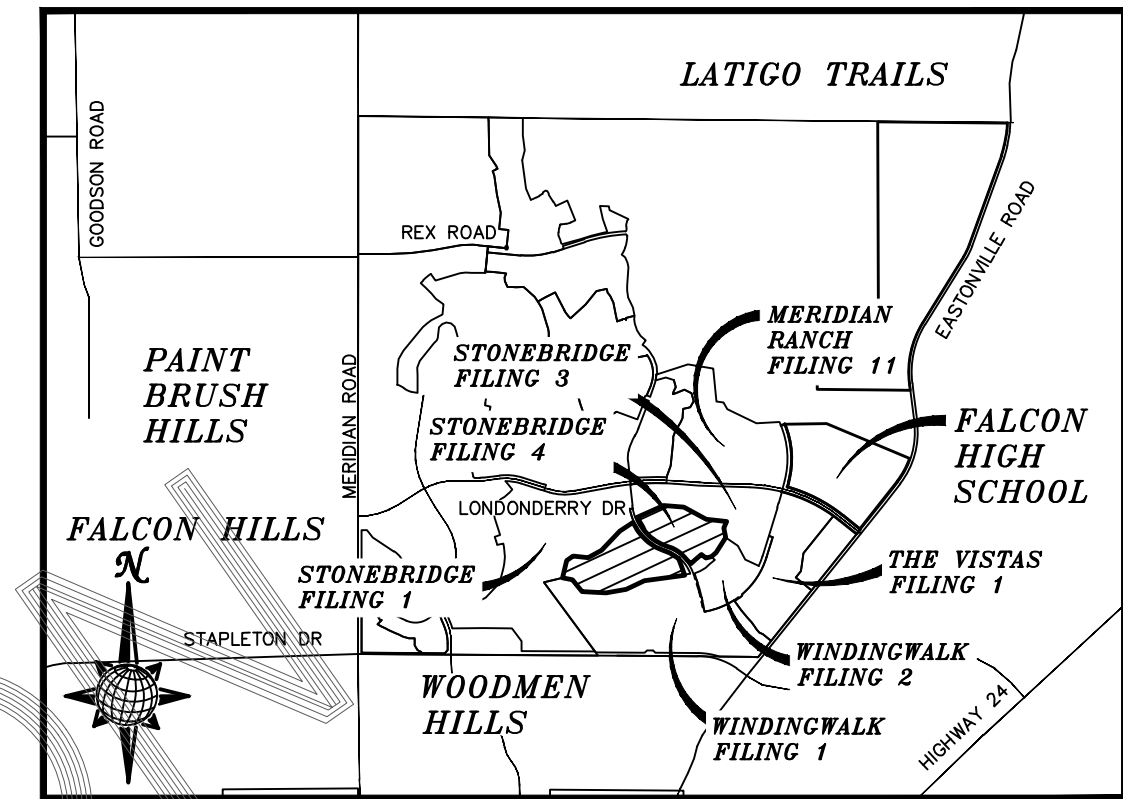


# CONSTRUCTION DRAWINGS FOR STONEBRIDGE FILING 4 AT MERIDIAN RANCH

## IMPROVEMENT PLANS

PREPARED FOR **GTL, INC. DBA GTL DEVELOPMENT, INC.**

A PARCEL OF LAND LOCATED IN A PORTION OF SECTION 29, AND 30  
IN TOWNSHIP 12 SOUTH, RANGE 64 WEST OF THE 6TH PRINCIPAL MERIDIAN,  
EL PASO COUNTY, STATE OF COLORADO.



**VICINITY MAP  
N.T.S.**

### UTILITY CONTACTS:

WATER - MERIDIAN SERVICE METROPOLITAN DISTRICT  
POC: KEVIN FACKERELL  
(719)-495-6567

GAS - BLACK HILLS ENERGY  
(719)-393-6625

SANITARY SEWER - MERIDIAN SERVICE METROPOLITAN DISTRICT  
POC: BRADEN McCORRY  
(719)-495-6567

ELECTRIC - MOUNTAIN VIEW ELECTRIC ASSOC.  
(719)-495-2283

DRAINAGE - EL PASO COUNTY PCD/INSPECTIONS  
(719)-520-6300

GEOTECHNICAL ENGINEER - ENTECH ENGINEERING, INC.  
(719)-531-5599

DRAINAGE - MERIDIAN SERVICE METROPOLITAN DISTRICT  
POC: TOM KERBY  
(719)-495-7444

FALCON FIRE PROTECTION DISTRICT  
(719) 495-4050

### CAUTION - NOTICE TO CONTRACTOR

THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND, WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE LOCAL UTILITY LOCATION CENTER AT LEAST 48 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATIONS OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.

### LEGAL DESCRIPTION:

KNOW ALL MEN BY THESE PRESENTS:  
THAT GTL, INC. DBA GTL DEVELOPMENT, INC., THEODORE TCHANG, PRESIDENT BEING THE OWNERS OF THE FOLLOWING DESCRIBED TRACT OF LAND:

TWO PARCELS OF LAND LOCATED IN A PORTION OF SECTION 29 AND 30, BOTH IN TOWNSHIP 12 SOUTH, RANGE 64 WEST OF THE 6TH PRINCIPAL MERIDIAN, EL PASO COUNTY, COLORADO, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

**PARCEL A:**  
BEGINNING AT A POINT ON THE SOUTHEASTERN MOST CORNER OF TRACT D OF STONEBRIDGE FILING NO. 1 AT MERIDIAN RANCH, RECORDED WITH RECEPTION NO. 215713582 IN THE RECORDS OF EL PASO COUNTY;

THE FOLLOWING SIX(6) COURSES ARE ON SAID SOUTHERLY LINE OF TRACT D:

1. THENCE N13°42'24"E A DISTANCE OF 350.00 FEET;
2. THENCE N56°18'54"E A DISTANCE OF 150.00 FEET;
3. THENCE S84°02'15"E A DISTANCE OF 300.00 FEET;
4. THENCE N60°01'20"E A DISTANCE OF 300.00 FEET;
5. THENCE N44°00'02"E A DISTANCE OF 520.00 FEET;
6. THENCE N56°12'41"E A DISTANCE OF 308.07 FEET;
7. THENCE S31°45'35"E A DISTANCE OF 134.54 FEET;
8. THENCE S12°21'07"W A DISTANCE OF 8.00 FEET;
9. THENCE S33°47'19"E A DISTANCE OF 60.00 FEET;
10. THENCE S38°56'54"E A DISTANCE OF 123.00 FEET;
11. THENCE S44°59'01"E A DISTANCE OF 59.00 FEET;
12. THENCE S46°40'09"E A DISTANCE OF 60.00 FEET;
13. THENCE S49°16'15"E A DISTANCE OF 58.53 FEET;
14. THENCE S54°59'06"E A DISTANCE OF 123.00 FEET;
15. THENCE S60°08'41"E A DISTANCE OF 60.00 FEET;
16. THENCE S65°03'17"E A DISTANCE OF 145.00 FEET;
17. THENCE S68°53'37"E A DISTANCE OF 140.36 FEET;
18. THENCE S58°13'49"E A DISTANCE OF 206.93 FEET;
19. THENCE S20°23'46"E A DISTANCE OF 350.00 FEET;
20. THENCE S82°25'21"W A DISTANCE OF 800.00 FEET;
21. THENCE S64°36'19"W A DISTANCE OF 400.00 FEET;
22. THENCE S79°31'13"W A DISTANCE OF 400.00 FEET;
23. THENCE N86°37'24"W A DISTANCE OF 475.00 FEET;
24. THENCE N38°44'01"W A DISTANCE OF 300.00 FEET;
25. THENCE N78°55'18"W A DISTANCE OF 200.00 FEET TO THE POINT OF BEGINNING.

THE ABOVE PARCEL OF LAND CONTAINS 40.435 ACRES, MORE OR LESS.

**PARCEL B:**  
BEGINNING AT A POINT ON THE SOUTHERN LINE OF TRACT C OF STONEBRIDGE FILING NO. 3 AT MERIDIAN RANCH, RECORDED WITH RECEPTION NO. 217714053 IN THE RECORDS OF EL PASO COUNTY;

THE FOLLOWING SIX(6) COURSES ARE ON SAID SOUTHERLY LINE OF TRACT C:

1. THENCE N66°06'02"E A DISTANCE OF 570.00 FEET;
2. THENCE S85°52'49"E A DISTANCE OF 400.00 FEET;
3. THENCE S61°19'51"E A DISTANCE OF 500.00 FEET;
4. THENCE S83°50'41"E A DISTANCE OF 410.00 FEET;
5. THENCE S23°25'11"W A DISTANCE OF 140.26 FEET;
6. THENCE S09°37'54"E A DISTANCE OF 190.96 FEET;
7. THENCE S32°40'27"W A DISTANCE OF 349.31 FEET;
8. THENCE S48°27'37"W A DISTANCE OF 122.15 FEET;
9. THENCE S77°17'41"W A DISTANCE OF 109.21 FEET;
10. THENCE N51°49'02"W A DISTANCE OF 111.67 FEET;
11. THENCE S49°10'35"W A DISTANCE OF 165.08 FEET;
12. THENCE S47°26'26"W A DISTANCE OF 115.00 FEET;
13. THENCE N42°50'23"W A DISTANCE OF 125.00 FEET;
36. THENCE N42°33'34"W A DISTANCE OF 60.00 FEET;
35. THENCE N47°54'59"W A DISTANCE OF 105.00 FEET;
34. THENCE N54°18'56"W A DISTANCE OF 97.00 FEET;
33. THENCE N61°13'42"W A DISTANCE OF 97.00 FEET;
32. THENCE N69°58'55"W A DISTANCE OF 100.00 FEET;
31. THENCE N69°16'10"W A DISTANCE OF 120.43 FEET;
30. THENCE N61°52'11"W A DISTANCE OF 60.00 FEET;
29. THENCE N60°08'41"W A DISTANCE OF 60.00 FEET;
28. THENCE N55°03'09"W A DISTANCE OF 144.23 FEET;
27. THENCE N43°46'04"W A DISTANCE OF 160.00 FEET;
26. THENCE N23°57'47"W A DISTANCE OF 105.00 FEET;
25. THENCE N31°38'39"W A DISTANCE OF 206.41 FEET TO THE POINT OF BEGINNING.

THE ABOVE PARCEL OF LAND CONTAINS 27.460 ACRES, MORE OR LESS.

THE FINAL PLAT CONTAINS 67.895 ACRES, MORE OR LESS.

SHEET NO	SHEET INDEX	SHEET NO	SHEET INDEX
1	COVER SHEET	15	STORM #1 & STORM #2
2	INDEX SHEET	16	SIDEWALK PLAN
3-4	DETAIL SHEET	17	OVERALL SANITARY SEWER
5	ENCLAVE SCENIC DR.	18	OVERALL SANITARY SEWER SERVICES
6	ENCLAVE SCENIC DR. & HIDDEN ENCLAVE CT.		OVERALL UNDERDRAIN
7-8	GRANITE RIDGE DR.	20	UNDERDRAIN DETAILS
9	GRANITE RIDGE DR. & GRANITE PARK LN.	21	OVERALL WATER
		22	OVERALL WATER SERVICES
10	MARBLE CANYON WAY	23	OVERALL STORM DRAIN
11	RANCH GATE DR.	24	INDEX SHEET
12	MERIDIAN HILLS TR.	25-30	LAYOUT
13	HIDDEN RANCH CT.	31-32	DETAIL SHEETS
14	SEWER #1 & SEWER #2 & SEWER #3		

### DESIGN ENGINEER'S STATEMENT:

THESE DETAILED PLANS AND SPECIFICATIONS WERE PREPARED UNDER MY DIRECTION AND SUPERVISION. SAID PLANS AND SPECIFICATIONS HAVE BEEN PREPARED ACCORDING TO THE CRITERIA ESTABLISHED BY THE COUNTY FOR DETAILED ROADWAY, DRAINAGE, GRADING AND EROSION CONTROL PLANS AND SPECIFICATIONS, AND SAID DETAILED PLANS AND SPECIFICATIONS ARE IN CONFORMITY WITH APPLICABLE MASTER DRAINAGE AND MASTER TRANSPORTATION PLANS. SAID PLANS AND SPECIFICATIONS MEET THE PURPOSES FOR WHICH THE PARTICULAR ROADWAY AND DRAINAGE FACILITIES ARE DESIGNED AND ARE CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. I ACCEPT RESPONSIBILITY FOR ANY LIABILITY CAUSED BY ANY NEGLIGENT ACTS, ERRORS OR OMISSIONS ON MY PART IN PREPARATION OF THESE DETAILED PLANS AND SPECIFICATIONS.

THOMAS A. KERBY, P.E. #31429

DATE

### DEVELOPERS STATEMENT:

#### DEVELOPERS STATEMENT:

THE UNDERSIGNED DEVELOPER HAS READ AND WILL COMPLY WITH ALL OF THE REQUIREMENTS SPECIFIED IN THESE CONSTRUCTION PLANS AND THE ACCOMPANYING DRAINAGE REPORT.

RAUL GUZMAN, VICE PRESIDENT  
GTL DEVELOPMENT, INC.

DATE

### OWNERS STATEMENT:

#### OWNERS STATEMENT:

THE UNDERSIGNED OWNER HAS READ AND WILL COMPLY WITH ALL OF THE REQUIREMENTS SPECIFIED IN THESE CONSTRUCTION PLANS AND THE ACCOMPANYING DRAINAGE REPORT.

RAUL GUZMAN, VICE PRESIDENT  
MERIDIAN RANCH INVESTMENTS, INC.

DATE

### EL PASO COUNTY:

COUNTY PLAN REVIEW IS PROVIDED ONLY FOR GENERAL CONFORMANCE WITH COUNTY DESIGN CRITERIA. THE COUNTY IS NOT RESPONSIBLE FOR THE ACCURACY AND ADEQUACY OF THE DESIGN, DIMENSIONS, AND/OR ELEVATIONS WHICH SHALL BE CONFIRMED AT THE JOB SITE. THE COUNTY THROUGH THE APPROVAL OF THIS DOCUMENT ASSUMES NO RESPONSIBILITY FOR COMPLETENESS AND/OR ACCURACY OF THIS DOCUMENT.

FILED IN ACCORDANCE WITH THE REQUIREMENTS OF THE EL PASO COUNTY LAND DEVELOPMENT CODE, DRAINAGE CRITERIA, AND ENGINEERING CRITERIA MANUAL AS AMENDED.

IN ACCORDANCE WITH ECM SECTION 1.12, THESE CONSTRUCTION DOCUMENTS WILL BE VALID FOR CONSTRUCTION FOR A PERIOD OF 2 YEARS FROM THE DATE SIGNED BY THE EL PASO COUNTY ENGINEER. IF CONSTRUCTION HAS NOT BEEN STARTED WITHIN THOSE 2 YEARS, THE PLANS WILL NEED TO BE RESUBMITTED FOR APPROVAL, INCLUDING PAYMENT OF REVIEW FEES ET THE PLANNING AND COMMUNITY DEVELOPMENT DIRECTORS DISCRETION.

JENNIFER IRVINE, P.E.  
COUNTY ENGINEER / ECM ADMINISTRATOR

DATE

### DISTRICT ENGINEER:

THOMAS A. KERBY, PE CO 31429  
MERIDIAN SERVICE METROPOLITAN DISTRICT

DATE

### WATER AND SANITARY SEWER APPROVALS:

MILTON GABRIELSKI, PRESIDENT  
MERIDIAN SERVICE METROPOLITAN DISTRICT

DATE

### BENCH MARK

- 1) MRR01 - 3 1/4" ALUMINUM CAP ON NO.8 REBAR LOCATED AT THE NORTHEAST CORNER OF THE INTERSECTION OF LONDONDERRY DRIVE AND ANGELES ROAD. LOCATED AT THE SE CORNER OF THE MERIDIAN RANCH RECREATIONAL CENTER SIGN. ELEVATION - 7098.40'
- 2) MRMS1 - 3 1/4" ALUMINUM CAP ON NO.6 REBAR LOCATED ON THE WEST SIDE OF RAINBOW BRIDGE DRIVE 1,150 FEET NORTH OF LONDONDERRY DRIVE. LOCATED NEAR THE BACK OF SIDE WALK AT THE NW CORNER OF RAINBOW BRIDGE DRIVE AND THE NORTHERLY ENTRANCE TO MERIDIAN RANCH ELEMENTARY SCHOOL (10480 RAINBOW BRIDGE DRIVE). ELEVATION - 7098.73'

### BASIS OF BEARING

BASIS OF BEARINGS FOR THIS DESCRIPTION IS THE SOUTH LINE OF THE SOUTHWEST QUARTER OF SECTION 29, T12S, R64W OF THE 6TH P.M., WHICH IS ASSUMED TO BEAR S89°25'42"E FROM THE SOUTHWEST CORNER OF SECTION 29 (A STONE W/SCRIBED "X") TO THE SOUTH QUARTER CORNER OF SECTION 29 (3.25" ALUM. CAP LS 30087).

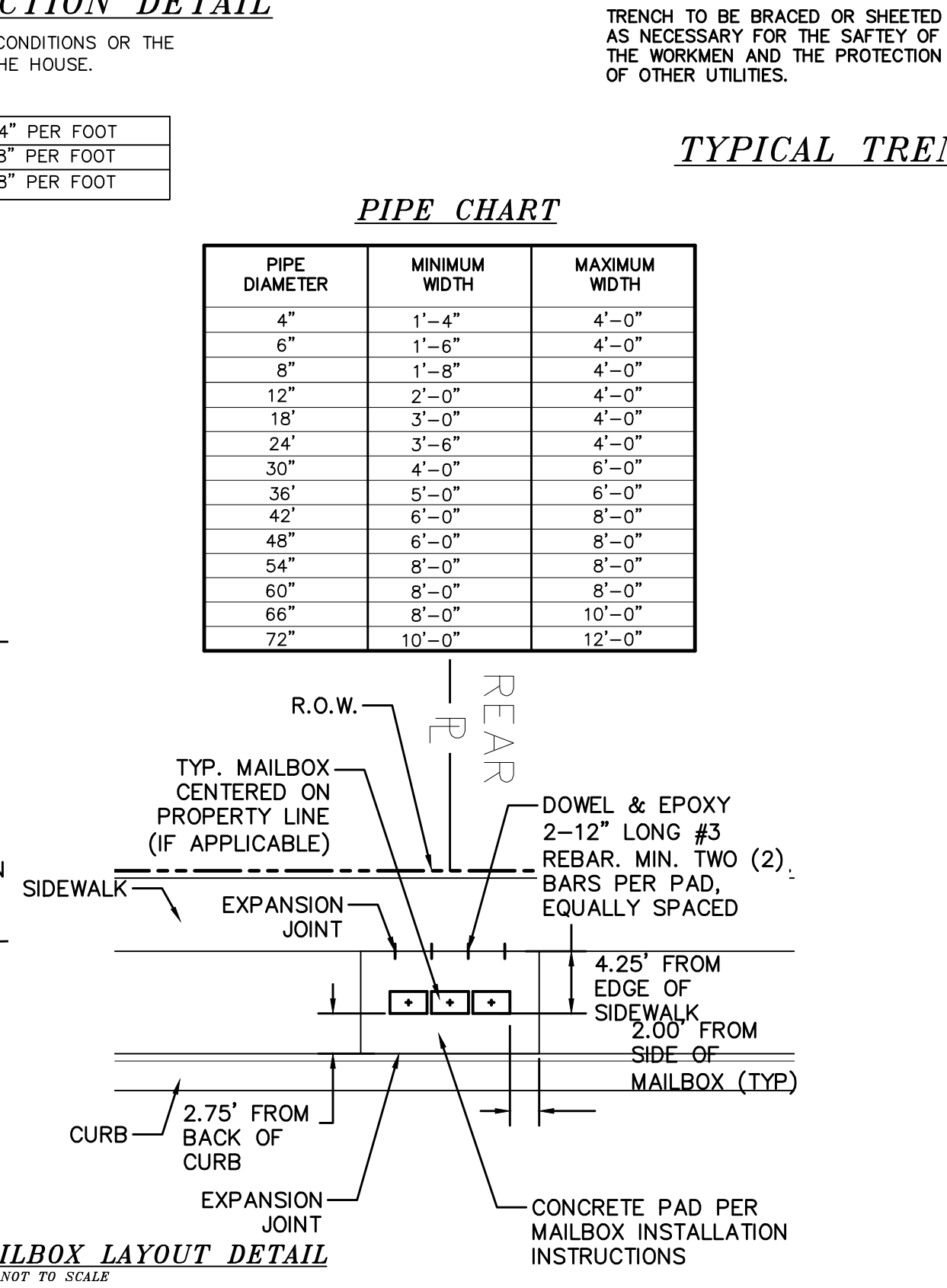
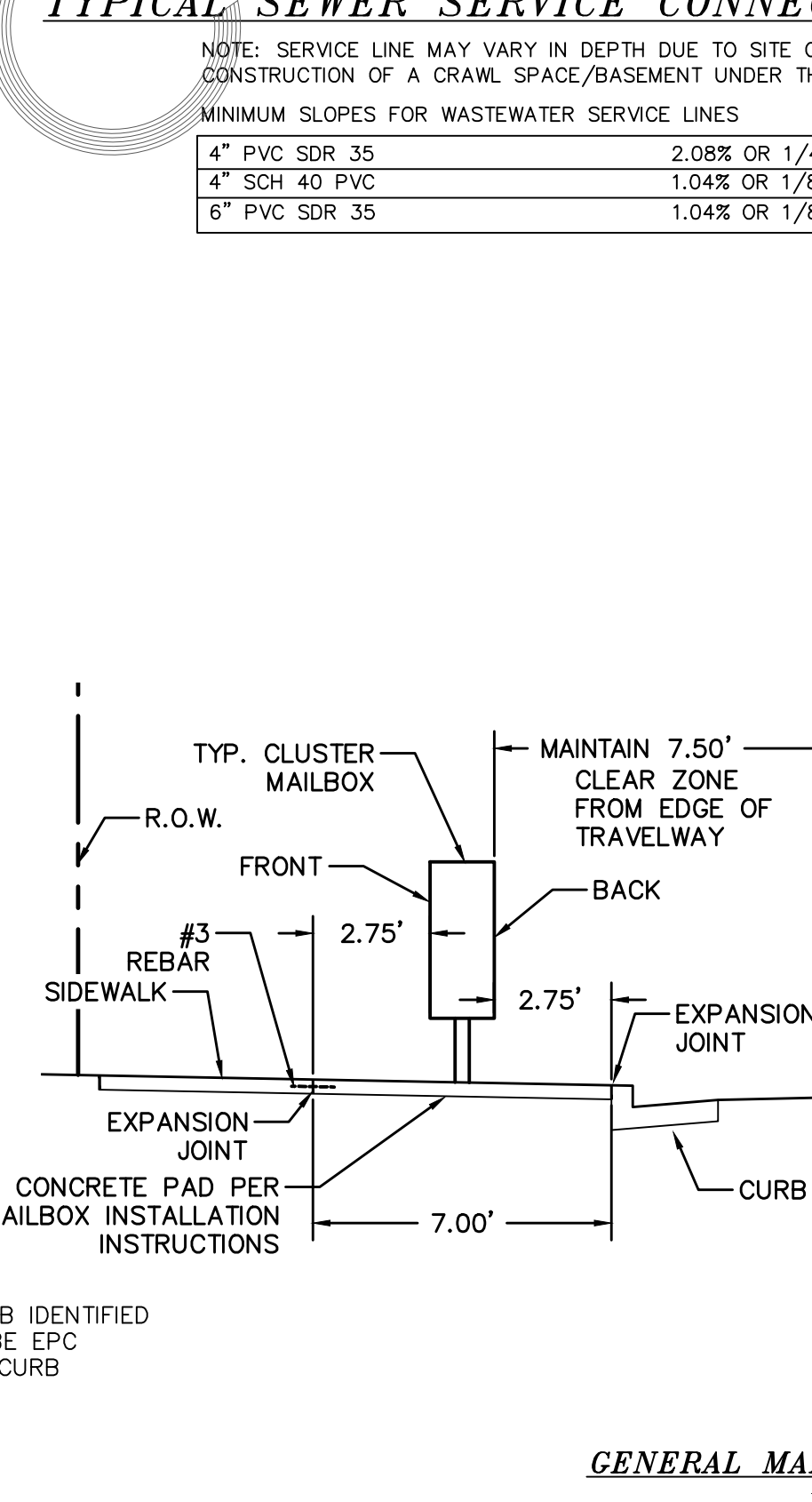
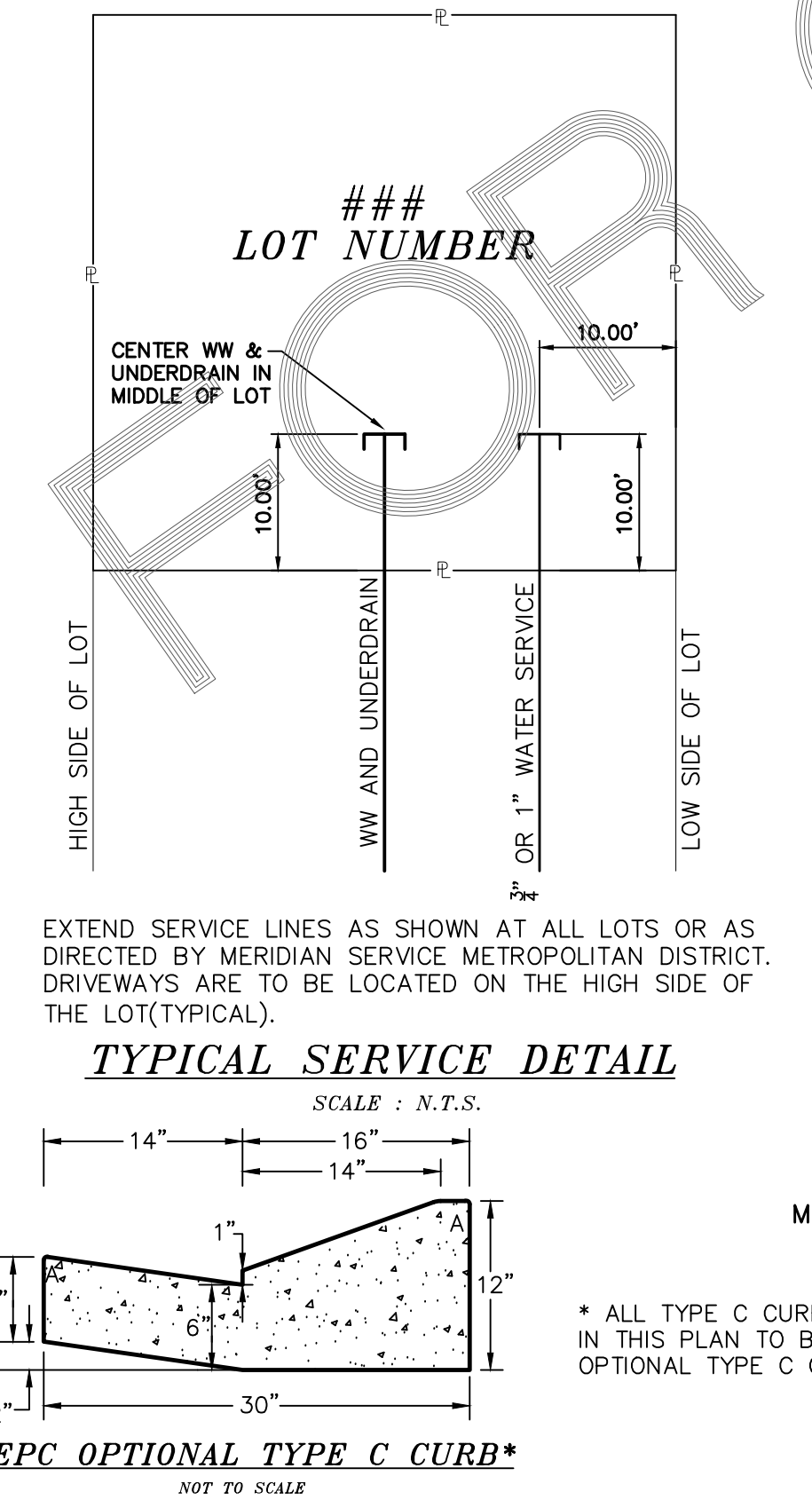
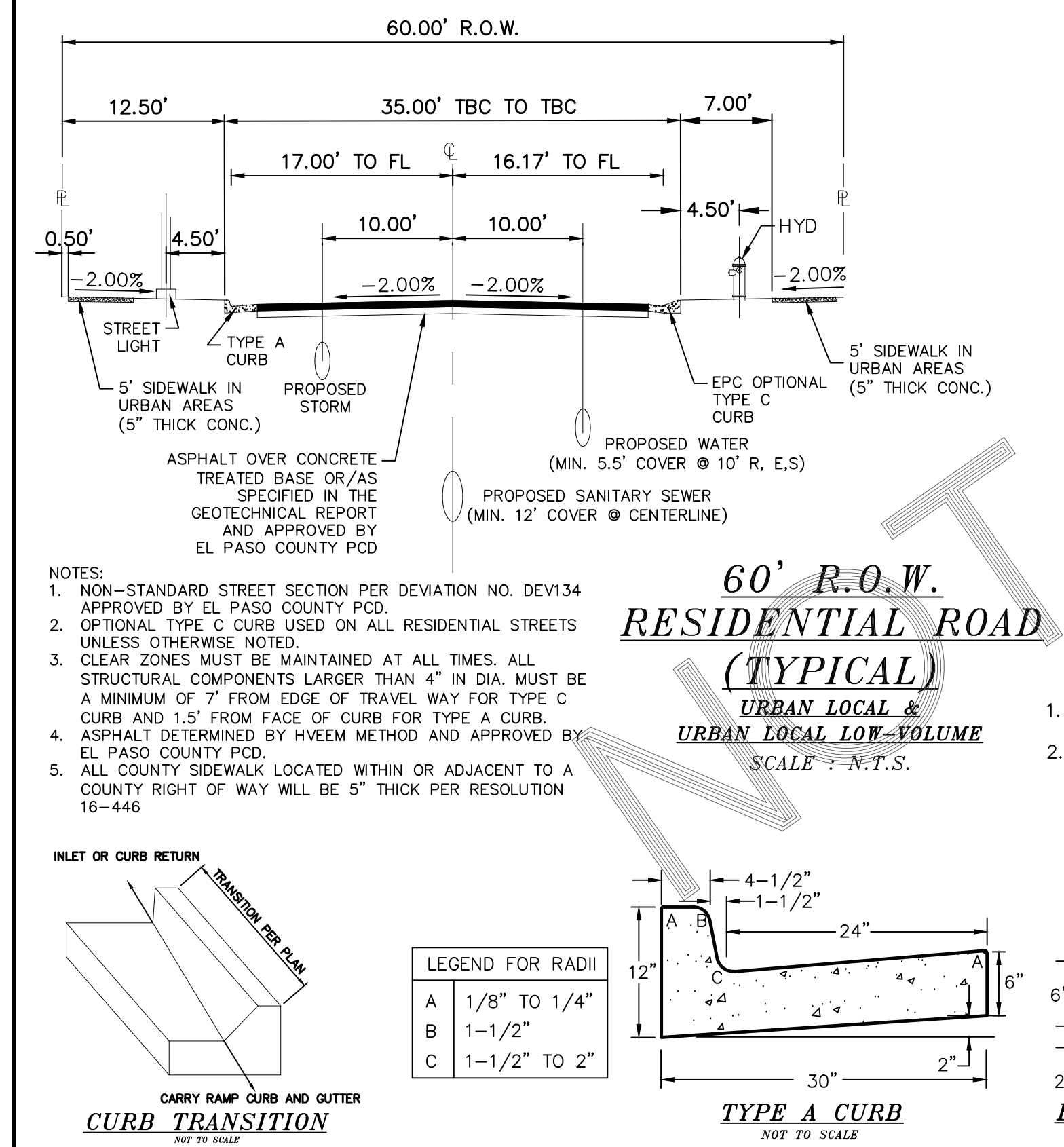
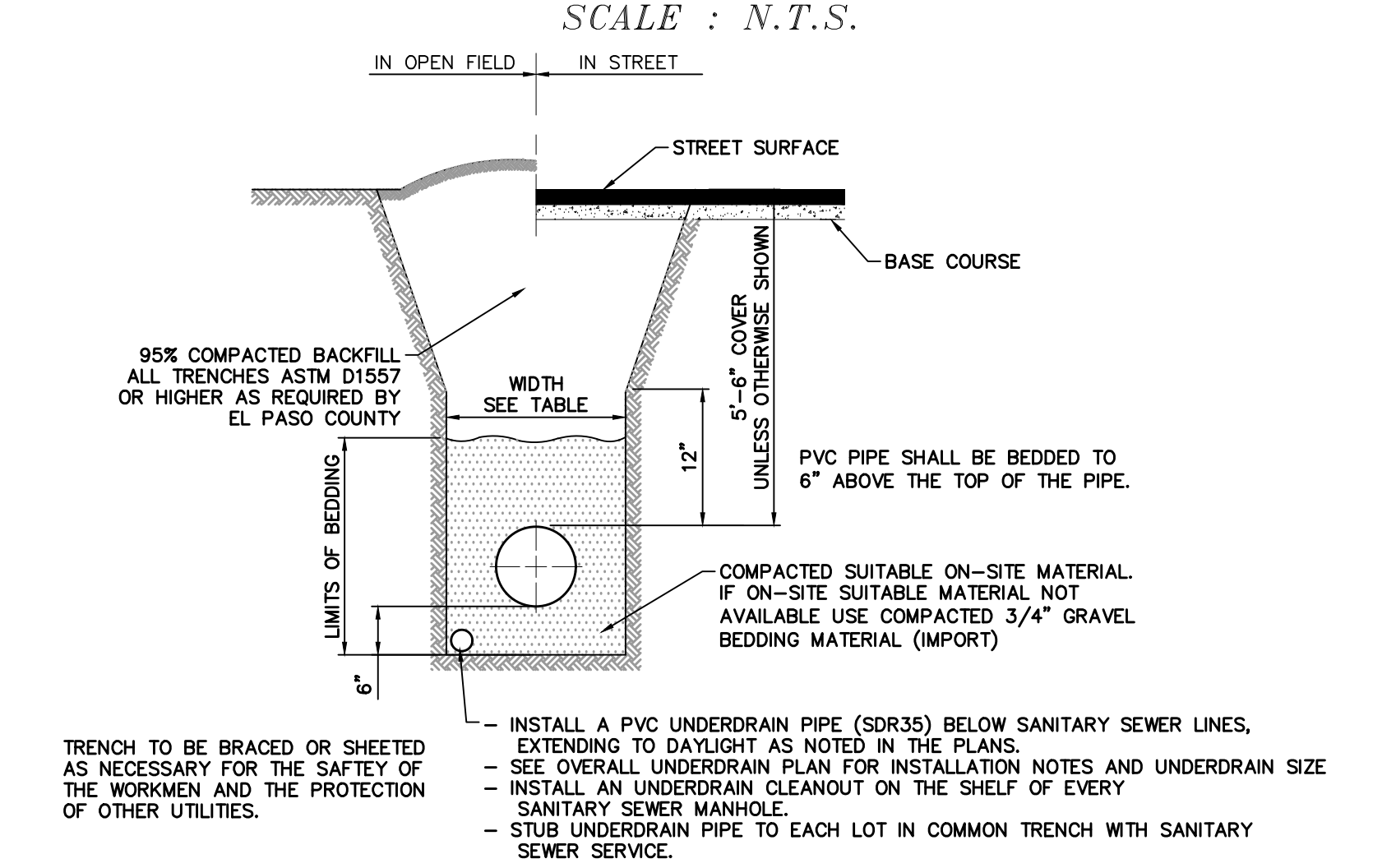
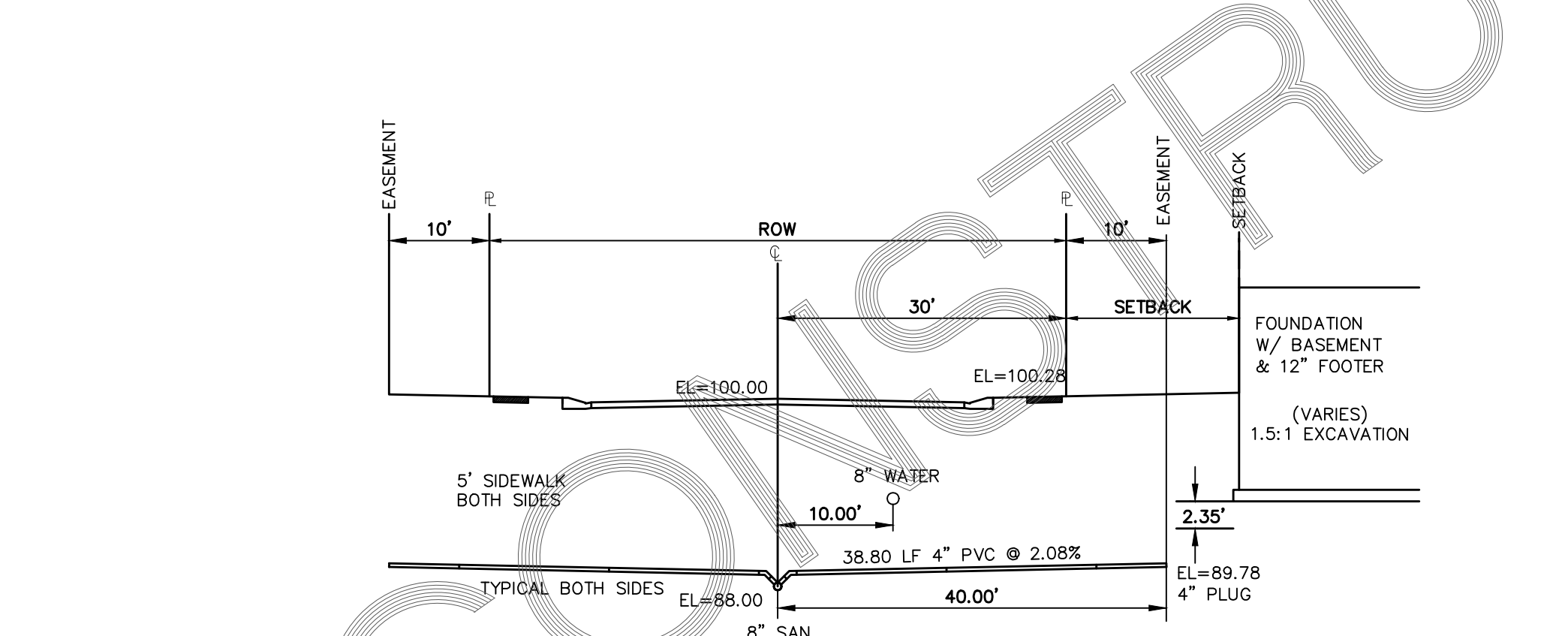
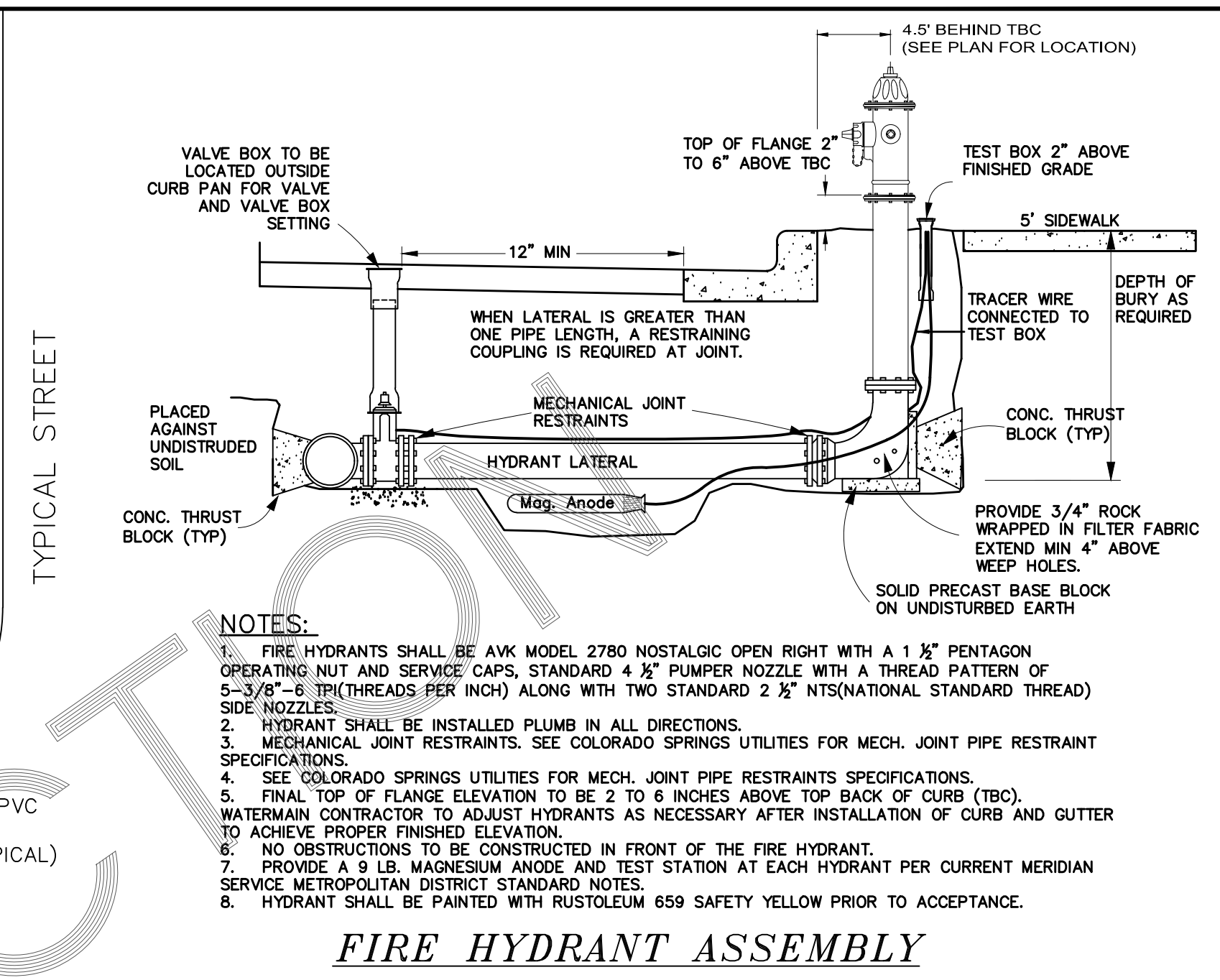
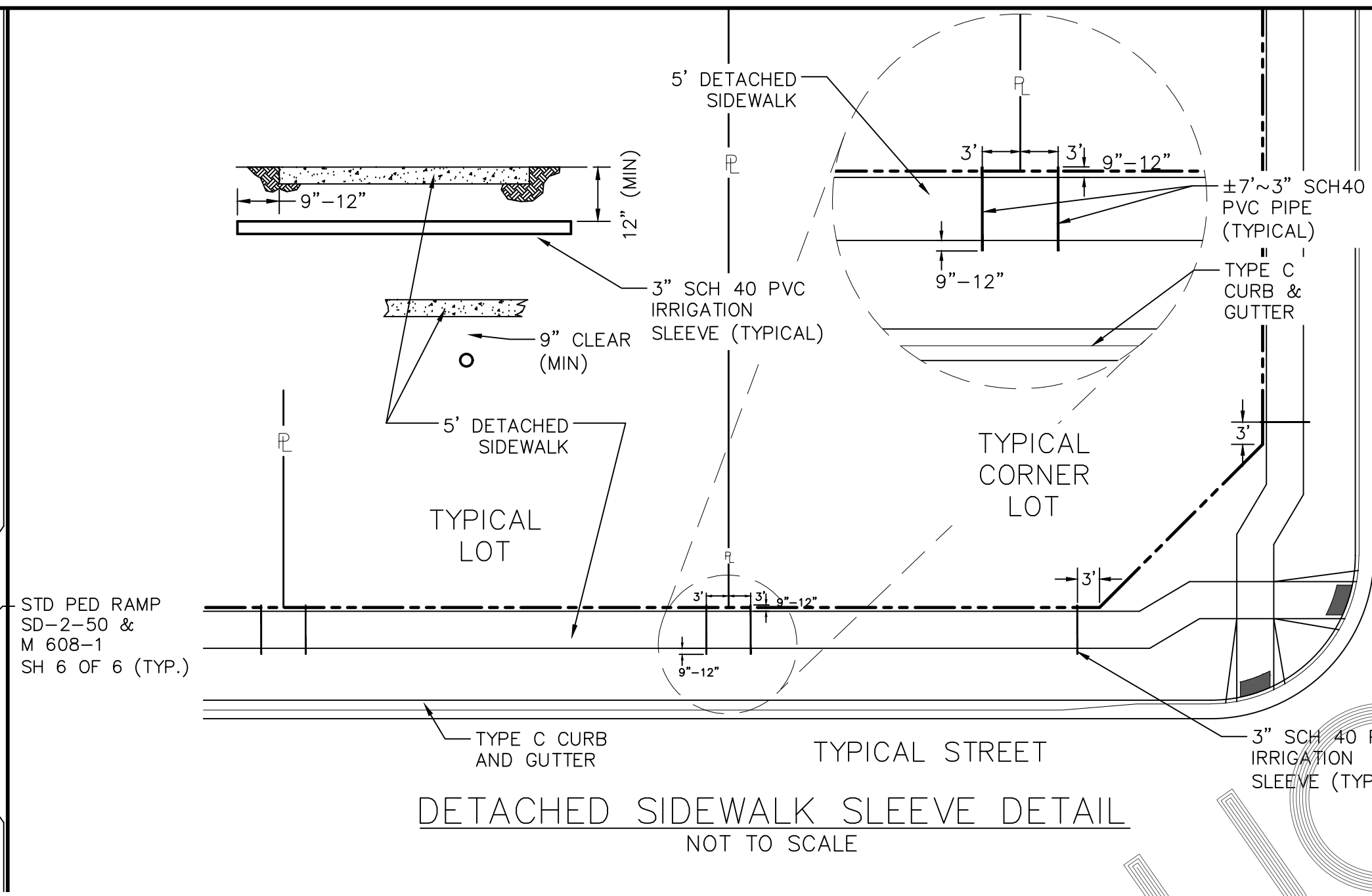
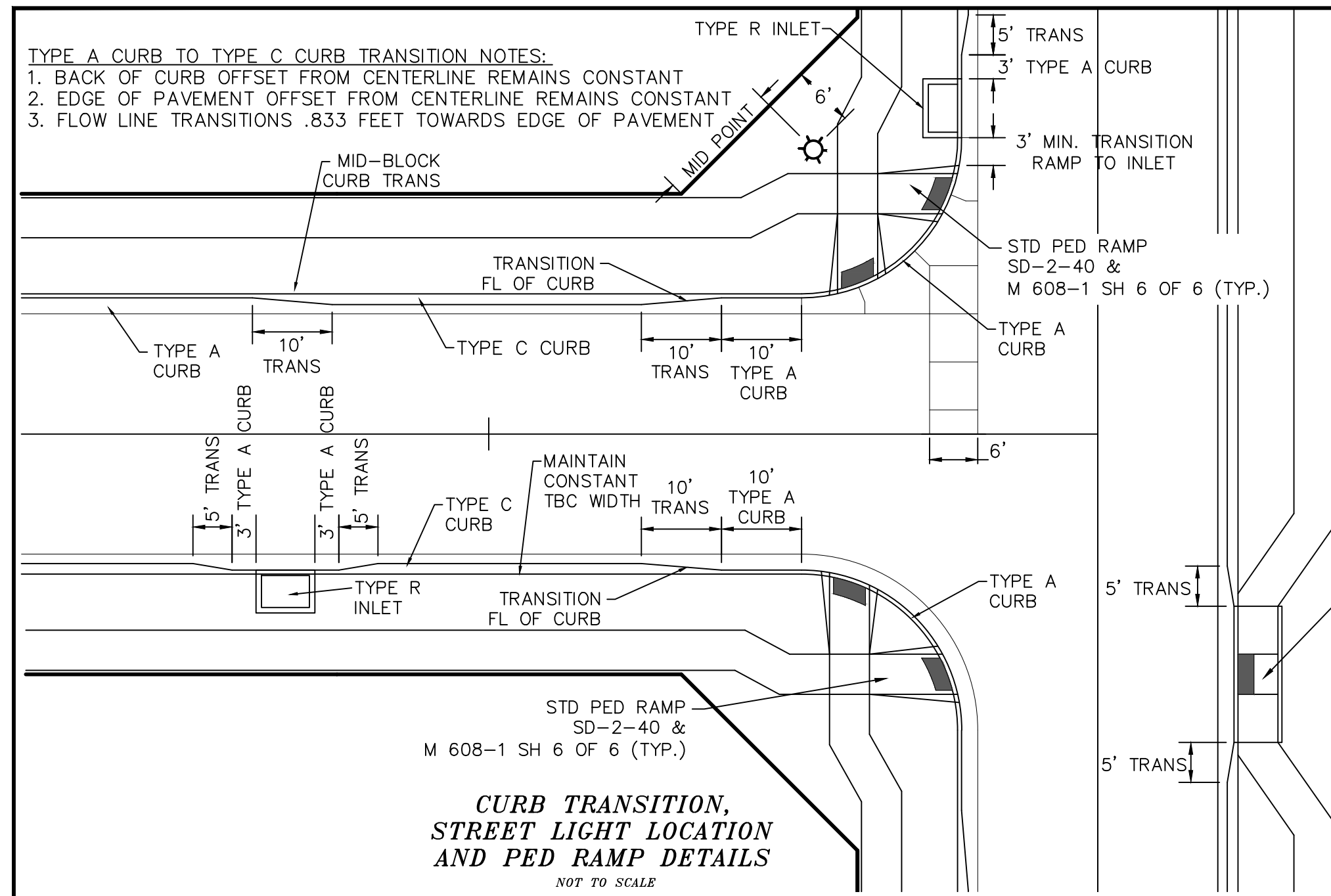


**TWO WORKING DAYS  
BEFORE YOU DIG  
CALL 811**

OR  
UTILITY NOTIFICATION CENTER OF COLORADO  
1-800-922-1987  
(SEE COVER FOR LIST OF UTILITY CONTACTS)

No.	Revisions	Date	Appr.
TECH CONTRACTORS 11886 STAPLETON DRIVE FALCON, CO 80831 TELEPHONE: 719.495.7444 FAX: 719.495.2457			
<b>MERIDIAN RANCH</b>			
STONEBRIDGE FILING 4 AT MERIDIAN RANCH STREET AND UTILITY PLANS COVER SHEET			
Scale	AS SHOWN	1 of 32	Date
Drawn by	LOG	Checked by	TAK
SEPTEMBER 2018			





LEGEND		
SYMBOL	ACRONYM	DESCRIPTION
	RCP W/FES	REINFORCED CONCRETE PIPE W/FLARED END SECTIONS
	INLET	STORM SEWER INLET BOX
	STMH	STORM SEWER MANHOLE
	ST	STORM SEWER LINE
	SS	SANITARY SEWER MAIN
	SSMH	SANITARY SEWER MANHOLE
	WM	WATER MAIN (ALL PIPES PVC, UNLESS OTHERWISE NOTED)
	GV	WATER GATE VALVE
	BV	WATER BUTTERFLY VALVE
	BOV	WATER BLOW-OFF VALVE
	HYD ASSY	FIRE HYDRANT ASSEMBLY
	TEE W/GV	WATER TEE W/ GATE VALVES
	ATT SW	ATTACHED SIDEWALK
		STANDARD PEDESTRIAN RAMP PER SD-2-40 & M-608-1 (SH 6 OF 6)
	ANODE	ANODE (CATHODIC PROTECTION)
	TS	TEST STATION
	HB	HAY BALE DAM
	SF	SILT FENCE
	EXIST	EXISTING FEATURES
		LOT NUMBERS
	PI	CROSS PAN PER SD-2-26
	BT	POINT OF INTERSECTION
	ET	END OF TRANSITION
		EXISTING CONTOUR (10')
		EXISTING CONTOUR (2')

**TECH CONTRACTORS**  
 11886 STAPLETON DRIVE  
 FALCON, CO 80831  
 TELEPHONE: 719.495.7444  
 FAX: 719.495.2457

**MERIDIAN RANCH**

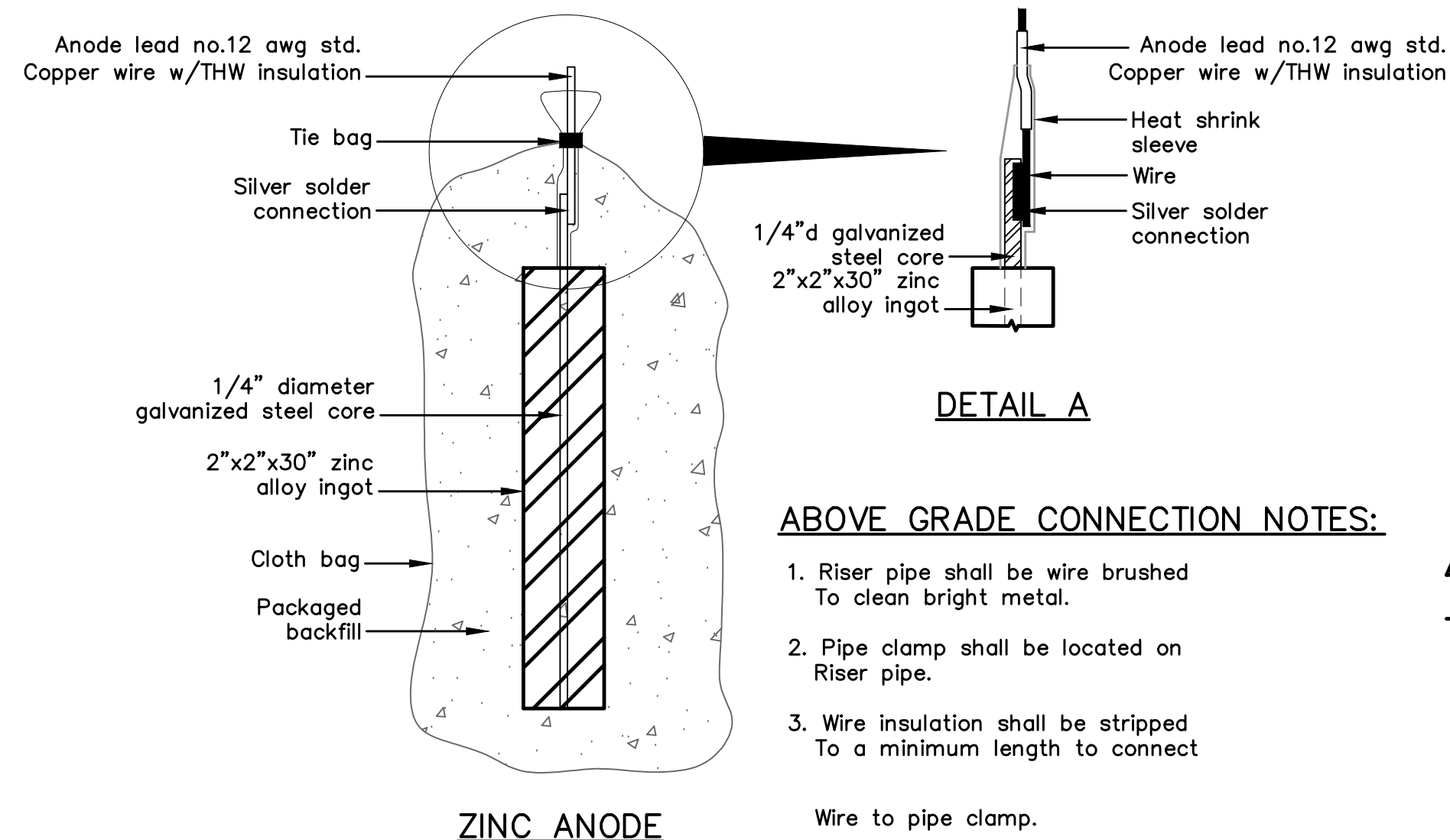
**STONEBRIDGE FILING 4 AT MERIDIAN RANCH STREET AND UTILITY PLANS**

**DETAIL SHEET**

Drawn by: LOG  
 Checked by: TAK  
 Date: SEPTEMBER 2018

Scale: AS SHOWN  
 3 of 32

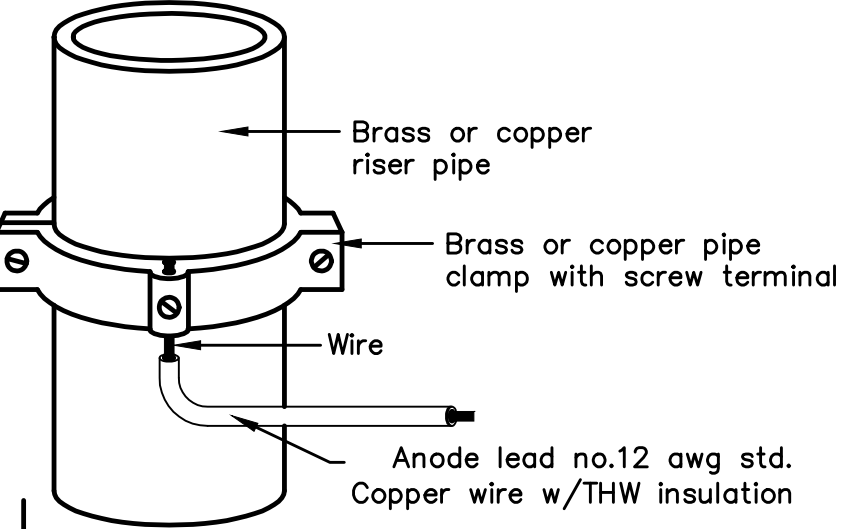
Revisions: No. Date Init. Appr. Date



**PACKAGED BACKFILL COMPOSITION:**

75% gypsum  
20% bentonite  
5% sodium sulfate

Ingot weight: 30 lbs.  
Pkgd. Weight: 70 lbs. Approx.

