
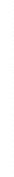





TWO WORKING DAYS
BEFORE YOU DIG
CALL 811

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


	Scale AS SHOWN	Drawn by	THE ESTATES AT ROLLING HILLS RANCH FILING 2 STREET AND UTILITY PLANS INDEX SHEET				 MERIDIAN RANCH	TECH CONTRACTORS 11886 STAPLETON DRIVE FALCON, CO 80831 TELEPHONE: 719.495.7444 FAX: 719.495.2457	1 LIGHT POLES SS SERVES WATER SERVES REX ROAD & 12" MM (SH-1,2,6,7,8,9,10,11,12,14,15,16,22,23,24,26,27,28,30,31,34,35,36,38)	Log	9/13/2021			
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	2 of 44	Date	SEPT 2020											



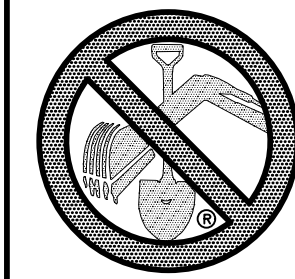
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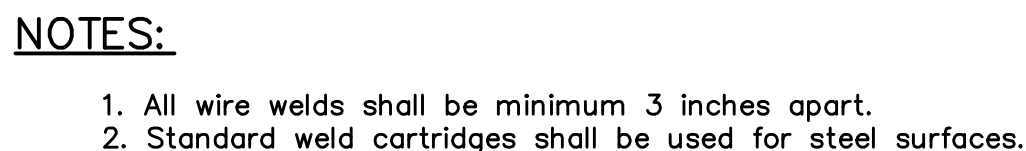
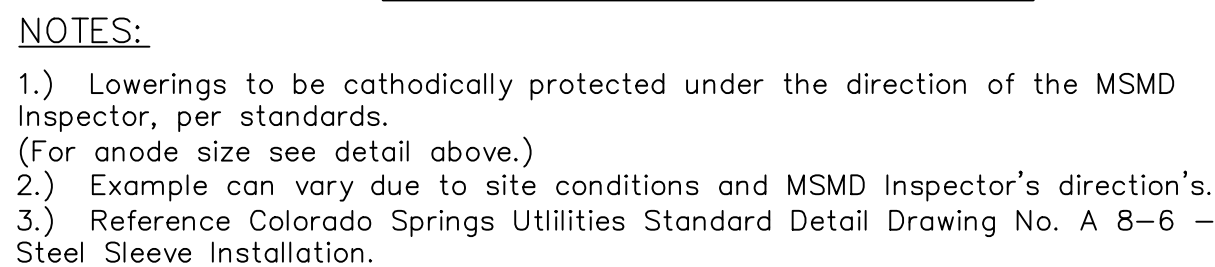
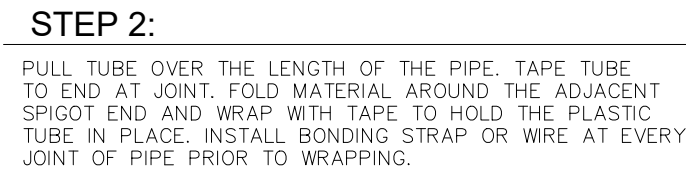
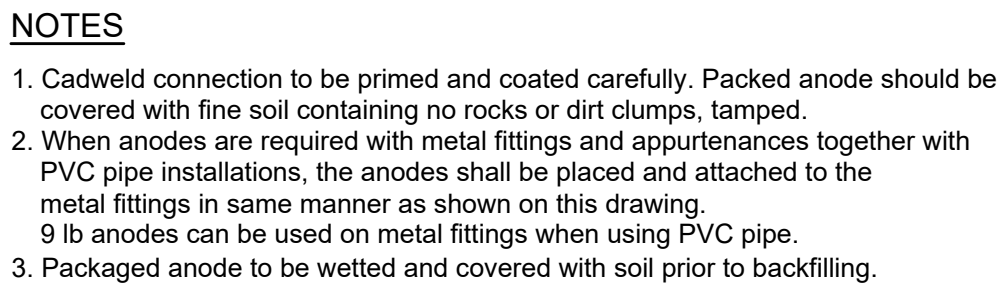
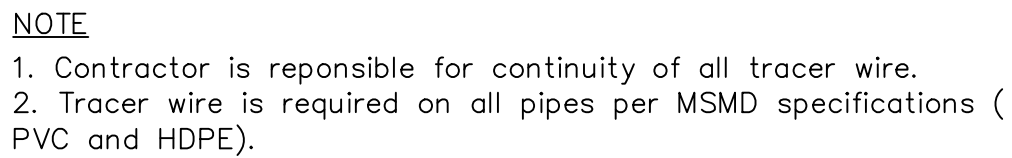
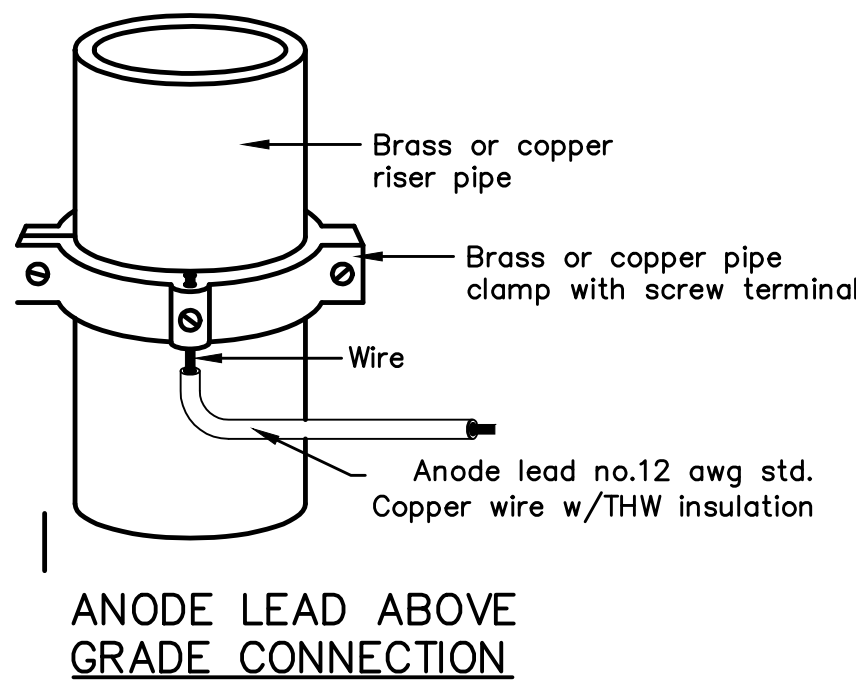
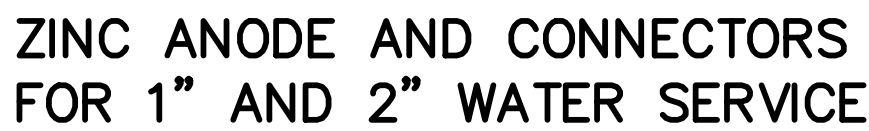
(IN FEET)

1 inch = 150 ft.





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METROPOLITAN DISTRICT GENERAL UTILITY NOTES FOR MERIDIAN SERVICE METROPOLITAN DISTRICT MSMD BOARD APPROVED: JANUARY 8, 2020				EL PASO COUNTY GENERAL NOTES:			
GENERAL NOTES							
1. MERIDIAN SERVICE METROPOLITAN DISTRICT (MSMD) CONTACT: 11886 STAPLETON DR FALCON, CO 80831 PHONE 719-495-6567				1. ALL DRAINAGE AND ROADWAY CONSTRUCTION SHALL MEET THE STANDARDS AND SPECIFICATIONS OF THE CITY OF COLORADO SPRINGS/EL PASO COUNTY DRAINAGE CRITERIA MANUAL, VOLUMES 1 AND 2, AND THE EL PASO COUNTY ENGINEERING CRITERIA MANUAL.			
2. ALL SANITARY SEWER, POTABLE WATER, RECLAIMED WATER, RAW WATER AND STORM DRAIN SYSTEMS SHALL BE CONSTRUCTED IN CONFORMANCE WITH THE CURRENT MERIDIAN SERVICE METROPOLITAN DISTRICT (MSMD) SPECIFICATIONS. MSMD SPECIFICATIONS HEREINAFTER SHALL BE CONSISTENT WITH THE COLORADO SPRINGS UTILITIES SPECIFICATIONS (CSUS) FOR WASTEWATER LINE EXTENSION & SERVICE STANDARDS, 2010 EDITION AND THE WATER LIND EXTENSION & SERVICE STANDARDS, 2014 EDITION, UNLESS OTHERWISE NOTED AND APPROVED.				2. CONTRACTOR SHALL BE RESPONSIBLE FOR THE NOTIFICATION AND FIELD NOTIFICATION OF ALL EXISTING UTILITIES, WHETHER SHOWN ON THE PLANS OR NOT, BEFORE BEGINNING CONSTRUCTION. LOCATION OF EXISTING UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. CALL 811 TO CONTACT THE UTILITY NOTIFICATION CENTER OF COLORADO (UNCC).			
3. ALL PLANS ON THE JOB SITE SHALL BE SIGNED AND APPROVED BY MSMD AND MSMD'S ENGINEER. ANY REVISION TO THE PLANS SHALL BE APPROVED BY MSMD AND MSMD'S ENGINEER AND SO NOTED ON THE PLANS.				3. CONTRACTOR SHALL KEEP A COPY OF THESE APPROVED PLANS, THE GRADING AND EROSION CONTROL PLAN, THE STORMWATER MANAGEMENT PLAN (SWMP), THE SOILS AND GEOTECHNICAL REPORT, AND THE APPROPRIATE DESIGN AND CONSTRUCTION STANDARDS AND SPECIFICATIONS AT THE JOB SITE AT ALL TIMES, INCLUDING THE FOLLOWING: a. EL PASO COUNTY ENGINEERING CRITERIA MANUAL (ECM) b. CITY OF COLORADO SPRINGS/EL PASO COUNTY DRAINAGE CRITERIA MANUAL, VOLUMES 1 AND 2 c. COLORADO DEPARTMENT OF TRANSPORTATION (CDOT) STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION d. CDOT M & S STANDARDS			
4. ALL MATERIALS AND WORKMANSHIP SHALL BE SUBJECT TO INSPECTION BY MSMD. MSMD RESERVES THE RIGHT TO ACCEPT OR REJECT ANY SUCH MATERIALS AND WORKMANSHIP THAT DOES NOT CONFORM TO MSMD STANDARDS AND SPECIFICATIONS.				4. 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 FROM REGULATIONS AND STANDARDS MUST BE REQUESTED, AND APPROVED, IN WRITING. ANY MODIFICATIONS NECESSARY TO MEET CRITERIA AFTER-THE-FACT WILL BE ENTIRELY THE DEVELOPER'S RESPONSIBILITY TO RECTIFY.			
5. ALL PIPE MATERIAL, BACKFILL, AND INSTALLATION SHALL CONFORM TO THE APPLICABLE SPECIFICATIONS OF THE EL PASO COUNTY PLANNING AND COMMUNITY DEVELOPMENT, COLORADO SPRINGS UTILITIES, MSMD, DISTRICT ENGINEER AND THE SOILS ENGINEER.				5. IT IS THE DESIGN ENGINEER'S RESPONSIBILITY TO ACCURATELY SHOW EXISTING CONDITIONS, BOTH ONSITE AND OFFSITE, ON THE CONSTRUCTION PLANS. ANY MODIFICATIONS NECESSARY DUE TO CONFLICTS, OMISSIONS, OR CHANGED CONDITIONS WILL BE ENTIRELY THE DEVELOPER'S RESPONSIBILITY TO RECTIFY.			
6. ALL UTILITY TRENCH BACKFILL SHALL BE PLACED PER THE APPROVED SOILS REPORT RECOMMENDATIONS AND UNDER THE DIRECTION OF THE SOILS ENGINEER. TRENCH BACKFILL SHALL BE MOISTURE CONDITIONED TO WITHIN 2 PERCENT OF OPTIMUM AND COMPACTED TO AT LEAST 95 PERCENT OF MAXIMUM MODIFIED PROCTOR DRY DENSITY (ASTM D 1557) OR HIGHER STANDARD AS REQUIRED BY THE EL PASO COUNTY PLANNING AND COMMUNITY DEVELOPMENT OR THE SOILS ENGINEER RECOMMENDATION. THIS SHALL INCLUDE ALL MAIN LINE, VALVES, FIRE HYDRANT RUNS, WATER & SEWER SERVICE LINES, CLEAN OUTS, INLET BOXES, MANHOLES, ETC. A QUALIFIED SOILS ENGINEER SHALL OBSERVE AND TEST THE BACKFILL AND COMPACTION OF ALL TRENCHES AND ALL REPORTS SHALL BE SUBMITTED TO MSMD FOR REVIEW AND APPROVAL.				6. CONTRACTOR SHALL SCHEDULE A PRE-CONSTRUCTION MEETING WITH EL PASO COUNTY PLANNING AND COMMUNITY DEVELOPMENT DEPARTMENT (PCD) – INSPECTIONS, PRIOR TO STARTING CONSTRUCTION.			
7. CONTRACTOR SHALL VERIFY THE LOCATION OF ALL EXISTING FACILITIES (ABOVEGROUND AND UNDERGROUND) WITHIN THE PROJECT SITE SUFFICIENTLY AHEAD OF CONSTRUCTION TO PERMIT THE REVISIONS OF THE CONSTRUCTION DRAWINGS IF IT IS FOUND THAT THE ACTUAL LOCATIONS ARE IN CONFLICT WITH THE PROPOSED WORK.				7. IT IS THE CONTRACTOR'S RESPONSIBILITY TO UNDERSTAND THE REQUIREMENTS OF ALL JURISDICTIONAL AGENCIES AND TO OBTAIN ALL REQUIRED PERMITS, INCLUDING BUT NOT LIMITED TO EL PASO COUNTY EROSION AND STORMWATER QUALITY CONTROL PERMIT (ESQCP), REGIONAL BUILDING FLOODPLAIN DEVELOPMENT PERMIT, U.S. ARMY CORPS OF ENGINEERS-ISSUED 401 AND/OR 404 PERMITS, AND COUNTY AND STATE FUGITIVE DUST PERMITS.			
8. ALL WATER AND SANITARY SEWER SERVICE LATERAL LOCATIONS SHALL BE CLEARLY MARKED BY STAMPING AN "S" FOR SEWER AND A "W" FOR WATER ON THE CURB FACE AT EACH SERVICE LATERAL LOCATION. ALL SLEEVE LOCATIONS SHALL BE CLEARLY MARKED BY STAMPING AN "X" ON THE CURB FACE. ALL PRIVATE IRRIGATION SLEEVES SHALL BE MARKED BY STAMPING AN "I" ON THE TOP OF THE SIDEWALK.				8. CONTRACTOR SHALL NOT DEVIATE FROM THE PLANS WITHOUT FIRST OBTAINING WRITTEN APPROVAL FROM THE DESIGN ENGINEER AND PCD. CONTRACTOR SHALL NOTIFY THE DESIGN ENGINEER IMMEDIATELY UPON DISCOVERY OF ANY ERRORS OR INCONSISTENCIES.			
9. BENDS, DEFLECTIONS & CUT PIPE LENGTHS SHALL BE USED TO HOLD HORIZONTAL ALIGNMENT OF SEWER AND WATER LINES TO NO MORE THAN 0.5' FROM THE DESIGNED ALIGNMENT.				9. ALL STORM DRAIN PIPE SHALL BE CLASS III RCP UNLESS OTHERWISE NOTED AND APPROVED BY PCD.			
10. AT ALL LOCATIONS WHERE CAP AND STUB IS NOTED ON DRAWINGS, PROVIDE A PLUG AT THE END OF THE PIPE JOINT NEAREST THE SPECIFIED STATION. PROVIDE A REVERSE ANCHOR AT ALL WATER LINE PLUGS AND BLOW OFFS.				10. CONTRACTOR SHALL COORDINATE GEOTECHNICAL TESTING PER ECM STANDARDS. PAVEMENT DESIGN SHALL BE APPROVED BY EL PASO COUNTY PCD PRIOR TO PLACEMENT OF CURB AND GUTTER AND PAVEMENT.			
11. ALL EXISTING UTILITY MAINS SHALL BE SUPPORTED AND PROTECTED IN PLACE AND FUNCTION CONTINUOUSLY DURING ALL CONSTRUCTION OPERATIONS. SHOULD A MSMD UTILITY FAIL OR BE DAMAGED AS A RESULT OF THE CONSTRUCTION OPERATION, IT SHALL BE REPAIRED IMMEDIATELY BY THE CONTRACTOR PER ALL MSMD SPECIFICATIONS. IN THE EVENT THE CONTRACTOR CANNOT IMMEDIATELY MAKE THE REPAIRS TO THE FAILED OR DAMAGED MSMD UTILITY TO THE SATISFACTION OF MSMD, MSMD MAY REPAIR OR CAUSE THE REPAIR AND BACK CHARGE ALL SUCH COSTS TO THE CONTRACTOR.				11. ALL CONSTRUCTION TRAFFIC MUST ENTER/EXIT THE SITE AT APPROVED CONSTRUCTION ACCESS POINTS.			
12. THE CONTRACTOR SHALL REPLACE OR REPAIR ANY AND ALL DAMAGE CAUSED BY THE CONTRACTOR DURING CONSTRUCTION ACTIVITIES TO ALL ABOVE OR BELOW GROUND IMPROVEMENTS, INCLUDING BUT NOT LIMITED TO FENCES, LANDSCAPING, CURB, GUTTER, SIDEWALK, ASPHALT, ELECTRIC SYSTEMS, GAS SYSTEMS, TELEPHONE/TELEVISION SYSTEMS, ETC.				12. SIGHT VISIBILITY TRIANGLES AS IDENTIFIED IN THE PLANS SHALL BE PROVIDED AT ALL INTERSECTIONS. OBSTRUCTIONS GREATER THAN 18 INCHES ABOVE FLOWLINE ARE NOT ALLOWED WITHIN SIGHT TRIANGLES.			
13. A PRECONSTRUCTION CONFERENCE MEETING SHALL BE HELD AT THE PROJECT SITE A MINIMUM OF 7 DAYS BEFORE CONSTRUCTION BEGINS AND SHALL BE ATTENDED BY ALL REPRESENTATIVES RESPONSIBLE FOR CONSTRUCTION, INSPECTION, SUPERVISION, TESTING AND ALL OTHER ASPECTS OF THE WORK. THE CONTRACTOR SHALL NOTIFY MSMD AND ALL AFFECTED UTILITY COMPANIES ADJACENT TO THE PROPOSED UTILITY CONSTRUCTION A MINIMUM OF 48 HOURS AND A MAXIMUM OF 96 HOURS PRIOR TO THE START OF CONSTRUCTION FOR SCHEDULING. THE CONTRACTOR SHALL SCHEDULE BI-WEEKLY CONSTRUCTION MEETINGS AT THE PROJECT SITE OR MORE FREQUENTLY AS DEEMED NECESSARY BY MSMD.				13. SIGNING AND STRIPING SHALL COMPLY WITH EL PASO COUNTY DEPARTMENT OF PUBLIC WORKS AND MUTCD CRITERIA. [IF APPLICABLE, ADDITIONAL SIGNING AND STRIPING NOTES WILL BE PROVIDED.]			
14. PRELIMINARY ACCEPTANCE SHALL BE DEFINED AS THE POINT IN TIME THAT MSMD ACCEPTS THE FACILITY FOR USE AND ALL SURFACE IMPROVEMENTS AND RESTORATIONS ARE COMPLETED.				14. CONTRACTOR SHALL OBTAIN ANY PERMITS REQUIRED, INCLUDING WORK WITHIN THE RIGHT-OF-WAY AND SPECIAL TRANSPORT PERMITS BY EL PASO COUNTY DEPARTMENT OF PUBLIC WORKS.			
15. FINAL ACCEPTANCE BY MSMD OF ANY UTILITY LINE OR SYSTEM SHALL NOT OCCUR UNTIL COMPLETION OF FINAL ASPHALT LAYERS AND/OR FINAL COMPLETION AND/OR RESTORATION OF ALL SURFACE IMPROVEMENTS. THE WARRANTY PERIOD FOR ALL FACILITIES SHALL BE 12 MONTHS COMMENCING WITH FINAL ACCEPTANCE. MSMD MAY REQUIRE RETESTING OF THE UTILITY SYSTEM PRIOR TO FINAL ACCEPTANCE.				15. THE LIMITS OF CONSTRUCTION SHALL REMAIN WITHIN THE PROPERTY LINE UNLESS OTHERWISE NOTED. THE OWNER/DEVELOPER SHALL OBTAIN WRITTEN PERMISSION AND EASEMENTS, WHERE REQUIRED, FROM ADJOINING PROPERTY OWNER(S) PRIOR TO ANY OFF-SITE DISTURBANCE, GRADING, OR CONSTRUCTION.			
16. INSPECTION FEES: CALL MSMD FOR FEE SCHEDULE OR VIEW AT WWW.MERIDIANRANCHMETRO.ORG.							
17. ALL COMMERCIAL/BUSINESS DEVELOPMENTS SHALL HAVE A MINIMUM EIGHT INCH DIAMETER WATER MAIN LOOPED THROUGH THE PROPOSED PROPERTY WITH GATE VALVES LOCATED WHERE THE MAIN ENTERS AND EXITS THE PROPERTY AND A MINIMUM EIGHT INCH SANITARY SEWER MAIN WITH A MANHOLE IN THE STREET WHERE THE MAIN ENTERS THE PROPERTY. THE EXTENT OF THE MAINS SHALL BE MARKED WITH THE APPROPRIATELY COLORED CARSONITE MARKERS AND TRACER WIRE.							
18. AFTER REVIEW AND APPROVAL OF PLANS FOR THE EXTENSION OF LINES, FACILITIES, AND/OR SERVICES, CONSTRUCTION MUST BE COMPLETED WITHIN 18 MONTHS FOR RESIDENTIAL SUBDIVISIONS AND 12 MONTHS FOR ANY COMMERCIAL INSTALLATIONS. IF WORK IS NOT COMPLETED WITHIN THIS TIME FRAME AND NO EXTENSION HAS BEEN GIVEN, THEN ALL PLANS MUST BE RE-SUBMITTED TO MSMD FOR REVIEW (WITH NEW FEES PAID) AND APPROVAL.							
19. PUMPING OR BYPASS OPERATIONS SHALL BE REVIEWED AND APPROVED BY MSMD AND THE ENGINEER OF RECORD PRIOR TO EXECUTION.							
20. ANY FACILITIES OUTSIDE OF PAVED ROADS MUST BE MARKED APPROPRIATELY WITH CARSONITE MARKERS AT EACH VALVE, MANHOLE, TEST STATION, AND ANY OTHER FACILITIES MSMD DEEMS NECESSARY.							
SANITARY SEWER NOTES							
21. SANITARY SEWER MANHOLES WITH ONE ENTRANCE PIPE SHALL BE A MINIMUM OF FOUR (4) FOOT IN DIAMETER, ALL OTHERS SHALL BE A MINIMUM OF FIVE (5) FOOT IN DIAMETER. ALL MANHOLE JOINT EXTERIORS SHALL BE WRAPPED WITH MINIMUM 12" WIDE CON-SEAL CS-212 APPLIED OVER APPROPRIATE MSMD APPROVED JOINT PRIMER. THE WHOLE EXTERIOR OF THE MANHOLES SHALL BE COATED WITH CONCRETE WATER PROOFING TAP APPLIED PER CSUS.							
22. ALL SANITARY SEWER MAINS, SANITARY SEWER LATERALS, AND WATER MAIN LINES (PVC & DUCTILE IRON) SHALL BE INSTALLED WITH COATED 12 GAUGE U.F. TRACER WIRE PER MSMD SPECIFICATIONS. SANITARY SEWER TRACER WIRE SHALL BE EXTENDED INTO THE MANHOLES AND WRAPPED AROUND THE TOP STEP OF THE MANHOLE AND EXTENDED TO EACH SANITARY SEWER LATERAL 2" X 4" MARKER AS NOTED BELOW (NOTE 26 AND 28). EXTEND TRACER WIRE TO THE TOP OF WATER VALVE BOXES A MINIMUM OF EVERY 500 FEET.							
23. TESTING OF FACILITIES:							
a. THE CONTRACTOR SHALL NOTIFY MSMD A MINIMUM OF 48 HOURS AND A MAXIMUM OF 96 HOURS PRIOR TO THE START OF ANY TESTING TO ALLOW MSMD STAFF TO BE PRESENT AT ALL TIMES DURING TESTING. ALL TESTING SHALL BE PER MSMD SPECIFICATIONS OR CSUS, WHICHEVER IS GREATER.							
b. ALL SANITARY SEWER FACILITIES SHALL MEET THE FOLLOWING TESTING REQUIREMENTS:							
• ALL SANITARY SEWER MAIN SHALL BE PRESSURE TESTED PER CSUS.							
• ALL SEWER MAIN SHALL BE PROPERLY BALLED/MANDRILL.							
• ALL SANITARY SEWER MANHOLES SHALL BE VACUUM TESTED PER CSUS.							
• ALL SANITARY SEWER MAINS SHALL BE CCTV INSPECTED WITH TWO VIDEOS ON DVDS SUBMITTED TO MSMD FOR REVIEW AND APPROVAL. ALL SANITARY SEWER MAINS SHALL BE JET CLEANED AND FLUSHED DIRECTLY PRIOR TO CCTV INSPECTION WITH RUNNING WATER IN THE SANITARY SEWER MAIN DURING THE CCTV INSPECTION. SANITARY SEWER MAINS THAT DO NOT MEET MSMD STANDARDS SHALL BE REPLACED AND OR REPAIRED AS NECESSARY AND RE-TESTED.							
24. COMMENCEMENT OF USE OF ANY SANITARY SEWER LINES AND/OR SYSTEMS. NO SANITARY SEWER FACILITY SHALL BE PLACED IN SERVICE UNTIL:							
a. MSMD HAS APPROVED ALL TESTS AND COMPACTION TESTING REPORTS, AS-BUILT DRAWINGS AND REVIEWS ARE SUBMITTED TO AND APPROVED BY MSMD.							
b. ALL SANITARY SEWER LINES ARE COMPLETED AND THE FIRST LIFT OF ASPHALT IS COMPLETED OVER THE LINE. IN THE CASE WHERE NO ASPHALT IS TO BE PLACED OVER THE LINE, ANY REQUIRED SURFACE IMPROVEMENTS SHALL BE COMPLETED PRIOR TO USE OF THE FACILITY.							
c. ALL NECESSARY EASEMENTS (PLATTED OR DEEDED) ARE DEDICATED, EXECUTED TO MSMD, AND RECORDED.							
d. DOWNSTREAM PLUG CAN BE REMOVED ONCE FIRST LIFT OF ASPHALT IS DOWN AND THE ABOVE REQUIREMENTS ARE MET.							
25. WHEN A RESIDENTIAL SEWER SERVICE IS INSTALLED ON AN EXISTING SEWER MAIN A DOUBLE STRAP STAINLESS STEEL SADDLE TEE SHALL BE USED. THE SADDLE TEE, GASKET HUB & GASKET SKIRT MUST BE A STRAIGHT STYLE CONNECTION; NO "Y" STYLE WILL BE ALLOWED. ALL SEWER SERVICE CORE CUTOUTS MUST BE RECOVERED AND RETURNED TO THE DISTRICT FOR INSPECTION. IF ALL SEWER SERVICE CORE CUTOUTS ARE RECOVERED AND COMPLETE, THEN NO VIDEO INSPECTION OF THAT PORTION OF THE SEWER MAIN IS REQUIRED. IF ANY SEWER SERVICE CORE CUTOUT OR PORTION THERE FROM IS NOT RECOVERED, THAT SECTION OF SEWER MAIN SHALL BE CLEANED AND VIDEO INSPECTED TO ENSURE THAT THE SEWER SERVICE CORES OR PORTION THERE FROM IS RECOVERED.							
26. SANITARY SEWER MAIN LENGTHS ARE MH CENTER TO MH CENTER. ALL SANITARY SEWER PIPES SHALL BE SDR 35 PVC OR EQUAL AND HAVE A MINIMUM COVER DEPTH OF 5'-6" INSTALLED WITH A COATED 12 GAUGE U.F. TRACER WIRE. USE PRE-MANUFACTURED IN-LINE PVC PUSH-ON WYES FOR SANITARY SEWER LATERAL CONNECTIONS TO THE SANITARY SEWER MAIN. TAPPING SADDLES MAY ONLY BE USED FOR TAPPING PRE-EXISTING SANITARY SEWER MAINS. ALL LOTS SHALL RECEIVE A 4" SANITARY SEWER SERVICE LATERAL. THE END OF EACH SANITARY SEWER SERVICE LATERAL SHALL BE "LOCATED" WITH A WOOD 2" X 4" EXTENDED 4' ABOVE FINISH GRADE FROM THE END OF THE SERVICE LOCATION AND PAINTED GREEN ABOVE FINISH GRADE. EXTEND THE COATED 12 GAUGE U.F. TRACER WIRE TO THE END OF EACH SANITARY SEWER LATERAL UP TO THE SURFACE COILED AROUND THE 2" X 4" MARKER. ALL TRACER WIRE CONNECTIONS SHALL BE WATER TIGHT STYLE OF APPROVED ELECTRICAL CONNECTORS SUCH AS A DBY (DIRECT BURY YELLOW) OR EQUAL.							
WATER NOTES							
27. ALL WATER MAIN PIPES SHALL BE AWWA C900 PVC, PRESSURE CLASS 200 OR MSMD APPROVED EQUAL, INSTALLED PER MANUFACTURERS' SPECIFICATIONS. ALL WATER MAIN FITTINGS SHALL HAVE MECHANICAL RESTRAINTS AND THRUST BLOCKS. ALL WATER MAIN PIPES SHALL HAVE A MINIMUM COVER DEPTH OF 5'-6" INSTALLED WITH A COATED 12 GAUGE U.F. TRACER WIRE.							
28. ALL LOTS SHALL RECEIVE A MINIMUM 3/4 " DIAMETER HDPE OR COPPER WATER SERVICE INSTALLED PER APPROVED PLANS CSUS AND MSMD SPECIFICATIONS. HDPE WATER SERVICE SHALL BE HDPE SDR-7 PE4710 RATED FOR 200 PSI WITH THE MARKING SDR-7, AWWA C901, NSF61 PE4710. WATER SERVICES SHALL BE INCREASED IN SIZE TO 1" DIAMETER WHERE THE RESIDENTIAL SERVICE WATER PRESSURE IS LESS THAN 40 PSI AT 10 GPM DEMAND AND ALL 1/3 ACRE OR GREATER LOTS SHALL RECEIVE A MINIMUM 1" DIAMETER WATER SERVICE AS INDICATED ON THE PLANS. THE CURB STOP VALVE AND BOX AT THE END OF EACH WATER SERVICE SHALL BE "LOCATED" WITH A 2" X 4" PIECE OF WOOD EXTENDED 4' ABOVE FINISH GRADE, PAINTED BLUE, DIRECTLY BEHIND THE CURB STOP VALVE AND BOX. ALL TRACER WIRE CONNECTIONS SHALL BE MADE WITH DBY (DIRECT BURY YELLOW) WATER TIGHT STYLE ELECTRICAL CONNECTORS OR EQUAL.							
29. IF HDPE WATER SERVICES ARE TO BE USED THEY SHALL INCLUDE A ROMAC 202 NS OR EQUAL TAPPING SADDLE AND A CURB STOP VALVE INSIDE A CURB STOP BOX AT THE END OF THE WATER SERVICE. ALL CORPORATION STOPS SHALL BE AY MCDONALD MODEL NUMBER 74701B-33 FOR SDR HDPE SAME SIZE AS THE WATER SERVICE. ALL CURB STOP VALVES SHALL BE ¾" AY MCDONALD MODEL NUMBER 76100 (FLARE X FLARE) OR EQUIVALENT WITH A MAIN SIDE ONE PACK JOINT (PEP) ADAPTOR AY MCDONALD MODEL NUMBER 74755-33 UNLESS OTHERWISE NOTED ON THE PLANS. ALL 1" DIAMETER WATER SERVICES SHALL RECEIVE A 1" INLET BY ¾" OUTLET CURB STOP VALVE.							
30. IF COPPER WATER SERVICES ARE TO BE USED THEY SHALL INCLUDE A ROMAC 202 BS OR EQUAL TAPPING SADDLE AND A CURB STOP VALVE INSIDE A CURB STOP BOX AT THE END OF THE WATER SERVICE. ALL CURB STOP VALVES SHALL BE ¾" UNLESS OTHERWISE NOTED ON THE PLANS. ALL 1" DIAMETER WATER SERVICES SHALL RECEIVE A 1" INLET BY ¾" OUTLET CURB STOP VALVE MANUFACTURED BY AY MCDONALD MODEL NUMBER 6104 (FLARE X FLARE) OR EQUIVALENT.							
31. ALL POTABLE WATER VALVES SHALL OPEN CLOCKWISE WITH THE VALVE OPERATING NUT INSTALLED LOW NEAR THE MAIN LINE AND PAINTED RED. ALL POTABLE AND RAW WATER VALVES NOT WITHIN PAVED STREETS SHALL BE MARKED WITH CARSONITE MARKERS. ALL RAW WATER VALVES SHALL OPEN COUNTERCLOCKWISE WITH THE VALVE OPERATING NUT INSTALLED HIGH WITHIN 1' FROM THE SURFACE AND PAINTED BLACK.							
32. ALL POTABLE WATER, RAW WATER AND NON-POTABLE WATER VALVES 14" OR GREATER SHALL BE BUTTERFLY VALVES WITH A SIDE OPERATING NUT. THE OPERATIONAL DEPTH OF THE POTABLE WATER VALVES SHALL NOT EXCEED 6' IN OVERALL DEPTH NOR SHALL IT BE CLOSER TO THE SURFACE THEN 4'							
33. FIRE HYDRANT LOCATIONS SHALL BE REVIEWED AND APPROVED BY THE APPLICABLE FIRE DEPARTMENT AUTHORITY.							
34. FIRE HYDRANTS SHALL BE AVK MODEL 2780 NOSTALGIC (PART # 27ND-023XX-0010B-AN) OPEN RIGHT WITH A 1 ½" PENTAGON OPERATING NUT AND SERVICE CAPS, STANDARD 4 1/2" PUMPER NOZZLE WITH A THREAD PATTERN OF 5 - 3/8" - 6 TPI (THREADS PER INCH) ALONG WITH TWO STANDARD 2 ½" NST (NATIONAL STANDARD THREAD) SIDE NOZZLES. HYDRANT SHALL BE PAINTED WITH RUSTOLEUM SAFETY YELLOW.							
35. ALL DUCTILE IRON PIPES, FITTINGS, VALVES AND FIRE HYDRANTS SHALL BE WRAPPED WITH POLYETHYLENE TUBING, DOUBLE BONDED AT EACH JOINT AND ELECTRICALLY ISOLATED. BONDING AND ANODE CONNECTIONS SHALL BE THOROUGHLY COATED WITH BITUMINOUS COATINGS.							
36. ALL DUCTILE IRON PIPE AND FITTINGS LESS THAN 12 INCHES IN DIAMETER SHALL HAVE CATHODIC PROTECTION USING TWO NO. 6 WIRES WITH 17 LB. MAGNESIUM ANODES EVERY 400 FEET AND 9 LB. MAGNESIUM ANODES AT EACH FITTING. ALL DUCTILE IRON PIPE AND FITTINGS 12 INCHES AND GREATER SHALL HAVE CATHODIC PROTECTION USING TWO NO. 6 WIRES WITH 17 LB. MAGNESIUM ANODES EVERY 300 FEET AND 9 LB. MAGNESIUM ANODES AT EACH FITTING. CATHODIC PROTECTION AND ANODES SHALL BE INSTALLED PER MSMD SPECIFICATIONS.							
37. ALL EXISTING WATER UTILITY MATERIAL REMOVED AS PART OF THE WORK ON THESE DRAWINGS SHALL BE RETURNED TO MSMD AS REQUESTED.							
38. TESTING OF FACILITIES:							
a. THE CONTRACTOR SHALL NOTIFY MSMD A MINIMUM OF 48 HOURS AND A MAXIMUM OF 96 HOURS PRIOR TO THE START OF ANY TESTING TO ALLOW MSMD STAFF TO BE PRESENT AT ALL TIMES DURING TESTING. ALL TESTING SHALL BE PER MSMD SPECIFICATIONS OR CSUS, WHICHEVER IS GREATER.							
b. ALL SECTIONS OF WATER LINES MUST FIRST PASS A CHLORINE TEST WITH A MINIMUM OF 50 PARTS PER MILLION OF RESIDUAL AFTER 24 HOURS. THE WHOLE SECTION OF LINE BEING TESTED MUST BE RE-CHLORINATED AND RE-TESTED IF IT DOES NOT PASS. ONCE THE SECTION OF LINE BEING TESTED PASSES THE CHLORINE TEST THE LINE MUST BE FLUSHED AND BAC-T TESTED PER CSUS. ONCE THE BAC-T TEST PASSES, THE SECTION OF LINE MAY BE PRESSURE TESTED. WATER FLUSHED FROM THE WATER SYSTEM MUST BE PROPERLY DE-CHLORINATED DURING THE FLUSHING PROCESS.							
c. ALL SECTIONS OF WATER LINES MUST PASS A TWO HOUR 200 PSI HYDROSTATIC PRESSURE TEST. THE PRESSURE SHALL NOT DECREASE BY MORE THAN 5 PSI DURING THE DURATION OF THE TEST. NO WATER SHALL BE ADDED DURING THE PRESSURE TEST. IF THE PRESSURE TEST FAILS, THE SECTIONS OF LINE THAT FAILED MUST AGAIN PASS THE CHLORINE TEST, BE FLUSHED, AND PASS THE BAC-T TEST PRIOR TO CONDUCTING A NEW PRESSURE TEST.							
d. ONCE WATER SERVICES ARE INSTALLED A SECOND WATER PRESSURE TEST MUST BE DONE TO A WORKING PSI OF 150 PSI FOLLOWING THE ABOVE TESTING STANDARDS.							
e. SECTIONS OF WATER LINES SHALL BE LEFT PRESSURIZED ONCE THE WATER LINES HAVE PASSED ALL TESTING DURING THE REMAINING CONSTRUCTION ACTIVITIES.							
39. COMMENCEMENT OF USE OF WATER LINES AND/OR SYSTEMS. NO WATER FACILITY SHALL BE PLACED IN SERVICE UNTIL:							
a. MSMD HAS APPROVED ALL TESTS AND COMPACTION TESTING REPORTS, AND AS-BUILT DRAWINGS ARE SUBMITTED TO AND APPROVED BY MSMD.							
b. ALL WATER LINES ARE COMPLETED AND THE FIRST LIFT OF ASPHALT IS COMPLETED OVER THE LINE. IN THE CASE WHERE NO ASPHALT IS TO BE PLACED OVER THE LINE, SURFACE IMPROVEMENTS SHALL BE COMPLETED PRIOR TO USE OF THE FACILITY.							
c. ALL EASEMENTS (PLATTED OR DEEDED) ARE DEDICATED, EXECUTED TO MSMD, AND RECORDED.							
40. ANY WATER SHUT DOWNS THAT NEED TO OCCUR ON THE CRITICAL LINES AS DEFINED BY THE MSMD SOP (STANDARD OPERATION PROCEDURE) MANUAL SHALL BE COORDINATED WITH MSMD STAFF FOR NIGHT TIME SHUT DOWNS.							
41. THE CONTRACTOR SHALL MAKE ALL NECESSARY CONNECTIONS TO EXISTING WATER MAINS WITHOUT A SHUTDOWN OF THE WATER SYSTEM. IN THE EVENT THAT A SHUTDOWN OF A WATER SYSTEM IS NECESSARY, THE CONTRACTOR SHALL ACQUIRE A PERMIT FROM MSMD.							
42. ALL NON-POTABLE WATER MAINS SHALL BE AWWA NON-POTABLE STANDARD (PURPLE PIPE) C900 PVC, PRESSURE CLASS 200 OR MSMD APPROVED EQUAL, INSTALLED PER MANUFACTURERS' SPECIFICATIONS. ALL WATER MAIN FITTINGS SHALL HAVE MECHANICAL RESTRAINTS AND THRUST BLOCKS. ALL WATER MAIN PIPES SHALL HAVE A MINIMUM COVER DEPTH OF 5'-6" INSTALLED WITH A COATED 12 GAUGE U.F. TRACER WIRE.							
43. ALL NON- POTABLE WATER VALVES SHALL OPEN COUNTER CLOCKWISE WITH A VALVE EXTENSION, EXTENDING TO WITHIN 1' OF THE SURFACE AND PAINTED PURPLE WITH AN OPEN DIRECTION ARROW.							
44. IRRIGATION SERVICES SHALL HAVE A STOP AND WASTE CURB STOP VALVE INSTALLED ALONG WITH A TRACER WIRE EXTENDING BACK TO THE MAIN LINE.							
THE ABOVE GUIDELINES ARE SUBJECT TO CHANGE AT ANY TIME.							
							
