

PRELIMINARY DRAINAGE PLAN
FOR

7933 CR 48, IOWA COLONY, TX 77583

OWNER

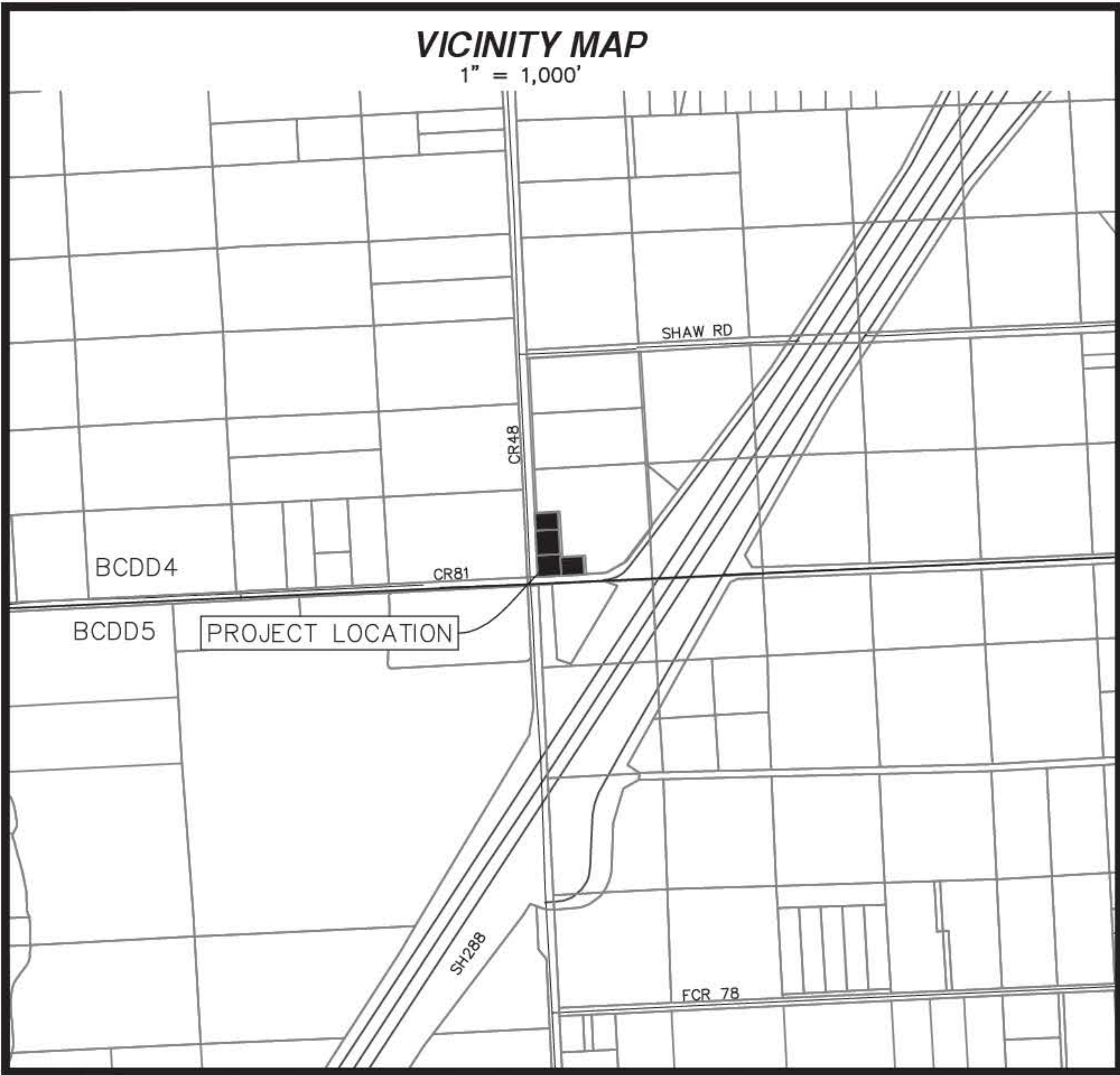
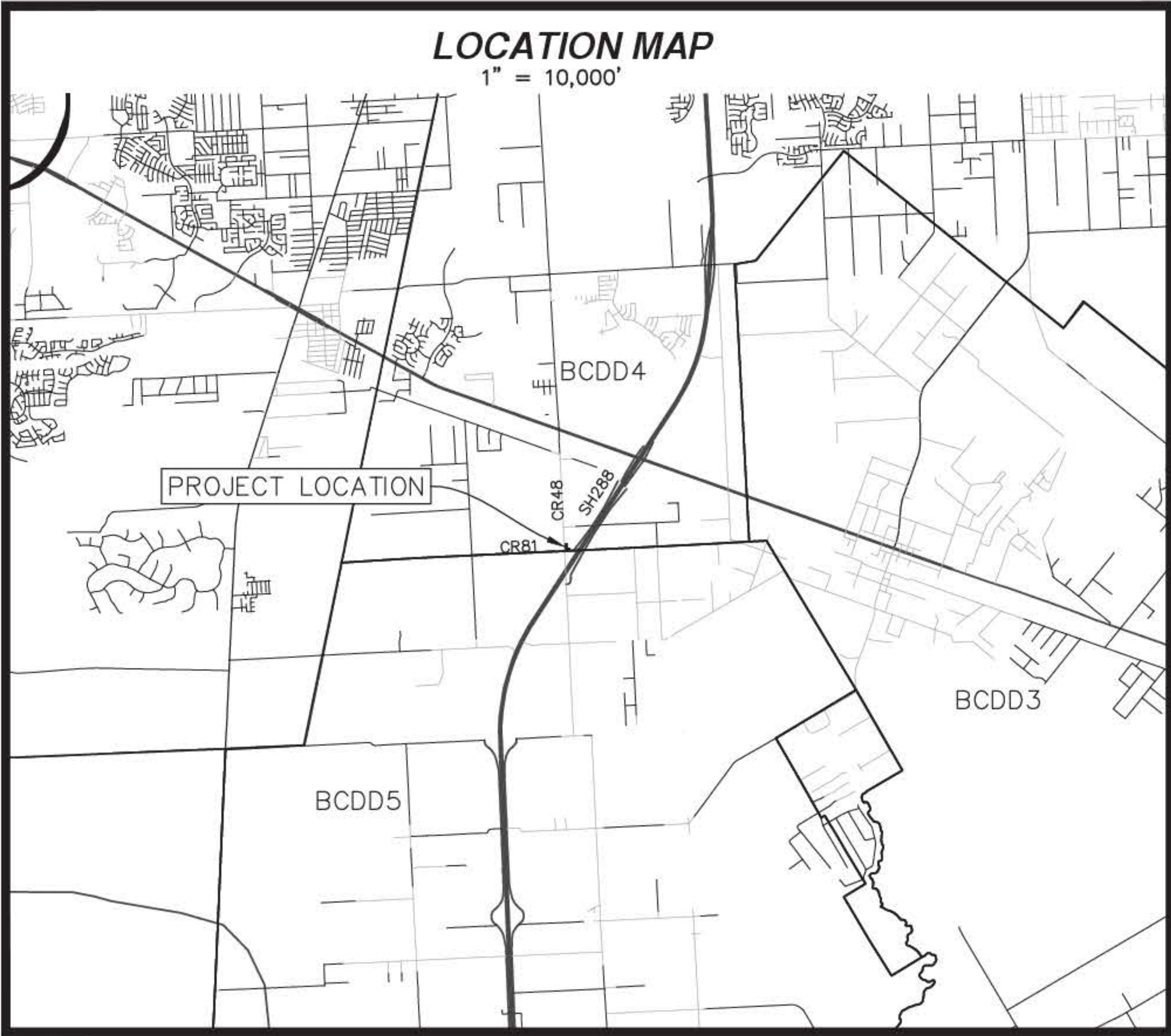
TRENT ANTHONY & MELISSA WILLIAMS

PHONE

832-779-6909

MAILING ADDRESS

9307 MOUNT LOGAN
MISSOURI CITY, TX 77459



APPROVED BY THE BOARD OF COMMISSIONERS ON April 05, 2022

[Signature]
Brazoria Drainage District No. 4

[Signature]
District Engineer

The above have signed these plans and/or plat based on the recommendation of the DISTRICT'S Engineer who has reviewed all sheets provided and found them to be in general compliance with the DISTRICT'S "Rules, Regulations, and Guidelines". This approval is only valid for three hundred sixty-five (365) calendar days. After that time re-approval is required. Please note, this does not necessarily mean that all the calculations provided in these plans and/or plats have been completely checked and verified. In the event of any conflict or inconsistency between the DISTRICT'S "Rules, Regulations, and Guidelines" and these approved drainage plans and/ or plat, the DISTRICT'S "Rules, Regulations & Guidelines" shall govern and prevail. Any approved variances shall be itemized on the cover sheet and placed on the appropriate sheet where applicable. Plans submitted have been prepared, signed and sealed by a Professional Engineer licensed to practice engineering in the State of Texas and plat has been signed and sealed by a Registered Professional Land Surveyor licensed to practice in the State of Texas, which conveys the engineer's and/or surveyor's responsibility and accountability.

BDD4 Ref. ID #: 21-000045



Notify Brazoria Drainage District No. 4 at inspections@bdd4.org or (281) 485-1434 prior to the start of construction. No building permit shall be issued until detention facility is constructed and approved by the District.

INDEX OF DRAWINGS	SHEET NO.
COVER SHEET	C-1
DEMOLITION PLAN	C-2
OVERALL SITE PLAN	C-3
GRADING PLAN	C-4
DRAINAGE PLAN	C-5
DRAINAGE PLAN CALCULATION	C-5.1
DRAINAGE DETAILS	C-5.2
UTILITY PLAN	C-6
OSSF DESIGN	C-6.1
STORMWATER POLLUTION PREVENTION PLAN	C-7

FLOOD PLAIN DATA
THIS PROPERTY LIES WITHIN ZONE "X-UNSHADED" PER THE FLOOD INSURANCE RATE MAP, COMMUNITY PANEL NO. 48039C0110-H, WHICH BEARS AN EFFECTIVE DATE JUNE 5, 1989.

NOTE:
CONTRACTOR SHALL NOTIFY BRAZORIA DRAINAGE DISTRICT NO. 4 AT LEAST FORTY- EIGHT (48) HOURS BEFORE PLACING ANY CONCRETE FOR DRAINAGE STRUCTURES. FAILURE TO PROPERLY COORDINATE AN ON-SITE INSPECTION BEFORE CONCRETE IS POURED WILL CAUSE PORTIONS OF THE CONCRETE TO BE BROKEN OUT AT THE APPLICANT'S EXPENSE IN ORDER TO PROBE TO THE DISTRICT'S INSPECTOR THAT CONSTRUCTION COMPLIES WITH DISTRICT RULES, REGULATIONS & GUIDELINES.

02/23/2022



File Name: CO - COVER.dwg Last Plotted: February 21, 2022 2:45 PM

FIF ENGINEERING
1526 KATY GAP RD. SUITE #804 KATY, TX 77494
PHONE: 346-800-4343
WWW.FIFENGINEERING.COM

FIRM #
F-17870

PROJECT ADDRESS:
7933 CR 48
IOWA COLONY, TX 77583

DRAWING TITLE:
COVER SHEET

DRAWN BY:	CHKD. BY:	REV#	DATE:	NOTE:
RA	NH			
SCALE:	DATE:			
NTS	11-12-2021			

C1

File Name: C2- DEMO PLAN.dwg, Last Printed: February 21, 2022 2:46 PM

FIF ENGINEERING
1526 KATY GAP RD. SUITE #804 KATY, TX 77494
PHONE: 346-800-4343
WWW.FIFENGINEERING.COM

FIRM #
F-17870

PROJECT ADDRESS:

7933 CR 48
IOWA COLONY, TX 77583

DRAWING TITLE:

DEMOLITION PLAN

DRAWN BY:

RA

SCALE:

1" = 20'

CHKD. BY:

NH

DATE:

11-12-2021

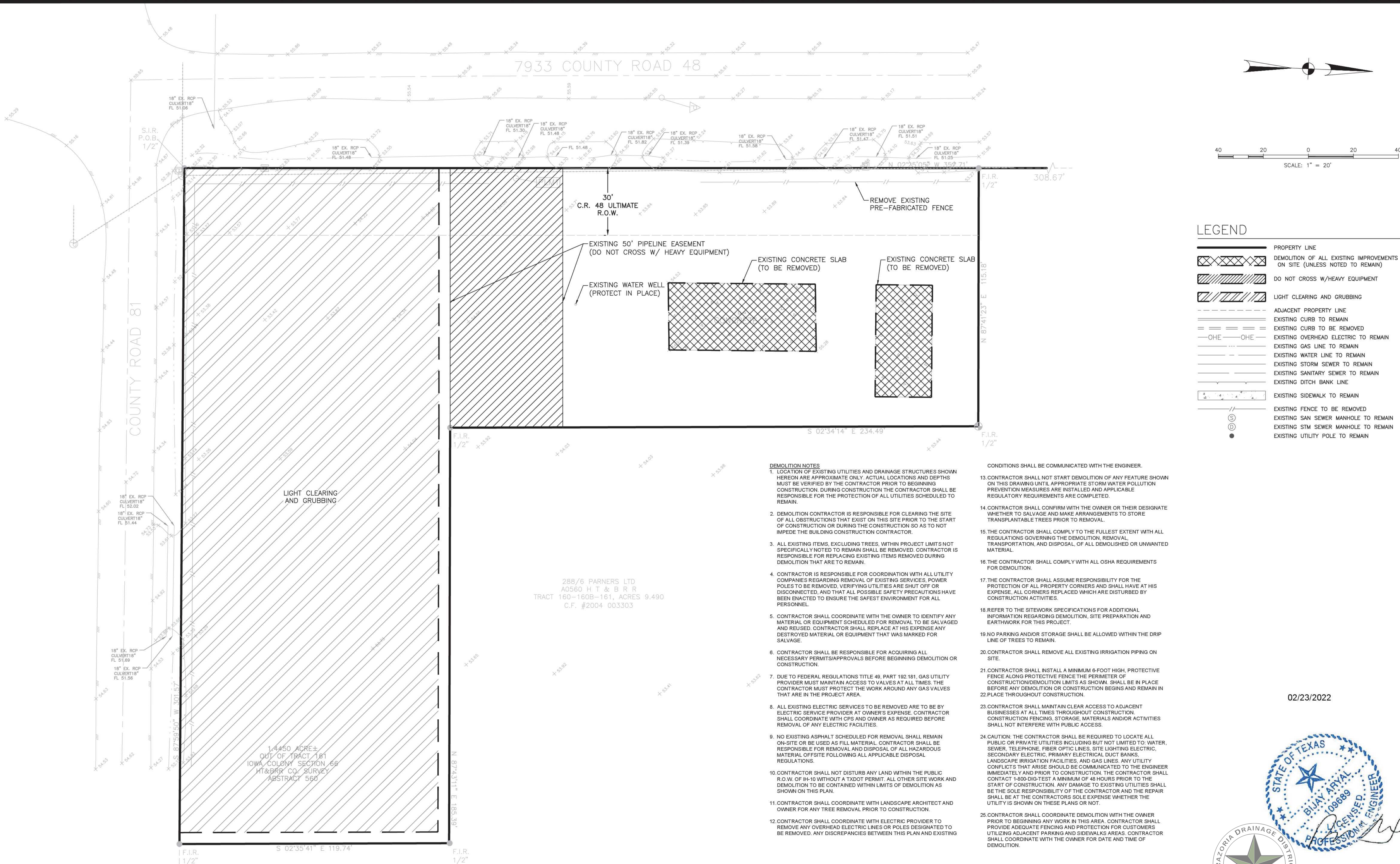
REV#

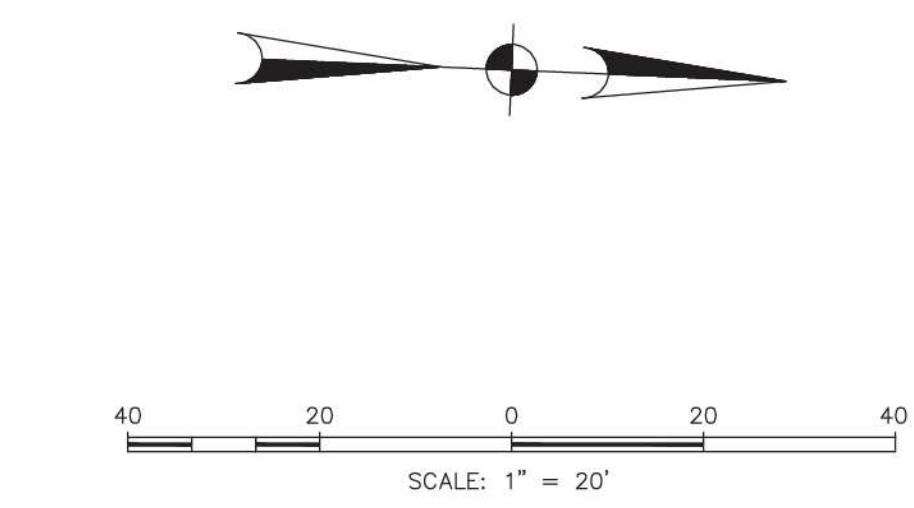
DATE:

NOTE:

Plan/Plan approvals expire after 365 days

C2



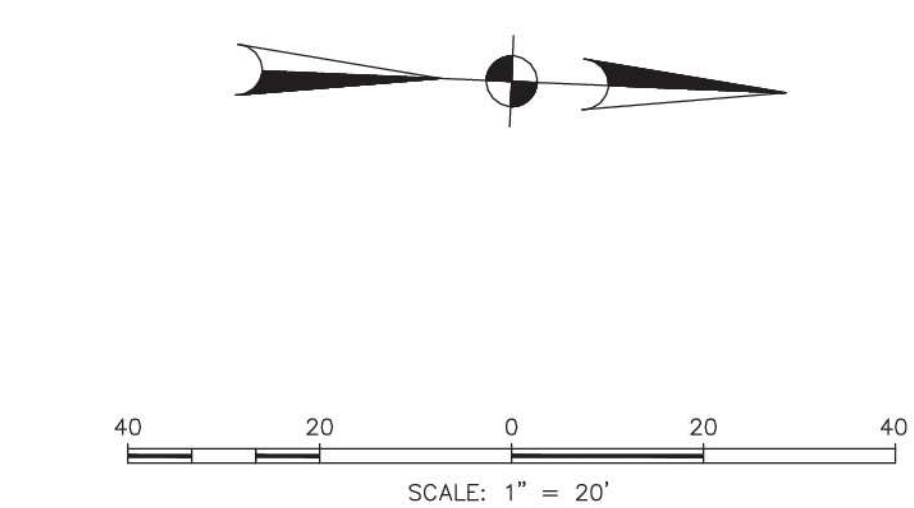


	PROPERTY LINE
	ADJACENT PROPERTY LINE
	EXISTING CURB
	EXISTING EASEMENT LINE
	PROPOSED BUILDING OVERHANG
	PROPOSED FENCE LINE
	PROPOSED 6-INCH CURB
	PROPOSED CONCRETE SIDEWALK
	PROPOSED SITE LANDSCAPING
	PROPOSED STORM SEWER CATCH BASIN
	PROPOSED CONCRETE WHEELSTOP
	PROPOSED WATER METER AND BACKFLOW DEVICE
	EXISTING SANITARY SEWER MANHOLE
	EXISTING STORM SEWER MANHOLE
	EXISTING TELECOM STRUCTURE
	EXISTING WATER VALVE
	EXISTING UTILITY POLE
	NUMBER OF PARKING SPACES

- GENERAL SITE NOTES
1. CONTRACTOR SHALL BE RESPONSIBLE FOR ACQUIRING ALL NECESSARY PERMITS BEFORE BEGINNING CONSTRUCTION.
2. ALL DIMENSIONS ARE TO FACE OF CURB, TO CENTER OF PAINT STRIPING, OR PERPENDICULAR TO THE PROPERTY LINE. ALL RADII AND OTHER DIMENSIONS ARE TO BACK OF CURB.
3. COORDINATE CONTROL IS AS SHOWN. NO OFFSETS FROM FACE OF CURB OR BUILDINGS ARE GIVEN.
4. CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER OF ANY QUESTION THAT MAY ARISE CONCERNING THE INTENT, PLACEMENT, OR LIMITS OF DIMENSIONS NECESSARY FOR CONSTRUCTION OF THE PROJECT.
5. CONTRACTOR SHALL BE RESPONSIBLE FOR RESTORING TO ITS ORIGINAL OR BETTER CONDITION ANY DAMAGE DONE TO EXISTING UTILITIES, FENCES, PAVEMENT, CURBS, DRIVEWAYS, SIDEWALKS, OR SIGNS.
6. CONTRACTOR SHALL PRESERVE ALL PROPERTY CORNER PINS/RODS, CONTROL POINTS, AND BENCHMARKS. IF ANY ARE DESTROYED OR REMOVED BY THE CONTRACTOR OR HIS EMPLOYEES, THEY SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
7. FIELD SURVEY COMPLETED BY GRULLER SURVEYING, LLC ON APRIL 5, 2011.
8. THE BOUNDARY TO PO TOP SURVEY SHALL BE CONSIDERED A PART OF THE CONTRACT DOCUMENTS.
9. ALL CURBS ARE 6" HIGH, UNLESS OTHERWISE NOTED.
10. ALL MATERIALS AND CONSTRUCTION PROCEDURES WITHIN THE SCOPE OF THE CONTRACT SHALL CONFORM TO ALL APPLICABLE CITY OF HOUSTON SPECIFICATIONS.
11. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF EXISTING UTILITIES PRIOR TO CONSTRUCTION. ANY UTILITIES, WHETHER SHOWN ON THE PLANS OR NOT, DAMAGED BY THE CONTRACTOR SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CONSTRUCTION STAKING.
13. DIMENSIONAL CONTROL POINTS ARE PROVIDED AS NEEDED. ADDITIONAL POINTS MAY BE AVAILABLE UPON REQUEST.
14. ALL PAVEMENT MARKINGS AND SIGNAGE OF ACCESSIBLE PARKING AREAS SHALL BE IN ACCORDANCE WITH THE MOST CURRENT T&A AND ADA STANDARDS.
15. ALL GROUND-MOUNTED OR BUILDING-MOUNTED EQUIPMENT TO SERVE A BUILDING, INCLUDING MECHANICAL, UTILITY METERBANKS, AND HEATING OR COOLING EQUIPMENT MUST BE SCREENED FROM PUBLIC VIEW WITH LANDSCAPING OR ARCHITECTURAL TREATMENT. REFER TO ARCHITECT AND LANDSCAPE PLANS FOR DETAILS.
16. NOT FIELD VERIFIED IS DENOTED N.F.V. IN PLAN.

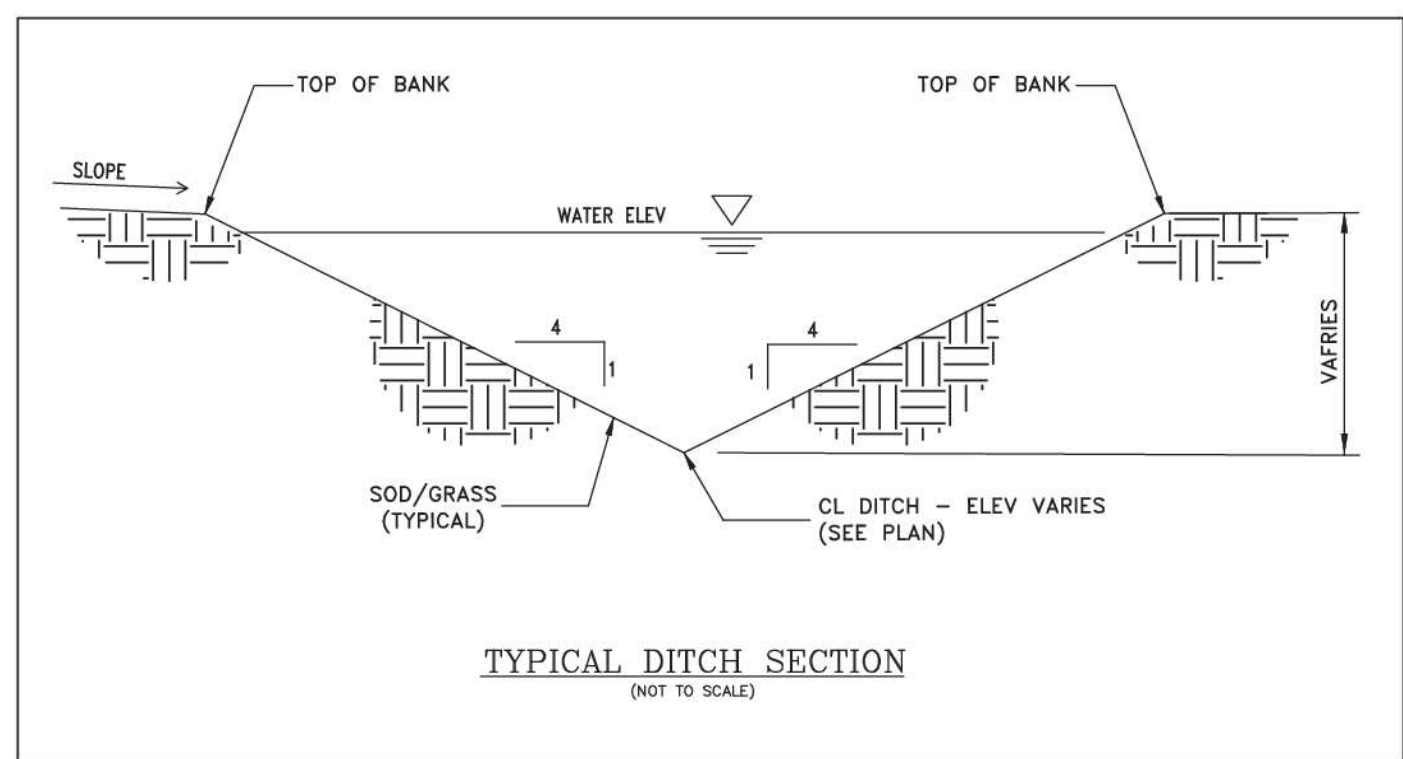


C3



_____ LINE
 _____ ADJACENT PROPERTY LINE
 _____ EXISTING CURB TO REMAIN
 _____ EXISTING EASEMENT LINE
 _____ PROPOSED HIGH POINT
 _____ PROPOSED BUILDING FOOTPRINT
 _____ PROPOSED FENCE LINE
 _____ PROPOSED 6-INCH CURB
 _____ PROPOSED CONCRETE SIDEWALK
 _____ PROPOSED CATCH BASIN
 _____ PROPOSED SWALE FLOWLINE ELEVATION
 _____ PROPOSED TOP OF CURB ELEVATION
 _____ PROPOSED GUTTER ELEVATION
 _____ PROPOSED FINISH GRADE ELEVATION
 _____ MATCH EXISTING ELEVATION
 _____ PROPOSED TOP OF SIDEWALK ELEVATION
 _____ PROPOSED TOP OF STEP ELEVATION
 _____ PROPOSED BOTTOM OF STEP ELEVATION
 _____ PROPOSED MANHOLE
 _____ EXISTING SANITARY SEWER MANHOLE
 _____ EXISTING STORM SEWER MANHOLE

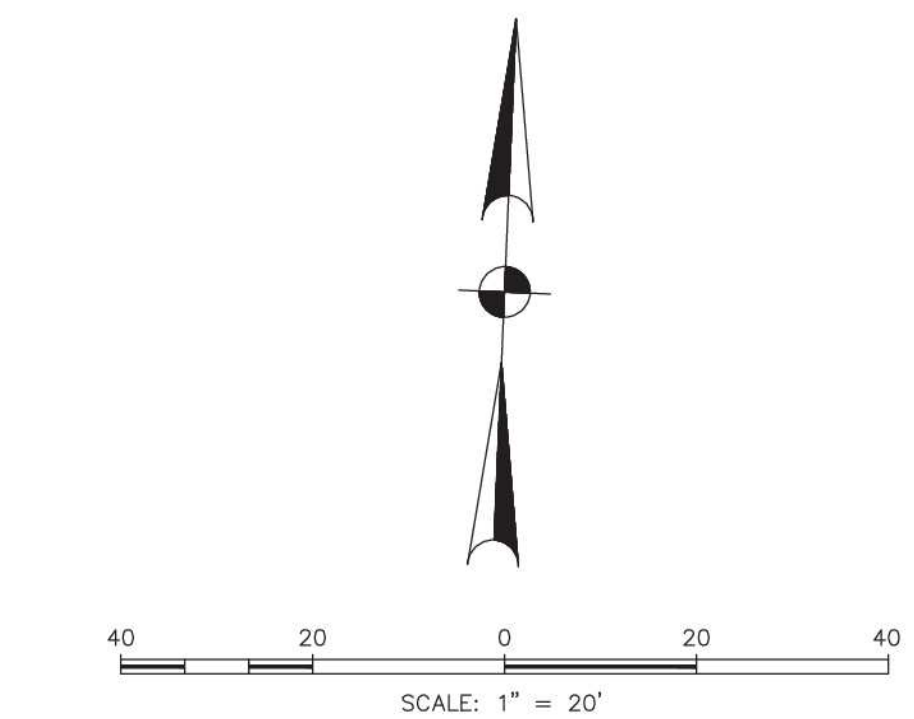
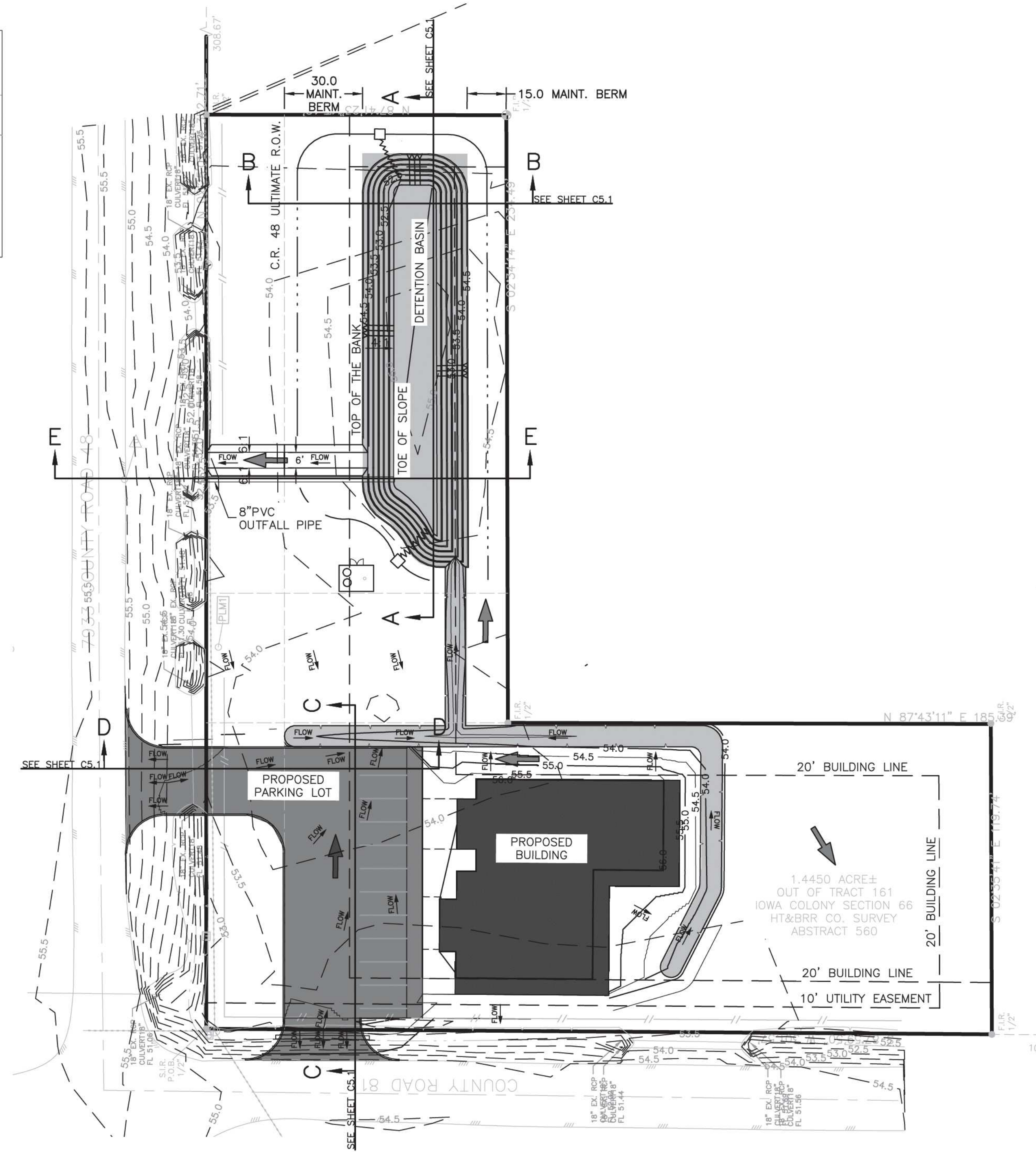
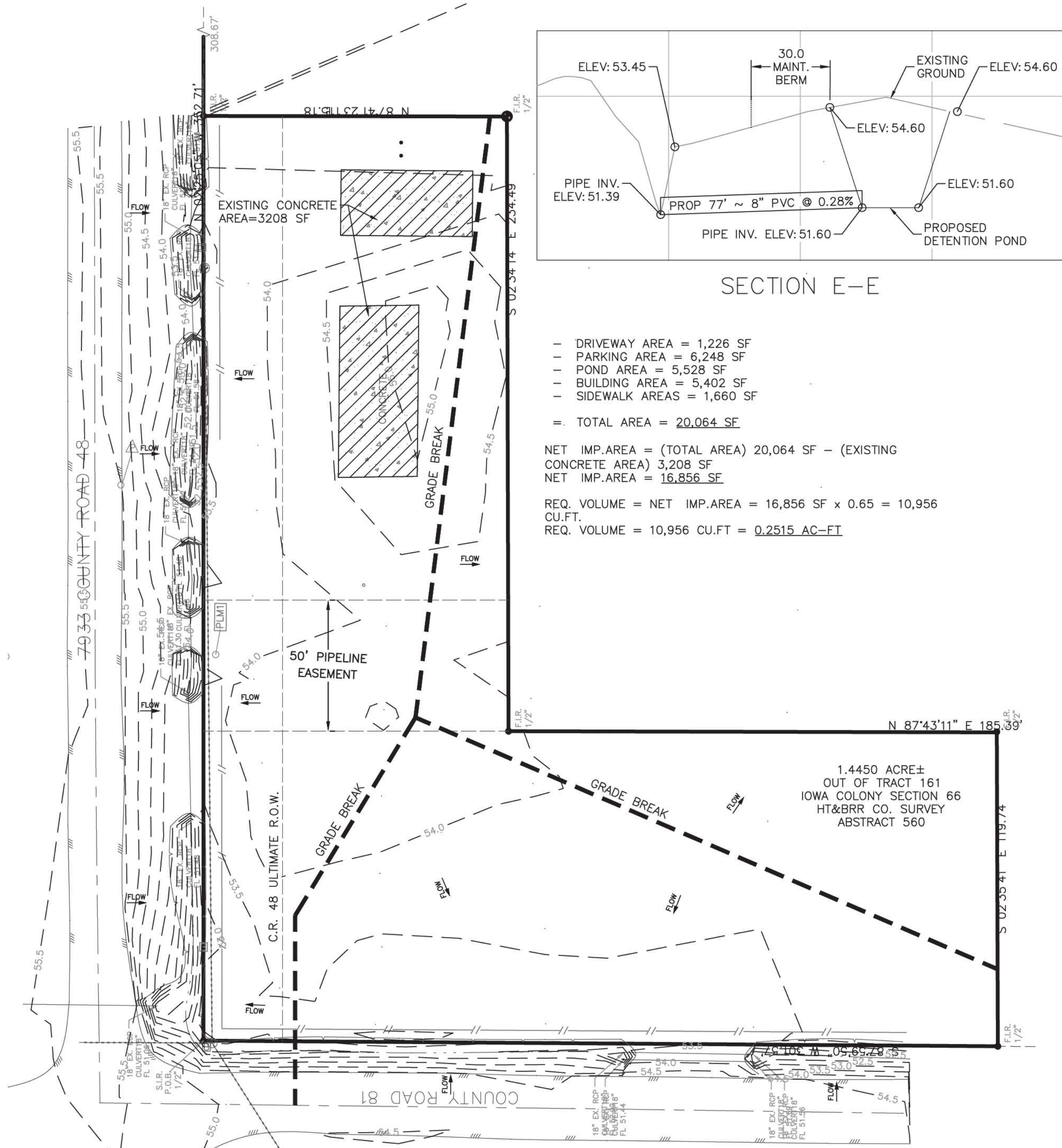
- GRADING NOTES**
1. ALL ELEVATIONS AND PROPOSED CONTOURS SHOWN ON THIS GRADING PLAN REFLECT FINISHED GRADES. THE THICKNESS OF PAVING, BASE, GRASS, TOPSOIL, AND MULCH MUST BE SUBTRACTED TO OBTAIN SUBGRADE ELEVATIONS.
 2. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER OF ANY QUESTIONS THAT MAY ARISE CONCERNING THE INTENT, PLACEMENT, OR LIMITS OF DIMENSIONS OR GRADES NECESSARY FOR CONSTRUCTION OF THIS PROJECT.
 3. THE CONTRACTOR SHALL VERIFY THE SUITABILITY OF ALL EXISTING AND PROPOSED SITE CONDITIONS INCLUDING GRADES AND DIMENSIONS BEFORE COMMENCEMENT OF CONSTRUCTION. THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY OF ANY DISCREPANCIES.
 4. THE CONTRACTOR SHALL REMOVE TOP SOIL, GRASS, ROOTS, DEBRIS, ETC., AND DISPOSE OFF SITE THOSE MATERIALS NOT SUITABLE FOR EMBANKMENT AND TOPSOIL. CLEAN STRIPPINGS AND TOPSOIL MAY BE STOCKPILED ON SITE FOR REUSE IN A LOCATION SPECIFIED BY THE OWNER.
 5. THE SITE CONTRACTOR SHALL BE RESPONSIBLE FOR SITE STABILIZATION. ALL DISTURBED AREAS SHALL BE REVEGETATED IN ACCORDANCE WITH PROJECT SPECIFICATIONS AND TPDES/SWPPP REQUIREMENTS. REFERENCE THE LANDSCAPE ARCHITECT'S PLAN, IF APPLICABLE.
 6. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS (USE OF SILT FENCES, ETC.) TO KEEP DRAINAGE AND SILT FROM WASHING ONTO ADJACENT PROPERTY, STREETS, OR DRAINAGE WAYS. CONTRACTOR SHALL IMMEDIATELY REMOVE SILT DEBRIS WHICH WASHES OFFSITE OR
 7. INTO EXISTING STORM DRAIN SYSTEMS. (SEE SWPPP PLANS & TPDES BOOK).
 8. THE CONTRACTOR SHALL PROVIDE A SMOOTH TRANSITION BETWEEN EXISTING SITE AND PROPOSED IMPROVEMENTS.
 9. UTILITIES SHOWN ON THE PLANS ARE FROM INFORMATION SOURCES AVAILABLE AT THE TIME OF DESIGN BUT MAY NOT REPRESENT ALL EXISTING UTILITIES ON SITE. THE CONTRACTOR WILL BE RESPONSIBLE FOR DETERMINING EXACT LOCATION OF ALL UTILITIES WHETHER SHOWN ON THE PLANS OR NOT. THE CONTRACTOR SHALL UNCOVER EXISTING UTILITIES PRIOR TO CONSTRUCTION OF SIZE, GRADE AND LOCATION. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY OF ANY DEVIATIONS FROM PLANS PRIOR TO BEGINNING CONSTRUCTION. ANY DAMAGE TO EXISTING UTILITIES, WHETHER SHOWN ON THE PLANS OR NOT, SHALL BE THE CONTRACTORS RESPONSIBILITY TO REPAIR, AT HIS OWN EXPENSE.
 10. POSITIVE DRAINAGE SHALL BE MAINTAINED THROUGHOUT THE SCOPE OF THE PROJECT. DRAINAGE SHALL BE DIRECTED AWAY FROM ALL BUILDING FOUNDATIONS. CONTRACTOR SHOULD TAKE PRECAUTIONS NOT TO ALLOW ANY PONDING OF WATER AND NOT TO BLOCK DRAINAGE FROM ADJACENT PROPERTY.
 11. FOR FILL PLACEMENT ON HILL SIDES OR STEEP SLOPE AREAS, THE CONTRACTOR SHALL REFERENCE THE PROJECT SPECIFICATIONS AND GEOTECHNICAL REPORT FOR SPECIAL INSTRUCTIONS REGARDING BENCHING.
 12. IT IS THE CONTRACTORS RESPONSIBILITY TO ENSURE THAT ALL GRADES ON SITE MEET ADA AND TAS STANDARDS WHICH INCLUDE BUT ARE NOT LIMITED TO:
 - A. SIDEWALKS AND ACCESSIBLE ROUTES TO BE AT 2% MAX CROSS SLOPE AND 5% MAX RUNNING SLOPE EXCEPT WHERE SPECIFICALLY NOTED OTHERWISE
 - B. ACCESSIBLE PARKING SPACES SHALL NOT EXCEED 2% SLOPE IN ANY DIRECTION
 - C. CURB RAMPS SHALL NOT EXCEED 8% IN VERTICAL DIFFERENCE AND SLOPE SHALL BE NO MORE THAN 12:1.
 13. TOP OF CURBS ADJACENT TO CURB RAMPS SHALL BE TAPERED TO BE FLUSH WITH RAMP SURFACE.
 14. ALL SANITARY SEWER MANHOLES RMS, CLEANOUTS, AND APPURTENANCES LOCATED WITHIN PAVED AREAS ARE TO BE SET FLUSH WITH PROPOSED PAVEMENT GRADES.
 15. CONTRACTOR TO GRADE GREENSPACE AND LANDSCAPED AREAS AWAY FROM BUILDING.