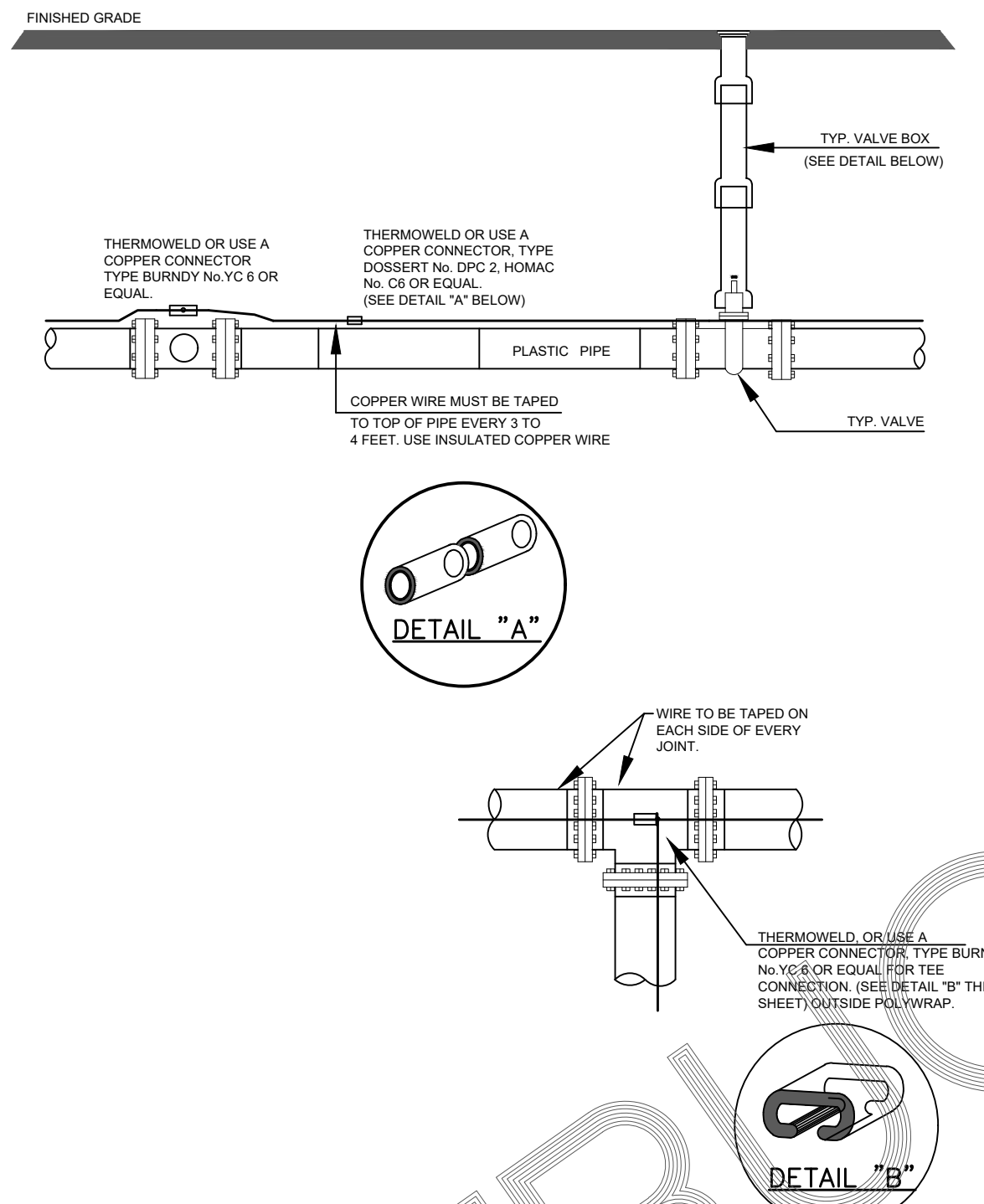


**ANODE LEAD ABOVE GRADE CONNECTION**

**ABOVE GRADE CONNECTION NOTES:**

1. Riser pipe shall be wire brushed To clean bright metal.
2. Pipe clamp shall be located on Riser pipe.
3. Wire insulation shall be stripped To a minimum length to connect Wire to pipe clamp.

**ZINC ANODE AND CONNECTORS FOR 1" AND 2" WATER SERVICE**



**Anode Design**

For use with DIP in conjunction with poly-wrap sleeves and piping in /1000 ohm-cm soil estimating a 3% holiday area.

Pipe Size Inches	Actual OD Inches	Anode Spacing Feet (see note 2)	Anode Weight (see note 2)
4	4.8	76.3	17 lb
6	6.9	53.1	17 lb
8	9.05	40.5	17 lb
12	13.20	27.7	17 lb
16	16	21.0	32 lb
20	20	16.9	32 lb
24	24	14.2	48 lb
30	30	11.4	48 lb
36	36	9.57	48 lb
42	42	8.24	48 lb
48	48	7.21	48 lb
54	54	6.42	48 lb

The distance from the point of the beginning to the first anode shall not exceed one half the recommended spacing.

**NOTES**

1. Cadweld connection to be primed and coated carefully. Packed anode should be covered with fine soil containing no rocks or dirt clumps, tamped.
2. When anodes are required with metal fittings and appurtenances together with PVC pipe installations, the anodes shall be placed and attached to the metal fittings in same manner as shown on this drawing. 9 lb anodes can be used on metal fittings when using PVC pipe.
3. Packaged anode to be wetted and covered with soil prior to backfilling.

**NOTE**

1. Contractor is responsible for continuity of all tracer wire.
2. Tracer wire is required on all pipes per MSMD specifications (PVC and HDPE).

**FIELD INSTALLATION OF POLYETHYLENE WRAP FOR DIP PIPE AND FITTINGS.**

**STEP 1:**

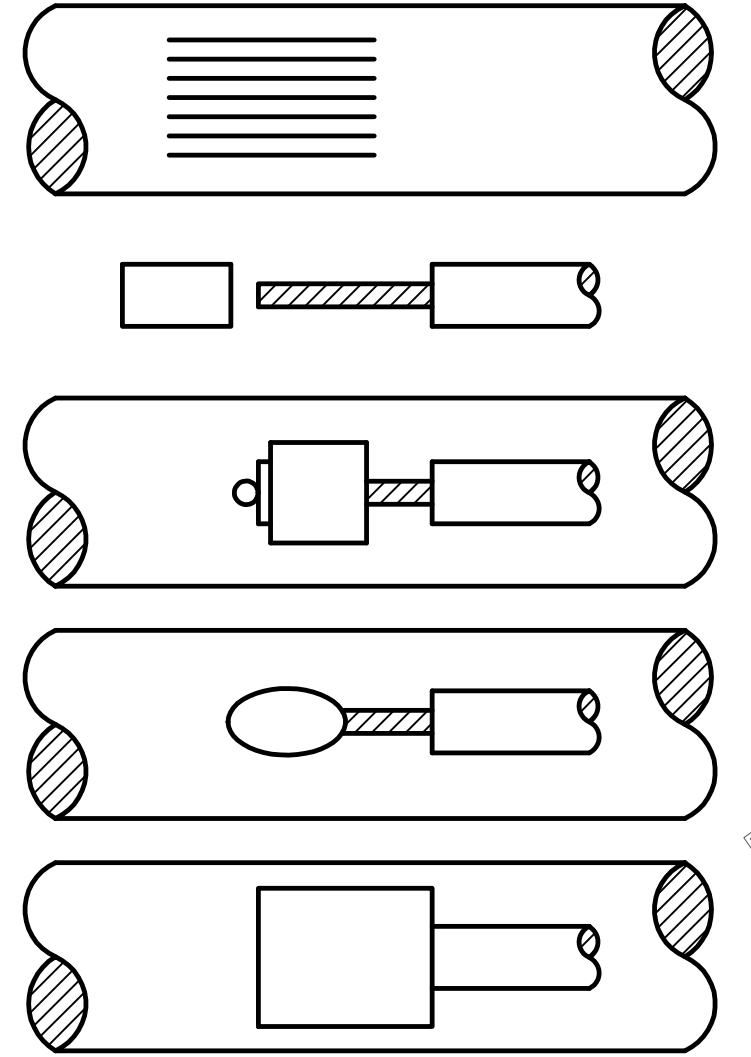
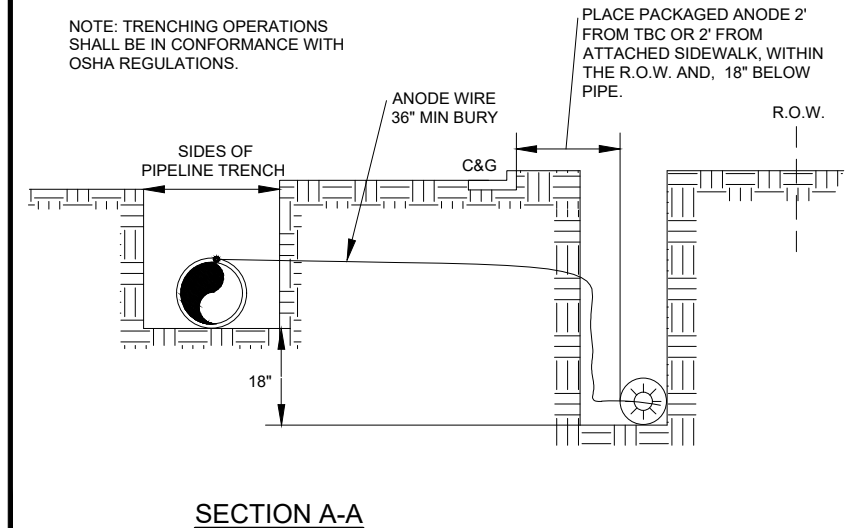
PLACE TUBE OF POLYETHYLENE MATERIAL ON PIPE PRIOR TO LOWERING IT INTO TRENCH.

**STEP 2:**

PULL TUBE OVER THE LENGTH OF THE PIPE. TAPE TUBE TO END AT JOINT. FOLD MATERIAL AROUND THE ADJACENT SPIGOT END AND WRAP WITH TAPE TO HOLD THE PLASTIC TUBE IN PLACE. INSTALL BONDING STRAP OR WIRE AT EVERY JOINT OF PIPE PRIOR TO WRAPPING.

**STEP 3:**

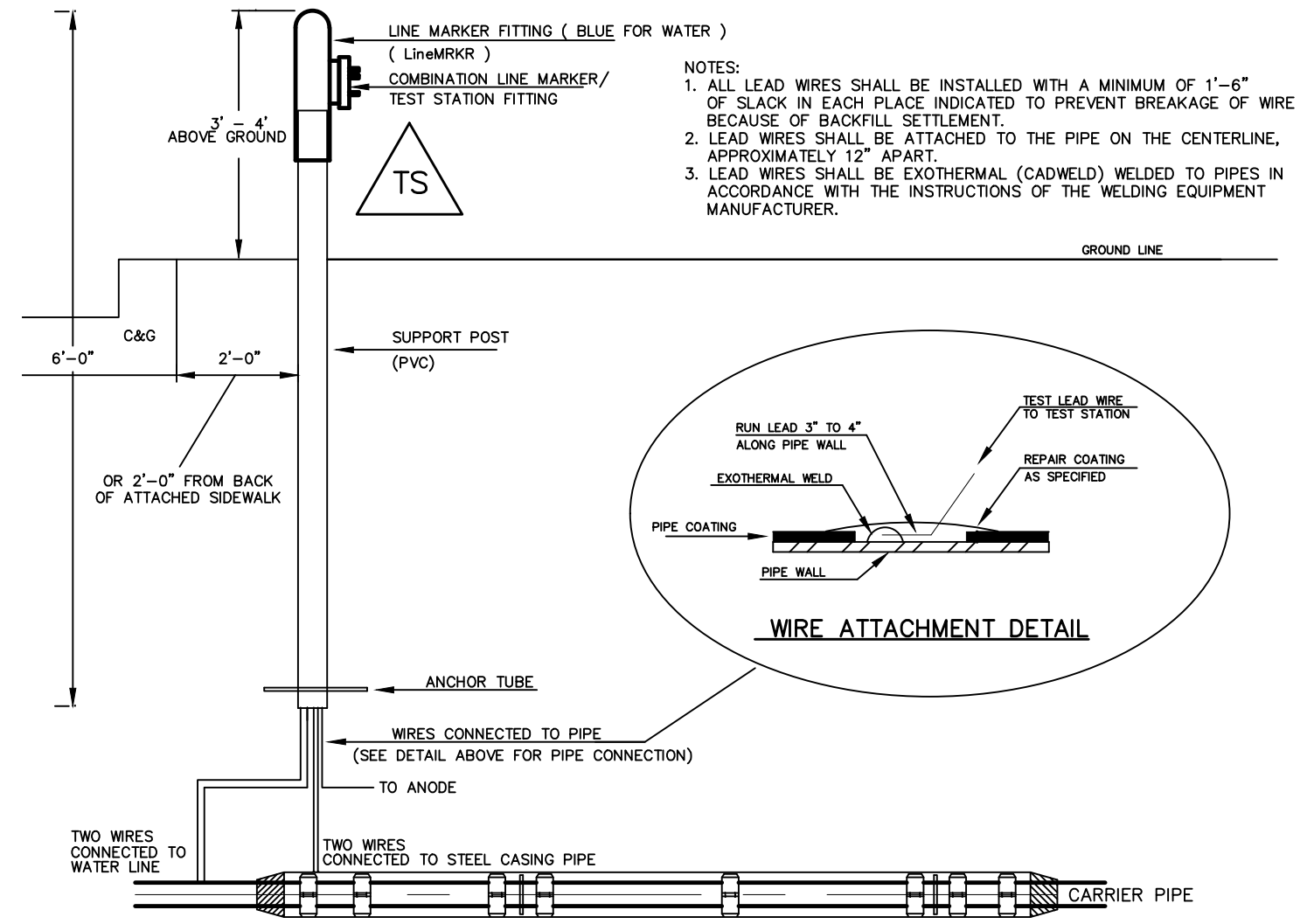
OVERLAP FIRST TUBE WITH ADJACENT TUBE AND SECURE WITH PLASTIC ADHESIVE TAPE. THE POLYETHYLENE TUBE MATERIAL COVERING THE PIPE SHALL BE LOOSE. EXCESS MATERIAL SHALL BE NEATLY DRAWN UP AROUND THE PIPE BARREL, FOLDED ON TOP OF PIPE AND TAPED IN PLACE.



**NOTES:**

1. All wire welds shall be minimum 3 inches apart.
2. Standard weld cartridges shall be used for steel surfaces.

**EXOTHERMIC WELD PROCESS**



**TYPICAL DETAIL FOR TEST STATION WITH STEEL SLEEVE INSTALLATION**

**NOTES:**

- 1.) Lowerings to be cathodically protected under the direction of the MSMD Inspector, per standards. (For anode size see detail above.)
- 2.) Example can vary due to site conditions and MSMD Inspector's direction's.
- 3.) Reference Colorado Springs Utilities Standard Detail Drawing No. A 8-6 - Steel Sleeve Installation.

	Date
	Appr.
	Date
	Revisions
	No.

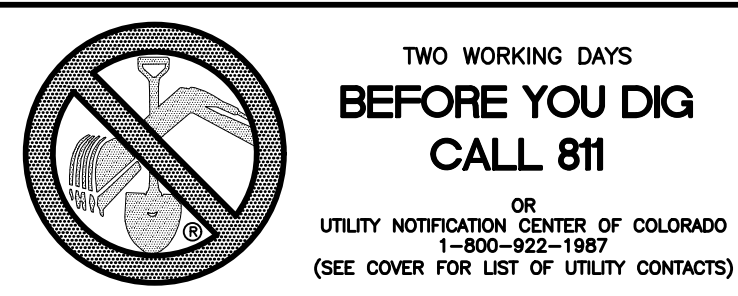
TECH CONTRACTORS  
11886 STAPLETON DRIVE  
FALCON, CO 80831  
TELEPHONE: 719.495.7444  
FAX: 719.495.2457



**STONEBRIDGE FILING 4 AT MERIDIAN RANCH STREET AND UTILITY PLANS**

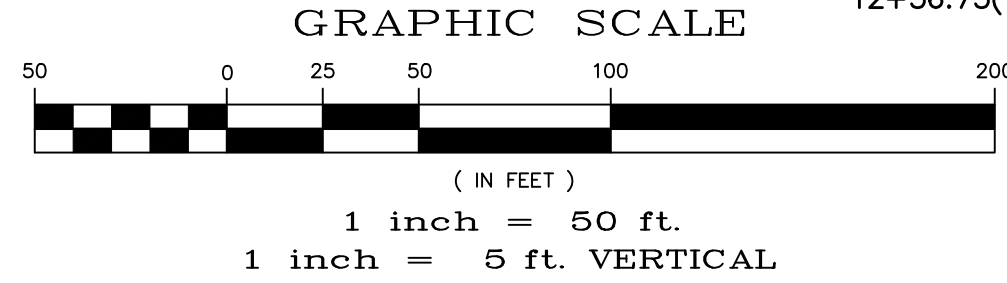
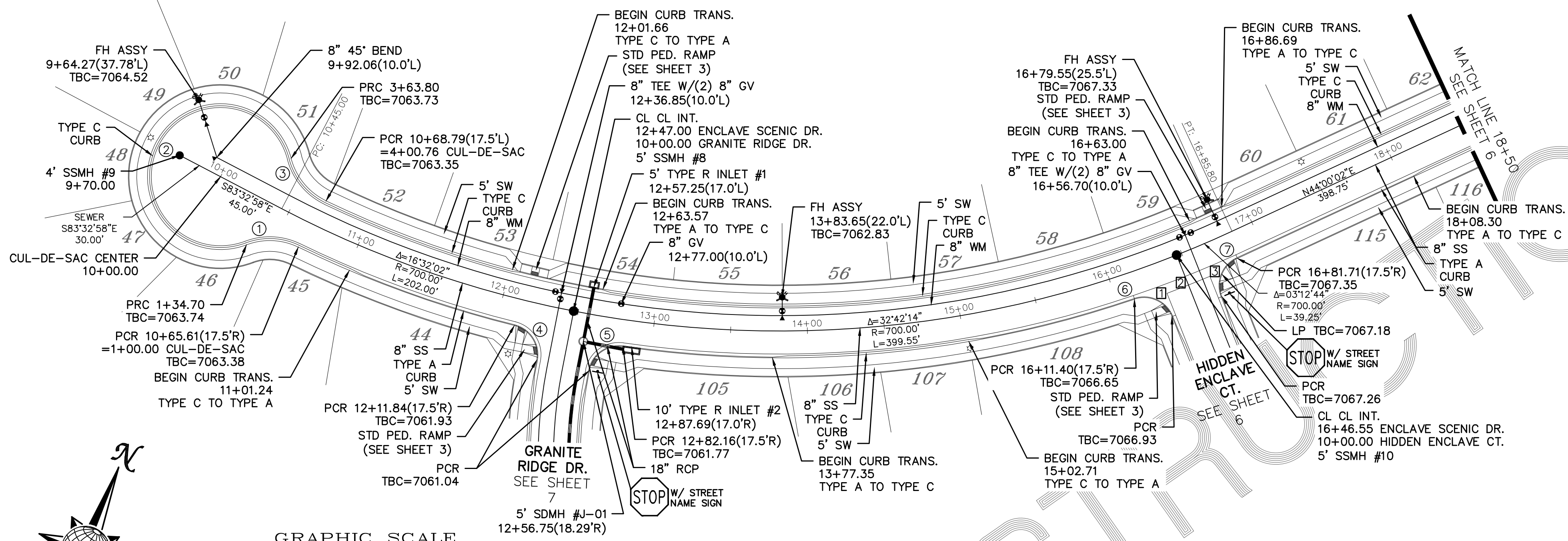
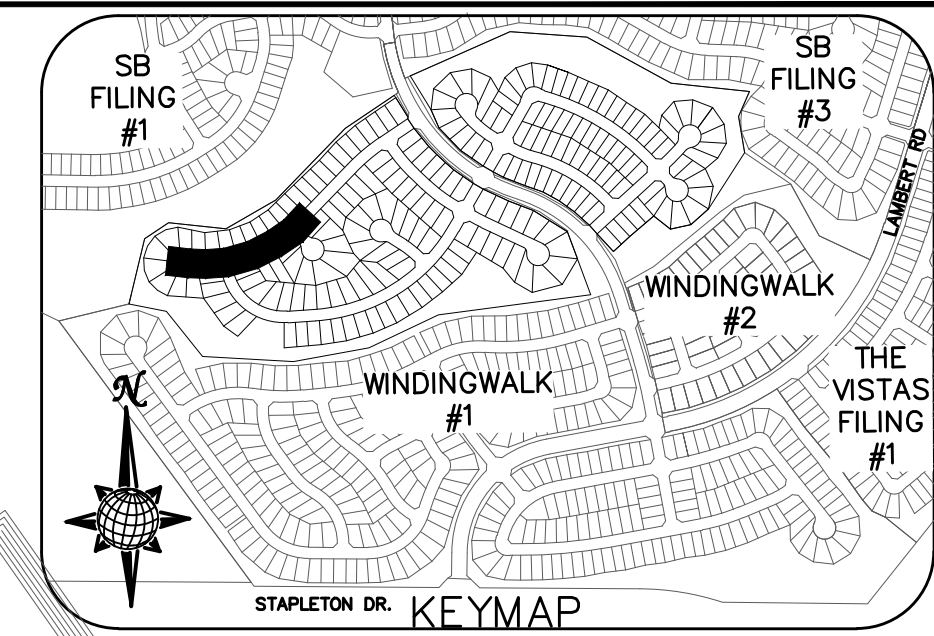
**DETAIL SHEET**

Drawn by	LOG	Checked by	TAK	Date	SEPTEMBER 2018
Scale	AS SHOWN	4	of	32	



INSTALL CROSS PAN  
PER COUNTY STD  
SD-2-26

- 1 = 7066.33
- 2 = 7066.50
- 3 = 7066.66



# ENCLAVE SCENIC DR.

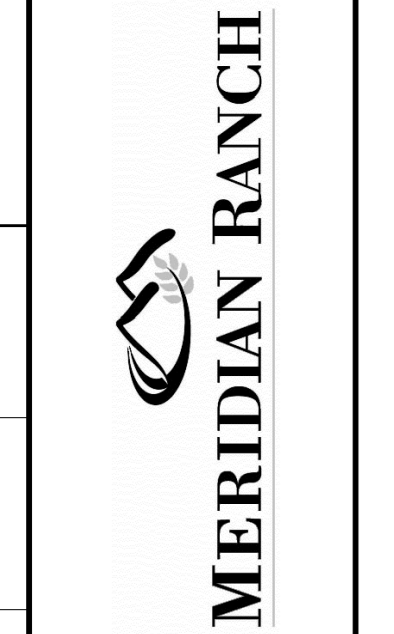
URBAN LOCAL LOW VOLUME TO STA 12+11.84  
URBAN LOCAL AFTER STA 12+11.84  
60' WIDE RIGHT OF WAY, 30' WIDE ASPHALT PAVEMENT (EDGE TO EDGE)

CURVE TABLE			
CURVE	LENGTH	RADIUS	DELTA
1	34.70'	42.50'	46°47'00"
2	229.10'	47.50'	276°20'37"
3	36.96'	42.50'	49°49'14"
4	29.65'	19.50'	87°07'20"
5	29.65'	19.50'	87°07'20"
6	29.65'	19.50'	87°07'20"
7	29.65'	19.50'	87°07'20"

ALL CURB RADIUS ARE TO TOP BACK OF CURB (TYP.)

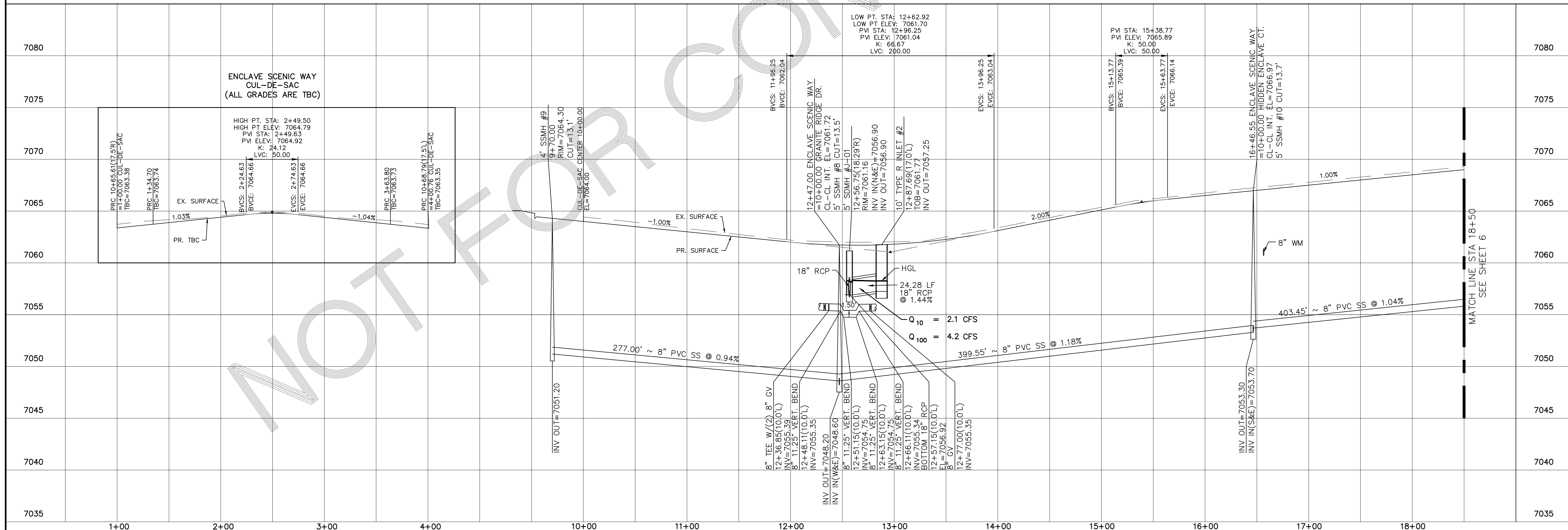
No.	Revisions	Date	Invt.	Appr.	Date

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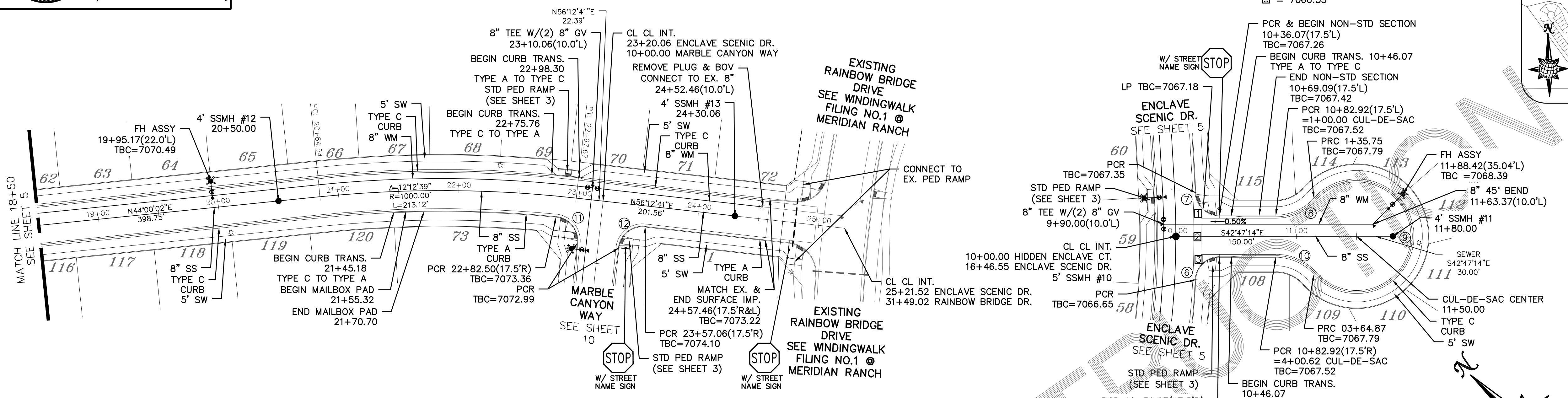
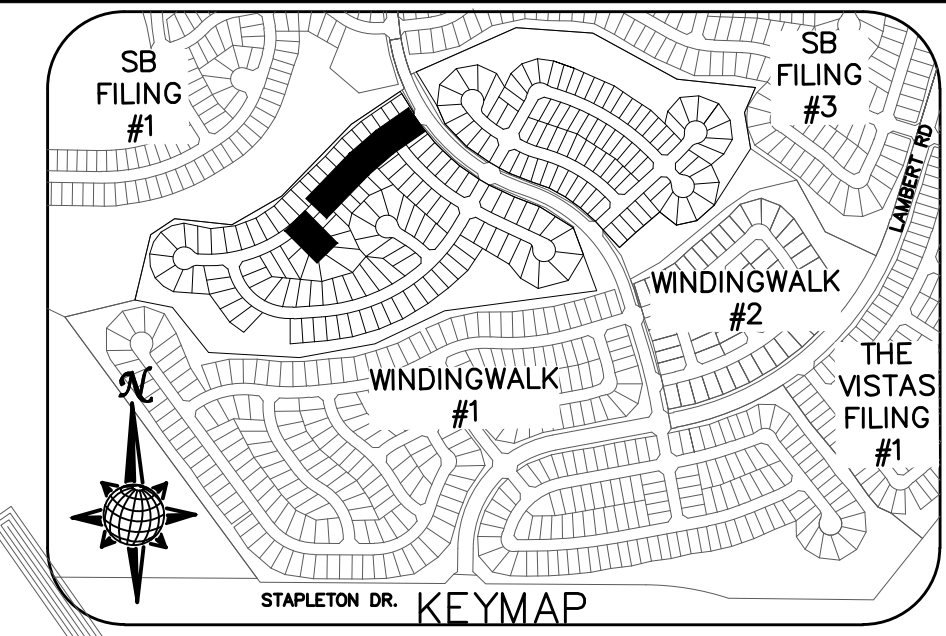


STONEBRIDGE FILING 4 AT  
MERIDIAN RANCH  
STREET AND UTILITY PLANS  
ENCLAVE SCENIC DR.

Scale AS SHOWN  
Drawn by LOG  
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Date SEPTEMBER 2018  
5 of 32



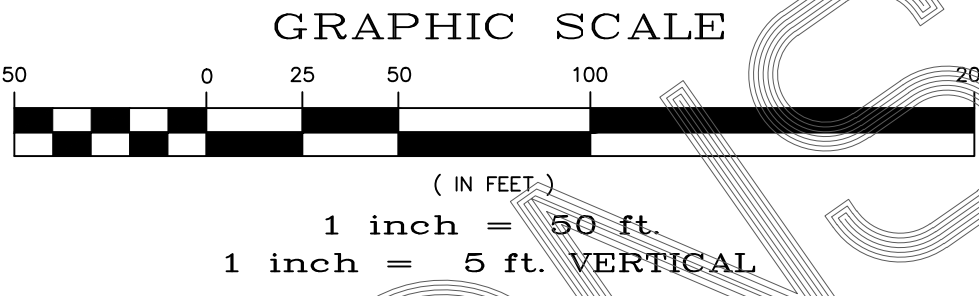
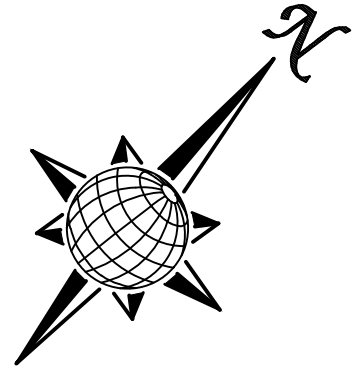
TWO WORKING DAYS  
**BEFORE YOU DIG**  
**CALL 811**  
 OR  
 UTILITY NOTIFICATION CENTER OF COLORADO  
 1-800-922-1987  
 (SEE COVER FOR LIST OF UTILITY CONTACTS)



INSTALL CROSS PAN  
 PER COUNTY STD  
 SD-2-26  
 □ = 7066.66  
 ▨ = 7066.50  
 ▩ = 7066.33

CURVE TABLE			
CURVE	LENGTH	RADIUS	DELTA
6	29.65'	19.50'	87°07'20"
7	29.65'	19.50'	87°07'20"
8	35.75'	42.50'	48°11'23"
9	229.13'	47.50'	276°22'46"
10	35.75'	42.50'	48°11'23"
11	30.93'	19.50'	90°52'09"
12	30.63'	19.50'	90°00'00"

ALL CURB RADII ARE TO TOP BACK OF CURB (TYP.)

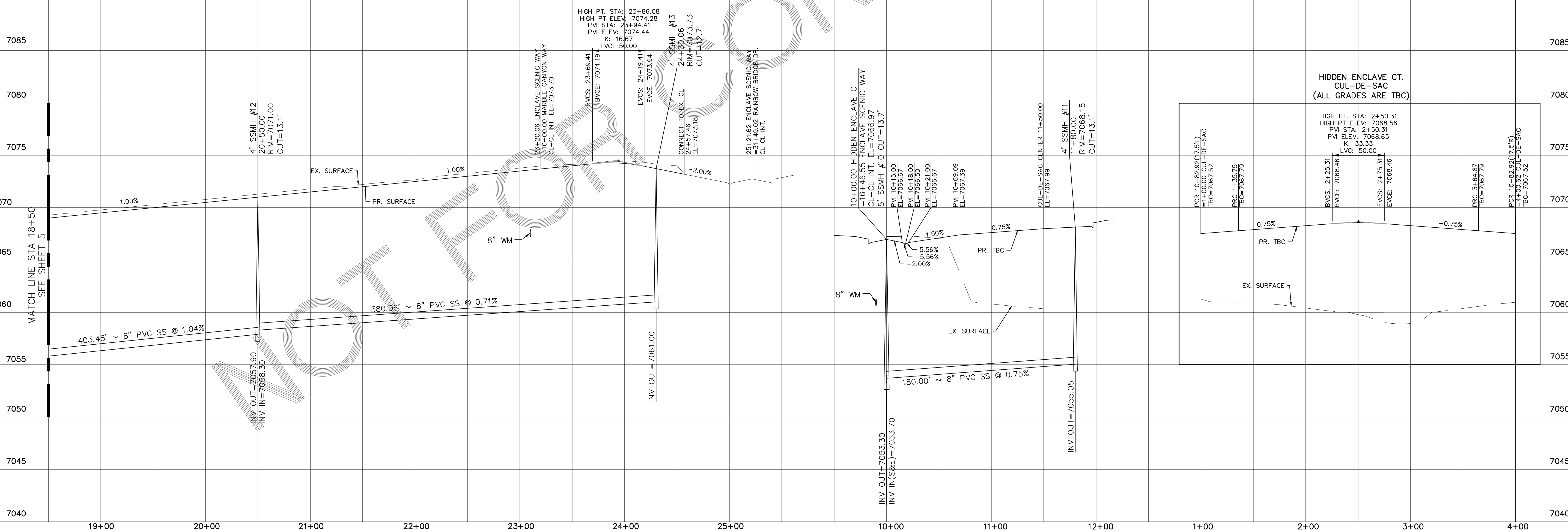


# ENCLAVE SCENIC DR.

# HIDDEN ENCLAVE CT.

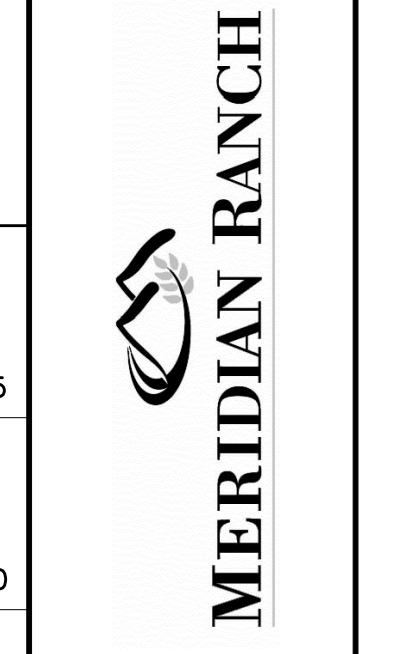
URBAN LOCAL, 60' WIDE RIGHT OF WAY, 30' WIDE ASPHALT PAVEMENT (EDGE TO EDGE)

URBAN LOCAL LOW VOLUME, 60' WIDE RIGHT OF WAY, 30' WIDE ASPHALT PAVEMENT (EDGE TO EDGE)



No.	Revisions	Date	Appr.

TECH CONTRACTORS  
 11886 STAPLETON DRIVE  
 FALCON, CO 80831  
 TELEPHONE: 719.495.7444  
 FAX: 719.495.2457



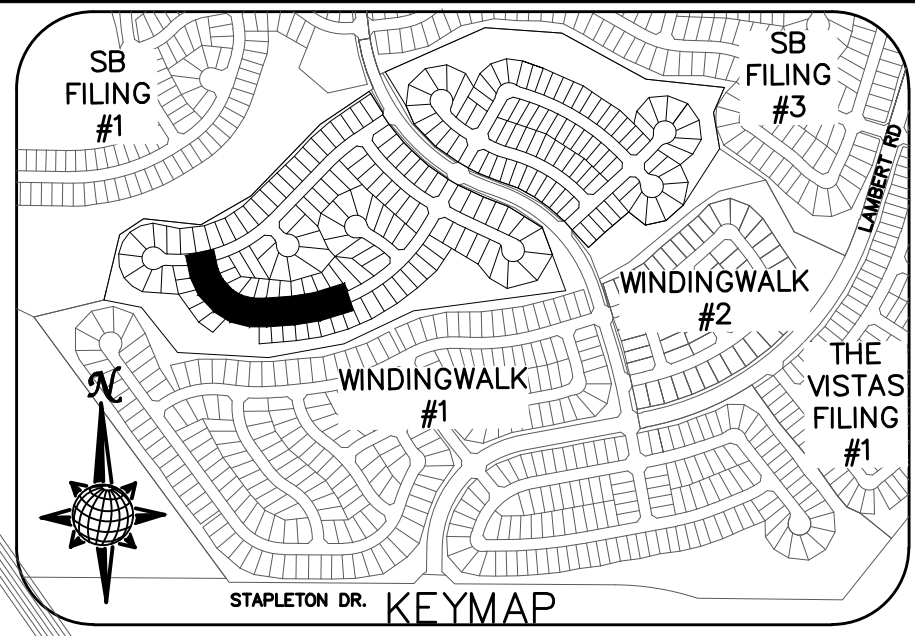
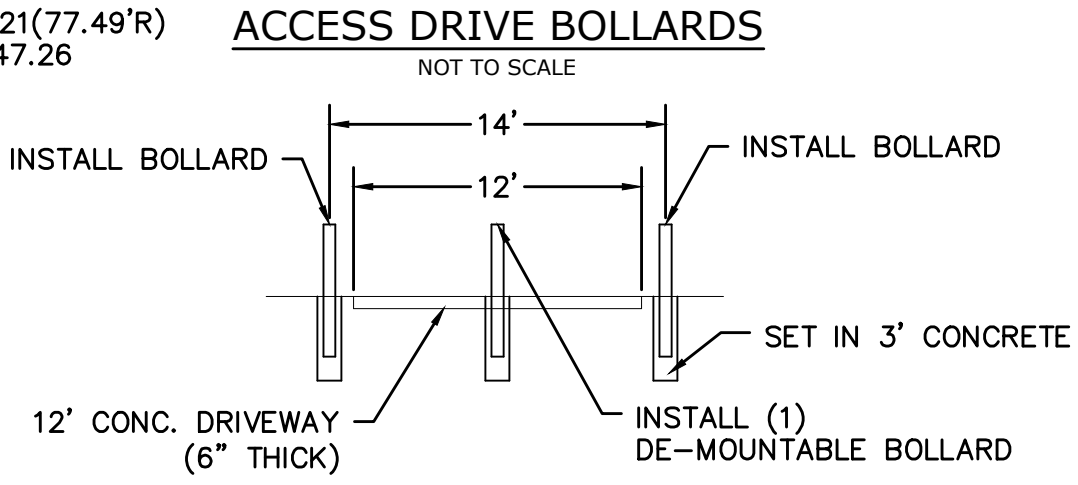
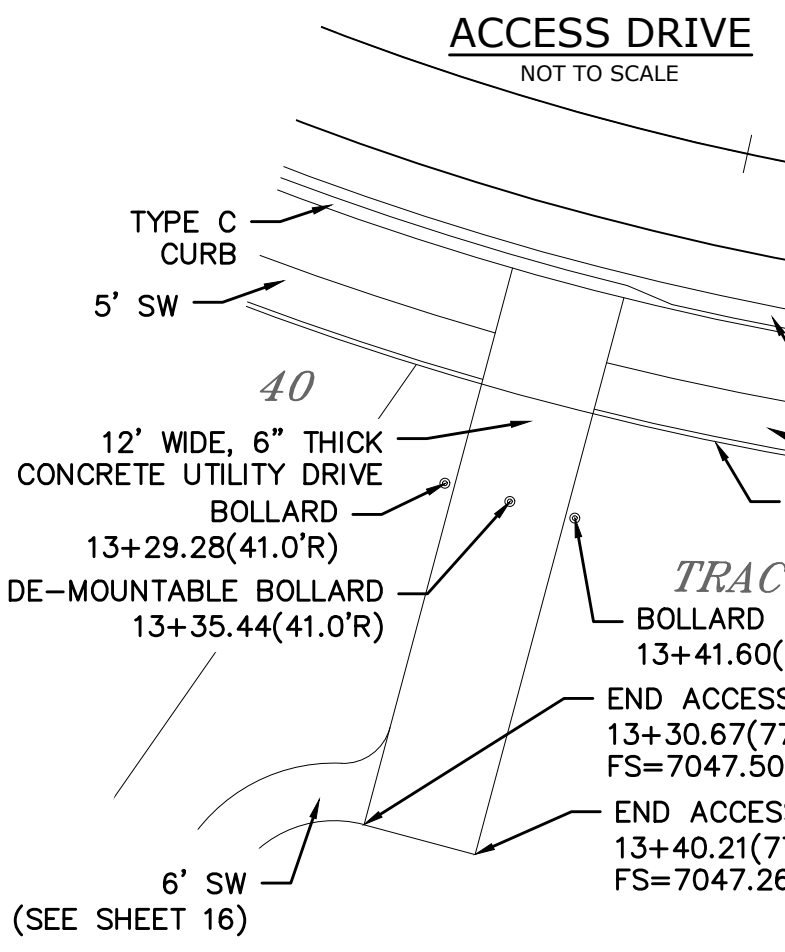
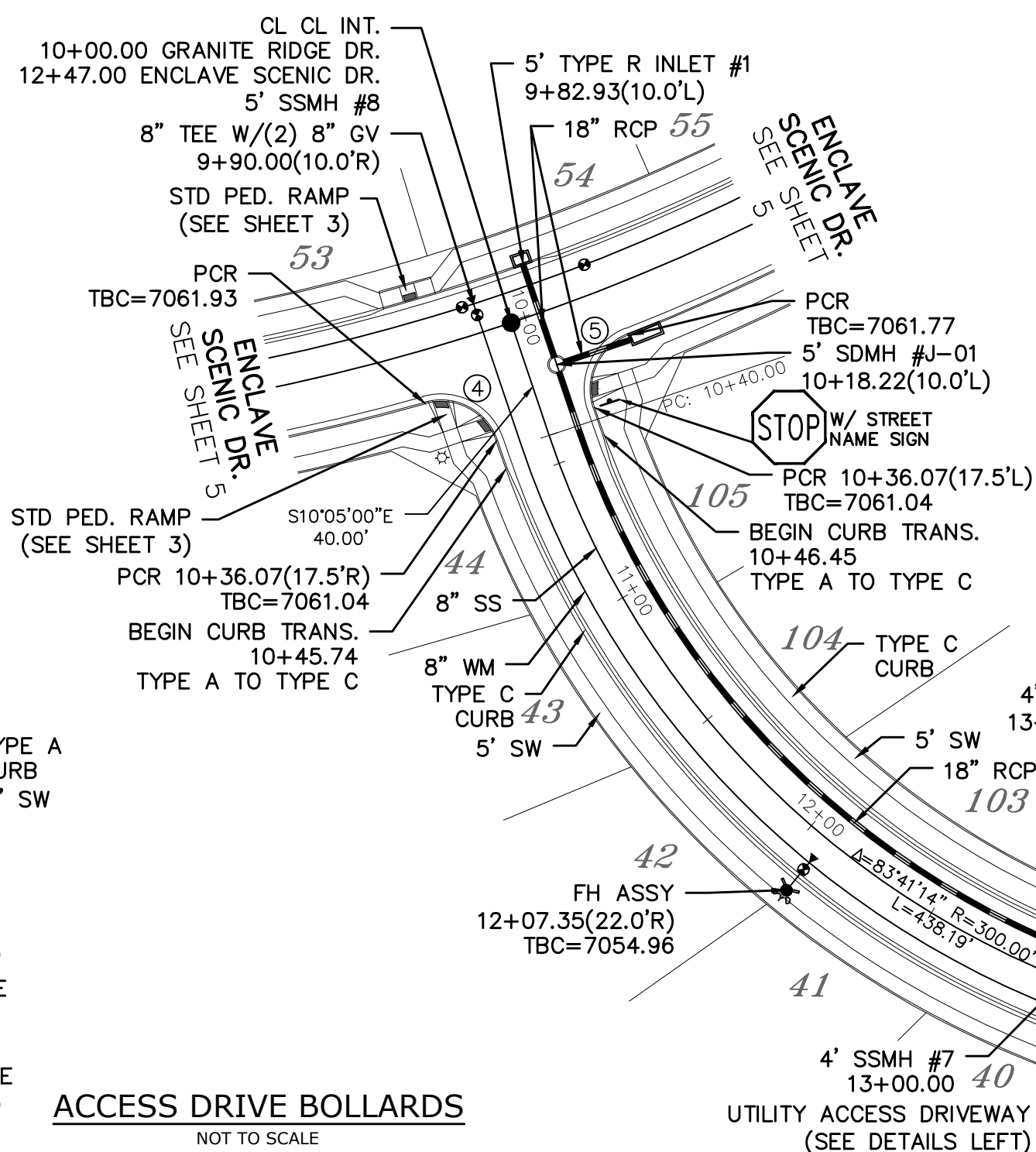
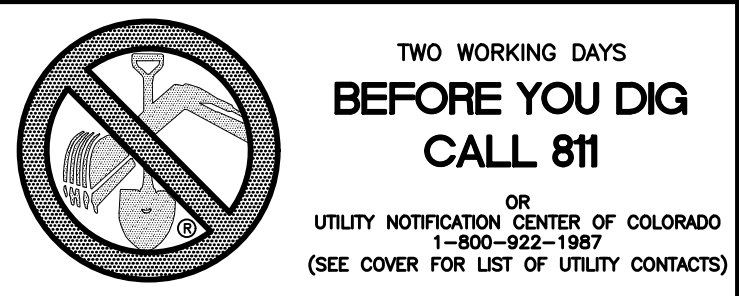
STONEBRIDGE FILING 4 AT  
 MERIDIAN RANCH  
 STREET AND UTILITY PLANS  
 ENCLAVE SCENIC DR. +  
 HIDDEN ENCLAVE CT.

Scale  
**AS SHOWN**  
 6 of 32

Drawn by  
 LOG

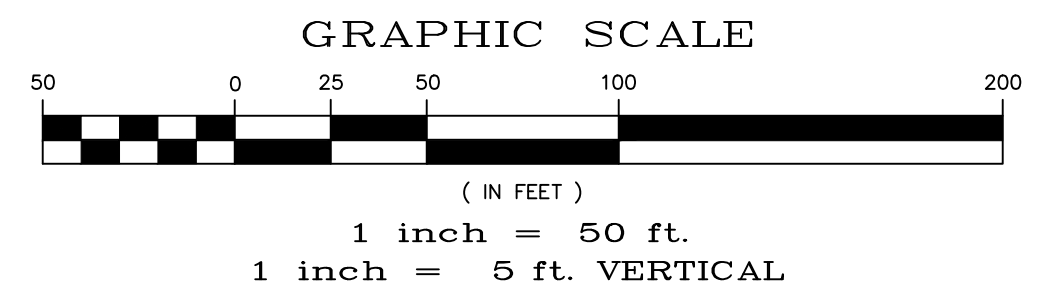
Checked by  
 TAK

Date  
 SEPTEMBER 2018



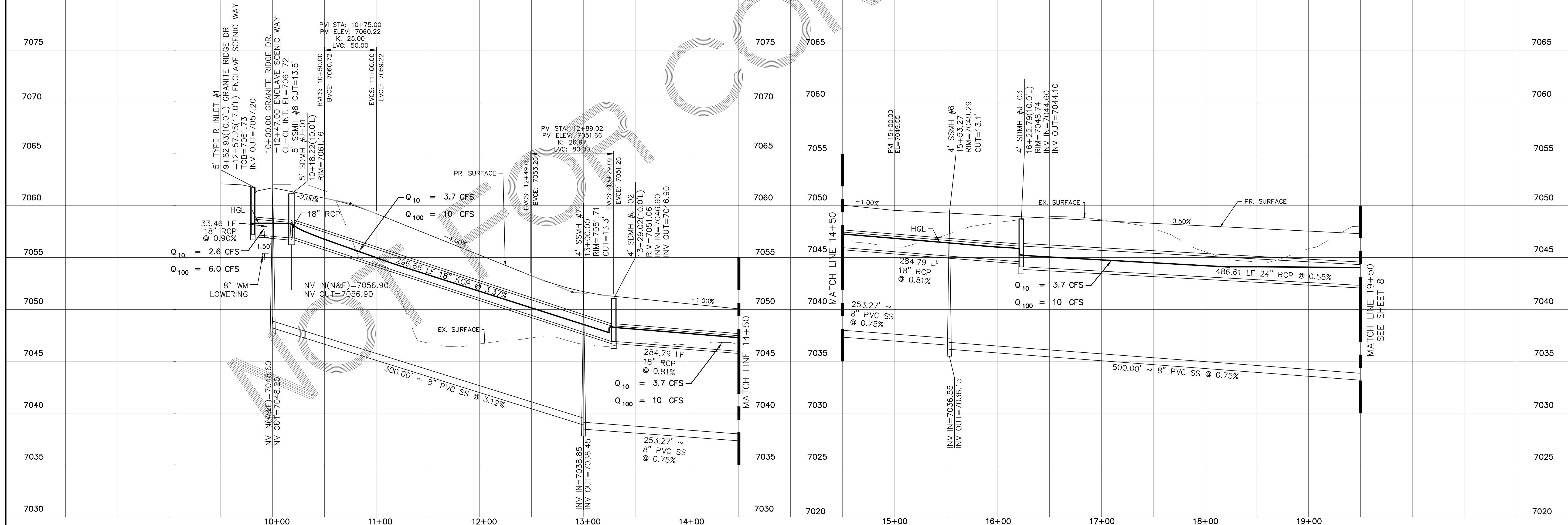
CURVE TABLE			
CURVE	LENGTH	RADIUS	DELTA
4	29.65'	19.50'	87°07'20"
5	29.65'	19.50'	87°07'20"

ALL CURB RADII ARE TO TOP BACK OF CURB (TYP.)

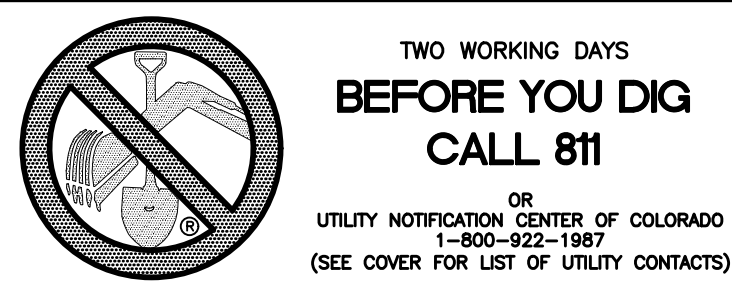


# GRANITE RIDGE DR.

URBAN LOCAL, 60' WIDE RIGHT OF WAY, 30' WIDE ASPHALT PAVEMENT (EDGE TO EDGE)

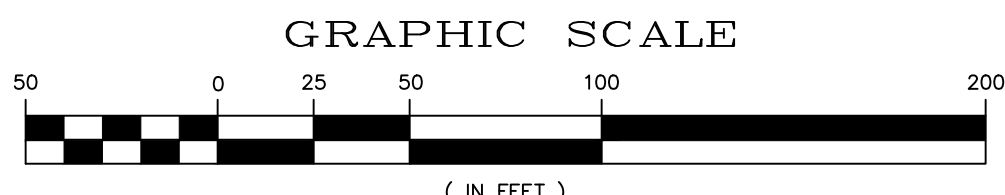
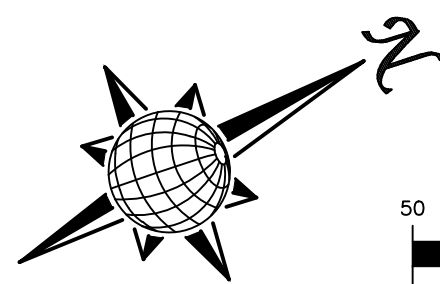
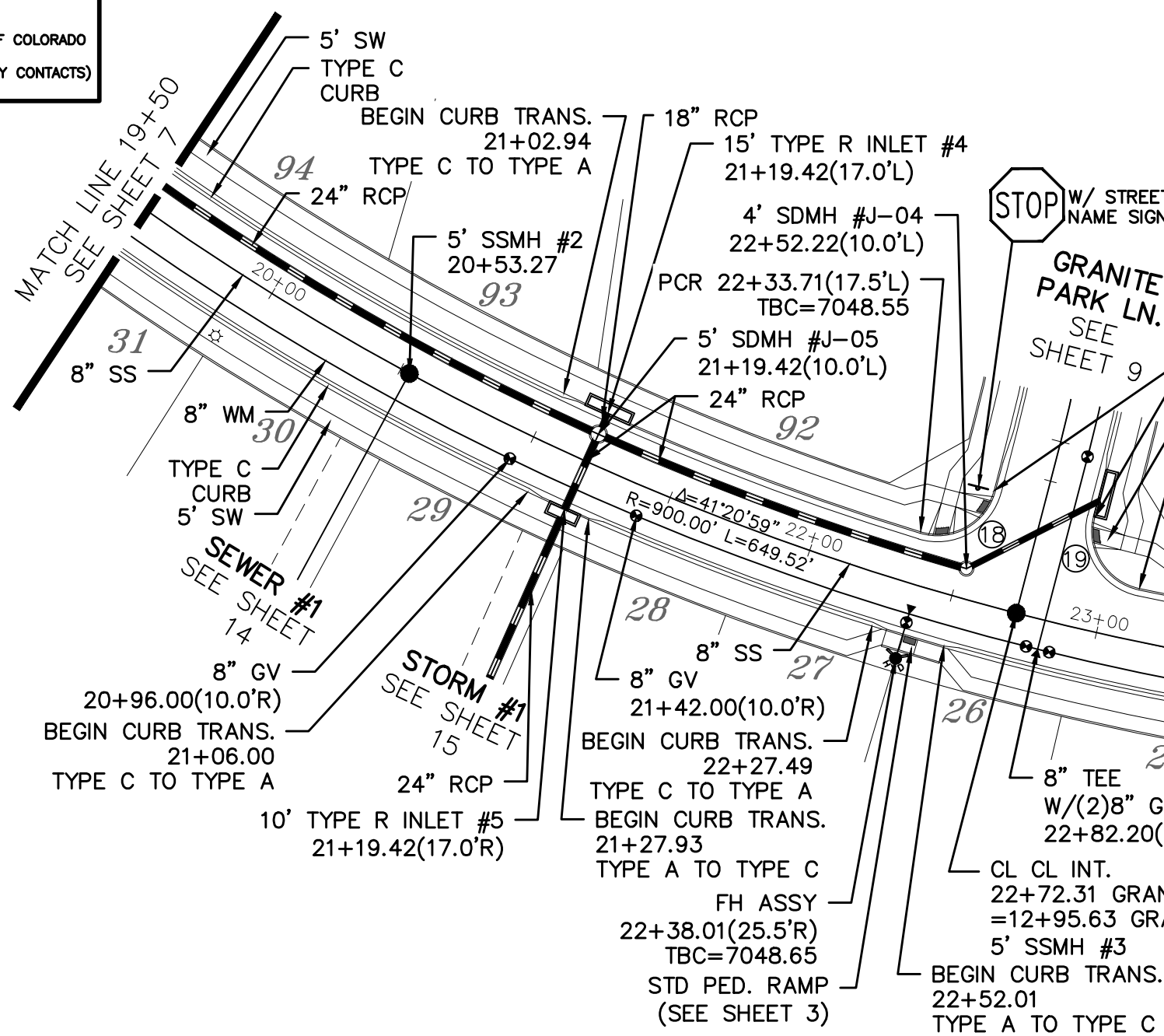


Scale	AS SHOWN	Drawn by	LOG
		Checked by	TAK
	7 of 32	Date	SEPTEMBER 2018
STONEBRIDGE FILING 4 AT MERIDIAN RANCH STREET AND UTILITY PLANS GRANITE RIDGE DR.			
TECH CONTRACTORS 11886 STAPLETON DRIVE FALCON, CO 80831 TELEPHONE: 719.495.7444 FAX: 719.495.2457			
No.	Revisions	Date	Appr.



