



McLeod • McCarthy
& Associates, P.A.
Civil Engineers

The Forum III
1655 Palm Beach Lakes Blvd, Ste. 810
West Palm Beach, FL 33401
P: 561.689.9500
F: 561.689.8080
www.mcleodmccarthy.com



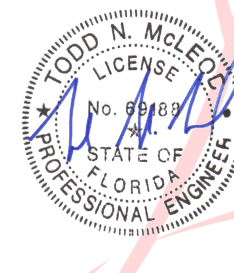
FIELD: DRAWN: P. Saffold
DESIGNED: TMM
APPROVED: TMM
PROJECT #24-004

REVISIONS
DATE
NO.

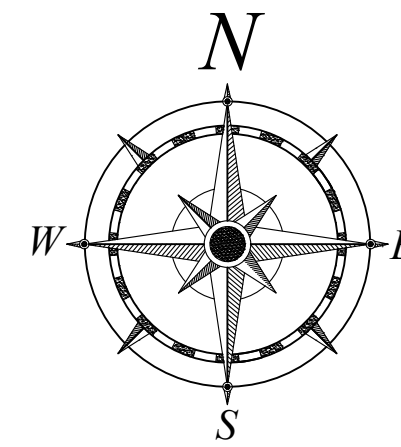
PRELIMINARY GRADING &
DRAINAGE PLAN
1220 10th STREET
STORAGE BUILDING ADDITION
LAKE PARK, FLORIDA

SITE PLAN RESUBMITTAL
DATE: 7/1/2025

SHEET
C1.1
OF 5



Digitally
signed by
Todd
McLeod
Date:
2025.07.01
11:09:06
-04'00'



0 15 30 60
SCALE: 1" = 30'

LEGEND

- PROP. SIGN
SURFACE FLOW ARROW
PROP. CONCRETE PAVEMENT
PROP. FULL-DEPTH ASPHALT
PAVEMENT OR RECONSTRUCTION
PROP. SEALCOAT & RESTRIPING
PROPOSED ELEVATION
EXIST. ELEVATION

NOTES:

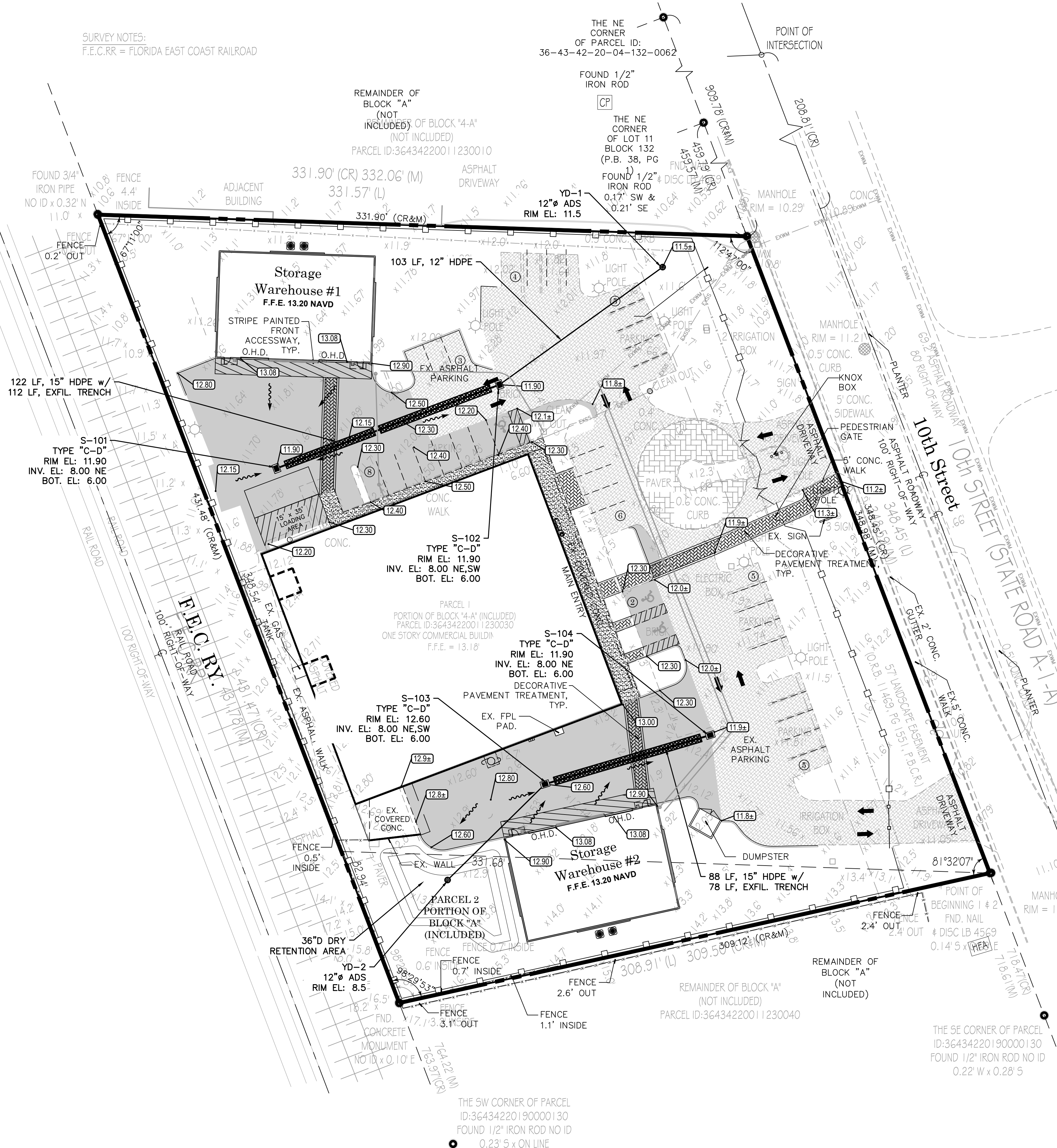
- EXIST. UTILITIES, DRAINAGE, & ELEVATIONS BASED ON SURVEY PREPARED BY LANDTEC SURVEYING. CONTRACTOR SHALL VERIFY INVERTS, PIPE SIZES, AND STRUCTURE LOCATIONS PRIOR TO SUBMITTING SHOP DRAWINGS.
- ALL LANDSCAPE AREAS ADJACENT TO BUILDING SHALL BE GRADED TO DRAIN AWAY FROM BUILDING.
- CONTRACTOR SHALL CONFIRM DETECTABLE WARNING REQUIREMENTS WITH BUILDING OFFICIAL PRIOR TO INSTALLATION.
- WHERE LANDSCAPE/SOD ABUTS BUILDING SLAB, A MINIMUM 3" SLAB REVEAL SHALL BE PROVIDED.
- MAXIMUM SLOPE FROM TOP OF CURB AND BACK OF WALK TO FINISHED GRADE SHALL BE 4(H):1(V), UNLESS OTHERWISE NOTED.
- ALL BUFFER, DETENTION, SWALE, AND UN-LANDSCAPED/UNPAVED AREAS SHALL BE SODDED UNLESS OTHERWISE NOTED.
- REFER TO SITE PLAN PREPARED BY 2GHO FOR ADDITIONAL SITE REQUIREMENTS.
- ALL CULVERTS LEADING TO EXFILTRATION TRENCH SHALL BE FITTED WITH A POLLUTION RETARDANT BAFFLE (PRB) PER THE ENCLOSED DETAIL.
- ALL BUFFER & UNPAVED/UNLANDSCAPED AREAS SHALL BE SODDED BY CONTRACTOR.
- ALL OFFSITE DISTURBED AREAS SHALL BE SODDED BY CONTRACTOR. ALL DAMAGED CURBING, PAVEMENT, STRIPING, SIGNAGE, LANDSCAPING, ETC. SHALL BE RESTORED BY CONTRACTOR.
- CONTRACTOR IS SOLELY RESPONSIBLE FOR PREPARING MAINTENANCE OF TRAFFIC (MOT) PLANS AND OBTAINING ALL REGULATORY APPROVALS FOR MOT PLANS. COPIES OF APPROVED MOT PLANS SHALL BE PROVIDED TO ENGINEER PRIOR TO COMMENCING WORK.
- ALL PIPE JOINTS SHALL BE WRAPPED PER FDOT INDEX NO. 430--001.

