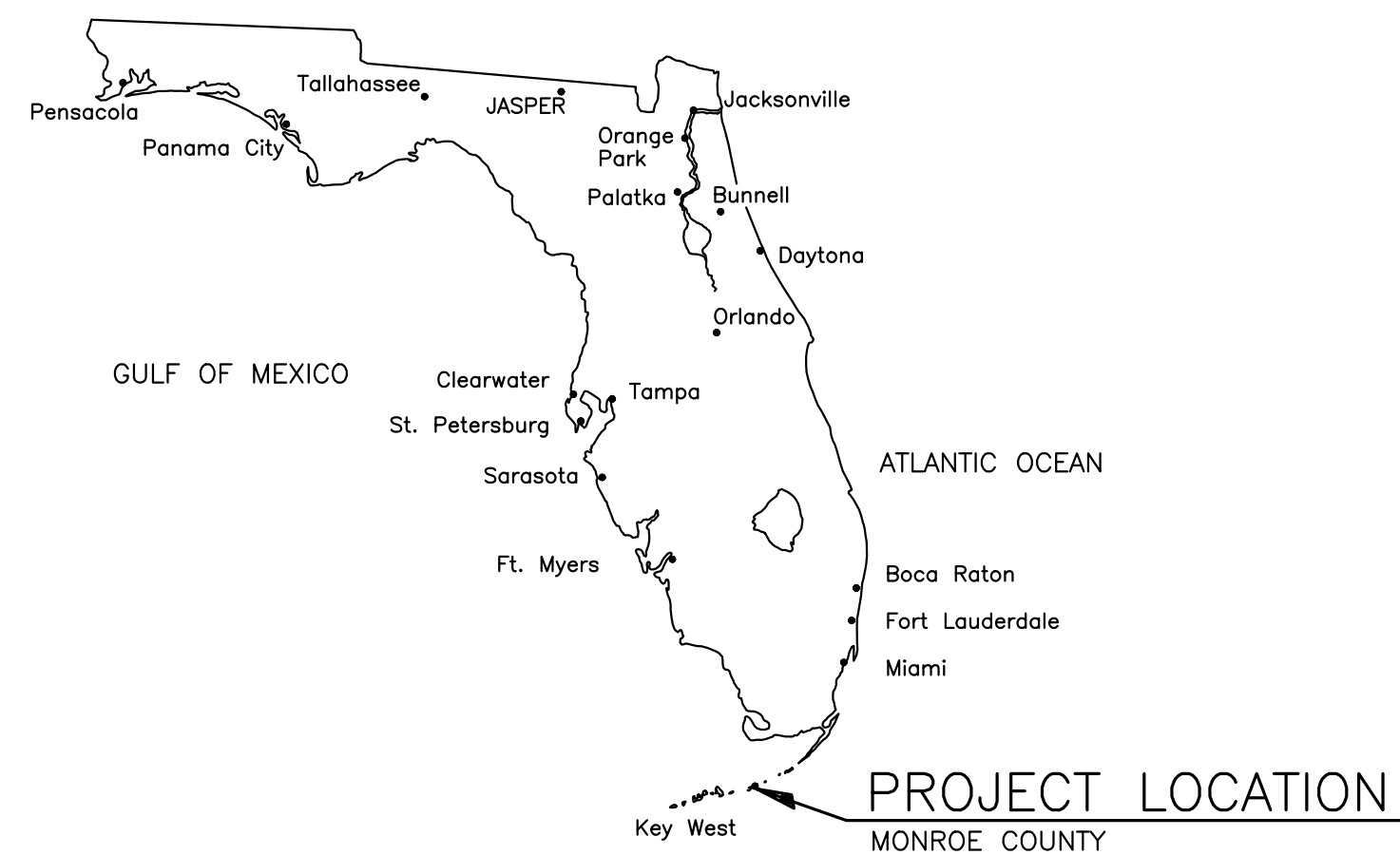


# SWAG 10TH STREET STORMWATER IMPROVEMENTS, PHASE 2A

## FOR CITY OF KEY COLONY BEACH, FLORIDA

M & A Project No. 0604-17-1



PATTI TREFRY  
MAYOR

TOM HARDING  
VICE-MAYOR

JOHN DENEALE  
COMMISSIONER

BETH RAMSAY-VICKREY  
COMMISSIONER

RON SUTTON  
COMMISSIONER

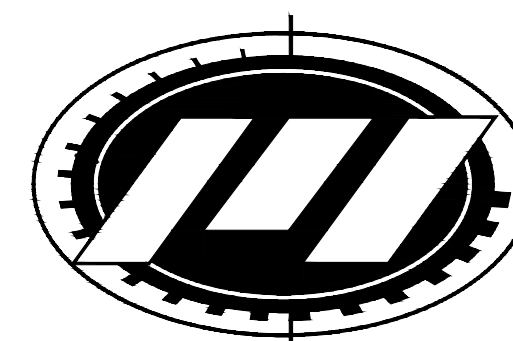
DAVE TURNER  
CITY ADMINISTRATOR

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1	COVER SHEET
2	GENERAL NOTES, ABBREVIATIONS & LEGEND
3	KEY MAP
4	EXISTING CONDITIONS, DEMOLITION PLAN & SWPPP
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7	DETAILS
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9	TYPICAL MISCELLANEOUS DETAILS



VICINITY MAP



**MITTAUER**  
**& ASSOCIATES, INC.**  
CONSULTING ENGINEERS

580-1 WELLS ROAD, ORANGE PARK, FLORIDA 32073  
TEL. (904) 278-0030 FAX. (904) 278-0840 FLORIDA LICENSE RY-6569

**CONSTRUCTION SET**

05/31/22

# GENERAL NOTES

## A. GENERAL CONSTRUCTION NOTES

- Existing underground utilities have been shown from the best available information. The Contractor shall notify the proper Utility Representative prior to commencing excavation near the utility. The Contractor is responsible for locating all utilities in the path of construction. Contractor shall field determine the location, size, and depth of all existing piping. The Contractor shall call the Sunshine State One center (1-800-432-4770).
- It shall be the sole responsibility of the Contractor to locate and avoid all utilities, structures and obstructions both above and below the ground surface. All damages resulting from the contractors failure to comply with this requirement shall be repaired at the Contractors expense.
- Contractor is responsible for supporting/protecting & maintaining all existing improvements (i.e., utilities, utility poles, structures, pavement, sidewalks, monitoring wells, foundations, etc.) which may be damaged/undermined or interrupted as a result of his operations. The Contractor shall immediately notify the Engineer of any such occurrences. The Contractor may be required to shore, sheet, brace, or support work to protect existing improvements. The Contractor shall maintain a minimum of 5 feet of undisturbed soil around all power poles. Where edge of utility trench would be closer than 5 feet from poles, Contractor shall be required to sheet around pole to maintain 5 feet of undisturbed soil. Where 5 feet of undisturbed soil cannot be maintained, Contractor shall make arrangements with power company to have poles held/braced. All costs associated with supporting/protecting existing improvements shall be borne by the Contractor.
- All existing facilities (e.g., pipes, roadways, sidewalks, landscaping, structure, etc.) not indicated to be disturbed/restored which are disturbed/damaged as a result of the Contractor's operations shall be restored to a condition equal to or better than that which existed prior to construction, at Contractor's expense.
- Horizontal and vertical controls are subject to adjustments in the field if necessary to avoid utility conflicts upon approval of the Engineer or his representative. Contractor shall not adjust location of pipe or other facilities (either vertically or horizontally) without approval of the Engineer or his representative.
- Contractor shall provide constant slope between indicated pipe invert elevations, unless otherwise directed by Engineer.
- Contractor shall not remove any trees of 4-inch diameter or larger without Owner's approval. Adjustment of pipe location to avoid trees shall be subject to approval of the Engineer. The Engineer makes no claim that any tree will survive construction of the proposed project.
- The Contractor shall provide all traffic control measures necessary to perform the work at his expense. Traffic control shall be in accordance with governing local, state and federal agencies including the MUTCD latest edition.
- Contractor shall provide all fill required to achieve proposed grades at his expense.
- Contractor shall apply for and obtain FDEP Generic Permit for Large and Small Construction Activities (CGP). The Contractor shall act as the Operator of all temporary, construction phase pollution prevention improvements and shall be responsible for their design, selection and implementation. Schematic erosion control measures are provided in these documents and shall be the basis of the Contractor's design.
- During any construction activity, including stabilization and revegetation of disturbed surfaces, the Contractor is responsible for the design, selection, permitting, implementation and operation of all temporary construction phase erosion and sediment control measures required to retain on-site sediment and prevent violations of the State of Florida water quality standards. The Contractor shall use appropriate best management practices described in the State of Florida Erosion and Sediment Control Designer and Reviewer Manual, June 2007. All turbidity/silt barriers must be in place downgradient from the construction zone prior to the start of any construction activity in general accordance with the plans and details provided in these documents. The barriers shall remain in place until all the disturbed areas have been properly stabilized.
- Maintenance and Operation of the Surface Water Management System: Upon completion of construction of the project, the Contractor shall remove accumulated sediment from the stormwater system.
- Unsuitable materials exposed during construction under utility pipes or structures shall be removed and replaced with selected backfill, properly compacted, in accordance with specifications.
- Compaction: Unless otherwise noted, the required percentage of maximum compaction shall be as follows; (per modified proctor max. dry density, ASTM D 1557)
  - Pipe Embedment  $\geq 98\%$
  - Above Pipe Embedment - Paved Areas  $\geq 98\%$
  - Above Pipe Embedment - Non-Paved Areas  $\geq 90\%$
  - Under Structures and Slabs  $\geq 98\%$
  - All other Areas  $\geq 90\%$
 When moisture content of soils do not allow required densities to be achieved, Contractor shall employ "best management practices" to achieve equivalent density, subject to Engineer's approval.
- It shall be the responsibility of the Contractor to review the soils report for this project (if provided). The Contractor shall consider all recommendations in the geotechnical soil report as the minimum requirements for soil placement, preparation and testing for this project.
- The contractor shall temporarily relocate the postal mail boxes and clusters as required for the construction of the project and reinstall them in their original locations upon completion of the construction. All work associated with the mail boxes or clusters shall be in accordance with the requirements of the U.S. Post Masters Office.
- Only that excavation that can be backfilled by the end of the work day will be excavated. No open trench will be allowed to remain after work ends for the day, unless approved by Engineer or governing authority.
- The Contractor shall employ the services of a Florida licensed surveyor who shall be responsible for laying out the work and for establishing the following: project temporary bench marks; elevation lines and grades; and right-of-way and easement limits for construction. Contractor shall also employ the services of a Florida Licensed Surveyor to obtain the required record drawing information.
- The Contractor shall employ a land surveyor, registered in the State of Florida to reference property and restore property corners and land markers which may be disturbed as a result of Contractor's operations.
- Project Benchmark: See Sheet No. 3 for location and description of Benchmark.
- Topographic information based on a survey by Prospect Surveying, LLC, performed on 06/24/15, Job No. 15-017.
- Contractor shall contact Florida Keys Electric Co-op, attn: Billy Goodwin (423-693-4829) related to any overhead power and/or power pole hold requirements during construction.

## B. GENERAL WATER SYSTEM NOTES

- All water line work shall be in accordance with FAC 62-555, Permitting and Construction of Public Water Systems. All materials that come in contact with drinking water shall be in conformance with ANSI/NSF International Standard 61 and shall be installed in accordance with applicable AWWA Standards and/or the manufacturer's recommendations.
- The Contractor shall verify the location and elevation of the proposed water main connection(s) prior to commencing work. It shall be the Contractor's responsibility to notify the Owner and the Engineer of any discrepancies.
- All workmanship and materials associated with water mains shall conform to the latest standards and specifications of the Florida Keys Aquaduct Authority (FKAA).
- Maintain minimum separation requirements between potable water mains and other utilities.
- All existing water main valves which are made inactive as the result of this project shall have their valve boxes removed and the disturbed roadway or grassed area restored. Valve boxes which are in paved areas shall have the cover removed and the section shall be filled with asphalt or flowable fill with the surface painted to match the surrounding pavement.
- The location of water services on the plans are approximate. Actual location of services shall be determined in the field by location of existing water lines and as directed by the Engineer and the Owner.

## C. GENERAL SEWER SYSTEM NOTES

- All sewer line work shall be in accordance with FAC 62-600, Domestic Wastewater Facilities and FAC 62-604, Collection Systems and Transmission Facilities.
- All workmanship, material, testing and as-built drawings shall conform to the latest standards and specifications of the FKAA.
- The location of sewer services on the plans are approximate. Actual location of services shall be determined in the field by test holing and as directed by the Engineer and the Owner.

## D. PAVEMENT STRIPING AND SIGNAGE NOTES

- Unless otherwise noted on the drawings, all existing signs removed by the construction activity, shall be restored to their original position prior to completion of the project. Any signs damaged during construction shall be replaced at the Contractors expense.
- All signs and pavement markings shall conform to the Manual on Uniform Traffic Control Devices (MUTCD) and the Florida Department of Transportation Roadway and Traffic Design Standards, latest editions.
- Sign assembly locations, shown on the plans, which are in conflict with lighting, utilities etc. may be adjusted slightly as directed by the Engineer.
- Existing signs to be permanently removed shall become the property of the Contractor and disposed of at his expense unless claimed by Owner or governing authority.
- All pavement striping within Right-of-Way or easements, as well as all stop bars, crosswalks, messages and directional arrows (regardless of location) shall be lead free, thermoplastic paint (FDOT spec. section 711). All other striping shall be reflective paint (FDOT spec. section 710) unless noted otherwise on the drawings.
- The aluminum column (post) & connection design shall adhere to FDOT index 11860 and the following criteria:
  - mounting height = 14' maximum
  - sign(s) area = 25 sq. ft. maximum
  - sign(s) width: single = 36" maximum  
dual = 48" maximum
  - driven post only
  - minimum post diameter = 3"
- All posts shall be installed plumb.
- All hardware shall be stainless steel (ASTM F593, ASTM F594, Alloy Group 2, Condition A, CW2 or SH4).

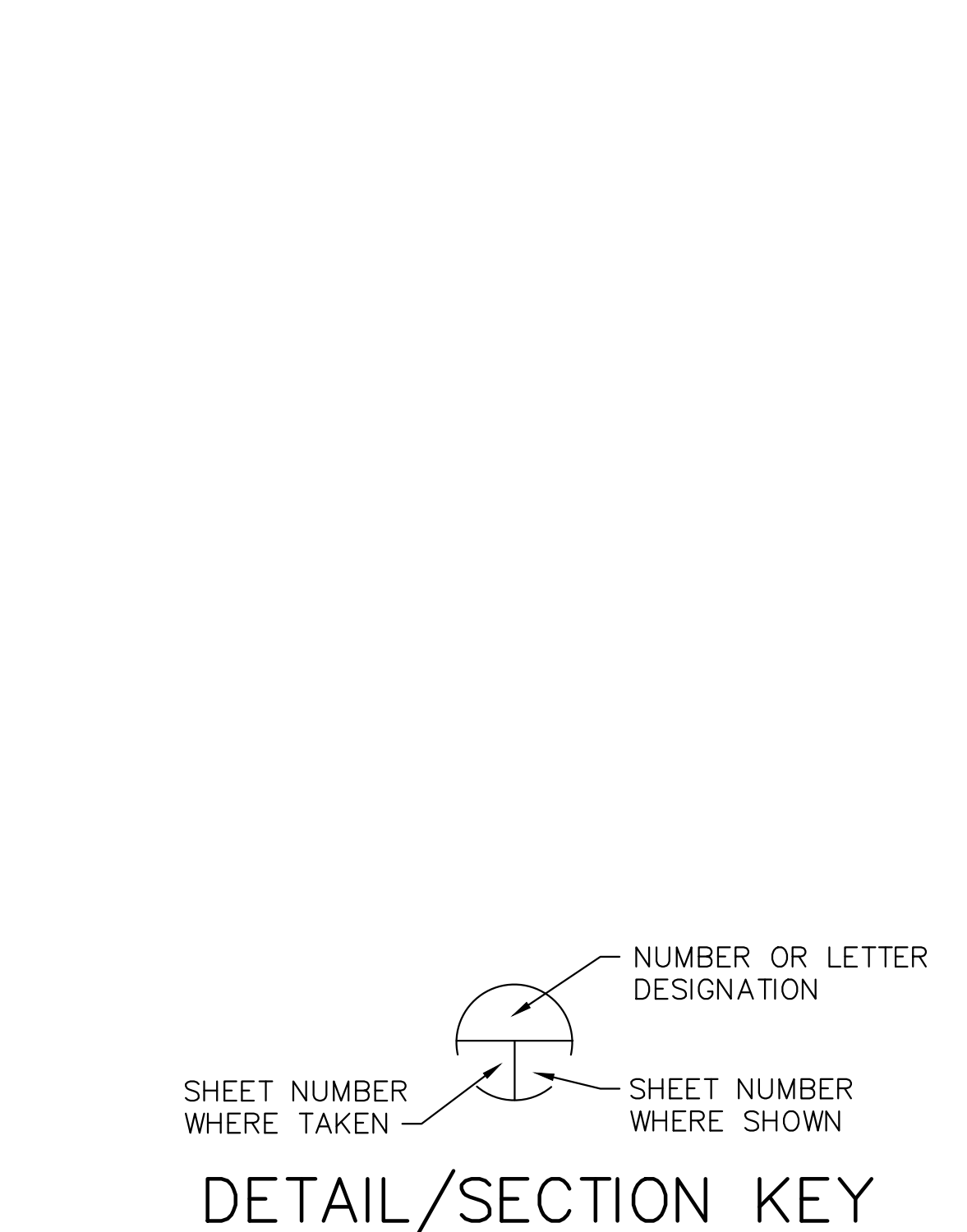
## E. ROADWAY NOTES

- All work performed within the City Right-of-Way shall conform to the most current edition of the following publications:
  - Standard Specifications for Road and Bridge Construction.
  - FDOT Design Standards.
  - FDOT Plans Prep Manual.
  - FDOT Flexible Pavement Design Manual for new construction and pavement rehabilitation.
 Should a conflict arise between the details shown in the plans and the Department of Transportation Standards, the Contractor shall immediately confer with the Engineer in order to resolve the discrepancy.
- Removal of existing striping shall be accomplished using the "hydro-blast" method. If this process damages or scars pavement, the pavement shall be milled and resurfaced per FDOT standards.
- All disturbed areas within the Department of Transportation Right-of-Way shall be restored to FDOT requirements.
- Burning of any material or debris is prohibited in FDOT Right-of-Way.
- All lanes must be opened for traffic during an evacuation notice of a hurricane or other catastrophic event and shall remain open for the duration for the evacuation or event.

