

VICTORIA GARDEN INNS HOTEL/RETAIL

CIVIL CONSTRUCTION PLAN SET

SECTION 05, TOWNSHIP 38 S, RANGE 41 E
STUART, FLORIDA



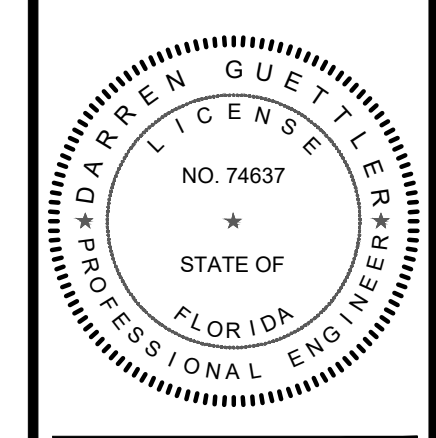
ENGINEERING & SURVEYING, LLC
1449 NW COMMERCE CENTRE DR
PORT ST. LUCIE, FL 34986
PHONE: (772) 879-0477
FIRM C.O.A. # 3222

REVISIONS:	
BY:	DATE:
JM	11-10-23
JM	12-07-23
JM	03-29-24
JM	07-26-24

NOT FOR CONSTRUCTION

PROJECT:
VICTORIA GARDEN INNS
HOTEL/RETAIL

CLIENT:
RAJ
PATEL
CITY OF STUART
FLORIDA

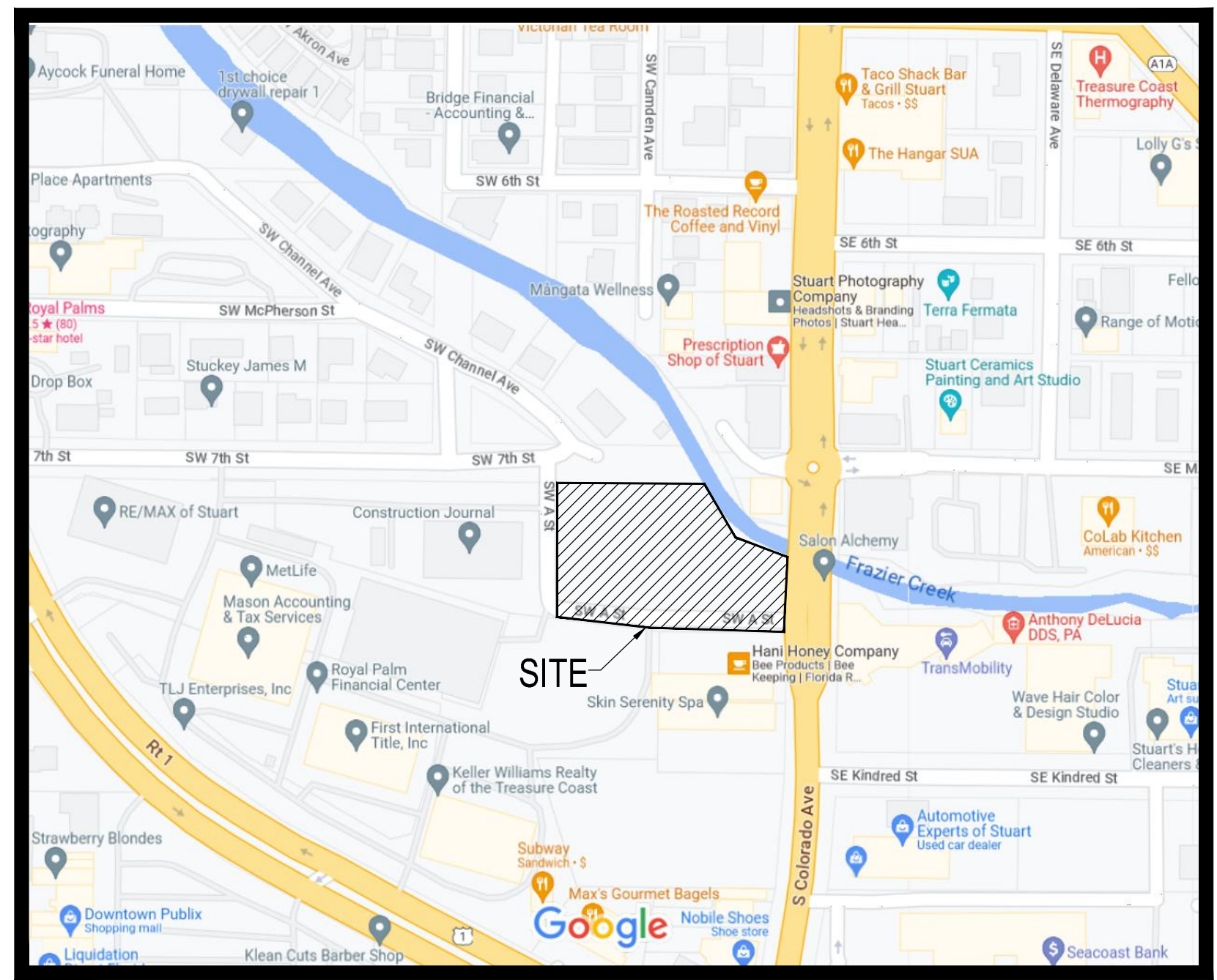


DARREN GUETTLER, PE
FLORIDA LICENSE No. 74637
7/26/24

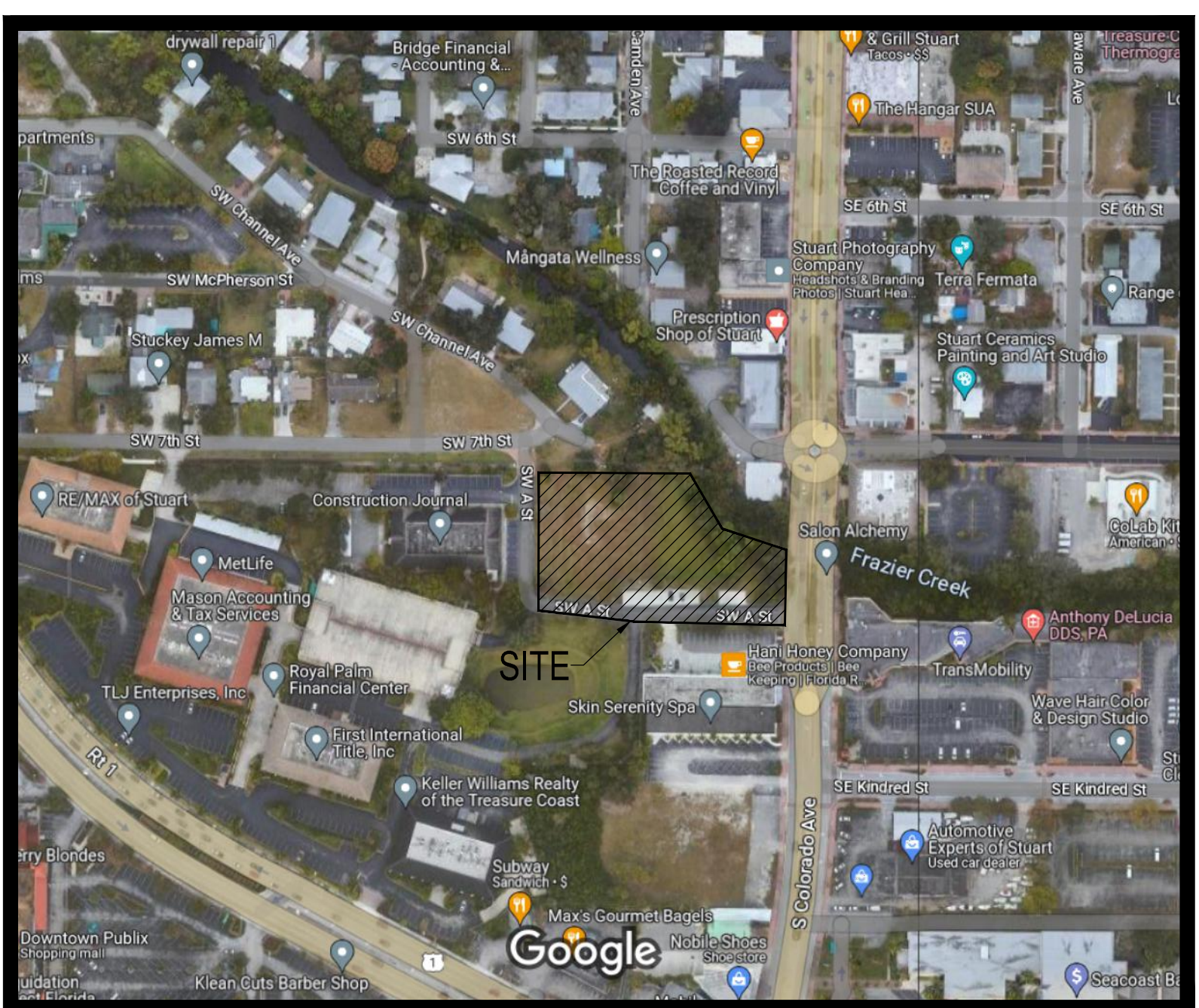
PROJECT No.: 22-1036
DRAWN BY: LG
CHECKED BY: JM
DATE: 04/20/2023
CAD ID.: 22-1036 COVER

SHEET TITLE:
Cover

SHEET NUMBER:
COV.



LOCATION MAP
N.T.S.



VICINITY AERIAL MAP
N.T.S.

PLAN FOR
RAJ PATEL

ENGINEER & SURVEYOR



ENGINEERING & SURVEYING, LLC.

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PORT ST. LUCIE, FL 34986
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ENGINEER'S PROJECT NO. 22-1036

INDEX OF DRAWINGS

SHEET NO.	DESCRIPTION
COV.	COVER SHEET
01	HORIZONTAL CONTROL PLAN
02	PAVING, GRADING, AND DRAINAGE PLAN
03	PAVING, GRADING, AND DRAINAGE DETAILS
04	CROSS SECTIONS
05 - 10	ADS MC-7200 STORMWATER CHAMBER DETAILS
11	WATER AND SEWER PLAN
12	WATER AND SEWER PLAN DETAILS
13	DEMOLITION EROSION CONTROL PLAN
14	STORMWATER POLLUTION PREVENTION PLAN

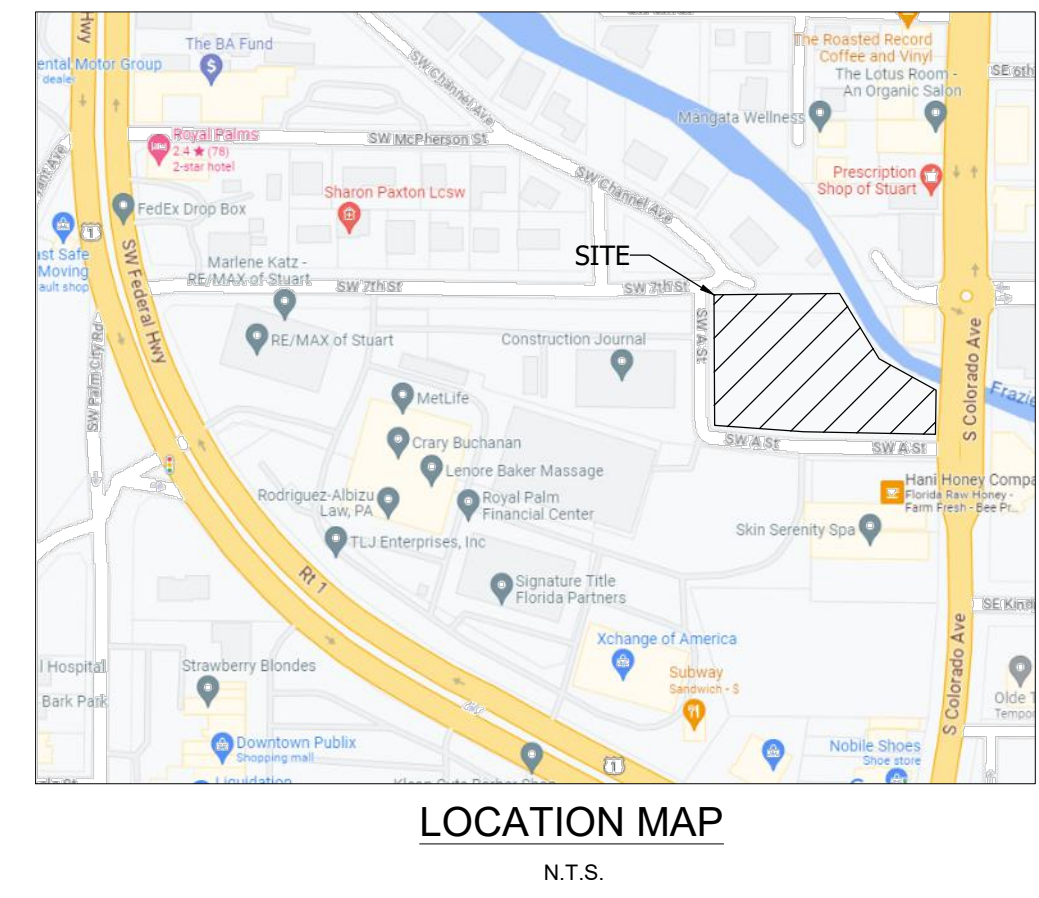
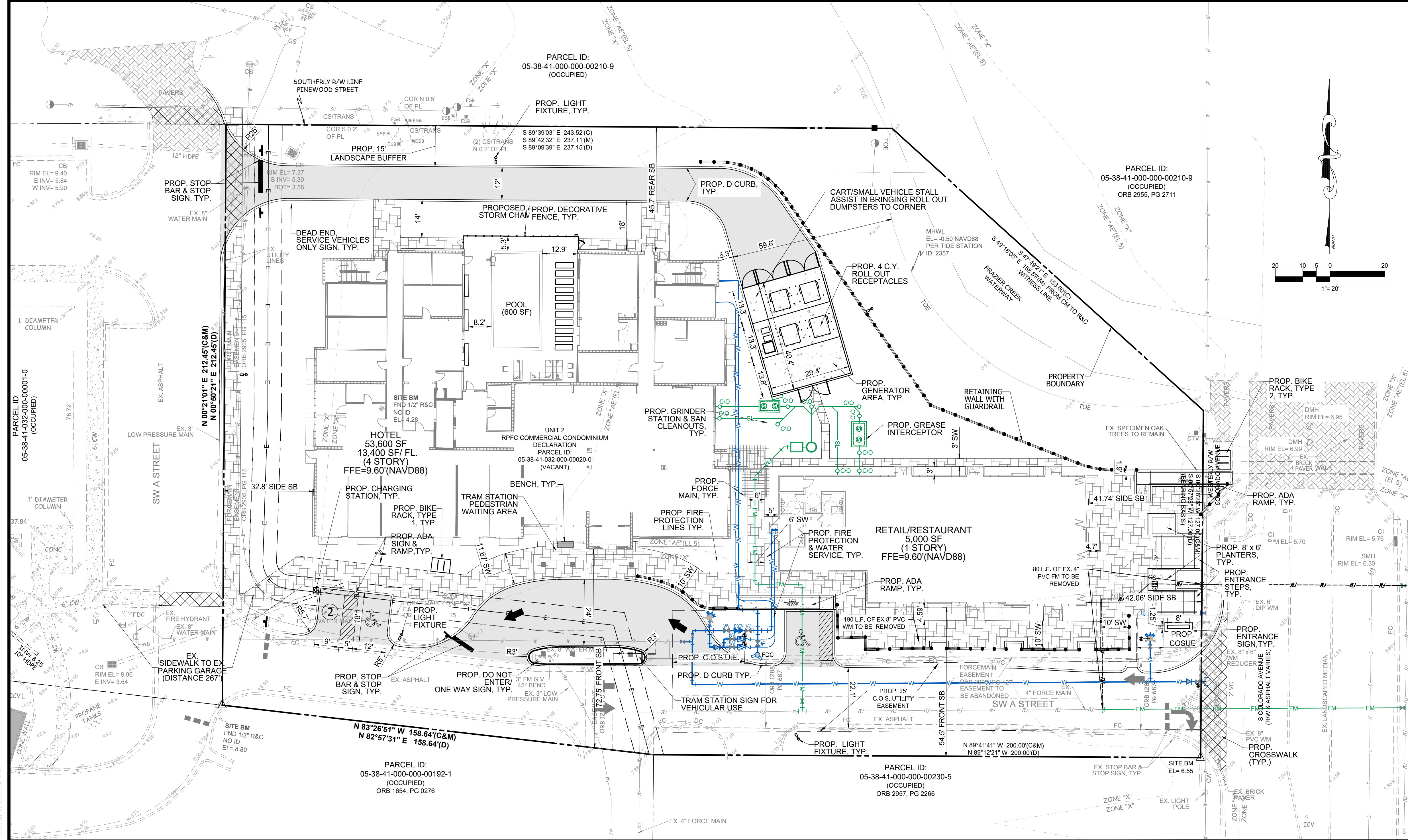


Construction Manager

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Darren C. Guettler, State of Florida
Professional Engineer, License No. 74637
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Printed on Friday, July 26, 2024, 4:00 PM by Jessica McChesney



