

CONSTRUCTION PLANS FOR HORIZON ROAD SELF STORAGE TRACT 22 & TRACT 23 OF RAINBOW ACRES

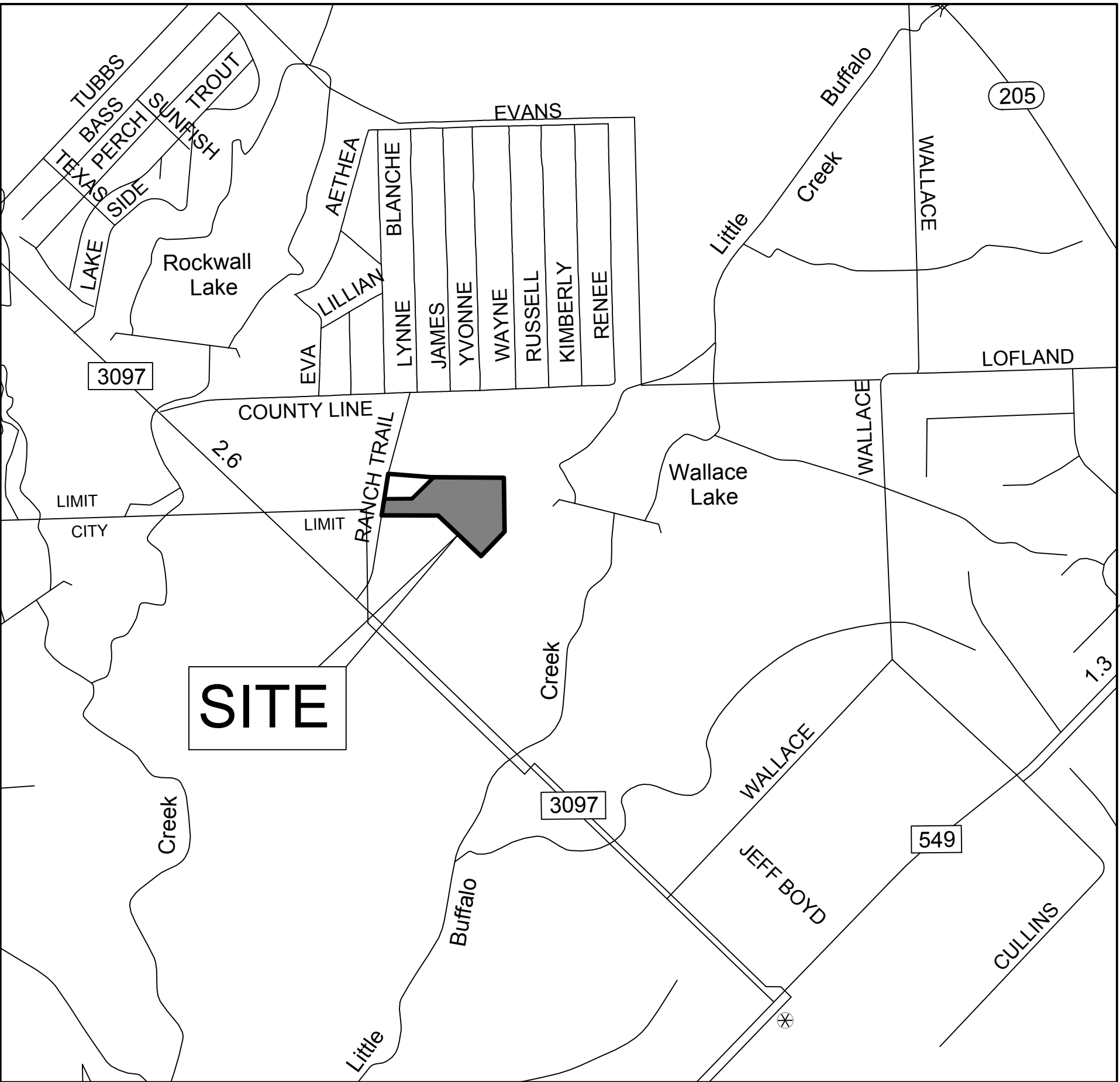
AN ADDITION TO THE CITY OF ROCKWALL
ROCKWALL COUNTY, TEXAS

CONTACT INFORMATION:

Mayor: Jim Pruitt
City of Rockwall Engineer:
Amy Williams, P.E., (972) 771-7746
City Manager:
Rick Crowley (972) 771-7746
Public Services Coordinator:
Elizabeth Morgan-(972) 771-7746
Building Inspections:
Rusty McDowell (972) 772-6748

TXDOT CONTACT INFORMATION :

KAUFMAN AREA OFFICE – BRENDA CALLAWAY
NUMBER – (972) 962-3617



VICINITY MAP
N.T.S.

SHEET INDEX

- No.
01 COVER SHEET
02 REPLAT - SHT 1 OF 2
03 REPLAT - SHT 2 OF 2
04 SITE PLAN
05 PH1 PAVING & DIMENSION CONTROL PLAN
06 PH2 PAVING & DIMENSION CONTROL PLAN
07 PH1 GRADING PLAN
08 PH2 GRADING PLAN
09 DRAINAGE AREA MAP - EXISTING
10 DRAINAGE AREA MAP - PROPOSED
11 STORM SEWER PLAN
12 STORM SEWER PROFILES
13 STORM SEWER PROFILES
14 STORM SEWER LATERAL PROFILES
15 DETENTION POND
16 PH1 WATER & SANITARY SEWER PLAN
17 PH2 WATER PLAN
18 EROSION CONTROL PLAN
19 GENERAL NOTES & SITE DETAILS
20 STORM SEWER DETAILS
21 SANITARY SEWER DETAILS
22 WATER DETAILS
23 EROSION CONTROL DETAILS
L1 LANDSCAPE PLAN
L2 TREESCAPE PLAN

RECORD DRAWINGS

To the best of our knowledge Engineering Concepts & Design, L.P., hereby states that this plan is As-Built. This information provided is based on surveying at the site and information provided by the contractor.
Todd Winters 3-15-2021
TODD WINTERS DATE

"Case No. SP2019-027"



CAUTION!

THE UTILITIES SHOWN ON THESE PLANS WERE COMPILED FROM VARIOUS SOURCES AND ARE INTENDED TO SHOW THE GENERAL EXISTENCE AND LOCATION OF UTILITIES IN THE AREA OF CONSTRUCTION. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THE ACCURACY OF THE UTILITY INFORMATION SHOWN ON THESE PLANS. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF ALL UTILITIES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL CONTACT UTILITY COMPANIES 48 HOURS IN ADVANCE OF ANY CONSTRUCTION ACTIVITIES IN ORDER TO DETERMINE IF THERE ARE ANY CONFLICTS WITH THE PROPOSED FACILITIES. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY WHEN CONFLICTS WITH EXISTING UTILITIES ARE DISCOVERED.



Owner/Applicant:
HORIZON ROAD SELF STORAGE, LLC
5763 S. SH-205 SUITE 100
ROCKWALL, TX 75032

ENGINEERINGCONCEPTS
& DESIGN, L.P.
ENGINEERING / PROJECT MANAGEMENT /
CONSTRUCTION SERVICES - FIRM REG. #F-001145
201 WINDCO CIR, STE 200, WYLIE, TX 75098
972-941-8400 FAX: 972-941-8401 WWW.ECDLP.COM

REVISIONS:
DATE: JAN. 07, 2020
PROJECT NO.: 05211
DWG FILE NAME: 01-COVER SHEET.DWG

THIS DOCUMENT IS RELEASED FOR THE PURPOSE OF
CONSTRUCTION.



SHEET

01

HORIZON ROAD SELF STORAGE
THE CITY OF ROCKWALL, ROCKWALL COUNTY, TEXAS

JANUARY 7, 2020
FOR CONSTRUCTION

Z:\PROJECTS\05211 Rockwall Mini Storage\dwg\SHEETS\01-COVER SHEET.dwg-COVER SHEET Plotted Mar 05, 2021 at 9:15am by Tony | Last Saved by Tony

WILLIAM W. FORD SURVEY
A-80

TRACT 17
RAINBO ACRES ADDITION
CAB. A, SL. 20
P.R.R.C.T

TRACT 16
CALLED 2.000 AC.
EPIC ROCKWALL VENTURES, LLC
INSTR. 2014000008464
D.R.R.C.T

PART OF TRACT 16
RAINBO ACRES ADDITION
CAB. A, SL. 20
P.R.R.C.T

SPC
N 7,008,362.44
E 2,597,811.92

S 89°37'02" E
70.88'

S 89°37'02" E 568.63'

10'x20' W.E.

5/8" IRF

10'x20' W.E.

10'x20' W.E.

10'x20' W.E.

10'x20' W.E.

10'x20' W.E.

10'x20' W.E.

10'x20' W.E.

10'x20' W.E.

10'x20' W.E.

10'x20' W.E.

10'x20' W.E.

10'x20' W.E.

10'x20' W.E.

10'x20' W.E.

10'x20' W.E.

10'x20' W.E.

10'x20' W.E.

10'x20' W.E.

10'x20' W.E.

10'x20' W.E.

10'x20' W.E.

10'x20' W.E.

10'x20' W.E.

10'x20' W.E.

10'x20' W.E.

10'x20' W.E.

10'x20' W.E.

10'x20' W.E.

10'x20' W.E.

10'x20' W.E.

10'x20' W.E.

10'x20' W.E.

10'x20' W.E.

10'x20' W.E.

10'x20' W.E.

10'x20' W.E.

10'x20' W.E.

10'x20' W.E.

10'x20' W.E.

LINE TABLE		
NO.	DIRECTION	DISTANCE
L1	N 44°28'39" W	10.00'
L2	N 45°31'21" E	20.00'
L3	S 44°28'39" E	10.00'
L4	N 43°26'10" E	10.00'
L5	S 46°33'50" E	20.00'
L6	S 43°26'10" W	10.00'
L7	N 43°26'10" E	10.00'
L8	S 46°33'50" E	20.00'
L9	S 43°26'10" W	10.00'
L10	S 46°33'50" E	20.00'
L11	S 43°26'10" W	20.00'
L12	N 46°33'50" W	1.60'
L13	S 46°33'50" E	10.00'
L14	S 43°26'10" W	20.00'
L15	N 46°33'50" W	10.00'
L16	N 46°33'50" W	10.00'
L17	S 43°26'10" W	10.00'
L18	N 46°33'50" W	20.00'
L19	N 43°26'10" E	10.00'
L20	S 43°26'10" W	11.96'
L21	N 46°33'50" W	20.00'
L22	S 00°15'59" E	8.11'
L23	S 89°44'01" W	20.00'
L24	N 00°15'59" W	10.00'
L25	S 00°15'59" E	10.00'
L26	S 89°44'01" W	20.00'
L27	N 00°15'59" W	9.40'
L28	S 89°44'01" W	14.58'
L29	S 32°56'55" E	13.30'
L30	S 68°11'52" E	32.53'
L31	N 82°21'13" E	33.74'
L32	S 43°36'01" E	44.71'
L33	S 11°13'45" W	64.87'
L34	S 35°31'12" E	32.08'
L35	S 00°49'26" E	40.46'
L36	S 77°32'04" W	27.72'
L37	N 60°37'24" E	5.62'

REPLAT OF
RAINBO ACRES
TRACT 22R & TRACT 23R

BEING A REPLAT OF
RAINBO ACRES
TRACT 22 & TRACT 23
CAB. J, SLIDE 249, P.R.R.C.T.

8.733 ACRES
2 LOTS

SITUATED IN THE

WILLIAM W. FORD SURVEY, A-80
CITY OF ROCKWALL,
ROCKWALL COUNTY, TEXAS

ENGINEERING CONCEPTS & DESIGN, L.P.
ENGINEERING/PROJECT MANAGEMENT/CONSTRUCTION SERVICES
TEXAS FIRM REG. NO. 001145
201 WINDCO CIRCLE, SUITE 200, WYLLIE TEXAS 75098
(972) 941-8400 FAX (972) 941-8401

OWNERS
TRUMAN HEIGHTS, LLC
4741 PARKWOOD DR.
ROCKWALL, TX 75032-2037
(972) 722-3666
HORIZON RD SELF STORAGE, LLC
5769 S.H. 205 #100
ROCKWALL, TX 75032

LAND SURVEYOR
R.C. MYERS SURVEYING, LLC
488 ARROYO COURT
SUNNYVALE, TX 75182
(214) 532-0636
FAX (972) 412-4875
EMAIL: rcmsurveying@gmail.com
FIRM NO. 10192300 JOB NO. 428

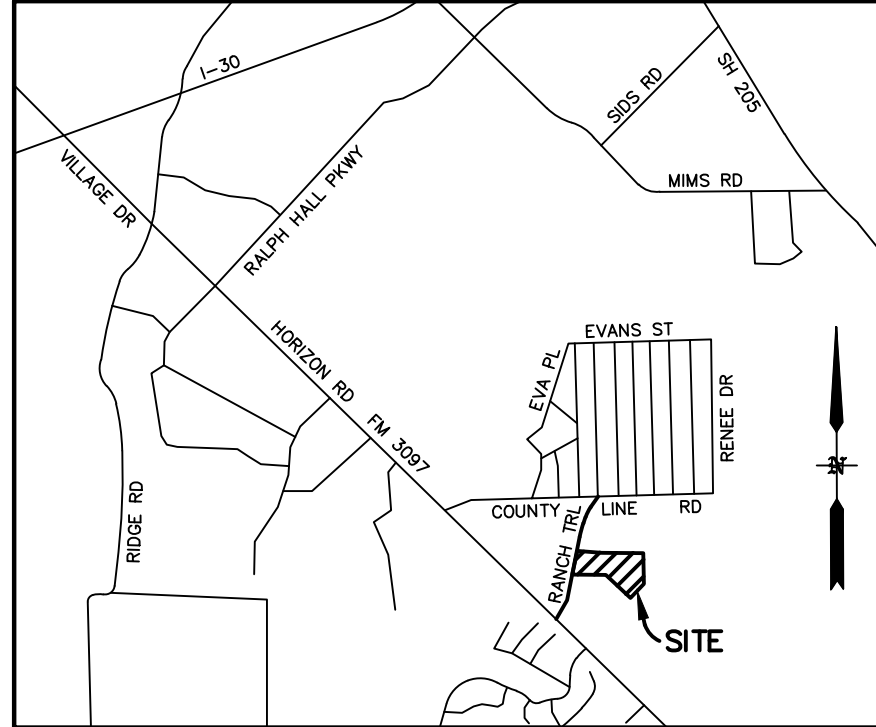
DATE: MARCH 3, 2021
DATE: OCTOBER 5, 2020

CASE NUMBER: P2017-050

SHEET 1 OF 2

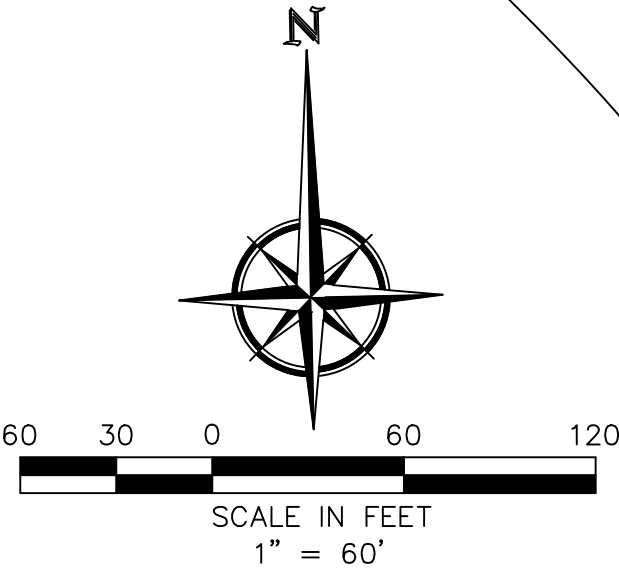
Z:\PROJECTS\05211 Rockwall Mini Storage\dwg\Plats\05211 Replat.dwg

LEGEND	
IRF	IRON ROD FOUND
CM	CONTROL MONUMENT
SPC	STATE PLANE COORDINATES
F.A.&U.E.	FIRE LANE ACCESS AND UTILITY EASEMENT
W.E.	WATER EASEMENT
D.&U.E.	DRAINAGE AND UTILITY EASEMENT
P.R.R.C.T.	PLAT RECORDS ROCKWALL COUNTY, TEXAS
D.R.R.C.T.	DEED RECORDS ROCKWALL COUNTY, TEXAS



CURVE TABLE						
CURVE	DELTA	RADIUS	TANGENT	LENGTH	CHORD BEARING	CHORD
C1	36°19'31"	25.00'	8.20'	15.85'	S 72°06'14" E	15.59'
C2	44°12'40"	25.00'	10.15'	19.29'	N 67°37'41" E	18.82'
C3	44°51'36"	25.00'	10.32'	19.57'	S 67°57'09" W	19.08'
C4	43°03'12"	49.00'	19.33'	36.82'	N 68°05'26" W	35.96'
C5	90°00'00"	30.00'	30.00'	47.12'	N 01°33'50" W	42.43'
C6	75°55'32"	25.00'	19.51'	33.13'	N 84°31'36" W	30.76'
C7	75°55'32"	49.00'	38.23'	64.93'	S 84°31'36" E	60.28'
C8	43°42'09"	25.00'	10.03'	19.07'	N 68°24'55" W	18.61'
C9	17°07'08"	30.00'	4.52'	8.96'	S 81°10'27" W	8.93'
C10	17°07'08"	49.00'	7.38'	14.64'	N 81°10'27" E	14.59'
C11	16°10'18"	25.00'	3.55'	7.06'	S 81°38'52" W	7.03'
C12	92°05'11"	25.00'	25.93'	40.18'	S 00°31'15" E	35.99'
C13	44°51'36"	49.00'	20.23'	38.36'	S 67°57'09" W	37.39'
C14	43°03'12"	25.00'	9.86'	18.79'	N 68°05'26" W	18.35'
C15	90°00'00"	25.00'	25.00'	39.27'	N 01°33'50" W	35.36'
C16	90°00'00"	25.00'	25.00'	39.27'	N 88°26'10" E	35.36'
C17	90°00'00"	25.00'	25.00'	39.27'	S 01°33'50" E	35.36'
C18	90°00'00"	25.00'	25.00'	39.27'	S 88°26'10" W	35.36'
C19	90°00'00"	25.00'	25.00'	39.27'	N 01°33'50" W	35.36'
C20	90°00'00"	25.00'	25.00'	39.27'	N 88°26'10" E	35.36'

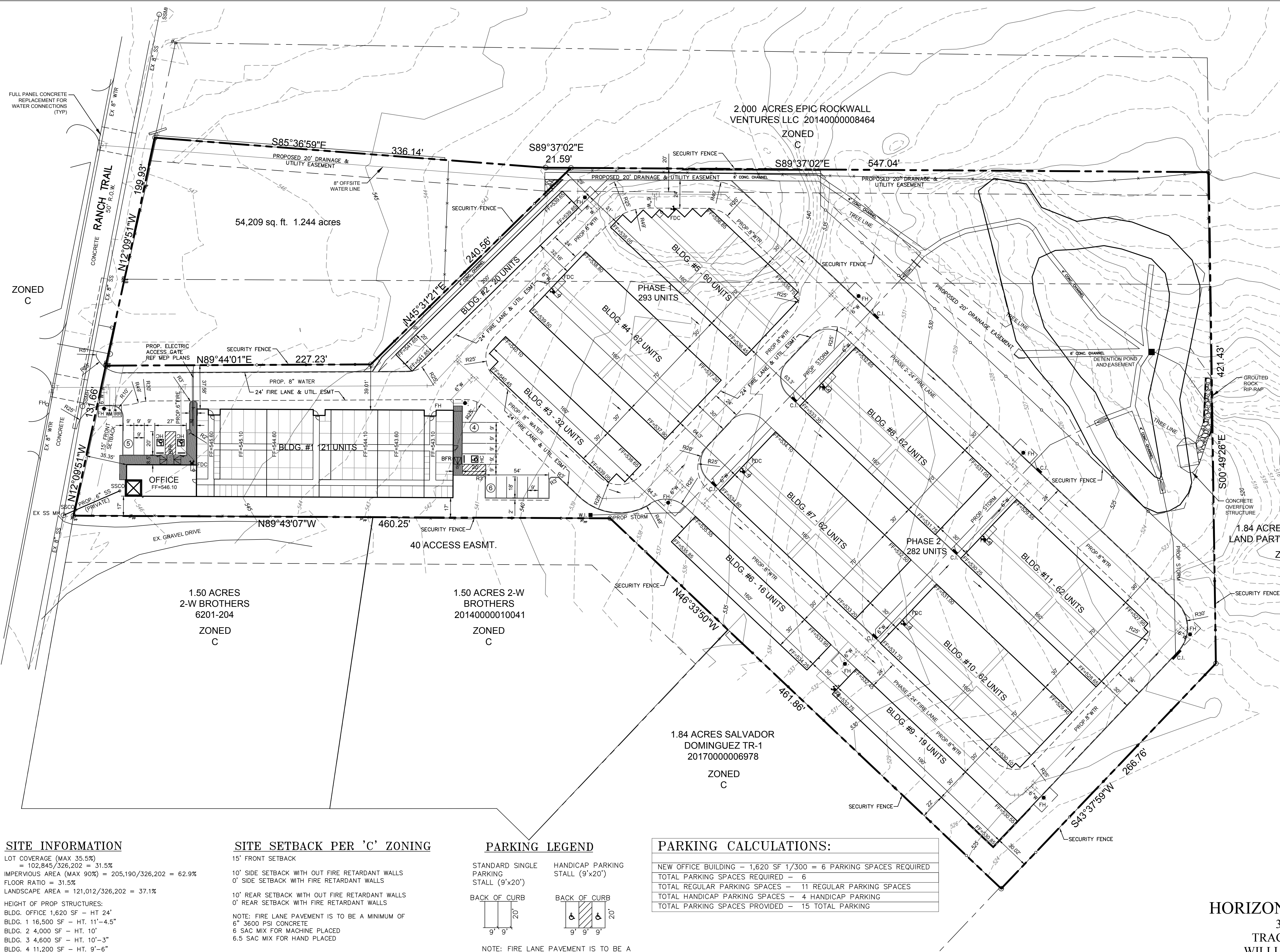
CALLLED 1.84 AC.
SALVADOR DOMINGUEZ
& DIANA DOMINGUEZ
INSTR. 20170000006978
D.R.R.C.T



POINT OF
BEGINNING

SPC
N 7,007,744.27
E 2,598,202.46

Y:\PROJECTS\05211 Rockwall Mini Storage\Drawings\SITE PLAN.dwg--SITE PLAN Picked Mar 15, 2021 at 10:37am by Tony | Last Saved by: Tony



SITE INFORMATION

LOT COVERAGE (MAX 35.5%)
= 102,845/326,202 = 31.5%
IMPERVIOUS AREA (MAX 90%) = 205,190/326,202 = 62.9%
FLOOR RATIO = 31.5%
LANDSCAPE AREA = 121,012/326,202 = 37.1%
HEIGHT OF PROP STRUCTURES:
BLDG. OFFICE 1,620 SF - HT 24'
BLDG. 1 16,500 SF - HT. 11'-4.5"
BLDG. 2 4,000 SF - HT. 10'
BLDG. 3 4,600 SF - HT. 10'-3"
BLDG. 4 11,200 SF - HT. 9'-6"
BLDG. 5 9,650 SF - HT. 9'-10.5"
BLDG. 6 4,800 SF - HT. 10'-3"
BLDG. 7 11,200 SF - HT. 9'-6"
BLDG. 8 11,200 SF - HT. 9'-6"
BLDG. 9 5,700 SF - HT. 10'-3"
BLDG. 10 11,200 SF - HT. 9'-6"
BLDG. 11 11,200 SF - HT. 9'-6"

PROP USE OF STRUCTURES: MINI PUBLIC STORAGE WAREHOUSES

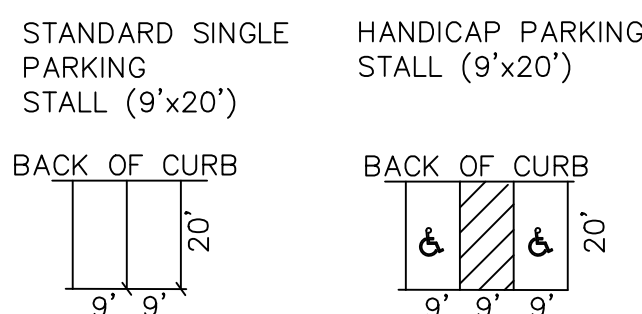
SITE SETBACK PER 'C' ZONING

15' FRONT SETBACK
10' SIDE SETBACK WITH OUT FIRE RETARDANT WALLS
0' SIDE SETBACK WITH FIRE RETARDANT WALLS
10' REAR SETBACK WITH OUT FIRE RETARDANT WALLS
0' REAR SETBACK WITH FIRE RETARDANT WALLS
NOTE: FIRE LANE PAVEMENT IS TO BE A MINIMUM OF
6" 3600 PSI CONCRETE
6 SAC MIX FOR MACHINE PLACED
6.5 SAC MIX FOR HAND PLACED

SITES NOTES

- RETAINING WALLS 3' AND OVER MUST BE ENGINEERED. ALL RETAINING WALLS MUST BE ROCK OR STONE FACE. NO SMOOTH CONCRETE WALLS.
- MAXIMUM 4:1 SLOPE FOR GRADES.
- AN AUTOMATIC SPRINKLER SYSTEM SHALL BE INSTALLED THROUGHOUT ALL SELF-SERVICE FACILITIES. EXCEPTION: ONE-STORY SELF-STORAGE FACILITIES THAT HAVE NO INTERIOR CORRIDORS AND ARE LESS THAN 5,000 SQUARE FEET.

PARKING LEGEND



NOTE: FIRE LANE PAVEMENT IS TO BE A MINIMUM OF 6" 3600 PSI CONCRETE
6 SAC MIX FOR MACHINE PLACED
6.5 SAC MIX FOR HAND PLACED

PARKING CALCULATIONS:

NEW OFFICE BUILDING - 1,620 SF 1/300 = 6 PARKING SPACES REQUIRED
TOTAL PARKING SPACES REQUIRED - 6
TOTAL REGULAR PARKING SPACES - 11 REGULAR PARKING SPACES
TOTAL HANDICAP PARKING SPACES - 4 HANDICAP PARKING
TOTAL PARKING SPACES PROVIDED - 15 TOTAL PARKING

RECORD DRAWINGS

To the best of our knowledge Engineering Concepts & Design, L.P., hereby states that this plan is As-Built. This information provided is based on surveying at the site and information provided by the contractor.

TODD WINTERS

3-15-2021
DATE

SITE PLAN HORIZON ROAD SELF STORAGE

326,202 sf 7.489 Acres
TRACT 23 OF RAINBOW ACRES
WILLIAM W. FORD SURVEY, A-20
CITY OF ROCKWALL, ROCKWALL COUNTY, TEXAS

Owner/Applicant:
HORIZON ROAD SELF STORAGE, LLC
5763 S. SH-205 SUITE 100
ROCKWALL, TX 75032

Engineer
ENGINEERING CONCEPTS & DESIGN, L.P.
ENGINEERING / PROJECT MANAGEMENT /
CONSTRUCTION SERVICES - FIRM REG. #F-001145
201 WINDCO CIR, STE 200, WYLIE, TX 75098
972-941-8400 FAX: 972-941-8401 WWW.ECDLP.COM

Scale 1"=40'

JANUARY 7, 2020

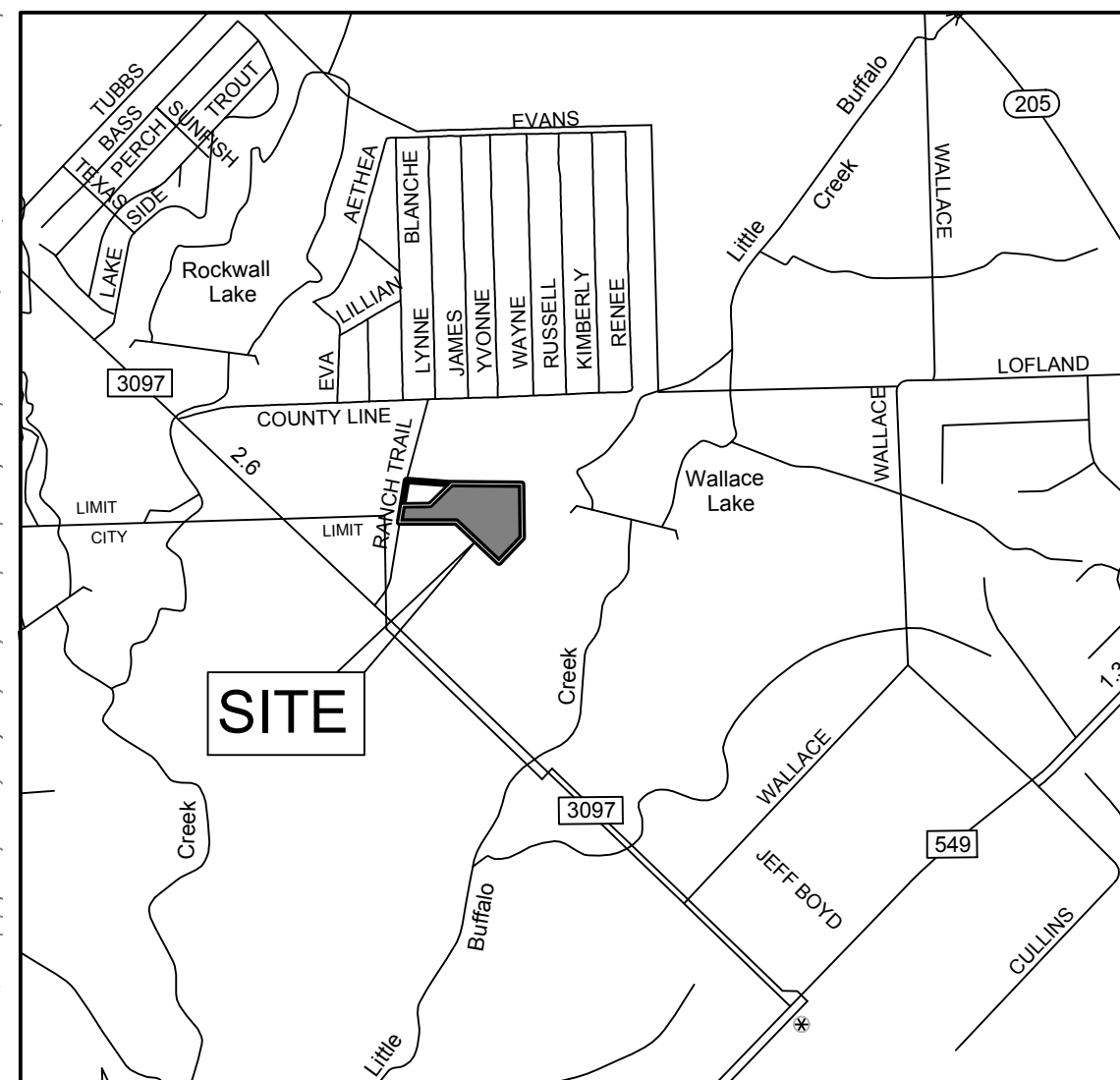
Project No. 05211

SP2019-027

Sheet 1 of 1

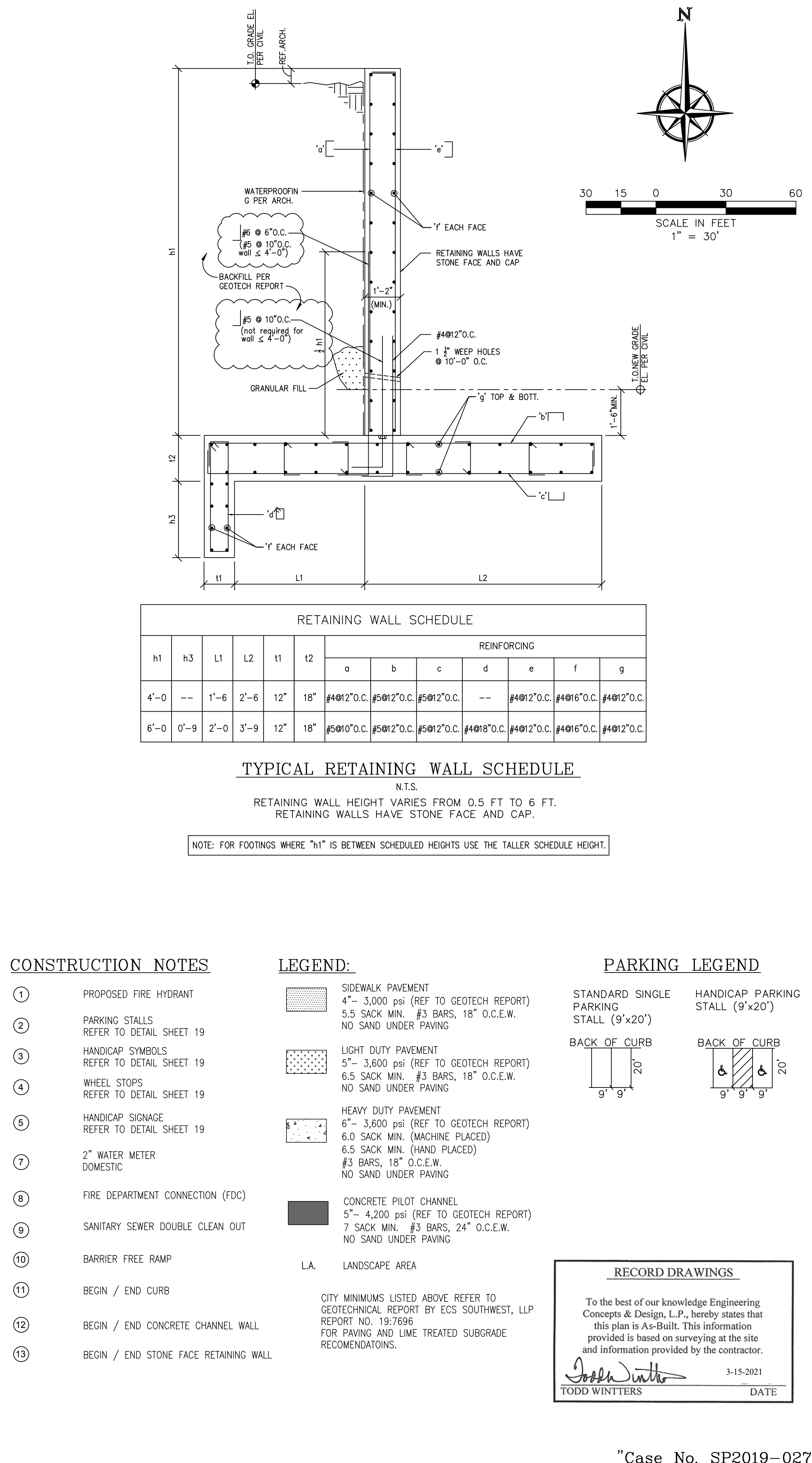


40 20 0 40 80
SCALE IN FEET
1" = 40'



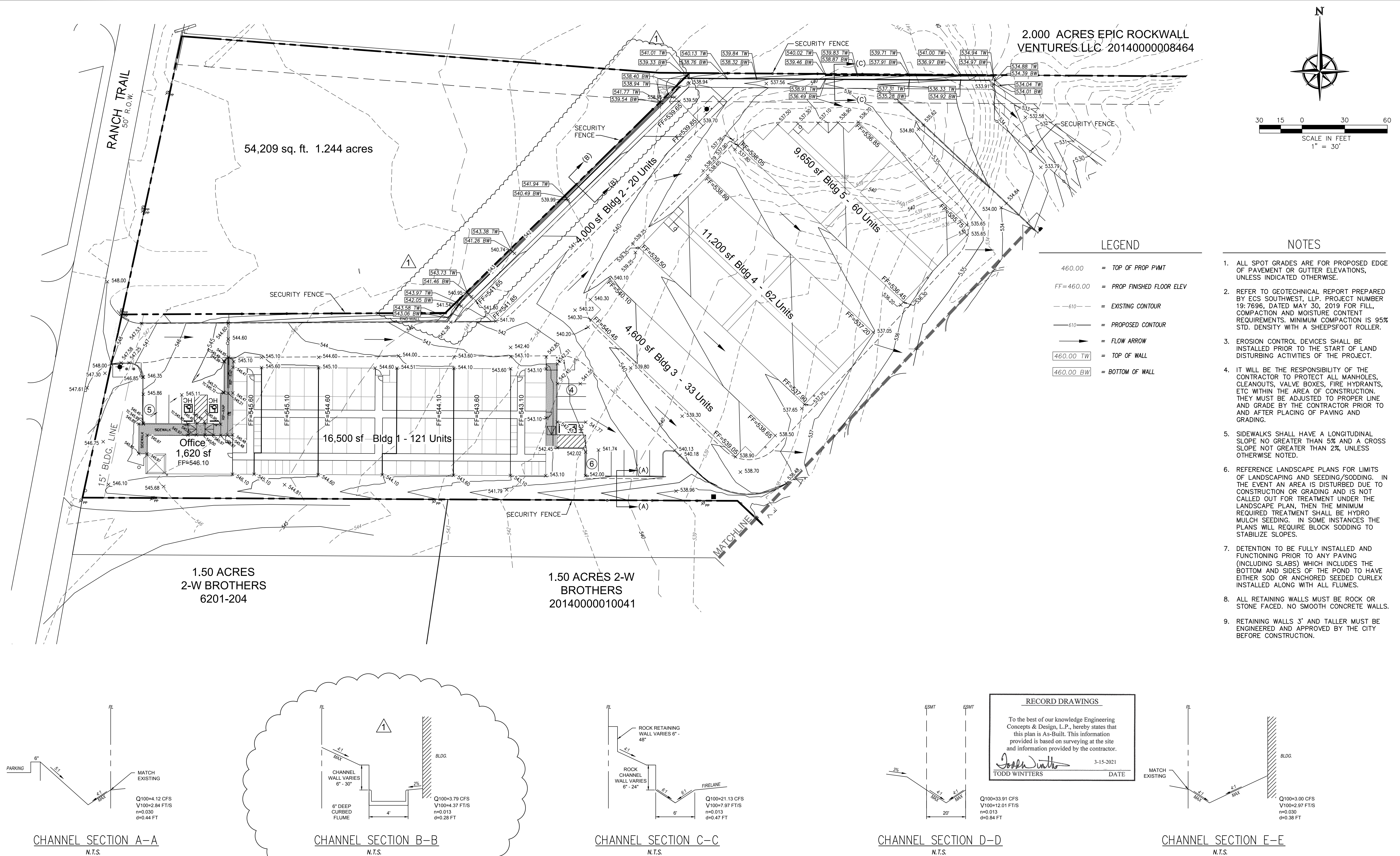
LEGEND

1/2" I.R.S. W/CAP	1/2" IRON ROD SET WITH YELLOW CAP STAMPED "RPLS 3963"
I.R.F.	IRON ROD FOUND
GW	GUY WIRE
PP	POWER POLE
LP	LIGHT POLE
EM	ELECTRIC METER
ICV	IRRIGATION CONTROL VALVE
B	BOLLARD
WM	WATER METER
SSMH	SANITARY SEWER MANHOLE
TPED	TELEPHONE PEDESTAL
XFR	ELECTRIC TRANSFORMER
MB	MAILBOX
WV	WATER VALVE
EBX	ELECTRIC BOX
FOM	FIBER OPTIC CABLE MARKER
A/C	AIR CONDITIONER UNIT
ES	ELECTRIC SWITCH
HW	HEADWALL
TS	TRAFFIC SIGN
WF	WATER FAUCET
FH	FIRE HYDRANT
FOV	FIBER OPTIC VAULT
CMP	CORRUGATED METAL PIPE
PVC	POLYVINYL CHLORIDE PIPE
RCP	REINFORCED CONCRETE PIPE
P.R.R.C.T.	PLAT RECORDS ROCKWALL CO. TX.
D.R.R.C.T.	DEEDS RECORDS ROCKWALL CO. TX.
—	EDGE OF ASPHALT
—	WIRE FENCE
—	OVERHEAD ELECTRIC LINE
—	SANITARY SEWER CLEAN-OUT
—	FIRE DEPARTMENT CONNECTION
—	CURB INLET
—	WYE INLET



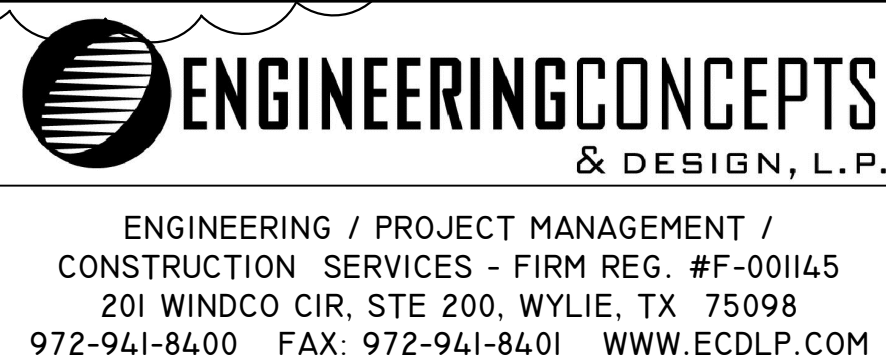
06

Y:\PROJECTS\05211 Rockwall Mini Storage\dwg\06-GRADING PLAN PH1 Plotted Mar 15, 2021 at 10:55am by Tony | Last Saved by Tony



BENCHMARKS: CITY OF ROCKWALL, TEXAS - CONTROL MONUMENTATION

ROCKWALL MONUMENT "RESET #1 3" BRASS DISK FOUND AT FM 740 (RIDGE ROAD) AND SUMMER LEE DRIVE NEAR NORTHWEST CORNER OF THE PARKING LOT FOR THE COMMUNITY BANK.
N: 7011544.252; E: 2590135.160; ELEVATION: 567.704
BASED ON NAD-83 TX, STATE PLANE, NORTH CENTRAL ZONE.



