BUILDING FOOTPRINT	1	15		
4	SPACES PROVIDED WITHIN BUILDING FOOTPRINT	1	15		
5	SPACES PROVIDED WITHIN BUILDING FOOTPRINT	1	15		
6	SPACES PROVIDED WITHIN BUILDING FOOTPRINT	1	15		
7	SPACES PROVIDED WITHIN BUILDING FOOTPRINT	1	15		
8	SPACES PROVIDED WITHIN BUILDING FOOTPRINT	1	15		
ON SITE	SPACES PROVIDED OUTSIDE BUILDINGS (BY BUILDING 3 & 8)		8		
TOTAL SPACES PROPOSED: (INCLUDES ACCESSIBLE)					128
*INCLUDES ACCESSIBLE SPACES			ACCESSIBLE SPACES PROVIDED:	8	

**SEE MHK SITE COVERAGE EXHIBIT FOR BUILDING NUMBERING

* PARCEL - PARKING TABLE

PARKING SPACES REQUIRED					
BUILDING **	USAGE	PARKING REQUIREMENT	CALCULATION		SPACES
1-4 (4-UNIT)	MULTIPLE FAMILY	1.5 SPACES PER EFFICIENCY OR 1 BEDROOM PER DWELLING UNIT	4 BDRM 40X1.5+60		60
TOTAL SPACES REQUIRED:					60
ACCESSIBLE SPACES REQUIRED:			3		
PARKING SPACES PROVIDED					
ITEM	PROPOSED LOCATION	ACCESSIBLE SPACES	SPACES*		
1-4 (4-UNIT)	SPACES PROVIDED WITHIN BUILDING FOOTPRINT	4	60		
TOTAL SPACES PROPOSED: (INCLUDES ACCESSIBLE)					60
*INCLUDES ACCESSIBLE SPACES			ACCESSIBLE SPACES PROVIDED:	4	

**SEE MHK SITE COVERAGE EXHIBIT FOR BUILDING NUMBERING

SEWER LEGEND

DESCRIPTION	EXISTING	PROPOSED
GRAVITY PIPE	—SS—	—
SINGLE SERVICE LATERAL	—	—
DOUBLE SERVICE LATERAL	>	>
MANHOLE	○	●
CLEANOUT	○	●

ABBREVIATIONS

HDPE	HIGH DENSITY POLYETHYLENE	LF	LINEAR FEET	SF	SQUARE FEET
BOT	BOTTOM	MAX	MAXIMUM	SS	SANITARY SEWER
CI	CURB INLET	MIN	MINIMUM	TC	TOP OF CURB
CPP	CORRUGATED PLASTIC PIPE	MH	MANHOLE	TG	TOP OF GUTTER
DIP	DUCTILE IRON PIPE	OC	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		

WATER LEGEND

DESCRIPTION	EXISTING	PROPOSED
WATER MAIN	—10"W—	—10"W—
SINGLE SERVICE LATERAL	- - - - -	- - - - -
DOUBLE SERVICE LATERAL	>	>
VALVE AND BOX	⊗	⊗
FIRE HYDRANT W/VALVE & BOX	⊗	⊗
POST HYDRANT	⊙	⊙
REDUCER	△	△
BACKFLOW PREVENTOR	▭	▭
CROSS	┌┐	┌┐
TEE	┌┐	┌┐
90° BEND - HORIZONTAL	└┘	└┘
45° BEND - HORIZONTAL	/	/
22-1/2° BEND - HORIZONTAL	/	/
11-1/4° BEND - HORIZONTAL	/	/
BEND - VERTICAL		
CAP		

PROJECT MAP

SCALE: 1" = 400'



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

GENERAL NOTES

- SURVEYING AND BOUNDARY INFORMATION BY SOUTHEASTERN LAND SURVEYING, LLC.
- ALL ELEVATIONS SHOWN ARE BASED ON NGVD 1929.
- TOPOGRAPHIC SURVEY BY SOUTHEASTERN LAND SURVEYING, LLC.
- CONTRACTOR IS TO VERIFY ACCURACY OF ANY TEMPORARY BENCHMARKS SHOWN PRIOR TO UTILIZING THEM FOR CONSTRUCTION.
- 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.
- IF WORK IS SUSPENDED OR DELAYED FOR 14 DAYS, THE CONTRACTOR SHALL TEMPORARILY STABILIZE THE DISTURBED AREA AT NO ADDITIONAL COST TO THE OWNER.
- THE CONTRACTOR SHALL INSTALL ANY BARRICADES PRIOR TO BEGINNING CONSTRUCTION
- 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.
 - 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 UPON REQUEST.
 - 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 PROJECT ENGINEER.
- 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.)
- 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 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.
 - THE CONTRACTOR SHALL INSTALL ALL EROSION CONTROL AND PREVENTION STRUCTURES SHOWN ON THE PLANS.
- THE CONTRACTOR SHALL NOTIFY THE ENGINEER IF UNSUITABLE MATERIAL IS DISCOVERED PRIOR TO BEGINNING ANY REMOVAL OPERATION.
- CONTRACTOR SHALL GRADE AREAS TO DRAIN FOR POSITIVE FLOW PRIOR TO FINAL APPROVAL.
- 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 UNIFORM TRAFFIC CONTROL DEVICES" BOTH CURRENT EDITIONS.
- ALL DRAINAGE WILL BE MADE FUNCTIONAL DAILY AS WORK PROGRESSES.
- ALL MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH TOWN OF KIAWAH ISLAND ROAD CODE.

DRAINAGE LEGEND

DESCRIPTION	EXISTING	PROPOSED
PIPE	- - - - -	- - - - -
DITCH	—	—
CURB INLET	□	■
GRATE INLET	□	■
JUNCTION BOX	□	■
OUTLET STRUCTURE	□	■

OTHER UTILITIES LEGEND

DESCRIPTION	EXISTING
NATURAL GAS	—UGG— UGG
TELEPHONE	—OHT— OHT
UNDERGROUND TELEPHONE	—UTL— UTL
ELECTRICITY	—OHP— OHP
UNDERGROUND ELECTRICITY	—UGP— UGP

COUNTY CHARLESTON
TOWN TOWN OF KIAWAH ISLAND
ZONING R2 ZONING DISTRICT
TMS 207-05-00-004.116.117.120
FLOOD ZONE AE-10 ELEV. 14

GENERAL INFORMATION

OWNER: 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

ENGINEER: THOMAS & HUTTON
682 JOHNNIE DODDS BLVD.
MT. PLEASANT, SC 29464
(843) 849-0200

ARCHITECT: MHK ARCHITECTURE
60 BROAD STREET
CHARLESTON, SC 29401
(843) 566-3577

NO.	REVISIONS	BY	DATE

THOMAS & HUTTON
Engineering | Surveying | Planning | GIS | Consulting

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KRA, LP
KIAWAH ISLAND, SOUTH CAROLINA

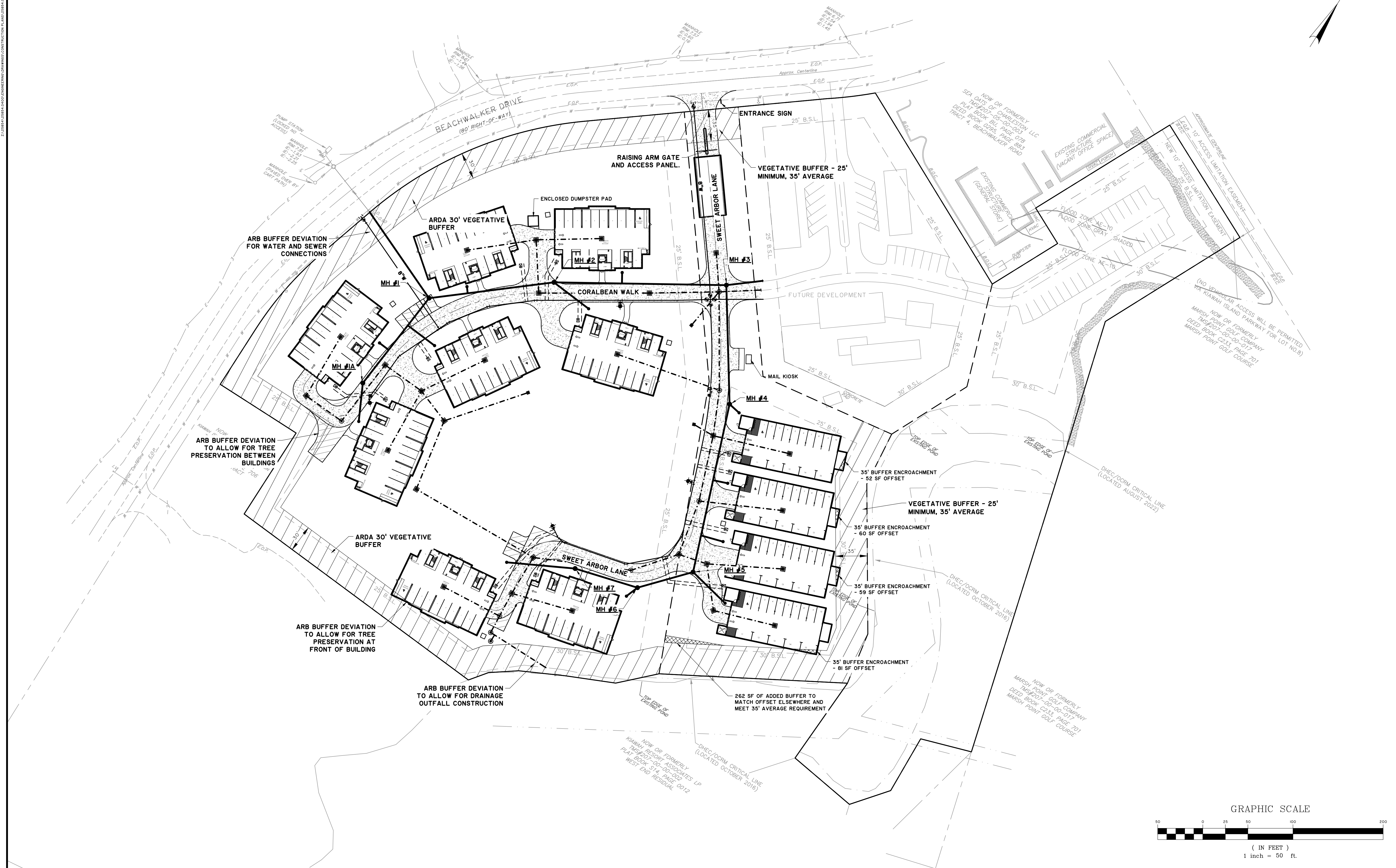
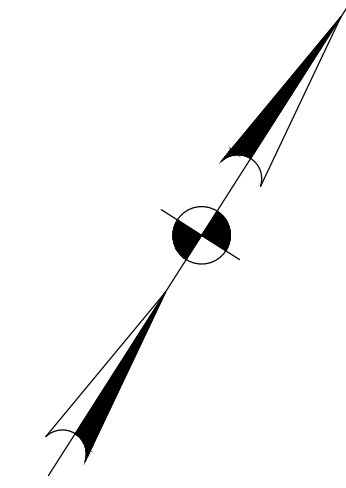
THE WEST END AT BEACHWALKER

GENERAL NOTES AND PROJECT MAP

JOB NO:	J-25854.0400
DATE:	5/1/23
DRAWN:	LMD
DESIGNED:	LMD
REVIEWED:	DJJ
APPROVED:	DJJ
SCALE:	AS SHOWN

GO.1

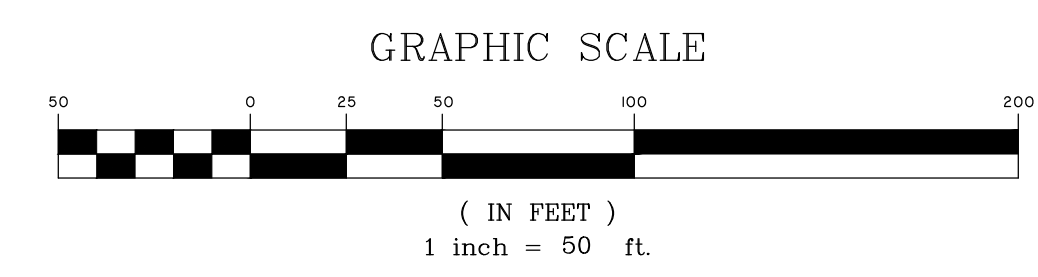
23-25854-0400 ENGINEERING CONSTRUCTION PLANS UNDERGROUND - CIVIL PLANS - 05/16/2023 - 03:37 PM



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KRA, LP
 KIAWAH ISLAND, SOUTH CAROLINA
THE WEST END AT BEACHWALKER
MASTER PLAN

JOB NO:	J-25854.0400
DATE:	5/1/23
DRAWN:	LMD
DESIGNED:	LMD
REVIEWED:	DJJ
APPROVED:	DJJ
SCALE:	1" = 50'



GO.3

TEMPORARY SEEDING - COASTAL													
SPECIES	LABS/AC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
SANDY, DROUGHTY SITES													
BROWNTOP MILLET	40												
RYE, GRAIN	56												
RYEGRASS	50												
WELL DRAINED, CLAYEY/LOAMEY SITES													
BROWNTOP MILLET	40												
JAPANESE MILLET	40												
RYE, GRAIN	56												
OATS	75												
RYEGRASS	50												

PERMANENT SEEDING - COASTAL													
SPECIES	LABS/AC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
SANDY, DROUGHTY SITES													
BROWNTOP MILLET	10												
BAHIAGRASS	40												
BROWNTOP MILLET	10												
BAHIAGRASS	30												
SERICEA LESPEDEZA	40												
BROWNTOP MILLET	10												
ATLANTIC COASTAL PANICGRASS	PLS												
BROWNTOP MILLET	10												
SWITCHGRASS (ALAMO)	8												
LITTLE BLUESTEM	4												
SERICEA LESPEDEZA	20												
BROWNTOP MILLET	10												
WEEPING LOVEGRASS	8												
WELL DRAINED, CLAYEY/LOAMEY SITES													
BROWNTOP MILLET	10												
BAHIAGRASS	40												
RYE, GRAIN	10												
BAHIAGRASS	40												
CLOVER, CRIMSON (ANNUAL)	5												
BROWNTOP MILLET	10												
BAHIAGRASS	30												
SERICEA LESPEDEZA	40												
BROWNTOP MILLET	10												
BERMUDA, COMMON	10												
SERICEA LESPEDEZA	40												
BROWNTOP MILLET	10												
BERMUDA, COMMON	12												
KOBE LESPEDEZA (ANNUAL)	10												
BROWNTOP MILLET	10												
BAHIAGRASS	20												
BERMUDA, COMMON	6												
SERICEA LESPEDEZA	40												
BROWNTOP MILLET	10												
SWITCHGRASS	8												
LITTLE BLUESTEM	PLS												
INDIANGRASS	3												

EROSION CONTROL LEGEND

DESCRIPTION	PLAN SYMBOL
SILT FENCE	
CLEARING LIMITS	CL CL
TREE PROTECTION	
SURFACE ROUGHENING	
TOP SOILING	
TEMPORARY SEEDING	TS
PERMANENT SEEDING	PS
MULCHING	M
EROSION CONTROL BLANKET OR TURF REINFORCEMENT MAT	
FLEXIBLE GROWTH MATRIX	FGM
BONDED FIBER MATRIX	BFM
SODDING	SO
STAKED SOD	
STAKED SOD AROUND INLET	
RIPRAP	
OUTLET PROTECTION - RIP RAP	
OUTLET PROTECTION - ECB OR TRM	

LIST OF ACRONYMS FOR SEDIMENT AND EROSION CONTROL

AASHTO	AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS
AMD	ACRYLAMIDE POLYMER
BFM	BONDED FIBER MATRIX
BMP(S)	BEST MANAGEMENT PRACTICE(S)
CFS	CUBIC FEET PER SECOND
CMP	CORRUGATED METAL PIPE
DHEC	DEPARTMENT OF HEALTH 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
MS4	MUNICIPAL SEPARATE STORM SEWER SYSTEM
MSDS	MATERIAL SAFETY DATA SHEETS
NPDES	NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
PAM	POLYACRYLAMIDE OR POLYMER
RCP	REINFORCED CONCRETE PIPE
SCS	SOIL CONSERVATION SERVICE
SWPPP	STORMWATER POLLUTION PREVENTION PROGRAM
TRM	TURF REINFORCEMENT MAT
VFS	VEGETATED FILTER STRIP

EROSION CONTROL LEGEND

DESCRIPTION	PLAN SYMBOL
ROCK SEDIMENT DIKE	
SEDIMENT TUBE	
ROCK CHECK DAM	
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	D
STORM DRAIN INLET PROTECTION - TYPE E SURFACE COURSE CURB INLET FILTER	E
STORM DRAIN INLET PROTECTION - TYPE F INLET TUBE	F
SILT SAC	G

CONSTRUCTION SEQUENCE		
CONSTRUCTION ACTIVITY	SCHEDULE CONSIDERATION	
1	OBTAIN COPIES OF ALL PLAN APPROVALS AND OTHER APPLICABLE PERMITS.	CONTRACTOR TO MAINTAIN OS-SWPP AT ALL TIMES DURING CONSTRUCTION.
INITIAL PHASE		
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.
3	HOLD PRE CONSTRUCTION CONFERENCE AT LEAST ONE WEEK PRIOR TO STARTING CONSTRUCTION. HOLD ADDITIONAL PRE CONSTRUCTION CONFERENCES AS NECESSARY FOR FUTURE WORK.	EACH CONTRACTOR, SUBCONTRACTOR, UTILITY CONTRACTOR, ETC. SHALL ATTEND A PRE CONSTRUCTION CONFERENCE IN PERSON AND EXECUTE A CONTRACTOR CERTIFICATION.
4	INSTALL CONSTRUCTION ACCESS PER THE INITIAL LAND DISTURBANCE PHASE STORMWATER MANAGEMENT PLAN.	STABILIZE BARE AREAS IMMEDIATELY AND INSTALL CONSTRUCTION EXITS / ENTRANCES.
5	LIMITED LAND CLEARING, GRADING, AND INITIAL INSTALLATION OF PERIMETER EROSION CONTROL BMPS INCLUDING SILT FENCE, SEDIMENT TRAPS, AND ROCK CHECK DAMS.	BEGIN MINOR CLEARING AND GRADING AS NEEDED FOR INSTALLATION PERIMETER EROSION CONTROL BMPS.
6	CONSTRUCT PERIMETER EROSION CONTROL BMPS - SILT FENCE, SEDIMENT TRAPS AND ROCK CHECK DAMS PER THE INITIAL LAND DISTURBANCE PHASE STORMWATER MANAGEMENT PLAN.	INSTALL ALL PERIMETER EROSION CONTROL BMPS PRIOR TO ANY MAJOR CLEARING AND GRADING ACTIVITIES. INSTALL ADDITIONAL TRAPS AND BARRIERS AS NEEDED DURING GRADING.
7	ESTABLISH RUNOFF CONTROLS - DIVERSIONS, PERIMETER DIKES, AND OUTLET PROTECTION PER THE INITIAL LAND DISTURBANCE PHASE STORMWATER MANAGEMENT PLAN.	INSTALL KEY PRACTICES AFTER PRINCIPAL SEDIMENT TRAPS AND BEFORE LAND GRADING. INSTALL ADDITIONAL RUNOFF-CONTROL MEASURES DURING GRADING.
CONSTRUCTION PHASE		
8	LAND CLEARING AND GRADING - SITE PREPARATION CUTTING, FILLING AND GRADING, SEDIMENTATION TRAPS, BARRIERS, DIVERSIONS, DRAINS, SURFACE ROUGHENING PER THE CONSTRUCTION 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.
9	INSTALL RUNOFF CONVEYANCE SYSTEM - INSTALL STORM DRAINS, STABILIZE BANKS AND CHANNELS. INSTALL STORM DRAIN INLET PROTECTION AS SOON AS INLET IS INSTALLED.	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 DITCH OR PIPING TO BE IN OPERATION.
10	INSTALL WASTEWATER COLLECTION, WATER DISTRIBUTION, AND STORM DRAINAGE SYSTEMS.	APPLY TEMPORARY OR PERMANENT STABILIZATION MEASURES IMMEDIATELY ON ALL DISTURBED AREAS WHERE WORK IS DELAYED OR COMPLETE. DIRECT ALL TRENCHING AND OTHER DEWATERING OPERATIONS THROUGH A DEWATERING BAG OR SIMILAR BMP PRIOR TO DISCHARGING.
11	INITIATE BUILDING CONSTRUCTION AS MARKET CONDITIONS DICTATE- CONNECT UTILITY SERVICE, INSTALL DRIVEWAY, CONSTRUCT BUILDINGS, ETC.	INSTALL NECESSARY EROSION AND SEDIMENTATION CONTROL PRACTICES PER OS-SWPPP.
12	SURFACE STABILIZATION - TEMPORARY AND PERMANENT SEEDING, MULCHING, SODDING, RIP RAP.	APPLY TEMPORARY OR PERMANENT STABILIZATION MEASURES IMMEDIATELY ON ALL DISTURBED AREAS WHERE WORK IS DELAYED OR COMPLETE.
13	AS PERVIOUS PAVEMENTS ARE INSTALLED, CHANGE INLET PROTECTION TO TYPE G.	INSTALL SEDIMENT CONTROL BMPS AS THE INLET BOXES BECOME AVAILABLE ON A BOX BY BOX PROCESS.
STABILIZATION PHASE		
14	LANDSCAPING AND FINAL STABILIZATION - TOPSOILING, TREES AND SHRUBS, PERMANENT SEEDING, MULCHING, SODDING, RIP RAP.	STABILIZE ALL OPEN AREAS, INCLUDING BORROW AND SPOIL AREAS. REMOVE AND STABILIZE ALL TEMPORARY CONTROL MEASURES.
15	REMOVE TEMPORARY SEDIMENT AND EROSION CONTROL BMPS AS ADJACENT AREAS ARE STABILIZED.	REMOVE SEDIMENT AND EROSION CONTROL BMPS ON A CASE BY CASE BASIS AND ONLY AFTER ALL UPSTREAM CONTRIBUTING AREA IS STABILIZED.

NO.	REVISIONS	BY	DATE

NO.	REVISIONS	BY	DATE

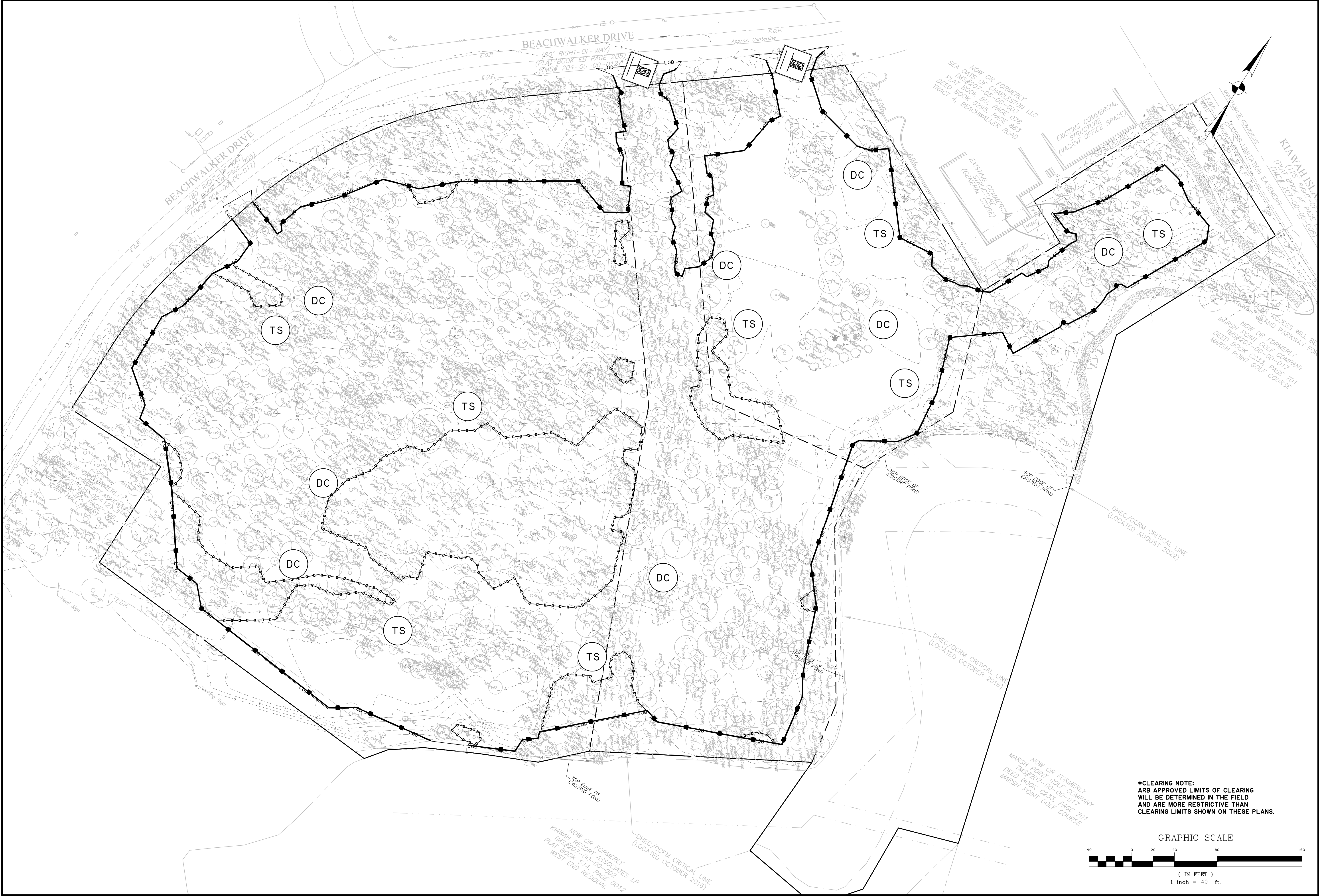
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KRA, LP
 KIAWAH ISLAND, SOUTH CAROLINA
 THE WEST END AT BEACHWALKER
 SWPPP - NOTES AND DETAILS

JOB NO:	J-25854.0400
DATE:	5/1/23
DRAWN:	LMD
DESIGNED:	LMD
REVIEWED:	DJJ
APPROVED:	DJJ
SCALE:	NOT TO SCALE

ECO.2

PL25854.DWG (SOUTH CAROLINA ENGINEERING BOARD REGISTRATION NO. 1445) DATE: 05/12/23 09:57 PM



NO.	REVISIONS	BY	DATE

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KRA, LP
 KIWAH ISLAND, SOUTH CAROLINA