02/23/2022

FIF ENGINEERING 1526 KATY GAP RD. SUITE #804 KATY, TX 77494 PHONE: 346-800-4343 WWW.FIFENGINEERING.COM	FIRM # F-17870	PROJECT ADDRESS: 7933 CR 48 IOWA COLONY, TX 77583	DRAWING TITLE: GRADING PLAN	DRAWN BY: RA	CHKD. BY: NH	REV#	DATE:	NOTE:		C4
				SCALE: 1" = 20'	DATE: 11-12-2021					
				Plat/Plan approvals expire after 365 days						

File Name: C4 - GRADING PLAN.dwg, Last Plotted: February 21, 2022 2:46 PM



- LEGEND**
- PROPERTY LINE
 - ADJACENT PROPERTY LINE
 - EXISTING CURB
 - EXISTING EASEMENT LINE
 - EXISTING OVERHEAD ELECTRIC LINE
 - EXISTING GAS LINE
 - EXISTING WATER LINE
 - EXISTING STORM SEWER
 - EXISTING SANITARY SEWER
 - EXISTING FENCE
 - PROPOSED DRAINAGE AREA LIMITS
 - PROPOSED STORM SEWER CATCH BASIN
 - PROPOSED STORM SEWER MANHOLE
 - PROPOSED FLOW DIRECTION
 - EXTREME EVENT FLOW DIRECTION
 - EXISTING/PROPOSED DRAINAGE AREA (AC)
 - EXISTING/PROPOSED 2-YEAR FLOW (CFS)
 - EXISTING STORM SEWER MANHOLE
 - EXISTING SANITARY SEWER MANHOLE
 - EXISTING CURB INLET
 - EXISTING UTILITY POLE
 - EXISTING LIGHT POLE
 - EXISTING ELECTRIC/COMMUNICATION BOX
 - EXISTING CONCRETE AREA
 - BUILDING & SIDEWALK AREA
 - POND AREA
 - DRIVEWAY & PARKING AREA

TRENCH SAFETY NOTE
CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR STRUCTURAL DESIGN/ GEOTECHNICAL SAFETY EQUIPMENT CONSULTANT, IF ANY, SHALL REVIEW THESE PLANS AND ANY AVAILABLE GEOTECHNICAL INFORMATION AND THE ANTICIPATED INSTALLATION SITES WITHIN THE PROJECT WORK AREA IN ORDER TO IMPLEMENT CONTRACTOR'S TRENCH EXCAVATION SAFETY PROTECTION SYSTEMS, PROGRAMS AND/OR PROCEDURES FOR THE PROJECT DESCRIBED IN THE CONTRACT DOCUMENTS. THE CONTRACTOR'S IMPLEMENTATION OF THESE SYSTEMS, PROGRAMS AND/OR PROCEDURES SHALL PROVIDE FOR ADEQUATE TRENCH EXCAVATION SAFETY PROTECTION THAT COMPLY WITH AS A MINIMUM, OSHA STANDARDS FOR TRENCH EXCAVATIONS. SPECIFICALLY, CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR SAFETY CONSULTANT SHALL IMPLEMENT A TRENCH SAFETY PROGRAM IN ACCORDANCE WITH OSHA STANDARDS GOVERNING THE PRESENCE AND ACTIVITIES OF INDIVIDUALS WORKING IN AND AROUND TRENCH EXCAVATION.

BCDD4 NOTES

- ANY GOVERNMENTAL BODY FOR PURPOSES OF DRAINAGE WORK MAY USE DRAINAGE EASEMENTS AND FEE STRIPS PROVIDED THE DISTRICT IS PROPERLY NOTIFIED.
- PERMANENT STRUCTURES, INCLUDING FENCES AND PERMANENT LANDSCAPING SHALL NOT BE ERECTED IN A DRAINAGE EASEMENT OR FEE STRIPS.
- MAINTENANCE OF DETENTION FACILITIES IS THE SOLE RESPONSIBILITY OF THE OWNER OF THE PROPERTY. THE DISTRICT WILL PROVIDE MAINTENANCE OF REGIONAL FACILITIES CONSTRUCTED BY DEVELOPER(S) FOR WHICH OWNERSHIP HAS BEEN TRANSFERRED TO THE DISTRICT WITH THE DISTRICT'S APPROVAL. THE DISTRICT IS RESPONSIBLE ONLY FOR THE MAINTENANCE OF FACILITIES OWNED BY THE DISTRICT UNLESS THE DISTRICT SPECIFICALLY CONTRACTS OR AGREES TO MAINTAIN OTHER FACILITIES.
- CONTRACTOR SHALL NOTIFY THE DISTRICT IN WRITING AT LEAST FORTY-EIGHT (48) HOURS BEFORE PLACING ANY CONCRETE FOR DRAINAGE STRUCTURES.
- THE DISTRICT'S PERSONNEL SHALL HAVE THE RIGHT TO ENTER UPON THE PROPERTY FOR INSPECTION AT ANY TIME DURING CONSTRUCTION OR AS MAY BE WARRANTED TO ENSURE THE DETENTION FACILITY AND DRAINAGE SYSTEM ARE OPERATING PROPERLY.

- APPROPRIATE COVER FOR THE SIDE SLOPES, BOTTOM AND MAINTENANCE BERM SHALL BE ESTABLISHED PRIOR TO ACCEPTANCE OF THE CONSTRUCTION BY THE DISTRICT. AT LEAST 95% GERMINATION OF THE GRASS MUST BE ESTABLISHED PRIOR TO ACCEPTANCE OF CONSTRUCTION BY THE DISTRICT.
- NO BUILDING PERMIT SHALL BE ISSUED FOR ANY LOT WITHIN THIS DEVELOPMENT UNTIL THE DETENTION FACILITY HAS BEEN CONSTRUCTED AND APPROVED BY THE DISTRICT.
- THE DISTRICT'S APPROVAL OF THE FINAL DRAINAGE PLAN (AND FINAL PLAT IF REQUIRED) DOES NOT AFFECT THE PROPERTY RIGHTS OF THIRD PARTIES. THE DEVELOPER IS RESPONSIBLE FOR OBTAINING AND MAINTAINING ANY AND ALL EASEMENTS, FEE STRIPS, AND/OR ANY OTHER RIGHTS-OF-WAY ACROSS THIRD PARTIES' PROPERTIES FOR PURPOSES OF MOVING EXCESS RUNOFF TO THE DISTRICT'S DRAINAGE FACILITIES AS CONTEMPLATED BY THE FINAL DRAINAGE PLAN AND FINAL PLAT.
- FUTURE DEVELOPMENT ON THIS SITE MUST BE APPROVED BY BRAZORIA DRAINAGE DISTRICT NO. 4.
- DRAINAGE EASEMENT SHALL BE USED ONLY FOR THE PURPOSES OF CONSTRUCTING, OPERATING, MAINTAINING, REPAIRING, REPLACING, AND RECONSTRUCTING OF A DRAINAGE FACILITY, AND ANY ALL RELATED EQUIPMENT AND FACILITIES TOGETHER WITH ANY AND ALL NECESSARY INCIDENTALS AND APPURTENANCES THERETO IN, UPON, OVER, ACROSS, AND THROUGH THE EASEMENT AREA. THE DISTRICT'S SUCCESSORS, ASSIGNS, AGENTS, EMPLOYEES, WORKMEN, AND REPRESENTATIVES SHALL AT ALL PRESENT AND FUTURE TIMES, HAVE THE RIGHT AND PRIVILEGE OF EGRESS IN, UPON, OVER, CROSS AND THROUGH THE EASEMENT AREA.

- ACCESS EASEMENTS SHALL BE USED FOR INGRESS AND EGRESS TO THE DISTRICT'S DRAINAGE FACILITIES AND SHALL BE KEPT CLEAR OF ANY AND ALL OBSTRUCTIONS
- AN AS-BUILT CERTIFICATE AND AS-BUILT SURVEY ARE REQUIRED TO BE SUBMITTED TO THE DISTRICT BEFORE A CERTIFICATE OF COMPLIANCE CAN BE ISSUED. CONTACT THE DISTRICT INSPECTOR FOR FURTHER CLARIFICATION.
- ALL DRAINAGE PLAN AND PLATS SHALL BE IN CONFORMANCE WITH THE DISTRICT'S RULES, REGULATIONS & GUIDELINES. BOARD APPROVALS OF A DRAINAGE PLAN OR PLAT DOES NOT CONSTITUTE PERMISSION TO DEVIATE. DEVIATION FROM THE DISTRICT'S RULES, REGULATIONS & GUIDELINES IS ONLY AUTHORIZED AND ALLOWED BY A SEPARATE REQUEST FOR VARIANCE WHICH WAS APPROVED BY THE BOARD. ANY BOARD APPROVED VARIANCE SHALL BE REFERENCED ON THE PLAN COVER PAGE AND ON THE APPROPRIATE SHEET WHERE APPLICABLE. THE USE OF THE TERM "GUIDELINES" HEREIN DOES NOT AFFECT THE MANDATORY NATURE OF THESE RULES, REGULATIONS & GUIDELINES.



