

VICINITY MAP
SCALE: N.T.S.

APPROVED BY: JP
DATE: 09-06-24
DRAWING #: 230222
PAGE: 1

DRAWN BY: RG
SCALE: 1" = 120'
DF: 1

J. Perales, P.E.
09/06/2024

- GENERAL NOTES
- EXISTING LAND USE IS CULTIVATED FARMLAND. PROPOSED LAND USE IS SINGLE FAMILY RESIDENTIAL DISTRICT WITH LOTS LESS THAN 1/4 ACRE. THE SITE IS CURRENTLY OUTSIDE THE CORPUS CHRISTI CITY LIMITS. A PETITION FOR ANNEXATION IS UNDERWAY. REQUESTED ZONING OF PROPERTY IS RS-45, SINGLE FAMILY RESIDENTIAL USE.
 - TOTAL ACREAGE OF THE PROPOSED SUBDIVISION IS 87.57 ACRES
 - ALL PROPOSED FINISHED FLOOR ELEVATIONS WILL BE A MINIMUM OF 18 INCHES ABOVE CROWN ELEVATIONS OF FRONTING STREETS.
 - A STORM WATER POLLUTION PREVENTION PLAN WILL BE SUBMITTED WITH THE DETAILED CONSTRUCTION PLANS FOR THE SUBDIVISION.
 - DRAINAGE IS IN SUBSTANTIAL COMPLIANCE WITH THE CITY'S MASTER DRAINAGE PLAN.
 - THE PROPOSED DEVELOPMENT FALLS WITHIN SECTION OCB-410-109.3 OUT OF THE CLARKWOOD SUB-BASIN (OCB-410) WITHIN THE OSO CREEK STORM WATER DRAINAGE BASIN.
 - THE RECEIVING WATER BODY FOR THE STORM WATER RUNOFF FOR THIS PROPERTY IS THE OSO CREEK BASIN. THE TCEQ HAS NOT CLASSIFIED THE AQUATIC LIFE FOR THE OSO CREEK, BUT IT IS RECOGNIZED AS AN ENVIRONMENTALLY SENSITIVE AREA. THE OSO CREEK DRAINS DIRECTLY INTO THE OSO BAY. THE TCEQ HAS CLASSIFIED THE AQUATIC LIFE USE FOR THE OSO BAY AS "EXCEPTIONAL" AND "OYSTER WATERS", AND HAS CATEGORIZED THE RECEIVING WATERS AS "CONTACT RECREATION" USE.
 - THERE ARE NO KNOWN NATURAL WATER BODIES, JURISDICTIONAL WETLANDS, ENDANGERED SPECIES HABITATS, STATE OF TEXAS SUBMERGED LANDS, OR CRITICAL DUNES WITHIN THE PROPERTY BOUNDARIES.
 - THE SITE DOES NOT LIE WITHIN A VELOCITY ZONE, NOR IS UPSTREAM OR ADJACENT TO THE NUECES RIVER WATER SUPPLY SOURCE FOR THE CITY OF CORPUS CHRISTI.
 - PER FLOOD INSURANCE RATE MAP, MAP NUMBER 48355C03006, DATED OCTOBER 13, 2022, THE SUBJECT PROPERTY IS NOT LOCATED WITHIN ANY SPECIAL FLOOD HAZARD AREAS. THIS FLOODING STATEMENT SHALL NOT CREATE LIABILITY ON THE PART OF THE SURVEYOR OR ENGINEER.
 - ALL BEARINGS ARE GRID BEARINGS BASED ON THE TEXAS COORDINATE SYSTEM FOR THE LAMBERT SOUTH ZONE NAD 83 (CORS 96) EPOCH 2002. ALL DISTANCES SHOWN ARE SURFACE DISTANCES.