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)							

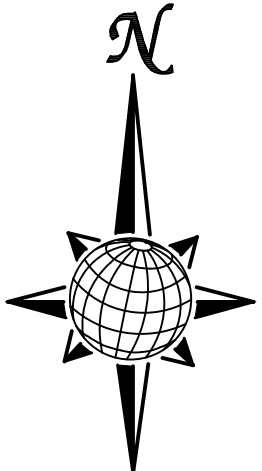
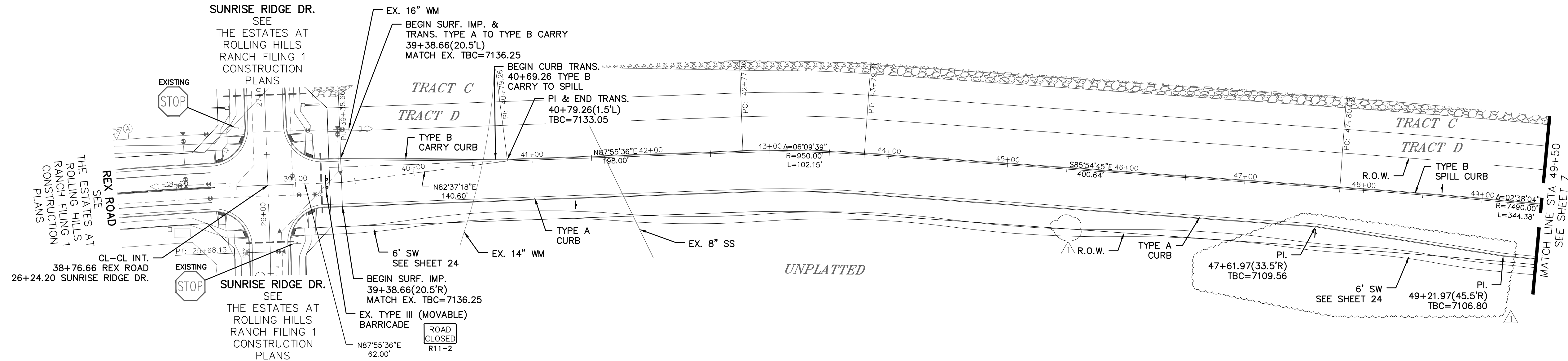
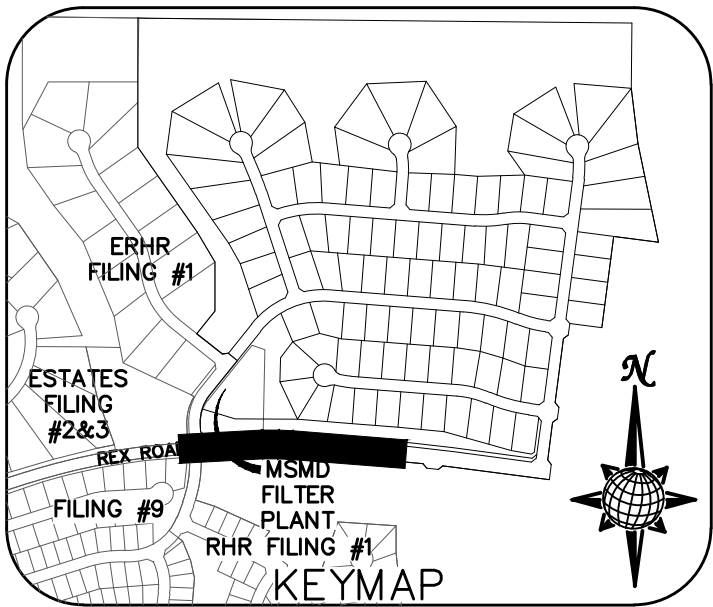


EXOTHERMIC WELD PROCESS

	Scale AS SHOWN	Drawn by LCG	THE ESTATES AT ROLLING HILLS RANCH FILING 2 STREET AND UTILITY PLANS DETAIL SHEET	 MERIDIAN RANCH	TECH CONTRACTORS 11886 STAPLETON DRIVE FALCON, CO 80831 TELEPHONE: 719.495.7444 FAX: 719.495.2457	1	LIGHT POLES, SS SERVICIES, WATER SERVICES, REAR ROAD & 12" WM (SH 1,2,6,7,8,9,10,11,12,14,15,16,18,22,24,26,27,28,30,31,34,35,36,38)	9/3/2021	LCG		
		Checked by TAK				2					
	5 of 44	Date SEPT 2020				3					
						No.	Revisions	Date	Invt.	Appr.	Date

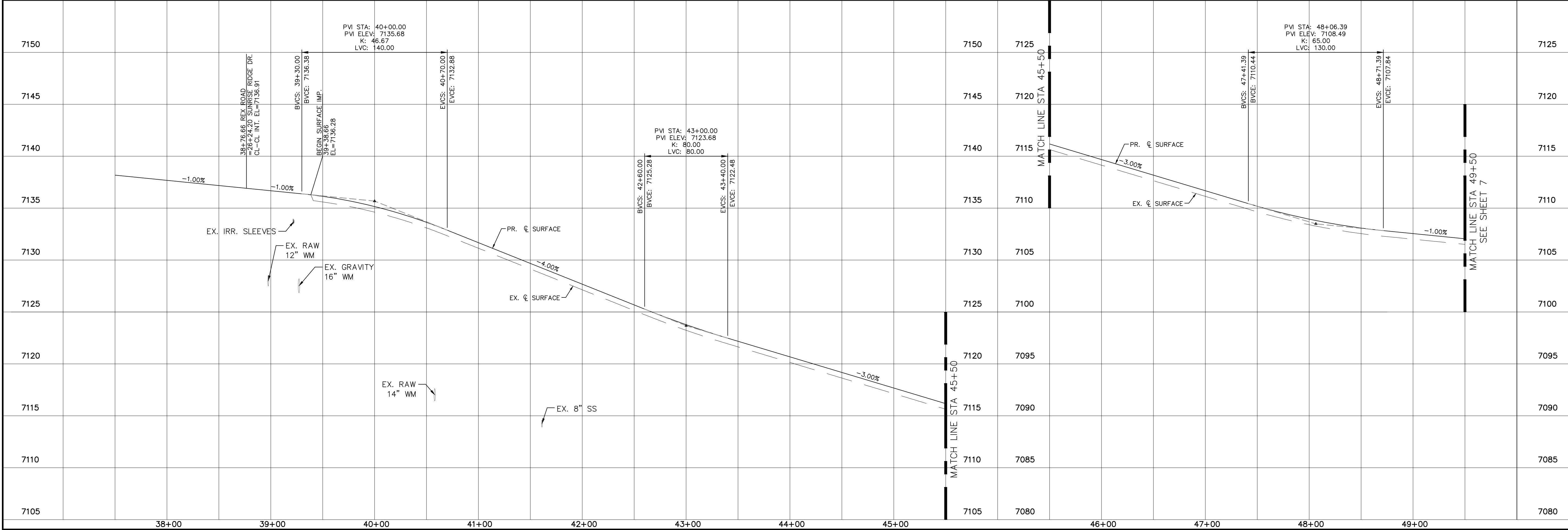


TWO WORKING DAYS
**BEFORE YOU DIG
CALL 811**
OR
UTILITY NOTIFICATION CENTER OF COLORADO
1-800-922-1987
(SEE COVER FOR LIST OF UTILITY CONTACTS)

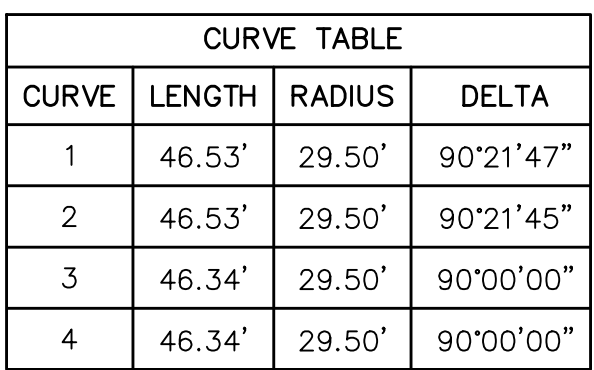
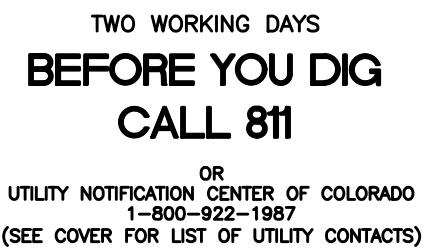


REX ROAD

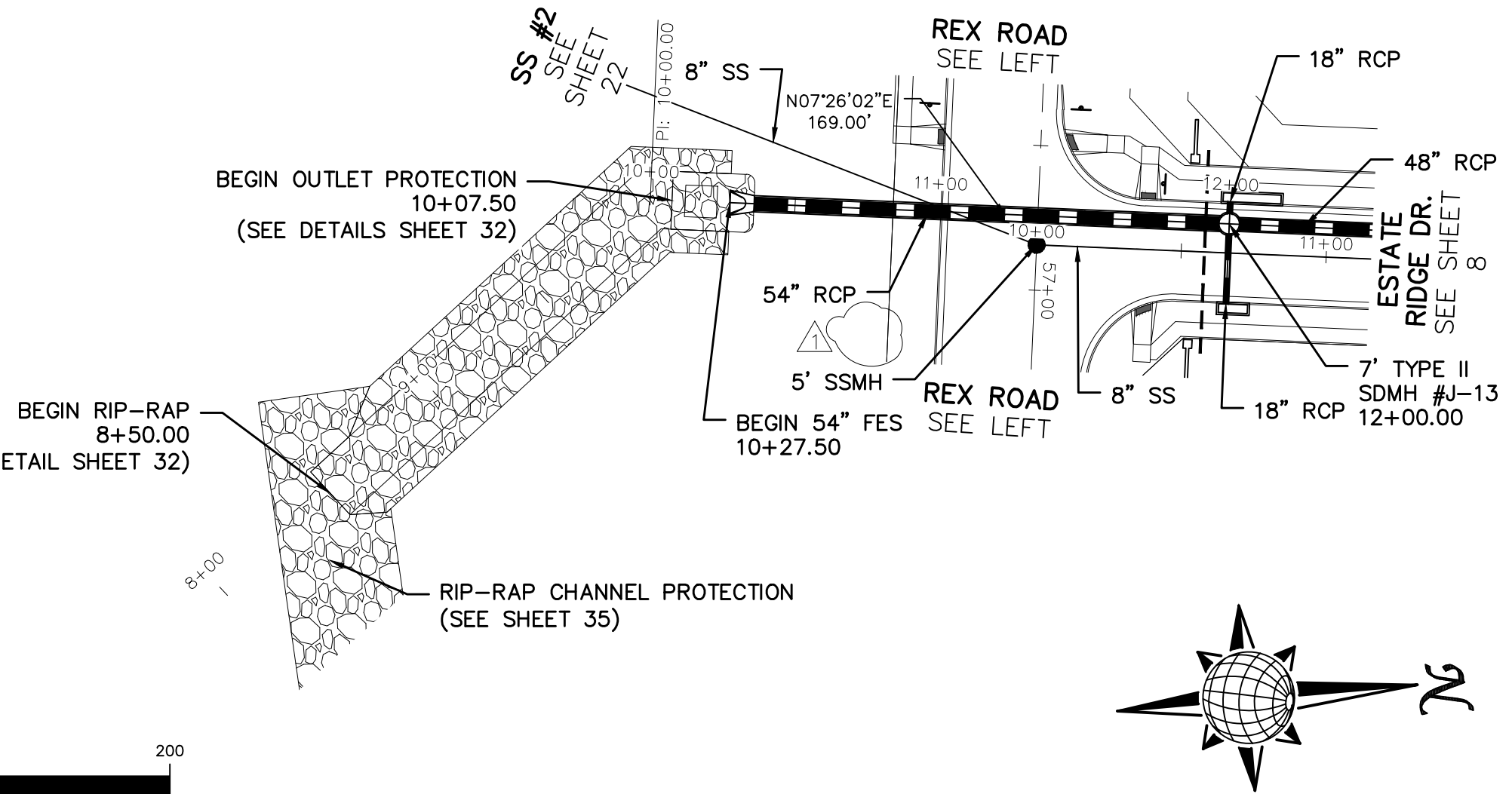
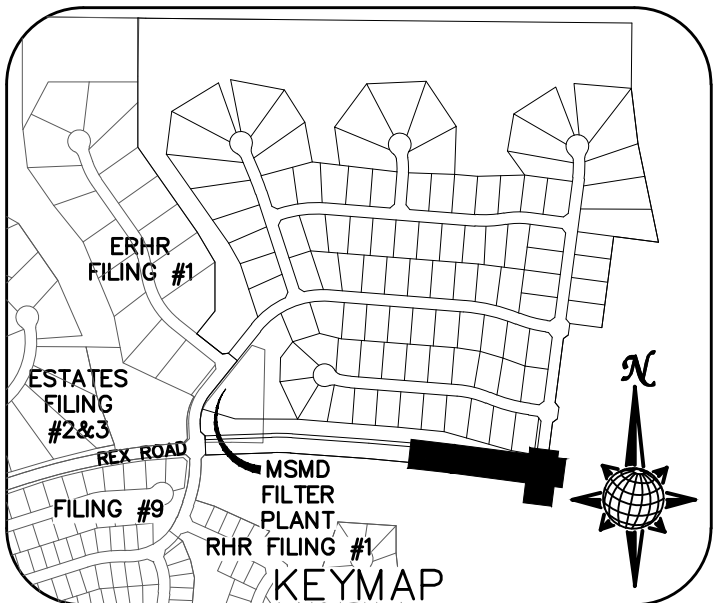
TEMP. MINOR ARTERIAL
80' WIDE RIGHT OF WAY, 31' WIDE ASPHALT PAVEMENT (EDGE TO EDGE)



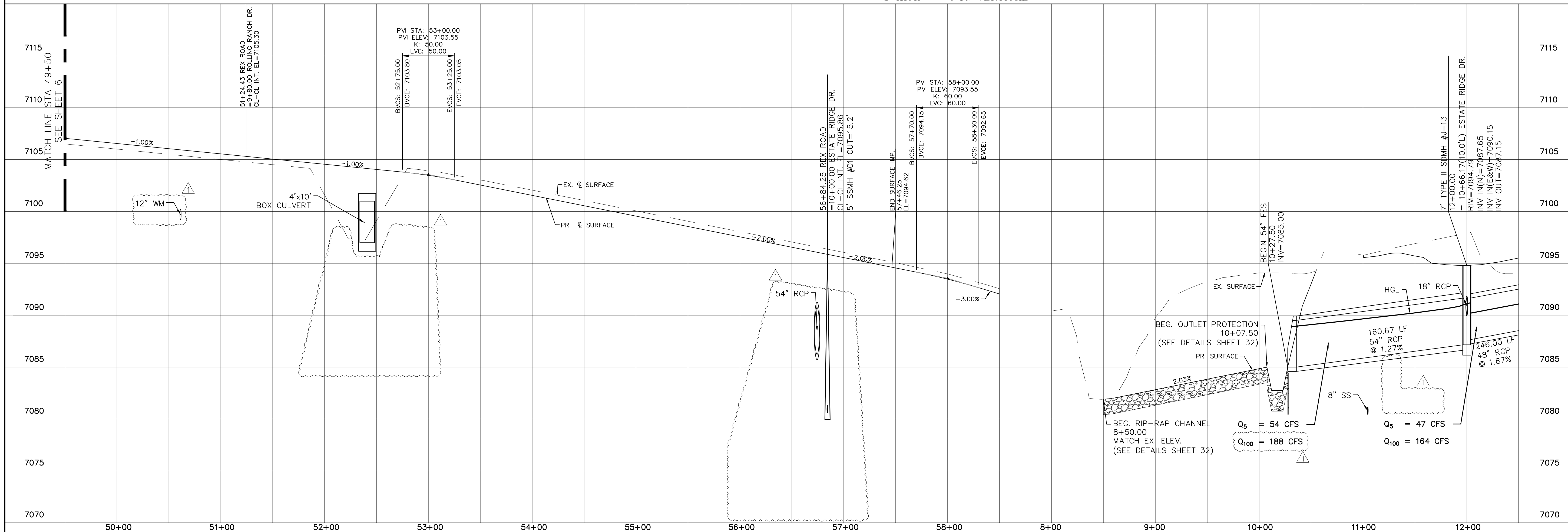
Scale AS SHOWN		6 of 44		Drawn by LOG		THE ESTATES AT ROLLING HILLS RANCH FILING 2 STREET AND UTILITY PLANS REX ROAD		 MERIDIAN RANCH		TECH CONTRACTORS 11886 STAPLETON DRIVE FALCON, CO 80831 TELEPHONE: 719.495.7444 FAX: 719.495.2457		1 LIGHT POLES SS SEREVIES WATER SERVICES REX ROAD 8' 12' WM (S+1.2, 6.7, 8.3, 10.1, 11.2, 14.1, 15.1, 16.2, 22.3, 24.2, 26.2, 27.2, 28.3, 31.3, 34.3, 35.3, 38)		9/13/2021		LOG					
				Checked by TAK								2									
				Date		SEPT 2020						3									
												No.		Revisions		Date		Invt.		Date	