# ABBREVIATIONS

ABBREVIATION	DESCRIPTION	MAINT	MAINTAIN OR MAINTENANCE
ABS	ACRYLONITRILE BUTADIENE STYRENE	MAN	MANUALLY
ABV	ABOVE	MAX	MAXIMUM
ACP	ASEBESTOS CEMENT PIPE	MCC	MOTOR CONTROL CENTER
AFG	ABOVE FINISH FLOOR (REF. ELEV.)	MES	METERED END SECTION
ALUM	ALUMINUM	MECH	MECHANICAL
ALT	ALTERED	MFR	MANUFACTURE
APRX	APPROXIMATE(LY)	MG	MILLION GALLON(S)
ARCH	ARCHITECT(LURAL)	MH	MILLION GALLONS PER DAY
ARV	AIR RELEASE VALVE	MNL	MANUAL
ASPH	ASPHALT	MNH	MEAN HIGH WATER
ASST	ASSEMBLY	MNI	MINUTE(S)
BE	BURIED ELECTRIC	MISC	MISCELLANEOUS
BF	BOTTOM FACE	MJ	MECHANICAL JOINT
BFO	BURIED FIBER OPTIC	MON	MONUMENT
BFV	BUTTERFLY VALVE	MPH	MILES PER HOUR
BITUM	BITUMINOUS OR BITUMASTIC	MPT	MALE PIPE THREAD
B	BASELINE	MNTD	MOUNTED
BLDG	BUILDING	MW	MANWAY; MONITORING WELL
BLK	BLOCK	N	NORTH
BM	BENCH MARK	NE	NORTHEAST
BOC	BACK OF CURB	NIC	NOT IN CONTRACT; NOT INCLUDED
BOE	BOOTH	NON	NONUAL
BT	BURIED TELEPHONE-CABLE	NO	NUMBER
BY	BALL VALVE	NPT	NATIONAL PIPE THREAD
BV	BOTH WAY(S)	NPW	NON-POTABLE WATER
C, CND	CONDUIT	NTS	NOT TO SCALE
CAP	CAPACITY	NW	NORTHWEST
CATV	CABLE TELEVISION	N/A	NOT APPLICABLE
CFM	CUBIC FEET PER MINUTE	OA	OVERALL DIMENSION
CFS	CUBIC FEET PER SECOND	OC	ON CENTER
CD	CAST IRON	OD	OUTSIDE DIAMETER
CIP	CAST IRON PIPE, CAST-IN-PLACE	OF	OUTSIDE FACE
E	CENTERLINE	OH	OVER HEAD
CLF	CHAIN LINK FENCE	OH, OHW	OVER HEAD ELECTRIC
CLR	CLEAR OR CLEARANCE	OPT	OPTIONAL
CM	CONCRETE MONUMENT	OSM	OPERATION AND MAINTENANCE
CMP	CORRUGATED METAL PIPE	PMT	PAVEMENT
CMU	CONCRETE MASONRY UNIT	PC	POINT OF CURVE
COR	CORNER	PE	PLAIN END
CO	CLEAN OUT	PI	POINT OF INTERSECTION
CONC	CONCRETE	PL	PLATE
CONT	CONTINUOUS	PLF	FOUNDS PER LINEAR FOOT
COV	COVERED	POB	POINT OF BEGINNING
CPLG	COUPLING	PPD	POWER POLE
CPVC	CORRUGATED POLYETHYLENE PIPE	PPM	PRESSURE
CUL	CULVERT	PPS	PRESSURE REDUCING VALVE
CV	CHECK VALVE	PS	PUMP STATION
C/Y	CUBIC YARD	PSF	POUNDS PER SQUARE FOOT
DBL	DOUBLE	PSI	POUNDS PER SQUARE INCH
DEMO	DEMOLITION	PSIA	POUNDS PER SQUARE INCH ABSOLUTE
DI	DUCTILE IRON	PSIG	POUNDS PER SQUARE INCH GAGE
DIA	DIAMETER	PT	POINT OF TANGENCY
DIM	DIMENSION	PV	PLUG VALVE
DIP	DUCTILE IRON PIPE	PVC	POLYVINYL CHLORIDE
DOT	DEPARTMENT OF TRANSPORTATION	PWR	POTABLE WATER/LVAN
DR	DRAIN	PWR	POWER
DWG	DRAWING	QTY	QUANTITY
E	EACH	R, RAD	RADIUS
ECC	ECCENTRIC	RD	ROAD
EL, ELEV	ELEVATION	RED	REDUCER
ELEC	ELECTRICAL	REBAR	REINFORCING STEEL BARS
EMER	EMERGENCY	REF	REFERENCE
EP	EDGE OF PAVEMENT	RENF	REINFORCED(ING)(MENT)
EQ	EQUIPMENT	REQD	REQUIRED
EPM	ETHYLENE PROPYLENE DIENE MONOMER	REST	RESTRAINED
EPCP	ELLIPTICAL REINFORCED CONCRETE PIPE	ROOM	ROOM
EQUIP	EQUIPMENT	RPM	REVOLUTIONS PER MINUTE
EST	ESTIMATE	RR	RAILROAD
ESTM	ESTIMATED	RT	RIGHT
EW	EACH WAY	RW	RAW WATER
EX	EXPANSION	RWM	RAW WATER MAIN
EX, EXIST	EXISTING	R/W	RIGHT-OF-WAY
EXT	EXTERIOR	S	SEWER; SOUTH
FB	FLAT BAR	SCH	SCHEDULE
FD	FLOOR DRAIN	SCHED	SCHEDULE
FDN	FOUNDATION	SE	SOUTHEAST
FDOT	FLORIDA DEPARTMENT OF TRANSPORTATION	SECT	SECTION
FF	FINISH FLOOR	SF	SQUARE FOOT OR FEET
FG	FIRE HYDRANT	SH	SHED(ING)(NG)
FIN	FINISH(ED)	SLJ	SLIP JOINT
FIN GR	FINISH GRADE	SLV	SLEEVE
FJ	FLANGED JOINT	SPEC	SPECIFICATION
FL	FLANGE(ING)	SQ	SQUARE
FLM	FEET PER MINUTE	SR	STATE ROAD
FPM	FEET PER SECOND	SS	SANITARY SEWER, STAINLESS STEEL
FPS	FEMALE PIPE THREAD	ST	STREET
FRP	FIBERGLASS REINFORCED PLASTIC	STA	STATION
FT	FOOT OR FEET	STD	STANDARD
FW	FINISHED WATER	STL	STEEL
F/F	FACE TO FACE	STRUCT	STRUCTURAL
G	GAS MAIN	SW	SOUTHWEST
GAL	GALLON(S)	SWD	SIDEWALK DEPTH
GALV	GALVANIZED	SYM	SYMMETRICAL
GIP	GALVANIZED IRON PIPE	S/W	SIDEWALK
GND	GROUND	TAN	TANGENT
GPH	GALLONS PER DAY	TBM	TEMPORARY BENCH MARK
GPM	GALLONS PER HOUR	TC, TOC	TOP OF CONCRETE
GPS	GALLONS PER MINUTE	TDH	TOTAL DYNAMIC HEAD
GR	GRADE	TEL, TELE	TELEPHONE
GSP	GALVANIZED STEEL	TEMP	TEMPORARY
GS	GALVANIZED STEEL PIPE	TF	TOP FACE
GV	GATE VALVE	THD	THREADED JOINT
HB	HOSE BIBB	TH	THICKNESS
HDPPE	HIGH-DENSITY POLYETHYLENE	TOB	TOP OF BANK
HGT	HEIGHT	TOE	TOE OF SLOPE
HR	HAND RAIL	TOS	TOE OF SLOPE; TOP OF STEEL
HQA	HAND-OFF-AUTO SWITCH	TP	TELEPHONE POLE, TOP OF PAVEMENT
HORIZ	HORIZONTAL	TV	TELEVISION
HP	HORSEPOWER	TYP	TYPICAL
HOUR	HOUR	T&B	TOP AND BOTTOM
HVAC	HEATING, VENTILATION, AND AIR CONDITIONING	UG	UNDERGROUND
HWL	HIGH WATER LEVEL	UGN	UNDERGROUND ELECTRIC
HWY	HIGHWAY	UNDN	UNDERGROUND
ID	INSIDE DIAMETER	UTIL	UTILITY
IF	INSIDE FACE	V	VOLTS
IN	INCHES	VAC	VACUUM
INF	INFLENT	VAR	VARIABLE
INT	INTERSECTION	VCP	VITRIFIED CLAY PIPE
INTR	INTERIOR	VEL	VELOCITY
INVT	INVERT	VERT	VERTICAL
IP	IRON PIPE	VFD	VARIABLE FREQUENCY DRIVE
IPS	INTERNATIONAL PIPE STANDARD; IRON PIPE SIZE	VOL	VOLUME
JB	JOINT	W	WEST
J	JOINT BOX	WL	WATER LINE
K	KIP(1,000 LB)	WM	WATER METER
KVA	KILOWATT-AMPERE	WS	WATER SURFACE
KW	KILOWATT	WT	WATER TREATMENT PLANT
L	LEFT	WTF	WEIGHT
LAB	LABORATORY	W/W	WELED WIRE FABRIC
LAV	LAVATORY	WM	WELED WIRE MESH
LB	POUND	WTP	WASTEWATER TREATMENT PLANT
LF	LINEAR FEET	W/O	WITHOUT
LP	LIGHT POLE	XFER	TRANSFER
LR	LONG RADIUS	XFMR	TRANSFORMER
LS	LUMP SUM	YD	YARD(S)
LWL	LOW WATER LEVEL	YR	YEAR(S)

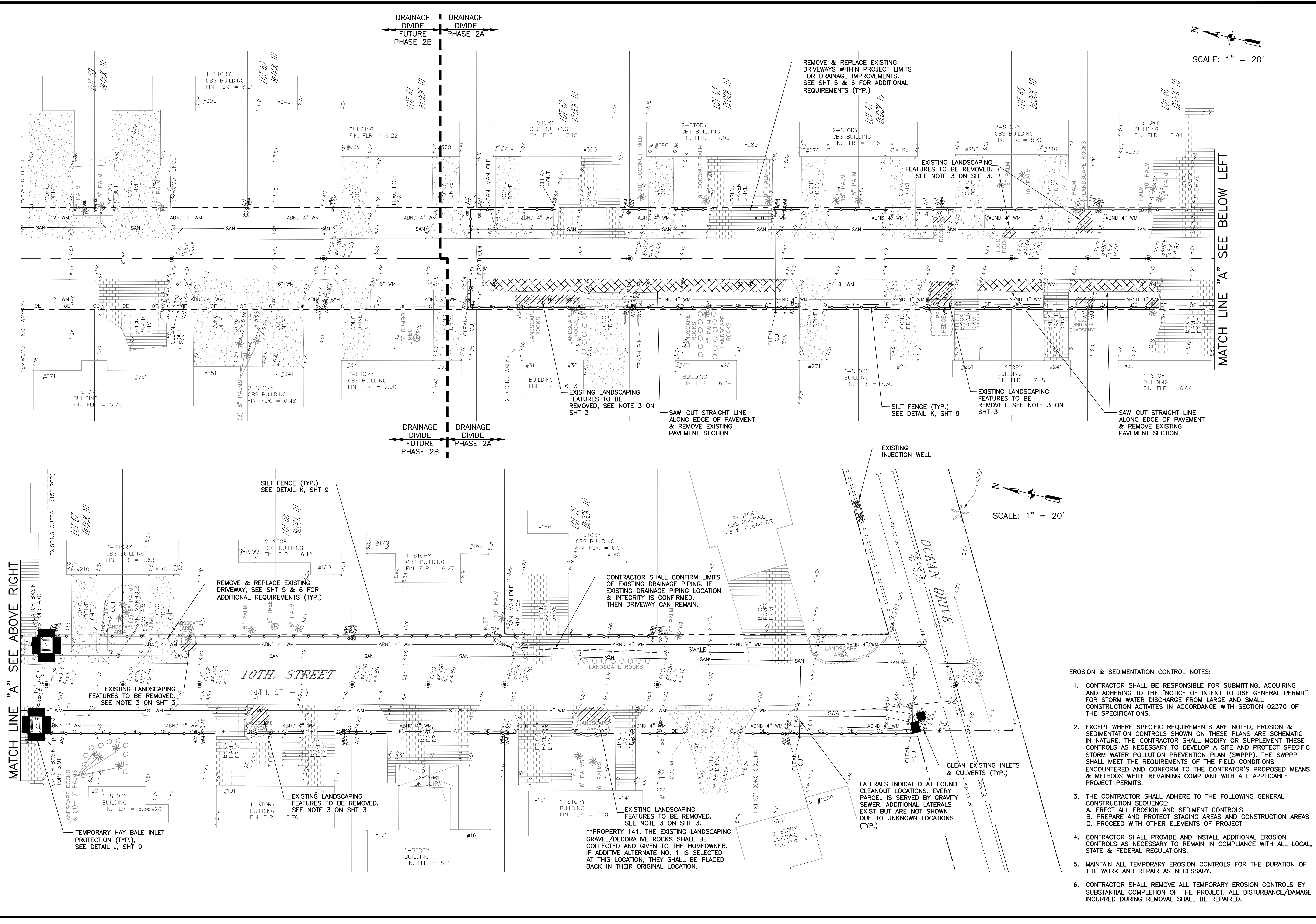
PROPOSED	EXISTING	DESCRIPTION
---	---	SANITARY SEWER
---	---	SANITARY FORCE MAIN
---	---	SANITARY MANHOLE
---	---	STORM PIPE
---	---	STORM MANHOLE OR INLET BASIN
---	---	STORM INLET
---	---	STORM SWALE
---	---	DRAINAGE INLET OR MES WITH FIBER ROLL OR TURBIDITY BARRIER PROTECTION
---	---	STAKED TURBIDITY BARRIER
---	---	FIBER ROLL WITH SILT FENCE TURBIDITY BARRIER PROTECTION
---	---	TRENCH WIDTH PAVEMENT/PAVER DEMOLITION AND RESTORATION
---	---	DEMOLISH PAVEMENT
---	---	VALVE
---	---	WATER MAIN
---	---	WATER SERVICE (SIZE VARIES)
---	---	GRADE CONTOURS
---	---	SPOT ELEVATIONS
---	---	BURIED POLE/ W/ANCHOR
---	---	POWER TELEPHONE
---	---	FIBER CABLE
---	---	CABLE TELEVISION
---	---	OVER HEAD ELEC
---	---	SWALE
---	---	RIGHT-OF-WAY
---	---	FENCING
---	---	ROADWAY OR DRIVEWAY
---	---	LIMITS OF WOODS
---	---	TREE



PROJECT CONTACTS				
TYPE	COMPANY	ADDRESS	PHONE	CONTACT PERSON
ELECTRIC	FLORIDA KEYS ELECTRIC COOPERATIVE	P.O. BOX 377 TAVERNIER, FL 33070	(305) 852-2431 EXT. 310	BILL LEE
TELEPHONE	AT&T	1120 S. ROGERS CIR. BOCA RATON, FL 33487	(561) 997-0240	DINU FARRUGARDU
CABLE	COMCAST	2601 SW 145TH AVE MIRAMAR, FL 33027	(754) 221-1254	LEONARD MAXWELL-NEWBOLD
WATER	FLORIDA KEYS AQUADUCT AUTHORITY	1100 KENNEDY DRIVE KEY WEST, FL 33040	(305) 295-2154	MARNIE WALTERSON
OWNER	CITY OF KEY COLONY BEACH, FLORIDA	600 WEST OCEAN DR. KEY COLONY BEACH, FL 33051	(305) 289-1212	GERARD ROUSSIN BUILDING OFFICIAL
DESIGN ENGINEER	MITTAUER & ASSOCIATES, INC.	580-1 WELLS ROAD ORANGE PARK, FL 32073	(904) 278-0030	JASON SHEPLER, P.E. JARROD PETROHOVICH, E.I.