PRELIMINARY STORM WATER MANAGEMENT PLAN

CLARKWOOD ESTATES
Corpus Christi, Texas

UNIT NO.	AREA ACRES	C EXIST IN/HR	I5 IN/HR	Q5 CFS	I25 IN/HR	Q25 CFS	I100 IN/HR	Q100 CFS	C PROP	I5 IN/HR	Q5 CFS	I25 IN/HR	Q25 CFS	I100 IN/HR	Q100 CFS	CALCULATED 5 YR DETENTION VOLUME CUBIC FEET	CUMULATIVE 5YR DETENTION VOLUME CUBIC FEET	DETENTION VOLUME PROVIDED CUBIC FEET
1	13.05	0.30	3.82	15.0	5.03	19.7	6.04	23.6	0.55	4.33	31.1	5.68	40.8	6.78	48.7	25758	25758	80100**
2	12.87	0.30	3.82	14.7	5.03	19.4	6.04	23.3	0.55	4.33	30.6	5.68	40.2	6.78	48.0	25438	51196	160200**
3	20.73	0.30	3.82	23.8	5.03	31.3	6.04	37.6	0.55	4.33	49.4	5.68	64.8	6.78	77.3	40957	92153	178815
4	18.52	0.30	3.82	21.2	5.03	27.9	6.04	33.6	0.55	4.33	44.1	5.68	57.9	6.78	69.1	44792	136945	199196
5	16.31	0.30	3.82	18.7	5.03	24.6	6.04	29.6	0.55	4.33	38.8	5.68	51.0	6.78	60.8	39316	176261	199196
TOTAL	81.48			93		123		148			194		255		304	176261	176261	199196

** DENOTES DETENTION CAPACITY PROVIDED BY TEMPORARY STORMWATER DETENTION DITCH ALONG CR36

STORMWATER COLLECTION SYSTEM DESIGN CRITERIA
CLARKWOOD ROAD IS DESIGNATED AS AN A2 ARTERIAL STREET IN THE CITY OF CORPUS CHRISTI TRANSPORTATION MASTER PLAN. COUNTY ROAD 36 IS DESIGNATED AS AN A2 ARTERIAL STREET IN THE CITY OF CORPUS CHRISTI TRANSPORTATION MASTER PLAN. NO OTHER HIGHER SERVICE LEVEL STREETS ARE DESIGNATED WITHIN THE PROPERTY BOUNDARIES BY THE CITY OF CORPUS CHRISTI MASTER PLAN. ALL OTHER STREETS WILL BE CONSIDERED AS LOCAL/NEIGHBORHOOD STREETS.
PER CITY OF CORPUS CHRISTI INFRASTRUCTURE DESIGN MANUAL (IDM), SECTION 3.03.a.b., 5 YEAR DESIGN STORM FREQUENCY IS TO BE USED FOR LOCAL/NEIGHBORHOOD STREET STORMWATER CONVEYANCE SYSTEMS. PER SECTION 3.03.a.d., 25 YEAR DESIGN STORM FREQUENCY IS TO BE USED FOR ARTERIAL STREET STORMWATER CONVEYANCE SYSTEMS.