REVISIONS:		EXTENDED 4' CONC FLUME, ADDED CURB CUT. 09/29/2020
REVISED SPOT ELEVATION ON FLUME SECTION		
REVISED FLUME SECTION B-B		
DRAWN:	ECDLP	DATE: March 5, 2021
CHECKED:	TW	DATE: January 7, 2020
PROJECT NO.:	5211	
DWG FILE NAME:	06-GRADING PLAN.DWG	

THIS DOCUMENT IS RELEASED FOR THE
PURPOSE OF CONSTRUCTION.

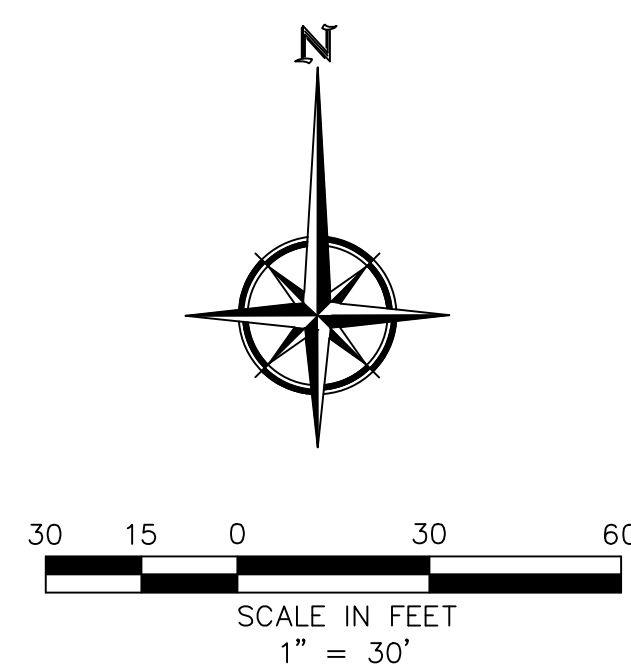


GRADING PLAN
HORIZON ROAD SELF STORAGE
PHASE 1 & 2 - 575 UNITS
TRACT 23 OF RAINBOW ACRES
CITY OF ROCKWALL, ROCKWALL COUNTY, TEXAS

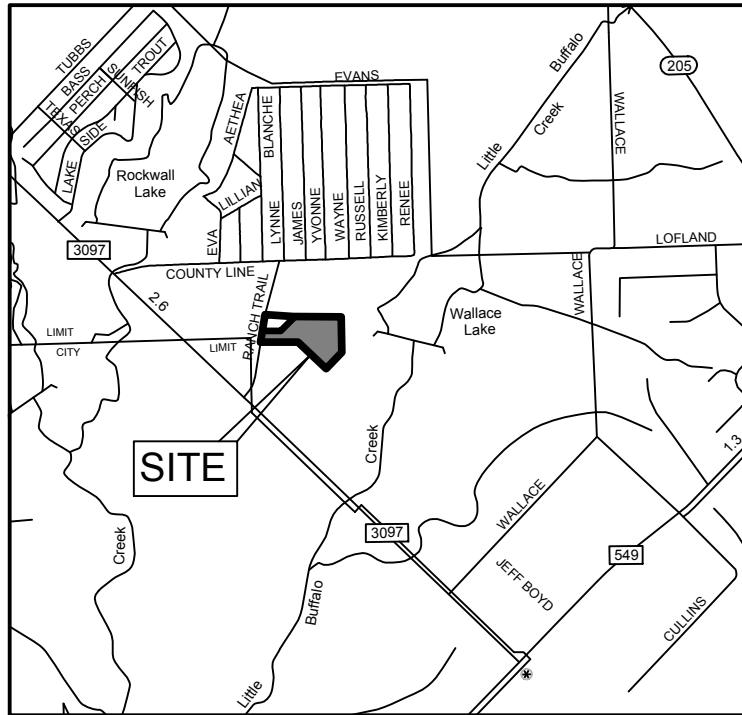
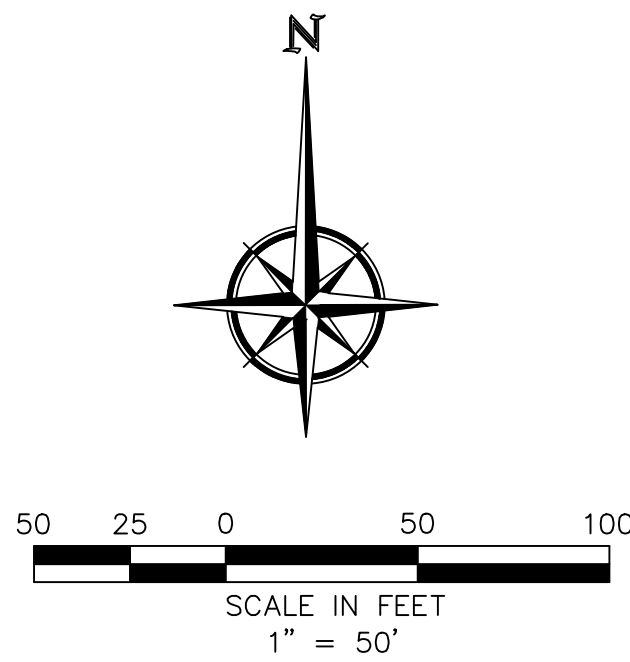
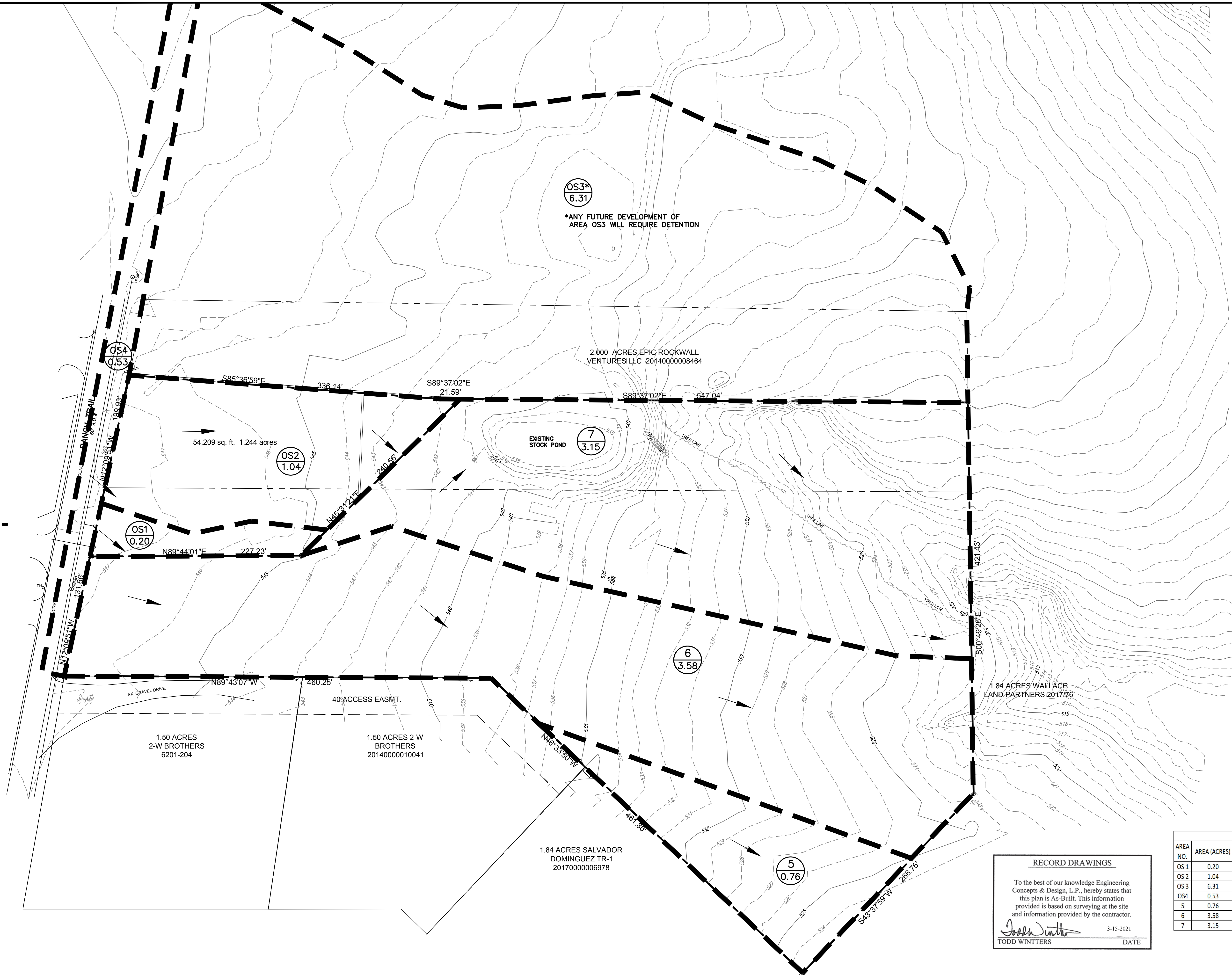
SHEET

07

"Case No. SP2019-027"



Z:\PROJECTS\05211 Rockwall Mini Storage\dwg\SHEETS\07-DRAINAGE AREA MAP - EXISTING.dwg-DAM Plotted Mar 05, 2021 at 9:25am by Tony | Last Saved by: Tony



LEGEND	
<div><div>4</div><div>6.18</div></div>	— DRAINAGE AREA NUMBER
—	— DRAINAGE AREA SIZE (AC)
---	--- DRAINAGE DIVIDE
→	→ FLOW DIRECTION
- - - 530 - - -	- - - EXISTING CONTOURS

DRAINAGE CALCULATIONS - EXISTING CONDITIONS											
AREA NO.	AREA (ACRES)	C	T _c	I _s (IN/HR)	Q _s (CFS)	I ₁₀ (IN/HR)	Q ₁₀ (CFS)	I ₂₅ (IN/HR)	Q ₂₅ (CFS)	I ₁₀₀ (IN/HR)	Q ₁₀₀ (CFS)
OS 1	0.20	0.50	10.00	6.10	0.61	7.10	0.71	8.30	0.83	9.80	0.98
OS 2	1.04	0.50	10.00	6.10	3.17	7.10	3.69	8.30	4.32	9.80	5.10
OS 3	6.31	0.50	10.00	6.10	19.25	7.10	22.41	8.30	26.19	9.80	30.93
OS 4	0.53	0.90	10.00	6.10	2.89	7.10	3.37	8.30	3.94	9.80	4.65
5	0.76	0.35	20.00	4.90	1.31	5.90	1.58	6.60	1.76	8.30	2.22
6	3.58	0.35	20.00	4.90	6.13	5.90	7.39	6.60	8.26	8.30	10.39
7	3.15	0.35	20.00	4.90	5.40	5.90	6.51	6.60	7.28	8.30	9.15

RECORD DRAWINGS

To the best of our knowledge Engineering Concepts & Design, L.P., hereby states that this plan is As-Built. This information provided is based on surveying at the site and information provided by the contractor.

Todd Winters 3-15-2021
TODD WINTERS DATE

BENCHMARKS: CITY OF ROCKWALL, TEXAS - CONTROL MONUMENTATION

ROCKWALL MONUMENT "RESET #1 3" BRASS DISK FOUND AT FM 740 (RIDGE ROAD) AND SUMMER LEE DRIVE NEAR NORTHWEST CORNER OF THE PARKING LOT FOR THE COMMUNITY BANK.
N: 7011544.252; E: 2590135.160; ELEVATION: 567.704
BASED ON NAD-83 TX, STATE PLANE, NORTH CENTRAL ZONE.

**ENGINEERINGCONCEPTS**
& DESIGN, L.P.

ENGINEERING / PROJECT MANAGEMENT /
CONSTRUCTION SERVICES - FIRM REG. #F-001145
201 WINDCO CIR, STE 200, WYLIE, TX 75098
972-941-8400 FAX: 972-941-8401 WWW.ECDLP.COM

REVISIONS:	
DRAWN: ECDLP	DATE: January 7, 2020
CHECKED: TW	DATE: January 7, 2020
PROJECT NO.: 5211	
DWG FILE NAME: 07-DRAINAGE AREA MAP - EXISTING.DWG	

THIS DOCUMENT IS RELEASED FOR THE
PURPOSE OF CONSTRUCTION.



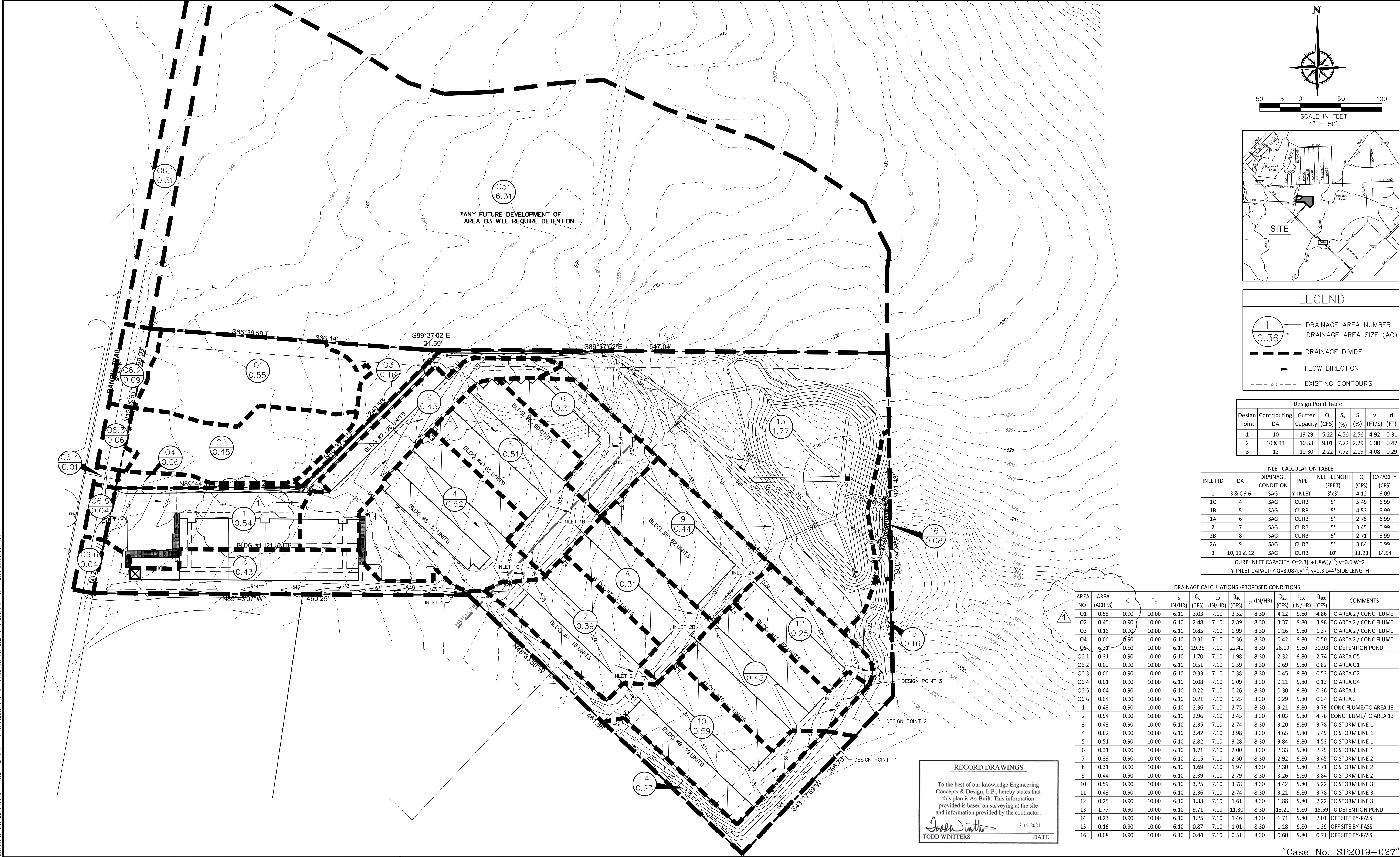
DRAINAGE AREA MAP - EXISTING
HORIZON ROAD SELF STORAGE
PHASE 1 & 2 - 575 UNITS
TRACT 23 OF RAINBOW ACRES
CITY OF ROCKWALL, ROCKWALL COUNTY, TEXAS

SHEET

09

"Case No. SP2019-027"

Z:\PROJECTS\05211 Rockwall Mini Storage\Drawings\08-DRAINAGE AREA MAP - PROPOSED.dwg - DAW Plotted Mar 05, 2021 at 9:26am by Tony I Last Saved by Tony



BENCHMARKS: CITY OF ROCKWALL, TEXAS - CONTROL MONUMENTATION

ROCKWALL MONUMENT "RESET #1 3" BRASS DISK FOUND AT FM 740 (RIDGE ROAD) AND SUMMER LEE DRIVE NEAR NORTHWEST CORNER OF THE PARKING LOT FOR THE COMMUNITY BANK.
N: 7011544.252; E: 2590135.160; ELEVATION: 567.704
BASED ON NAD-83 TX, STATE PLANE, NORTH CENTRAL ZONE.

ENGINEERINGCONCEPTS & DESIGN, L.P.

ENGINEERING / PROJECT MANAGEMENT /
CONSTRUCTION SERVICES - FIRM REG. #F-001145
201 WINDCO CIR, STE 200, WYLIE, TX 75098
972-941-8400 FAX: 972-941-8401 WWW.ECDLP.COM

REVISIONS: REVISED DRAINAGE AREA 1 AND 2, 09/29/2020	
1	
DRAWN: ECDLP	DATE: September 29, 2020
CHECKED: TW	DATE: January 7, 2020
PROJECT NO.: 5211	
DWG FILE NAME: 08-DRAINAGE AREA MAP - PROPOSED.DWG	

THIS DOCUMENT IS RELEASED FOR THE
PURPOSE OF CONSTRUCTION.

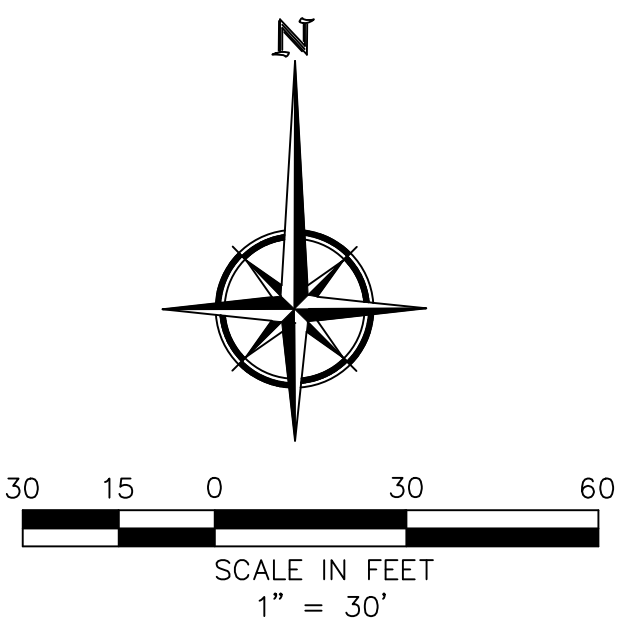
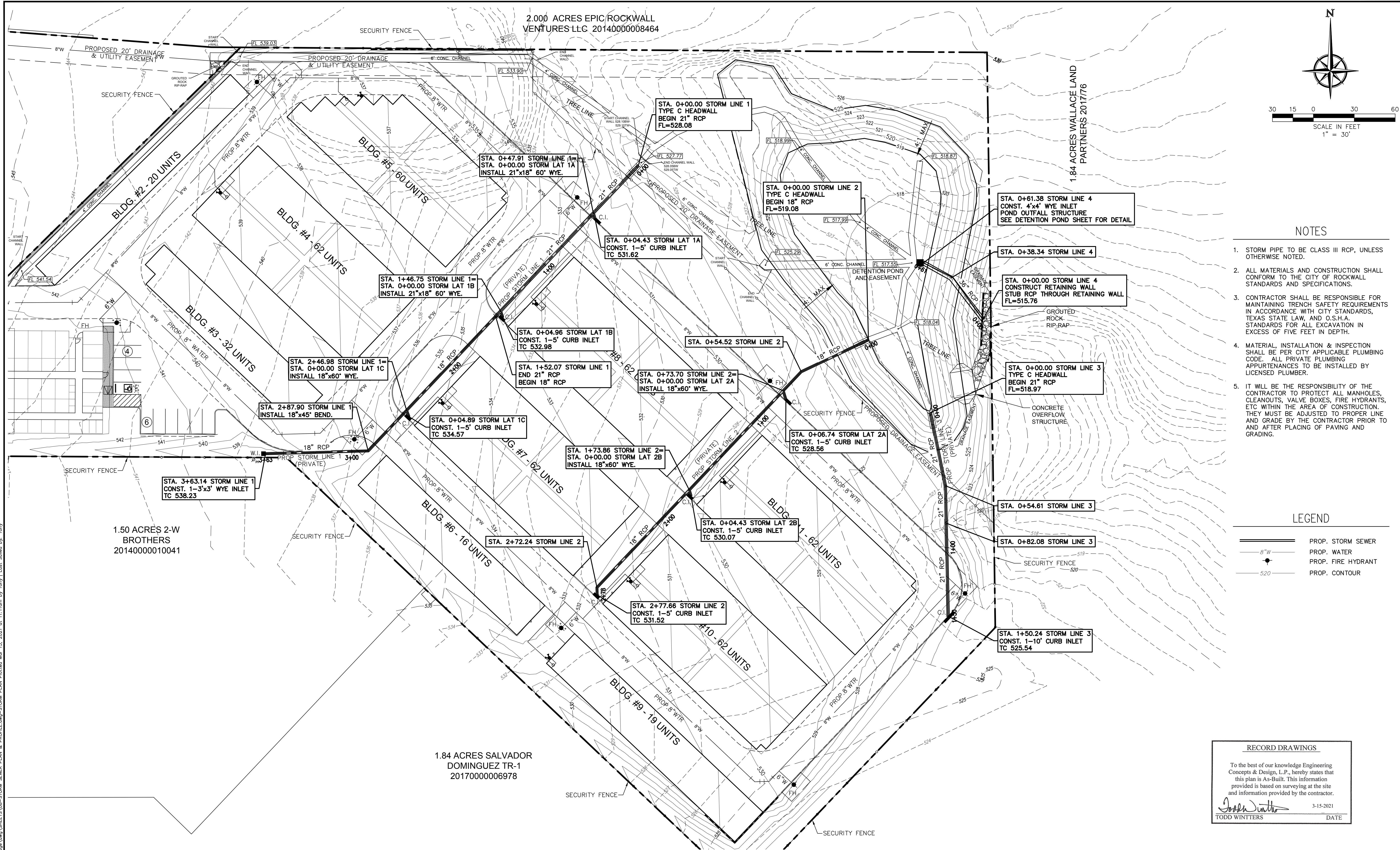


DRAINAGE AREA MAP - PROPOSED
HORIZON ROAD SELF STORAGE
PHASE 1 & 2 - 575 UNITS
TRACT 23 OF RAINBOW ACRES
CITY OF ROCKWALL, ROCKWALL COUNTY, TEXAS

"Case No. SP2019-027"

SHEET

10



NOTES

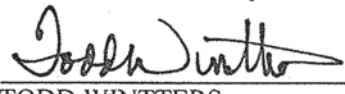
1. STORM PIPE TO BE CLASS III RCP, UNLESS OTHERWISE NOTED.
2. ALL MATERIALS AND CONSTRUCTION SHALL CONFORM TO THE CITY OF ROCKWALL STANDARDS AND SPECIFICATIONS.
3. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING TRENCH SAFETY REQUIREMENTS IN ACCORDANCE WITH CITY STANDARDS, TEXAS STATE LAW, AND O.S.H.A. STANDARDS FOR ALL EXCAVATION IN EXCESS OF FIVE FEET IN DEPTH.
4. MATERIAL, INSTALLATION & INSPECTION SHALL BE PER CITY APPLICABLE PLUMBING CODE. ALL PRIVATE PLUMBING APPURTENANCES TO BE INSTALLED BY LICENSED PLUMBER.
5. IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROTECT ALL MANHOLES, CLEANOUTS, VALVE BOXES, FIRE HYDRANTS, ETC WITHIN THE AREA OF CONSTRUCTION. THEY MUST BE ADJUSTED TO PROPER LINE AND GRADE BY THE CONTRACTOR PRIOR TO AND AFTER PLACING OF PAVING AND GRADING.

LEGEND

- | | |
|--|--------------------|
| | PROP. STORM SEWER |
| | PROP. WATER |
| | PROP. FIRE HYDRANT |
| | PROP. CONTOUR |


RECORD DRAWINGS

To the best of our knowledge Engineering Concepts & Design, L.P., hereby states that this plan is As-Built. This information provided is based on surveying at the site and information provided by the contractor.

 3-15-2021
TODD WINTERS DATE

BENCHMARKS: CITY OF ROCKWALL, TEXAS - CONTROL MONUMENTATION

ROCKWALL MONUMENT "RESET #1 3" BRASS DISK FOUND AT FM 740 (RIDGE ROAD) AND SUMMER LEE DRIVE NEAR NORTHWEST CORNER OF THE PARKING LOT FOR THE COMMUNITY BANK.
N: 7011544.252; E: 2590135.160; ELEVATION: 567.704
BASED ON NAD-83 TX, STATE PLANE, NORTH CENTRAL ZONE.

 **ENGINEERINGCONCEPTS**
& DESIGN, L.P.

ENGINEERING / PROJECT MANAGEMENT /
CONSTRUCTION SERVICES - FIRM REG. #F-001145
201 WINDCO CIR, STE 200, WYLIE, TX 75098
972-941-8400 FAX: 972-941-8401 WWW.ECDLP.COM

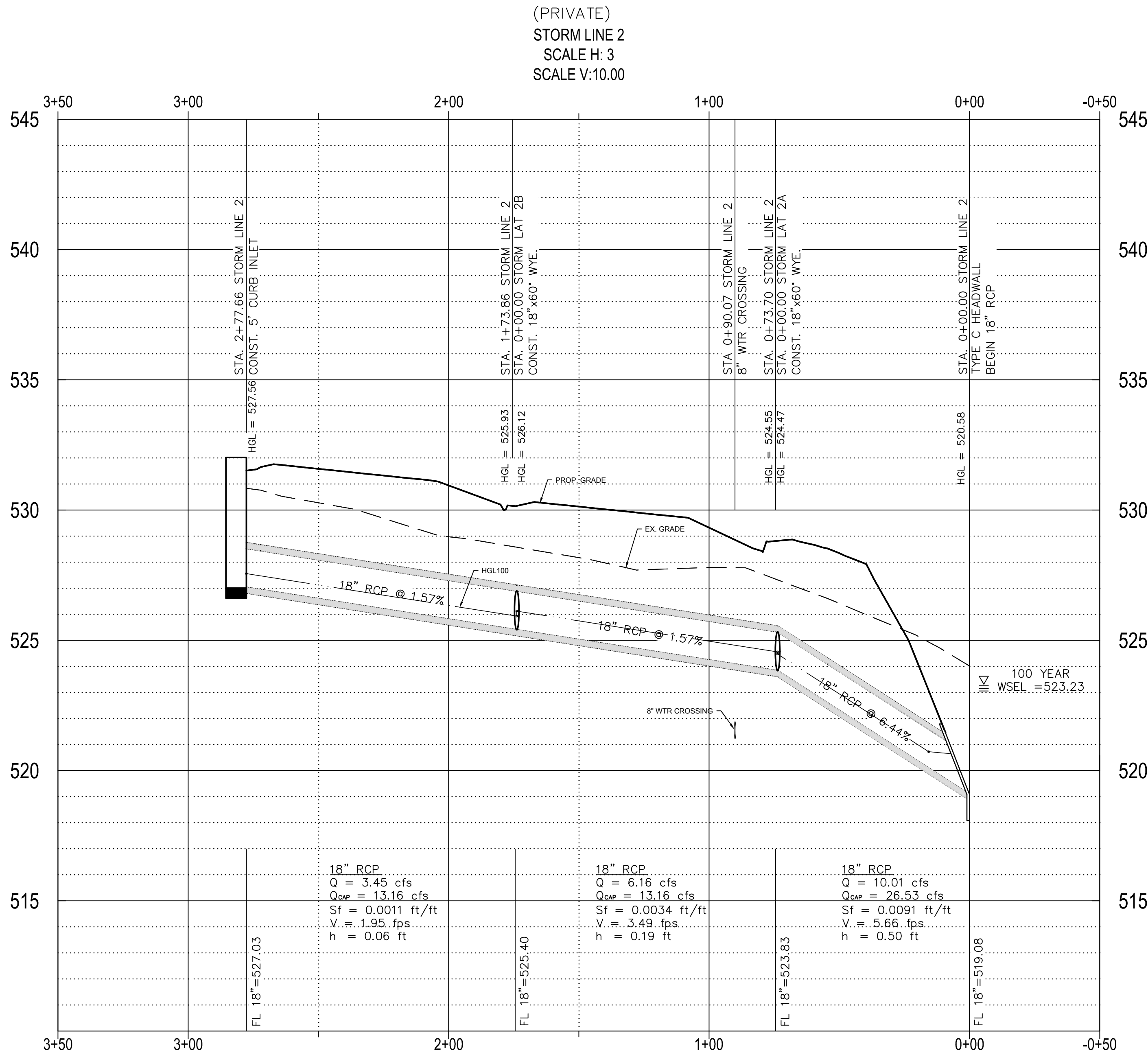
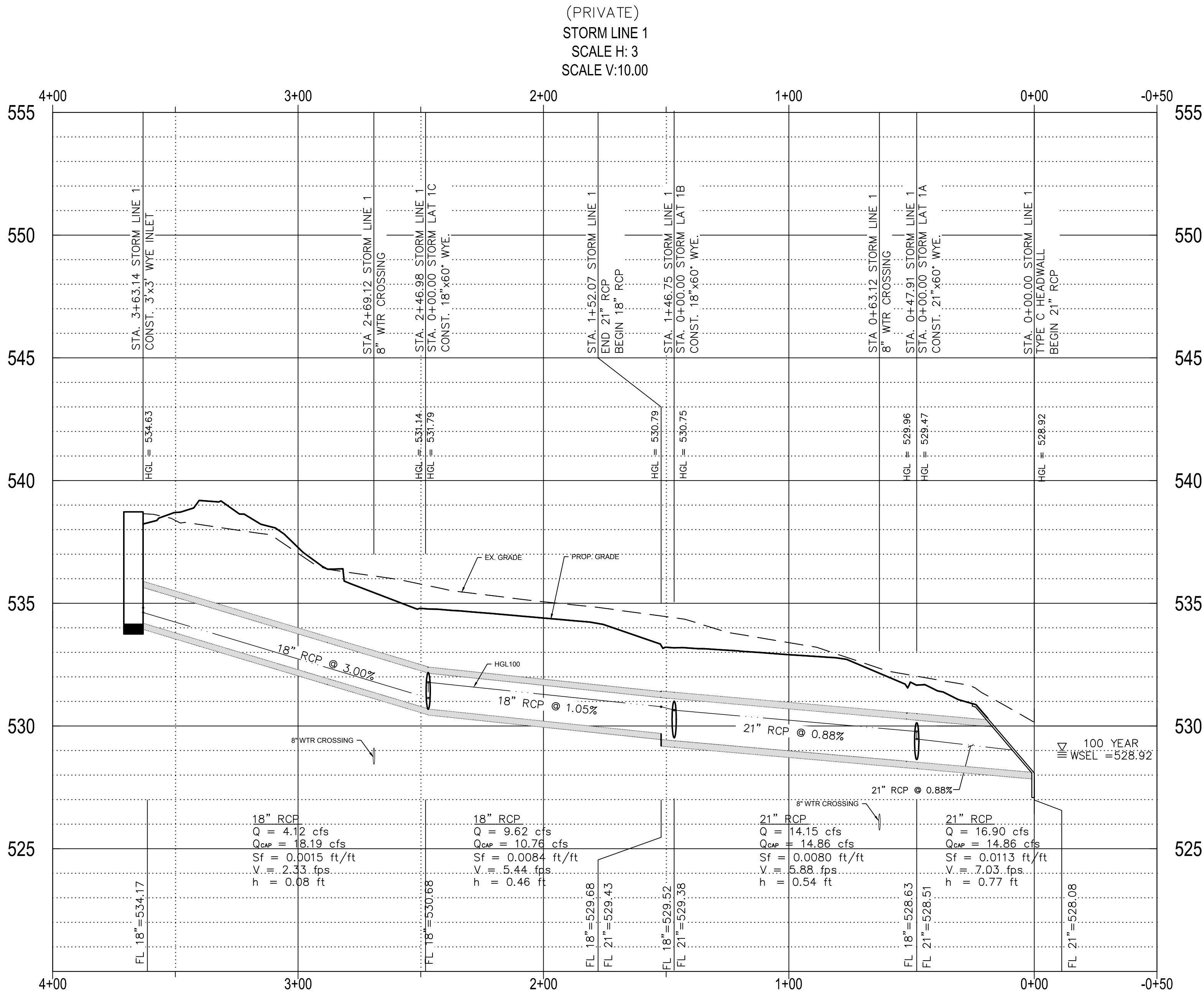
REVISIONS:	
DRAWN: ECDLP	DATE: March 5, 2021
CHECKED: TW	DATE: January 7, 2020
PROJECT NO.: 5211	
DWG FILE NAME: 08-STORM SEWER PLAN & PROFILE.DWG	

THIS DOCUMENT IS RELEASED FOR THE
PURPOSE OF CONSTRUCTION.