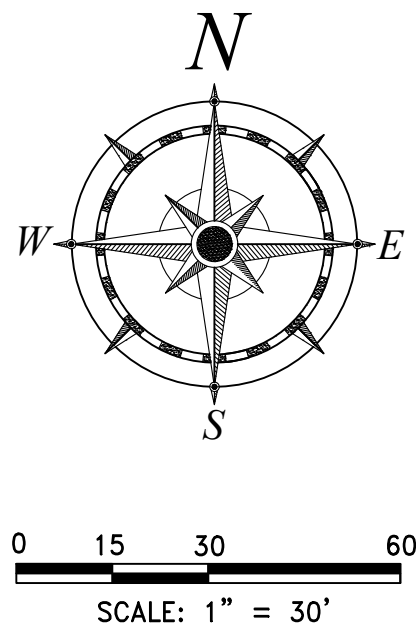
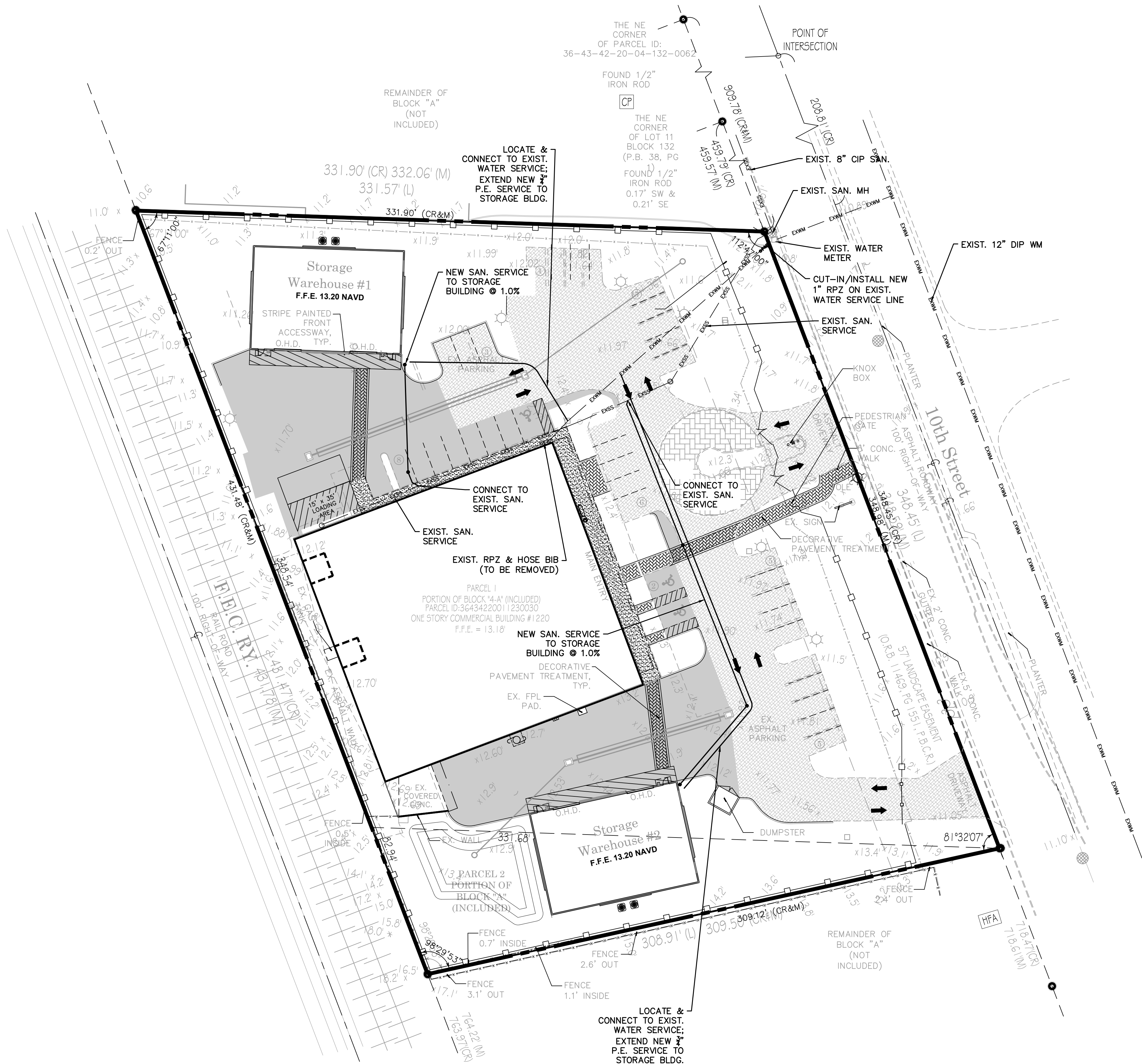
ACCESSIBILITY NOTES:

- ACCESSIBLE ROUTES SHALL BE CONSTRUCTED TO MEET THE REQUIREMENTS OF THE FLORIDA BUILDING CODE -- ACCESSIBILITY.
- ALL WALKS CROSSING A VEHICULAR AREA SHALL HAVE DETECTABLE WARNING SURFACE (TRUNCATED DOME) IN ACCORDANCE WITH THE FLORIDA BUILDING CODE -- ACCESSIBILITY.
- CURB RAMP SLOPES AND DIMENSIONS SHALL BE IN ACCORDANCE WITH THE FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) STANDARD INDEX NO. 522--02. CURB RAMP DETECTABLE WARNING SURFACES SHALL BE TRUNCATED DOME AND SHALL BE IN ACCORDANCE WITH THE FLORIDA BUILDING CODE.
- DETECTABLE WARNING SHALL BE THE WIDTH OF THE WALKING SURFACE AND 3' IN LONGITUDINAL LENGTH (DIRECTION OF TRAVEL). DETECTABLE WARNING MATS SHALL PER THE FDOT APPROVED PRODUCTS LIST (APL), LATEST EDITION.

NOTE: THESE PLANS ARE STILL UNDER REGULATORY PERMIT REVIEW. OWNER IS ADVISED NOT TO ENTER INTO CONTRACT FOR THE CONSTRUCTION OF THIS PROJECT UNTIL ALL PERMITS ARE ISSUED. BIDDING/CONTRACTING PRIOR TO COMPLETION OF PERMITTING WILL RESULT IN INCREASED COSTS & CHANGE ORDERS.

DATUM NOTE: ALL ELEVATIONS REFER TO NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88). TO CONVERT TO NGVD 1929, ADD 1.50' TO NAVD ELEVATIONS.





LEGEND	
	EASEMENT LINE
	EXISTING WATER MAIN, GATE VALVE (G.V.), TEE, F.H. AND PLUG
	EXISTING SANITARY SEWER MAIN, MANHOLE AND DIRECTION OF FLOW
	PROPOSED WATER MAIN, GATE VALVE (G.V.), BEND AND TEE WITH FIRE HYDRANT ASSEMBLY
	PROPOSED SANITARY SEWER MAIN, SINGLE & DOUBLE SEWER SERVICE CLEAN OUT (C.O.), MANHOLE AND
	CONCRETE
	MILLING & RESURFACING
	ASPHALT PAVEMENT
	EXIST. UTILITY TO BE VERIFIED BY SOFT DIGS PRIOR TO APPROVAL OF SHOP DRAWINGS
	UTILITY EASEMENT
	U.E.

- NOTES:
1. PRIOR TO CONSTRUCTION, IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO FIELD VERIFY (ELEVATION & LOCATION) ALL EXISTING UTILITIES. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO CONTINUATION OF WORK.
 2. M. OF 12" FROM EDGE OF PAVEMENT, OR SHALL BE PROTECTED BY BOLLARDS.
 3. VALVES SHALL NOT BE PLACED IN CURBS.
 4. ALL WATER AND SANITARY SERVICES SHALL BE CONSTRUCTED A MINIMUM OF 5' FROM DRAINAGE STRUCTURES.
 5. RECORD DRAWINGS MUST HAVE DATA FOR TAP AND METER LOCATIONS FOR ALL WATER MAIN SERVICES.
 6. PRESSURE TESTING AND CERTIFICATION SHALL FOLLOW SEACOAST UTILITY AUTHORITY CONSTRUCTION STANDARDS, LATEST EDITION.
 7. CONTRACTOR SHALL ADJUST ALL EXISTING SANITARY MANHOLE RIMS, CLEANOUTS, AND VALVE BOXES TO NEW FINISHED GRADE AND SHALL POUR CONCRETE COLLARS AS REQUIRED BY SUA SPECIFICATIONS, PRIOR TO FINAL PAVING/CONCRETE.
 8. CONTRACTOR SHALL LOCATE & PROTECT ALL EXIST. UTILITIES.
 9. CONTRACTOR SHALL VERIFY ALL EXISTING UTILITY LOCATIONS, SIZES, MATERIALS, AND DEPTHS VIA "SOFT DIGS", PRIOR TO SUBMITTING SHOP DRAWINGS.
 10. CONTRACTOR IS SOLELY RESPONSIBLE FOR PREPARING MOT DRAWINGS AND OBTAINING ALL REQUIRED MOT APPROVALS.
 11. WATER/SEWER SYMBOLS ARE REPRESENTATIVE OF THE CORRESPONDING FITTINGS ONLY. CONTRACTOR SHALL NOT ATTEMPT TO ATTEMPT TO CONSTRUCT WATER/SEWER SYSTEM BY SCALING THE SYMBOLS FORM THESE PLANS. ALL FITTINGS SHALL INSTEAD BE BUILT PER THE ENCLOSED DETAILS.

- RECORD DRAWING NOTES:
1. RECORD DRAWINGS SHALL BE PREPARED IN THE STATE PLANE COORDINATE SYSTEM.
 2. ALL UTILITY FEATURES SHALL BE SHOWN IN THEIR AS-BUILT LOCATION.
 3. STATE PLANE COORDINATES SHALL BE DISPLAYED ON RECORD DRAWINGS FOR ALL FEATURES SPECIFIED IN THE SUA STANDARDS.

- GENERAL WATER NOTES:
1. ALL WATER SERVICE BRASS ARE REQUIRED TO BE LEAD FREE.
 2. CONTRACTOR SHALL ALLOW A MINIMUM OF 90 DAYS FROM SUBMITTAL OF WATER/SEWER ASBUILT RECORD DRAWINGS UNTIL REQUEST FOR FIRST WATER METER IN ORDER TO ALLOW FOR EOR AND SUA REVIEW OF ASBUILT DRAWINGS. ASBUILTS WHICH DO NOT COMPLY WITH SUA STANDARDS OR WHICH INDICATE UTILITY WORK WHICH DOES NOT COMPLY WITH THESE PLANS AND SUA/HEALTH DEPT. CRITERIA, MAY REQUIRE SIGNIFICANT CORRECTIVE WORK AND MAY RESULT IN SIGNIFICANT DELAYS WHICH SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
 3. CONTRACTOR IS SOLELY RESPONSIBLE FOR ALL BACTERIOLOGICAL TESTING AND RETESTING UNTIL PROJECT PASSES PBC HEALTH DEPARTMENT RELEASE PROCESS.
 4. CONTRACTOR IS SOLELY RESPONSIBLE FOR PROVIDING ALL SURVEY SERVICES (VIA LICENSED SURVEYOR) ASSOCIATED WITH ASBUILT RECORD DRAWING PREPARATION, EASEMENT SKETCH/LEGAL DESCRIPTIONS, AND ALL PROJECT STAKING/LAYOUT AND UTILITY VERIFICATION.