REVISION DESCRIPTION  
 DATE BY  
 NO  
 1 INCH  
 DATE 05/31/22  
 PROJ. MGR. JRS  
 DESG. JPP  
 DRAWN USA  
 MTTAUER & ASSOCIATES, INC.  
 CONSULTING ENGINEERS  
 580-1 WELLS ROAD, ORANGE PARK, FLORIDA 32073  
 TEL. (904) 278-0030 FAX. (904) 278-0040  
 CITY OF KEY COLONY BEACH  
 SWAG 10th Street Stormwater Improvements, Phase 2A  
 General Notes, Abbreviations & Legend  
 Monroe County, Florida  
 JOB NO. 0604-17-1  
 SHEET NO. 2

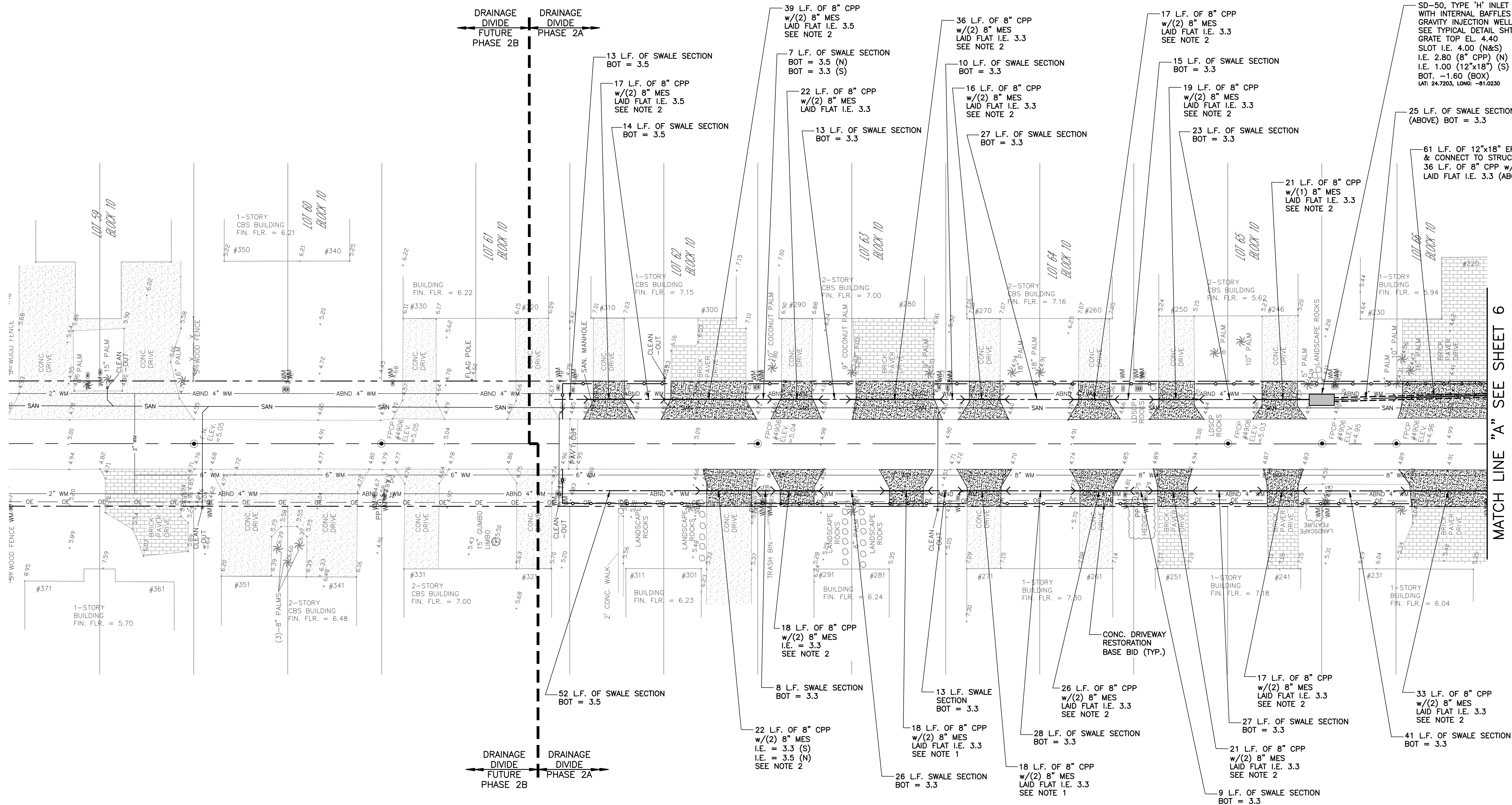




- EROSION & SEDIMENTATION CONTROL NOTES:**
- CONTRACTOR SHALL BE RESPONSIBLE FOR SUBMITTING, ACQUIRING AND ADHERING TO THE "NOTICE OF INTENT TO USE GENERAL PERMIT" FOR STORM WATER DISCHARGE FROM LARGE AND SMALL CONSTRUCTION ACTIVITIES IN ACCORDANCE WITH SECTION 02370 OF THE SPECIFICATIONS.
  - EXCEPT WHERE SPECIFIC REQUIREMENTS ARE NOTED, EROSION & SEDIMENTATION CONTROLS SHOWN ON THESE PLANS ARE SCHEMATIC IN NATURE. THE CONTRACTOR SHALL MODIFY OR SUPPLEMENT THESE CONTROLS AS NECESSARY TO DEVELOP A SITE AND PROTECT SPECIFIC STORM WATER POLLUTION PREVENTION PLAN (SWPPP). THE SWPPP SHALL MEET THE REQUIREMENTS OF THE FIELD CONDITIONS ENCOUNTERED AND CONFORM TO THE CONTRACTOR'S PROPOSED MEANS & METHODS WHILE REMAINING COMPLIANT WITH ALL APPLICABLE PROJECT PERMITS.
  - THE CONTRACTOR SHALL ADHERE TO THE FOLLOWING GENERAL CONSTRUCTION SEQUENCE:
    - ERECT ALL EROSION AND SEDIMENT CONTROLS
    - PREPARE AND PROTECT STAGING AREAS AND CONSTRUCTION AREAS C. PROCEED WITH OTHER ELEMENTS OF PROJECT
  - CONTRACTOR SHALL PROVIDE AND INSTALL ADDITIONAL EROSION CONTROLS AS NECESSARY TO REMAIN IN COMPLIANCE WITH ALL LOCAL, STATE & FEDERAL REGULATIONS.
  - MAINTAIN ALL TEMPORARY EROSION CONTROLS FOR THE DURATION OF THE WORK AND REPAIR AS NECESSARY.
  - CONTRACTOR SHALL REMOVE ALL TEMPORARY EROSION CONTROLS BY SUBSTANTIAL COMPLETION OF THE PROJECT. ALL DISTURBANCE/DAMAGE INCURRED DURING REMOVAL SHALL BE REPAIRED.

<p><b>MITTALAJER &amp; ASSOCIATES, INC.</b> CONSULTING ENGINEERS 580-1 WELLS ROAD, ORANGE PARK, FLORIDA CA. 32073 TEL. (904) 278-0030 FAX. (904) 278-0840</p>	
<p>DESIGNER: JPP DRAWN: MAL PROJECT MGR: JRS DATE: 05/23/22</p>	<p>NO. DATE BY</p>
<p>CITY OF KEY COLONY BEACH SWAG 10th Street Stormwater Improvements, Phase 2A Existing Conditions, Demolition Plan &amp; SWPPP Monroe County, Florida</p>	
<p>JOB NO. 0604-17-1 SHEET NO. 4</p>	

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MATCH LINE "A" SEE SHEET 6

**BASE BID - PLAN**  
1" = 20'

- LEGEND**
- CONCRETE DRIVEWAY RESTORATION (BASE BID) SEE TYPICAL DETAILS
  - CPP PIPE w/MES (BASE BID)
  - 6" SWALE (BASE BID) SEE TYPICAL SECTION

**NOTES:**

1. BASE BID SHALL BE AN OPEN SWALE COLLECTION SYSTEM IN ACCORDANCE WITH THE 'TYPICAL SWALE SECTION'. SEE SHIT 5A & 6A FOR ADDITIVE ALTERNATE No.1 REQUIREMENTS.
2. ALL SOLID PIPE IS BASE BID AND IS INTENDED FOR USE IN PAVED AREAS.
3. SELECTION OF AREAS TO RECEIVE ADDITIVE ALTERNATE UNIT PRICE Nos. 1 & 2 UPGRADES SHALL BE DETERMINED POST-BID.
4. GROUNDWATER IN THE PROJECT AREA IS TIDALLY INFLUENCED AND FLUCTUATES CONTINUOUSLY. THE CONTRACTOR SHALL GOVERN EXCAVATION ACTIVITIES ACCORDINGLY.
5. WHERE CONTRACTOR ENCOUNTERS AN EXISTING DRIVEWAY CULVERT NOT SHOWN ON PLANS, CONTRACTOR SHALL FLUSH CULVERT AND LAMP FOR CONCENTRICITY AND SUITABLE INSTALLATION. COORDINATE WITH OWNER ON PIPE ADEQUACY. CONTRACTOR SHALL MARRY PROJECT PIPE WORK TO EXISTING PIPE BY ADJUSTING PROJECT PIPE FOR EXISTING INVERT AND PROVIDING AN APPROPRIATE COUPLING, UNIT PRICE.
6. SPECIAL DRIVEWAY RESTORATION REQUIREMENTS REGARDING PAVERS AND STONE WILL BE ADDRESSED BY THE CITY ON A CASE-BY-CASE BASIS WITH EACH RESIDENT.
7. RELOCATE WATER METERS AS REQUIRED TO CONSTRUCT DRAINAGE IMPROVEMENTS.

CITY OF KEY COLONY BEACH  
SWAG 10th Street Stormwater Improvements, Phase 2A  
Plan - 10th Street (BASE BID)  
Monroe County, Florida

JOB NO.  
0604-17-1  
SHEET NO.

**MITTALNER & ASSOCIATES, INC.**  
CONSULTING ENGINEERS  
580-1 WELLS ROAD, ORANGE PARK, FLORIDA CA NO. 6569  
TEL. (904) 278-0030 FAX. (904) 278-0840

DESIGNER	JPP
DRAWN	MAL
PROJECT MANAGER	JRS
DATE	05/31/22

NO.	DATE	BY

REVISION DESCRIPTION

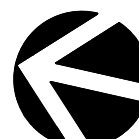
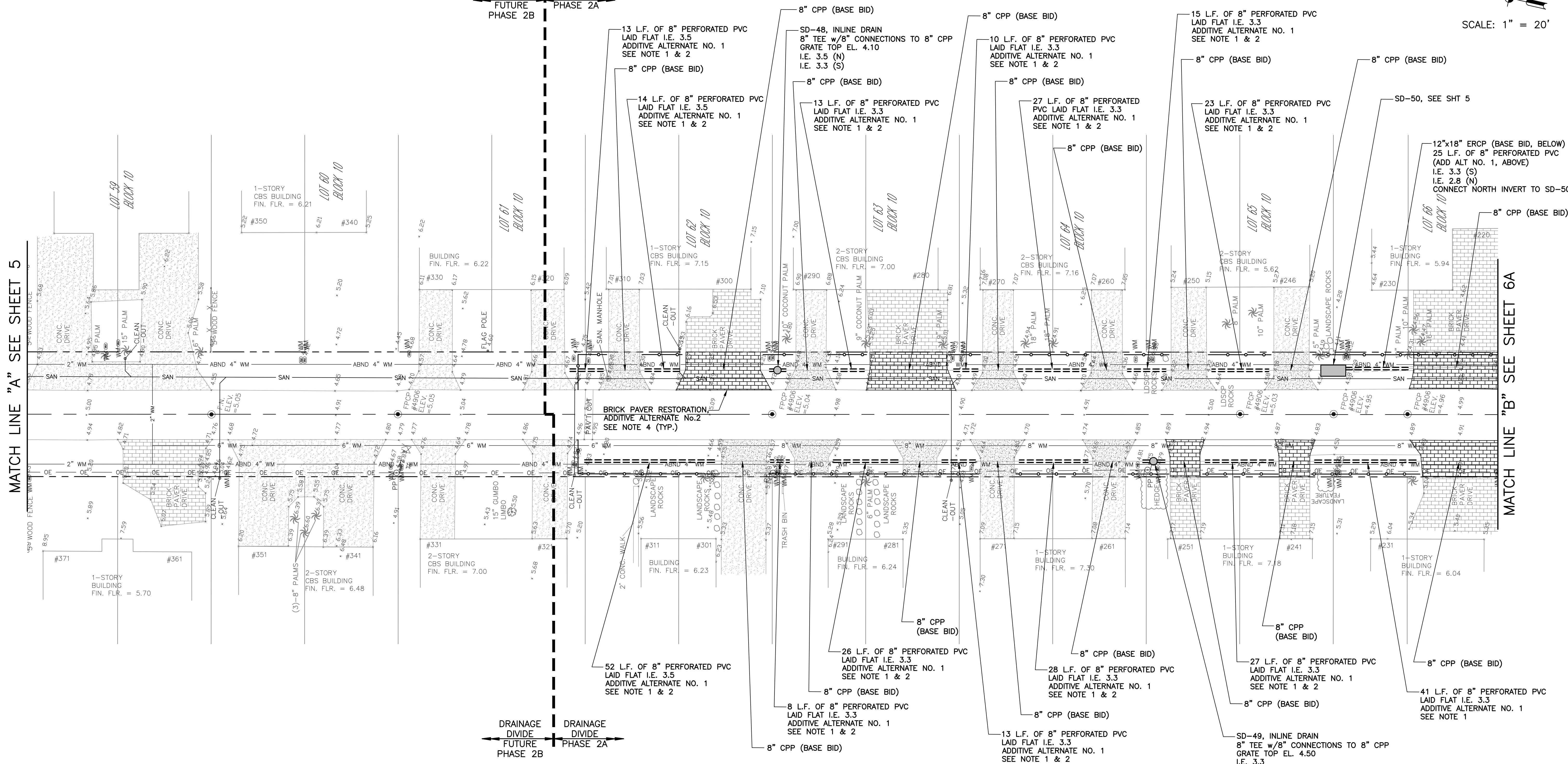
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MATCH LINE "A" SEE SHEET 5

MATCH LINE "B" SEE SHEET 6A

DRAINAGE DIVIDE FUTURE PHASE 2B | DRAINAGE DIVIDE PHASE 2A

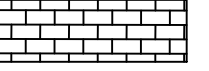


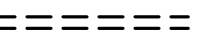
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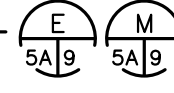
### ADDITIVE ALTERNATE No.1 - PLAN

1" = 20'

#### LEGEND

-  BRICK PAVER DRIVEWAY RESTORATION (ADDITIVE ALTERNATE NO. 2) SPECIAL DRIVEWAY RESTORATION REQUIREMENTS REGARDING PAVERS AND STONE WILL BE ADDRESSED BY THE CITY ON A CASE-BY-CASE BASIS WITH EACH RESIDENT.
-  CONCRETE DRIVEWAY RESTORATION (BASE BID)
-  CPP PIPE (BASE BID)
-  PERFORATED PVC PIPE (ADDITIVE ALTERNATE NO. 1)

#### NOTES:

1. ALL PERFORATED PIPE AND INLINE DRAINS SHOWN ON PLANS ARE INTENDED FOR USE IN NON-PAVED AREAS AND SHALL BE INCLUDED IN ADDITIVE ALTERNATE UNIT PRICE No. 1. SELECTION OF AREAS TO RECEIVE ADDITIVE ALTERNATE UNIT PRICE Nos. 1 & 2 UPGRADES SHALL BE DETERMINED POST BID.
2. CONTRACTORS UNIT PRICE FOR ADDITIVE ALTERNATE No. 1 SHALL INCLUDE ALL INCIDENTAL ITEMS SUCH AS FITTINGS AND COUPLINGS NECESSARY FOR ANY PARTICULAR RUN AT NO ADDITIONAL COST TO THE OWNER.
3. GROUNDWATER IN THE PROJECT AREA IS TIDALLY INFLUENCED AND FLUCTUATES CONTINUOUSLY. THE CONTRACTOR SHALL GOVERN EXCAVATION ACTIVITIES ACCORDINGLY.
4. REPAIR OF PAVERS WITHIN RIGHT-OF-WAY: CONTRACTOR SHALL PROVIDE UNIT PRICE FOR REMOVAL AND REPLACEMENT OF EXISTING PAVERS WITHIN RIGHT-OF-WAY AS ADDITIVE ALTERNATE UNIT PRICE No. 2. BASE BID PRICE SHALL INCLUDE DEMOLITION AND STANDARD CONCRETE RESTORATION AS SHOWN ON PLANS. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS. SELECTION OF AREAS TO RECEIVE ADDITIVE ALTERNATE PRICE No. 2 (IF ANY) SHALL BE MADE POST-BID.
5. FOR INLINE DRAIN REQUIREMENTS, SEE DETAIL 
6. RELOCATE WATER METERS AS REQUIRED TO CONSTRUCT DRAINAGE IMPROVEMENTS.