LEGEND

EXISTING GRADE ELEVATION	PROPOSED ASPHALT PAVEMENT
PROPOSED ELEVATION (H.P. = HIGH POINT)	DECORATIVE PAVERS OR CONCRETE
RUNOFF FLOW DIRECTION	PROPOSED CONCRETE SIDEWALK
EXISTING WATER MAIN	PROPOSED ADA DETECTABLE WARNING MAT
EXISTING FORCE MAIN	PROPOSED CLEAN OUT
EXISTING GRAVITY SEWER MAIN	D.E. DRAINAGE EASEMENT
EXISTING EDGE OF PAVEMENT	U.E. UTILITY EASEMENT
EXISTING LIGHT POLE	L.B. LANDSCAPE BUFFER
PROPOSED LIGHT FIXTURE	PROPOSED GRAVITY SEWER MAIN
PROPOSED SQUARE CATCH BASIN	PROPOSED BLDG. SEWER
PROPOSED DRAINAGE MAN HOLE	PROPOSED WATER SERVICE
PROPOSED ROUND CATCH BASIN	PROPOSED STORM SEWER
PROPOSED STORMWATER CHAMBER SYSTEM	PROPOSED MITERED END SWALE

LEGAL DESCRIPTION:
 UNIT 2 RFP COMMERCIAL CONDO PER DOC IN OR 2499/1296 CONSISTING OF 70,614 SF VACANT LAND



Construction Manager



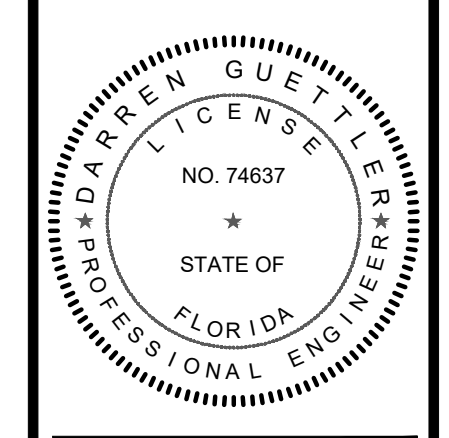
REVISIONS:

BY:	DATE:	COMMENT:
JM	11-10-23	REVISED PER C.O.S. COMMENTS
JM	12-07-23	REVISED PER C.O.S. COMMENTS
JM	03-29-24	REV. STM CHAMBERS UTILITIES FOR FPL
JM	07-26-24	PLAN REV. PER SFWMD RAI

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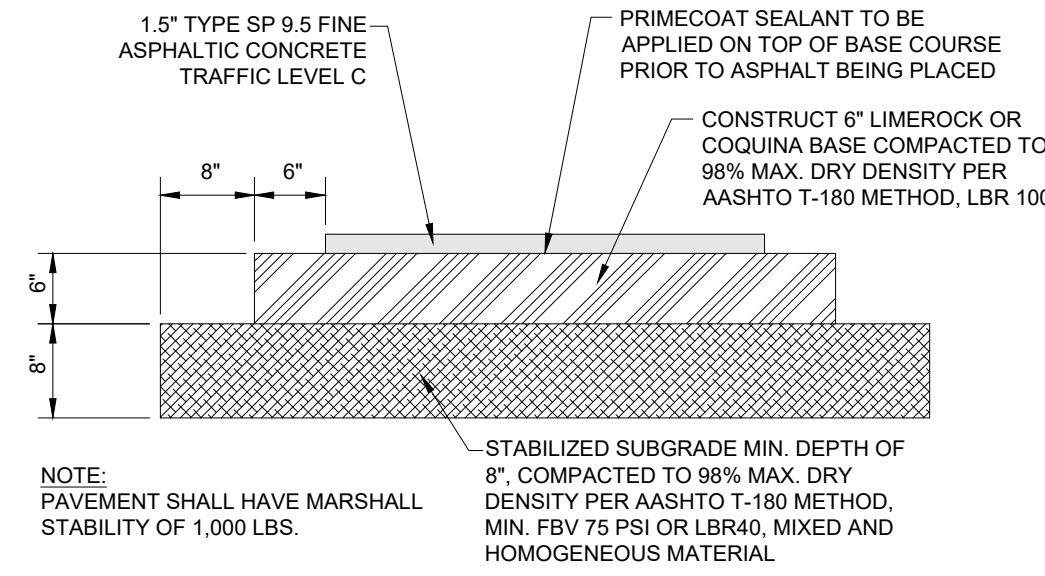
PROJECT No.: 22-1036
 DRAWN BY: LG
 CHECKED BY: JM
 DATE: 04/20/2023
 2301036 HORIZONTAL CONTROL

SHEET TITLE:
HORIZONTAL CONTROL PLAN

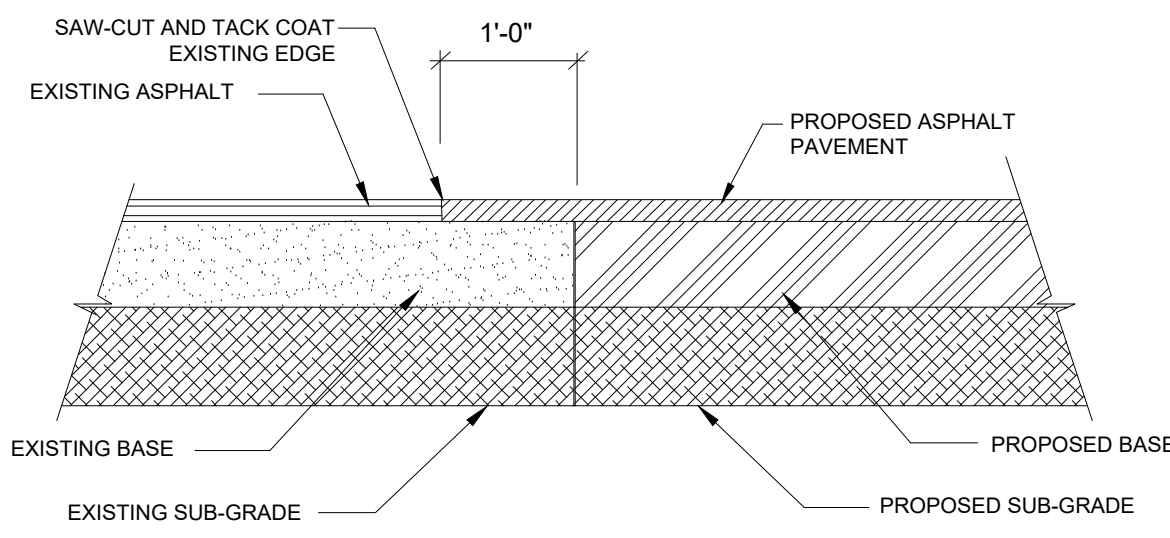
SHEET NUMBER:
01

NOTE:
 THE PROPERTY OWNER, CONTRACTOR, AND AUTHORIZED REPRESENTATIVES SHALL PROVIDE PICKUP, REMOVAL, AND DISPOSAL OF LITTER WITHIN THE PROJECT LIMITS AND SHALL BE RESPONSIBLE FOR MAINTENANCE OF THE AREA FROM THE EDGE OF PAVEMENT TO THE PROPERTY LINE WITHIN THE CITY'S RIGHT-OF-WAY IN ACCORDANCE WITH CITY CODE, SECTION 41.08(g).

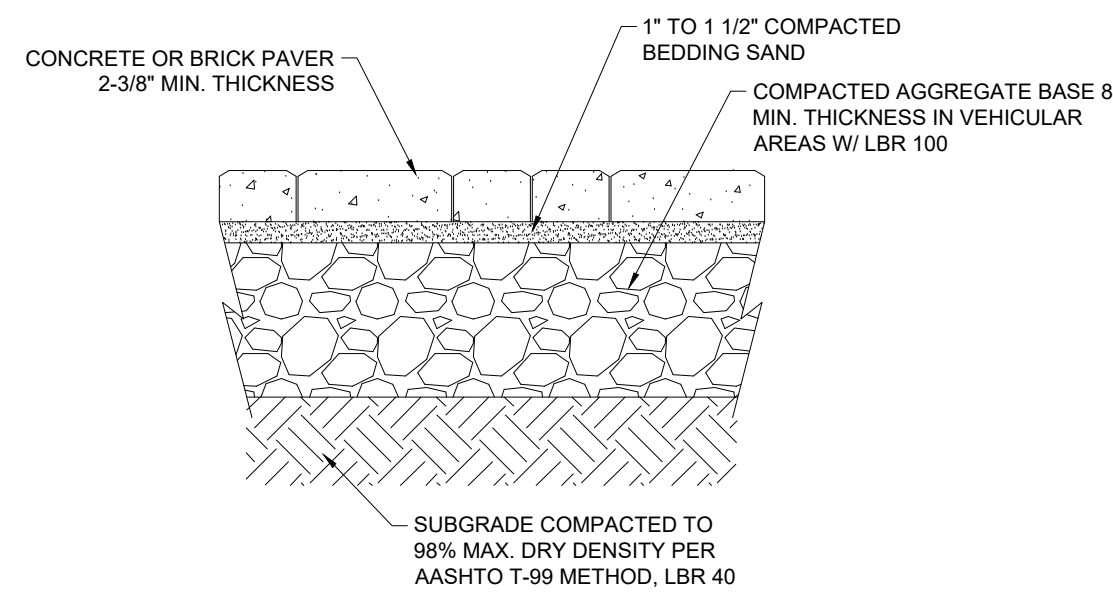




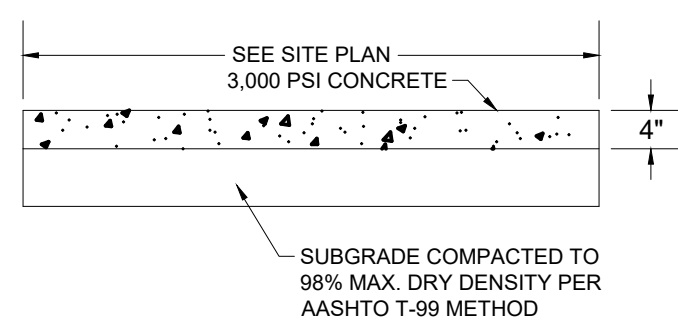
TYPICAL ONSITE ASPHALT PAVEMENT DETAILS
N.T.S.



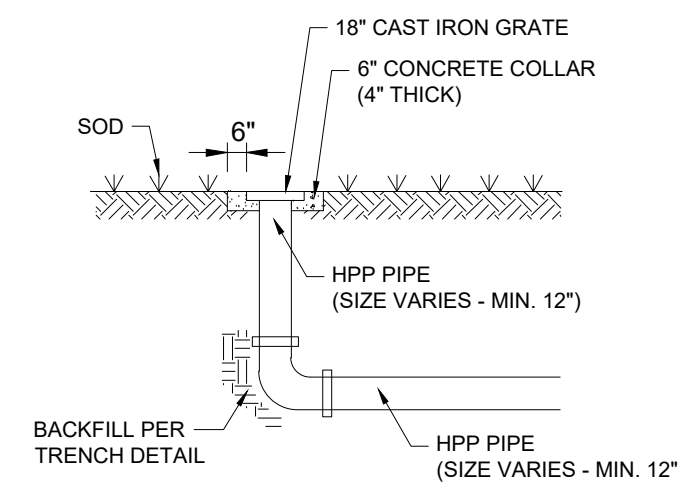
ASPHALT PAVEMENT SAWCUT & BUTTJOINT DETAIL
N.T.S.



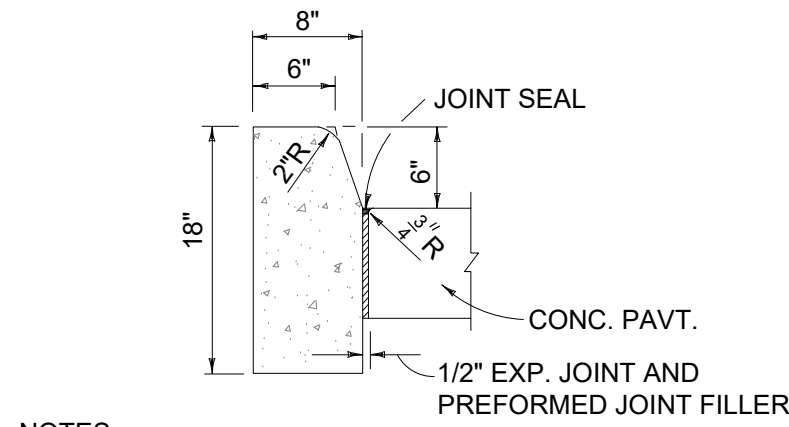
CONCRETE OR BRICK PAVER DETAIL
N.T.S.



CONCRETE SIDEWALK DETAIL
N.T.S.



YARD DRAIN DETAIL
N.T.S.

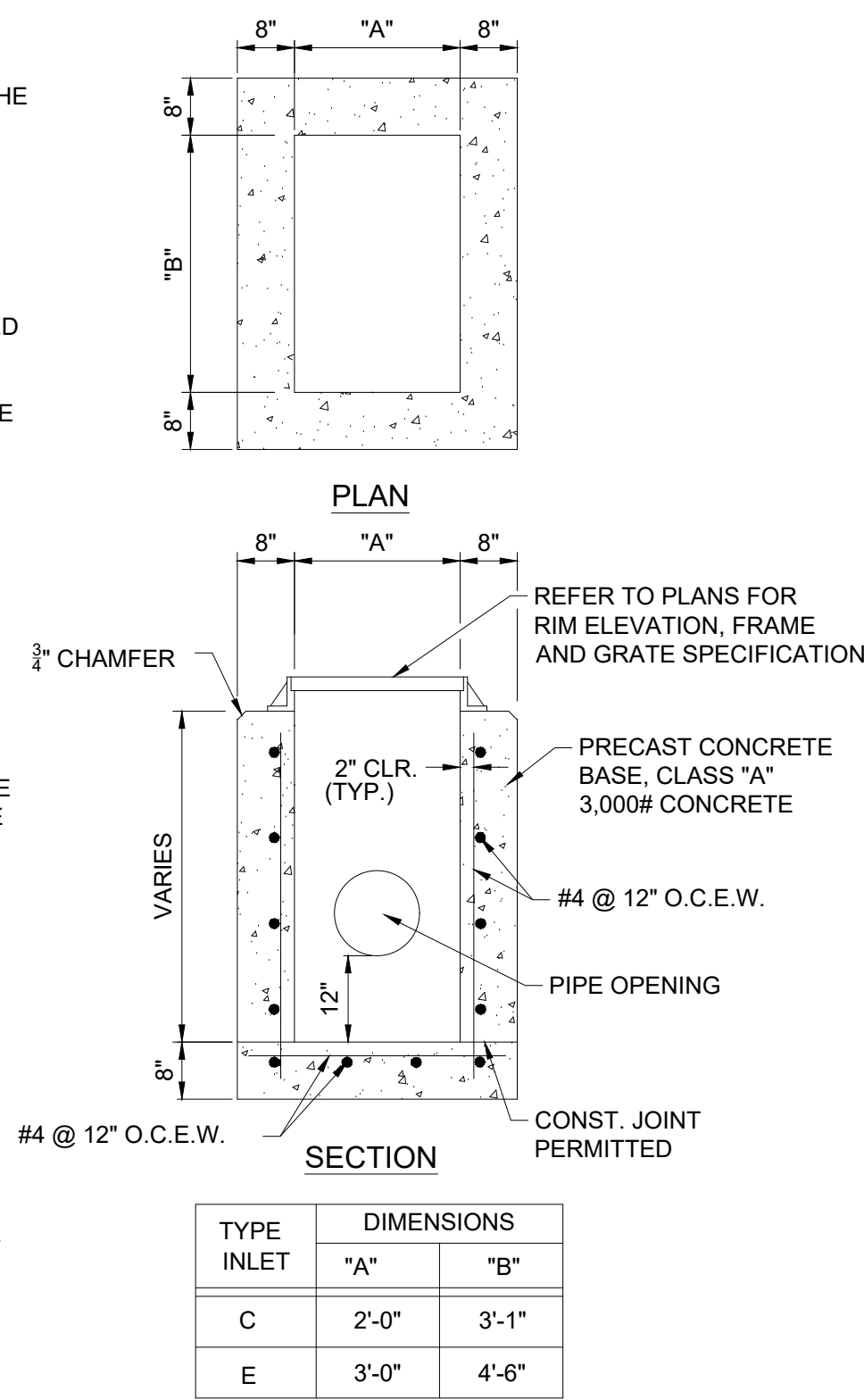


NOTES:
FOR USE ADJACENT TO CONCRETE OR FLEXIBLE PAVEMENT, CONCRETE SHOWN, EXPANSION JOINT, PREFORMED JOINT FILLER AND JOINT SEAL ARE REQUIRED BETWEEN CURBS AND CONCRETE PAVEMENT ONLY, SEE DIAGRAM RIGHT.