TWO WORKING DAYS  
BEFORE YOU DIG  
CALL 811

OR  
UTILITY NOTIFICATION CENTER OF COLORADO  
1-800-922-1987  
(SEE COVER FOR LIST OF UTILITY CONTACTS)



1 inch = 50 ft.  
1 inch = 5 ft. VERTICAL

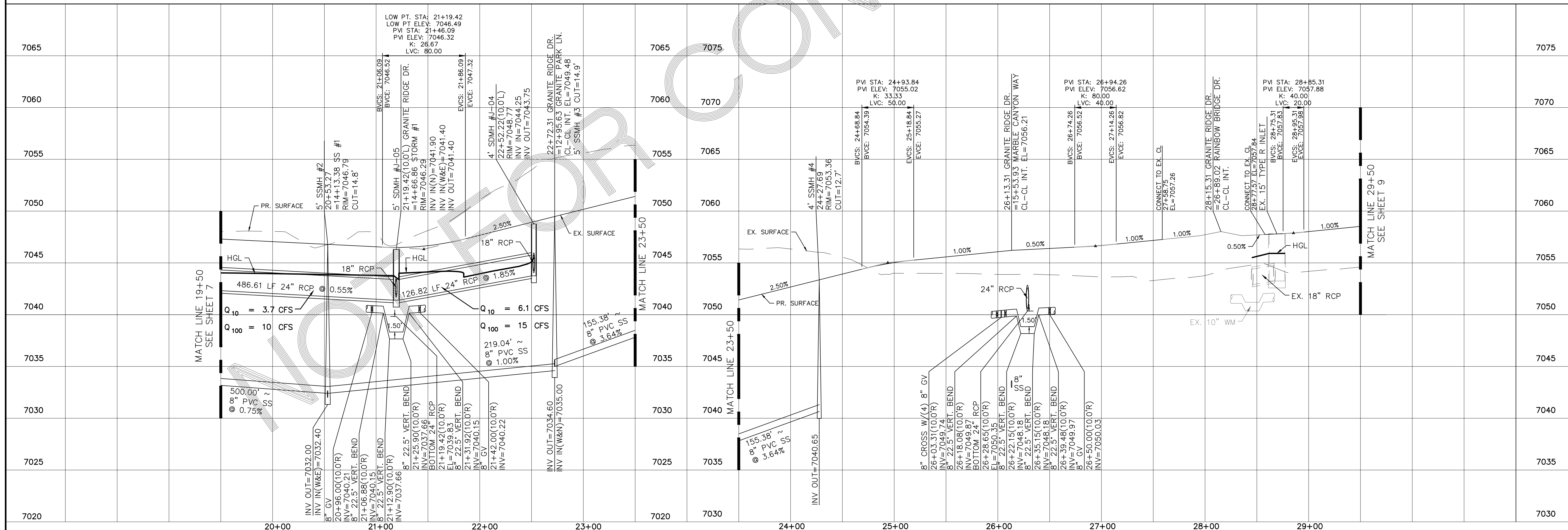
# GRANITE RIDGE DR.

URBAN LOCAL, 60' WIDE RIGHT OF WAY, 30' WIDE ASPHALT PAVEMENT (EDGE TO EDGE)



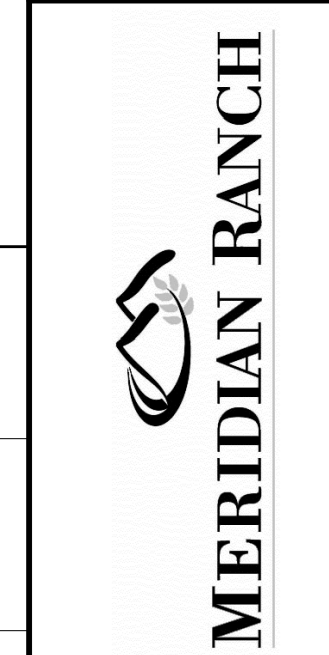
CURVE TABLE			
CURVE	LENGTH	RADIUS	DELTA
18	31.47'	19.50'	92°27'26"
19	31.47'	19.50'	92°27'26"
20	30.63'	19.50'	90°00'00"
21	30.63'	19.50'	90°00'00"
22	30.63'	19.50'	90°00'00"
23	30.63'	19.50'	90°00'00"

ALL CURB RADII ARE TO TOP BACK OF CURB (TYP.)



No.	Revisions	Date	Appr.	Date

TECH CONTRACTORS  
11886 STAPLETON DRIVE  
FALCON, CO 80831  
TELEPHONE: 719.495.7444  
FAX: 719.495.2457



STONEBRIDGE FILING 4 AT  
MERIDIAN RANCH  
STREET AND UTILITY PLANS  
GRANITE RIDGE DR.

Scale	AS SHOWN
Drawn by	LOG
Checked by	TAK
Date	SEPTEMBER 2018
8 of 32	

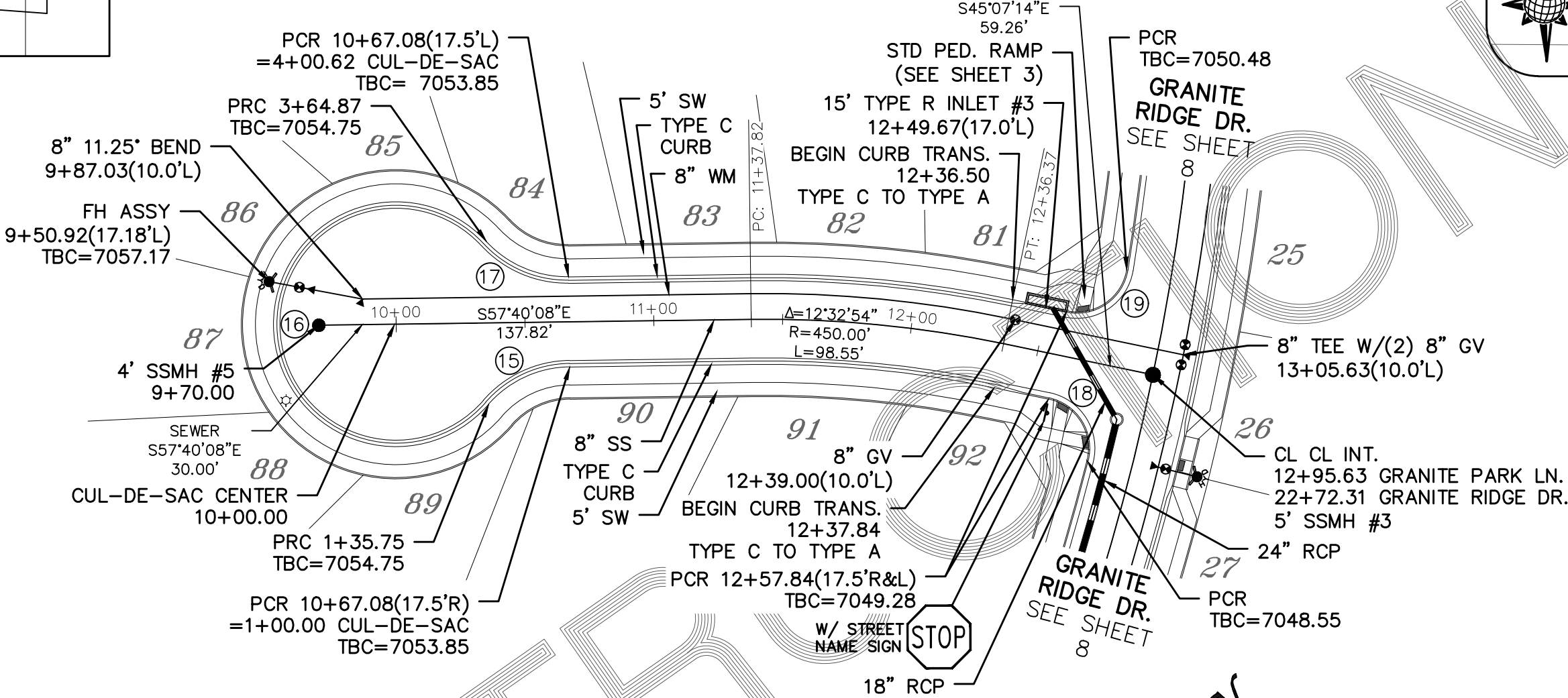
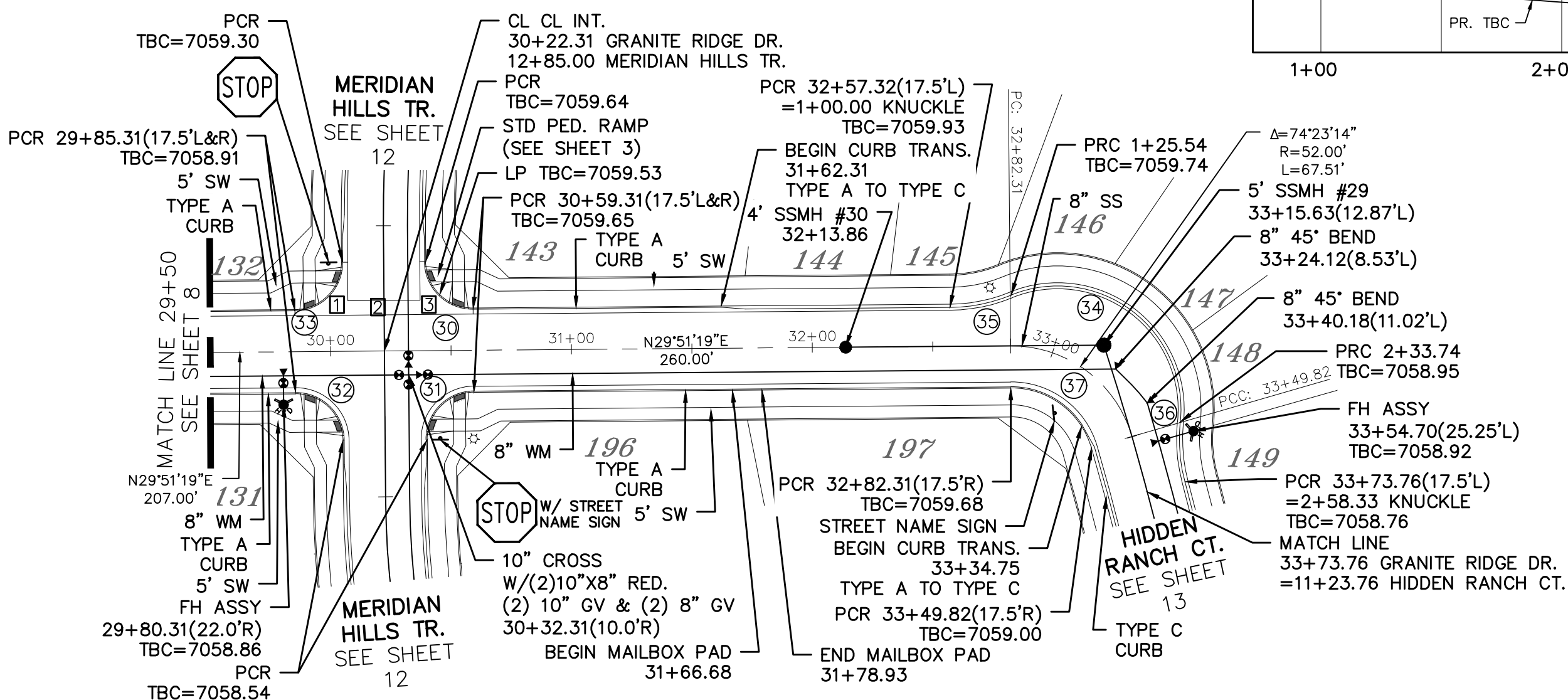
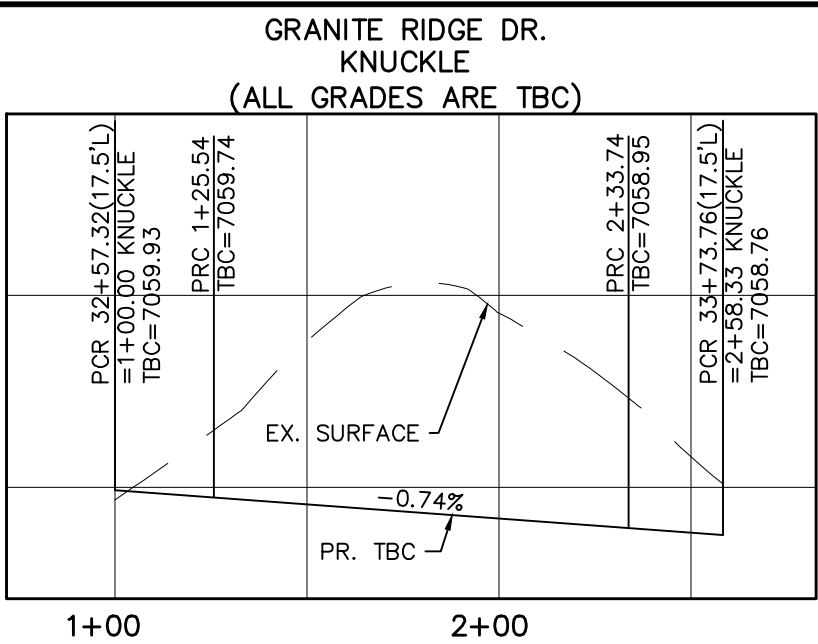


**TWO WORKING DAYS  
BEFORE YOU DIG  
CALL 811**

OR  
UTILITY NOTIFICATION CENTER OF COLORADO  
1-800-922-1987  
(SEE COVER FOR LIST OF UTILITY CONTACTS)

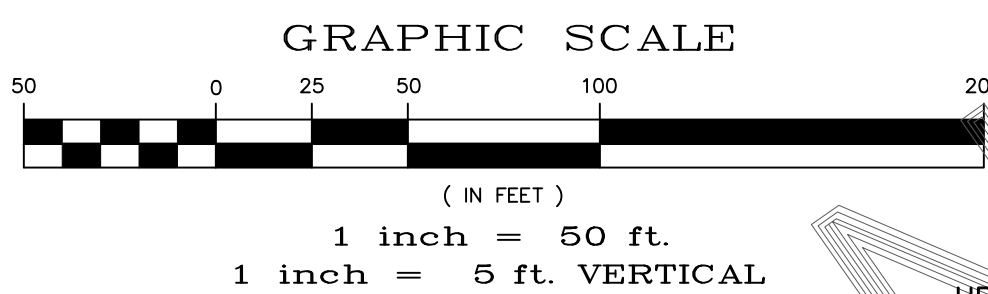
INSTALL CROSS PAN  
PER COUNTY STD  
SD-2-26

□ = 7058.61  
□ = 7058.78  
□ = 7058.95



CURVE TABLE			
CURVE	LENGTH	RADIUS	DELTA
15	35.75'	42.50'	48°11'23"
16	229.13'	47.50'	276°22'46"
17	35.75'	42.50'	48°11'23"
18	31.47'	19.50'	92°27'26"
19	31.47'	19.50'	92°27'26"
30	30.63'	19.50'	90°00'00"
31	30.63'	19.50'	90°00'00"
32	30.63'	19.50'	90°00'00"
33	30.63'	19.50'	90°00'00"
34	108.20'	52.50'	118°04'54"
35	25.54'	67.50'	21°41'00"
36	24.58'	67.50'	20°52'06"
37	44.79'	34.50'	74°23'14"

ALL CURB RADII ARE TO TOP BACK OF CURB (TYP.)

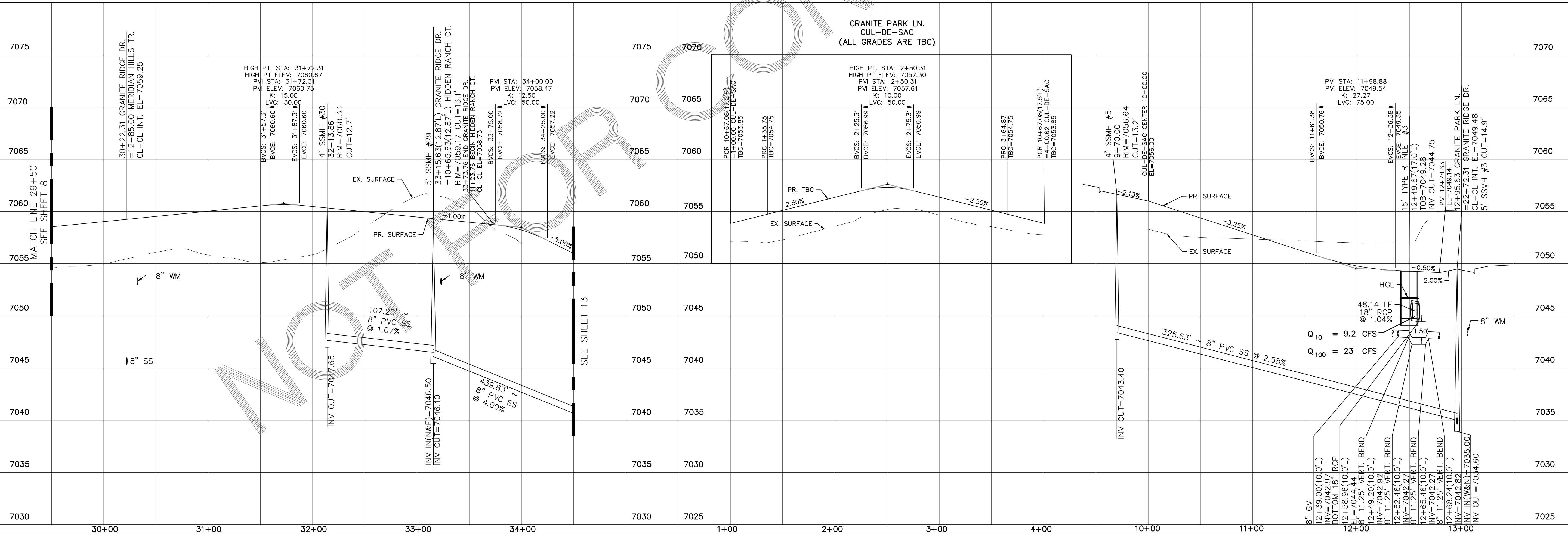


# GRANITE RIDGE LN.

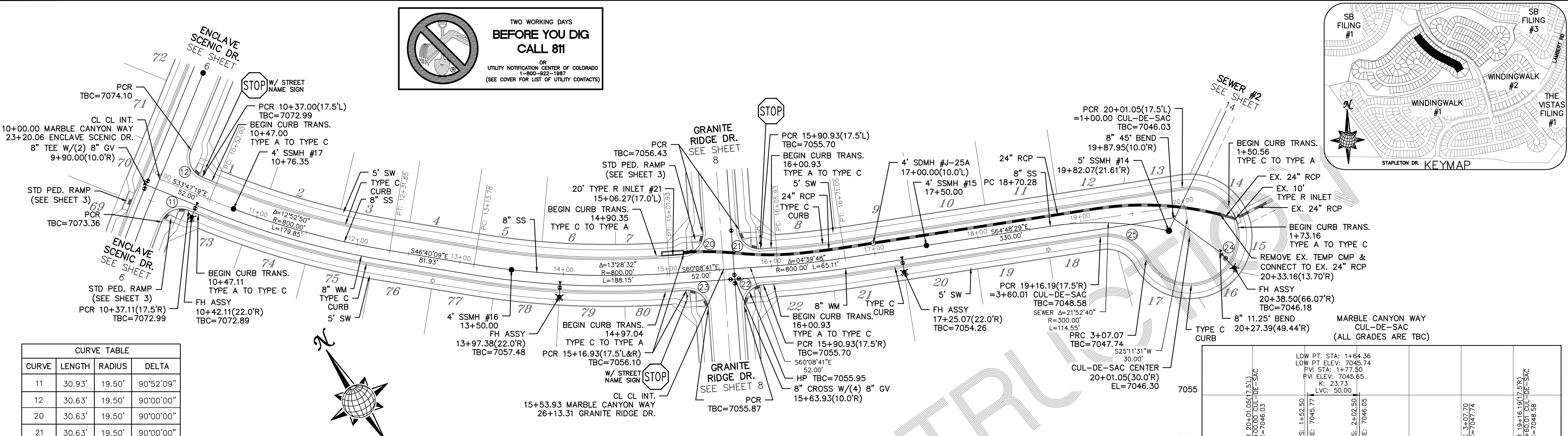
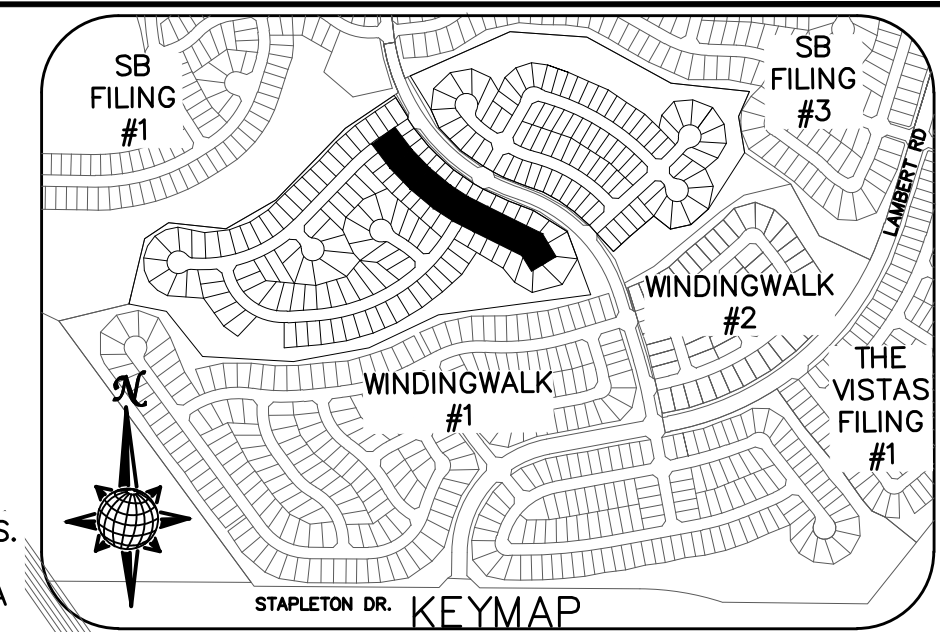
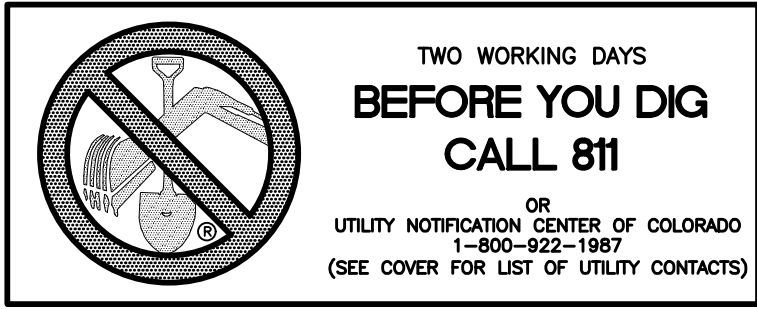
URBAN LOCAL, 60' WIDE RIGHT OF WAY, 30' WIDE ASPHALT PAVEMENT (EDGE TO EDGE)

# GRANITE PARK LN.

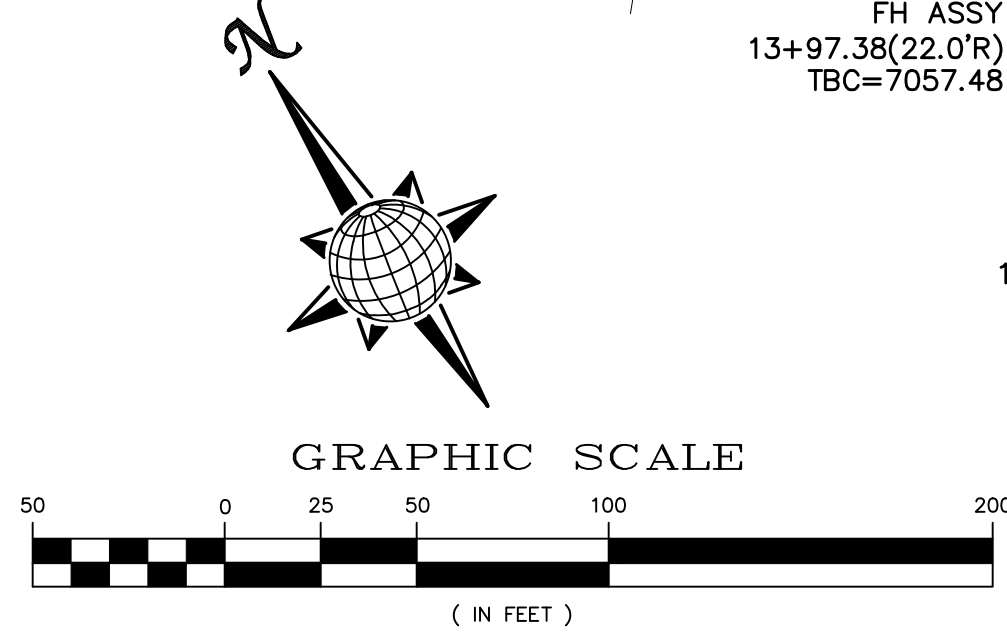
URBAN LOCAL LOW VOLUME, 60' WIDE RIGHT OF WAY, 30' WIDE ASPHALT PAVEMENT (EDGE TO EDGE)



Date	Appr.
Date	Init.
No.	Revisions
TECH CONTRACTORS 11886 STAPLETON DRIVE FALCON, CO 80831 TELEPHONE: 719.495.7444 FAX: 719.495.2457	
STONEBRIDGE FILING 4 AT MERIDIAN RANCH STREET AND UTILITY PLANS GRANITE RIDGE DR. + GRANITE PARK LN.	
Scale	AS SHOWN
Drawn by	LOG
Checked by	TAK
Date	SEPTEMBER 2018
9 of 32	

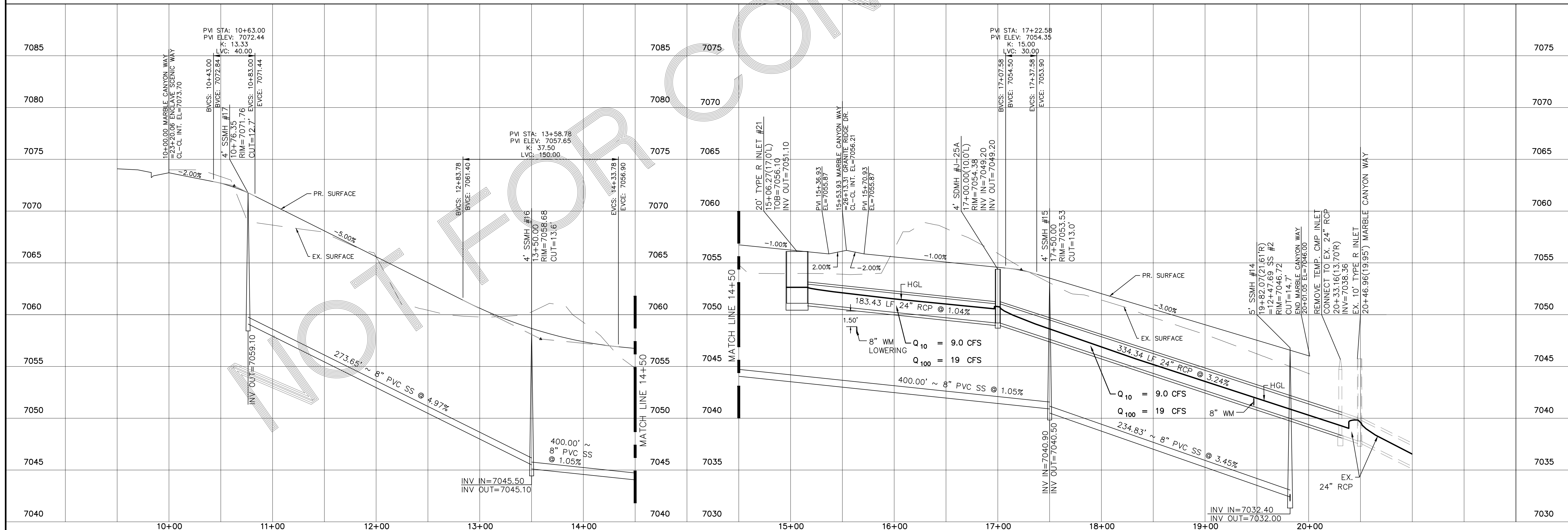
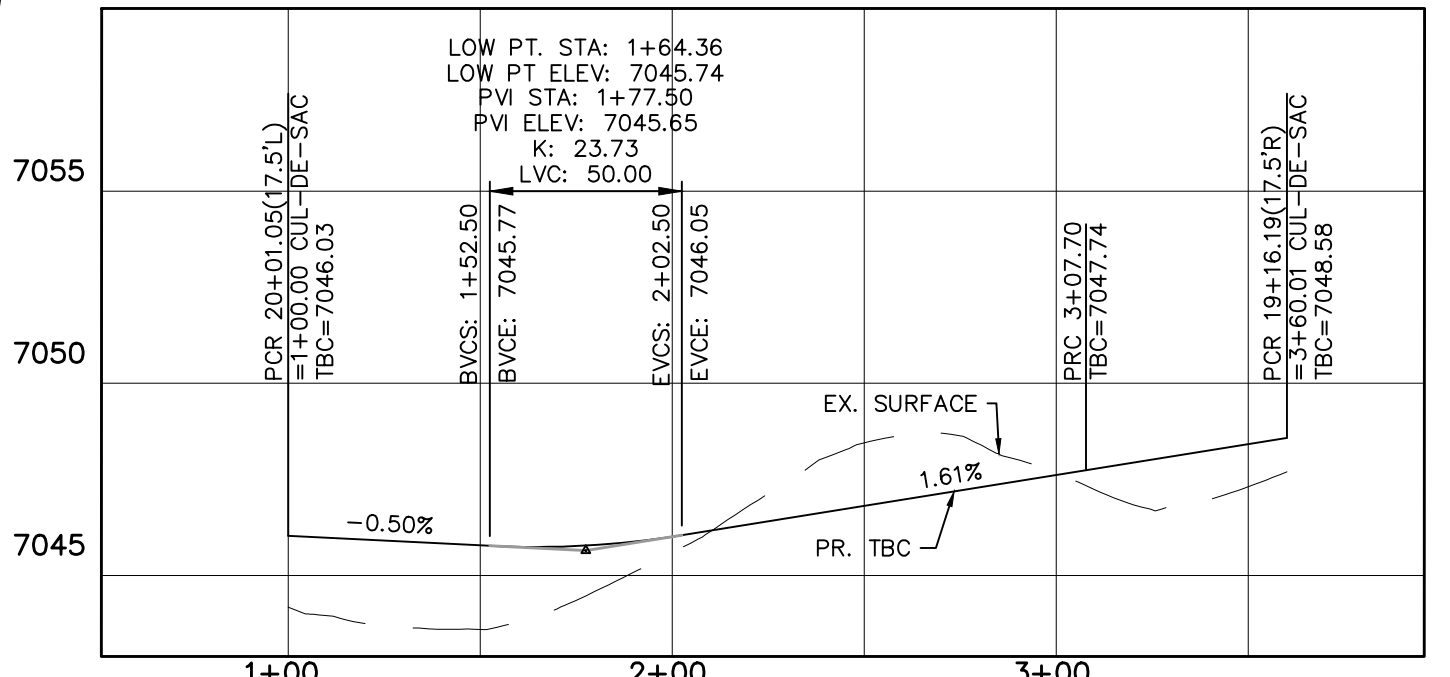


CURVE	LENGTH	RADIUS	DELTA
11	30.93'	19.50'	90°52'09"
12	30.63'	19.50'	90°00'00"
20	30.63'	19.50'	90°00'00"
21	30.63'	19.50'	90°00'00"
22	30.63'	19.50'	90°00'00"
23	30.63'	19.50'	90°00'00"
24	207.70'	47.50'	250°31'44"
25	52.32'	42.50'	70°31'44"



# MARBLE CANYON WAY

URBAN LOCAL TO STA 15+90.93  
URBAN LOCAL LOW VOLUME AFTER STA 15+90.93  
60' WIDE RIGHT OF WAY, 30' WIDE ASPHALT PAVEMENT (EDGE TO EDGE)



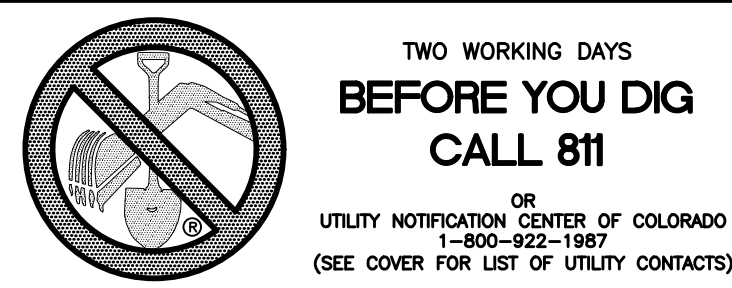
Date	Appr.
Date	Revis
No.	

TECH CONTRACTORS  
11886 STAPLETON DRIVE  
FALCON, CO 80831  
TELEPHONE: 719.495.7444  
FAX: 719.495.2457

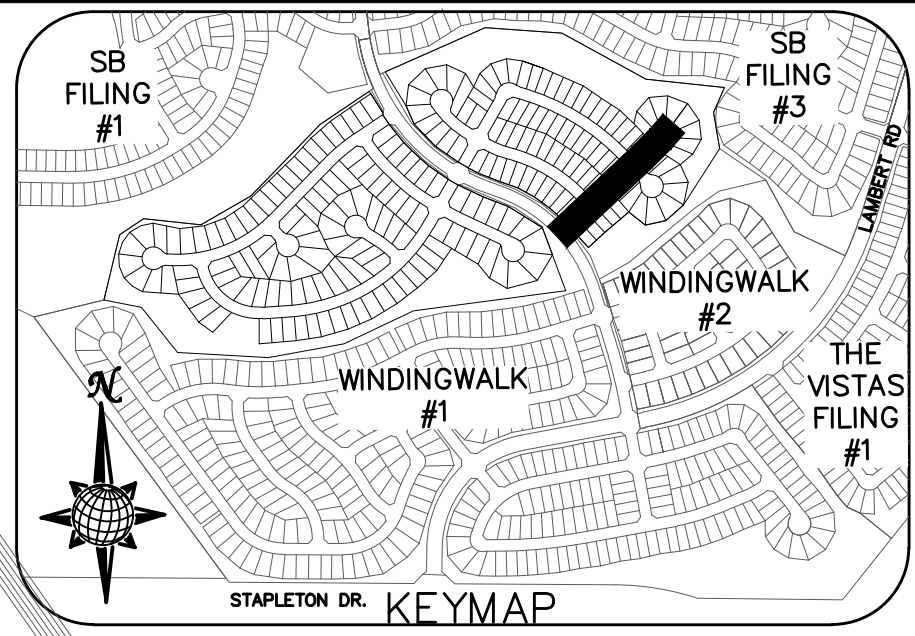


STONEBRIDGE FILING 4 AT  
MERIDIAN RANCH  
STREET AND UTILITY PLANS  
MARBLE CANYON WAY

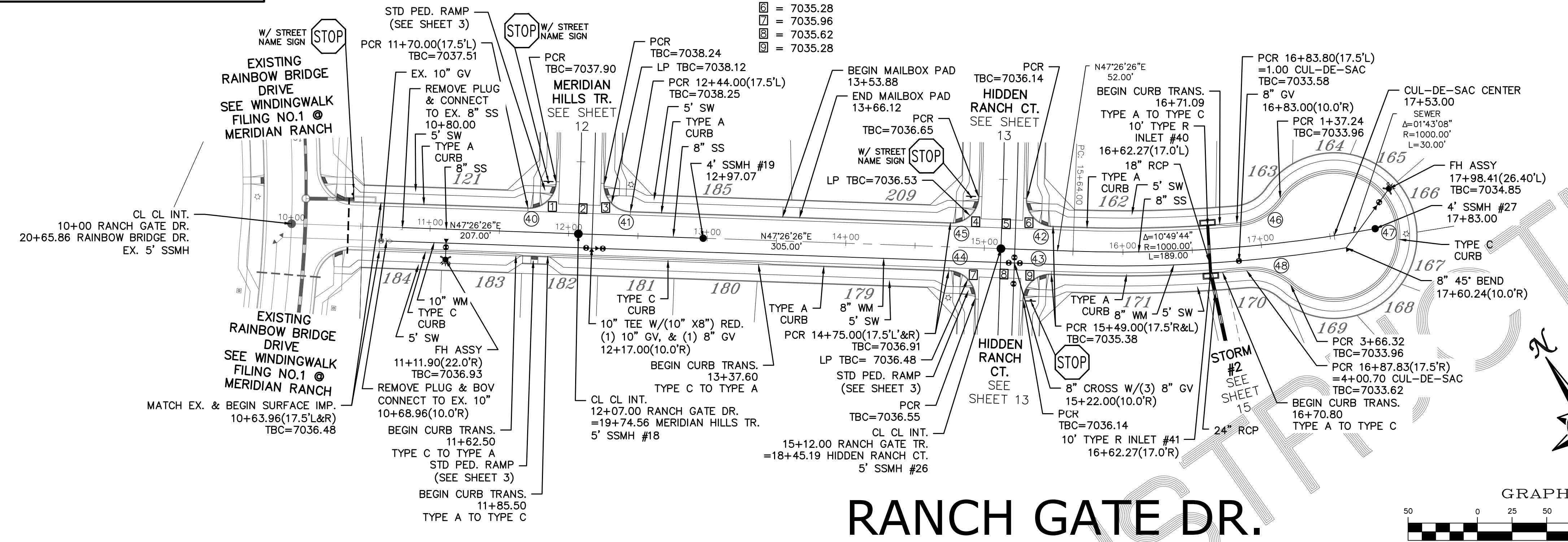
Drawn by <b>AS SHOWN</b>	Checked by <b>TAK</b>	Date <b>SEPTEMBER 2018</b>
Scale <b>10 of 32</b>		



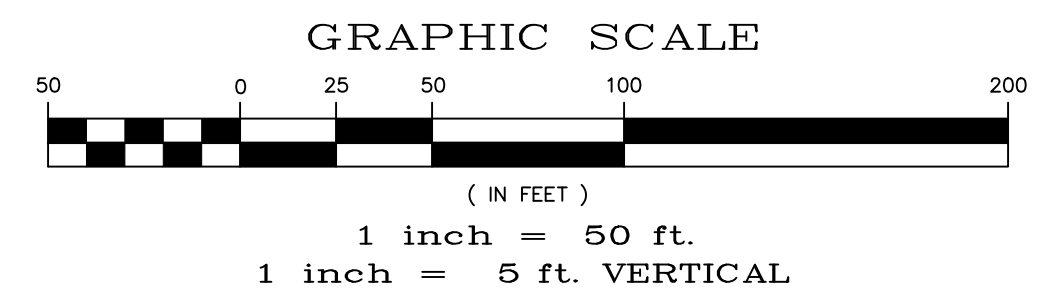
- INSTALL CROSS PAN PER COUNTY STD SD-2-26
- 1 = 7037.21
  - 2 = 7037.38
  - 3 = 7037.55
  - 4 = 7035.96
  - 5 = 7035.62
  - 6 = 7035.28
  - 7 = 7035.96
  - 8 = 7035.62
  - 9 = 7035.28



Date	Appr.
Date	Rev.
No.	Revisions



CURVE	LENGTH	RADIUS	DELTA
40	30.63'	19.50'	90°00'00"
41	30.63'	19.50'	90°00'00"
42	30.63'	19.50'	90°00'00"
43	30.63'	19.50'	90°00'00"
44	30.63'	19.50'	90°00'00"
45	30.63'	19.50'	90°00'00"
46	37.24'	42.50'	50°12'10"
47	229.08'	47.50'	276°19'18"
48	34.38'	42.50'	46°21'00"



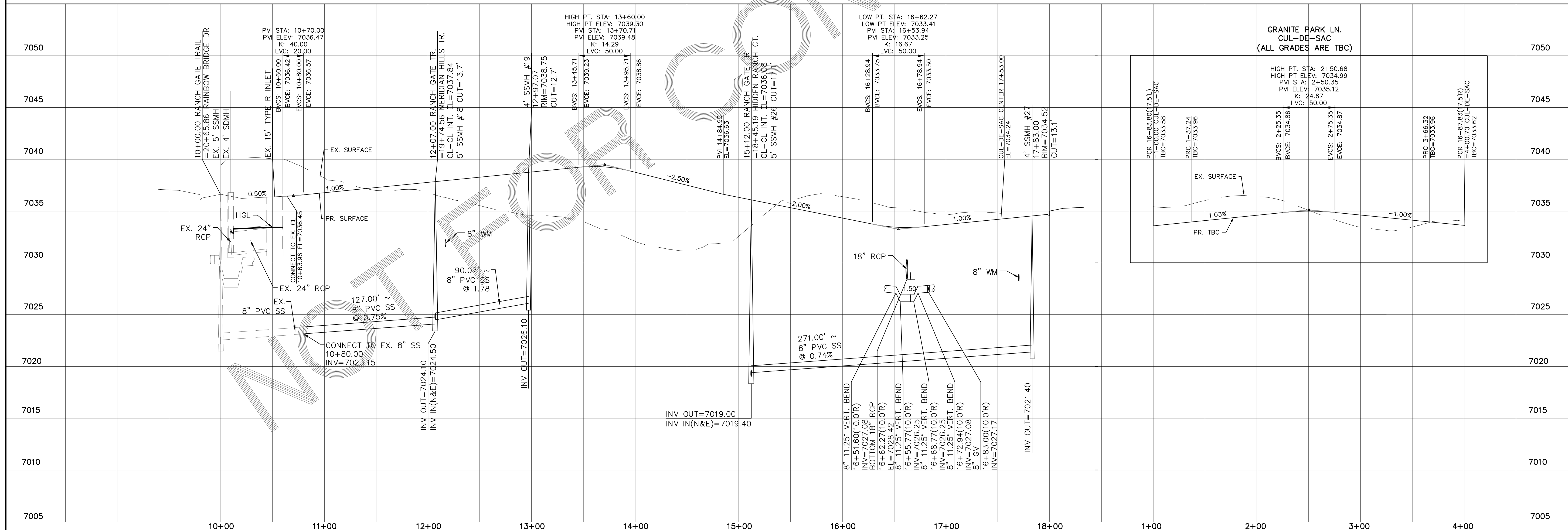
**RANCH GATE DR.**  
 URBAN LOCAL TO STA 15+49.00  
 URBAN LOCAL LOW VOLUME AFTER STA 15+49.00  
 60' WIDE RIGHT OF WAY, 30' WIDE ASPHALT PAVEMENT (EDGE TO EDGE)

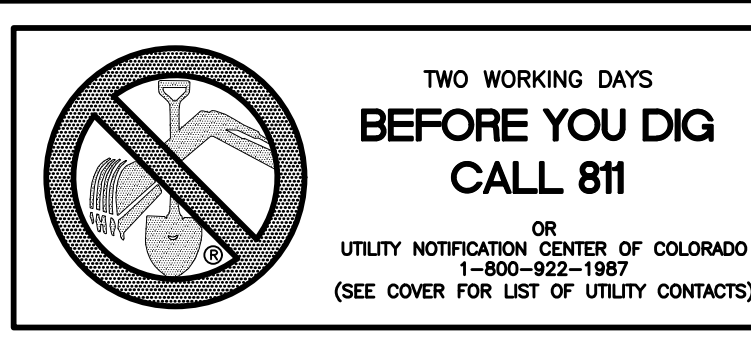
TECH CONTRACTORS  
 11886 STAPLETON DRIVE  
 FALCON, CO 80831  
 TELEPHONE: 719.495.7444  
 FAX: 719.495.2457



STONEBRIDGE FILING 4 AT  
 MERIDIAN RANCH  
 STREET AND UTILITY PLANS  
 RANCH GATE DR.

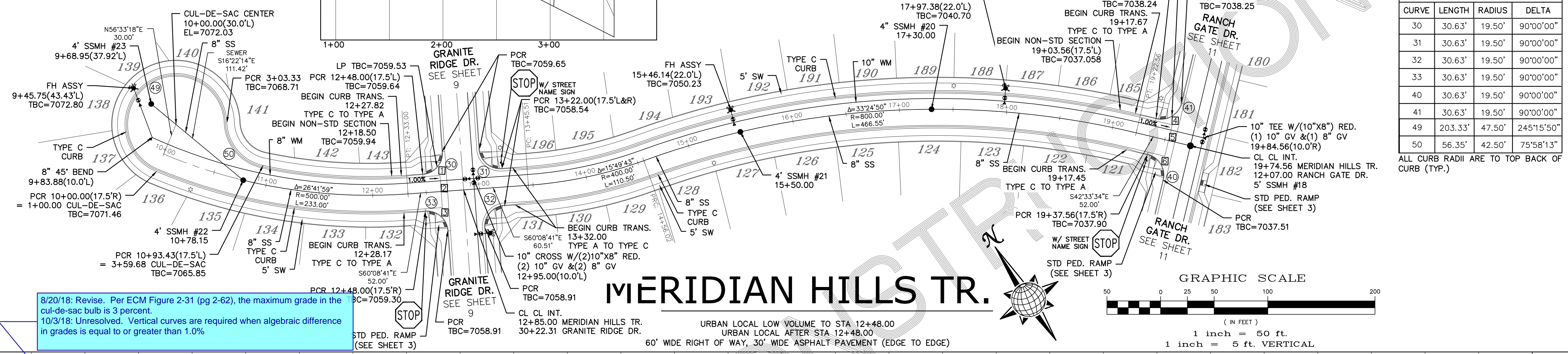
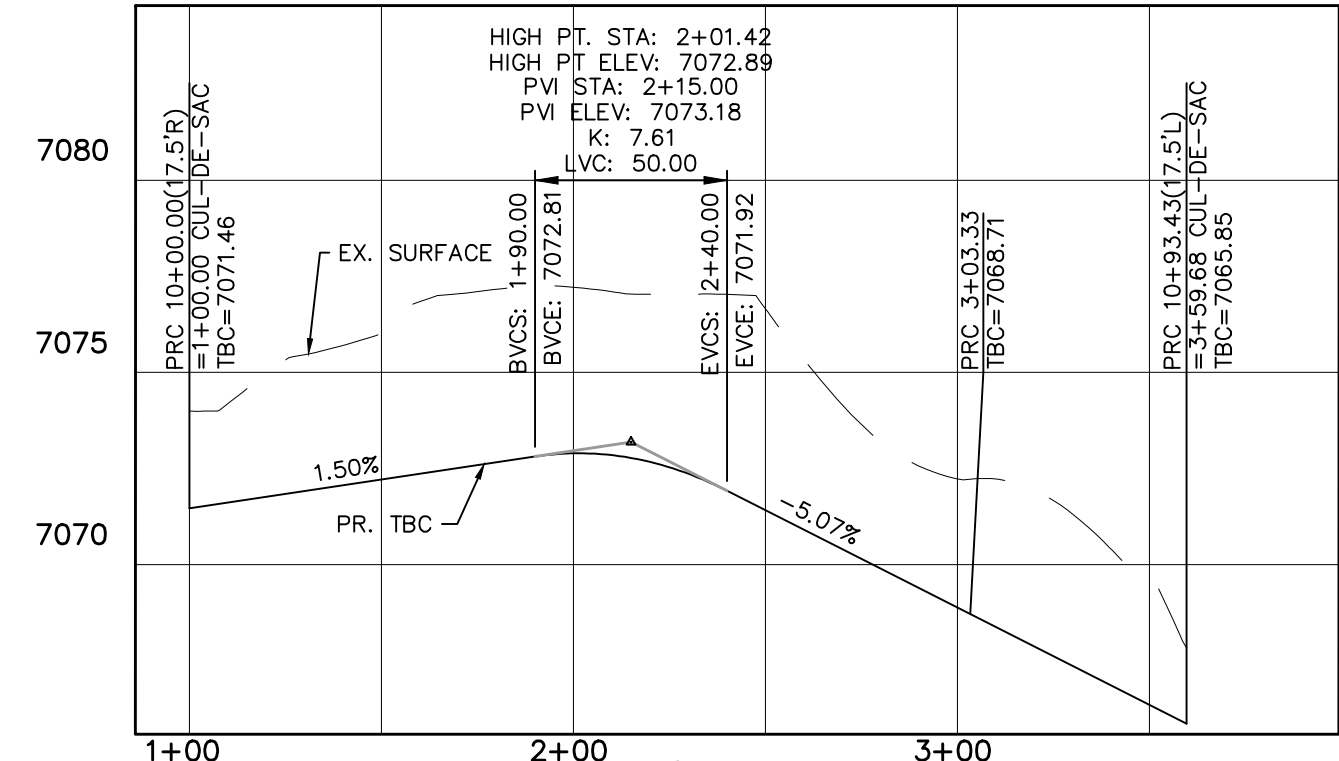
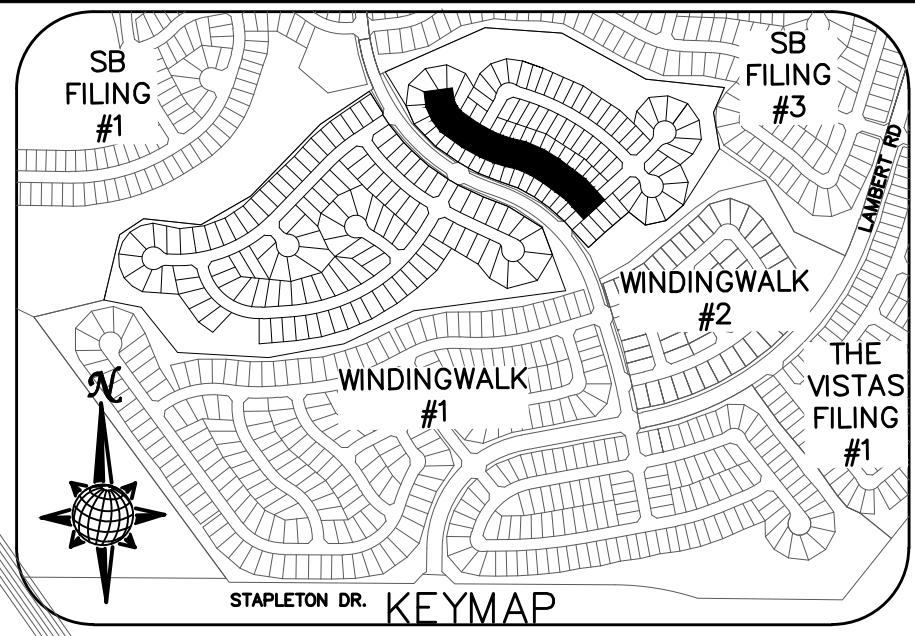
Scale AS SHOWN  
 Drawn by LOG  
 Checked by TAK  
 Date SEPTEMBER 2018  
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MERIDIAN HILLS TR.  
CUL-DE-SAC  
(ALL GRADES ARE TBC)

- INSTALL CROSS PAN  
PER COUNTY STD  
SD-2-26
- = 7058.95
  - = 7058.78
  - = 7058.61
  - = 7037.55
  - = 7037.38
  - = 7037.21



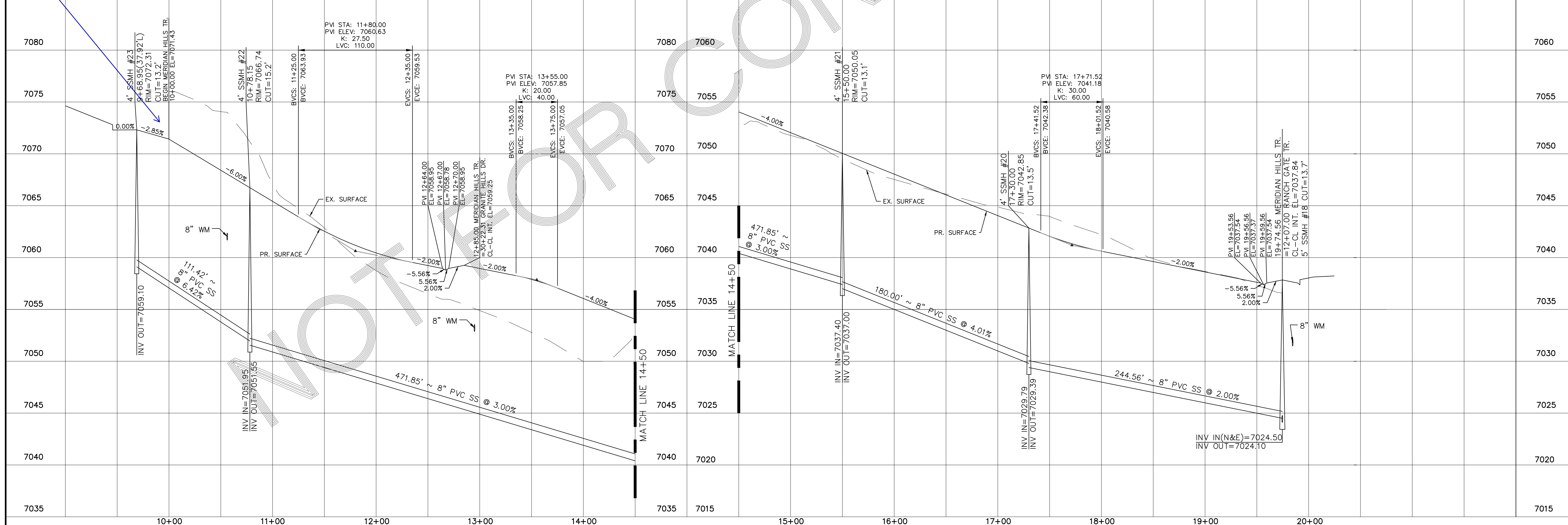
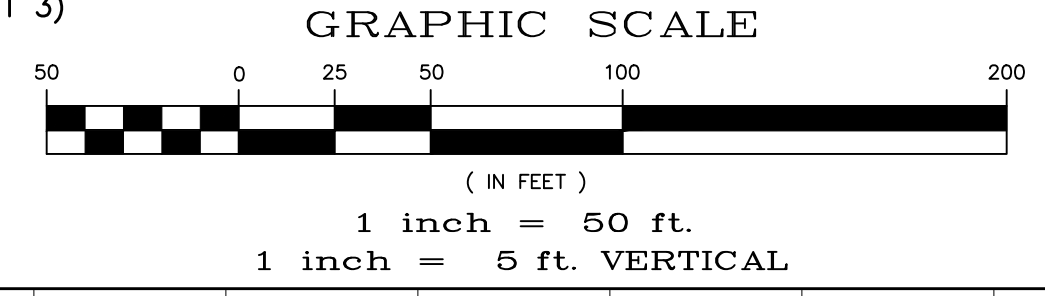
CURVE TABLE			
CURVE	LENGTH	RADIUS	DELTA
30	30.63'	19.50'	90°00'00"
31	30.63'	19.50'	90°00'00"
32	30.63'	19.50'	90°00'00"
33	30.63'	19.50'	90°00'00"
40	30.63'	19.50'	90°00'00"
41	30.63'	19.50'	90°00'00"
49	203.33'	47.50'	245°15'50"
50	56.35'	42.50'	75°58'13"

ALL CURB RADII ARE TO TOP BACK OF CURB (TYP.)