STORM SEWER PLAN
HORIZON ROAD SELF STORAGE
PHASE 1 & 2 - 575 UNITS
TRACT 23 OF RAINBOW ACRES
CITY OF ROCKWALL, ROCKWALL COUNTY, TEXAS

Z:\PROJECTS\05211 Rockwall Mini Storage\dwg\SHEETS\08-STORM SEWER PLAN & PROFILE.dwg - STORM PROFILE 1 Plotted Mar 05, 2021 at 9:28am by Tony | Last Saved by: Tony



RECORD DRAWINGS

To the best of our knowledge Engineering Concepts & Design, L.P., hereby states that this plan is As-Built. This information provided is based on surveying at the site and information provided by the contractor.

Todd Winters 3-15-2021
TODD WINTERS DATE

BENCHMARKS: CITY OF ROCKWALL, TEXAS - CONTROL MONUMENTATION

ROCKWALL MONUMENT "RESET #1 3" BRASS DISK FOUND AT FM 740 (RIDGE ROAD) AND SUMMER LEE DRIVE NEAR NORTHWEST CORNER OF THE PARKING LOT FOR THE COMMUNITY BANK.
N: 7011544.252; E: 2590135.160; ELEVATION: 567.704
BASED ON NAD-83 TX, STATE PLANE, NORTH CENTRAL ZONE.

ENGINEERINGCONCEPTS
& DESIGN, L.P.

ENGINEERING / PROJECT MANAGEMENT /
CONSTRUCTION SERVICES - FIRM REG. #F-001145
201 WINDCO CIR, STE 200, WYLIE, TX 75098
972-941-8400 FAX: 972-941-8401 WWW.ECDLP.COM

REVISIONS:	
DRAWN: ECDLP	DATE: January 6, 2020
CHECKED: TW	DATE: January 7, 2020
PROJECT NO.: 5211	
DWG FILE NAME: 08-STORM SEWER PLAN & PROFILE.DWG	

THIS DOCUMENT IS RELEASED FOR THE
PURPOSE OF CONSTRUCTION.



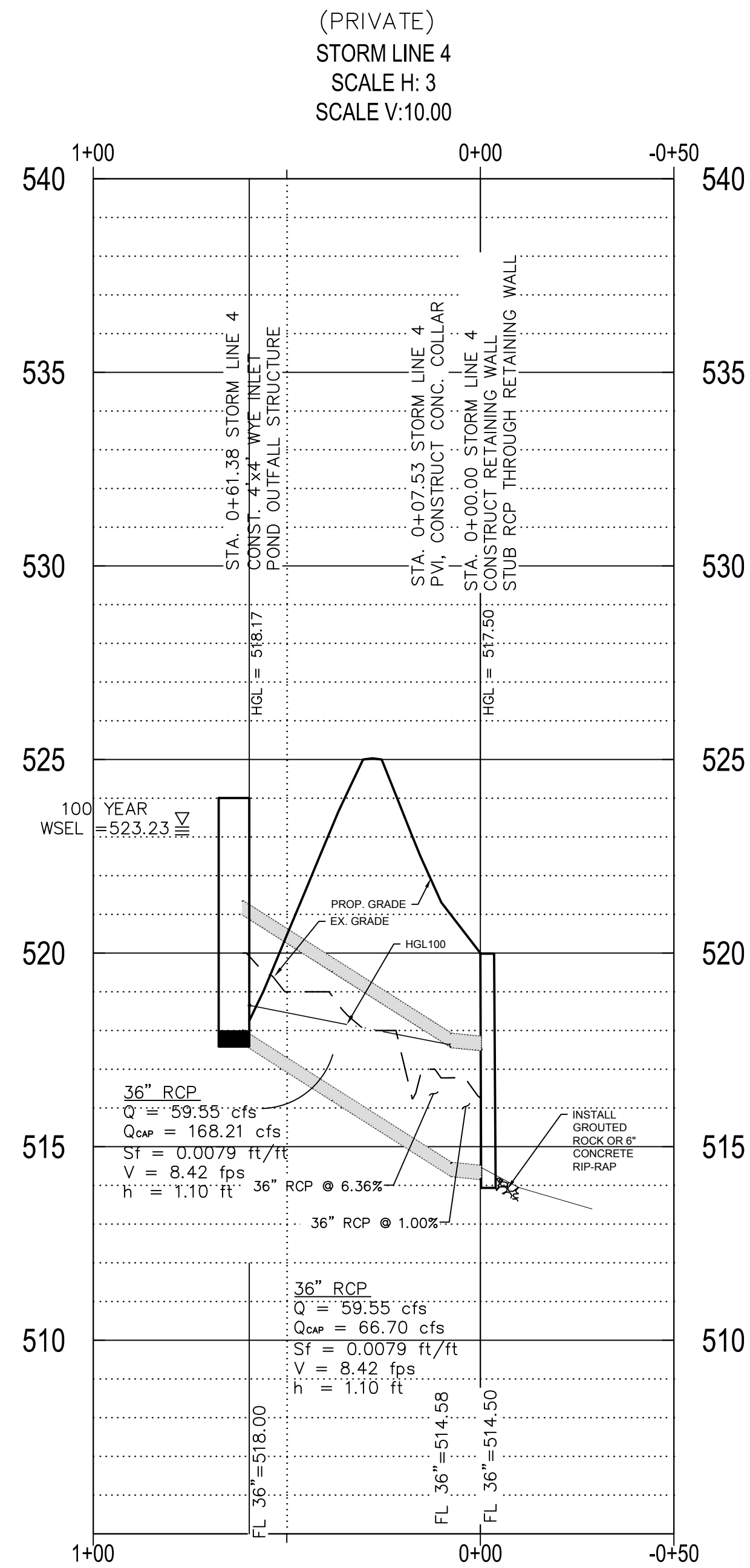
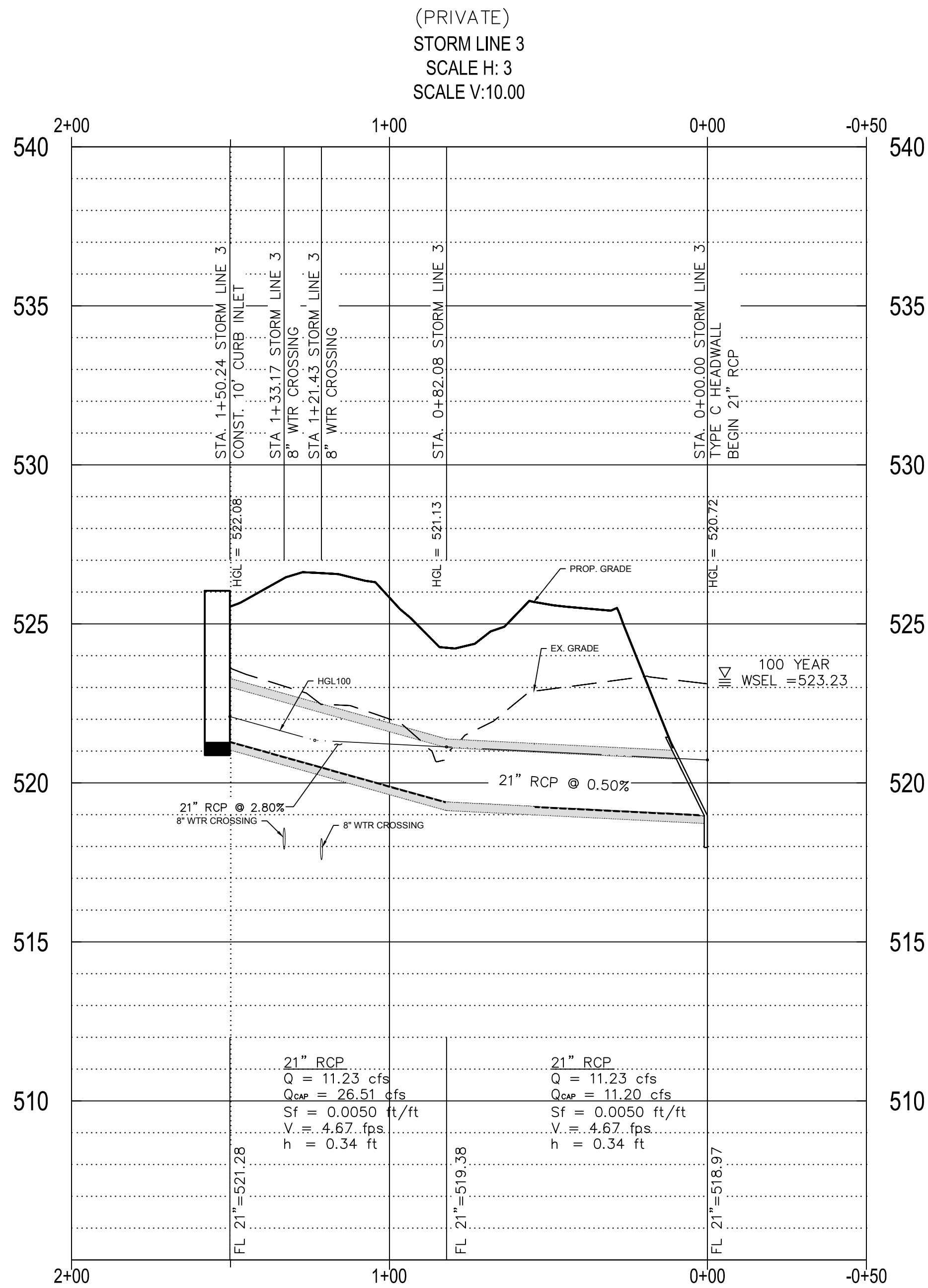
STORM SEWER PROFILES
HORIZON ROAD SELF STORAGE
PHASE 1 & 2 - 575 UNITS
TRACT 23 OF RAINBOW ACRES
CITY OF ROCKWALL, ROCKWALL COUNTY, TEXAS

SHEET

12

"Case No. SP2019-027"

Z:\PROJECTS\05211 Rockwall Mini Storage\dwg\SHEETS\08-STORM SEWER PLAN & PROFILE.dwg--STORM PROFILE 2 Plotted Mar 05, 2021 at 9:29am by Tony | Last Saved by: Tony



RECORD DRAWINGS

To the best of our knowledge Engineering Concepts & Design, L.P., hereby states that this plan is As-Built. This information provided is based on surveying at the site and information provided by the contractor.

Todd Winters 3-15-2021
TODD WINTERS DATE

BENCHMARKS: CITY OF ROCKWALL, TEXAS - CONTROL MONUMENTATION

ROCKWALL MONUMENT "RESET #1 3" BRASS DISK FOUND AT FM 740 (RIDGE ROAD) AND SUMMER LEE DRIVE NEAR NORTHWEST CORNER OF THE PARKING LOT FOR THE COMMUNITY BANK.
N: 7011544.252; E: 2590135.160; ELEVATION: 567.704
BASED ON NAD-83 TX, STATE PLANE, NORTH CENTRAL ZONE.

ENGINEERINGCONCEPTS
& DESIGN, L.P.

ENGINEERING / PROJECT MANAGEMENT /
CONSTRUCTION SERVICES - FIRM REG. #F-001145
201 WINDCO CIR, STE 200, WYLIE, TX 75098
972-941-8400 FAX: 972-941-8401 WWW.ECDLP.COM

REVISIONS:	
DRAWN: ECDLP	DATE: January 6, 2020
CHECKED: TW	DATE: January 7, 2020
PROJECT NO.: 5211	
DWG FILE NAME: 08-STORM SEWER PLAN & PROFILE.DWG	

THIS DOCUMENT IS RELEASED FOR THE
PURPOSE OF CONSTRUCTION.



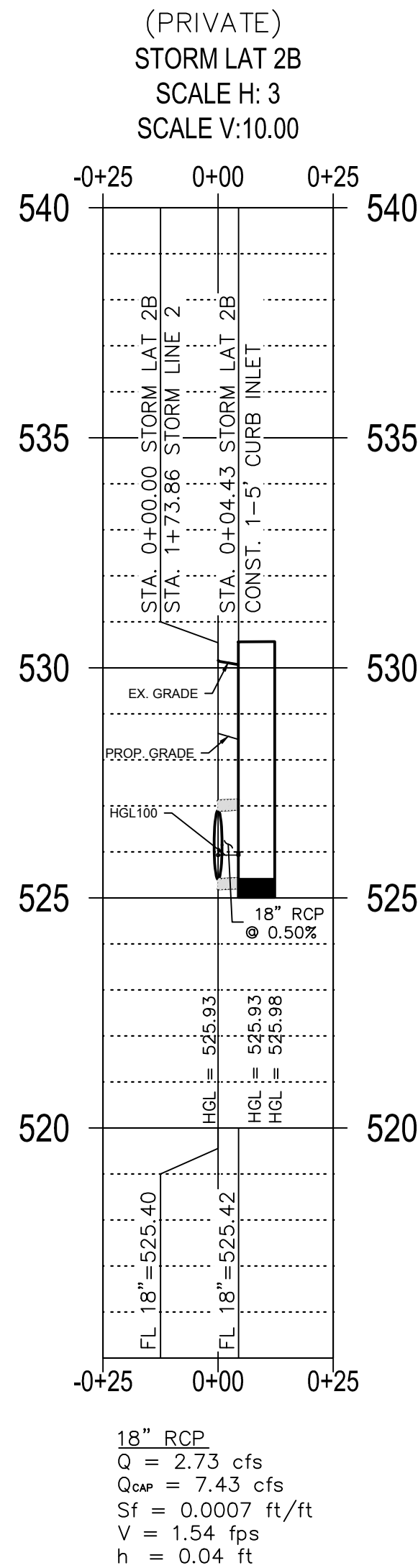
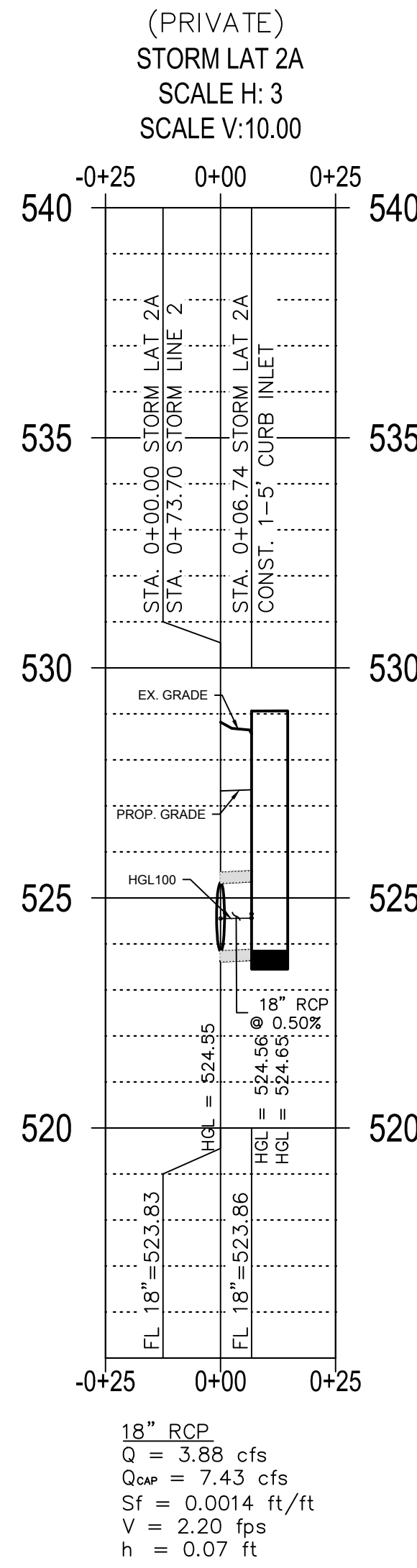
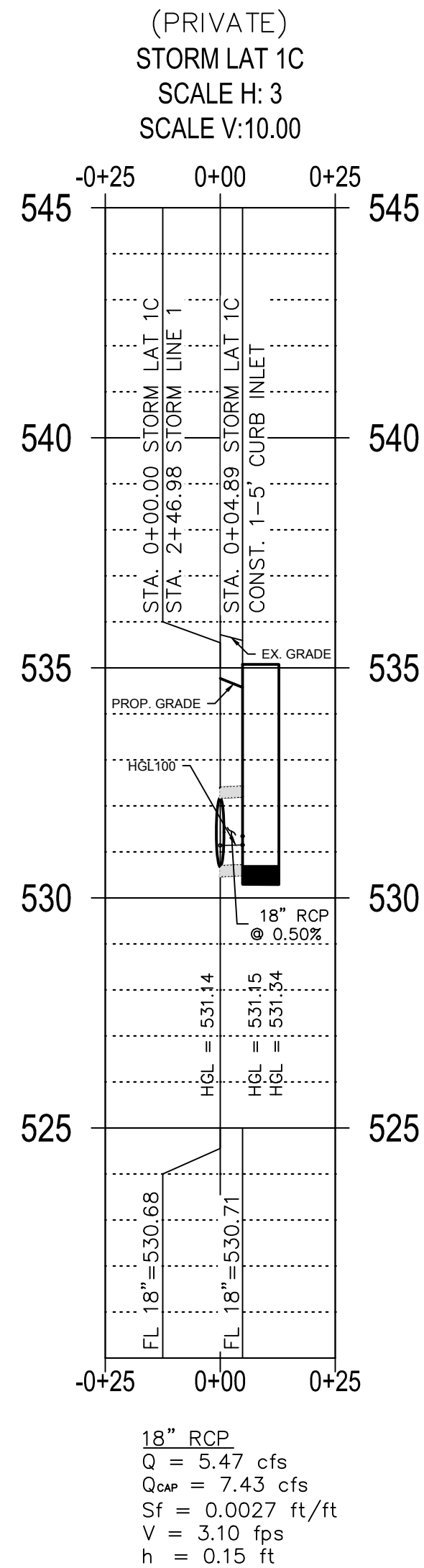
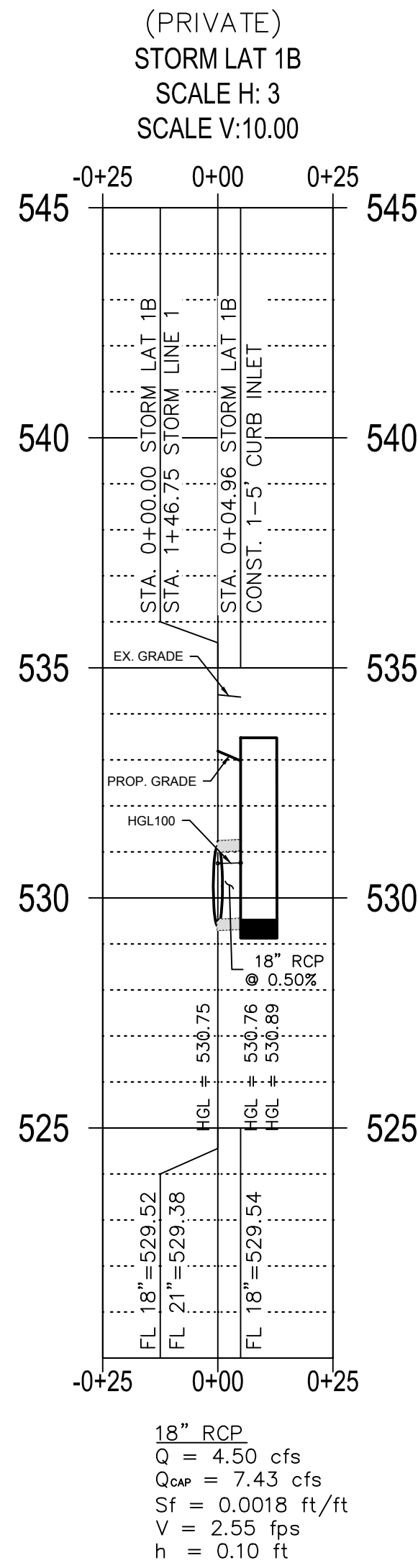
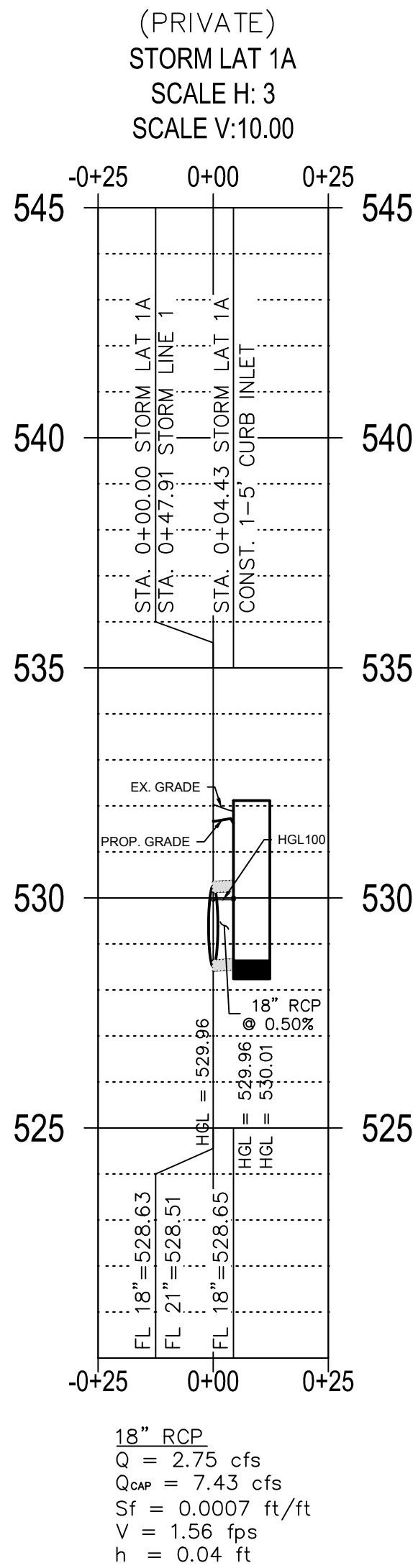
STORM SEWER PROFILES
HORIZON ROAD SELF STORAGE
PHASE 1 & 2 - 575 UNITS
TRACT 23 OF RAINBOW ACRES
CITY OF ROCKWALL, ROCKWALL COUNTY, TEXAS

SHEET

13

"Case No. SP2019-027"

Z:\PROJECTS\05211 Rockwall Mini Storage\dwg\SHEETS\08-STORM SEWER PLAN & PROFILE.dwg-STORM PROFILE 3 Plotted Mar 05, 2021 at 9:29am by Tony | Last Saved by Tony



RECORD DRAWINGS

To the best of our knowledge Engineering Concepts & Design, L.P., hereby states that this plan is As-Built. This information provided is based on surveying at the site and information provided by the contractor.

Todd Winters
TODD WINTERS
3-15-2021
DATE

BENCHMARKS: CITY OF ROCKWALL, TEXAS - CONTROL MONUMENTATION

ROCKWALL MONUMENT "RESET #1 3" BRASS DISK FOUND AT FM 740 (RIDGE ROAD) AND SUMMER LEE DRIVE NEAR NORTHWEST CORNER OF THE PARKING LOT FOR THE COMMUNITY BANK.
N: 7011544.252; E: 2590135.160; ELEVATION: 567.704
BASED ON NAD-83 TX, STATE PLANE, NORTH CENTRAL ZONE.

ENGINEERINGCONCEPTS
& DESIGN, L.P.

ENGINEERING / PROJECT MANAGEMENT /
CONSTRUCTION SERVICES - FIRM REG. #F-001145
201 WINDCO CIR, STE 200, WYLIE, TX 75098
972-941-8400 FAX: 972-941-8401 WWW.ECDLP.COM

REVISIONS:	
DRAWN: ECDLP	DATE: January 6, 2020
CHECKED: TW	DATE: January 7, 2020
PROJECT NO.: 5211	
DWG FILE NAME: 08-STORM SEWER PLAN & PROFILE.DWG	

THIS DOCUMENT IS RELEASED FOR THE
PURPOSE OF CONSTRUCTION.



STORM SEWER LATERAL PROFILES
HORIZON ROAD SELF STORAGE
PHASE 1 & 2 - 575 UNITS
TRACT 23 OF RAINBOW ACRES
CITY OF ROCKWALL, ROCKWALL COUNTY, TEXAS

"Case No. SP2019-027"

SHEET

14

Z:\PROJECTS\05211 Rockwall Mini Storage\Drawings\DETENTION POND.dwg--DETENTION POND 05, 2021 at 8:32am by: Tony | Last Saved by: Tony

		DETENTION POND VOLUME CALCULATOR			
MODIFIED RATIONAL METHOD					
5 YEAR FREQUENCY					
		Acres	Q		
SITE TOTAL		8.73	16.63		
BYPASS		0.47	2.58		
Q _{Total} -Q _{Bypass}			14.05		
Present Conditions			Proposed Conditions		
DETAINED AREAS			TOTAL AREA		
EXISTING DA ID	5, 6, & 7	OS 1 & OS 2	PROPOSED DA ID	DA 1 - DA16 & O1 - O4	BYPASS AREA
AREA, ACRES	7.49	1.24	AREA, ACRES	8.73	0.47
C	0.35	0.50	C	0.90	0.90
Tc	20.00	10.00	Tc	10.00	10.00
I _s	4.90	6.10	I _s	6.10	6.10
Q _s	12.85	3.78	Q _s	47.93	2.58
Time	Inflow	Outflow	Storage (cf)	Tc	Intensity
5	20271	6321	13950	5	8.6
10	28757	8428	20328	10	6.1
15	38892	10535	28357	15	5.5
20	46199	12642	33557	20	4.9
30	57985	16856	41128	30	4.1
40	64113	21071	43043	40	3.4
50	69999	25285	40714	50	2.8
60	73542	29499	44043	60	2.6
70	79199	33713	45486	70	2.4
80	86741	37927	48814	80	2.3
90	89098	42141	46957	90	2.1
100	89570	46355	43215	100	1.9
110	93341	50569	42772	110	1.8

DETENTION POND VOLUME CALCULATOR					
MODIFIED RATIONAL METHOD					
10 YEAR FREQUENCY					
Acres		Q			
SITE TOTAL	8.73	19.87			
BYPASS	0.47	3.00			
Q _{Total} -Q _{Bypass}	16.87				
Present Conditions			Proposed Conditions		
DETAINED AREAS			TOTAL AREA		
EXISTING DA ID	5, 6, & 7	OS 1 & OS 2	PROPOSED DA ID	DA 1 - DA16 & O1 - O4	BYPASS AREA
AREA, ACRES	7.49	1.24	AREA, ACRES	8.73	0.47
C	0.35	0.50	C	0.90	0.90
Tc	20.00	10.00	Tc	10.00	10.00
I ₁₀	5.90	7.10	I ₁₀	7.10	7.10
Q ₁₀	15.47	4.40	Q ₁₀	55.78	3.00
Time	Inflow	Outflow	Storage (cf)	Tc	Intensity
5	23807	7589	16217	5	10.1
10	33471	10119	23351	10	7.1
15	45963	12649	33314	15	6.5
20	55628	15179	40449	20	5.9
30	67884	20239	47616	30	4.8
40	75427	25298	50129	40	4.0
50	82499	30358	52141	50	3.5
60	84856	35418	49438	60	3.0
70	92398	40477	51921	70	2.8
80	98055	45537	52518	80	2.6
90	106070	50597	55473	90	2.5
100	113141	55656	57484	100	2.4
110	119269	60716	58553	110	2.3

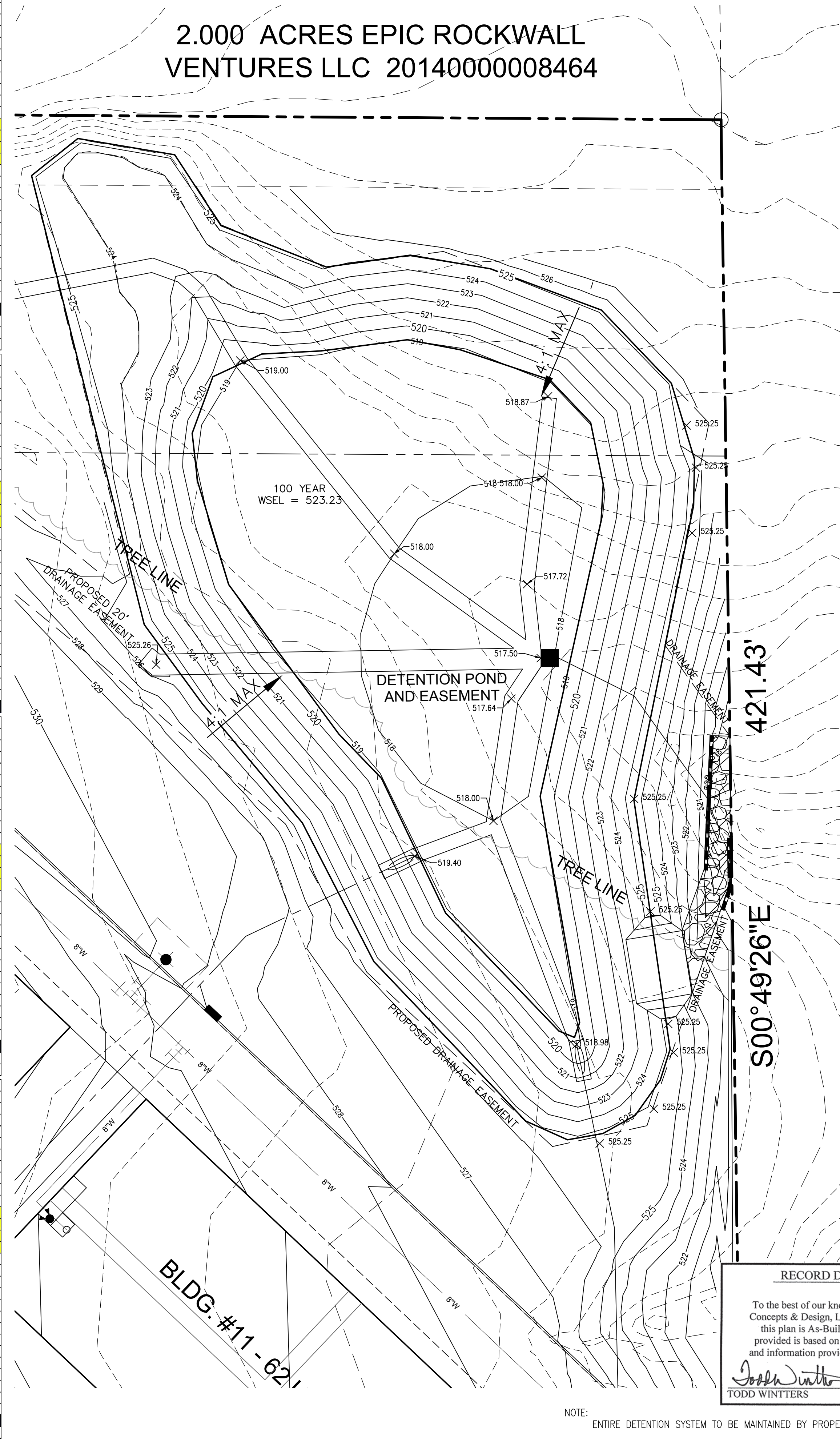
DETENTION POND VOLUME CALCULATOR						
MODIFIED RATIONAL METHOD						
25 YEAR FREQUENCY						
Acres		Q				
SITE TOTAL		8.73	22.45			
BYPASS		0.47	3.51			
Q _{Design} -Q _{Bypass}			18.94			
Present Conditions				Proposed Conditions		
DETAINED AREAS				TOTAL AREA		
EXISTING DA ID	5, 6, & 7	OS 1 & OS 2		PROPOSED DA ID	DA 1 - DA16 & O1 - O4	BYPASS AREA
AREA, ACRES	7.49	1.24		AREA, ACRES	8.73	0.47
C	0.35	0.50		C	0.90	0.90
Tc	20.00	10.00		Tc	10.00	10.00
I _s	6.60	8.30		I _s	8.30	8.30
Q _s	17.30	5.15		Q _s	65.21	3.51
Time	Inflow	Outflow	Storage(cf)		Tc	Intensity
5	28285	8522	19764		5	12.0
10	39128	11362	27766		10	8.3
15	53035	14203	38832		15	7.5
20	62227	17043	45184		20	6.6
30	77784	22724	55060		30	5.5
40	86741	28406	58336		40	4.6
50	94284	34087	60197		50	4.0
60	98998	39768	59231		60	3.5
70	108898	45449	63449		70	3.3
80	116912	51130	65782		80	3.1
90	123041	56811	66230		90	2.9
100	127283	62492	64791		100	2.7
110	129641	68173	61467		110	2.5

DETENTION POND VOLUME CALCULATOR					
MODIFIED RATIONAL METHOD					
100 YEAR FREQUENCY					
Acres		Q			
SITE TOTAL		8.73	27.83		
BYPASS		0.47	4.15		
Q _{Design} -Q _{Bypass}			23.69		
Present Conditions			Proposed Conditions		
DETAINED AREAS			TOTAL AREA		
EXISTING DA ID	5, 6, & 7	OS 1 & OS 2	PROPOSED DA ID	DA 1 - DA16 & O1 - O4	BYPASS AREA
AREA, ACRES	7.49	1.24	AREA, ACRES	8.73	0.47
C	0.35	0.50	C	0.90	0.9
Tc	20.00	10.00	Tc	10.00	10
I ₁₀₀	8.30	9.80	I ₁₀₀	9.80	9.8
Q ₁₀₀	21.76	6.08	Q ₁₀₀	77.00	4.15
Time	Inflow	Outflow	Storage (cf)	Tc	Intensity
5	35121	10660	24461	5	14.9
10	46199	14213	31986	10	9.8
15	63642	17767	45875	15	9.0
20	78256	21320	56936	20	8.3
30	97584	28427	69157	30	6.9
40	109369	35534	73836	40	5.8
50	117855	42640	75215	50	5.0
60	127283	49747	77536	60	4.5
70	131998	56854	75144	70	4.0
80	137655	63960	73694	80	3.7
90	148497	71067	77430	90	3.5
100	160283	78174	82109	100	3.4
110	163866	85281	78585	110	3.2

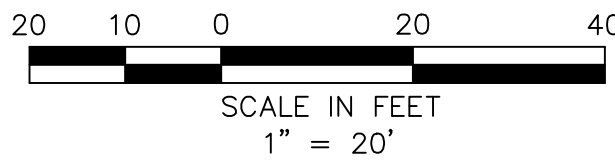
BENCHMARKS: CITY OF ROCKWALL , TEXAS – CONTROL MONUMENTATION

ROCKWALL MONUMENT "RESET #1 3" BRASS DISK FOUND AT FM 740 (RIDGE ROAD) AND SUMMER LEE DRIVE NEAR NORTHWEST CORNER OF THE PARKING LOT FOR THE COMMUNITY BANK.
N: 7011544.252; E: 2590135.160; ELEVATION: 567.704
BASED ON NAD-83 TX, STATE PLANE, NORTH CENTRAL ZONE.

2.000 ACRES EPIC ROCKWALL VENTURES LLC 20140000008464



NOTE: ENTIRE DETENTION SYSTEM TO BE MAINTAINED BY PROPERTY OWNER.