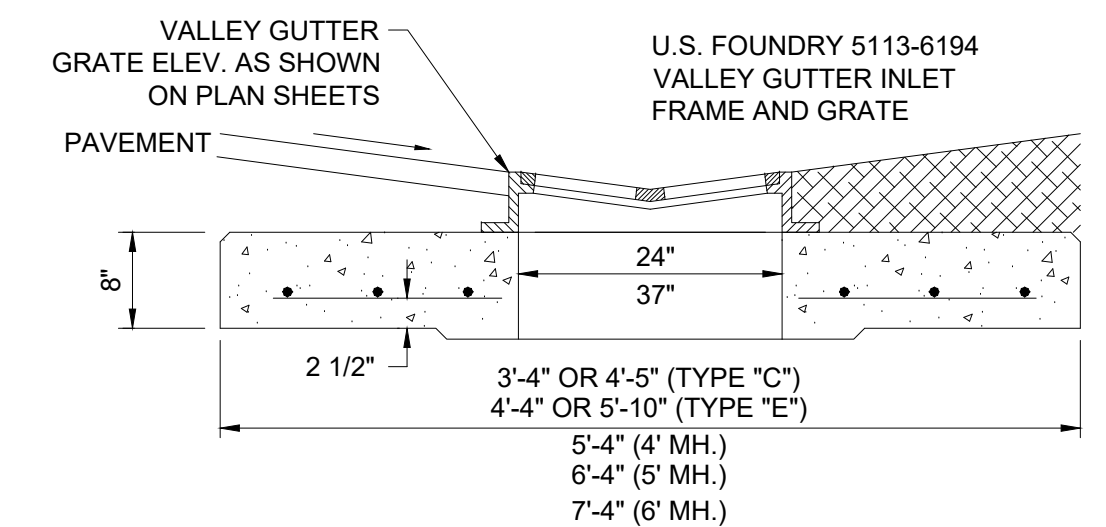
TYPE "D" CURB
N.T.S.

INLET AND MANHOLE NOTES:

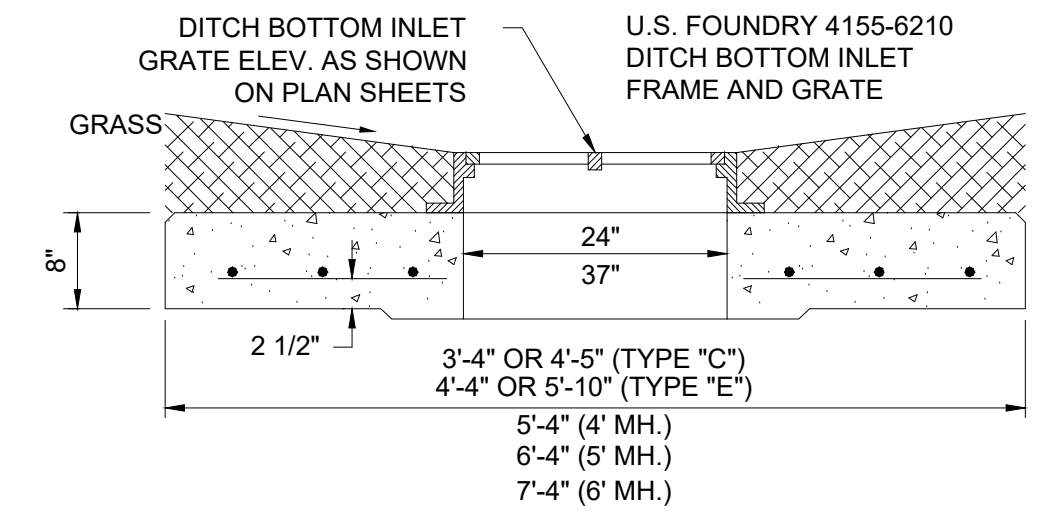
1. ALL INLET CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CURRENT F.D.O.T. STANDARDS INDEX # 201 & 232.
2. SHOP DRAWINGS SHALL BE SUBMITTED TO THE ENGINEER.
3. STRUCTURES WITH SKEWED PIPE CONNECTIONS SHALL BE INSTALLED IN ACCORDANCE WITH F.D.O.T. STANDARDS INDEX # 200, SHEET 3 OF 5 AND INDEX # 201, SHEET 5 OF 5. ROUND STRUCTURES ARE TO BE USED WHERE SKEW ANGLES EXCEED MAXIMUM ALLOWED OR WHEN PIPE CONNECTION WOULD BE AT THE CORNER OF A RECTANGULAR STRUCTURE. RECTANGULAR STRUCTURES WITH A CORNER OPENING IS ONLY TO BE USED WHEN A ROUND STRUCTURE IS NOT POSSIBLE.
4. ALL EXPOSED CORNERS AND EDGES SHALL BE CHAMFERED 3/4".
5. INLETS AND MANHOLES SHALL BE PRECAST CLASS "A" 3,000 P.S.I. CONCRETE.
6. FRAMES AND GRATES SHALL BE CAST IRON AND IN ACCORDANCE WITH F.D.O.T. SPECIFICATIONS.
7. INLET GRATES SHALL BE U.S. FOUNDRY OR EQUAL.
8. ALL INLET GRATES SHALL HAVE LOCKING CHAINS IN ACCORDANCE WITH F.D.O.T. STANDARD INDEX #201, OR AN APPROVED ALTERNATE SECURING MECHANISM.
9. REINFORCING STEEL SHALL CONFORM TO A.S.T.M. 615 GRADE 40.
10. AS AN ALTERNATE, PRECAST CIRCULAR (MANHOLES) MAY BE FURNISHED IN ACCORDANCE WITH F.D.O.T. STANDARD INDEX #200 WITH WALLS AND REINFORCEMENT IN ACCORDANCE WITH A.S.T.M. C-478 SPECIFICATIONS, EXCEPT THAT MINIMUM WALL THICKNESS SHALL BE 6".
- 11) ALL INLETS IN GRASSED AREAS SHALL BE STANDARD TYPE "C" & "E" INLETS HAVING CONCRETE COLLARS. ALL INLETS IN GRASSED AREA AND ADJACENT TO GRASSED AREAS SHALL BE PROTECTED FROM SCOUR BY INSTALLATION OF A 4' WIDE PERIMETER APRON OF SOD. ADDITIONALLY ALL INLET GRATES SHALL BE WRAPPED WITH FILTER CLOTH DURING CONSTRUCTION.



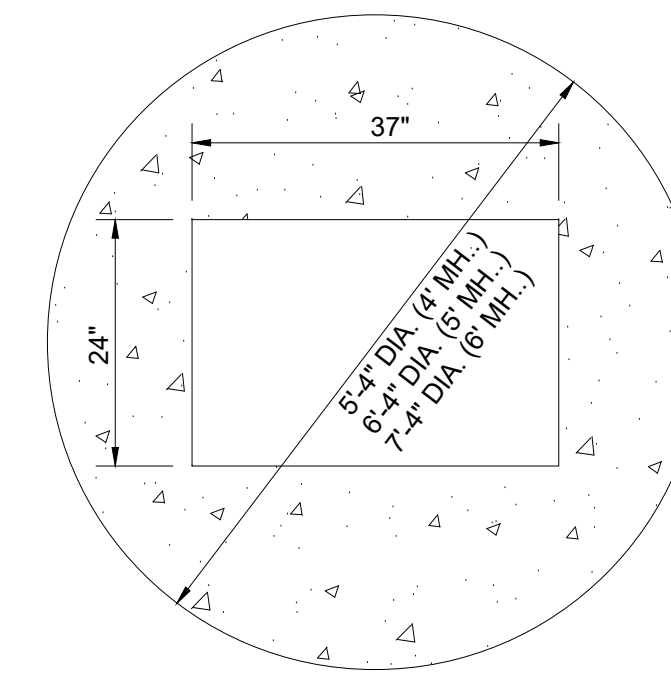
STANDARD TYPE "C" & "E" INLET DETAIL
N.T.S.



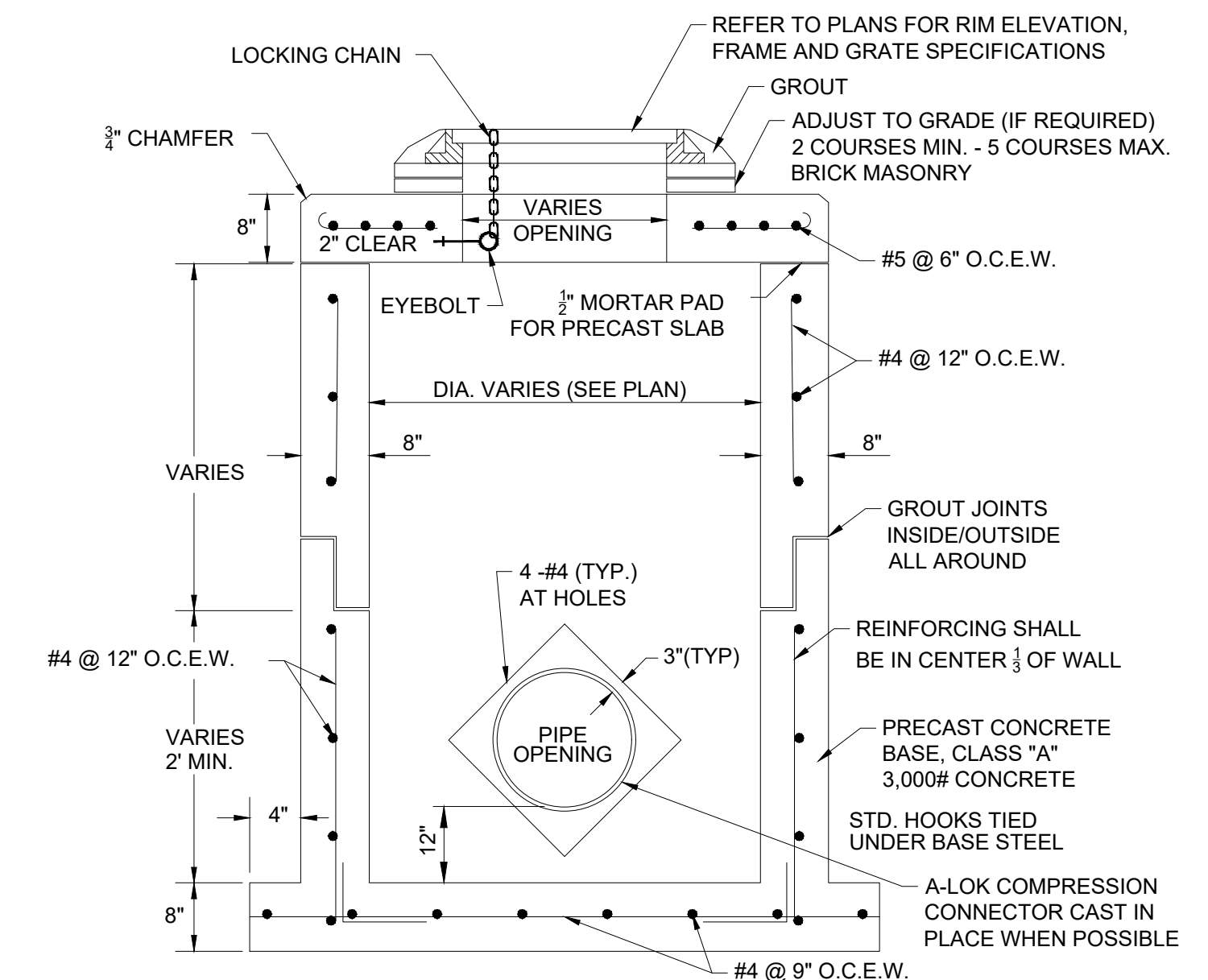
VALLEY GUTTER INLET (VGI) DETAIL
N.T.S.



DITCH BOTTOM INLET (DBI) DETAIL
N.T.S.



PLAN (4', 5' OR 6' MH)
N.T.S.



- NOTES:
1. ALL REINFORCEMENT TO MEET CURRENT F.D.O.T. SPECIFICATIONS.
 2. THIS STRUCTURE MAY BE SUBSTITUTED WITH OTHER STRUCTURES ONLY IF THE STANDARDS HAVE BEEN MET.

STORM MANHOLE DETAIL
N.T.S.

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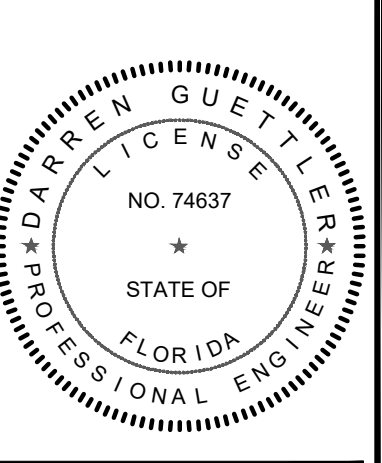
NOTE: ALL GRADES SHOWN ARE IN NAVD88

REVISIONS:	
BY: DATE:	COMMENT:
JM 11-10-23	REVISED PER C.O.S. COMMENTS
JM 12-07-23	REVISED PER C.O.S. COMMENTS
JM 03-29-24	REV. STM CHAMBERS UTILITIES FOR FPL
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PROJECT No.: 22-1036
DRAWN BY: LG
CHECKED BY: JM
DATE: 04/20/2023
CAD ID: 22-1036 PGD DETAILS

SHEET TITLE:
PAVING, GRADING, & DRAINAGE DETAILS

SHEET NUMBER:
03



PROJECT INFORMATION	
ENGINEERED PRODUCT MANAGER	
ADS SALES REP	
PROJECT NO.	



VICTORIA GARDEN INNS

STUART, FL, USA

MC-7200 STORMTECH CHAMBER SPECIFICATIONS

- CHAMBERS SHALL BE STORMTECH MC-7200.
- CHAMBERS SHALL BE ARCH-SHAPED AND SHALL BE MANUFACTURED FROM VIRGIN, IMPACT-MODIFIED POLYPROPYLENE COPOLYMERS.
- CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2418, "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS" CHAMBER CLASSIFICATION 60x101.
- CHAMBER ROWS SHALL PROVIDE CONTINUOUS, UNOBSTRUCTED INTERNAL SPACE WITH NO INTERNAL SUPPORTS THAT WOULD IMPEDE FLOW OR LIMIT ACCESS FOR INSPECTION.
- THE STRUCTURAL DESIGN OF THE CHAMBERS, THE STRUCTURAL BACKFILL, AND THE INSTALLATION REQUIREMENTS SHALL ENSURE THAT THE LOAD FACTORS SPECIFIED IN THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, SECTION 12.12, ARE MET FOR: 1) LONG-DURATION DEAD LOADS AND 2) SHORT-DURATION LIVE LOADS, BASED ON THE AASHTO DESIGN TRUCK WITH CONSIDERATION FOR IMPACT AND MULTIPLE VEHICLE PRESENCES.
- CHAMBERS SHALL BE DESIGNED, TESTED AND ALLOWABLE LOAD CONFIGURATIONS DETERMINED IN ACCORDANCE WITH ASTM F2787, "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS". LOAD CONFIGURATIONS SHALL INCLUDE: 1) INSTANTANEOUS (<1 MIN) AASHTO DESIGN TRUCK LIVE LOAD ON MINIMUM COVER 2) MAXIMUM PERMANENT (75-YR) COVER LOAD AND 3) ALLOWABLE COVER WITH PARKED (1-WEEK) AASHTO DESIGN TRUCK.
- REQUIREMENTS FOR HANDLING AND INSTALLATION:
 - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
 - TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 3".
 - TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, a) THE ARCH STIFFNESS CONSTANT SHALL BE GREATER THAN OR EQUAL TO 450 LBS/FT/%. THE ASC IS DEFINED IN SECTION 6.2.8 OF ASTM F2418. AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.
- ONLY CHAMBERS THAT ARE APPROVED BY THE SITE DESIGN ENGINEER WILL BE ALLOWED. UPON REQUEST BY THE SITE DESIGN ENGINEER OR OWNER, THE CHAMBER MANUFACTURER SHALL SUBMIT A STRUCTURAL EVALUATION FOR APPROVAL BEFORE DELIVERING CHAMBERS TO THE PROJECT SITE AS FOLLOWS:
 - THE STRUCTURAL EVALUATION SHALL BE SEALED BY A REGISTERED PROFESSIONAL ENGINEER.
 - THE STRUCTURAL EVALUATION SHALL DEMONSTRATE THAT THE SAFETY FACTORS ARE GREATER THAN OR EQUAL TO 1.95 FOR DEAD LOAD AND 1.75 FOR LIVE LOAD, THE MINIMUM REQUIRED BY ASTM F2787 AND BY SECTIONS 3 AND 12.12 OF THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS FOR THERMOPLASTIC PIPE.
 - THE TEST DERIVED CREEP MODULUS AS SPECIFIED IN ASTM F2418 SHALL BE USED FOR PERMANENT DEAD LOAD DESIGN EXCEPT THAT IT SHALL BE THE 75-YEAR MODULUS USED FOR DESIGN.
- CHAMBERS AND END CAPS SHALL BE PRODUCED AT AN ISO 9001 CERTIFIED MANUFACTURING FACILITY.