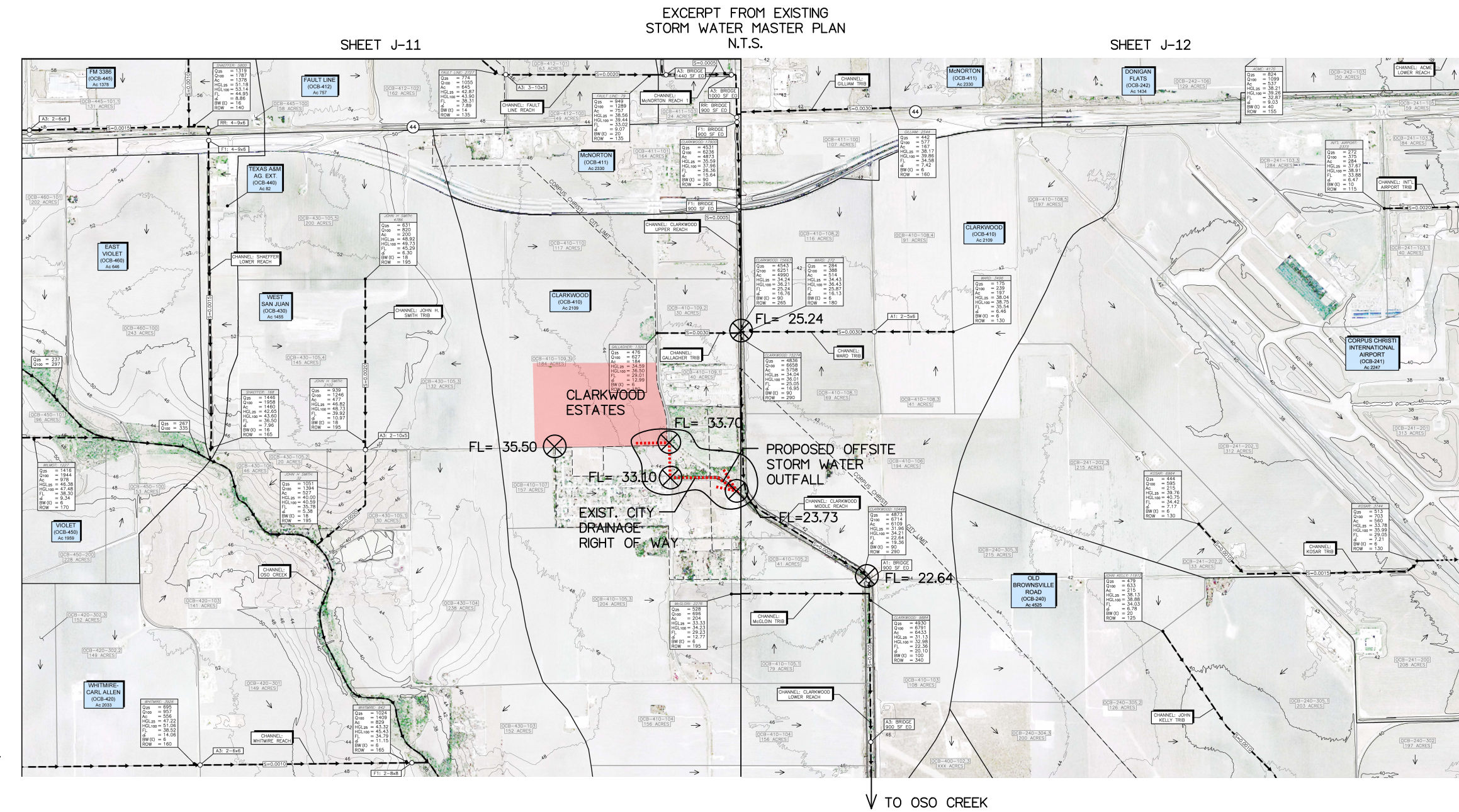
STORMWATER RUNOFF ESTIMATES
TOTAL PROPERTY AREA = 87.57 ACRES
DRAINAGE AREA IS LESS THAN 200 ACRES. THE RATIONAL METHOD IS TO BE USED FOR STORMWATER RUNOFF CALCULATIONS.
FOR NUECES COUNTY, 5 YEAR EVENT: $d5 = 79$ $d5 = 8.7$ $d5 = 0.794$
FOR NUECES COUNTY, 25 YEAR EVENT: $d25 = 91$ $d25 = 9.4$ $d25 = 0.759$
FOR NUECES COUNTY, 100 YEAR EVENT: $d100 = 99$ $d100 = 9.4$ $d100 = 0.730$
EXISTING LAND USE IS CULTIVATED FARMLAND WITH CLAYEY SOIL AND OVERLAND SLOPE < 1%
RUNOFF COEFFICIENT, C = 0.30 PER IDM TABLE 3.1

ESTIMATED RUNOFF VELOCITY = 1.0 FT/SEC PER SCS UPLANDS METHOD GRAPH OF SLOPE VS. FLOW VELOCITY
L = 2300 FT.
TC EXISTING = 36.7 MIN
I5 EXISTING = $79 / (36.7 + 8.7) 0.794 = 3.82$ IN/HR
I25 EXISTING = $91 / (36.7 + 8.7) 0.759 = 5.03$ IN/HR
I100 EXISTING = $99 / (36.7 + 9.4) 0.730 = 6.04$ IN/HR