- GENERAL SEWER NOTES:
1. ON-SITE SEWER LATERALS ARE PRIVATELY OWNED AND MAINTAINED PAST SUA POINT-OF-SERVICE.
 2. CONTRACTOR SHALL CONFIRM THAT PROPOSED SEWER LATERAL INVERTS HAVE SUFFICIENT DEPTH TO CONNECT TO BUILDING PLUMBING PRIOR TO COMMENCING UTILITY CONSTRUCTION. CONTRACTOR IS SOLELY RESPONSIBLE FOR COST OF MODIFYING SEWER LATERALS IF HE FAILS TO COORDINATE PLUMBING/LATERAL DEPTHS PRIOR TO CONSTRUCTION.

NOTE: THESE PLANS ARE STILL UNDER REGULATORY PERMIT REVIEW. OWNER IS ADVISED NOT TO ENTER INTO CONTRACT FOR THE CONSTRUCTION OF THIS PROJECT UNTIL ALL PERMITS ARE ISSUED. BIDDING/CONTRACTING PRIOR TO COMPLETION OF PERMITTING WILL RESULT IN INCREASED COSTS & CHANGE ORDERS.

DATUM NOTE: ALL ELEVATIONS REFER TO NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88). TO CONVERT TO NGVD 1929, ADD 1.50' TO NAVD ELEVATIONS.



**McLeod • McCarthy
& Associates, P.A.**
Civil Engineers

The Forum III
1655 Palm Beach Lakes Blvd, Ste. 810
West Palm Beach, FL 33401
P: 561.689.9500
F: 561.689.8080
www.mcleodmccarthy.com



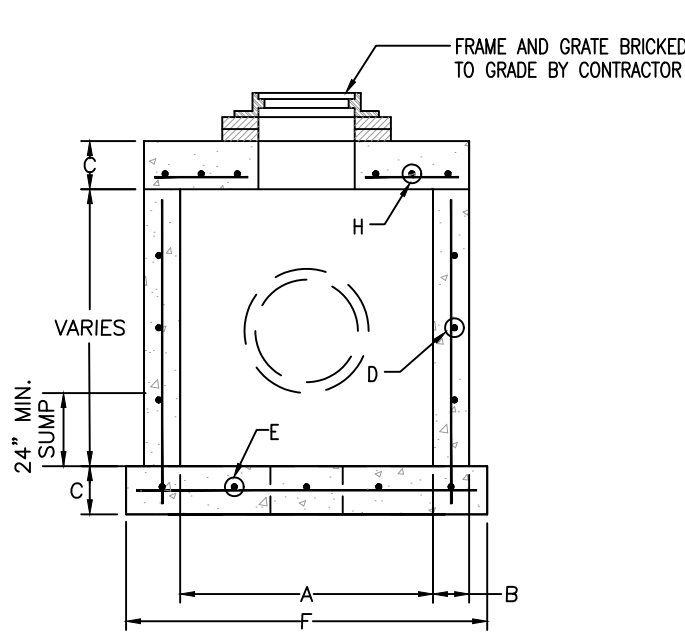
FIELD:
DRAWN: P. Saffold
DESIGNED: TMM
APPROVED: TMM
PROJECT #24-004

REVISIONS
DATE
NO.

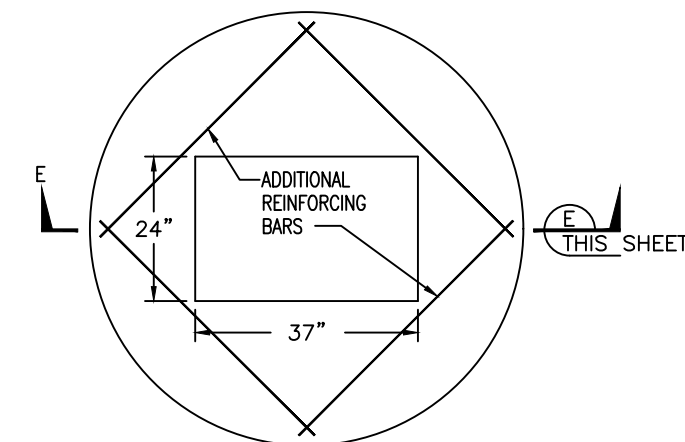
**PRELIMINARY WATER &
SEWER PLAN**
1220 10th STREET
STORAGE BUILDING ADDITION
LAKE PARK, FLORIDA

SITE PLAN RESUBMITTAL
DATE: 7/1/2025

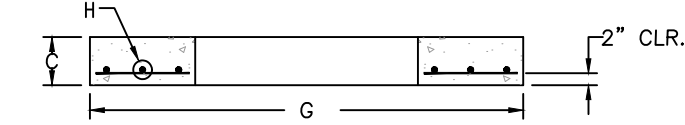
SHEET
C1.2
OF 5



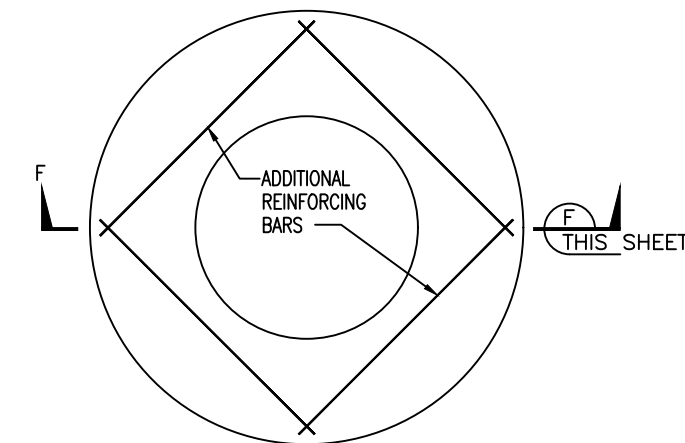
CATCH BASIN
(SEE TABLE FOR DIMENSIONS)



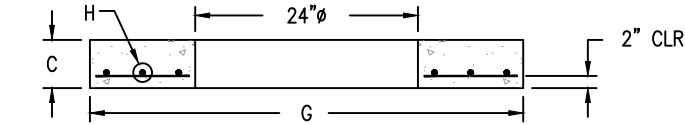
TOP SLAB FOR CATCH BASIN



SECTION E
(SEE TABLE FOR DIMENSIONS)



TOP SLAB FOR MANHOLE



SECTION F
(SEE TABLE FOR DIMENSIONS)

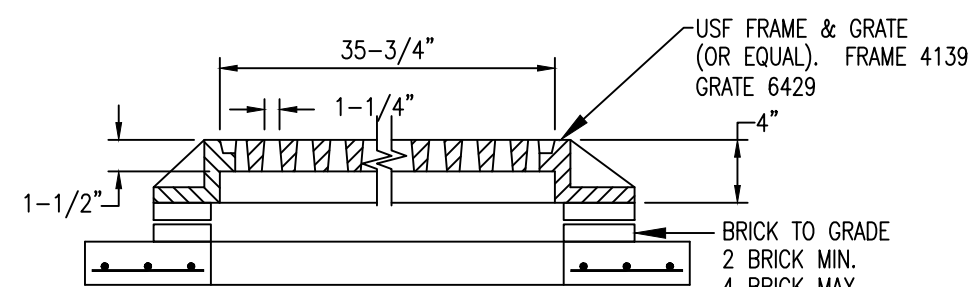
A	B	C	D	E*	F	G	H*
3'-6"	4"	8"	ASTM C-478	#4 @ 12"	4'-8"	4'-2"	#4 @ 6"
3'-0"	6"	8"	ASTM C-478	#4 @ 12"	5'-0"	4'-6"	#4 @ 6"
4"	6"	8"	ASTM C-478	#4 @ 12"	6'-0"	5'-0"	#4 @ 6"
4"	8"	8"	ASTM C-478	#4 @ 12"	6'-4"	5'-4"	#4 @ 6"
5'-0"	8"	8"	ASTM C-478	#5 @ 12"	7'-4"	6'-4"	#5 @ 6"
6'-0"	8"	8"	ASTM C-478	#5 @ 6"	8'-0"	7'-0"	#5 @ 6"
6'-0"	8"	8"	ASTM C-478	#5 @ 6"	8'-4"	7'-4"	#5 @ 6"
7'-0"	8"	8"	ASTM C-478	#5 @ 6"	9'-4"	8'-4"	#5 @ 6"
8'-0"	10"	10"	ASTM C-478	#5 @ 6"	10'-8"	9'-8"	#6 @ 6"
10'-0"	12"	12"	ASTM C-478	#5 @ 6"	12'-0"	12'-0"	#6 @ 6"