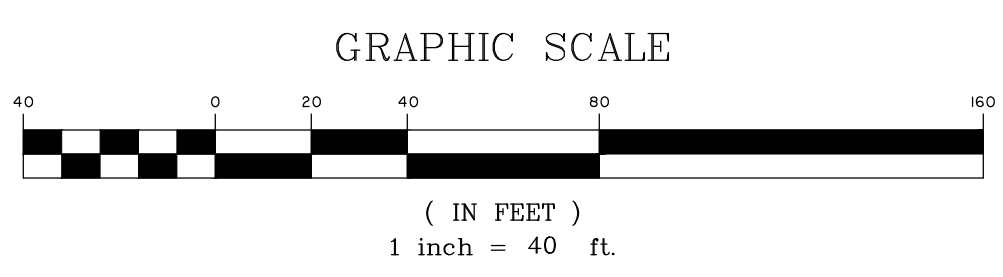
THE WEST END AT BEACHWALKER

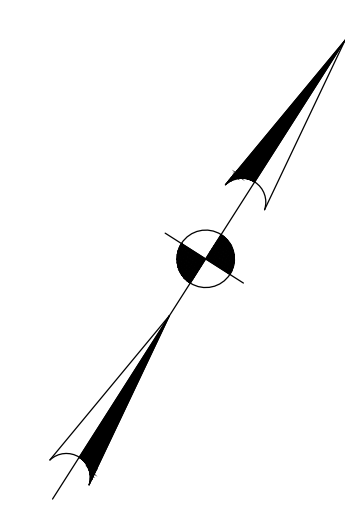
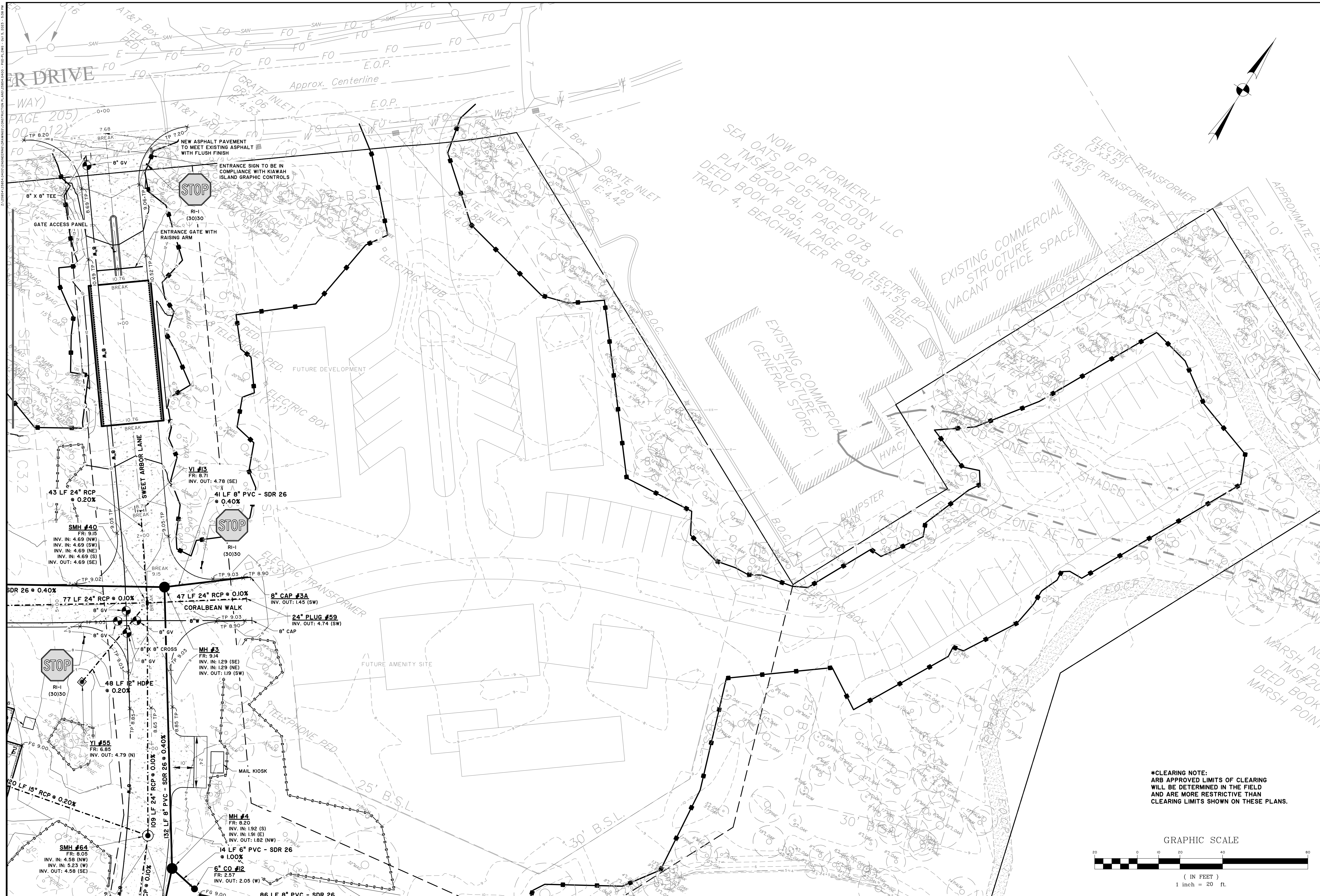
SWPPP - INITIAL LAND DISTURBANCE PHASE

JOB NO: J-25854.0400
 DATE: 5/1/23
 DRAWN: LMD
 DESIGNED: LMD
 REVIEWED: DJJ
 APPROVED: DJJ
 SCALE: 1" = 40'

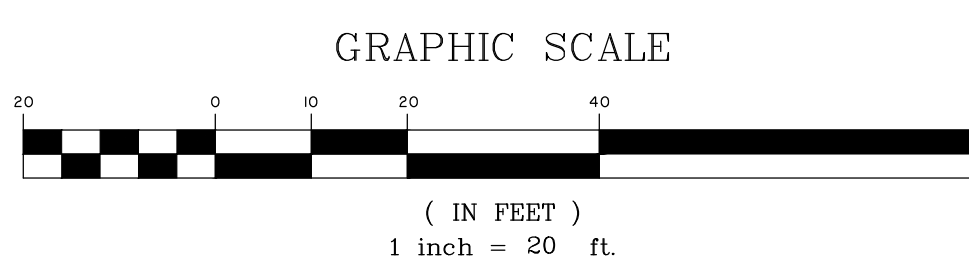
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***CLEARING NOTE:**
 ARB APPROVED LIMITS OF CLEARING
 WILL BE DETERMINED IN THE FIELD
 AND ARE MORE RESTRICTIVE THAN
 CLEARING LIMITS SHOWN ON THESE PLANS.





*CLEARING NOTE:
ARB APPROVED LIMITS OF CLEARING
WILL BE DETERMINED IN THE FIELD
AND ARE MORE RESTRICTIVE THAN
CLEARING LIMITS SHOWN ON THESE PLANS.



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KRA, LP
 KIAWAH ISLAND, SOUTH CAROLINA

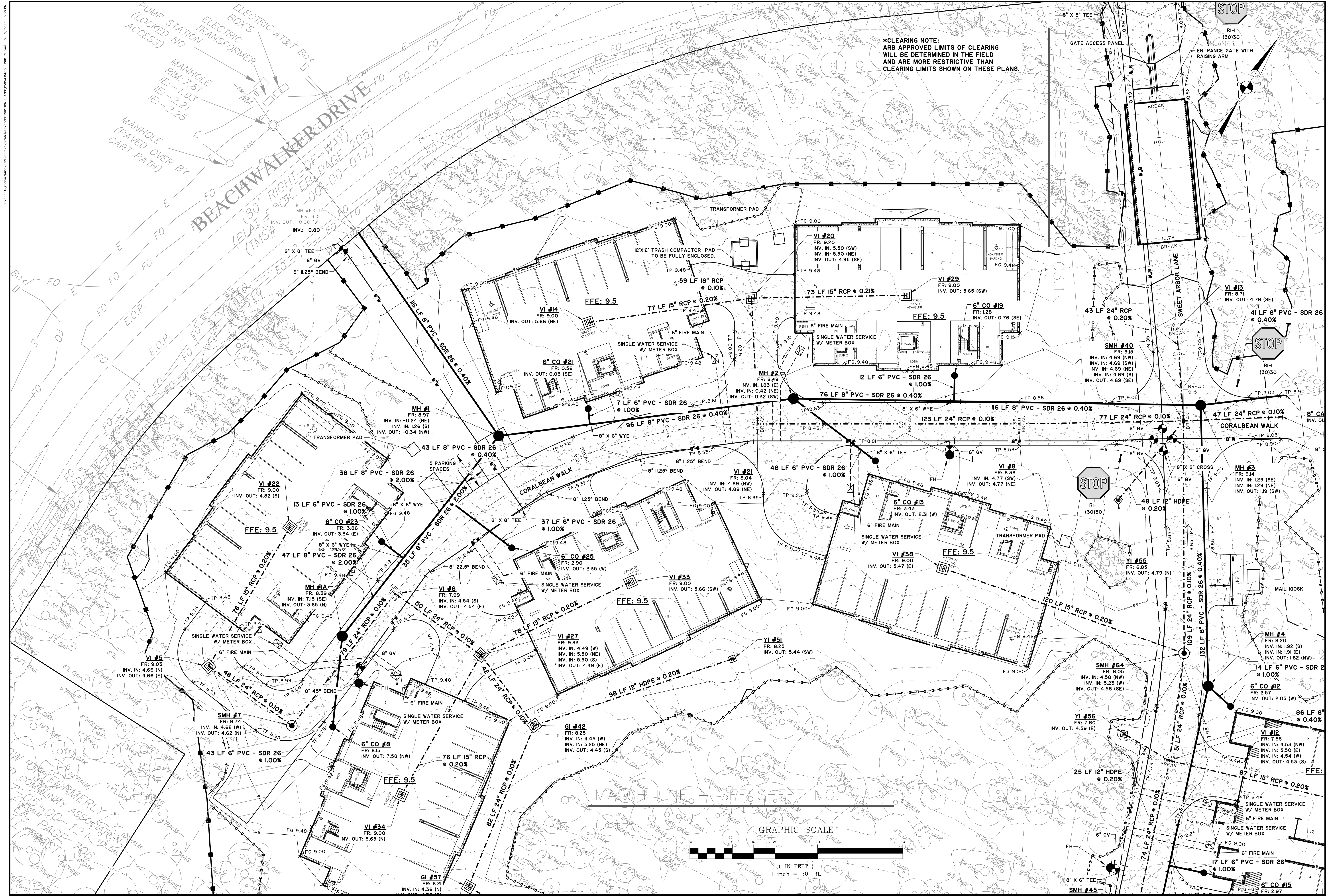
THE WEST END AT BEACHWALKER

SITE DEVELOPMENT PLAN

JOB NO: J-25854.0400
 DATE: 5/1/23
 DRAWN: LMD
 DESIGNED: LMD
 REVIEWED: DJJ
 APPROVED: DJJ
 SCALE: 1" = 20'

C3.1

2/23/23 10:58 AM C:\PROJECTS\2023\05\THE WEST END AT BEACHWALKER\DWG\SDP\SDP_C3.1.dwg PLOT FILE: SDP_C3.1.plt



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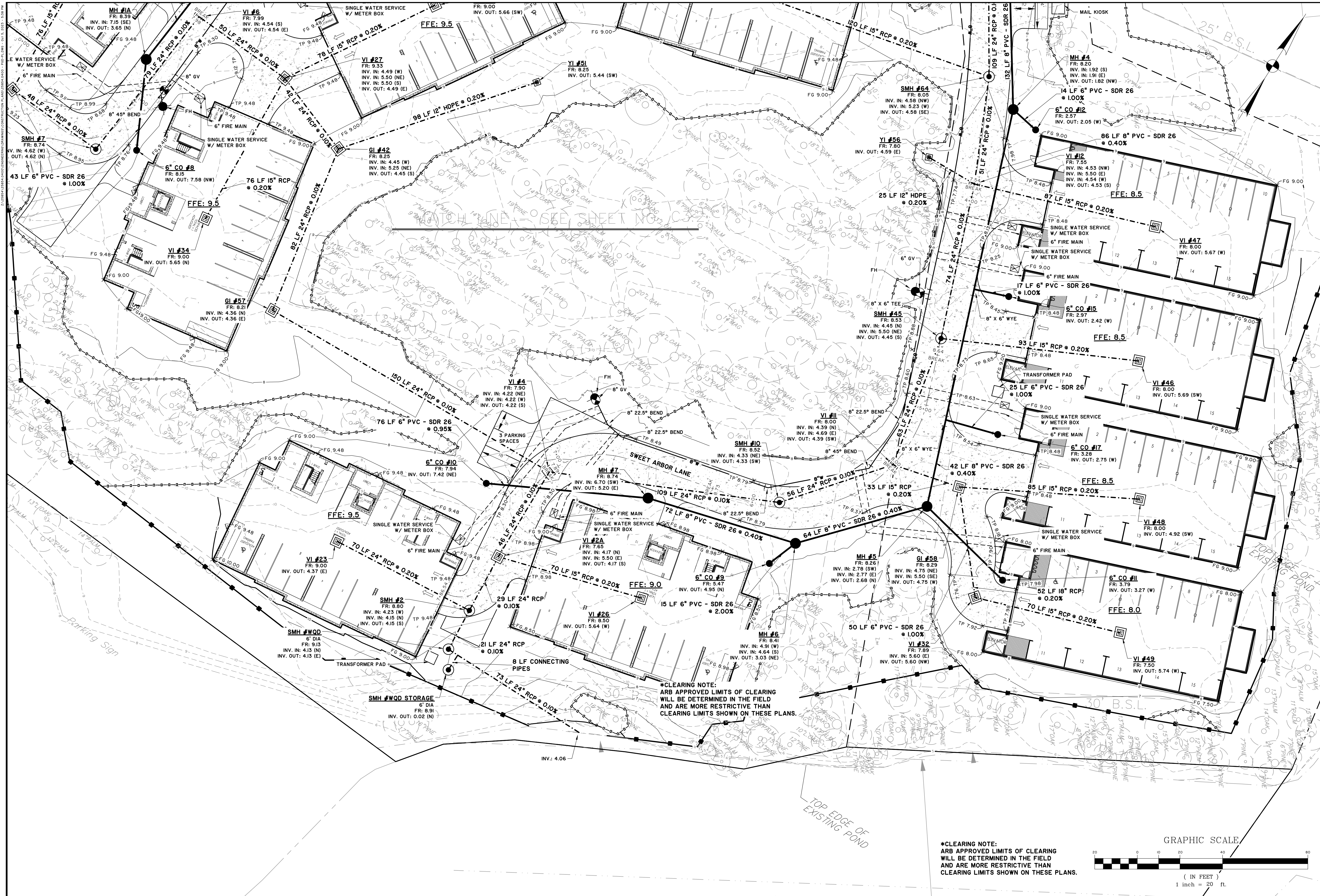
KRA, LP
 KIAWAH ISLAND, SOUTH CAROLINA

THE WEST END AT BEACHWALKER

SITE DEVELOPMENT PLAN

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C3.2



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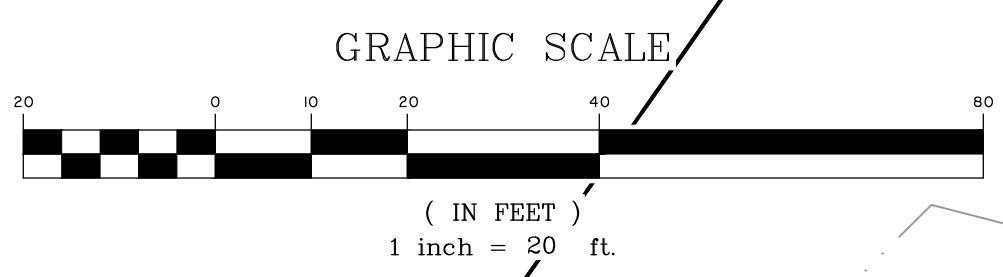
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 KIAWAH ISLAND, SOUTH CAROLINA
 THE WEST END AT BEACHWALKER
 SITE DEVELOPMENT PLAN