IMPORTANT - NOTES FOR THE BIDDING AND INSTALLATION OF MC-7200 CHAMBER SYSTEM

- STORMTECH MC-7200 CHAMBERS SHALL NOT BE INSTALLED UNTIL THE MANUFACTURER'S REPRESENTATIVE HAS COMPLETED A PRE-CONSTRUCTION MEETING WITH THE INSTALLERS.
- STORMTECH MC-7200 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH MC-7200 CONSTRUCTION GUIDE".
- CHAMBERS ARE NOT TO BE BACKFILLED WITH A DOZER OR EXCAVATOR SITUATED OVER THE CHAMBERS. STORMTECH RECOMMENDS 3 BACKFILL METHODS:
 - STONESHOOTER LOCATED OFF THE CHAMBER BED.
 - BACKFILL AS ROWS ARE BUILT USING AN EXCAVATOR ON THE FOUNDATION STONE OR SUBGRADE.
 - BACKFILL FROM OUTSIDE THE EXCAVATION USING A LONG BOOM HOE OR EXCAVATOR.
- THE FOUNDATION STONE SHALL BE LEVELED AND COMPACTED PRIOR TO PLACING CHAMBERS.
- JOINTS BETWEEN CHAMBERS SHALL BE PROPERLY SEATED PRIOR TO PLACING STONE.
- MAINTAIN MINIMUM - 9" (230 mm) SPACING BETWEEN THE CHAMBER ROWS.
- INLET AND OUTLET MANIFOLDS MUST BE INSERTED A MINIMUM OF 12" (300 mm) INTO CHAMBER END CAPS.
- EMBEDMENT STONE SURROUNDING CHAMBERS MUST BE A CLEAN, CRUSHED, ANGULAR STONE MEETING THE AASHTO M43 DESIGNATION OF #3 OR #4.
- STONE SHALL BE BROUGHT UP EVENLY AROUND CHAMBERS SO AS NOT TO DISTORT THE CHAMBER SHAPE. STONE DEPTHS SHOULD NEVER DIFFER BY MORE THAN 12" (300 mm) BETWEEN ADJACENT CHAMBER ROWS.
- STONE MUST BE PLACED ON THE TOP CENTER OF THE CHAMBER TO ANCHOR THE CHAMBERS IN PLACE AND PRESERVE ROW SPACING.
- THE CONTRACTOR MUST REPORT ANY DISCREPANCIES WITH CHAMBER FOUNDATION MATERIAL BEARING CAPACITIES TO THE SITE DESIGN ENGINEER.
- ADS RECOMMENDS THE USE OF "FLEXSTORM CATCH IT" INSERTS DURING CONSTRUCTION FOR ALL INLETS TO PROTECT THE SUBSURFACE STORMWATER MANAGEMENT SYSTEM FROM CONSTRUCTION SITE RUNOFF.

NOTES FOR CONSTRUCTION EQUIPMENT

- STORMTECH MC-7200 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH MC-7200 CONSTRUCTION GUIDE".
- THE USE OF EQUIPMENT OVER MC-7200 CHAMBERS IS LIMITED:
 - NO EQUIPMENT IS ALLOWED ON BARE CHAMBERS.
 - NO RUBBER TIRED LOADER, DUMP TRUCK, OR EXCAVATORS ARE ALLOWED UNTIL PROPER FILL DEPTHS ARE REACHED IN ACCORDANCE WITH THE "STORMTECH MC-3500/MC-7200 CONSTRUCTION GUIDE".
 - WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT CAN BE FOUND IN THE "STORMTECH MC-7200 CONSTRUCTION GUIDE".
- FULL 36" (900 mm) OF STABILIZED COVER MATERIALS OVER THE CHAMBERS IS REQUIRED FOR DUMP TRUCK TRAVEL OR DUMPING.

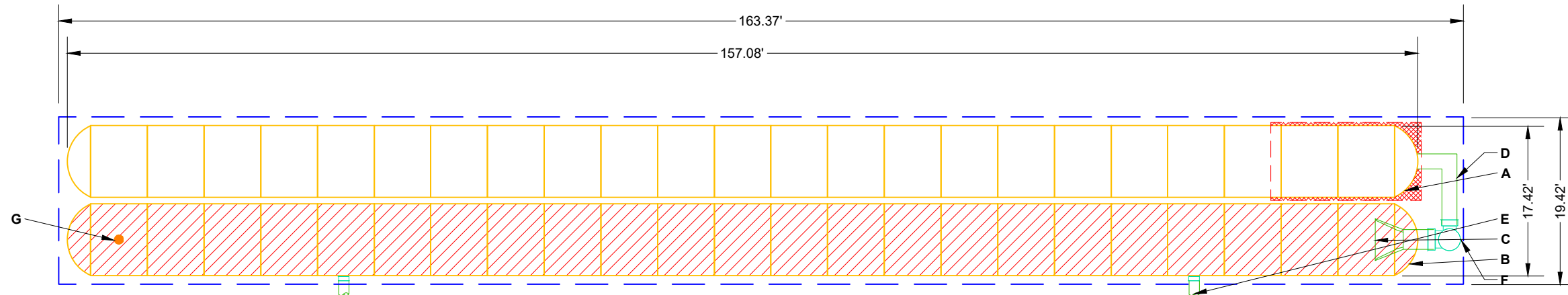
USE OF A DOZER TO PUSH EMBEDMENT STONE BETWEEN THE ROWS OF CHAMBERS MAY CAUSE DAMAGE TO CHAMBERS AND IS NOT AN ACCEPTABLE BACKFILL METHOD. ANY CHAMBERS DAMAGED BY USING THE "DUMP AND PUSH" METHOD ARE NOT COVERED UNDER THE STORMTECH STANDARD WARRANTY.

CONTACT STORMTECH AT 1-888-892-2694 WITH ANY QUESTIONS ON INSTALLATION REQUIREMENTS OR WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT.

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PROPOSED LAYOUT		PROPOSED ELEVATIONS:		*INVERT ABOVE BASE OF CHAMBER				
				PART TYPE	ITEM ON LAYOUT	DESCRIPTION	INVERT*	MAX FLOW
46	STORMTECH MC-7200 CHAMBERS	MAXIMUM ALLOWABLE GRADE (TOP OF PAVEMENT/UNPAVED):	12.50					
4	STORMTECH MC-7200 END CAPS	MINIMUM ALLOWABLE GRADE (UNPAVED WITH TRAFFIC):	8.00	PREFABRICATED END CAP	A	18" TOP PARTIAL CUT END CAP, PART#: MC7200IEPP18T / TYP OF ALL 18" TOP CONNECTIONS	29.36"	
12	STONE ABOVE (in)	MINIMUM ALLOWABLE GRADE (UNPAVED NO TRAFFIC):	7.50	PREFABRICATED END CAP	B	24" BOTTOM PARTIAL CUT END CAP, PART#: MC7200IEPP24B / TYP OF ALL 24" BOTTOM CONNECTIONS AND ISOLATOR PLUS ROWS	2.26"	
12	STONE BELOW (in)	MINIMUM ALLOWABLE GRADE (TOP OF RIGID CONCRETE PAVEMENT):	7.50					
40	STONE VOID	MINIMUM ALLOWABLE GRADE (BASE OF FLEXIBLE PAVEMENT):	7.50	FLAMP	C	INSTALL FLAMP ON 24" ACCESS PIPE / PART#: MCFLAMP		
13832	INSTALLED SYSTEM VOLUME (CF) (PERIMETER STONE INCLUDED) (COVER STONE INCLUDED) (BASE STONE INCLUDED)	TOP OF STONE:	6.50	MANIFOLD	D	18" x 18" TOP MANIFOLD, ADS N-12	29.36"	
		TOP OF MC-7200 CHAMBER:	5.50	INSERTA TEE	E	12" DIAMETER (TYP 2 PLACES)	8.00"	
		18" x 18" TOP MANIFOLD INVERT:	2.95	NYLOPLAST (INLET W/ ISO PLUS ROW)	F	30" DIAMETER (24.00" SUMP MIN)		5.5 CFS IN
3172	SYSTEM AREA (SF)	24" ISOLATOR ROW PLUS INVERT:	0.69					
365.6	SYSTEM PERIMETER (ft)	BOTTOM OF MC-7200 CHAMBER:	0.50	INSPECTION PORT	G	6" SEE DETAIL		
		BOTTOM OF STONE:	-0.50					



- ISOLATOR ROW PLUS (SEE DETAIL)
- PLACE MINIMUM 17.50' OF ADSPLUS125 WOVEN GEOTEXTILE OVER BEDDING STONE AND UNDERNEATH CHAMBER FEET FOR SCOUR PROTECTION AT ALL CHAMBER INLET ROWS
- BED LIMITS

NOTES

- MANIFOLD SIZE TO BE DETERMINED BY SITE DESIGN ENGINEER. SEE TECH NOTE #6.32 FOR MANIFOLD SIZING GUIDANCE.
- DUE TO THE ADAPTATION OF THIS CHAMBER SYSTEM TO SPECIFIC SITE AND DESIGN CONSTRAINTS, IT MAY BE NECESSARY TO CUT AND COUPLE ADDITIONAL PIPE TO STANDARD MANIFOLD COMPONENTS IN THE FIELD.
- THE SITE DESIGN ENGINEER MUST REVIEW ELEVATIONS AND IF NECESSARY ADJUST GRADING TO ENSURE THE CHAMBER COVER REQUIREMENTS ARE MET.
- THIS CHAMBER SYSTEM WAS DESIGNED WITHOUT SITE-SPECIFIC INFORMATION ON SOIL CONDITIONS OR BEARING CAPACITY. THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR DETERMINING THE SUITABILITY OF THE SOIL AND PROVIDING THE BEARING CAPACITY OF THE INSITU SOILS. THE BASE STONE DEPTH MAY BE INCREASED OR DECREASED ONCE THIS INFORMATION IS PROVIDED.
- **NOT FOR CONSTRUCTION:** THIS LAYOUT IS FOR DIMENSIONAL PURPOSES ONLY TO PROVE CONCEPT & THE REQUIRED STORAGE VOLUME CAN BE ACHIEVED ON SITE.

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VICTORIA GARDEN INNS

STUART, FL, USA

DATE: _____ DRAWN: JH

PROJECT #: _____ CHECKED: N/A

NO.	DATE	DRW	CHK	DESCRIPTION

888-892-2694 | WWW.STORMTECH.COM

4640 TRUJMAN BLVD
HILLIARD, OH 43026
1-800-733-7473

30
15
0

SHEET
6 OF 15

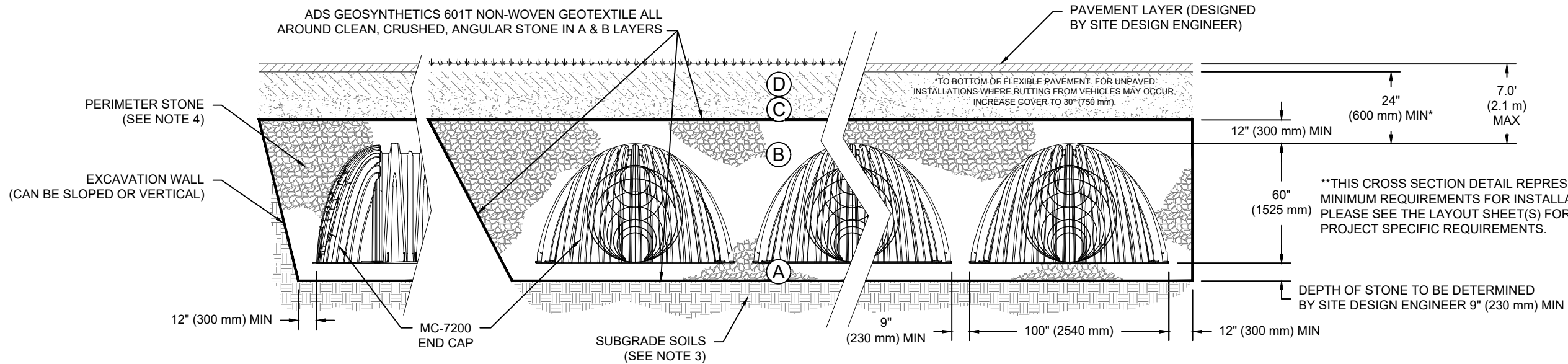
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ACCEPTABLE FILL MATERIALS: STORMTECH MC-7200 CHAMBER SYSTEMS

MATERIAL LOCATION	DESCRIPTION	AASHTO MATERIAL CLASSIFICATIONS	COMPACTION / DENSITY REQUIREMENT
D	FINAL FILL: FILL MATERIAL FOR LAYER 'D' STARTS FROM THE TOP OF THE 'C' LAYER TO THE BOTTOM OF FLEXIBLE PAVEMENT OR UNPAVED FINISHED GRADE ABOVE. NOTE THAT PAVEMENT SUBBASE MAY BE PART OF THE 'D' LAYER	N/A	PREPARE PER SITE DESIGN ENGINEER'S PLANS. PAVED INSTALLATIONS MAY HAVE STRINGENT MATERIAL AND PREPARATION REQUIREMENTS.
C	INITIAL FILL: FILL MATERIAL FOR LAYER 'C' STARTS FROM THE TOP OF THE EMBEDMENT STONE ('B' LAYER) TO 24" (600 mm) ABOVE THE TOP OF THE CHAMBER. NOTE THAT PAVEMENT SUBBASE MAY BE A PART OF THE 'C' LAYER.	AASHTO M145 ¹ A-1, A-2-4, A-3 OR AASHTO M43 ¹ 3, 357, 4, 467, 5, 56, 57, 6, 67, 68, 7, 78, 8, 89, 9, 10	BEGIN COMPACTIONS AFTER 24" (600 mm) OF MATERIAL OVER THE CHAMBERS IS REACHED. COMPACT ADDITIONAL LAYERS IN 12" (300 mm) MAX LIFTS TO A MIN. 95% PROCTOR DENSITY FOR WELL GRADED MATERIAL AND 95% RELATIVE DENSITY FOR PROCESSED AGGREGATE MATERIALS.
B	EMBEDMENT STONE: FILL SURROUNDING THE CHAMBERS FROM THE FOUNDATION STONE ('A' LAYER) TO THE 'C' LAYER ABOVE.	AASHTO M43 ¹ 3, 357, 4, 467, 5, 56, 57	NO COMPACTION REQUIRED.
A	FOUNDATION STONE: FILL BELOW CHAMBERS FROM THE SUBGRADE UP TO THE FOOT (BOTTOM) OF THE CHAMBER.	AASHTO M43 ¹ 3, 357, 4, 467, 5, 56, 57	PLATE COMPACT OR ROLL TO ACHIEVE A FLAT SURFACE. ^{2,3}

PLEASE NOTE:

1. THE LISTED AASHTO DESIGNATIONS ARE FOR GRADATIONS ONLY. THE STONE MUST ALSO BE CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR NO. 4 (AASHTO M43) STONE".
2. STORMTECH COMPACTION REQUIREMENTS ARE MET FOR 'A' LOCATION MATERIALS WHEN PLACED AND COMPACTED IN 9" (230 mm) (MAX) LIFTS USING TWO FULL COVERAGES WITH A VIBRATORY COMPACTOR.
3. WHERE INFILTRATION SURFACES MAY BE COMPROMISED BY COMPACTION, FOR STANDARD DESIGN LOAD CONDITIONS, A FLAT SURFACE MAY BE ACHIEVED BY RAKING OR DRAGGING WITHOUT COMPACTION EQUIPMENT. FOR SPECIAL LOAD DESIGNS, CONTACT STORMTECH FOR COMPACTION REQUIREMENTS.
4. ONCE LAYER 'C' IS PLACED, ANY SOIL/MATERIAL CAN BE PLACED IN LAYER 'D' UP TO THE FINISHED GRADE. MOST PAVEMENT SUBBASE SOILS CAN BE USED TO REPLACE THE MATERIAL REQUIREMENTS OF LAYER 'C' OR 'D' AT THE SITE DESIGN ENGINEER'S DISCRETION.
5. WHERE RECYCLED CONCRETE AGGREGATE IS USED IN LAYERS 'A' OR 'B' THE MATERIAL SHOULD ALSO MEET THE ACCEPTABILITY CRITERIA OUTLINED IN TECHNICAL NOTE 6.20 "RECYCLED CONCRETE STRUCTURAL BACKFILL".



NOTES:

1. CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2418, "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS" CHAMBER CLASSIFICATION 60x101
2. MC-7200 CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
3. THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR ASSESSING THE BEARING RESISTANCE (ALLOWABLE BEARING CAPACITY) OF THE SUBGRADE SOILS AND THE DEPTH OF FOUNDATION STONE WITH CONSIDERATION FOR THE RANGE OF EXPECTED SOIL MOISTURE CONDITIONS.
4. PERIMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS.
5. REQUIREMENTS FOR HANDLING AND INSTALLATION:
 - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
 - TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 3".
 - TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, a) THE ARCH STIFFNESS CONSTANT SHALL BE GREATER THAN OR EQUAL TO 450 LBS/FT/%. THE ASC IS DEFINED IN SECTION 6.2.8 OF ASTM F2418. AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.