8/20/18: Revise. Per ECM Figure 2-31 (pg 2-62), the maximum grade in the cul-de-sac bulb is 3 percent.  
10/3/18: Unresolved. Vertical curves are required when algebraic difference in grades is equal to or greater than 1.0%

# MERIDIAN HILLS TR.

URBAN LOCAL LOW VOLUME TO STA 12+48.00  
URBAN LOCAL AFTER STA 12+48.00  
60' WIDE RIGHT OF WAY, 30' WIDE ASPHALT PAVEMENT (EDGE TO EDGE)

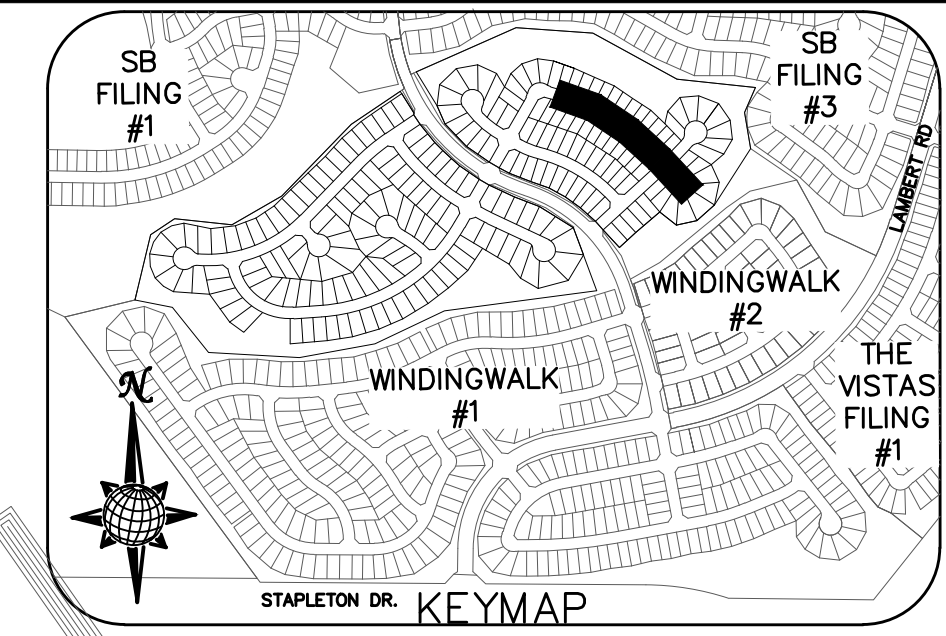
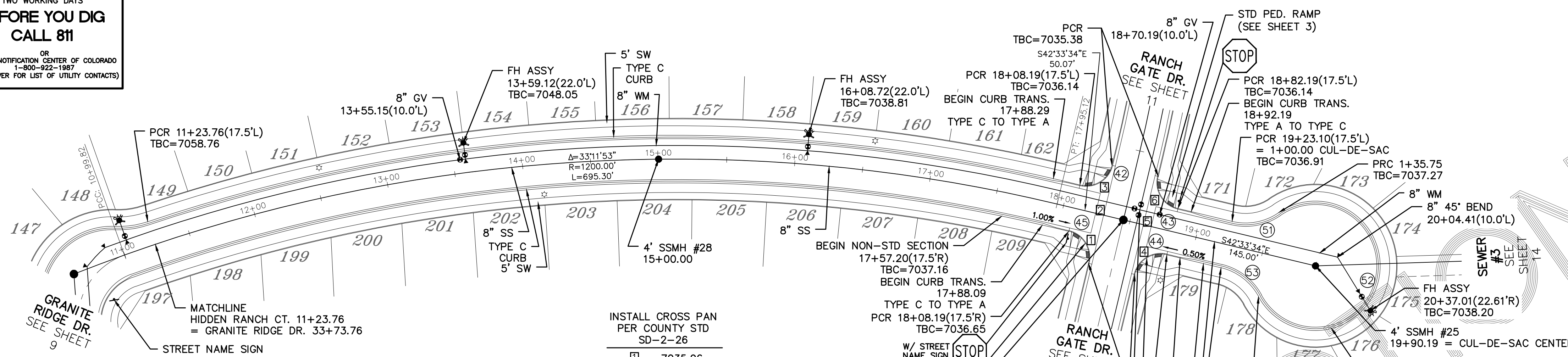


TECH CONTRACTORS 11886 STAPLETON DRIVE FALCON, CO 80831 TELEPHONE: 719.495.7444 FAX: 719.495.2457	 <b>MERIDIAN RANCH</b>	<b>STONEBRIDGE FILING 4 AT MERIDIAN RANCH STREET AND UTILITY PLANS MERIDIAN HILLS TR.</b>	Drawn by <b>LOG</b>	Checked by <b>TAK</b>
Scale <b>AS SHOWN</b>	12 of 32	Date <b>SEPTEMBER 2018</b>	No.	Revisions
			Date	Appr.



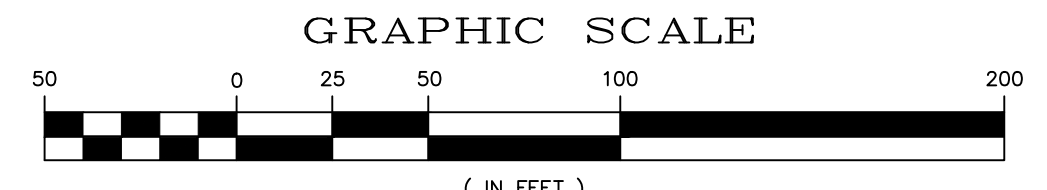
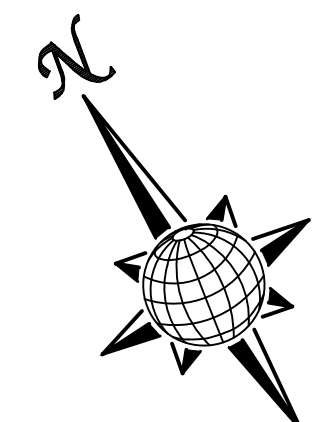
TWO WORKING DAYS  
**BEFORE YOU DIG  
CALL 811**

OR  
UTILITY NOTIFICATION CENTER OF COLORADO  
1-800-922-1987  
(SEE COVER FOR LIST OF UTILITY CONTACTS)



CURVE	LENGTH	RADIUS	DELTA
42	30.63'	19.50'	90°00'00"
43	30.63'	19.50'	90°00'00"
44	30.63'	19.50'	90°00'00"
45	30.63'	19.50'	90°00'00"
51	35.75'	42.50'	48°11'23"
52	229.13'	47.50'	276°22'46"
53	35.75'	42.50'	48°11'23"

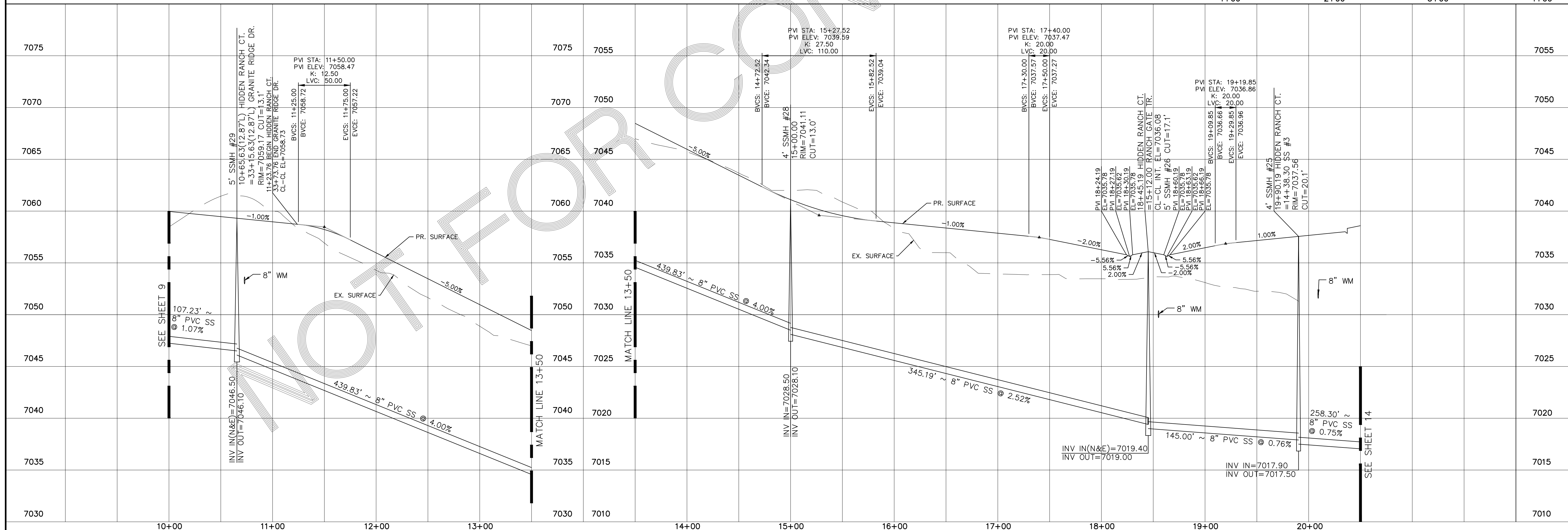
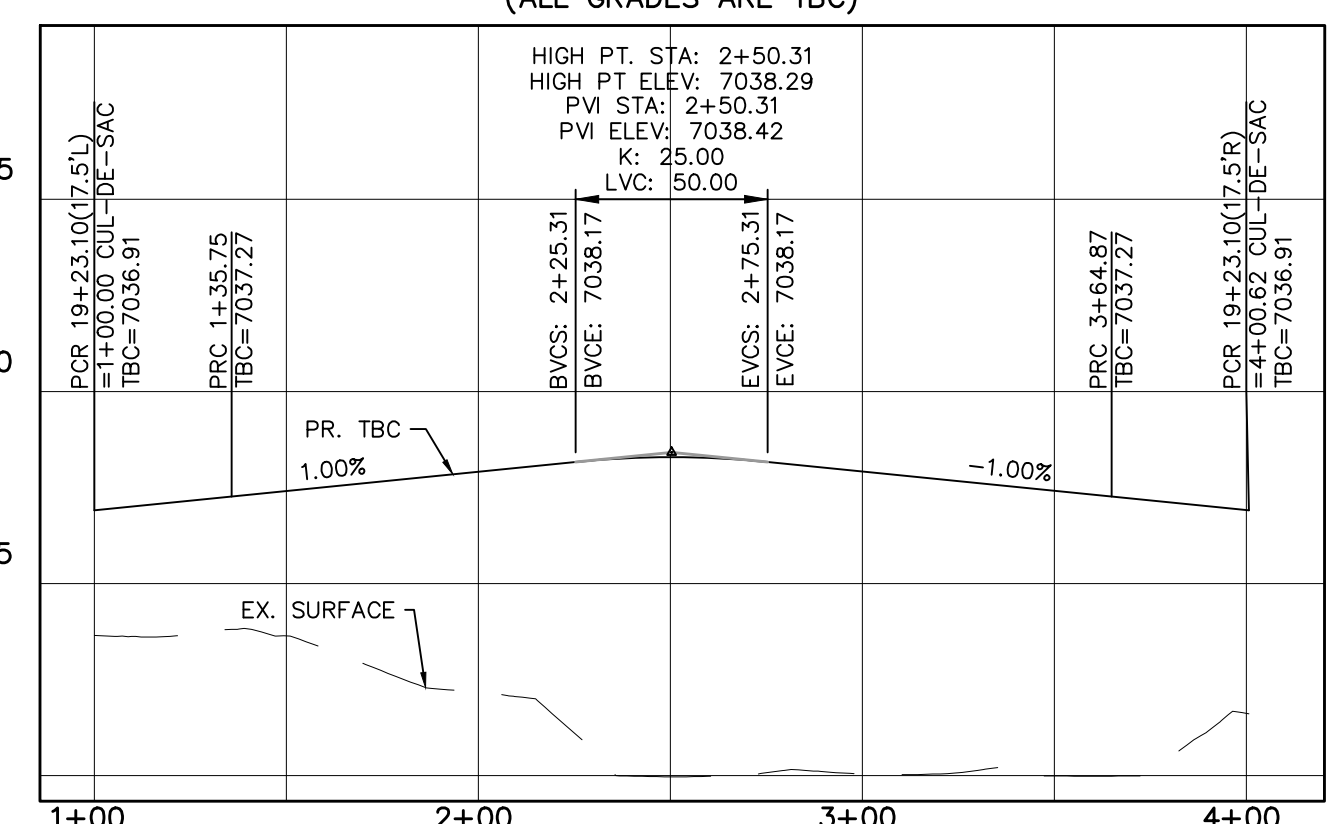
ALL CURB RADII ARE TO TOP BACK OF CURB (TYP.)



- INSTALL CROSS PAN PER COUNTY STD SD-2-26
- = 7035.96
  - = 7035.62
  - = 7035.28
  - = 7035.96
  - = 7035.62
  - = 7035.28

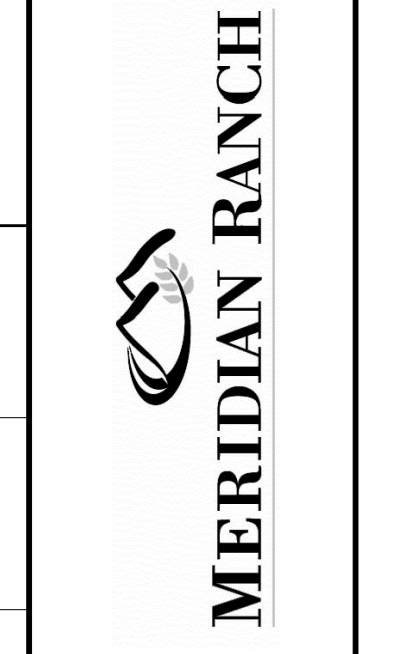
# HIDDEN RANCH CT.

URBAN LOCAL TO STA 18+82.19  
URBAN LOCAL LOW VOLUME AFTER STA 18+82.19  
60' WIDE RIGHT OF WAY, 30' WIDE ASPHALT PAVEMENT (EDGE TO EDGE)



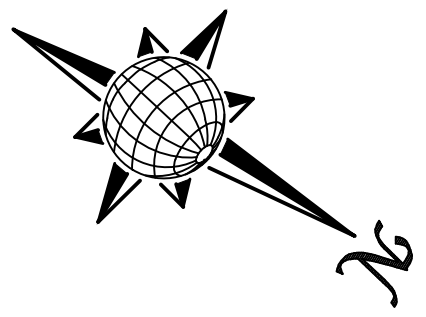
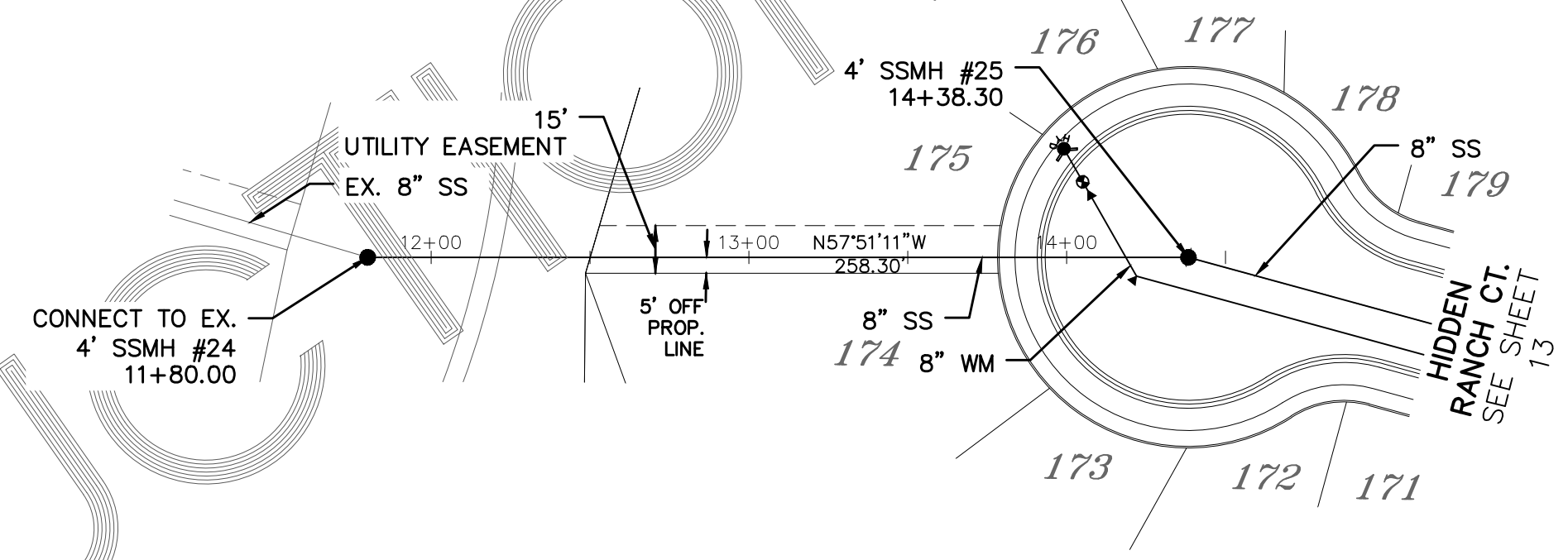
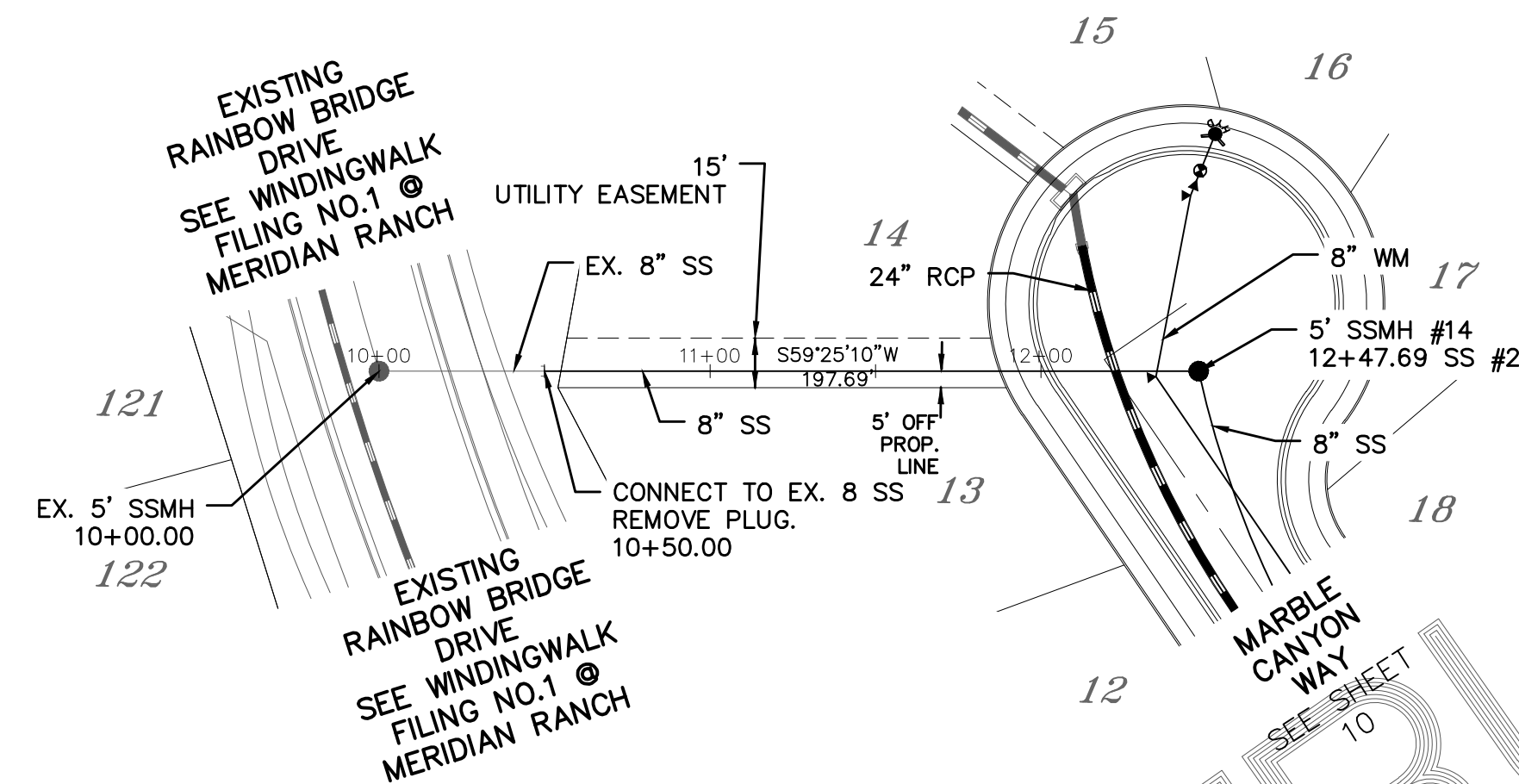
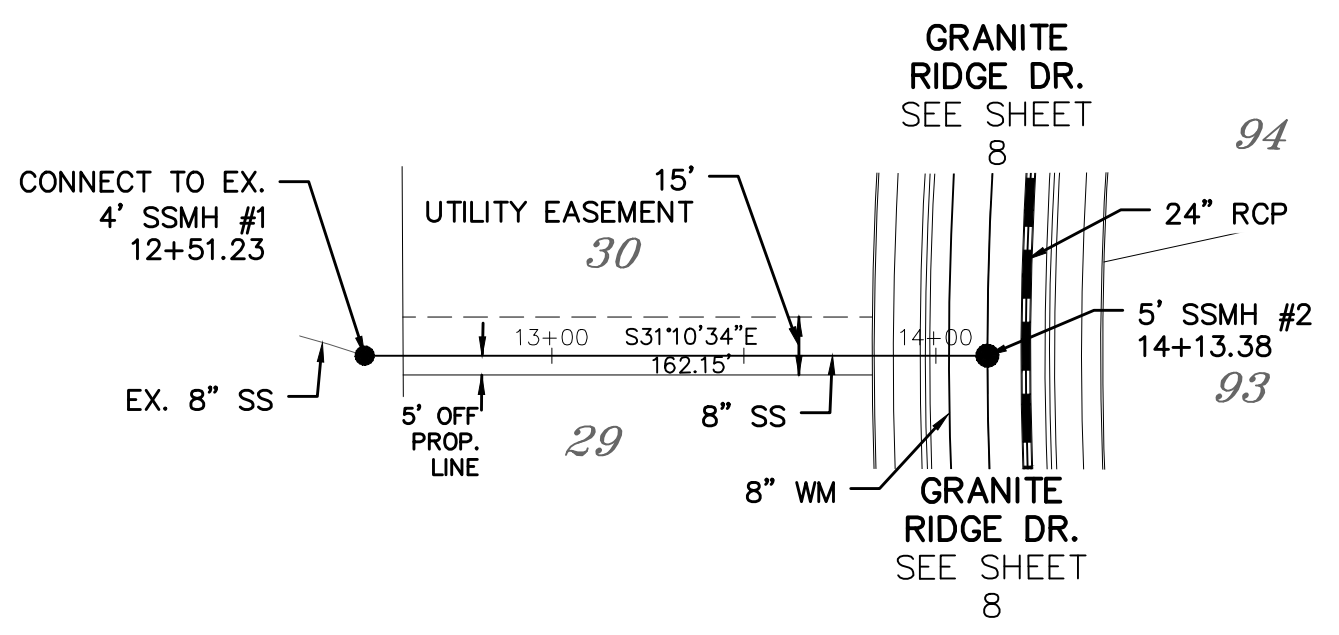
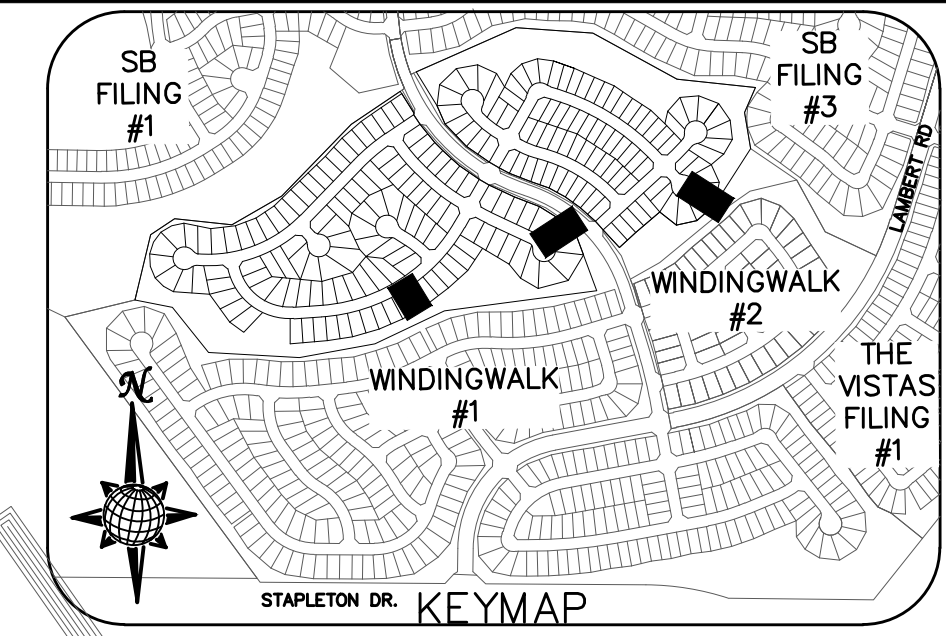
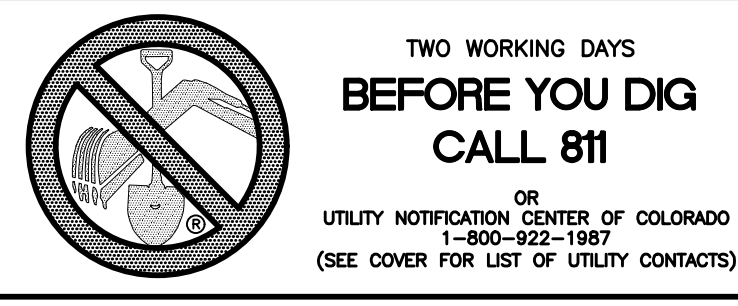
No.	Revisions	Date	Appr.

TECH CONTRACTORS  
11886 STAPLETON DRIVE  
FALCON, CO 80831  
TELEPHONE: 719.495.7444  
FAX: 719.495.2457

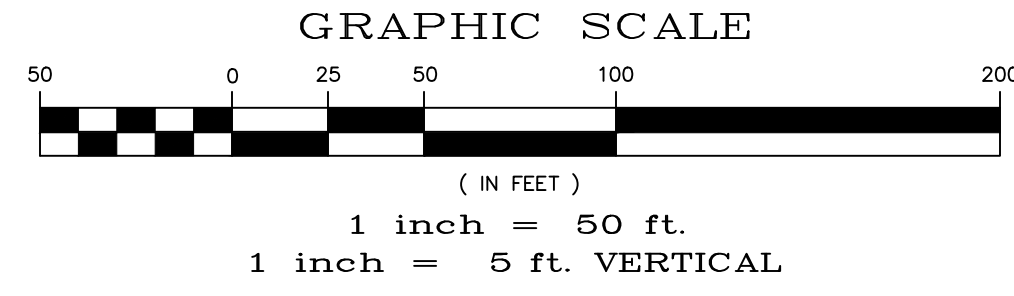


STONEBRIDGE FILING 4 AT  
MERIDIAN RANCH  
STREET AND UTILITY PLANS  
HIDDEN RANCH CT.

Scale	AS SHOWN
Drawn by	LOG
Checked by	TAK
Date	SEPTEMBER 2018
13 of 32	



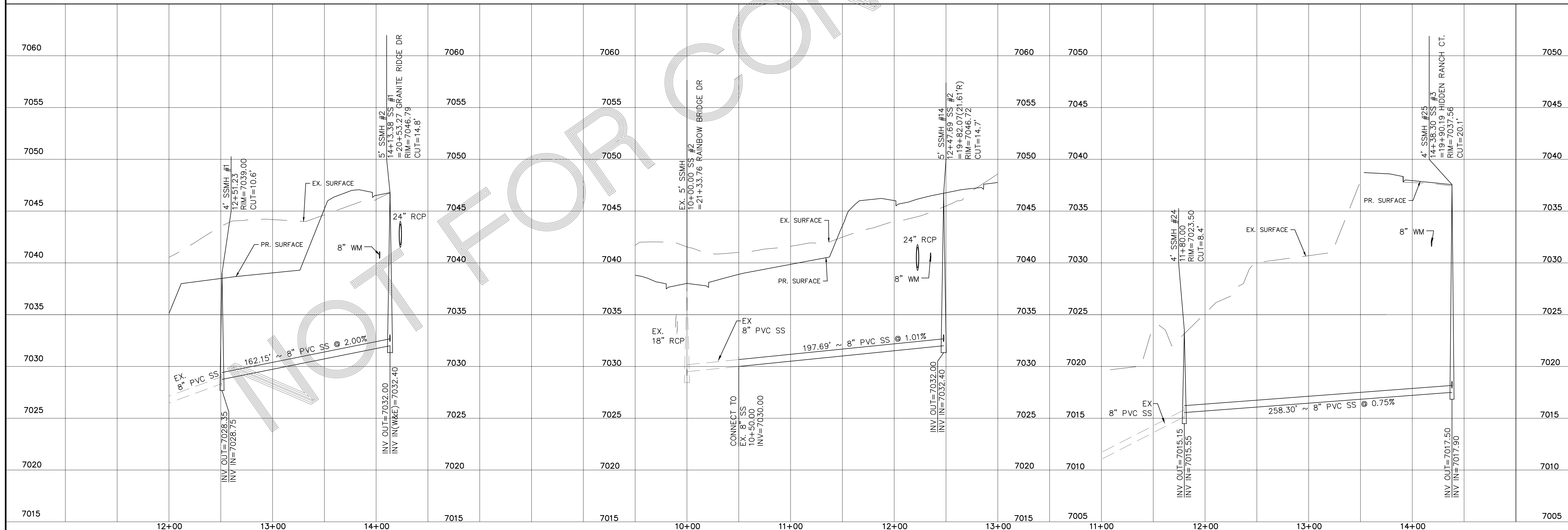
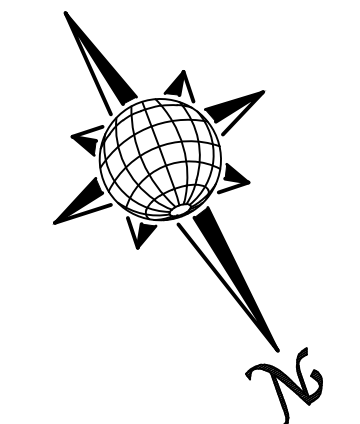
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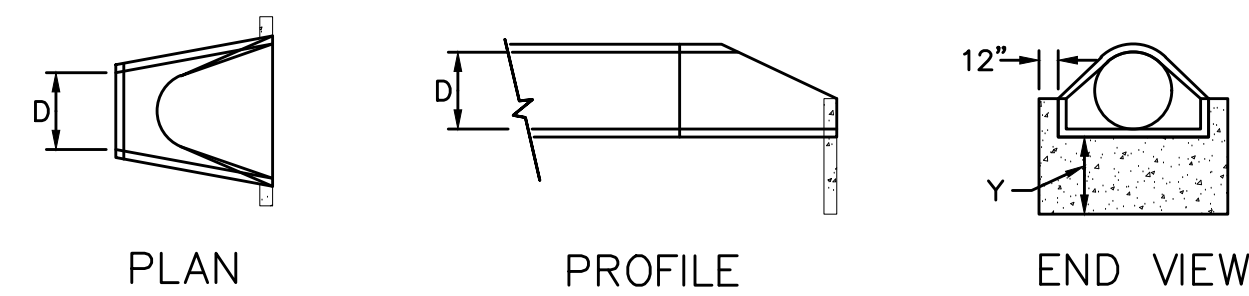
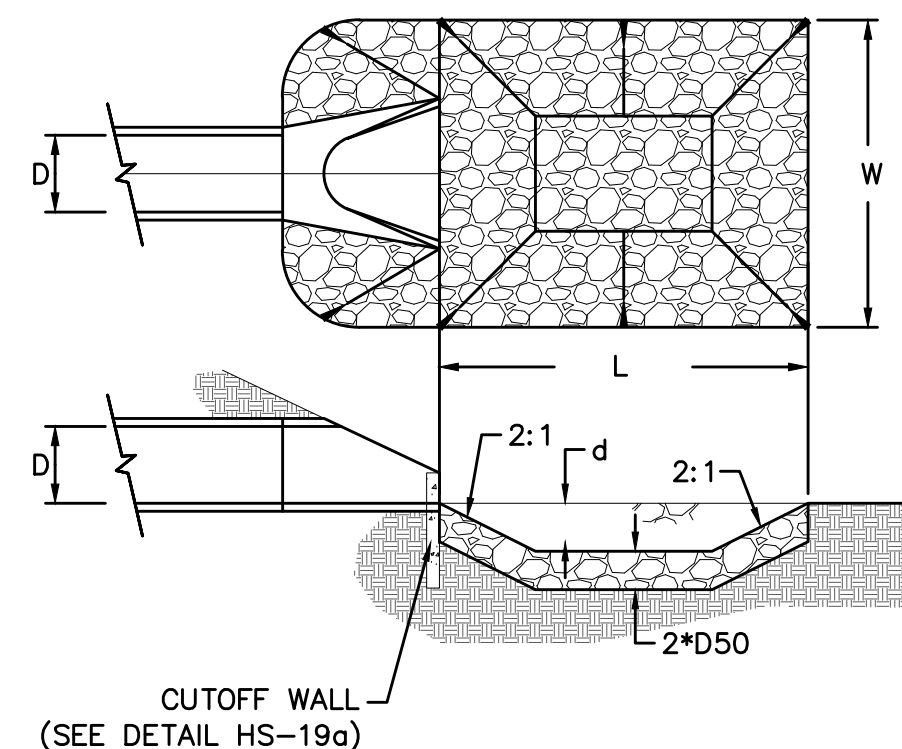
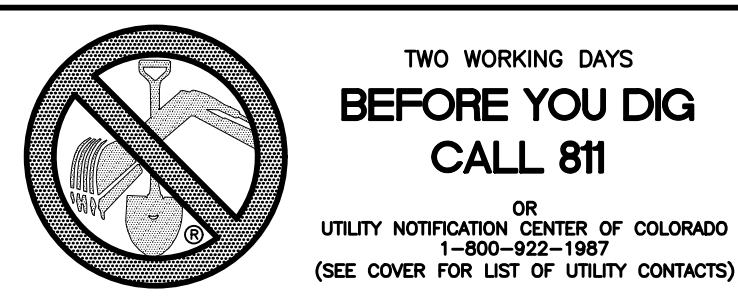
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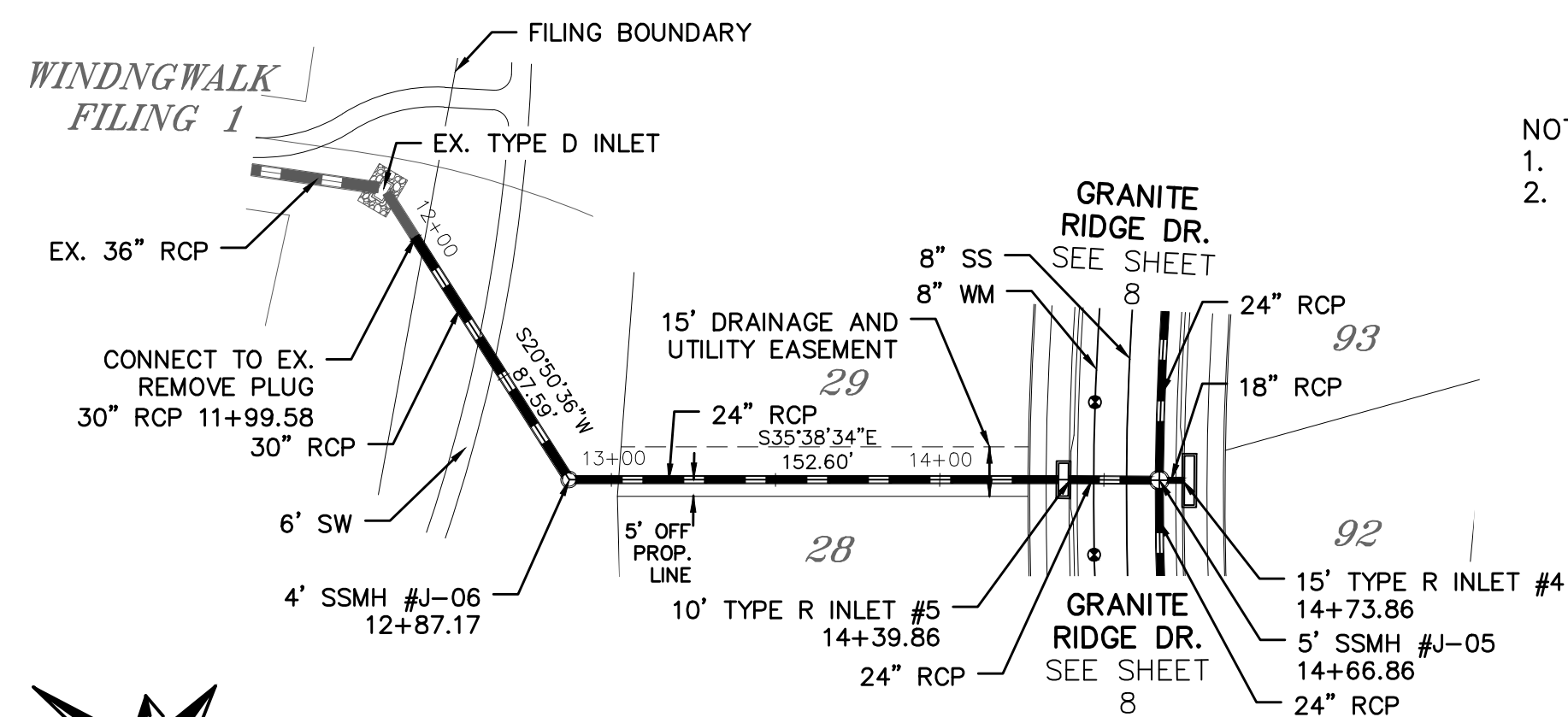
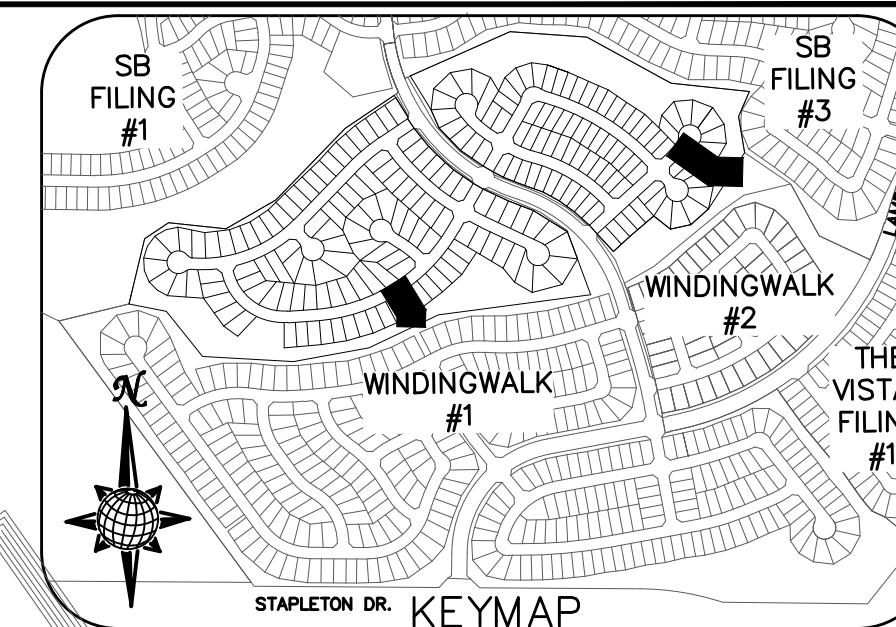
# SEWER #3



TECH CONTRACTORS 11886 STAPLETON DRIVE FALCON, CO 80831 TELEPHONE: 719.495.7444 FAX: 719.495.2457		No.	Revisions	Date	Appr.
		STONEBRIDGE FILING 4 AT MERIDIAN RANCH STREET AND UTILITY PLANS SEWER #1 + SEWER #2 + SEWER #3			
		Scale AS SHOWN	Drawn by LOG	Checked by TAK	Date SEPTEMBER 2018
14 of 32					



URBAN DRAINAGE AND FLOOD CONTROL DISTRICT  
Figure HS-19a. Culvert Cutoff Wall



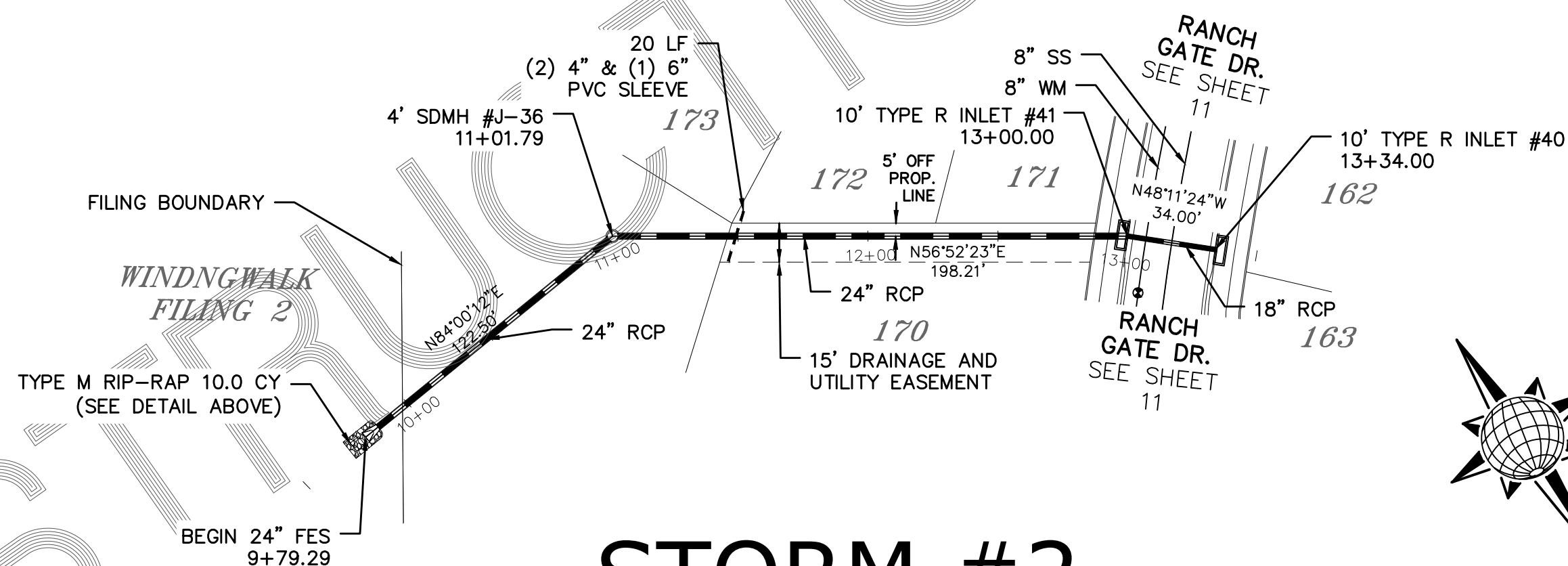
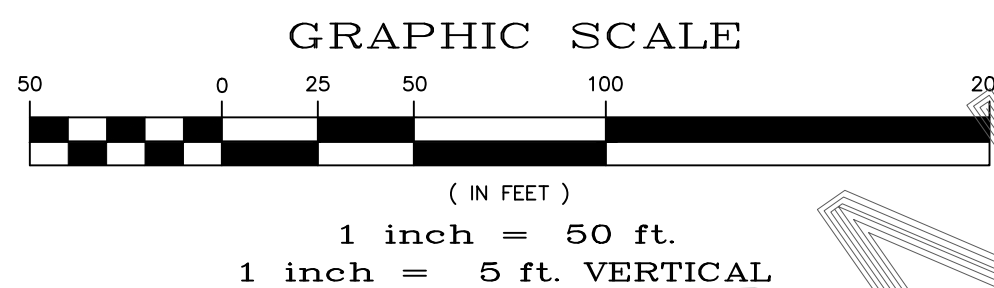
# STORM #1

URBAN DRAINAGE AND FLOOD CONTROL DISTRICT (MODIFIED\*)  
Figure HS-19. Culvert and Outlet Erosion Protection  
\*RIP RAP RECTANGULAR POOL

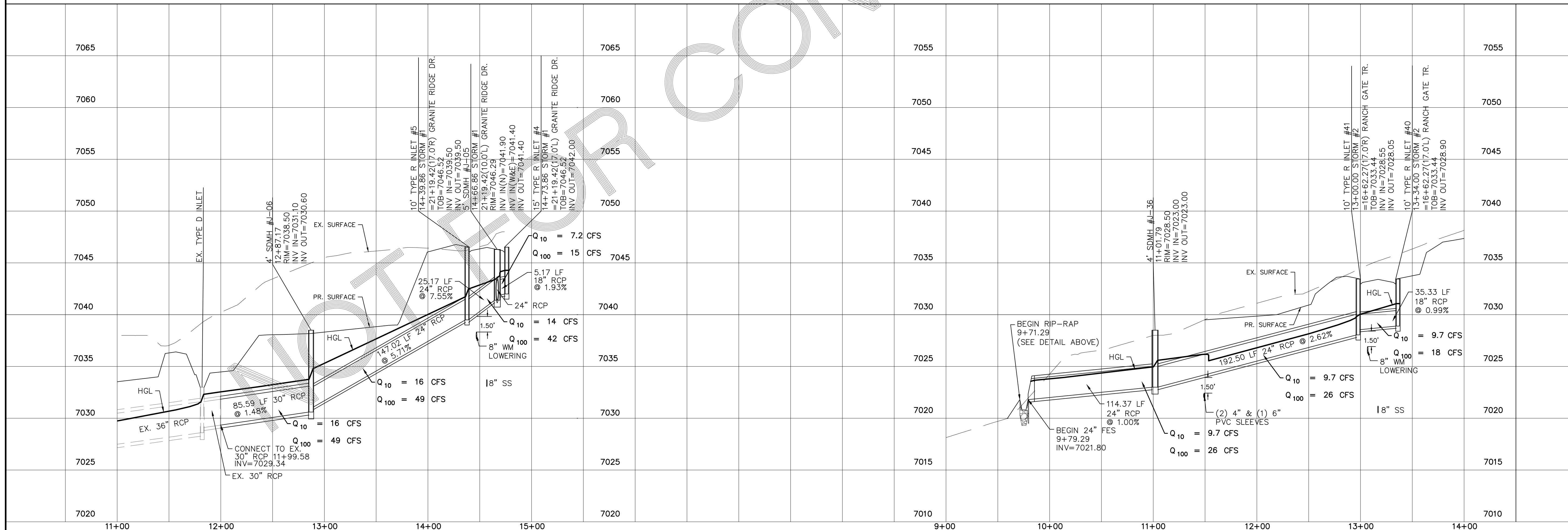
- NOTES:  
1. Headwall with wingwalls or flared end section required at all culvert outlets.  
2. Provide joint fasteners for flared end sections.

STORM #2  
OUTLET PROTECTION DETAIL  
NTS

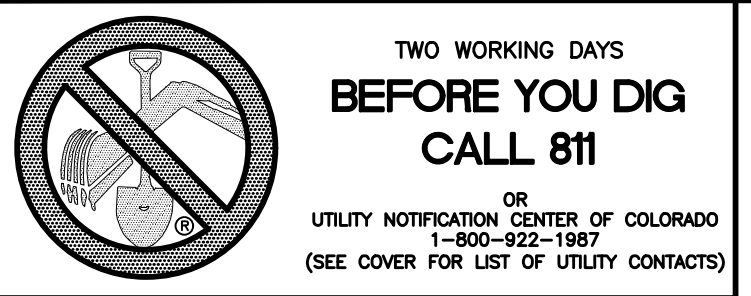
PIPE OUTLET	L	W	d	TYPE	D <sub>50</sub>	CY	Y	NOTES
24"	8.0	8.0	1.0	M	1.00'	10.0	2.3'	SEE RIGHT



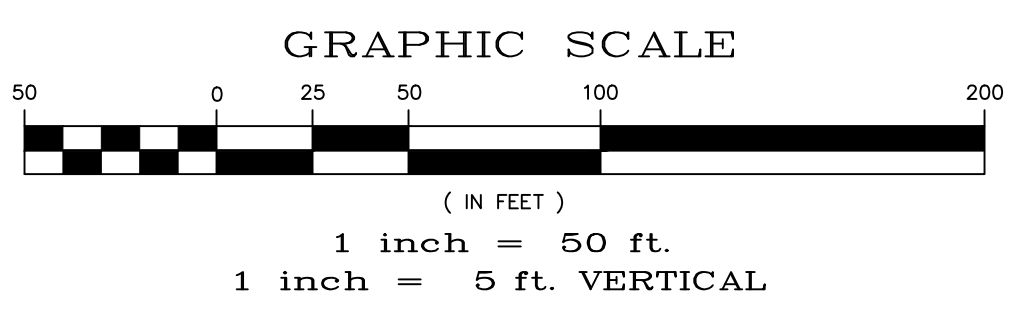
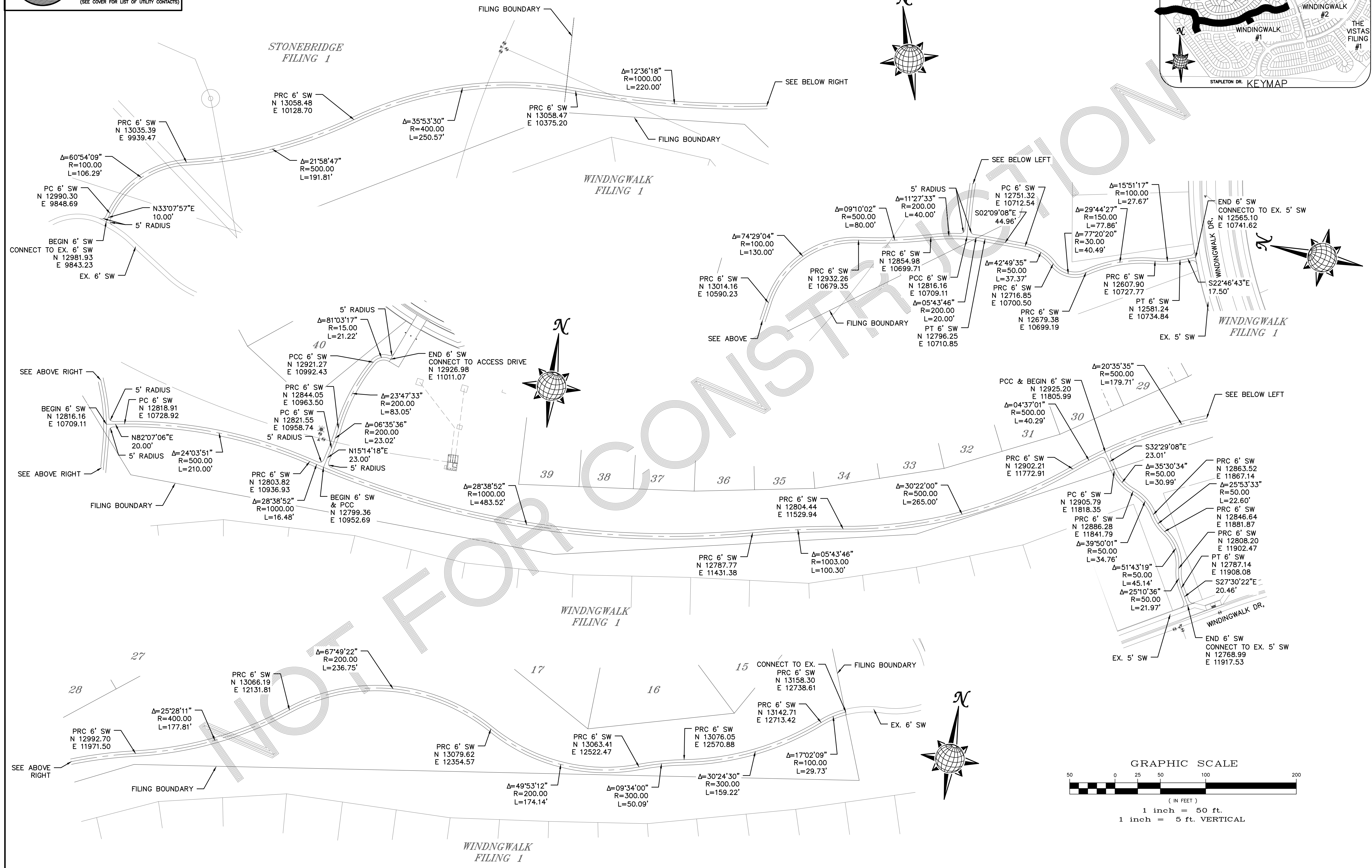
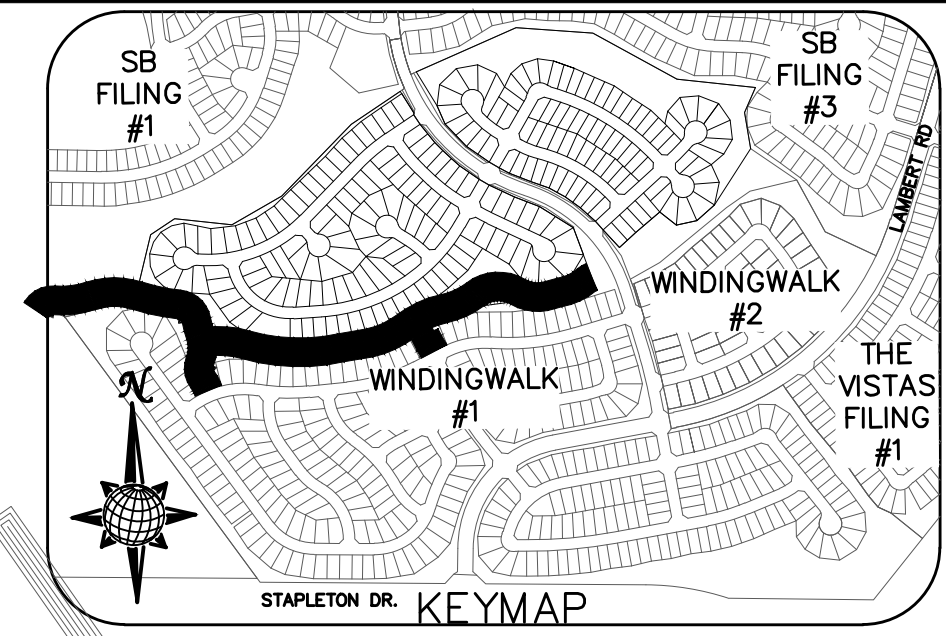
# STORM #2



Date	Appr.	Date	Invt.	No.
TECH CONTRACTORS 11886 STAPLETON DRIVE FALCON, CO 80831 TELEPHONE: 719.495.7444 FAX: 719.495.2457				
MERIDIAN RANCH				
STONEBRIDGE FILING 4 AT MERIDIAN RANCH STREET AND UTILITY PLANS STORM #1 + STORM #2				
Scale	AS SHOWN	Drawn by	LOG	Checked by
				TAK
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# 6' SIDEWALK PLAN



Date		Appr.	
Date		Invt.	
Date		No.	
Revisions		No.	
TECH CONTRACTORS 11886 STAPLETON DRIVE FALCON, CO 80831 TELEPHONE: 719.495.7444 FAX: 719.495.2457			
 <b>MERIDIAN RANCH</b>			
<b>STONEBRIDGE FILING 4 AT MERIDIAN RANCH STREET AND UTILITY PLANS SIDEWALK PLAN</b>			
Scale	AS SHOWN	Drawn by LOG	Checked by TAK
16	of 32	Date	SEPTEMBER 2018





TWO WORKING DAYS  
**BEFORE YOU DIG**  
**CALL 811**  
 OR  
 UTILITY NOTIFICATION CENTER OF COLORADO  
 1-800-922-1987  
 (SEE COVER FOR LIST OF UTILITY CONTACTS)

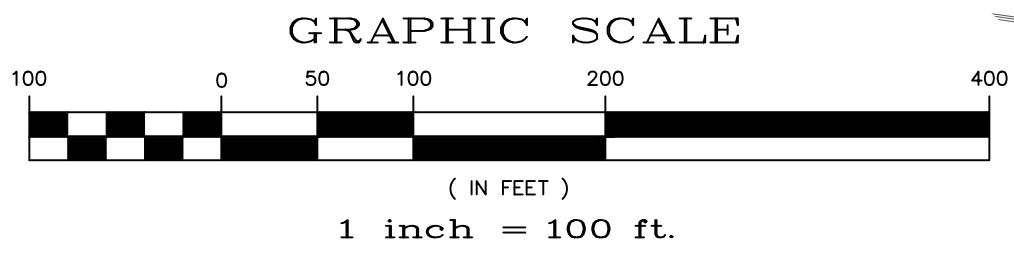
STONEBRIDGE  
 FILING 1


STONEBRIDGE  
 FILING 3



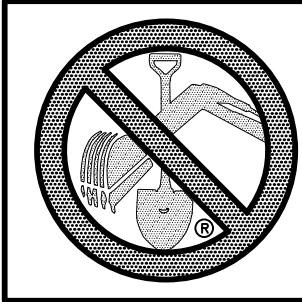
NOTE:  
 CONTRACTOR SHALL PROTECT ALL EXISTING UTILITIES.  
 EX. UTILITIES SEE CONSTRUCTION DRAWINGS FOR:  
 1) GUTHRIE RAW WATER EXTENSION THE VISTAS FILING 1 OFFSITE  
 2) WINDINGWALK FILING 1 AT MERIDIAN RANCH  
 3) WINDINGWALK FILING 2 AT MERIDIAN RANCH

NOTE:  
 8" SS UNLESS OTHERWISE LABELED.