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



STORM #1



	Scale AS SHOWN	Drawn by	THE ESTATES AT ROLLING HILLS RANCH FILING 2 STREET AND UTILITY PLANS REX ROAD + STORM #1	 MERIDIAN RANCH	TECH CONTRACTORS 11886 STAPLETON DRIVE FALCON, CO 80831 TELEPHONE: 719.495.7444 FAX: 719.495.2457	1	LIGHT POLES SS SERVISES WATER SERVICES REX ROAD & 12 TH WM (SH 12.67,8.9,10,11,12,14,15,16,22,24,26,27,28,29,30,31,34,35,36,38)	9/3/2021	LOG		
		Checked by				2					
		Date				3					
		7 of 44	SEPT 2020			No.	Revisions	Date	Invt.	Appr.	Date

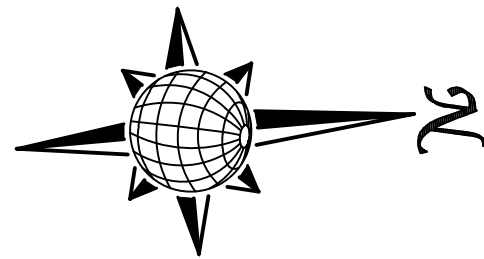


TWO WORKING DAYS
**BEFORE YOU DIG
CALL 811**

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

CURVE TABLE			
CURVE	LENGTH	RADIUS	DELTA
3	46.34'	29.50'	90°00'00"
4	46.34'	29.50'	90°00'00"
5	30.63'	19.50'	90°00'00"
8	30.63'	19.50'	90°00'00"
9	30.63'	19.50'	90°00'00"
10	30.63'	19.50'	90°00'00"
11	30.63'	19.50'	90°00'00"
12	30.63'	19.50'	90°00'00"

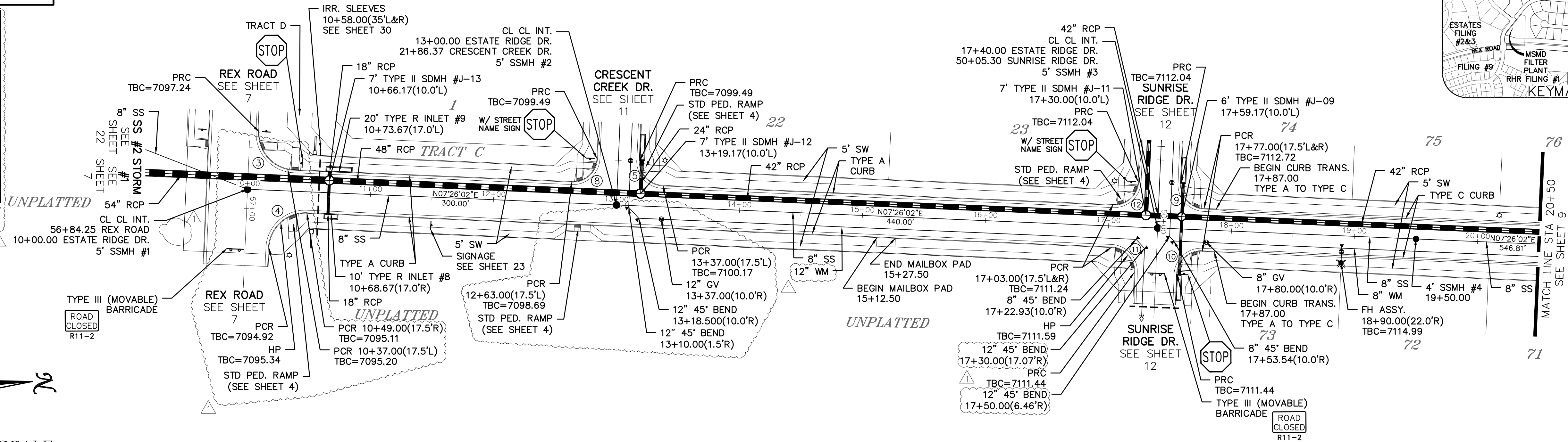
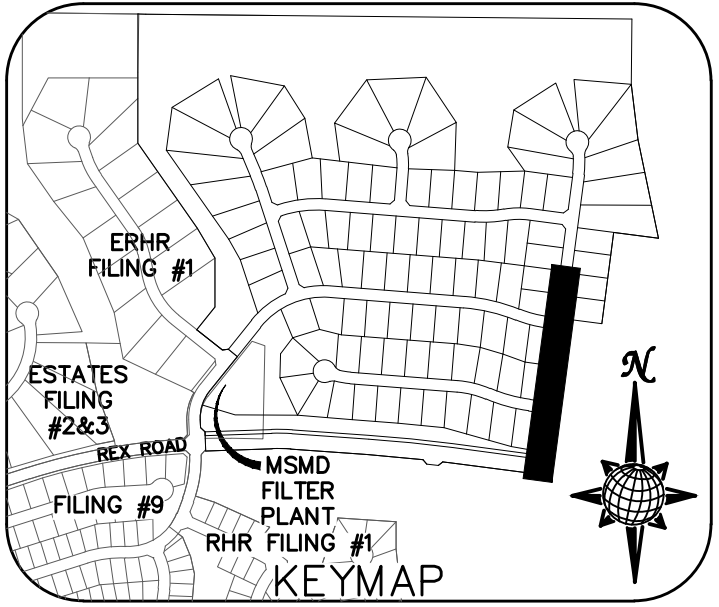
ALL CURB RADII ARE TO TOP BACK OF CURB (TYP.)



GRAPHIC SCALE

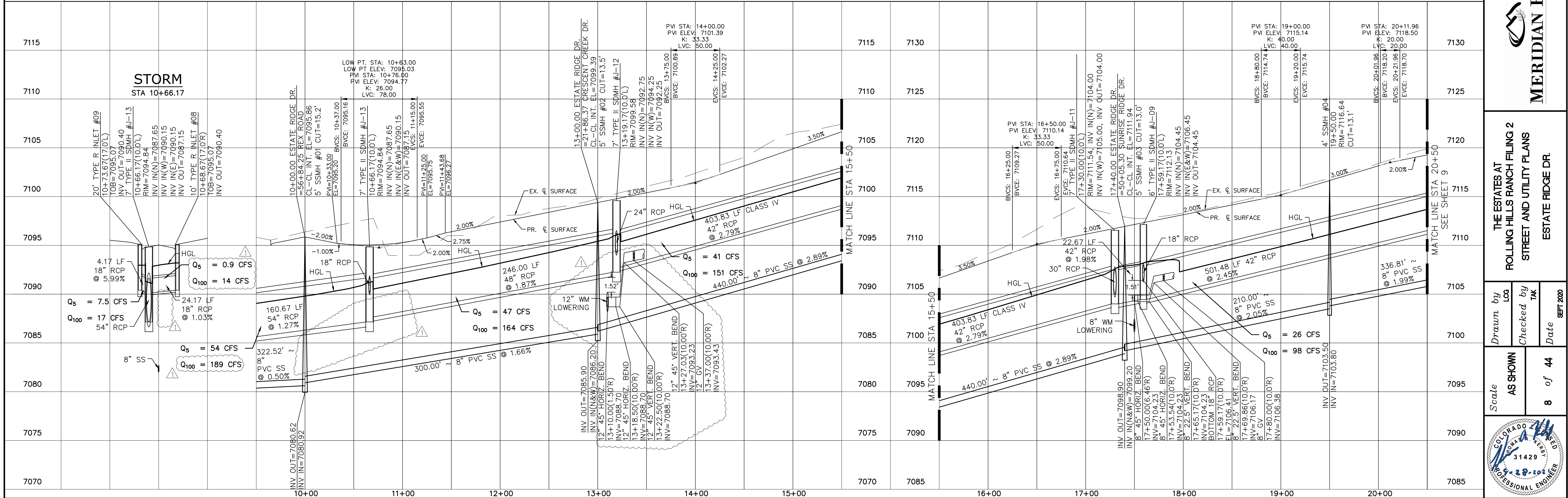


1 inch = 50 ft.
1 inch = 5 ft. VERTICAL



ESTATE RIDGE DR.

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



Log	Date	Init.	Appr.
9/13/2021			

No.	Revisions
1	
2	
3	

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

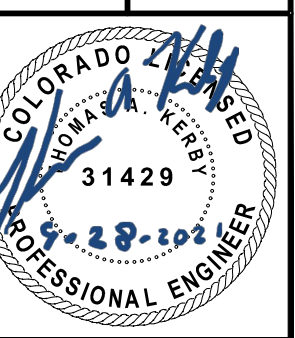


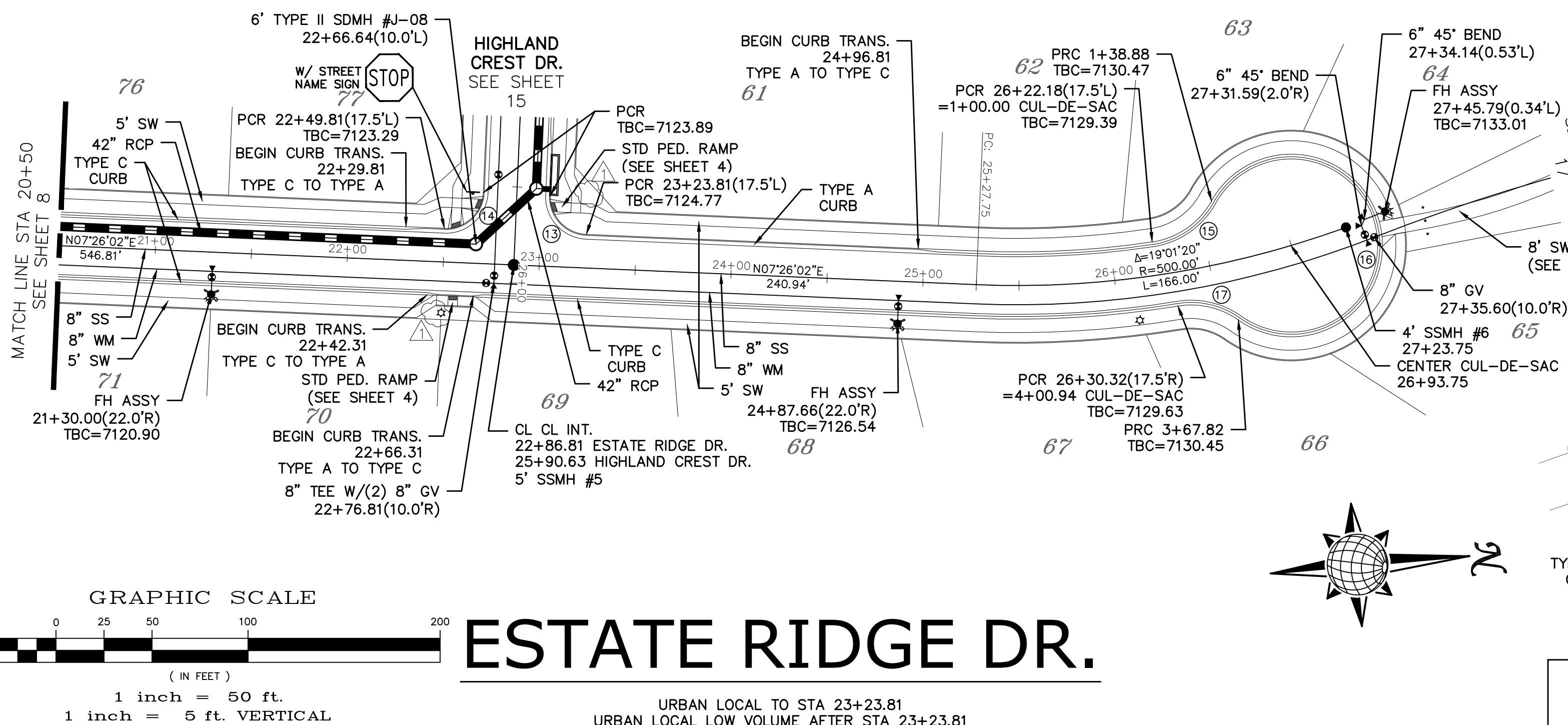
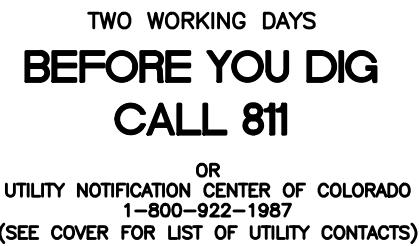
MERIDIAN RANCH

THE ESTATES AT
ROLLING HILLS RANCH FILING 2
STREET AND UTILITY PLANS
ESTATE RIDGE DR.

Drawn by	Log	Checked by	TAK	Date
				SEPT 2020

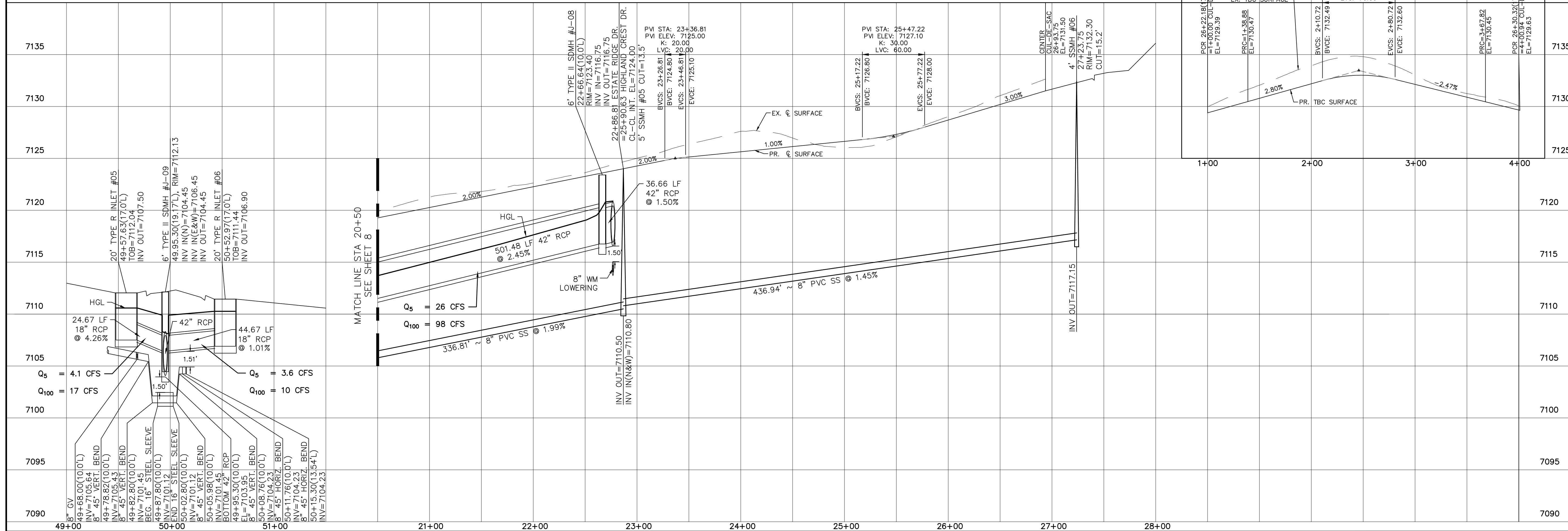
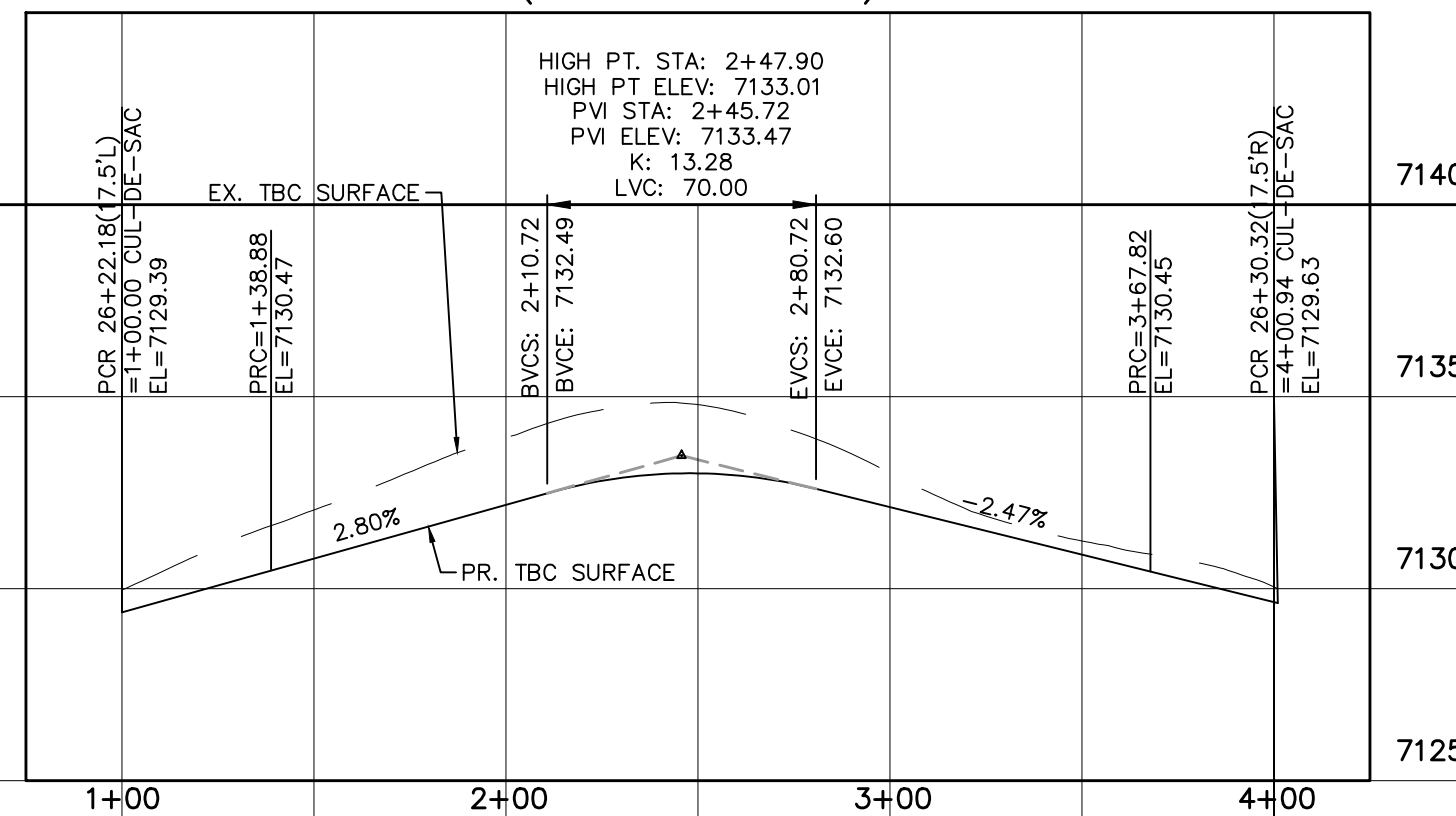
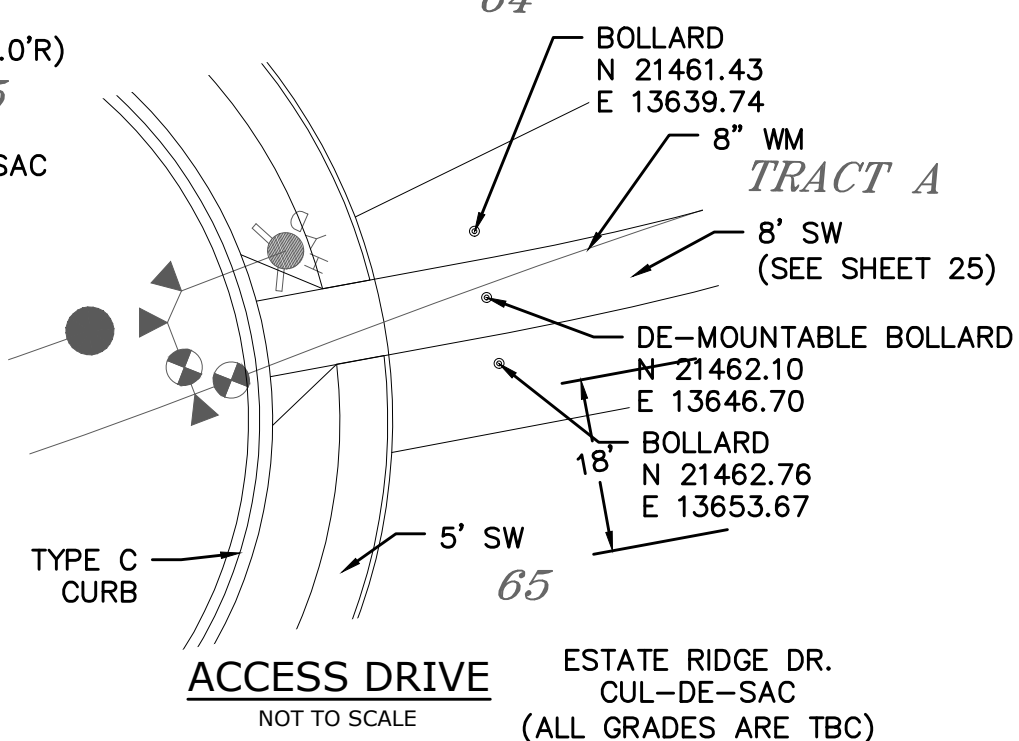
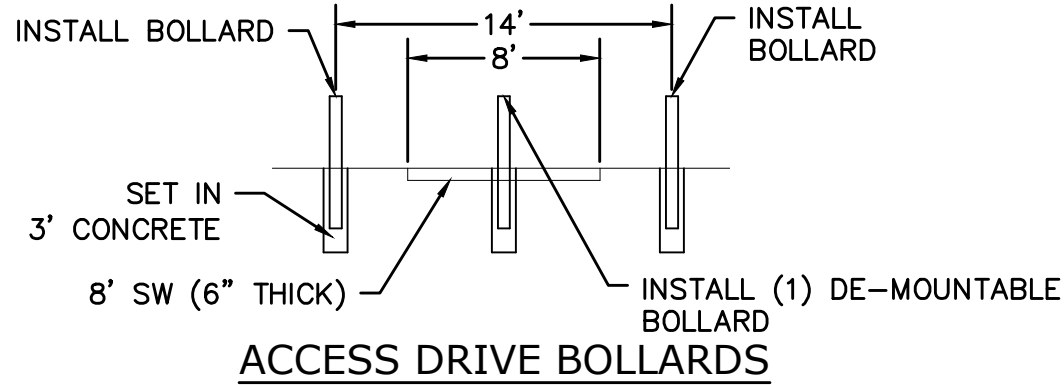
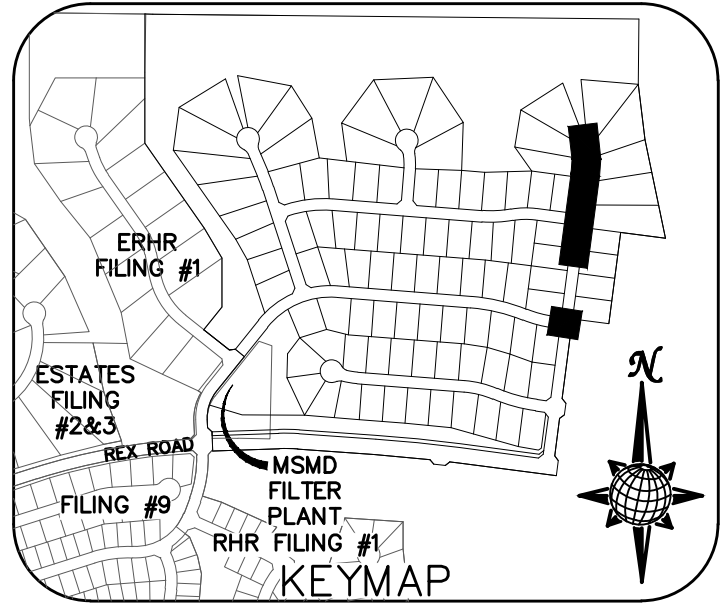
Scale	AS SHOWN	8 of 44
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CURVE TABLE			
CURVE	LENGTH	RADIUS	DELTA
13	30.63'	19.50'	90°00'00"
14	30.63'	19.50'	90°00'00"
15	38.88'	42.50'	52°25'17"
16	228.93'	47.50'	276°08'49"
17	33.13'	42.50'	44°39'30"

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

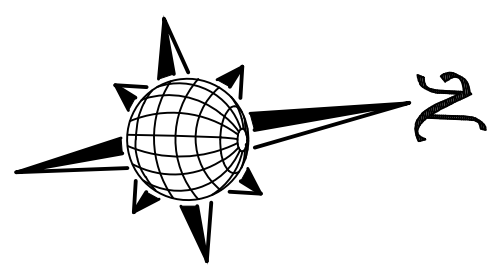
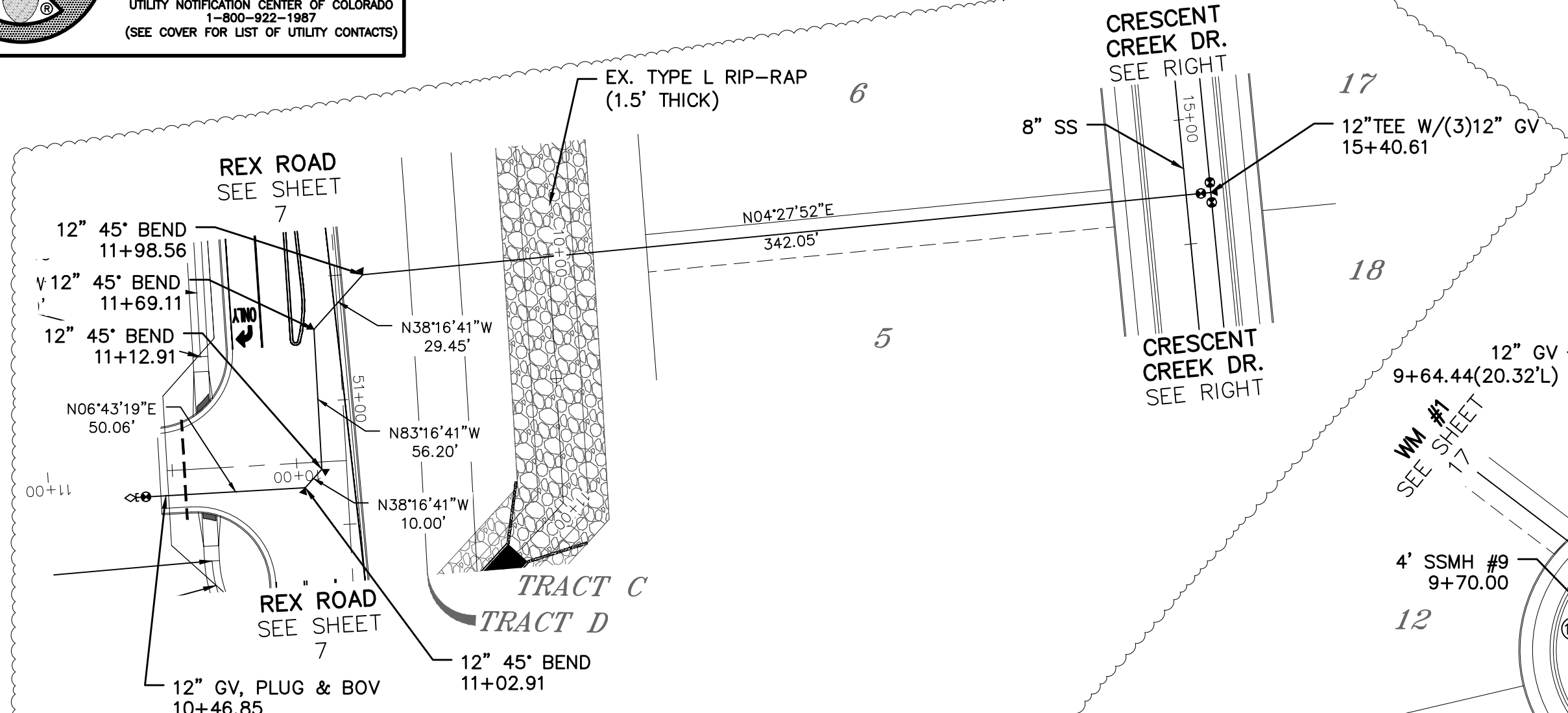


	Scale AS SHOWN	<i>Drawn by</i> LOQ	THE ESTATES AT ROLLING HILLS RANCH FILING 2 STREET AND UTILITY PLANS ESTATE RIDGE DR.	 MERIDIAN RANCH	TECH CONTRACTORS 11886 STAPLETON DRIVE FALCON, CO 80831 TELEPHONE: 719.495.7444 FAX: 719.495.2457	1	LIGHT POLES SS SERVICIES WATER SERVICES REEX ROAD & 12" WM (SH 14.6, 78.9, 10.11, 12.14, 15.16, 22.22, 24.26, 27.28, 29.30, 31.34, 35.36, 38)	9/13/2021	LOQ				
	2												
	9 of 44	<i>Date</i> SEPT 2020				3							
						No.	Revisions	Date	Invt.	Appr.			