CITY OF KEY COLONY BEACH  
 SWAG 10th Street Stormwater Improvements, Phase 2A  
 Plan - 10th Street (ADDITIVE ALTERNATE)  
 Monroe County, Florida

JOB NO.  
0604-17-1  
SHEET NO.

5A



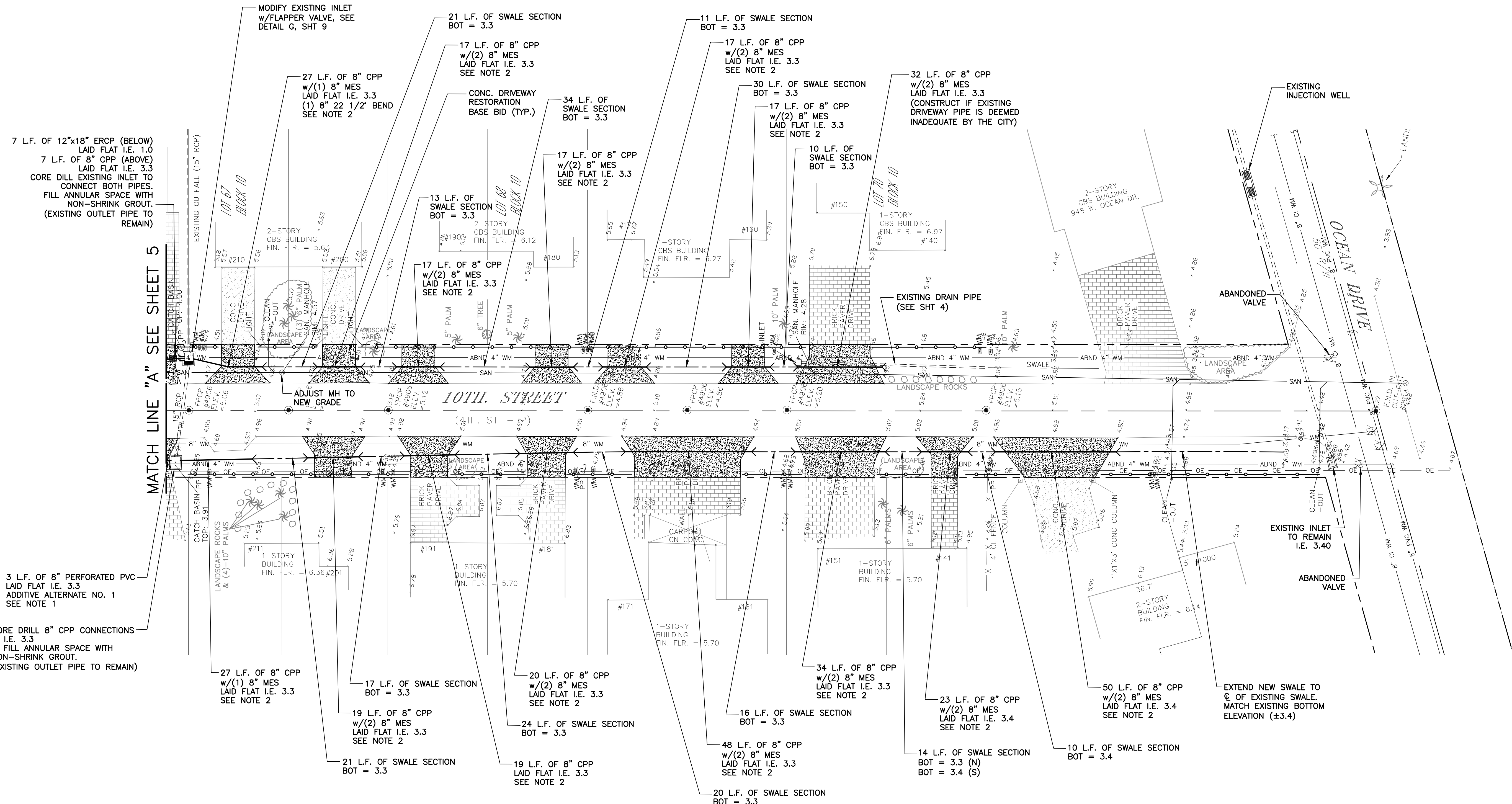
**MITTALUER & ASSOCIATES, INC.**  
 CONSULTING ENGINEERS  
 580-1 WELLS ROAD, ORANGE PARK, FLORIDA CA. 32073  
 TEL. (904) 278-0030 FAX. (904) 278-0840

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DRAWN	MAL
PROJ. MGR.	JRS
DATE	05/31/22

NO.	DATE	BY

REVISION DESCRIPTION

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**BASE BID - PLAN**  
1" = 20'

- LEGEND**
- CONCRETE DRIVEWAY RESTORATION (BASE BID) SEE TYPICAL DETAILS (A), (C), (D)
  - CPP PIPE w/MES (BASE BID)
  - SWALE (BASE BID) SEE TYPICAL SECTION (B)

- NOTES:**
1. BASE BID SHALL BE AN OPEN SWALE COLLECTION SYSTEM IN ACCORDANCE WITH THE 'TYPICAL SWALE SECTION'. SEE SHT 5A & 6A FOR ADDITIVE ALTERNATE No.1 REQUIREMENTS.
  2. ALL SOLID PIPE IS BASE BID AND IS INTENDED FOR USE IN PAVED AREAS.
  3. SELECTION OF AREAS TO RECEIVE ADDITIVE ALTERNATE UNIT PRICE Nos. 1 & 2 UPGRADES SHALL BE DETERMINED POST-BID.
  4. GROUNDWATER IN THE PROJECT AREA IS TIDALLY INFLUENCED AND FLUCTUATES CONTINUOUSLY. THE CONTRACTOR SHALL GOVERN EXCAVATION ACTIVITIES ACCORDINGLY.
  5. WHERE CONTRACTOR ENCOUNTERS AN EXISTING DRIVEWAY CULVERT NOT SHOWN ON PLANS, CONTRACTOR SHALL FLUSH CULVERT AND LAMP FOR CONCENTRICITY AND SUITABLE INSTALLATION. COORDINATE WITH OWNER ON PIPE ADEQUACY. CONTRACTOR SHALL MARRY PROJECT PIPE WORK TO EXISTING PIPE BY ADJUSTING PROJECT PIPE FOR EXISTING INVERT AND PROVIDING AN APPROPRIATE COUPLING, UNIT PRICE.
  6. SPECIAL DRIVEWAY RESTORATION REQUIREMENTS REGARDING PAVERS AND STONE WILL BE ADDRESSED BY THE CITY ON A CASE-BY-CASE BASIS WITH EACH RESIDENT.
  7. RELOCATE WATER METERS AS REQUIRED TO CONSTRUCT DRAINAGE IMPROVEMENTS.

CITY OF KEY COLONY BEACH  
SWAG 10th Street Stormwater Improvements, Phase 2A  
Plan - 10th Street (BASE BID)  
Monroe County, Florida

JOB NO.  
0604-17-1  
SHEET NO.

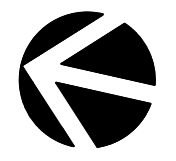
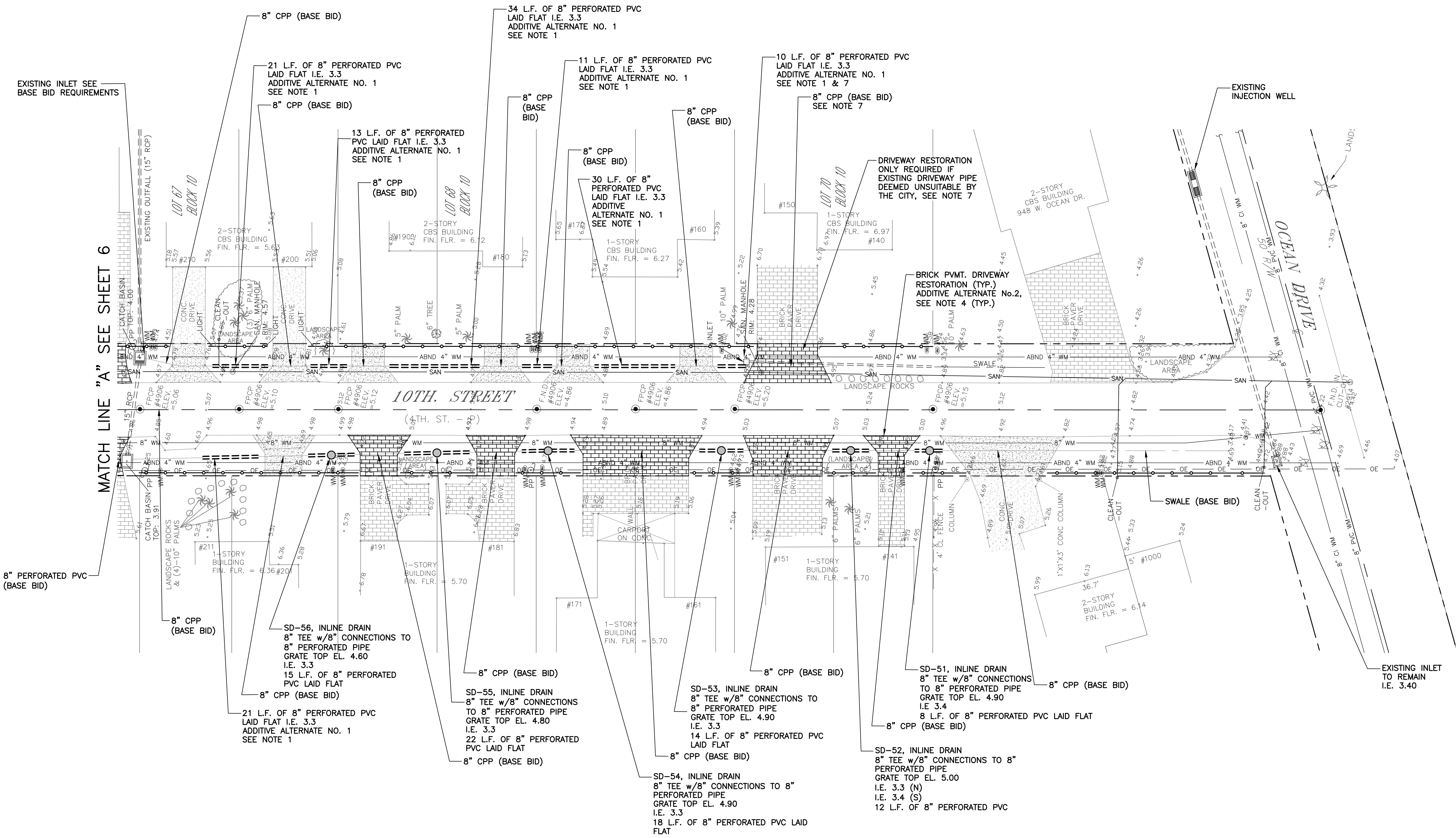
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DESIGN	JRP
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DATE	05/31/22

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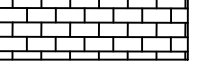


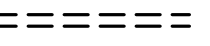
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**ADDITIVE ALTERNATE No.1 - PLAN**  
1" = 20'

**LEGEND**

	BRICK PAVER DRIVEWAY RESTORATION (ADDITIVE ALTERNATE NO. 2) SPECIAL DRIVEWAY RESTORATION REQUIREMENTS REGARDING PAVERS AND STONE WILL BE ADDRESSED BY THE CITY ON A CASE-BY-CASE BASIS WITH EACH RESIDENT.
	CONCRETE DRIVEWAY RESTORATION (BASE BID)
	CPP PIPE (BASE BID)
	PERFORATED PVC PIPE (ADDITIVE ALTERNATE NO. 1)

**NOTES:**

- ALL PERFORATED PIPE AND INLINE DRAINS SHOWN ON PLANS ARE INTENDED FOR USE IN NON-PAVED AREAS AND SHALL BE INCLUDED IN ADDITIVE ALTERNATE UNIT PRICE No. 1. SELECTION OF AREAS TO RECEIVE ADDITIVE ALTERNATE UNIT PRICE Nos. 1 & 2 UPGRADES SHALL BE DETERMINED POST-BID.
- CONTRACTORS UNIT PRICE FOR ADDITIVE ALTERNATE No. 1 SHALL INCLUDE ALL INCIDENTAL ITEMS SUCH AS FITTINGS AND COUPLINGS NECESSARY FOR ANY PARTICULAR RUN AT NO ADDITIONAL COST TO THE OWNER.
- GROUNDWATER IN THE PROJECT AREA IS TIDALLY INFLUENCED AND FLUCTUATES CONTINUOUSLY. THE CONTRACTOR SHALL GOVERN EXCAVATION ACTIVITIES ACCORDINGLY.
- REPAIR OF PAVERS WITHIN RIGHT-OF-WAY: CONTRACTOR SHALL PROVIDE UNIT PRICE FOR REMOVAL AND REPLACEMENT OF EXISTING PAVERS WITHIN RIGHT-OF-WAY AS ADDITIVE ALTERNATE UNIT PRICE No. 2. BASE BID PRICE SHALL INCLUDE DEMOLITION AND STANDARD CONCRETE RESTORATION AS SHOWN ON PLANS. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS. SELECTION OF AREAS TO RECEIVE ADDITIVE ALTERNATE PRICE No. 2 (IF ANY) SHALL BE MADE POST-BID.
- FOR INLINE DRAIN REQUIREMENTS, SEE DETAIL 
- RELOCATE WATER METERS AS REQUIRED TO CONSTRUCT DRAINAGE IMPROVEMENTS.
- FOR ADDITIVE ALTERNATE NO. 1 IS SELECTED FOR THIS AREA, THE PERFORATED PIPE SHALL EITHER BE TIED INTO THE NEW 8" CPP INSTALLED AS PART OF THE BASE BID WORK OR CONNECTED TO THE EXISTING INLINE DRAIN AS PART OF THE ADDITIVE ALTERNATE NO. 1 PRICING. THE CONTRACTOR SHALL MODIFY THE EXISTING INLINE DRAIN AS REQUIRED TO ACCOMMODATE THE PERF PIPE CONNECTION (I.E. REMOVE 90 AND INSTALL TEE, ETC.)

CITY OF KEY COLONY BEACH  
SWAG 10th Street Stormwater Improvements, Phase 2A  
Plan - 10th Street (ADDITIVE ALTERNATE)  
Monroe County, Florida

JOB NO.  
0604-17-1  
SHEET NO.