PROPOSED LAND USE SINGLE FAMILY RESIDENTIAL WITH LOTS LESS THAN 1/3 ACRE IN SIZE AND OVERLAND SLOPE >1%, <3.5%
RUNOFF COEFFICIENT, C = 0.55 PER IDM TABLE 3.1
ESTIMATED RUNOFF VELOCITY = 2.0 FT/SEC FOR OVERLAND FLOW PER SCS UPLANDS METHOD GRAPH OF SLOPE VS. FLOW VELOCITY, AND 2.0 FT/SEC FOR PIPE FLOW
L OVERLAND = 200 FT. T = 1.7 MIN
L PIPE = 2800 FT. T = 23.3 MIN

TC TOTAL = 25.0 MIN => USE 30.0 MIN
I5 PROPOSED = $79 / (30.0 + 8.7) 0.794 = 4.33$ IN/HR
I25 PROPOSED = $91 / (30.0 + 8.7) 0.759 = 5.68$ IN/HR
I100 PROPOSED = $99 / (30.0 + 9.4) 0.730 = 6.78$ IN/HR

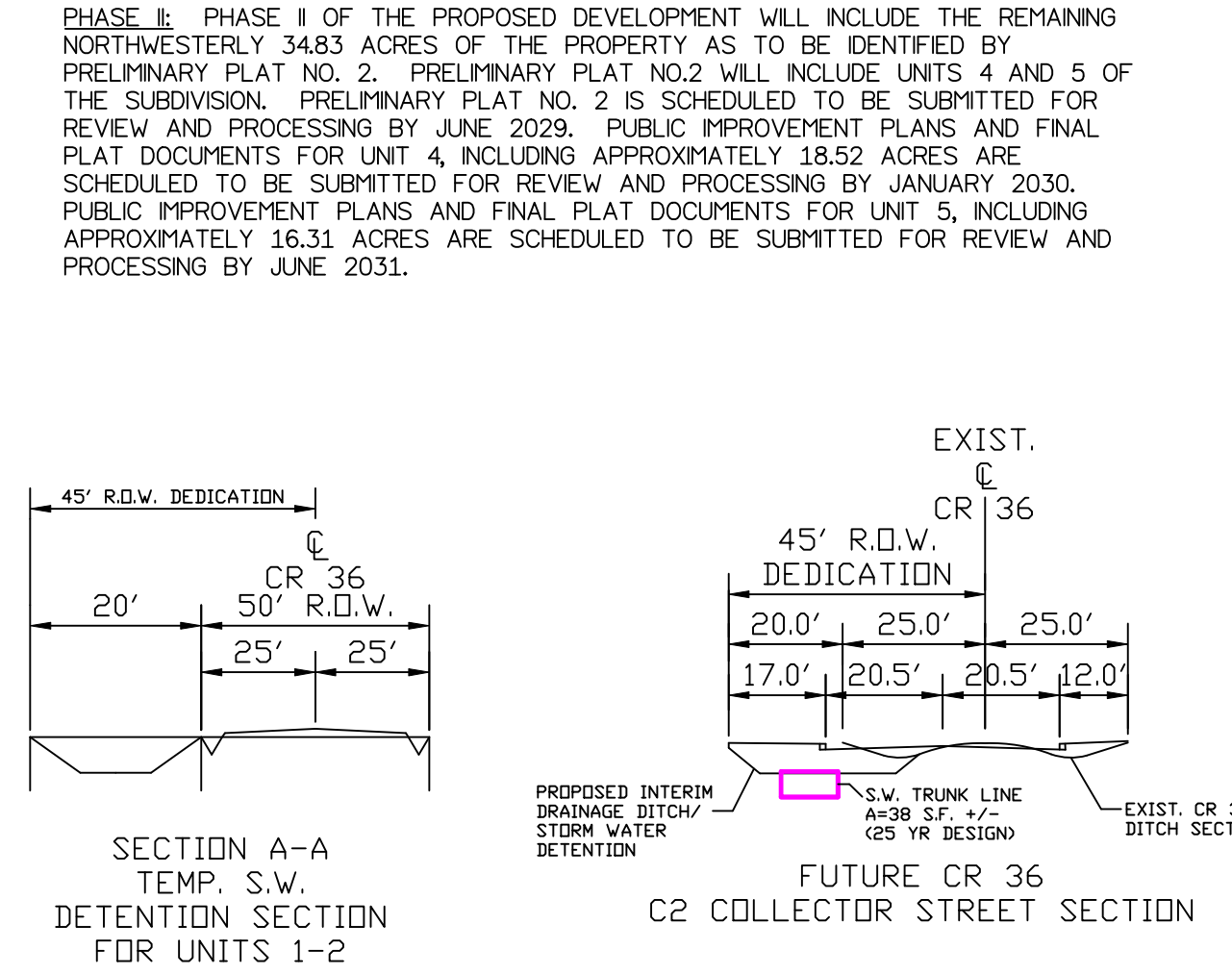
CALCULATED DETENTION VOLUME REQUIREMENTS:
DRAINAGE AREA IS LESS THAN 200 ACRES. U.S. SOIL CONSERVATION SERVICE TRIANGULAR UNIT HYDROGRAPH PROCEDURE WILL BE USED TO CALCULATE STORMWATER DETENTION REQUIREMENTS.
TL = 2/3 TC MAX
TD = 8/3 TL
REQUIRED DETENTION VOLUMES
= ((POSTDEVELOPMENT - PREDEVELOPMENT, CFS) X 60 CFM/CFS X TD (MIN.))/2, (CU FT)