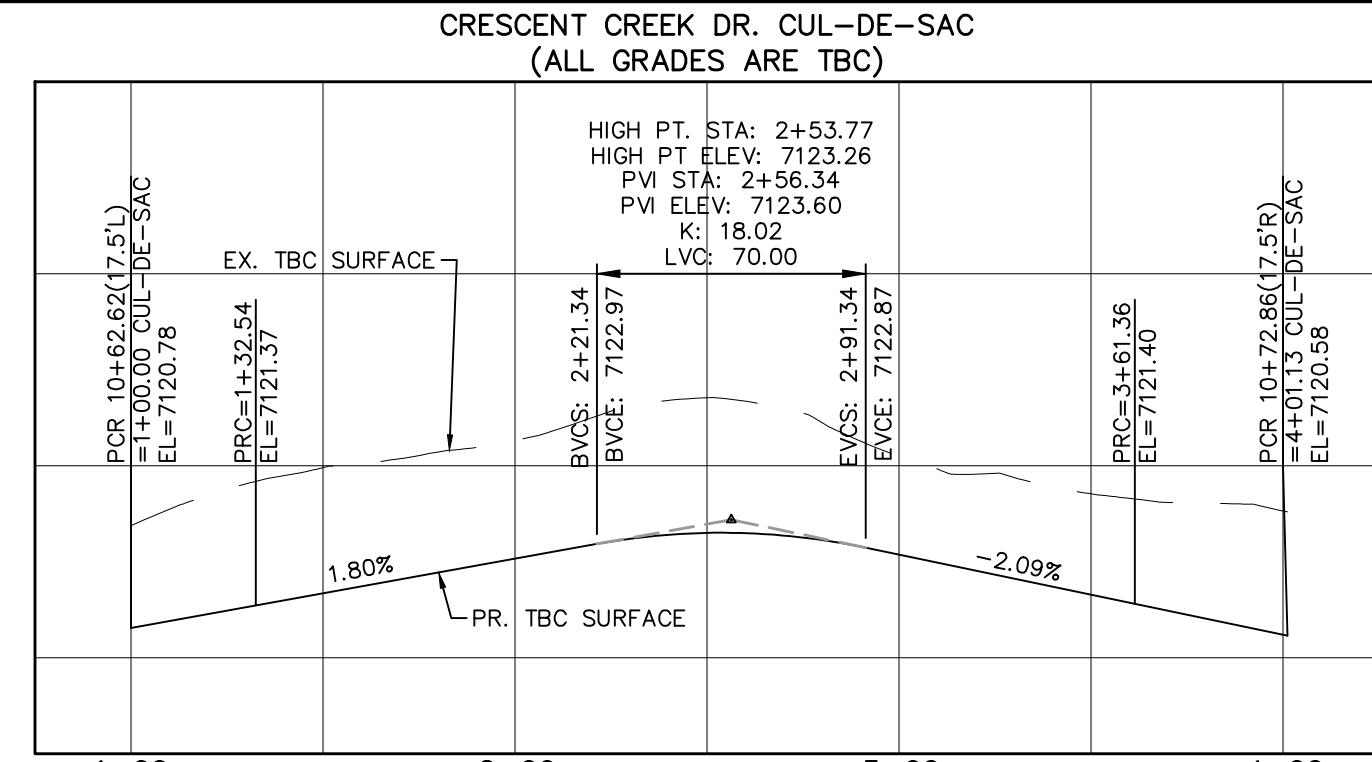
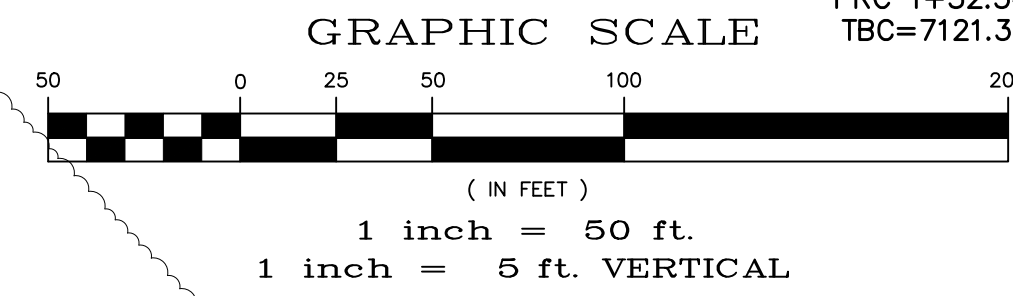




TWO WORKING DAYS
BEFORE YOU DIG
CALL 811
OR
UTILITY NOTIFICATION CENTER OF COLORADO
1-800-922-1987
(SEE COVER FOR LIST OF UTILITY CONTACTS)

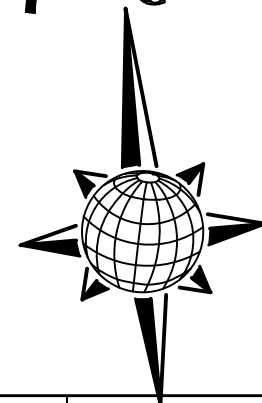
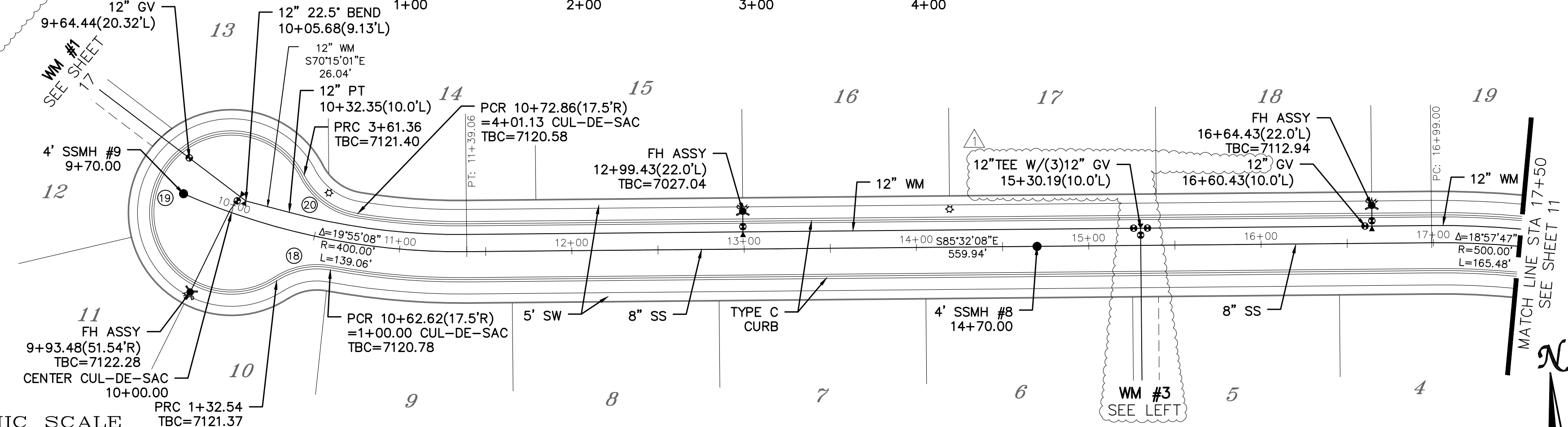
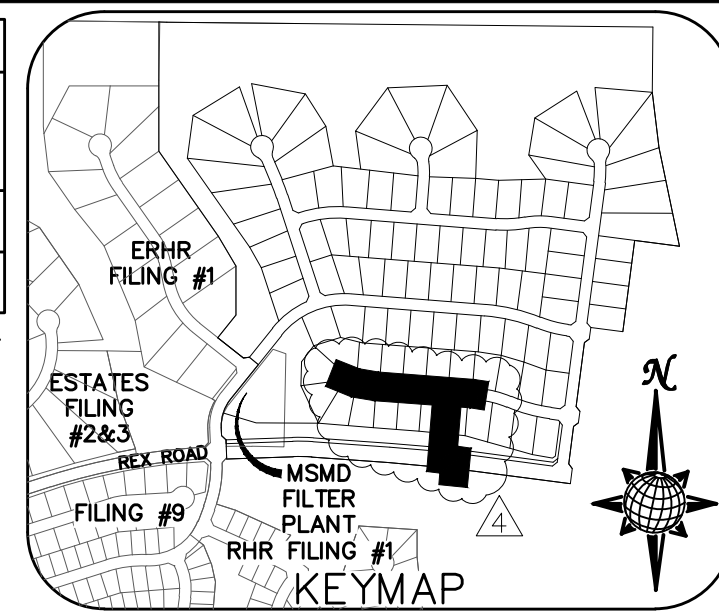


WM #3



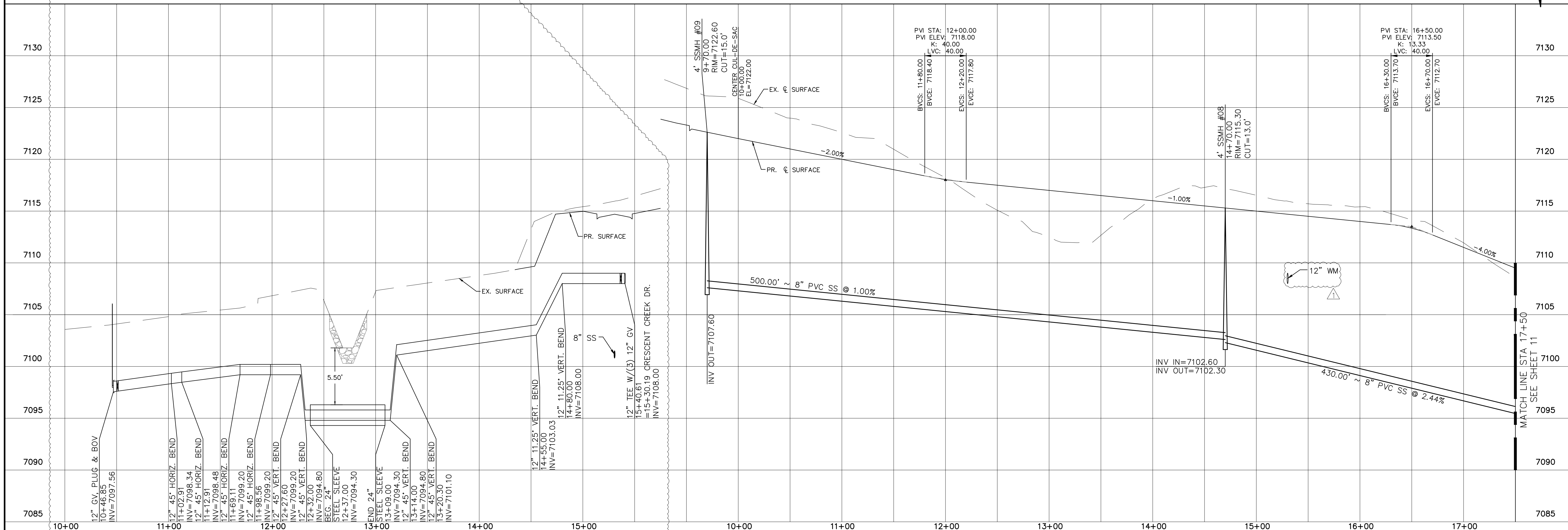
CURVE TABLE			
CURVE	LENGTH	RADIUS	DELTA
18	32.54'	42.50'	43°51'42"
19	228.82'	47.50'	276°00'52"
20	39.77'	42.50'	53°37'12"

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



CRESCENT CREEK DR.

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



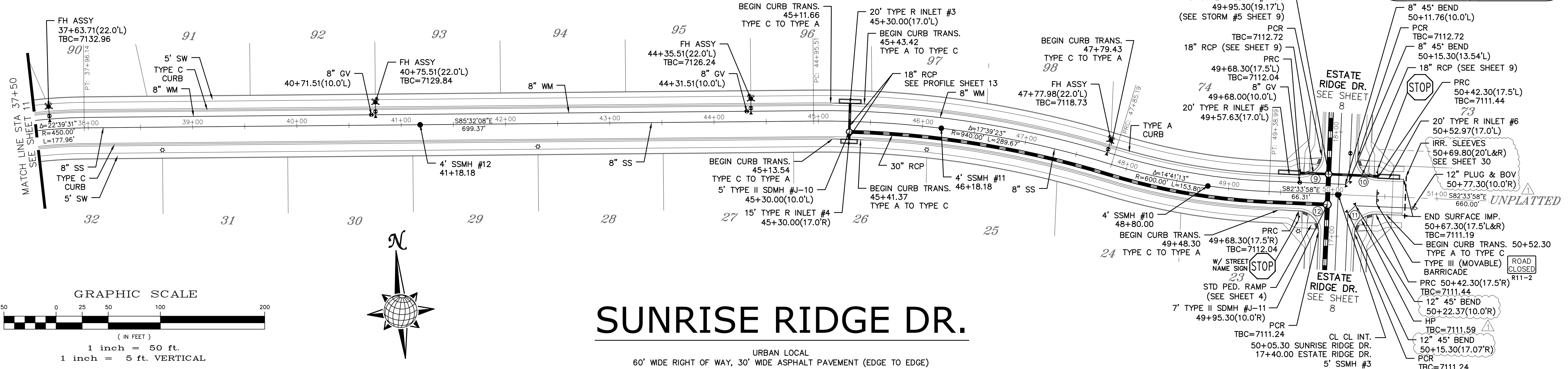
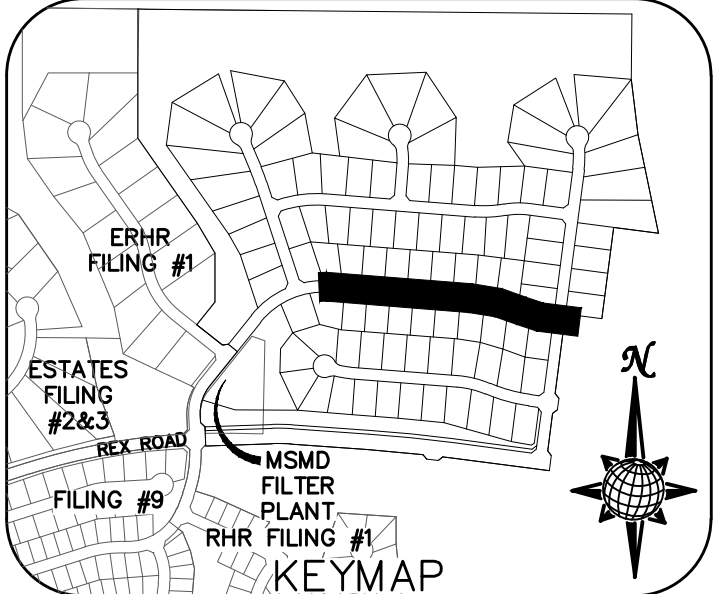
Log		Date		Date					
9/13/2021									
1		2		3					
No.		Revisions		Date					
TECH CONTRACTORS 11886 STAPLETON DRIVE FALCON, CO 80831 TELEPHONE: 719.495.7444 FAX: 719.495.2457									
 MERIDIAN RANCH									
THE ESTATES AT ROLLING HILLS RANCH FILING 2 STREET AND UTILITY PLANS CRESCENT CREEK DR. + WM #3									
Drawn by	Log	Checked by	TAK	Date	8/27/2020				
Scale	AS SHOWN		10	of	44				



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)

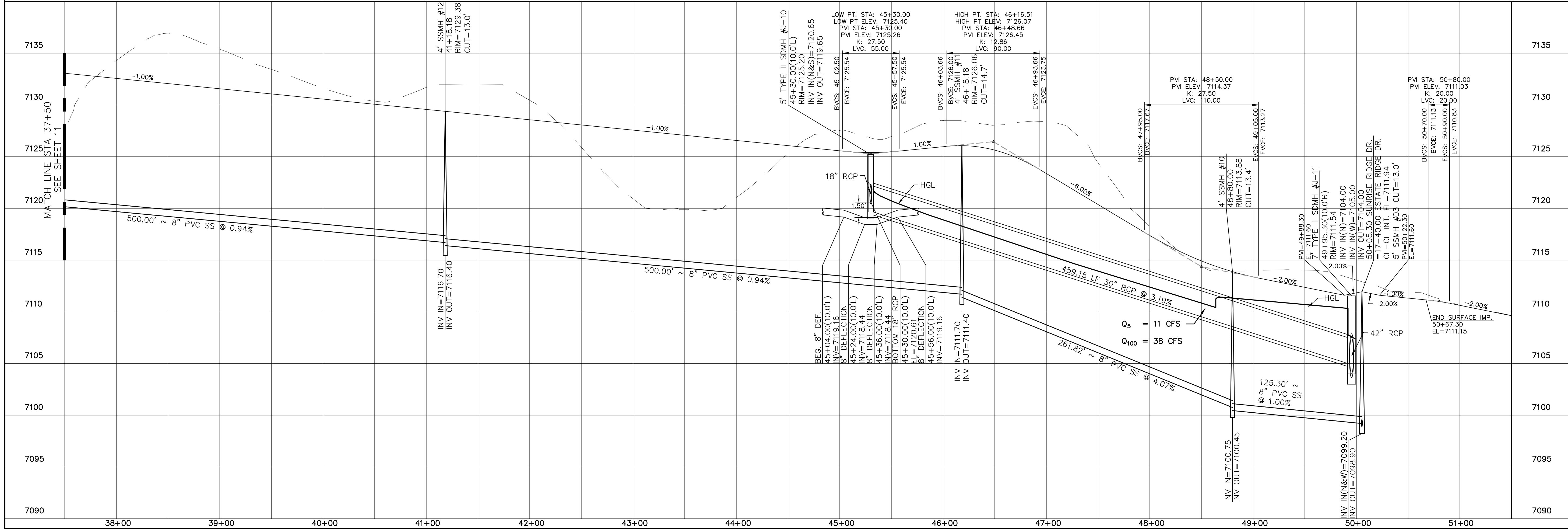
CURVE TABLE			
CURVE	LENGTH	RADIUS	DELTA
9	30.63'	19.50'	90°00'00"
10	30.63'	19.50'	90°00'00"
11	30.63'	19.50'	90°00'00"
12	30.63'	19.50'	90°00'00"

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

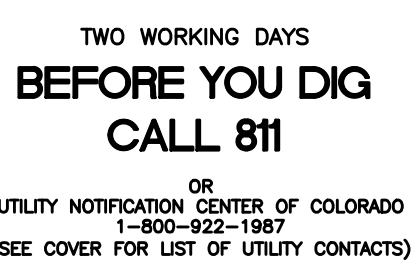


SUNRISE RIDGE DR.

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

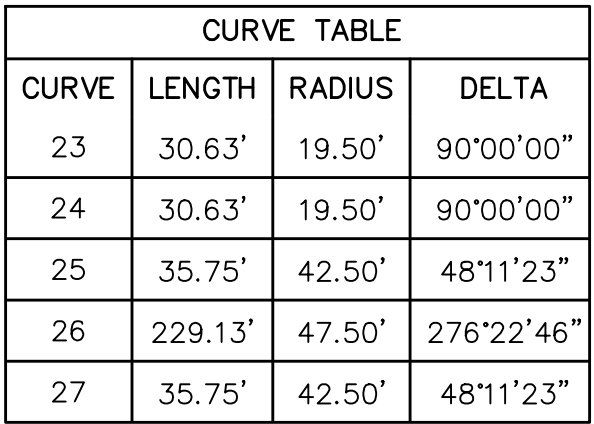


Log	9/13/2021	Init.	Date	Appr.
1	2	3	No.	Revisions
TECH CONTRACTORS 11886 STAPLETON DRIVE FALCON, CO 80831 TELEPHONE 719.495.7444 FAX 719.495.2457				
MERIDIAN RANCH				
THE ESTATES AT ROLLING HILLS RANCH FILING 2 STREET AND UTILITY PLANS SUNRISE RIDGE DR.				
Drawn by	Log	Checked by	TAK	Date
AS SHOWN				8/27/2020
Scale	12	of	44	

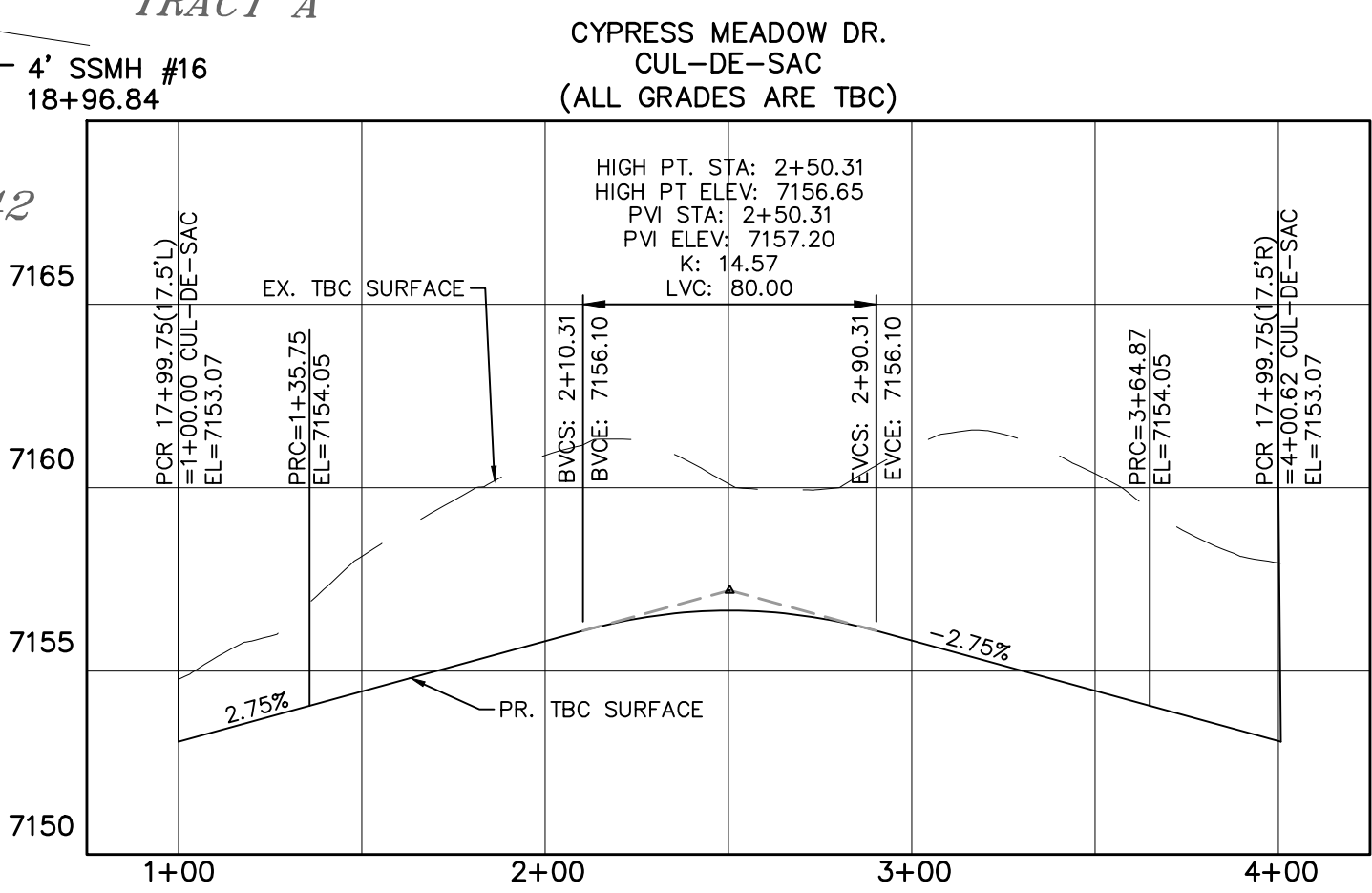
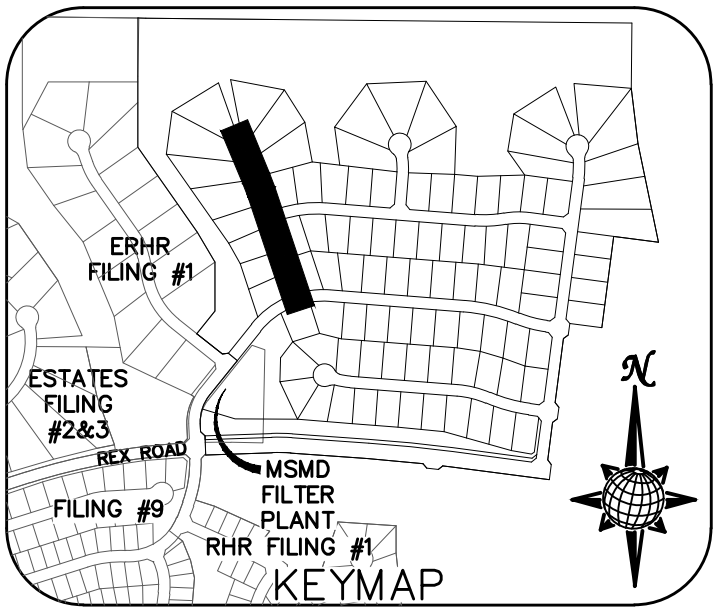


INSTALL CROSS PAN
PER COUNTY STD
SD-2-26

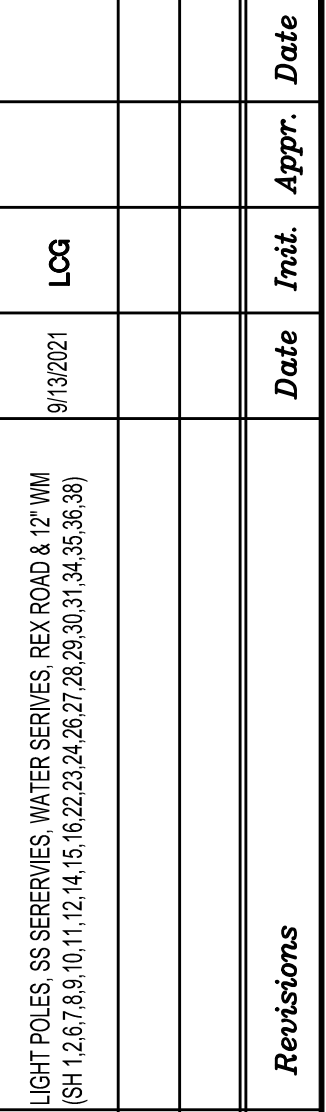
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2	=	7133.91
3	=	7133.75



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



URBAN LOCAL TO STA 14+87.00
URBAN LOCAL LOW VOLUME AFTER STA 14+87.00
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



MERIDIAN RANCH

THE ESTATES AT
LING HILLS RANCH FILING 2
REET AND UTILITY PLANS
CYPRESS MEADOW DR.