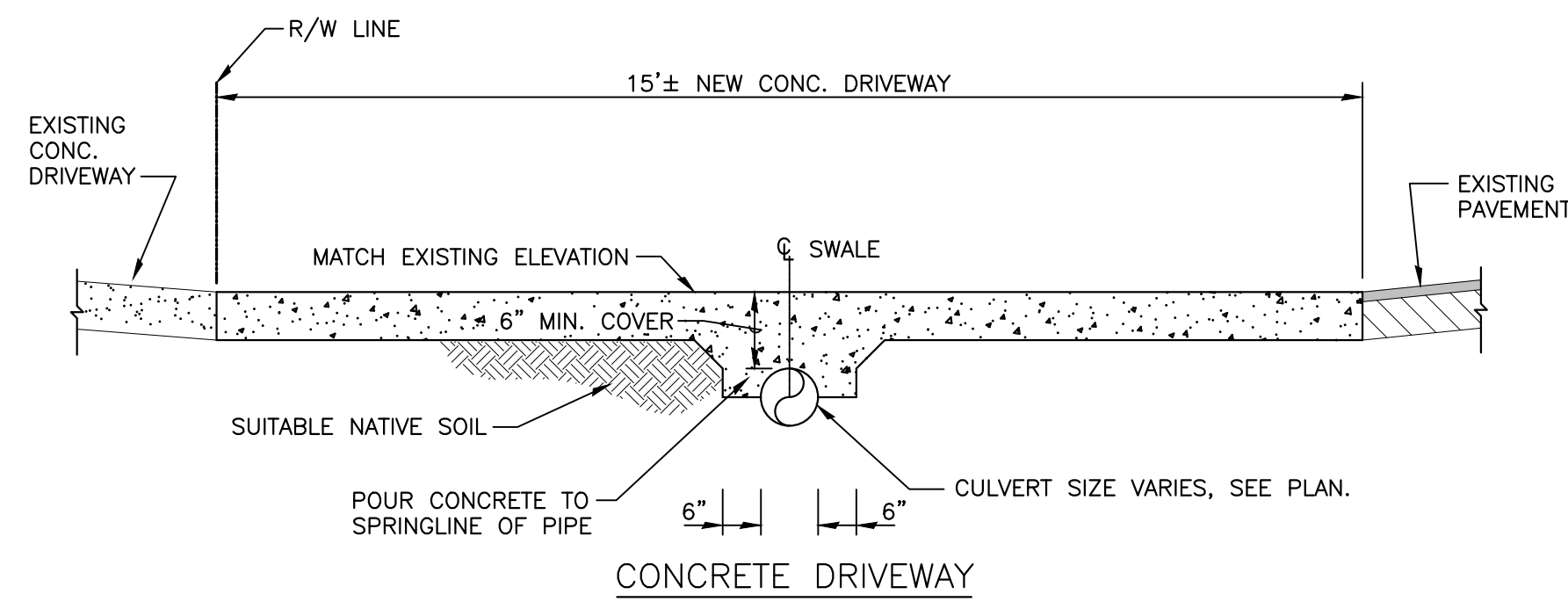
**MITTALUER & ASSOCIATES, INC.**  
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DRAWN	MAL
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DATE	05/31/22

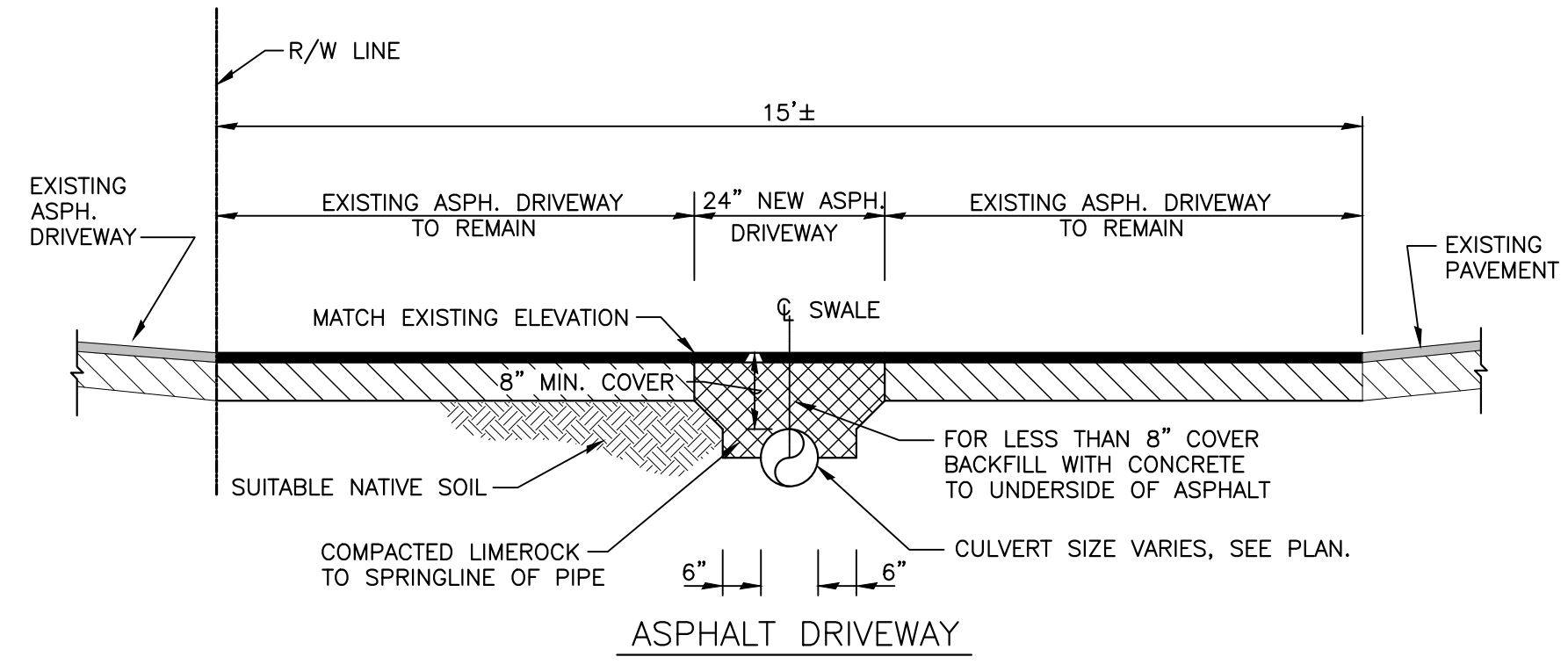
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REVISION DESCRIPTION

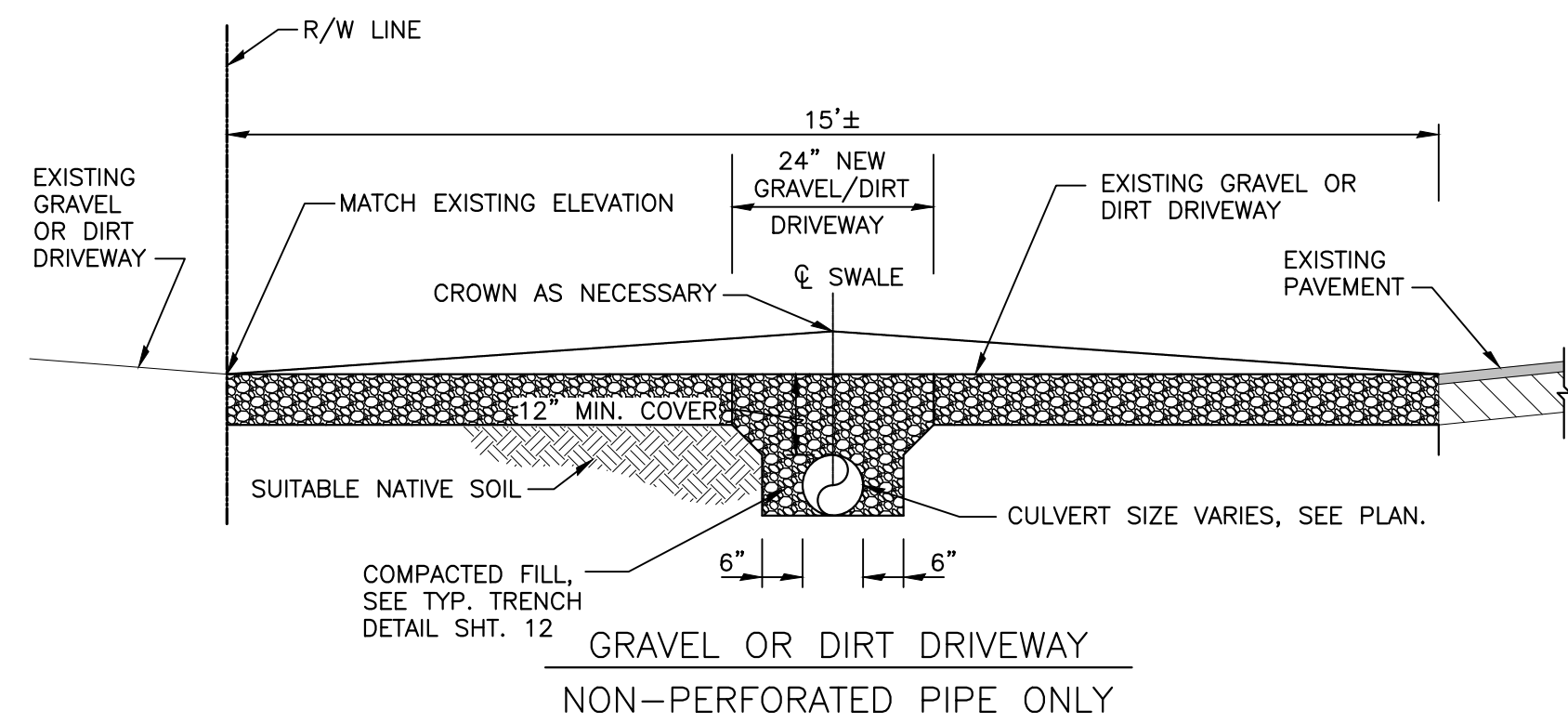




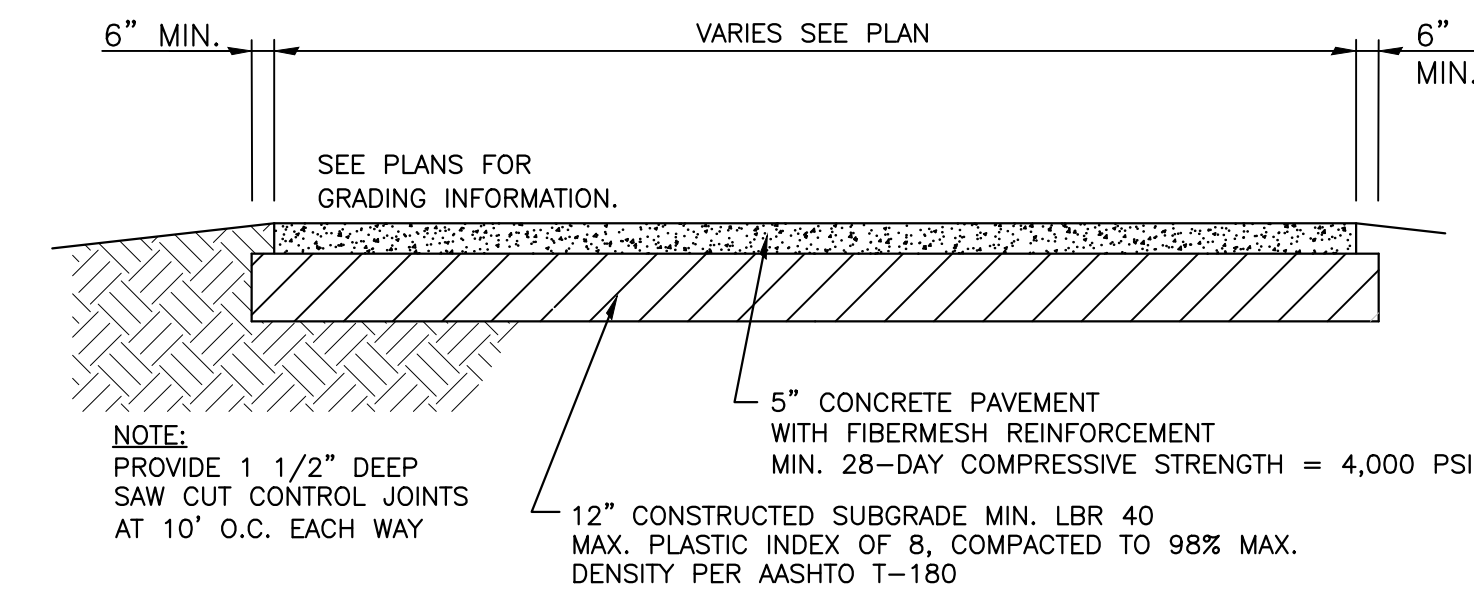
**A** TYPICAL DRIVEWAY CULVERT INSTALLATIONS  
5A+7 BASE BID NTS



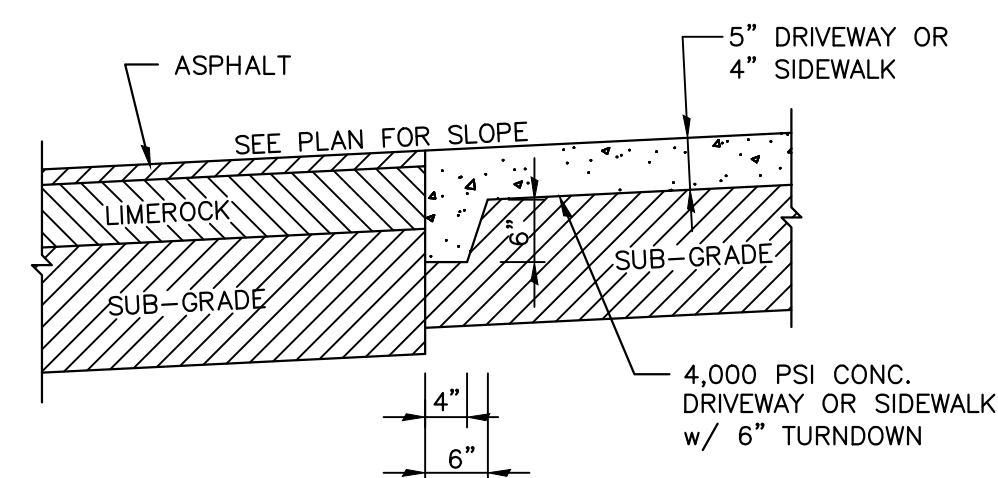
**B** TYPICAL SWALE SECTION  
5A+7 BASE BID NTS



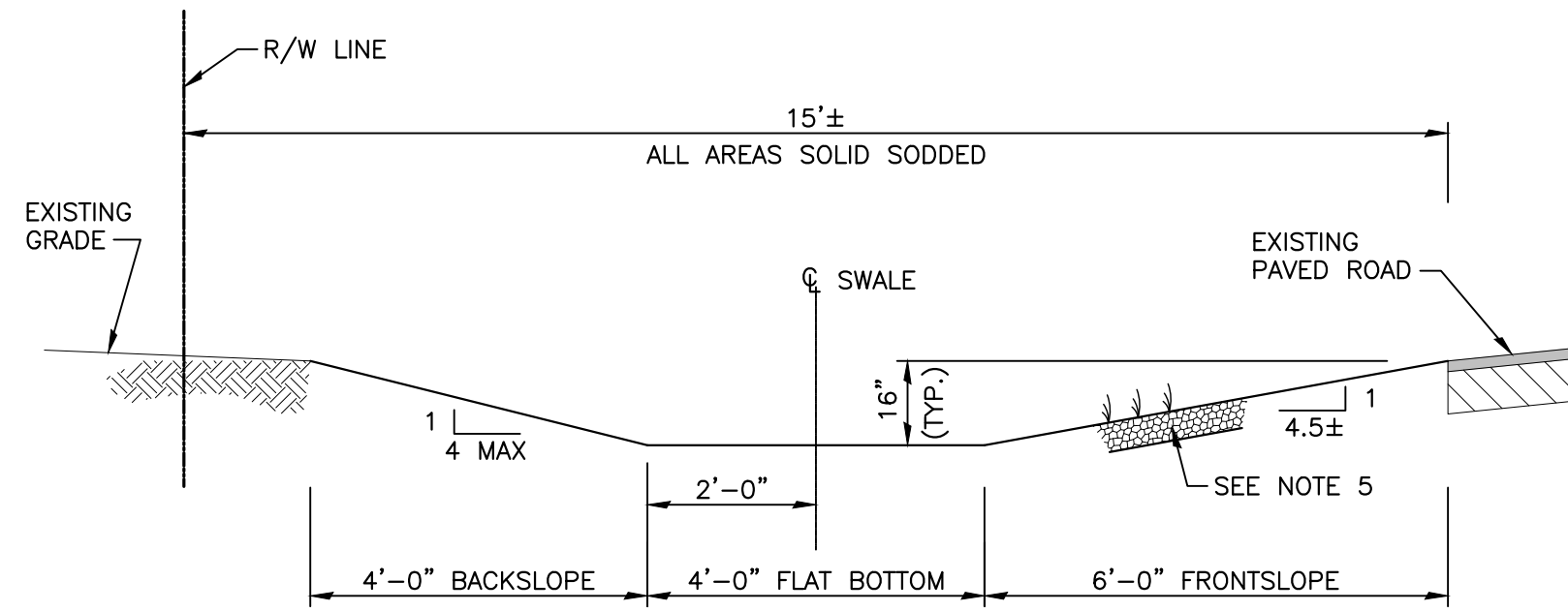
**C** TYPICAL DRIVEWAY PLAN (BASE BID)  
5A+7 NTS