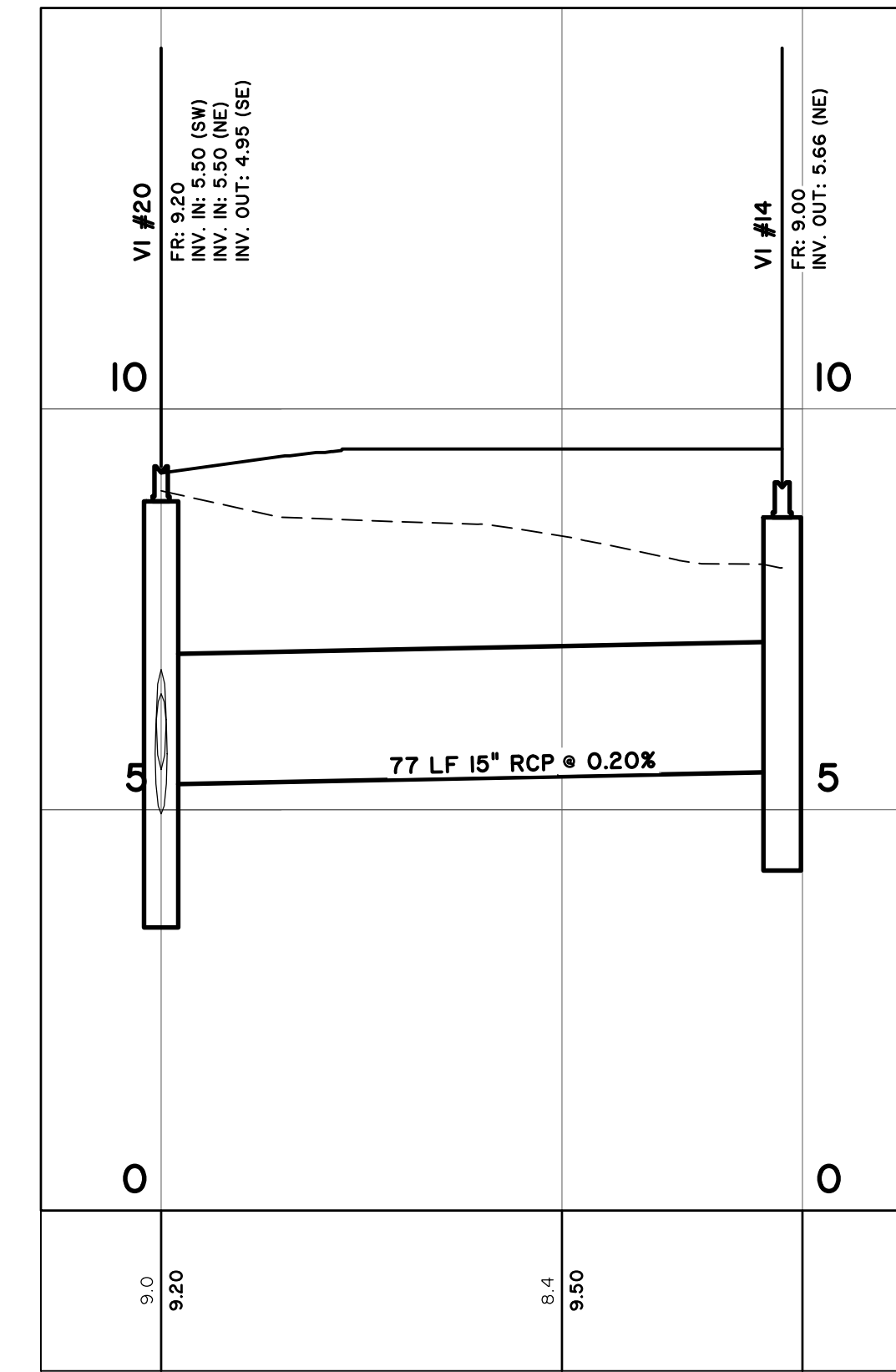
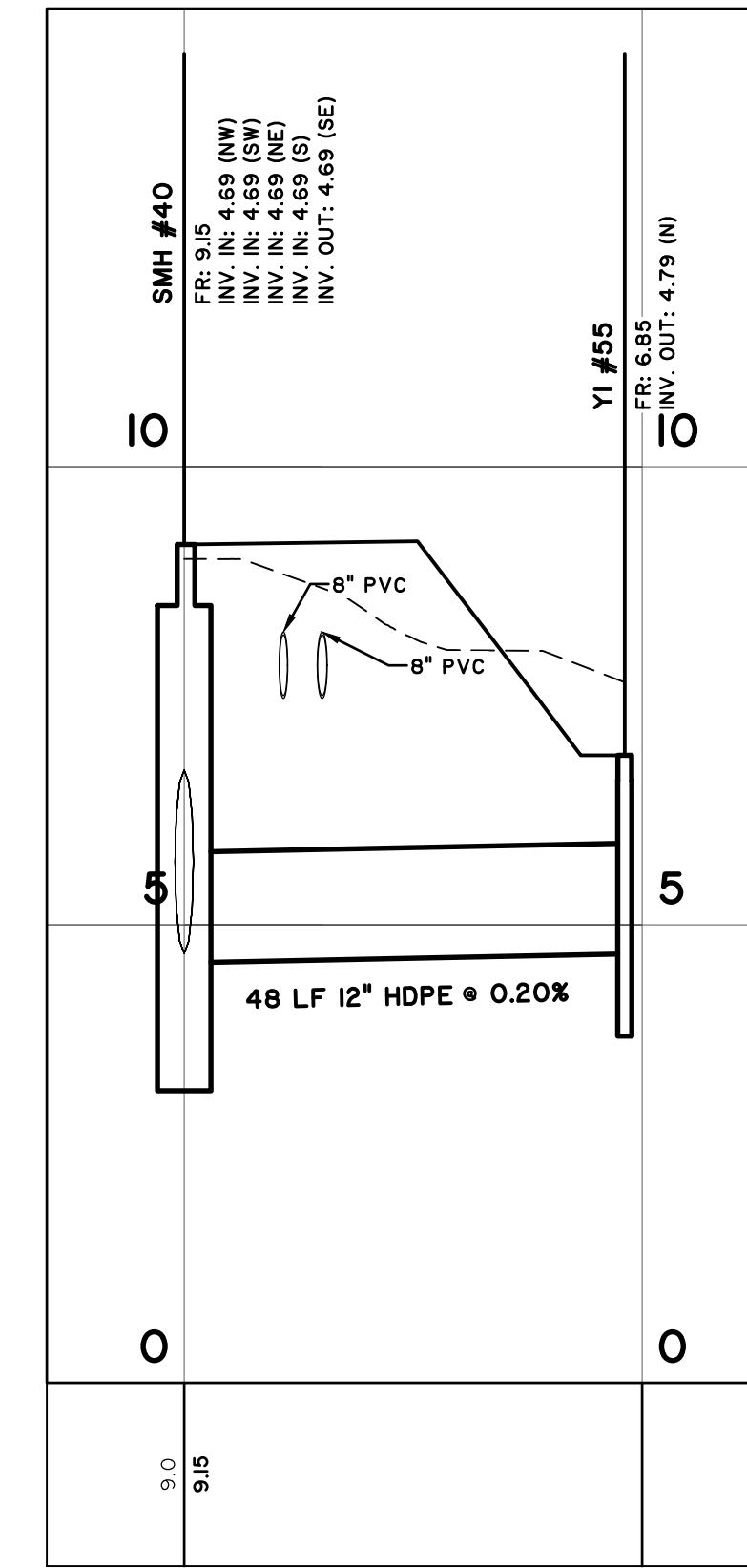
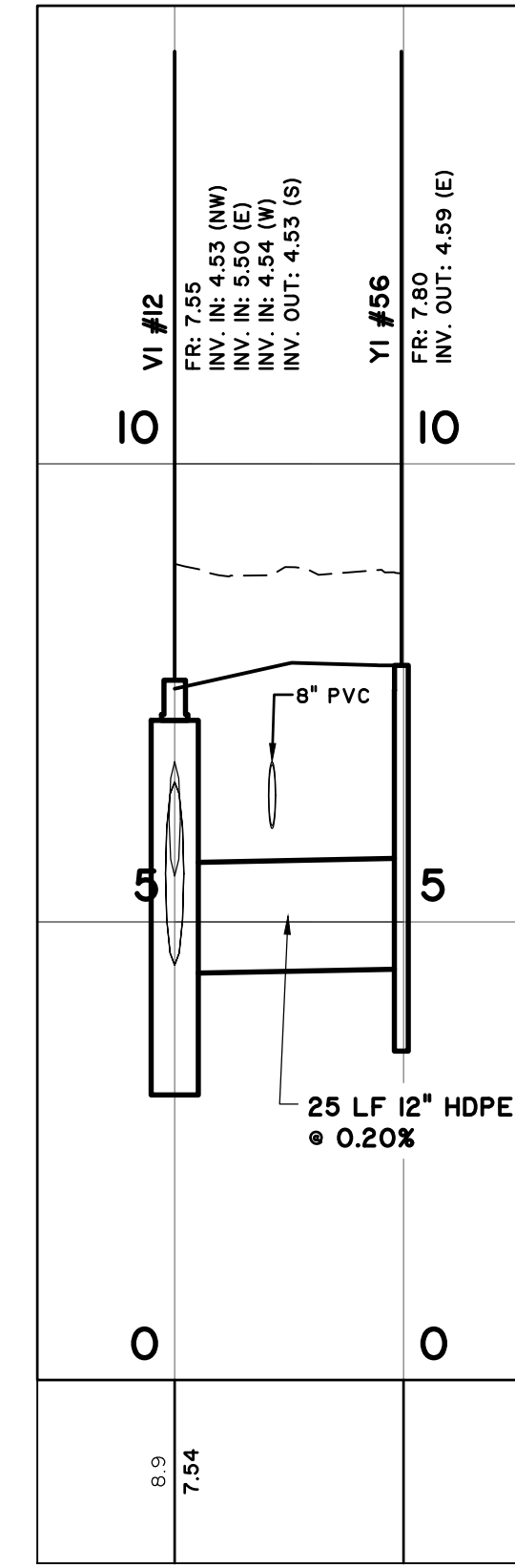
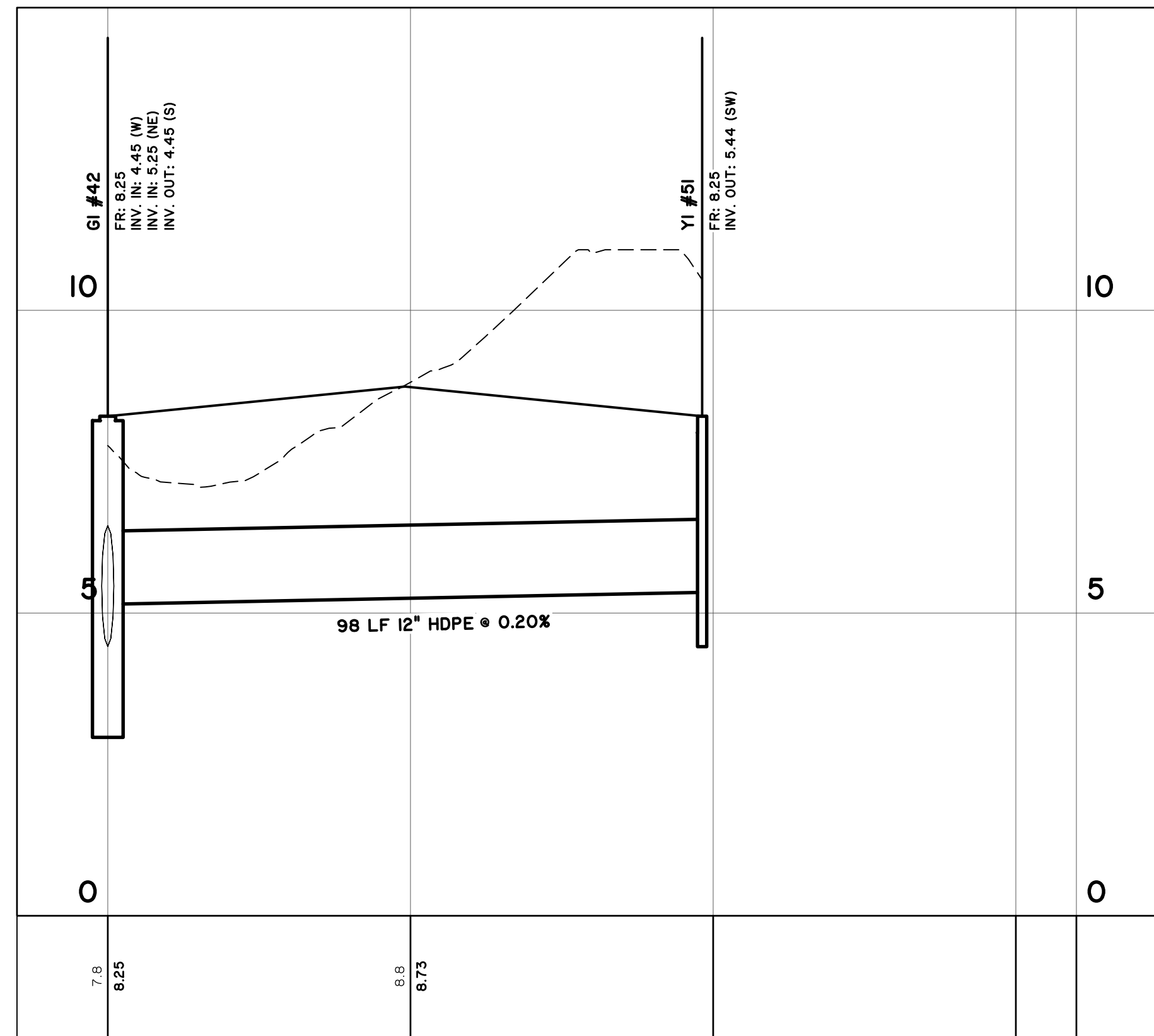
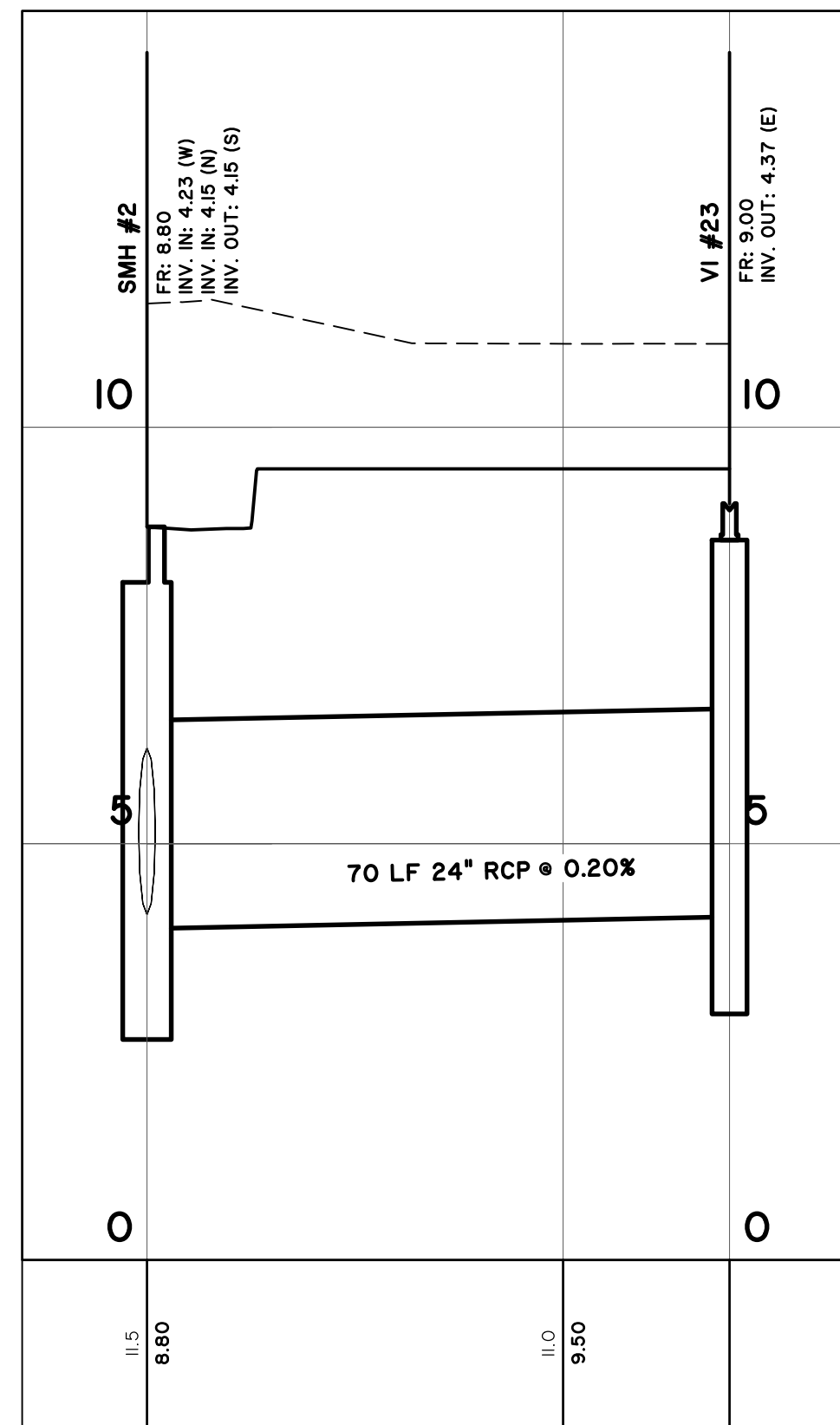
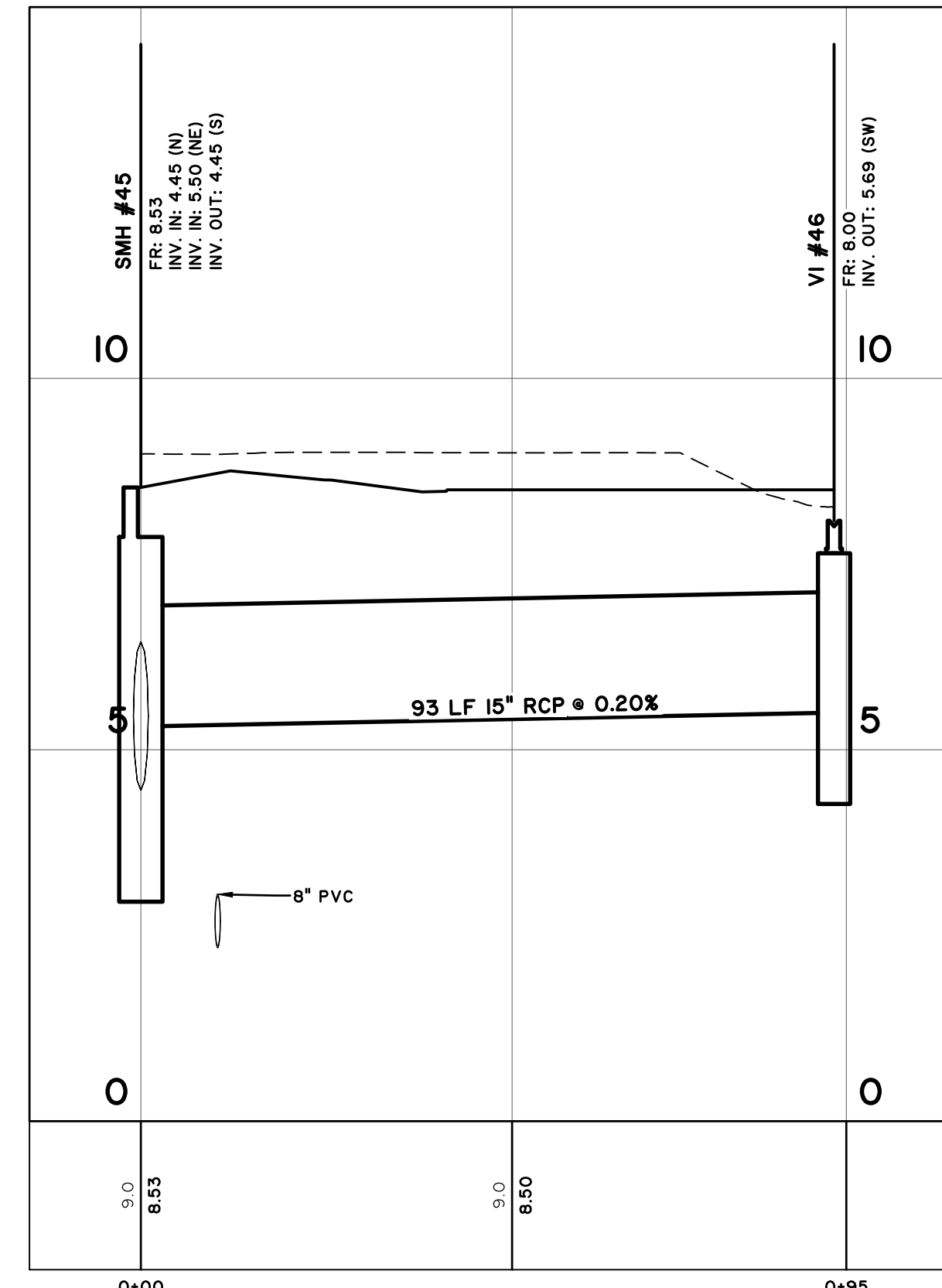
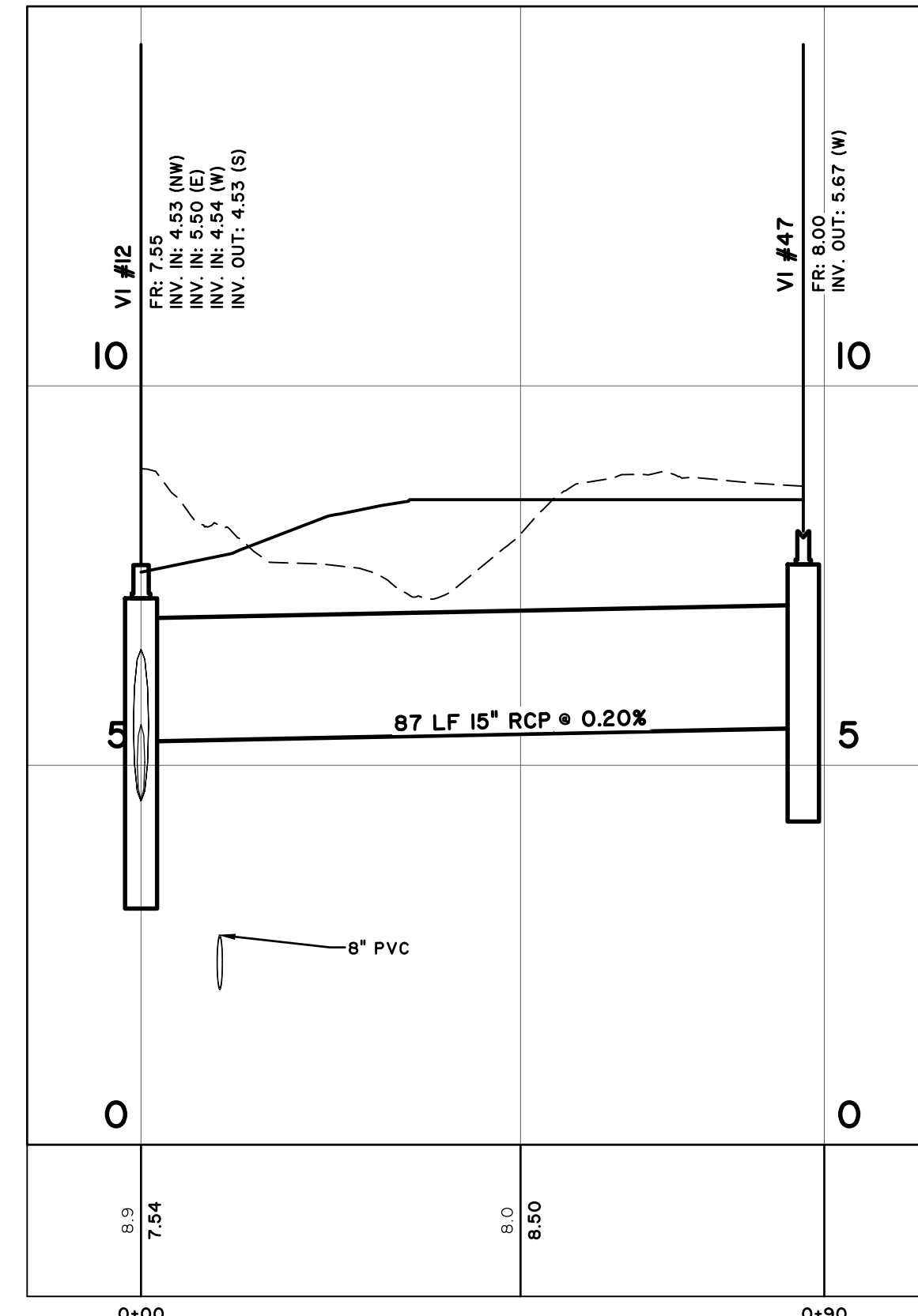
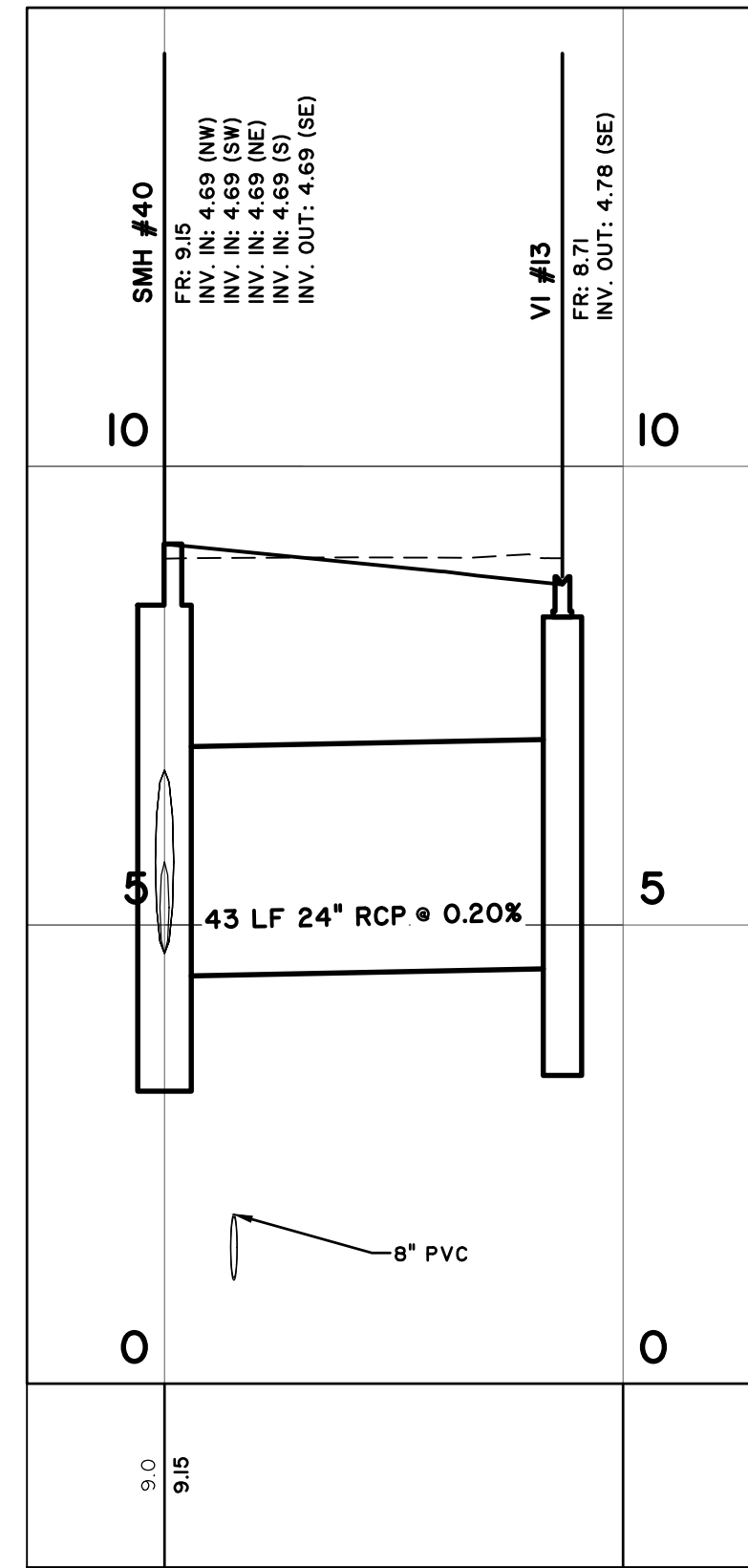
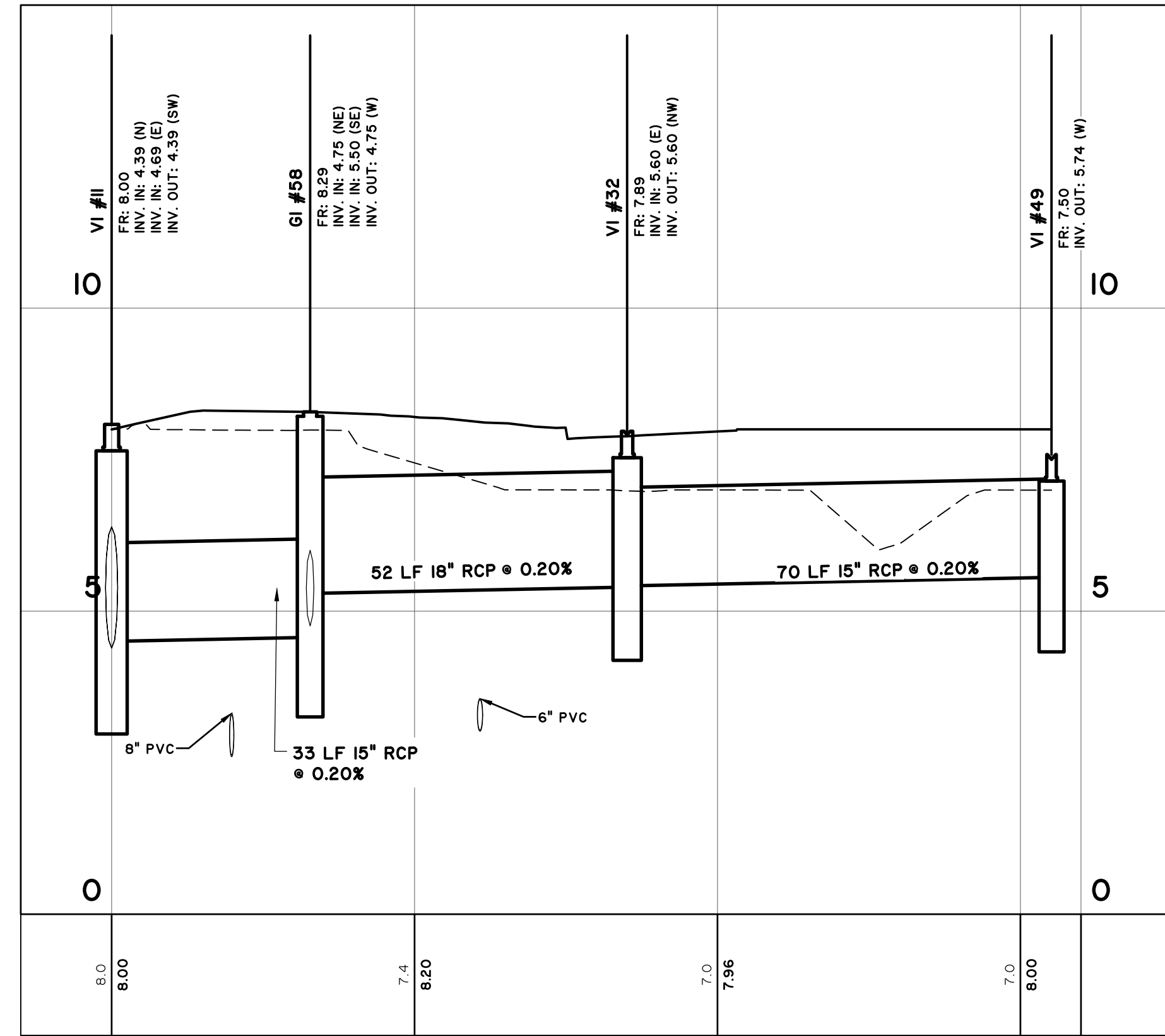
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 DATE: 5/1/23
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 DESIGNED: LMD
 REVIEWED: DJJ
 APPROVED: DJJ
 SCALE: 1" = 20'

C3.3

*CLEARING NOTE:
 ARB APPROVED LIMITS OF CLEARING
 WILL BE DETERMINED IN THE FIELD
 AND ARE MORE RESTRICTIVE THAN
 CLEARING LIMITS SHOWN ON THESE PLANS.

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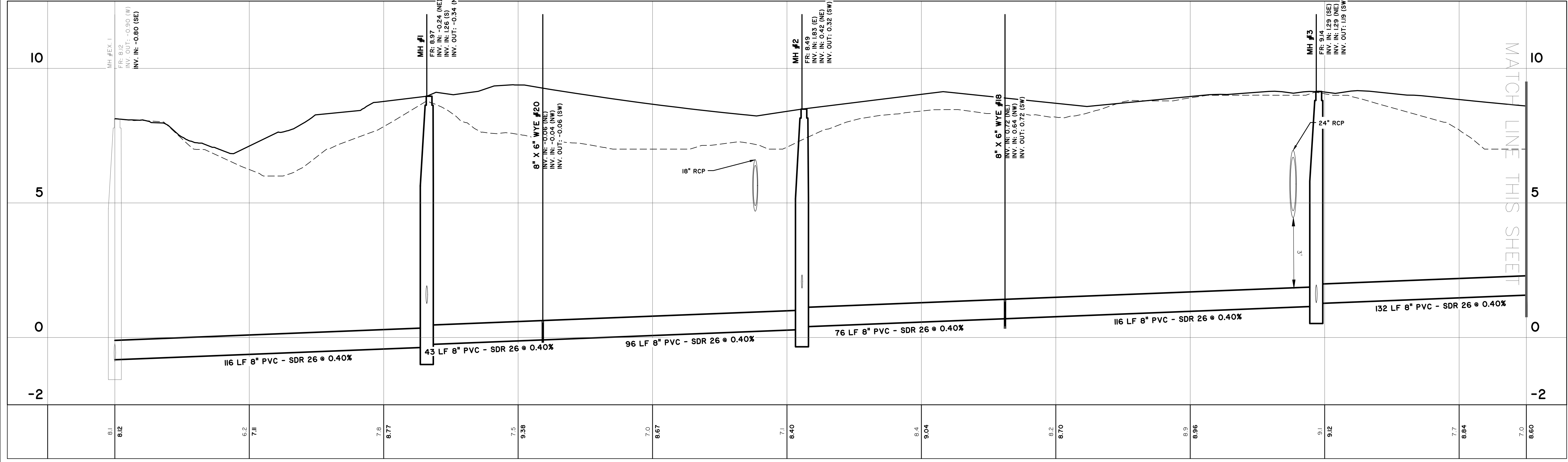




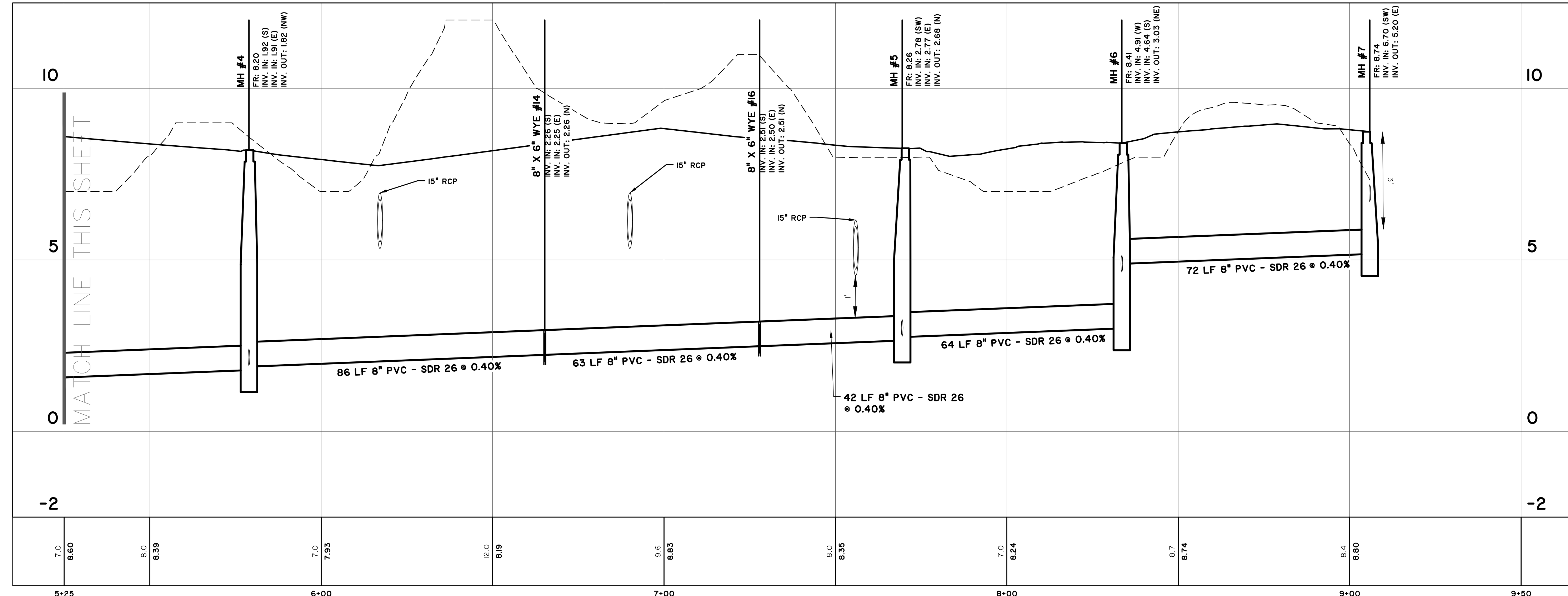
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KRA, LP
 KIAWAH ISLAND, SOUTH CAROLINA
 THE WEST END AT BEACHWALKER
 DRAINAGE PROFILES



Sewer - Run 1
 STATIONS: 0+25 - 5+25
 SCALE: HORZ.: 1" = 20'
 VERT.: 1" = 2'



Sewer - Run 1
 STATIONS: 5+25 - 9+50
 SCALE: HORZ.: 1" = 20'
 VERT.: 1" = 2'

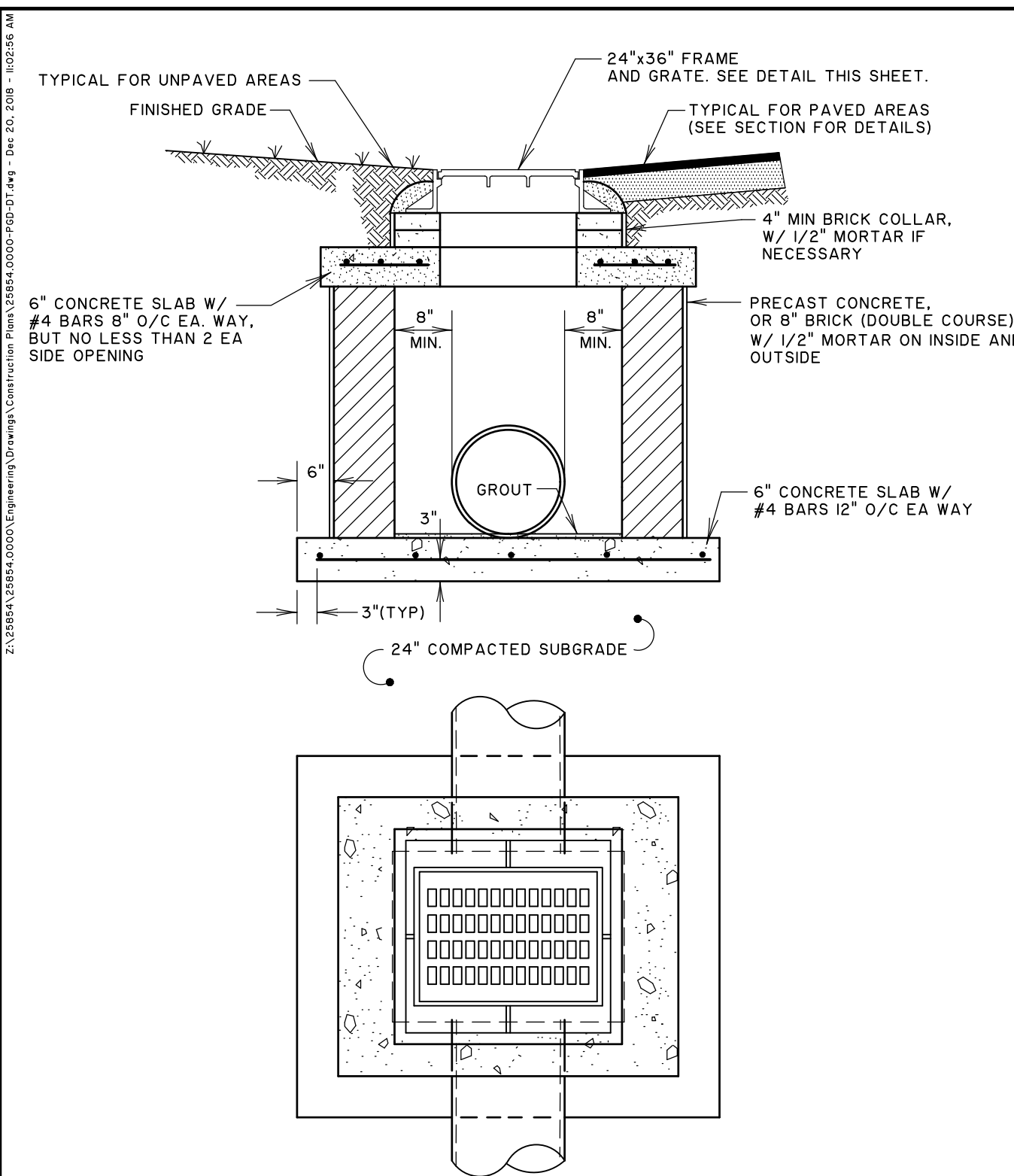
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KRA, LP
 KIAWAH ISLAND, SOUTH CAROLINA
 THE WEST END AT BEACHWALKER
 SEWER PROFILES