<i>Drawn by</i> LCG	<i>Checked by</i> TAK	<i>Date</i>
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Scale
AS SHOWN
13 of 44

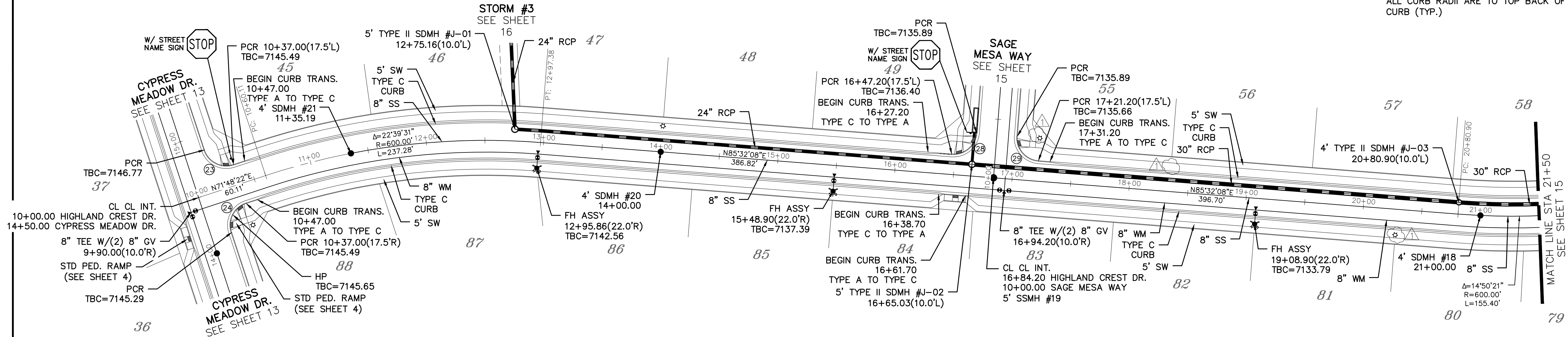
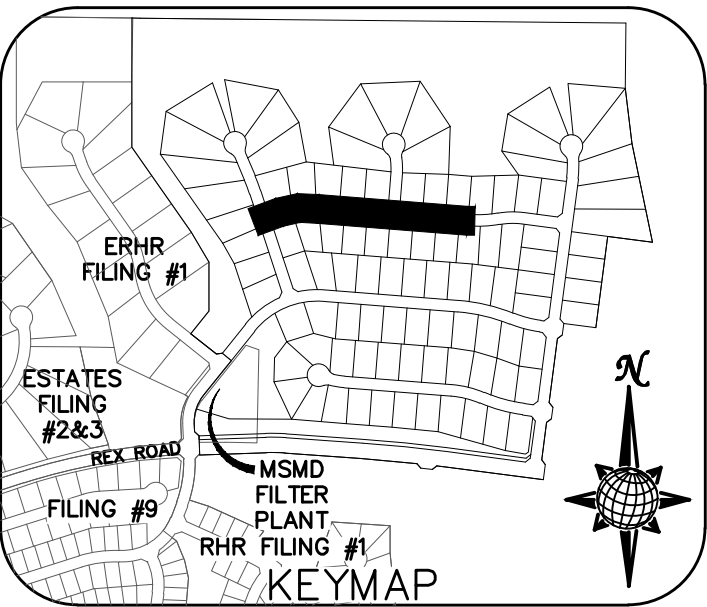




TWO WORKING DAYS
**BEFORE YOU DIG
CALL 811**
OR
UTILITY NOTIFICATION CENTER OF COLORADO
1-800-922-1987
(SEE COVER FOR LIST OF UTILITY CONTACTS)

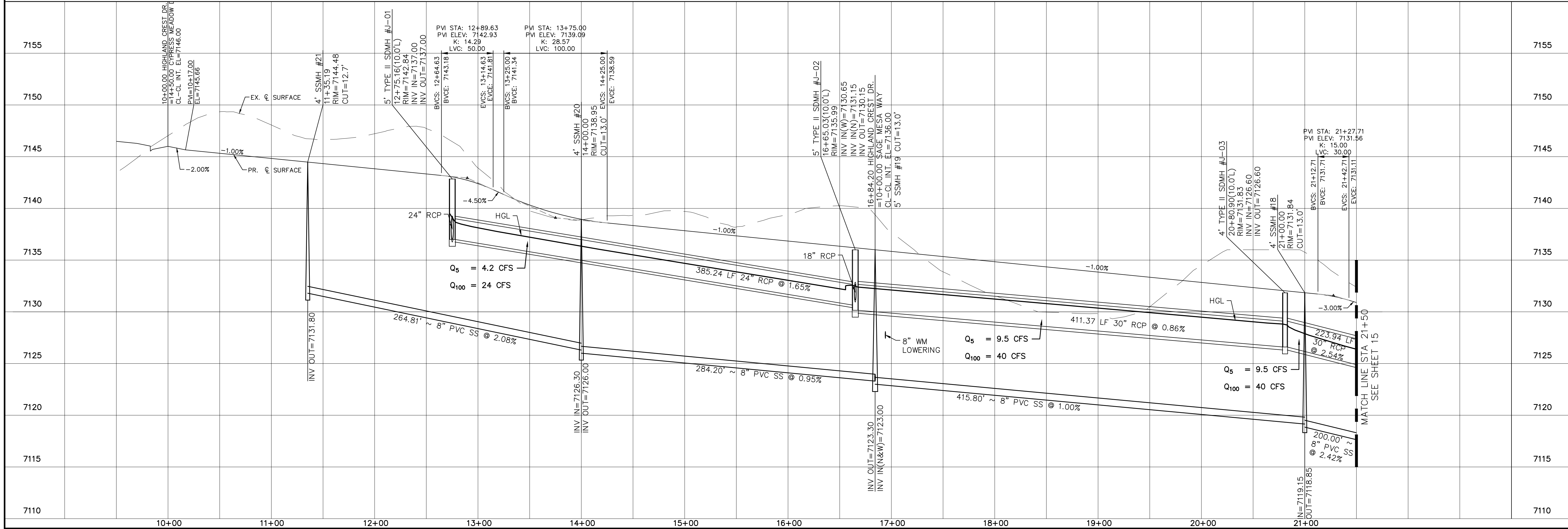
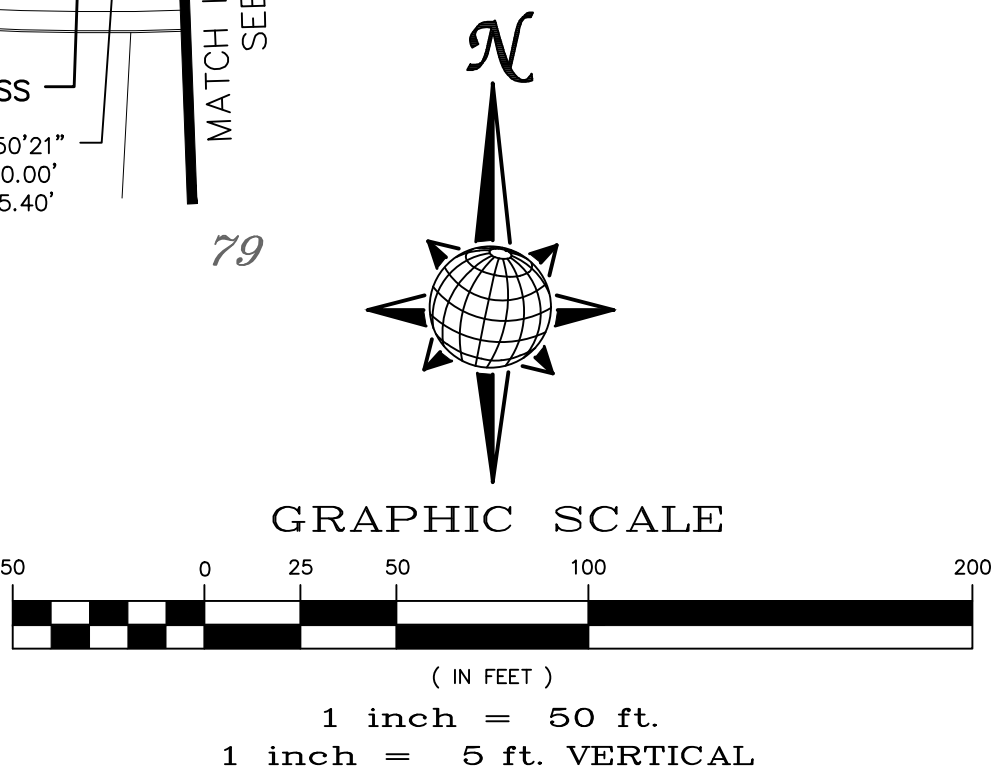
CURVE TABLE			
CURVE	LENGTH	RADIUS	DELTA
23	30.63'	19.50'	90°00'00"
24	30.63'	19.50'	90°00'00"
28	30.63'	19.50'	90°00'00"
29	30.63'	19.50'	90°00'00"

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

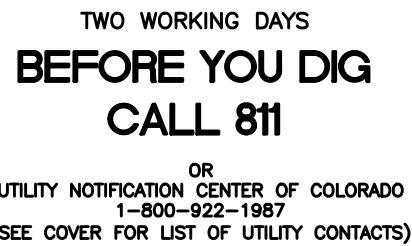


HIGHLAND CREST DR.

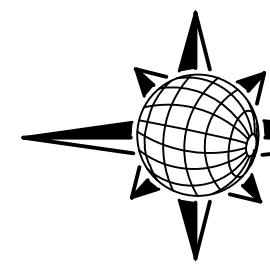
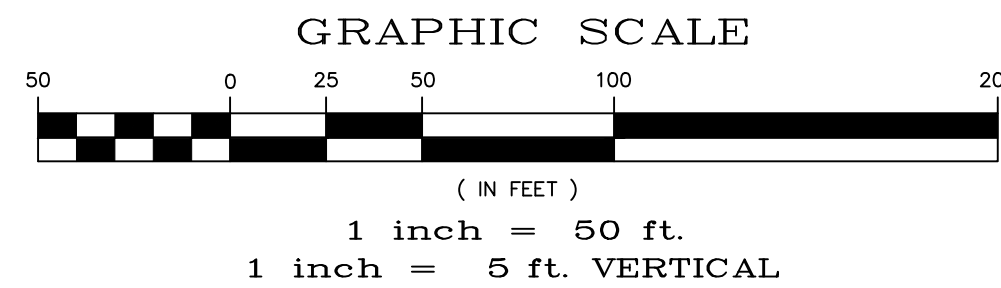
URBAN LOCAL
60' WIDE RIGHT OF WAY, 30' WIDE ASPHALT PAVEMENT (EDGE TO EDGE)



Log		Date		Date					
9/13/2021									
1		2		3					
No.		Revisions		No.					
TECH CONTRACTORS 11886 STAPLETON DRIVE FALCON, CO 80831 TELEPHONE: 719.495.7444 FAX: 719.495.2457									
MERIDIAN RANCH									
THE ESTATES AT ROLLING HILLS RANCH FILING 2 STREET AND UTILITY PLANS HIGHLAND CREST DR.									
Drawn by	Log	Checked by	TAK	Date	SEPT 2020				
Scale	AS SHOWN		14	of	44				

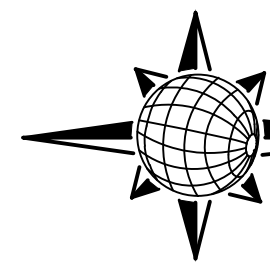
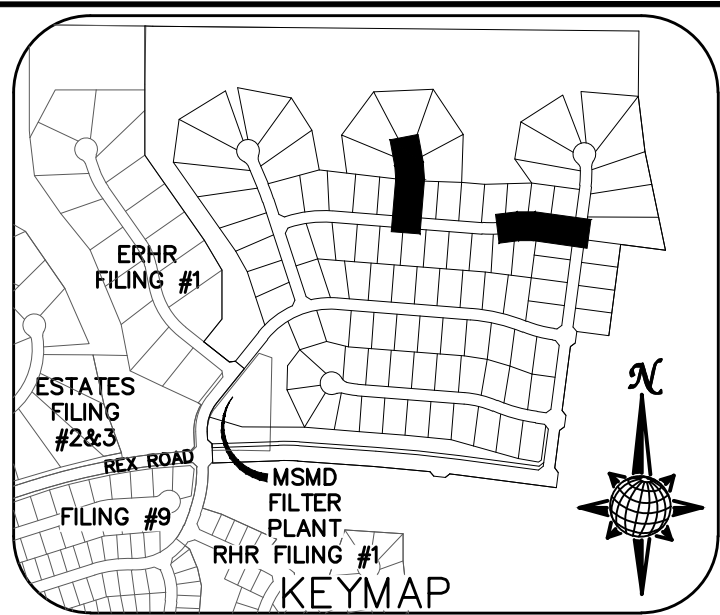


URBAN LOCAL
60' WIDE RIGHT OF WAY, 30' WIDE ASPHALT PAVEMENT (EDGE TO EDGE)



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

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



TECH CONTRACTORS 11886 STAPLETON DRIVE FALCON, CO 80831 TELEPHONE: 719.495.7444 FAX: 719.495.2457					
1	LIGHT POLES SS SERVICIES WATER SERVICES REK ROAD & 12" VM (SH 1,2,617.8,10,11,12,14,15,16,22,23,24,27,28,29,30,31,34,35,36,38)	LOG	9/13/2021		
2					
No.	Revisions	Date	Inst.	Appr.	Date



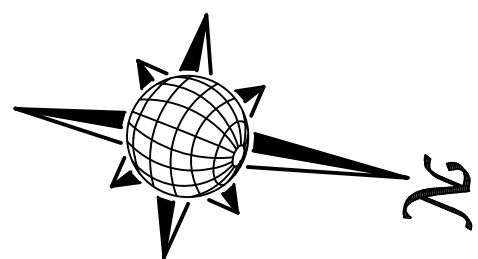
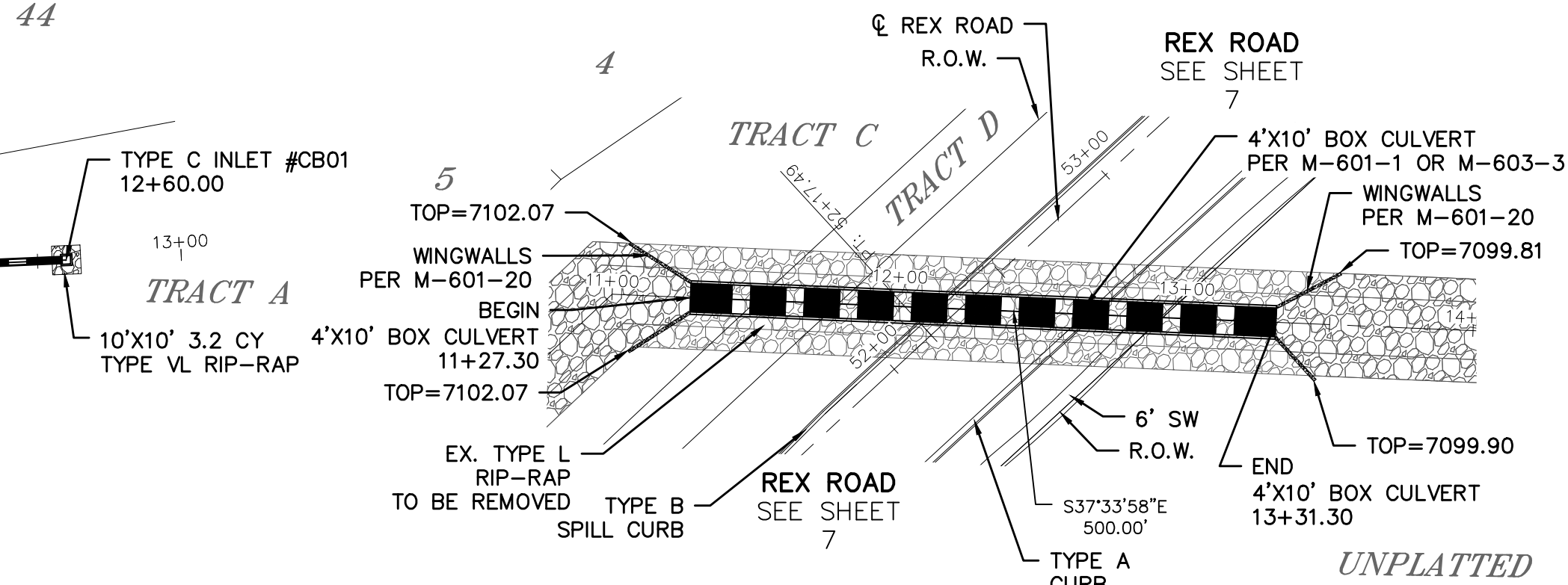
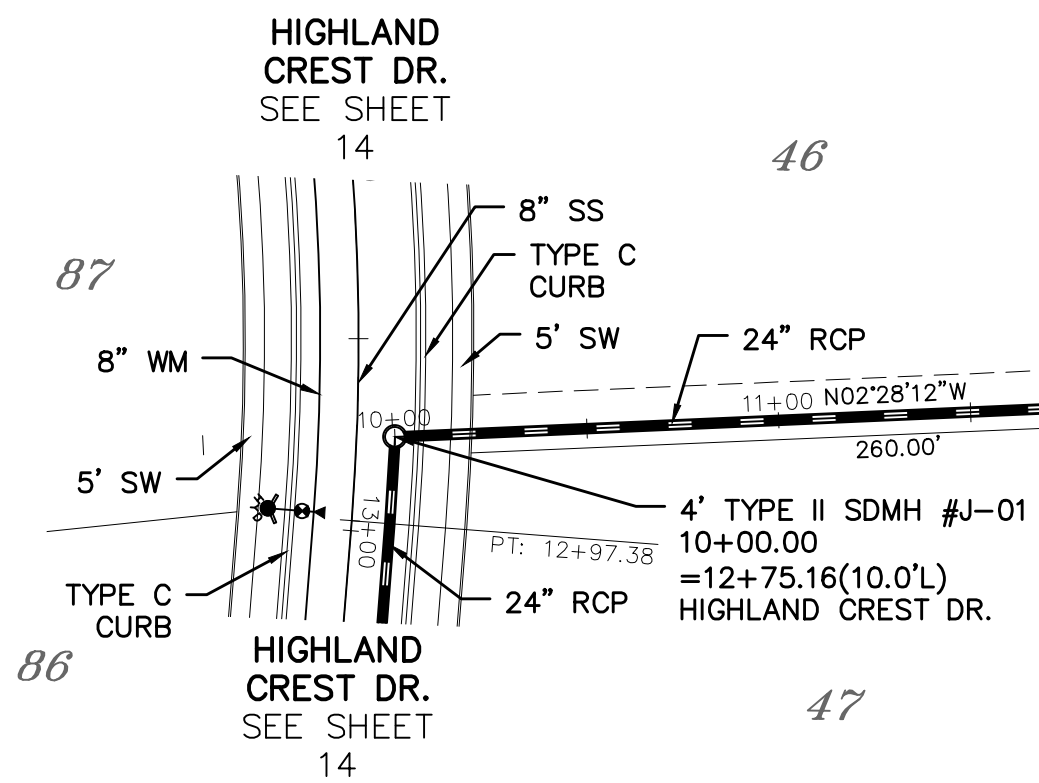
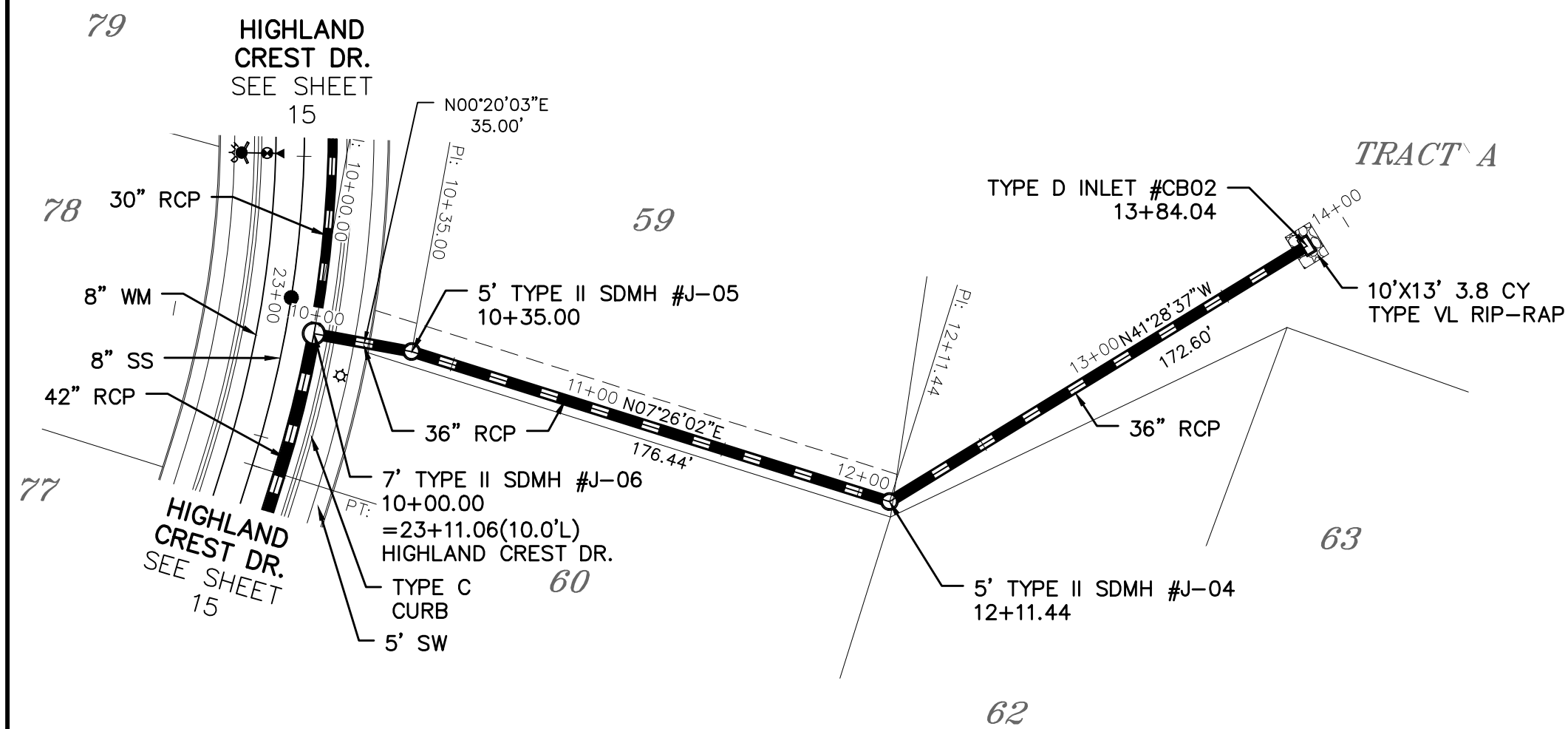
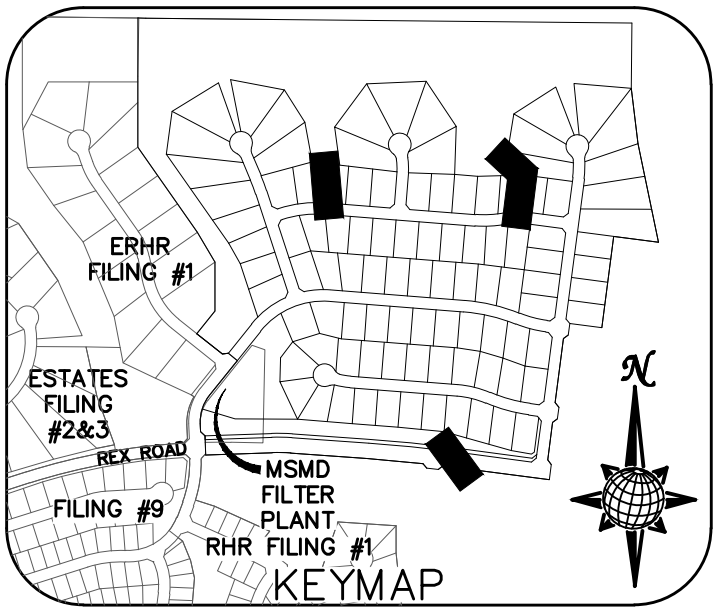
MERIDIAN RANCH

THE ESTATES AT
HILLING HILLS RANCH FILING 2
STREET AND UTILITY PLANS
HIGHLAND CREST DR. +
SAGE MESA WAY

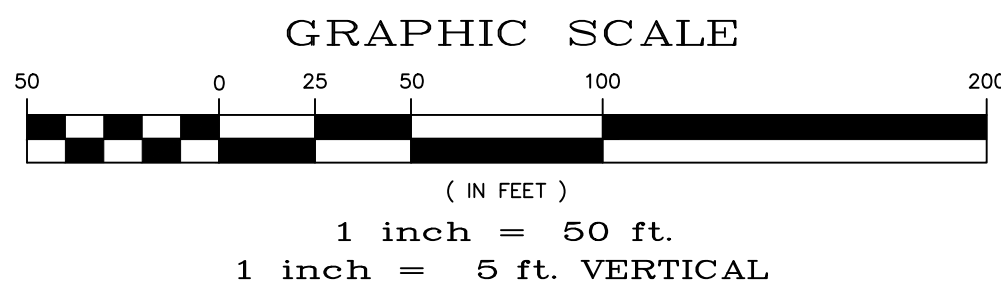
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	Checked by	TAK
	Date	SEPT 2020



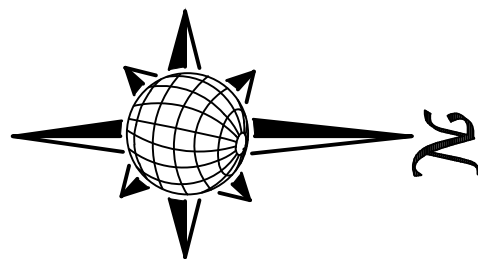
TWO WORKING DAYS
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1-800-922-1987
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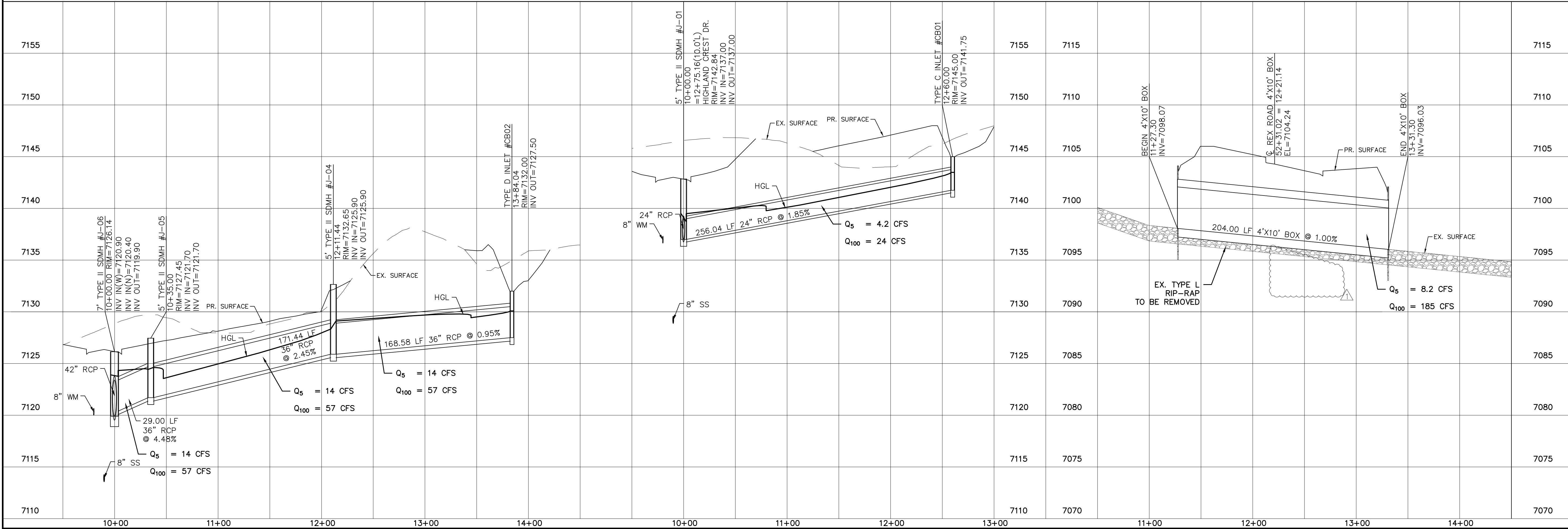
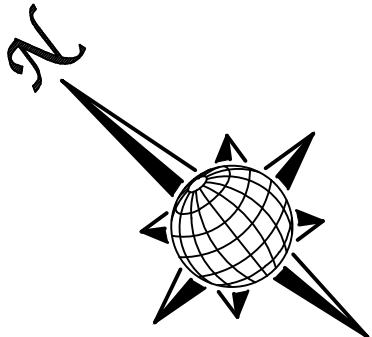
STORM #2