DETENTION POND

TOTAL AREA DRAINING INTO POND 15.11 AC. (DA 01-06.6 & DA 1-13)
AREA PASSING THROUGH POND 6.87 AC. (DA 05-06.6)
ONSITE DRAINAGE AREA TO POND 7.03 AC. (DA 1-13)
OFFSITE DRAINAGE AREA TO POND 1.21 AC. (DA 01-04)
AREA BYPASSING POND 0.47 AC. (DA 14, 15, & 16)

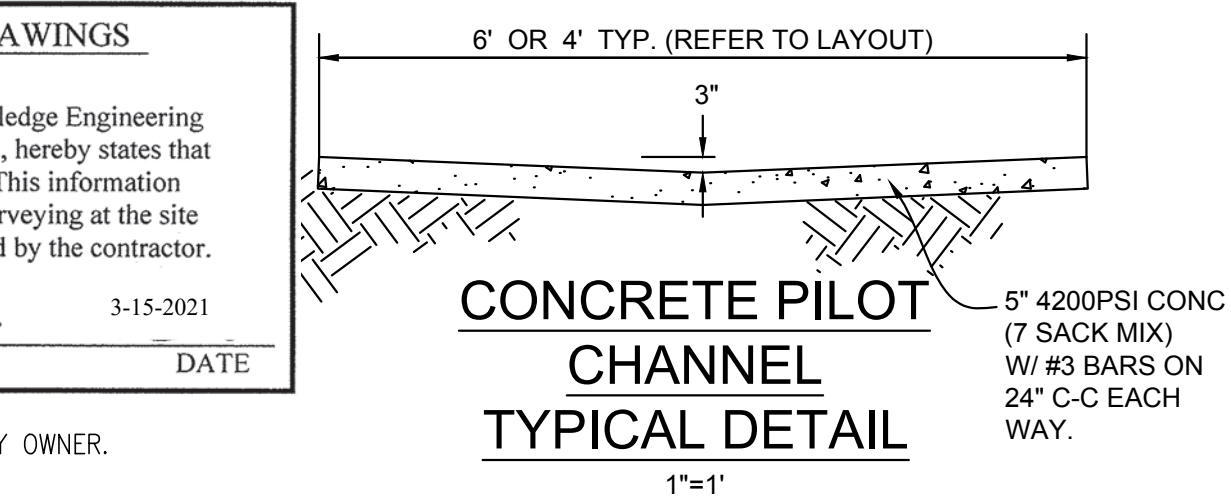
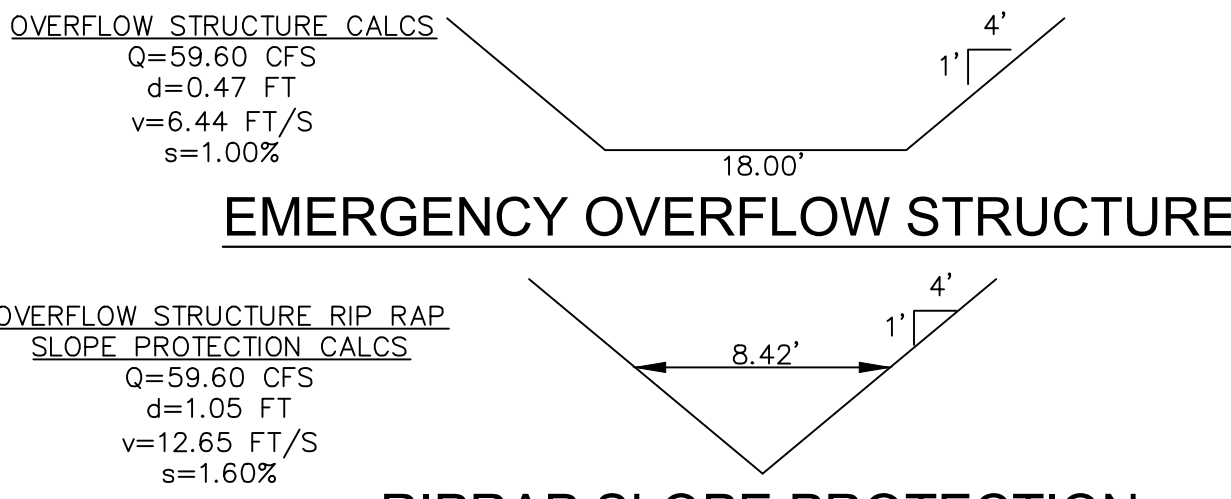
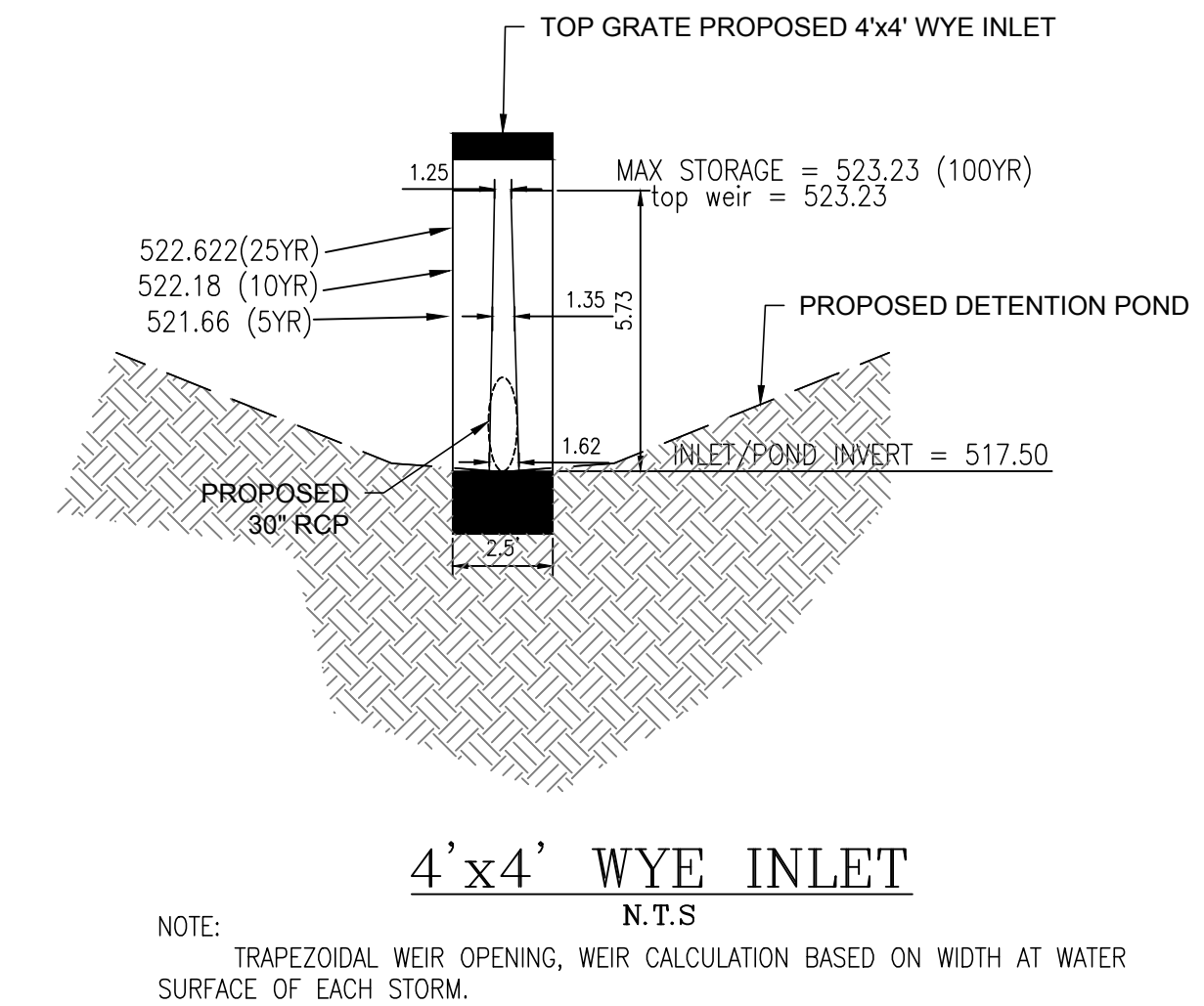
EXISTING C FACTOR, VARIES FOR DIFFERENT DA'S:
C=0.35 - DA 5, 6, & 7
C=0.50 - DA OS 1, OS2, & OS3
C=0.90 - DA OS 4
DEVELOPED C FACTOR, C=0.90

ALLOWABLE RELEASE, 5 YEAR (Q= CIA)
5 YEAR 20 MINUTE INTENSITY I=4.90
5 YEAR 10 MINUTE INTENSITY I=6.10
14.05cfs (site) 22.32cfs (pass thru)
Q(5)= 36.37 cfs (ALLOWABLE RELEASE)

ALLOWABLE RELEASE, 10 YEAR (Q= CIA)
10 YEAR 20 MINUTE INTENSITY I=5.90
10 YEAR 10 MINUTE INTENSITY I=7.10
18.87cfs (site) 25.98cfs (pass thru)
Q(10)= 42.85 cfs (ALLOWABLE RELEASE)

ALLOWABLE RELEASE, 25 YEAR (Q= CIA)
25 YEAR 20 MINUTE INTENSITY I=6.60
25 YEAR 10 MINUTE INTENSITY I=8.30
18.94cfs (site) 30.37cfs (pass thru)
Q(25)= 49.31 cfs (ALLOWABLE RELEASE)

ALLOWABLE RELEASE, 100 YEAR (Q= CIA)
100 YEAR 20 MINUTE INTENSITY I=8.30
100 YEAR 10 MINUTE INTENSITY I=9.80
23.69cfs (site) 35.86cfs (pass thru)
Q(100)= 59.55 cfs (ALLOWABLE RELEASE)



RECORD DRAWINGS
To the best of our knowledge Engineering Concepts & Design, L.P., hereby states that this plan is As-Built. This information provided is based on surveying at the site and information provided by the contractor.
TODD WINTERS
DATE 3-15-2021

CONCRETE PILOT CHANNEL
TYPICAL DETAIL
1"=1'



THIS DOCUMENT IS RELEASED FOR THE PURPOSE OF CONSTRUCTION.

REVISIONS:	
DRAWN: ECDLP	DATE: January 7, 2020
CHECKED: TW	DATE: January 7, 2020
PROJECT NO.: 5211	
DWG FILE NAME: 09-DETENTION POND.DWG	

NOTE: DETENTION SHALL BE FULLY INSTALLED & OPERATIONAL BEFORE PAVING AND BUILDING CONSTRUCTION.

Detention Pond Volume Calculations

Pond Overflow Elevation = 525.25
100yr Water Surface Elevation = 523.23
INVERT ELEVATION 517.50

Contour Elevation	Surface Area (sf)	Average Area	Cumulative Volume (cf)
517.50	0		
518.00	3,388	1,694	847
519.00	13,425	8,407	5,051
520.00	15,581	14,503	19,554
521.00	17,830	16,706	36,260
522.00	20,180	19,005	55,265
523.00	22,684	21,432	76,697
524.00	25,261	23,973	100,670
525.00	28,004	26,633	127,303

5 YEAR WS 521.66
10 YEAR WS 522.15
25 YEAR WS 522.62
100 YEAR WS 523.23

Outlet Structure Calculations 5 Year Discharge @ Max Water Surface

Q total = #####s Allowed
Storage Elevation = 521.66
Invert Elevation = 517.50
Width Weir (1) = 1.35

Q total = 38.18cfs Provided
Q ALLOW TO Q DESIGN, 10yr DIFFERENCE = #####

WEIR (1)
Q=CL(H)^{3/2}
C= 3.333
H= 4.16 {H = Storage elev. minus FL of weir}
L= 1.35
Q= 38.18cfs
Weir opening 1.35 feet x 4.16 ' @ WS 521.66

Outlet Structure Calculations 10 Year Discharge @ Max Water Surface

Q total = 42.85cfs Allowed
Storage Elevation = 522.15
Invert Elevation = 517.50
Width Weir (1) = 1.32

Q total = 44.12cfs Provided
Q ALLOW TO Q DESIGN, 10yr DIFFERENCE = 3.0%

WEIR (1)
Q=CL(H)^{3/2}
C= 3.333
H= 4.65 {H = Storage elev. minus FL of weir}
L= 1.32
Q= 44.12cfs
Weir opening 1.32 feet x 4.65 ' @ WS 522.15

Outlet Structure Calculations 25 Year Discharge @ Max Water Surface

Q total = 49.31cfs Allowed
Storage Elevation = 522.62
Invert Elevation = 517.50
Width Weir (1) = 1.29

Q total = 49.81cfs Provided
Q ALLOW TO Q DESIGN, 10yr DIFFERENCE = 1.0%

WEIR (1)
Q=CL(H)^{3/2}
C= 3.333
H= 5.12 {H = Storage elev. minus FL of weir}
L= 1.29
Q= 49.81cfs
Weir opening 1.29 feet x 5.12 ' @ WS 522.62

Outlet Structure Calculations 100 Year Discharge @ Max Water Surface

Q total = 59.55 cfs Allowed
Storage Elevation = 523.23
Invert Elevation = 523.23
Width Weir (1) = 1.25

Q total = 57.14 cfs Provided
Q ALLOW TO Q DESIGN, 10yr DIFFERENCE = -4.0%

WEIR (1)
Q=CL(H)^{3/2}
C= 3.333
H= 5.73 {H = Storage elev. minus FL of weir}
L= 1.25
Q= 57.14cfs
Weir opening 1.25 feet x 5.73 ' @ FL 523.23

WEIR (2)
Q=CL(H)^{3/2}
C= 3.333
H= 0.00 {H = Storage elev. minus FL of weir}
L= 12.0
Q= 0.00 cfs
Weir opening 12.0 feet x 0.00 ' @ FL 523.23

"Case No. SP2019-027"

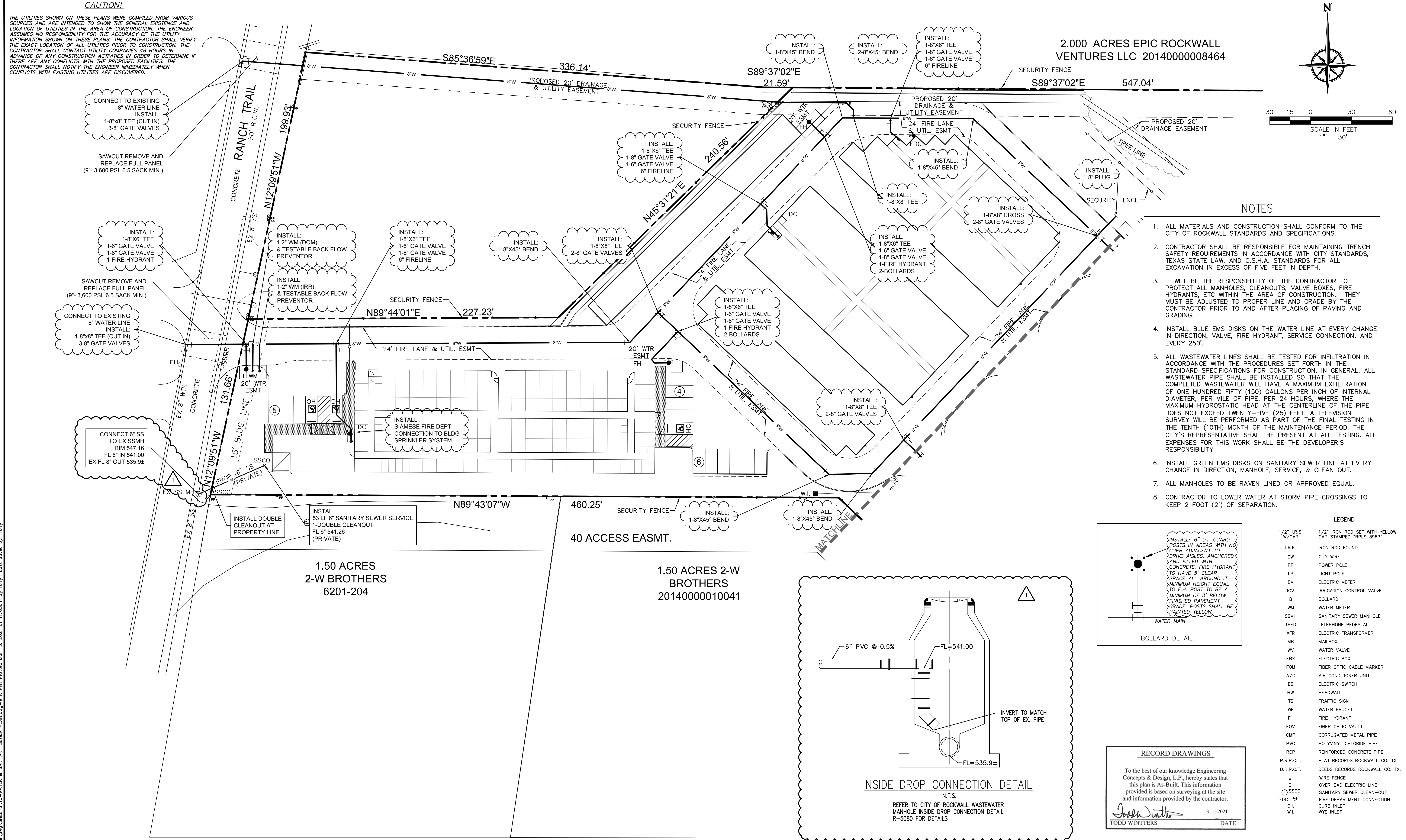
SHEET

DETENTION POND
HORIZON ROAD SELF STORAGE
PHASE 1 & 2 - 575 UNITS
TRACT 23 OF RAINBOW ACRES
CITY OF ROCKWALL, ROCKWALL COUNTY, TEXAS

15

CAUTION!
THE UTILITIES SHOWN ON THESE PLANS WERE COMPILED FROM VARIOUS SOURCES AND ARE INTENDED TO SHOW THE GENERAL EXISTENCE AND LOCATION OF UTILITIES IN THE AREA OF CONSTRUCTION. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THE ACCURACY OF THE UTILITY INFORMATION SHOWN ON THESE PLANS. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF ALL UTILITIES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL CONTACT UTILITY COMPANIES 48 HOURS IN ADVANCE OF ANY CONSTRUCTION ACTIVITIES IN ORDER TO DETERMINE IF THERE ARE ANY CONFLICTS WITH THE PROPOSED FACILITIES. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY WHEN CONFLICTS WITH EXISTING UTILITIES ARE DISCOVERED.

Y:\PROJECTS\05211 Rockwall Mini Storage\DWG\SHEETS\10-WATER & SANITARY SEWER PLAN.dwg--WTR (PH) Plotted Mar. 15, 2021 at 11:05am by Tony J. Lost Saved by: Tony



BENCHMARKS: CITY OF ROCKWALL, TEXAS - CONTROL MONUMENTATION

ROCKWALL MONUMENT "RESET #1 3" BRASS DISK FOUND AT FM 740 (RIDGE ROAD) AND SUMMER LEE DRIVE NEAR NORTHWEST CORNER OF THE PARKING LOT FOR THE COMMUNITY BANK.
N: 7011544.252; E: 2590135.160; ELEVATION: 567.704
BASED ON NAD-83 TX, STATE PLANE, NORTH CENTRAL ZONE.



ENGINEERING / PROJECT MANAGEMENT /
CONSTRUCTION SERVICES - FIRM REG. #F-001145
201 WINDCO CIR, STE 200, WYLIE, TX 75098
972-941-8400 FAX: 972-941-8401 WWW.ECDLP.COM

REVISIONS:	
03/20	REVISED SANITARY SEWER FLOWLINE & ADDED DETAIL
DRAWN: ECDLP	DATE: March 5, 2021
CHECKED: TW	DATE: January 7, 2020
PROJECT NO.: 5211	
DWG FILE NAME: 10-WATER & SANITARY SEWER PLAN.DWG	

THIS DOCUMENT IS RELEASED FOR THE
PURPOSE OF CONSTRUCTION.



WATER & SANITARY SEWER PLAN
HORIZON ROAD SELF STORAGE
PHASE 1 & 2 - 575 UNITS
TRACT 23 OF RAINBOW ACRES
CITY OF ROCKWALL, ROCKWALL COUNTY, TEXAS

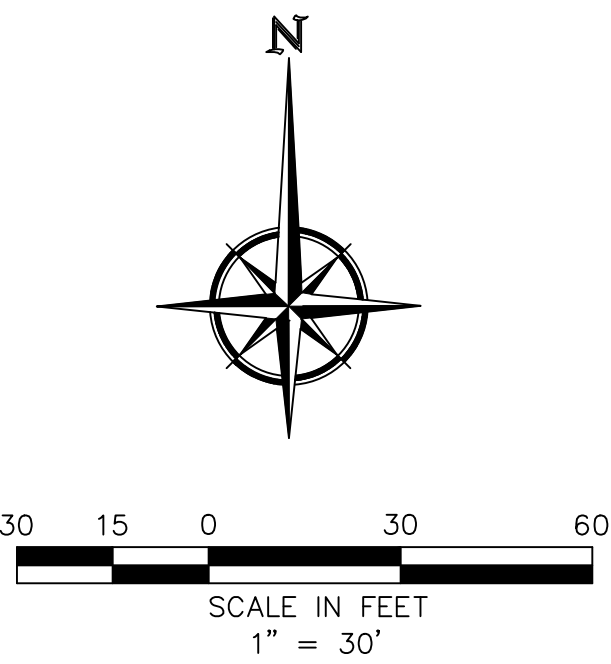
SHEET

16

"Case No. SP2019-027"

CAUTION!
THE UTILITIES SHOWN ON THESE PLANS WERE COMPILED FROM VARIOUS SOURCES AND ARE INTENDED TO SHOW THE GENERAL EXISTENCE AND LOCATION OF UTILITIES IN THE AREA OF CONSTRUCTION. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THE ACCURACY OF THE UTILITY INFORMATION SHOWN ON THESE PLANS. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF ALL UTILITIES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL CONTACT UTILITY COMPANIES 48 HOURS IN ADVANCE OF ANY CONSTRUCTION ACTIVITIES IN ORDER TO DETERMINE IF THERE ARE ANY CONFLICTS WITH THE PROPOSED FACILITIES. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY WHEN CONFLICTS WITH EXISTING UTILITIES ARE DISCOVERED.

2.000 ACRES EPIC ROCKWALL
VENTURES LLC 20140000008464

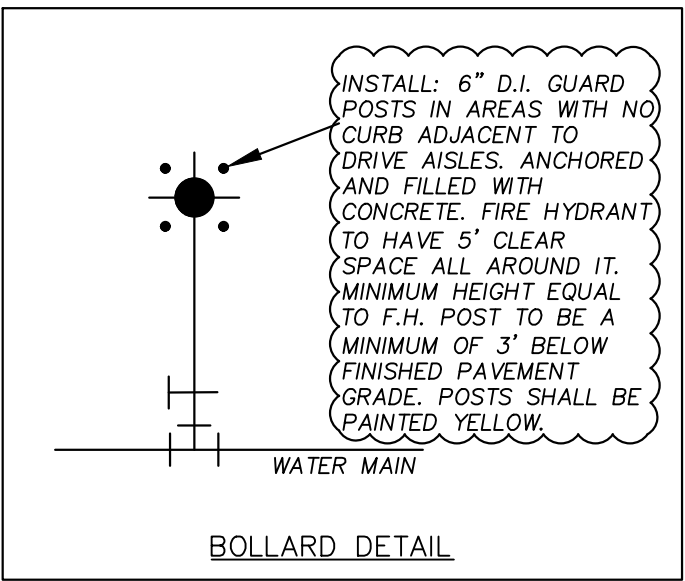


NOTES

1. ALL MATERIALS AND CONSTRUCTION SHALL CONFORM TO THE CITY OF ROCKWALL STANDARDS AND SPECIFICATIONS.
2. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING TRENCH SAFETY REQUIREMENTS IN ACCORDANCE WITH CITY STANDARDS, TEXAS STATE LAW, AND O.S.H.A. STANDARDS FOR ALL EXCAVATION IN EXCESS OF FIVE FEET IN DEPTH.
3. IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROTECT ALL MANHOLES, CLEANOUTS, VALVE BOXES, FIRE HYDRANTS, ETC WITHIN THE AREA OF CONSTRUCTION. THEY MUST BE ADJUSTED TO PROPER LINE AND GRADE BY THE CONTRACTOR PRIOR TO AND AFTER PLACING OF PAVING AND GRADING.
4. INSTALL BLUE EMS DISKS ON THE WATER LINE AT EVERY CHANGE IN DIRECTION, VALVE, FIRE HYDRANT, SERVICE CONNECTION, AND EVERY 250'.
5. ALL WASTEWATER LINES SHALL BE TESTED FOR INFILTRATION IN ACCORDANCE WITH THE PROCEDURES SET FORTH IN THE STANDARD SPECIFICATIONS FOR CONSTRUCTION. IN GENERAL, ALL WASTEWATER PIPE SHALL BE INSTALLED SO THAT THE COMPLETED WASTEWATER WILL HAVE A MAXIMUM EXFILTRATION OF ONE HUNDRED FIFTY (150) GALLONS PER INCH OF INTERNAL DIAMETER, PER MILE OF PIPE, PER 24 HOURS, WHERE THE MAXIMUM HYDROSTATIC HEAD AT THE CENTERLINE OF THE PIPE DOES NOT EXCEED TWENTY-FIVE (25) FEET. A TELEVISION SURVEY WILL BE PERFORMED AS PART OF THE FINAL TESTING IN THE TENTH (10TH) MONTH OF THE MAINTENANCE PERIOD. THE CITY'S REPRESENTATIVE SHALL BE PRESENT AT ALL TESTING. ALL EXPENSES FOR THIS WORK SHALL BE THE DEVELOPER'S RESPONSIBILITY.
6. INSTALL GREEN EMS DISKS ON SANITARY SEWER LINE AT EVERY CHANGE IN DIRECTION, MANHOLE, SERVICE, & CLEAN OUT.
7. ALL MANHOLES TO BE RAVEN LINED OR APPROVED EQUAL.
8. CONTRACTOR TO LOWER WATER AT STORM PIPE CROSSINGS TO KEEP 2 FOOT (2') OF SEPARATION.

LEGEND

1/2" I.R.S. W/CAP	1/2" IRON ROD SET WITH YELLOW CAP STAMPED "RPLS 3963"
I.R.F.	IRON ROD FOUND
GW	GUY WIRE
PP	POWER POLE
LP	LIGHT POLE
EM	ELECTRIC METER
ICV	IRRIGATION CONTROL VALVE
B	BOLLARD
WM	WATER METER
SSMH	SANITARY SEWER MANHOLE
TPED	TELEPHONE PEDESTAL
XFR	ELECTRIC TRANSFORMER
MB	MAILBOX
WV	WATER VALVE
EBX	ELECTRIC BOX
FOM	FIBER OPTIC CABLE MARKER
A/C	AIR CONDITIONER UNIT
ES	ELECTRIC SWITCH
HW	HEADWALL
TS	TRAFFIC SIGN
WF	WATER FAUCET
FH	FIRE HYDRANT
FOV	FIBER OPTIC VAULT
CMP	CORRUGATED METAL PIPE
PVC	POLYVINYL CHLORIDE PIPE
RCP	REINFORCED CONCRETE PIPE
P.R.R.C.T.	PLAT RECORDS ROCKWALL CO. TX.
D.R.R.C.T.	DEEDS RECORDS ROCKWALL CO. TX.
—	EDGE OF ASPHALT
—	WIRE FENCE
—	OVERHEAD ELECTRIC LINE
○ SSCO	SANITARY SEWER CLEAN-OUT
FDC	FIRE DEPARTMENT CONNECTION
C.I.	CURB INLET
W.I.	WYE INLET



RECORD DRAWINGS
To the best of our knowledge Engineering Concepts & Design, L.P., hereby states that this plan is As-Built. This information provided is based on surveying at the site and information provided by the contractor.
Todd Winters 3-15-2021
TODD WINTERS DATE

1.50 ACRES 2-W
BROTHERS
20140000010041

1.84 ACRES SALVADOR
DOMINGUEZ TR-1
20170000006978

BENCHMARKS: CITY OF ROCKWALL , TEXAS – CONTROL MONUMENTATION

ROCKWALL MONUMENT "RESET #1 3" BRASS DISK FOUND AT FM 740 (RIDGE ROAD) AND SUMMER LEE DRIVE NEAR NORTHWEST CORNER OF THE PARKING LOT FOR THE COMMUNITY BANK.
N: 7011544.252; E: 2590135.160; ELEVATION: 567.704
BASED ON NAD-83 TX, STATE PLANE, NORTH CENTRAL ZONE.



**ENGINEERINGCONCEPTS
& DESIGN, L.P.**

ENGINEERING / PROJECT MANAGEMENT /
CONSTRUCTION SERVICES - FIRM REG. #F-001145
201 WINDCO CIR, STE 200, WYLIE, TX 75098
972-941-8400 FAX: 972-941-8401 WWW.ECDLP.COM

REVISIONS:

DRAWN: ECDLP	DATE: March 5, 2021
CHECKED: TW	DATE: January 7, 2020
PROJECT NO.: 5211	
DWG FILE NAME: 10-WATER & SANITARY SEWER PLAN.DWG	

THIS DOCUMENT IS RELEASED FOR THE
PURPOSE OF CONSTRUCTION.

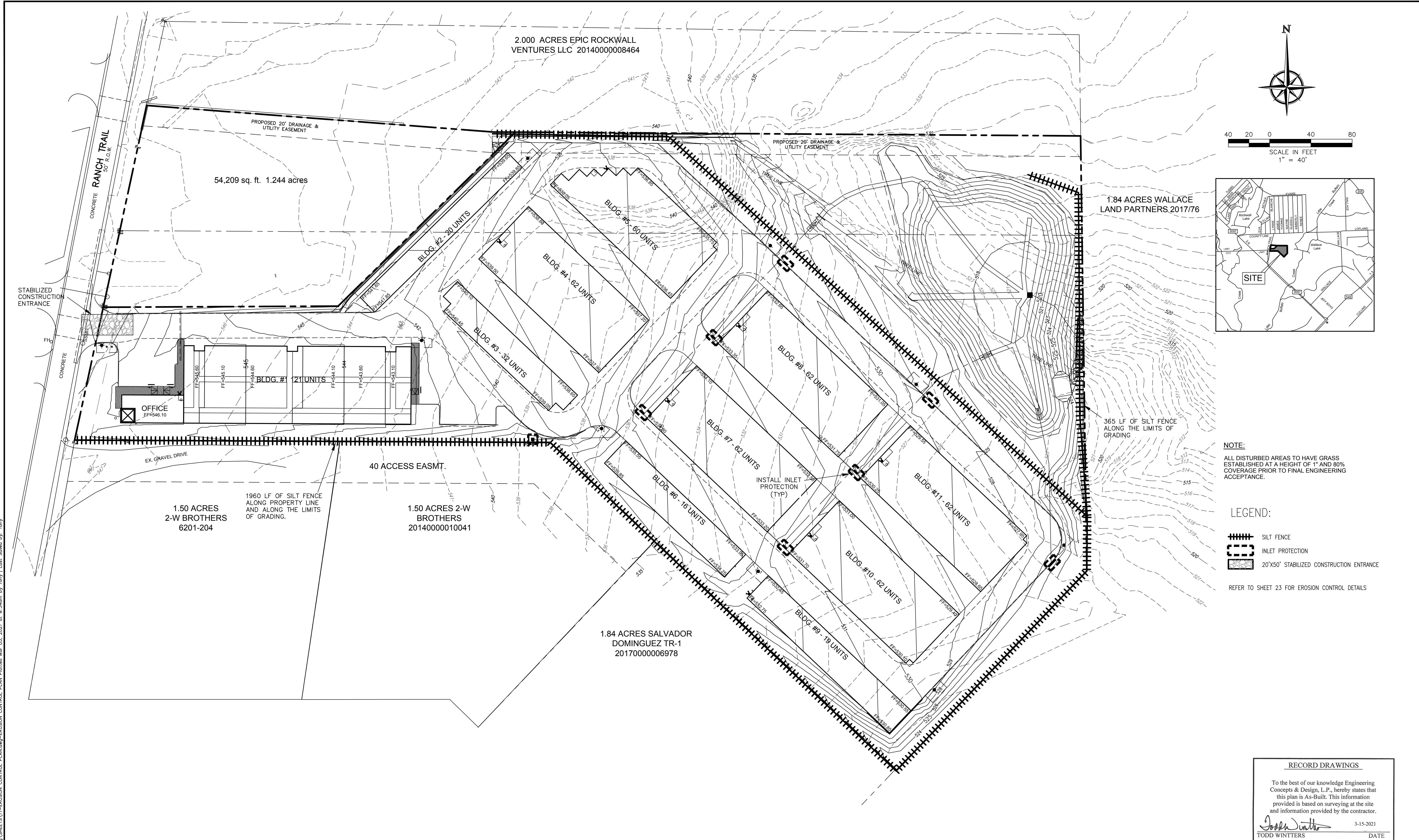


WATER PLAN
HORIZON ROAD SELF STORAGE
PHASE 1 & 2 - 575 UNITS
TRACT 23 OF RAINBOW ACRES
CITY OF ROCKWALL, ROCKWALL COUNTY, TEXAS

"Case No. SP2019-027"

SHEET

17



BENCHMARKS: CITY OF ROCKWALL , TEXAS – CONTROL MONUMENTATION

ROCKWALL MONUMENT "RESET #1 3" BRASS DISK FOUND AT FM 740 (RIDGE ROAD) AND
SUMMER LEE DRIVE NEAR NORTHWEST CORNER OF THE PARKING LOT FOR THE COMMUNITY
BANK.
N: 7011544.252; E: 2590135.160; ELEVATION: 567.704
BASED ON NAD-83 TX, STATE PLANE, NORTH CENTRAL ZONE.



ENGINEERING / PROJECT MANAGEMENT /
CONSTRUCTION SERVICES - FIRM REG. #F-001145
201 WINDCO CIR, STE 200, WYLIE, TX 75098
972-941-8400 FAX: 972-941-8401 WWW.ECDLP.COM

REVISIONS:	
DRAWN: ECDLP	DATE: January 7, 2020
CHECKED: TW	DATE: January 7, 2020
PROJECT NO.: 5211	
DWG FILE NAME: 11-EROSION CONTROL PLAN.DWG	

THIS DOCUMENT IS RELEASED FOR THE
PURPOSE OF CONSTRUCTION.



EROSION CONTROL PLAN
HORIZON ROAD SELF STORAGE
PHASE 1 & 2 - 575 UNITS
TRACT 23 OF RAINBOW ACRES
CITY OF ROCKWALL, ROCKWALL COUNTY, TEXAS

SHEET

18

"Case No. SP2019-027"

GENERAL NOTES:

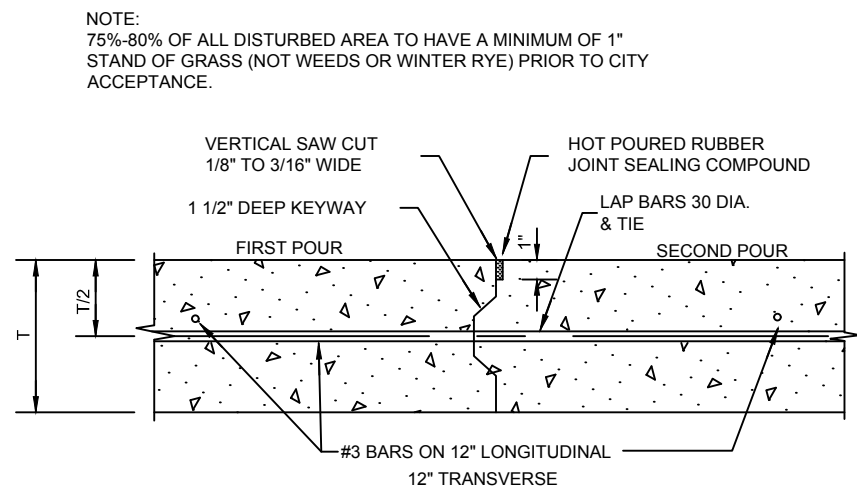
1. All work, methods, materials, and equipment shall conform to City of Rockwall Subdivision Regulations, the North Central Texas Council of Government construction standards 4th edition, any special provisions to the NCTCOG approved by the city of Rockwall. Standard details can be obtained from NCTCOG and the City of Rockwall.
2. Prior to construction, the contractor shall familiarize himself with the contract documents and specifications, the plans including all notes and any other applicable standards or specifications relevant to the proper completion of the work specified. Failure on the part of the contractor to familiarize himself with all standards or specifications pertaining to this work shall in no way relieve the contractor of responsibility for performing the work in accordance with all such applicable standards and specifications.
3. Contractor shall have in his possession, prior to construction, all—necessary permits, licenses, etc. Contractor shall have at least one set of approved engineering plans and specifications on site at all time.
4. Any item of work called for by the plans and/or specification and not included, as a bid item shall be subsidiary to the construction of the various bid items.
5. Construction inspection will be performed by representatives of the owner, engineer, City, geotechnical engineer, and reviewing authorities and agencies. Unrestricted access shall be provided to them at all times. Contractor is responsible for scheduling required inspections as required by contract documents.
6. The contractor and all subcontractors must confine their activities to the work area. Any damage resulting from work outside the work area, shall be the contractor's responsibility.
7. It will be the responsibility of each contractor to protect all existing public and private utilities throughout the construction of this project. Contractor shall contact the appropriate utility companies for line locations prior to commencement of construction and shall assume full liability to those companies for any damages caused to their facilities. Location of utilities are taken from the City and Utility Company records. Contractor shall field verify to determine exact location of utilities. Contractor to adjust all existing and proposed utilities to final grade.
8. Trench safety design will be the responsibility of the contractor. The contractor shall abide by all applicable federal, state, and local laws governing excavation. Trench side slopes shall meet OSHA standards. Shutting, shoring, and bracing shall be required when side slope standards are not meet. A pull box, meeting OSHA standards will be acceptable. The contractor shall submit detailed plans to the City Engineer for review showing how OSHA Standards for excavation shall be met prior to the start of any utility construction. The plans shall be sealed by an Engineer registered by the State of Texas.
9. Contractor shall stockpile salvage materials for inspection. All items not salvaged by the owner shall be removed from the site at the contractor's expense. The owner will transport salvaged materials away from the site at the owner's expense. Salvage, stockpile, and removal of materials shall be considered subsidiary to the various bid items and shall not be paid for directly unless such items are specifically included in the bid items.
10. The contractor shall be responsible for providing and maintaining all necessary warning and safety work, material, and operations needed to provide for the health and safety of the public until all work has been completed, including maintenance bond periods, and to be accepted by City of Rockwall in writing.
11. All fill to be compacted to 95% with sheeps foot roller in 8" lifts.