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VICTORIA GARDEN INNS

STUART, FL, USA

DATE: _____ DRAWN: JH CHECKED: N/A

PROJECT #: _____ DESCRIPTION

DATE _____ DRW _____ CHK _____

888-892-2694 | WWW.STORMTECH.COM

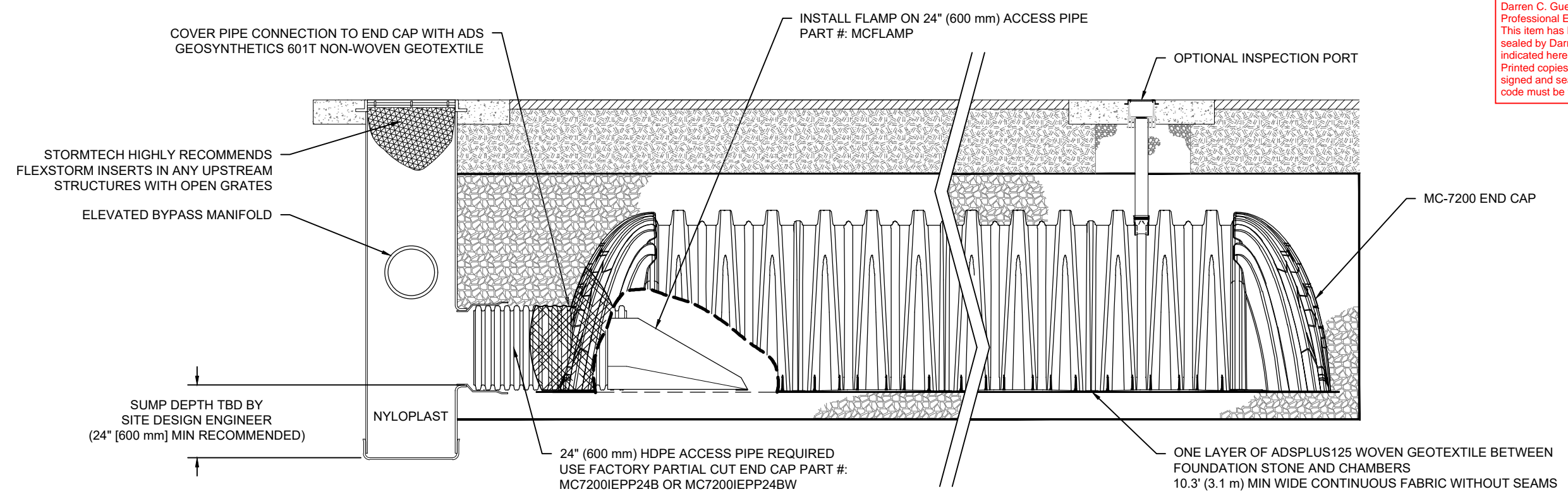
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SHEET

7 OF 15

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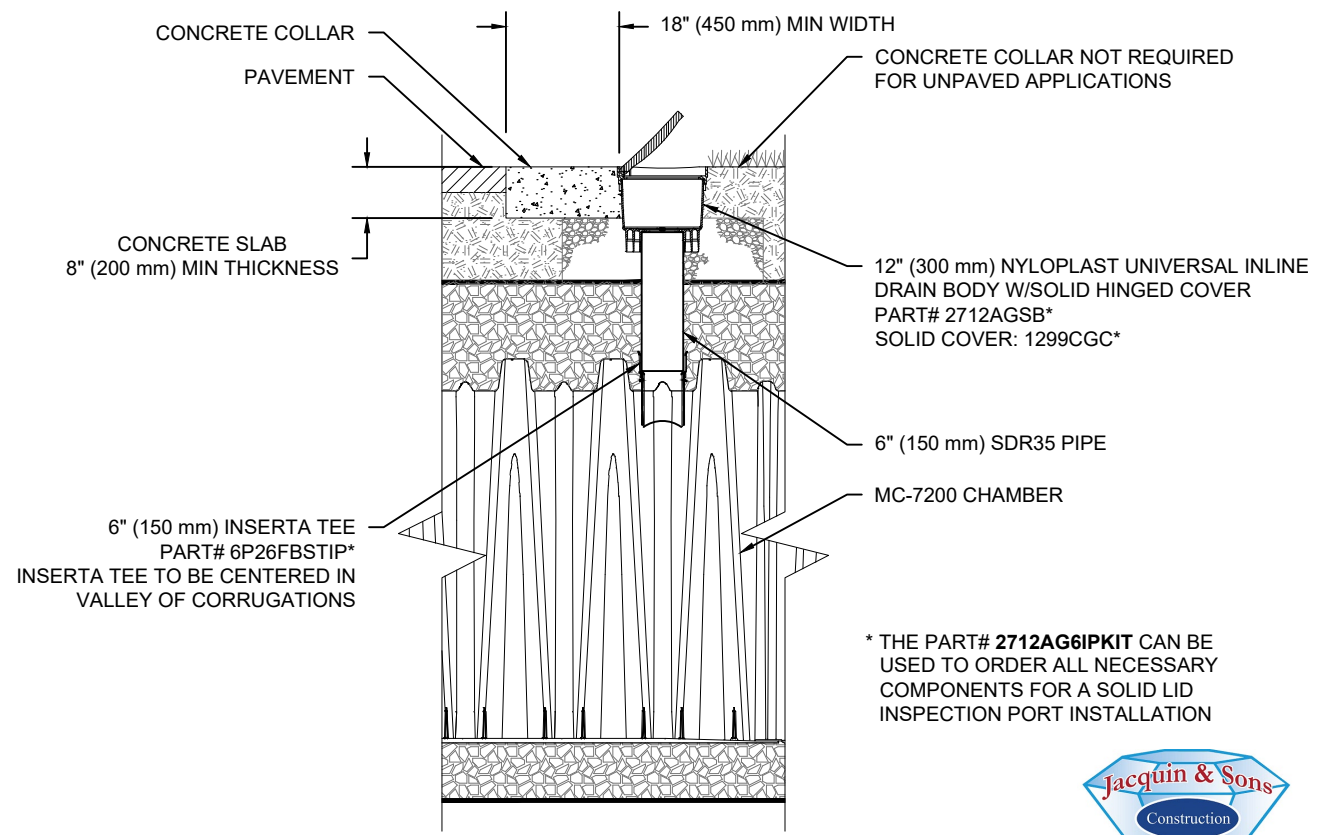
MC-7200 ISOLATOR ROW PLUS DETAIL
 NTS

INSPECTION & MAINTENANCE

- STEP 1) INSPECT ISOLATOR ROW PLUS FOR SEDIMENT
- A. INSPECTION PORTS (IF PRESENT)
 - A.1. REMOVE/OPEN LID ON NYLOPLAST INLINE DRAIN
 - A.2. REMOVE AND CLEAN FLEXSTORM FILTER IF INSTALLED
 - A.3. USING A FLASHLIGHT AND STADIA ROD, MEASURE DEPTH OF SEDIMENT AND RECORD ON MAINTENANCE LOG
 - A.4. LOWER A CAMERA INTO ISOLATOR ROW PLUS FOR VISUAL INSPECTION OF SEDIMENT LEVELS (OPTIONAL)
 - A.5. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.
 - B. ALL ISOLATOR PLUS ROWS
 - B.1. REMOVE COVER FROM STRUCTURE AT UPSTREAM END OF ISOLATOR ROW PLUS
 - B.2. USING A FLASHLIGHT, INSPECT DOWN THE ISOLATOR ROW PLUS THROUGH OUTLET PIPE
 - i) MIRRORS ON POLES OR CAMERAS MAY BE USED TO AVOID A CONFINED SPACE ENTRY
 - ii) FOLLOW OSHA REGULATIONS FOR CONFINED SPACE ENTRY IF ENTERING MANHOLE
 - B.3. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.
- STEP 2) CLEAN OUT ISOLATOR ROW PLUS USING THE JETVAC PROCESS
- A. A FIXED CULVERT CLEANING NOZZLE WITH REAR FACING SPREAD OF 45" (1.1 m) OR MORE IS PREFERRED
 - B. APPLY MULTIPLE PASSES OF JETVAC UNTIL BACKFLUSH WATER IS CLEAN
 - C. VACUUM STRUCTURE SUMP AS REQUIRED
- STEP 3) REPLACE ALL COVERS, GRATES, FILTERS, AND LIDS; RECORD OBSERVATIONS AND ACTIONS.
- STEP 4) INSPECT AND CLEAN BASINS AND MANHOLES UPSTREAM OF THE STORMTECH SYSTEM.

NOTES

1. INSPECT EVERY 6 MONTHS DURING THE FIRST YEAR OF OPERATION. ADJUST THE INSPECTION INTERVAL BASED ON PREVIOUS OBSERVATIONS OF SEDIMENT ACCUMULATION AND HIGH WATER ELEVATIONS.
2. CONDUCT JETTING AND VACTORING ANNUALLY OR WHEN INSPECTION SHOWS THAT MAINTENANCE IS NECESSARY.



MC-7200 6" (150 mm) INSPECTION PORT DETAIL
 NTS

* THE PART# 2712AG6IPKIT CAN BE USED TO ORDER ALL NECESSARY COMPONENTS FOR A SOLID LID INSPECTION PORT INSTALLATION



VICTORIA GARDEN INNS		STUART, FL, USA
DATE:	DRAWN: JH	CHECKED: N/A
PROJECT #:		
DESCRIPTION		
DATE	DRW	CHK
StormTech® Chamber System		
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SHEET 8 OF 15		

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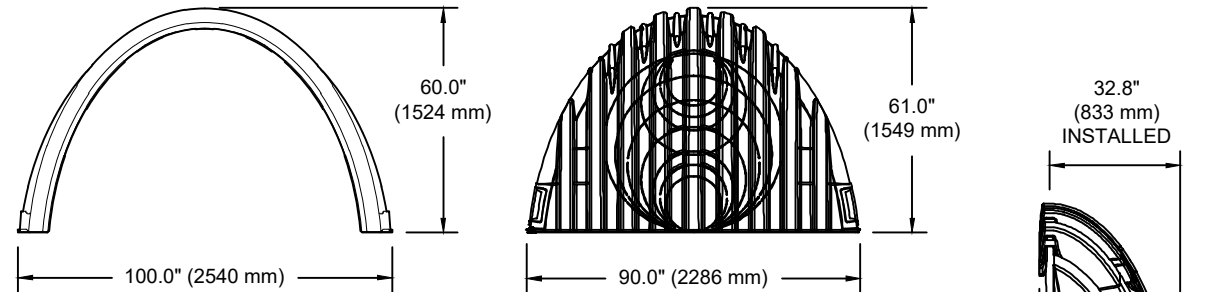
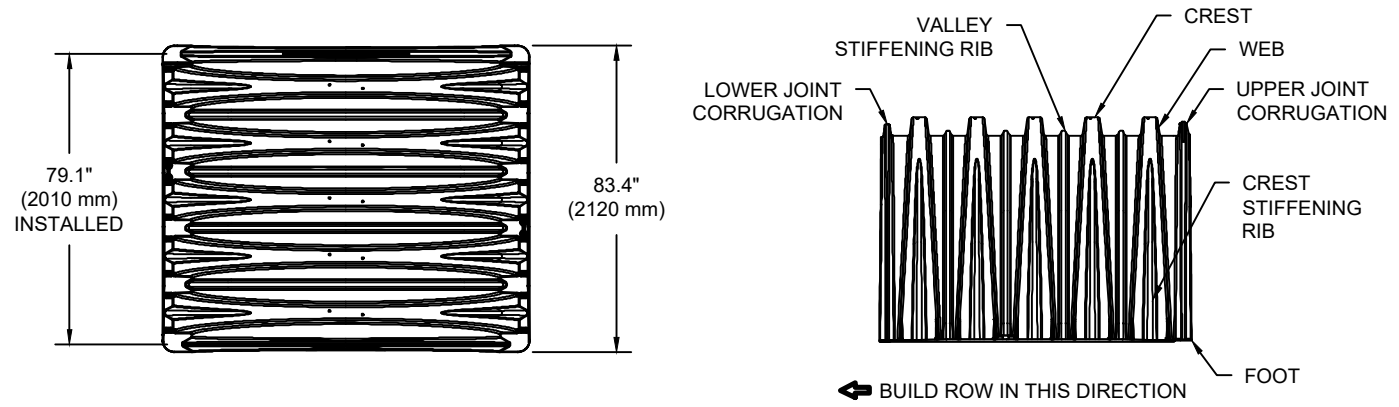
Construction Manager

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MC-7200 TECHNICAL SPECIFICATION

NTS



NOMINAL CHAMBER SPECIFICATIONS

SIZE (W X H X INSTALLED LENGTH)	100.0" X 60.0" X 79.1"	(2540 mm X 1524 mm X 2010 mm)
CHAMBER STORAGE	175.9 CUBIC FEET	(4.98 m ³)
MINIMUM INSTALLED STORAGE*	267.3 CUBIC FEET	(7.56 m ³)
WEIGHT (NOMINAL)	205 lbs.	(92.9 kg)

NOMINAL END CAP SPECIFICATIONS

SIZE (W X H X INSTALLED LENGTH)	90.0" X 61.0" X 32.8"	(2286 mm X 1549 mm X 833 mm)
END CAP STORAGE	39.5 CUBIC FEET	(1.12 m ³)
MINIMUM INSTALLED STORAGE*	115.3 CUBIC FEET	(3.26 m ³)
WEIGHT (NOMINAL)	90 lbs.	(40.8 kg)

*ASSUMES 12" (305 mm) STONE ABOVE, 9" (229 mm) STONE FOUNDATION AND BETWEEN CHAMBERS, 12" (305 mm) STONE PERIMETER IN FRONT OF END CAPS AND 40% STONE POROSITY.

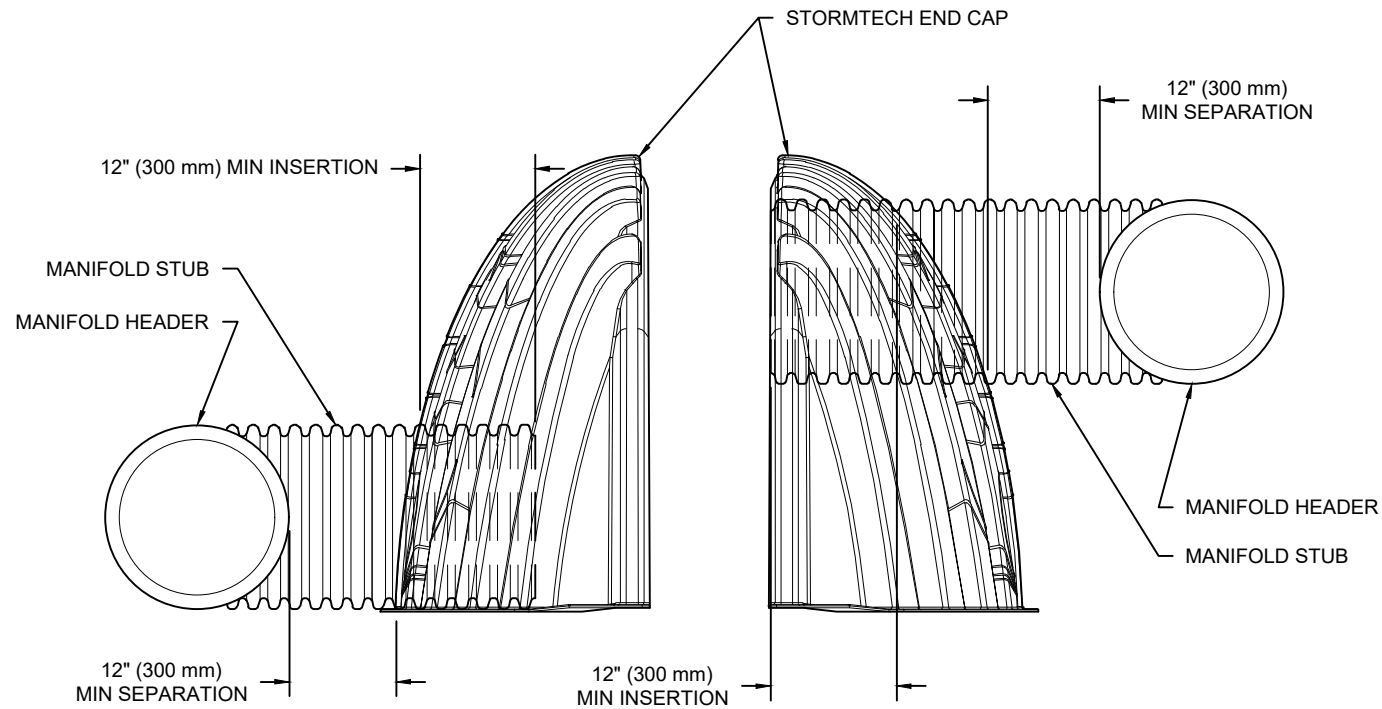
PARTIAL CUT HOLES AT BOTTOM OF END CAP FOR PART NUMBERS ENDING WITH "B"
 PARTIAL CUT HOLES AT TOP OF END CAP FOR PART NUMBERS ENDING WITH "T"
 END CAPS WITH A PREFABRICATED WELDED STUB END WITH "W"

PART #	STUB	B	C
MC7200IEPP06T	6" (150 mm)	42.54" (1081 mm)	---
MC7200IEPP06B	---	---	0.86" (22 mm)
MC7200IEPP08T	8" (200 mm)	40.50" (1029 mm)	---
MC7200IEPP08B	---	---	1.01" (26 mm)
MC7200IEPP10T	10" (250 mm)	38.37" (975 mm)	---
MC7200IEPP10B	---	---	1.33" (34 mm)
MC7200IEPP12T	12" (300 mm)	35.69" (907 mm)	---
MC7200IEPP12B	---	---	1.55" (39 mm)
MC7200IEPP15T	15" (375 mm)	32.72" (831 mm)	---
MC7200IEPP15B	---	---	1.70" (43 mm)
MC7200IEPP18T	18" (450 mm)	29.36" (746 mm)	---
MC7200IEPP18TW		---	1.97" (50 mm)
MC7200IEPP18B		---	---
MC7200IEPP18BW	24" (600 mm)	23.05" (585 mm)	---
MC7200IEPP24T		---	2.26" (57 mm)
MC7200IEPP24B		---	---
MC7200IEPP24BW	30" (750 mm)	---	2.95" (75 mm)
MC7200IEPP30BW		---	3.25" (83 mm)
MC7200IEPP36BW		---	3.55" (90 mm)
MC7200IEPP42BW	42" (1050 mm)	---	---

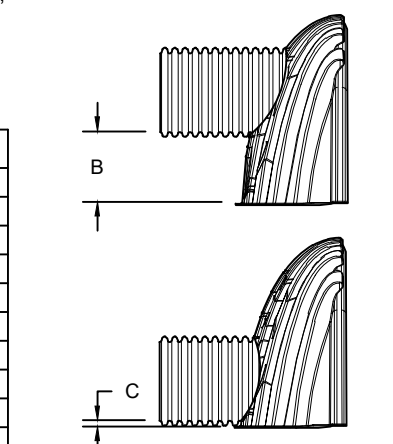
NOTE: ALL DIMENSIONS ARE NOMINAL

MC-SERIES END CAP INSERTION DETAIL

NTS



NOTE: MANIFOLD STUB MUST BE LAID HORIZONTAL FOR A PROPER FIT IN END CAP OPENING.