STORM #3



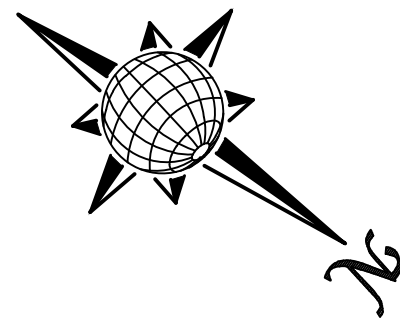
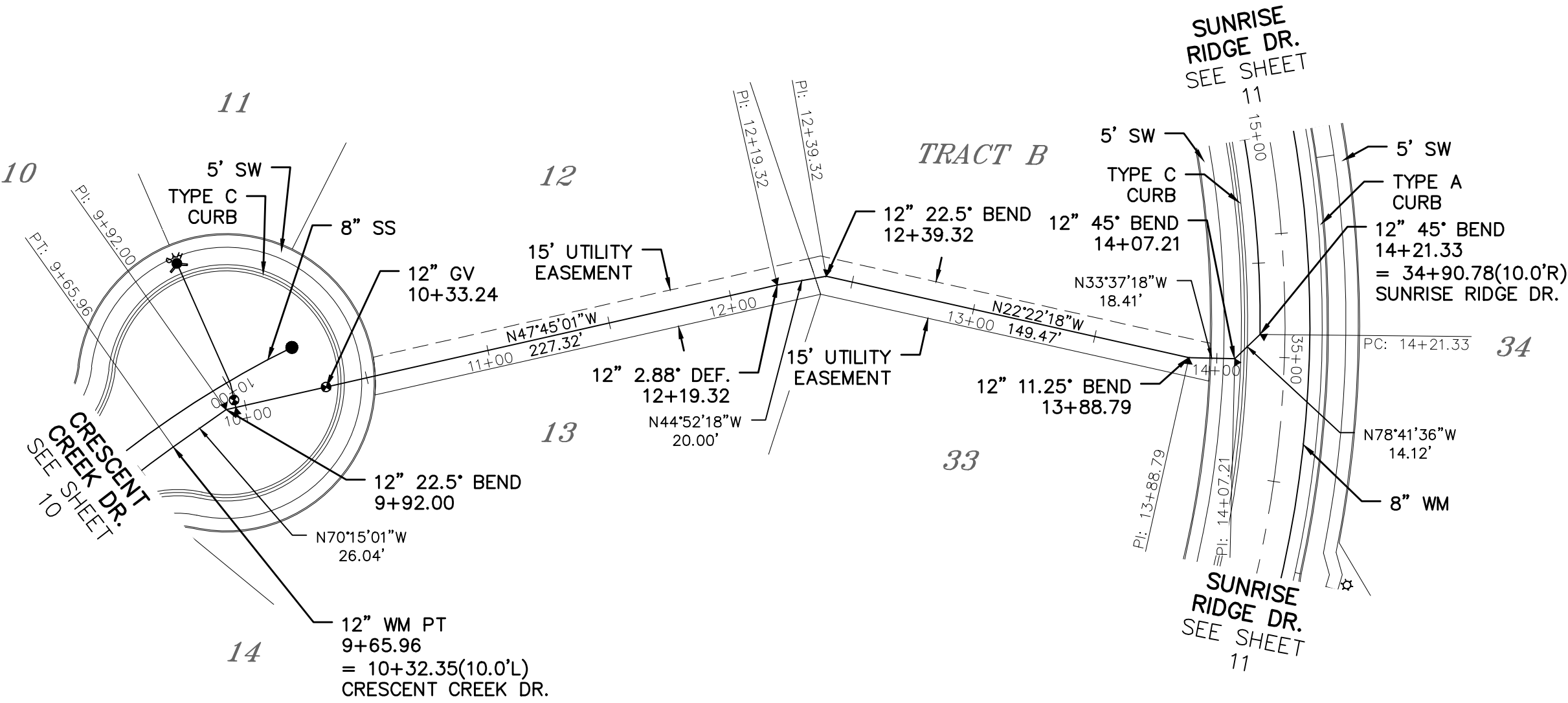
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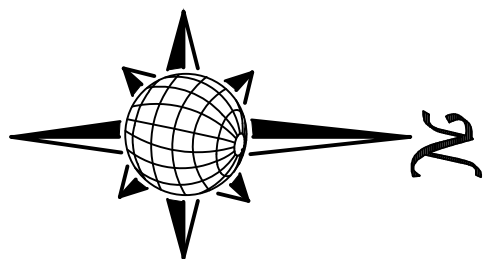
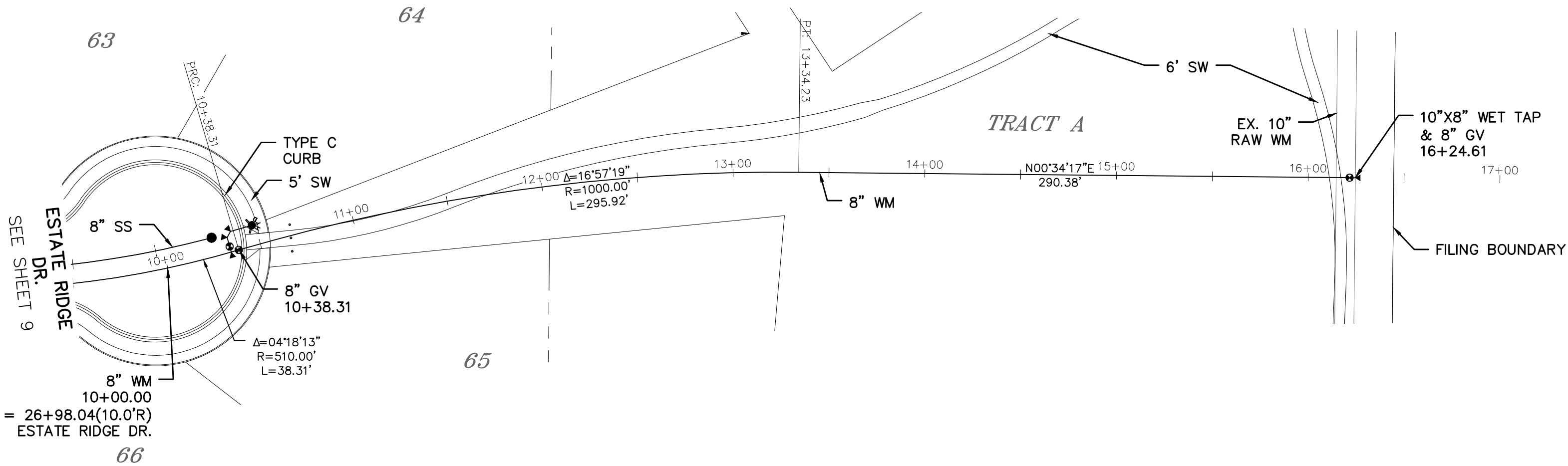
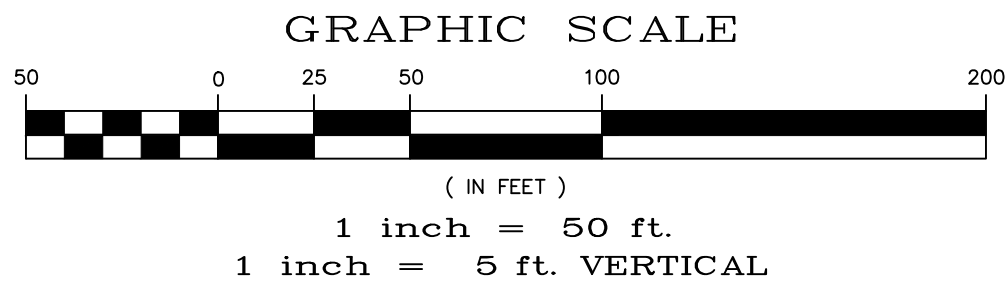
Log		Date		Appr.	
9/13/2021					
1		2		3	
No.		Revisions		Date	
TECH CONTRACTORS		11886 STAPLETON DRIVE		FALCON, CO 80831	
719.495.7444		TELEPHONE		719.495.2457	
FAX					
THE ESTATES AT ROLLING HILLS RANCH FILING 2 STREET AND UTILITY PLANS STORM #2, STORM #3 + STORM #4					
Drawn by		Checked by		Date	
Log		TAK		8/27/2020	
Scale		AS SHOWN		16 of 44	



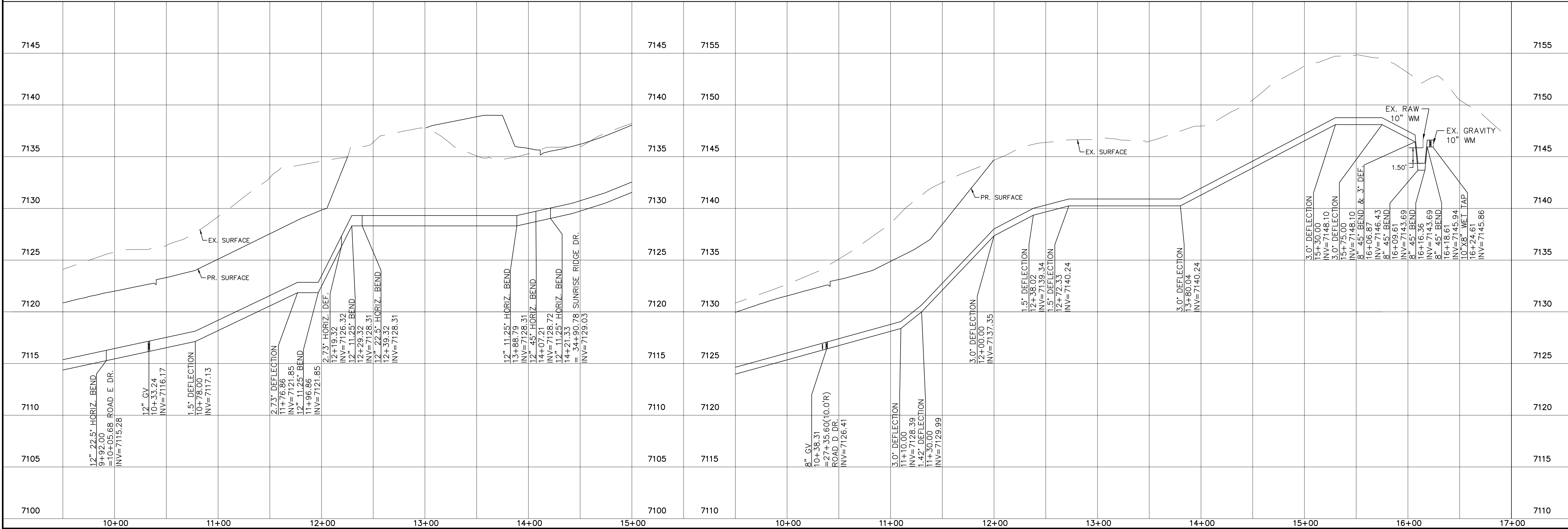
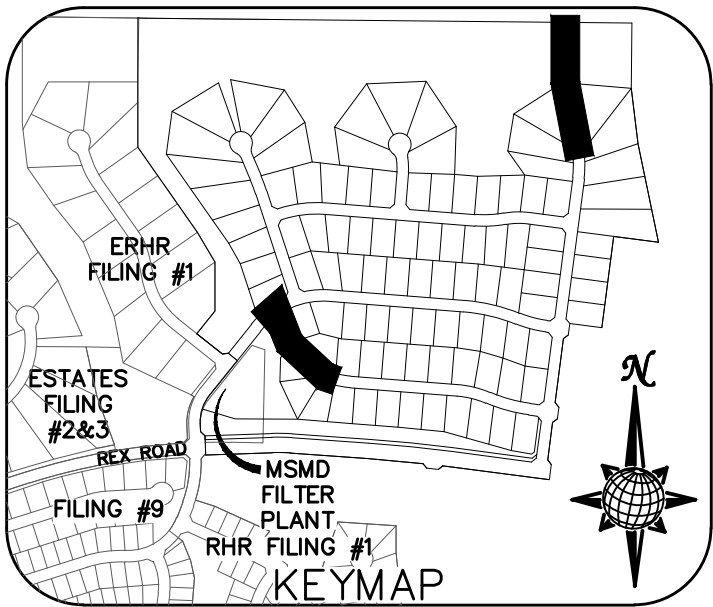
TWO WORKING DAYS
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1-800-922-1987
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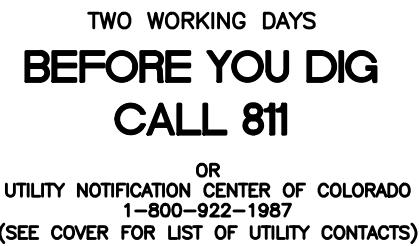
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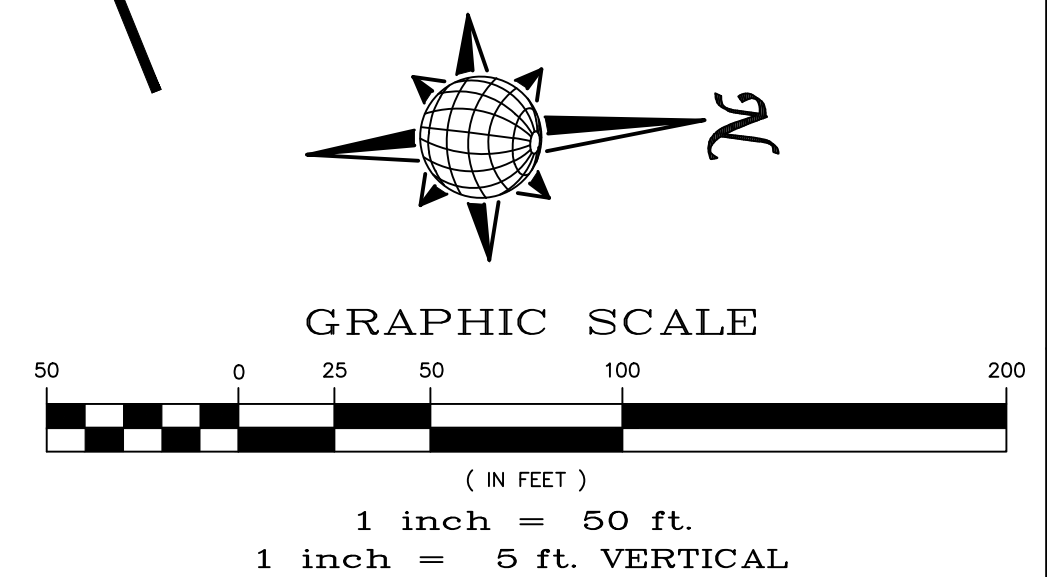
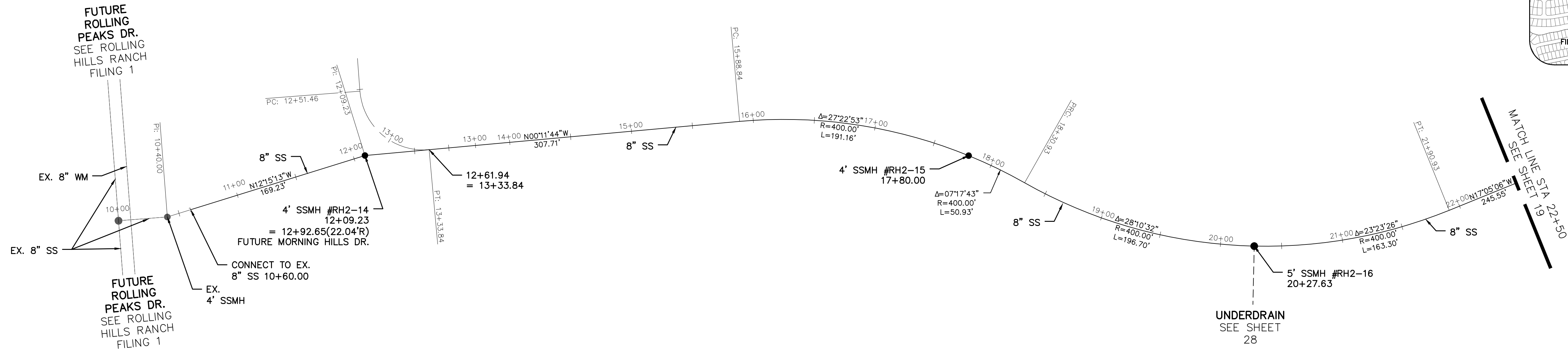
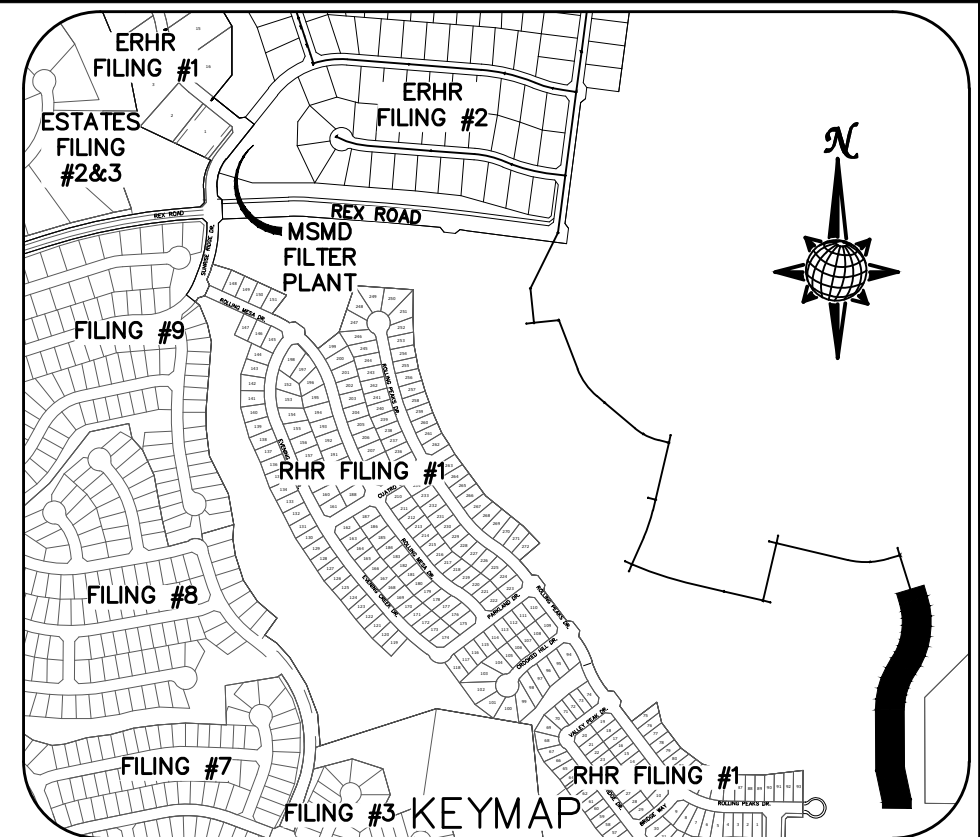
WM #2



Scale AS SHOWN		17 of 44		Drawn by LOG		THE ESTATES AT ROLLING HILLS RANCH FILING 2 STREET AND UTILITY PLANS WM #1 + WM #2		 MERIDIAN RANCH		TECH CONTRACTORS 11886 STAPLETON DRIVE FALCON, CO 80831 TELEPHONE: 719.495.7444 FAX: 719.495.2457		1 LIGHT POLES, SS SERVICIES WATER SERVICES, REX ROAD & 12" WM (SH:12.67,8.9, 10.11,12.14,15,16,22,23,24,26,27,28,29,30,31,34,35,36,38)		9/13/2021		LOG					
				Checked by TAK								2									
				Date		SEPT 2020						3									
												No.		Revisions		Date		Init.		Date	

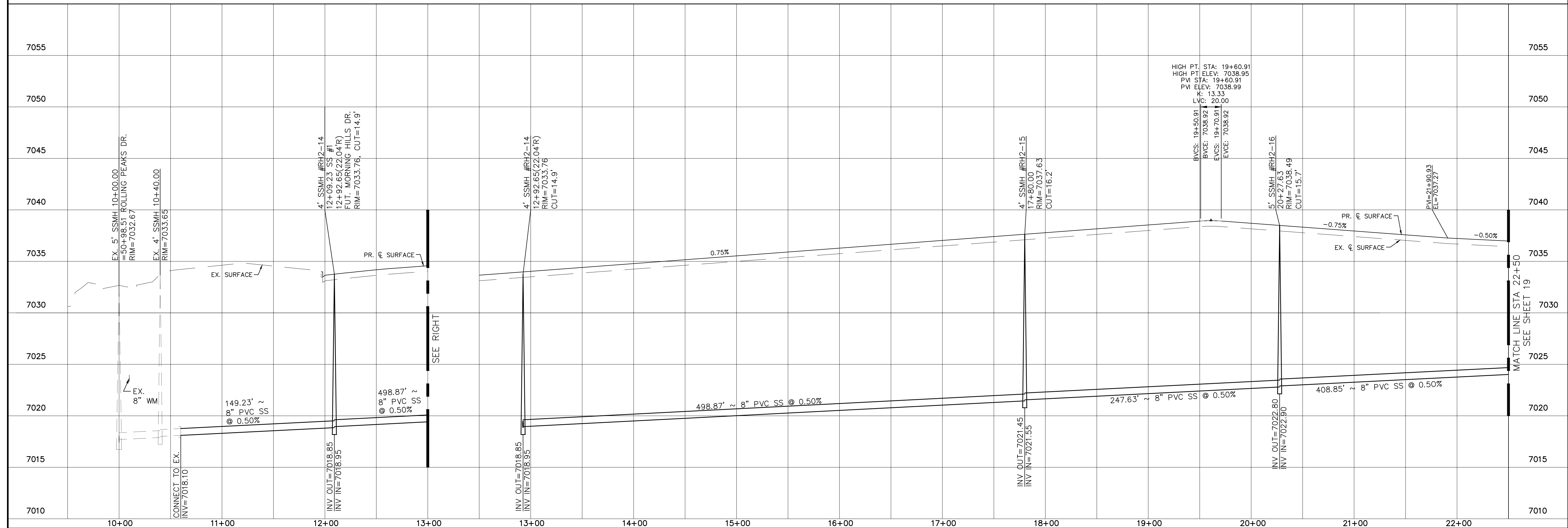


NOTE:
APPROVAL OF THESE PLANS DOES NOT CONSTITUTE
APPROVAL OF THE ROADWAY DESIGN AND PROFILES SHOWN.



SS #1

FUT. MORNING HILLS DR.



No.	Revisions	Date	Invt.	Appr.	Date
1	(SH 12.6,7.6,9.10,11,12,14,15,16,22,23,24,26,27,28,29,30,31,34,35,36,38)	09/13/2024			
2					
3					

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



MERIDIAN RANCH

ROLLING HILLS RANCH FILING 2
STREET AND UTILITY PLANS
SS #1 + FUT. MORNING HILLS DR.

LOG
Checked by TAK
Date SEPT 2020

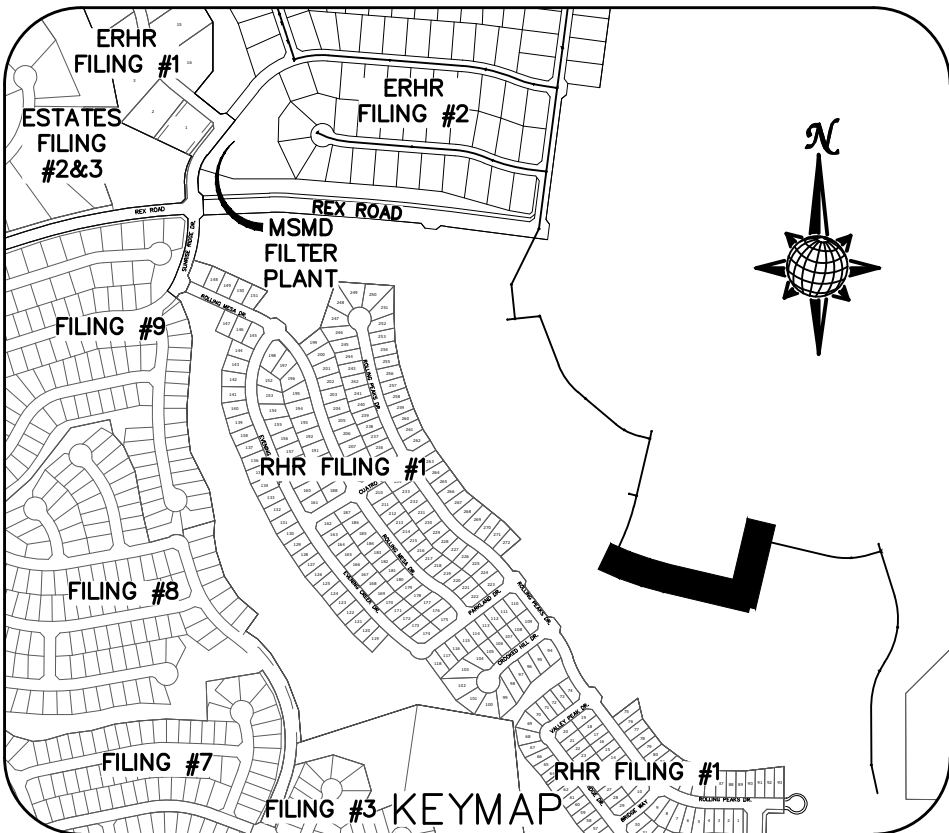
AS SHOWN	18 of 44
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Log	Date	Appr.	Date
9/13/2021			