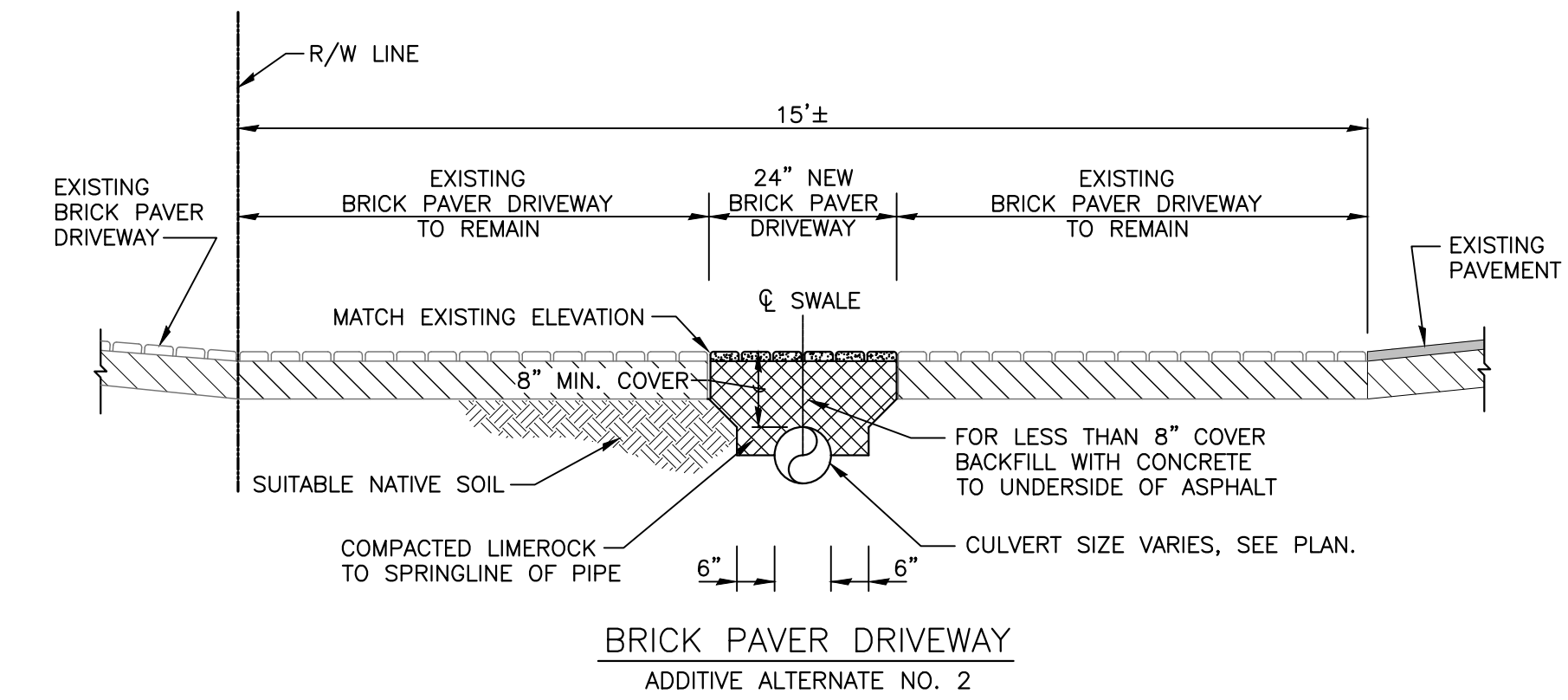
**D** TYPICAL CONCRETE DRIVEWAY SECTION  
5A+7 NTS



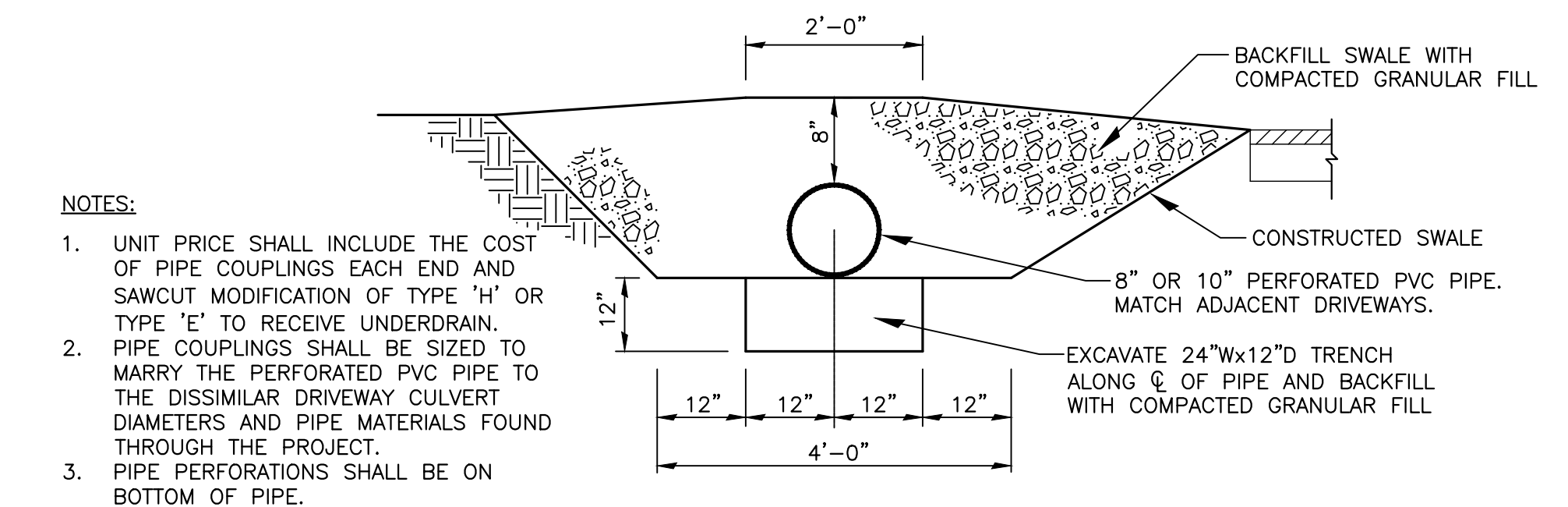
**E** CONCRETE TO ASPHALT INTERFACE  
5A+7 NTS



**F** TYPICAL ASPHALTIC DRIVEWAY SECTION  
5A+7 NTS



**G** TYPICAL PAVER DRIVEWAY CULVERT INSTALLATIONS  
5A+7 (ADDITIVE ALTERNATE NO. 2) NTS



**H** SWALE CLOSURE WITH UNDERDRAIN PIPING  
5A+7 (ADDITIVE ALTERNATE NO. 1) NTS

- NOTES:**
1. IN THE EVENT AVAILABLE R/W NARROWS, THE CONTRACTOR SHALL FIRST REDUCE THE FLAT BOTTOM WIDTH, SECOND STEEPEN THE BACKSLOPE AND LAST STEEPEN THE FRONT SLOPE.
  2. ANY CHANGES TO THE PROFILE SHALL BE COORDINATED WITH THE ENGINEER.
  3. BACKSLOPE GRADES SHALL NOT BE STEEPER THAN 3:1.
  4. FRONT SLOPE GRADES SHALL NOT BE STEEPER THAN 4:1.
  5. RESTORED SWALE SURFACE SHALL MATCH ADJACENT PROPERTY. WHERE ADJACENT YARD IS GRASS, SWALE SHALL BE SOLID SODDED. WHERE ADJACENT YARD IS GRAVEL, SWALE SHALL BE 4" OF PEA GRAVEL OVER A CONTINUOUS WEED INHIBITING FABRIC.

**NOTES:**

1. UNIT PRICE SHALL INCLUDE THE COST OF PIPE COUPLINGS EACH END AND SAWCUT MODIFICATION OF TYPE 'H' OR TYPE 'E' TO RECEIVE UNDERDRAIN.
2. PIPE COUPLINGS SHALL BE SIZED TO MARRY THE PERFORATED PVC PIPE TO THE DISSIMILAR DRIVEWAY CULVERT DIAMETERS AND PIPE MATERIALS FOUND THROUGH THE PROJECT.
3. PIPE PERFORATIONS SHALL BE ON BOTTOM OF PIPE.

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PROJ. MGR.	JRS		

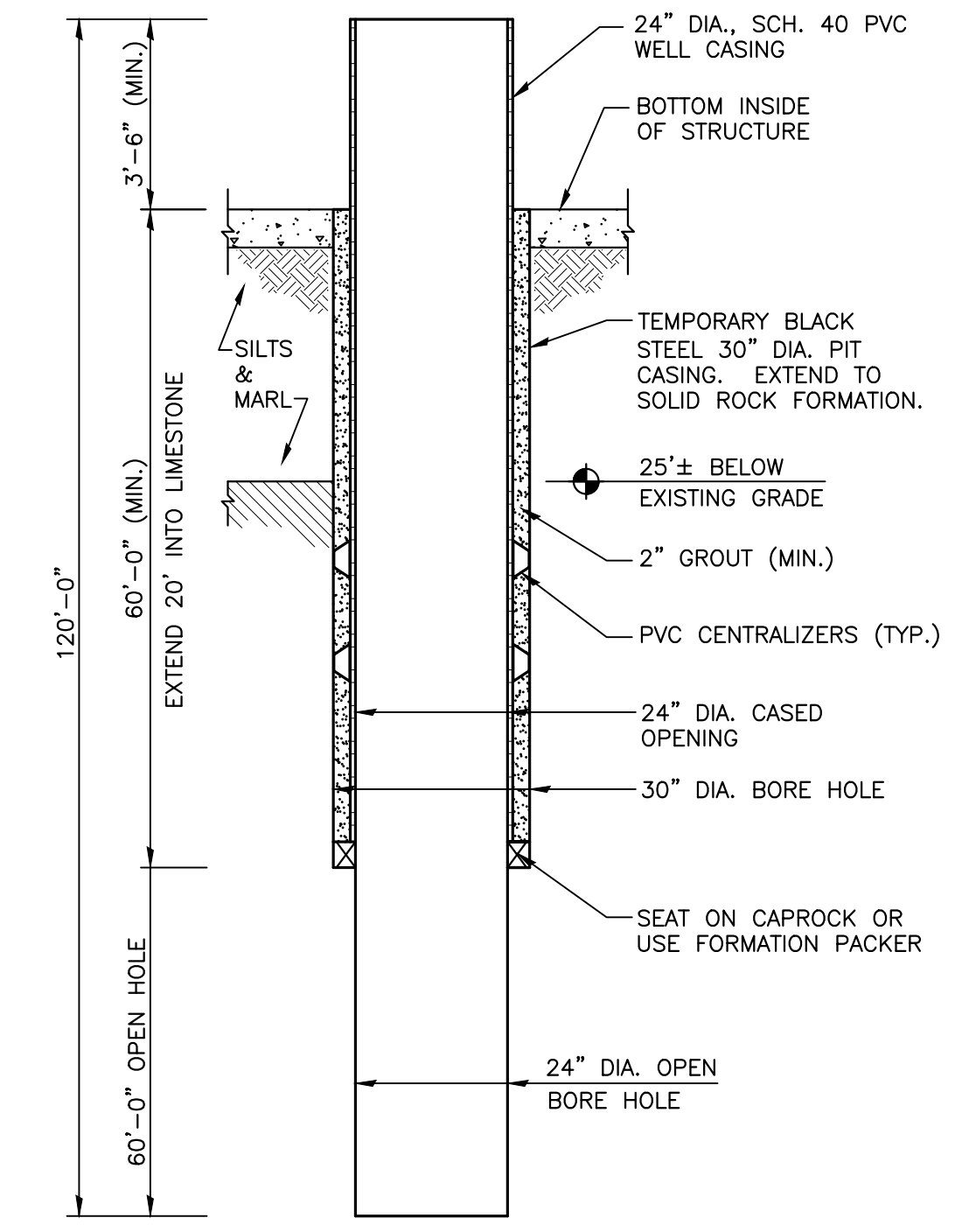
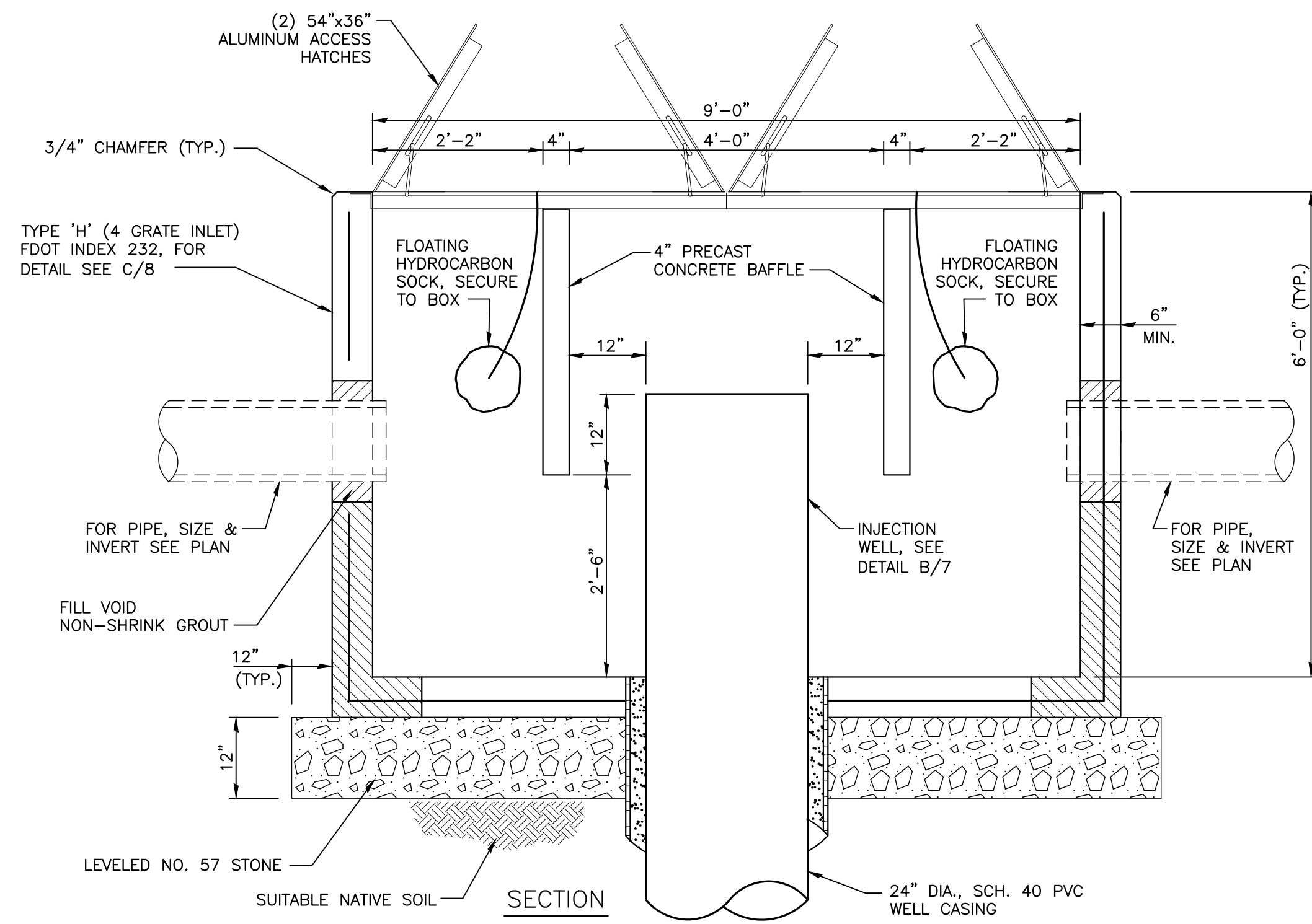
**MITTALUER & ASSOCIATES, INC.**  
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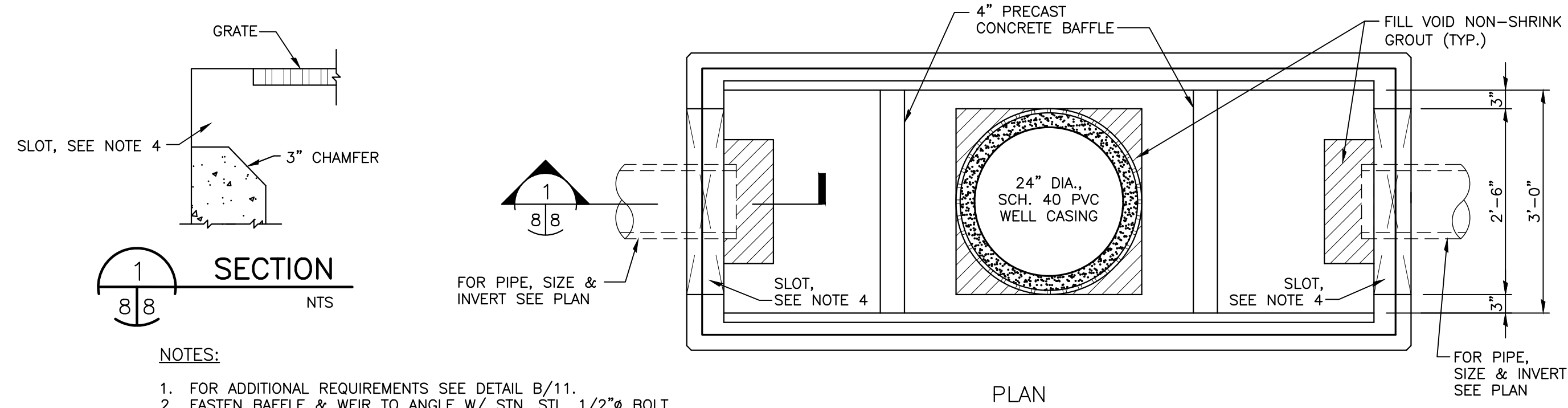
CITY OF KEY COLONY BEACH  
SWAG 10th Street Stormwater Improvements, Phase 2A  
Details  
Monroe County, Florida