INLET NOTES

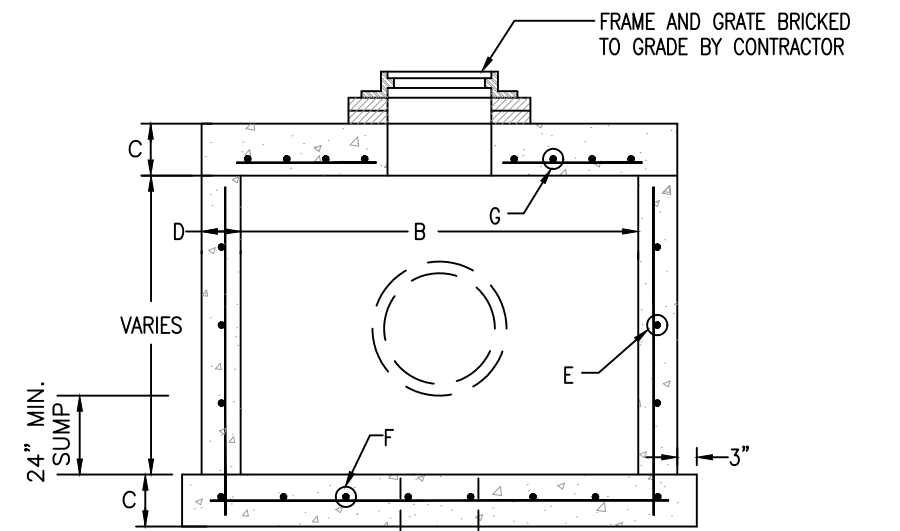
BEVELED EDGES: ALL EXPOSED CORNERS AND EDGES TO BE CHAMFERED 3/4".
FOUNDATION MATERIAL: WHERE MATERIAL UNSATISFACTORY FOR FOUNDATION IS ENCOUNTERED, ALL SUCH MATERIAL MUST BE REMOVED DOWN TO SATISFACTORY MATERIAL AND BACKFILLED TO SUBGRADE WITH CLEAN SAND.
INLET TYPES: INLETS ARE TO BE CONSTRUCTED TO THE DIMENSIONS SHOWN HEREON. INLETS RECEIVING PIPE LARGER THAN 42" DIAMETER SHALL BE IN ACCORDANCE WITH F.D.O.T. STANDARDS

MATERIAL: INLET WALLS AND BASES MAY EITHER BE CAST-IN-PLACE CLASS I, 2500 P.S.I. CONCRETE OR PRECAST CLASS II, 4000 (MIN.) P.S.I. CONCRETE.

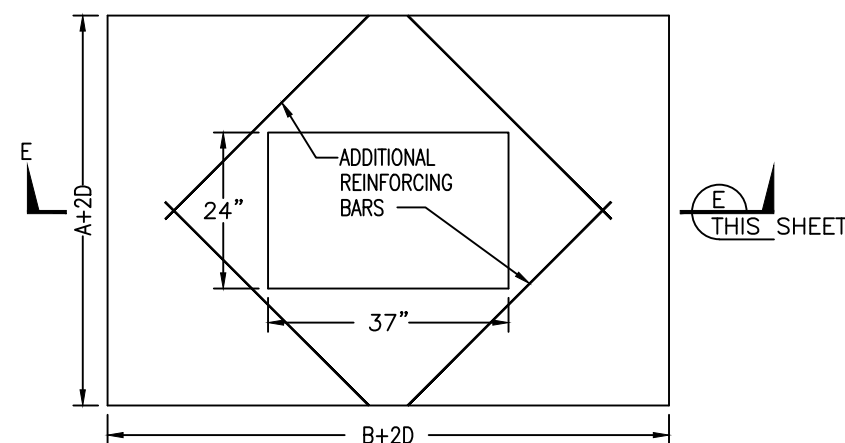
CIRCULAR CATCH BASIN (ON-SITE)



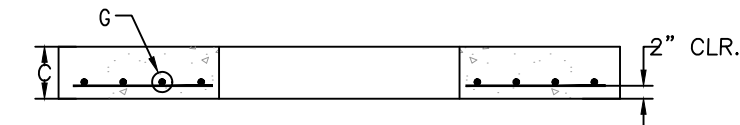
ON-SITE INLET FRAME & GRATE
(TYPE "C-D" INLET)



CATCH BASIN
(SEE TABLE FOR DIMENSIONS)



TOP SLAB FOR CATCH BASIN



SECTION E
(SEE TABLE FOR DIMENSIONS)

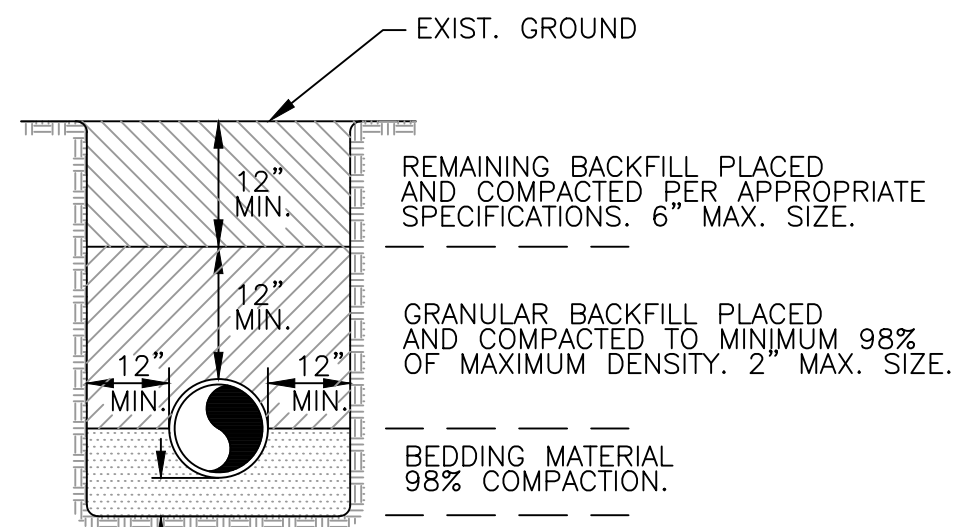
A	B	C	D	E*	F*	G*
3'-6"	3'-6"	8"	6"	#4 @ 12"	#4 @ 9"	#4 @ 6"
4'-0"	4'-0"	8"	6"	#4 @ 12"	#4 @ 9"	#4 @ 6"
4'-10"	5'-0"	8"	8"	#4 @ 12"	#5 @ 12"	#5 @ 6"
6'-0"	6'-0"	8"	8"	#4 @ 12"	#6 @ 12"	#6 @ 6"
8'-0"	8'-0"	10"	8"	#4 @ 12"	#6 @ 12"	#6 @ 6"
10'-0"	10'-0"	10"	8"	#4 @ 12"	#6 @ 6"	#7 @ 6"
3'-0"	4'-8"	8"	8"	#4 @ 12"	#4 @ 12"	#4 @ 6"
3'-6"	6'-0"	8"	8"	#4 @ 12"	#5 @ 12"	#5 @ 6"
4'-0"	6'-0"	8"	8"	#4 @ 12"	#5 @ 12"	#5 @ 6"
3'-6"	8'-0"	8"	8"	#4 @ 12"	#5 @ 12"	#5 @ 6"
4'-0"	8'-0"	8"	8"	#4 @ 12"	#5 @ 12"	#5 @ 6"
5'-0"	7'-0"	8"	8"	#4 @ 12"	#5 @ 12"	#5 @ 6"
6'-0"	8'-0"	8"	8"	#4 @ 12"	#6 @ 12"	#6 @ 6"
8'-0"	12'-0"	8"	8"	#4 @ 12"	#6 @ 12"	#6 @ 6"

INLET NOTES

BEVELED EDGES: ALL EXPOSED CORNERS AND EDGES TO BE CHAMFERED 3/4".
FOUNDATION MATERIAL: WHERE MATERIAL UNSATISFACTORY FOR FOUNDATION IS ENCOUNTERED, ALL SUCH MATERIAL MUST BE REMOVED DOWN TO SATISFACTORY MATERIAL AND BACKFILLED TO SUBGRADE WITH CLEAN SAND.
INLET TYPES: INLETS ARE TO BE CONSTRUCTED TO THE DIMENSIONS SHOWN HEREON. INLETS RECEIVING PIPE LARGER THAN 42" DIAMETER SHALL BE IN ACCORDANCE WITH F.D.O.T. STANDARDS

MATERIAL: INLET WALLS AND BASES MAY EITHER BE CAST-IN-PLACE CLASS I, 2500 P.S.I. CONCRETE OR PRECAST CLASS II, 4000 (MIN.) P.S.I. CONCRETE.