No.	Revisions
1	
2	
3	

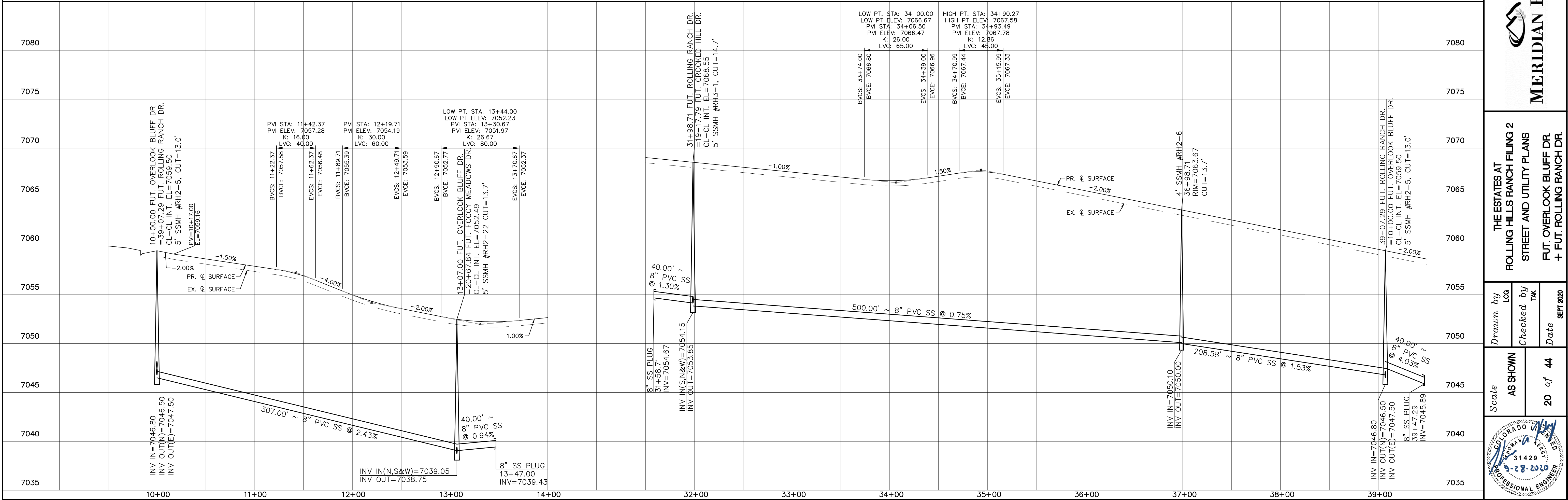
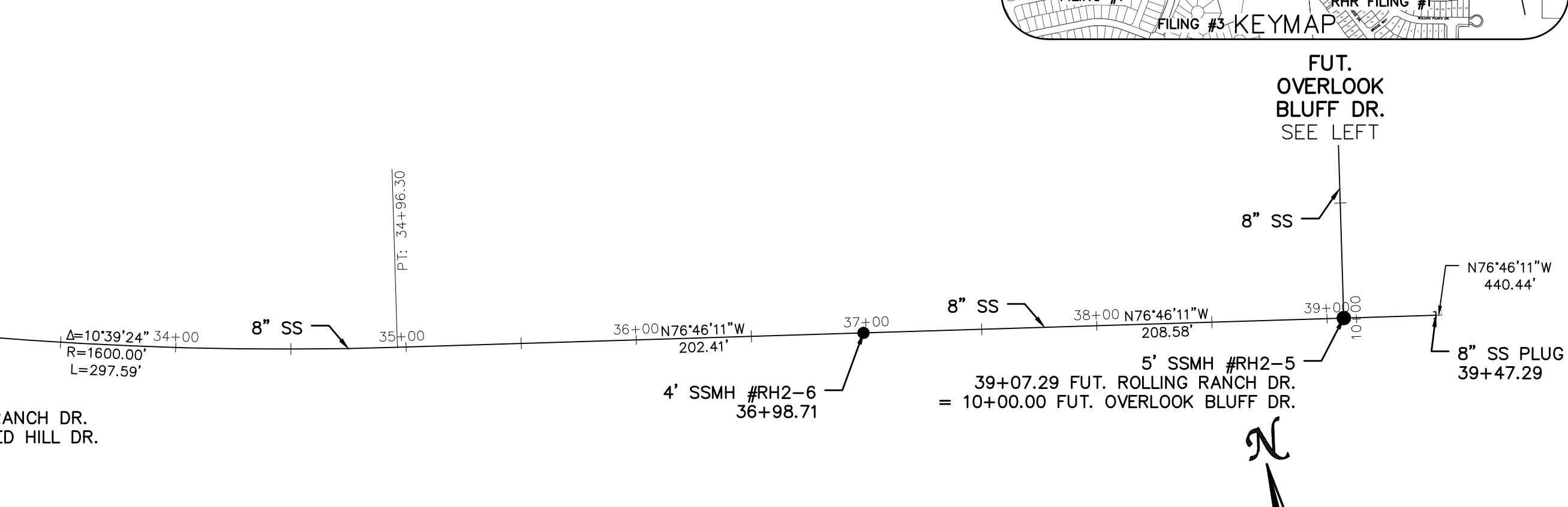
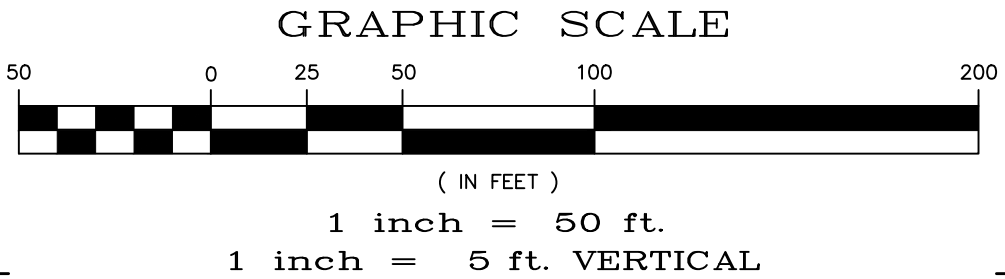
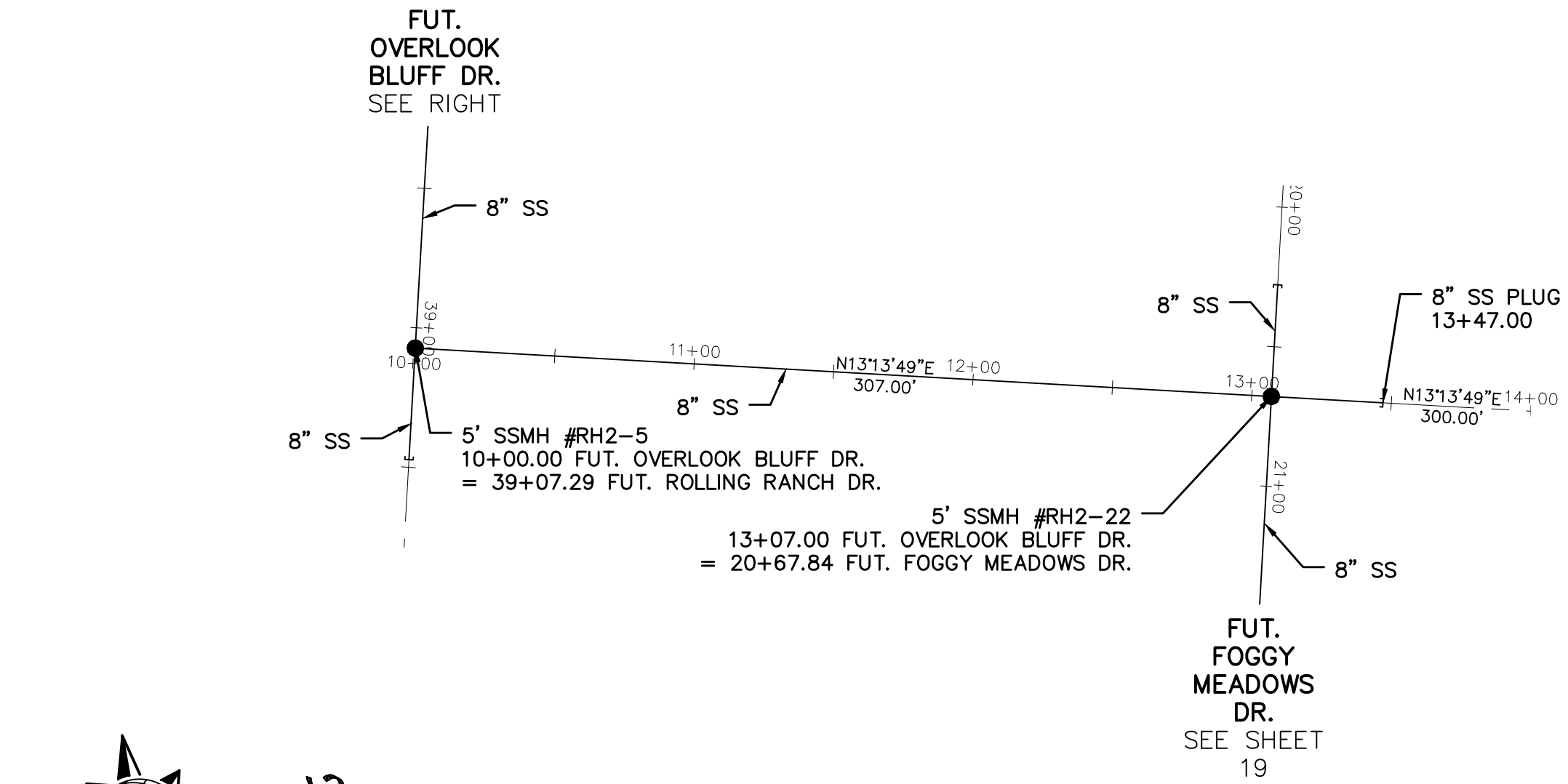
TECH CONTRACTORS
11886 STAPLETON DRIVE
FALCON, CO 80831
TELEPHONE: 719.495.7444
FAX: 719.495.2457

MERIDIAN RANCH

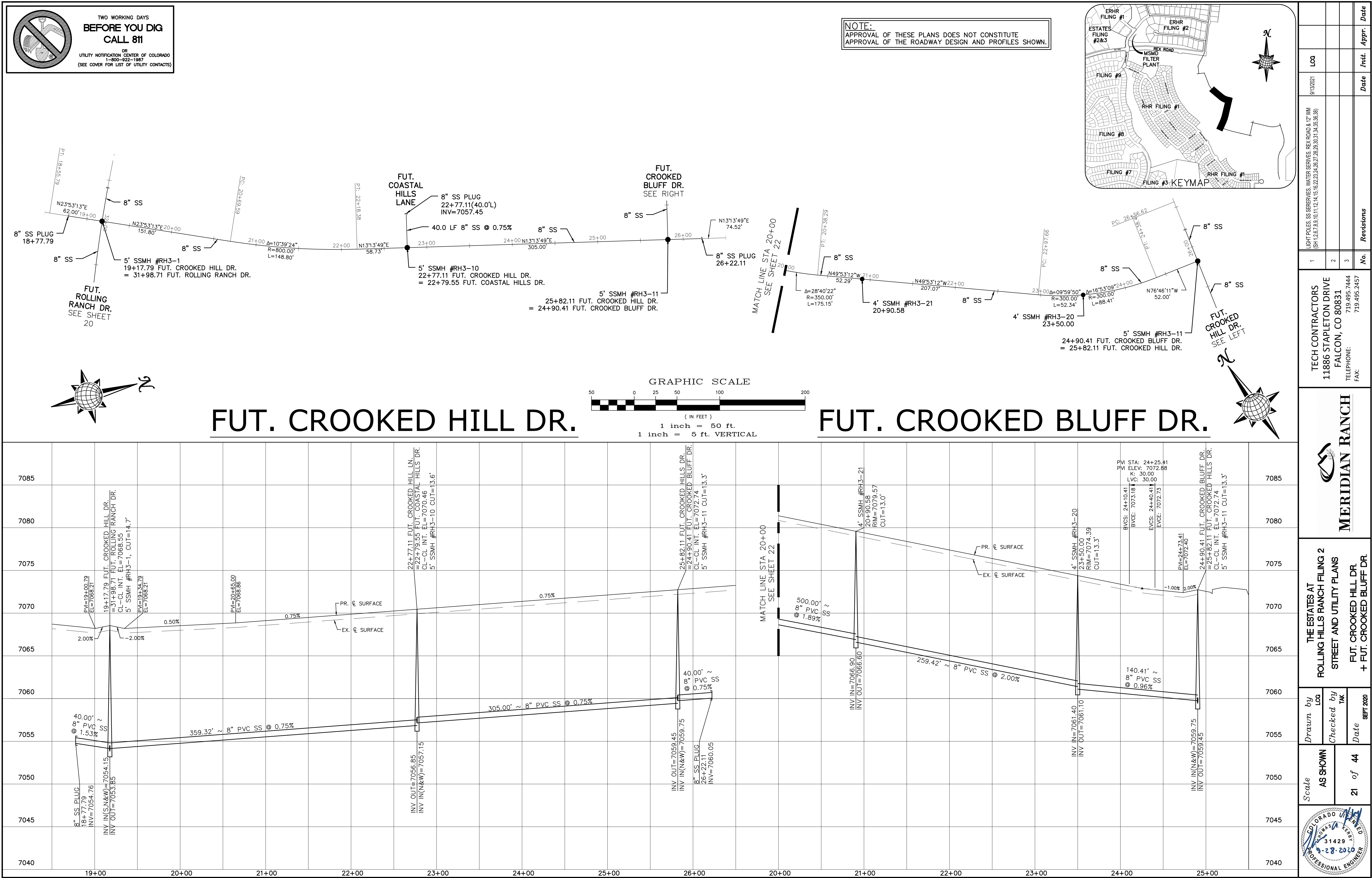
THE ESTATES AT
ROLLING HILLS RANCH FILING 2
STREET AND UTILITY PLANS
FUT. OVERLOOK BLUFF DR.
+ FUT. ROLLING RANCH DR.

Drawn by	Log	Checked by	TAK	Date
				8/27/2020

Scale	AS SHOWN	20	of	44
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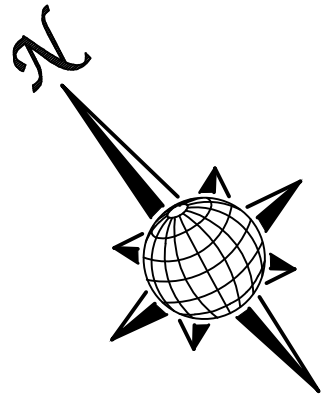
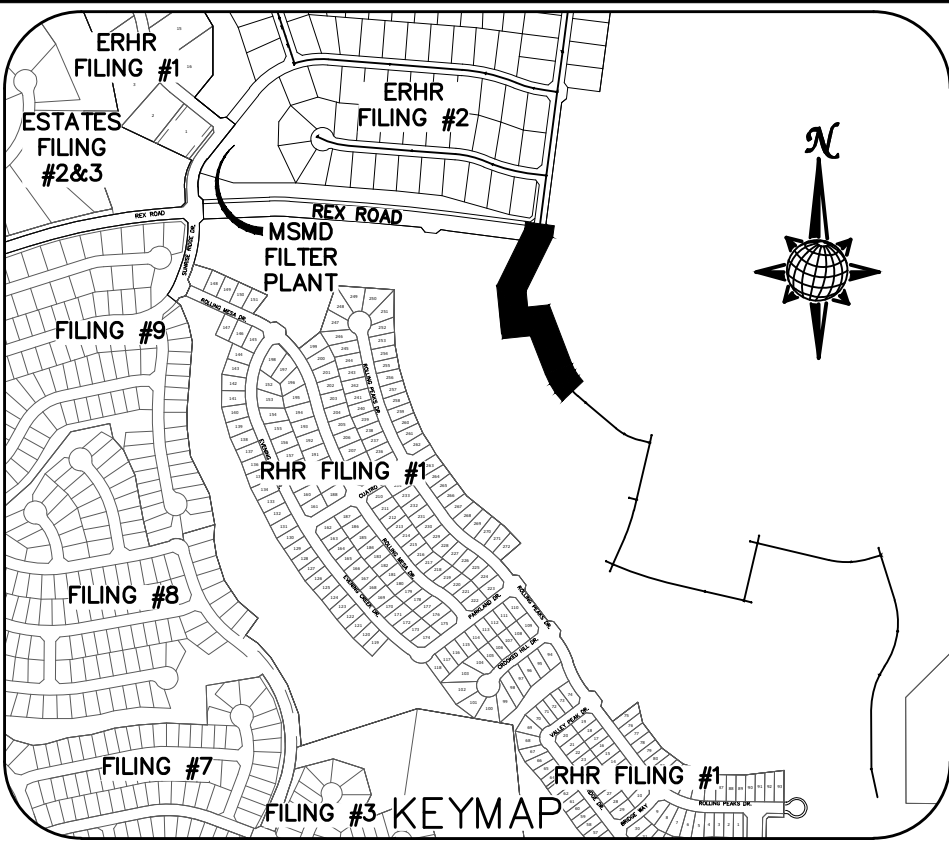
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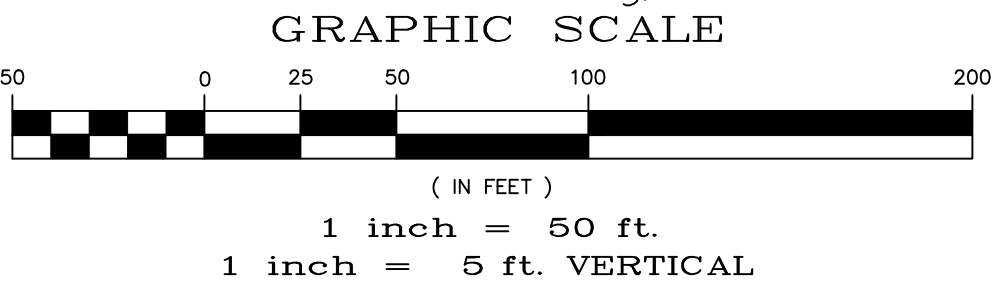


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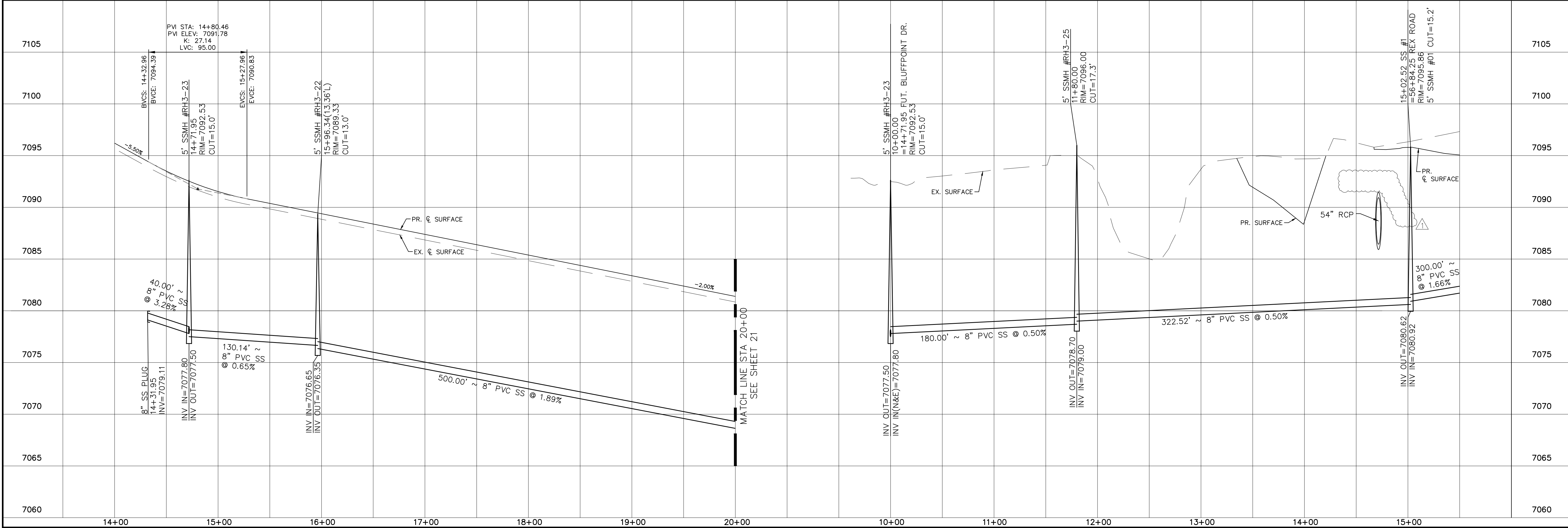
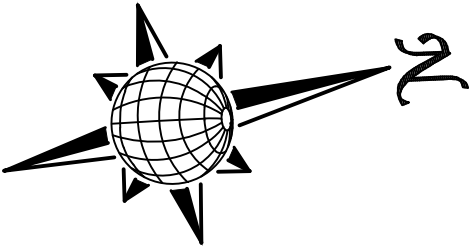
NOTE:
APPROVAL OF THESE PLANS DOES NOT CONSTITUTE
APPROVAL OF THE ROADWAY DESIGN AND PROFILES SHOWN.



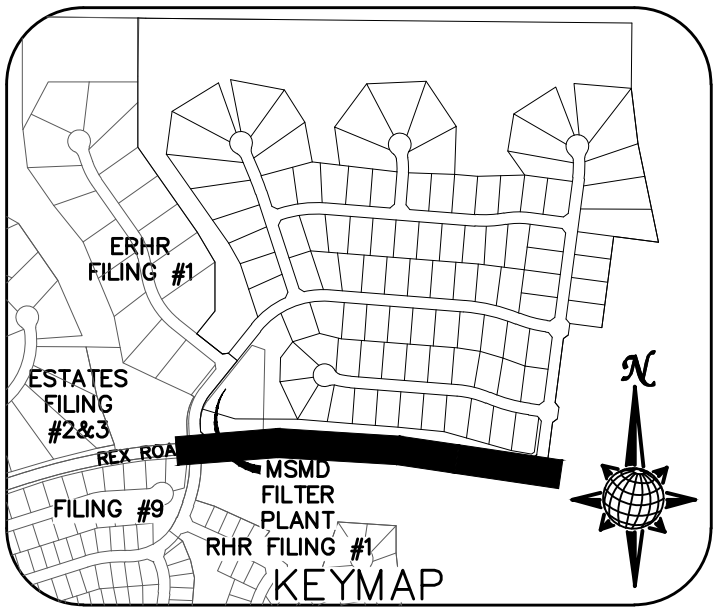
FUT. CROOKED BLUFF DR.



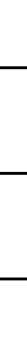

SS #2



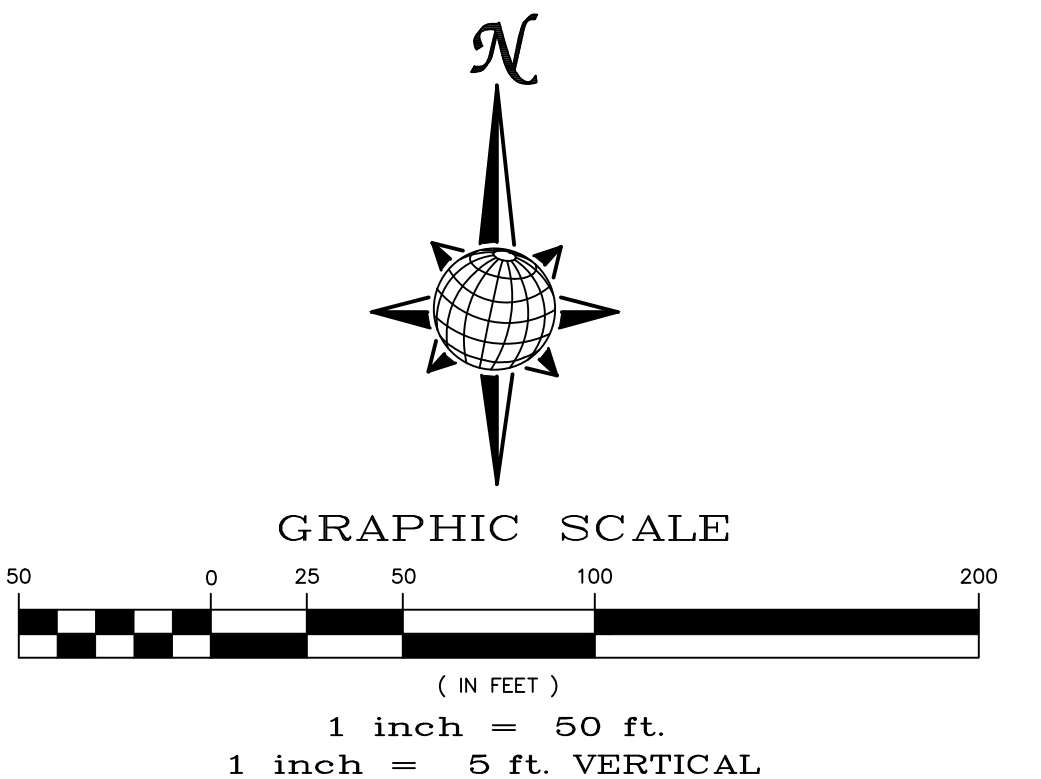
Log		Date		Appr.	
9/13/2021					
LIGHT POLES SS SERVES WATER SERVES REX ROAD 8.12' VM (S+12.6, 7.83, 10.11, 12.14, 15.16, 22.23, 24.26, 27.28, 30.31, 34.35, 38.39)					
1		2		3	
TECH CONTRACTORS		11886 STAPLETON DRIVE		719.495.7444	
		FALCON, CO 80831		719.495.7444	
		TELEPHONE		719.495.2457	
		FAX			
MERIDIAN RANCH		THE ESTATES AT ROLLING HILLS RANCH FILING 2		STREET AND UTILITY PLANS	
		FUT. CROOKED BLUFF DR.		+ SS #2	
Drawn by		Checked by		Date	
Log		TAK		8/27/2020	
Scale		AS SHOWN		22 of 44	
PROFESSIONAL ENGINEER		31429		2020-000	

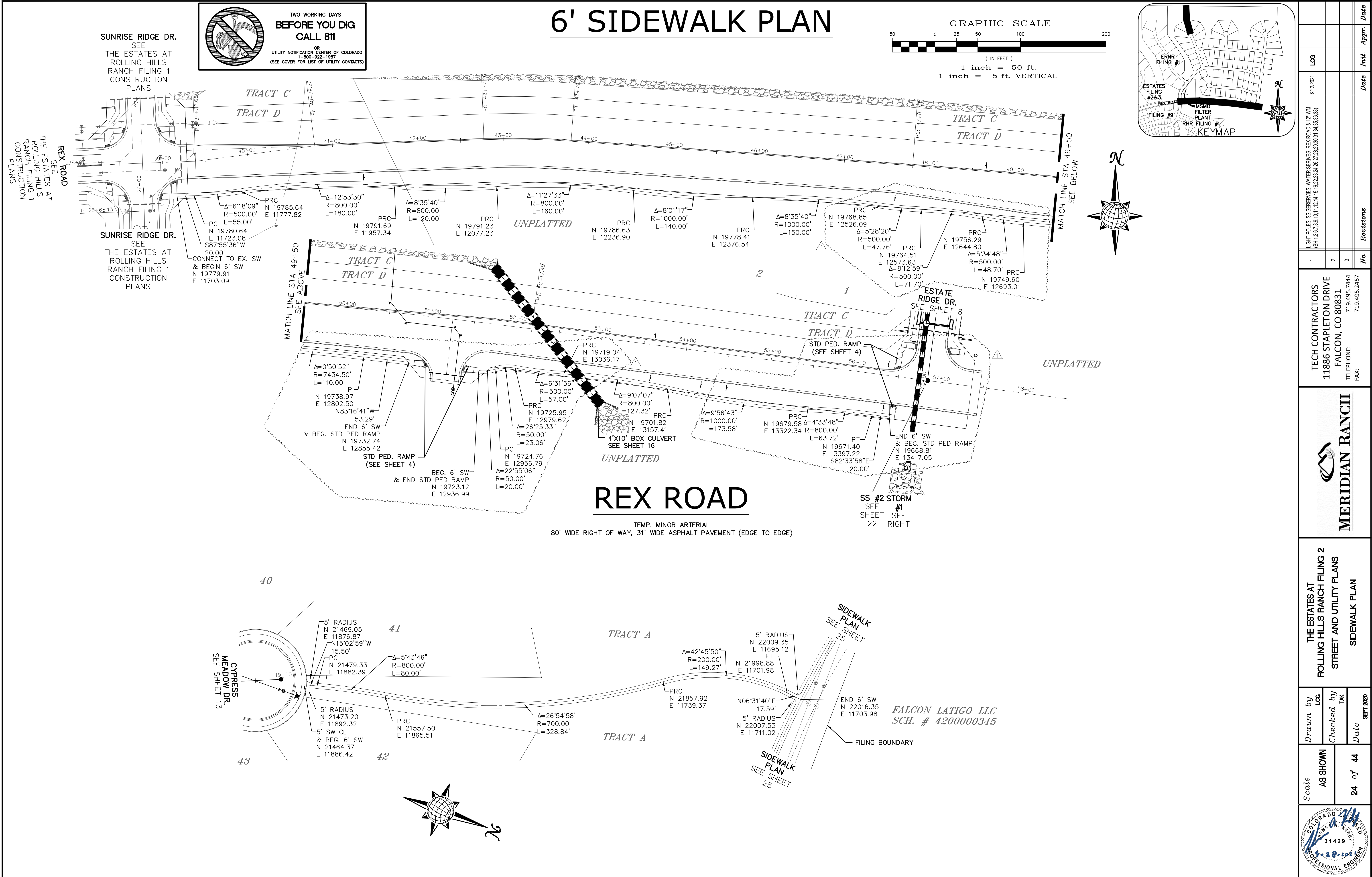



1. ALL SIGNS AND PAVEMENT MARKINGS SHALL BE IN COMPLIANCE WITH THE CURRENT MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).
2. REMOVAL OF EXISTING PAVEMENT MARKINGS SHALL BE ACCOMPLISHED BY A METHOD THAT DOES NOT MATERIALLY DAMAGE THE PAVEMENT. THE PAVEMENT MARKINGS SHALL BE REMOVED TO THE EXTENT THAT THEY WILL NOT BE VISIBLE UNDER DAY OR NIGHT CONDITIONS. AT NO TIME WILL IT BE ACCEPTABLE TO PAINT OVER EXISTING PAVEMENT MARKINGS.
3. ANY DEVIATION FROM THE STRIPING AND SIGNING PLAN SHALL BE APPROVED BY EL PASO COUNTY PLANNING AND COMMUNITY DEVELOPMENT.
4. ALL SIGNS SHOWN ON THE SIGNING AND STRIPING PLAN SHALL BE NEW SIGNS. EXISTING SIGNS MAY REMAIN OR BE REUSED IF THEY MEET CURRENT EL PASO COUNTY AND MUTCD STANDARDS.
5. STREET NAME AND REGULATORY STOP SIGNS SHALL BE ON THE SAME POST AT INTERSECTIONS.
6. ALL REMOVED SIGNS SHALL BE DISPOSED OF IN A PROPER MANNER BY THE CONTRACTOR.
7. ALL STREET NAME SIGNS SHALL HAVE "D" SERIES LETTERS, WITH LOCAL ROADWAY SIGNS BEING 4" UPPER-LOWER CASE LETTERING ON 8" BLANK AND NON-LOCAL ROADWAY SIGNS BEING 6" LETTERING, UPPER-LOWER CASE ON 12" BLANK, WITH A WHITE BORDER THAT IS NOT RECESSED. MULTI-LANE ROADWAYS WITH SPEED LIMITS OF 40 MPH OR HIGHER SHALL HAVE 8" UPPER-LOWER CASE LETTERING ON 18" BLANK WITH A WHITE BORDER THAT IS NOT RECESSED. THE WIDTH OF THE NON-RECESSED WHITE BORDERS SHALL MATCH PAGE 255 OF THE 2012 MUTCD "STANDARD HIGHWAY SIGNS"
8. ALL TRAFFIC SIGNS SHALL HAVE A MINIMUM HIGH INTENSITY PRISMATIC GRADE SHEETING.
9. ALL LOCAL RESIDENTIAL STREET SIGNS SHALL BE MOUNTED ON A 1.75" X 1.75" SQUARE TUBE SIGN POST AND STUB POST BASE. FOR OTHER APPLICATIONS, REFER TO THE CDOT STANDARD S-614-8 REGARDING USE OF THE P2 TUBULAR STEEL POST SUBBASE DESIGN.
10. ALL SIGNS SHALL BE SINGLE SHEET ALUMINUM WITH 0.100" MINIMUM THICKNESS.
11. ALL LIMIT LINES/STOP LINES, CROSSWALK LINES, PAVEMENT LEGENDS, AND ARROWS SHALL BE A MINIMUM 125 MIL THICKNESS PREFORMED THERMOPLASTIC PAVEMENT MARKINGS WITH TAPERED LEADING EDGES PER CDOT STANDARD S-627-1. WORD AND SYMBOL MARKINGS SHALL BE THE NARROW TYPE. STOP BARS SHALL BE 24" IN WIDTH. CROSSWALKS LINES SHALL BE 12" WIDE AND 8' LONG PER CDOT S-627-1.
12. ALL LONGITUDINAL LINES SHALL BE A MINIMUM 15MIL THICKNESS EPOXY PAINT. ALL NON-LOCAL RESIDENTIAL ROADWAYS SHALL INCLUDE BOTH RIGHT AND LEFT EDGE LINE STRIPING AND ANY ADDITIONAL STRIPING AS REQUIRED BY CDOT S-627-1.
13. THE CONTRACTOR SHALL NOTIFY EL PASO COUNTY PLANNING AND COMMUNITY DEVELOPMENT (PCD) (719) 520-6819 PRIOR TO AND UPON COMPLETION OF SIGNING AND STRIPING.
14. THE CONTRACTOR SHALL OBTAIN A WORK IN THE RIGHT OF WAY PERMIT FROM THE EL PASO COUNTY DEPARTMENT OF PUBLIC WORKS (DPW) PRIOR TO ANY SIGNAGE OR STRIPING WORK WITHIN AN EXISTING EL PASO COUNTY ROADWAY.