JOB NO. 0604-17-1  
SHEET NO. 7

REVISION DESCRIPTION NO. DATE BY



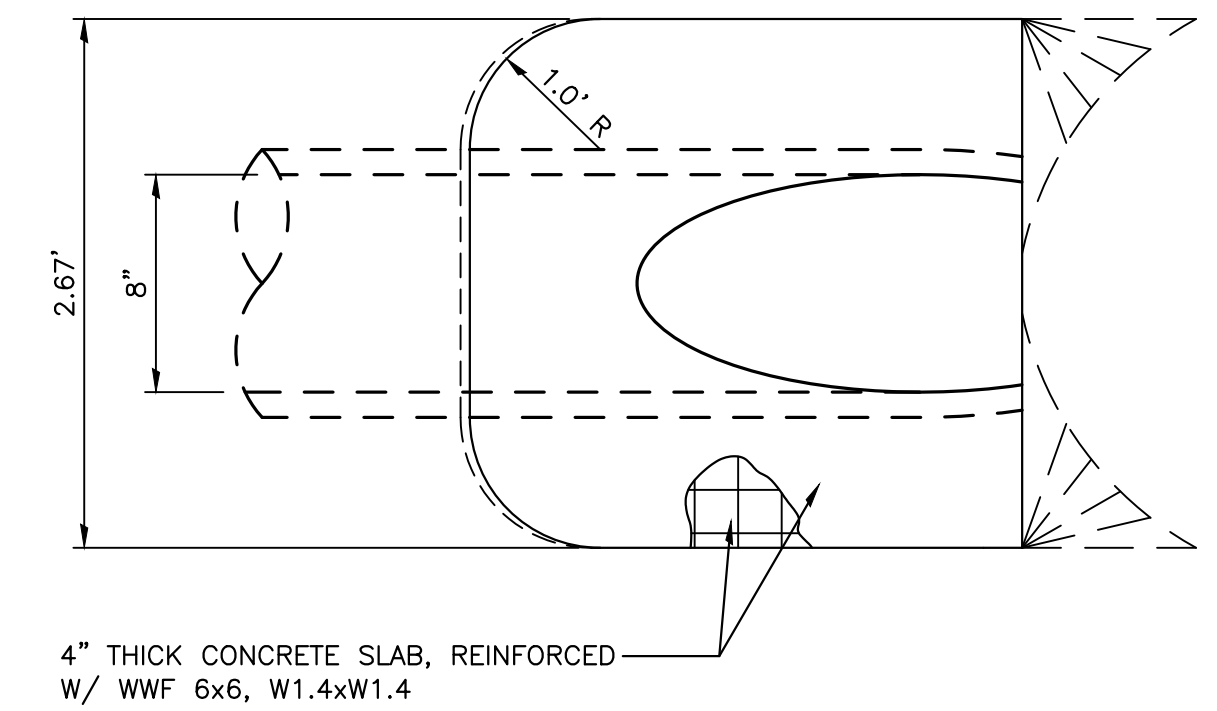
**C** STORM SEWER INJECTION WELL  
NTS



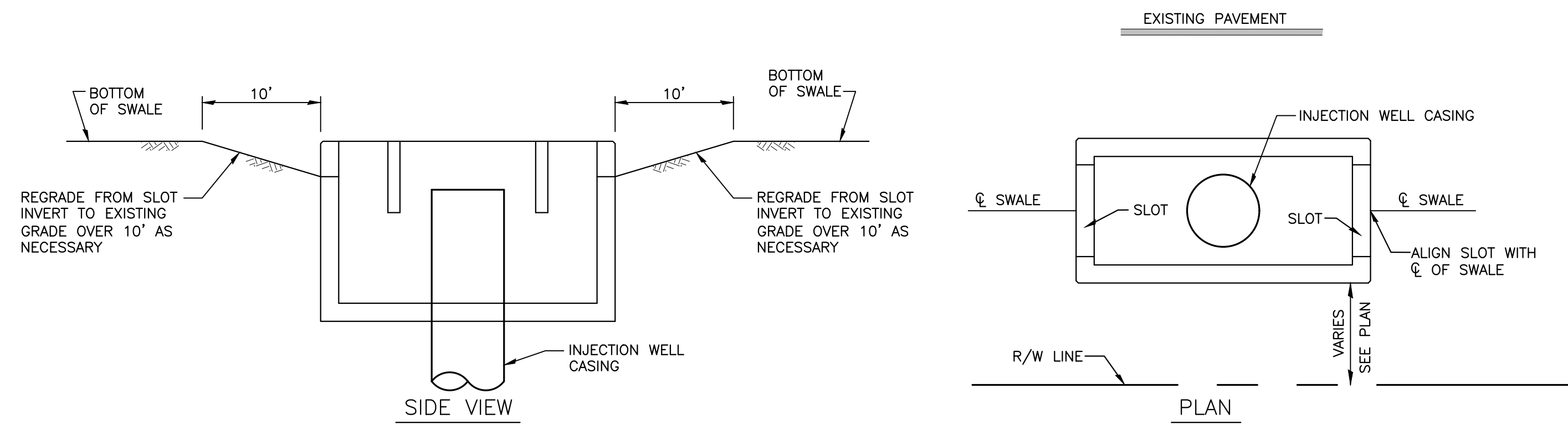
**NOTES:**

1. FOR ADDITIONAL REQUIREMENTS SEE DETAIL B/11.
2. FASTEN BAFFLE & WEIR TO ANGLE W/ STN. STL. 1/2" Ø BOLT, WASHER, LOCK WASHER & NUT, SPACED AT 12" O.C. MAX.
3. SUPPORT GRATE ACROSS SLOT WITH 2x1x1/4" ANGLE.
4. IF SWALE IS NOT CONSTRUCTED ADJACENT TO INLET, THEN SLOTS ARE NOT REQUIRED. INSTEAD, EXFILTRATION TRENCH PIPING SHALL BE CONNECTED DIRECTLY TO THE INLET.

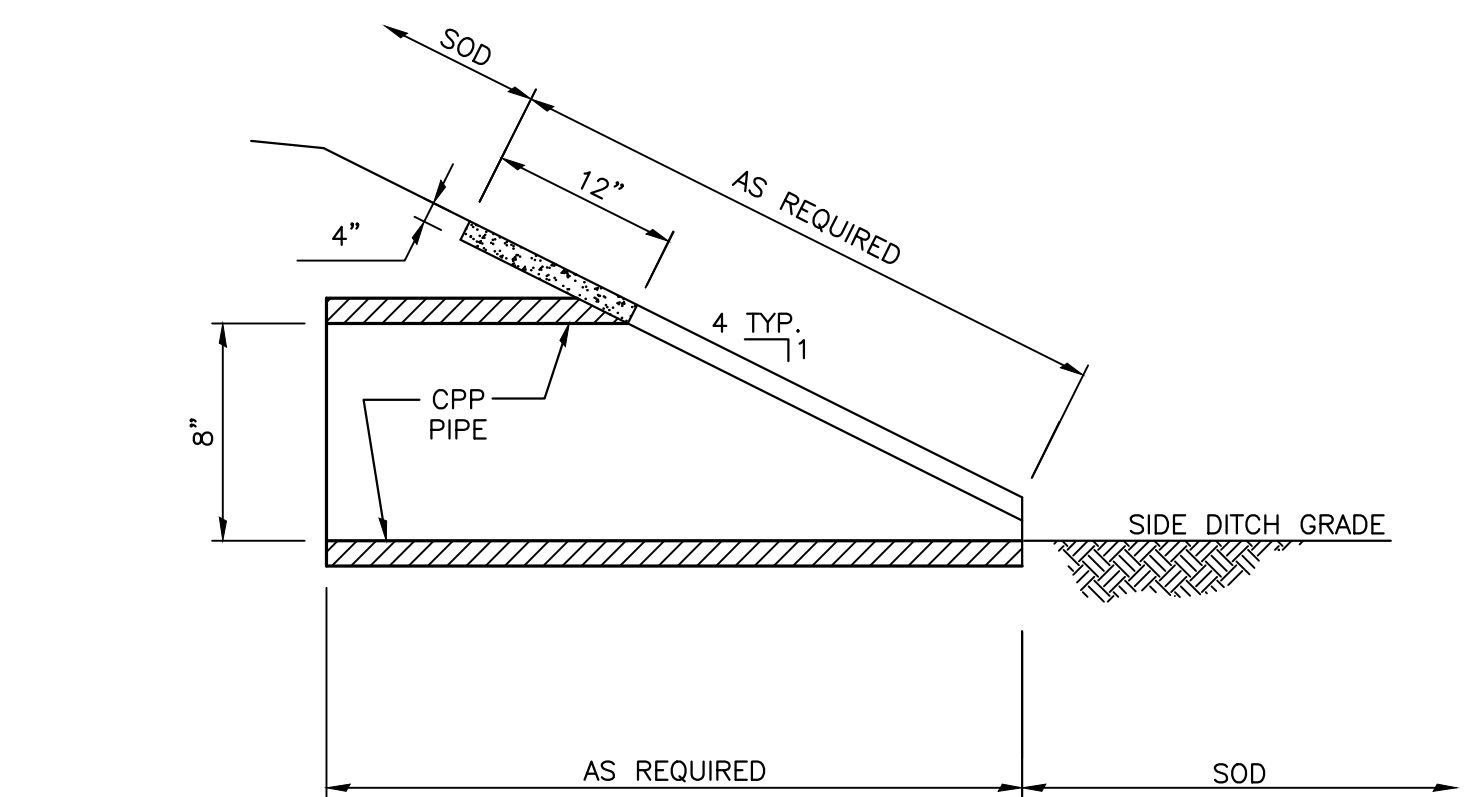
**A** TYPE 'H' INLET WITH GRAVITY INJECTION WELL  
NTS



4" THICK CONCRETE SLAB, REINFORCED  
W/ WWF 6x6, W1.4xW1.4



**B** TYPE 'H' INLET INSTALLATION DETAILS  
NTS

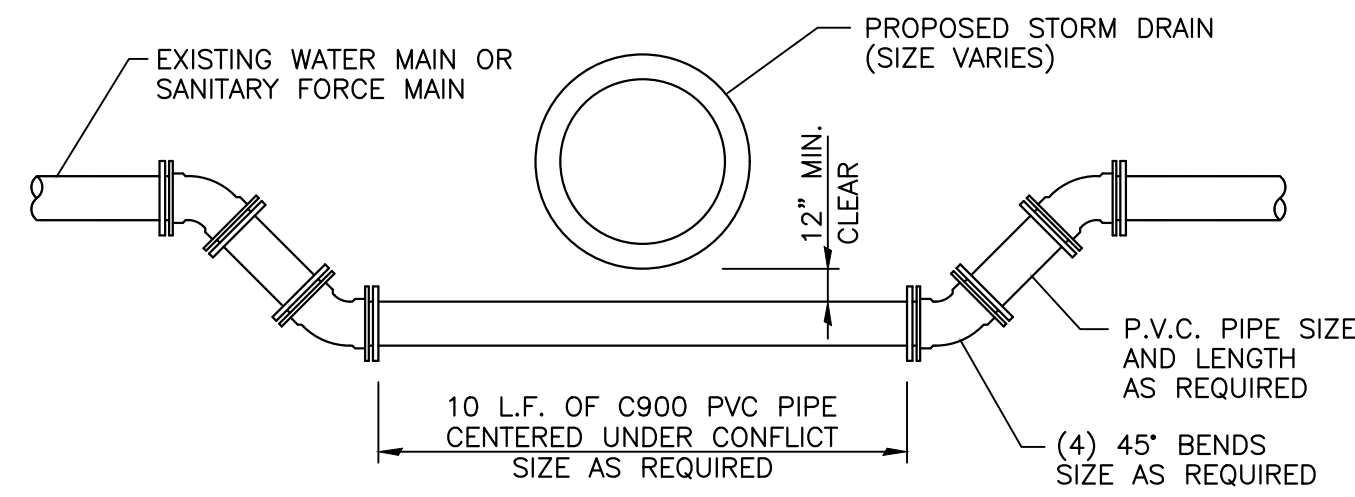


**NOTE:**

IF ADDITIVE ALTERNATE No. 1 IS SELECTED BY THE HOME OWNER, THE MITERED END SECTION WILL NOT BE REQUIRED. THE DRIVEWAY CULVERT WILL CONNECT DIRECTLY TO THE EXFILTRATION TRENCH PIPING.

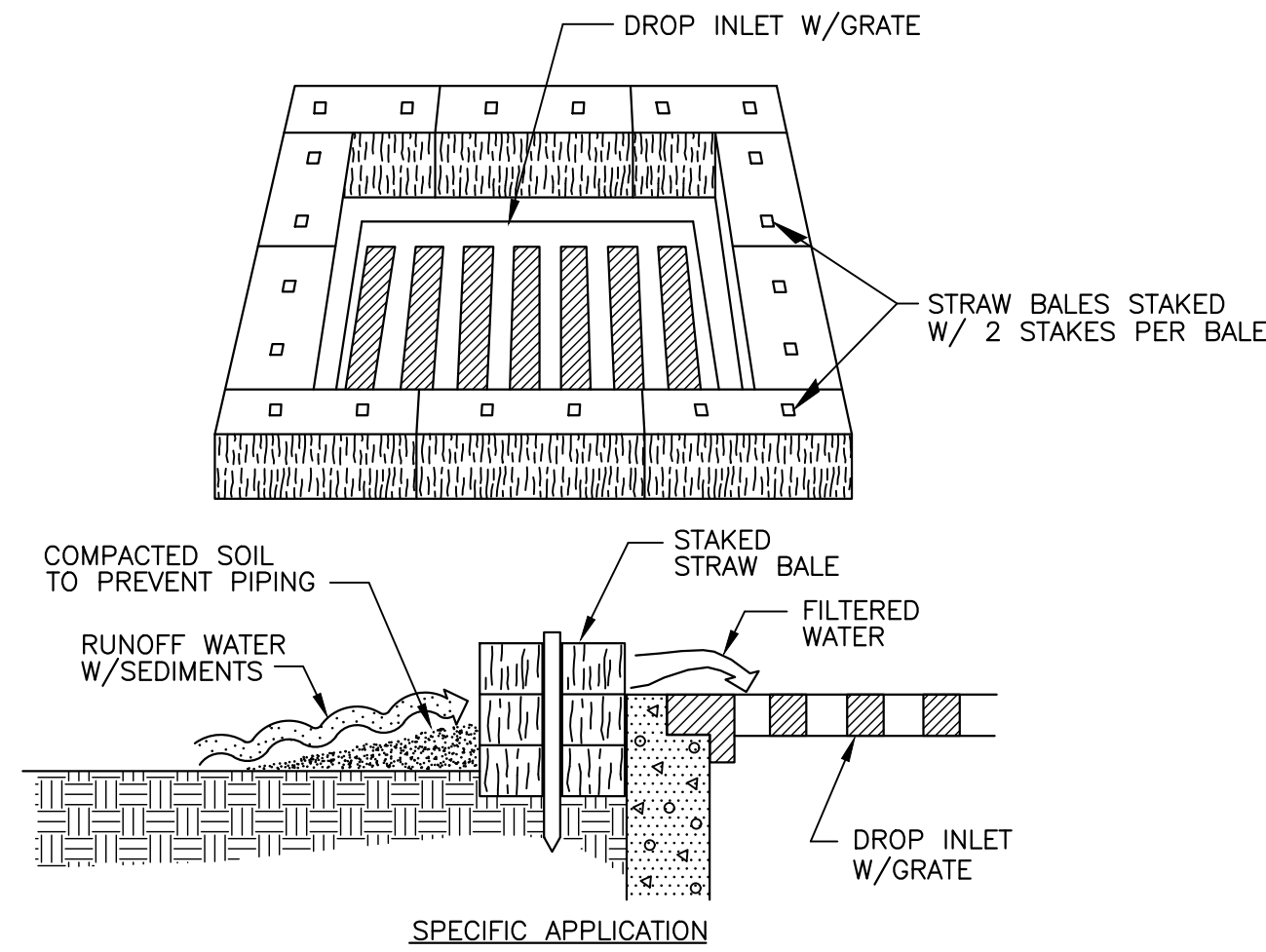
**D** 8" MITERED END SECTION - DETAIL  
(BASE BID) NTS

<p>DESIGNER: JPP DRAWN: MAL PROJ. MGR.: JRS DATE: 05/31/22</p>		<p>NO. _____ DATE _____ BY _____</p>	<p>REVISION DESCRIPTION</p>
<p>SCALE: 1" = 1'</p>		<p>MITTALUER &amp; ASSOCIATES, INC. CONSULTING ENGINEERS 580-1 WELLS ROAD, ORANGE PARK, FLORIDA 32073 TEL: (904) 278-0030 FAX: (904) 278-0840</p>	
<p>CITY OF KEY COLONY BEACH SWAG 10th Street Stormwater Improvements, Phase 2A</p>		<p>Monroe County, Florida</p>	
<p>JOB NO. 0604-17-1 SHEET NO. 08</p>		<p>08</p>	



- NOTES:**
- CONTRACTOR TO VERIFY EXISTING AND PROPOSED ELEVATIONS AT ALL UTILITY CONFLICT LOCATIONS.
  - ALL JOINTS (PROPOSED AND EXISTING) AT UTILITY CONFLICTS SHALL BE MECHANICALLY RESTRAINED.
  - ALL POTABLE WATER WORK TO BE DONE BY FKA.
  - ALL JOINTS (PROPOSED AND EXISTING) AT UTILITY CONFLICTS SHALL BE MECHANICALLY RESTRAINED.