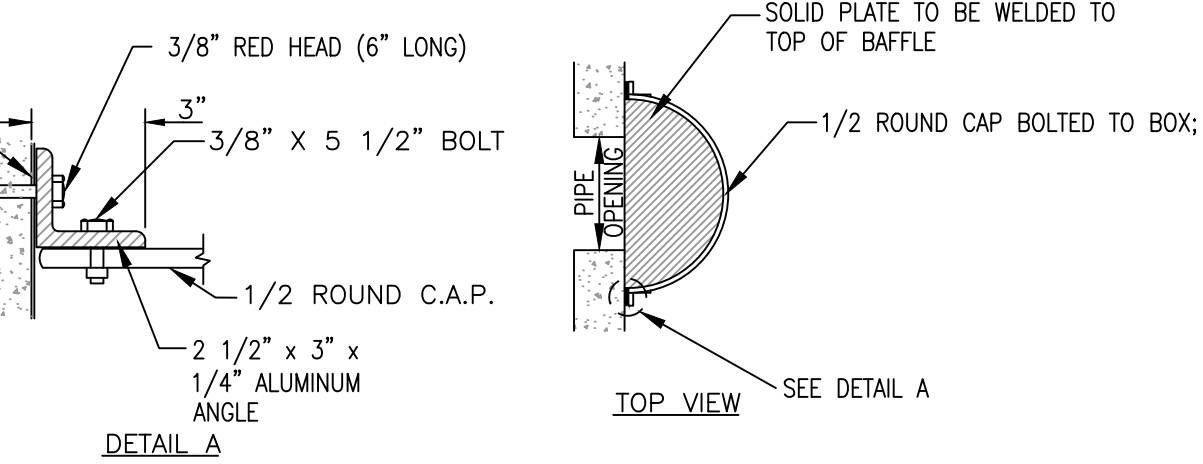
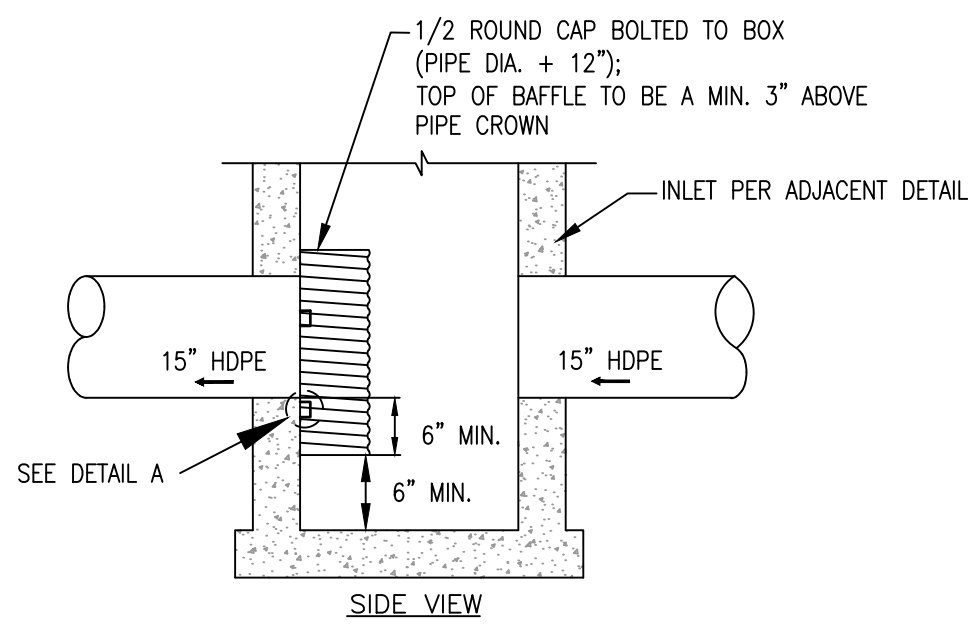
RECTANGULAR CATCH BASIN (ON-SITE)



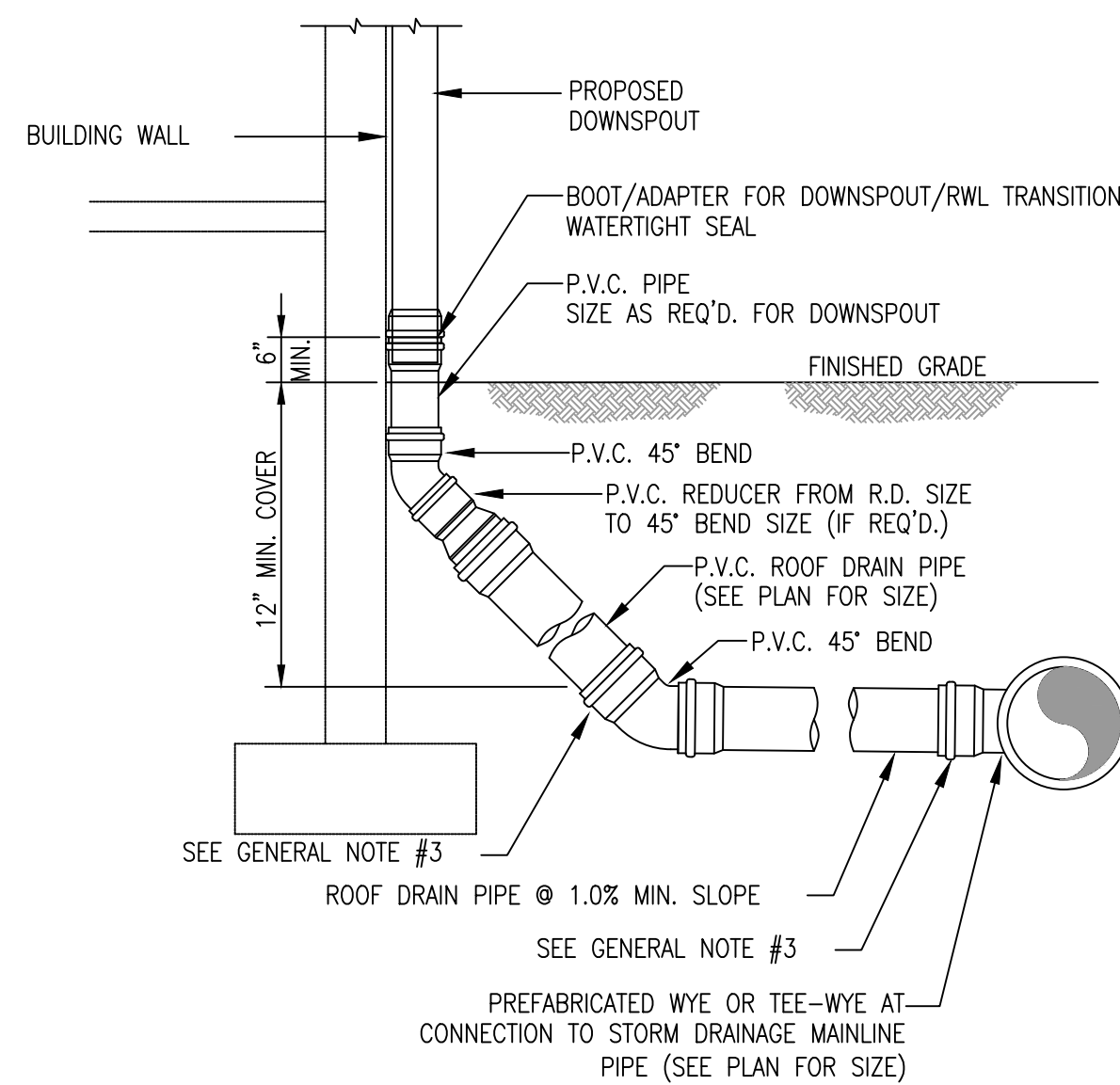
INLET NOTES

- BEDDING SHALL CONSIST OF IN-SITU GRANULAR MATERIAL OR WASHED AND GRADED LIMEROCK 3/8" TO 1/2" SIZING, UNSUITABLE IN-SITU MATERIALS SUCH AS MUCK, DEBRIS AND LARGER ROCK SHALL BE REMOVED.
- THE PIPE SHALL BE FULLY SUPPORTED FOR ITS ENTIRE LENGTH WITH APPROPRIATE COMPACTION UNDER THE PIPE HAUNCHES.
- THE PIPE SHALL BE PLACED IN A DRY TRENCH.
- BACKFILL SHALL BE FREE OF UNSUITABLE MATERIALS SUCH AS LARGER ROCK, MUCK AND DEBRIS.
- SEE GENERAL NOTES FOR PIPE BACKFILL BENEATH PROPOSED PAVEMENT.

TRENCH DETAIL
N.T.S.



POLLUTION RETARDANT BAFFLE (PRB) DETAIL
N.T.S.

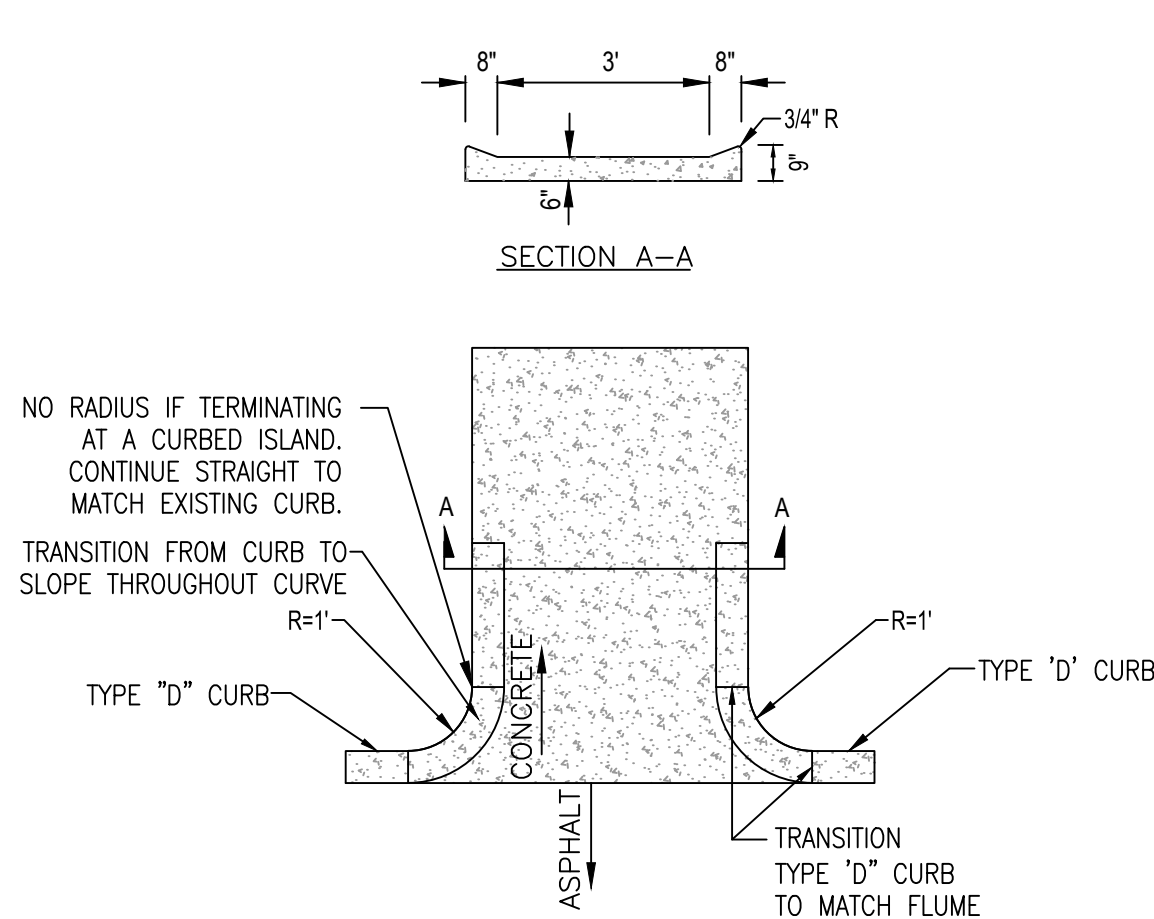


GENERAL NOTES:

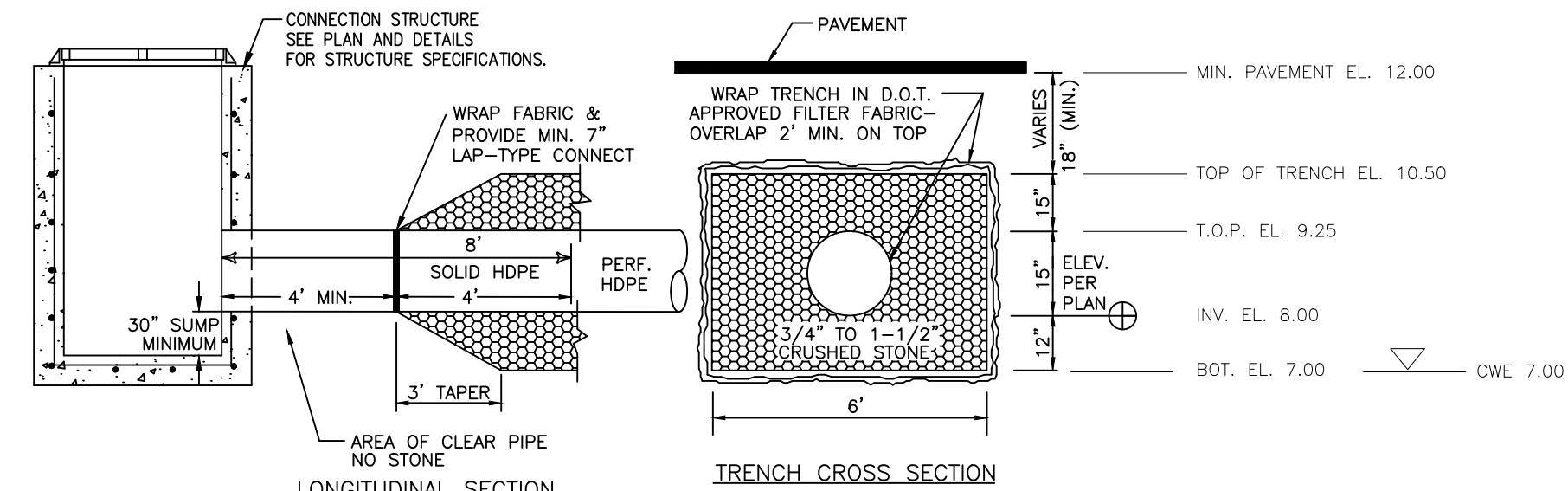
- PROVIDE TEMPORARY P.V.C. PLUG IN BELL END OF DOWNSPOUT SERVICE STUB-UP.
- ADDITIONAL BENDS MAY BE REQUIRED TO CLEAR BUILDING FOUNDATIONS OR TO CONNECT TO MAIN TRUNK LINE STORM DRAINAGE PIPES.
- USE A FABRICATED P.V.C. TRANSITION ADAPTER TO TRANSITION FROM P.V.C. PIPE TO H.D.P.E. PIPE OR FITTINGS.
- ALL PIPE AND FITTING JOINTS SHALL BE WATERTIGHT.

DOWNSPOUT TIE-IN DETAIL

N.T.S.



CONCRETE FLUME DETAIL
N.T.S.



ON-SITE EXFILTRATION TRENCH DETAIL
N.T.S.

PAVEMENT SECTION REQUIREMENTS			
TYPE	WEARING SURFACE	BASE	SUB-GRADE
CONCRETE PAVEMENT (ON-SITE)	6" THICK (4,000 PSI) WITH JOINTING PER ACI 330. JOINTING PLAN TO BE SUBMITTED PRIOR TO POURING CONCRETE	N/A	12" THICK, COMPACTED TO 98% MAXIMUM DRY DENSITY A.A.S.H.T.O. T-180 (LBR 40)
ASPHALT PAVEMENT (ON-SITE)	2" THICK SP-9.5 A.C.S.C. (2-LIFTS)	8" THICK LIMEROCK BASE (LBR 100) COMPACTED TO 98% AASHTO T-180 DENSITY & PLACED IN 4" MAX. LIFTS.	12" THICK, COMPACTED TO 98% MAXIMUM DRY DENSITY A.A.S.H.T.O. T-180 (LBR 40)
SIDEWALKS (ONSITE)	SIDEWALK: 4" THICK CONCRETE (3,000 PSI). CONCRETE TO BE BROOM FINISHED WITH EVEN, DUSTLESS SURFACE. CONTROL JOINTS TO BE SPACED 5' ON CENTER. ISOLATION JOINTS REQUIRED WHERE SIDEWALK ABUTS BUILDING, EXISTING PAVEMENT, OR OTHER STRUCTURES.		

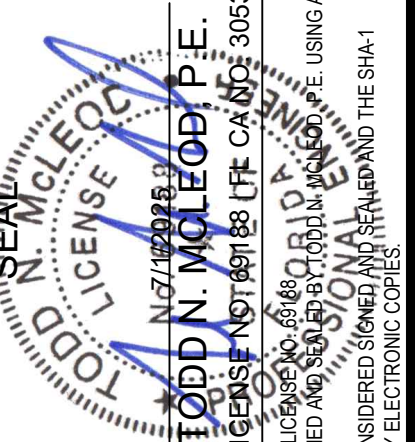
NOTE: THESE PLANS ARE STILL UNDER REGULATORY PERMIT REVIEW. OWNER IS ADVISED NOT TO ENTER INTO CONTRACT FOR THE CONSTRUCTION OF THIS PROJECT UNTIL ALL PERMITS ARE ISSUED. BIDDING/CONTRACTING PRIOR TO COMPLETION OF PERMITTING WILL RESULT IN INCREASED COSTS & CHANGE ORDERS.

DATUM NOTE: ALL ELEVATIONS REFER TO NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88). TO CONVERT TO NGVD 1929, ADD 1.50' TO NAVD ELEVATIONS.



McLeod & McCarthy
& Associates, P.A.
Civil Engineers

The Forum III
1655 Palm Beach Lakes Blvd, Ste. 810
West Palm Beach, FL 33401
P: 561.689.9500
F: 561.689.8080
www.mcleodmccarthy.com



FIELD: P. Saffold
DRAWN: TMM
DESIGNED: TMM
APPROVED: TMM
PROJECT #24-004

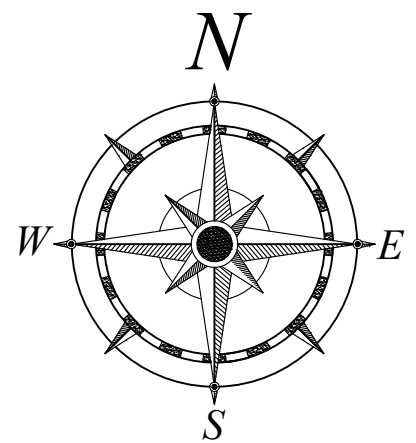
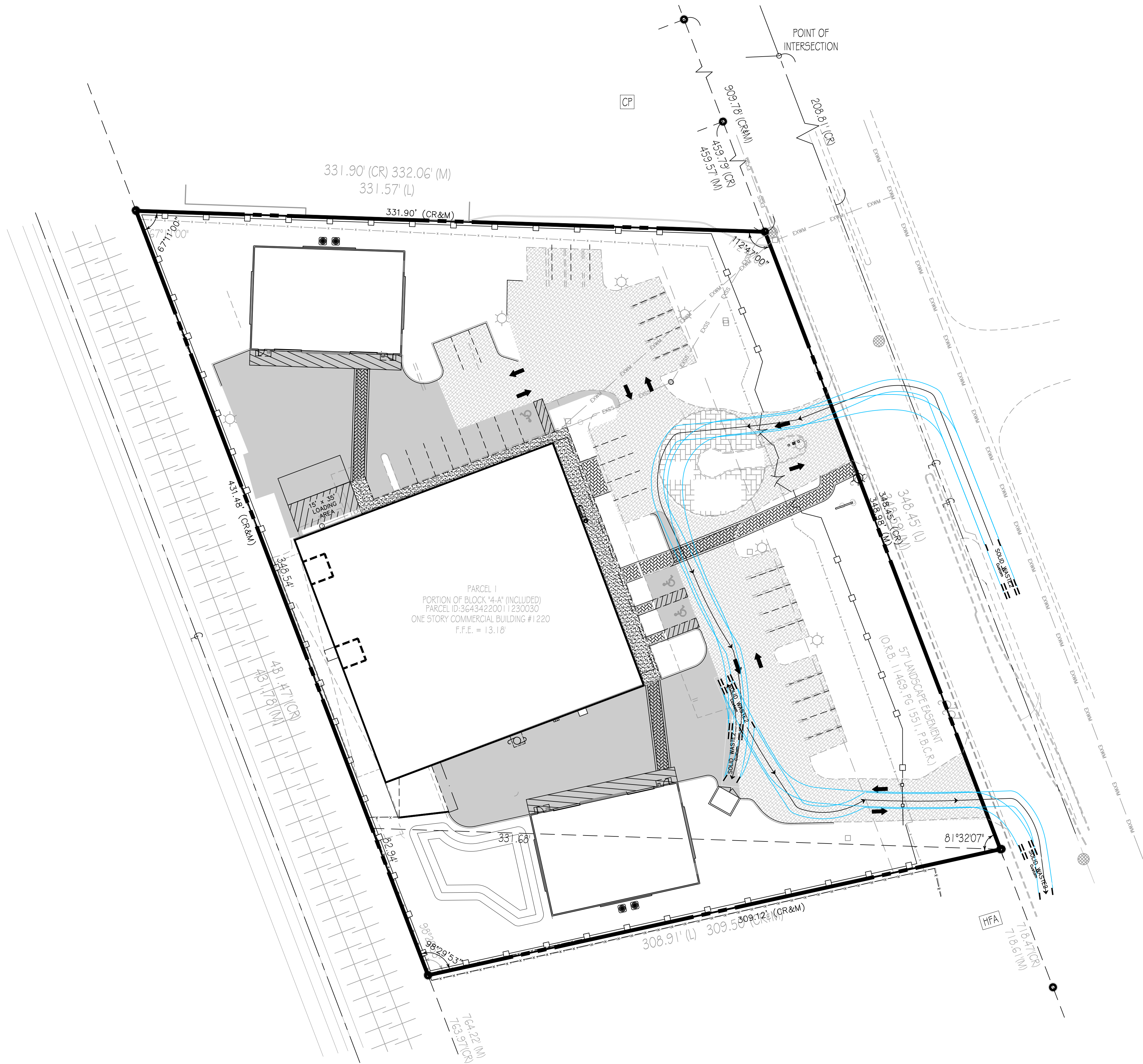
NO. DATE REVISIONS