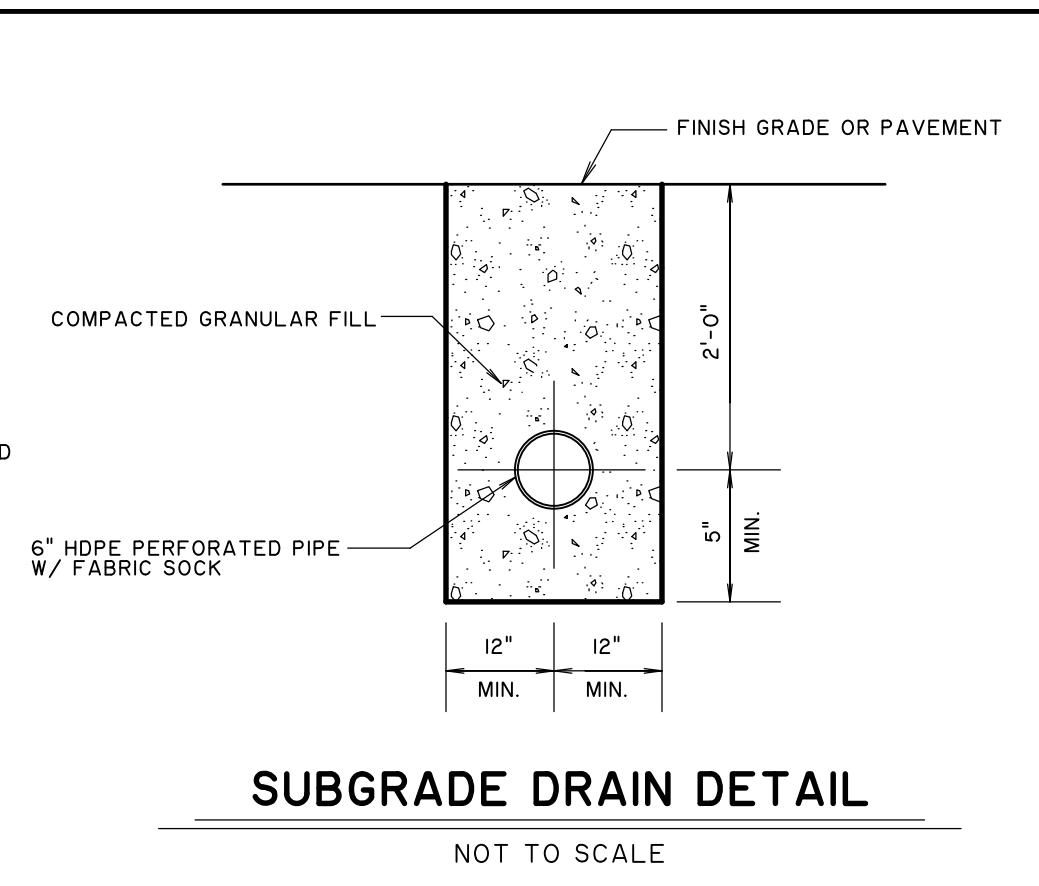
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DATE:	5/1/23
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DESIGNED:	LMD
REVIEWED:	DJJ
APPROVED:	DJJ
SCALE:	1" = 20'

C3.7

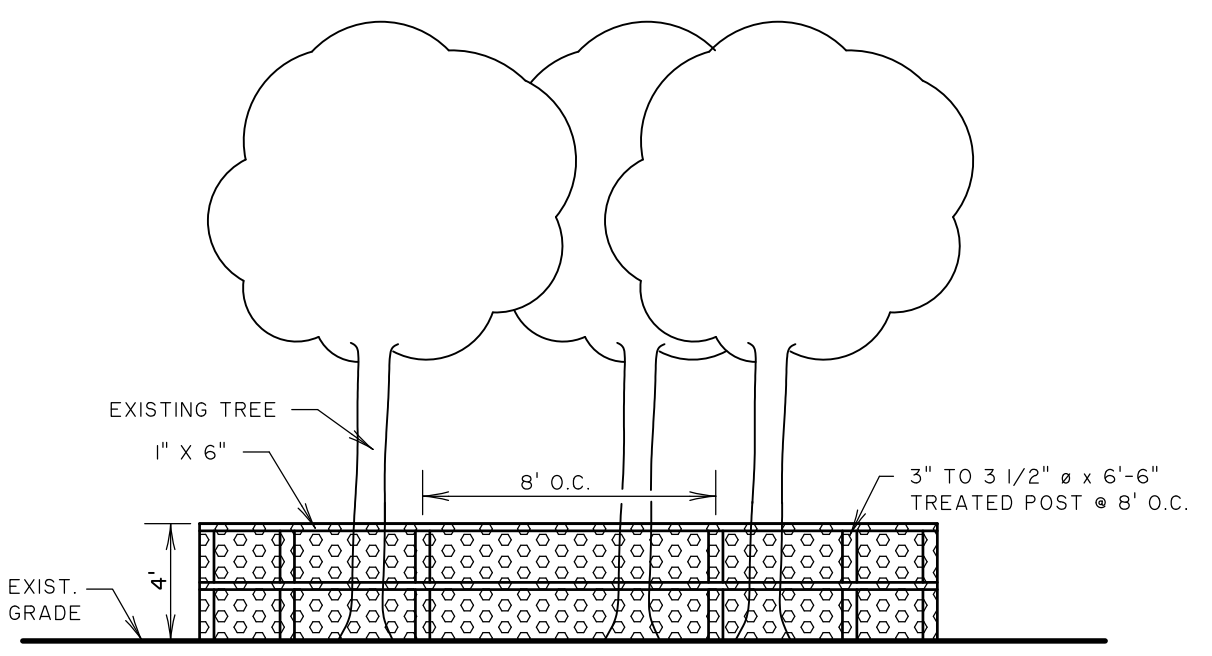


STANDARD 24"x36" GRATE INLET
NOT TO SCALE

- NOTES:
1. CHAMFER ALL EXPOSED CONCRETE EDGES 3/4".
 2. WHERE BRICK IS USED, ALL EXPOSED SURFACES SHALL BE COATED WITH 1/2" 1:2 MORTAR INSIDE AND OUTSIDE.
 3. IF PRECAST BOX IS USED, TOP, RISER, AND BASE SHALL CONFORM TO THE LATEST REVISION OF ASTM C-478.
 4. ONLY TYPE S OR M MORTAR SHALL BE USED AND ALL BRICK SHALL MEET SCDOT SPECIFICATIONS.
 5. UNLESS OTHERWISE SHOWN THE CENTER OF THE FRAME FOR GRATE INLET STRUCTURES ARE TO BE LOCATED 6'-0" FROM THE EDGE OF PAVEMENT I.E. CENTER OF FRAME TO ALIGN WITH THE CENTER OF ROADSIDE SWALE.

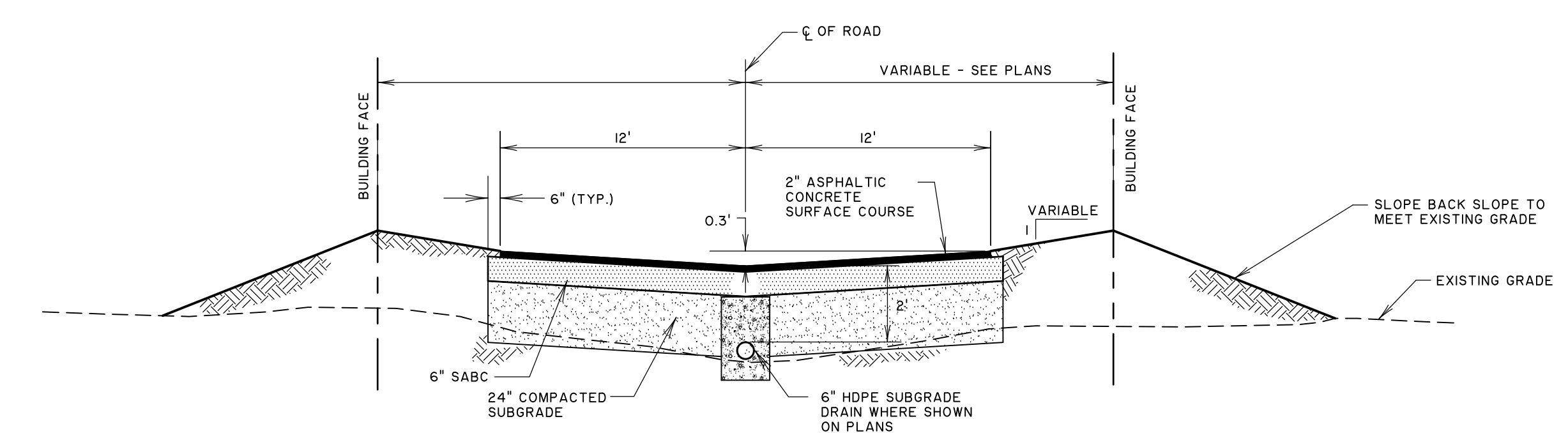


SUBGRADE DRAIN DETAIL
NOT TO SCALE

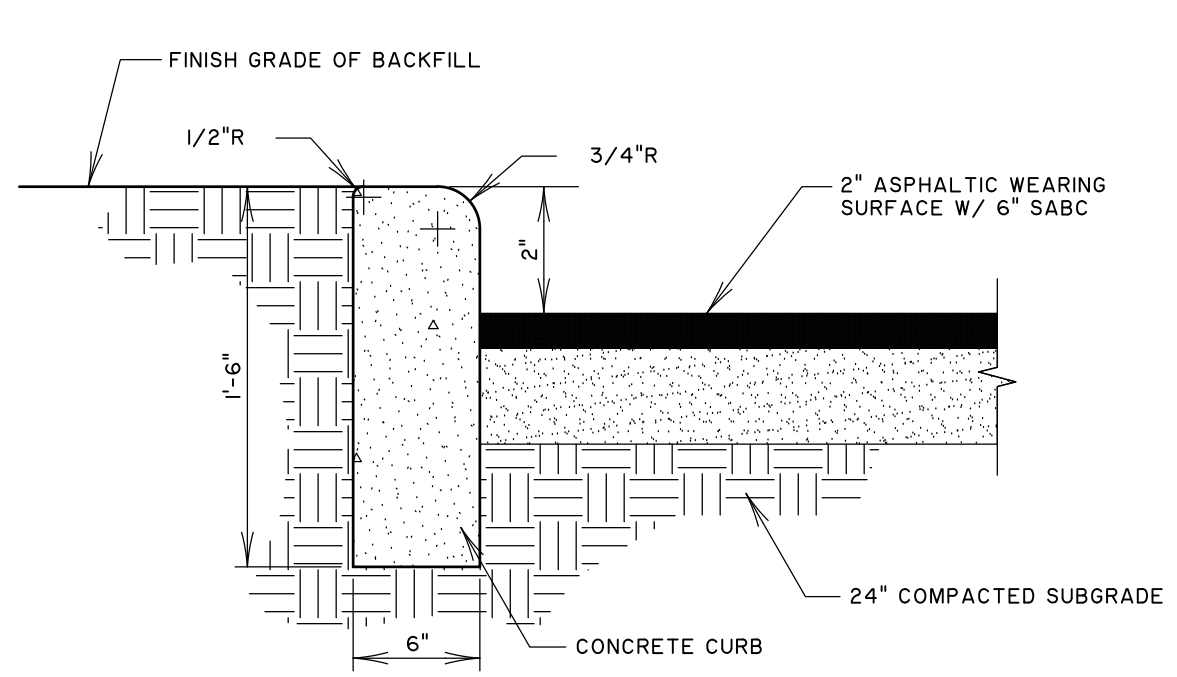


- NOTES:
1. CONTRACTOR TO PROTECT AND SAVE TREE. INSTALL 4' HIGH WOODEN RAIL FENCE AROUND TREE. FENCE TO BE CONSTRUCTED OF TREATED LUMBER.
 2. ATTACH RAILS TO POST WITH GALVANIZED NAILS.

TREE PROTECTION DETAIL
NOT TO SCALE

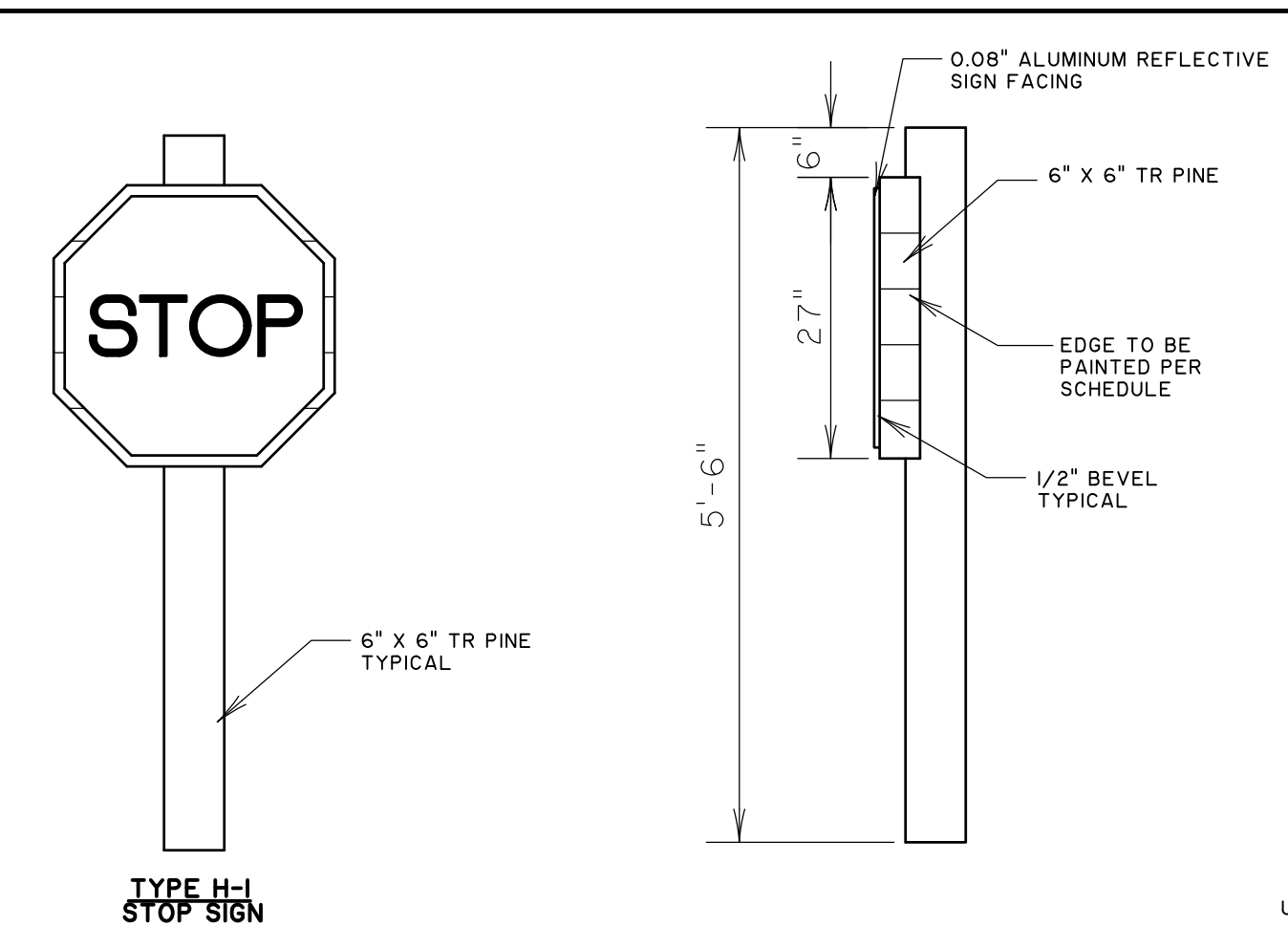


INVERTED ROAD SECTION
NOT TO SCALE



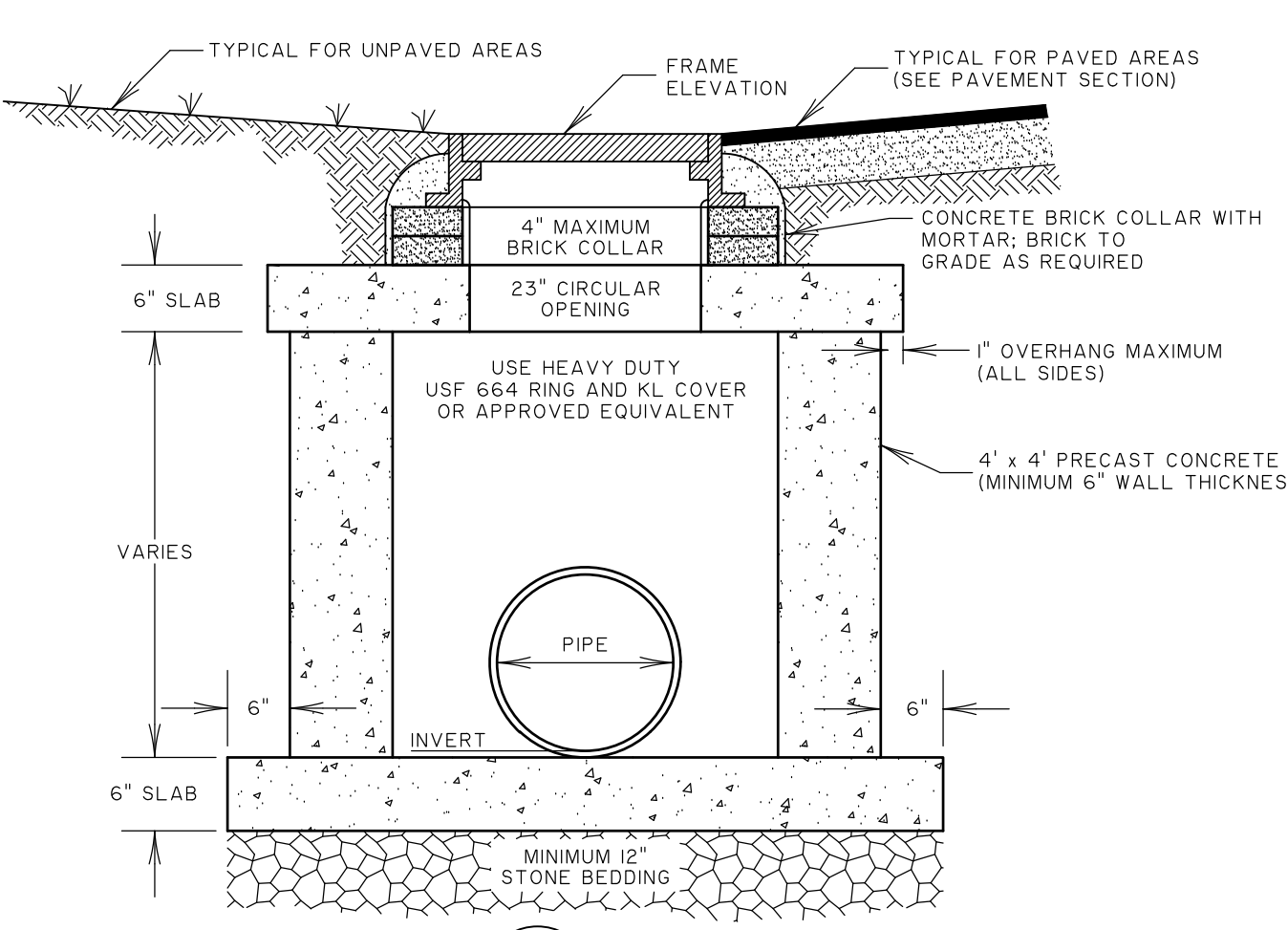
CONCRETE HEADER CURB DETAIL
NOT TO SCALE

- NOTES:
1. ALL CONCRETE SHALL BE 3,000 PSI.
 2. PROVIDE CONTROL JOINTS EVERY TEN FEET (10').
 3. PROVIDE EXPANSION JOINTS EVERY FIFTY FEET (50').
 4. PROVIDE EXPANSION JOINT WHERE CURB ABUTS SIDEWALKS, OR OTHER STRUCTURES.
 5. PROVIDE LIGHT BROOM FINISH.



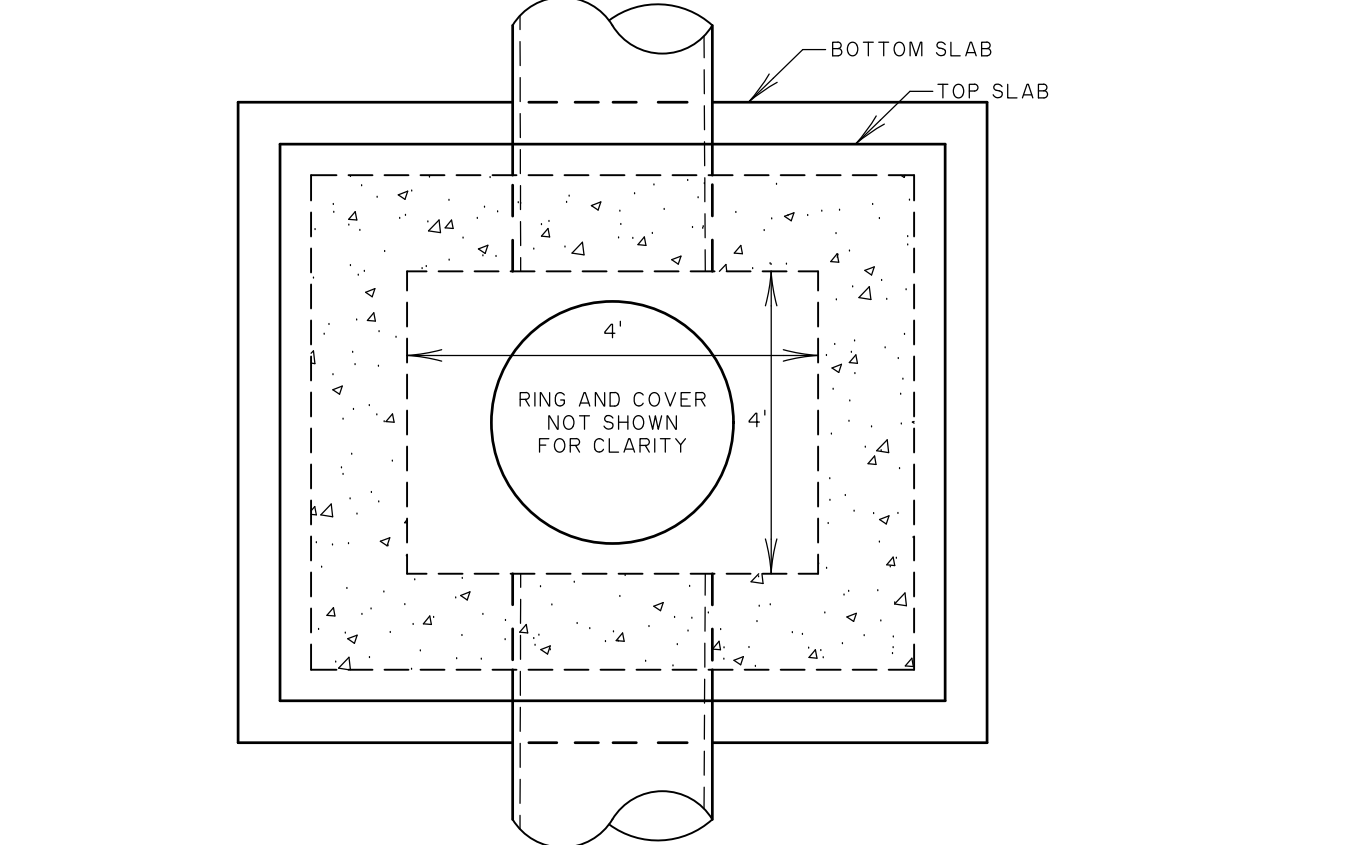
- NOTES:
1. USED WHEREVER VEHICULAR TRAFFIC CONTROL IS NEEDED. GUIDELINES FOR USE SHOULD BE BASED ON SOUTH CAROLINA'S TRAFFIC LAWS AND MUTCD CURRENT ADDITIONS.
 2. PRIMARY MATERIAL FOR THE SIGN POST AND FACE SHOULD BE 6" X 6" TREATED YELLOW PINE. OVERALL POST LENGTH IS 9'-0". SPECIAL HARDWARE INCLUDES 1/2" COUNTERSUNK Ogee WASHERS USED ON BOLTS HOLDING THE FACE PANEL TO POST. ALL OTHER HARDWARE IS STANDARD.
 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
NOT TO SCALE



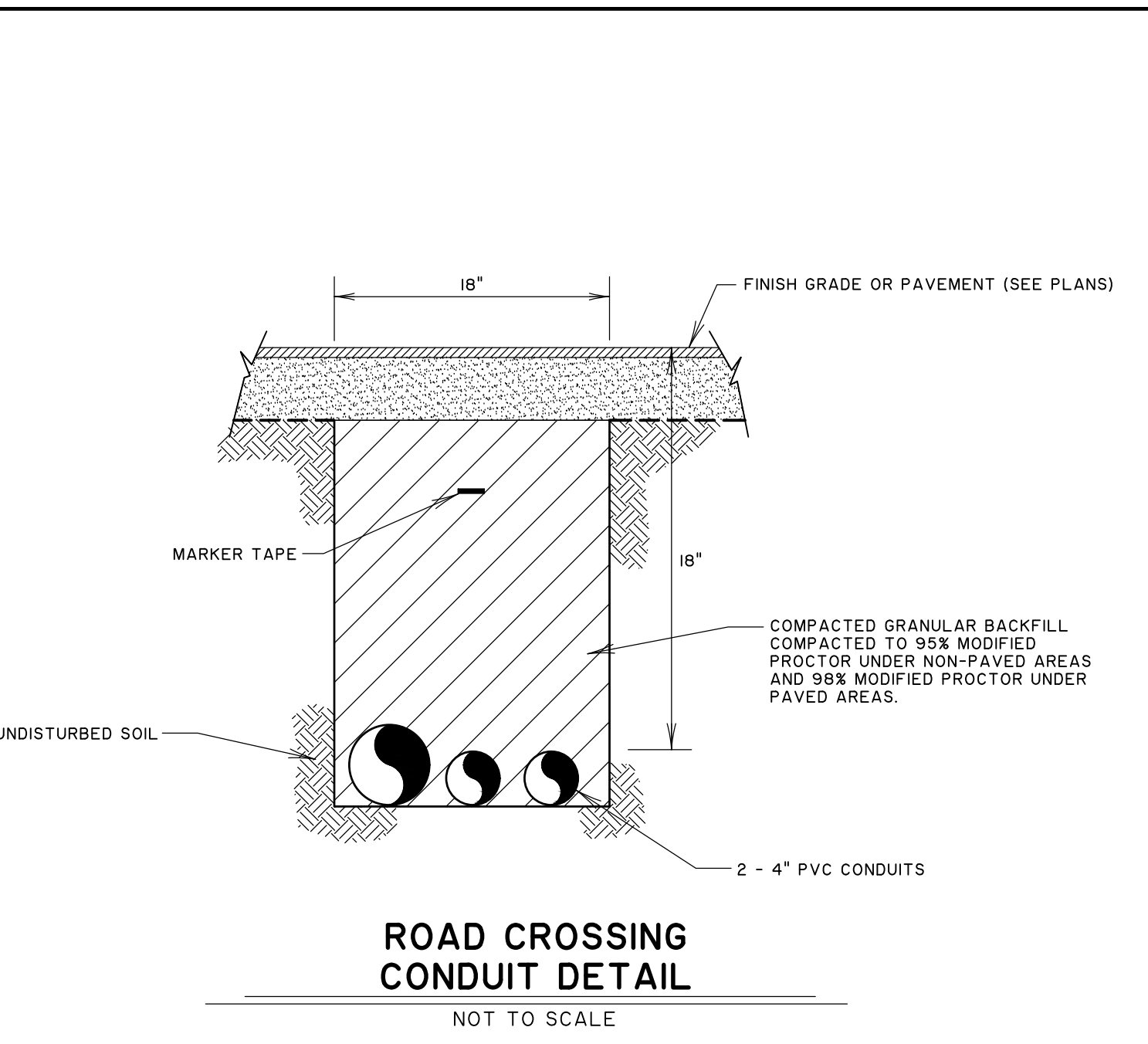
RCP BEDDING UNPAVED AREAS
NOT TO SCALE

- NOTES:
1. TW SHALL BE LESS THAN OR EQUAL TO OD + 2 FEET.
 2. TRENCH SHALL BE DEWATERED BEFORE BEDDING MATERIAL IS PLACED.
 3. EACH JOINT SHALL BE WRAPPED WITH FILTER FABRIC.
 4. SEE ASTM D2321, 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 II OR CLASS III.
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 II AND CLASS III 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.