WATER NOTES:

1. All new water line shall be fully purged. Do not test against existing valves when connecting to existing lines.
2. Where water mains either cross or otherwise come within 9 feet of a sanitary sewer main, the contractor will conform to Texas Administrative Code Title 30, Part 1, Chapter 290, Subchapter D, Rule §290.44. and City requirements.
3. Utility contractor shall use MEGALUG when installing the water line and double strap services when installing the services.
4. Water services shall be installed w/double strap saddle and tap installed with a corporation stop at the distribution pipeline and an angle stop.
5. All water lines shall be pressure tested and disinfected in accordance with AWWA C 601. A passing Bacteriological test (negative for coliform) shall be achieved prior to acceptance.
6. Water pipelines shall be PVC pipe conforming to the Standard Specifications for Construction. In general, the water pipelines shall be Class 200 PVC C900 DR14 pipe, and installed with a minimum of four feet (4') of cover, unless approved by the City. All pipes shall be installed in embedment material as shown on the Standard Drawings and in conformance with the Standard Specifications of Construction. Blue EMS locator pads to be installed on waterline every 250' and at every bend, service, and valve.
7. All gate valves shall be manufactured by Mueller or an approved equal with resilient seat only and shall conform to and shall be installed according to the Standard Specifications of Construction.
8. Fire hydrants shall be either Mueller or an approved equal conforming to the requirements set forth in the Standard Specifications for Construction. All fire hydrants shall be installed with a six-inch (6") gate valve on the hydrant lead. The installation shall be as set forth in the Standard Specifications for Construction. Fire hydrants shall be painted to meet the City's requirements for color code as set forth in the Standard Specifications. In general, the fire hydrant will be reflective silver with differing cap color, which corresponds to the size of hydrant feeder line, as detailed in Table 5.2. Fire hydrants shall be installed at the end of each dead end line. Minimum main size for a fire hydrant shall be eight inches (8") if main is over fifty feet (50') long.
- In non-residential developments an eight inch (8") lead will be required on all fire hydrants that are located more than fifty feet (50') from a looped water line.
9. Service pipelines shall be in accordance with the designs shown on the Standard Drawings. The materials shall be Mueller or approved equal and shall be installed in accordance with the Standard Specifications for Construction.
10. Mega-lugs or approved equal shall be installed at all horizontal change in directions at all vertical changes in directions that require a bend. The restraints shall be placed at the bend and at the next pipe joint in each direction from the bend.
11. Commercial irrigation meters and domestic shall have a testable double check backflow preventer.
12. Install blue EMS disks on the water line at every change in direction, valve, fire hydrant, service connection, and every 250'.

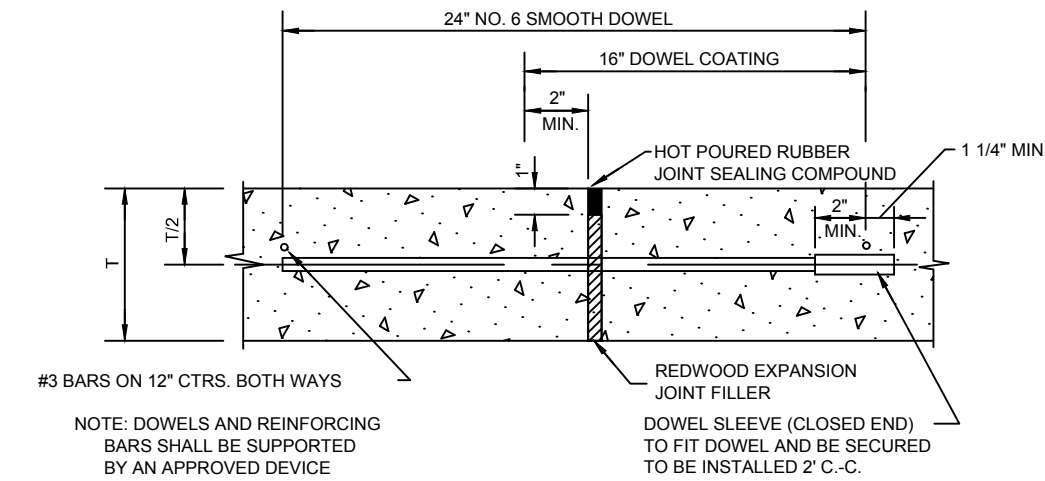
WASTEWATER NOTES:

1. All wastewater lines shall be tested for infiltration in accordance with the procedures set forth in the Standard Specifications for Construction. In general, all wastewater pipe shall be installed so that the completed wastewater will have a maximum exfiltration of one hundred fifty (150) gallons per inch of internal diameter, per mile of pipe, per 24 hours, where the maximum hydrostatic head at the centerline of the pipe does not exceed twenty-five (25) feet. A television survey will be performed as part of the final testing in the tenth (10th) month of the maintenance period. The City's representative shall be present at all testing. All expenses for this work shall be the developer's responsibility.
2. Install green EMS disks on sanitary sewer line at every change in direction, manhole, service, & clean out.
3. All manholes to be Raven lined or approved equal.



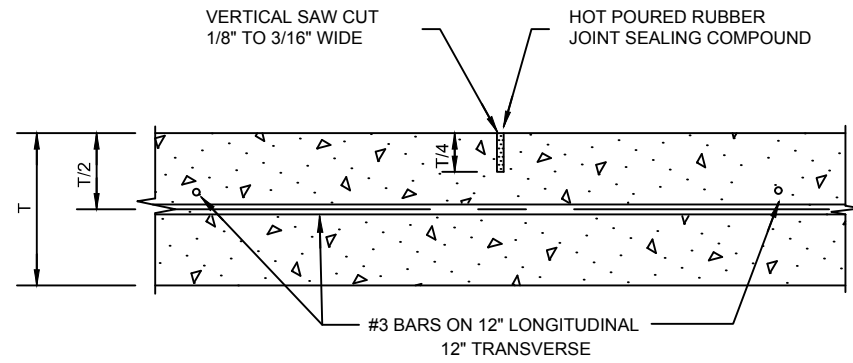
CONSTRUCTION JOINT DETAIL

N.T.S.



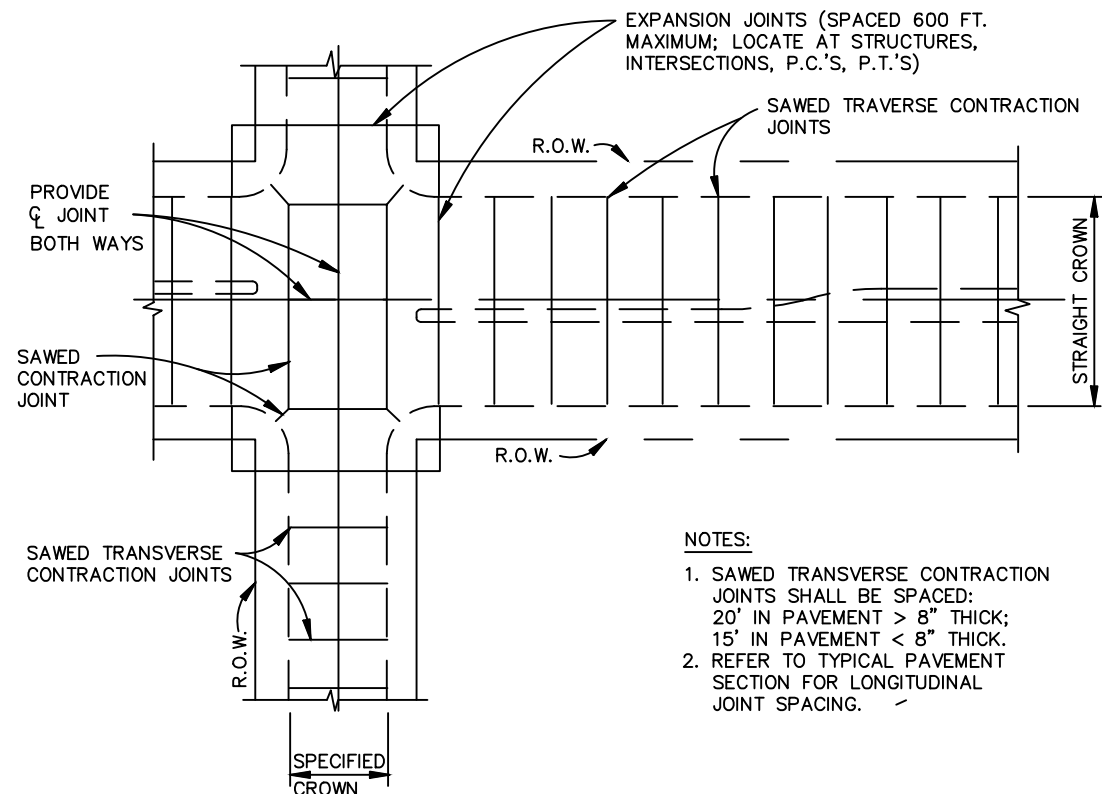
TRANSVERSE EXPANSION JOINT DETAIL

NOTE: SPACE 600' O.C., LOCATE AT INTERSECTIONS



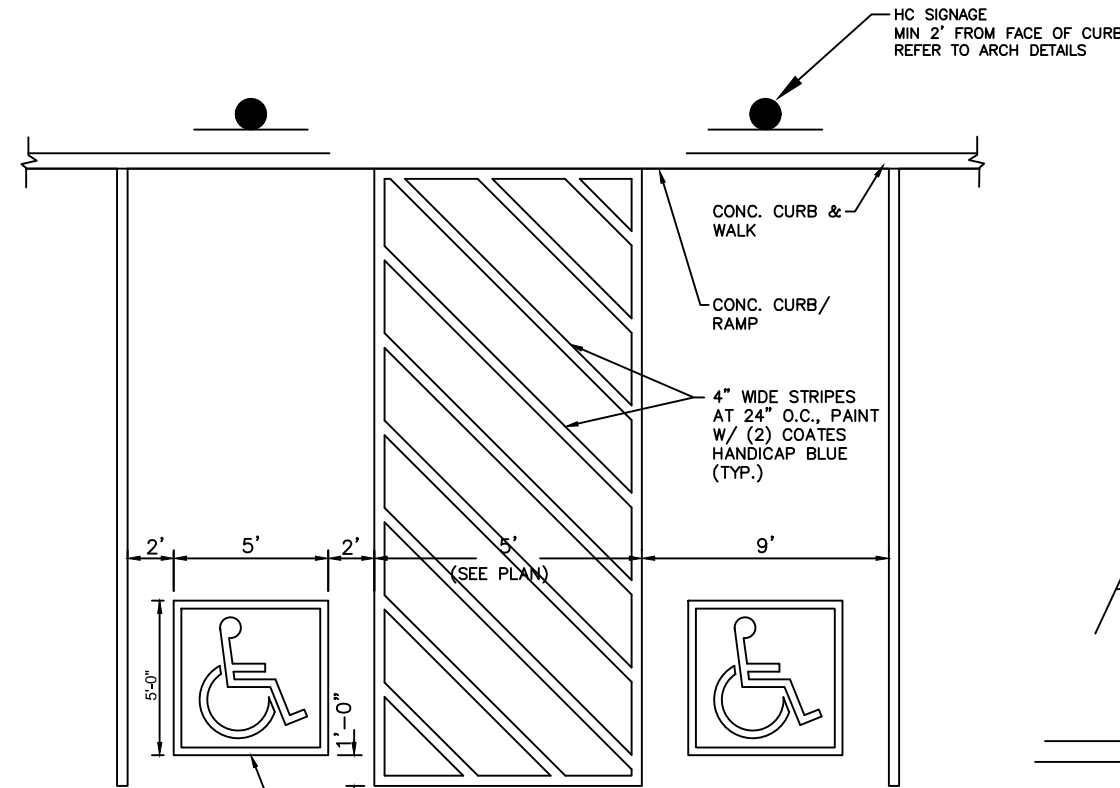
SAWED DUMMY JOINT DETAIL

N.T.S.



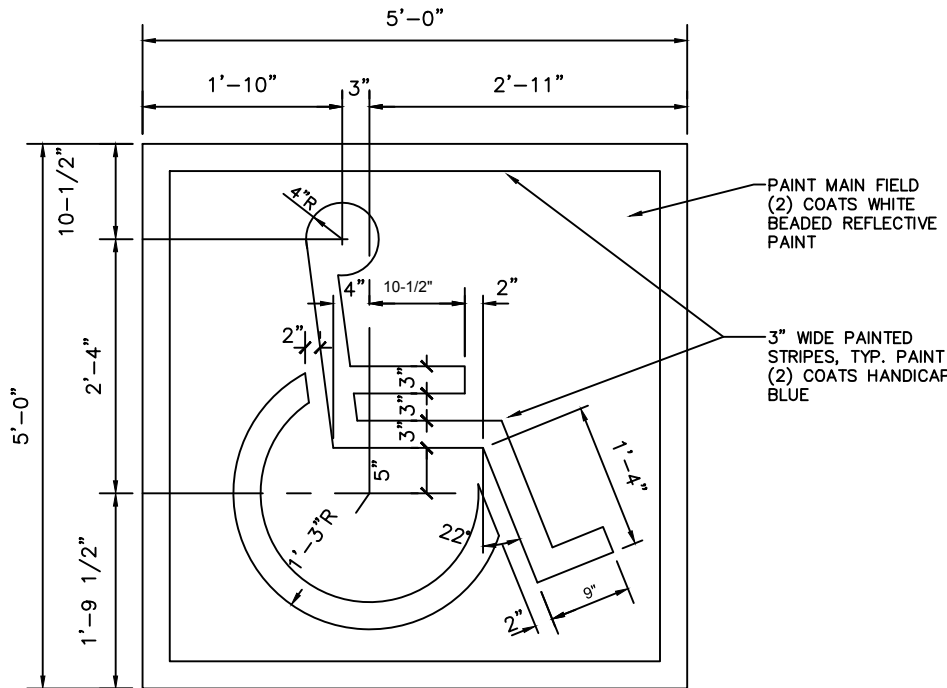
SPACING DIAGRAM FOR TRANSVERSE JOINTS

N.T.S.



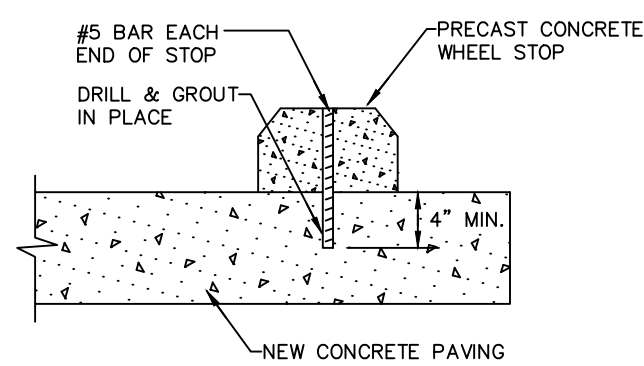
ACCESSIBILITY PARKING

N.T.S.



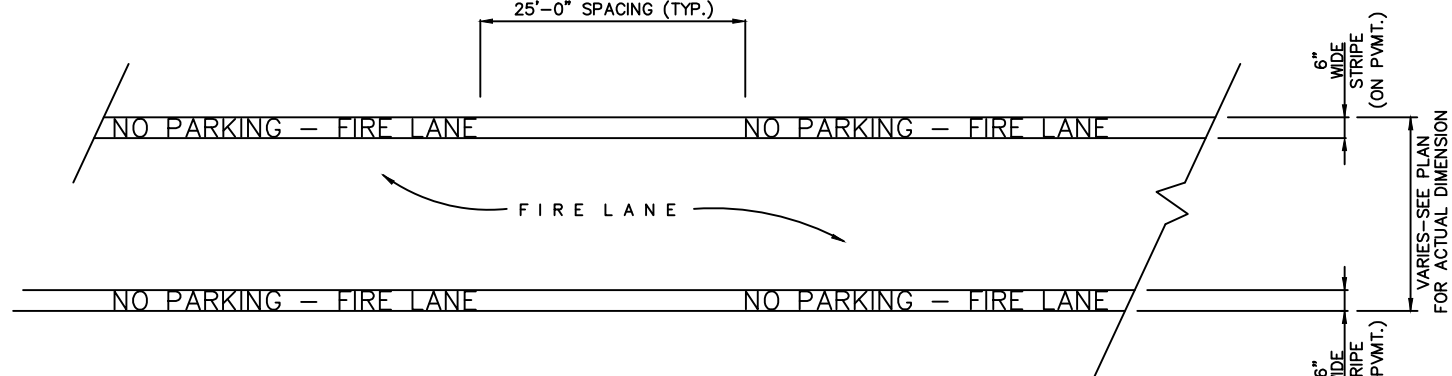
PAINTED ACCESSIBILITY SYMBOL

N.T.S.



WHEEL STOP DETAIL

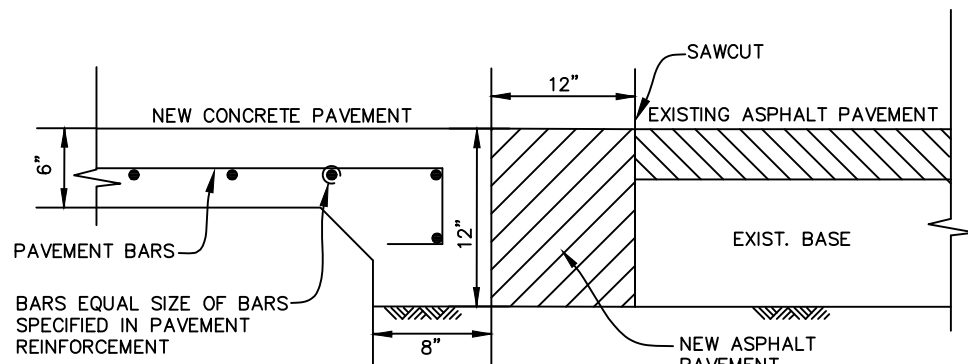
N.T.S.



FIRELANE STRIPING DETAIL

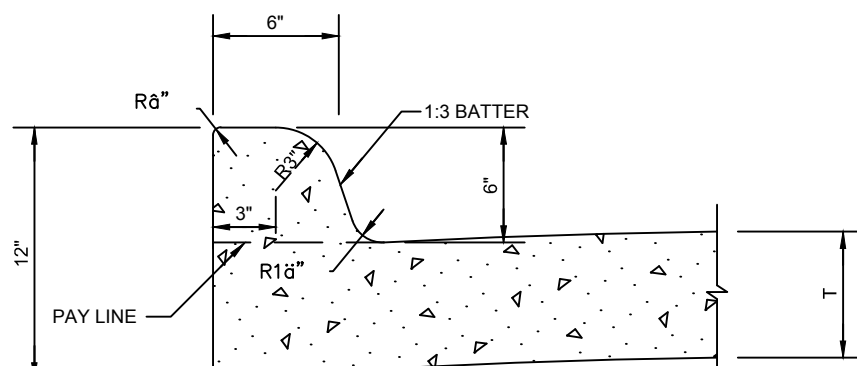
N.T.S.

- NOTE: Firelane markings shall be placed on curb when firelane is adjacent to curb and on pavement in all other applications.
- STRIPING DETAILS AND SPECIFICATIONS
- A. Paint:
1. Stripe shall be six (6) inches wide when on pavement and from the top of the seam of the curb to a point even with the driving surface when on curb, painted with an exterior acrylic latex paint.
 - a. Color shall be "Traffic Red" Glidden No. 63251 or equal.
 2. Letters shall be four (4) inches high pointed with an exterior acrylic latex paint.
 - b. Color shall be "Traffic White" Glidden No. 563245 or equal.
- B. Application:
1. Stripe may be brushed or sprayed, one coat to finish.
 2. Letters shall be stencil formed, brush applied and spaced as detailed on this sheet.



CONNECTION TO EXISTING ASPHALT PAVEMENT

N.T.S.



INTEGRAL CURB DETAIL

N.T.S.

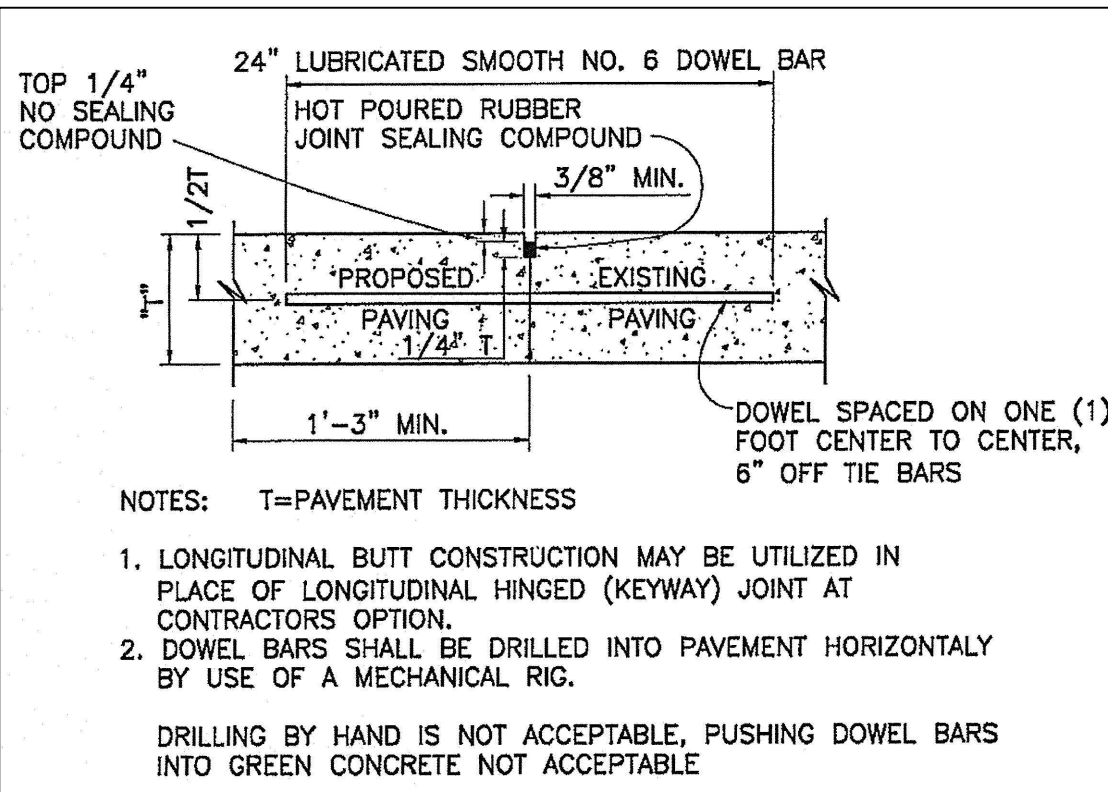
NOTE:

- DETENTION / DRAINAGE TO BE MAINTAINED, AND REPAIRED BY PROPERTY OWNER.
- DETENTION / DRAINAGE TO BE FULLY INSTALLED PER PLAN AND MAINTAINED INCLUDING SOD OR SEEDED ANCHORED CURLEX ON SIDES AND BOTTOM BEFORE PAVING IS INSTALLED.
- ALL ROW(S) TO BE SODDED PRIOR TO CITY ACCEPTANCE AND CO/CO.

RECORD DRAWINGS

To the best of our knowledge Engineering Concepts & Design, L.P., hereby states that this plan is As-Built. This information provided is based on surveying at the site and information provided by the contractor.

Todd Winters 3-15-2021
TODD WINTERS DATE



LONGITUDINAL BUTT JOINT

N.T.S.

BENCHMARKS: CITY OF ROCKWALL , TEXAS – CONTROL MONUMENTATION

ROCKWALL MONUMENT "RESET #1 3" BRASS DISK FOUND AT FM 740 (RIDGE ROAD) AND SUMMER LEE DRIVE NEAR NORTHWEST CORNER OF THE PARKING LOT FOR THE COMMUNITY BANK.
N: 7011544.252; E: 2590135.160; ELEVATION: 567.704
BASED ON NAD-83 TX, STATE PLANE, NORTH CENTRAL ZONE.



ENGINEERING / PROJECT MANAGEMENT /
CONSTRUCTION SERVICES - FIRM REG. #F-001145
201 WINDCO CIR, STE 200, WYLIE, TX 75098
972-941-8400 FAX: 972-941-8401 WWW.ECDLP.COM

REVISIONS:	
DRAWN: ECDLP	DATE: January 7, 2020
CHECKED: TW	DATE: January 7, 2020
PROJECT NO.: 5211	
DWG FILE NAME: 12-GENERAL NOTES & SITE DETAILS.DWG	

THIS DOCUMENT IS RELEASED FOR THE
PURPOSE OF CONSTRUCTION.



GENERAL NOTES & SITE DETAILS
HORIZON ROAD SELF STORAGE
PHASE 1 & 2 - 575 UNITS
TRACT 23 OF RAINBOW ACRES
CITY OF ROCKWALL, ROCKWALL COUNTY, TEXAS