TECH CONTRACTORS 11886 STAPLETON DRIVE FALCON, CO 80831 TELEPHONE: 719.495.7444 FAX: 719.495.2457		No.	Revisions	Date	Appr.
 <b>MERIDIAN RANCH</b>		STONEBRIDGE FILING 4 AT MERIDIAN RANCH STREET AND UTILITY PLANS OVERALL SANITARY SEWER			
		Scale AS SHOWN	Drawn by LOG	Checked by TAK	Date SEPTEMBER 2018

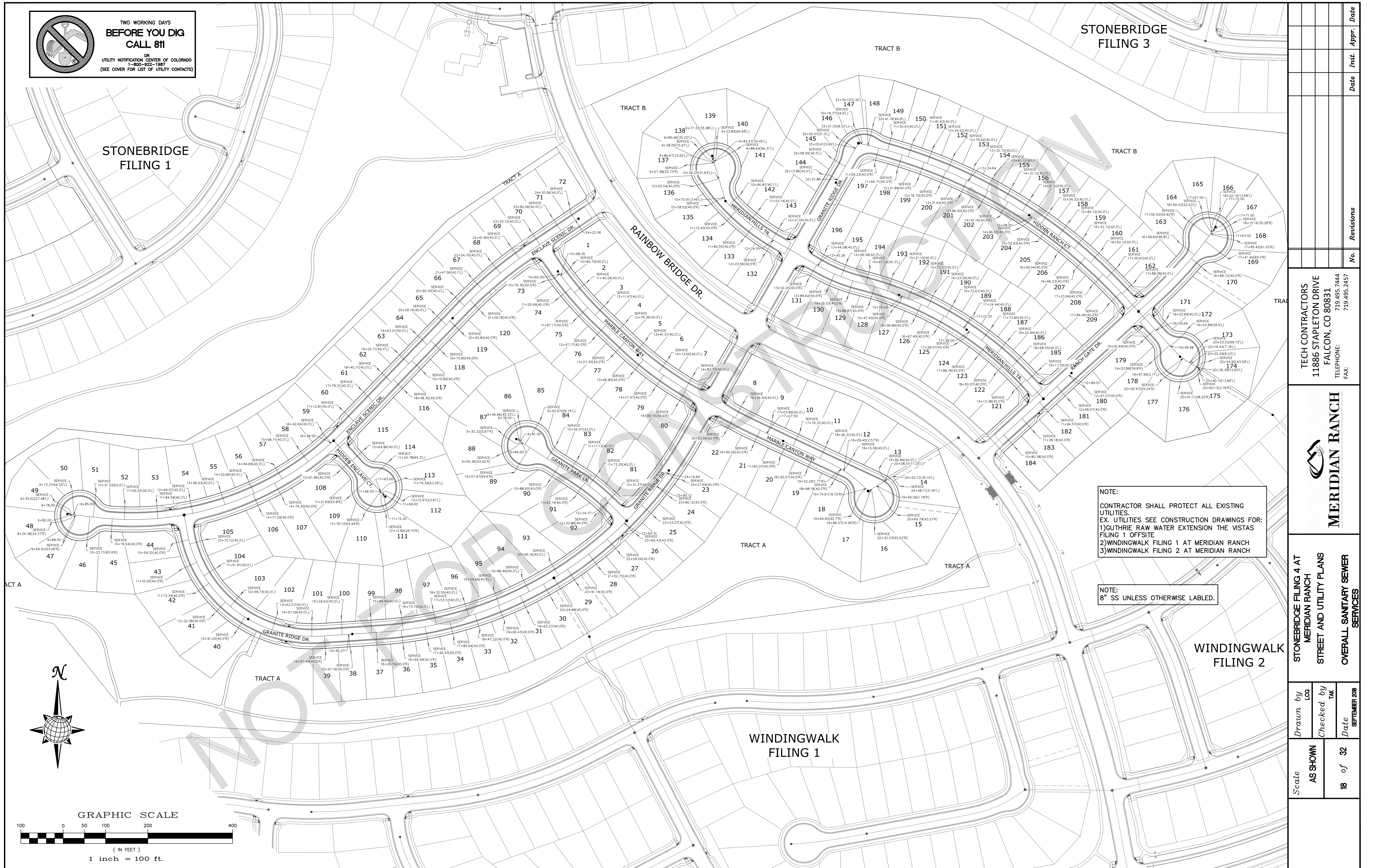
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OR  
UTILITY NOTIFICATION CENTER OF COLORADO  
1-800-922-1087  
(SEE COVER FOR LIST OF UTILITY CONTACTS)

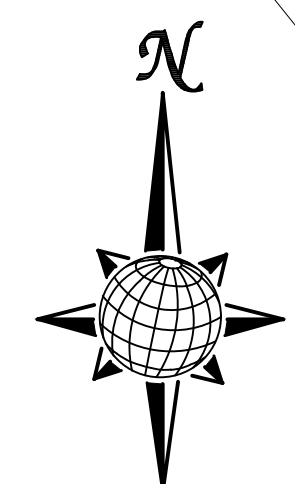
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FILING 1**

**STONEBRIDGE  
FILING 3**

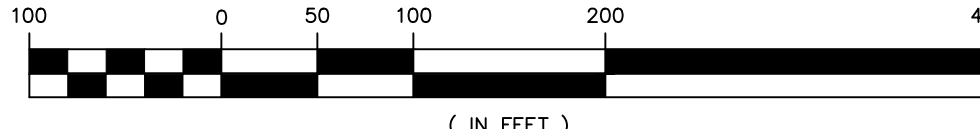


**NOTE:**  
CONTRACTOR SHALL PROTECT ALL EXISTING UTILITIES.  
EX. UTILITIES SEE CONSTRUCTION DRAWINGS FOR:  
1)GUTHRIE RAW WATER EXTENSION THE VISTAS FILING 1 OFFSITE  
2)WINDINGWALK FILING 1 AT MERIDIAN RANCH  
3)WINDINGWALK FILING 2 AT MERIDIAN RANCH

**NOTE:**  
8" SS UNLESS OTHERWISE LABELED.



**GRAPHIC SCALE**



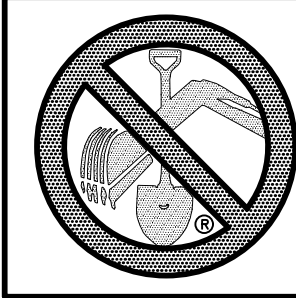
Date	Appr.	Date	Revis	No.

**TECH CONTRACTORS**  
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FALCON, CO 80831  
TELEPHONE:  
719.495.7444  
FAX:  
719.495.2457



**STONEBRIDGE FILING 4 AT  
MERIDIAN RANCH  
STREET AND UTILITY PLANS  
OVERALL SANITARY SEWER  
SERVICES**

Scale	AS SHOWN
Drawn by	LOG
Checked by	TAK
Date	SEPTEMBER 2018
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TWO WORKING DAYS  
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OR  
UTILITY NOTIFICATION CENTER OF COLORADO  
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(SEE COVER FOR LIST OF UTILITY CONTACTS)

**STONEBRIDGE  
FILING 1**

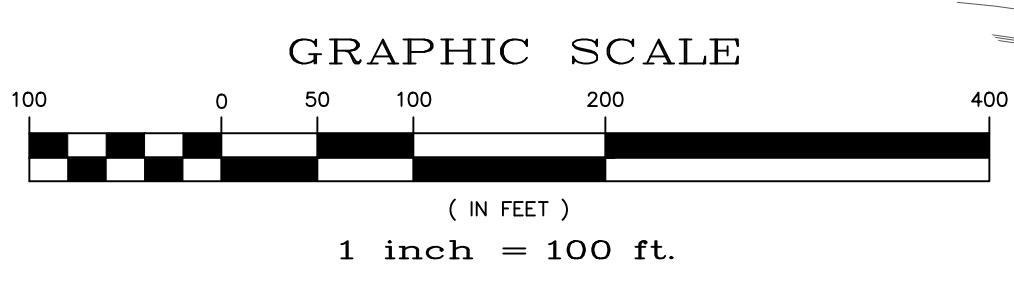
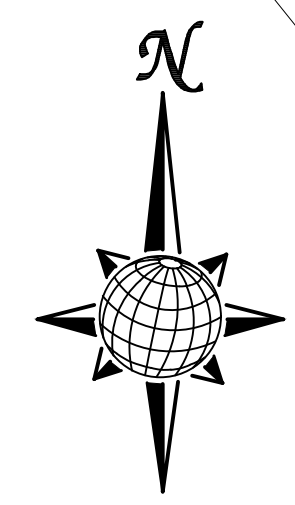
LEGEND	
	EX. 4" UNDERDRAIN
	EX. 6" UNDERDRAIN
	EX. 8" UNDERDRAIN
	4" UNDERDRAIN
	6" UNDERDRAIN

**STONEBRIDGE  
FILING 3**

**WINDINGWALK  
FILING 2**

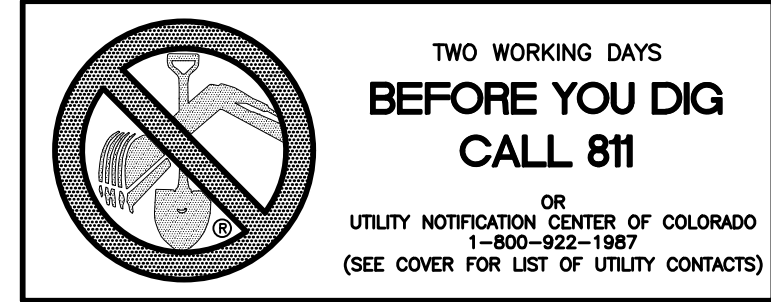
**WINDINGWALK  
FILING 1**

**NOTE:**  
CONTRACTOR SHALL PROTECT ALL EXISTING UTILITIES.  
EX. UTILITIES SEE CONSTRUCTION DRAWINGS FOR:  
1) GUTHRIE RAW WATER EXTENSION THE VISTAS FILING 1 OFFSITE  
2) WINDINGWALK FILING 1 AT MERIDIAN RANCH  
3) WINDINGWALK FILING 2 AT MERIDIAN RANCH



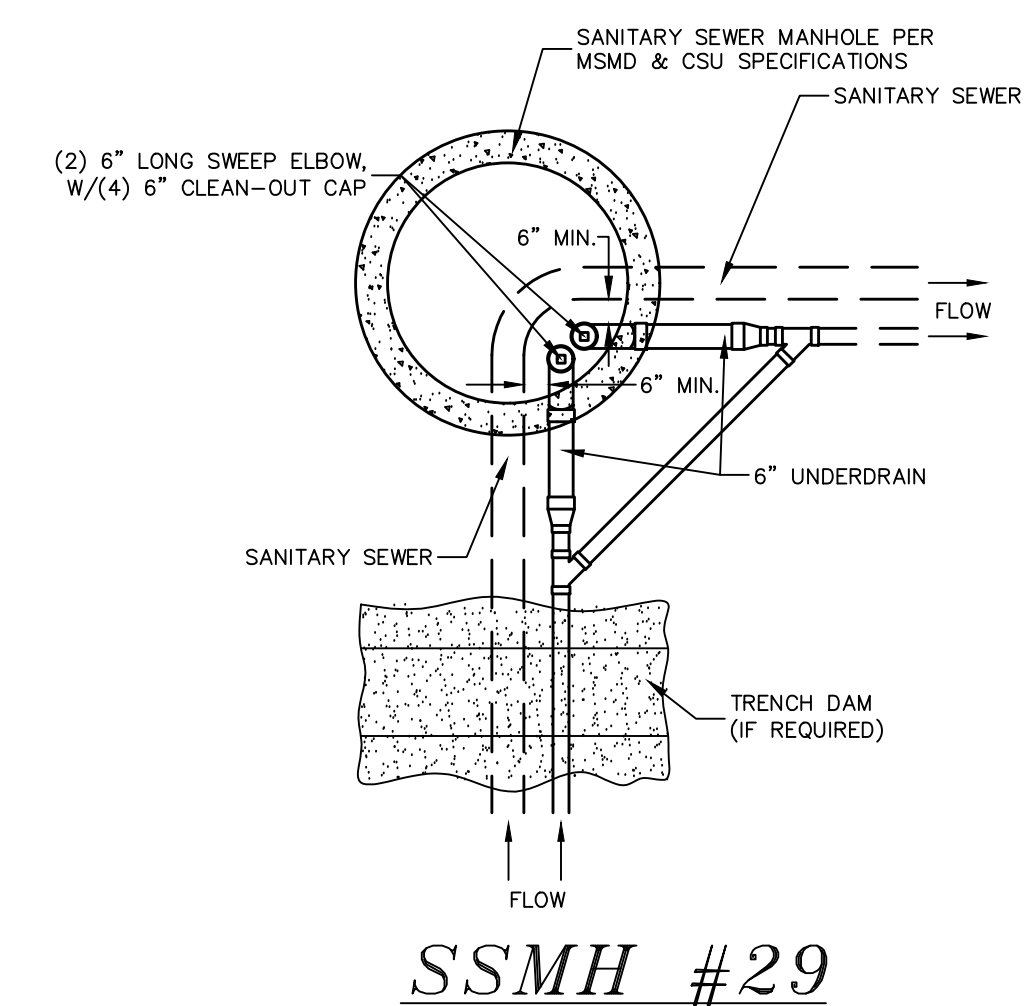
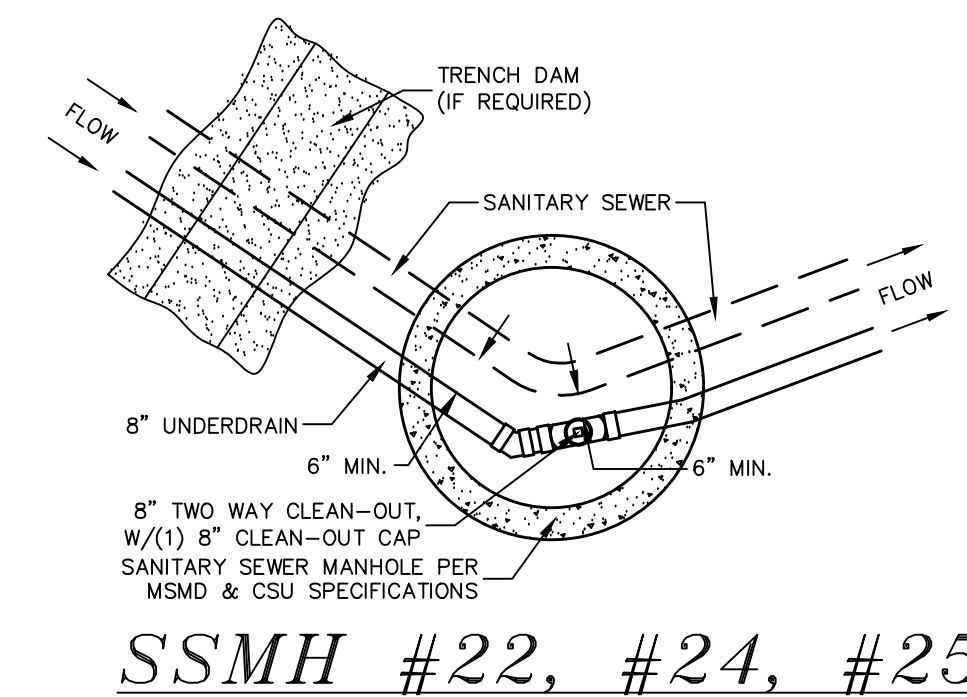
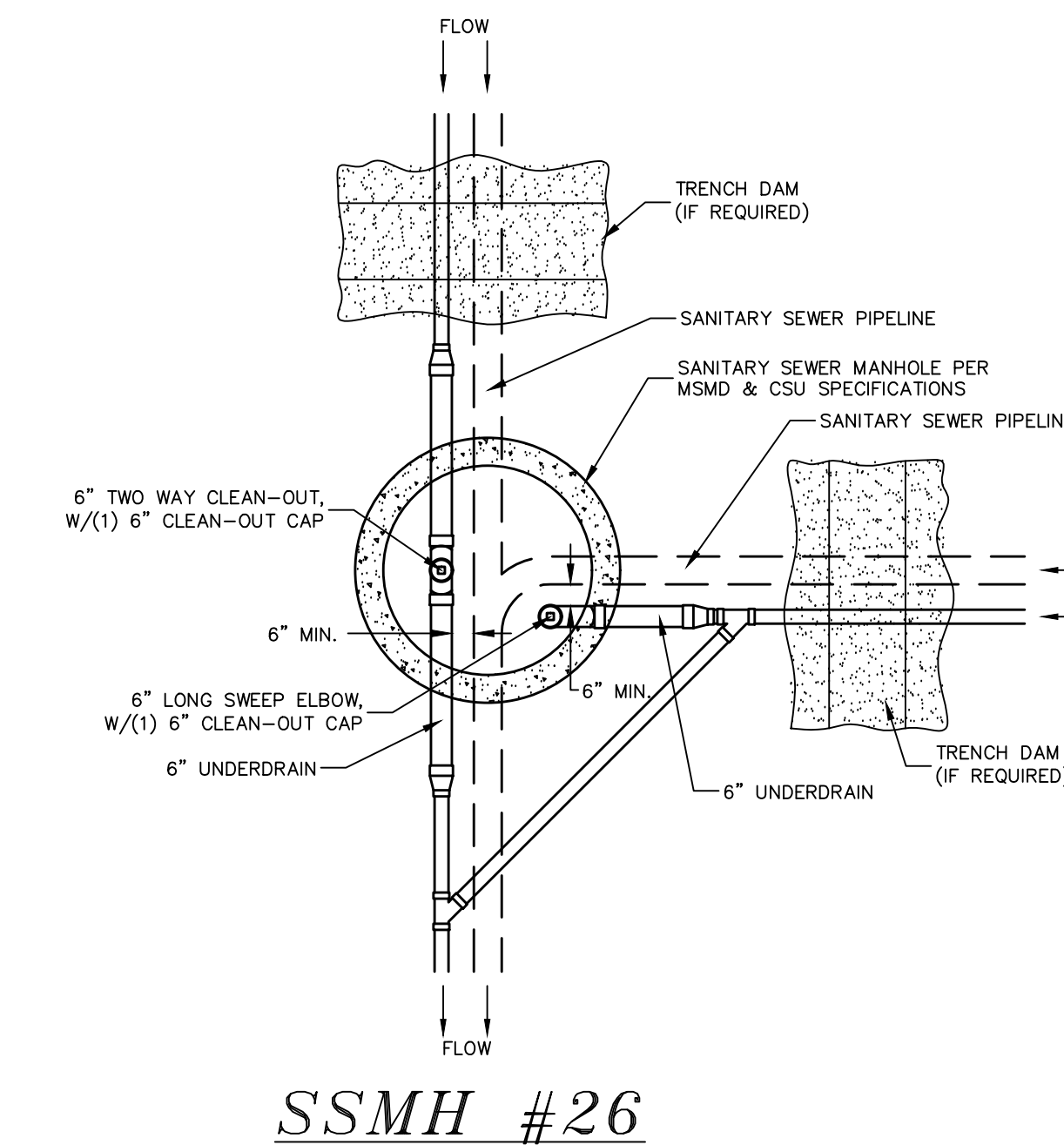
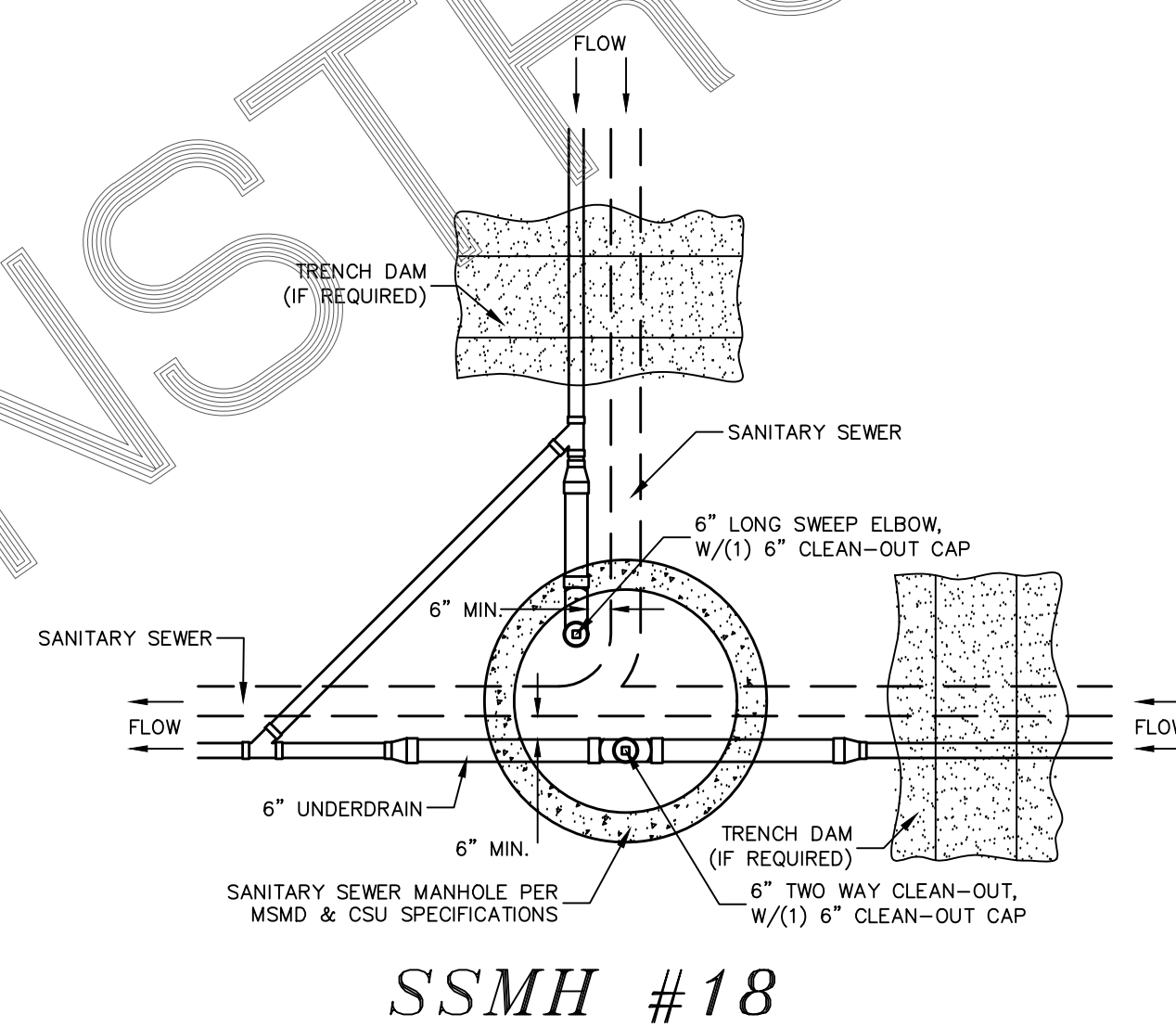
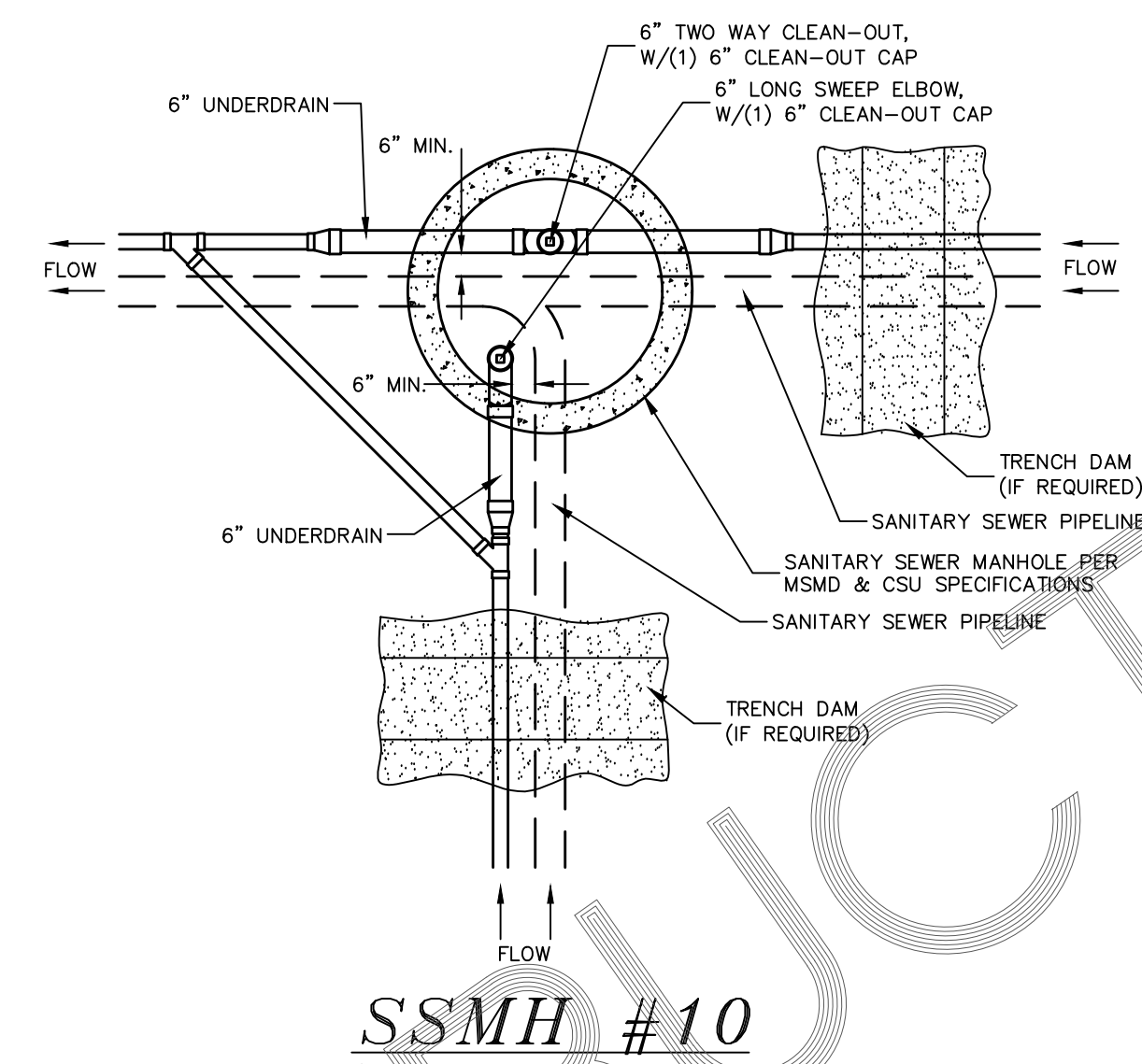
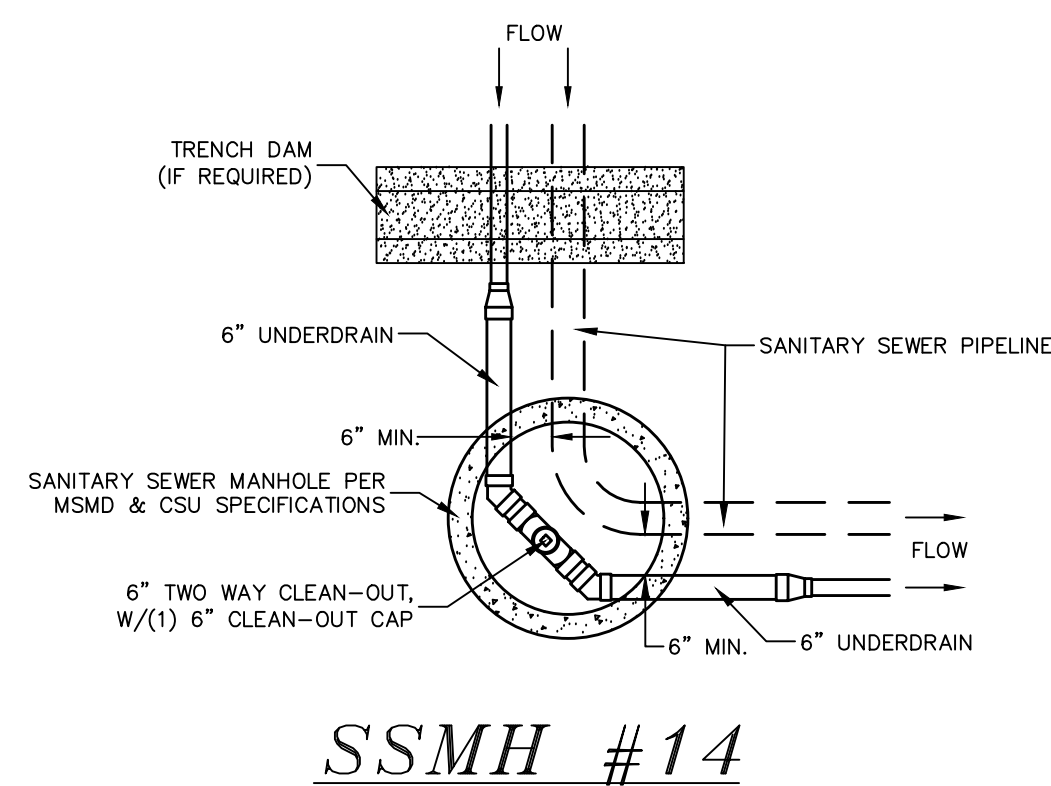
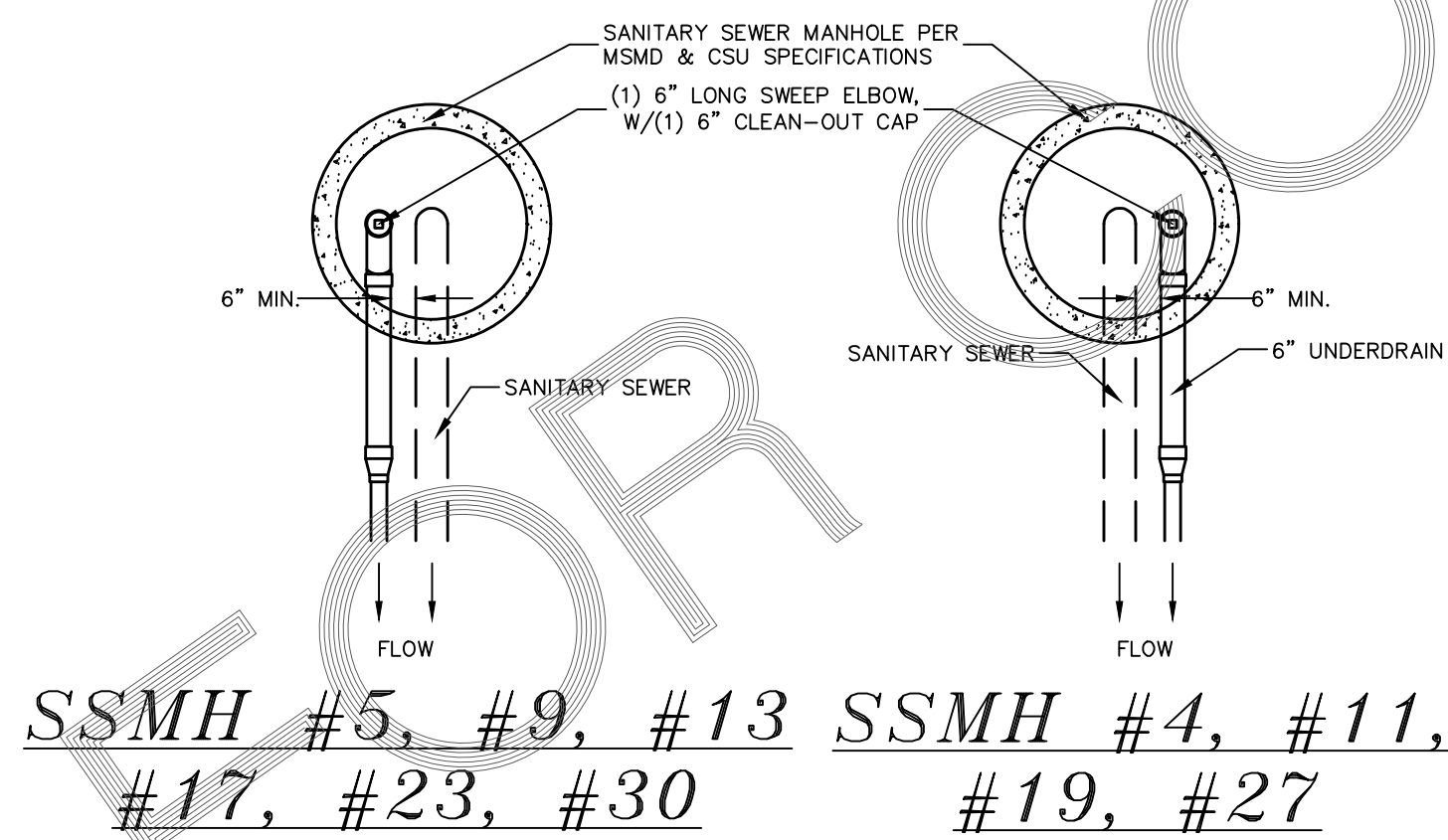
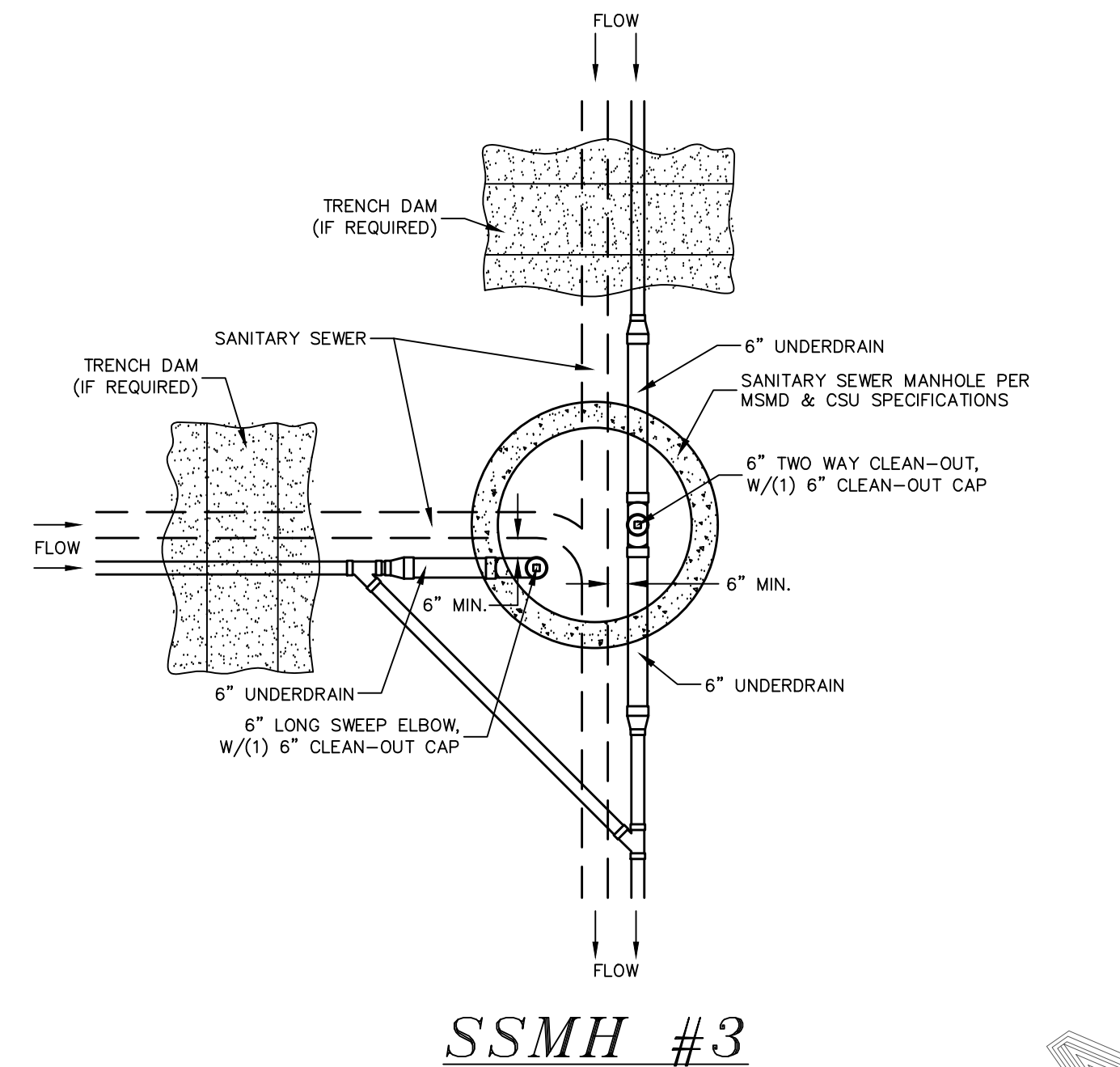
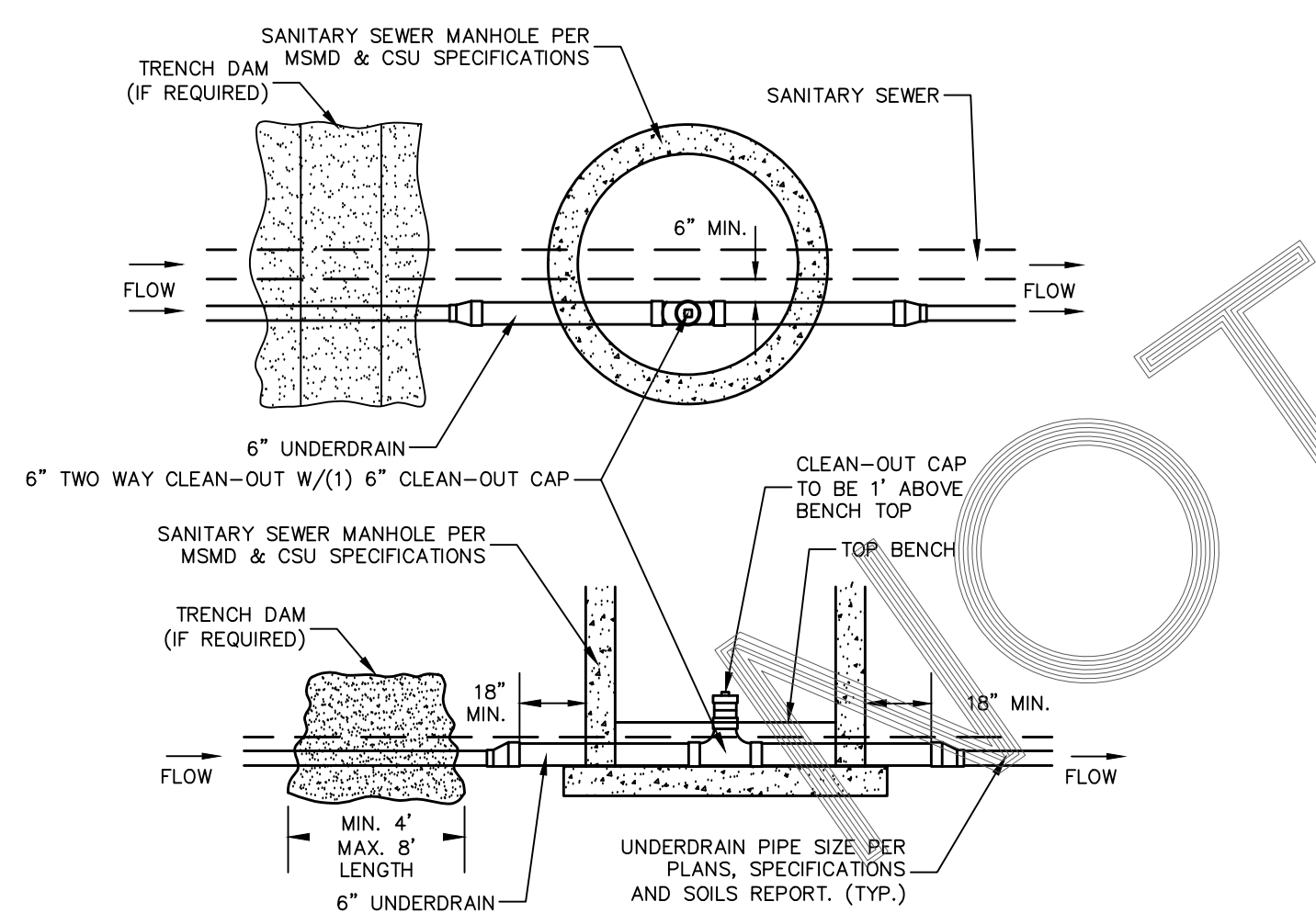
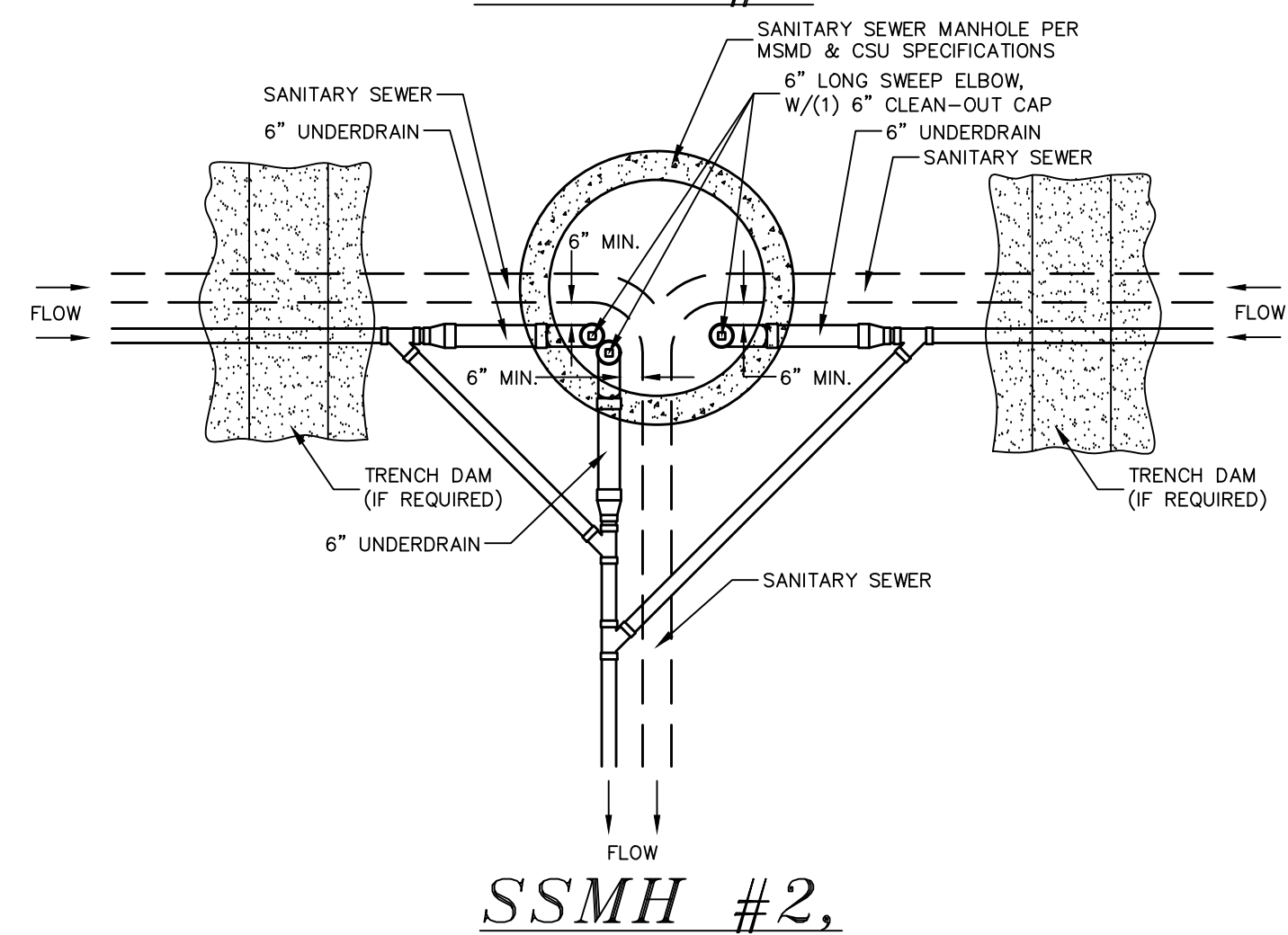
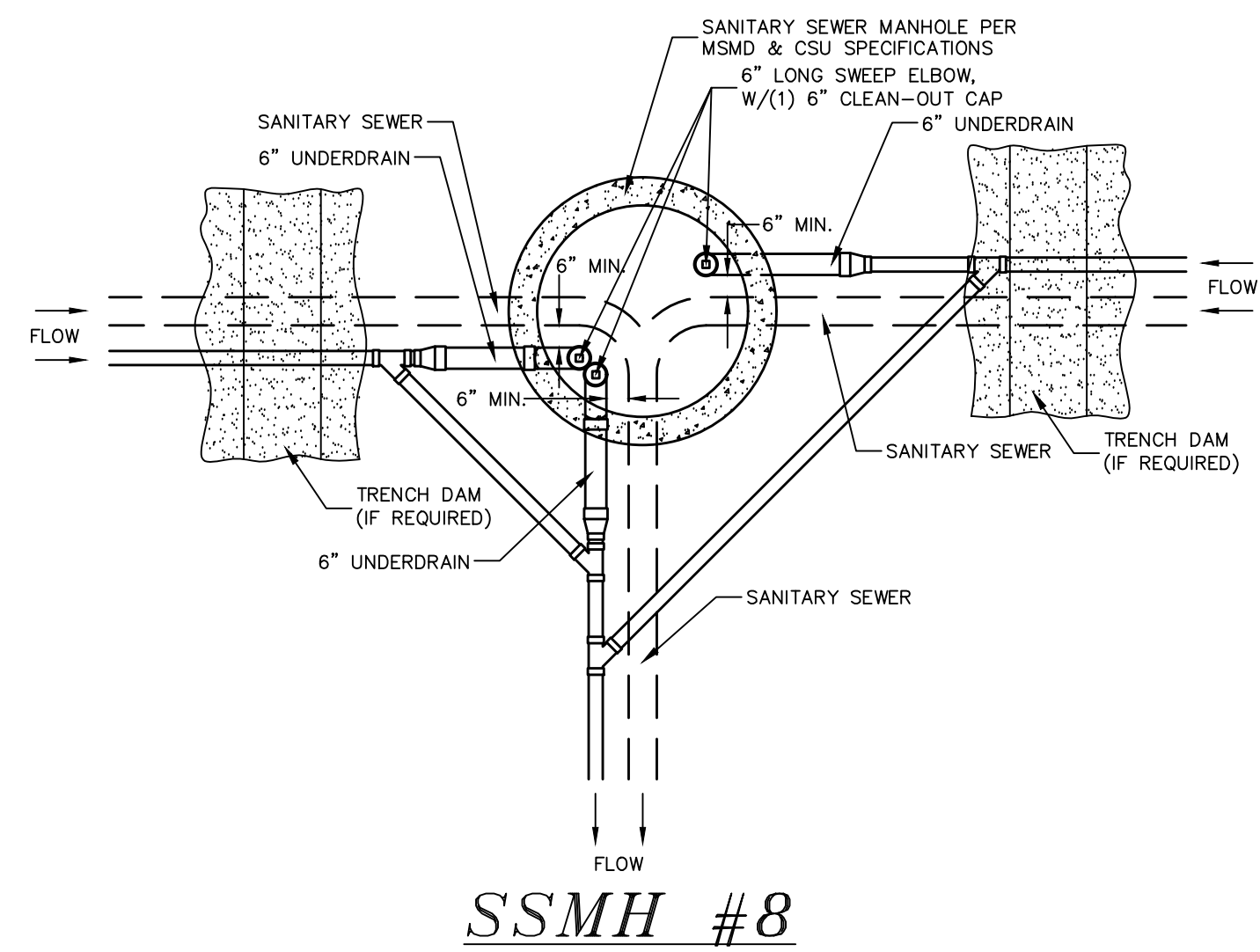
TECH CONTRACTORS 11886 STAPLETON DRIVE FALCON, CO 80831 TELEPHONE: 719.495.7444 FAX: 719.495.2457		No.	Revisions	Date	Appr.
 <b>MERIDIAN RANCH</b>		STONEBRIDGE FILING 4 AT MERIDIAN RANCH STREET AND UTILITY PLANS		OVERALL UNDERDRAIN	
		Scale <b>AS SHOWN</b>	Drawn by LOG	Checked by TAK	Date SEPTEMBER 2018

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## CLEAN-OUT DETAILS

SCALE : N.T.S.

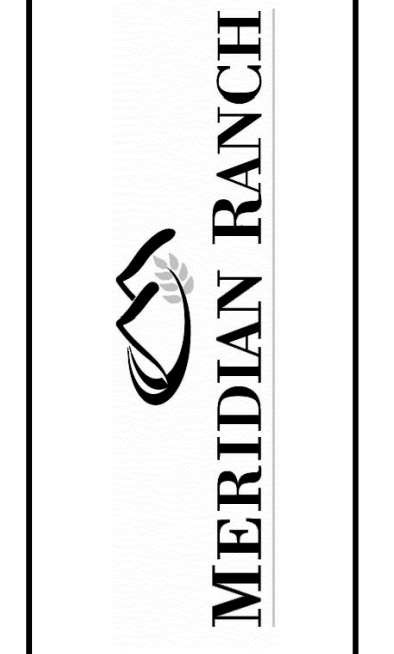


**NOTES:**

1. THE UNDERDRAIN SYSTEM SHALL BE PASSIVE, WATER TIGHT, NON-PERFORATED PIPE, WITH THE MAIN LINE SIZE DESIGNED BY THE ENGINEER. ALL UNDERDRAIN PIPES AND FITTINGS SHALL BE SDR 35 PVC, OR MSMD APPROVED EQUAL, INSTALLED PER THE SAME INSTALLATION STANDARDS AS OUTLINED BY CSUS FOR SANITARY SEWER SYSTEMS. THE UNDERDRAIN SYSTEM AT EACH SANITARY SEWER MANHOLE SHALL CONTAIN 6" CLEAN-OUTS IN EACH UNDERDRAIN MAIN DIRECTION PER THE CLEAN-OUT DETAIL. ALL LOTS SHALL RECEIVE A WHITE 3" UNDERDRAIN SERVICE LATERAL ADJACENT TO THE SANITARY SEWER SERVICE LATERAL.
2. TESTING OF THE UNDERDRAIN SYSTEM WILL CONSIST OF VISUAL INSPECTIONS FOR WATER IN THE SYSTEM, ALONG WITH A VIDEO INSPECTION PERFORMED BY MSMD PERSONNEL. ALL UNDERDRAIN MAINS AND DOWNSTREAM INFILTRATION STRUCTURES SHALL BE CLEAN AND DEBRIS FREE UPON COMPLETION OF THE SYSTEM AND PRIOR TO CCTV. ALL UNDERDRAIN MAINS SHALL BE CCTV INSPECTED BY MSMD AND REVIEWED FOR APPROVAL. THE SPECIFICATION FOR ALLOWABLE STANDING WATER AND WATER INFILTRATION IN THE UNDERDRAIN SYSTEM SHALL BE THE SAME AS PER CSUS FOR SANITARY SEWER SYSTEMS. IF EXCESS WATER IS OBSERVED IN THE UNDERDRAIN SYSTEM, THE CONTRACTOR SHALL LOCATE THE SOURCE OF WATER INFILTRATION AND REPAIR AS NECESSARY TO MEET CSUS.
3. IF THE UNDERDRAIN MAIN HAS LOW SPOTS THAT EXCEED CSUS STANDARDS, THE CONTRACTOR SHALL REPAIR THE LINE AS NECESSARY TO MEET CSUS. UNDERDRAIN MAINS THAT DO NOT MEET MSMD STANDARDS SHALL BE REPLACED AND OR REPAIRED AS NECESSARY. THE CONTRACTOR SHALL RE-CCTV INSPECT THE UNDERDRAIN MAIN LINES AFTER THE REPAIRS HAVE BEEN MADE WITH ONE VIDEO SUBMITTED TO MSMD FOR REVIEW AND APPROVAL.
4. UNDERDRAIN MAIN LINES SHALL HAVE CONTINUOUS POSITIVE DRAINAGE TO THE POINT OF DISCHARGE INTO A BELOW GRADE AN APPROVED UNDERDRAIN INFILTRATION STRUCTURE WHEREVER POSSIBLE. UNDERDRAIN INFILTRATION STRUCTURES SHALL BE DESIGNED WITH OVERFLOW LINES FOR FUTURE EXPANSION AS NEEDED. IF GROUNDWATER IS ENCOUNTERED DURING CONSTRUCTION OF THE INFILTRATION STRUCTURE, STOP INSTALLATION AND CONTACT THE DISTRICT ENGINEER FOR POSSIBLE ALTERNATE DESIGN.
5. UNDERDRAINS WILL DAYLIGHT AT LOCATIONS SHOWN ON THE DRAWINGS.
6. UNDERDRAIN CLEANOUTS SHALL BE 6 INCH AND SHALL BE LOCATED AT EVERY MANHOLE. UNDERDRAIN CLEANOUTS AND CLEANOUT CONSTRUCTION WILL LEAVE NO INFILTRATION WITHIN SEWER MANHOLES. MANHOLE PENETRATIONS TO BE FILLED WITH NON-SHRINKING GROUT. UNDERDRAIN SIZE WILL NOT BE REDUCED THROUGH THE MANHOLE.
7. TRENCH DAMS WILL BE PROVIDED AT INTERVALS NO GREATER THAN 350 FEET IN SANITARY SEWER SECTIONS WHERE GROUNDWATER EXISTS OR WHERE DIRECTED BY THE ENGINEER. A TRENCH DAM WILL BE CONSTRUCTED WITHIN THE FIRST 100 FEET OF EITHER ENTERING OR EXITING GROUNDWATER. THE CONTRACTOR SHALL NOTIFY THE DISTRICT WHEN GROUNDWATER IS ENCOUNTERED TO REVIEW TRENCH DAM NEEDS, LOCATIONS, AND MATERIALS.
8. TRENCH DAMS MAY BE CONSTRUCTED OF ON SITE MATERIALS IF APPROVED BY THE SOILS ENGINEER.
9. TRENCH DAMS SHALL COMPLETELY INTERRUPT GRAVEL BEDDING AND STABILIZATION THE FULL WIDTH OF THE TRENCH FOR A LENGTH OF NO LESS THAN 4 FEET BUT NO GREATER THAN 8 FEET.
10. TRENCH DAMS SHALL BE COMPACTED TO 95% OF STANDARD PROCTOR AROUND THE SEWER AND UNDERDRAIN PIPELINES.
11. IF ALTERNATE MATERIALS (CONCRETE) OR SOIL AMENDED TRENCH DAMS ARE NECESSARY OR REQUIRED BY THE ENGINEER, THE DAMS SHALL BE EXTENDED A MINIMUM OF 6 FEET ABOVE THE PIPELINE BUT IN NO CASE CLOSER THAN 6' FROM THE SURFACE.