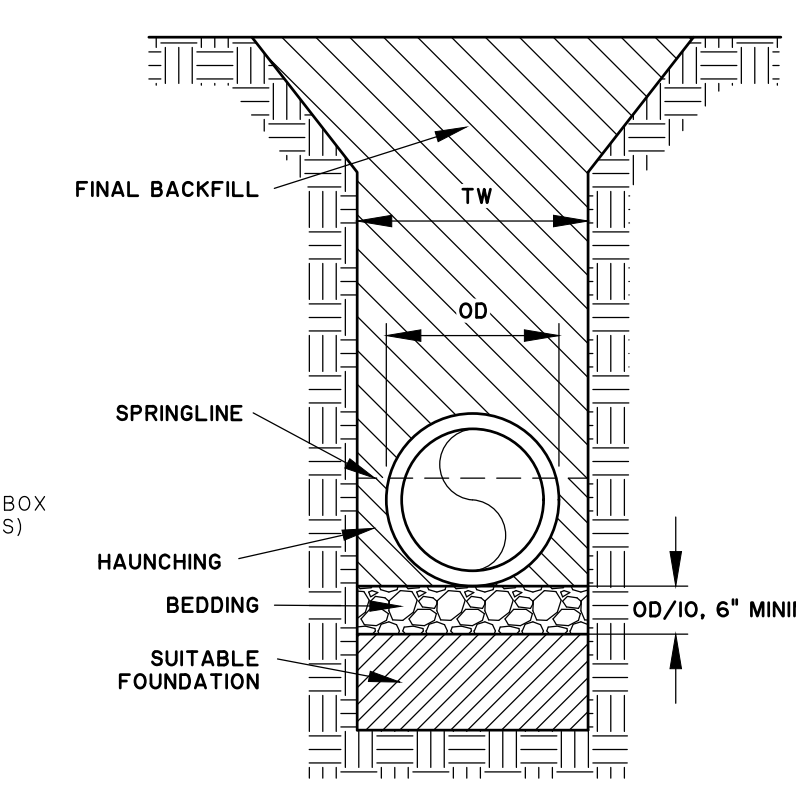


STORM DRAIN MANHOLE 30" PIPE AND SMALLER
NOT TO SCALE

- NOTES:
1. 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 TOP SLAB, VERTICAL WALLS (RISERS), AND BOTTOM SLAB SHALL BE #4 BARS AT 12" O.C. EACH WAY.
 6. CHAMFER ALL EXPOSED CONCRETE EDGES 3/4".



ROAD CROSSING CONDUIT DETAIL
NOT TO SCALE



RCP BEDDING PAVED AREAS
NOT TO SCALE

- NOTES:
1. TW SHALL BE LESS THAN OR EQUAL TO OD + 2 FEET.
 2. TRENCH SHALL BE DEWATERED BEFORE BEDDING MATERIAL IS PLACED.
 3. EACH JOINT SHALL BE WRAPPED WITH FILTER FABRIC.
 4. SEE ASTM D2321, 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 II OR CLASS III.
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 II AND CLASS III 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

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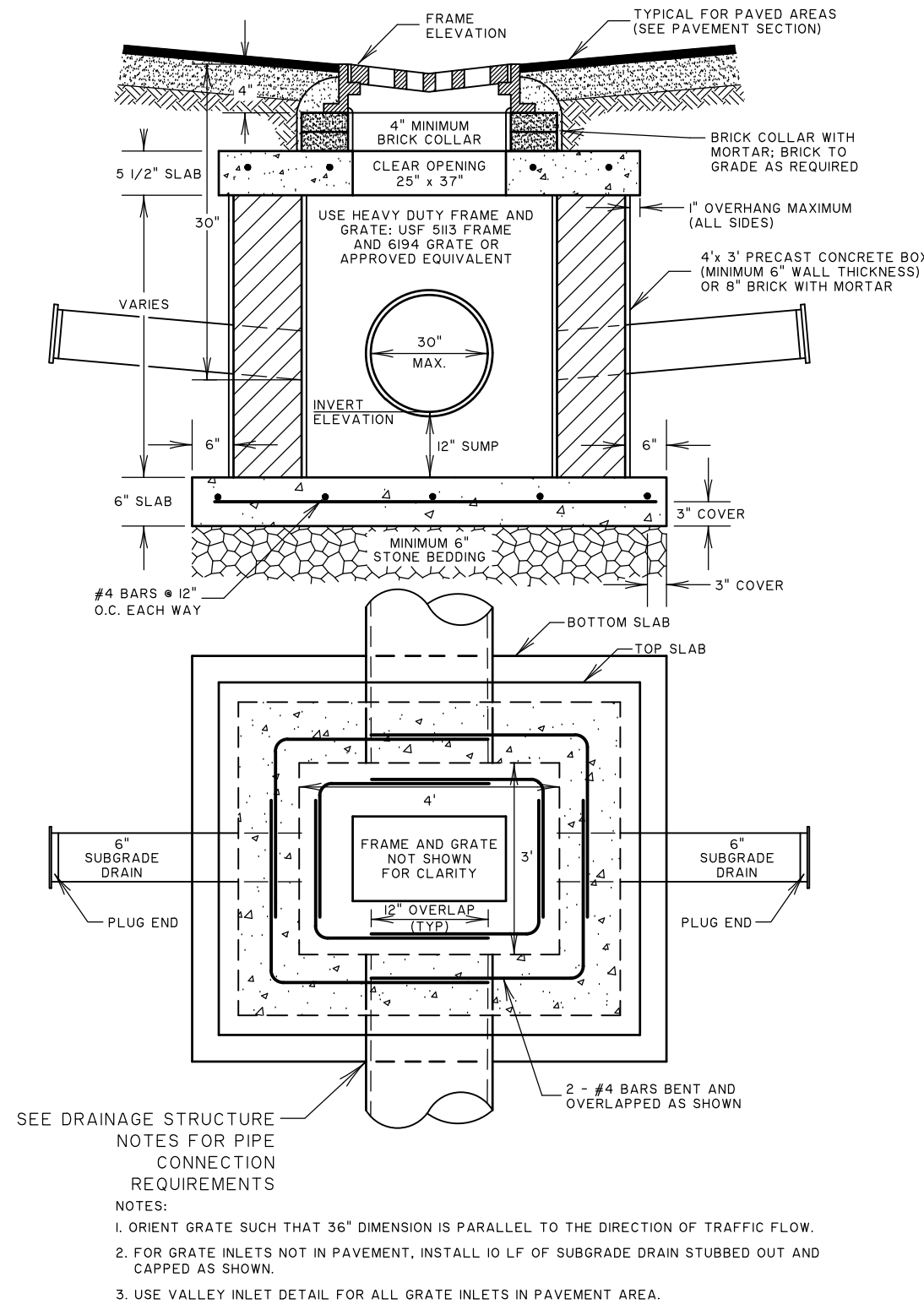
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THE WEST END AT BEACHWALKER
PAVING, GRADING AND DRAINAGE DETAILS

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SCALE: 1" = 1'

C5.1



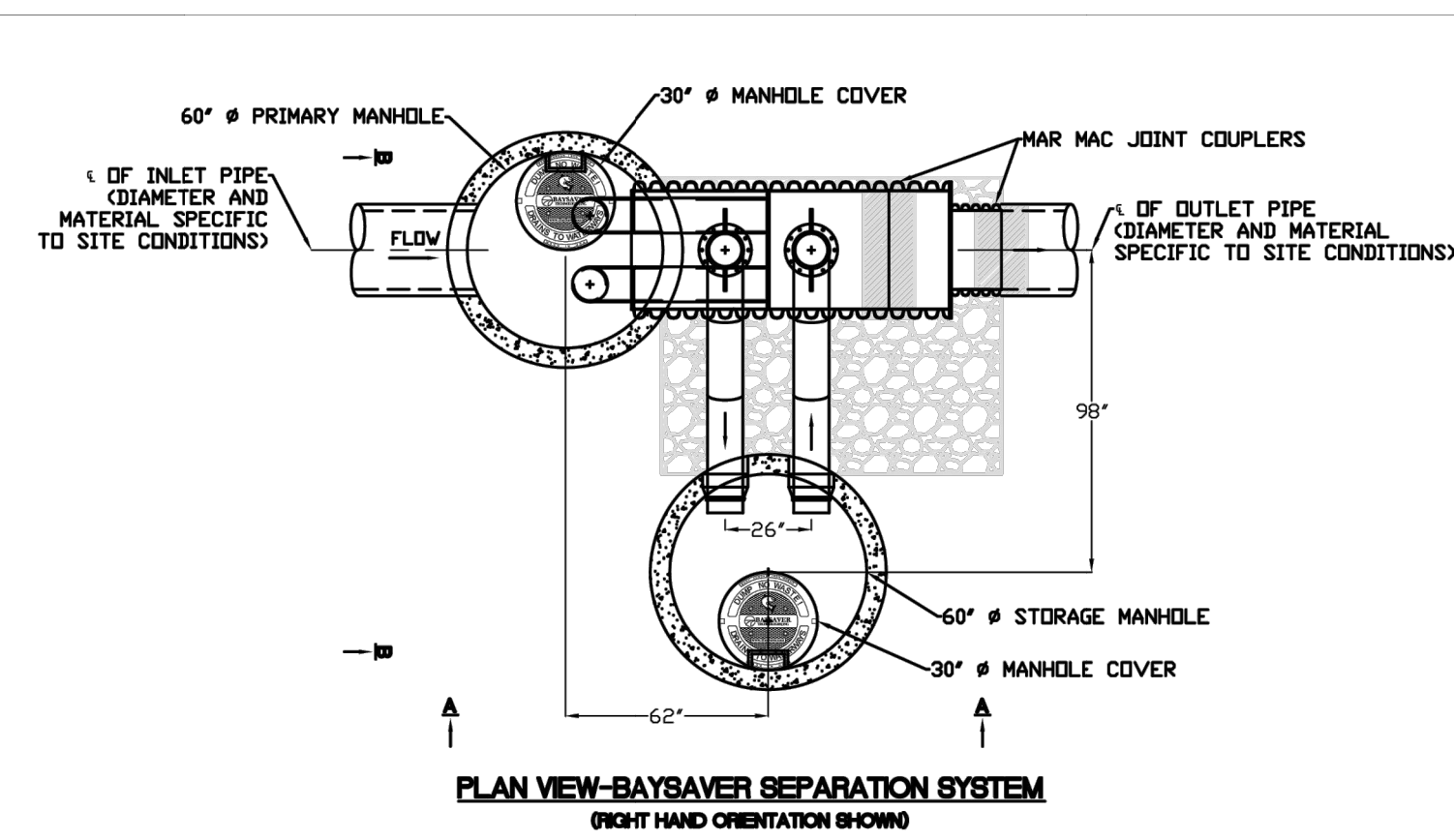
SEE DRAINAGE STRUCTURE NOTES FOR PIPE CONNECTION REQUIREMENTS

NOTES:

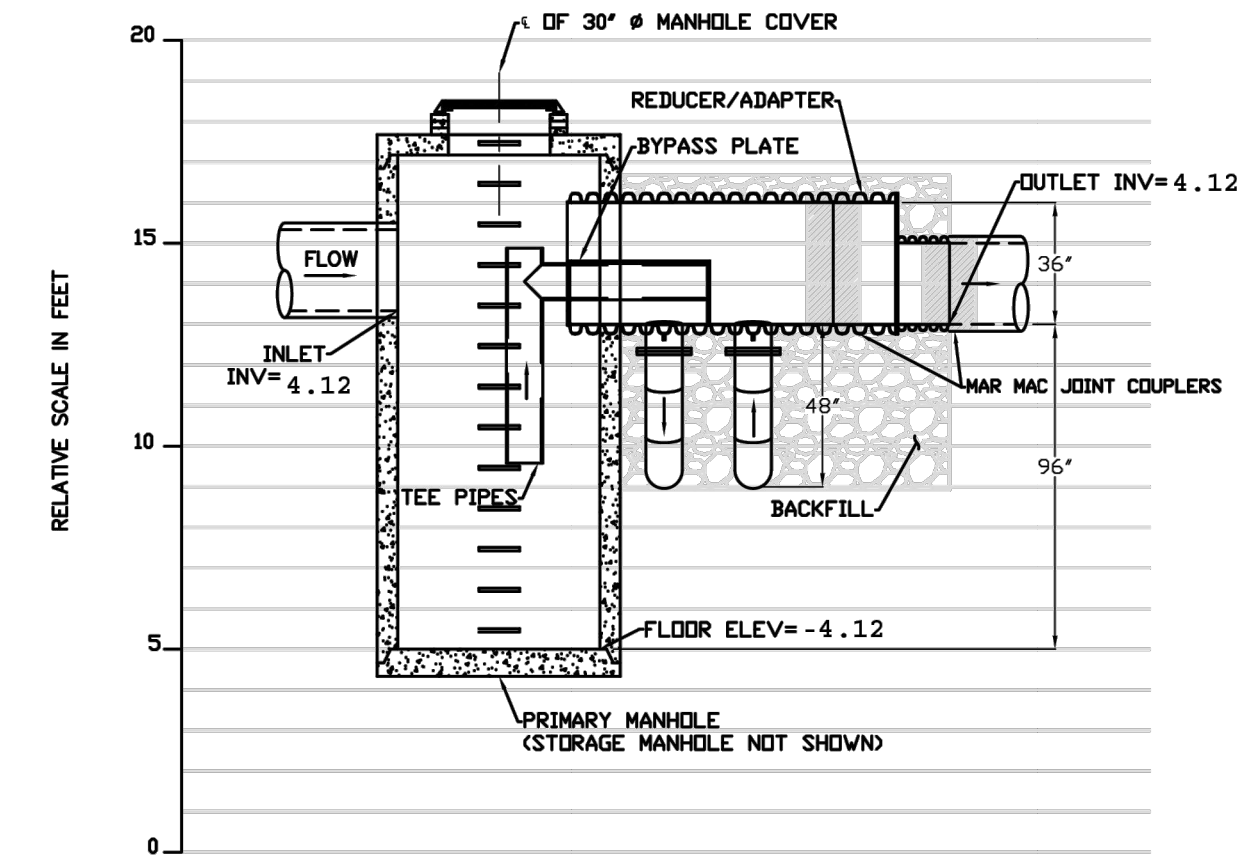
1. ORIENT GRATE SUCH THAT 36" DIMENSION IS PARALLEL TO THE DIRECTION OF TRAFFIC FLOW.
2. FOR GRATE INLETS NOT IN PAVEMENT, INSTALL 10 LF OF SUBGRADE DRAIN STUBBED OUT AND CAPPED AS SHOWN.
3. USE VALLEY INLET DETAIL FOR ALL GRATE INLETS IN PAVEMENT AREA.

VALLEY INLET DETAIL

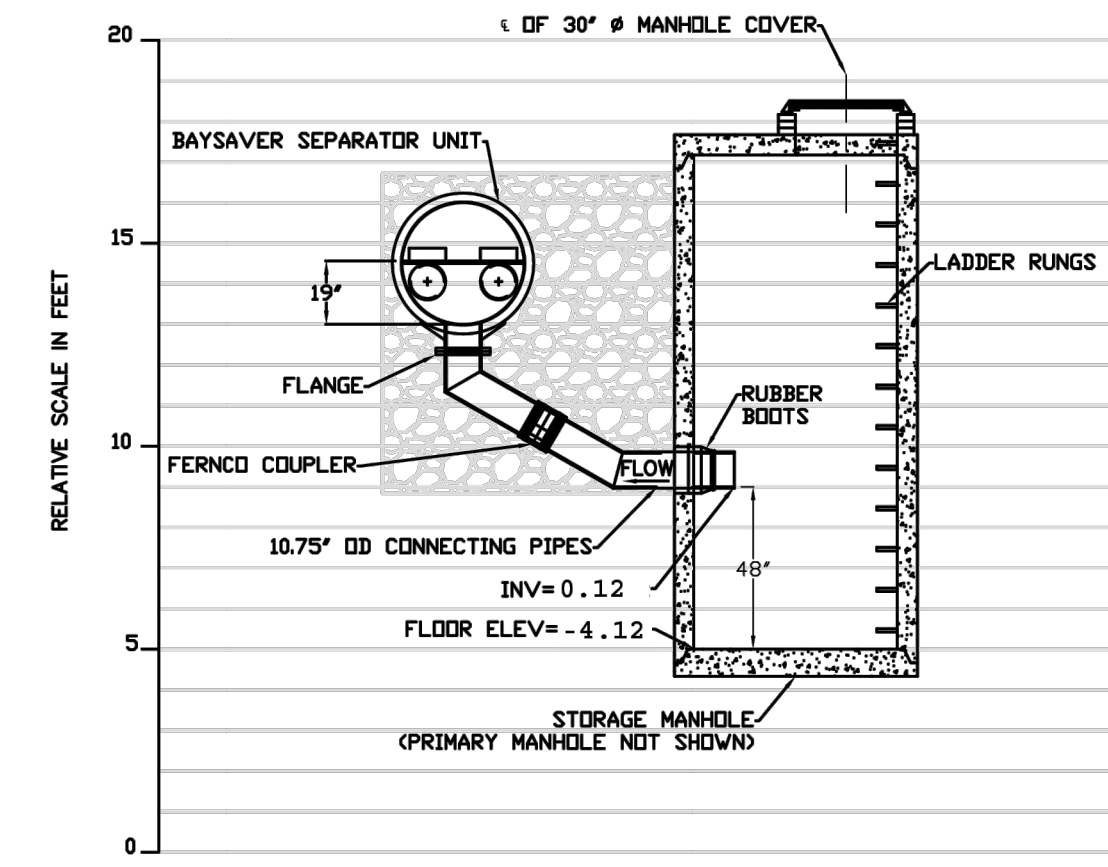
NOT TO SCALE



PLAN VIEW-BAYSAYER SEPARATION SYSTEM
(RIGHT HAND ORIENTATION SHOWN)



PROFILE VIEW A-A



PROFILE VIEW B-B

INLET PIPE INVERT:	4.12
INLET PIPE ID AND MATERIAL:	24" RCP
OUTLET PIPE INVERT:	4.12
OUTLET PIPE ID AND MATERIAL:	24" RCP
PRIMARY MANHOLE RIM ELEVATION:	9.34
STORAGE MANHOLE RIM ELEVATION:	9.96
ORIENTATION (RIGHT OR LEFT):	R

- GENERAL NOTES:
1. MANHOLES SHOWN REPRESENT STANDARD PRECAST STRUCTURES PROVIDED BY OTHERS.
 2. SEAL THE CONNECTING PIPES INTO THE STORAGE MANHOLE USING RUBBER BOOTS/GASKETS.
 3. THE BAYSAYER SEPARATION SYSTEM INCLUDES THE SEPARATOR UNIT, (2) CONNECTING PIPES, (2) FERROU COUPLERS, (1) REDUCER ADAPTER, AND (2) MARMAC JOINT COUPLERS.
 4. RIGHT HAND ORIENTATION SHOWN. FOR LEFT HAND ORIENTATION ROTATE STORAGE MANHOLE AND CONNECTING PIPES 180°.
 5. SEE BAYSAYER SPECIFICATIONS AND INSTALLATION INSTRUCTIONS FOR FURTHER DETAIL.
 6. USE NON-SHRINK GROUT TO SEAL THE INLET PIPE AND BAYSAYER IN TO THE PRIMARY MANHOLE.
 7. BACKFILL CLASS I, II OR III BACKFILL SHOULD BE USED TO AN ELEVATION OF AT LEAST 6" OVER THE CROWN OF THE SEPARATOR UNIT.
 8. 12" COVER REQUIRED FOR TRAFFIC RATED SURFACE.
 9. BAYSAYER IS PROTECTED BY US PATENT NO. 5,746,911

REV	DESCRIPTION	DATE	APPR	NOTES

BAYSAYER TECHNOLOGIES
800-229-7283
WWW.BAYSAYER.COM

DESIGNED: TEP DATE: 5/28/15
DRAWN: EKH SCALE: N.T.S.
CHECKED: PR DWG NO: 3K

3K BAYSAYER™ SYSTEM DETAILS

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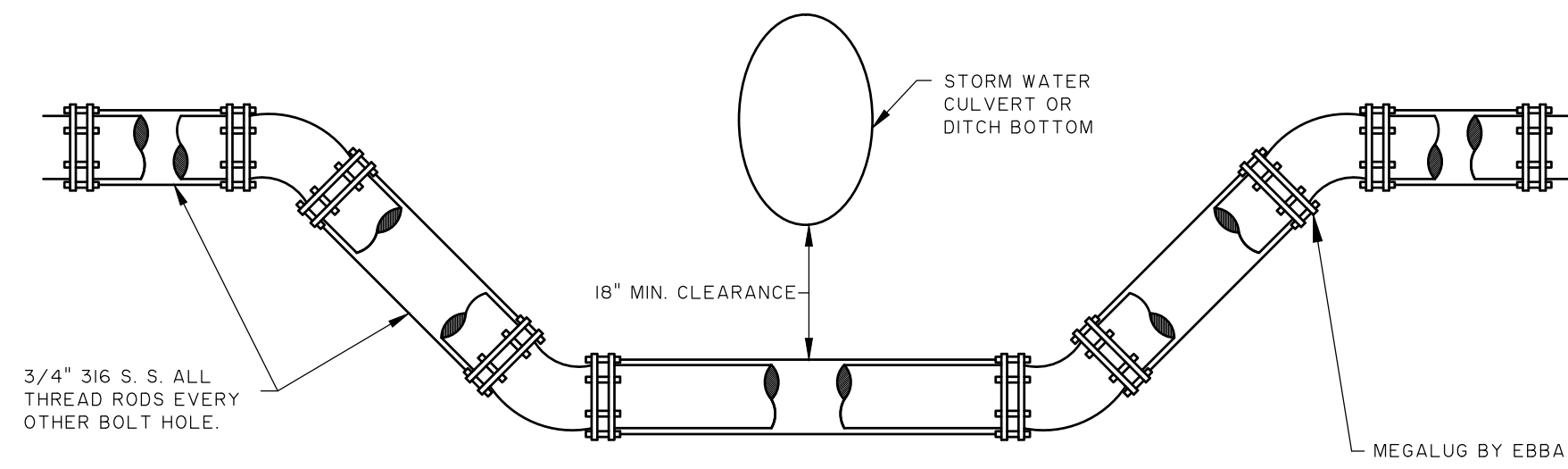
KRA, LP
KIAWAH ISLAND, SOUTH CAROLINA

THE WEST END AT BEACHWALKER

PAVING GRADING AND DRAINAGE DETAILS

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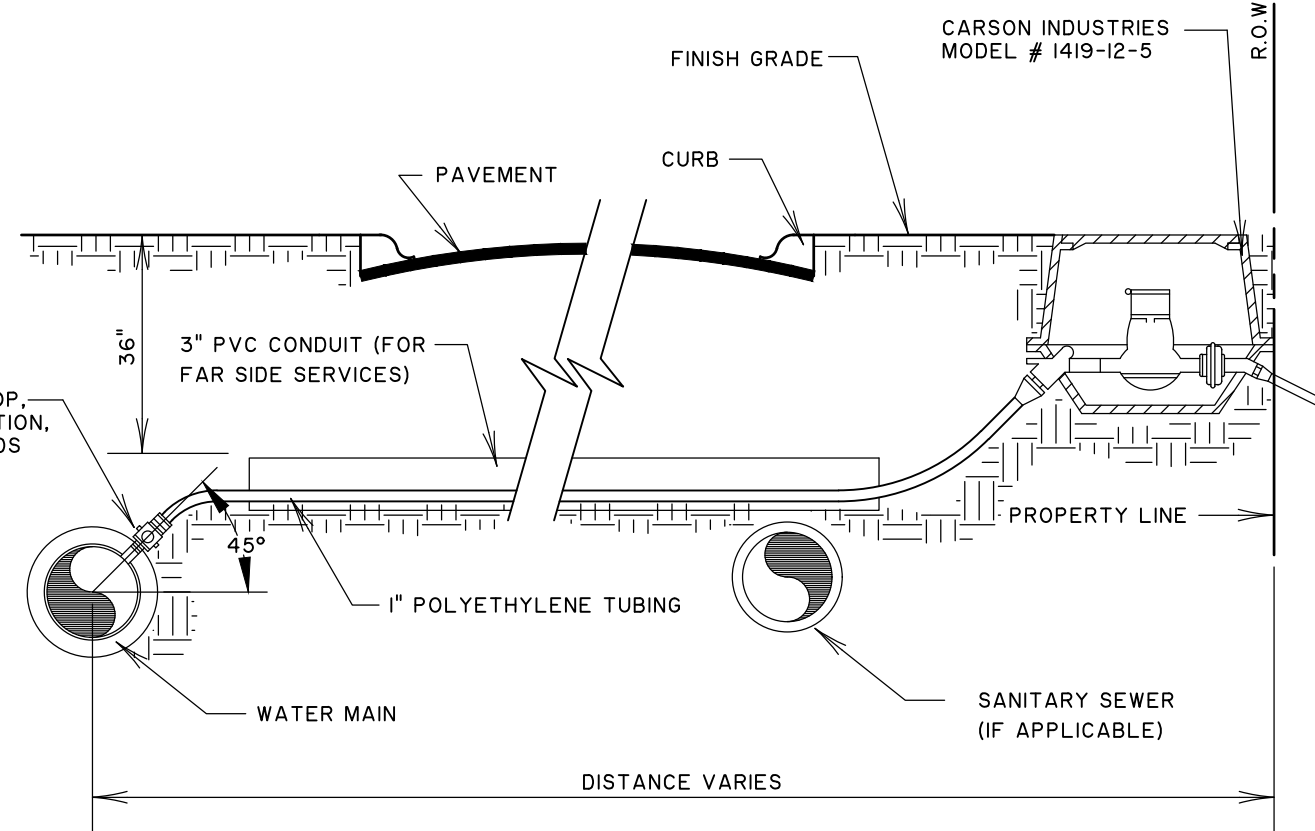
C5.2



DUCTILE IRON MEGALUG SHALL CONFORM TO ASTM A536-80 SPECIFICATIONS.

VERTICAL OFFSET DETAIL

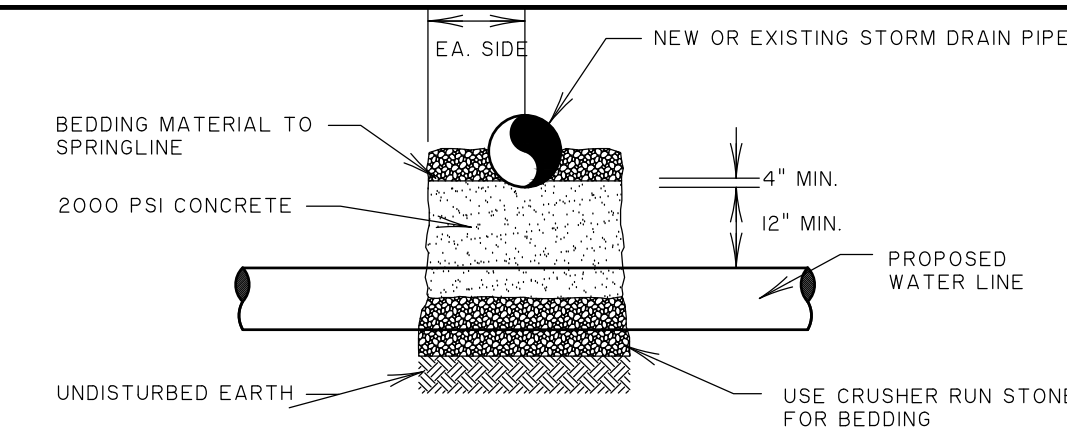
NOT TO SCALE



TYPICAL SINGLE RESIDENTIAL WATER SERVICE

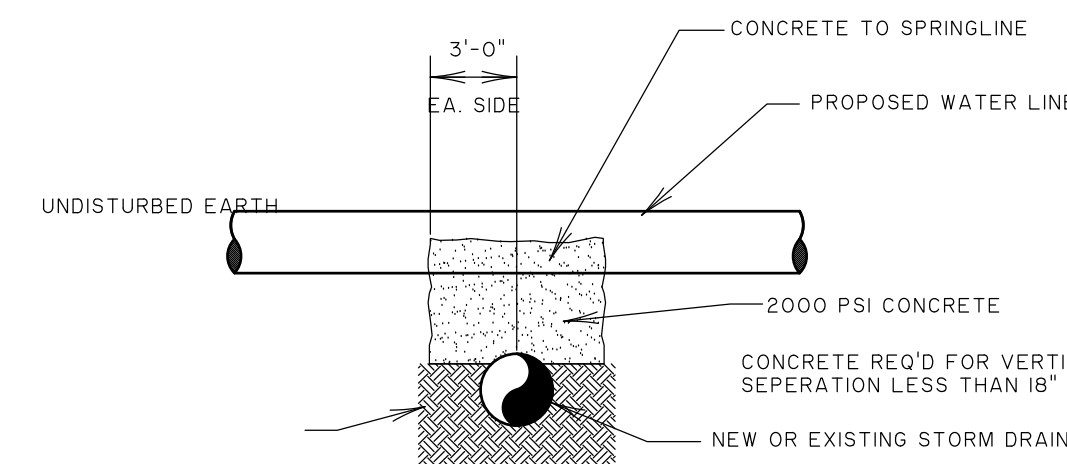
NOT TO SCALE

- CORPORATION STOP TO BE 1" MUELLER # H 15005
- POLYETHYLENE TUBING TO BE 1" IPS 4-04306
- CURB VALVE AND YOKE BOX TO BE CARSON INDUSTRIES MODEL # 1419-12-5
- WATER METER TO BE INSTALLED BY KIAWAH ISLAND UTILITY, INC.
- SEAL ENDS OF SLEEVE WITH WATER PROOF SEALANT
- 3" PVC CASING PIPE SHALL BE INSTALLED UNDER PAVING FOR ALL FAR SIDE SERVICES.