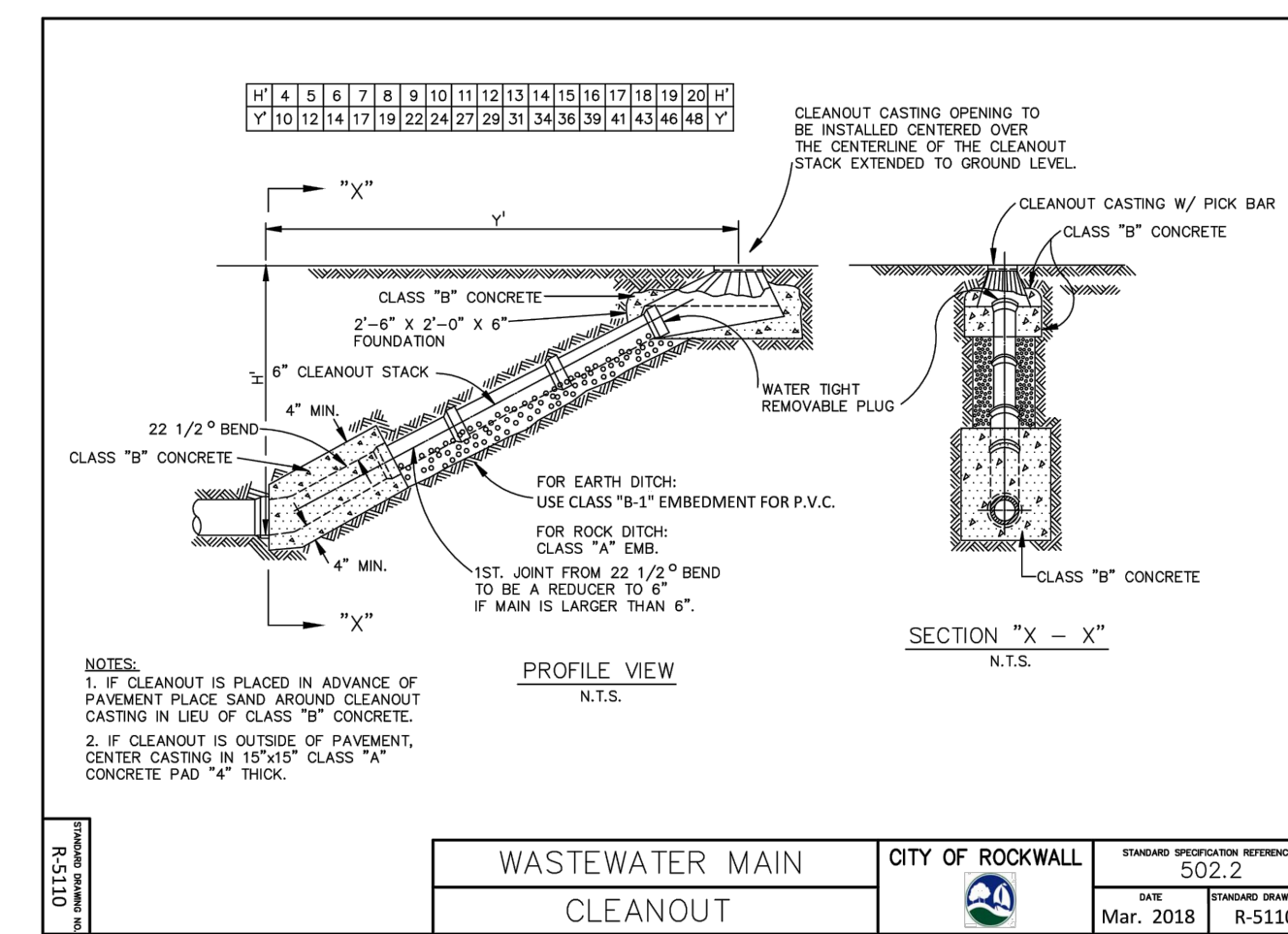
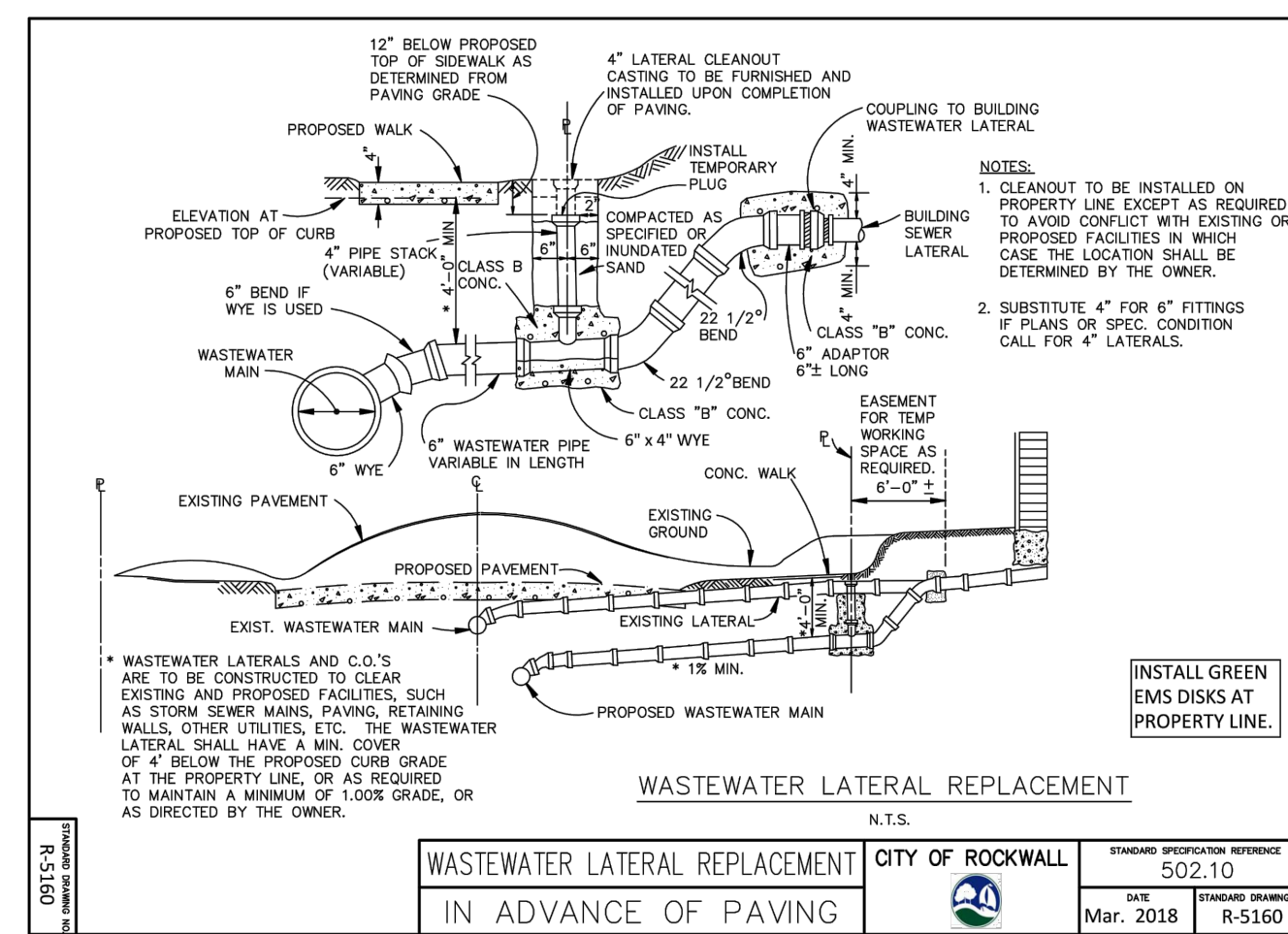
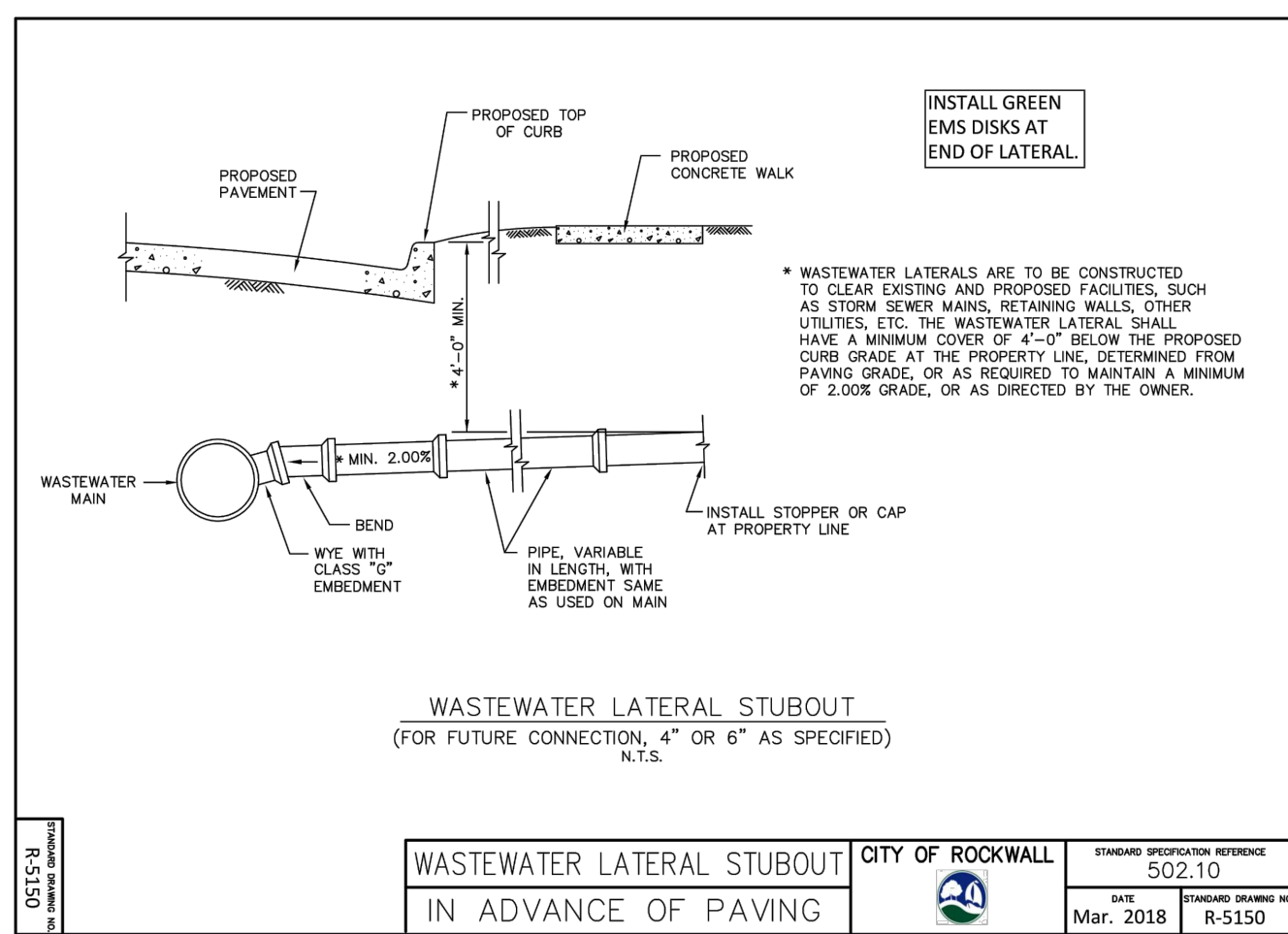
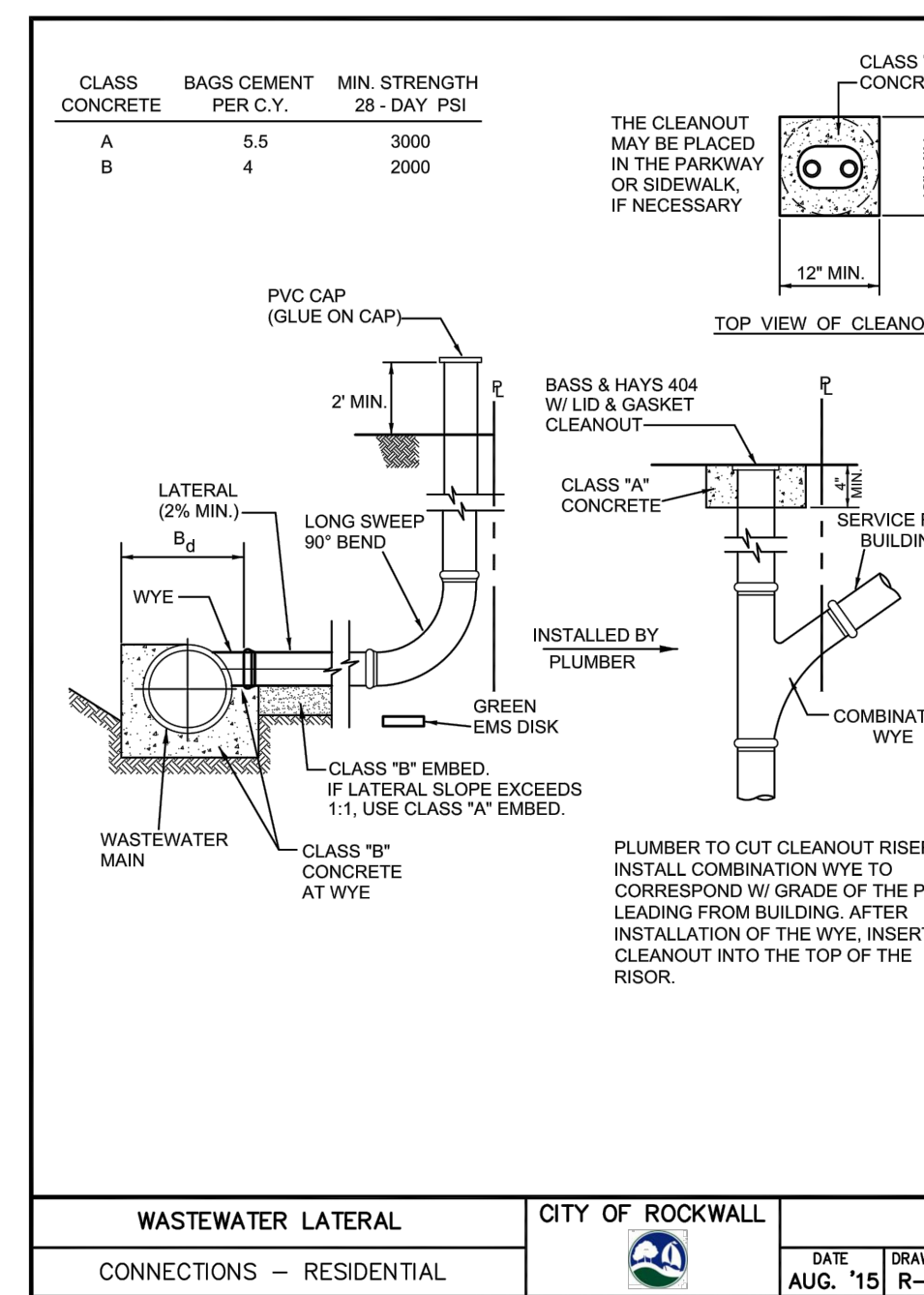
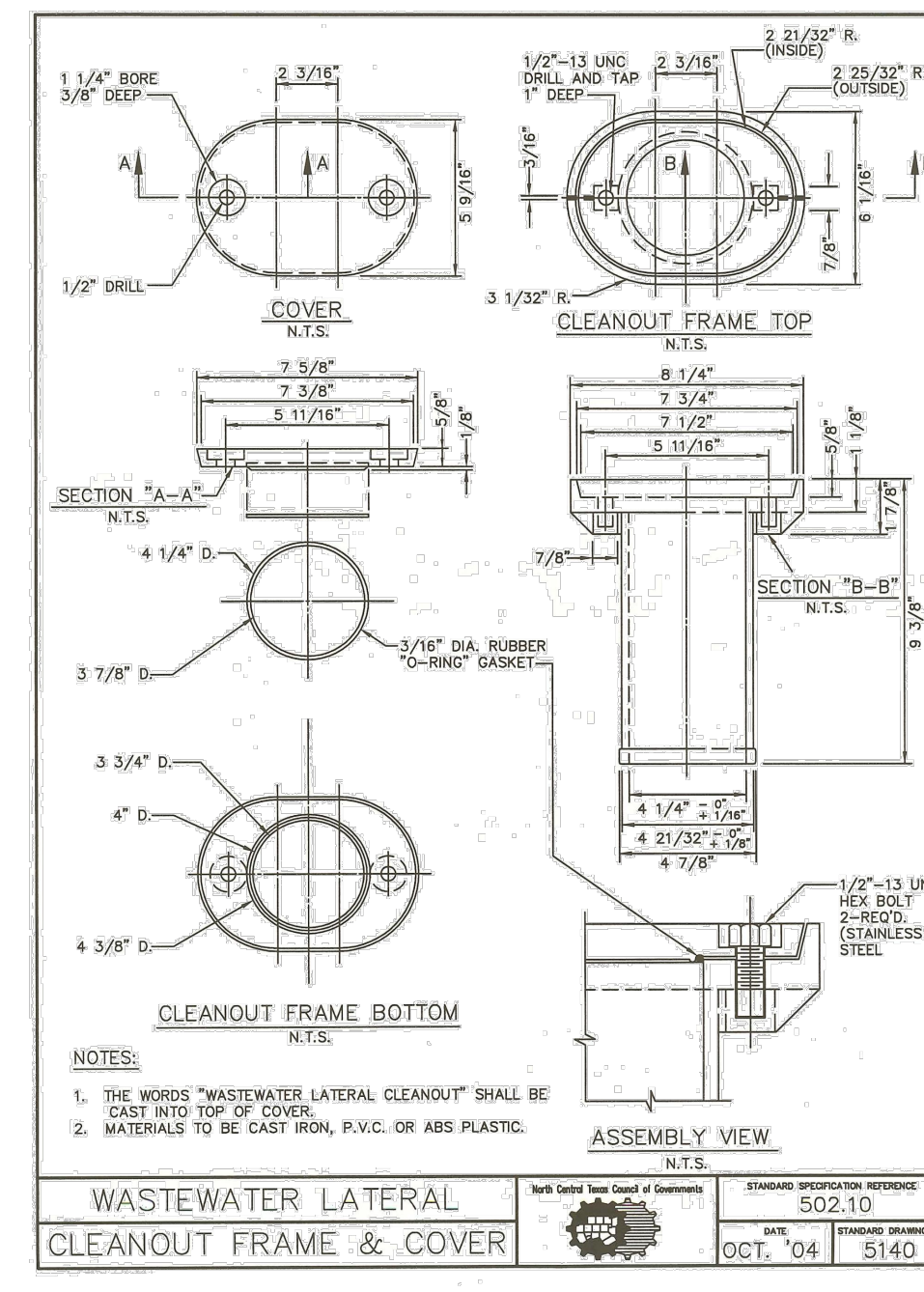
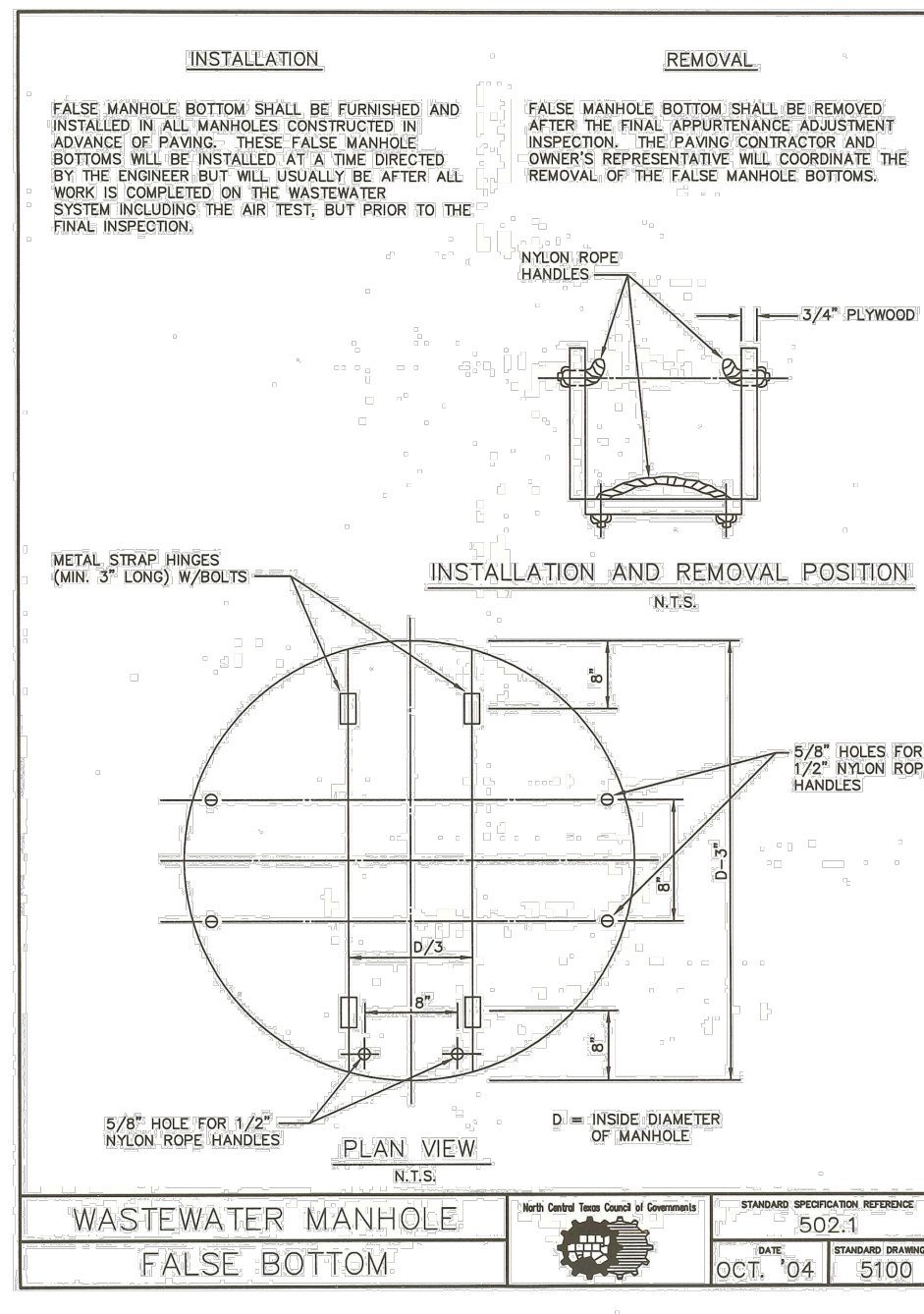
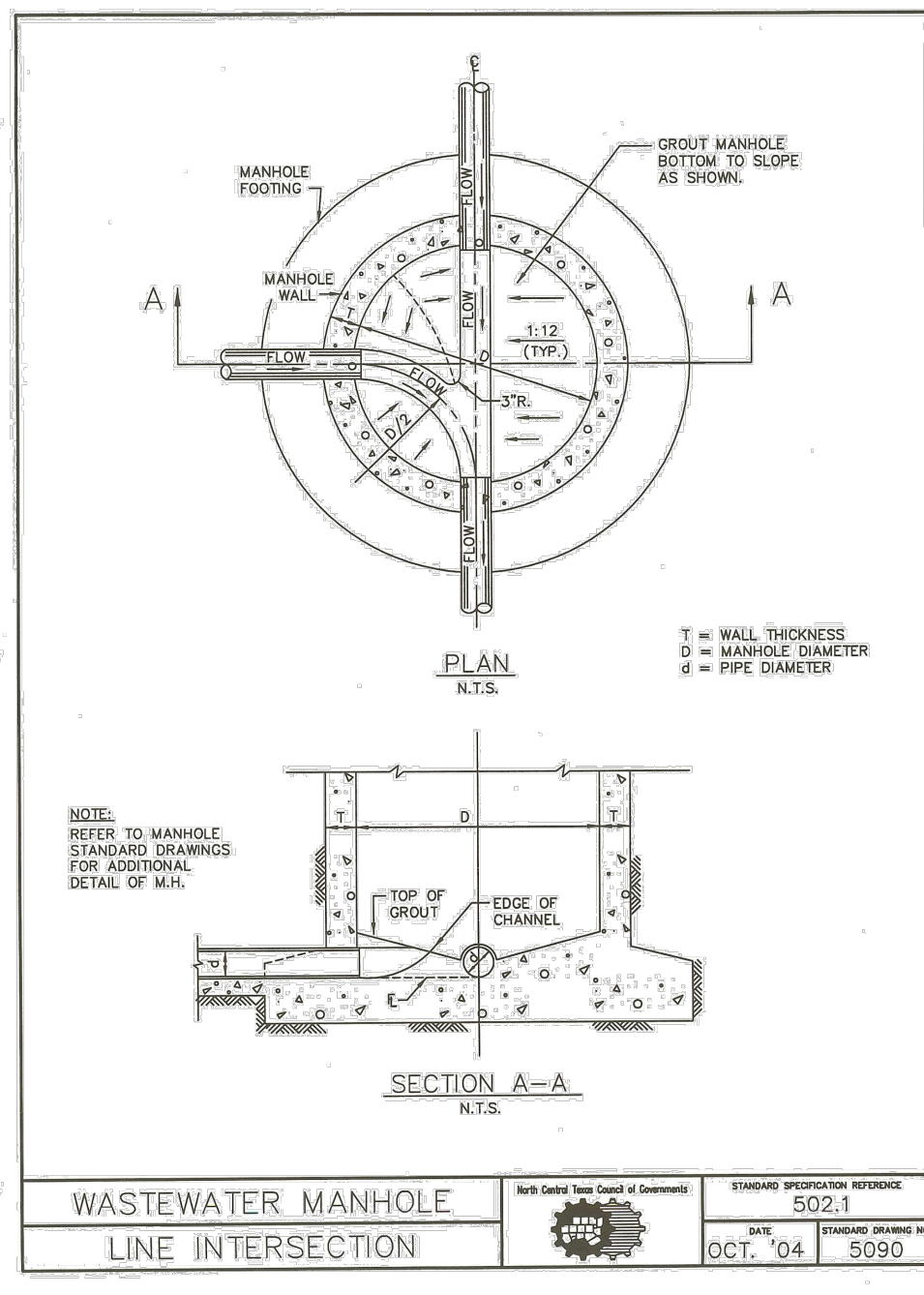
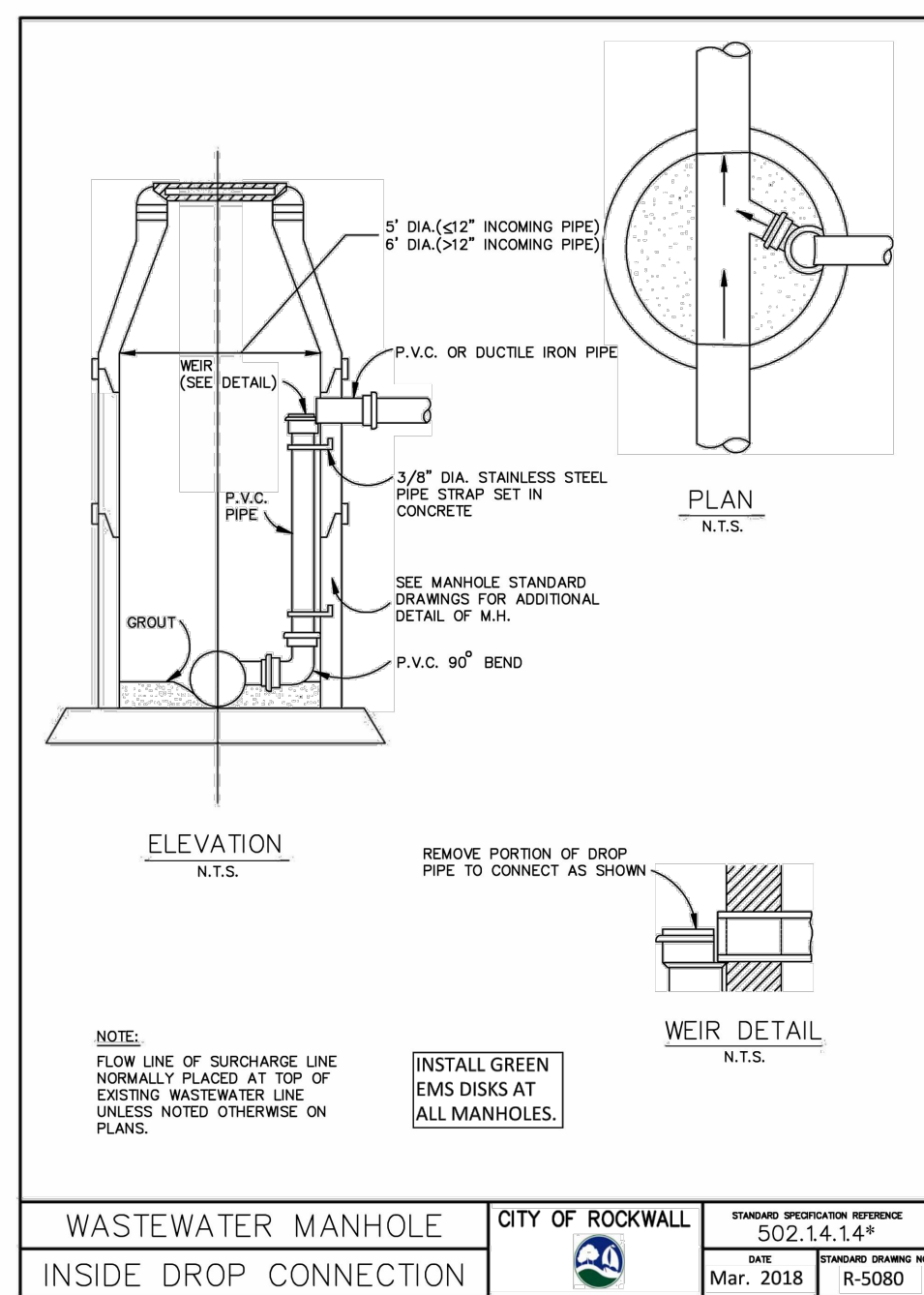
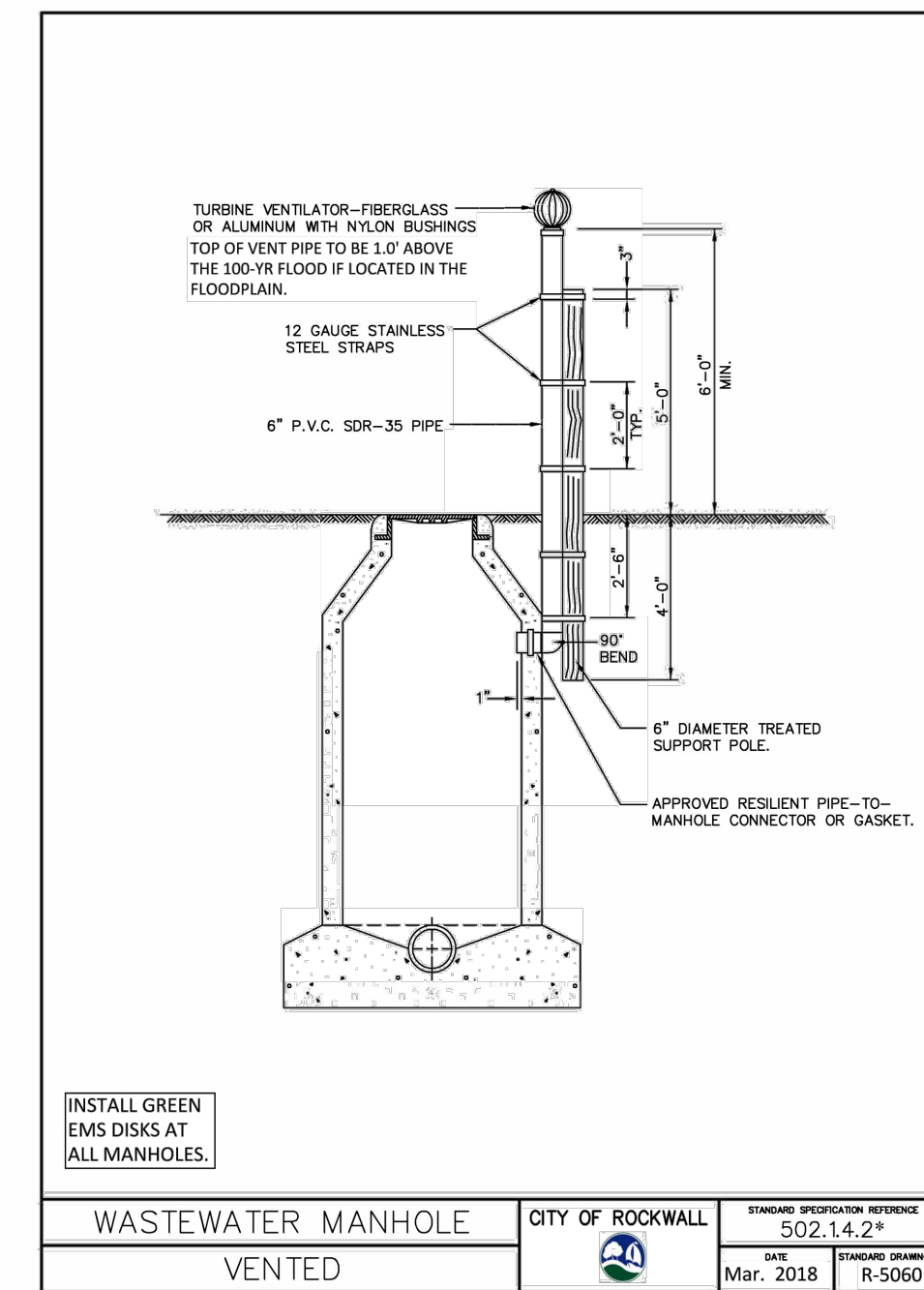
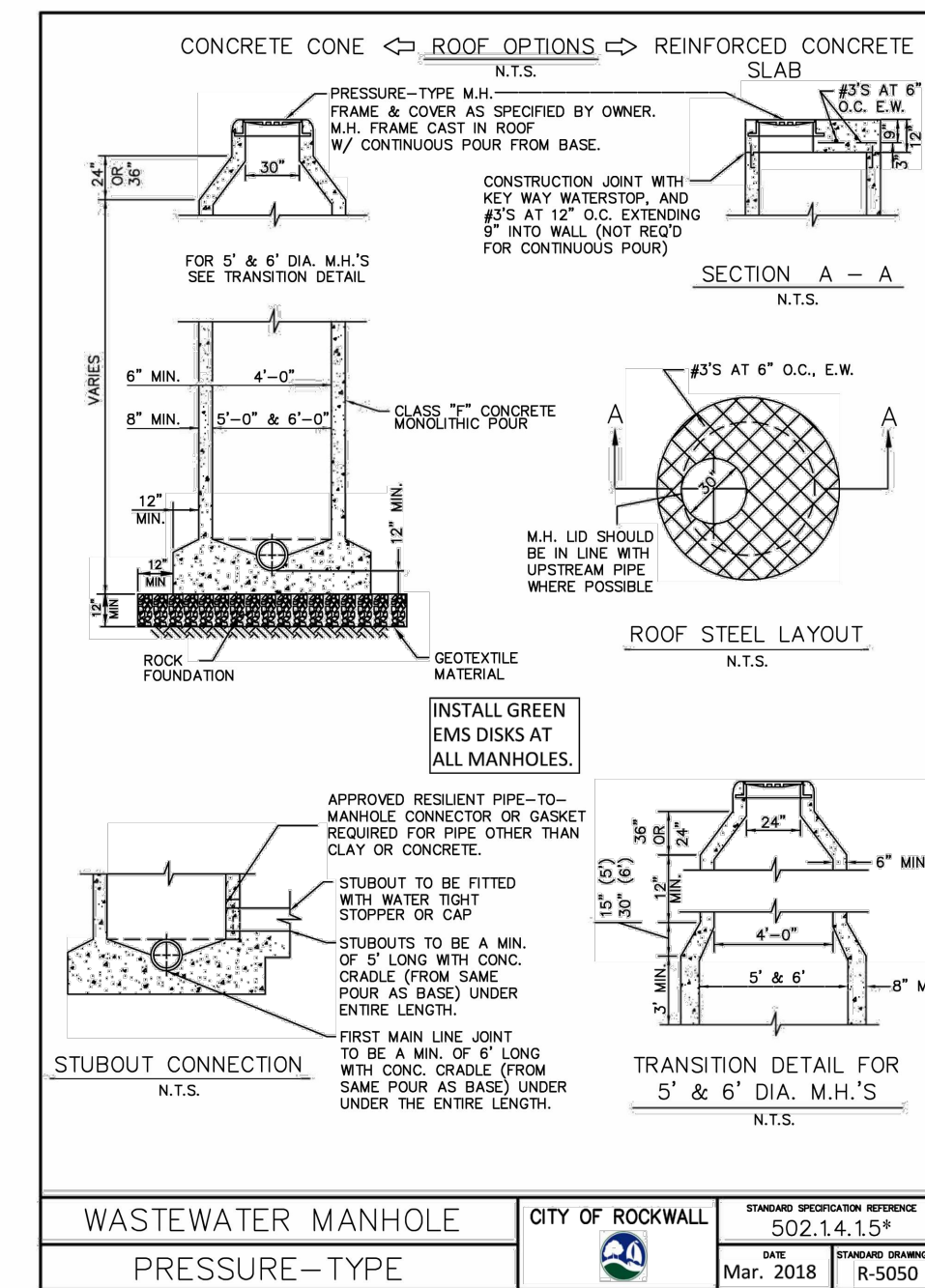
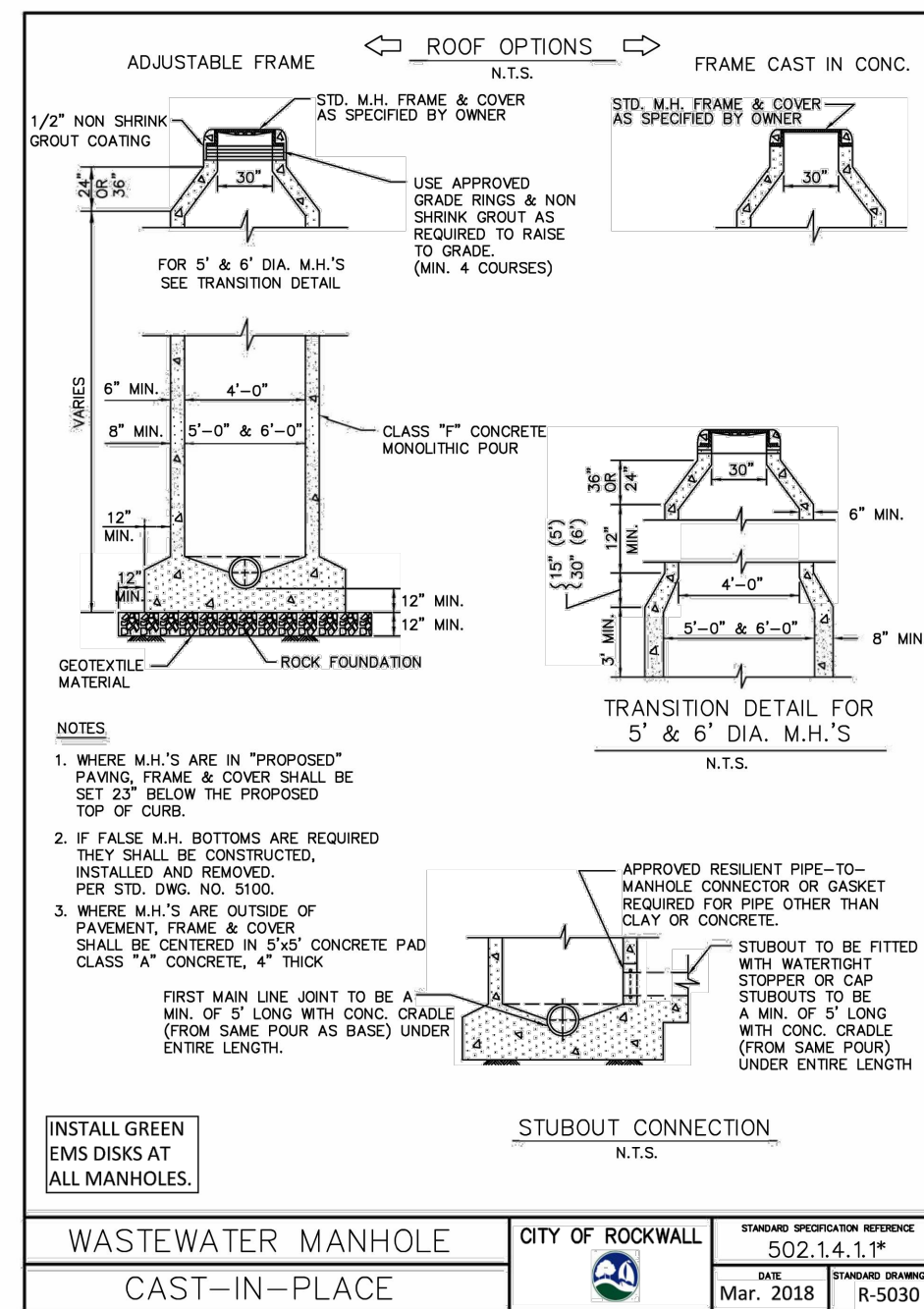
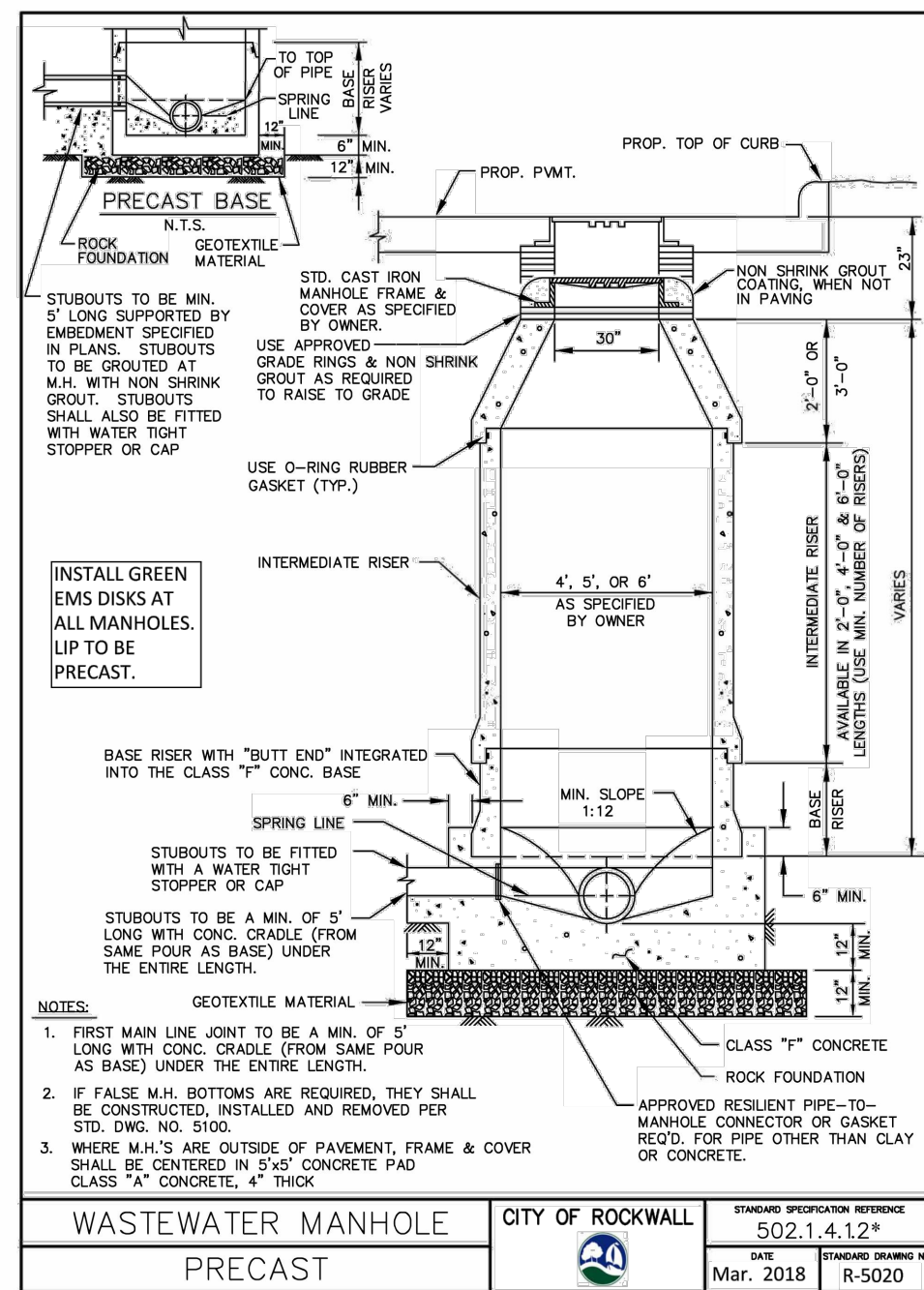
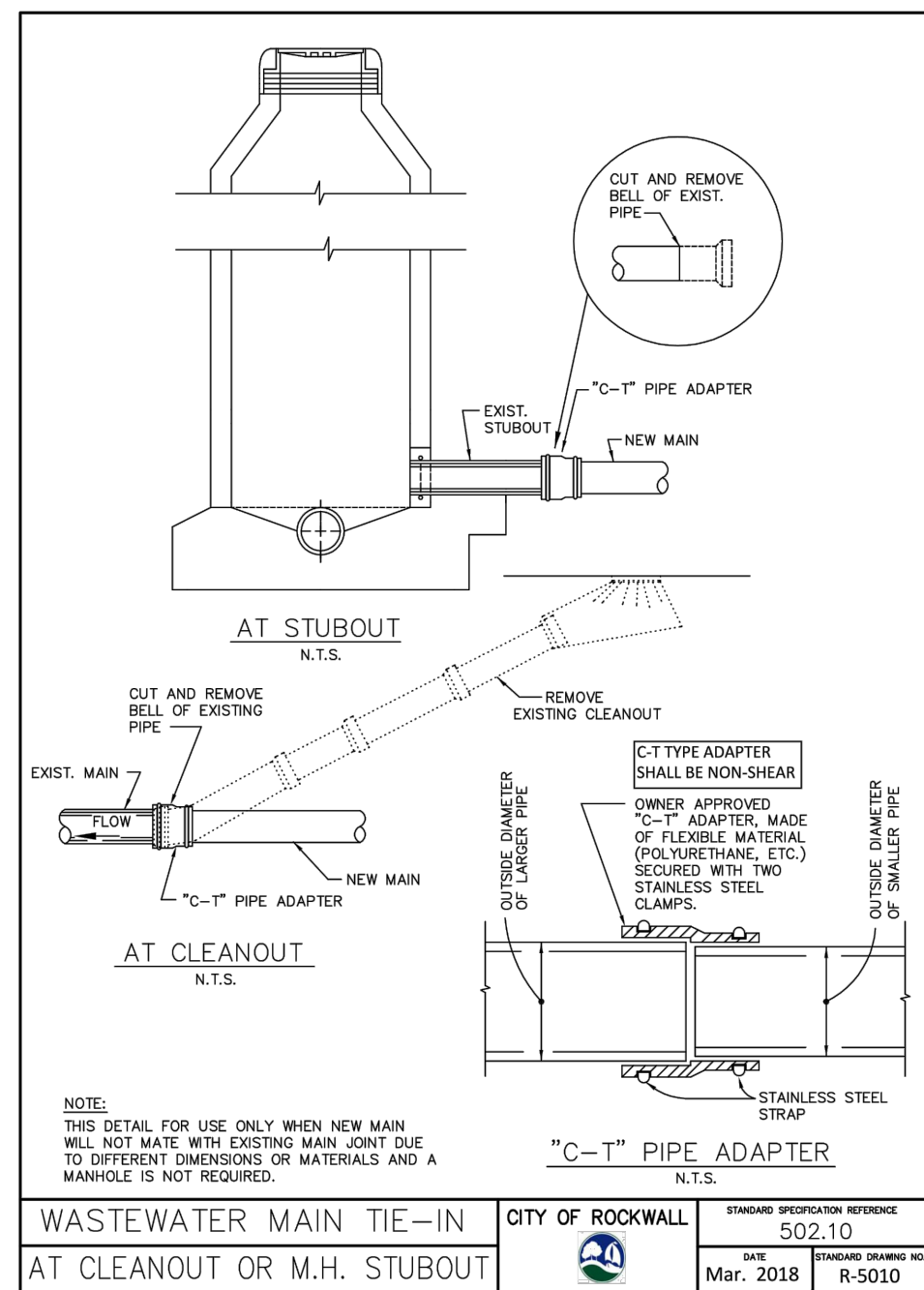
SHEET

19

"Case No. SP2019-027"

Z:\PROJECTS\05211 Rockwall Mini Storage\Drawings\GEN NOTES SITE DETAILS.dwg--GEN NOTES & SITE DETAILS.dwg--SHEETS\12--GENERAL NOTES & SITE DETAILS.dwg--TODD WINTERS 3-15-2021 at 9:35am by Tony I Last Saved by: Tony

Z:\PROJECTS\05211 Rockwall Mini Storage\dwg-SANITARY SEWER DETAILS.dwg-SANITARY SEWER DETAILS Plotted Mar. 05, 2021 at 9:32am by Tony I Last Saved by: Tony



RECORD DRAWINGS

To the best of our knowledge Engineering Concepts & Design, L.P., hereby states that this plan is As-Built. This information provided is based on surveying at the site and information provided by the contractor.