FIF ENGINEERING
1526 KATY GAP RD. SUITE #804 KATY, TX 77494
PHONE: 346-800-4343
WWW.FIFENGINEERING.COM

FIRM #
F-17870

PROJECT ADDRESS:
7933 CR 48
IOWA COLONY, TX 77583

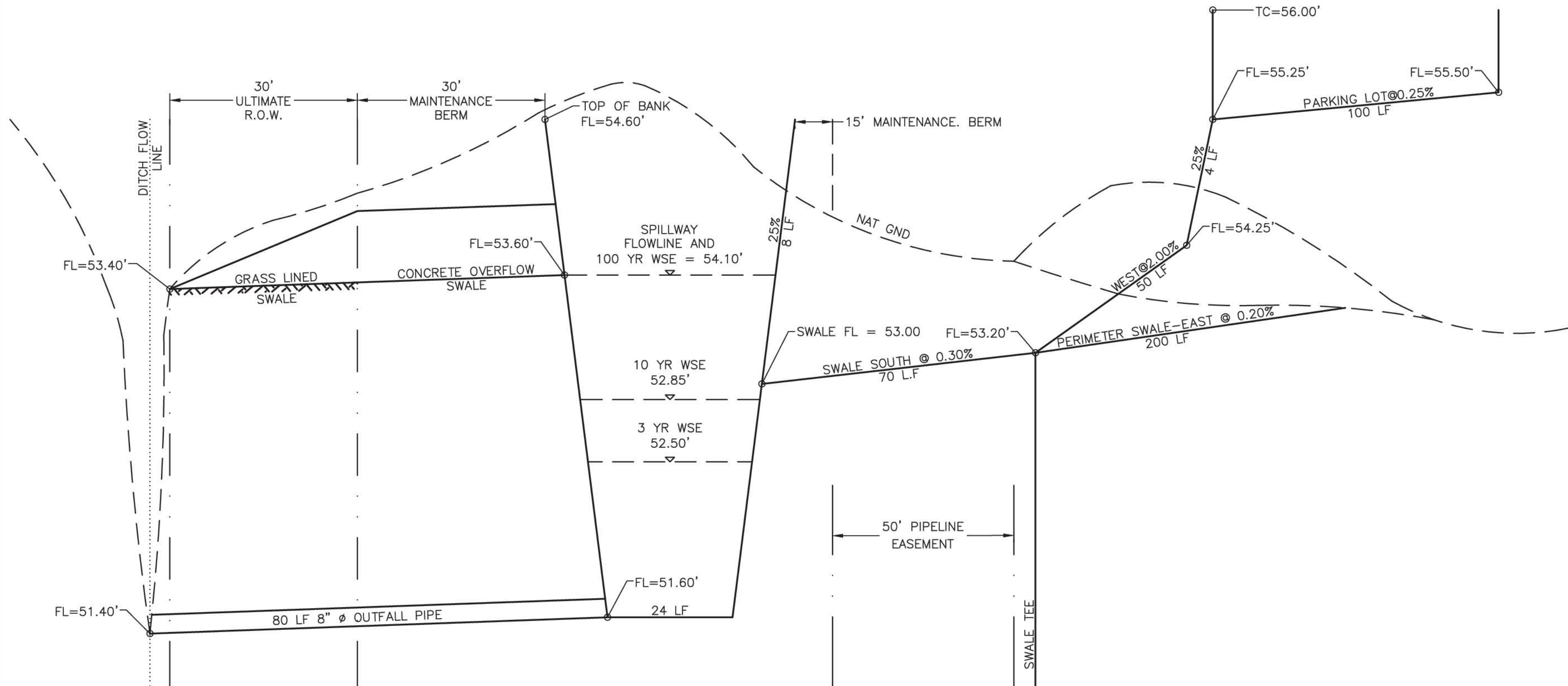
DRAWING TITLE:
DRAINAGE PLAN

DRAWN BY:	CHKD. BY:	REV#	DATE:	NOTE:
RA	NH			
SCALE:	DATE:			
1" = 20'	11-12-2021			

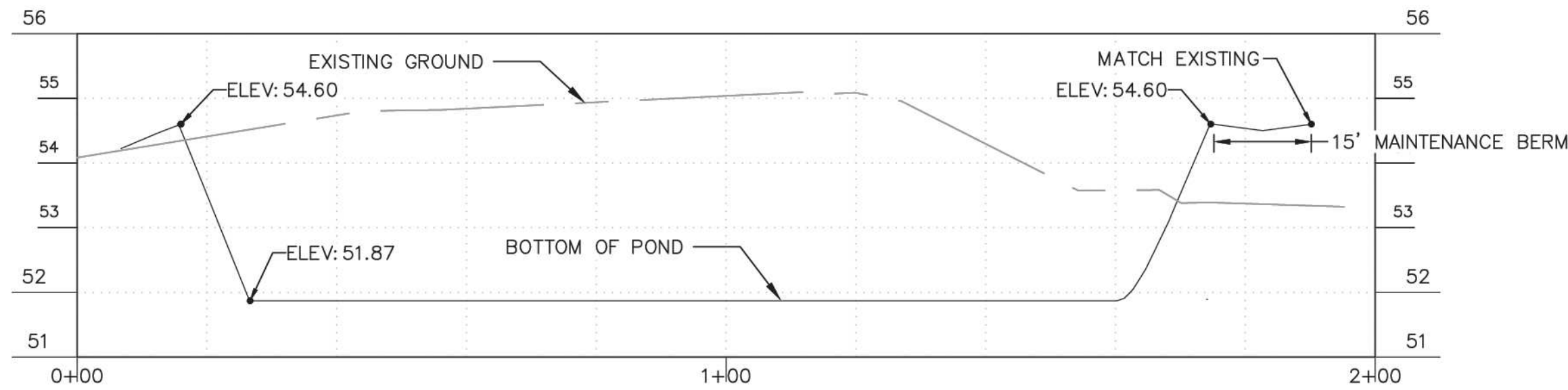
Plan/Plan approvals expire after 365 days

C5

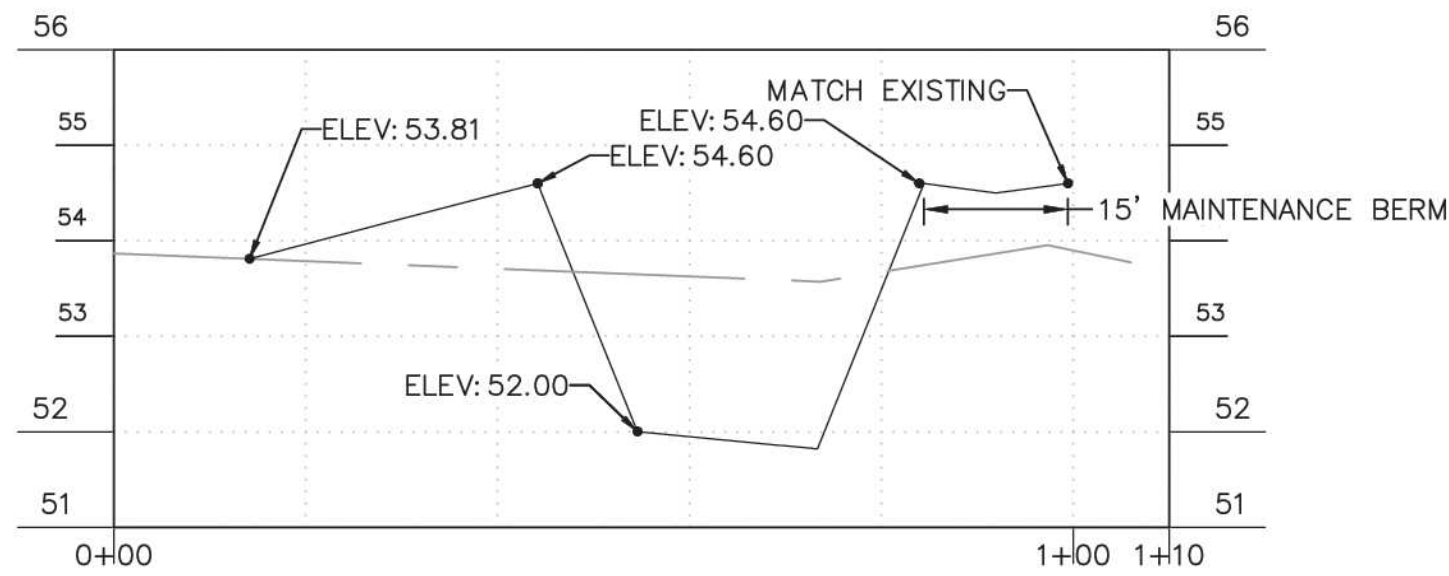
File Name: C5- DRAINAGE PLAN.dwg, Last Plotted: February 21, 2022 2:47 PM



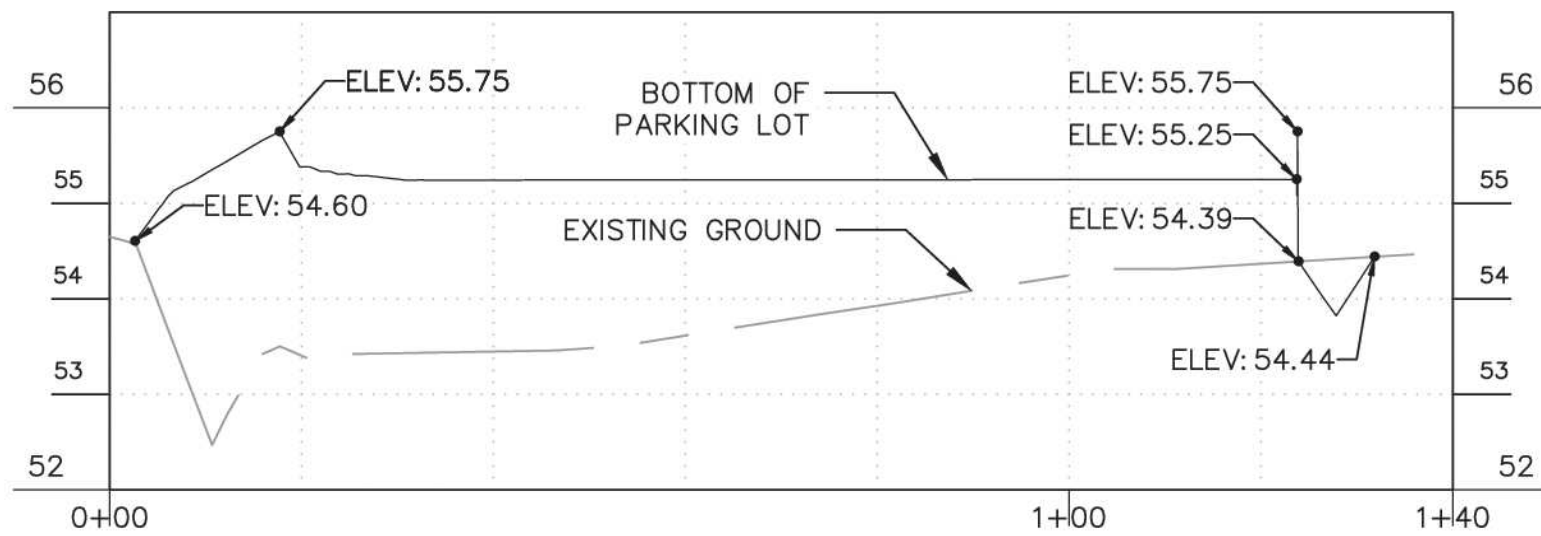
STORM SEWER SYSTEM FLOW DIAGRAM
NOT TO SCALE



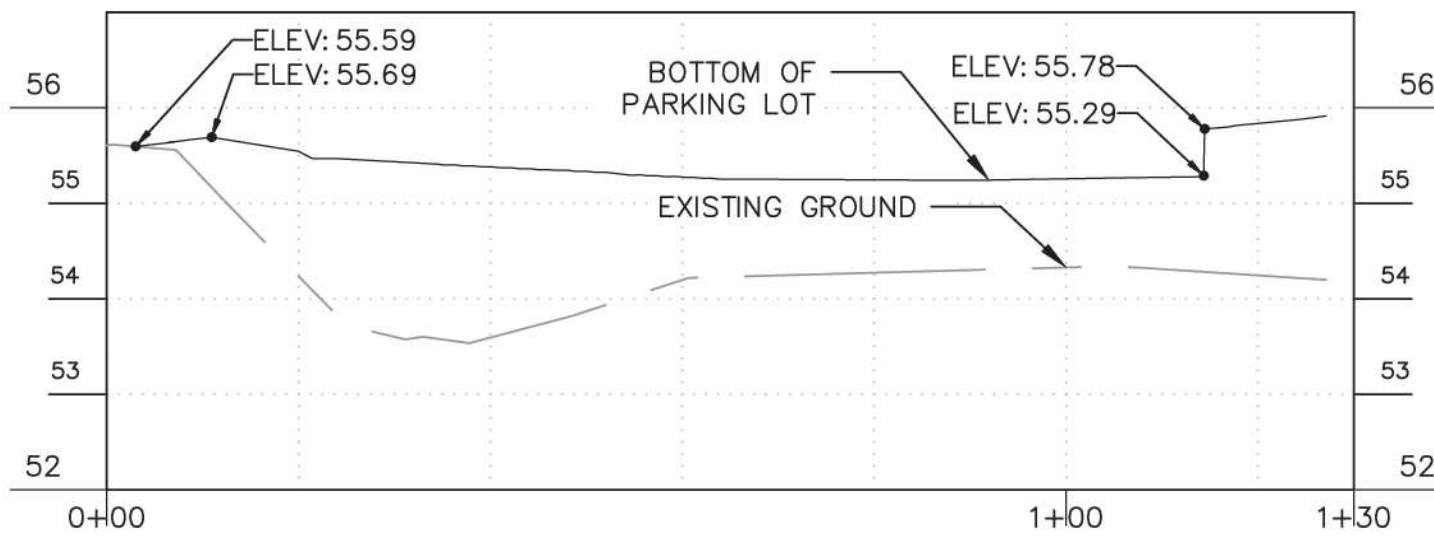
SECTION A-A
V SCALE = 1:20
H SCALE = 1:2



SECTION B-B
V SCALE = 1:20
H SCALE = 1:2



SECTION C-C
V SCALE = 1:20
H SCALE = 1:2



SECTION D-D
V SCALE = 1:20
H SCALE = 1:2

DETENTION VOLUME CAPACITY CALCULATIONS

TOTAL TRACT AREA = 1.4442 ACRES

PER BRAZORIA COUNTY DRAINAGE CRITERIA MANUAL

SECTION 3.7.1

- SMALL PROJECTS ARE TWO (2) ACRES OR SMALLER
- ON-SITE DETENTION WILL BE REQUIRED BASED ON 0.65 AC-FT/AC
- OUTLET SHALL BE SIZED IN ACCORDANCE WITH SECTION 3.7.2
- 10-YR VOLUME = 100 YR VOLUME x 0.57
- 3-YR VOLUME = 100 YR VOLUME x 0.39
- RUNOFF HYDROGRAPH AND ROUTING OF FLOOD FLOWS ARE NOT REQUIRED

1. AREA OF IMPERVIOUS COVER TO BE REMOVED/DEMOLISHED
= 3,208 SF = 0.0851 AC
AREA OF IMPERVIOUS COVER TO BE
ADDED/CONSTRUCTED
20,064 SF = 0.4606 AC
NET AREA OF IMPERVIOUS COVER
= 20,064 SF - 3,208 SF = 16,856 SF = 0.3870 AC

2. VOLUME OF DETENTION CAPACITY REQUIRED BY SECTION 3.7.1
= 0.3870 AC x 0.65 = 0.2515 AC-FT

3. VOLUME OF DETENTION CAPACITY TO BE ADDED/CONSTRUCTED IN POND

- POND TOP OF BANK = 54.60'
- POND MAX WSE = 53.60'
- OUTFALL FL = 51.60'
- CAPACITY VOLUME = 8,343 CU.FT (FROM SOFTWARE)
- = 0.1915 AC-FT
- VOLUME REQUIRED = 0.2515 AC-FT

REMAINING REQUIRED = 0.2515 - 0.1915
= 0.060 AC-FT OR 2,614 AC.FT

4. VOLUME OF DETENTION CAPACITY TO BE CONSTRUCTED/ADDED IN
PARKING LOT

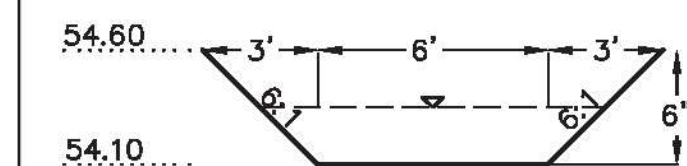
- PARKING AREA = 100' L x 47' W = 4,700 SF
- RECTANGULAR VOLUME = 4,700 SF x 0.5 LF
= 2,350 CU.FT
- TETRAHEDRAL VOLUME => 1/3 (BASE AREA) x (HEIGHT)
AREA OF BASE 11.75 SF
HEIGHT = 100'
=> 1,175/3 = 391.67 CU.FT
TOTAL VOLUME IN PARKING AREA
= 2,350 CU.FT + 391.67 CU.FT = 2,741.67 CU.FT
= 0.0629 AC-FT

5. VOLUME PROVIDED IN RELATION TO VOLUME REQUIRED

- VOLUME REQUIRED = 0.2515 AC-FT
- VOLUME PROVIDED
= 0.1915 AC-FT + 0.0629 AC-FT
= 0.2544 AC-FT
- VOLUME PROVIDED > VOLUME REQUIRED
=> 0.2544 AC-FT > 0.2515 AC-FT

VOLUME PROVIDED IS GREATER THAN VOLUME REQUIRED

OVERFLOW WEIR CAPACITY



Q₁₀₀ = 4.48 CFS

CIPOLLETTI TRAPEZOIDAL WEIR

Q = 3.247 Lh^{3/2}
L = 6.0'
h = 0.50'

=> Q = 3.367x6.0x0.5^{3/2} = 7.14 CFS
Q_{weir} > Q₁₀₀

RESTRICTOR PIPE CALCULATIONS

2.1.3.2

PREDEVELOPMENT TIME OF CONSTRUCTION

TC=D/(60v) + TI
V = 0.35 FT/S (GRASS)
TI = 15 MINUTES (UNDEVELOPED)
D = 100 LF

TC = 100 / (60x0.35) + 15
= 19.8 MINUTES

2.1.3.3

RAINFALL INTENSITY

I = b/(Tc+d)⁴

b₁₀₀ = 90.8
d₁₀₀ = 16.5
e₁₀₀ = 0.685
b₁₀ = 107.9
d₁₀ = 23.6
e₁₀ = 0.781
b₃ = 90.6
d₃ = 19.5
e₃ = 0.803

=> I₁₀₀ = 7.75
I₁₀ = 5.68
I₃ = 4.75

PRE-DEVELOPMENT PEAK RUNOFF
CALCULATIONS

Q = CIA
C = 0.40
A = 1.444 AC
I₁₀₀ = 7.75
I₁₀ = 5.68
I₃ = 4.75

Q₁₀₀ = 4.48 CFS
Q₁₀ = 3.28 CFS
Q₃ = 2.74 CFS

RESTRICTOR PIPE CALCULATIONS

1. 100 YR WSE IN BASIN = 53.60'
10 YR WSE IN BASIN = 52.85'
3 YR WSE IN BASIN = 52.50'
RECEIVING CHANNEL FL = 51.40'

2. Q = CA^{1/2}gH
H₁₀₀ = 53.60' - 51.40' = 2.20'
H₁₀ = 52.85' - 51.40' = 1.45'
H₃ = 52.50' - 51.40' = 1.10'
g = 32.2 FT/S²
C = 0.80
Q₁₀₀ = 4.48 CFS
Q₁₀ = 3.28 CFS
Q₃ = 2.74 CFS
A₁₀₀ = 0.470 SF
A₁₀ = 0.424 SF
A₃ = 0.407 SF

USE 8" Ø RESTRICTOR PIPE

=> AREA OF 8" Ø PIPE = 0.349 SF
RESTRICTED Q₁₀₀ = 3.32 CFS
RESTRICTED Q₁₀ = 2.70 CFS
RESTRICTED Q₃ = 2.35 CFS

FIF ENGINEERING
1526 KATY GAP RD. SUITE #804 KATY, TX 77494
PHONE: 346-800-4343
WWW.FIFENGINEERING.COM

FIRM #
F-17870

PROJECT ADDRESS:

7933 CR 48
IOWA COLONY, TX 77583

DRAWING TITLE:

DRAINAGE CALCULATIONS

DRAWN BY:

RA

SCALE:

CHKD. BY:

NH

DATE:

11-12-2021

REV#

DATE:

NOTE:

Plan/Plan approvals expire after 365 days



C5.1

Fif Name: C5- DRAINAGE PLANNING, Last Printed: February 21, 2022 2:48 PM

FIF ENGINEERING
1526 KATY GAP RD. SUITE #804 KATY, TX 77494
PHONE: 346-800-4343
WWW.FIFENGINEERING.COM

FIRM #
F-17870

PROJECT ADDRESS:

7933 CR 48
IOWA COLONY, TX 77583

DRAWING TITLE:

DRAINAGE DETAILS

DRAWN BY:

RA

SCALE:

CHKD. BY:

NH

DATE:

11-12-2021

REV#

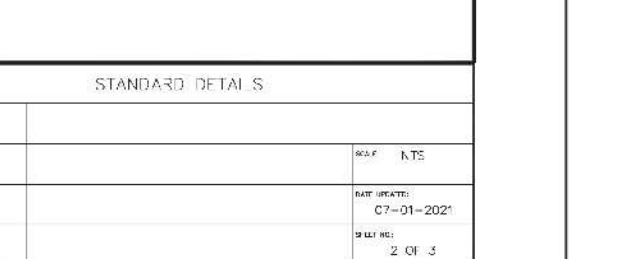
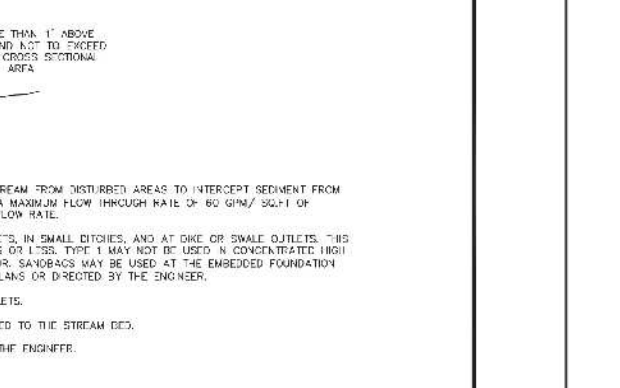
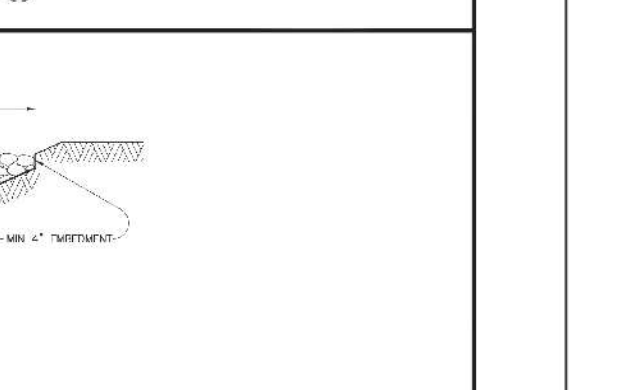
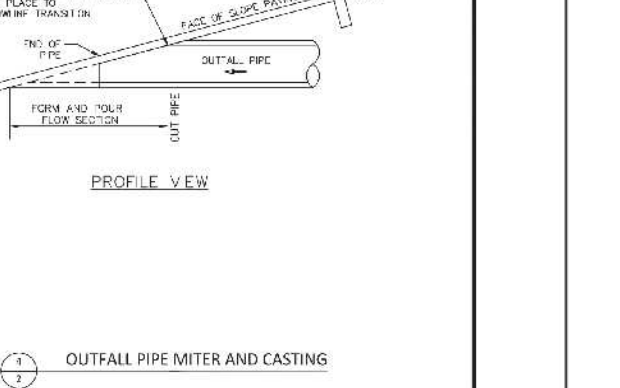
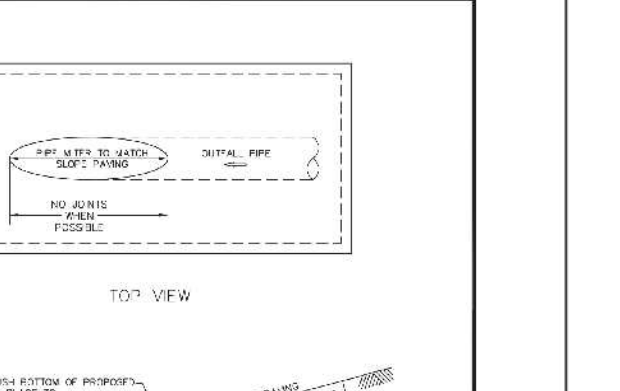
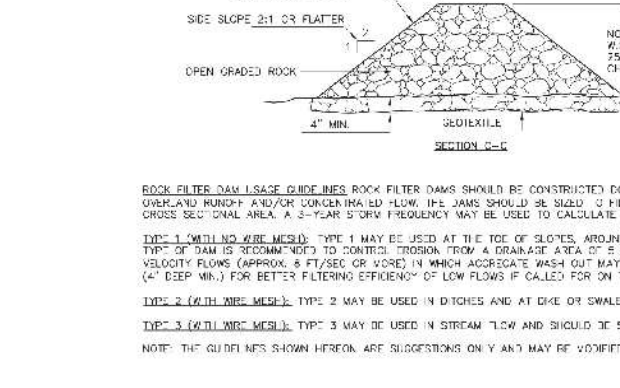
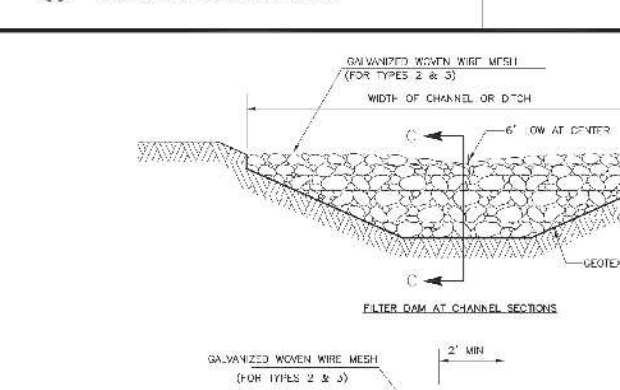
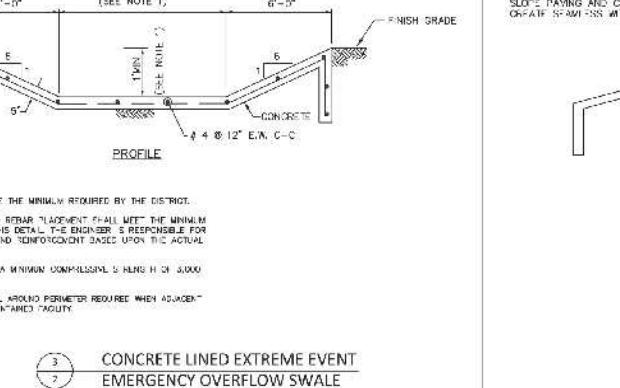
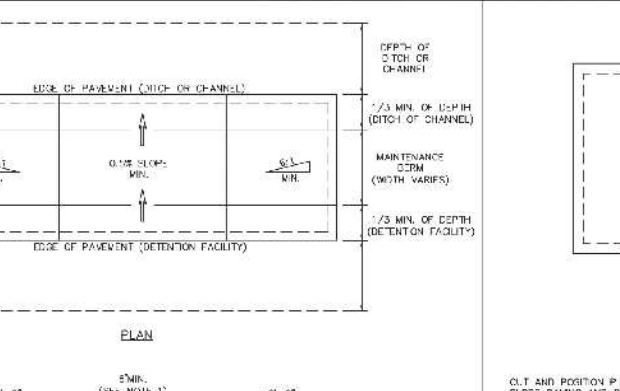
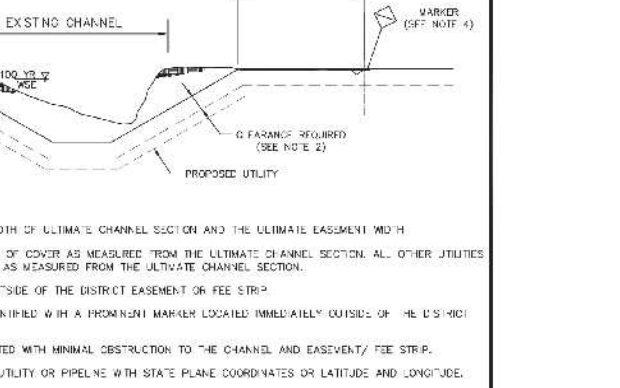
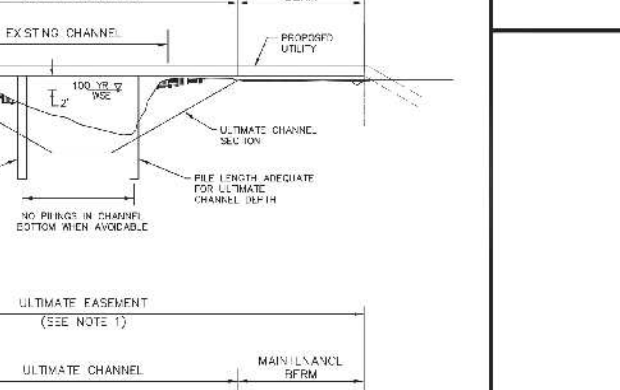
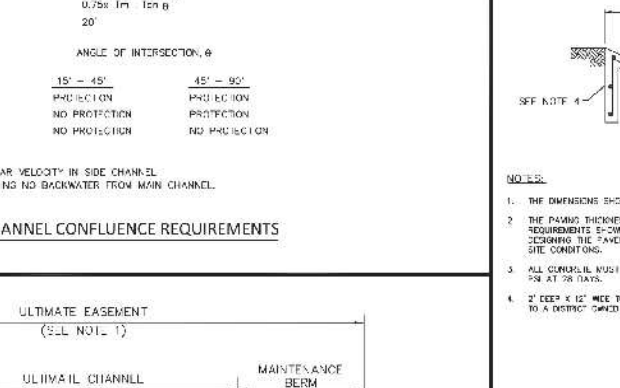
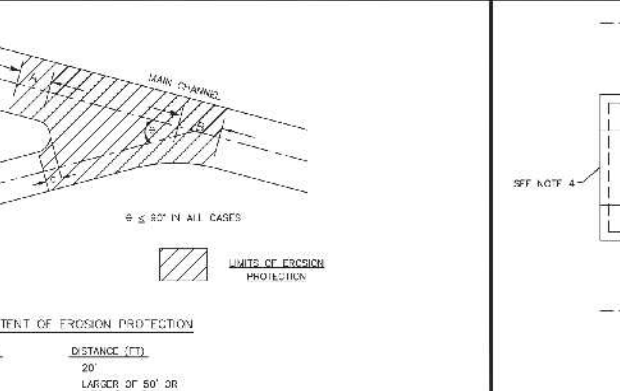