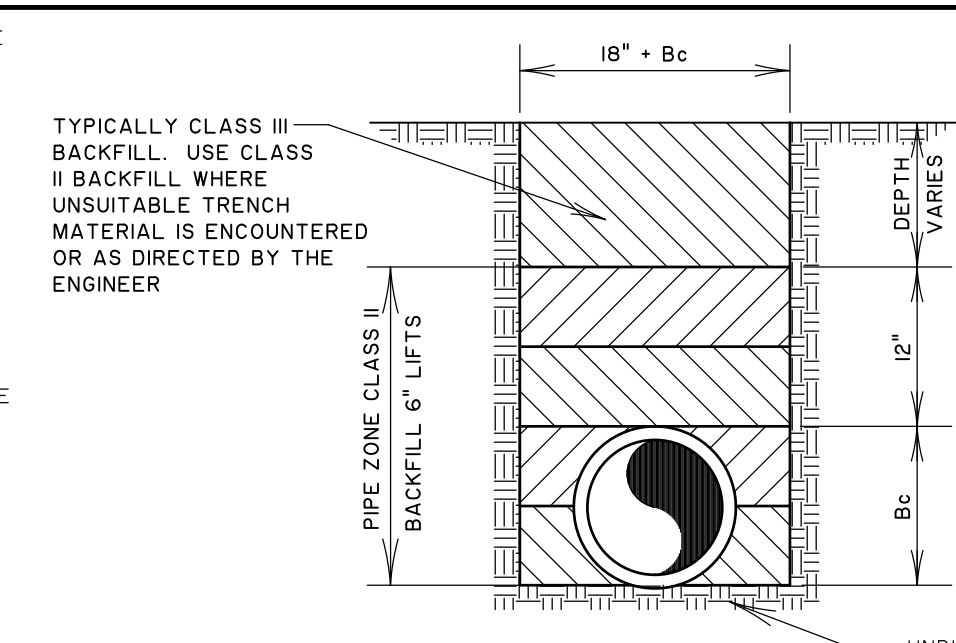
WATER LINE CROSSING BELOW STORM DRAIN

NOT TO SCALE



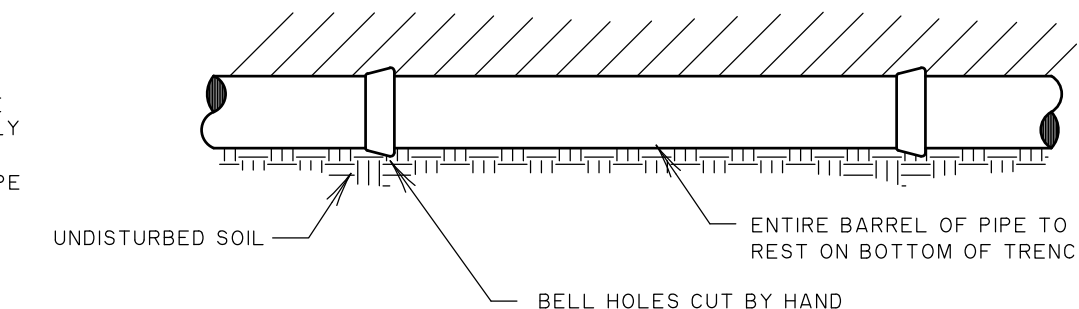
WATER LINE CROSSING ABOVE STORM DRAIN

NOT TO SCALE



- INSTALL APPROVED METAL DETECTION TAPE 18" FROM FINISHED GRADE.
- FOR INFORMATION ON BACKFILL MATERIAL SEE SANITARY SEWER DETAIL SHEET
- ALL DUCTILE IRON PIPE WATER MAIN SHALL BE ENCASED IN 8 MIL. MINIMUM POLYETHYLENE FILM IN TUBE FORM.

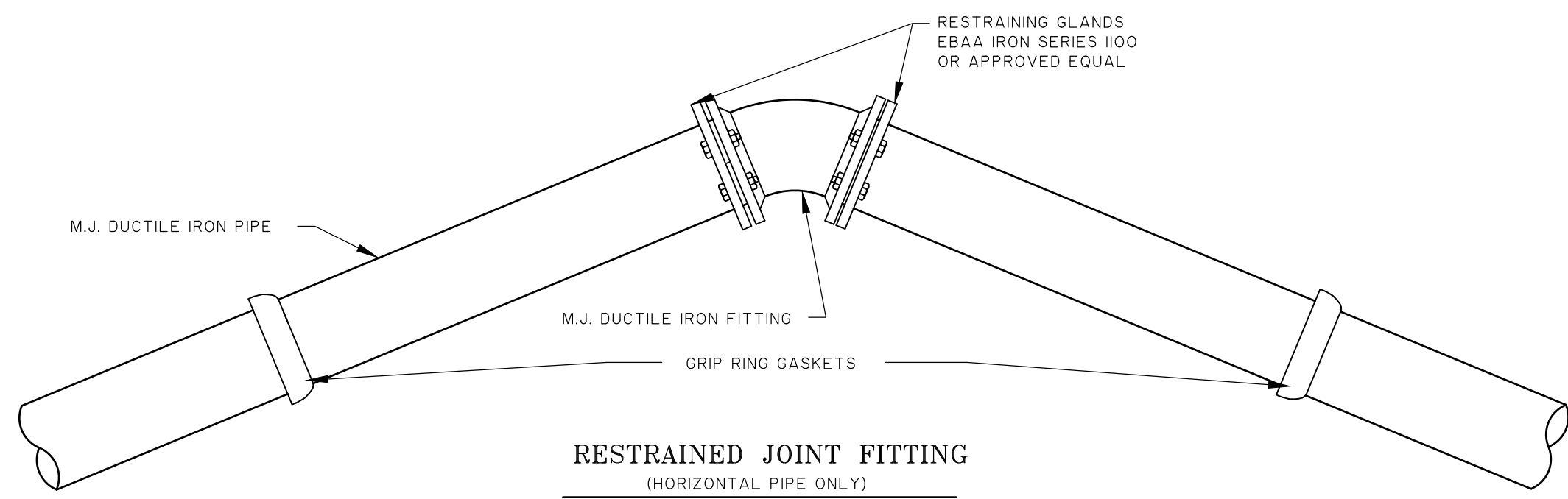
CROSS SECTION



LONGITUDINAL SECTION

WATER MAIN BEDDING DETAIL

NOT TO SCALE



RESTRAINED JOINT FITTING (HORIZONTAL PIPE ONLY)

NOT TO SCALE

NOTES:

- THE FOLLOWING CONDITIONS WERE USED TO CALCULATE THE RESTRAINED LENGTHS:
LAYING CONDITION IS TYPE 3;
SOIL DESIGNATED AS SAND-SILT;
DEPTH IS 3 FT.;
DESIGN PRESSURE (TEST) IS 150 PSI;
SAFETY FACTOR IS 1.5.
FOR THE TEE BRANCH AND REDUCER, LENGTHS IN THE TABLE BELOW ARE BASED ON BRANCHING AND REDUCING FROM THE NEXT LARGER SIZE IN THE TABLE. DEVIATIONS FROM THESE CONDITIONS MUST BE BASED ON THE ABOVE PARAMETERS.
- JOINT RESTRAINT SHALL BE:
FOR PVC (4"-12") : EBAA SERIES 1500 RESTRAINT HARNESS OR APPROVED EQUIVALENT
FOR DIP : EBAA SERIES 1700 RESTRAINT HARNESS OR APPROVED EQUIVALENT

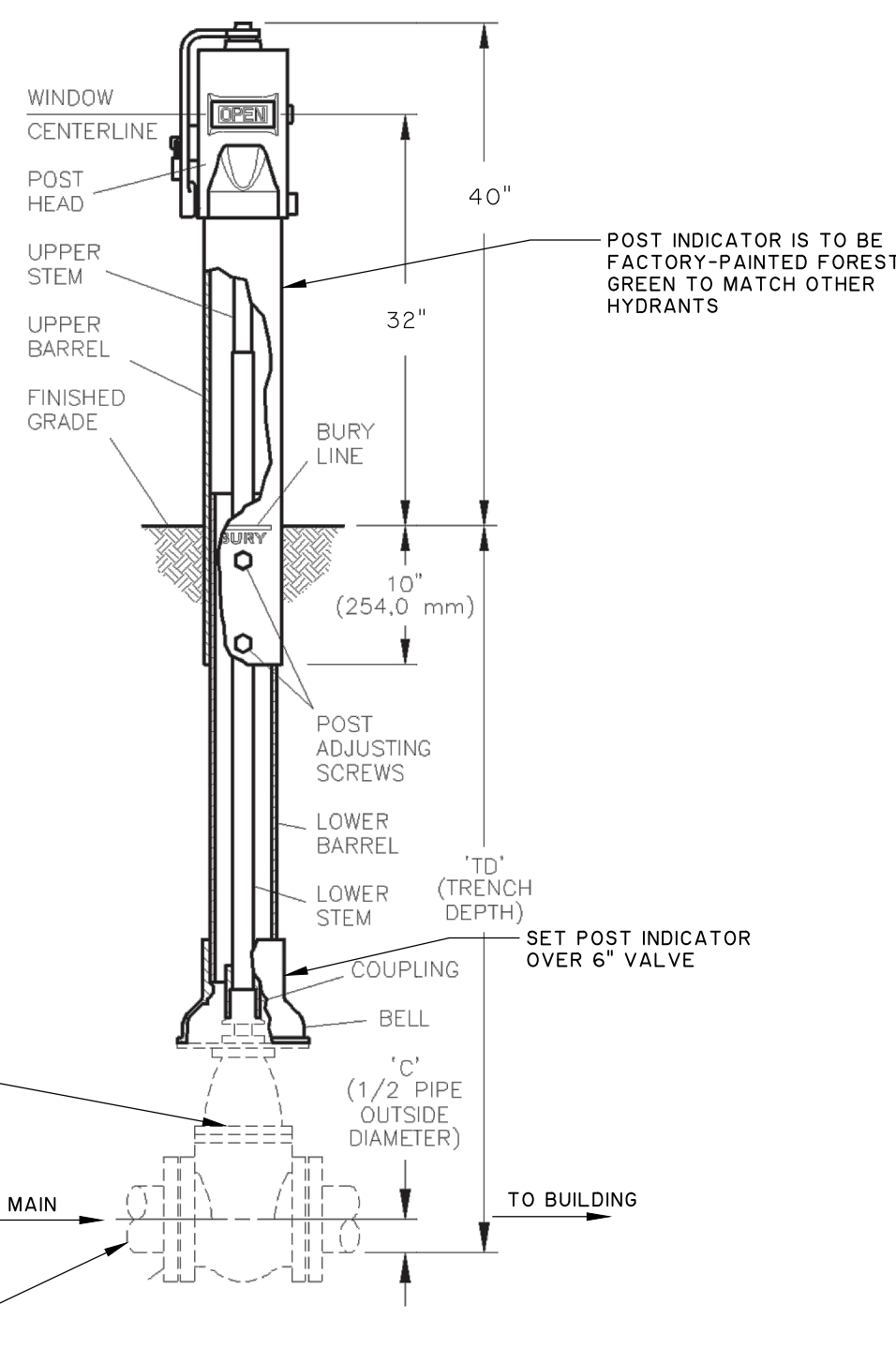
RESTRAINED JOINT TABLE								
LENGTH OF RESTRAINED JOINT REQUIRED (IN L.F. EACH SIDE OF THE BEND)								
SIZE	1 1/4"	2 1/2"	4 5/8"	90°	TEE BRANCH	DEAD END	REDUCER	VALVE
4"	2	5	10	24	37	60	44	60
6"	3	7	14	33	64	85	46	85
8"	4	9	18	43	90	110	46	110
10"	5	10	21	51	113	133	50	133
12"	10	20	30	60	140	160	60	160

RESTRAINED JOINT FITTING

NOT TO SCALE

GENERAL NOTES

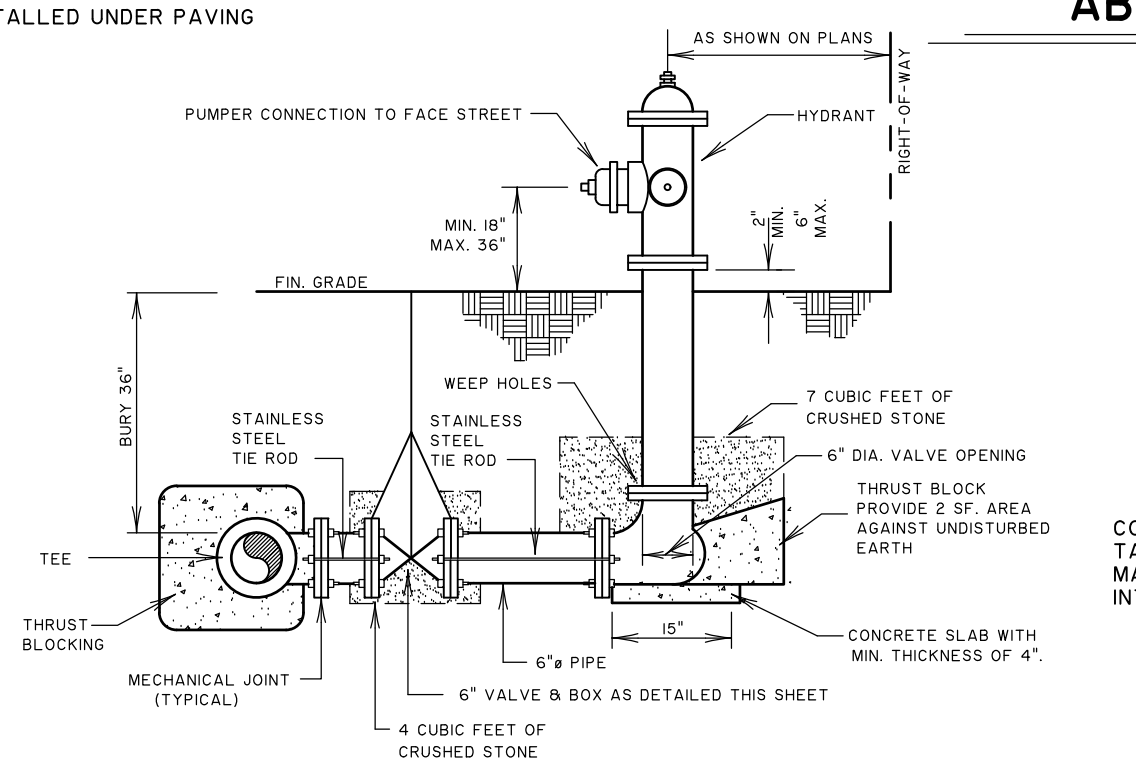
- ALL VALVES AND HYDRANTS SHALL OPEN COUNTER CLOCKWISE.
- THE CONTRACTOR MUST CALL KIAWAH ISLAND UTILITY, INC., 72 HOURS PRIOR TO TAPPING THE MAIN WATER LINE, PERFORMING A PRESSURE TEST, OR CONDUCTING BACTERIOLOGICAL TESTS. KIAWAH ISLAND UTILITY, INC. WILL HAVE A COMPANY REPRESENTATIVE ON SITE FOR EACH OF THESE EVENTS. KIAWAH ISLAND UTILITY, INC. MUST ALSO BE NOTIFIED AND PRESENT FOR THE INSPECTION OF ALL HYDRANTS, VALVES, AND THRUST BLOCKS PRIOR TO THEM BEING COVERED.
- AFTER A SUCCESSFUL PRESSURE TEST, THE CONTRACTOR MUST CONDUCT BACTERIOLOGICAL TESTS ACCORDING TO SC DHEC REGULATIONS. TWO SAMPLES MUST SHOW NEGATIVE BACTERIOLOGICAL RESULTS OR THE PROCESS MUST BE REPEATED. THE CONTRACTOR IS RESPONSIBLE FOR ALL COSTS OF ALL TESTING, INCLUDING WATER USED IN FLUSHING.
- ALL NEW FIRE HYDRANTS MUST BE TESTED FOR STATIC AND RESIDUAL FLOWS AND THE FLOWS AT 20 PSI.
- KIAWAH ISLAND UTILITY, INC. SHALL HAVE THE RIGHT OF ENTRY TO THE CONSTRUCTION SITE TO OBSERVE AND VERIFY THAT THE CONSTRUCTION IS IN ACCORDANCE WITH THE APPROVED PLANS AND SPECIFICATIONS AND TO WITNESS TESTING OF THE SYSTEM.



VERTICAL POST INDICATOR

NOT TO SCALE

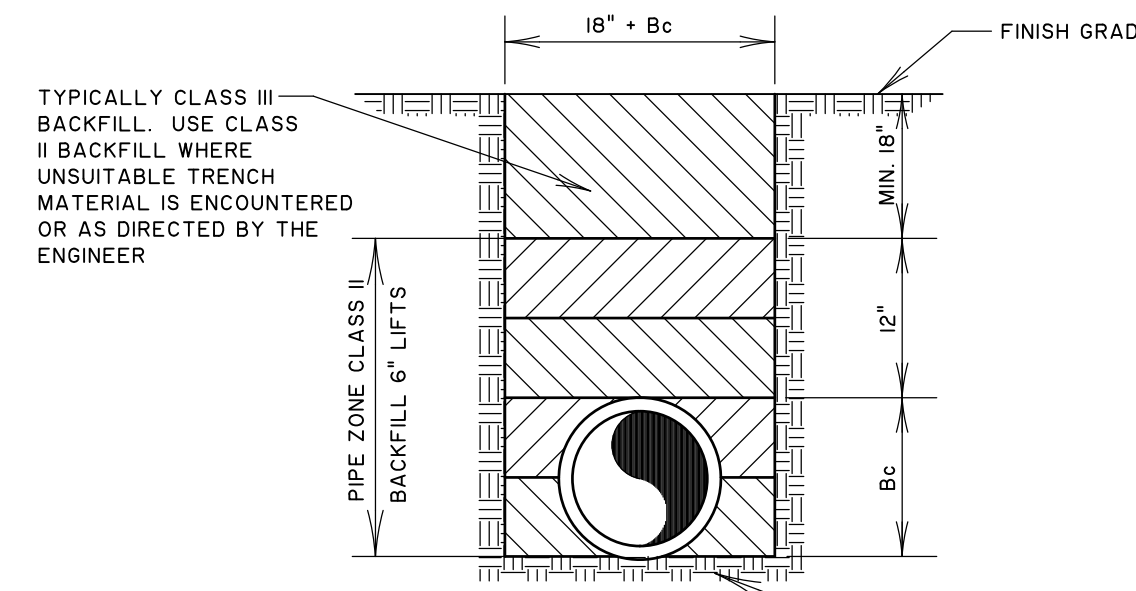
- TRENCH DEPTH OF 6" PIPE IS TO BE MIN. 30"
- GATE VALVE TO BE DIP BODY CONFORMING TO AWWA C-509-09 WITH A WORKING PRESSURE RATING OF 200 PSI.
- VERTICAL POST INDICATOR TO BE MUELLER A-20806 OR EQUAL.



- NOTES:**
- FIRE HYDRANT TO BE PLACED A MIN. OF 3' FROM EDGE OF PAVEMENT AND BACK OF CURB.
 - PUMPER CONNECTION TO FACE STREET AND HOSE CONNECTIONS SHALL BE FREE OF OBSTRUCTIONS.
 - TOP OF VALVE BOXES TO BE 1" ABOVE FINISHED GRADE IN UNPAVED AREAS AND FLUSH IN PAVED AREAS.
 - ALL FIRE HYDRANTS ARE TO BE FACTORY PAINTED FOREST GREEN.
 - FIRE HYDRANT TO BE 5 1/4" MAIN NOZZLE, OPEN LEFT, AMERICAN DARLING 6" B-84-B-A OR MUELLER SUPER CENTURION 250.

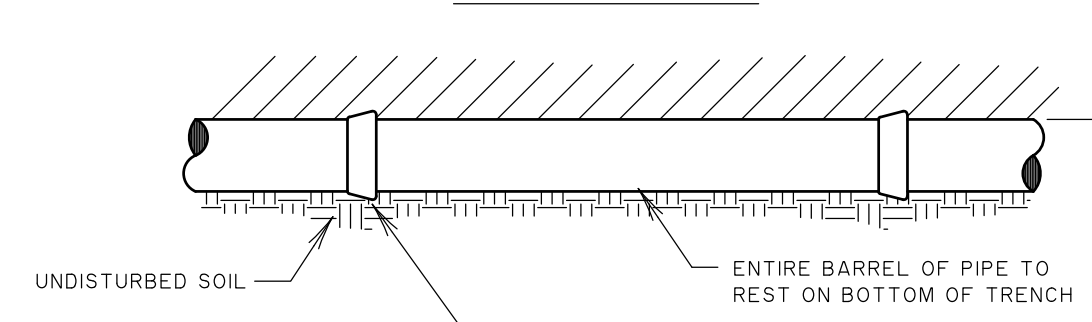
FIRE HYDRANT DETAIL

NOT TO SCALE



- INSTALL APPROVED METAL DETECTION TAPE 18" FROM FINISHED GRADE.
- FOR INFORMATION ON BACKFILL MATERIAL SEE SANITARY SEWER DETAIL SHEET
- ALL DUCTILE IRON PIPE WATER MAIN SHALL BE ENCASED IN 8 MIL. MINIMUM POLYETHYLENE FILM IN TUBE FORM.

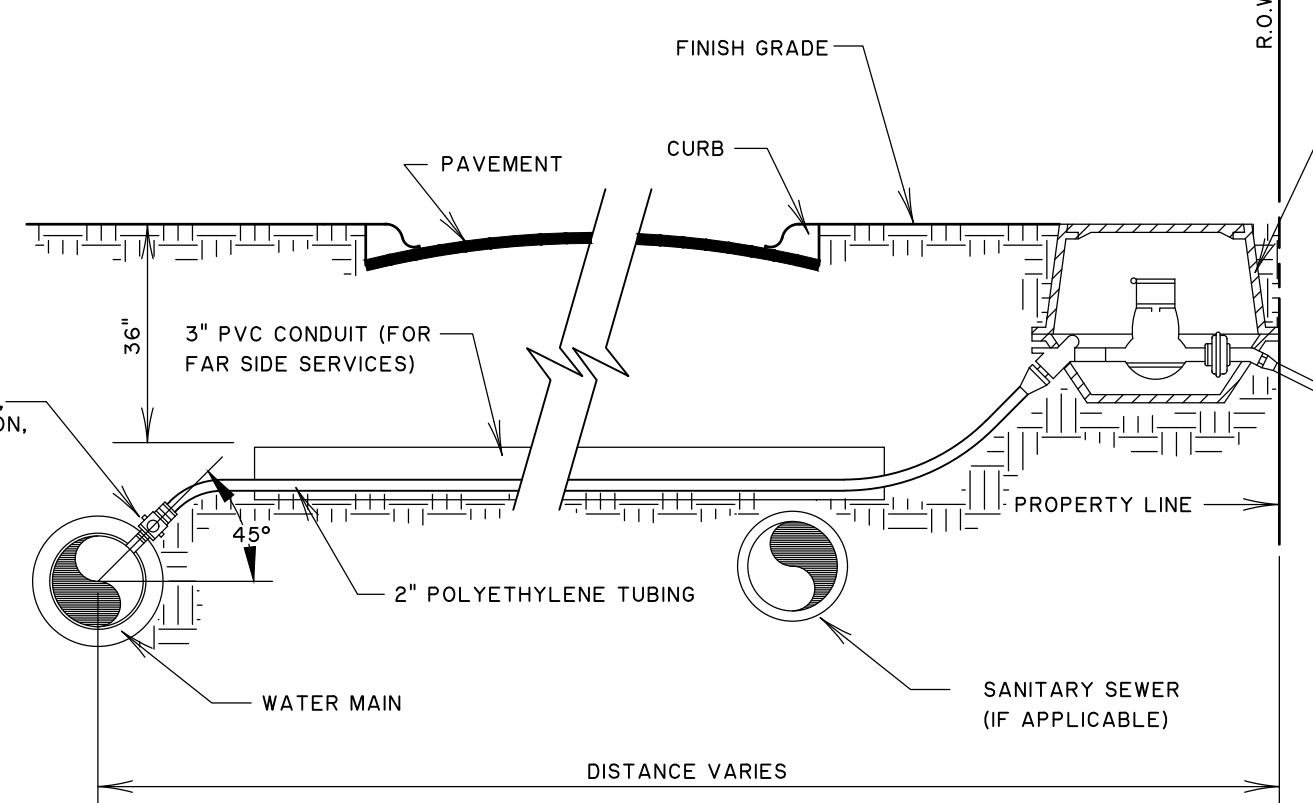
CROSS SECTION



LONGITUDINAL SECTION

FIRE MAIN BEDDING DETAIL

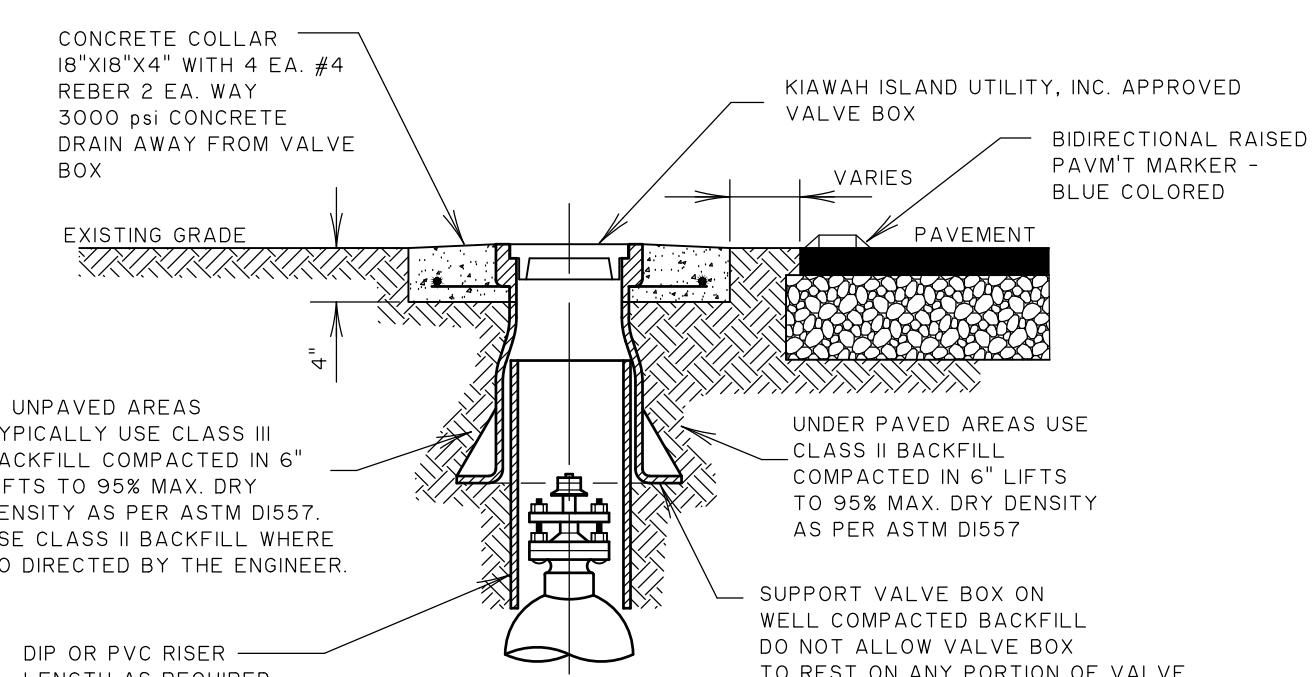
NOT TO SCALE



TYPICAL MULTI-FAMILY BUILDING WATER SERVICE

NOT TO SCALE

- CORPORATION STOP TO BE 2" MUELLER # H 15005
- POLYETHYLENE TUBING TO BE 2" IPS 4-04306
- CURB VALVE AND YOKE BOX TO BE CARSON INDUSTRIES MODEL # 1419-12-5
- WATER METER TO BE INSTALLED BY KIAWAH ISLAND UTILITY, INC.
- SEAL ENDS OF SLEEVE WITH WATER PROOF SEALANT
- 3" PVC CASING PIPE SHALL BE INSTALLED UNDER PAVING FOR ALL FAR SIDE SERVICES.