Todd Winters 3-15-2021

TODD WINTERS DATE

NOTE: NCTCOG DETAILS SHOWN HEREON HAVE BEEN MODIFIED TO INCLUDE THE CITY OF ROCKWALL UPDATES* AS PUBLISHED IN THE CITY OF ROCKWALL'S UNIFIED DEVELOPMENT CODE. REFER TO THE CITY DOCUMENT FOR EXACT DESCRIPTIONS OF THE UPDATES.

BENCHMARKS: CITY OF ROCKWALL, TEXAS - CONTROL MONUMENTATION

ROCKWALL MONUMENT "RESET #1 3" BRASS DISK FOUND AT FM 740 (RIDGE ROAD) AND SUMMER LEE DRIVE NEAR NORTHWEST CORNER OF THE PARKING LOT FOR THE COMMUNITY BANK.
N: 7011544.252; E: 2590135.160; ELEVATION: 567.704
BASED ON NAD-83 TX, STATE PLANE, NORTH CENTRAL ZONE.

ENGINEERINGCONCEPTS & DESIGN, L.P.

ENGINEERING / PROJECT MANAGEMENT /
CONSTRUCTION SERVICES - FIRM REG. #F-001145
201 WINDCO CIR, STE 200, WYLIE, TX 75098
972-941-8400 FAX: 972-941-8401 WWW.ECDLP.COM

REVISIONS:

DRAWN: ECDLP DATE: January 7, 2020
CHECKED: TW DATE: January 7, 2020
PROJECT NO.: 5211
DWG FILE NAME: 14-SANITARY SEWER DETAILS.DWG

THIS DOCUMENT IS RELEASED FOR THE PURPOSE OF CONSTRUCTION.



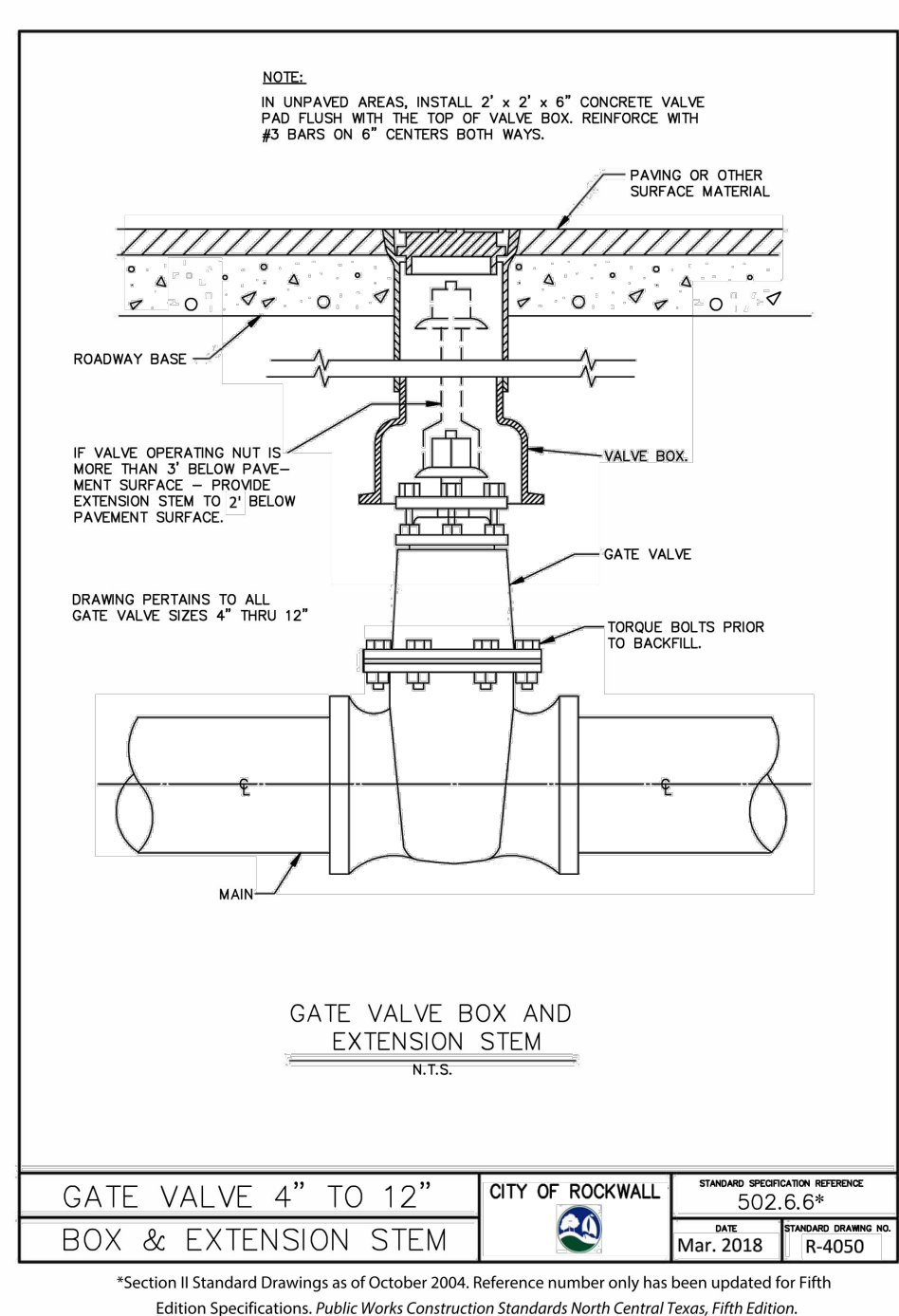
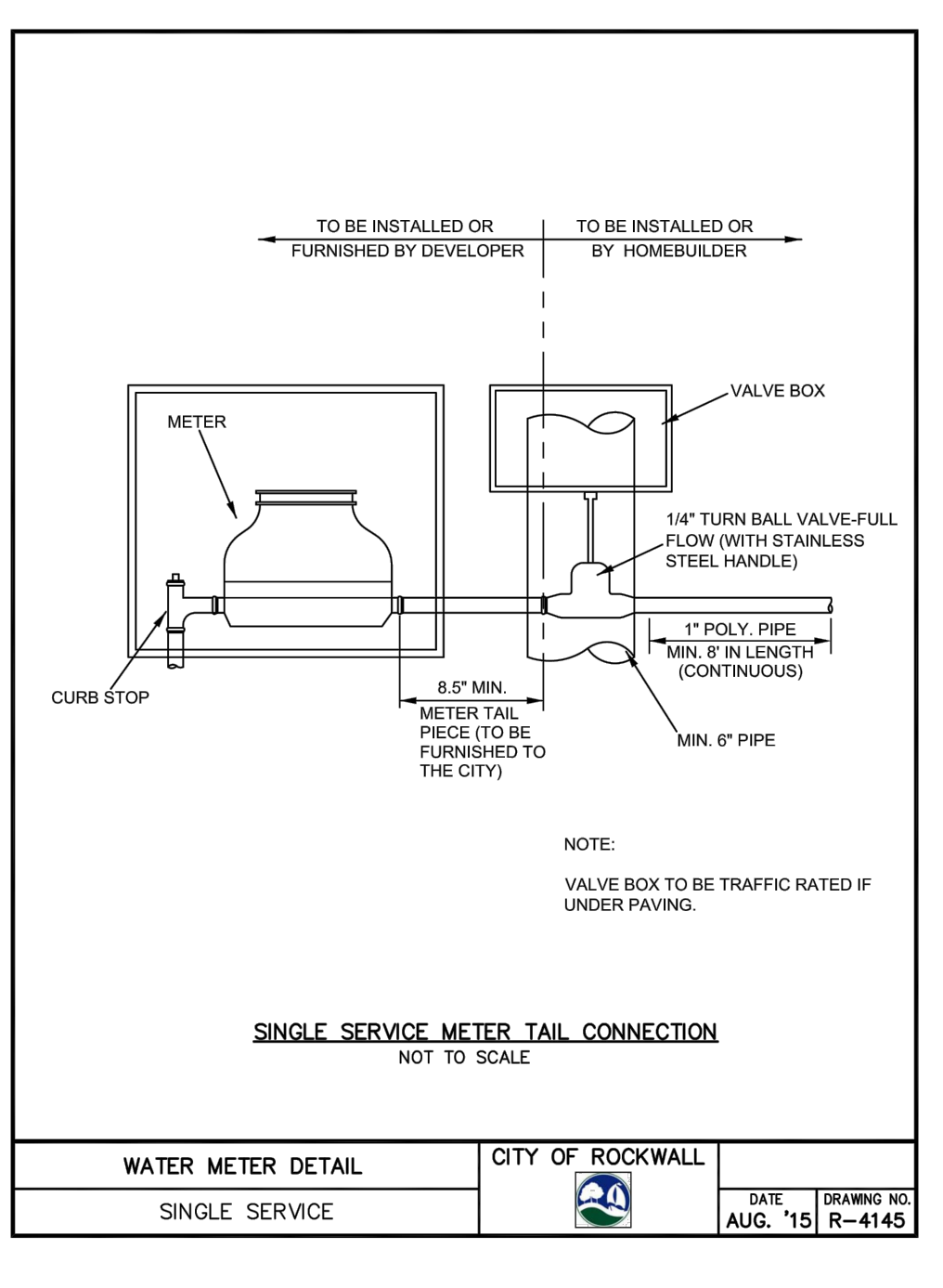
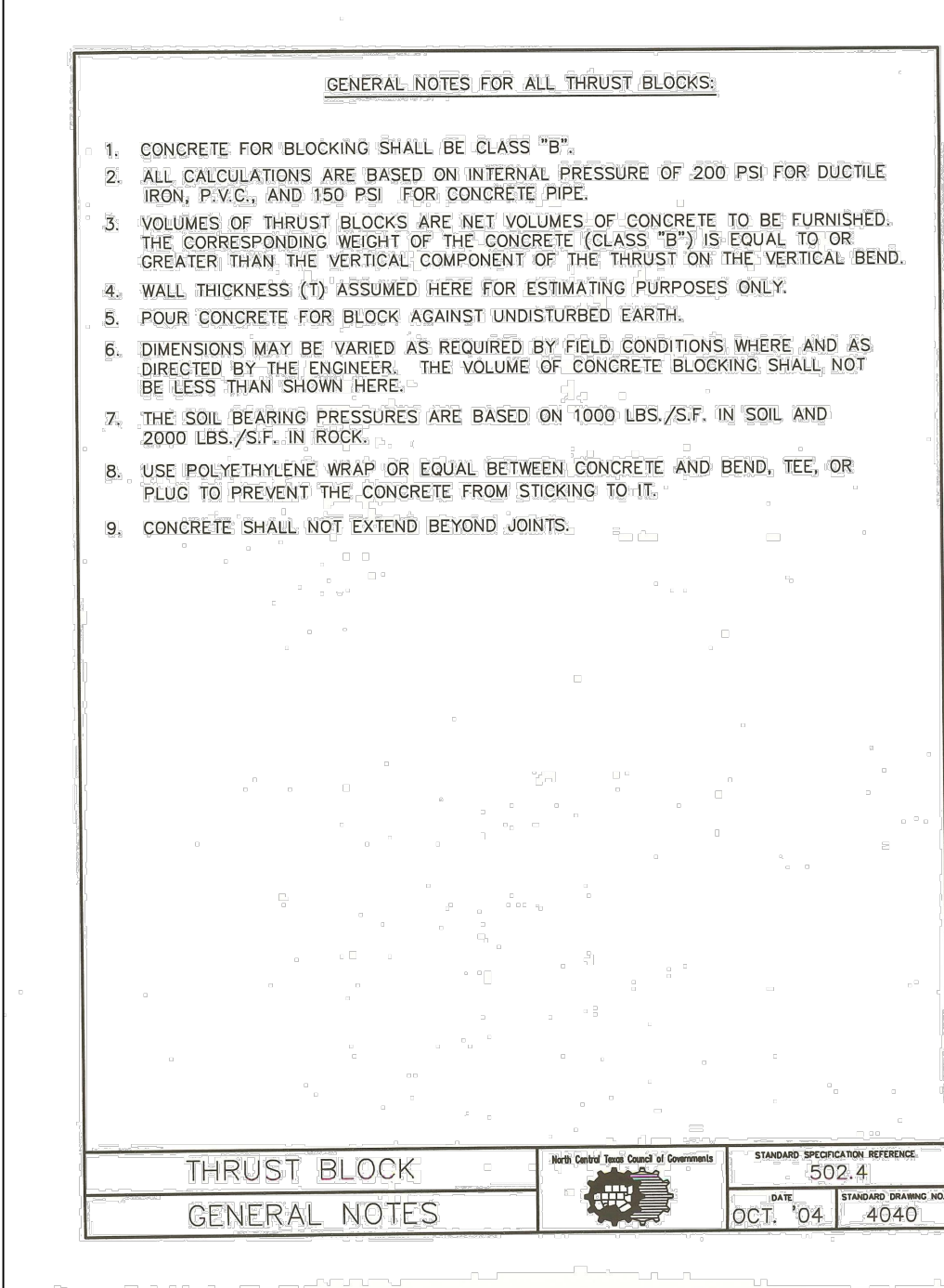
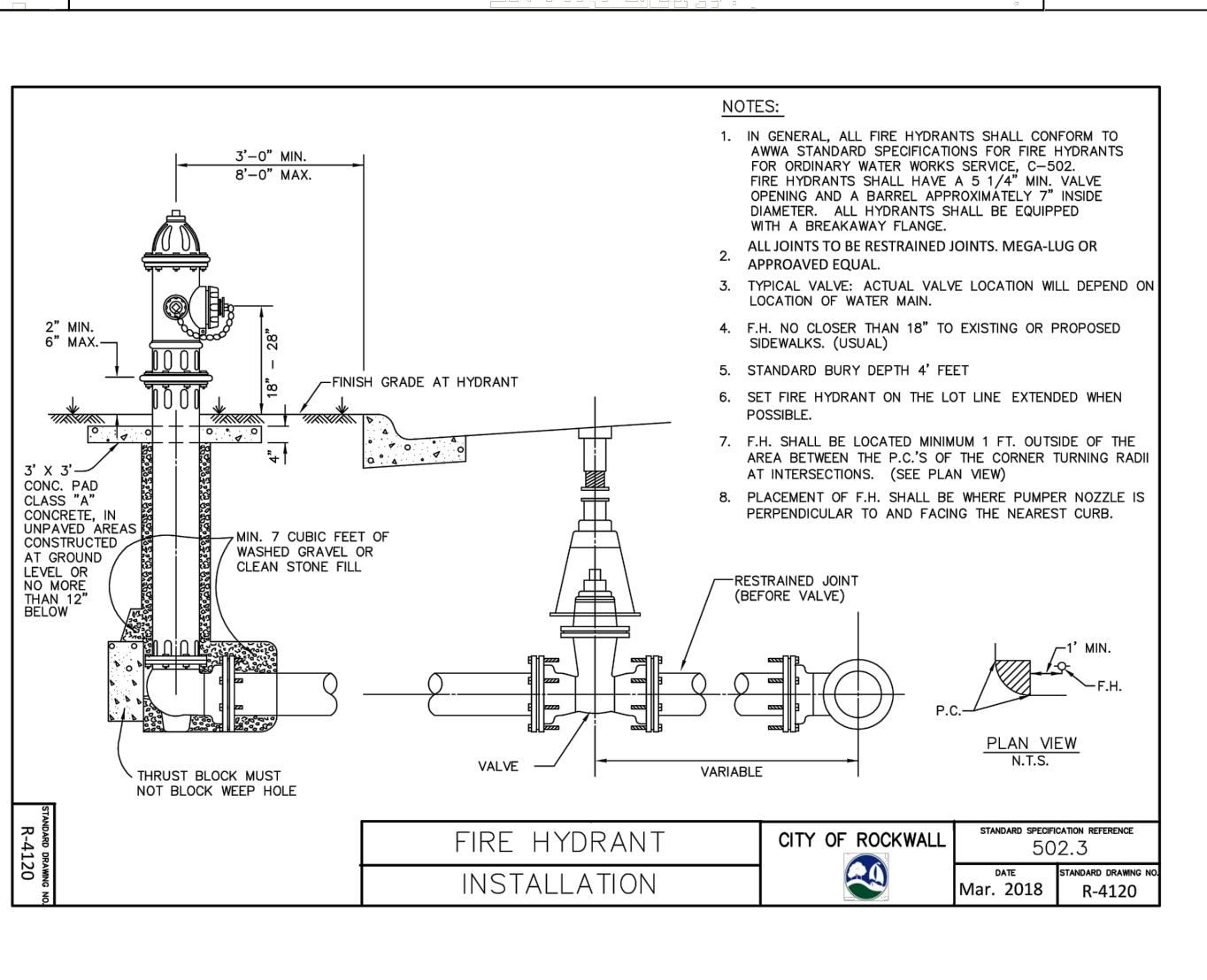
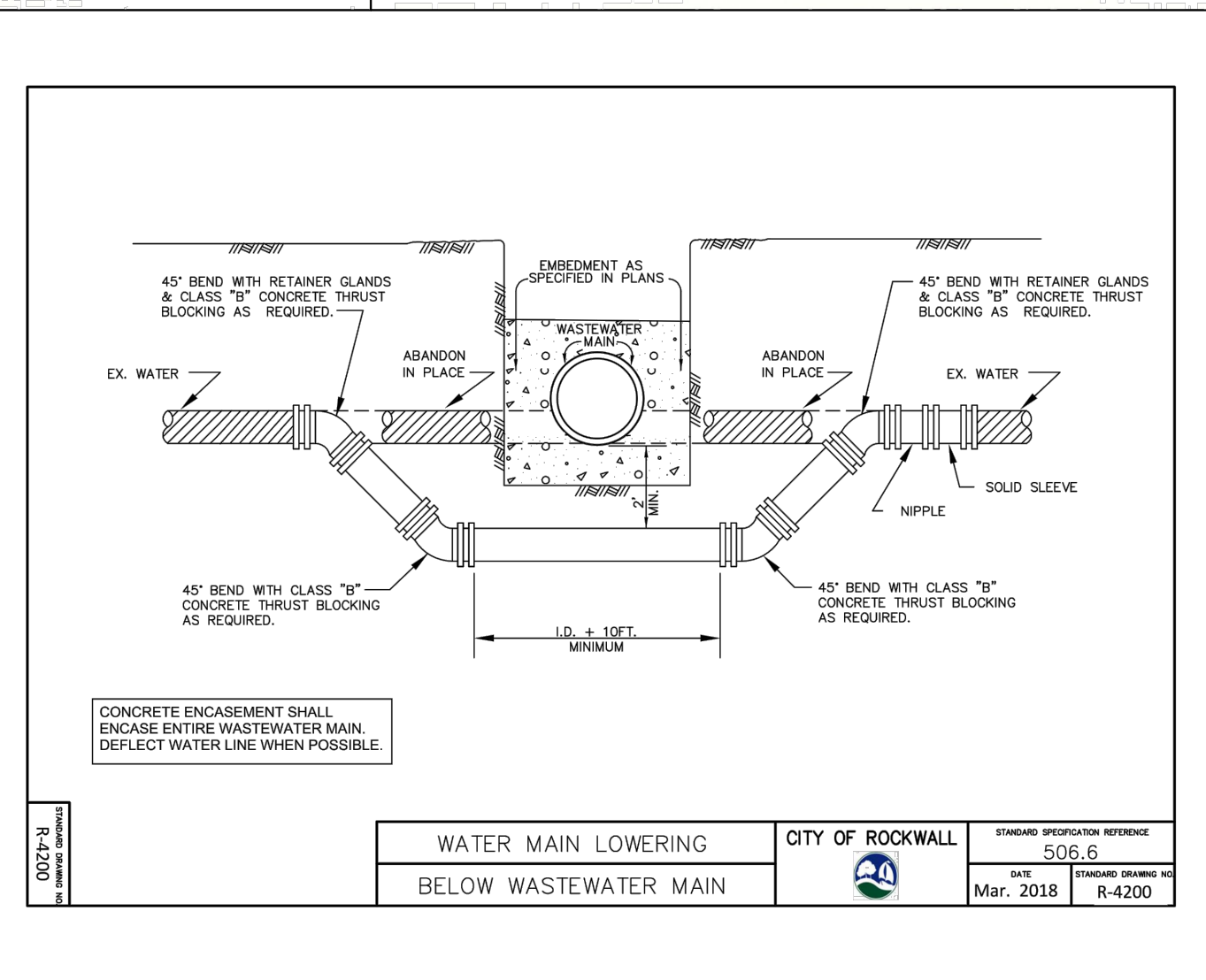
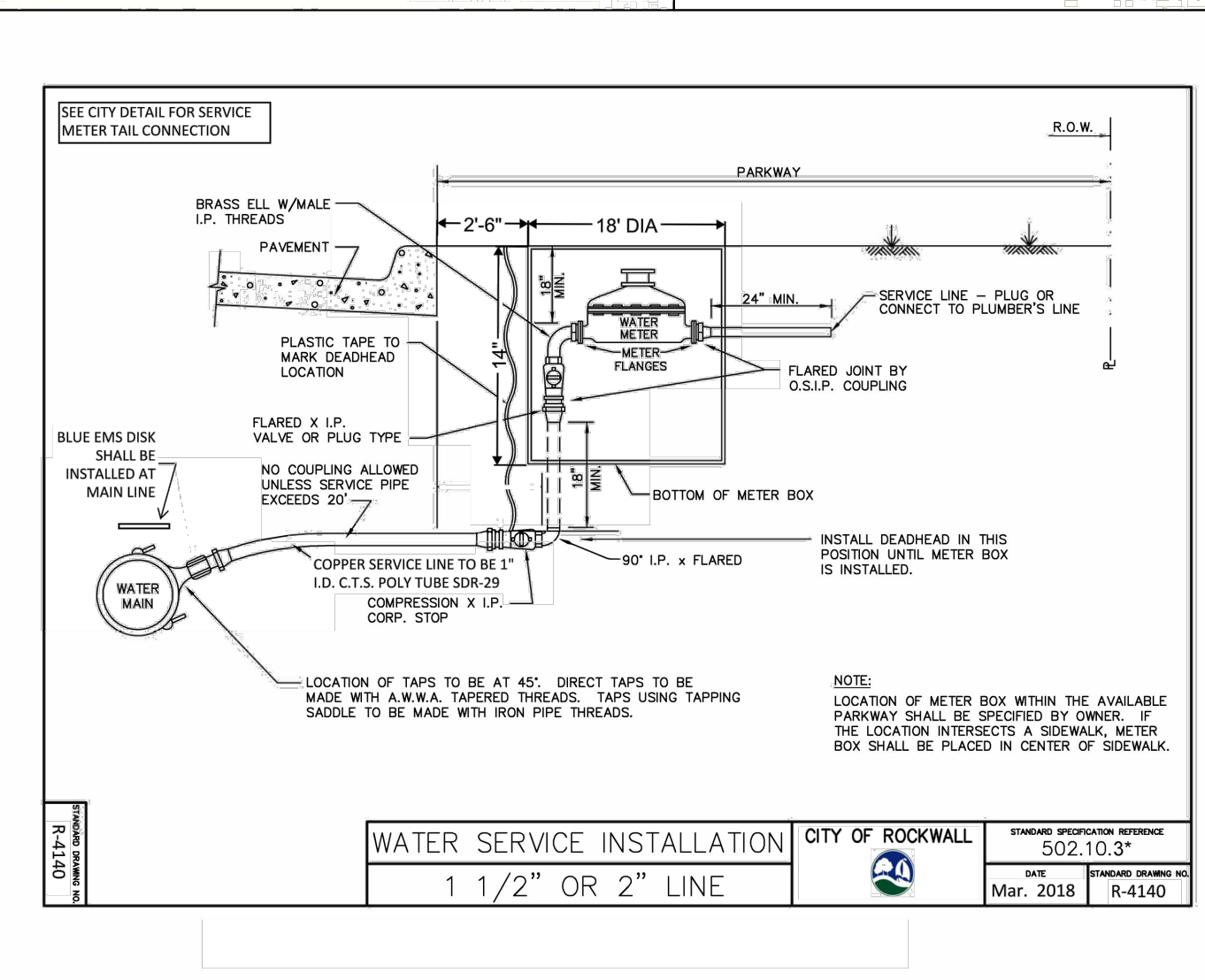
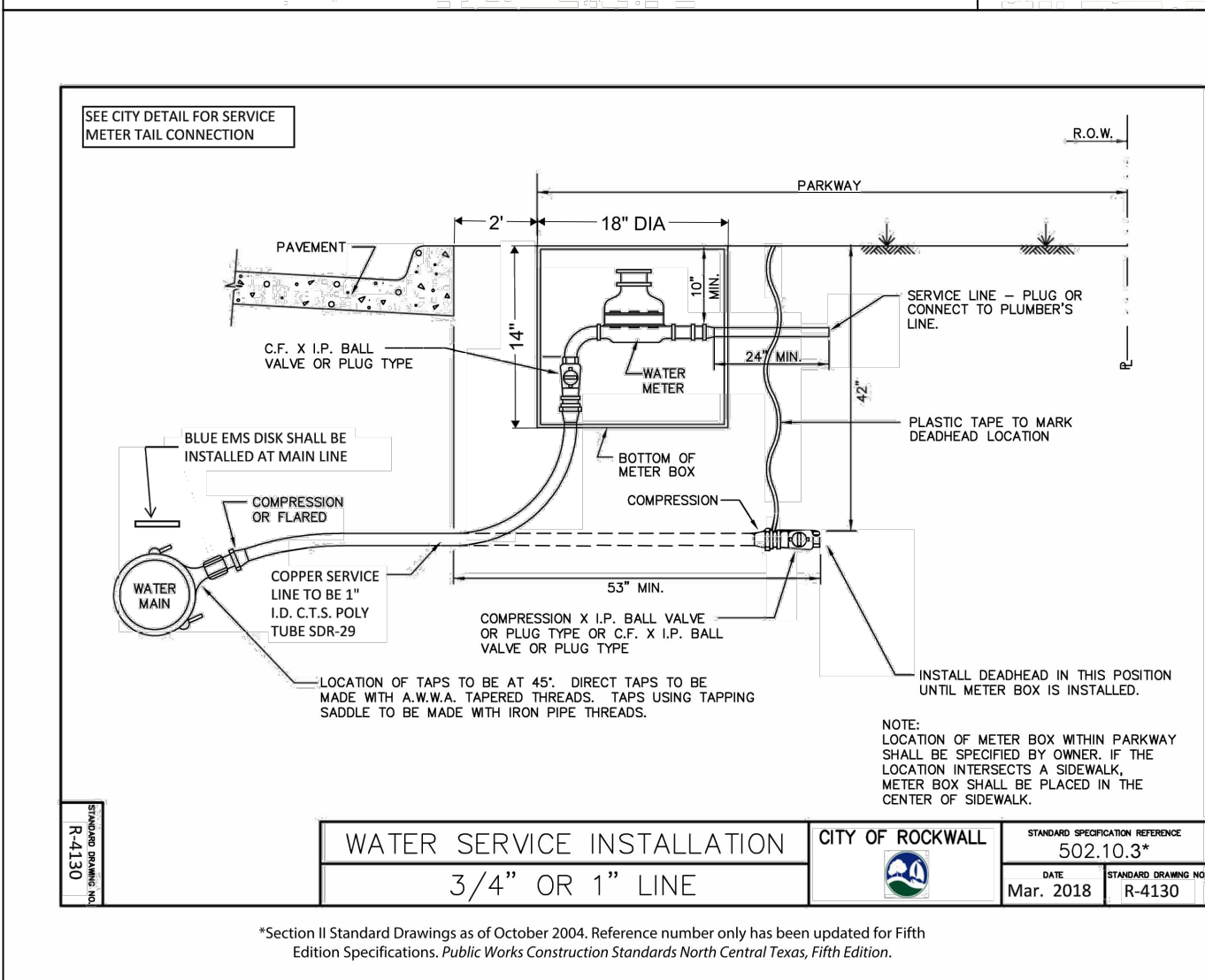
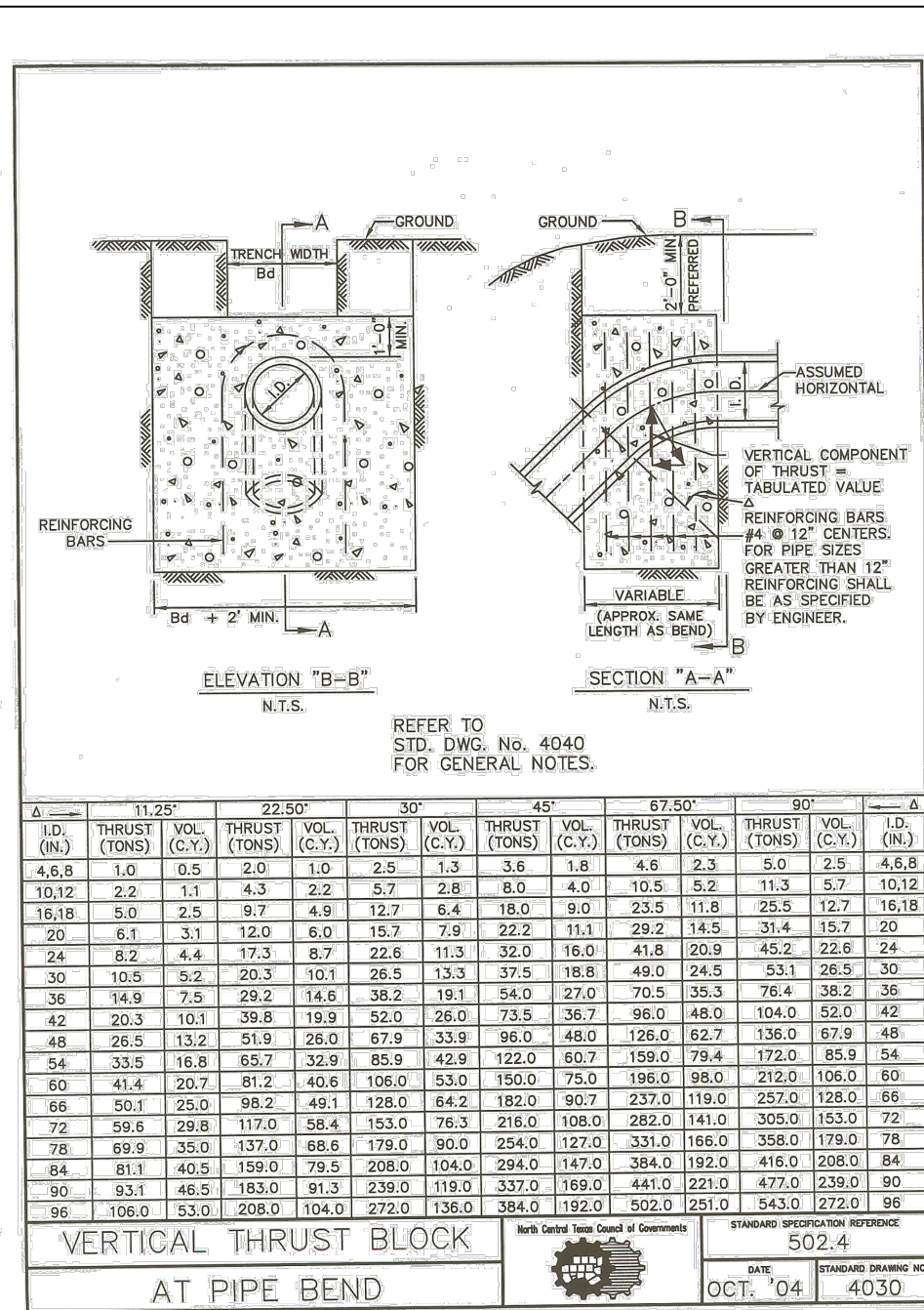
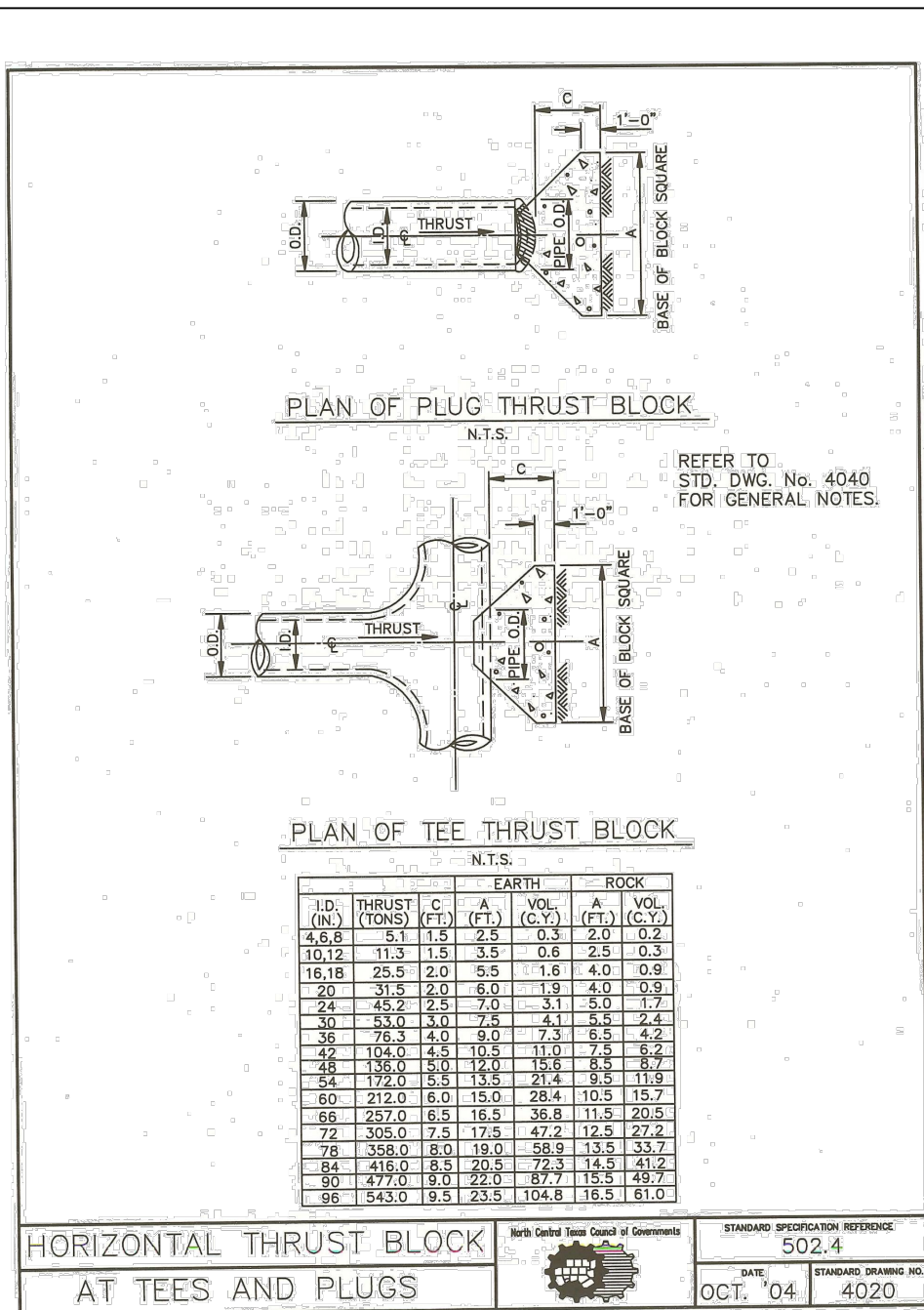
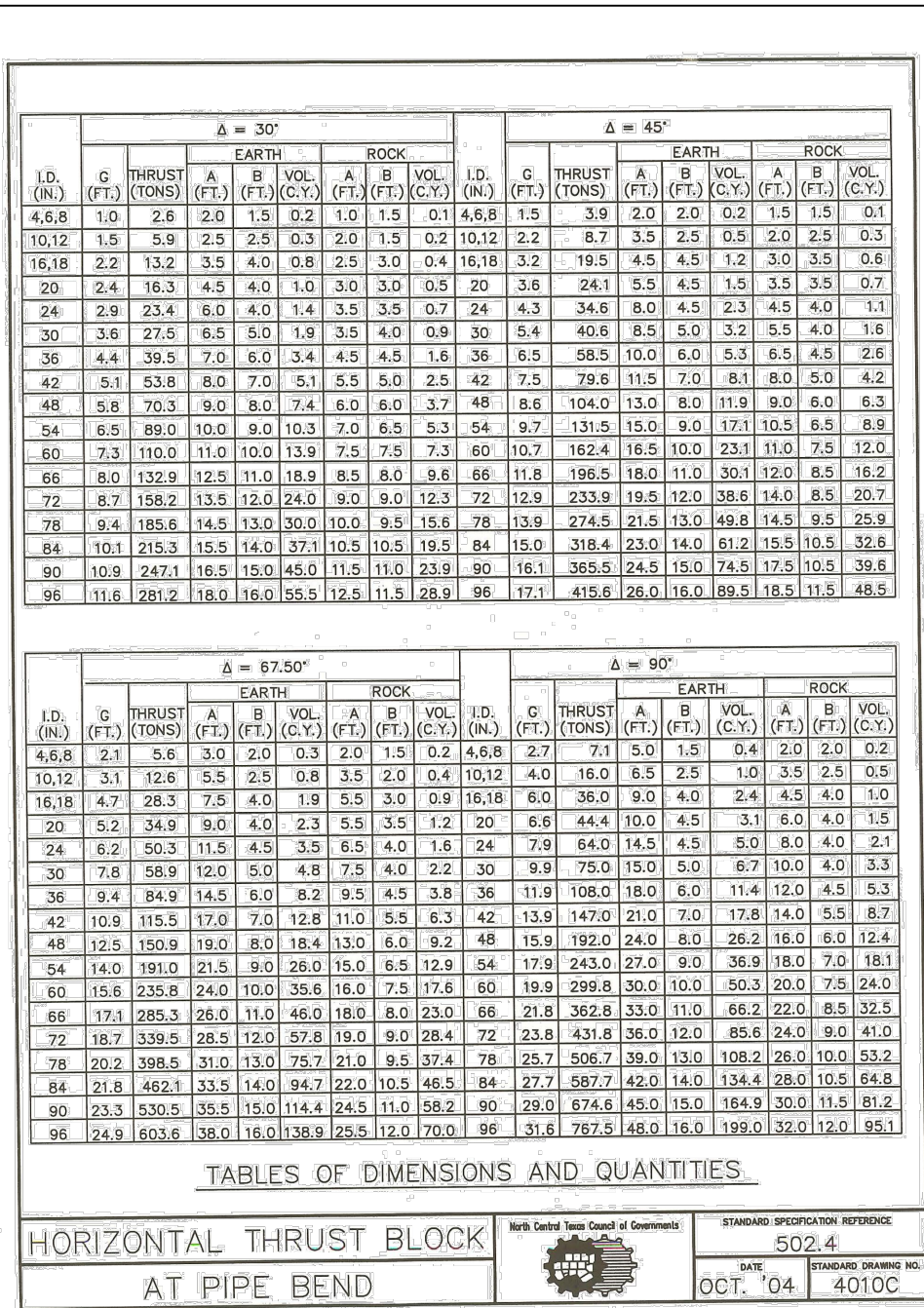
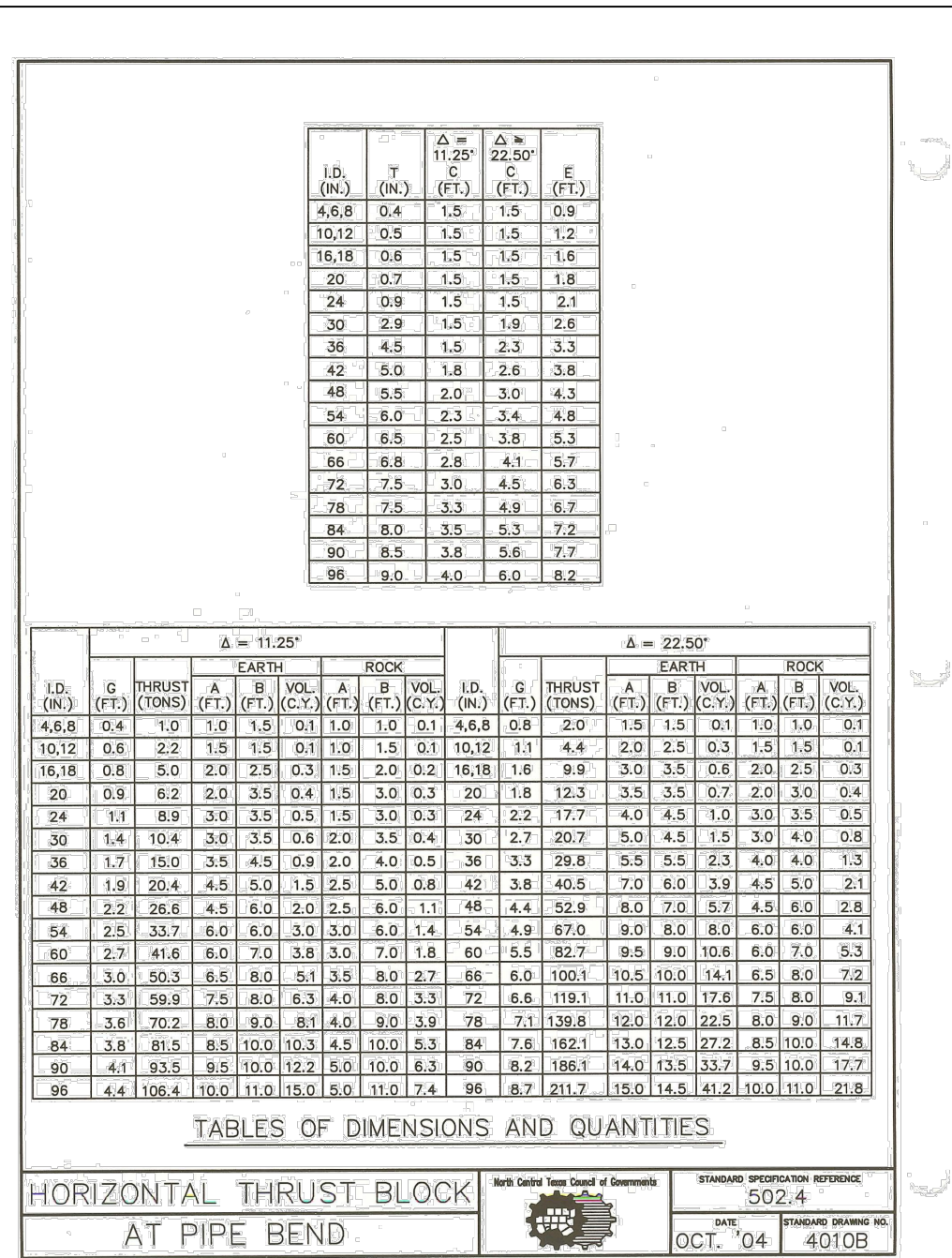
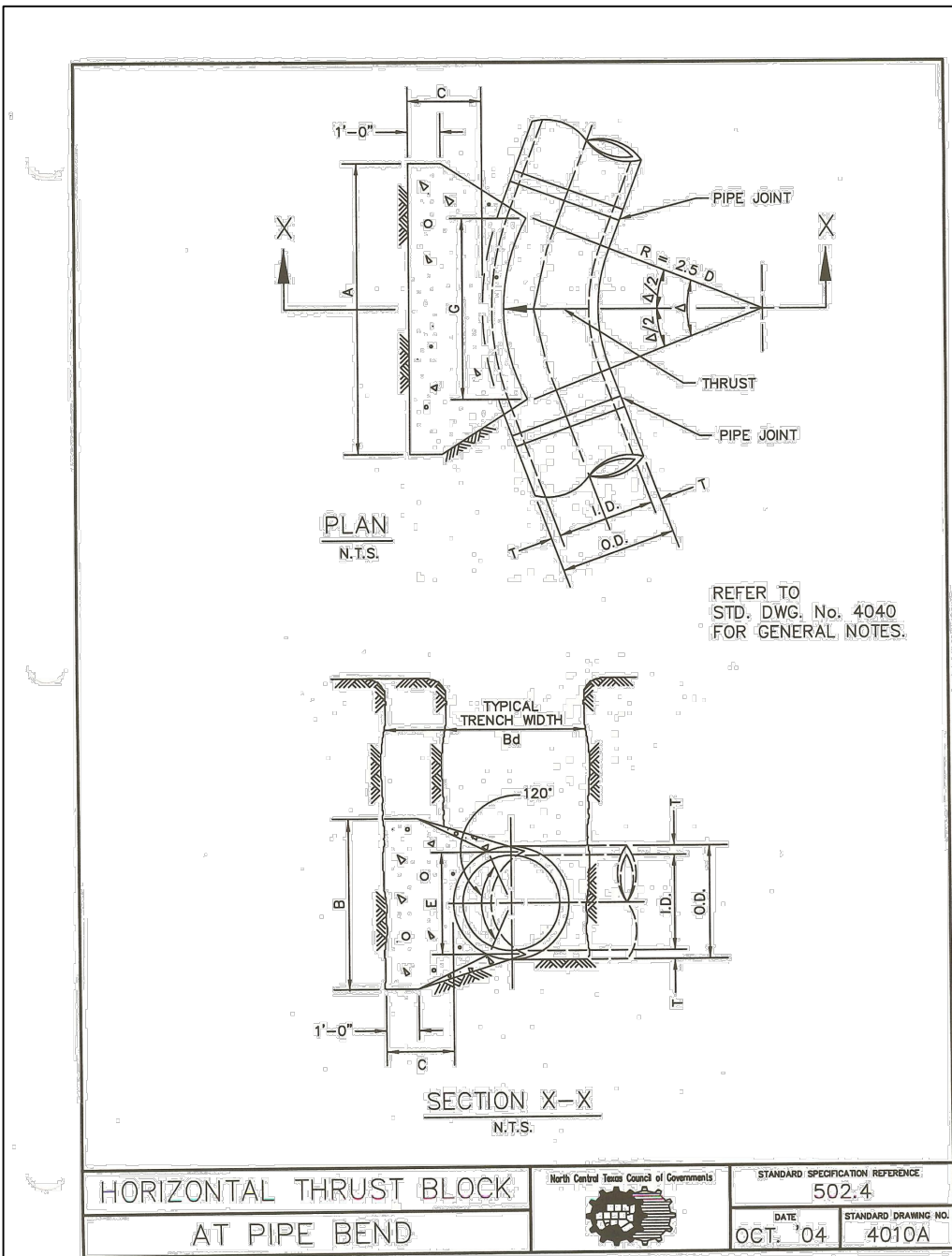
SANITARY SEWER DETAILS
HORIZON ROAD SELF STORAGE
PHASE 1 & 2 - 575 UNITS
TRACT 23 OF RAINBOW ACRES
CITY OF ROCKWALL, ROCKWALL COUNTY, TEXAS