CUSTOM PREFABRICATED INVERTS ARE AVAILABLE UPON REQUEST. INVENTORIED MANIFOLDS INCLUDE 12-24" (300-600 mm) SIZE ON SIZE AND 15-48" (375-1200 mm) ECCENTRIC MANIFOLDS. CUSTOM INVERT LOCATIONS ON THE MC-7200 END CAP CUT IN THE FIELD ARE NOT RECOMMENDED FOR PIPE SIZES GREATER THAN 10" (250 mm). THE INVERT LOCATION IN COLUMN 'B' ARE THE HIGHEST POSSIBLE FOR THE PIPE SIZE.

VICTORIA GARDEN INNS

STUART, FL, USA

DATE:

DRAWN: JH

CHECKED: N/A

PROJECT #:

DESCRIPTION

CHK

DATE

DRW

CHK

DATE

CHK

DATE

CHK

DATE

CHK

StormTech[®]
 Chamber System

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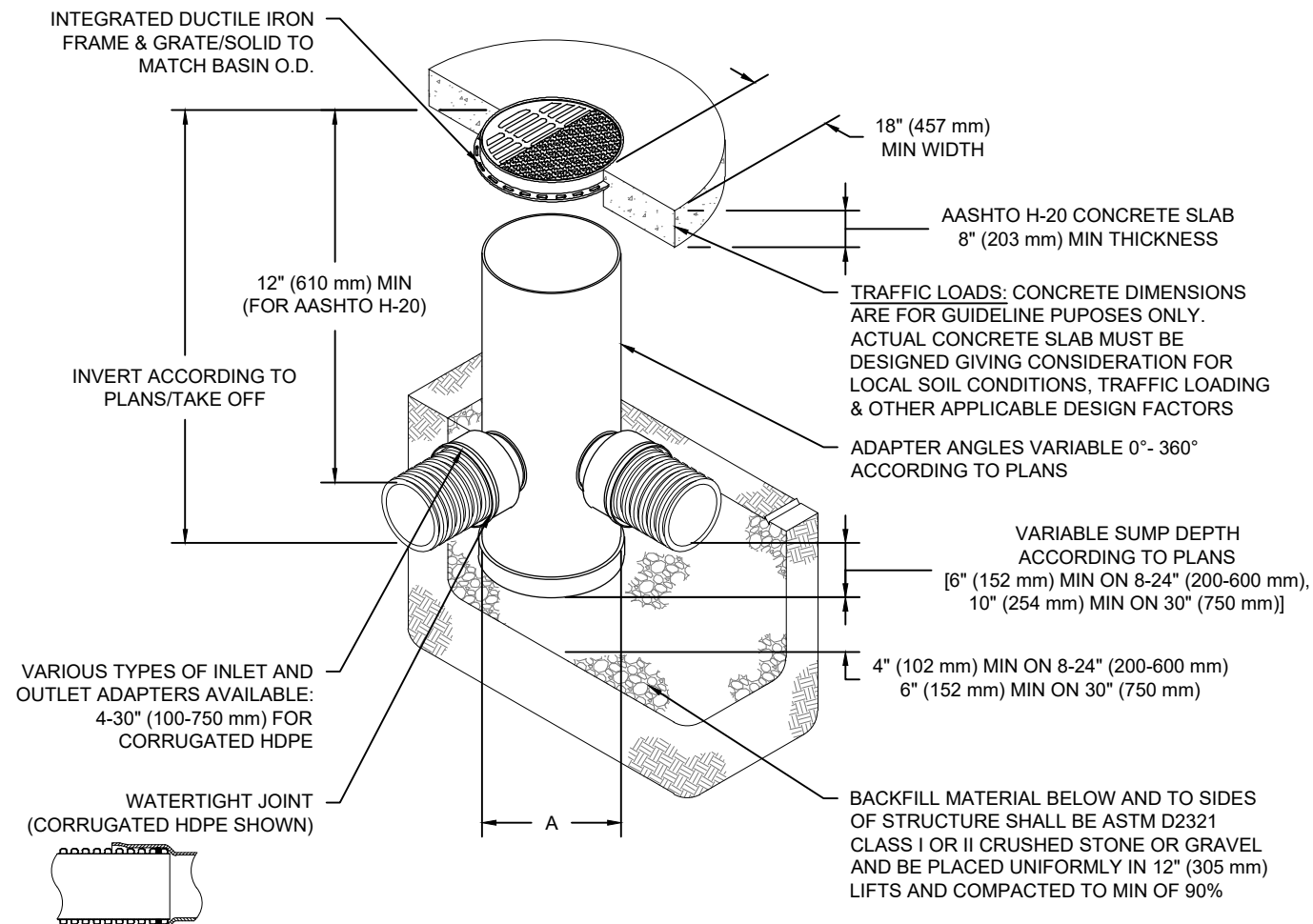
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 1-800-733-7473



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NYLOPLAST DRAIN BASIN

NTS



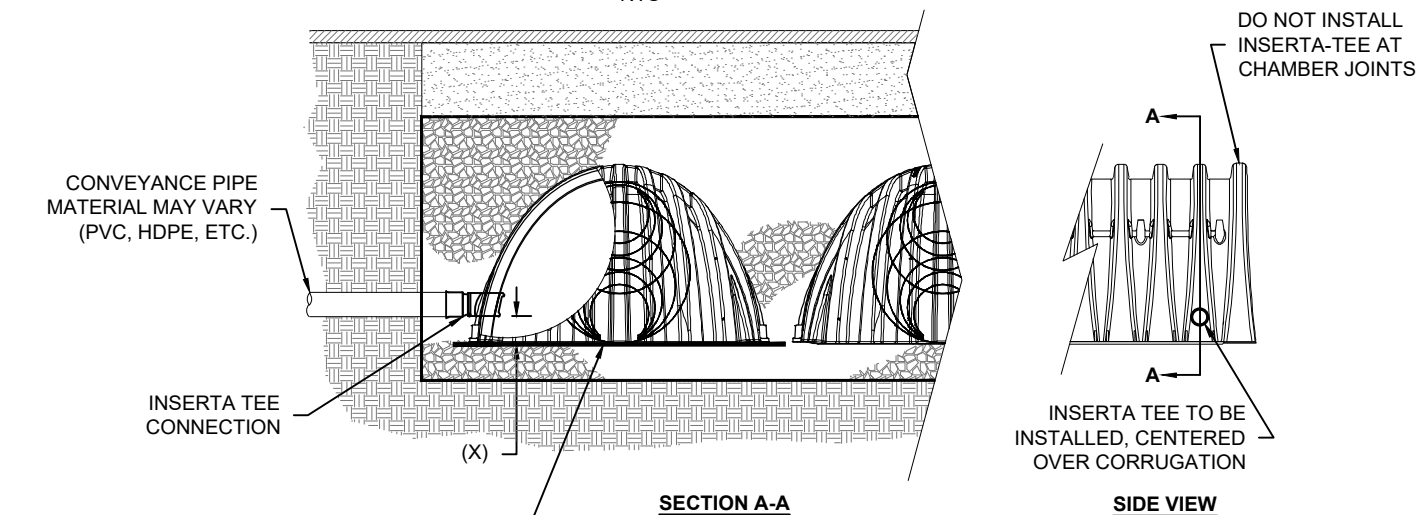
NOTES

- 8-30" (200-750 mm) GRATES/SOLID COVERS SHALL BE DUCTILE IRON PER ASTM A536 GRADE 70-50-05
- 12-30" (300-750 mm) FRAMES SHALL BE DUCTILE IRON PER ASTM A536 GRADE 70-50-05
- DRAIN BASIN TO BE CUSTOM MANUFACTURED ACCORDING TO PLAN DETAILS
- DRAINAGE CONNECTION STUB JOINT TIGHTNESS SHALL CONFORM TO ASTM D3212 FOR CORRUGATED HDPE (ADS & HANCOR DUAL WALL) & SDR 35 PVC
- FOR COMPLETE DESIGN AND PRODUCT INFORMATION: WWW.NYLOPLAST-US.COM
- TO ORDER CALL: 800-821-6710

A	PART #	GRATE/SOLID COVER OPTIONS		
8" (200 mm)	2808AG	PEDESTRIAN LIGHT DUTY	STANDARD LIGHT DUTY	SOLID LIGHT DUTY
10" (250 mm)	2810AG	PEDESTRIAN LIGHT DUTY	STANDARD LIGHT DUTY	SOLID LIGHT DUTY
12" (300 mm)	2812AG	PEDESTRIAN AASHTO H-10	STANDARD AASHTO H-20	SOLID AASHTO H-20
15" (375 mm)	2815AG	PEDESTRIAN AASHTO H-10	STANDARD AASHTO H-20	SOLID AASHTO H-20
18" (450 mm)	2818AG	PEDESTRIAN AASHTO H-10	STANDARD AASHTO H-20	SOLID AASHTO H-20
24" (600 mm)	2824AG	PEDESTRIAN AASHTO H-10	STANDARD AASHTO H-20	SOLID AASHTO H-20
30" (750 mm)	2830AG	PEDESTRIAN AASHTO H-20	STANDARD AASHTO H-20	SOLID AASHTO H-20

INSERTA TEE DETAIL

NTS



PLACE ADSPLUS WOVEN GEOTEXTILE (CENTERED ON INSERTA-TEE INLET) OVER BEDDING STONE FOR SCOUR PROTECTION AT SIDE INLET CONNECTIONS. GEOTEXTILE MUST EXTEND 6" (150 mm) PAST CHAMBER FOOT

NOTES:

- PART NUMBERS WILL VARY BASED ON INLET PIPE MATERIALS. CONTACT STORMTECH FOR MORE INFORMATION.
- CONTACT ADS ENGINEERING SERVICES IF INSERTA TEE INLET MUST BE RAISED AS NOT ALL INVERTS ARE POSSIBLE.

CHAMBER	MAX DIAMETER OF INSERTA TEE	HEIGHT FROM BASE OF CHAMBER (X)
SC-310	6" (150 mm)	4" (100 mm)
SC-740	10" (250 mm)	4" (100 mm)
SC-800	10" (250 mm)	4" (100 mm)
DC-780	10" (250 mm)	4" (100 mm)
MC-3500	12" (300 mm)	6" (150 mm)
MC-4500	12" (300 mm)	8" (200 mm)
MC-7200	12" (300 mm)	8" (200 mm)

INSERTA TEE FITTINGS AVAILABLE FOR SDR 26, SDR 35, SCH 40 IPS GASKETED & SOLVENT WELD, N-12, HP STORM, C-900 OR DUCTILE IRON

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STUART, FL, USA
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CHECKED: N/A

DATE	CHK	DRW	DESCRIPTION

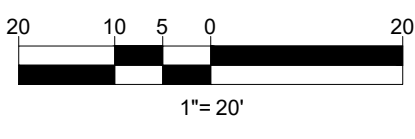
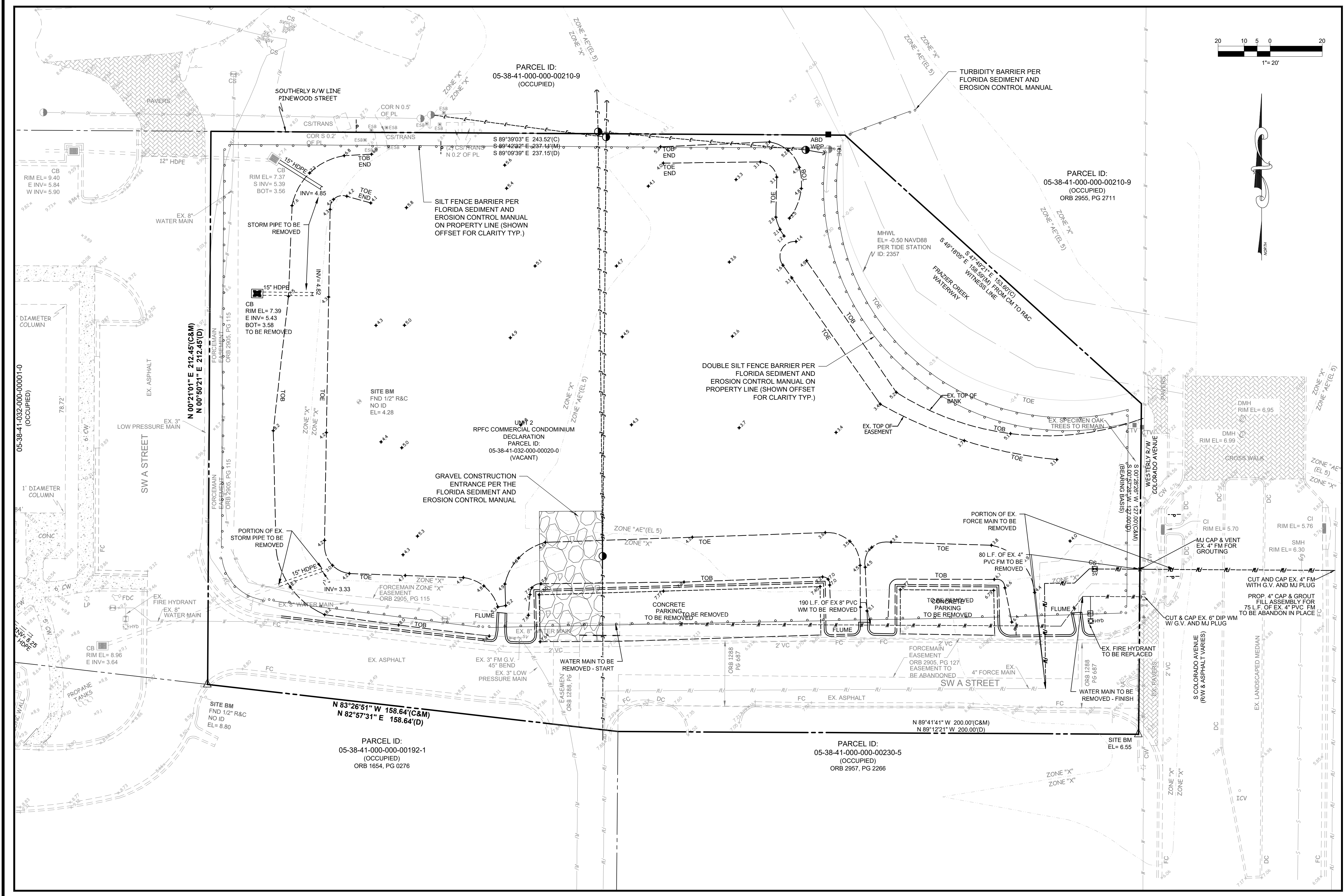
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NOTE:
 EROSION AND SEDIMENT CONTROL - CONTRACTOR IS RESPONSIBLE FOR PROVIDING AND MAINTAINING EROSION AND SEDIMENT CONTROL USING THE LATEST F.D.O.T. STANDARDS. BALED HAY, STRAW, AND SILTATION BARRIERS WILL BE INSTALLED WHERE NEEDED TO PREVENT SILTATION OF ADJACENT PROPERTY, PUBLIC RIGHT-OF-WAY, WETLANDS AND WATERWAYS. THESE WILL REMAIN IN PLACE UNTIL GRASSING OR SODDING HAS BEEN COMPLETED OR UNTIL SILTATION AND EROSION ARE NO LONGER A THREAT TO ADJACENT PROPERTIES AND WATERWAYS. STREET SWEEPING SHALL BE PERFORMED ANYTIME SEDIMENT HAS BEEN TRACKED ONTO THE ADJACENT ROADWAYS FROM THE SITE OR THE SITE DRIVEWAYS. SHOULD DUST BECOME AN ISSUE, ALL UNSTABILIZED AREAS SHALL BE WETTED DOWN SUFFICIENTLY IN ORDER TO PREVENT DUST.