No.	Revisions	Date	Init.	Appr.	Date

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STONEBRIDGE FILING 4 AT  
MERIDIAN RANCH  
STREET AND UTILITY PLANS  
UNDERDRAIN DETAILS

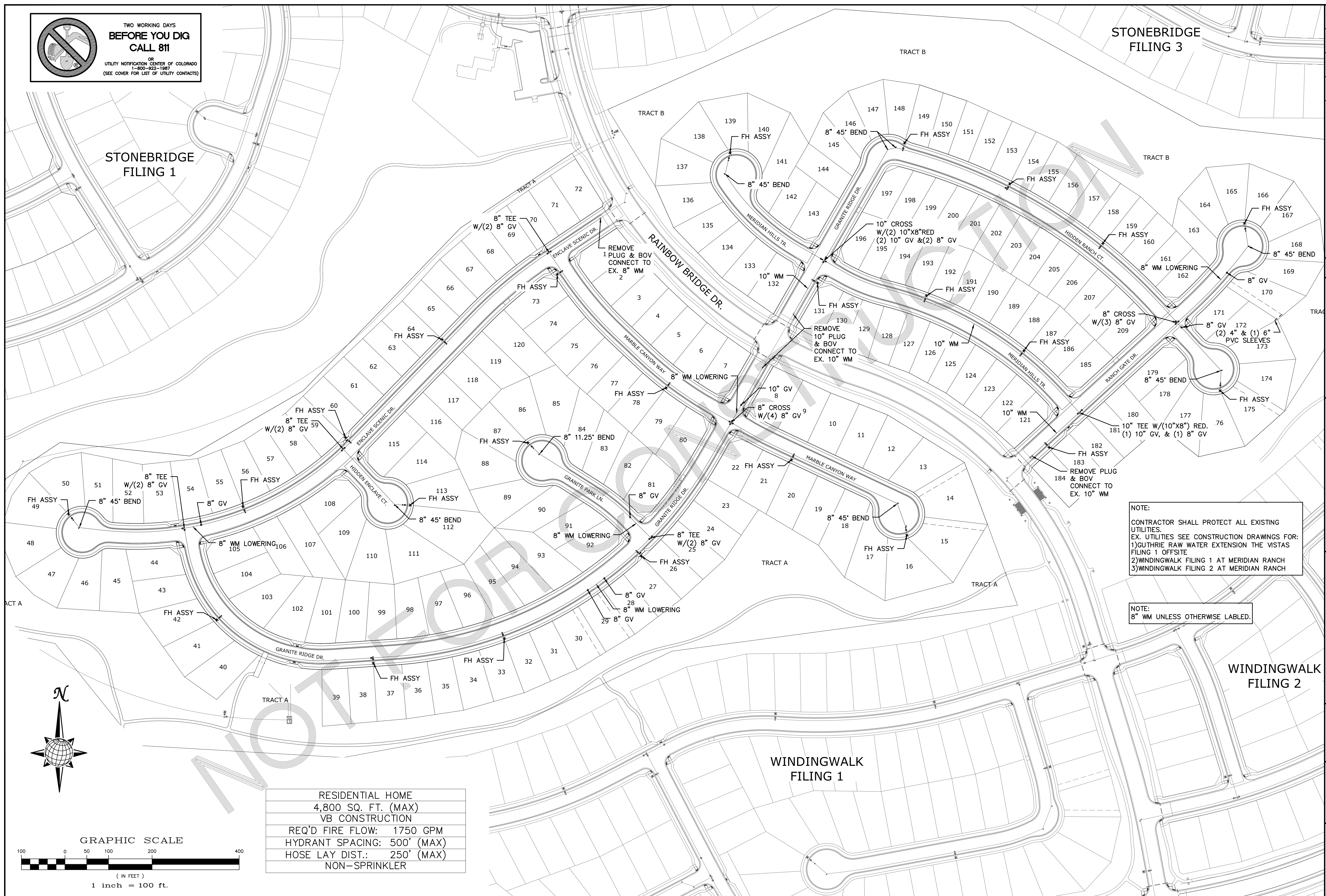
Scale	AS SHOWN
Drawn by	LOG
Checked by	TAK
Date	SEPTEMBER 2018
20 of	32



TWO WORKING DAYS  
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STONEBRIDGE  
FILING 1

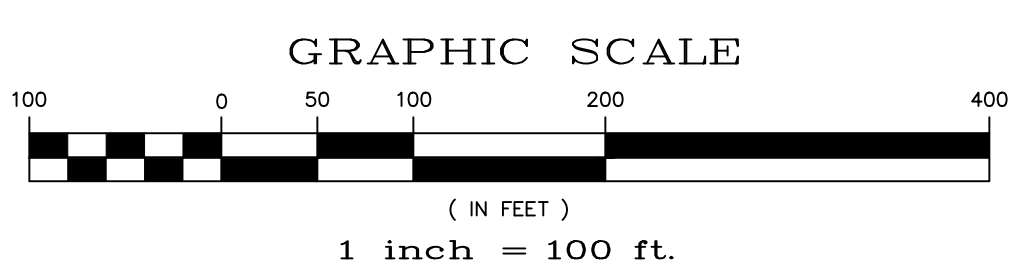
STONEBRIDGE  
FILING 3



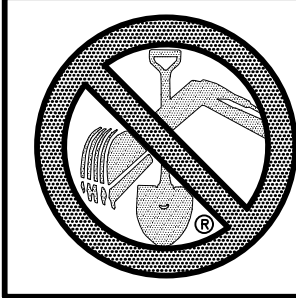
NOTE:  
CONTRACTOR SHALL PROTECT ALL EXISTING UTILITIES.  
EX. UTILITIES SEE CONSTRUCTION DRAWINGS FOR:  
1) GUTHRIE RAW WATER EXTENSION THE VISTAS FILING 1 OFFSITE  
2) WINDINGWALK FILING 1 AT MERIDIAN RANCH  
3) WINDINGWALK FILING 2 AT MERIDIAN RANCH

NOTE:  
8" WM UNLESS OTHERWISE LABELED.

RESIDENTIAL HOME  
4,800 SQ. FT. (MAX)  
VB CONSTRUCTION  
REQ'D FIRE FLOW: 1750 GPM  
HYDRANT SPACING: 500' (MAX)  
HOSE LAY DIST.: 250' (MAX)  
NON-SPRINKLER



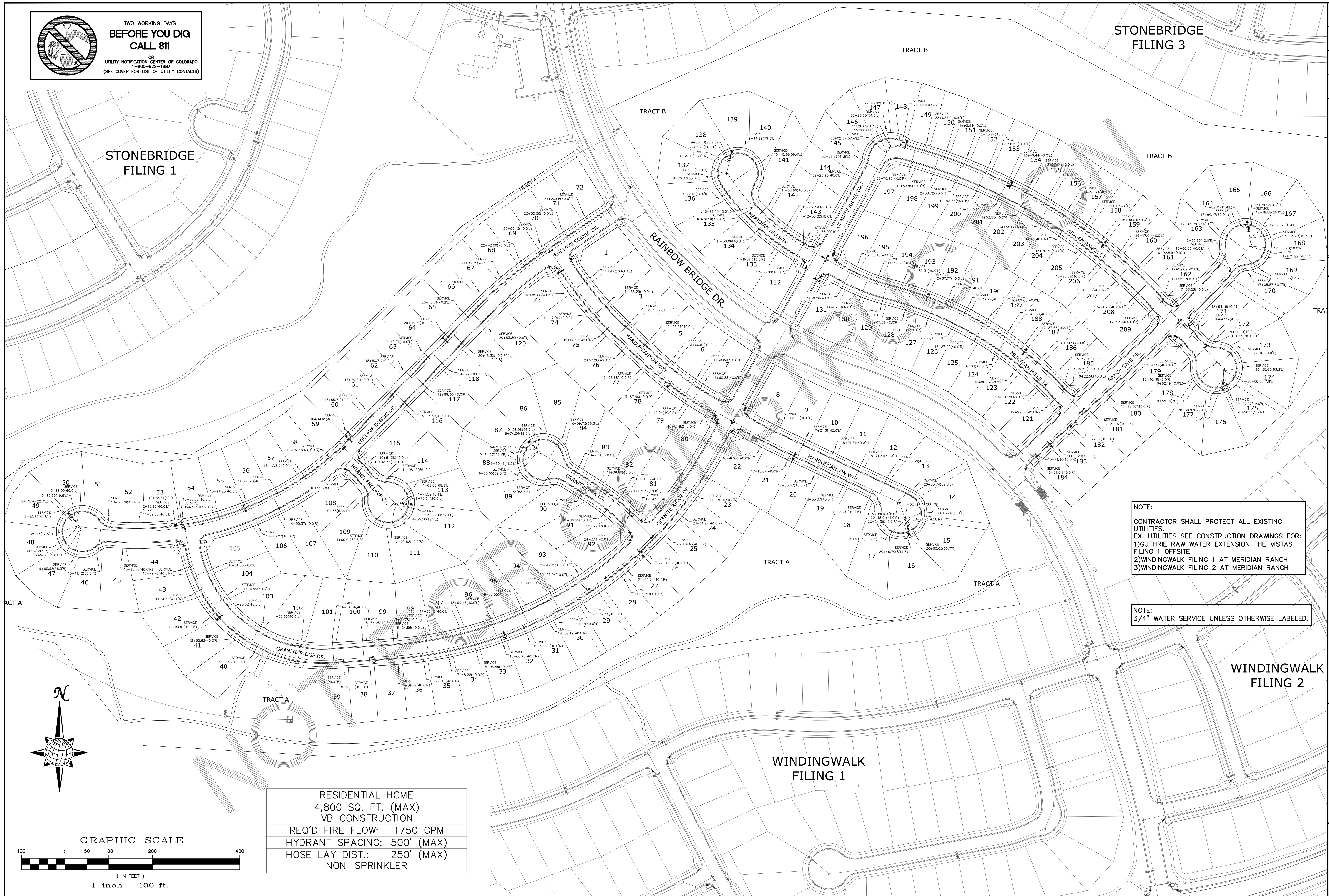
TECH CONTRACTORS 11886 STAPLETON DRIVE FALCON, CO 80831 TELEPHONE: 719.495.7444 FAX: 719.495.2457		No.	Revisions	Date	Appr.
 <b>MERIDIAN RANCH</b>		STONEBRIDGE FILING 4 AT MERIDIAN RANCH STREET AND UTILITY PLANS		OVERALL WATER	
		Scale AS SHOWN	Drawn by LOG	Checked by TAK	Date SEPTEMBER 2018



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(SEE COVER FOR LIST OF UTILITY CONTACTS)

**STONEBRIDGE  
FILING 1**

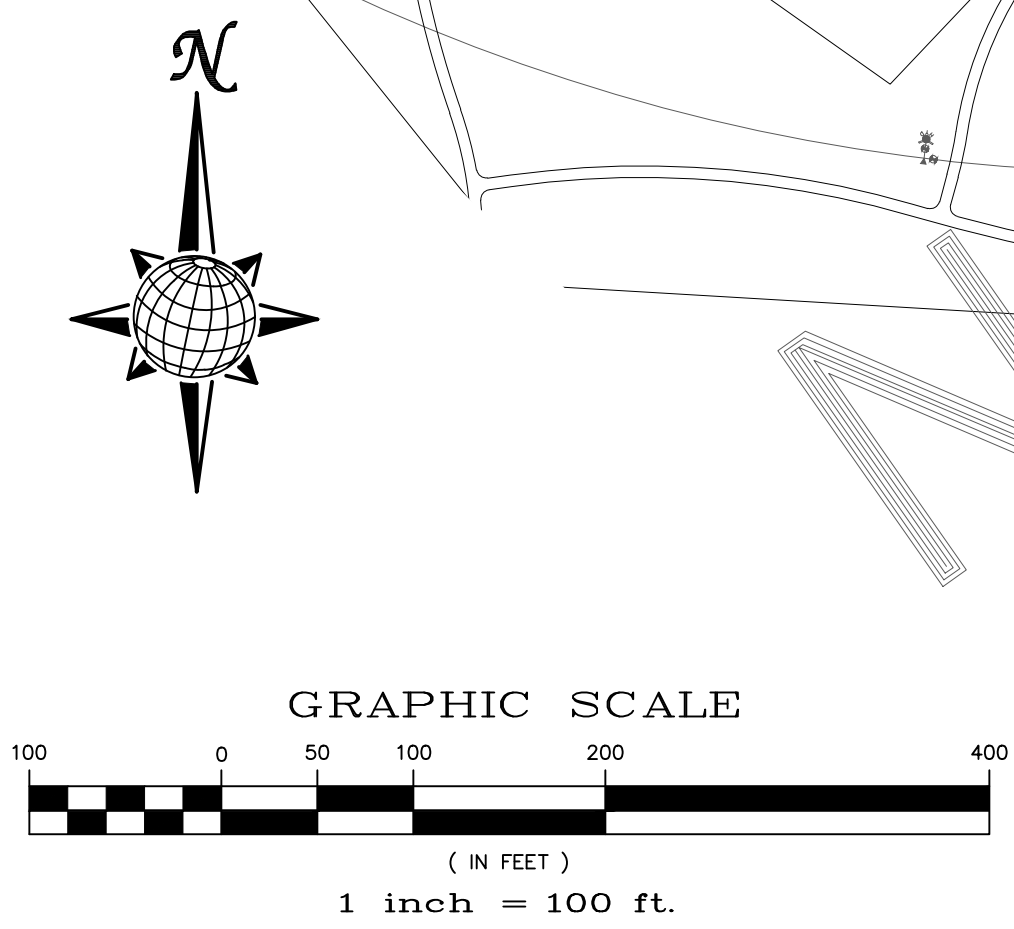
**STONEBRIDGE  
FILING 3**



**NOTE:**  
CONTRACTOR SHALL PROTECT ALL EXISTING UTILITIES.  
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2) WINDINGWALK FILING 1 AT MERIDIAN RANCH  
3) WINDINGWALK FILING 2 AT MERIDIAN RANCH

**NOTE:**  
3/4" WATER SERVICE UNLESS OTHERWISE LABELED.

RESIDENTIAL HOME  
4,800 SQ. FT. (MAX)  
VB CONSTRUCTION  
REQ'D FIRE FLOW: 1750 GPM  
HYDRANT SPACING: 500' (MAX)  
HOSE LAY DIST.: 250' (MAX)  
NON-SPRINKLER



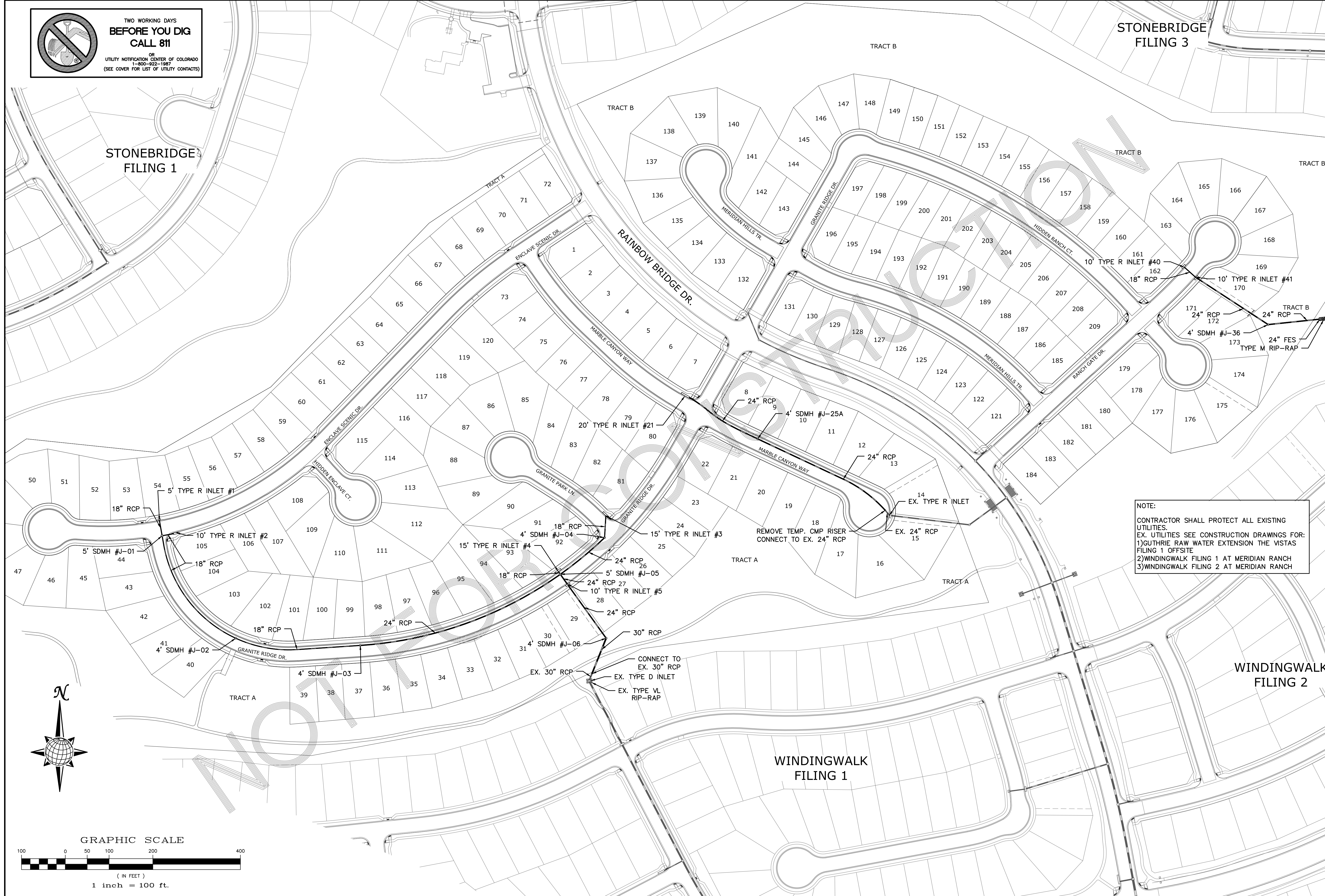
TECH CONTRACTORS 11886 STAPLETON DRIVE FALCON, CO 80831 TELEPHONE: 719.495.7444 FAX: 719.495.2457		No.	Revisions	Date	Appr.
<b>MERIDIAN RANCH</b>					
STONEBRIDGE FILING 4 AT MERIDIAN RANCH STREET AND UTILITY PLANS OVERALL WATER SERVICES					
Scale	AS SHOWN	22 of 32			
Drawn by	LOG	Checked by	TAK	Date	SEPTEMBER 2018



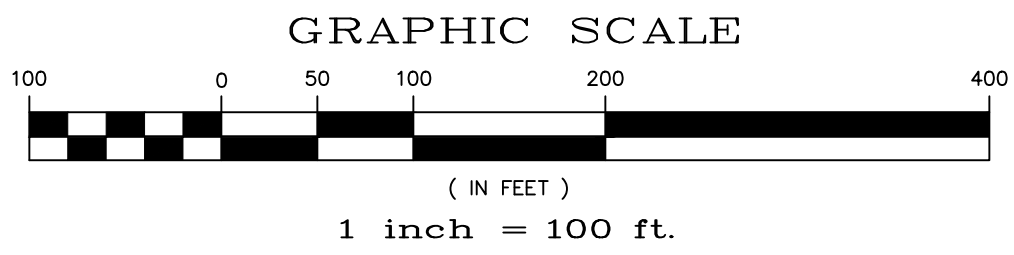
TWO WORKING DAYS  
**BEFORE YOU DIG  
 CALL 811**  
 OR  
 UTILITY NOTIFICATION CENTER OF COLORADO  
 1-800-922-1987  
 (SEE COVER FOR LIST OF UTILITY CONTACTS)

STONEBRIDGE  
 FILING 1

STONEBRIDGE  
 FILING 3



NOTE:  
 CONTRACTOR SHALL PROTECT ALL EXISTING UTILITIES.  
 EX. UTILITIES SEE CONSTRUCTION DRAWINGS FOR:  
 1) GUTHRIE RAW WATER EXTENSION THE VISTAS FILING 1 OFFSITE  
 2) WINDINGWALK FILING 1 AT MERIDIAN RANCH  
 3) WINDINGWALK FILING 2 AT MERIDIAN RANCH



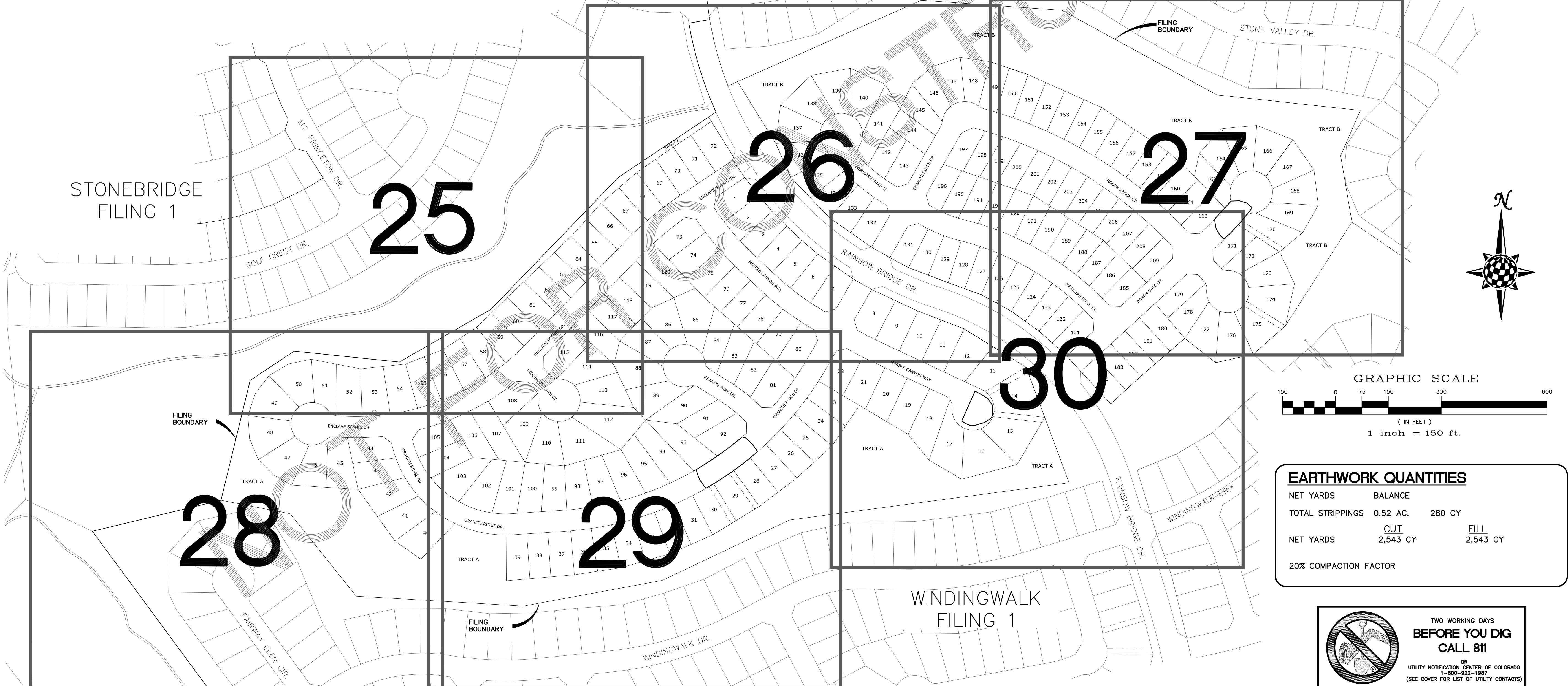
TECH CONTRACTORS 11886 STAPLETON DRIVE FALCON, CO 80831 TELEPHONE: 719.495.7444 FAX: 719.495.2457		No.	Revisions	Date	Appr.
 <b>MERIDIAN RANCH</b>		STONEBRIDGE FILING 4 AT MERIDIAN RANCH STREET AND UTILITY PLANS		OVERALL STORM DRAIN	
		Scale AS SHOWN	Drawn by LOG	Checked by TAK	Date SEPTEMBER 2018

**GENERAL NOTES:**

1. CONSTRUCTION MAY NOT COMMENCE UNTIL A CONSTRUCTION PERMIT IS OBTAINED FROM PLANNING AND COMMUNITY DEVELOPMENT (PCD) AND A PRECONSTRUCTION CONFERENCE IS HELD WITH PCD INSPECTIONS.
2. STORMWATER DISCHARGES FROM CONSTRUCTION SITES SHALL NOT CAUSE OR THREATEN TO CAUSE POLLUTION, CONTAMINATION, OR DEGRADATION OF STATE WATERS. ALL WORK AND EARTH DISTURBANCE SHALL BE DONE IN A MANNER THAT MINIMIZES POLLUTION OF ANY ON-SITE OR OFF SITE WATERS, INCLUDING WETLANDS.
3. NOTWITHSTANDING ANYTHING DEPICTED IN THESE PLANS IN WORDS OR GRAPHIC REPRESENTATION, ALL DESIGN AND CONSTRUCTION RELATED TO ROADS, STORM DRAINAGE AND EROSION CONTROL SHALL CONFORM TO THE STANDARDS AND REQUIREMENTS OF THE MOST RECENT VERSION OF THE RELEVANT ADOPTED EL PASO COUNTY STANDARDS, INCLUDING THE LAND DEVELOPMENT CODE, THE ENGINEERING CRITERIA MANUAL, THE DRAINAGE CRITERIA MANUAL, AND THE DRAINAGE CRITERIA MANUAL VOLUME 2. ANY DEVIATIONS TO REGULATIONS AND STANDARDS MUST BE REQUESTED, AND APPROVED, IN WRITING.
4. A SEPARATE STORMWATER MANAGEMENT PLAN (SWMP) FOR THIS PROJECT SHALL BE COMPLETED AND AN EROSION AND STORMWATER QUALITY CONTROL PERMIT (ESQCP) ISSUED PRIOR TO COMMENCING CONSTRUCTION. DURING CONSTRUCTION THE SWMP IS THE RESPONSIBILITY OF THE DESIGNATED STORMWATER MANAGER, SHALL BE LOCATED ON SITE AT ALL TIMES AND SHALL BE KEPT UP TO DATE WITH WORK PROGRESS AND CHANGES IN THE FIELD.
5. ONCE THE ESQCP HAS BEEN ISSUED, THE CONTRACTOR MAY INSTALL THE INITIAL STAGE EROSION AND SEDIMENT CONTROL BMPS AS INDICATED ON THE GEC. A PRECONSTRUCTION MEETING BETWEEN THE CONTRACTOR, ENGINEER, AND EL PASO COUNTY WILL BE HELD PRIOR TO ANY CONSTRUCTION. IT IS THE RESPONSIBILITY OF THE APPLICANT TO COORDINATE THE MEETING TIME AND PLACE WITH COUNTY PCD INSPECTIONS STAFF.
6. SOIL EROSION CONTROL MEASURES FOR ALL SLOPES, CHANNELS, DITCHES, OR ANY DISTURBED LAND AREA SHALL BE COMPLETED WITHIN 21 CALENDAR DAYS AFTER FINAL GRADING, OR FINAL EARTH DISTURBANCE, HAS BEEN COMPLETED. DISTURBED AREAS AND STOCKPILES WHICH ARE NOT AT FINAL GRADE BUT WILL REMAIN DORMANT FOR LONGER THAN 30 DAYS SHALL ALSO BE MULCHED WITHIN 21 DAYS AFTER INTERIM GRADING. AN AREA THAT IS GOING TO REMAIN IN AN INTERIM STATE FOR MORE THAN 60 DAYS SHALL ALSO BE SEEDED. ALL TEMPORARY SOIL EROSION CONTROL MEASURES AND BMPS SHALL BE MAINTAINED UNTIL PERMANENT SOIL EROSION CONTROL MEASURES ARE IMPLEMENTED AND ESTABLISHED.
7. TEMPORARY SOIL EROSION CONTROL FACILITIES SHALL BE REMOVED AND EARTH DISTURBANCE AREAS GRADED AND STABILIZED WITH PERMANENT SOIL EROSION CONTROL MEASURES PURSUANT TO STANDARDS AND SPECIFICATION PRESCRIBED IN THE DCM VOLUME II AND THE ENGINEERING CRITERIA MANUAL (ECM) APPENDIX I.
8. ALL PERSONS ENGAGED IN EARTH DISTURBANCE SHALL IMPLEMENT AND MAINTAIN ACCEPTABLE SOIL EROSION AND SEDIMENT CONTROL MEASURES INCLUDING BMPS IN CONFORMANCE WITH THE EROSION CONTROL TECHNICAL STANDARDS OF THE DRAINAGE CRITERIA MANUAL (DCM) VOLUME II AND IN ACCORDANCE WITH THE STORMWATER MANAGEMENT PLAN (SWMP).
9. ALL TEMPORARY EROSION CONTROL FACILITIES INCLUDING BMPS AND ALL PERMANENT FACILITIES INTENDED TO CONTROL EROSION OF ANY EARTH DISTURBANCE OPERATIONS, SHALL BE INSTALLED AS DEFINED IN THE APPROVED PLANS, THIS SWMP AND THE DCM VOLUME II AND MAINTAINED THROUGHOUT THE DURATION OF THE EARTH DISTURBANCE OPERATION.
10. ANY EARTH DISTURBANCE SHALL BE CONDUCTED IN SUCH A MANNER SO AS TO EFFECTIVELY REDUCE ACCELERATED SOIL EROSION AND RESULTING SEDIMENTATION. ALL DISTURBANCES SHALL BE DESIGNED, CONSTRUCTED, AND COMPLETED SO THAT THE EXPOSED AREA OF ANY DISTURBED LAND SHALL BE LIMITED TO THE SHORTEST PRACTICAL PERIOD OF TIME.
11. ANY TEMPORARY OR PERMANENT FACILITY DESIGNED AND CONSTRUCTED FOR THE CONVEYANCE OF STORMWATER AROUND, THROUGH, OR FROM THE EARTH DISTURBANCE AREA SHALL BE DESIGNED TO LIMIT THE DISCHARGE TO A NON-EROSIVE VELOCITY.
12. CONCRETE WASH WATER SHALL BE CONTAINED AND DISPOSED OF IN ACCORDANCE WITH THE SWMP. NO WASH WATER SHALL BE DISCHARGED TO OR ALLOWED TO RUNOFF TO STATE WATERS, INCLUDING ANY SURFACE OR SUBSURFACE STORM DRAINAGE SYSTEM OR FACILITIES.
13. EROSION CONTROL BLANKETING IS TO BE USED ON SLOPES STEEPER THAN 3:1.

14. BUILDING, CONSTRUCTION, EXCAVATION, OR OTHER WASTE MATERIALS SHALL NOT BE TEMPORARILY PLACED OR STORED IN THE STREET, ALLEY, OR OTHER PUBLIC WAY, UNLESS IN ACCORDANCE WITH AN APPROVED TRAFFIC CONTROL PLAN. BMP'S MAY BE REQUIRED BY EL PASO COUNTY ENGINEERING IF DEEMED NECESSARY, BASED ON SPECIFIC CONDITIONS AND CIRCUMSTANCES.
15. VEHICLE TRACKING OF SOILS AND CONSTRUCTION DEBRIS OFF-SITE SHALL BE MINIMIZED. MATERIALS TRACKED OFFSITE SHALL BE CLEANED UP AND PROPERLY DISPOSED OF IMMEDIATELY.
16. CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL OF ALL WASTES FROM THE CONSTRUCTION SITE FOR DISPOSAL IN ACCORDANCE WITH LOCAL AND STATE REGULATORY REQUIREMENTS. NO CONSTRUCTION DEBRIS, TREE SLASH, BUILDING MATERIAL WASTES OR UNUSED BUILDING MATERIALS SHALL BE BURIED, DUMPED, OR DISCHARGED AT THE SITE.
17. THE OWNER, SITE DEVELOPER, CONTRACTOR, AND/OR THEIR AUTHORIZED AGENTS SHALL BE RESPONSIBLE FOR THE REMOVAL OF ALL CONSTRUCTION DEBRIS, DIRT, TRASH, ROCK, SEDIMENT, AND SAND THAT MAY ACCUMULATE IN THE STORM SEWER OR OTHER DRAINAGE CONVEYANCE SYSTEM AND STORMWATER APPURTENANCES AS A RESULT OF SITE DEVELOPMENT.
18. THE QUANTITY OF MATERIALS STORED ON THE PROJECT SITE SHALL BE LIMITED, AS MUCH AS PRACTICAL, TO THAT QUANTITY REQUIRED TO PERFORM THE WORK IN AN ORDERLY SEQUENCE. ALL MATERIALS STORED ON-SITE SHALL BE STORED IN A NEAT, ORDERLY MANNER, IN THEIR ORIGINAL CONTAINERS, WITH ORIGINAL MANUFACTURER'S LABELS.
19. NO CHEMICALS ARE TO BE USED BY THE CONTRACTOR, WHICH HAVE THE POTENTIAL TO BE RELEASED IN STORMWATER UNLESS PERMISSION FOR THE USE OF A SPECIFIC CHEMICAL IS GRANTED IN WRITING BY THE ECM ADMINISTRATOR. IN GRANTING THE USE OF SUCH CHEMICALS, SPECIAL CONDITIONS AND MONITORING MAY BE REQUIRED.
20. BULK STORAGE STRUCTURES FOR PETROLEUM PRODUCTS AND OTHER CHEMICALS SHALL HAVE ADEQUATE PROTECTION SO AS TO CONTAIN ALL SPILLS AND PREVENT ANY SPILLED MATERIAL FROM ENTERING STATE WATERS, INCLUDING ANY SURFACE OR SUBSURFACE STORM DRAINAGE SYSTEM OR FACILITIES.
21. NO PERSON SHALL CAUSE THE IMPEDIMENT OF STORMWATER FLOW IN THE FLOW LINE OF THE CURB AND GUTTER OR IN THE DITCHLINE.
22. INDIVIDUALS SHALL COMPLY WITH THE COLORADO WATER QUALITY CONTROL ACT (TITLE 25, ARTICLE 8, CRS), AND THE CLEAN WATER ACT (33 USC 1344), IN ADDITION TO THE REQUIREMENTS INCLUDED IN THE DCM VOLUME II AND THE ECM APPENDIX I. ALL APPROPRIATE PERMITS MUST BE OBTAINED BY THE CONTRACTOR PRIOR TO CONSTRUCTION (NPDES, FLOODPLAIN, 404, FUGITIVE DUST, ETC.). IN THE EVENT OF CONFLICTS BETWEEN THESE REQUIREMENTS AND LAWS, RULES, OR REGULATIONS OF OTHER FEDERAL, STATE, OR COUNTY AGENCIES, THE MORE RESTRICTIVE LAWS, RULES, OR REGULATIONS SHALL APPLY.
23. ALL CONSTRUCTION TRAFFIC MUST ENTER/EXIT THE SITE AT APPROVED CONSTRUCTION ACCESS POINTS.
24. PRIOR TO ACTUAL CONSTRUCTION THE PERMITEE SHALL VERIFY THE LOCATION OF EXISTING UTILITIES.
25. A WATER SOURCE SHALL BE AVAILABLE ON SITE DURING EARTHWORK OPERATIONS AND UTILIZED AS REQUIRED TO MINIMIZE DUST FROM EARTHWORK EQUIPMENT AND WIND.
26. THE SOILS REPORT FOR THIS SITE HAS BEEN PREPARED BY ENTECH ENGINEERING, INC. AND SHALL BE CONSIDERED A PART OF THESE PLANS.
27. AT LEAST TEN DAYS PRIOR TO THE ANTICIPATED START OF CONSTRUCTION, FOR PROJECTS THAT WILL DISTURB 1 ACRE OR MORE, THE OWNER OR OPERATOR OF CONSTRUCTION ACTIVITY SHALL SUBMIT A PERMIT APPLICATION FOR STORMWATER DISCHARGE TO THE COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT, WATER QUALITY DIVISION. THE APPLICATION CONTAINS CERTIFICATION OF COMPLETION OF A STORMWATER MANAGEMENT PLAN (SWMP), OF WHICH THIS GRADING AND EROSION CONTROL PLAN MAY BE A PART. FOR INFORMATION OR APPLICATION MATERIALS CONTACT:

COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT  
 WATER QUALITY CONTROL DIVISION  
 WQCD - PERMITS  
 4300 CHERRY CREEK DRIVE SOUTH  
 DENVER, CO 80246-1530  
 ATTN: PERMITS UNIT



EARTHWORK QUANTITIES			
NET YARDS	BALANCE		
TOTAL STRIPPINGS	0.52 AC.	280 CY	
NET YARDS	CUT	FILL	
	2,543 CY	2,543 CY	
20% COMPACTION FACTOR			

**TWO WORKING DAYS BEFORE YOU DIG CALL 811**

OR  
 UTILITY NOTIFICATION CENTER OF COLORADO  
 1-800-922-1967  
 (SEE COVER FOR LIST OF UTILITY CONTACTS)

No.	Revisions	Date	Appr.

TECH CONTRACTORS  
 11886 STAPLETON DRIVE  
 FALCON, CO 80831  
 TELEPHONE: 719.495.7444  
 FAX: 719.495.2457



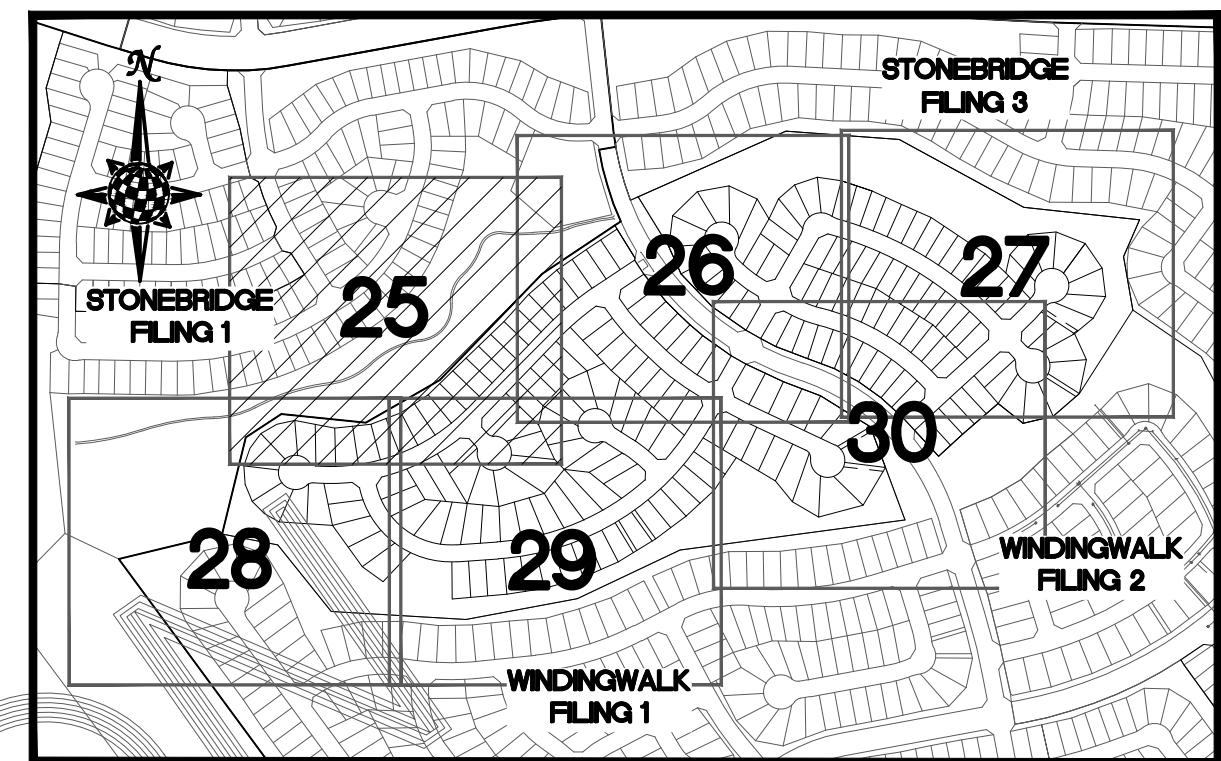
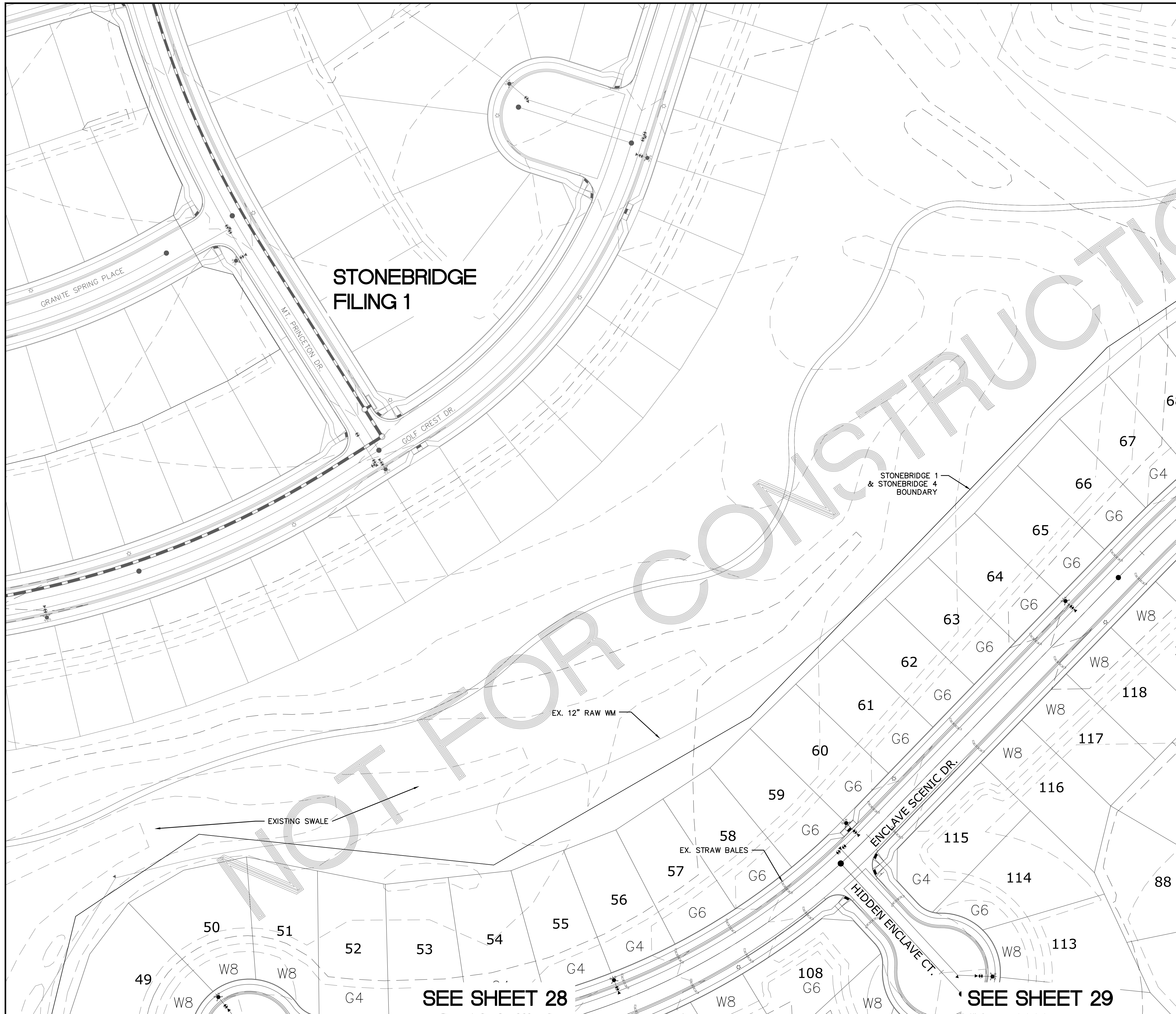
STONEBRIDGE FILING 4 AT  
 MERIDIAN RANCH  
 GRADING-EROSION CONTROL PLAN  
 INDEX SHEET

Scale	Drawn by	Checked by	Date
AS SHOWN	LOG	TAK	SEPTEMBER 2018

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S:\Civil\Proj\Stonebridge Filing 4\DWG\Plan\_Sheets\Improvement\_Plans\04-S4.dwg - 9/14/2016 11:18:41 AM



**INDEX MAP**  
N.T.S.

**LEGEND**

SYMBOL	ACRONYM	DESCRIPTION
		STRAW BALES
		EROSION WAFFLES PER DETAIL SHEET 32
		EROSION CONTROL BLANKET PER DETAIL ECB-1 & ECB-2 DCM VOL. 2
		RCP REINFORCED CONCRETE PIPE
	(SF)	SILT FENCE PER DETAIL SF-1, SF-2 & SF-3 DCM VOL. 2
	(VTC)	VEHICLE TRACKING CONTROL PER DETAIL VT-2 DCM VOL. 2
	(IP)	INLET PROTECTION PER DETAIL SHEET 32
		EXISTING CONTOUR (10')
		EXISTING CONTOUR (2')
		PROPOSED CONTOUR (10')
		PROPOSED CONTOUR (2')
		2.00% GRADE
		75 LOT NUMBER
		LOT GRADE TYPE

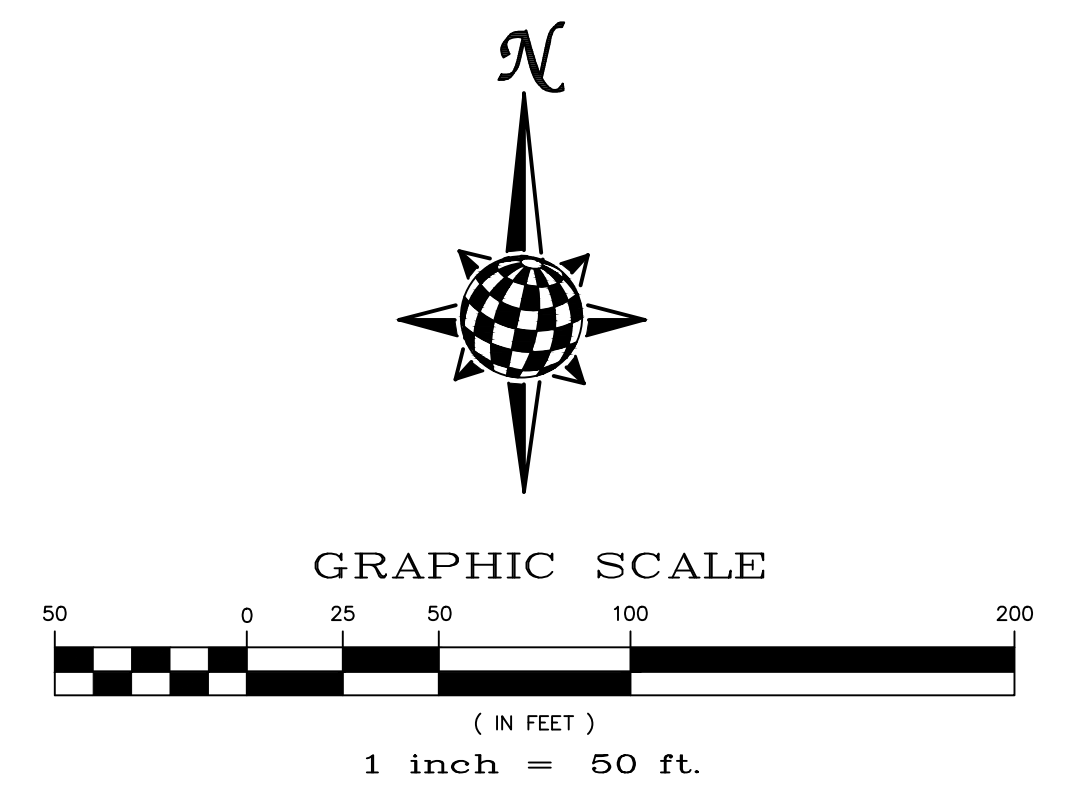
**NOTE:**  
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CONTRACTOR SHALL PROTECT ALL EXISTING UTILITIES.  
EX. UTILITIES SEE CONSTRUCTION DRAWINGS FOR:  
1) WINDINGWALK FILING 1 AT MERIDIAN RANCH  
2) WINDINGWALK FILING 2 AT MERIDIAN RANCH  
3) THE VISTAS FILING 1 AT MERIDIAN RANCH  
4) OFFSITE IMPROVEMENTS FOR THE VISTAS FILING 1 AT MERIDIAN RANCH

SEE SHEET 26

SEE SHEET 28

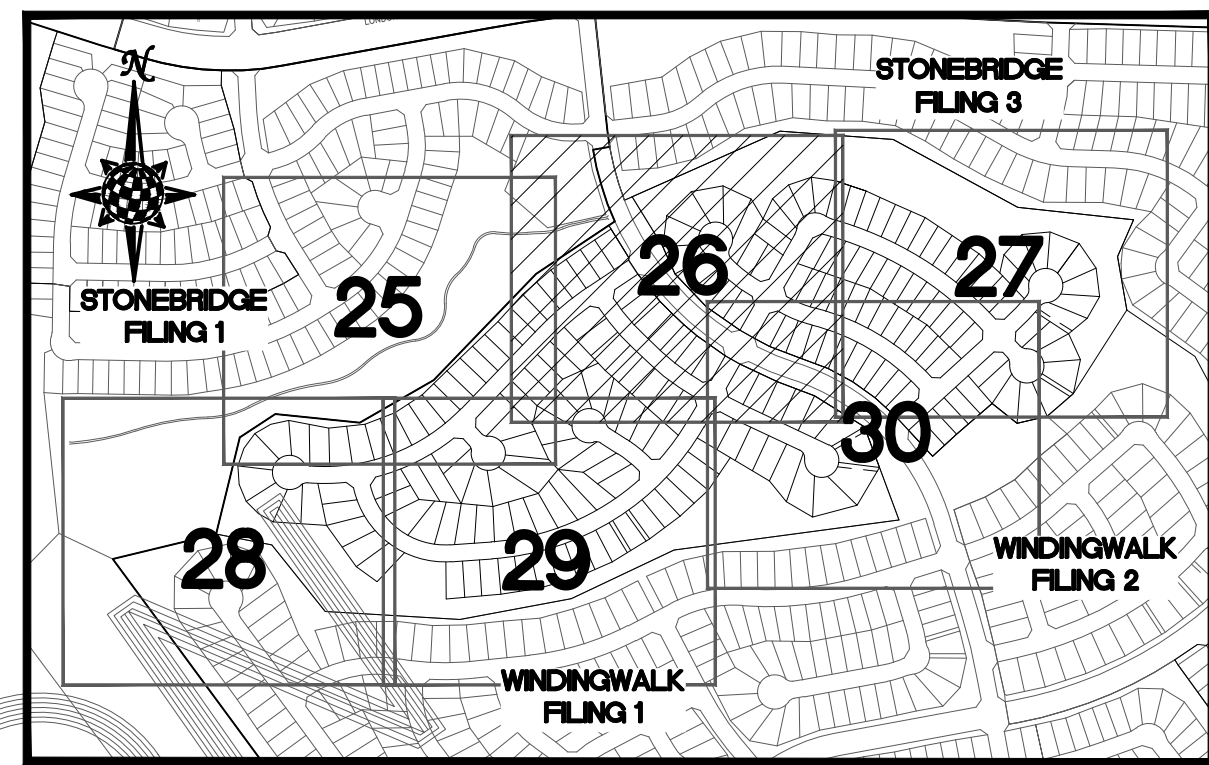
SEE SHEET 29



Scale	AS SHOWN	25 of 32	Date	SEPTEMBER 2016
Drawn by	LOG	Checked by	TAK	
STONEBRIDGE FILING 4 AT MERIDIAN RANCH GRADING+EROSION CONTROL PLAN LAYOUT				
TECH CONTRACTORS 11886 STAPLETON DRIVE FALCON, CO 80831 TELEPHONE: 719.495.7444 FAX: 719.495.2457				
MERIDIAN RANCH				
Revisions				
No.	Date	Revised	Appr.	Date

STONEBRIDGE FILING 3

STONEBRIDGE FILING 1



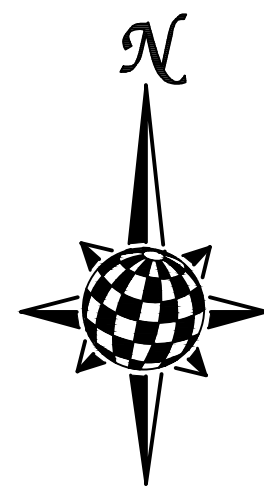
INDEX MAP  
N.T.S.

LEGEND

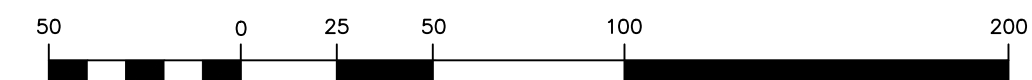
SYMBOL	ACRONYM	DESCRIPTION
(Symbol)		STRAW BALES
(Symbol)		EROSION WATTLES PER DETAIL SHEET 32
(Symbol)		EROSION CONTROL BLANKET PER DETAIL ECB-1 & ECB-2 DCM VOL. 2
(Symbol)	RCP	REINFORCED CONCRETE PIPE
(Symbol)	(SF)	SILT FENCE PER DETAIL SF-1, SF-2 & SF-3 DCM VOL. 2
(Symbol)	(VTC)	VEHICLE TRACKING CONTROL PER DETAIL VT-2 DCM VOL. 2
(Symbol)	(IP)	INLET PROTECTION PER DETAIL SHEET 32
(Symbol)		EXISTING CONTOUR (10')
(Symbol)		EXISTING CONTOUR (2')
(Symbol)		PROPOSED CONTOUR (10')
(Symbol)		PROPOSED CONTOUR (2')
(Symbol)		GRADE
(Symbol)		2.00%
(Symbol)		75
(Symbol)		LOT NUMBER
(Symbol)		LOT GRADE TYPE

NOTE: ALL CONTOURS SHOWN WITHIN THE PLAN SET ARE TO FINISHED SURFACE. ALL STREET SECTIONS ARE TO BE GRADED TO ROUGH SUB-GRADE AS SHOWN IN THEIR RESPECTIVE TYPICAL STREET SECTION SHOWN ON SHEET 31.

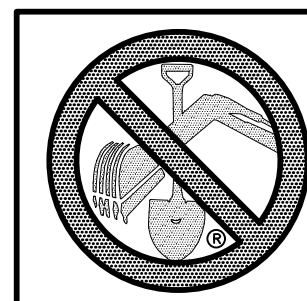
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2) WINDINGWALK FILING 2 AT MERIDIAN RANCH  
3) THE VISTAS FILING 1 AT MERIDIAN RANCH  
4) OFFSITE IMPROVEMENTS FOR THE VISTAS FILING 1 AT MERIDIAN RANCH



GRAPHIC SCALE



( IN FEET )  
1 inch = 50 ft.