- IN UNPAVED AREAS TYPICALLY USE CLASS III BACKFILL COMPACTED IN 6" LIFTS TO 95% MAX DRY DENSITY AS PER ASTM D1557. USE CLASS II BACKFILL WHERE SO DIRECTED BY THE ENGINEER.
- UNDER PAVED AREAS USE CLASS II BACKFILL COMPACTED IN 6" LIFTS TO 95% MAX. DRY DENSITY AS PER ASTM D1557
- SUPPORT VALVE BOX ON WELL COMPACTED BACKFILL DO NOT ALLOW VALVE BOX TO REST ON ANY PORTION OF VALVE

NOTES:

- CENTER VALVE BOX OVER OPERATING NUT TO INSURE FREE VALVE OPERATION.
- USE 6" RISER PIPE ON 4" AND 6" VALVES.
- USE 8" RISER PIPE ON 8" VALVES AND LARGER.
- LOCATION OF VALVE SHALL BE MARKED WITH A CLEAR BIDIRECTIONAL RAISED PAVEMENT MARKER ON THE EDGE OF PAVEMENT NEAR THE VALVE.

VALVE BOX DETAIL

NOT TO SCALE

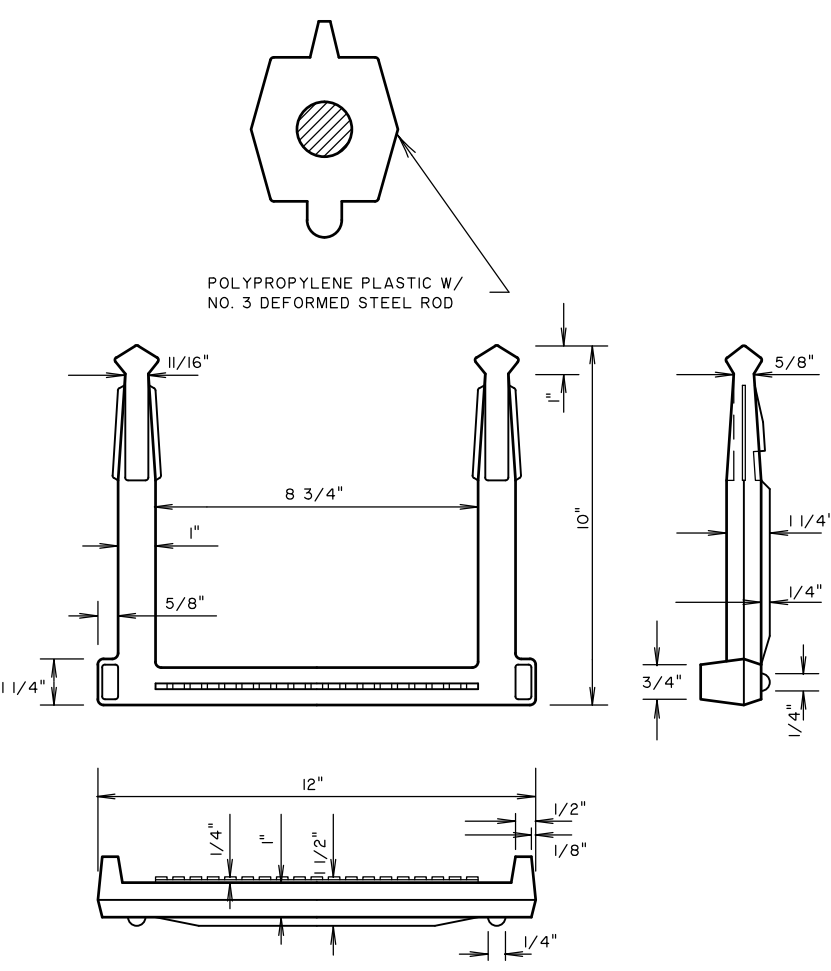
NO.	REVISIONS	BY	DATE

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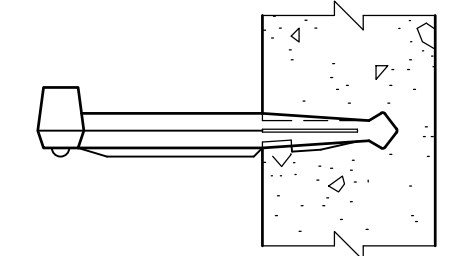
KRA, LP
 KIAWAH ISLAND, SOUTH CAROLINA
 THE WEST END AT BEACHWALKER
 WATER AND SEWER DETAILS

JOB NO:	J-25854.0400
DATE:	5/1/23
DRAWN:	LMD
DESIGNED:	LMD
REVIEWED:	DJJ
APPROVED:	DJJ
SCALE:	1" = 1'

C5.3



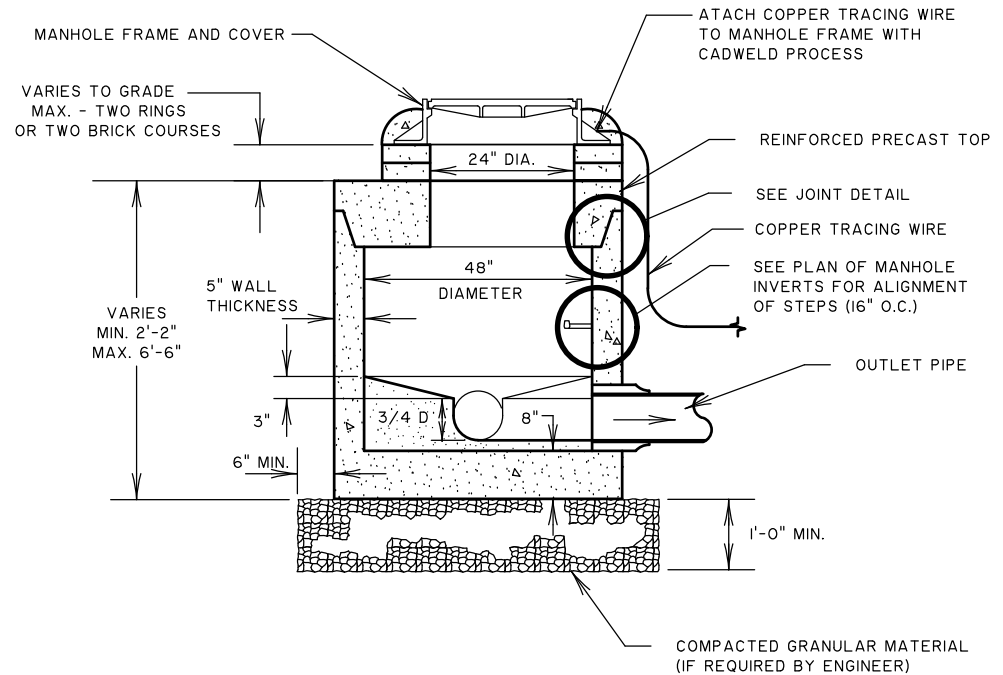
MANHOLE STEPS SHALL BE M.A. IND. INC. MODEL NO. P51 OR AN APPROVED EQUAL.



STEPS SHALL BE PLACED INTO WET CONCRETE WALL DURING MANUFACTURE, OR MORTARED INTO HOLES AFTER CONCRETE HAS SET.

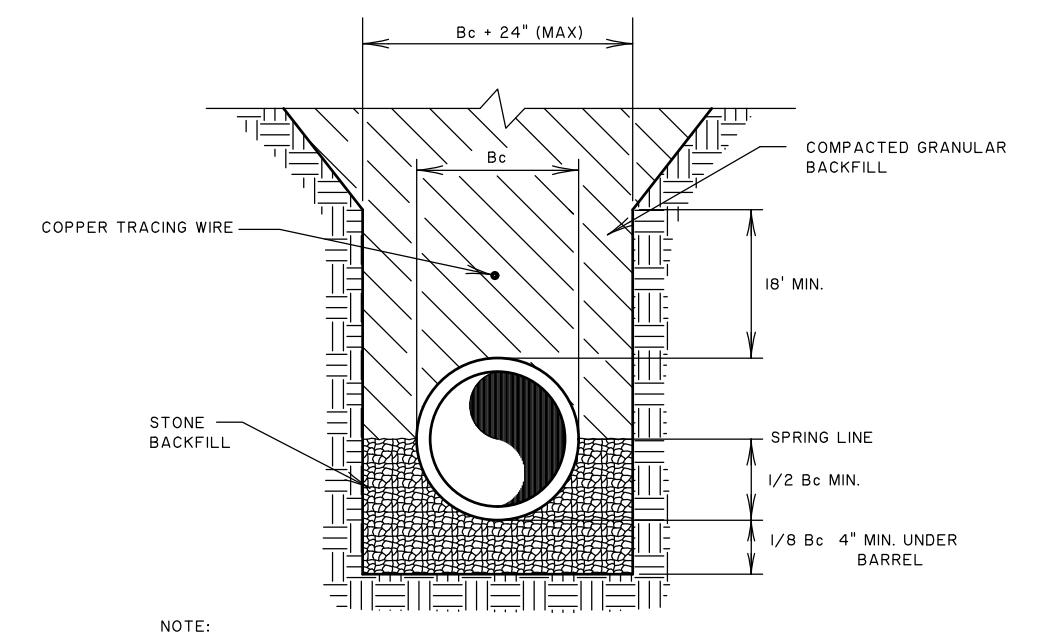
MANHOLE STEP DETAIL

NOT TO SCALE



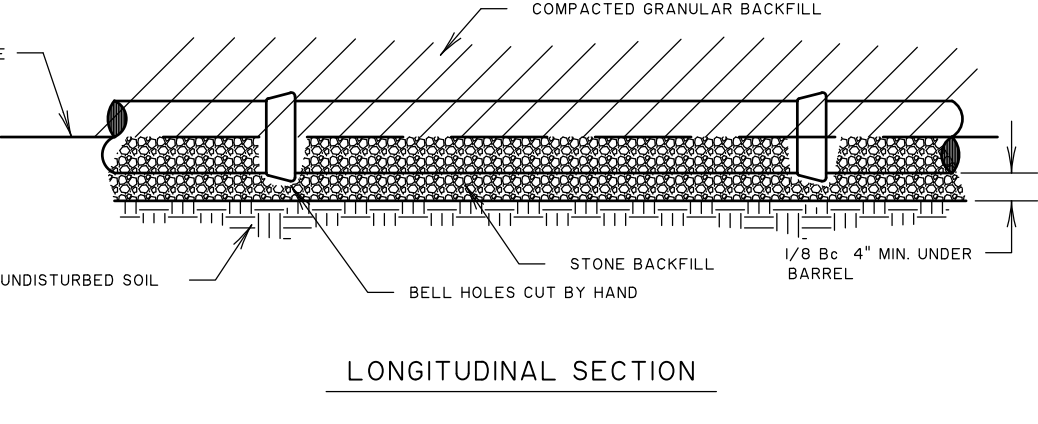
STANDARD PRECAST SHALLOW MANHOLE

NOT TO SCALE



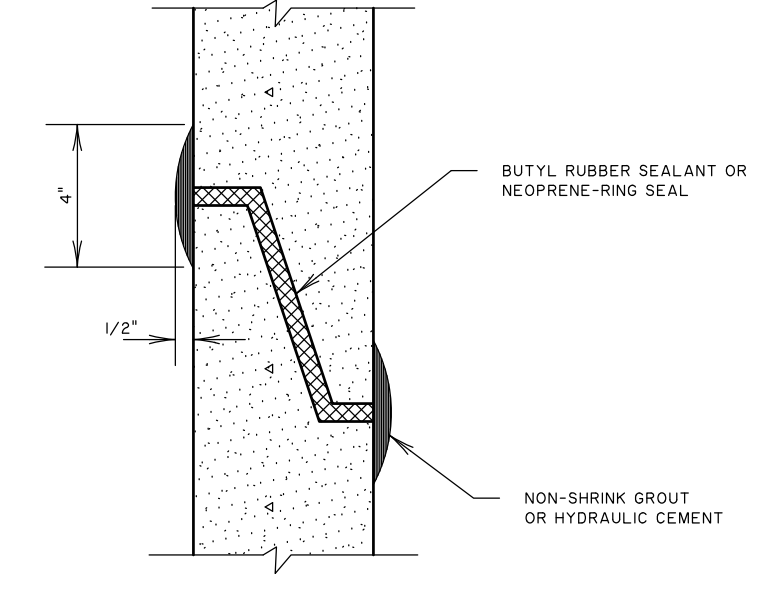
SEWER LINE BEDDING DETAIL UNDER PAVED AREAS

NOT TO SCALE



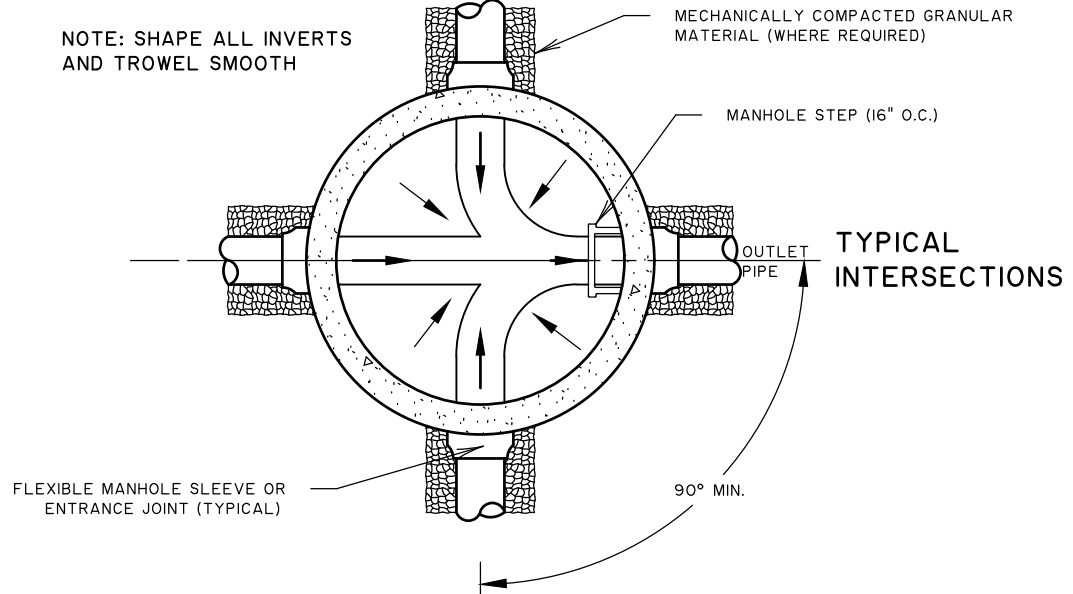
SEWER LINE BEDDING DETAIL

NOT TO SCALE



PRECAST MANHOLE TYPICAL JOINT DETAIL

NOT TO SCALE



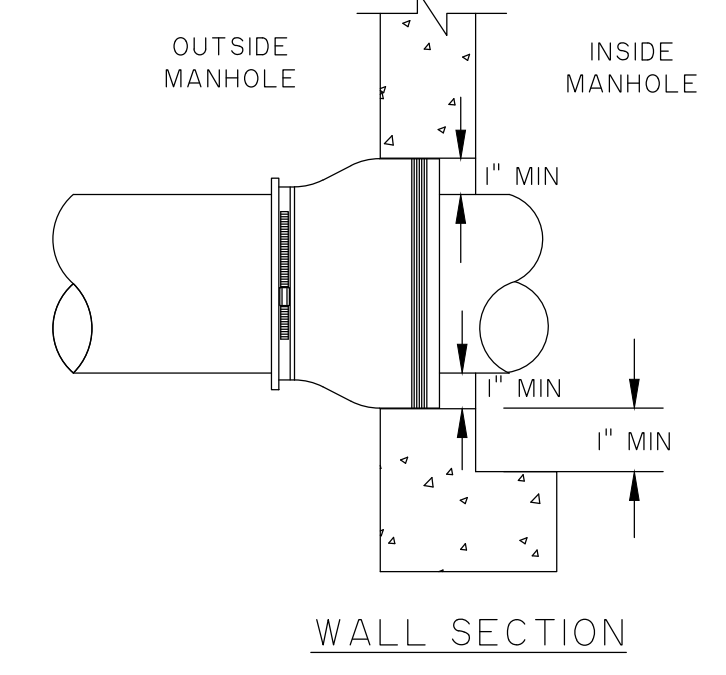
PLAN OF MANHOLE INVERTS

NOT TO SCALE

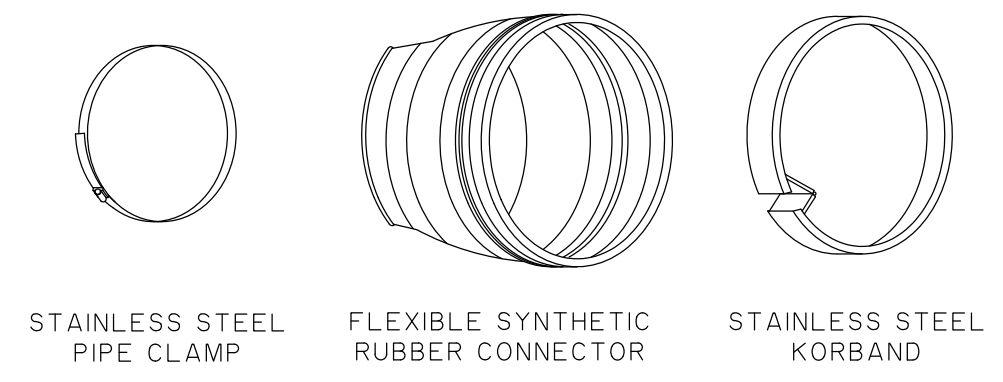
NOTE: ALL MANHOLE BATTER SECTIONS SHALL BE PLACED DURING CONSTRUCTION SO THAT THE MANHOLE RING IS DIRECTLY OVER THE OUTLET INVERT.

NOTES:

1. NEOPRENE BOOT, KOR-N-SEAL OR EQUAL, TO BE USED ON ALL PRECAST MANHOLES WITH ALL TYPES OF PIPES.
2. EXTERNAL BAND (300-SERIES NON-MAGNETIC CORROSION-RESISTANT STEEL).
3. KORBAND (6061-T6 ALUMINUM ALLOY WITH A BLACK ANODIZED SURFACE).