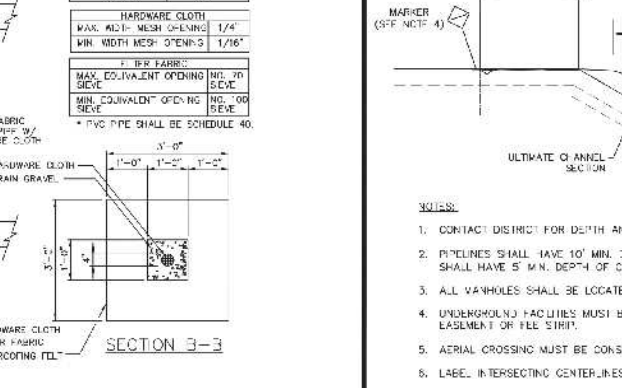
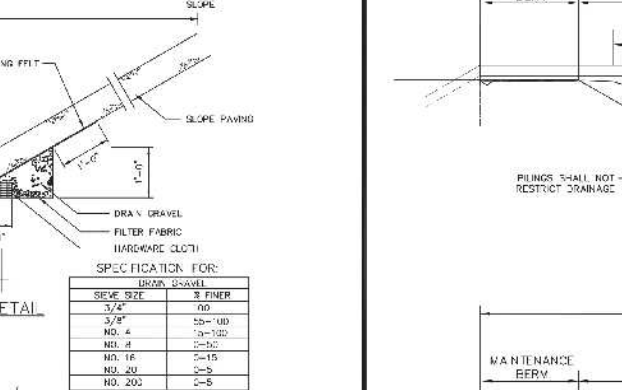
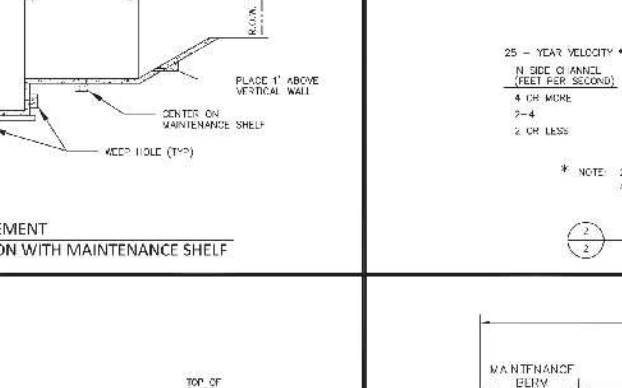
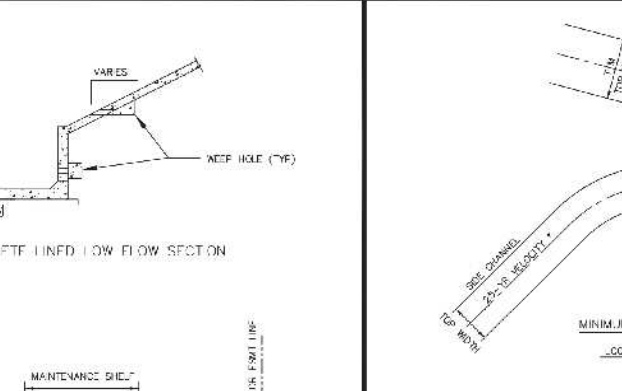
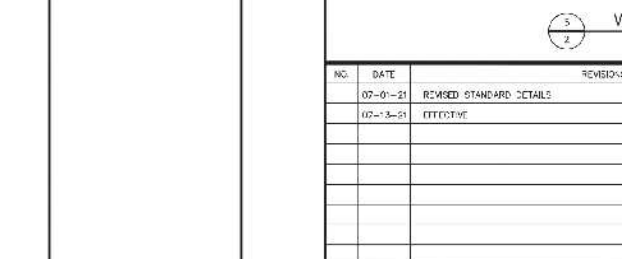
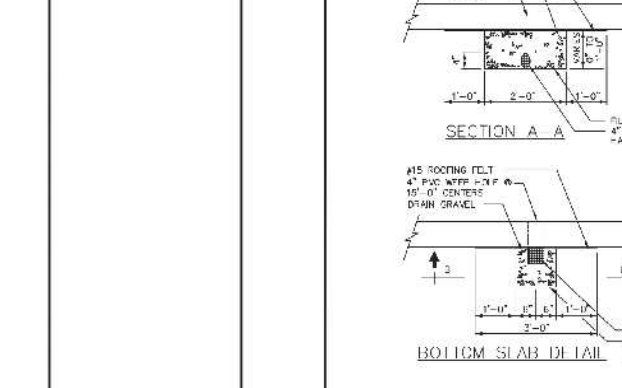
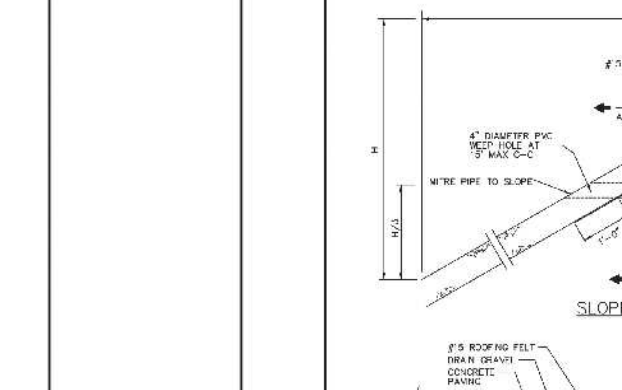
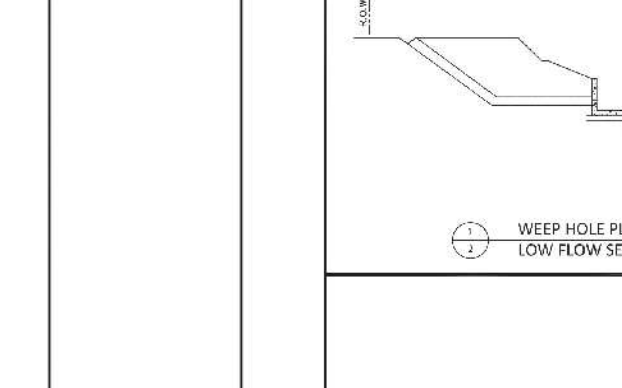
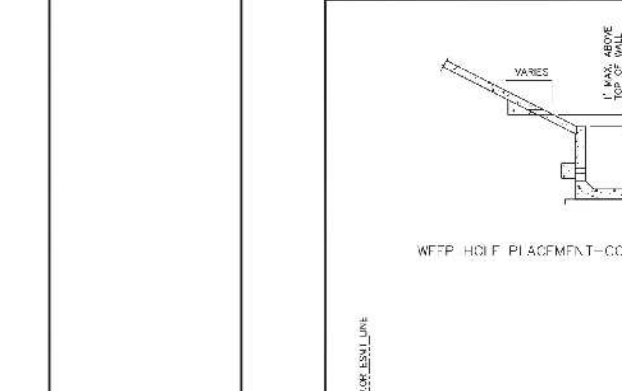
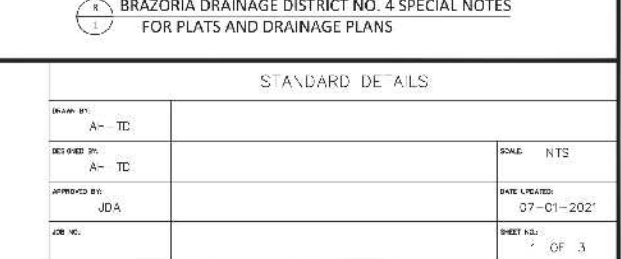
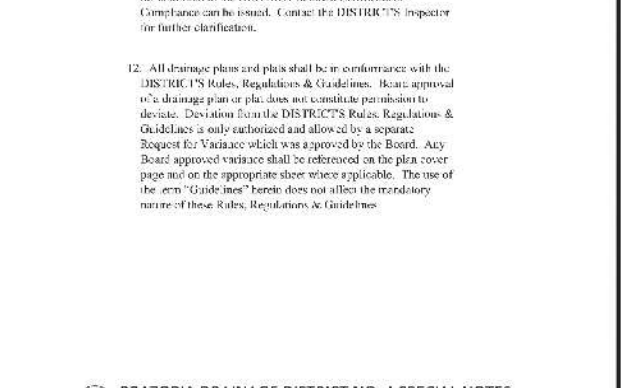
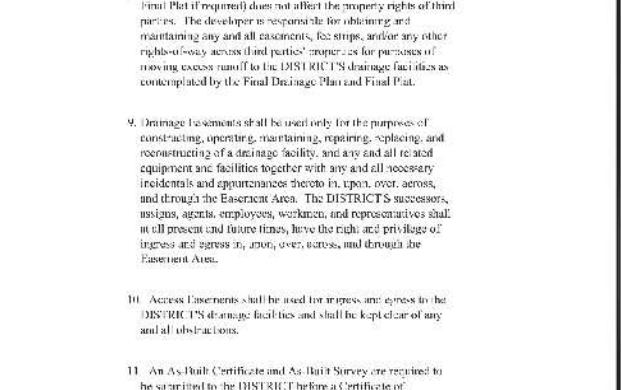
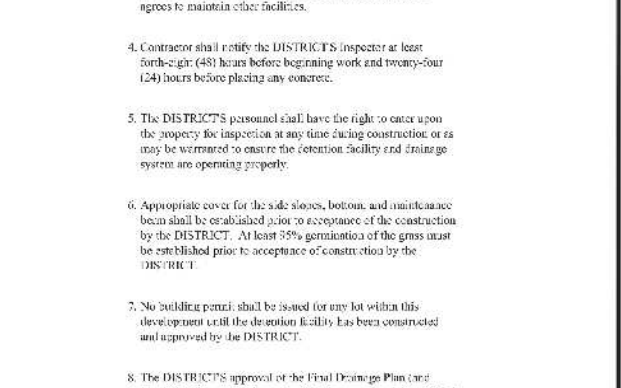
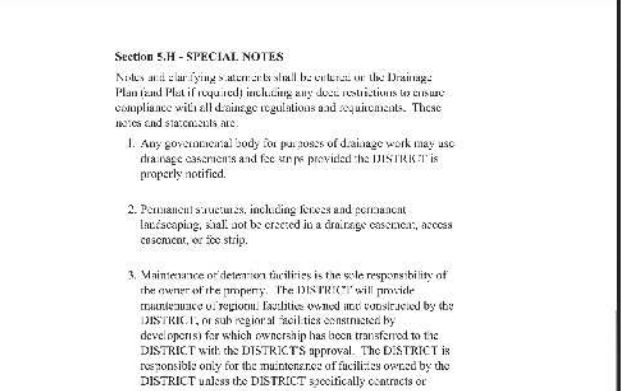
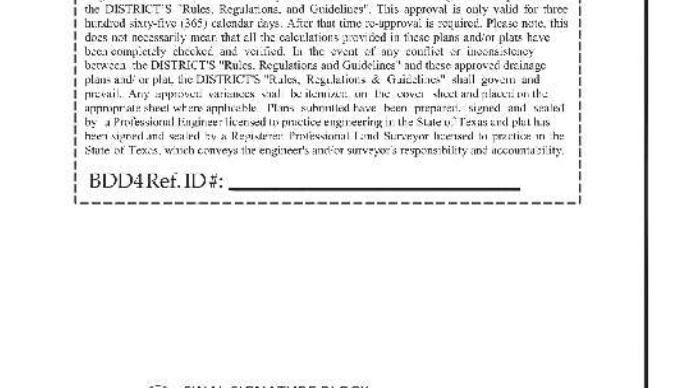
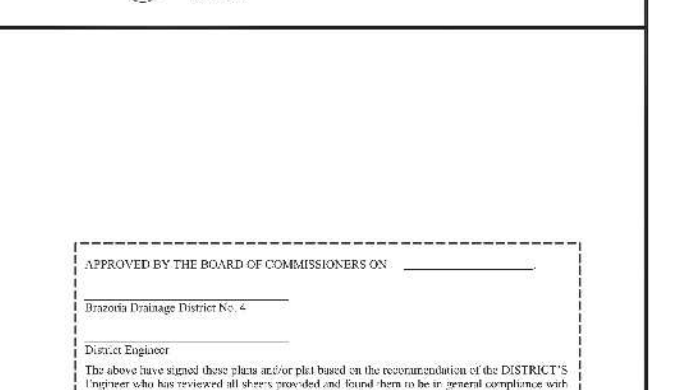
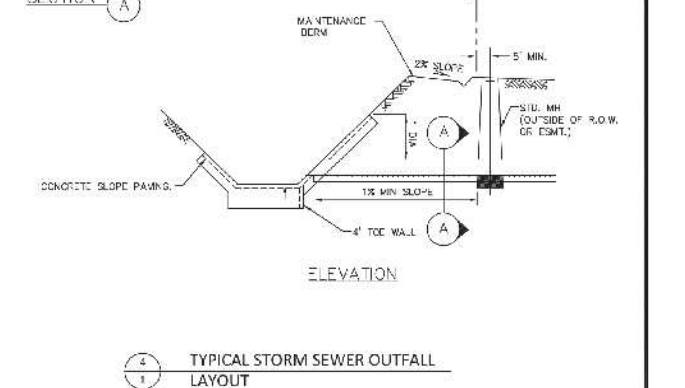
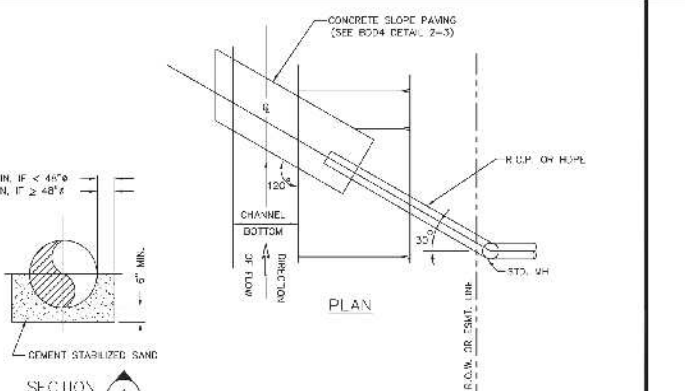
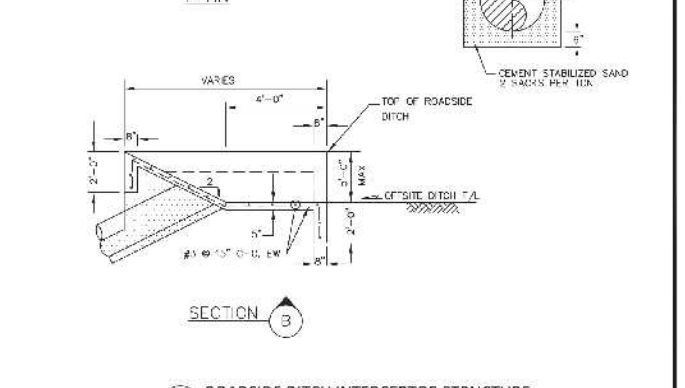
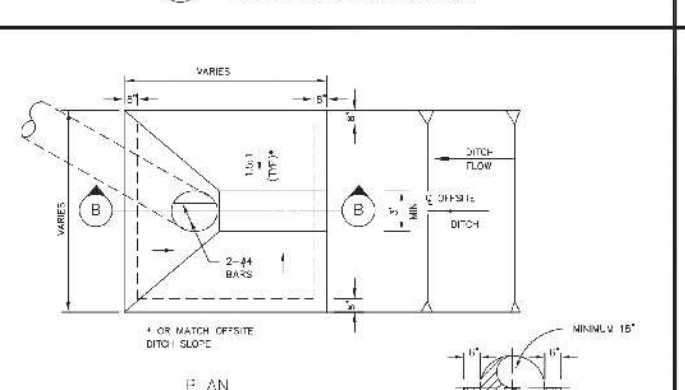
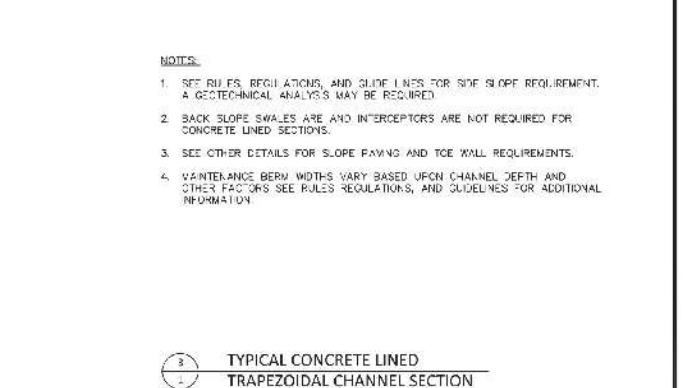
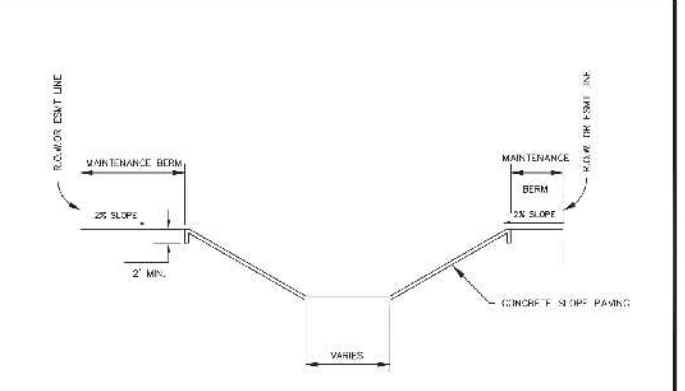
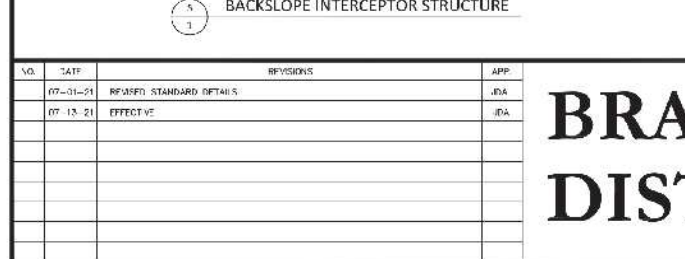
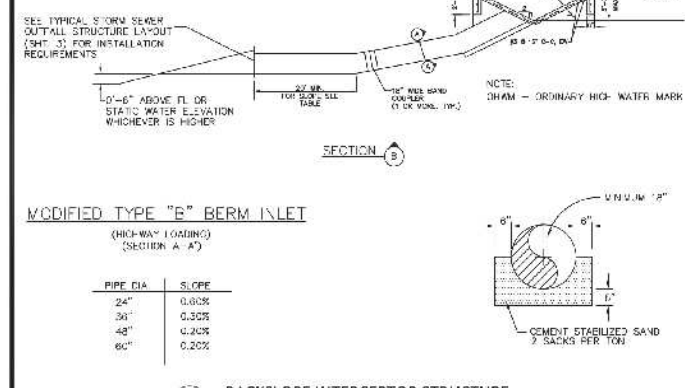
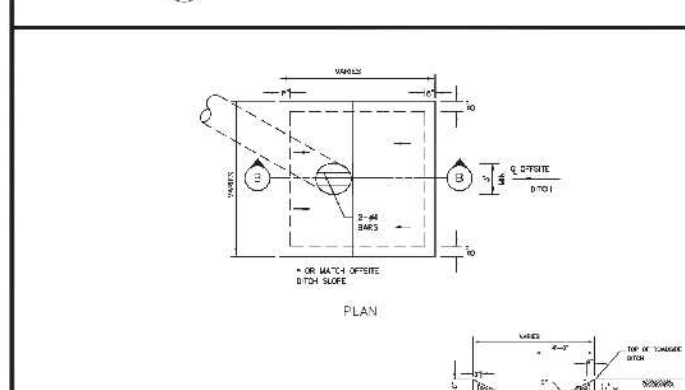
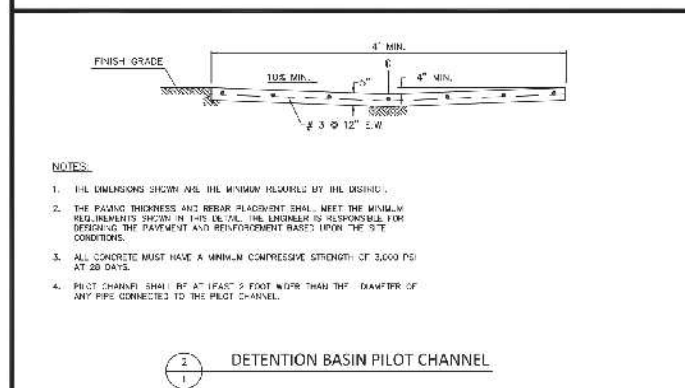
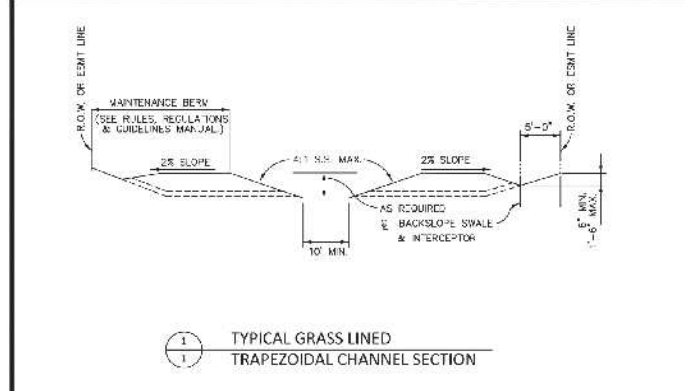
DATE:

NOTE:

02/23/2022

Plan/Plan approvals expire after 365 days

C5.2



BRAZORIA DRAINAGE DISTRICT NO. 4



BRAZORIA DRAINAGE DISTRICT NO. 4
4813 W. BROADWAY
PEARLAND, TX 77581
OFFICE 281-485-1434
FAX 281-485-1405
WWW.BDD4.ORG
INFO@BDD4.ORG

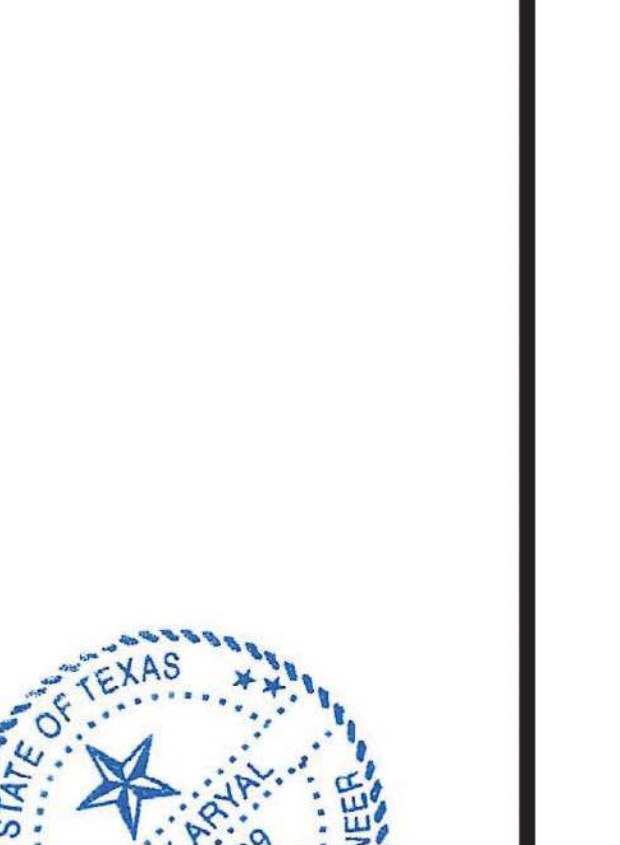
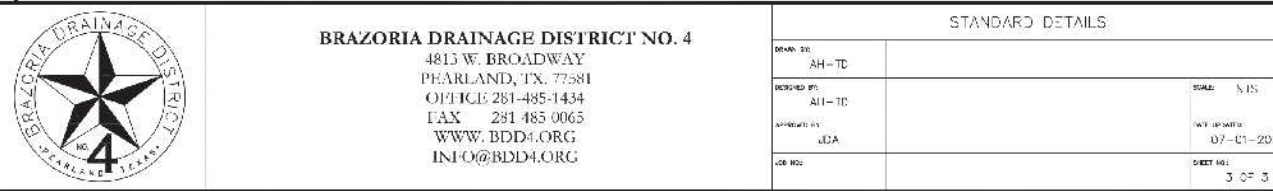
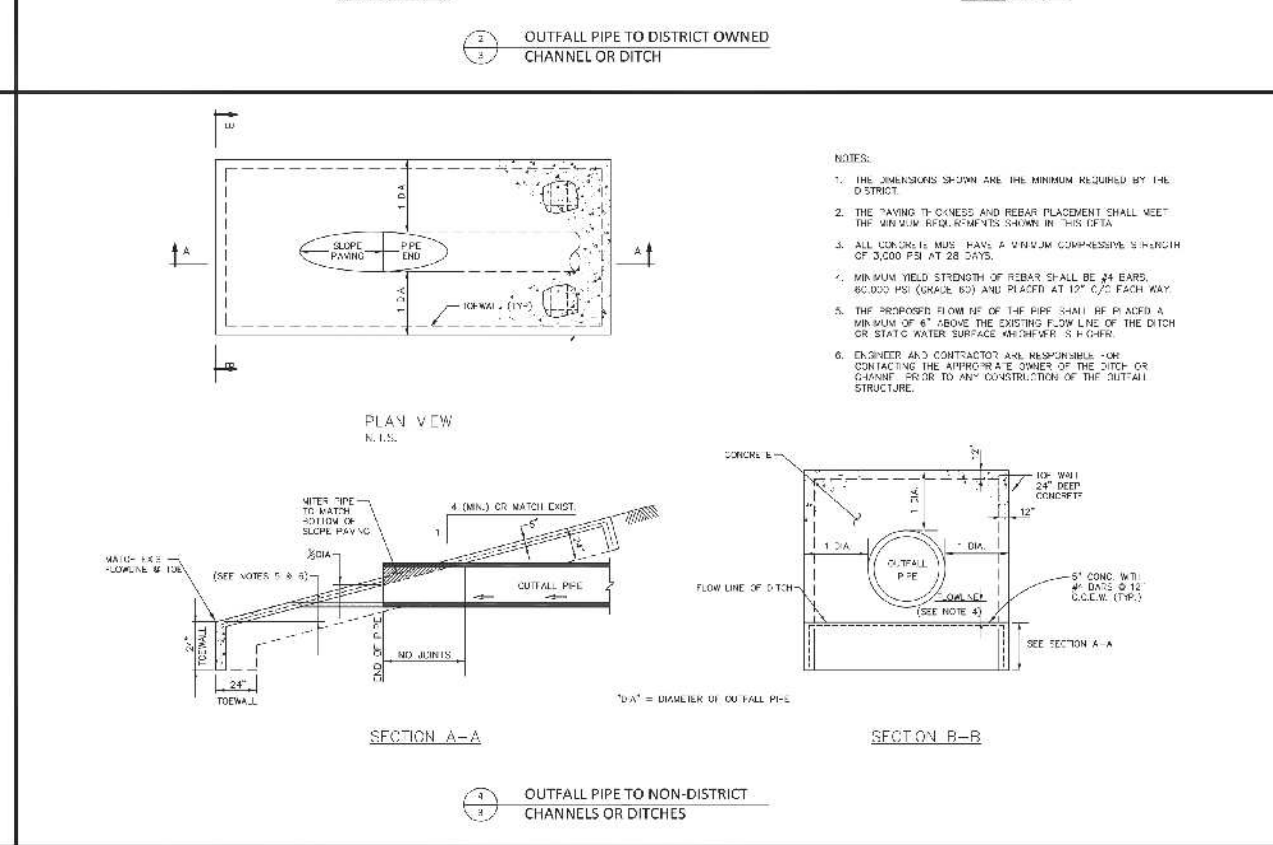
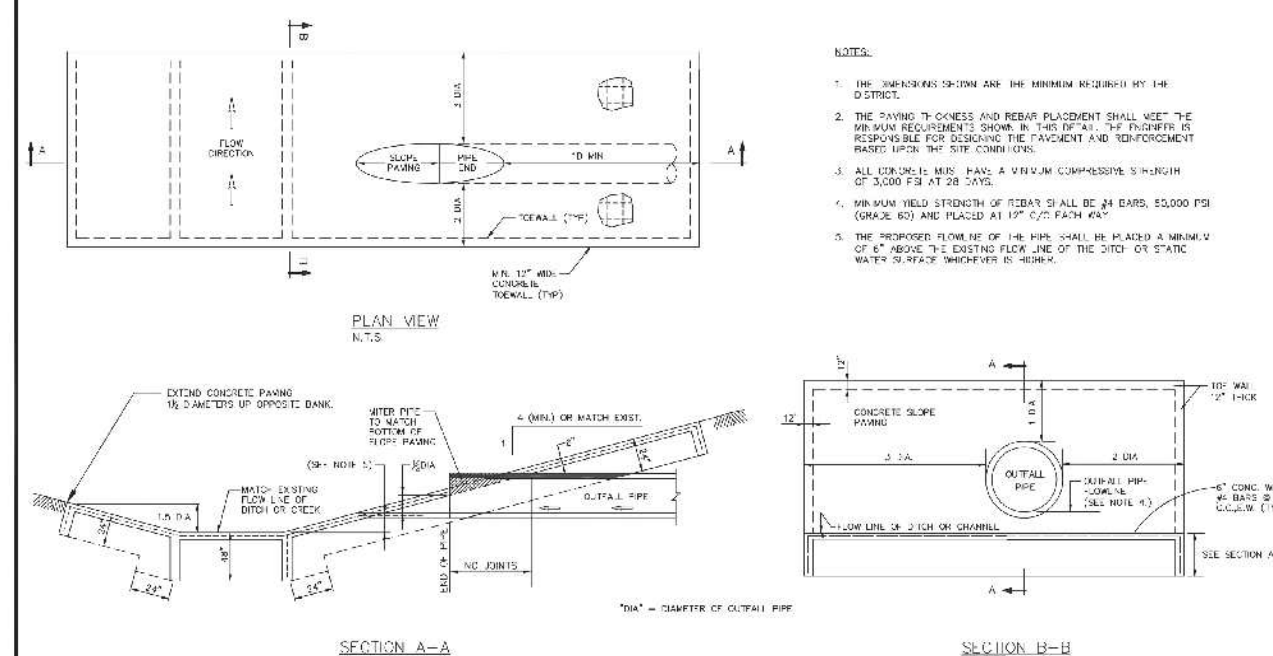
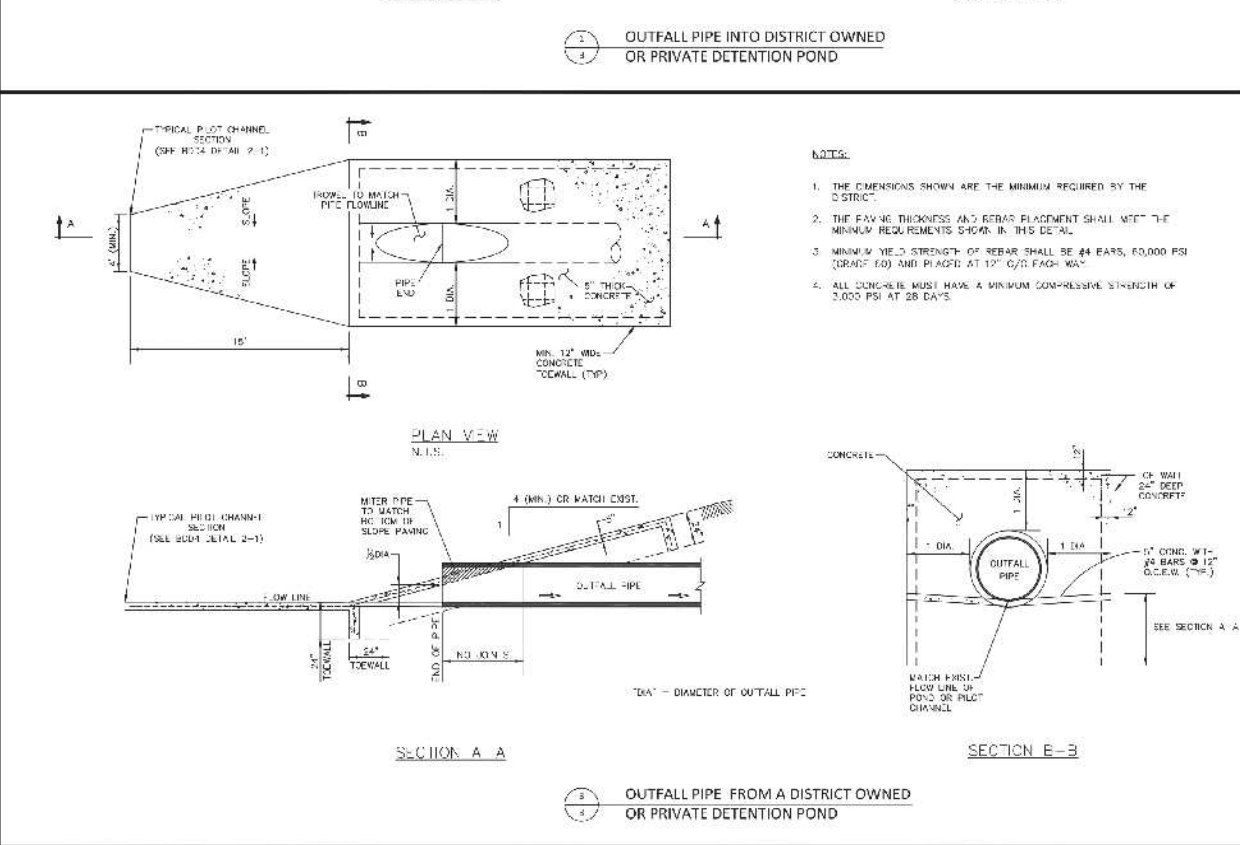
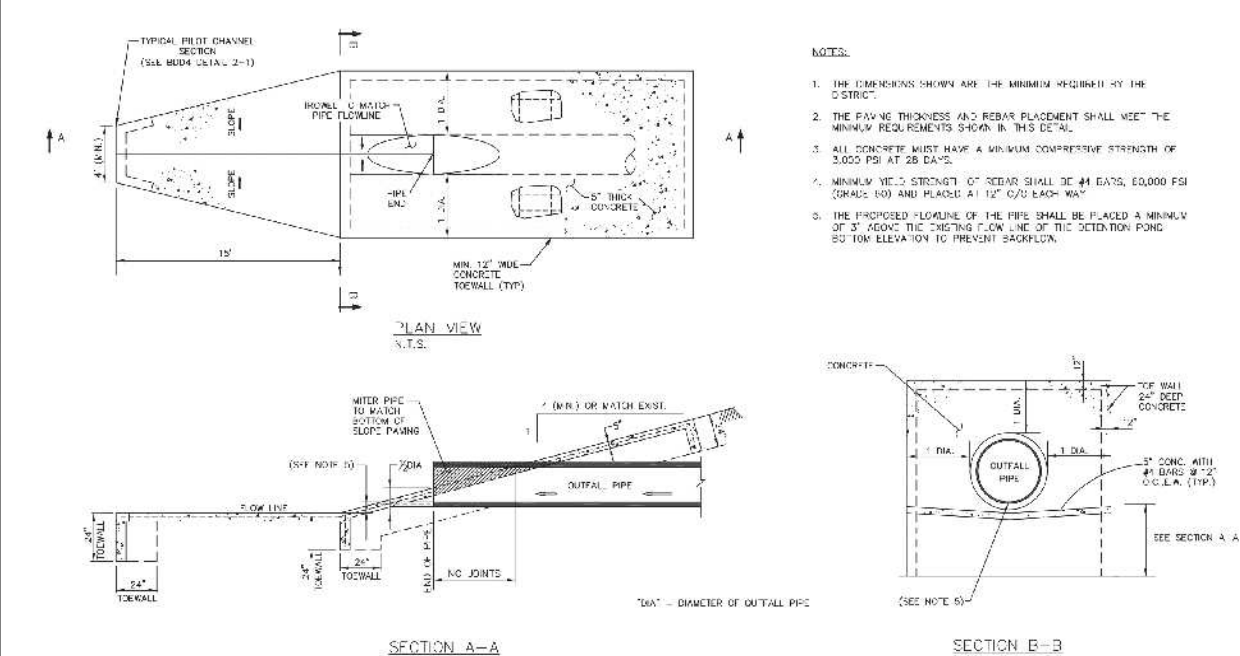
STANDARD DETAILS
Brazoria Drainage District No. 4
4813 W. BROADWAY
PEARLAND, TX 77581
OFFICE 281-485-1434
FAX 281-485-1405
WWW.BDD4.ORG
INFO@BDD4.ORG

BRAZORIA DRAINAGE DISTRICT NO. 4



BRAZORIA DRAINAGE DISTRICT NO. 4
4813 W. BROADWAY
PEARLAND, TX 77581
OFFICE 281-485-1434
FAX 281-485-1405
WWW.BDD4.ORG
INFO@BDD4.ORG

STANDARD DETAILS
Brazoria Drainage District No. 4
4813 W. BROADWAY
PEARLAND, TX 77581
OFFICE 281-485-1434
FAX 281-485-1405
WWW.BDD4.ORG
INFO@BDD4.ORG



BRAZORIA DRAINAGE DISTRICT NO. 4



BRAZORIA DRAINAGE DISTRICT NO. 4
4813 W. BROADWAY
PEARLAND, TX 77581
OFFICE 281-485-1434
FAX 281-485-1405
WWW.BDD4.ORG
INFO@BDD4.ORG

STANDARD DETAILS
Brazoria Drainage District No. 4
4813 W. BROADWAY
PEARLAND, TX 77581
OFFICE 281-485-1434
FAX 281-485-1405
WWW.BDD4.ORG
INFO@BDD4.ORG



File Name: C6 - UTILITY PLAN.dwg, Last Plotted: February 21, 2022 2:48 PM

FIF ENGINEERING
1526 KATY GAP RD. SUITE #804 KATY, TX 77494
PHONE: 346-800-4343
WWW.FIFENGINEERING.COM

FIRM #
F-17870

PROJECT ADDRESS:

7933 CR 48
IOWA COLONY, TX 77583

DRAWING TITLE:

UTILITY PLAN

DRAWN BY:

RA

SCALE:

1" = 20'

CHKD. BY:

NH

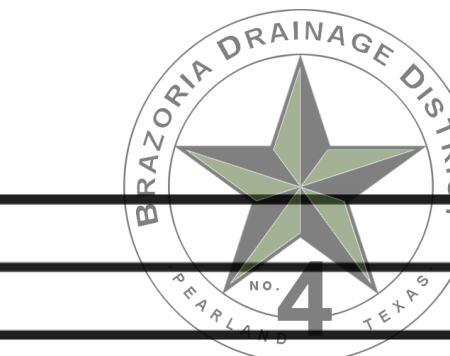
DATE:

11-12-2021

REV#

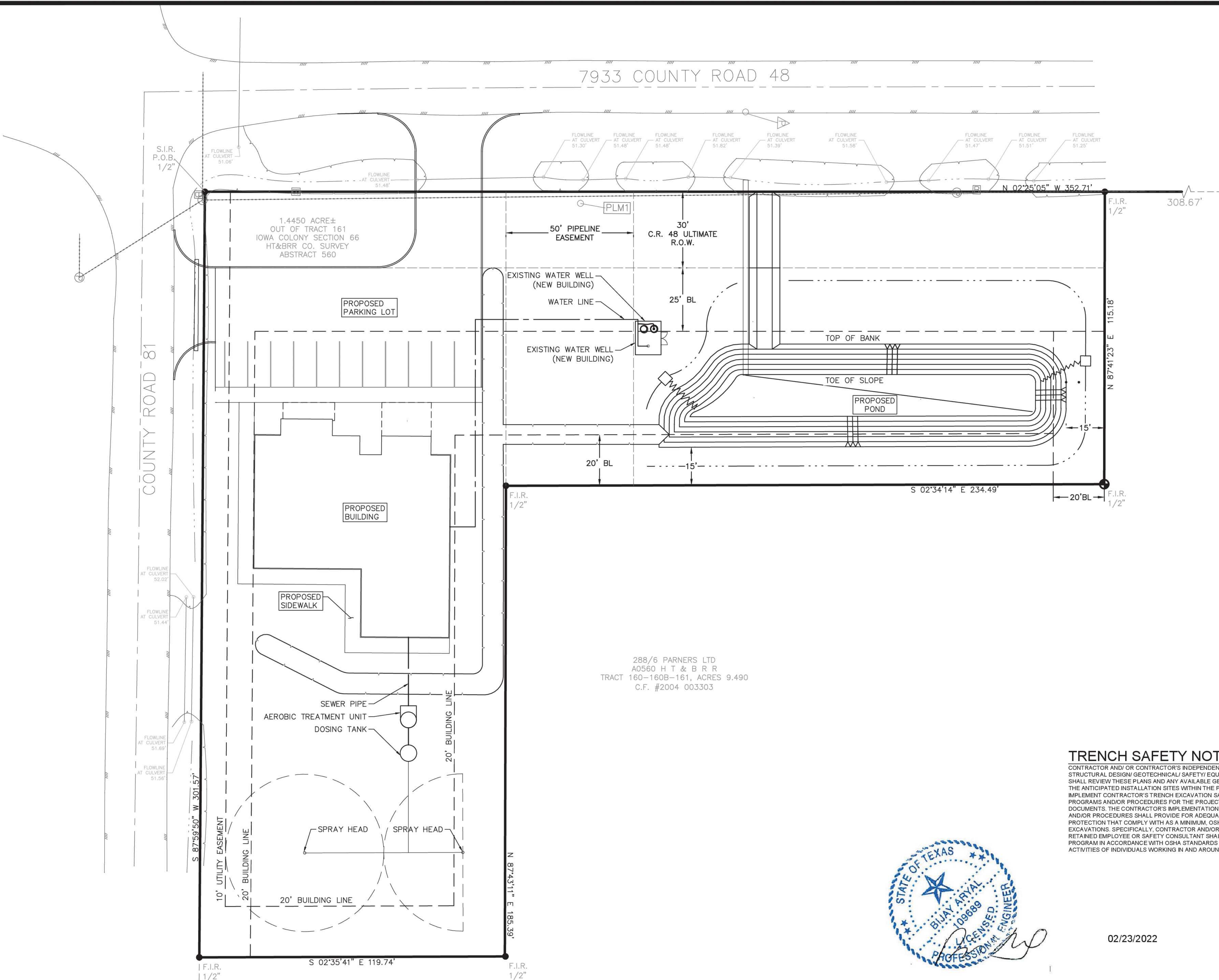
DATE:

NOTE:



Plan/Plan approvals expire after 365 days

C6



LEGEND

	PROPERTY LINE
	ADJACENT PROPERTY LINE
	EXISTING CURB
	EXISTING EASEMENT LINE
	EXISTING OVERHEAD ELECTRIC
	PROPOSED BUILDING OVERHANG
	PROPOSED FENCE LINE
	PROPOSED 6-INCH CURB
	PROPOSED CONCRETE SIDEWALK
	PROPOSED SITE LANDSCAPING
	PROPOSED STORM SEWER CATCH BASIN
	PROPOSED CONCRETE WHEELSTOP
	PROPOSED WATER METER AND BACKFLOW DEVICE
	EXISTING SANITARY SEWER MANHOLE
	EXISTING STORM SEWER MANHOLE
	EXISTING TELECOM STRUCTURE
	EXISTING WATER VALVE
	EXISTING UTILITY POLE
	NUMBER OF PARKING SPACES

GENERAL SITE NOTES

- CONTRACTOR SHALL BE RESPONSIBLE FOR ACQUIRING ALL NECESSARY PERMITS BEFORE BEGINNING CONSTRUCTION.
- ALL DIMENSIONS ARE TO FACE OF CURB, TO CENTER OF PAINT STRIPING, OR PERPENDICULAR TO THE PROPERTY LINE. ALL RADII AND OTHER DIMENSIONS ARE TO BACK OF CURB.
- COORDINATE CONTROL IS AS SHOWN. NO OFFSETS FROM FACE OF CURB OR BUILDINGS ARE GIVEN.
- CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER OF ANY QUESTIONS THAT MAY ARISE CONCERNING THE INTENT, PLACEMENT, OR LIMITS OF DIMENSIONS NECESSARY FOR CONSTRUCTION OF THE PROJECT.
- CONTRACTOR SHALL BE RESPONSIBLE FOR RESTORING TO ITS ORIGINAL OR BETTER CONDITION ANY DAMAGE DONE TO EXISTING UTILITIES, FENCES, PAVEMENT, CURBS, DRIVEWAYS, SIDEWALKS, OR SIGNS.
- CONTRACTOR SHALL PRESERVE ALL PROPERTY CORNER PINS/RODS, CONTROL POINTS, AND BENCHMARKS. IF ANY ARE DESTROYED OR REMOVED BY THE CONTRACTOR OR HIS EMPLOYEES, THEY SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
- FIELD SURVEY COMPLETED BY GRULLER SURVEYING, LLC ON APRIL 5, 2011.
- THE BOUNDARY/TOPO SURVEY SHALL BE CONSIDERED A PART OF THE CONTRACT DOCUMENTS.
- ALL CURBS ARE 6" HIGH, UNLESS OTHERWISE NOTED.
- ALL MATERIALS AND CONSTRUCTION PROCEDURES WITHIN THE SCOPE OF THIS CONTRACT SHALL CONFORM TO ALL APPLICABLE CITY OF HOUSTON SPECIFICATIONS.
- THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF EXISTING UTILITIES PRIOR TO CONSTRUCTION. ANY UTILITIES, WHETHER SHOWN ON THE PLANS OR NOT, DAMAGED BY THE CONTRACTOR SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CONSTRUCTION STAKING.
- DIMENSIONAL CONTROL POINTS ARE PROVIDED AS NEEDED. ADDITIONAL POINTS MAY BE AVAILABLE UPON REQUEST.
- ALL PAVEMENT MARKINGS AND SIGNAGE OF ACCESSIBLE PARKING AREAS SHALL BE IN ACCORDANCE WITH THE MOST CURRENT TAS AND ADA STANDARDS.
- ALL GROUND-MOUNTED OR BUILDING-MOUNTED EQUIPMENT TO SERVE A BUILDING, INCLUDING MECHANICAL, UTILITY METERTANKS, AND HEATING OR COOLING EQUIPMENT MUST BE SCREENED FROM PUBLIC VIEW WITH LANDSCAPING OR ARCHITECTURAL TREATMENT. REFER TO ARCHITECT AND LANDSCAPE PLANS FOR DETAILS.
- NOT FIELD VERIFIED IS DENOTED N.F.V. IN PLAN.

TRENCH SAFETY NOTE

CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR STRUCTURAL DESIGN/ GEOTECHNICAL/ SAFETY/ EQUIPMENT CONSULTANT, IF ANY, SHALL REVIEW THESE PLANS AND ANY AVAILABLE GEOTECHNICAL INFORMATION AND THE ANTICIPATED INSTALLATION SITES WITHIN THE PROJECT WORK AREA IN ORDER TO IMPLEMENT CONTRACTOR'S TRENCH EXCAVATION SAFETY PROTECTION SYSTEMS, PROGRAMS AND/OR PROCEDURES FOR THE PROJECT DESCRIBED IN THE CONTRACT DOCUMENTS. THE CONTRACTOR'S IMPLEMENTATION OF THESE SYSTEMS, PROGRAMS AND/OR PROCEDURES SHALL PROVIDE FOR ADEQUATE TRENCH EXCAVATION SAFETY PROTECTION THAT COMPLY WITH AS A MINIMUM, OSHA STANDARDS FOR TRENCH EXCAVATIONS. SPECIFICALLY, CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR SAFETY CONSULTANT SHALL IMPLEMENT A TRENCH SAFETY PROGRAM IN ACCORDANCE WITH OSHA STANDARDS GOVERNING THE PRESENCE AND ACTIVITIES OF INDIVIDUALS WORKING IN AND AROUND TRENCH EXCAVATION.



02/23/2022

File Name: C7-SWPPP.dwg, Last Plotted: February 21, 2022 2:49 PM

FIF ENGINEERING
1526 KATY GAP RD. SUITE #804 KATY, TX 77494
PHONE: 346-800-4343
WWW.FIFENGINEERING.COM

FIRM #
F-17870

PROJECT ADDRESS:

7933 CR 48
IOWA COLONY, TX 77583

DRAWING TITLE:

STORMWATER POLLUTION PREVENTION PLAN

DRAWN BY:

RA

SCALE:

1" = 20'

CHKD. BY:

NH

DATE:

11-12-2021

REV#

DATE:

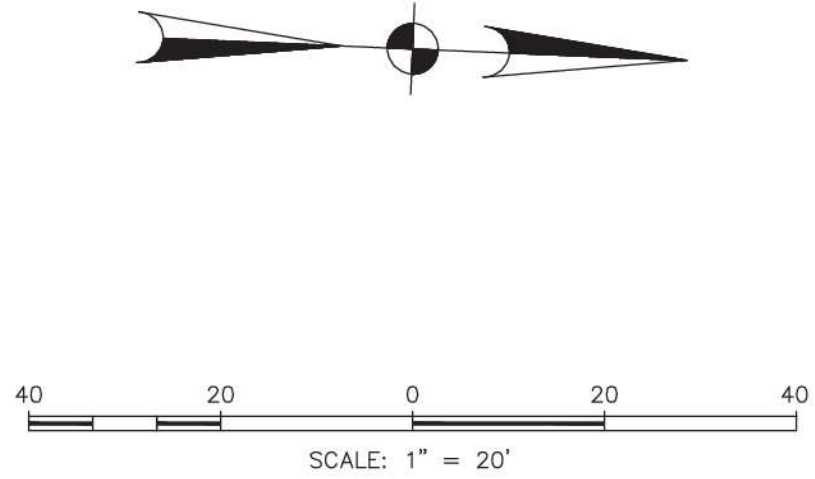
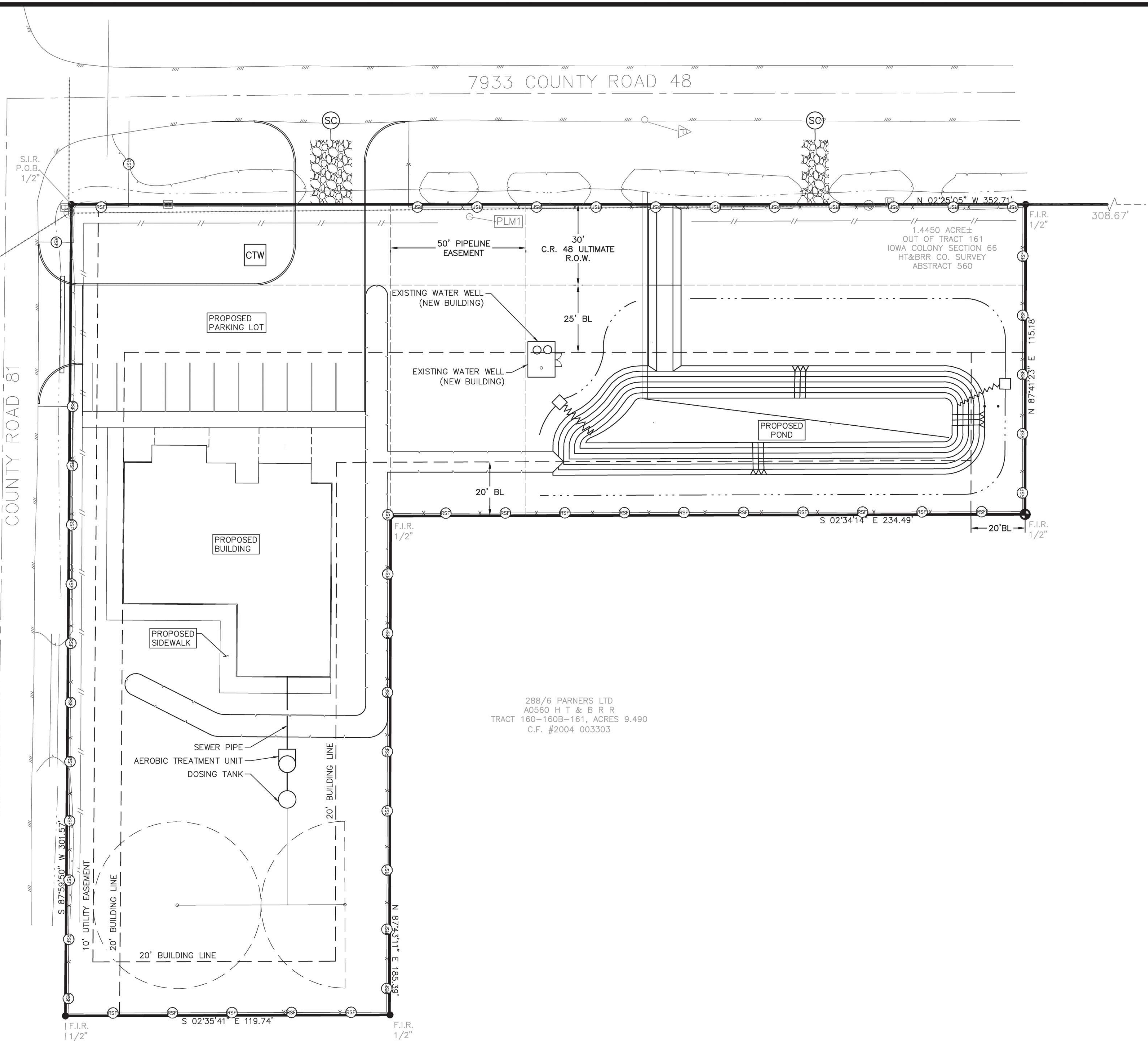
NOTE:

Plan/Plan approvals expire after 365 days

SWPPP NOTES

- PRIOR TO START OF CONSTRUCTION CONTRACTOR SHALL INSTALL POLLUTION PREVENTION SYSTEMS AT LOCATION SHOWN ON PLANS.
- IF POLLUTION PREVENTION SYSTEMS ARE EXISTING FROM PRIOR CONTRACTS, OWNER AND/OR OWNER'S REPRESENTATIVE WITH THE CONTRACTOR SHALL EXAMINE THE EXISTING POLLUTION PREVENTION SYSTEMS FOR DAMAGE PRIOR TO CONTRACTOR STARTING CONSTRUCTION OF THE CONTRACT. ANY DAMAGE NOTED AT THIS TIME SHALL BE REPAIRED AT OWNER'S EXPENSE.
- CONTRACTOR SHALL INSPECT ALL POLLUTION PREVENTION SYSTEMS SPECIFIED HEREIN, AS REQUIRED IN THE PERMIT.
- CONTRACTOR SHALL MAINTAIN, REPAIR AND/OR REPLACE DAMAGED EROSION AND SEDIMENTATION CONTROL SYSTEMS THROUGHOUT THE DURATION OF THE CONTRACT.
- CONTRACTOR SHALL PROVIDE PROTECTED STORAGE AREAS FOR CHEMICALS, PAINTS, SOLVENTS, FERTILIZERS AND OTHER POTENTIALLY TOXIC MATERIALS.
- CONTRACTOR SHALL LOCATE FUEL/MATERIAL STORAGE AREAS AWAY FROM STORM WATER CONVEYANCE SYSTEMS. CONTRACTOR SHALL USE A LINER UNDER ABOVE GROUND STORAGE TANKS. CONTRACTOR SHALL USE FILTER FABRIC FENCING, HAY BALES, OR BERMS AROUND FUEL STORAGE AREAS.
- CONTRACTOR SHALL ADVISE OWNER IMMEDIATELY, VERBALLY, AND IN WRITING, OF ANY FUEL OR TOXIC MATERIAL SPILLS ONTO THE PROJECT/CONSTRUCTION AREA AND THE ACTIONS TAKEN TO REMEDY THE PROBLEM.
- CONTRACTOR IS RESPONSIBLE FOR DISPOSING OF HIS FUELS, MATERIALS, AND CONTAMINATED EXCAVATIONS IN A LEGALLY APPROVED MANNER.
- CONTRACTOR IS RESPONSIBLE FOR COMPLYING WITH ALL APPLICABLE ENVIRONMENTAL LAWS.
- CONTRACTOR IS RESPONSIBLE FOR PROVIDING ADEQUATELY MAINTAINED SANITARY FACILITIES.
- CONTRACTOR SHALL BE RESPONSIBLE FOR STREET CLEANING, ON A DAILY BASIS, ALL MUD AND DIRT DEPOSITED ON THE EXISTING PAVEMENT DUE TO HIS CONSTRUCTION ACTIVITY.
- CONTRACTOR SHALL PROVIDE A STABILIZED CONSTRUCTION EXIT.
- SEDIMENT WILL BE REMOVED FROM BEHIND THE FILTER FABRIC FENCE WHEN IT BECOMES ABOUT ONE-THIRD OF THE HEIGHT OF THE FENCE.
- WHEN ALL CONSTRUCTION ACTIVITY IS COMPLETE AND THE SITE HAS BEEN ESTABLISHED, STRUCTURAL CONTROLS WILL BE REMOVED AND DISTURBED AREAS WILL BE RESTABILIZED.
- AT COMPLETION OF THE CONTRACT, OWNER AND/OR OWNER'S REPRESENTATIVE AND THE CONTRACTOR SHALL EXAMINE THE POLLUTION PREVENTION SYSTEM BEFORE RELIEVING CONTRACTOR OF HIS MAINTENANCE RESPONSIBILITIES.
- CONTRACTOR TO BE RESPONSIBLE FOR THE SUBMISSION OF HIS STORM WATER POLLUTION PREVENTION PLAN ITEMS INSPECTION REPORT WITH HIS PAYMENT REQUEST. FAILURE TO COMPLY MAY RESULT IN A DELAY IN PAYMENT.
- TEXAS WATER CODE § 11.086 NO PERSON MAY DIVERT OR IMPOUND THE NATURAL FLOW OF SURFACE WATERS IN THIS STATE, OR PERMIT A DIVERSION OR IMPOUNDING BY HIM TO CONTINUE, IN A MANNER THAT DAMAGES THE PROPERTY OF ANOTHER BY THE OVERFLOW OF THE WATER DIVERTED OR IMPOUNDED.
- ALL SUBCONTRACTORS WILL BE EDUCATED TO FOLLOW STORM WATER POLLUTION PREVENTION REQUIREMENTS.
- ANY LAND CLEARING, CONSTRUCTION, DEVELOPMENT, OR OTHER ACTIVITIES INVOLVING THE MOVEMENT OF EARTH SHALL BE IN ACCORDANCE WITH THE SWPPP.
- A SITE OPERATOR SHALL BE IN SITE ALL DAYS WHERE CONSTRUCTION OR GRADING ACTIVITY TAKES PLACE.
- STRUCTURAL BMPs WILL BE INSPECTED AND MAINTAINED AT LEAST EVERY 14 DAYS AND AFTER ANY PRECIPITATION OR RUNOFF EVENT THAT CAUSES SURFACE EROSION, SEDIMENT TRANSPORT OR VEHICULAR TRACKING.
- SCRAPING AND SWEEPING OF STREETS, SIDEWALKS AND FLOWLINES MUST BE CONDUCTED AT THE END OF EACH WORK DAY WHEN DIRT AND OTHER CONSTRUCTION MATERIAL HAS BEEN TRACKED ONTO STREETS.
- EACH MATERIALS AND LANDSCAPE MATERIALS SUCH AS SOD, ROCK AND MULCH SHALL NOT BE STOCKPILED, PLACED OR STORED ON DRIVEWAYS, STREETS, SIDEWALKS OR IN STORM WATER FLOWLINES.
- CONSTRUCTION SUPPLIES (E.G., TRUSSES AND LUMBER), ROLL OFF CONTAINERS, DUMPSTERS, PORTABLE TOILETS, TRAILERS, ETC., SHALL NOT BE STORED ON STREETS OR SIDEWALKS OR OTHER IMPERVIOUS SURFACES. THESE ITEMS SHALL BE STORED ON THE CONSTRUCTION SITE OR STAGING AREAS.
- PORTABLE SANITARY FACILITIES SHALL BE LOCATED ON THE NATURAL GROUND AND AT LEAST 25 FEET FROM ANY STORM SEWER INLET OR WATER BODY AND SHALL BE SERVICED REGULARLY AS NEEDED.

COUNTY ROAD 81



LEGEND

- REINFORCED FILTER FABRIC FENCE
- INLET PROTECTION BARRIER
- CONCRETE TRUCK WASHOUT
- STABILIZED CONSTRUCTION ACCESS

02/23/2022



C7