SILT FENCE SHALL BE IN PLACE PRIOR TO CLEARING
 ONSITE PROJECT AREA: 70,754 S.F. (1.62 AC)
 TOTAL AREA TO BE CLEARED: 70,754 S.F. (1.62 AC)

LEGEND	
— WM	EXISTING WATER MAIN
— FM	EXISTING FORCE MAIN
— S	EXISTING GRAVITY SEWER MAIN
---	EXISTING EDGE OF PAVEMENT TO REMAIN
---	EXISTING EDGE OF PAVEMENT TO BE REMOVED
■	CONCRETE TO BE REMOVED
☆	EXISTING LIGHT POLE TO BE REMOVED
—	SILT FENCE

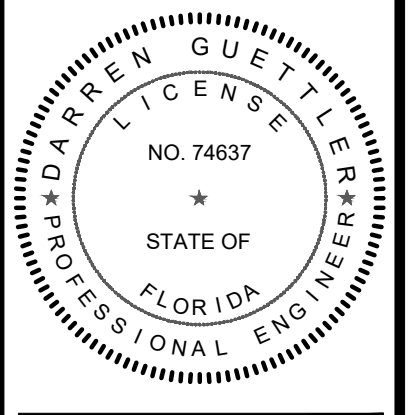


REVISIONS:	
BY:	DATE:
JM	11-10-23
JM	12-07-23
JM	03-29-24
JM	07-26-24

NOT FOR CONSTRUCTION

PROJECT:
**VICTORIA GARDEN INNS
 HOTEL/RETAIL**

CLIENT:
**RAJ
 PATEL**
 CITY OF STUART
 FLORIDA



DARREN GUETTLER, PE
 FLORIDA LICENSE No. 74637
 7/26/24

PROJECT No.: 22-1036
 DRAWN BY: LC
 CHECKED BY: JM
 DATE: 04/20/2023
 CAD ID.: 22-1036 SWPPP

SHEET TITLE:
**DEMOLITION AND
 EROSION
 CONTROL PLAN**

SHEET NUMBER:
13



Construction Manager

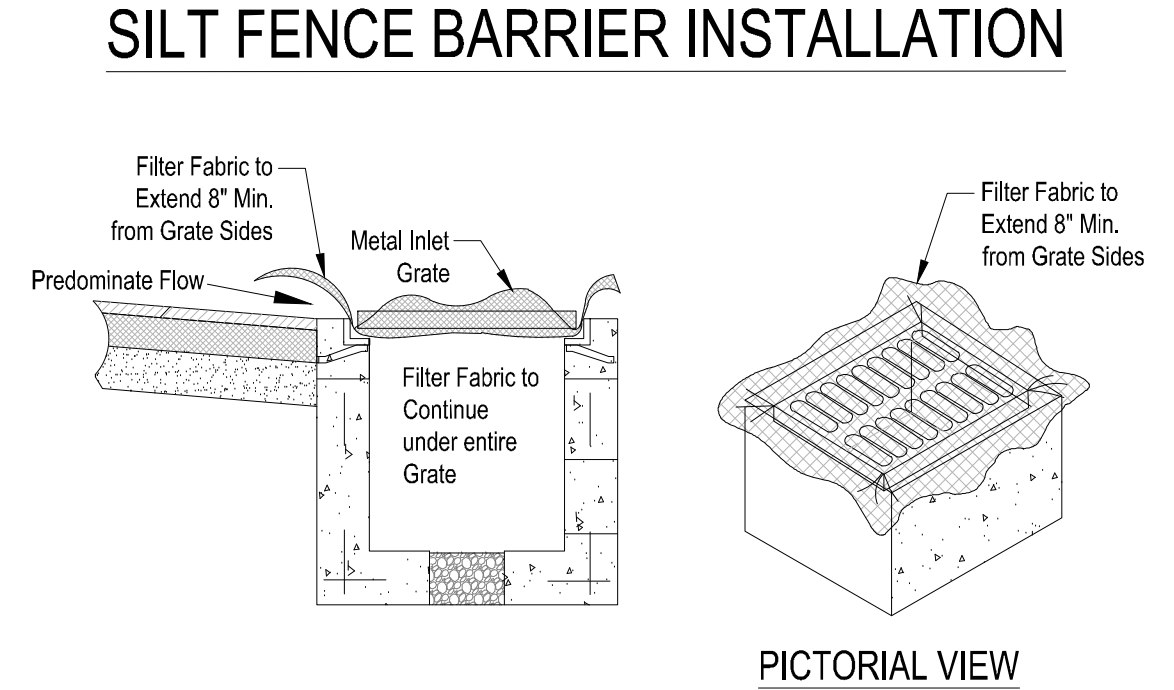
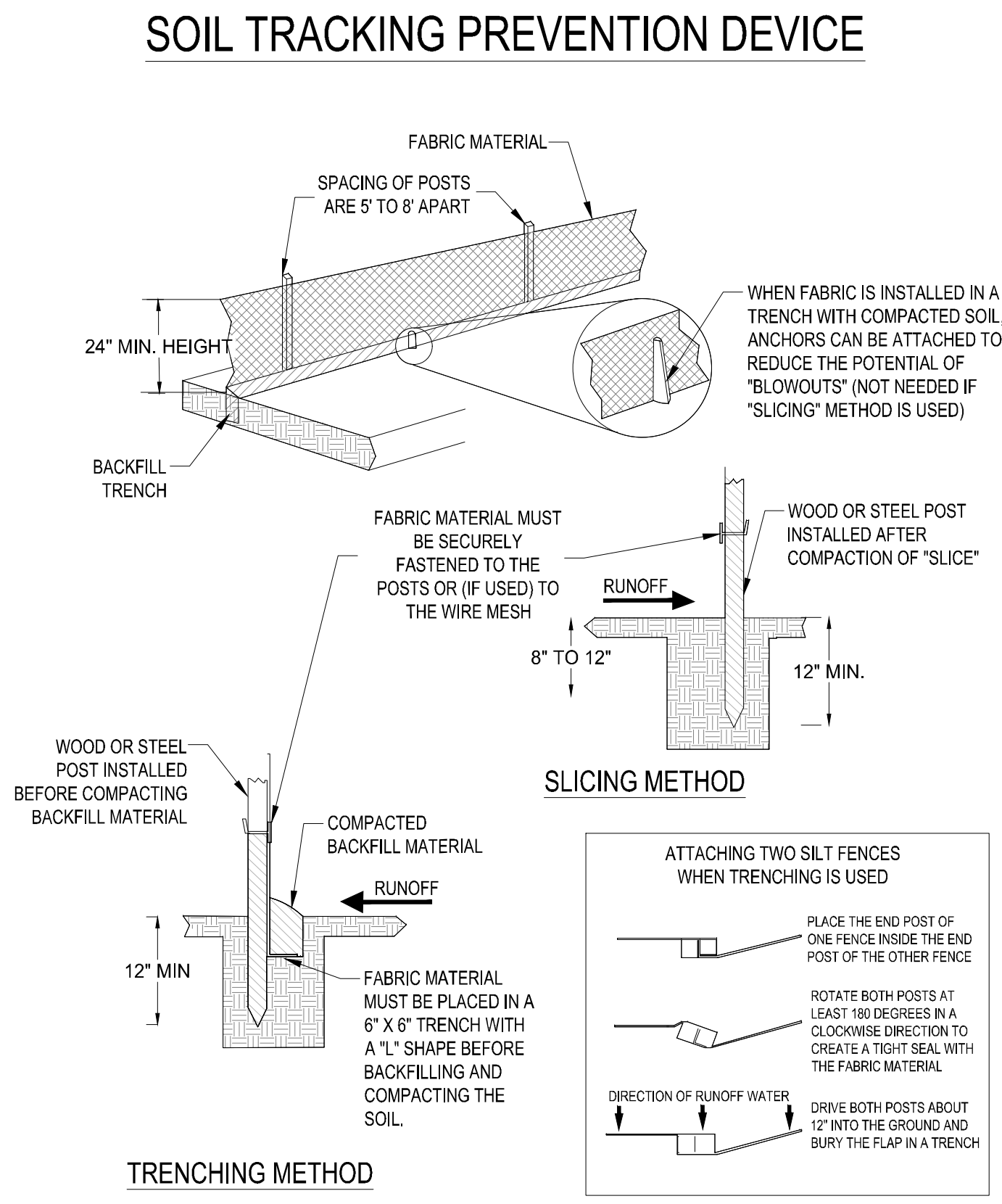
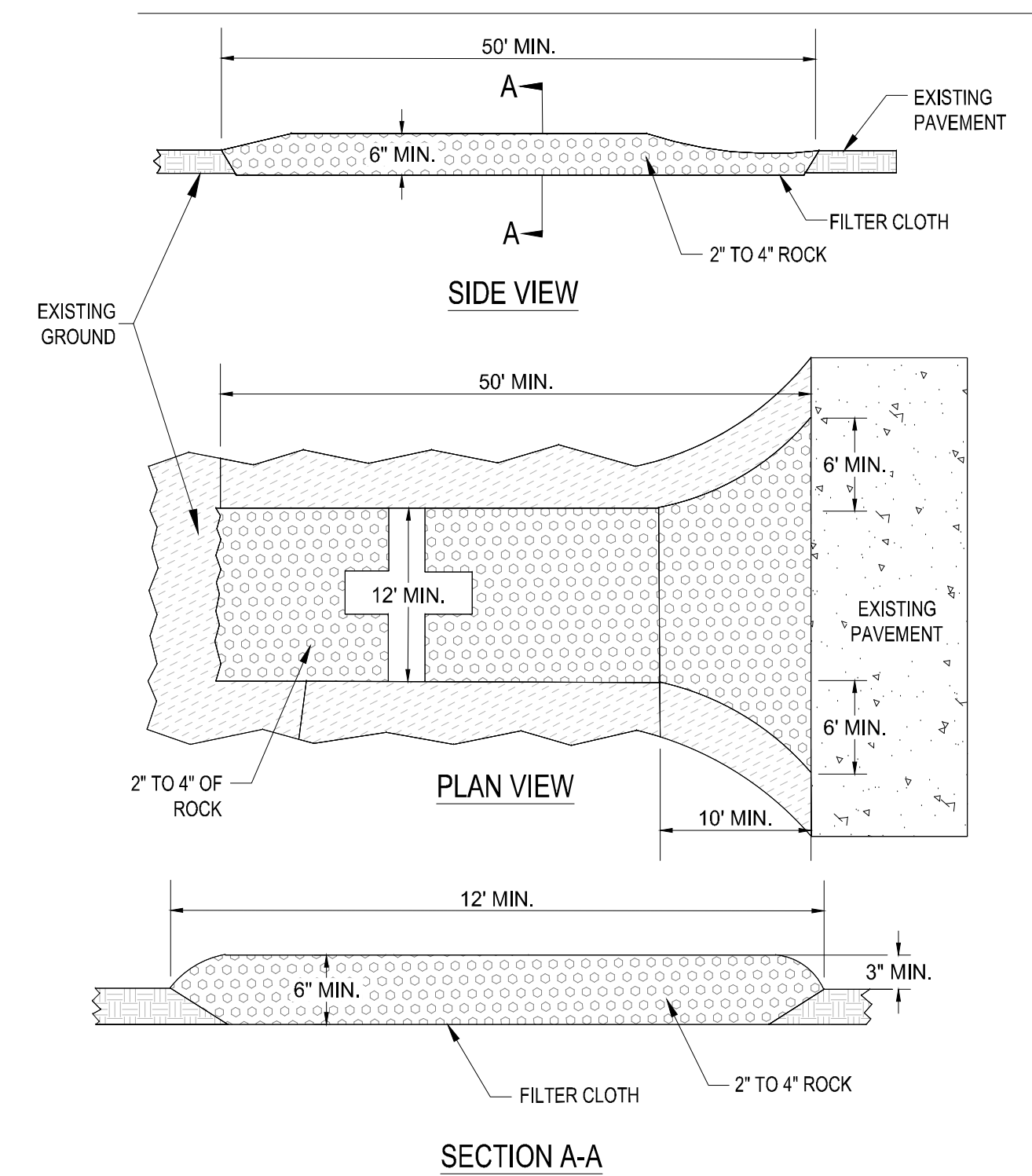
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Section 1	Project Name and location information:	Creekside City of Stuart, Florida
Section 2	Describe the nature of the construction activity:	Construction activities consist of a single story retail/restaurant building, and a 4-story hotel with associated paved access that will serve the project site in the City of Stuart, Martin County, Florida
Section 3	Describe the intended sequence of major soil disturbing activities: The following sequence of major activities shall be followed unless the contractor can propose an alternative that is equal or exceeds the erosion and sediment control practices described in this document, and is approved by the Engineer. The detailed sequence for the entire project can vary significantly from contractor to contractor. The contractor is responsible for providing a detailed sequence of construction for all construction activities.	<ol style="list-style-type: none"> 1. Placement of all erosion control devices. 2. Clearing and grubbing, earthwork, filling of the existing lake, and excavation of the dry detention area. 3. Storm sewer construction; all storm sewer shall be constructed in the upstream direction. 4. Water & wastewater utility construction. 5. Earthwork associated with roadway, curb, subgrade, base and pavement. 6. Final seed and mulch and landscaping and sodding of the unpaved project area as called for in plans.
Section 4	Total area onsite and offsite:	1.80 acres
Section 5	Total area onsite and offsite to be disturbed:	1.62 acres
Section 6	Existing data describing the soil or quality of any stormwater discharge from the site: The soils are silty fine sand to clean sands. The small sand particle size will make the potential for erosion high.	Runoff Data Runoff Coefficients: Before: 0.81 During: 0.30-0.81 After: 0.81
Section 7	Estimate the drainage area size for each discharge point:	1.80 acres
Section 8	Latitude and longitude of each discharge point and identify the receiving water or MS4 for each discharge point:	There is one (1) discharge point for the project. Lat. N027° 11' 37.65", Long. W080° 15' 11.90" into the Frazier Creek
Section 9	Give a detailed description of all controls, Best Management Practices (BMPs) and measures that will be implemented at the construction site for each activity identified in the intended sequence of major soil disturbing activities section. Provide time frames in which the controls will be implemented. NOTE: All controls shall be consistent with performance standards for erosion and sediment control and stormwater treatment set forth in s. 62-40.432, F.A.C., the applicable Stormwater or Environmental Resource Permitting requirements of the Department or a Water Management District, and the guidelines contained in the State of Florida Erosion and Sediment Control Designer and Reviewer Manual, FDOT, FDEP, and any subsequent amendments.	<p>The following defines general quantities for the sequence of construction and the use of stabilization and structural practices. The contractor is also responsible for documenting this portion of the SWPPP. The construction of this project is expected to last twelve months.</p> <p>Install stabilized construction entrances at all common areas where construction vehicles will be entering and exiting the construction site. The driveways shall be constructed per the Florida Sediment and Erosion Control Manual.</p> <p>Install silt fences, Type III, around all ditch bottom inlets on the project, and the project perimeter. Filter cloth under the grates on catch basins may be used in lieu of a silt fence.</p> <p>Install staked turbidity barriers at the locations as indicated in the Paving and Drainage Plan (discharge points).</p>
Section 10	Describe all temporary and permanent stabilization practices. Stabilization practices include temporary seeding, mulching, permanent seeding, geotextiles, sod stabilization, vegetative buffer strips, protection of trees, vegetative preservations, etc.	<p>Temporary: Seed and mulch, and sod in accordance with Specification Section 104.</p> <p>Permanent: All stabilization practices 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 7 days after the construction activity in that portion of the site has temporarily ceased. The contractor is also responsible for documenting this portion of the SWPPP.</p>
Section 11	Describe all structural controls to be implemented to divert stormwater flow from exposed soils and structural practices to store flows, retain sediment on-site or in any other way limit stormwater runoff. These controls include silt fences, earth dikes, diversions, swales, sediment traps, check dams, subsurface drains, pipe slope drains, level spreaders, storm drain inlet protection, rock outlet protection, reinforced soil retaining systems, gabions, coagulating agents and temporary or permanent sediment basins.	<p>Temporary: Silt fence in accordance with the Florida Sediment and Erosion Control Manual. Staked turbidity barrier in accordance with the Florida Sediment and Erosion Control Manual. Soil tracking prevention device in accordance with the Florida Sediment and Erosion Control Manual. A stabilized construction entrance to be constructed per the Florida Sediment and Erosion Control Manual. All sediment controls shall be in place prior to any soil disturbing activity upstream of the control.</p>
Section 12	Describe all sediment basins to be implemented for areas that will disturb 10 or more acres at one time. The sediment basins (or an equivalent alternative) should be able to provide 3,600 cubic feet of storage for each acre drained. Temporary sediment basins (or an equivalent alternative) are recommended for drainage areas under 10 acres.	N/A - less than 10 acres
Section 13	Describe all permanent stormwater management controls such as, but not limited to, detention or retention systems or vegetated swales that will be installed during the construction process.	Stormwater will be captured with catch basins and treated onsite in the proposed stormwater chamber retention system.
Section 14	Waste disposal, this may include construction debris, chemicals, litter, and sanitary wastes:	All construction materials and debris will be placed in a dumpster and hauled off site to a landfill or other proper disposal site. No materials will be buried on site.
Section 15	Offsite vehicle tracking from construction entrances/exits:	Off site vehicle tracking of sediments and dust generation will be minimized via a rock construction entrance, street sweeping and the use of water to keep dust down.
Section 16	The proper application rates of all fertilizers, herbicides and pesticides used at the construction site:	Florida-friendly fertilizers and pesticides will be used at a minimum and in accordance with the manufacturer's suggested application rates.
Section 17	The storage, application, generation and migration of all toxic substances:	All paints and other chemicals will be stored in a locked covered shed.
Section 18	Other:	Port-o-lets will be placed away from storm sewer systems, storm inlet(s), surface waters and wetlands. No vehicle maintenance shall be conducted on-site. A washdown area shall be designated at all times and will not be located in any area that will allow for the discharge of polluted runoff.