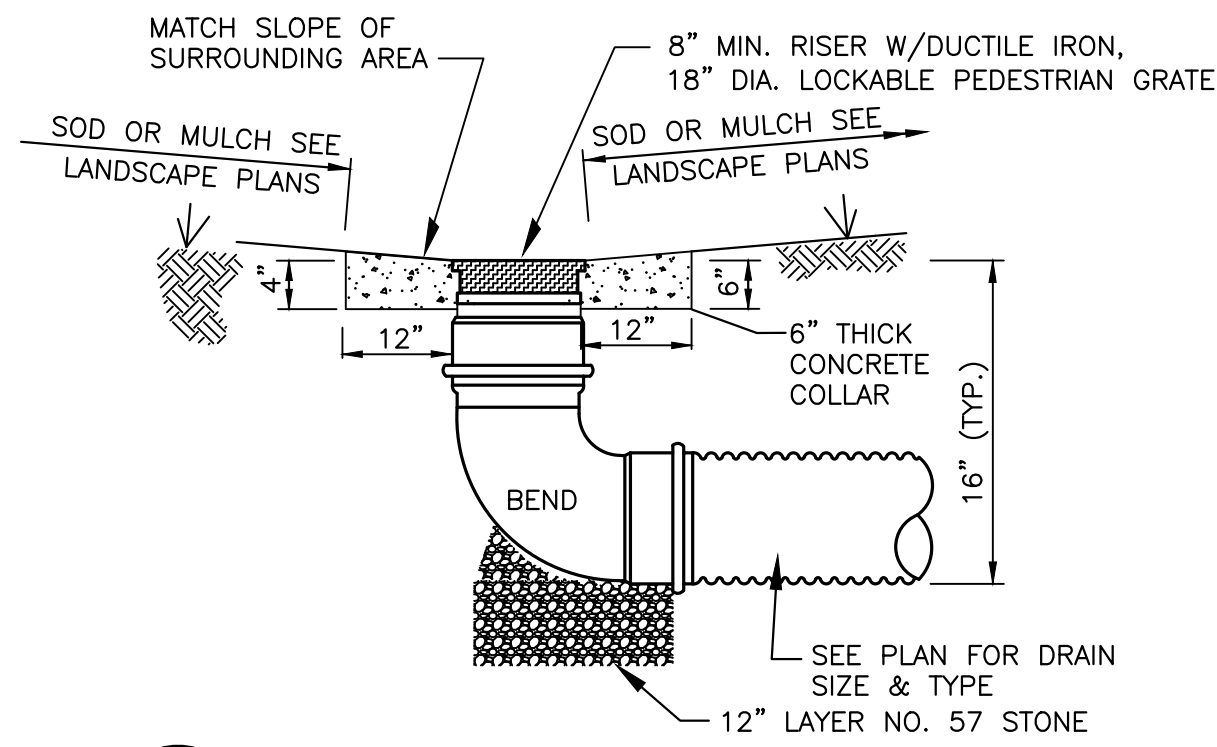
**D UTILITY CONFLICT TYPE B**  
5A+9 NTS



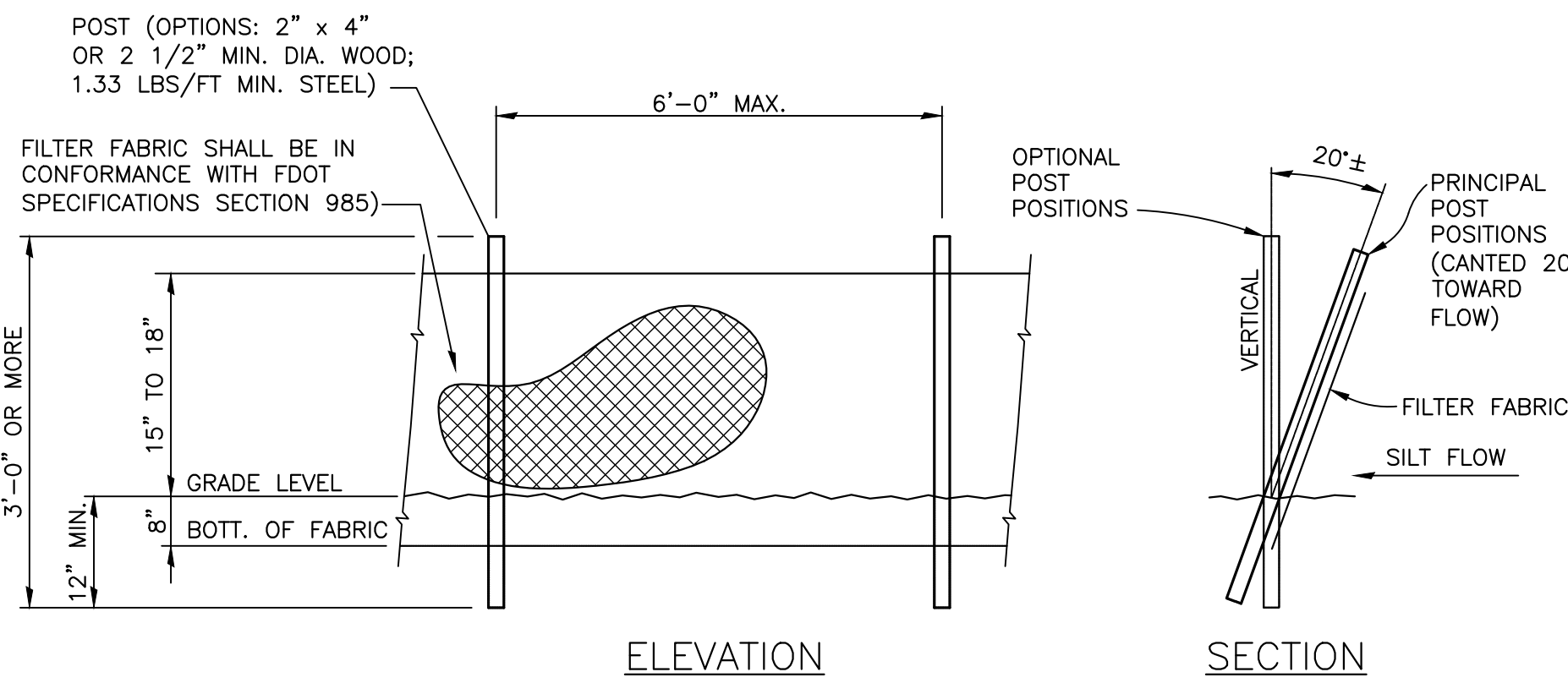
**SPECIFIC APPLICATION**

THIS METHOD OF INLET PROTECTION IS APPLICABLE WHERE THE INLET DRAINS A RELATIVELY FLAT AREA ( SLOPES NO GREATER THAN 5% ) WHERE SHEET OR OVERLAND FLOWS (NOT EXCEEDING 0.5 CFS ) ARE TYPICAL. THE METHOD SHALL NOT APPLY TO INLETS RECEIVING CONCENTRATED FLOWS, SUCH AS IN STREET OR HIGHWAY MEDIANS.

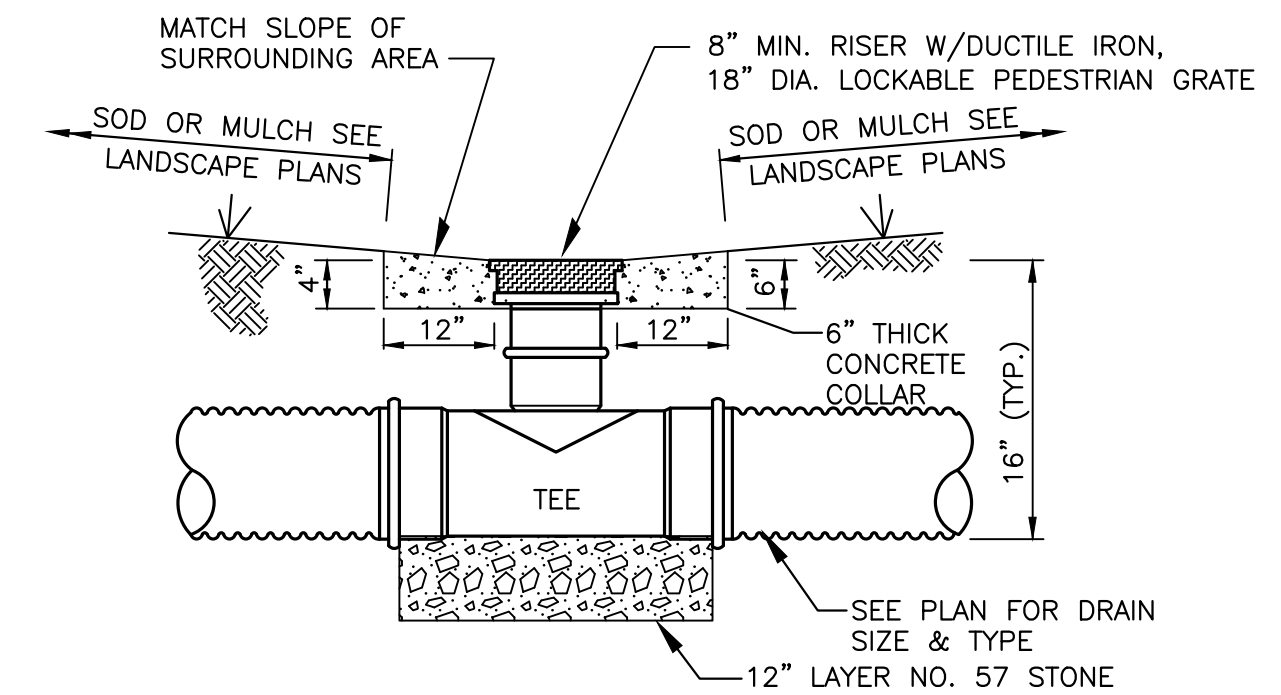
**J STRAW BALE DROP INLET SEDIMENT FILTER**  
4/9 NTS



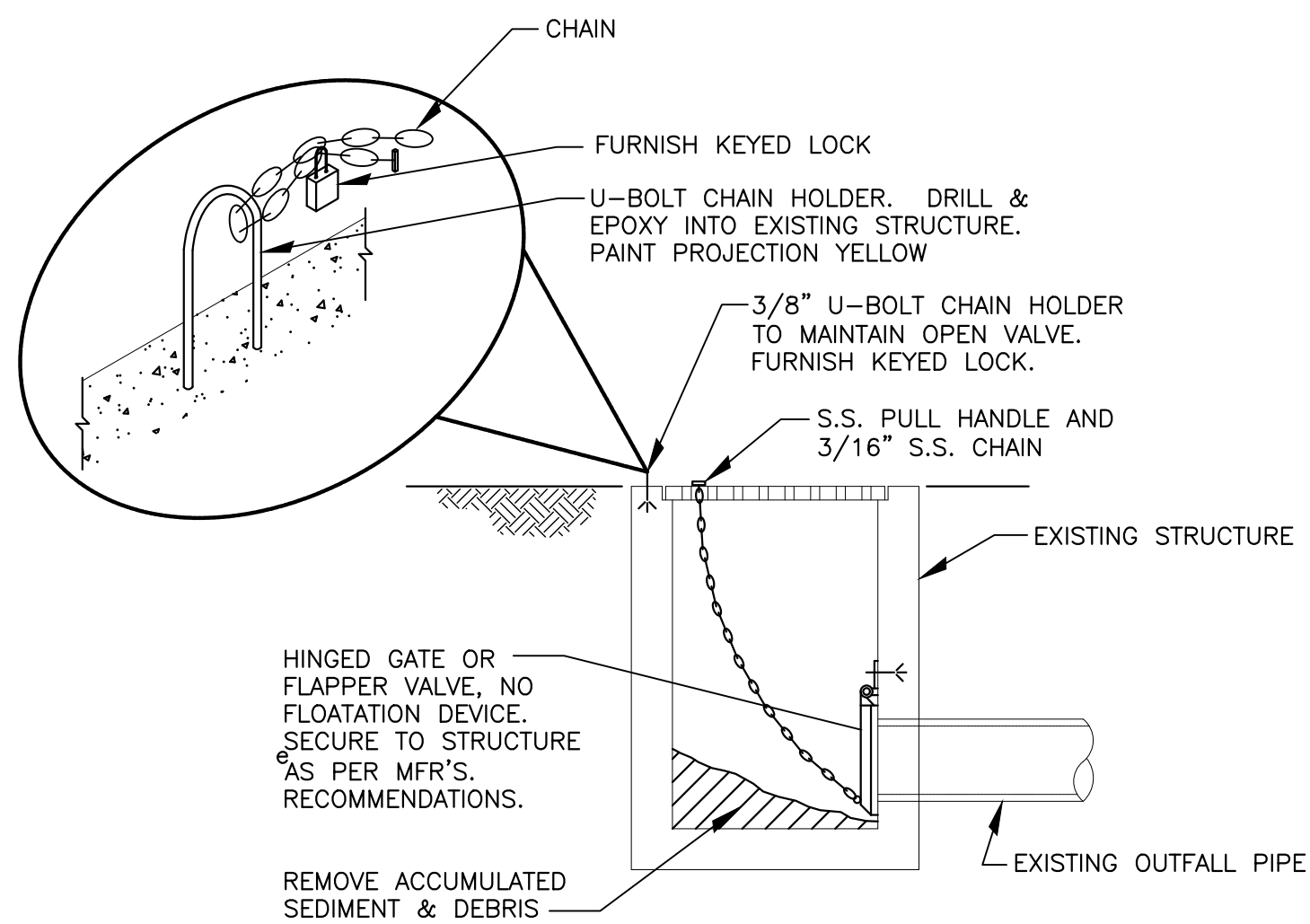
**E TYPICAL PVC INLINE DRAIN**  
5A+9 ADDITIVE ALTERNATE NO. 1 NTS



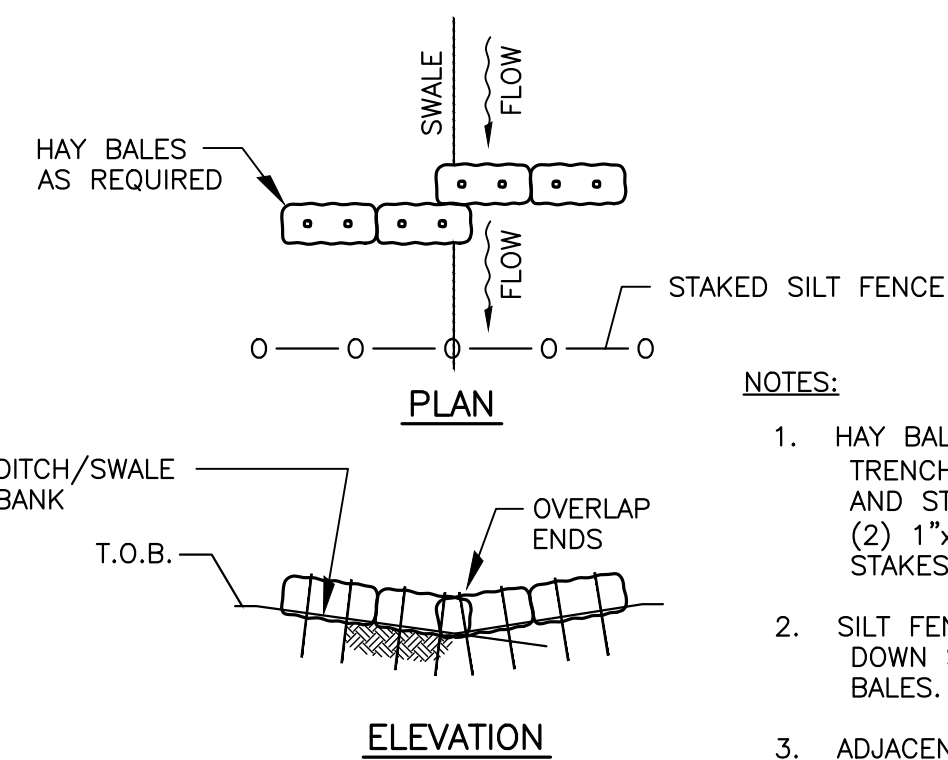
**K TYPE III SILT FENCE**  
4/9 NTS



**M TYPICAL PVC INLINE DRAIN**  
5A+9 ADDITIVE ALTERNATE NO. 1 NTS



**G VALVE CLOSURE AT EXISTING INLETS**  
5A+9 NTS



**L HAY BALE PLACEMENT**  
4/9 NTS

- NOTES:**
- HAY BALES SHALL BE TRENCHED 3" TO 4" AND STAKED WITH (2) 1"x2"x4" WOOD STAKES PER BALE.
  - SILT FENCE SHALL BE DOWN STREAM OF HAY BALES.
  - ADJACENT BALES SHALL BE BUTTED FIRMLY TOGETHER. UNAVOIDABLE GAPS SHALL BE PLUGGED WITH HAY OR STRAW TO PREVENT SILT FROM PASSING.