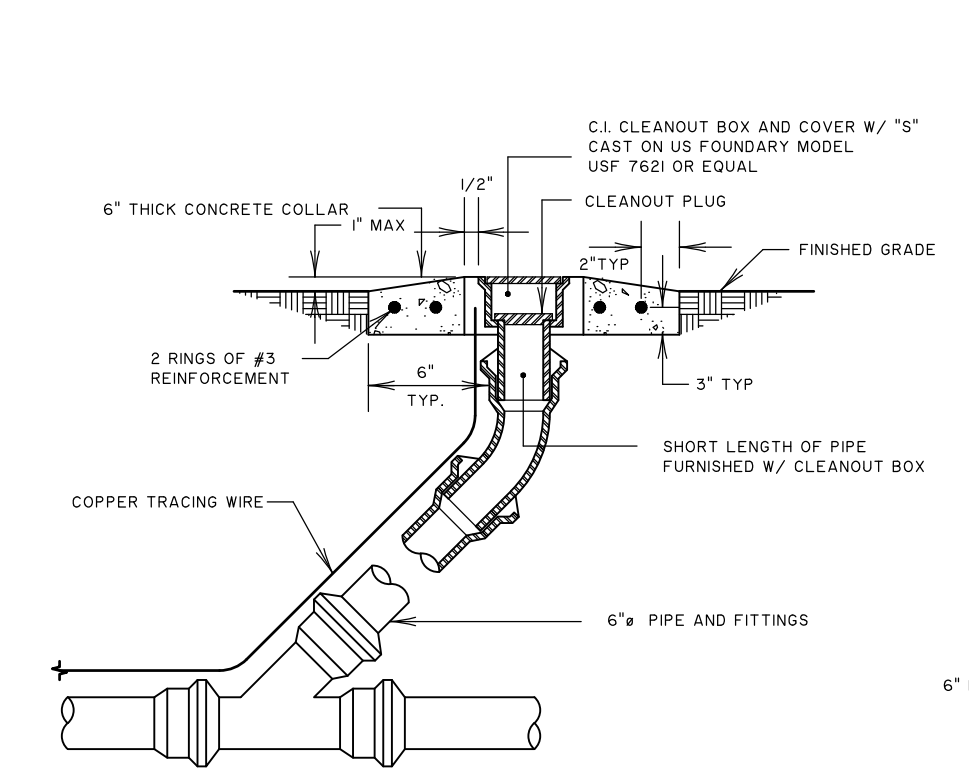
WALL SECTION



TYPICAL PARTS

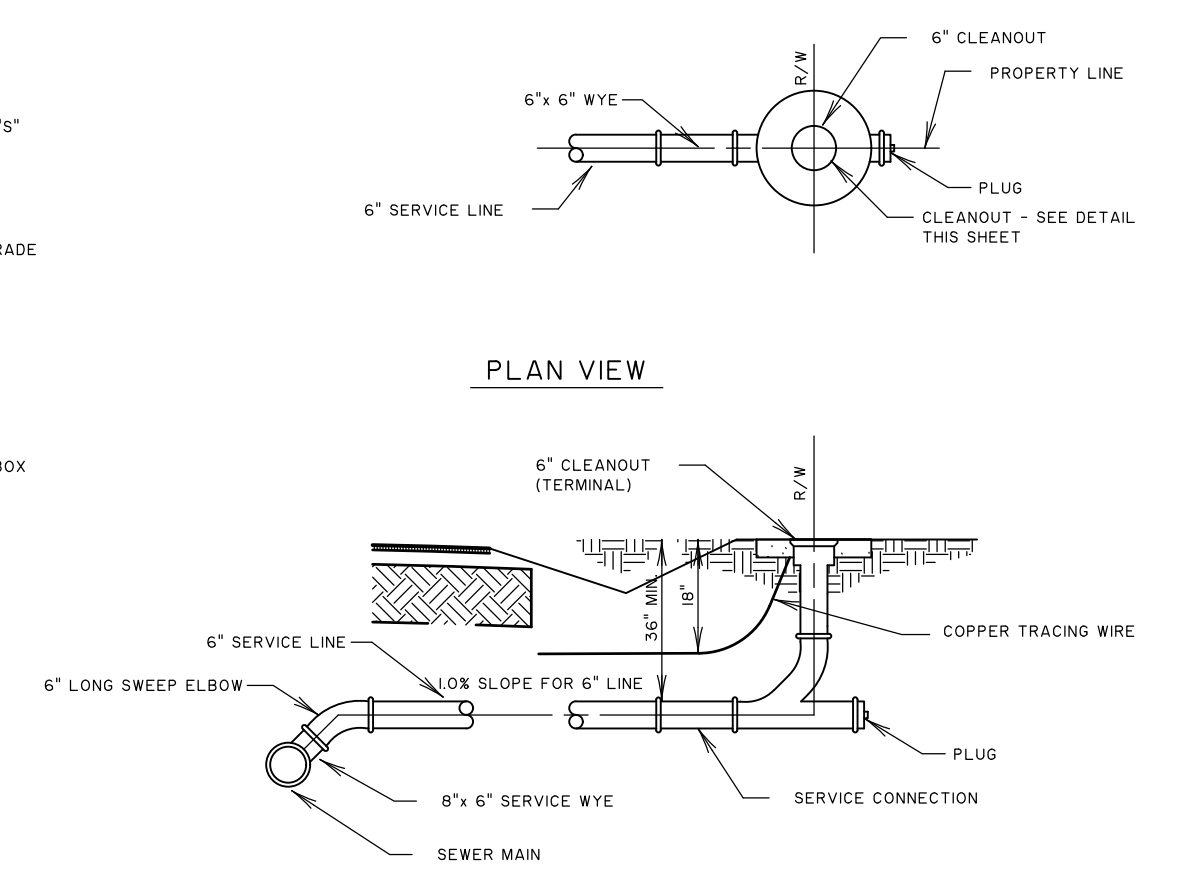
FLEXIBLE MANHOLE SLEEVE

NOT TO SCALE



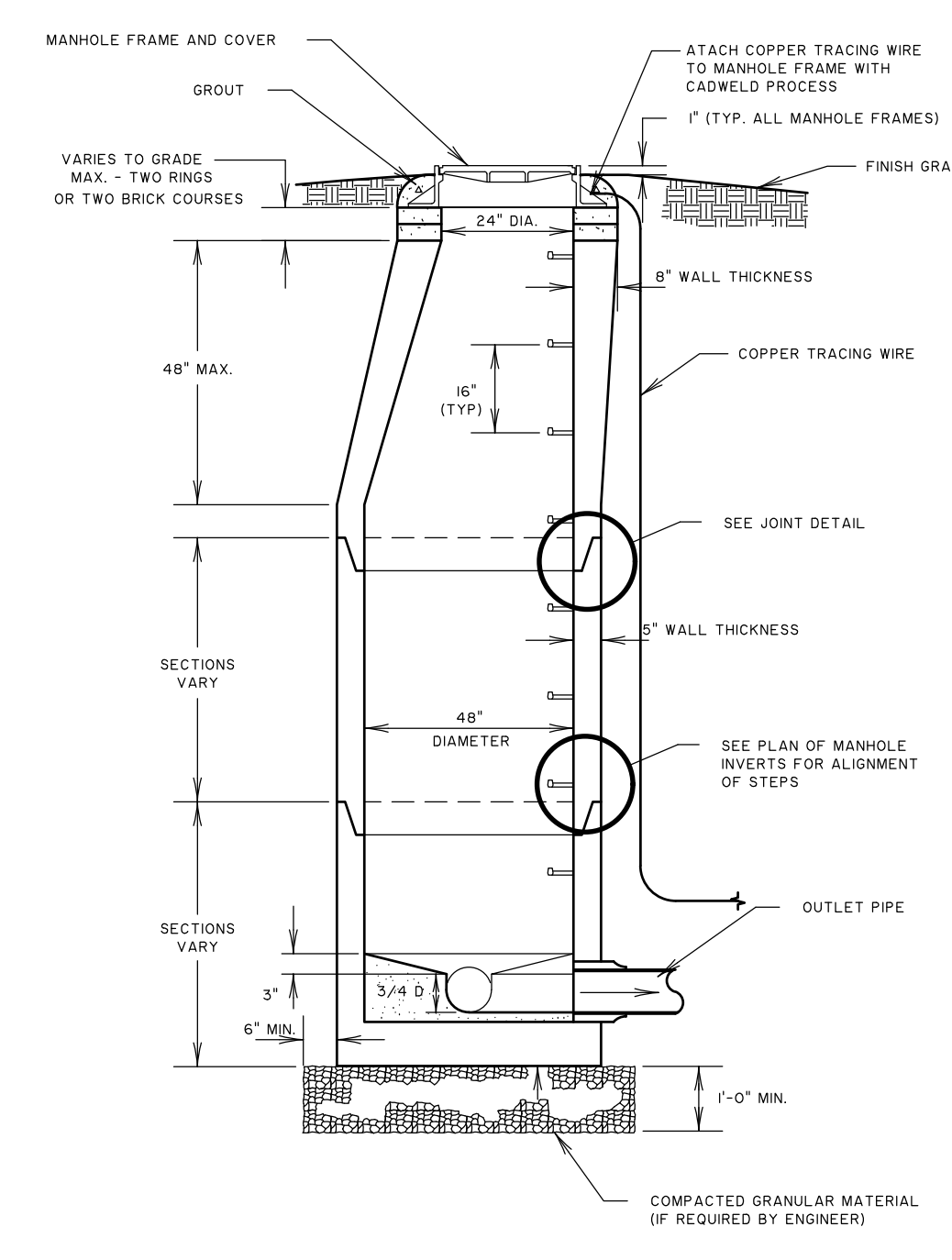
CLEANOUT DETAIL

NOT TO SCALE



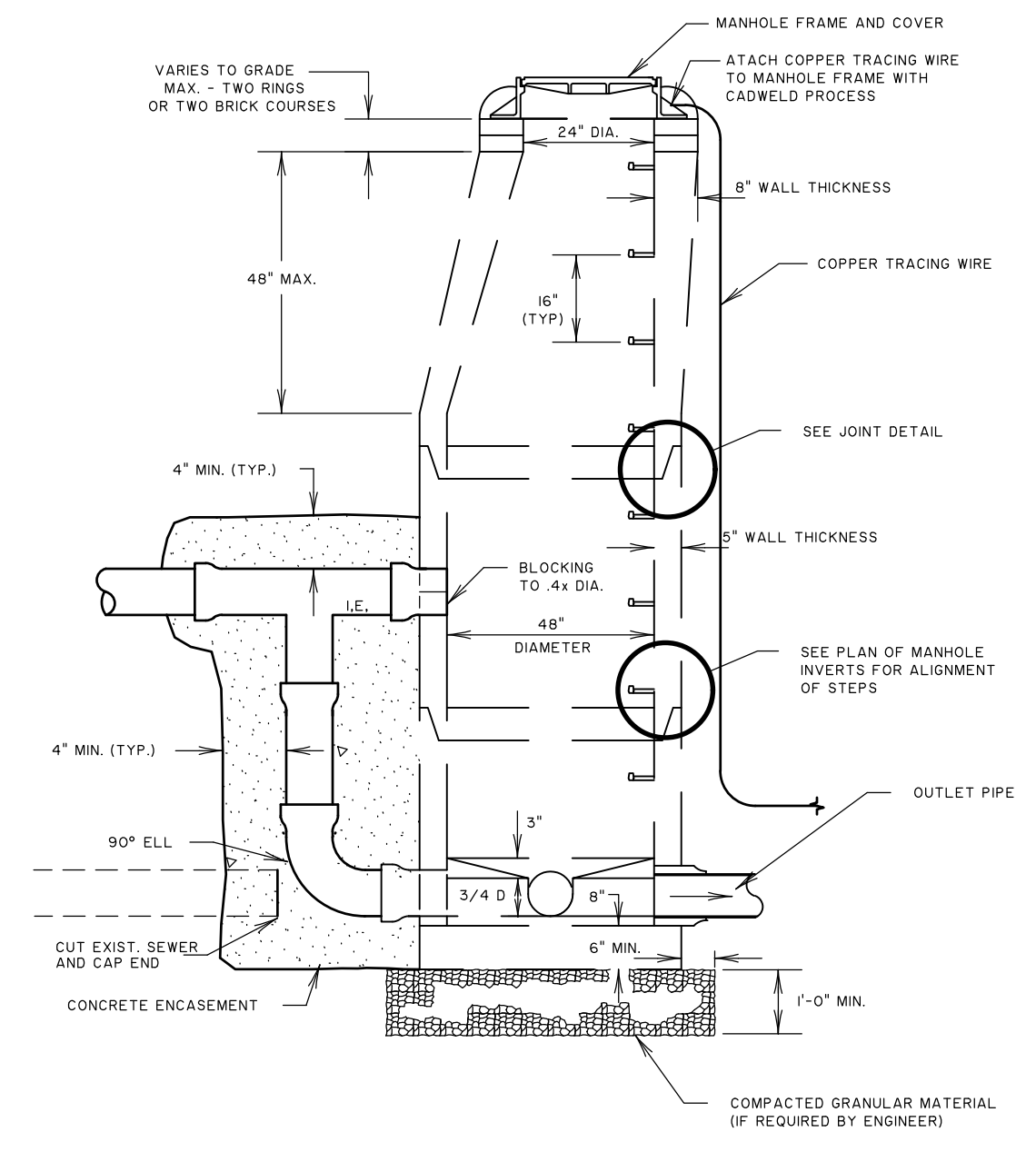
SINGLE SEWER SERVICE DETAIL

NOT TO SCALE



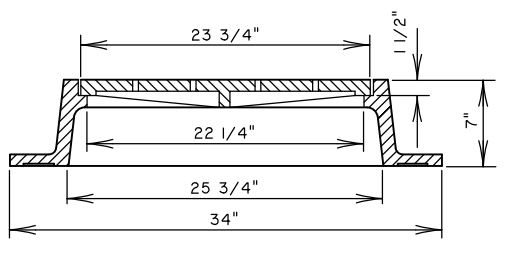
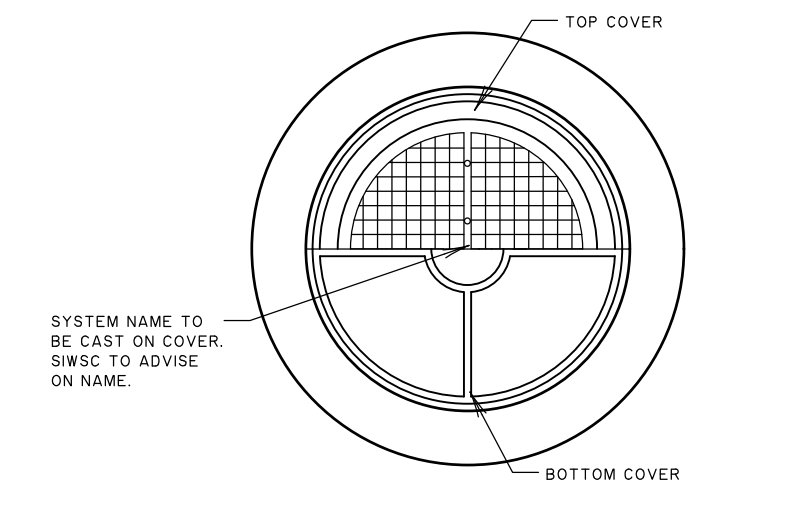
STANDARD PRECAST MANHOLE

NOT TO SCALE



STANDARD DROP MANHOLE

NOT TO SCALE



TOTAL WT. 310#

NOTE: CASTINGS SHALL BE OF UNIFORM QUALITY; FREE FROM BLOWHOLES, POROSITY, HARD SPOTS, SHRINKAGE, DISTORTION OR OTHER DEFECTS. THEY SHALL BE SMOOTH AND WELL CLEANED BY SHOTBLASTING OR BY OTHER APPROVED METHOD. UNLESS AN ALTERNATIVE SPECIFICATION IS MADE THEY SHALL BE COATED W/ ASPHALT PAINT WHICH SHALL RESULT IN A SMOOTH COATING, TOUGH AND TENACIOUS WHEN COLD, NOT TACKY AND NOT BRITTLE. MATERIALS USED IN THE MANUFACTURE OF CASTINGS SHALL CONFORM TO ASTM, AASTHO, AISA, MIL, AMS OR FEDERAL SPECIFICATIONS FOR IRON OR DUCTILE IRON, AS FOLLOWS: GRAY IRON-ASTM CLASS 30, DUCTILE IRON-GRADE 60-40-18. ALL CASTINGS SHALL BE MANUFACTURED TRUE TO PATTERN; COMPONENT PARTS SHALL FIT TOGETHER IN A SATISFACTORY MANNER. ROUND FRAMES AND COVERS SHALL BE OF NON-ROCKING DESIGN, OR SHALL HAVE MACHINED BEARING SURFACES TO PREVENT ROCKING AND RATTLING UNDER TRAFFIC. ALL WEIGHTS GIVEN ARE AVERAGE (AND APPROXIMATE) VALUES. DEVIATIONS SHALL NOT EXCEED TOLERANCES PERMITTED BY ASTM STANDARDS. CASTINGS TO MATCH EXISTING SWCS STANDARD.

MANHOLE COVER AND FRAME DETAIL

NOT TO SCALE

NO.	REVISIONS	BY	DATE

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KRA, LP
 KIAWAH ISLAND, SOUTH CAROLINA
 THE WEST END AT BEACHWALKER
 WATER AND SEWER DETAILS

JOB NO: J-25854.0400
 DATE: 5/1/23
 DRAWN: LMD
 DESIGNED: LMD
 REVIEWED: DJJ
 APPROVED: DJJ
 SCALE: 1" = 1'

C5.4

ZONING RESTRICTIONS - PARCEL 11

MAX # OF UNITS (R)	MAX UNITS PER BLDG (R)	MAX HEIGHT	MAX STORIES	MAX F.A.R. (C)
60	7	50'	4	--

LOT COVERAGE - PARCEL 11		ALLOWED/ACTUAL	
LOT HIGHLAND AREA			247,551.48 SQFT
MAX LOT COVERAGE (IMPERVIOUS)		33% / 31.09%	81,691.98 SQFT
MAX SECONDARY COVERAGE (PERVIOUS PLUS IMPERVIOUS)		39.67% / 34.81%	98,203.67 SQFT
BUILDINGS		22.33%	55,280 SQFT
PRIMARY PAVEMENT		9.20%	22,781 SQFT
TOTAL COVERED		31.53%	78,061 SQFT
PERVIOUS SECONDARY COVERAGE		3.72%	9,241 SQFT
*LOT ACCESS EXEMPT FROM SQUARE FOOTAGE			87,302 SQFT

PARCEL 11 LOT COVERAGE CALCULATIONS

BUILDINGS COVERAGE= 55,280 SQFT (6,910 SQFT X 8 TOTAL BUILDINGS)

PAVEMENT
PAVED ROAD 21,428 SQFT
PRIMARY WALKWAYS 1,088 SQFT
TRASH COLLECTION PAD 145 SQFT
PUMP HOUSE 100 SQFT

TOTAL LOT COVERAGE = 78,061 SQFT

PARKING COUNT - PARCEL 11

UNIT TYPE	TOTAL UNITS	REQUIRED	PROVIDED
2 BDRM UNITS	1 PER BLDG.	1.75 PER UNIT= 1.75 PER BLDG.	14+1 PER BUILDING (8 BUILDINGS)
3 BDRM UNITS	6 PER BLDG.	2 PER UNIT= 12 PER BLDG.	
ON SITE (PROVIDED OUTSIDE BUILDINGS BY BUILDING 3 & 8)			8 TOTAL
110 TOTAL			128 TOTAL

NOTE: PARCEL 11 ZONING RESTRICTIONS, LOT COVERAGE CALCULATIONS AND PARKING COUNT CALCULATIONS ARE PER EXHIBIT 13.3 OF THE DEVELOPMENT AGREEMENT

ZONING RESTRICTIONS - PARCEL *

MAX # OF UNITS (R)	MAX UNITS PER BLDG (R)	MAX HEIGHT	MAX STORIES	MAX F.A.R. (C)
22 (22.92 PER ACREAGE)	4	40'	2	--

LOT COVERAGE - PARCEL *

LOT COVERAGE - PARCEL *		ALLOWED/ACTUAL	
LOT HIGHLAND AREA			65,813.88 SQFT
MAX LOT COVERAGE (IMPERVIOUS)		60% / 49.64%	39,488.33 SQFT
MAX SECONDARY COVERAGE (PERVIOUS PLUS IMPERVIOUS)		66% / 50.09%	43,437.16 SQFT
BUILDINGS		38.28%	25,196 SQFT
PRIMARY PAVEMENT		11.36%	7,477 SQFT
TOTAL COVERED		49.64%	32,673 SQFT
PERVIOUS SECONDARY COVERAGE		0.45%	300 SQFT
			32,973 SQFT

**"POLE" AREA OF A FLAG LOT SHALL BE EXCLUDED FROM HIGHLAND AREA
TOTAL HIGHLAND AREA = 63,830.28 SF
"POLE" AREA = 18,016.40 SF
HIGHLAND AREA = 65,813.88 SF

**PER SEC. 12-63.3 ACCESS DRIVE LOCATED ON THE "POLE" OF A FLAG LOT SHALL BE EXCLUDED FROM LOT COVERAGE

PARCEL * LOT COVERAGE CALCULATIONS

BUILDINGS COVERAGE= 25,196 SQFT (6,299 SQFT X 4 TOTAL BUILDINGS)

PAVEMENT
PAVED ROAD 7,377 SQFT
MAIL KIOSK PAD 100 SQFT

TOTAL LOT COVERAGE = 32,673 SQFT

PARKING COUNT - PARCEL *

UNIT TYPE	TOTAL UNITS	REQUIRED	PROVIDED
2 BDRM UNITS	2 PER BLDG.	1.5 PER 1 BDRM PER D.U. =	15 PER BUILDING
3 BDRM UNITS	2 PER BLDG.	15 PER BLDG	
60 TOTAL			60 TOTAL

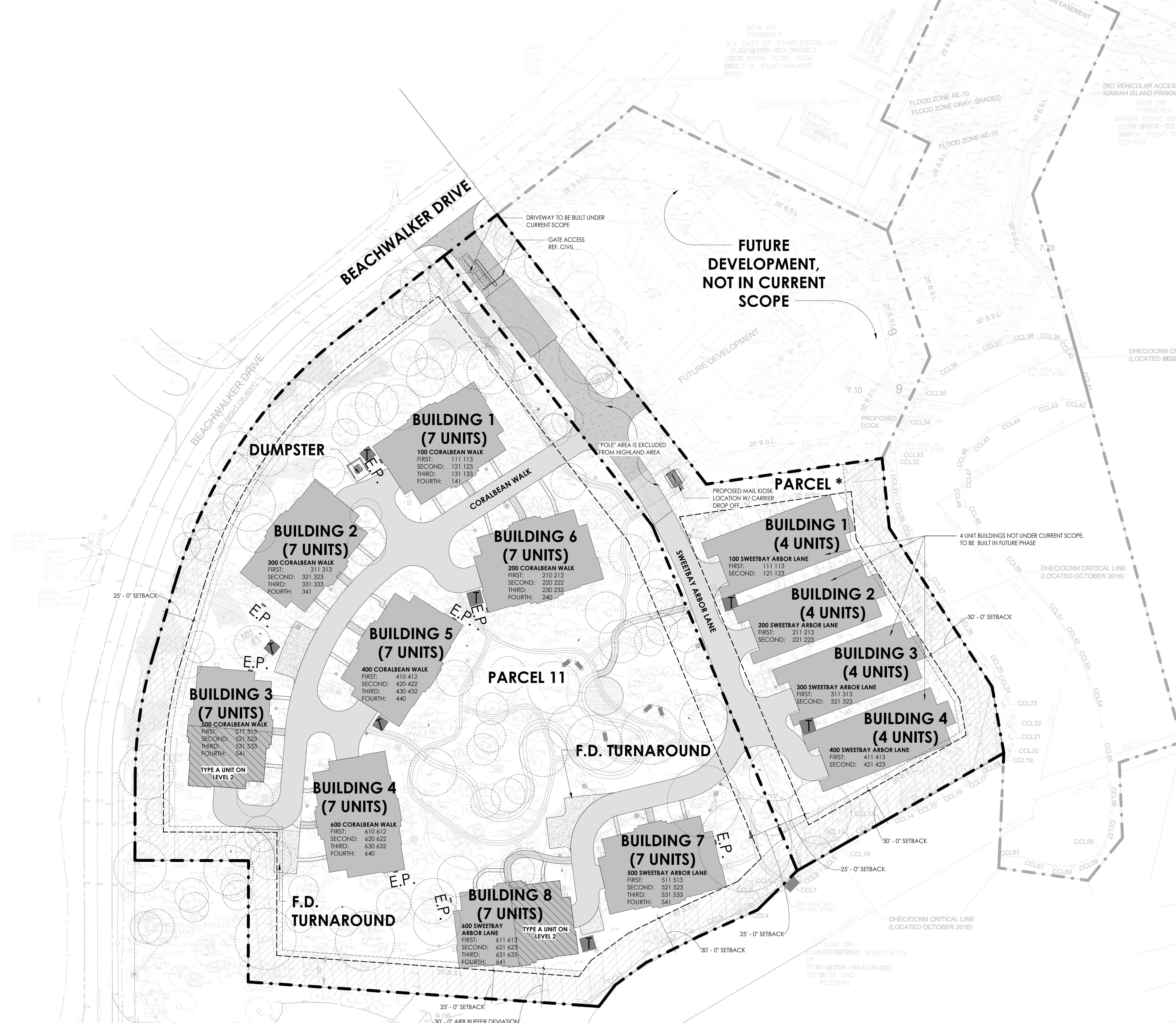
NOTE: PARCEL * ZONING RESTRICTIONS, LOT COVERAGE CALCULATIONS AND PARKING CALCULATIONS ARE PER TOWN OF KIAWAH ISLAND ZONING

MASTER PLAN UNIT COUNT

PARCEL	2 BDRM UNITS	3 BDRM UNITS	TOTAL UNITS	TOTAL SF	EST. BEDS
PARCEL 11	8	48	56	243,824	160
PARCEL *	8	8	16	75,558	40
TOTAL	16	56	72	319,382	200

E.P. ELECTRICAL PANEL LOCATIONS TENTATIVE

T TRANSFORMER LOCATIONS TENTATIVE



MASTER SITE PLAN 1

SCALE: 1" = 40'-0"



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THE WEST END AT BEACHWALKER DR
BEACHWALKER DR
KIAWAH ISLAND, SC

FOR ARB PERMIT ONLY

MATTHEW H. KRAGH
REG# AR 9839

SOUTH CAROLINA SEAL
REG# AR 101418

ARB PERMIT SUBMITTAL	09/22/2023
REVIEW COMMENTS	10/07/2023

MASTER SITE PLAN

PHASE CD
PR NO 23008

A001

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8/2023

THE WEST END AT BEACHWALKER (7-UNIT BUILDING) KIAWAH ISLAND

NOT FOR CONSTRUCTION

MATTHEW H. KRAGH
REG# AR 1939

SOUTH CAROLINA SEAL
REG# AR 101418

75% CONSTRUCTION DOCUMENTS 09/01/2023

EXTERIOR ELEVATIONS

PHASE CD
PR NO 23008

A200

KEY	MATERIAL
01	13" NUCCEDAR SHINGLES: 5" EXPOSURE
02	STANDING SEAM METAL ROOF
03	CEMENTITIOUS PANELING
04	TABBY STUCCO
05	METAL RAILING
06	FACTORY PRE-PRIMED TREATED WOOD
07	6x6 COLUMN W/ 10x10 CEMENTITIOUS COVER AND TRIM
08	WOOD BRACKETS
09	BEVELED 5x5 GLITTER
10	DECORATIVE CORNICE
11	DECORATIVE CORBELS



NORTH ELEVATION
SCALE: 1/4" = 1'-0" ①

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THE WEST END AT BEACHWALKER
(7-UNIT BUILDING)
KIAWAH ISLAND

NOT FOR CONSTRUCTION

MATTHEW H. KRAGH
REG# AR 9839

SOUTH CAROLINA SEAL
REG# AR 101418

75% CONSTRUCTION DOCUMENTS 09/01/2023

EXTERIOR ELEVATIONS

PHASE CD
PR NO 23008

A201

KEY	MATERIAL
01	13" NUCCEDAR SHINGLES: 5" EXPOSURE
02	STANDING SEAM METAL ROOF
03	CEMENTITIOUS PANELING
04	TABBY STUCCO
05	METAL RAILING
06	FACTORY PRE-PRIMED TREATED WOOD
07	6X6 COLUMN W/ 10X10 CEMENTITIOUS COVER AND TRIM
08	WOOD BRACKETS
09	BEVELED SX5 GLITTER
10	DECORATIVE CORNICE
11	DECORATIVE CORBELS



EAST ELEVATION 1
SCALE: 1/4" = 1'-0"

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THE WEST END AT BEACHWALKER (7-UNIT BUILDING) KIAWAH ISLAND

NOT FOR CONSTRUCTION

MATTHEW H. KRAGH
REG# AR 1939

SOUTH CAROLINA SEAL
REG# AR 101418

75% CONSTRUCTION DOCUMENTS 09/01/2023

EXTERIOR ELEVATIONS

PHASE CD
PR NO 23008

A202

KEY	MATERIAL
01	13' NUCCEDAR SHINGLES: 5' EXPOSURE
02	STANDING SEAM METAL ROOF
03	CEMENTITIOUS PANELING
04	TABBY STUCCO
05	METAL RAILING
06	FACTORY PRE-PRIMED TREATED WOOD
07	6x6 COLUMN W/ 10x10 CEMENTITIOUS COVER AND TRIM
08	WOOD BRACKETS
09	BEVELED 5x5 GLITTER
10	DECORATIVE CORNICE
11	DECORATIVE CORBELS



SOUTH ELEVATION 1
SCALE: 1/4" = 1'-0"

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THE WEST END AT BEACHWALKER (7-UNIT BUILDING) KIAWAH ISLAND

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SOUTH CAROLINA SEAL
REG# AR 101418

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EXTERIOR ELEVATIONS

PHASE CD
PR NO 23008

A203

KEY	MATERIAL
01	13' NUCCEDAR SHINGLES: 5' EXPOSURE
02	STANDING SEAM METAL ROOF
03	CEMENTITIOUS PANELING
04	TABBY STUCCO
05	METAL RAILING
06	FACTORY PRE-PRIMED TREATED WOOD
07	6x6 COLUMN W/ 10x10 CEMENTITIOUS COVER AND TRIM
08	WOOD BRACKETS
09	BEVELED SX5 GLITTER
10	DECORATIVE CORNICE
11	DECORATIVE CORBELS



WEST ELEVATION ①
SCALE: 1/4" = 1'-0"

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THE WEST END AT BEACHWALKER
(7-UNIT BUILDING)
KIAWAH ISLAND

NOT FOR CONSTRUCTION

MATTHEW H. KRAGH
REG# AR 1939

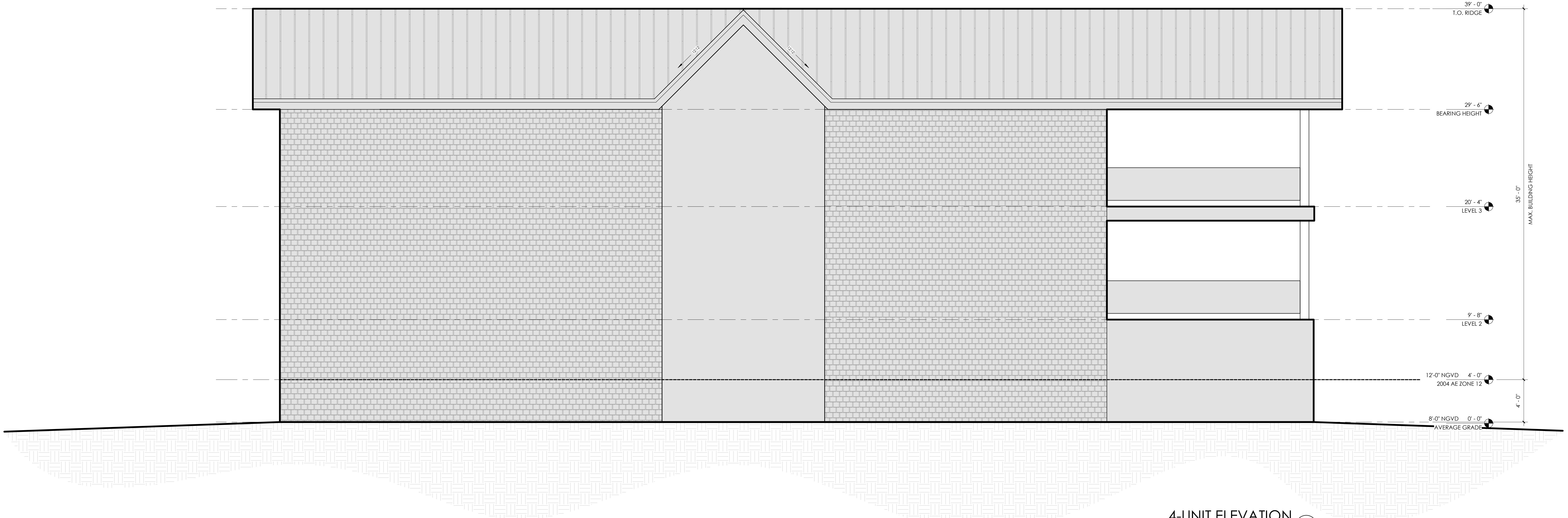
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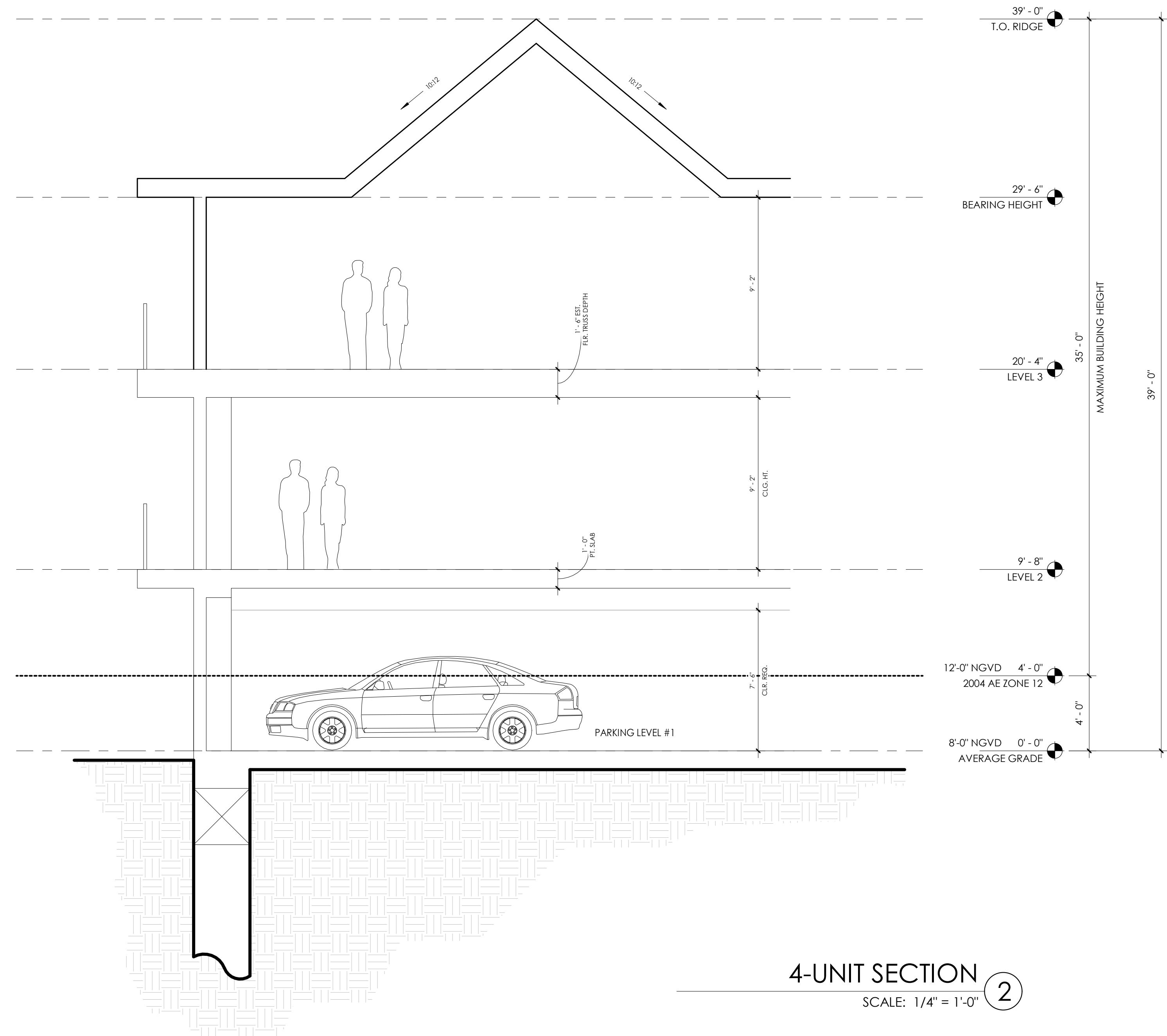
4-UNIT BUILDING PRELIMINARY ELEVATIONS

PHASE CD
PR NO 23008

A206



4-UNIT ELEVATION 1
SCALE: 1/4" = 1'-0"



4-UNIT SECTION 2
SCALE: 1/4" = 1'-0"