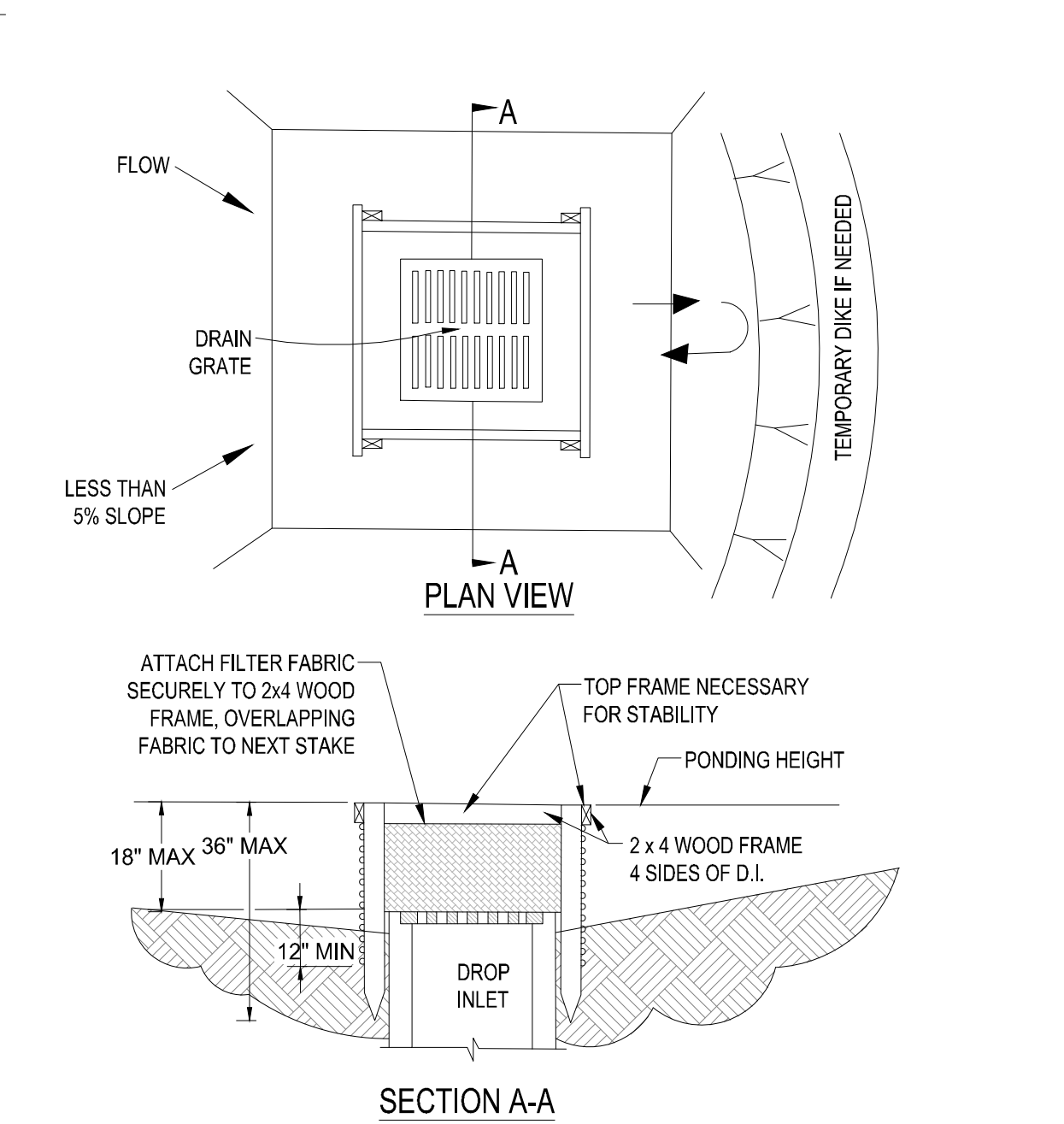
Section 19	Provide a detailed description of the maintenance plan for all structural and non-structural controls to assure that they remain in good and effective operating condition.
	<p>Contractor shall provide routine maintenance of permanent and temporary sediment and erosion control features in accordance with the technical specifications or as follows, whichever is more stringent:</p> <ul style="list-style-type: none"> • Silt fence shall be inspected at least weekly. Any required repairs shall be made immediately. Sediment deposits shall be removed when they reach approximately one-half the height of the barrier. • Maintenance shall be performed on the rock entrance when any void spaces are full of sediment. • Inlet(s)/outfalls shall be inspected immediately after each rain event and any required repairs to the filter inlets, silt fence, or filter fabric shall be performed immediately. • Bare areas of the site that were previously seeded shall be reseeded per manufacturers' instructions. • Mulch and sod that has been washed out shall be replaced immediately. • Maintain all other areas of the site with proper controls as necessary.
Section 20	Inspections: Describe the inspection and inspection documentation procedures, as required by the FDEP NPDES Generic Permit for Stormwater Discharge from Large and Small Construction Activities.
	<p>Qualified personnel will inspect all points of discharges, all disturbed areas of construction that have not been stabilized, constructed areas and locations where vehicles enter and exit the site, and all BMPs at least once every 7 calendar days and within 24 hours of the end of a rainfall event that is 0.5 inches or greater. Where sites have been finally stabilized, said inspections shall be conducted at least once every month until the Notice of Termination is filed.</p>
Section 21	Identify and describe all sources of non-stormwater discharges as allowed by the FDEP NPDES Generic Permit for Stormwater Discharge from Large and Small Construction Activities.
	<p>The contractor is required to submit a dewatering plan to SFWMD for approval prior to commencement of any construction activities that require dewatering. This plan shall include any stockpile areas and excavation areas. The contractor is responsible for documenting this portion of the SWPPP. If contaminated soil or groundwater is encountered, contact the District Hazardous Materials Coordinator</p>
Section 22	Site Map
	<p>The construction plans will substitute as site maps. Locations of the required information are described below.</p> <p>Drainage Patterns: The drainage flow directions are shown on the Paving and Drainage Plan.</p> <p>Approximate Slopes: The slopes of the site can be seen on the Grading and Drainage plan and cross sections.</p> <p>Areas of Soil Disturbance: The areas to be disturbed are indicated on the plan. Any areas where permanent features are shown to be constructed above or below ground will be disturbed.</p> <p>Areas not to be disturbed: Those areas shown outside of the limits of the silt fence will not be disturbed.</p> <p>Locations of Controls: The erosion control devices and locations are shown on the Sediment & Erosion Control Plan.</p> <p>Areas to be stabilized: Temporary stabilization practices are also shown on the plans, if applicable. Areas of permanent stabilization are shown on the Paving and Drainage Plan.</p> <p>Surface Water: Surface water runoff will be collected by inlets and culverts and direct stormwater into the onsite stormwater chamber system prior to a controlled release to the Frazier Creek.</p> <p>Receiving Waters Ultimate outfall is to Frazier Creek which is part of the south fork of the St. Lucie River.</p>
Section 23	All contractor(s) and subcontractor(s) identified in the SWPPP must sign the following certification:
	<p>"I certify under penalty of law that I understand, and shall comply with, the terms and conditions of the State of Florida Generic Permit for Stormwater Discharge from Large and Small Construction Activities and this Stormwater Pollution Prevention Plan prepared thereunder. This document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."</p> <p>Name (Operator and/or Responsible Authority) _____ Date _____</p>

Name	Title	Company Name, Address and Phone Number	Responsible Items	Date



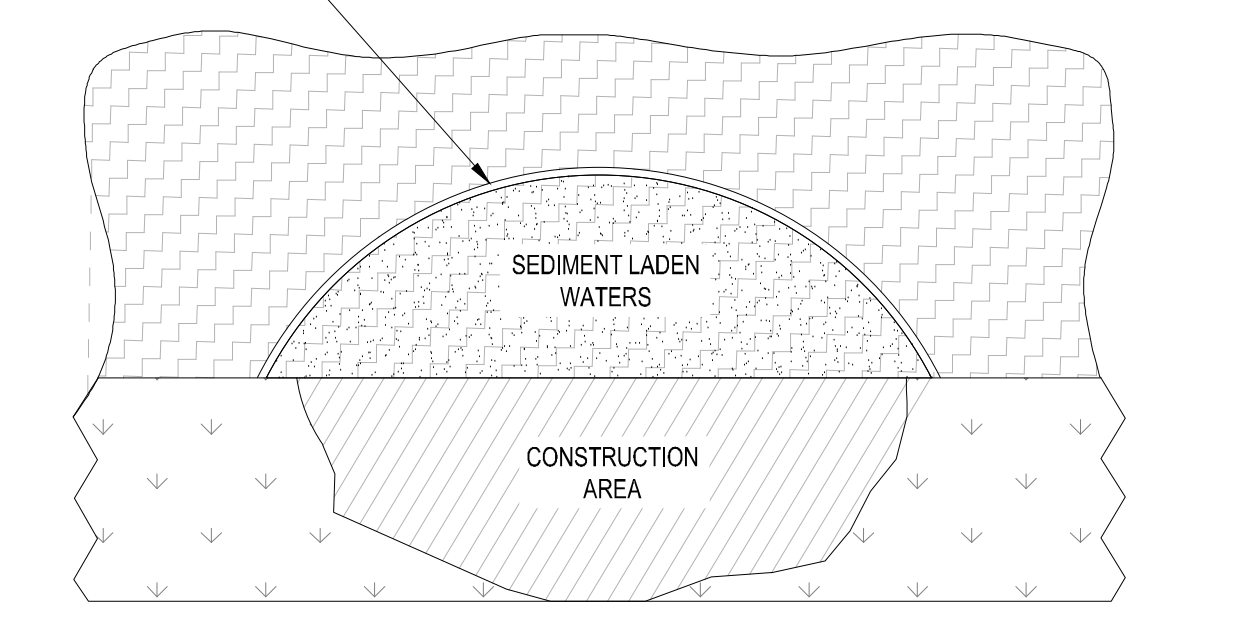
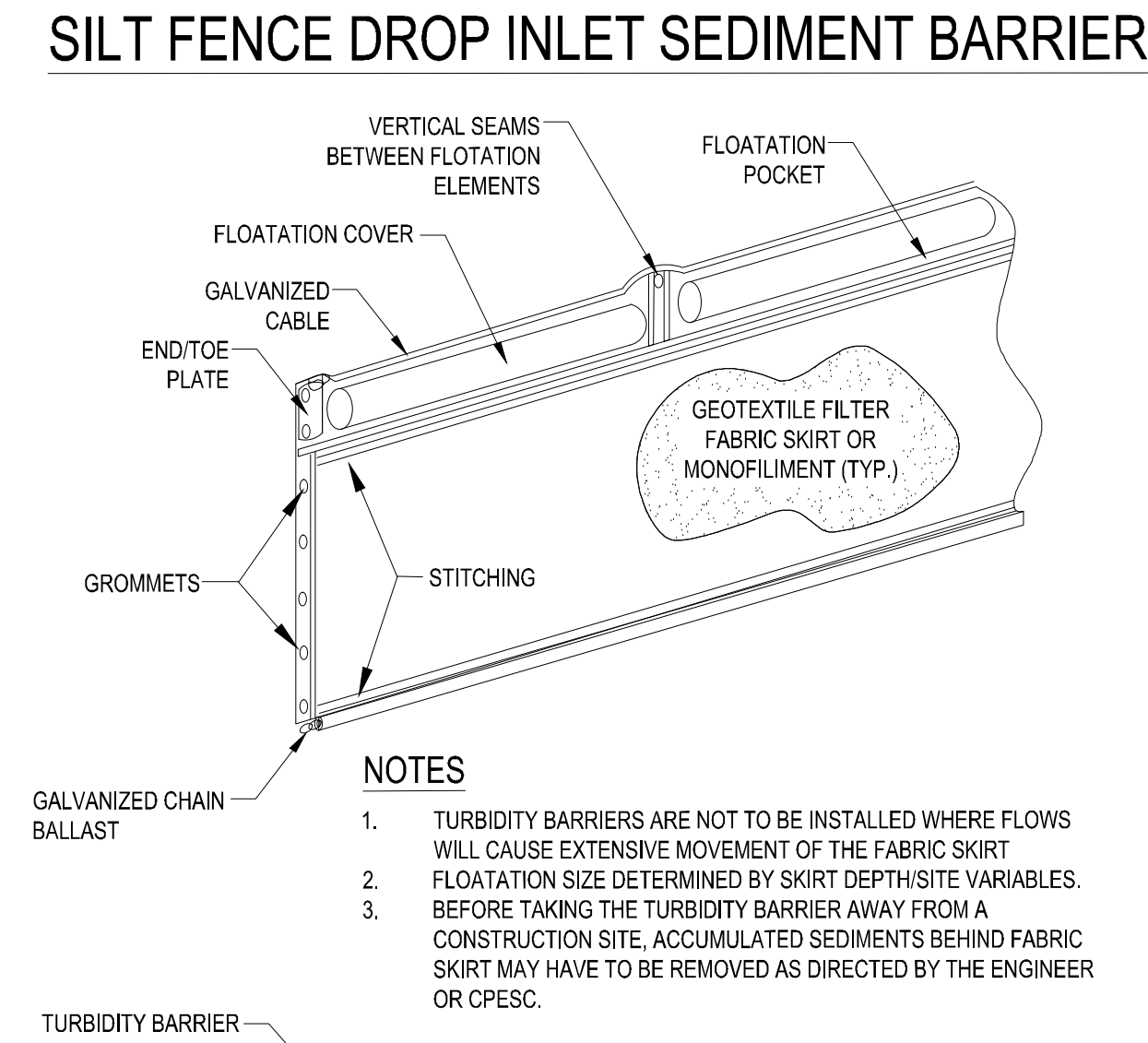
GENERAL NOTES:

1. THIS INLET IS DESIGNED WITH FILTER FABRIC PROTRUDING 8" FROM SIDES FOR GRIPPING WHEN SEDIMENT NEEDS TO BE CLEARED AFTER FINAL CONSTRUCTION.
2. FILTER FABRIC TO BE INSTALLED AND TRIMMED BEFORE GRATE IS INSET.



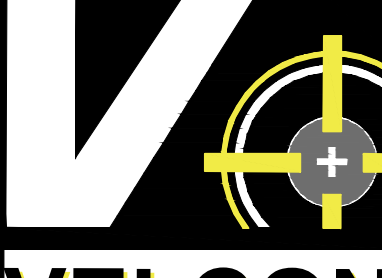
NOTES:

1. DROP INLET SEDIMENT BARRIERS ARE TO BE USED FOR SMALL, NEARLY LEVEL DRAINAGE AREAS. (LESS THAN 5%)
2. USE 2 x 4 WOOD OR EQUIVALENT METAL STAKES, (3' MIN. LENGTH)
3. INSTALL 2 x 4 WOOD TOP FRAME TO INSURE STABILITY.
4. THE TOP OF THE FRAME (PONDING HEIGHT) MUST BE WELL BELOW THE GROUND ELEVATION DOWNSLOPE TO PREVENT RUNOFF FROM BYPASSING THE INLET. A TEMPORARY DIKE MAY BE NECESSARY ON THE DOWNSLOPE OF THE STRUCTURE.



ELECTRONICALLY SIGNED & SEALED
 Darren C. Guettler, State of Florida
 Professional Engineer, License No. 74637
 This item has been electronically signed and sealed by Darren C. Guettler on the date indicated here using a SHA authentication code. Printed copies of this document are not considered signed and sealed and the SHA authentication code must be verified on any electronic copies.





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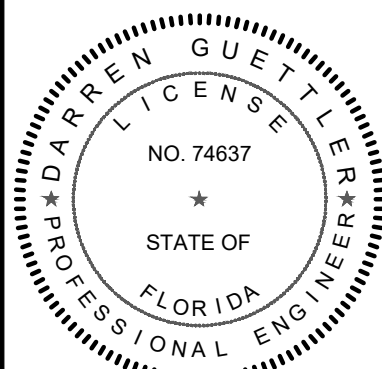
REVISIONS:	
BY:	DATE:
JM	11-10-23
JM	12-07-23
JM	03-29-24
JM	07-26-24

NOT FOR CONSTRUCTION

PROJECT: VICTORIA GARDEN INNS HOTEL/RETAIL

CLIENT: RAJ PATEL

CITY OF STUART, FLORIDA



DARREN GUETTLER, PE
 FLORIDA LICENSE No. 74637
 7/26/24

PROJECT No.:	22-1036
DRAWN BY:	LG
CHECKED BY:	JM
DATE:	04/20/2023
CAD ID.:	22-1036 SWPPP

SHEET TITLE: **STORMWATER POLLUTION PREVENTION PLAN**

SHEET NUMBER: **14**