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**BEFORE YOU DIG  
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UTILITY NOTIFICATION CENTER OF COLORADO  
1-800-322-1987  
(SEE COVER FOR LIST OF UTILITY CONTACTS)

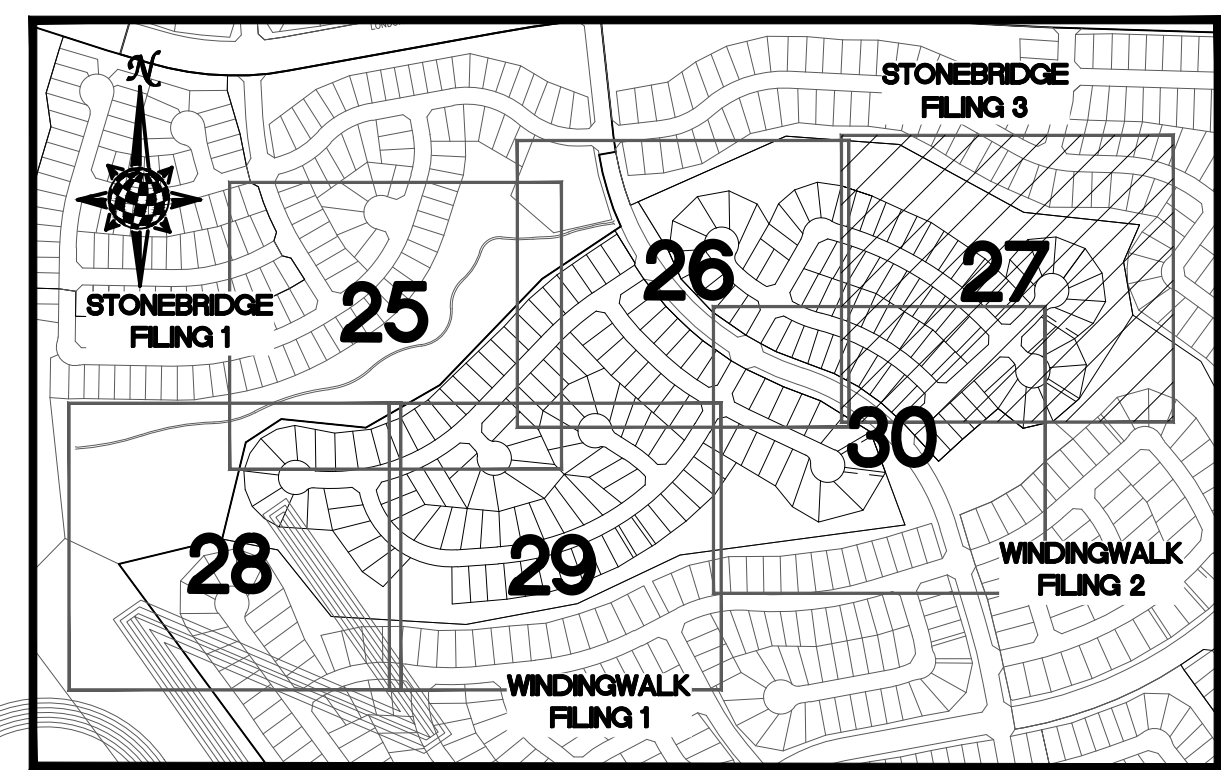
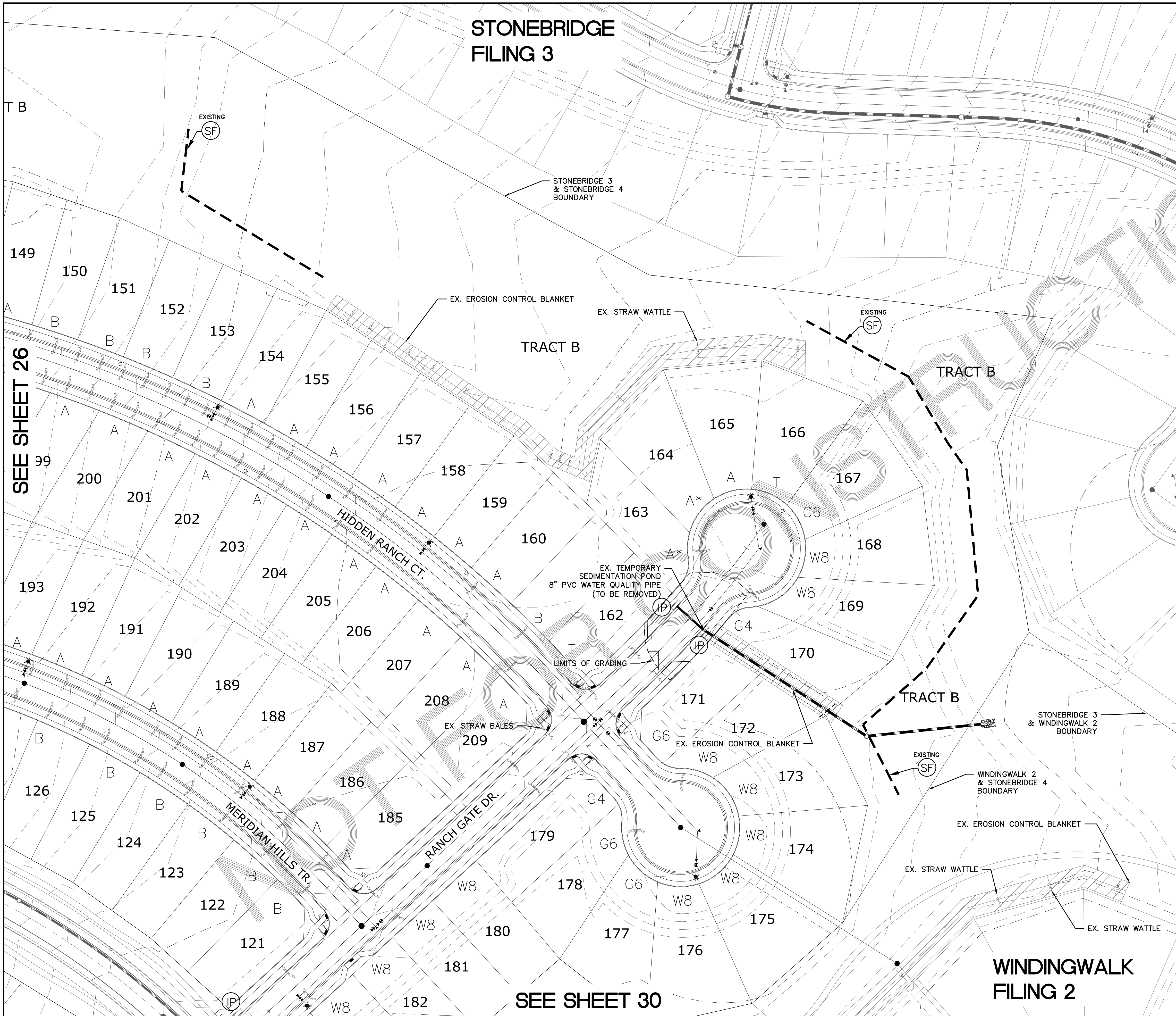
SEE SHEET 25

SEE SHEET 27

SEE SHEET 29

SEE SHEET 30

TECH CONTRACTORS 11886 STAPLETON DRIVE FALCON, CO 80831 TELEPHONE: 719.495.7444 FAX: 719.495.2457	
MERIDIAN RANCH	
STONEBRIDGE FILING 4 AT MERIDIAN RANCH GRADING-EROSION CONTROL PLAN LAYOUT	
Drawn by LOG	Checked by TAK
Scale AS SHOWN	Date 26 of 32 SEPTEMBER 2018
Date	Appr.
Date	Revisions
No.	No.



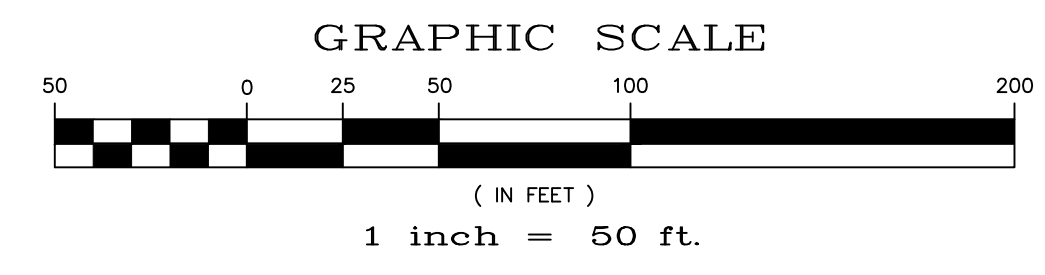
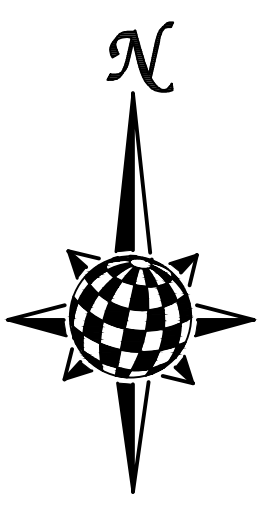
**INDEX MAP**  
N.T.S.

**LEGEND**

SYMBOL	ACRONYM	DESCRIPTION
[Symbol]		STRAW BALES
[Symbol]		EROSION WATTLES PER DETAIL SHEET 32
[Symbol]		EROSION CONTROL BLANKET PER DETAIL ECB-1 & ECB-2 DCM VOL. 2
[Symbol]		RCP REINFORCED CONCRETE PIPE
[Symbol]	SF	SILT FENCE PER DETAIL SF-1, SF-2 & SF-3 DCM VOL. 2
[Symbol]	VTQ	VEHICLE TRACKING CONTROL PER DETAIL VT-2 DCM VOL. 2
[Symbol]	IP	INLET PROTECTION PER DETAIL SHEET 32
[Symbol]		EXISTING CONTOUR (10')
[Symbol]		EXISTING CONTOUR (2')
[Symbol]		PROPOSED CONTOUR (10')
[Symbol]		PROPOSED CONTOUR (2')
[Symbol]		GRADE
2.00%		GRADE
75		LOT NUMBER
		LOT GRADE TYPE

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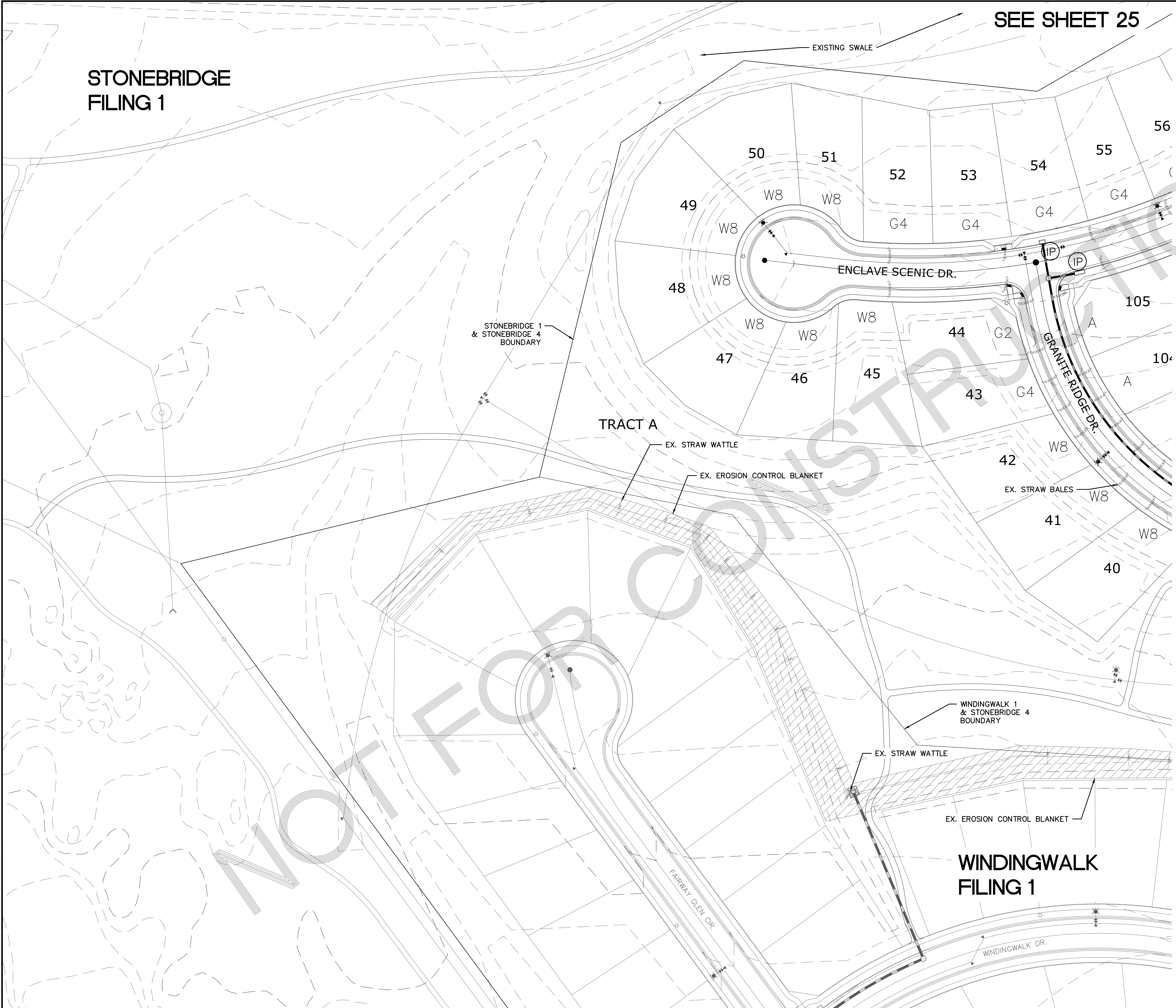
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2) WINDINGWALK FILING 2 AT MERIDIAN RANCH  
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4) OFFSITE IMPROVEMENTS FOR THE VISTAS FILING 1 AT MERIDIAN RANCH



SEE SHEET 26

SEE SHEET 30

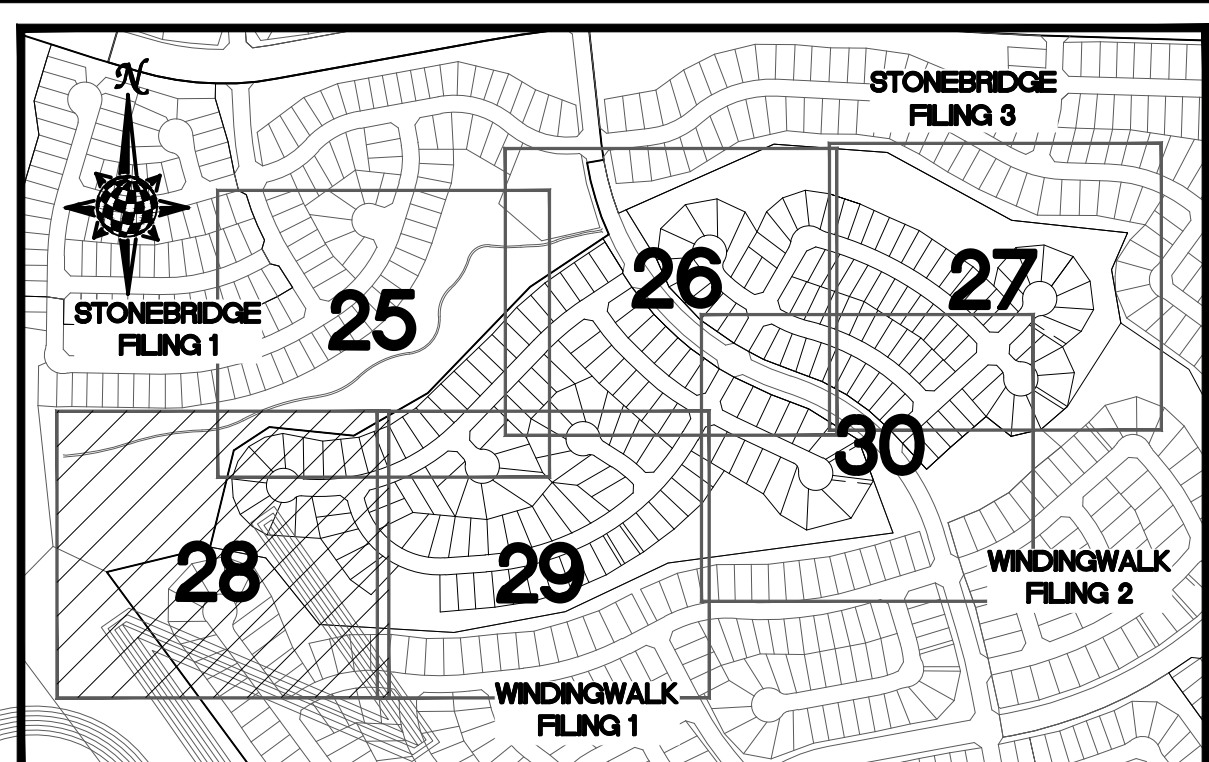
				Date <i>Invt.</i> <i>Appr.</i>
TECH CONTRACTORS 11886 STAPLETON DRIVE FALCON, CO 80831 TELEPHONE: 719.495.7444 FAX: 719.495.2457	<b>MERIDIAN RANCH</b>			Revisions <i>No.</i>
<b>STONEBRIDGE FILING 4 AT MERIDIAN RANCH GRADING-EROSION CONTROL PLAN LAYOUT</b>				
<i>Drawn by</i> LOG	<i>Checked by</i> TAK	<i>Date</i> SEPTEMBER 2018		
<i>Scale</i> AS SHOWN	27 of 32			



SEE SHEET 25

STONEBRIDGE  
FILING 1

**INDEX MAP**  
N.T.S.



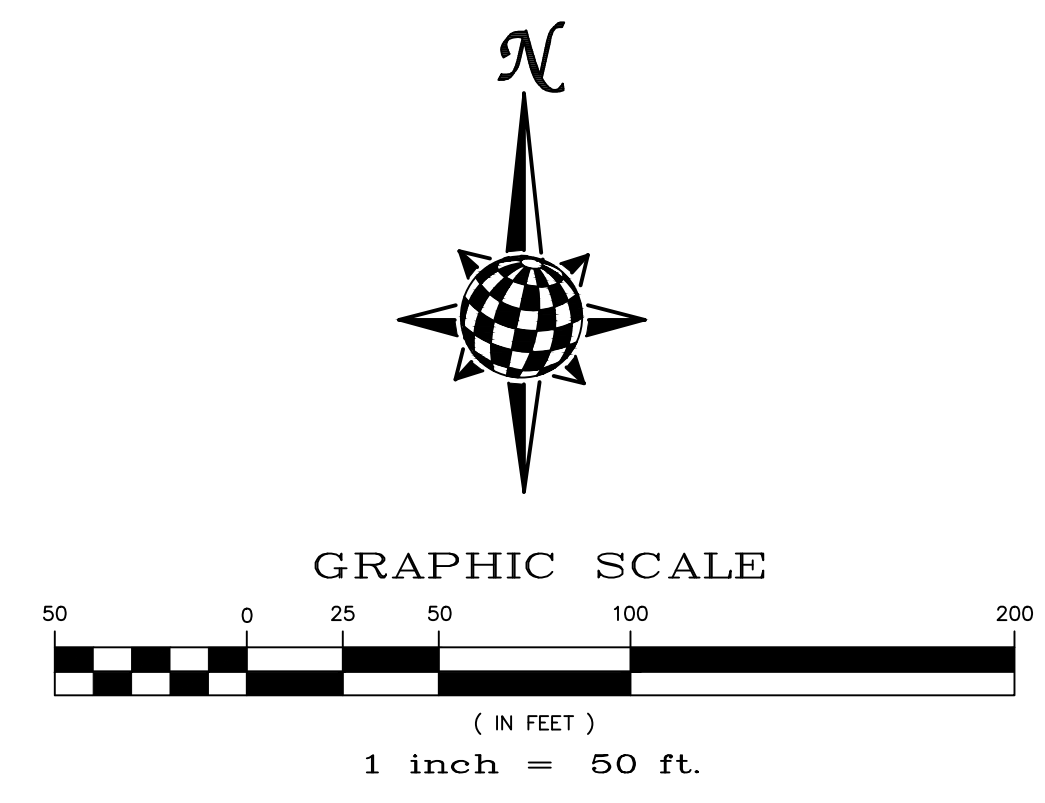
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SYMBOL	ACRONYM	DESCRIPTION
[Symbol]		STRAW BALES
[Symbol]		EROSION WATTLES PER DETAIL SHEET 32
[Symbol]		EROSION CONTROL BLANKET PER DETAIL ECB-1 & ECB-2 DCM VOL. 2
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[Symbol]	(SF)	SILT FENCE PER DETAIL SF-1, SF-2 & SF-3 DCM VOL. 2
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[Symbol]	(IP)	INLET PROTECTION PER DETAIL SHEET 32
[Symbol]		EXISTING CONTOUR (10')
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[Symbol]		PROPOSED CONTOUR (10')
[Symbol]		PROPOSED CONTOUR (2')
[Symbol]		GRADE
[Symbol]		2.00%
[Symbol]		75
[Symbol]		LOT NUMBER
[Symbol]		LOT GRADE TYPE

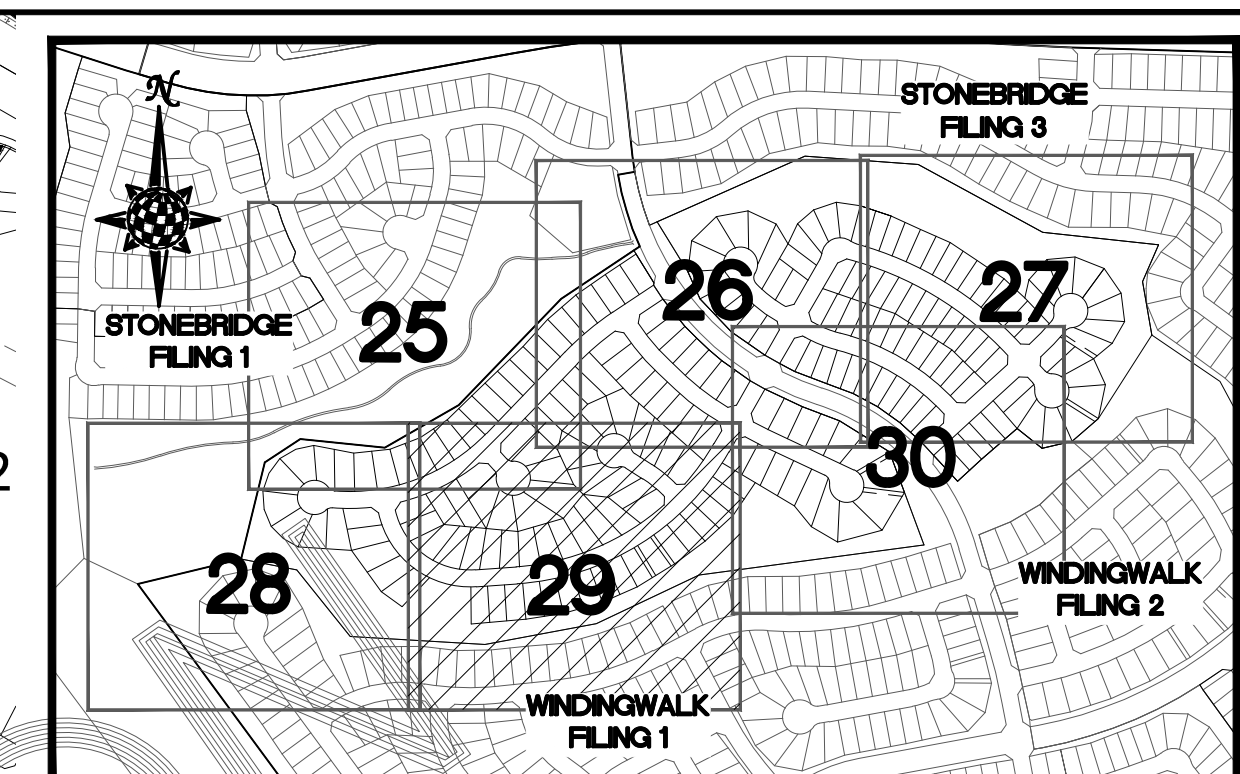
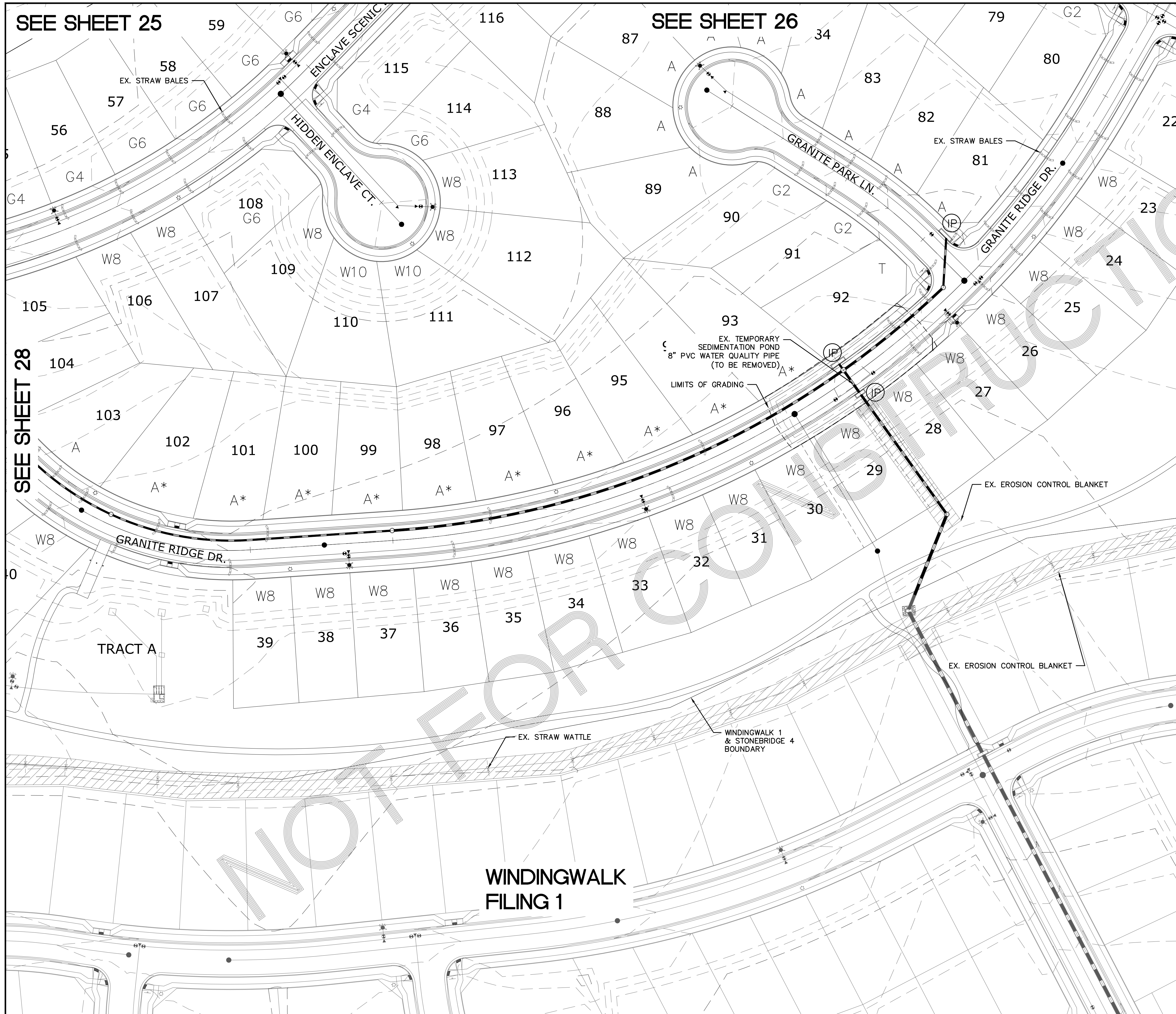
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2) WINDINGWALK FILING 2 AT MERIDIAN RANCH  
3) THE VISTAS FILING 1 AT MERIDIAN RANCH  
4) OFFSITE IMPROVEMENTS FOR THE VISTAS FILING 1 AT MERIDIAN RANCH

SEE SHEET 29



TECH CONTRACTORS 11886 STAPLETON DRIVE FALCON, CO 80831 TELEPHONE: 719.495.7444 FAX: 719.495.2457	
<b>MERIDIAN RANCH</b>	
Scale AS SHOWN 28 of 32	Drawn by LOG Checked by TAK Date SEPTEMBER 2018
STONEBRIDGE FILING 4 AT MERIDIAN RANCH GRADING+EROSION CONTROL PLAN LAYOUT	
No. _____	Revisions _____
Date _____	Appr. _____



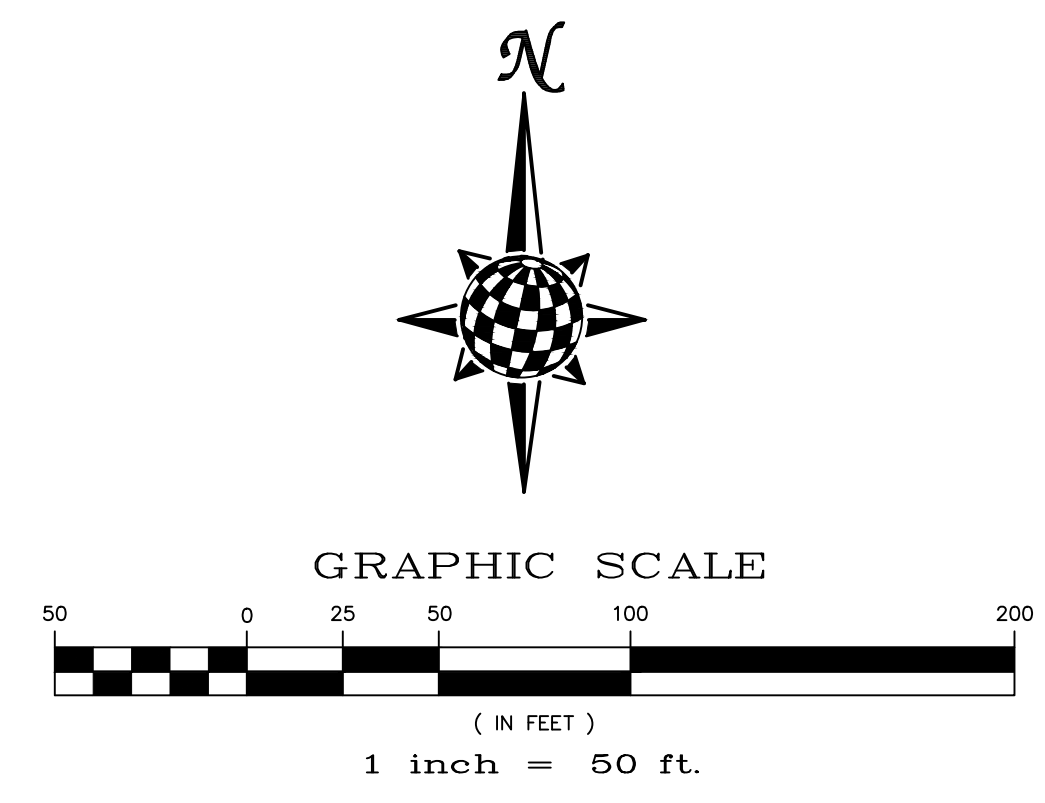
**INDEX MAP**  
N.T.S.

**LEGEND**

SYMBOL	ACRONYM	DESCRIPTION
		STRAW BALES
		EROSION WATTLES PER DETAIL SHEET 32
		EROSION CONTROL BLANKET PER DETAIL ECB-1 & ECB-2 DCM VOL. 2
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		EXISTING CONTOUR (10')
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		PROPOSED CONTOUR (10')
		PROPOSED CONTOUR (2')
		GRADE
		LOT NUMBER
		LOT GRADE TYPE

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2) WINDINGWALK FILING 2 AT MERIDIAN RANCH  
3) THE VISTAS FILING 1 AT MERIDIAN RANCH  
4) OFFSITE IMPROVEMENTS FOR THE VISTAS FILING 1 AT MERIDIAN RANCH



**TWO WORKING DAYS BEFORE YOU DIG CALL 811**

OR  
UTILITY NOTIFICATION CENTER OF COLORADO  
1-800-922-1987  
(SEE COVER FOR LIST OF UTILITY CONTACTS)

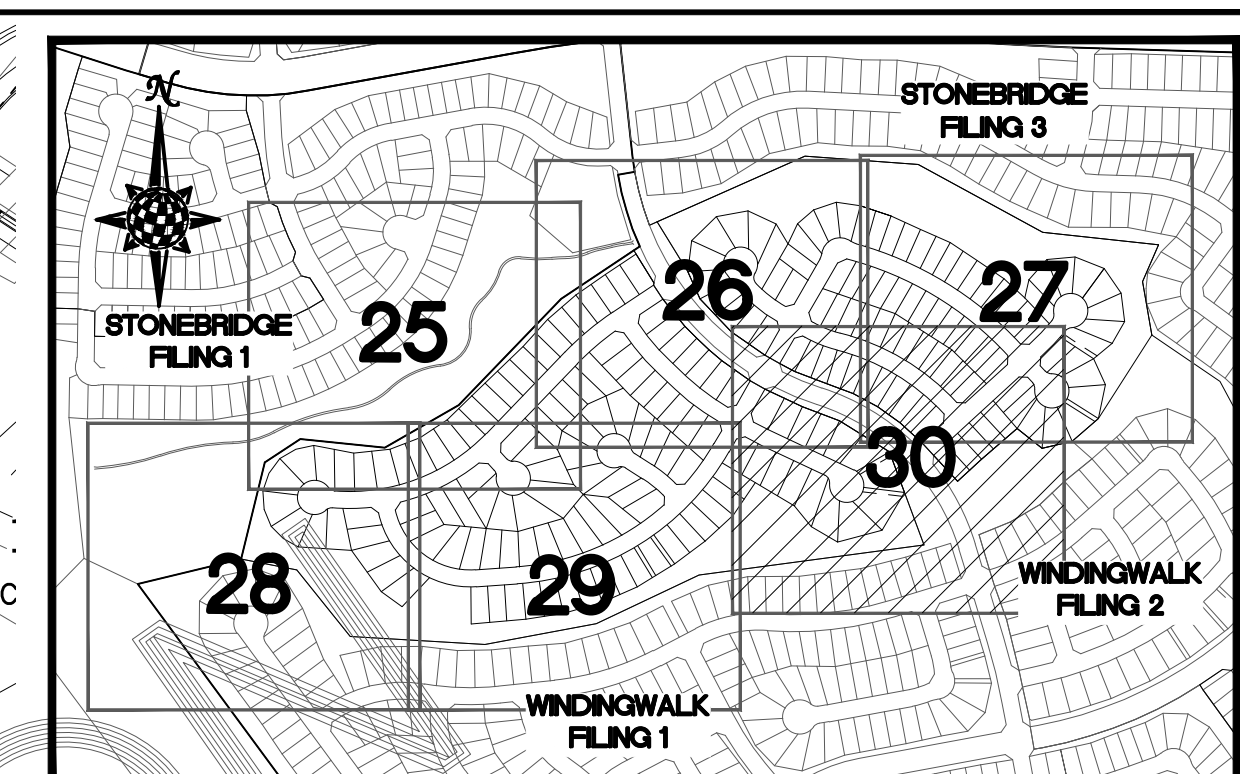
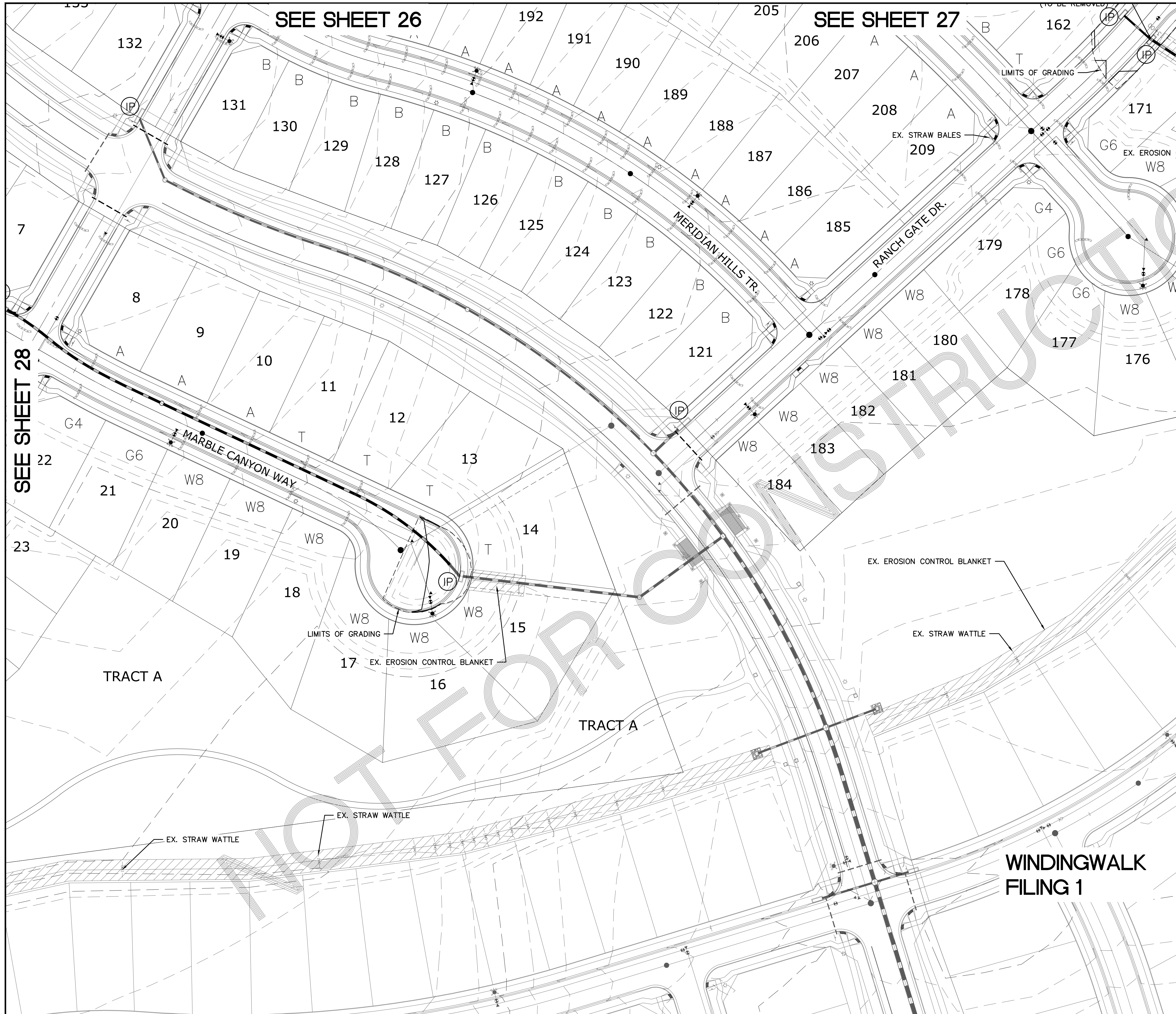
SEE SHEET 28

SEE SHEET 25

SEE SHEET 26

SEE SHEET 30

Scale	AS SHOWN	29 of 32
Drawn by	LOG	Checked by
		TAK
Date	SEPTEMBER 2018	
STONEBRIDGE FILING 4 AT MERIDIAN RANCH GRADING-EROSION CONTROL PLAN LAYOUT		
 <b>MERIDIAN RANCH</b>		
TECH CONTRACTORS 11886 STAPLETON DRIVE FALCON, CO 80831 TELEPHONE: 719.495.7444 FAX: 719.495.2457		
No.	Revisions	Date / Init. / Appr. / Date



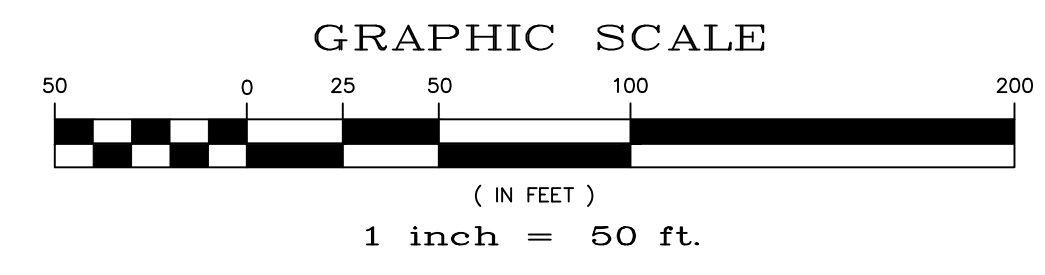
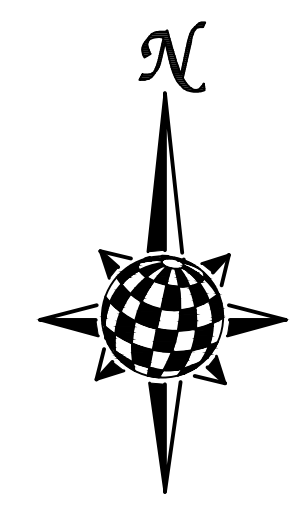
### INDEX MAP N.T.S.

#### LEGEND

SYMBOL	ACRONYM	DESCRIPTION
		STRAW BALES
		EROSION WATTLES PER DETAIL SHEET 32
		EROSION CONTROL BLANKET PER DETAIL ECB-1 & ECB-2 DCM VOL. 2
	RCP	REINFORCED CONCRETE PIPE
	SF	SILT FENCE PER DETAIL SF-1, SF-2 & SF-3 DCM VOL. 2
	VTQ	VEHICLE TRACKING CONTROL PER DETAIL VT-2 DCM VOL. 2
	IP	INLET PROTECTION PER DETAIL SHEET 32
		EXISTING CONTOUR (10')
		EXISTING CONTOUR (2')
		PROPOSED CONTOUR (10')
		PROPOSED CONTOUR (2')
		2.00% GRADE
		75 LOT NUMBER
		W8 LOT GRADE TYPE

NOTE:  
ALL CONTOURS SHOWN WITHIN THE PLAN SET ARE TO FINISHED SURFACE. ALL STREET SECTIONS ARE TO BE GRADED TO ROUGH SUB-GRADE AS SHOWN IN THEIR RESPECTIVE TYPICAL STREET SECTION SHOWN ON SHEET 31.

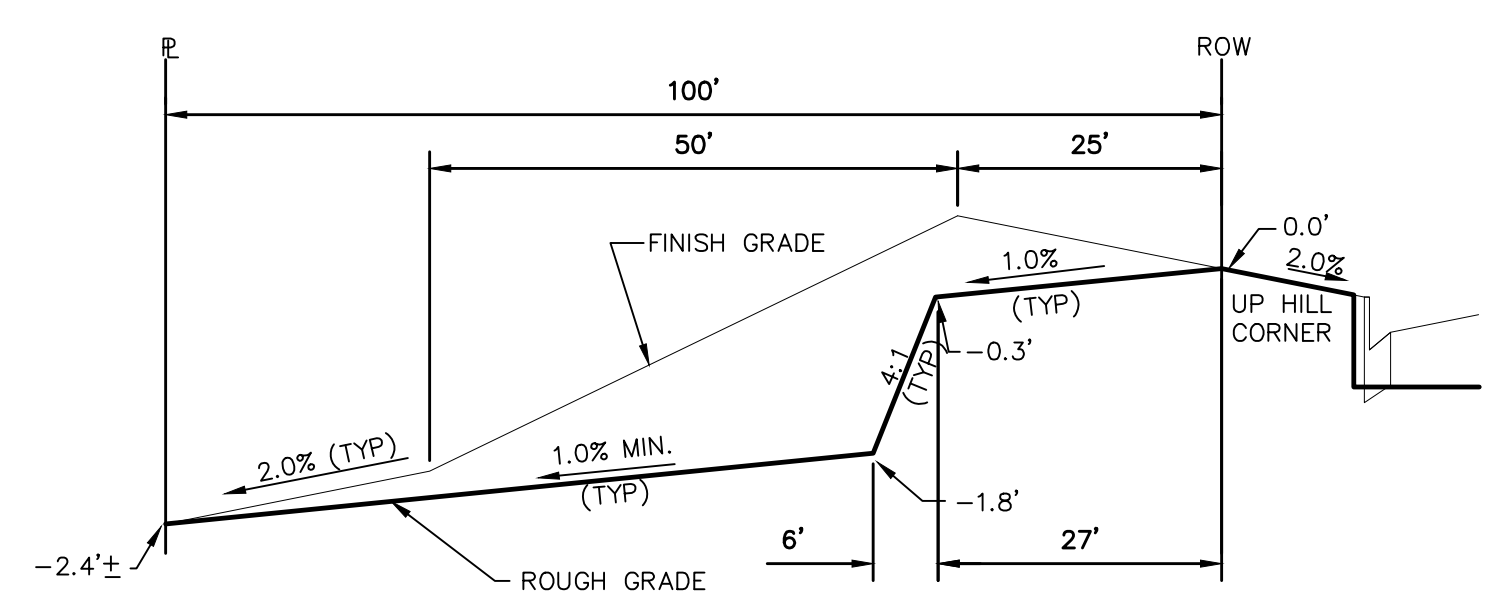
CONTRACTOR SHALL PROTECT ALL EXISTING UTILITIES.  
EX. UTILITIES SEE CONSTRUCTION DRAWINGS FOR:  
1) WINDINGWALK FILING 1 AT MERIDIAN RANCH  
2) WINDINGWALK FILING 2 AT MERIDIAN RANCH  
3) THE VISTAS FILING 1 AT MERIDIAN RANCH  
4) OFFSITE IMPROVEMENTS FOR THE VISTAS FILING 1 AT MERIDIAN RANCH



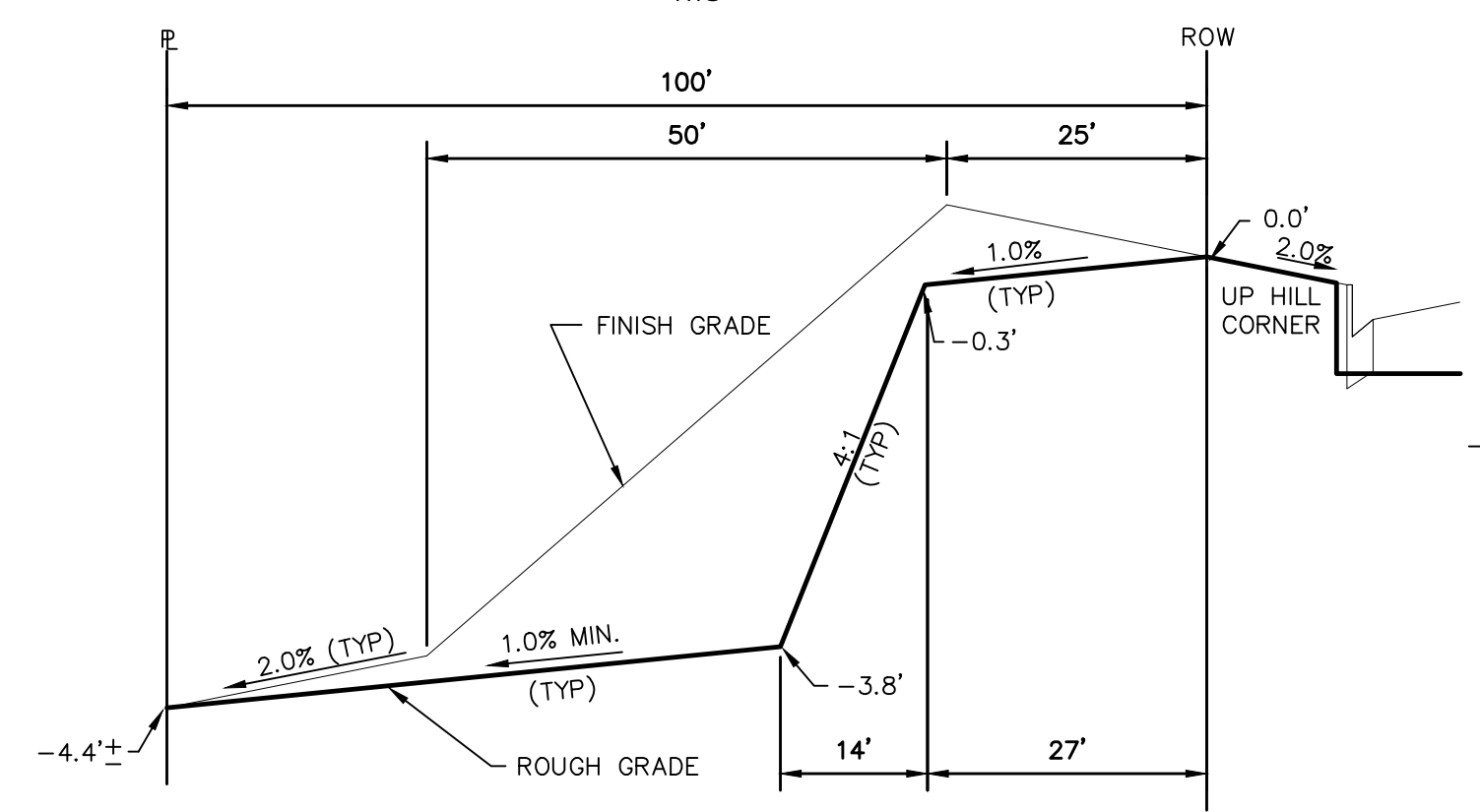
**TWO WORKING DAYS  
BEFORE YOU DIG  
CALL 811**

OR  
UTILITY NOTIFICATION CENTER OF COLORADO  
1-800-922-1987  
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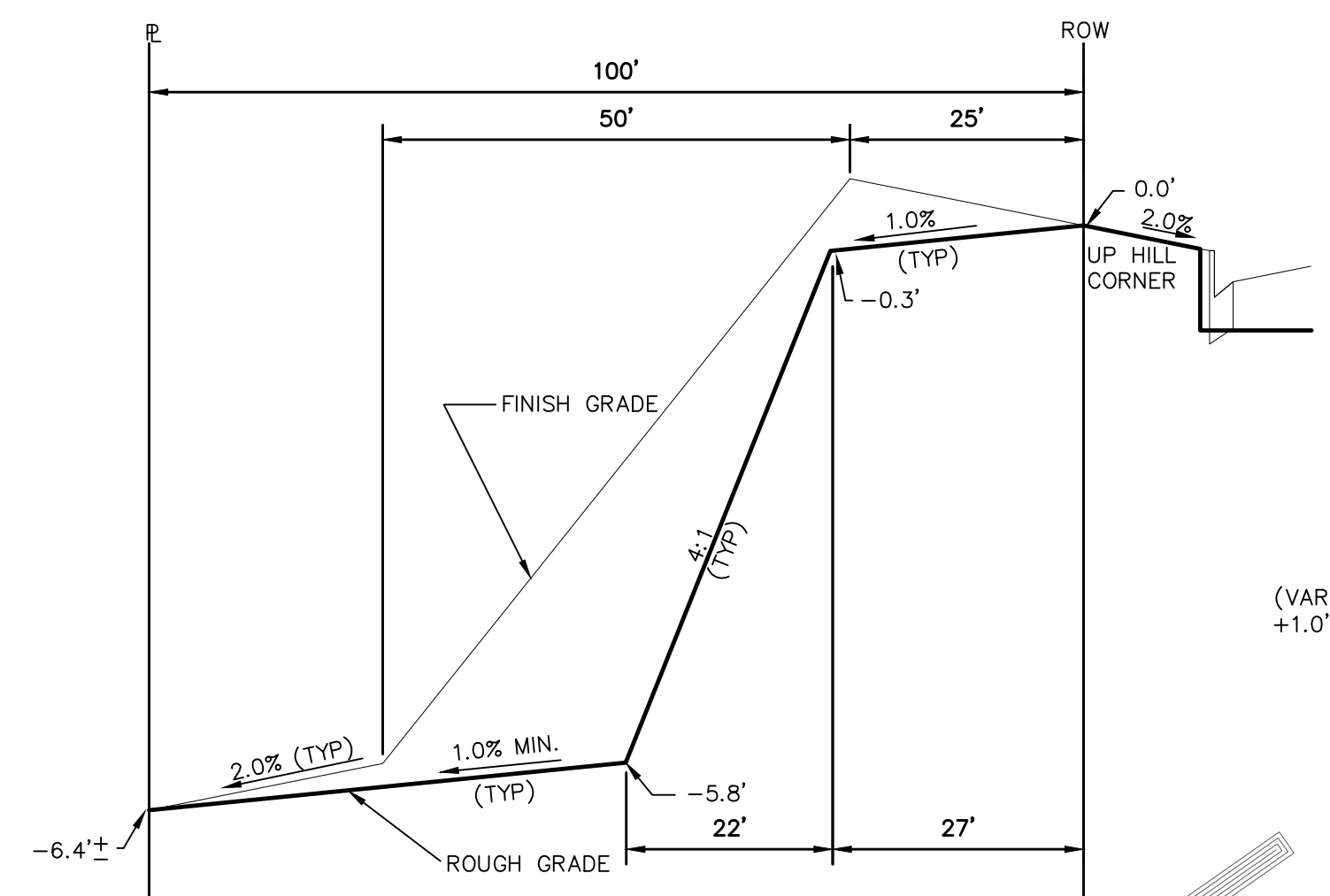
TECH CONTRACTORS 11886 STAPLETON DRIVE FALCON, CO 80831 TELEPHONE: 719.495.7444 FAX: 719.495.2457	<b>MERIDIAN RANCH</b>	STONEBRIDGE FILING 4 AT MERIDIAN RANCH	GRADING+EROSION CONTROL PLAN LAYOUT	Drawn by LOG
				Checked by TAK
				Date SEPTEMBER 2016
Scale AS SHOWN	30 of 32			
				Date / Revis. / No. / Date / Appr.