SHEET

21

"Case No. SP2019-027"

Z:\PROJECTS\05211 Rockwall Mini Storage\Drawings\15-WATER DETAILS.dwg--WATER DETAILS.dwg--Terry L Last Saved by: Terry



RECORD DRAWINGS

To the best of our knowledge Engineering Concepts & Design, L.P., hereby states that this plan is As-Built. This information provided is based on surveying at the site and information provided by the contractor.

TODD WINTERS
3-15-2021
DATE

NOTE: NCTCOG DETAILS SHOWN HEREON HAVE BEEN MODIFIED TO INCLUDE THE "CITY OF ROCKWALL UPDATES" AS PUBLISHED IN THE CITY OF ROCKWALL'S UNIFIED DEVELOPMENT CODE. REFER TO THE CITY DOCUMENT FOR EXACT DESCRIPTIONS OF THE UPDATES.

BENCHMARKS: CITY OF ROCKWALL, TEXAS - CONTROL MONUMENTATION

ROCKWALL MONUMENT "RESET #1 3" BRASS DISK FOUND AT FM 740 (RIDGE ROAD) AND SUMMER LEE DRIVE NEAR NORTHWEST CORNER OF THE PARKING LOT FOR THE COMMUNITY BANK.

N: 701544.252; E: 2590135.160; ELEVATION: 567.704

BASED ON NAD-83 TX, STATE PLANE, NORTH CENTRAL ZONE.

ENGINEERINGCONCEPTS
& DESIGN, L.P.

ENGINEERING / PROJECT MANAGEMENT /
CONSTRUCTION SERVICES - FIRM REG. #F-001145
201 WINDCO CIR, STE 200, WYLLIE, TX 75098
972-941-8400 FAX: 972-941-8401 WWW.ECDLP.COM

REVISIONS:

DRAWN: ECDLP
CHECKED: TW
PROJECT NO.: 5211
DWG FILE NAME: 15-WATER DETAILS.DWG

DATE: January 7, 2020
DATE: January 7, 2020

THIS DOCUMENT IS RELEASED FOR THE
PURPOSE OF CONSTRUCTION.

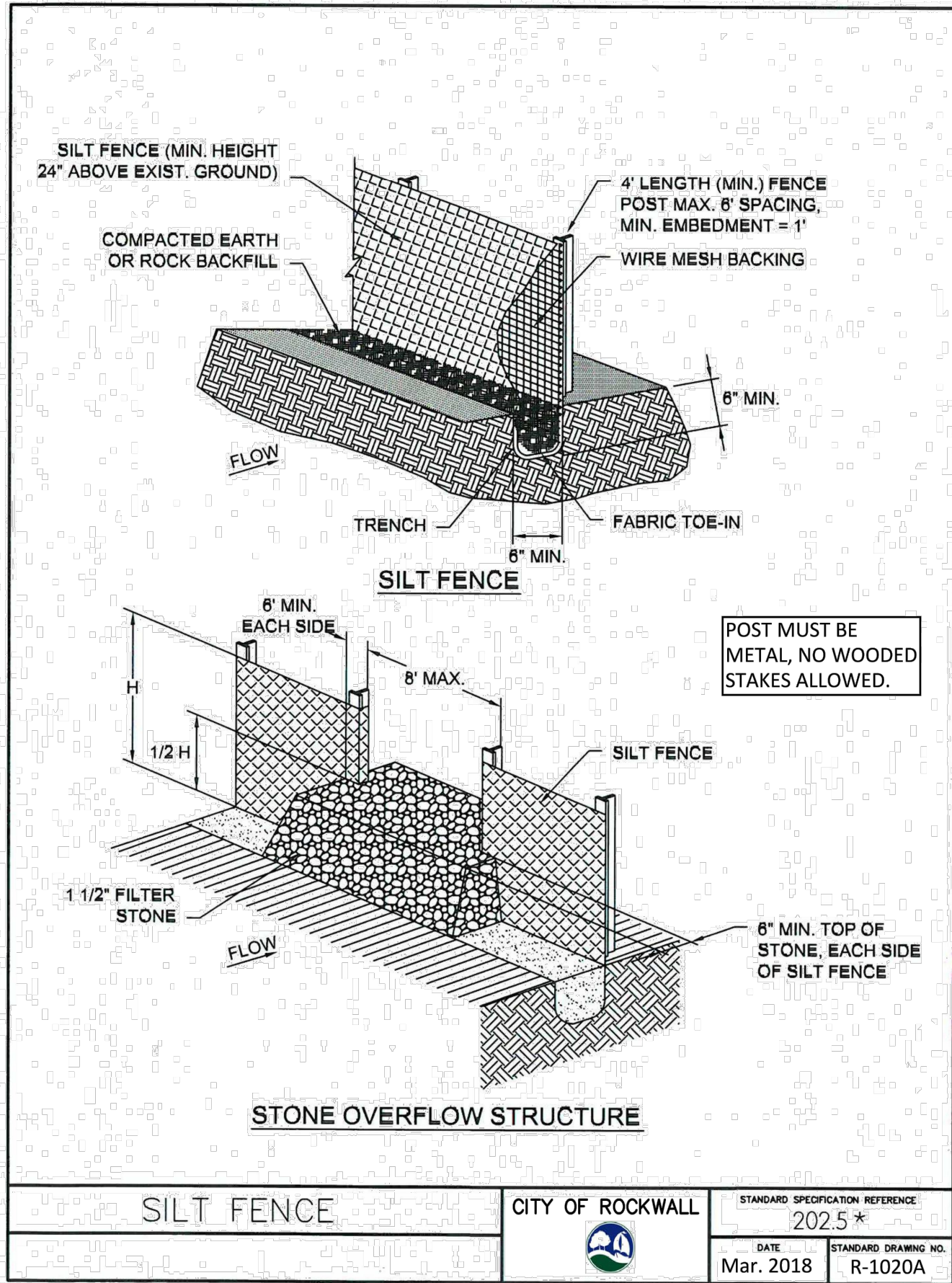


WATER DETAILS
HORIZON ROAD SELF STORAGE
PHASE 1 & 2 - 575 UNITS
TRACT 23 OF RAINBOW ACRES
CITY OF ROCKWALL, ROCKWALL COUNTY, TEXAS

SHEET
22

"Case No. SP2019-027"

Z:\PROJECTS\05211 Rockwall Mini Storage\Drawings\16-EROSION CONTROL DETAILS.dwg - PLOTTED Mar 05, 2021 at 9:39am by Tony, I Last Saved by: Tony



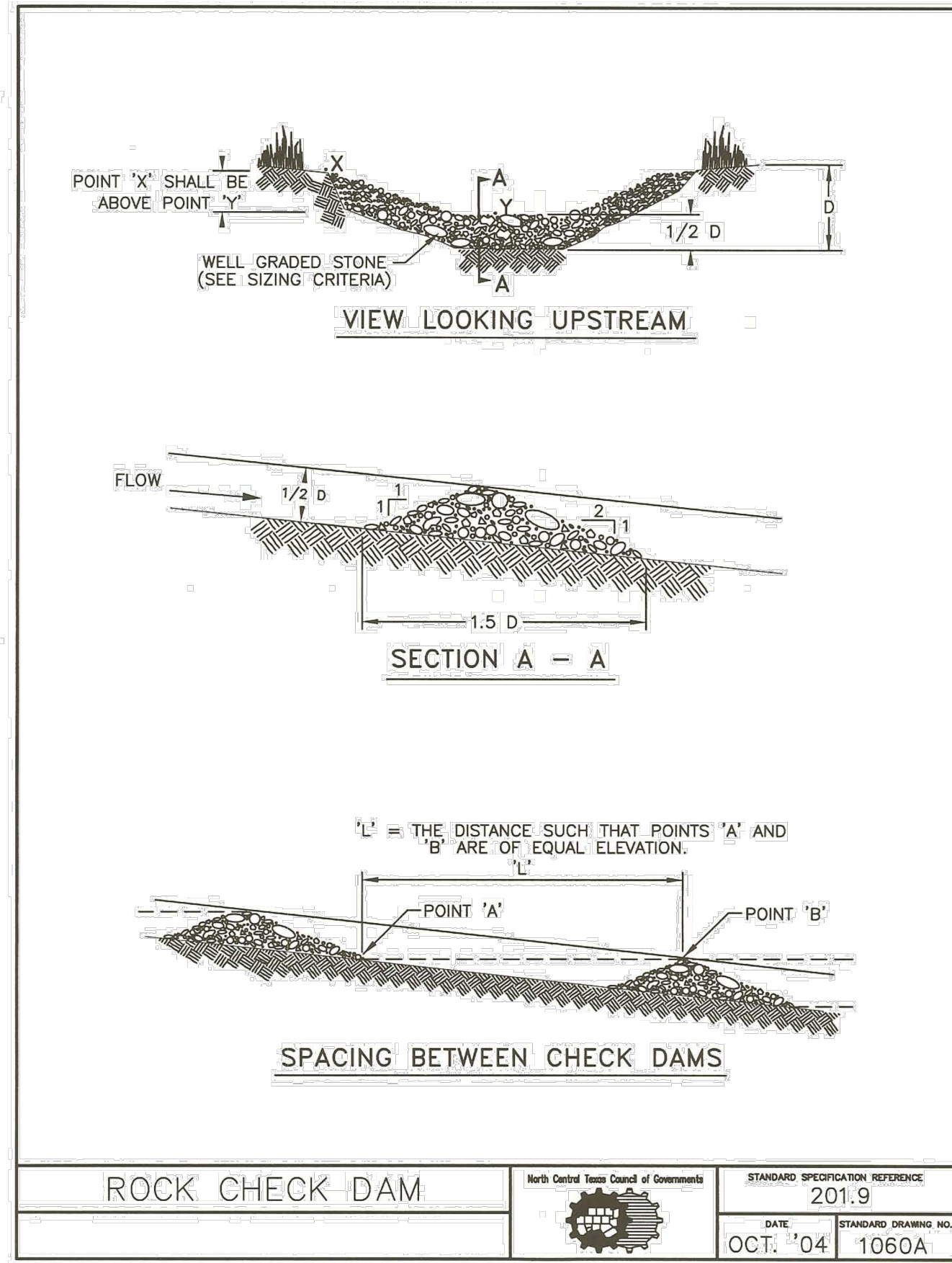
*Section II Standard Drawings as of October 2004. Reference number only has been updated for Fifth Edition Specifications. Public Works Construction Standards North Central Texas, Fifth Edition.

SILT FENCE GENERAL NOTES:

1. POSTS WHICH SUPPORT THE SILT FENCE SHALL BE INSTALLED ON A SLIGHT ANGLE TOWARD THE ANTICIPATED RUNOFF SOURCE. POST MUST BE EMBEDDED A MINIMUM OF ONE FOOT.
2. THE TOE OF THE SILT FENCE SHALL BE TRENCHED IN WITH A SPADE OR MECHANICAL TRENCHER, SO THAT THE DOWNSLOPE FACE OF THE TRENCH IS FLAT AND PERPENDICULAR TO THE LINE OF FLOW. WHERE FENCE CANNOT BE TRENCHED IN (E.G. PAVEMENT), WEIGHT FABRIC FLAP WITH ROCK ON UPHILL SIDE TO PREVENT FLOW FROM SEEPING UNDER FENCE.
3. THE TRENCH MUST BE A MINIMUM OF 6 INCHES DEEP AND 6 INCHES WIDE TO ALLOW FOR THE SILT FENCE FABRIC TO BE LAID IN THE GROUND AND BACKFILLED WITH COMPACTED MATERIAL.
4. SILT FENCE SHOULD BE SECURELY FASTENED TO EACH SUPPORT POST OR TO WIRE BACKING, WHICH IN TURN IS ATTACHED TO THE FENCE POST. THERE SHALL BE A 3 FOOT OVERLAP, SECURELY FASTENED WHERE ENDS OF FABRIC MEET.
5. INSPECTION SHALL BE AS SPECIFIED IN THE SWPPP. REPAIR OR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED.
6. SILT FENCE SHALL BE REMOVED WHEN FINAL STABILIZATION IS ACHIEVED OR ANOTHER EROSION OR SEDIMENT CONTROL DEVICE IS EMPLOYED.
7. ACCUMULATED SILT SHALL BE REMOVED WHEN IT REACHES A DEPTH OF HALF THE HEIGHT OF THE FENCE. THE SILT SHALL BE DISPOSED OF AT AN APPROVED SITE AND IN SUCH A MANNER AS TO NOT CONTRIBUTE TO ADDITIONAL SILTATION.
8. FILTER STONE SHALL BE WRAPPED IN FILTER FABRIC AND BURIED SIX (6") INCHES MINIMUM.



*Section II Standard Drawings as of October 2004. Reference number only has been updated for Fifth Edition Specifications. Public Works Construction Standards North Central Texas, Fifth Edition.

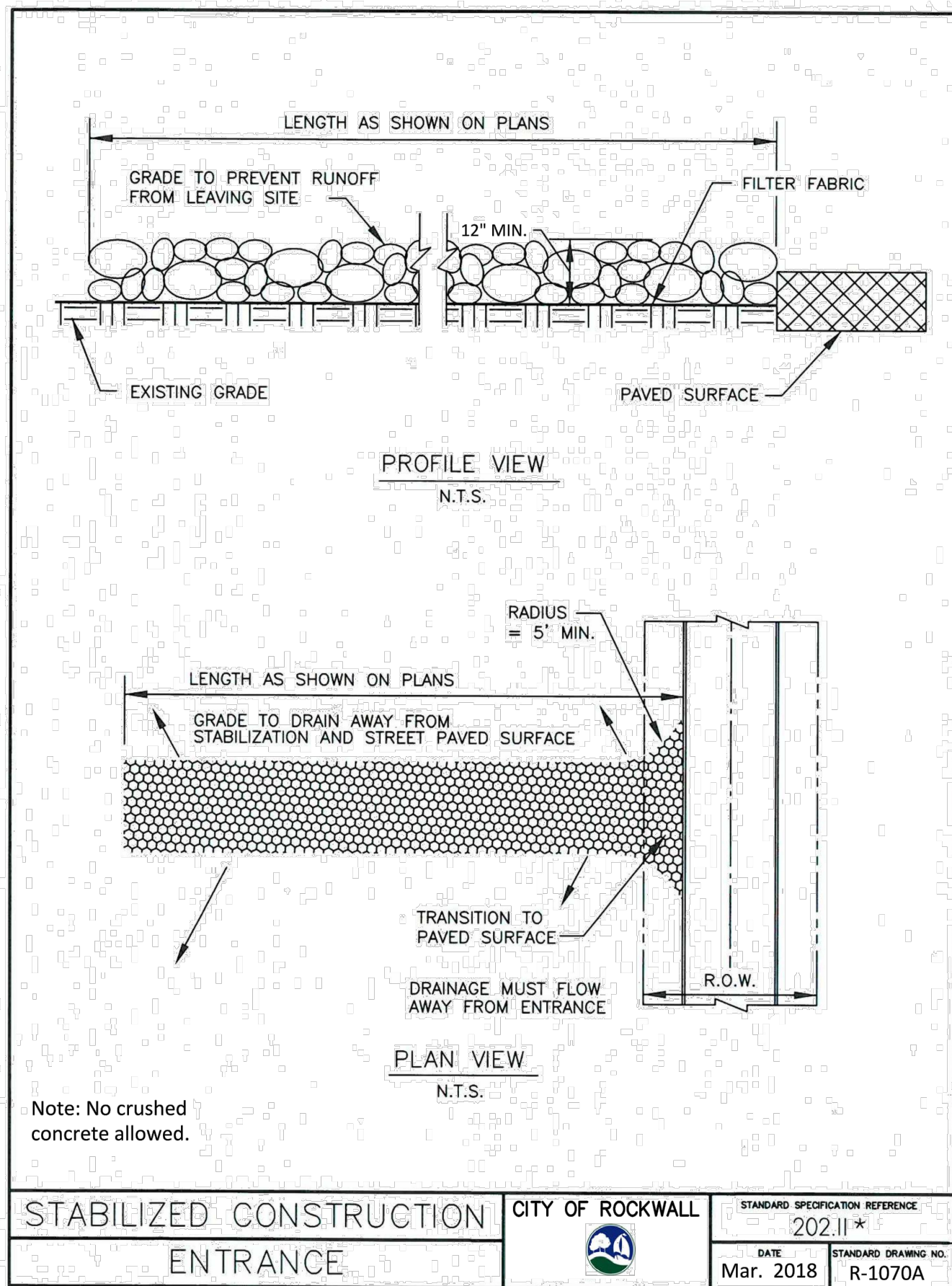


ROCK CHECK DAM GENERAL NOTES:

1. STONE SHALL BE WELL GRADED WITH SIZE RANGE FROM 1 1/2 TO 3 1/2 INCHES IN DIAMETER DEPENDING ON EXPECTED FLOWS.
2. THE CHECK DAM SHALL BE INSPECTED AS SPECIFIED IN THE SWPPP AND SHALL BE REPLACED WHEN THE STRUCTURE CEASES TO FUNCTION AS INTENDED DUE TO SILT ACCUMULATION AMONG THE ROCKS, WASHOUT, CONSTRUCTION TRAFFIC DAMAGE, ETC.
3. WHEN SILT REACHES A DEPTH EQUAL TO ONE-THIRD OF THE HEIGHT OF THE CHECK DAM OR ONE FOOT, WHICHEVER IS LESS, THE SILT SHALL BE REMOVED AND DISPOSED OF PROPERLY.
4. WHEN THE SITE HAS ACHIEVED FINAL STABILIZATION OR ANOTHER EROSION OR SEDIMENT CONTROL DEVICE IS EMPLOYED, THE CHECK DAM AND ACCUMULATED SILT SHALL BE REMOVED AND DISPOSED OF IN AN APPROVED MANNER.
5. FILTER STONE SHALL BE WRAPPED IN APPROPRIATE SIZED WIRE MESH TO CONTAIN STONE AND BURIED SIX (6") INCHES MINIMUM.



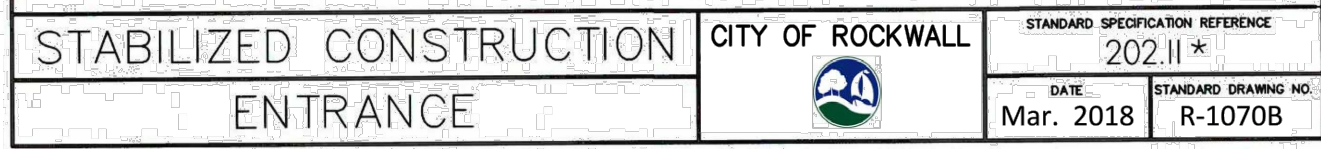
*Section II Standard Drawings as of October 2004. Reference number only has been updated for Fifth Edition Specifications. Public Works Construction Standards North Central Texas, Fifth Edition.



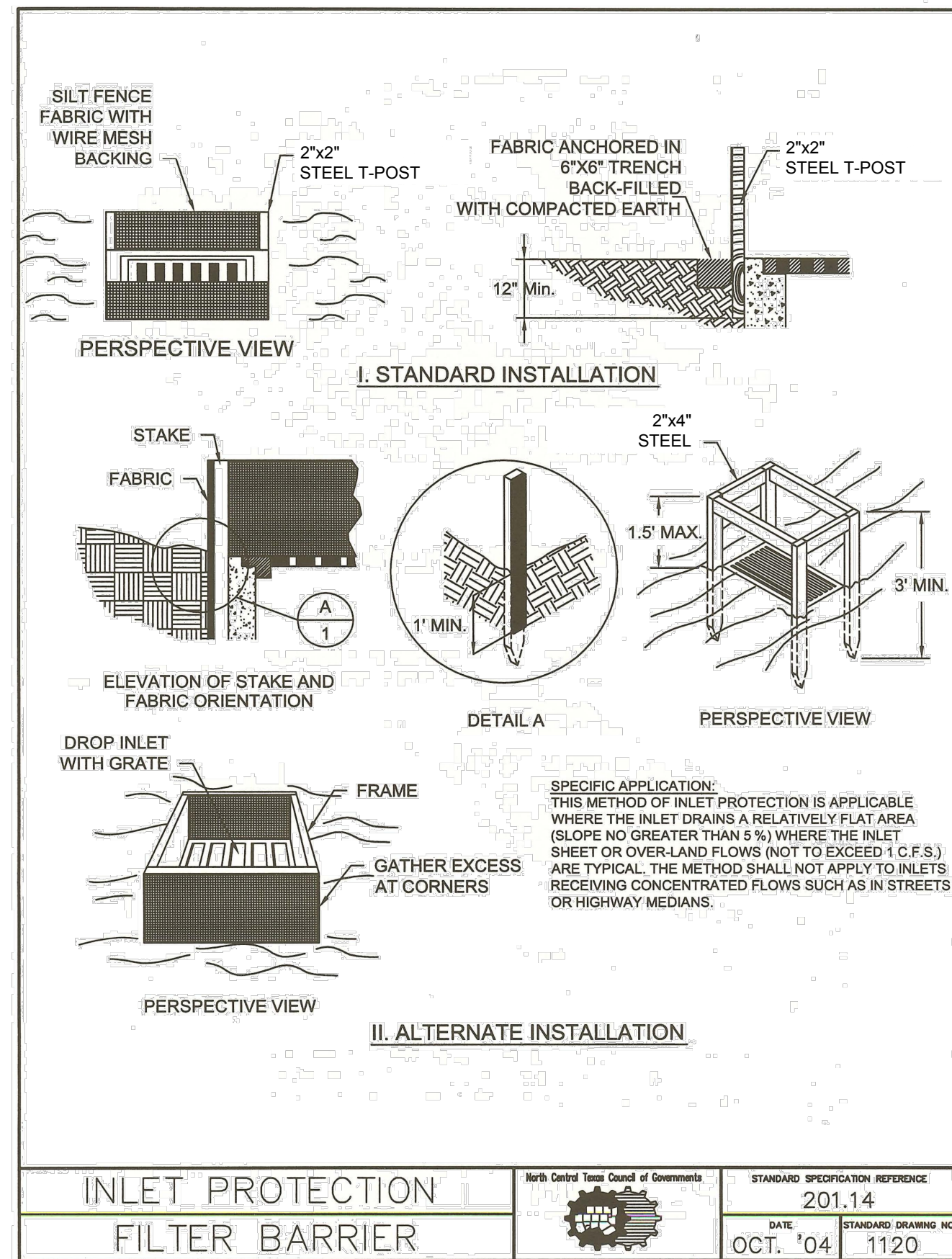
*Section II Standard Drawings as of October 2004. Reference number only has been updated for Fifth Edition Specifications. Public Works Construction Standards North Central Texas, Fifth Edition.

STABILIZED CONSTRUCTION ENTRANCE GENERAL NOTES:

1. STONE SHALL BE 4 TO 6 INCH DIAMETER COARSE AGGREGATE.
2. MINIMUM LENGTH SHALL BE 50 FEET AND WIDTH SHALL BE 20 FEET.
3. THE THICKNESS SHALL NOT BE LESS THAN 12 INCHES.
4. THE WIDTH SHALL BE NO LESS THAN THE FULL WIDTH OF ALL POINTS OF INGRESS OR EGRESS.
5. WHEN NECESSARY, VEHICLES SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO A PUBLIC ROADWAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE WITH DRAINAGE FLOWING AWAY FROM BOTH THE STREET AND THE STABILIZED ENTRANCE. ALL SEDIMENT SHALL BE PREVENTED FROM ENTERING ANY STORM DRAIN, DITCH OR WATERCOURSE USING APPROVED METHODS.
6. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PAVED SURFACES. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND. ALL SEDIMENT SPILLED, DROPPED, WASHED, OR TRACKED ONTO PAVED SURFACES MUST BE REMOVED IMMEDIATELY.
7. THE ENTRANCE MUST BE PROPERLY GRADED OR INCORPORATE A DRAINAGE SWALE TO PREVENT RUNOFF FROM LEAVING THE CONSTRUCTION SITE.
8. PREVENT SHORTCUTTING OF THE FULL LENGTH OF THE CONSTRUCTION ENTRANCE BY INSTALLING BARRIERS AS NECESSARY.
9. INSPECTION SHALL BE AS SPECIFIED IN THE SWPPP.
10. NO CRUSHED CONCRETE ALLOWED.



*Section II Standard Drawings as of October 2004. Reference number only has been updated for Fifth Edition Specifications. Public Works Construction Standards North Central Texas, Fifth Edition.



RECORD DRAWINGS

To the best of our knowledge Engineering Concepts & Design, L.P., hereby states that this plan is As-Built. This information provided is based on surveying at the site and information provided by the contractor.

Todd Winters 3-15-2021
TODD WINTERS DATE

NOTE: NCTCOG DETAILS SHOWN HEREON HAVE BEEN MODIFIED TO INCLUDE THE CITY OF ROCKWALL UPDATES* AS PUBLISHED IN THE CITY OF ROCKWALL'S UNIFIED DEVELOPMENT CODE. REFER TO THE CITY DOCUMENT FOR EXACT DESCRIPTIONS OF THE UPDATES.

BENCHMARKS: CITY OF ROCKWALL, TEXAS - CONTROL MONUMENTATION

ROCKWALL MONUMENT "RESET #1 3" BRASS DISK FOUND AT FM 740 (RIDGE ROAD) AND SUMMER LEE DRIVE NEAR NORTHWEST CORNER OF THE PARKING LOT FOR THE COMMUNITY BANK.
N: 701544.252; E: 2590135.160; ELEVATION: 567.704
BASED ON NAD-83 TX, STATE PLANE, NORTH CENTRAL ZONE.



ENGINEERING / PROJECT MANAGEMENT /
CONSTRUCTION SERVICES - FIRM REG. #F-001145
201 WINDCO CIR, STE 200, WYLIE, TX 75098
972-941-8400 FAX: 972-941-8401 WWW.ECDLP.COM

REVISIONS:	
DRAWN: ECDLP	DATE: January 7, 2020
CHECKED: TW	DATE: January 7, 2020
PROJECT NO.: 5211	
DWG FILE NAME: 16-EROSION CONTROL DETAILS.DWG	

THIS DOCUMENT IS RELEASED FOR THE
PURPOSE OF CONSTRUCTION.



EROSION CONTROL DETAILS
HORIZON ROAD SELF STORAGE
PHASE 1 & 2 - 575 UNITS
TRACT 23 OF RAINBOW ACRES
CITY OF ROCKWALL, ROCKWALL COUNTY, TEXAS

SHEET

23

"Case No. SP2019-027"