PHASING SCHEDULE FOR CLARKWOOD ESTATES SUBDIVISION

PHASE I: THE TOTAL AREA OF THE PROPERTY IS 87.57 ACRES. PHASE I WILL INCLUDE THE SOUTHEASTERLY 52.74 ACRE PORTION OF THE PROPERTY IDENTIFIED BY PRELIMINARY PLAT NO. 1. PRELIMINARY PLAT NO. 1 IDENTIFIES THE FIRST THREE UNITS OF THE SUBDIVISION TO BE DEVELOPED. PRELIMINARY PLAT NO. 1 IS SCHEDULED TO BE SUBMITTED FOR REVIEW AND PROCESSING BY SEPTEMBER 2024. PUBLIC IMPROVEMENT PLANS AND FINAL PLAT DOCUMENTS FOR UNIT 1, INCLUDING APPROXIMATELY 13.05 ACRES, ARE SCHEDULED TO BE SUBMITTED FOR REVIEW AND PROCESSING BY OCTOBER 2024. PUBLIC IMPROVEMENT PLANS AND FINAL PLAT DOCUMENTS FOR UNIT 2, INCLUDING APPROXIMATELY 12.87 ACRES, ARE SCHEDULED TO BE SUBMITTED FOR REVIEW AND PROCESSING BY JANUARY 2026. PUBLIC IMPROVEMENT PLANS AND FINAL PLAT DOCUMENTS FOR UNIT 3, INCLUDING APPROXIMATELY 20.73 ACRES, ARE SCHEDULED TO BE SUBMITTED FOR REVIEW AND PROCESSING BY JUNE 2028.

PHASE II: PHASE II OF THE PROPOSED DEVELOPMENT WILL INCLUDE THE REMAINING NORTHWESTERLY 34.83 ACRES OF THE PROPERTY AS TO BE IDENTIFIED BY PRELIMINARY PLAT NO. 2. PRELIMINARY PLAT NO. 2 WILL INCLUDE UNITS 4 AND 5 OF THE SUBDIVISION. PRELIMINARY PLAT NO. 2 IS SCHEDULED TO BE SUBMITTED FOR REVIEW AND PROCESSING BY JUNE 2029. PUBLIC IMPROVEMENT PLANS AND FINAL PLAT DOCUMENTS FOR UNIT 4, INCLUDING APPROXIMATELY 18.52 ACRES, ARE SCHEDULED TO BE SUBMITTED FOR REVIEW AND PROCESSING BY JANUARY 2030. PUBLIC IMPROVEMENT PLANS AND FINAL PLAT DOCUMENTS FOR UNIT 5, INCLUDING APPROXIMATELY 16.31 ACRES, ARE SCHEDULED TO BE SUBMITTED FOR REVIEW AND PROCESSING BY JUNE 2031.



SECTION A-A
TEMP. S.W. DETENTION SECTION
FOR UNITS 1-2

C2 COLLECTOR STREET SECTION