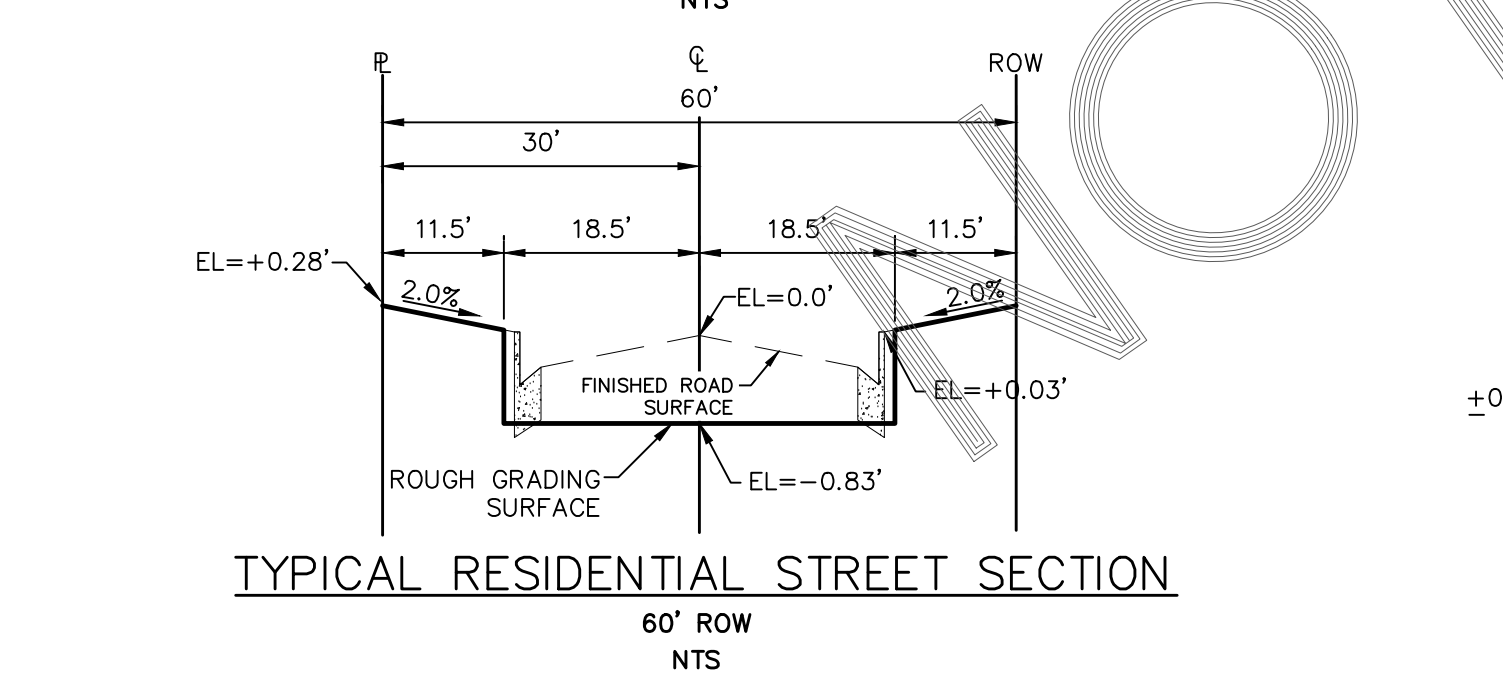
TYPICAL LOT "G2" TEMPLATES



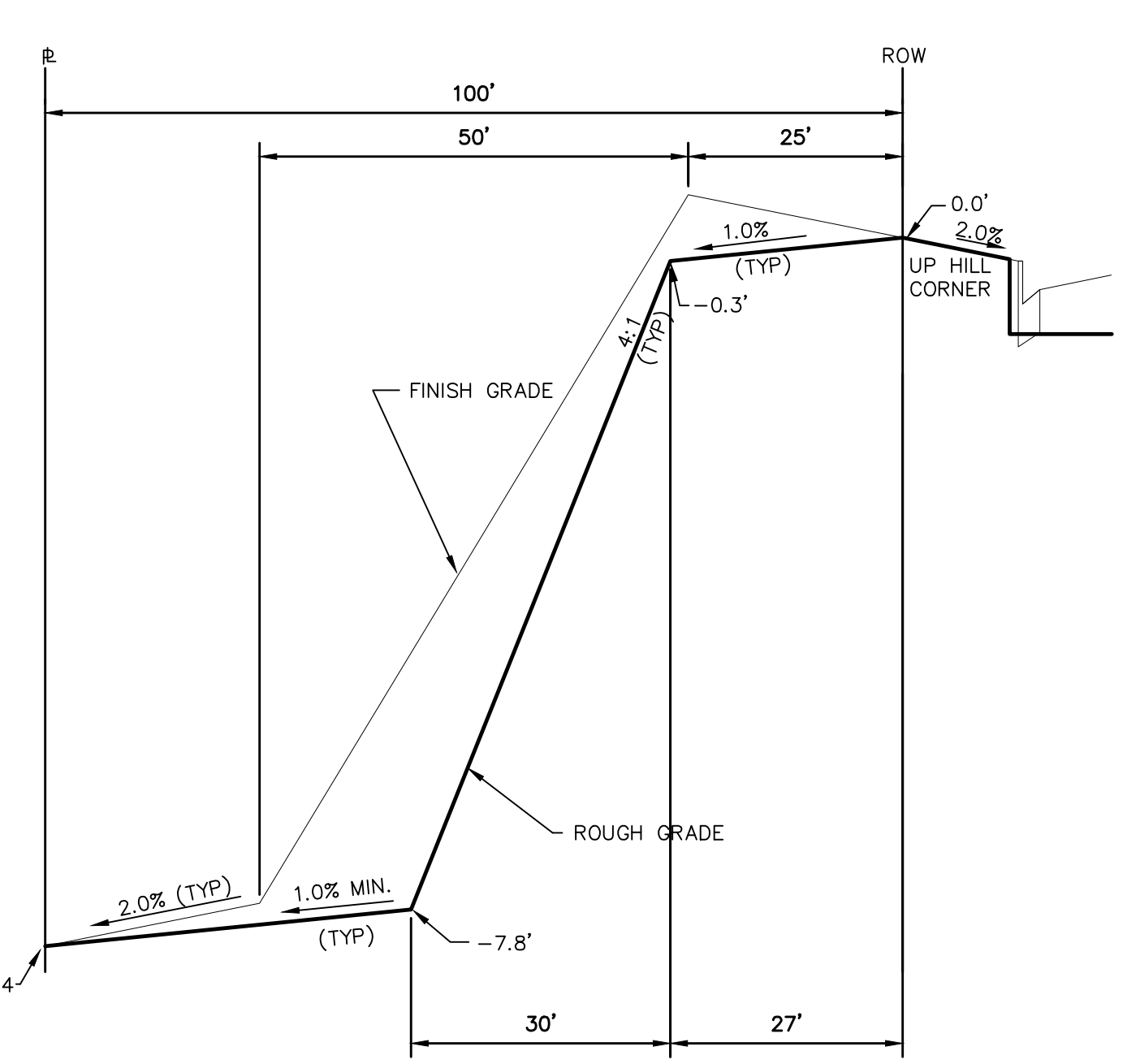
TYPICAL LOT "G4" TEMPLATES



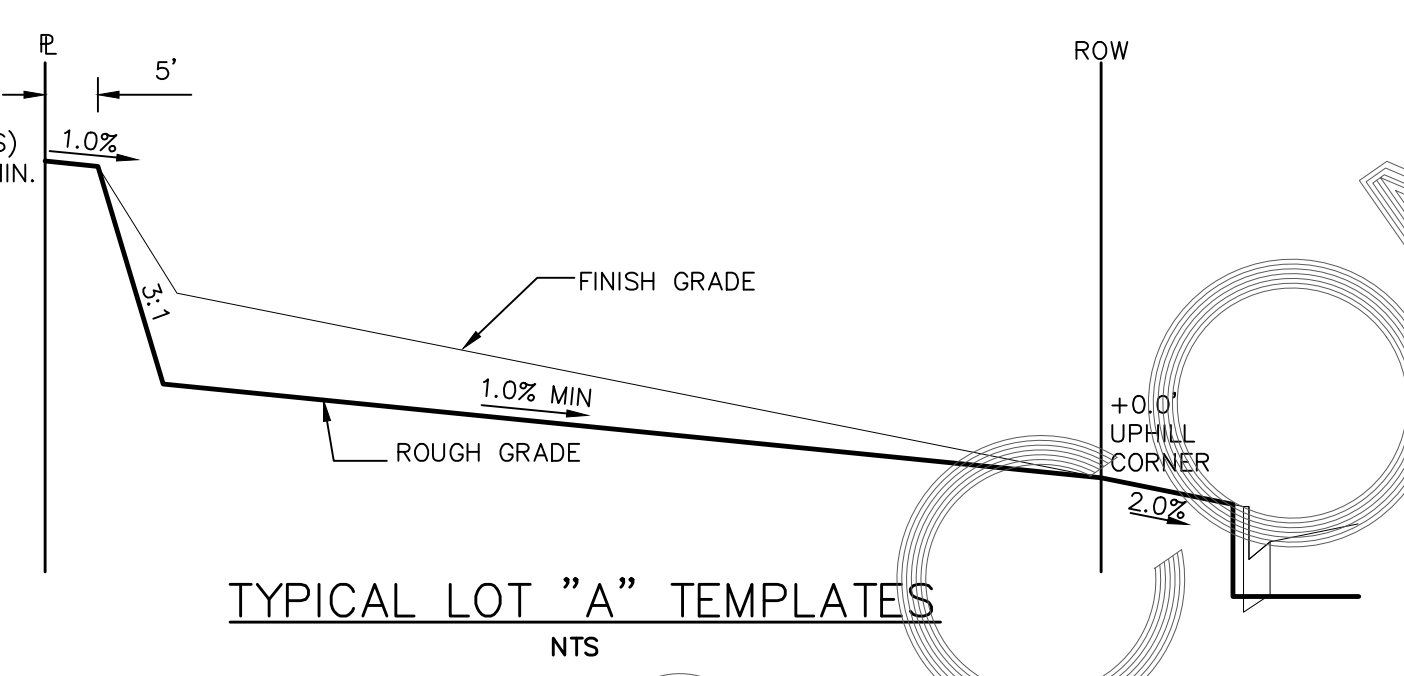
TYPICAL LOT "G6" TEMPLATES



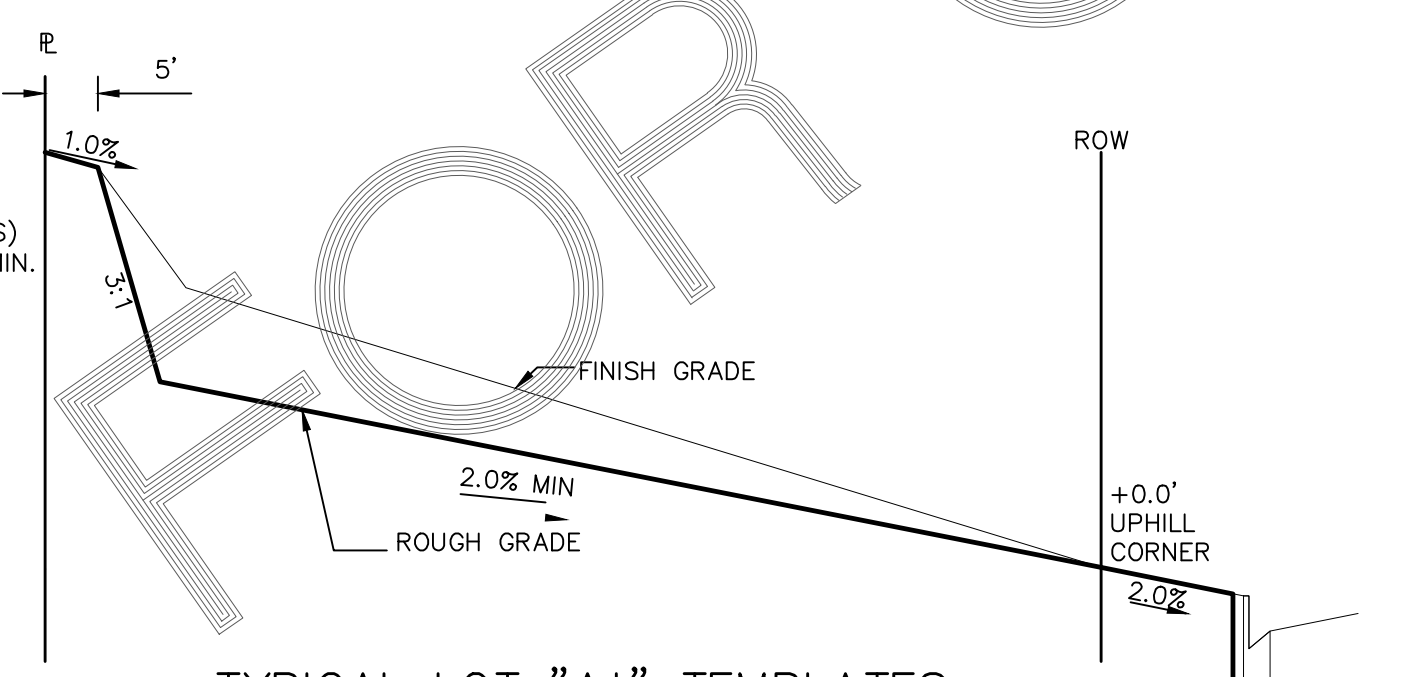
TYPICAL RESIDENTIAL STREET SECTION



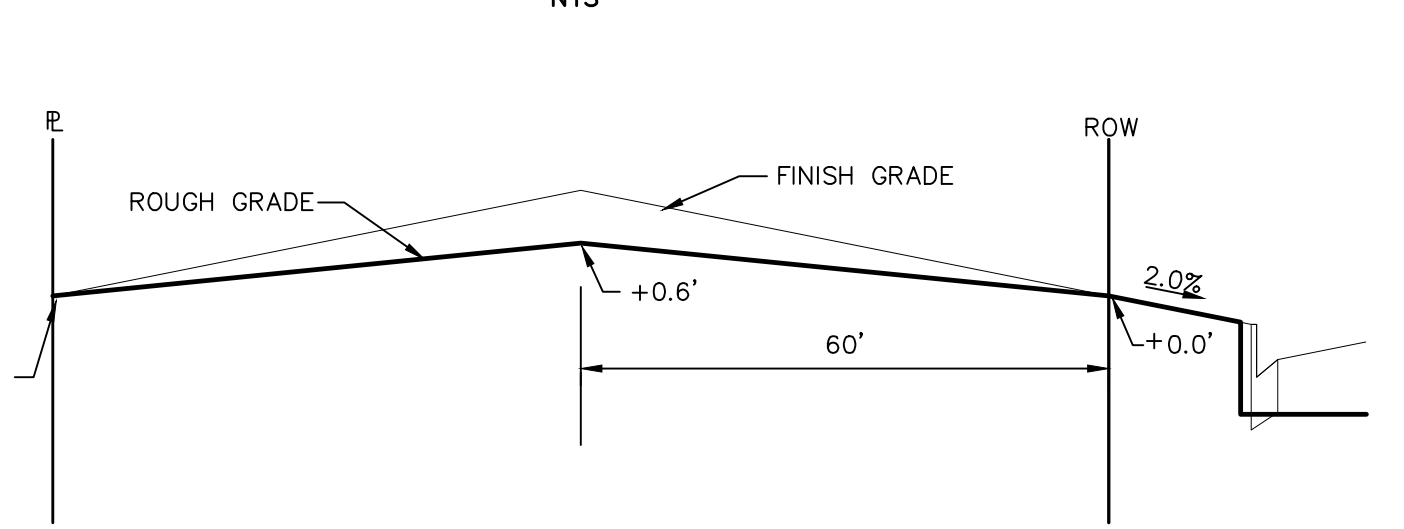
TYPICAL LOT "W8" TEMPLATES



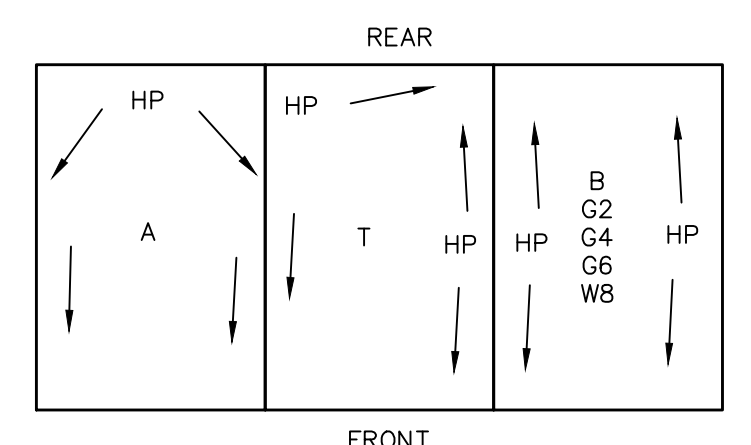
TYPICAL LOT "A" TEMPLATES



TYPICAL LOT "A\*" TEMPLATES



TYPICAL LOT "B" TEMPLATES



TYPICAL DRAINAGE PATTERN

**STEPS FOR CONSTRUCTION**

THE ANTICIPATED START FOR THIS PROJECT IS JANUARY 2019 WITH AN ANTICIPATED COMPLETION DATE OF JUNE 2019. BELOW IS A BRIEF OUTLINE OF THE CONSTRUCTION SEQUENCE FOR THIS PROJECT.

- \* INSTALL INITIAL BMP'S
- \* CONSTRUCTION OF DITCHES AND EROSION CONTROL STRUCTURES
- \* ROUGH GRADING OF LOTS AND ROADS
- \* SANITARY SEWER
- \* WATER
- \* STORM SEWER AND CULVERTS
- \* ELECTRIC
- \* GAS
- \* PHONE & CABLE TV
- \* FINISHED ROAD GRADING AND PAVING

**EROSION AND SEDIMENT CONTROLS**

SILT FENCES AND STRAW BALE CHECK DAMS (OR APPROVED EQUAL) WILL BE INSTALLED PRIOR TO ANY EXCAVATION FOR THE MAJOR ROADS. STRAW BALE CHECK DAMS, FILTREX OR APPROVED EQUAL WILL BE PLACED AT ALL ENTRANCES AND EXITS OF DRAINAGE WAYS. STRAW BALES, FILTREX OR APPROVED EQUAL WILL BE INSTALLED AROUND THE OUTLET AND OVERFLOW STRUCTURE. THE OUTLET STRUCTURE WILL ALSO BE PROTECTED WITH RIPRAP ON THE DOWNSTREAM SIDE.

NON-STRUCTURE PRACTICES TO CONTROL EROSION AND SEDIMENTATION WILL INCLUDE RESEEDING OF GROUND COVER IN DISTURBED AREAS ACCORDING TO THE EROSION CONTROL PLAN. TEMPORARY SEEDING OF THE DETENTION POND AND MULCHING ALONG STEEP EMBANKMENTS WILL BE PERFORMED AS REQUIRED.

SILT FENCE IS REQUIRED TO BE IN PLACE PRIOR TO ANY MOVEMENT OF DIRT.

**MATERIAL HANDLING AND SPILL PREVENTION**

THE MOST PROBABLE SOURCE OF NON-STORMWATER POLLUTION IS REFUELING AND DAILY MAINTENANCE OPERATIONS. IF MOBILE FUEL TRUCKS ARE USED TO SERVICE EQUIPMENT, ABSORBENT MATERIALS AND CONTAINERS FOR THE STORAGE OF USED ABSORBENT MATERIAL WILL BE CLOSE BY. IF A FUEL TANK IS LEFT ON SITE, BERMS WILL BE BUILT AROUND THE TANK TO CAPTURE ANY SPILLED FUEL. AGAIN, ABSORBENT MATERIALS AND THEIR CONTAINERS WILL BE ON HAND.

**FINAL STABILIZATION AND LONG TERM STORMWATER MANAGEMENT**

ONCE THE MAJOR ROADS ARE PAVED AND THE SURROUNDING DISTURBED AREAS ARE 70% ESTABLISHED WITH VEGETATION AND ACCEPTANCE BY THE MERIDIAN RANCH SERVICE DISTRICT, THE CHECK DAMS AND THE SILT FENCES AROUND THE STREETS CAN BE REMOVED. AFTER COMPLETION OF THE STORM SEWER SYSTEM, THE STRAW BALES AND/OR FILTREX CAN BE REMOVED. AFTER ALL GROUND DISTURBING CONSTRUCTION HAS BEEN COMPLETED AND ALL SLOPES ARE 70% ESTABLISHED WITH VEGETATION AND ACCEPTANCE BY THE MERIDIAN RANCH SERVICE DISTRICT, REMAINING CHECK DAMS AND SILT FENCES CAN BE REMOVED. THE RIPRAP ON ANY OF THE OUTLETS WILL REMAIN AFTER CONSTRUCTION TO REDUCE EROSION OF THE CHANNELS. ALL PERMANENT SWALES WILL BE LINED WITH LANDSCAPING TO SLOW RUNOFF AND FILTER SEDIMENTS.

**OTHER CONTROLS**

- THERE ARE SEVERAL BEST MANAGEMENT PRACTICES THAT CAN BE EMPLOYED TO PREVENT OR MITIGATE THE SOURCE OF POLLUTANTS AND CONTAMINATION OF STORMWATER RUNOFF. SOME OF THESE ARE:
- \* ALL REFUSE DUMPSTERS AND RECEPTACLES SHALL BE EQUIPPED WITH FUNCTIONAL LIDS TO PREVENT RAIN AND SNOW FROM ENTERING.
- \* STORAGE CONTAINERS, DRUMS AND BAGS SHALL BE STORED AWAY FROM DIRECT TRAFFIC ROUTES TO PREVENT ACCIDENTAL SPILLS.
- \* EMPTY DRUMS SHALL BE COVERED TO PREVENT COLLECTION OF PRECIPITATION.
- \* CONTAINERS SHALL BE STORED ON PALLETS OR OTHER DUNNAGE TO PREVENT CORROSION OF CONTAINERS, WHICH CAN RESULT WHEN CONTAINERS COME IN CONTACT WITH MOISTURE ON THE GROUND.
- \* REGULARLY SCHEDULED REMOVAL OF CONSTRUCTION TRASH AND DEBRIS.
- THE CONTRACTOR IS CERTAINLY NOT LIMITED TO THESE GOOD HOUSEKEEPING MEASURES, AND MAY IMPLEMENT FURTHER CONTROLS AS PRUDENCE AND GOOD JUDGEMENT DEEM NECESSARY.

**INSPECTION AND MAINTENANCE**

- A THOROUGH INSPECTION OF THE STORMWATER MANAGEMENT SYSTEM SHALL BE PERFORMED EVERY 14 DAYS AS WELL AS AFTER ANY RAIN OR SNOWMELT EVENT THAT CAUSES SURFACE EROSION:
- \* EROSION OF V-NOTCH SWALES, CHANNELS AND SIDE SLOPES SHALL BE REPAIRED.
- \* WHEN THE CHECK DAMS HAVE SILTED UP TO HALF THEIR HEIGHT, THE SILT SHALL BE REMOVED, CHANNEL GRADE REESTABLISHED, AND SIDE SLOPES RE-SEEDED IF NECESSARY. ANY CHECK DAMS THAT HAVE SHIFTED OR DECAYED SHALL BE REPAIRED OR REPLACED.
- \* SILT FENCES SHALL BE CLEANED WHENEVER SEDIMENT HAS REACHED A DEPTH OF 6" AT THE FENCE, AND BROKEN WOODEN PARTS OR TORN FABRIC SHALL BE REPAIRED OR REPLACED.
- \* ANY ACCUMULATED TRASH OR DEBRIS SHALL BE REMOVED FROM OUTLETS.
- \* IF THE DEPTH OF THE SILT IN THE TEMPORARY SEDIMENTATION TRAP EXCEEDS 1/2 OF THE ORIGINAL DEPTH, THE TRAP SHALL BE CLEANED OUT AND RESTORED TO ITS ORIGINAL DEPTH. THE OVERFLOW SPILLWAY SHALL BE CLEANED OR REPAIRED AS NECESSARY.
- AN INSPECTION AND MAINTENANCE LOG FOLLOWS THIS STORMWATER MANAGEMENT PLAN.

**REVEGETATION AND SEEDING**

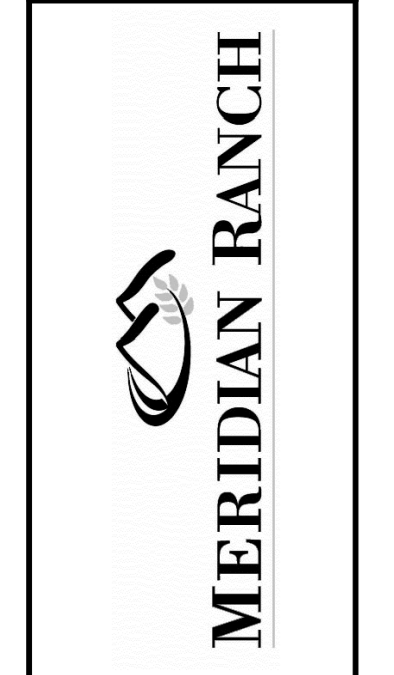
ALL DISTURBED AREAS SHALL BE REQUIRE SEEDING WITHIN TWO (2) WEEKS FOLLOWING THE ESTABLISHMENT OF FINAL GRADE. AREAS TO RECEIVE PAVEMENT DURING THE CONSTRUCTION OF THE ROAD SYSTEM SHALL NOT RECEIVE ANY SEEDING. SEEDING SHOULD BE ACCOMPLISHED USING AN APPROPRIATE GRASS DRILL, BY BROADCASTING OR BY HYDROMULCHING. IF SEEDING BY THE BROADCAST METHOD IS SELECTED THE APPLICATION RATE SHOULD BE DOUBLED. IF HYDROMULCHING IS SELECTED TWO OPERATIONS SHOULD BE CONSIDERED. APPLYING THE SEED FIRST AND THE MULCH IN A SECOND OPERATION. UPON COMPLETION OF THE SEEDING OPERATION THE SITE SHOULD BE COVERED WITH WEED FREE MULCH AT A RATE OF 4,000 LBS. PER ACRE. MULCH SHALL BE INSTALLED PER DCM VOLUME 2, FIGURE MU-1, FOUND ON PAGE 3-30.

BELOW IS THE ACCEPTED GRASS MIX FOR SANDY SOILS:

GRASS	VARIETY	AMOUNT IN PLS LBS. PER ACRE
SIDEOATS GRAMA	EL RENO	3.0
WESTERN WHEATGRASS	BARTON	2.5
SLENDER WHEATGRASS	NATIVE	2.0
LITTLE BLUESTERN	PASTURA	2.0
SAND DROPSEED	NATIVE	0.5
SWITCH GRASS	NEBRASKA	3.0
WEEPING LOVE GRASS	MORPHA	1.0

No.	Revisions	Date	Appr.

TECH CONTRACTORS  
11886 STAPLETON DRIVE  
FALCON, CO 80831  
TELEPHONE: 719.495.7444  
FAX: 719.495.2457



STONEBRIDGE FILING 4 AT  
MERIDIAN RANCH  
GRADING-EROSION CONTROL PLAN  
DETAIL SHEET

Scale	Drawn by	Checked by	Date
AS SHOWN	LOG	TAK	SEPTEMBER 2018

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TWO WORKING DAYS  
**BEFORE YOU DIG CALL 811**  
OR  
UTILITY NOTIFICATION CENTER OF COLORADO  
1-800-922-1987  
(SEE COVER FOR LIST OF UTILITY CONTACTS)

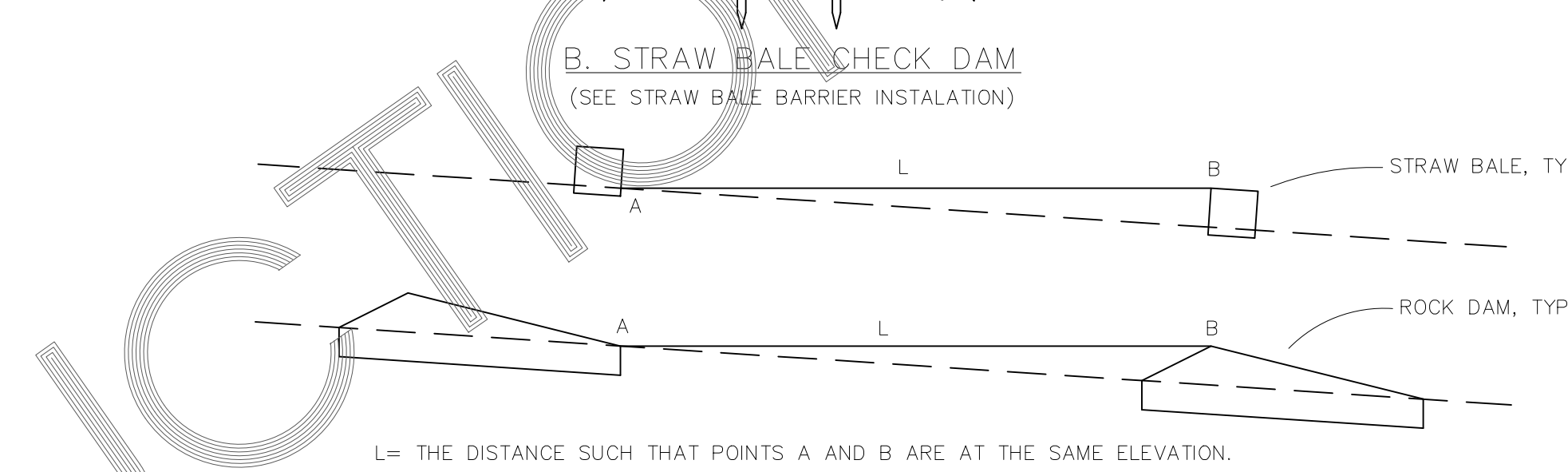
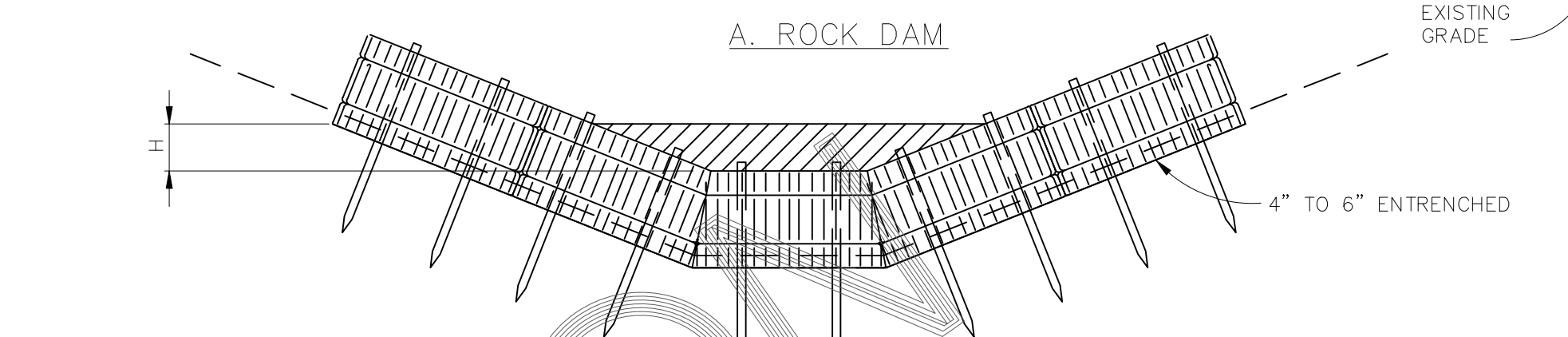
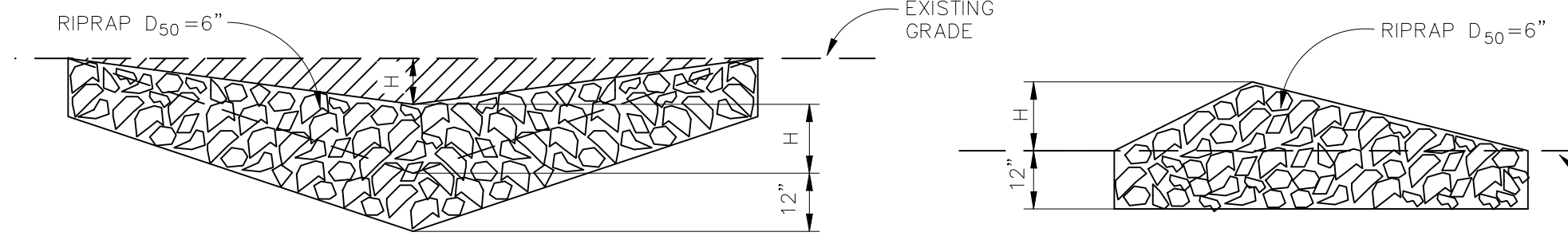
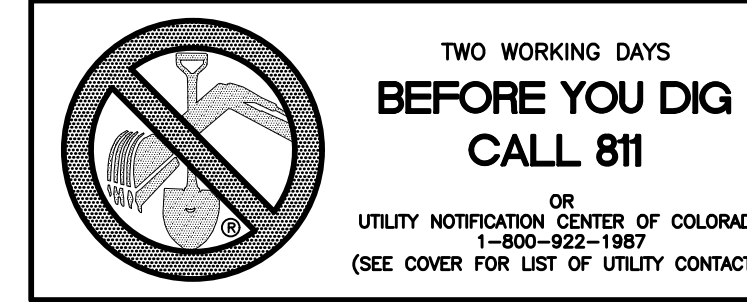
## STRAW BALE BARRIER NOTES

### INSTALLATION REQUIREMENTS

- STRAW BALE BARRIERS SHALL BE INSTALLED PRIOR TO ANY LAND DISTURBING ACTIVITIES.
- BALES SHALL CONSIST OF APPROXIMATELY 5 CUBIC FEET OF CERTIFIED WEED FREE HAY OR STRAW AND WEIGH NOT LESS THAN 35 POUNDS.
- BALES ARE TO BE PLACED IN A SINGLE ROW WITH THE END OF THE BALES TIGHTLY ABUTTING ONE ANOTHER.
- EACH BALE IS TO BE SECURELY ANCHORED WITH AT LEAST TWO STAKES AND THE FIRST STAKE IS TO BE DRIVEN TOWARD THE PREVIOUSLY LAID BALE TO FORCE THE BALES TOGETHER.
- STAKES ARE TO BE A MINIMUM OF 42 INCHES LONG. METAL STAKES SHALL BE STANDARD "T" OR "U" TYPE WITH MINIMUM WEIGHT OF 1.33 POUNDS PER LINEAR FOOT. WOOD STAKES SHALL HAVE A MINIMUM DIAMETER OR CROSS SECTION DIMENSION OF 2 INCHES.
- BALES ARE TO BE BOUND WITH EITHER WIRE OR STRING AND ORIENTED SUCH THAT THE BINDINGS ARE AROUND THE SIDES AND NOT ALONG THE TOPS AND BOTTOMS OF THE BALE.
- GAPS BETWEEN BALES ARE TO BE CHINKED ( FILLED BY WEDGING) WITH STRAW OR THE SAME MATERIAL OF THE BALE.
- END BALES ARE TO EXTEND UPSLOPE SO THE TRAPPED RUNOFF CANNOT FLOW AROUND THE ENDS OF THE BARRIER.

### MAINTENANCE REQUIREMENTS

- CONTRACTOR SHALL INSPECT STRAW BALE BARRIERS IMMEDIATELY AFTER EACH RAINFALL, AT LEAST DAILY DURING PROLONGED RAINFALL, AND WEEKLY DURING PERIODS NO RAINFALL.
- DAMAGED OR INEFFECTIVE BARRIERS SHALL PROMPTLY BE REPAIRED, REPLACING BALES IF NECESSARY, AND UNENTRENCHED BALES NEED TO BE REPAIRED WITH COMPACTED BACKFILL MATERIAL.
- SEDIMENT SHALL BE REMOVED FROM BEHIND STRAW BALE BARRIERS WHEN IT ACCUMULATES TO APPROXIMATELY 1/2 THE HEIGHT OF THE BARRIER.
- STRAW BALE BARRIERS SHALL BE REMOVED WHEN ADEQUATE VEGETATIVE COVER IS ATTAINED AS APPROVED BY THE CITY.



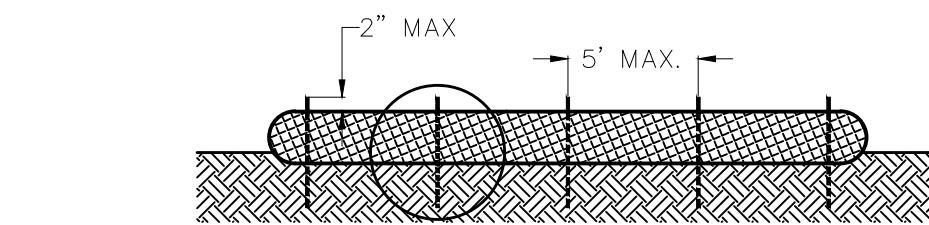
### CHECK DAM NOTES

- #### INSTALLATION REQUIREMENTS

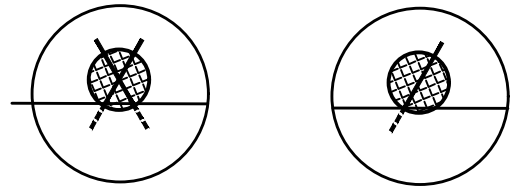
  - STRAW BALES USED AS CHECK DAMS ARE TO MEET THE REQUIREMENTS STATED IN FIGURE SBB-2.
  - THE "H" DIMENSION SHALL BE SELECTED TO PROVIDE WEIR FLOW CONVEYANCE FOR 2-YEAR FLOW OR GREATER.

#### MAINTENANCE REQUIREMENTS

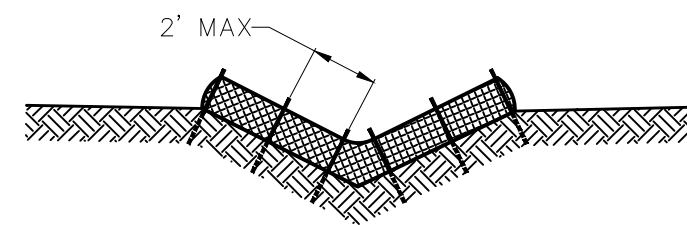
  - REGULAR INSPECTIONS ARE TO BE MADE OF ALL CHECK DAMS, ESPECIALLY AFTER STORM EVENTS.
  - REPLACE STONE AS NECESSARY TO MAINTAIN THE CORRECT HEIGHT OF THE DAM.
  - ACCUMULATED SEDIMENT AND DEBRIS IS TO BE REMOVED FROM BEHIND THE DAMS AFTER EACH STORM OR WHEN 1/2 OF THE ORIGINAL HEIGHT OF THE DAM IS REACHED.
  - CHECK DAMS ARE TO REMAIN IN PLACE AND OPERATIONAL UNTIL THE DRAINAGE AREA AND CHANNEL ARE PERMANENTLY STABILIZED.
  - WHEN CHECK DAMS ARE REMOVED THE CHANNEL LINING OR VEGETATION IS TO BE RESTORED.



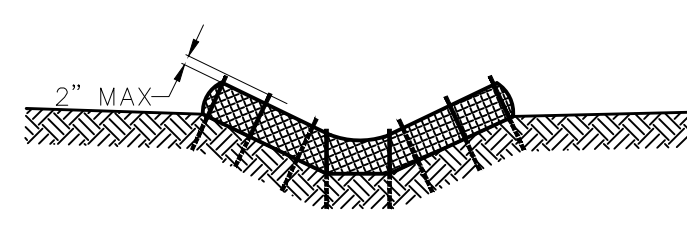
SECTION - SURFACE APPLICATION



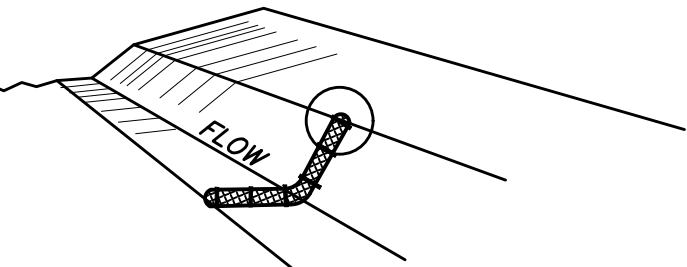
INSET A INSET B



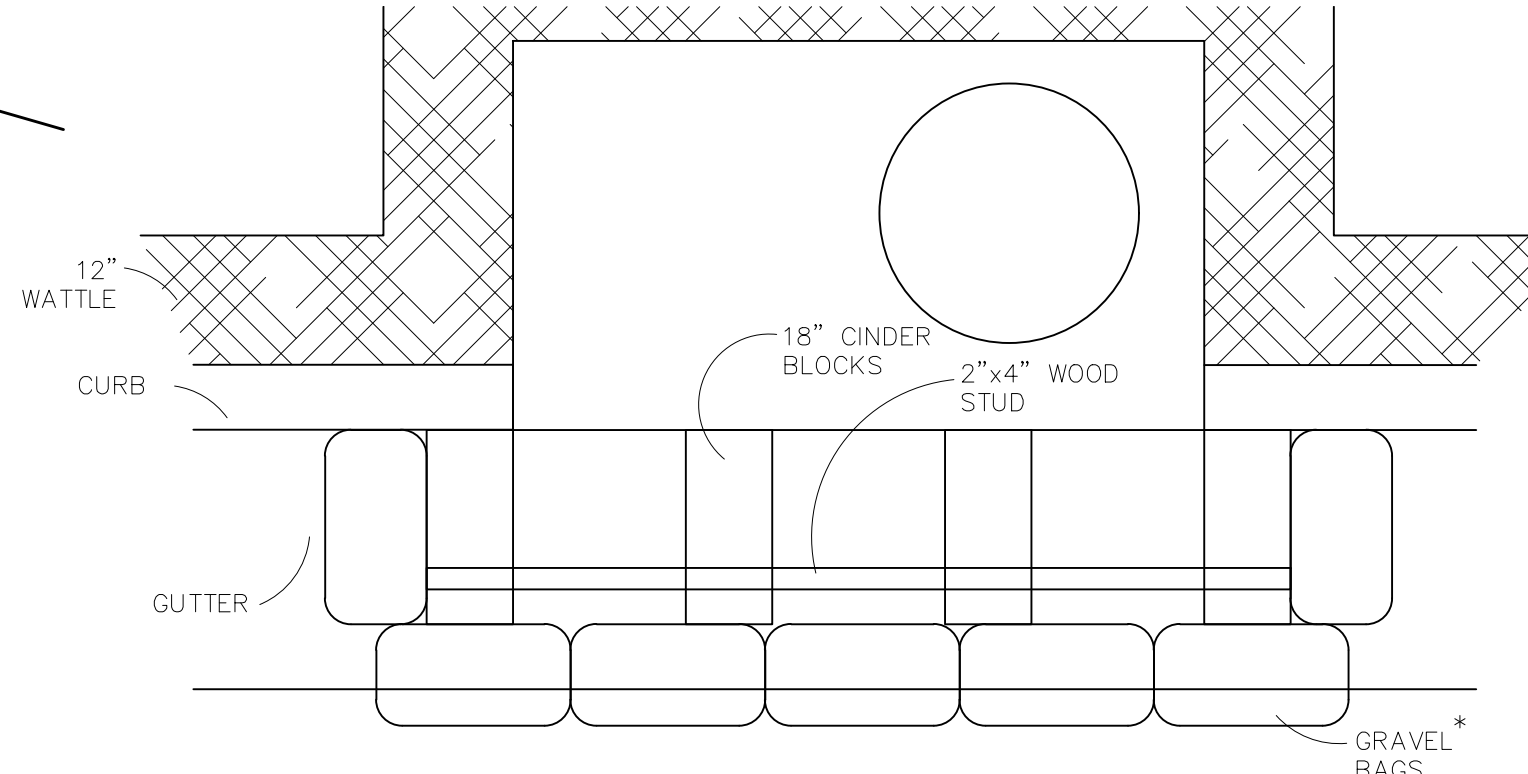
SECTION - V-NOTCH CHANNEL



SECTION - TRAPAZOIDAL CHANNEL



PLAN VIEW



### STRAW BALE BARRIER

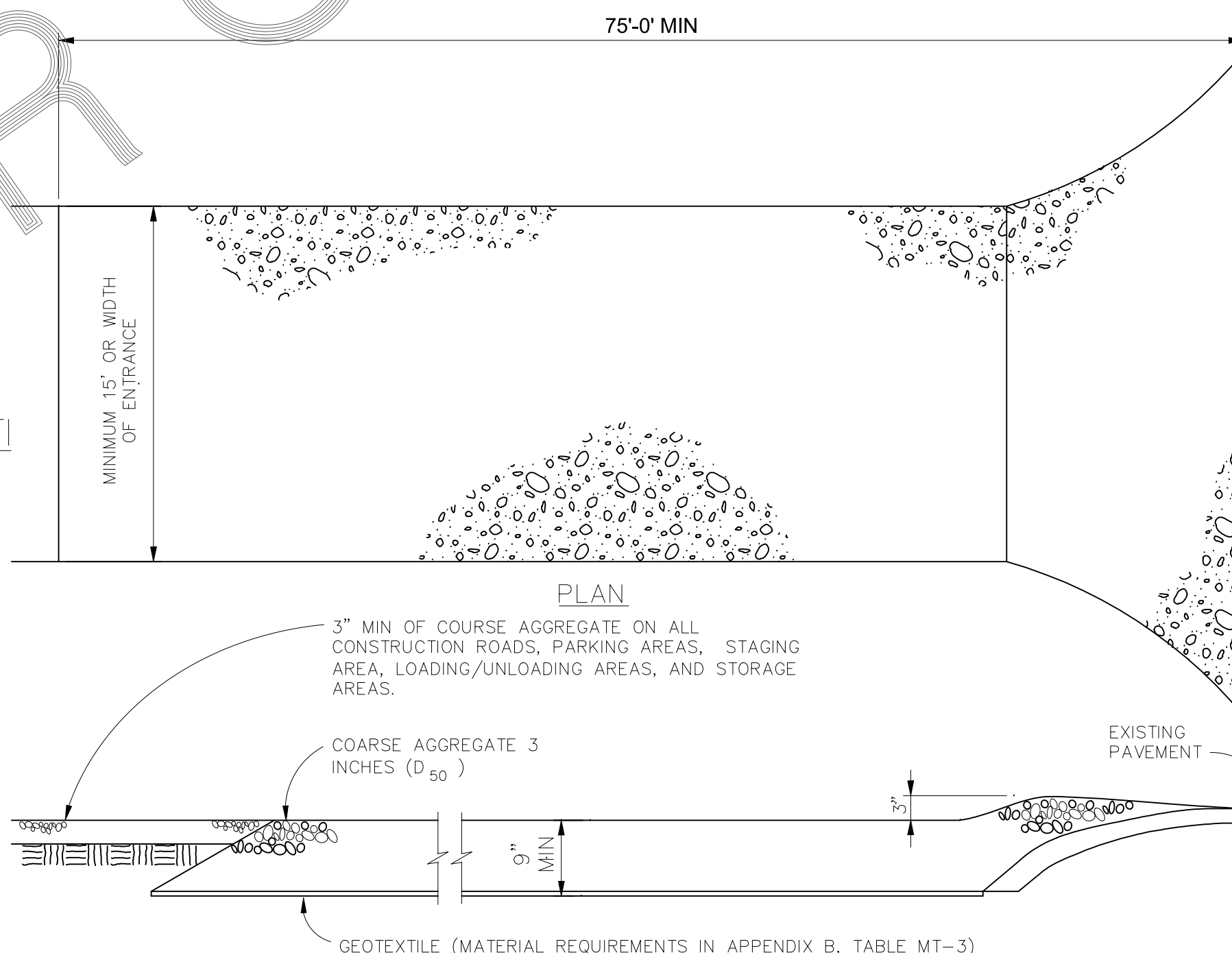
### VEHICLE TRACKING NOTES

#### INSTALLATION REQUIREMENTS

- ALL ENTRANCES TO THE CONSTRUCTION SITE ARE TO BE STABILIZED PRIOR TO CONSTRUCTION BEGINNING.
- CONSTRUCTION ENTRANCES ARE TO BE BUILT WITH AN APRON TO ALLOW FOR TURNING TRAFFIC, BUT SHOULD NOT BE BUILT OVER EXISTING PAVEMENT EXCEPT FOR A SIGHT OVERLAP.
- AREAS TO BE STABILIZED ARE TO BE PROPERLY GRADED AND COMPACTED PRIOR TO LAYING DOWN GEOTEXTILE AND STONE.
- CONSTRUCTION ROADS, PARKING AREAS, LOADING/UNLOADING ZONES, STORAGE AREAS, AND STAGING AREAS ARE TO BE STABILIZED.
- CONSTRUCTION ROADS ARE TO BE BUILT TO CONFORM TO SITE GRADES, BUT SHOULD NOT HAVE SIDE SLOPES OR ROAD GRADES THAT ARE EXCESSIVELY STEEP.

#### MAINTENANCE REQUIREMENTS

- REGULAR INSPECTIONS ARE TO BE MADE OF ALL STABILIZED AREAS ESPECIALLY AFTER STORM EVENTS.
- STONES ARE TO BE REAPPLIED PERIODICALLY AND WHEN REPAIR IS NECESSARY.
- SEDIMENT TRACKED ONTO PAVED ROADS IS TO BE REMOVED DAILY BY SHOVELING OR SWEEPING. SEDIMENT IS NOT TO BE WASHED DOWN STORM SEWER DRAINS.
- STORM SEWER INLET PROTECTION IS TO BE IN PLACE, INSPECTED, AND CLEANED IF NECESSARY.
- OTHER ASSOCIATED SEDIMENT CONTROL MEASURES ARE TO BE INSPECTED TO ENSURE GOOD WORKING CONDITION.



### SECTION

### VEHICLE TRACKING

NTS

## CONCRETE BLOCK AND GRAVEL BAG\* CURB INLET PROTECTION

### CONCRETE BLOCK AND GRAVEL BAG\* CURB INLET PROTECTION NOTES

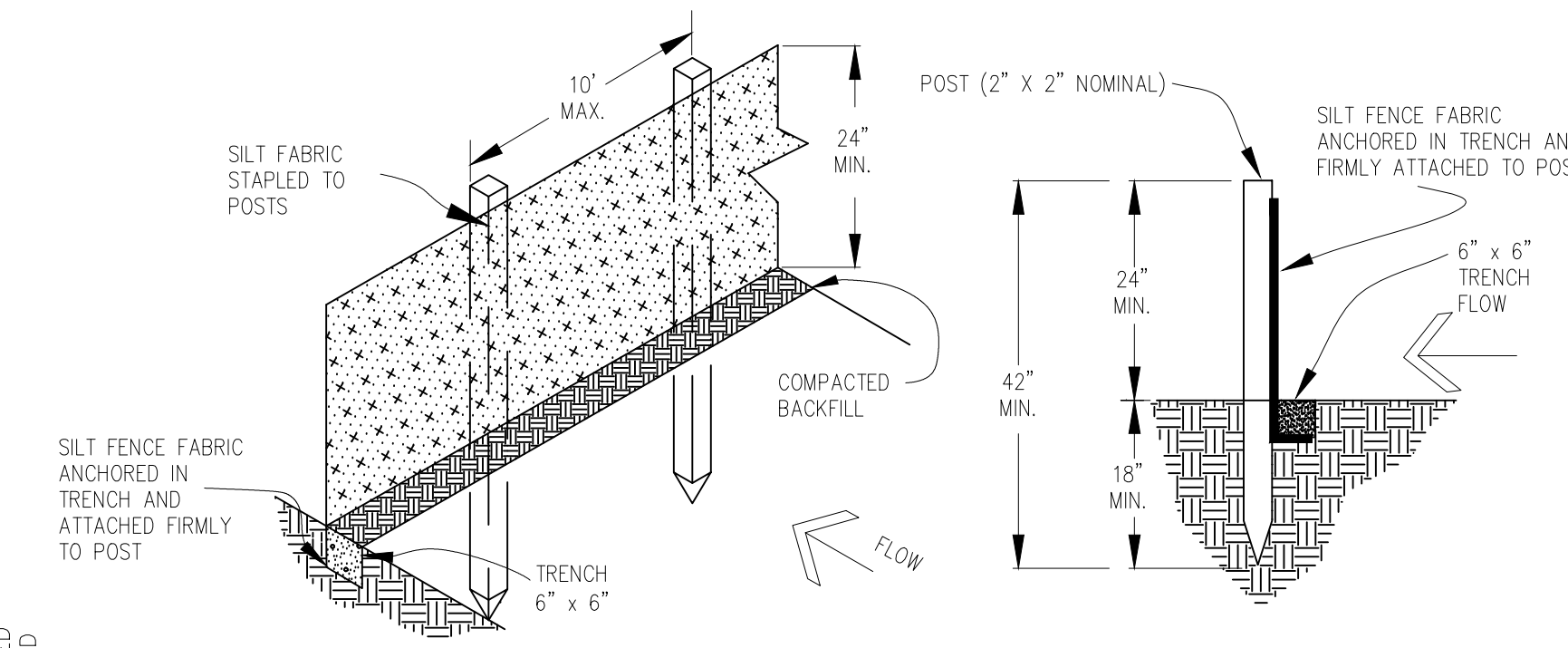
#### INSTALLATION REQUIREMENTS

- INLET PROTECTION SHALL BE INSTALLED IMMEDIATELY AFTER CONSTRUCTION OF INLET.
- CONCRETE BLOCKS ARE TO BE LAID AT 2' SPACING ON THEIR SIDES WITH THE OPEN ENDS OF THE BLOCK FACING EACH OTHER.
- IF MORE THAN ONE 2X4 IS REQUIRED, THEY NEED TO OVERLAP BY A MINIMUM OF 2'.
- GRAVEL BAGS ARE TO BE PLACED AROUND THE CONCRETE BLOCKS AND 2X4 TO CLOSELY ABUTTING ONE ANOTHER SO THERE ARE NO GAPS.
- GRAVEL BAGS ARE TO CONTAIN WASHED SAND OR GRAVEL APPROXIMATELY 3/4 INCH IN DIAMETER.
- BAGS ARE TO BE MADE OF 1/4" INCH WIRE MESH (USED WITH GRAVEL ONLY) OR GEOTEXTILE.

#### MAINTENANCE REQUIREMENTS

- CONTRACTOR SHALL INSPECT INLET PROTECTION IMMEDIATELY AFTER EACH RAINFALL, AT LEAST DAILY DURING PROLONGED RAINFALL, AND WEEKLY DURING PERIODS NO RAINFALL.
- DAMAGED OR INEFFECTIVE INLET PROTECTION SHALL PROMPTLY BE REPAIRED OR REPLACED.
- SEDIMENT SHALL BE REMOVED WHEN SEDIMENT HAS ACCUMULATED TO APPROXIMATELY 1/2 THE DESIGN DEPTH OF THE TRAP.
- INLET PROTECTION SHALL BE REMOVED WHEN ADEQUATE VEGETATIVE COVER IS ATTAINED WITHIN THE DRAINAGE AREA AS APPROVED BY THE CITY.

\* AN ALTERNATE 3/4" TO 1" GRAVEL FILTER OVER A WIRE SCREEN MAY BE USED IN PLACE OF GRAVEL BAGS. THE WIRE MESH SHALL EXTEND ABOVE THE TOP OF THE CONCRETE BLOCKS AND THE GRAVEL PLACED OVER THE WIRE SCREEN TO THE TOP OF THE CONCRETE BLOCKS.



### SILT FENCE

### SILT FENCE NOTES

#### INSTALLATION REQUIREMENTS

- SILT FENCES SHALL BE INSTALLED PRIOR TO ANY LAND DISTURBING ACTIVITIES.
- WHEN JOINTS ARE NECESSARY, SILT FENCE GEOTEXTILE SHALL BE SPLICED TOGETHER ONLY AT SUPPORT POST AND SECURELY SEALED.
- METAL POSTS SHALL BE "STUDDED TEE" OR "U" TYPE WITH MINIMUM WEIGHT OF 1.33 POUNDS PER LINEAR FOOT. WOOD POSTS SHALL HAVE A MINIMUM DIAMETER OR CROSS SECTION DIMENSION OF 2 INCHES.
- THE FILTER MATERIAL SHALL BE FASTENED SECURELY TO METAL OR WOOD POSTS USING WIRE TIES, OR TO WOOD POSTS WITH 3/4" LONG #9 HEAVY-DUTY STAPLES. THE SILT FENCE GEOTEXTILE SHALL NOT BE STAPLED TO EXISTING TREES.
- WHILE NOT REQUIRED, WIRE MESH FENCE MAY BE USED TO SUPPORT THE GEOTEXTILE. WIRE FENCE SHALL BE FASTENED SECURELY TO THE UPSLOPE SIDE OF THE POSTS USING HEAVY-DUTY WIRE STAPLES AT LEAST 3/4" LONG, THE WIRES OR HOG RINGS. THE WIRE SHALL EXTEND INTO THE TRENCH A MINIMUM OF 6" AND SHALL NOT EXTEND MORE THAN 3' ABOVE THE ORIGINAL GROUND SURFACE.

- ALONG THE TOE OF FILLS, INSTALL THE SILT FENCE ALONG A LEVEL CONTOUR AND PROVIDE AN AREA BEHIND THE FENCE FOR RUNOFF TO POND AND SEDIMENT TO SETTLE. A MINIMUM DISTANCE OF 5 FEET FROM THE TOE OF THE FILL IS RECOMMENDED.
- THE HEIGHT OF THE SILT FENCE FROM THE GROUND SURFACE SHALL BE MINIMUM OF 24 INCHES AND SHALL NOT EXCEED 36 INCHES; HIGHER FENCES MAY INPOUND VOLUMES OF WATER SUFFICIENT TO CAUSE FAILURE OF THE STRUCTURE.

#### MAINTENANCE REQUIREMENTS

- CONTRACTOR SHALL INSPECT SILT FENCES IMMEDIATELY AFTER EACH RAINFALL, AT LEAST DAILY DURING PROLONGED RAINFALL, AND WEEKLY DURING PERIODS OF NO RAINFALL. DAMAGED, COLLAPSED, UNENTRENCHED OR INEFFECTIVE SILT FENCES SHALL BE PROMPTLY REPAIRED OR REPLACED.
- SEDIMENT SHALL BE REMOVED FROM BEHIND SILT FENCE WHEN IT ACCUMULATES TO HALF THE EXPOSED GEOTEXTILE HEIGHT.
- SILT FENCES SHALL BE REMOVED WHEN ADEQUATE VEGETATIVE COVER IS ATTAINED AS APPROVED BY THE CITY.

No.	Revisions	Date	Date	Appr.
TECH CONTRACTORS 11886 STAPLETON DRIVE FALCON, CO 80831 TELEPHONE: 719.495.7444 FAX: 719.495.2457				
<b style="font-size: 1.2em;">MERIDIAN RANCH</b>				
<b>STONEBRIDGE FILING 4 AT MERIDIAN RANCH</b> <b>GRADING-EROSION CONTROL PLAN</b> <b>DETAIL SHEET</b>				
Scale	Drawn by	Checked by	Date	Date
AS SHOWN	LOG	TAK	SEPTEMBER 2018	SEPTEMBER 2018
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