PRELIMINARY ENGINEERING DETAILS
1220 10th STREET
STORAGE BUILDING ADDITION
LAKE PARK, FLORIDA

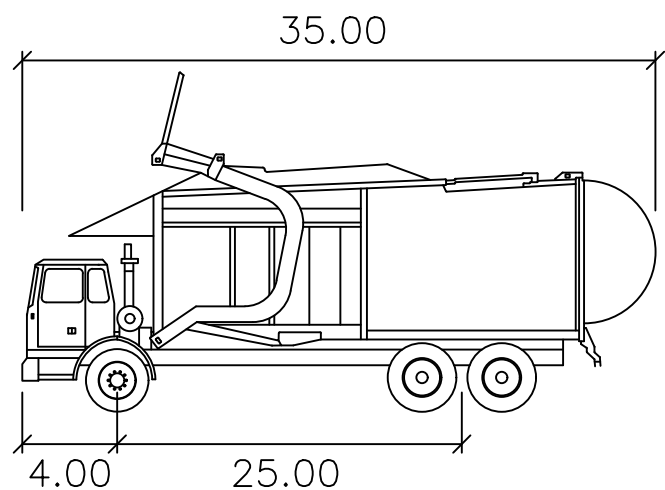
SITE PLAN RESUBMITTAL
DATE: 7/1/2025

SHEET
C2.1
OF 5

<div>STANDARD WATER, RECLAIMED WATER AND SEWER SEPARATION STATEMENT</div> <div><div><div>1. STORM SEWER, GRAVITY WASTEWATER, FORCE MAINS AND RECLAIMED WATER MAINS CROSSING UNDER POTABLE WATER MAINS SHALL BE LAID TO PROVIDE A MINIMUM VERTICAL DISTANCE OF TWELVE (12) INCHES BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE CROWN OF THE LOWER PIPE, WHERE THIS MINIMUM SEPARATION CANNOT BE MAINTAINED BETWEEN GRAVITY SEWER OR STORM SEWER, THE CROSSING SHALL BE ARRANGED SO THAT THE STORM/GRAVITY SEWER PIPE JOINTS AND POTABLE WATER MAIN JOINTS ARE EQUIDISTANT FROM THE POINT OF CROSSING WITH NO LESS THAN SIX (6) FEET BETWEEN ANY TWO JOINTS. BOTH PIPES SHALL BE D.I.P., AND THE MINIMUM VERTICAL SEPARATION SHALL BE SIX (6) INCHES. WHERE THERE IS NO ALTERNATIVE TO STORM/WASTEWATER/FORCE MAIN/RECLAIMED WATER MAINS CROSSING OVER A POTABLE WATER MAIN, THE CRITERIA FOR MINIMUM TWELVE (12) INCH VERTICAL SEPARATION BETWEEN LINES AND JOINT ARRANGEMENT, AS STATED ABOVE, SHALL BE REQUIRED, AND BOTH PIPES SHALL BE D.I.P., RESPECTIVE OF SEPARATION, IN ALL OF THE ABOVE CASES D.I.P. IS NOT REQUIRED FOR STORM SEWER PIPE.</div><div>2. FORCE MAINS CROSSING RECLAIMED WATER MAINS OR STORM SEWER SHALL BE LAID TO PROVIDE A MINIMUM VERTICAL DISTANCE OF TWELVE (12) INCHES BETWEEN THE OUTSIDE OF THE FORCE MAIN AND THE OUTSIDE OF THE RECLAIMED WATER MAIN OR STORM SEWER AND THE RECLAIMED WATER MAIN SHALL CROSS OVER THE FORCE MAIN.</div><div>3. AT THE UTILITY CROSSING DESCRIBED IN ITEMS 1 AND 2 ABOVE, ONE FULL LENGTH OF DUCTILE IRON WATER MAIN PIPE SHALL BE CENTERED SO THE WATER MAIN JOINTS WILL BE AS FAR AS POSSIBLE FROM THE OTHER PIPELINE JOINTS. WHERE THIS IS NOT POSSIBLE, THE WATER MAIN SHALL BE AT LEAST THREE (3) FEET FROM STORM SEWERS AND SIX (6) FEET FROM GRAVITY SEWER MAINS, FORCE MAINS AND RECLAIMED WATER MAINS.</div><div>4. SEWER SERVICE (LATERALS) SHALL CROSS UNDER WATER MAINS WITH A MINIMUM VERTICAL SEPARATION OF TWELVE (12) INCHES. IF (12") VERTICAL SEPARATION CANNOT BE MAINTAINED, THEN THE WATER MAIN SHALL BE D.I.P. AND THE SEWER SERVICE LATERAL SHALL BE C-300 SDR 19 OR BETTER AND THE MINIMUM SEPARATION SHALL BE SIX (6) INCHES. WHEN IT IS NOT POSSIBLE FOR THE WATER MAIN TO CROSS OVER THE SEWER SERVICE LATERAL, A MINIMUM VERTICAL SEPARATION OF AT LEAST TWELVE (12) INCHES MUST BE MAINTAINED, THE WATER MAIN SHALL BE D.I.P. AND THE SEWER LATERAL SHALL BE C-300 SDR 19 OR BETTER.</div><div>5. MAINTAIN MINIMUM TEN (10) FEET HORIZONTAL DISTANCE BETWEEN POTABLE WATER MAIN OR FORCE MAIN, RECLAIMED WATER MAIN, STORM SEWER OR GRAVITY SEWER MAIN OR ON SITE SEWAGE DISPOSAL SYSTEMS. ADDITIONAL SEPARATION MAY BE REQUIRED AS OUTLINED IN SECTION II OF SUA STANDARDS.</div></div></div>		<div>INSTALLATION PROTOCOL</div> <div><div>1. ALL PIPE IS TO BE LAID IN A CLEAN DRY TRENCH.</div><div>2. ALL MUCK AND UNSUITABLE MATERIALS ENCOUNTERED IN TRENCH BOTTOM SHALL BE REMOVED AND REPLACED WITH COMPACTED GRANULAR MATERIAL TO 98% OF MAXIMUM DENSITY PER AASHTO T-180. PROCTOR AND DENSITY TEST RESULTS SHALL BE SUBMITTED TO EOR WITH A COPY TO AUTHORITY.</div><div>3. ALL BACKFILL SHALL BE PLACED IN 12 INCH LIFTS AND COMPACTED BY MECHANICAL MEANS TO 98% OF MAXIMUM DENSITY PER MSHTO T-180 OR AS OTHERWISE REQUIRED BY THE PERMITTING AGENCY.</div><div>4. UTILITIES CROSSING ROAD RIGHT-OF-WAY SHALL BE INSTALLED PRIOR TO ROAD CONSTRUCTION AND BACKFILLED AND COMPACTED WITHIN RIGHT-OF-WAY LIMITS IN STRICT ACCORDANCE WITH THE DIRECTIONS OF THE EOR AND REQUIREMENTS OF ALL AGENCIES OF JURISDICTION.</div><div>5. EMBEDED MATERIALS BELOW PIPE SHALL CONFORM TO UNIFIED SOIL CLASSIFICATION SYSTEM (U.S.C.S.) SOIL CLASSIFICATION CLASS I OR II AS NOTED IN ASTM D2321.</div><div>6. ALL LINES UNDER CONSTRUCTION SHALL BE PLUGGED WITH A WING PLUG, AND ALL PRESSURE PIPES ARE TO BE PLUGGED WITH A MECHANICAL PLUG OR CAP AT THE END OF THE WORKING DAY TO PREVENT GROUND WATER AND POTENTIAL CONTAMINANTS FROM ENTERING COMPLETED LINES AND LINES UNDER CONSTRUCTION.</div><div>7. ABOVE GROUND PIPING, INCLUDING BUT NOT LIMITED TO, AERIAL CROSSINGS, LIFT STATION PIPING, FIRE LINES, METER/BACKFLOW PREVENTION DEVICE ASSEMBLIES, ETC. SHALL BE FLANGED AND BE COATED IN ACCORDANCE WITH SECTION 2 OF SEACOAST UTILITY AUTHORITY CONSTRUCTION STANDARDS. THE FINISHED COAT OF PAINT SHALL BE GREEN IN COLOR FOR SANITARY SEWER, LAVENDER FOR RECLAIMED APPURTENANCES AND BLUE FOR POTABLE WATER APPURTENANCES.</div><div>8. ALL FLANGED PIPE SHALL BE CAULKED BETWEEN EACH FLANGE AND THREADS WITH SIKKA 1 A URETHANE CAULK AFTER BLASTING AND PRIOR TO PRIMING.</div><div>9. ALL THE RODS, BOLTS, NUTS, ETC. INSTALLED UNDERGROUND MUST BE COR TEN OR APPROVED EQUAL AND SHALL BE PAINTED WITH KOPPERS 300-M OR AN AUTHORITY APPROVED EQUAL. BRASS AND STAINLESS STEEL HARDWARE IS EXEMPT FROM THIS REQUIREMENT.</div><div>10. COATINGS AND LININGS DAMAGED DUE MISHANDLING OR OTHERWISE, MUST BE REPLACED. COATING AND LININGS DAMAGED DUE TO FIELD CUTTING SHALL BE REPAIRED IN STRICT ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. THIS INCLUDES, BUT IS NOT LIMITED TO, COBALT MORTAR AND POLYETHYLENE PIPE LININGS, PROTECTO 401, GALVANIZED COATINGS, PVC FENCE COATINGS AND OTHER TYPE COATINGS. APPROVAL MUST BE OBTAINED FROM AUTHORITY PRIOR TO PERFORMING COATING AND LINING REPAIRS. INSPECTIONS OF ALL REPAIRS ARE REQUIRED.</div><div>11. ALL STAINLESS STEEL NUTS, BOLTS AND HARDWARE REFERENCED IN THESE STANDARDS, SHALL BE SS 316 GRADE AND SHALL BE SO STAMPED BY THE MANUFACTURER TO VERIFY ALLOY. THE USE OF ANY OTHER STAINLESS STEEL ALLOY WILL REQUIRE SPECIFIC APPROVAL BY AUTHORITY. IN GENERAL, STAINLESS STEEL NUTS, BOLTS AND HARDWARE ARE REQUIRED IN AND AROUND LIFT STATIONS AND FOR FACILITIES INSTALLED OVER OR UNDER BRACKISH OR MARINE WATERS. THIS REQUIREMENT APPLIES TO FLANGE BOLTS AND NUTS ON FLANGED PIPING, MOUNTING BRACKETS, ALL THREAD ROD, ANCHOR BOLTS, WASHERS, CLAMPS AND OTHER MISCELLANEOUS HARDWARE. ANTI-GALLING COMPOUND ANTI-SEIZE LUBRICANT SHALL BE APPLIED TO THE THREADS OF ALL STAINLESS STEEL BOLTS PRIOR TO INSTALLATION.</div><div>ANTI-SEIZE LUBRICANT SHALL BE GRAPHITE 50 ANTI-SEIZE BY LOCTITE CORPORATION, 1000 ANTI-SEIZE PASTE BY DOW CORNING OR 3M LUBE AND ANTI-SEIZE BY 3M.</div><div>12. ALL RUBBER AND SYNTHETIC ELASTOMERIC COMPONENTS OF PRODUCTS THAT COME IN CONTACT WITH POTABLE WATER SHALL BE MANUFACTURED WITH CHLORAMINE RESISTANT ELASTOMERS AND SHALL BEAR NSF APPROVAL.</div><div>13. ALL MAIN, INCLUDING FITTINGS, SHALL BE EASILY IDENTIFIABLE AS TO THEIR CONTENTS AND SHALL BE COLOR CODED OR MARKED USING THE UNIVERSAL COLOR CODE OF BLUE FOR WATER, GREEN FOR SEWER AND LAVENDER FOR RECLAIMED. PIPE STRIPED DURING MANUFACTURING OF THE PIPE SHALL HAVE CONTINUOUS STRIPES THAT RUN PARALLEL TO THE AXIS OF THE PIPE, THAT ARE LOCATED AT NO GREATER THAN 90-DEGREE INTERVALS AROUND THE PIPE, AND THAT WILL REMAIN INTACT DURING AND AFTER INSTALLATION OF THE PIPE. IF TAPE IS USED TO STRIPE PIPE DURING INSTALLATION OF THE PIPE, THE TAPE SHALL BE APPLIED IN A CONTINUOUS LINE THAT RUNS PARALLEL TO THE AXIS OF THE PIPE AND THAT IS LOCATED ALONG THE TOP OF THE PIPE. FOR PIPES WITH AN INTERNAL DIAMETER OF 24 INCHES OR GREATER, TAPE SHALL BE APPLIED IN CONTINUOUS LINES ALONG EACH SIDE OF THE PIPE AS WELL AS ALONG THE TOP OF THE PIPE.</div></div>		<div>DETAIL "A"</div> <div><div>PROPERTY LINE</div><div>METER BOX AND METER PURCHASE THROUGH SUA</div><div>1" CURB STOP (MIN.) WITH LOCKING WINGS AND DRILLED METER NUT</div><div>PAVEMENT</div><div>EDGE OF PAVEMENT</div><div>30" MINIMUM JOG</div><div>30" MIN. COVER</div><div>OR EXISTING COVER</div><div>MAGNETIC MARKER</div><div>SEE NOTE NO. 9</div><div>1" CORPORATION STOP AND TUBING (MINIMUM SIZE)</div><div>DOUBLE STRAP TAPPING SADDLE (NO DIRECT TAPS PERMITTED)</div><div>SEAL BOTH ENDS OF CASING WITH GROUT</div><div>A</div><div>D</div></div> <div>NOTES: (PLEASE REFER TO WRITTEN SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS)</div> <div><div>1. CASINGS SHALL BE REQUIRED FOR ALL LONG SIDE SERVICES.</div><div>2. SUCCESSIVE TAPS ON THE WATER MAIN SHALL BE SPACED A MINIMUM OF 18" OFFSET AND AT 90° FROM THE CENTERLINE AS SHOWN ON DETAIL "A".</div><div>3. WHERE NO SIDEWALK EXISTS, METER BOXES SHALL BE SET TO CONFORM TO FINISH GRADE.</div><div>4. COPPER TUBING SHALL BE TYPE "K" WITH COMPRESSION FITTINGS.</div><div>5. POLYETHYLENE TUBING SHALL BE SDR 9, COPPER TUBE SIZE.</div><div>6. ROTATE THE CORPORATION STOP SO THAT THE OPERATING NUT IS ACTUATED FROM THE VERTICAL POSITION RATHER THAN THE HORIZONTAL POSITION.</div><div>7. BOTH COPPER AND POLYETHYLENE TUBING SERVICE LINES SHALL BE CONTINUOUS FROM CORPORATION STOP TO CURB STOP WITH NO FITTINGS IN BETWEEN.</div><div>8. TAPPING SADDLES AND CORPORATION STOPS SHALL HAVE ANMA INLET THREADS.</div><div>9. SERVICE CASING SHALL NOT BE INSTALLED BY WATER JETTING UNDER ROADWAY.</div><div>10. GALVANIZED SCHEDULE 40 CASING REQUIRED FOR ANY INSTALLATION REQUIRING A JACK AND BORE. SCHEDULE 40 PVC MAY BE USED FOR AN OPEN CUT INSTALLATION WITH THE APPROVAL OF SUA, CASING SHOULD EXTEND TEN (10) FEET BEYOND EDGE OF PAVEMENT AND SIZED AS FOLLOWS:<div>A) 1" SERVICE USE 2" CASING</div><div>B) 1 1/2" SERVICE USE 3" CASING</div><div>C) 2" SERVICE USE 4" CASING</div></div></div>
---	--	--	--	---



SCALE: 1" = 30'



Width : 10.00
Track : 8.00
Lock to Lock Time : 6.0
Steering Angle : 40.0



McLeod • McCarthy
& Associates, P.A.
Civil Engineers

The Forum III
1655 Palm Beach Lakes Blvd, Ste. 810
West Palm Beach, FL 33401
P: 561.689.9500
F: 561.689.8080
www.mcleodmccarthy.com



FIELD: DRAWN: P. Saffold
DESIGNED: TNM
APPROVED: TNM
PROJECT #24-004
TODD N. McLEOD, P.E.
FL LICENSE NOTARY PUBLIC
THIS DOCUMENT HAS BEEN ELECTRONICALLY SIGNED AND SEALED BY THE ENGINEER USING A
PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED VALID UNLESS THEY ARE THE SHA-1
AUTHENTICATION CODE MUST BE VERIFIED ON ANY ELECTRONIC COPIES

NO.	DATE	REVISIONS

AUTOTURN EXHIBIT
1220 10th STREET
STORAGE BUILDING ADDITION
LAKE PARK, FLORIDA

SITE PLAN RESUBMITTAL
DATE: 7/1/2025

SHEET
EX1
OF 5

NOTE: THESE PLANS ARE STILL UNDER REGULATORY PERMIT REVIEW. OWNER IS ADVISED NOT TO ENTER INTO CONTRACT FOR THE CONSTRUCTION OF THIS PROJECT UNTIL ALL PERMITS ARE ISSUED. BIDDING/CONTRACTING PRIOR TO COMPLETION OF PERMITTING WILL RESULT IN INCREASED COSTS & CHANGE ORDERS.

DATUM NOTE: ALL ELEVATIONS REFER TO NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88). TO CONVERT TO NGVD 1929, ADD 1.50' TO NAVD ELEVATIONS.