	Scale AS SHOWN	Drawn by LOG	THE ESTATES AT ROLLING HILLS RANCH FILING 2 STREET AND UTILITY PLANS SIGNAGE AND STRIPING	 MERIDIAN RANCH	TECH CONTRACTORS 11886 STAPLETON DRIVE FALCON, CO 80831 TELEPHONE: 719.495.7444 FAX: 719.495.2457	1	LIGHT POLES, SS SERVIERVES WATER SERVICES, REX ROAD & 12" MM (SH 12.67.83.9, 10.11.12.14, 15.16.22.23.24, 26.27.28.29.30.31.34, 35.36.38)	9/13/2021	LOG	
	23 of 44	Checked by TAK	Date SEPT 2020			No.	Revisions	Date	Instr.	Appr.

TEMP. MINOR ARTERIAL
80' WIDE RIGHT OF WAY, 31' WIDE ASPHALT PAVEMENT (EDGE TO EDGE)







TWO WORKING DAYS

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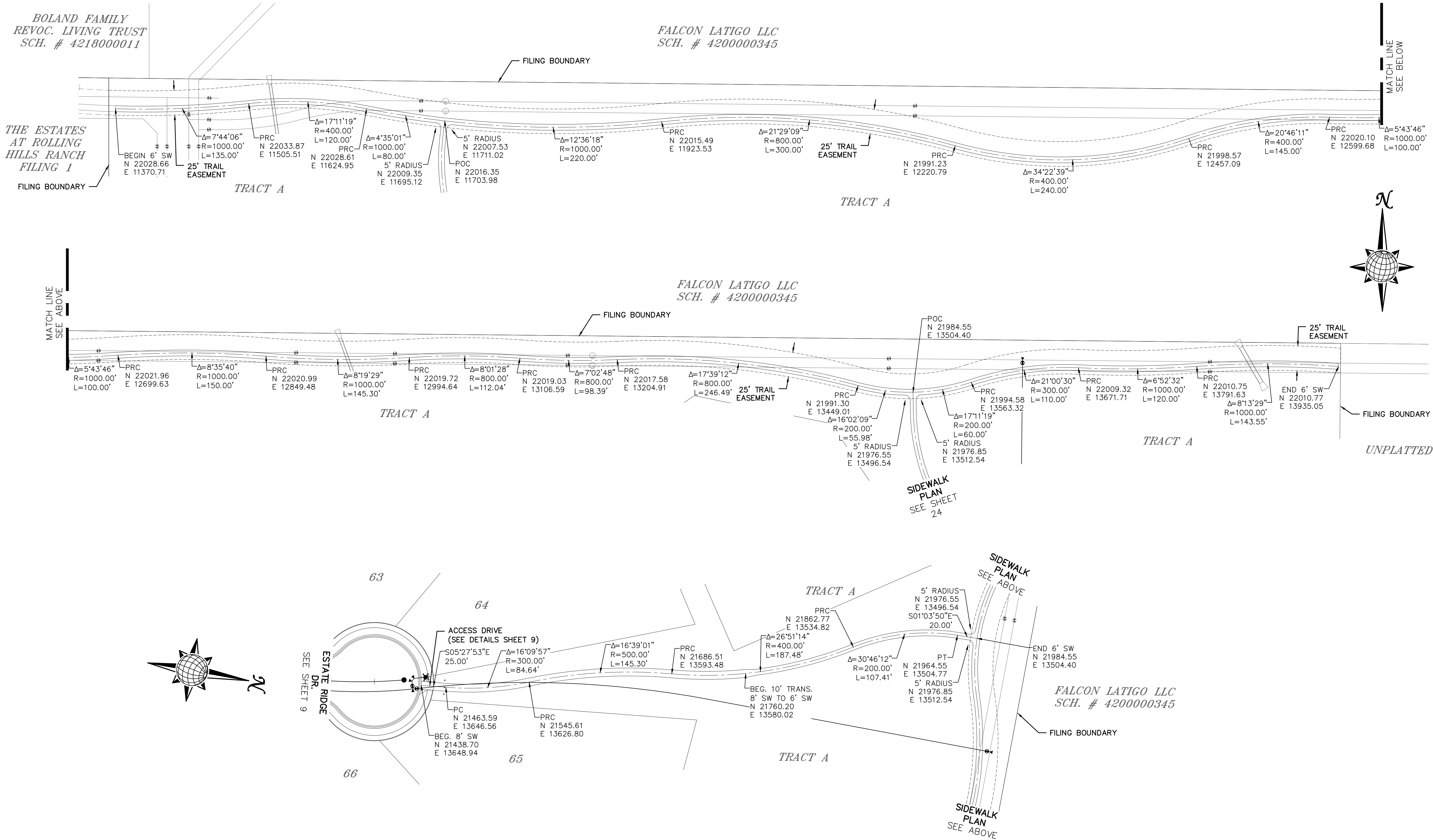
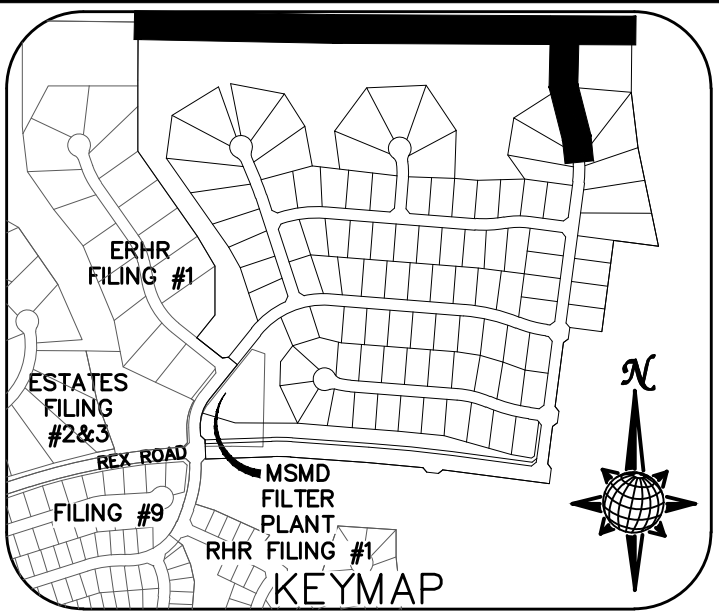
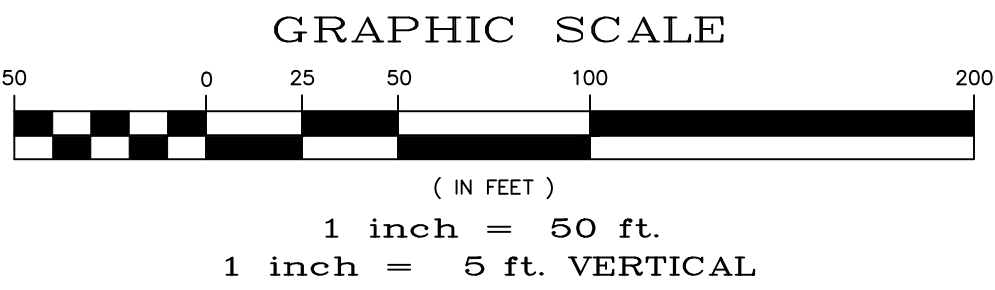
OR

UTILITY NOTIFICATION CENTER OF COLORADO

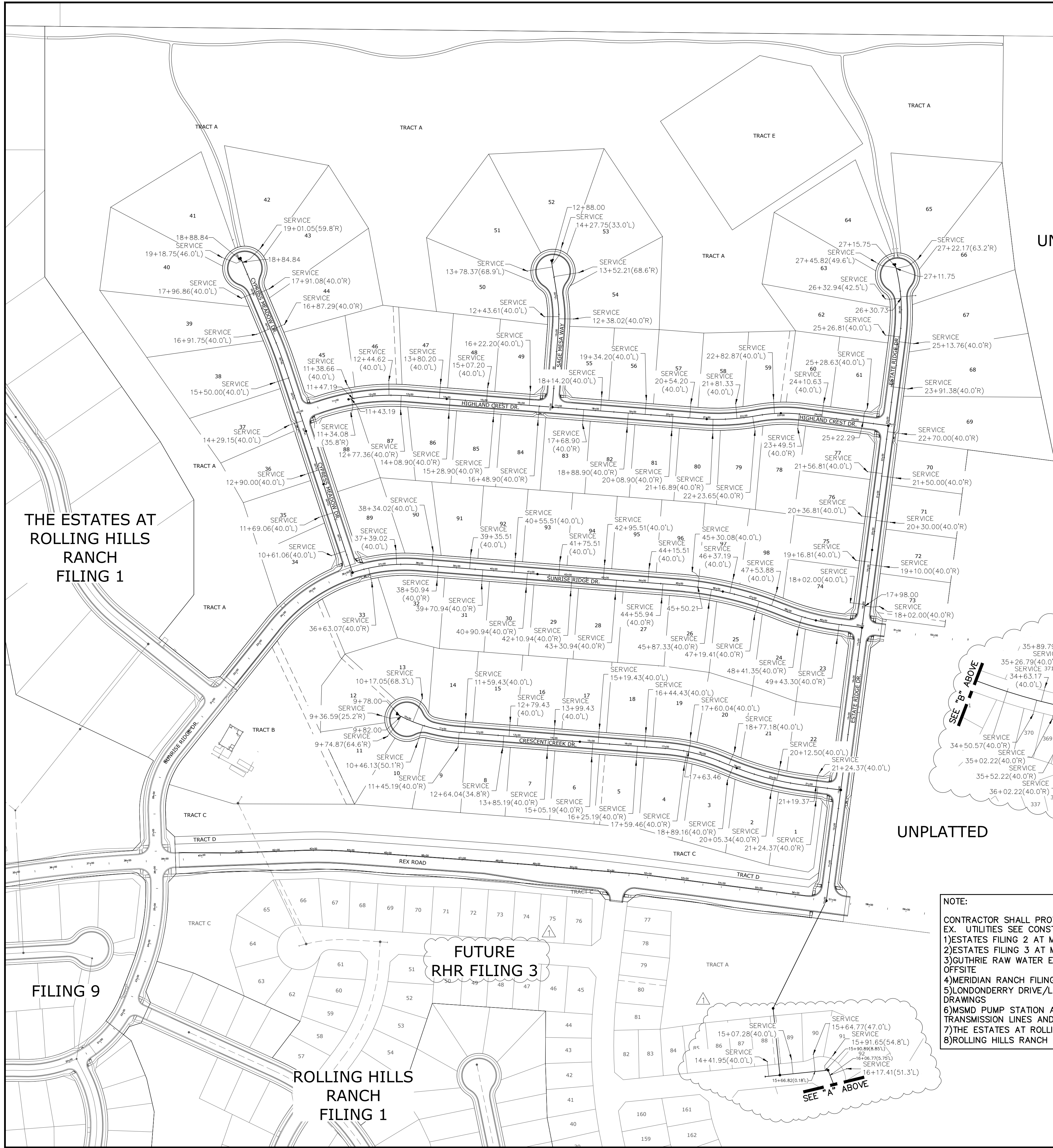
1-800-922-1987

(SEE COVER FOR LIST OF UTILITY CONTACTS)

6' SIDEWALK PLAN



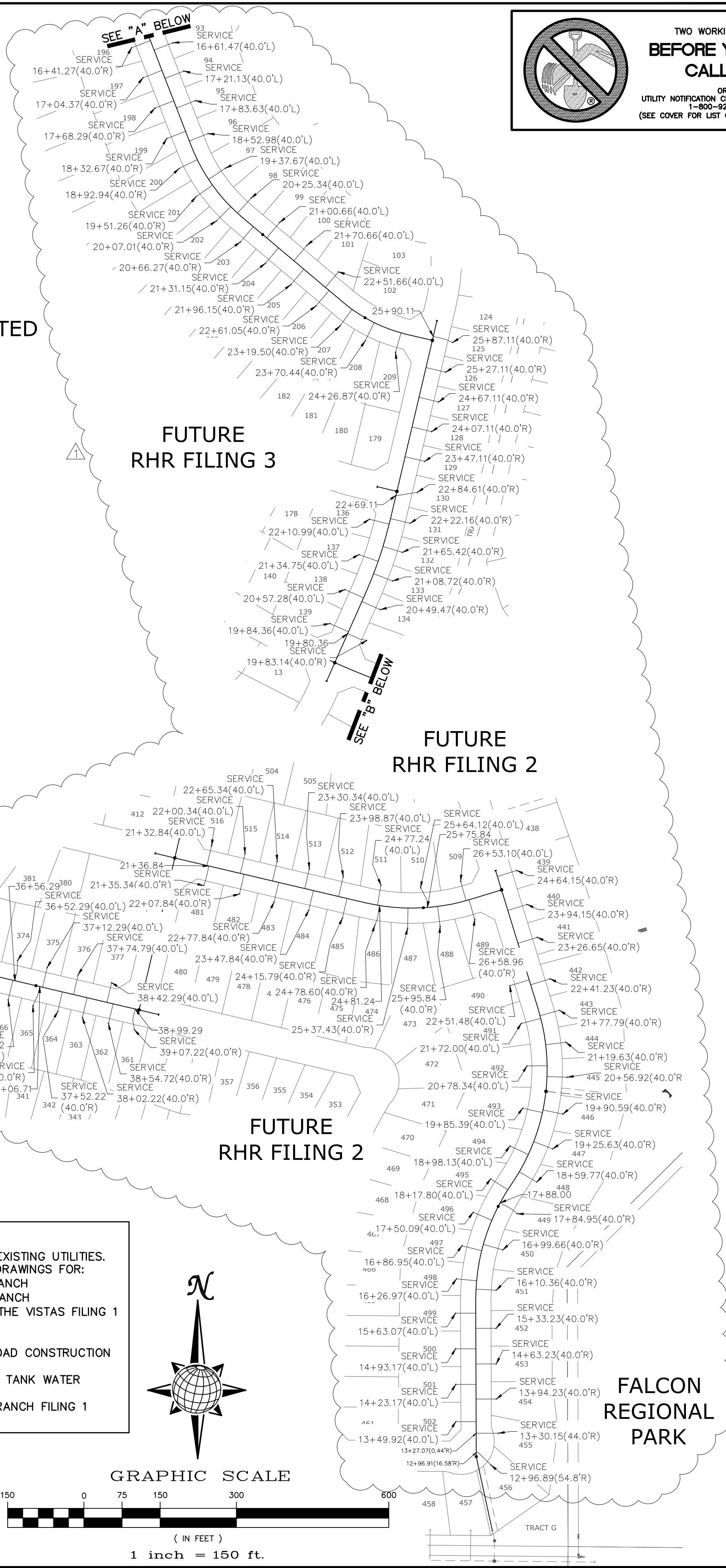
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9/13/2021					
LIGHT POLES SS SEREVIES WATER SERVICES REX ROAD & 12' W/M (S4 12.67 8.81 10.11 12.14 15.16 22.23 24.26 27.28 30.31 34.35 36.38)					
TECH CONTRACTORS		11886 STAPLETON DRIVE		FALCON, CO 80831	
719.495.7444		TELEPHONE		719.495.2457	
719.495.2457		FAX		719.495.2457	
MERIDIAN RANCH		THE ESTATES AT ROLLING HILLS RANCH FILING 2		STREET AND UTILITY PLANS	
SIDEWALK PLAN		Scale AS SHOWN		25 of 44	
Drawn by		Checked by		Date	
Log		TAK		SEPT 2020	
31429		31429		31429	
PROFESSIONAL ENGINEER		PROFESSIONAL ENGINEER		PROFESSIONAL ENGINEER	



UNPLATTED

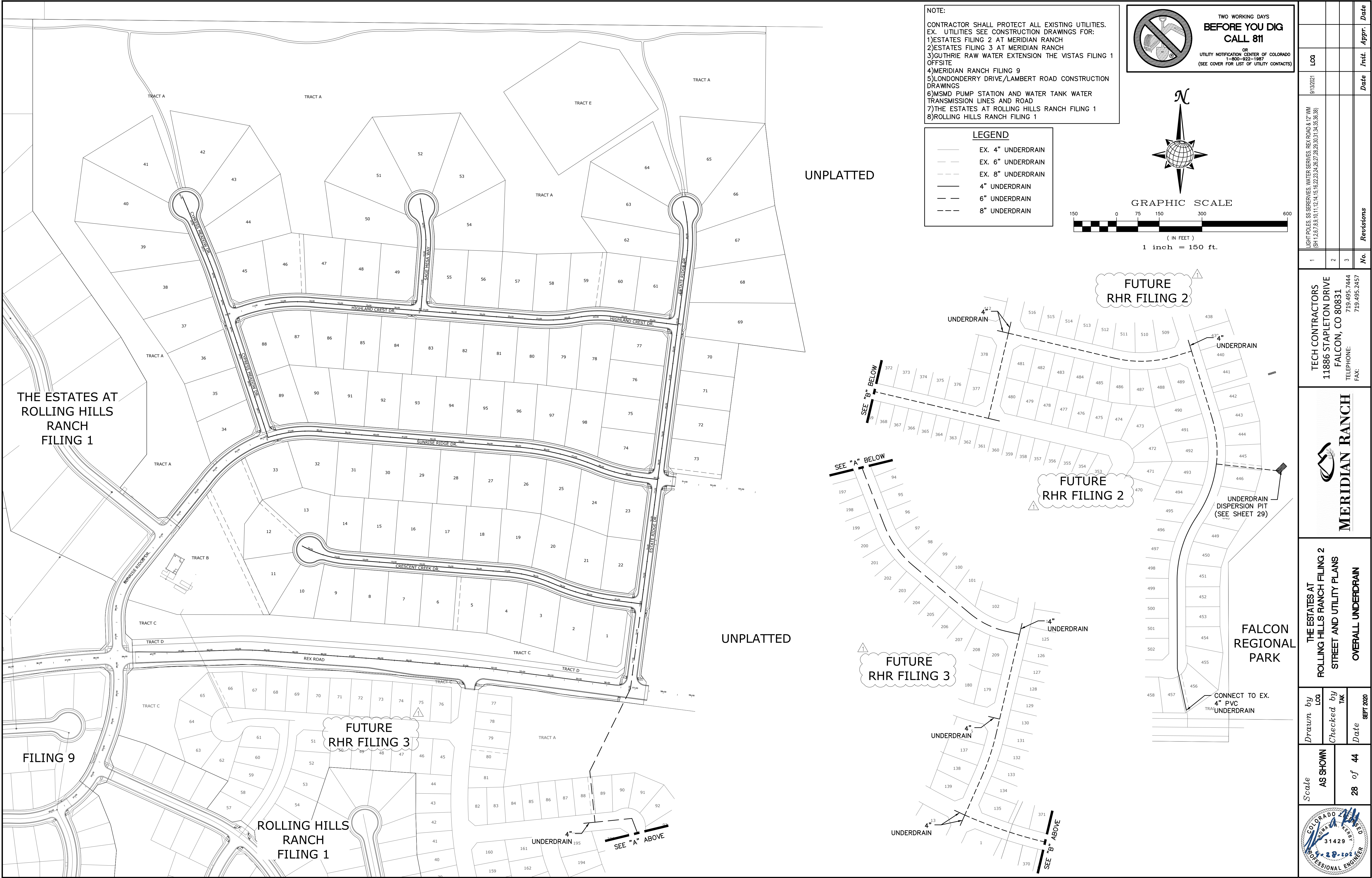
UNPLATTED

NOTE:
CONTRACTOR SHALL PROTECT ALL EXISTING UTILITIES.
EX. UTILITIES SEE CONSTRUCTION DRAWINGS FOR:
1)ESTATES FILING 2 AT MERIDIAN RANCH
2)ESTATES FILING 3 AT MERIDIAN RANCH
3)GUTHRIE RAW WATER EXTENSION THE VISTAS FILING 1 OFFSITE
4)MERIDIAN RANCH FILING 9
5)LONDONDERRY DRIVE/LAMBERT ROAD CONSTRUCTION DRAWINGS
6)MSMD PUMP STATION AND WATER TANK WATER TRANSMISSION LINES AND ROAD
7)THE ESTATES AT ROLLING HILLS RANCH FILING 1
8)ROLLING HILLS RANCH FILING 1



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1-800-922-1987
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Log	Init.	Appr.	Date
9/13/2021			
1	2	3	No.
TECH CONTRACTORS 11886 STAPLETON DRIVE FALCON, CO 80831 TELEPHONE 719.495.7444 FAX 719.495.2457			
MERIDIAN RANCH			
THE ESTATES AT ROLLING HILLS RANCH FILING 2 STREET AND UTILITY PLANS OVERALL SS SERVICES			
Drawn by	Log	Checked by	TAK
Scale	AS SHOWN	Date	27 of 44
SEPT 2020			
PROFESSIONAL ENGINEER 31429			



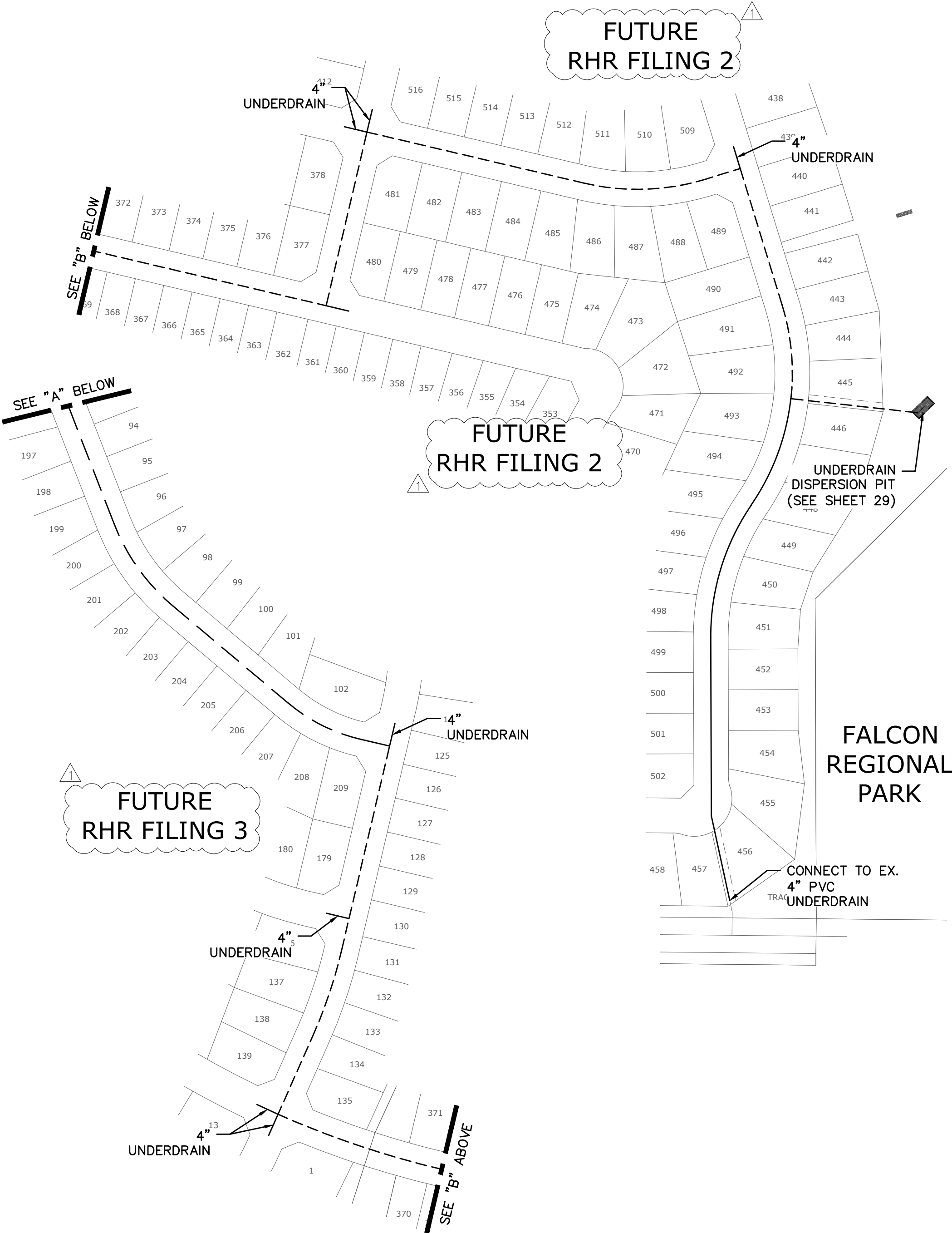
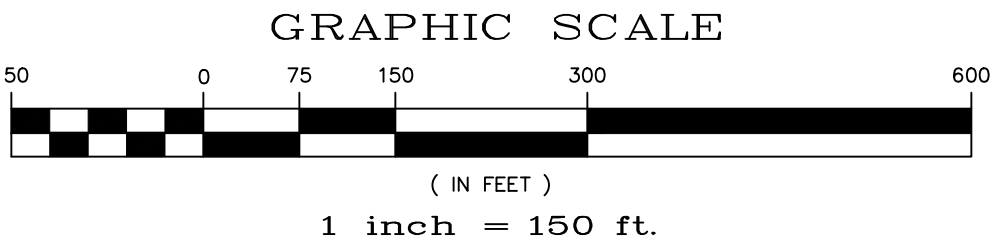
NOTE:
CONTRACTOR SHALL PROTECT ALL EXISTING UTILITIES.
EX. UTILITIES SEE CONSTRUCTION DRAWINGS FOR:
1)ESTATES FILING 2 AT MERIDIAN RANCH
2)ESTATES FILING 3 AT MERIDIAN RANCH
3)GUTHRIE RAW WATER EXTENSION THE VISTAS FILING 1 OFFSITE
4)MERIDIAN RANCH FILING 9
5)LONDONDERRY DRIVE/LAMBERT ROAD CONSTRUCTION DRAWINGS
6)MSND PUMP STATION AND WATER TANK WATER TRANSMISSION LINES AND ROAD
7)THE ESTATES AT ROLLING HILLS RANCH FILING 1
8)ROLLING HILLS RANCH FILING 1



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

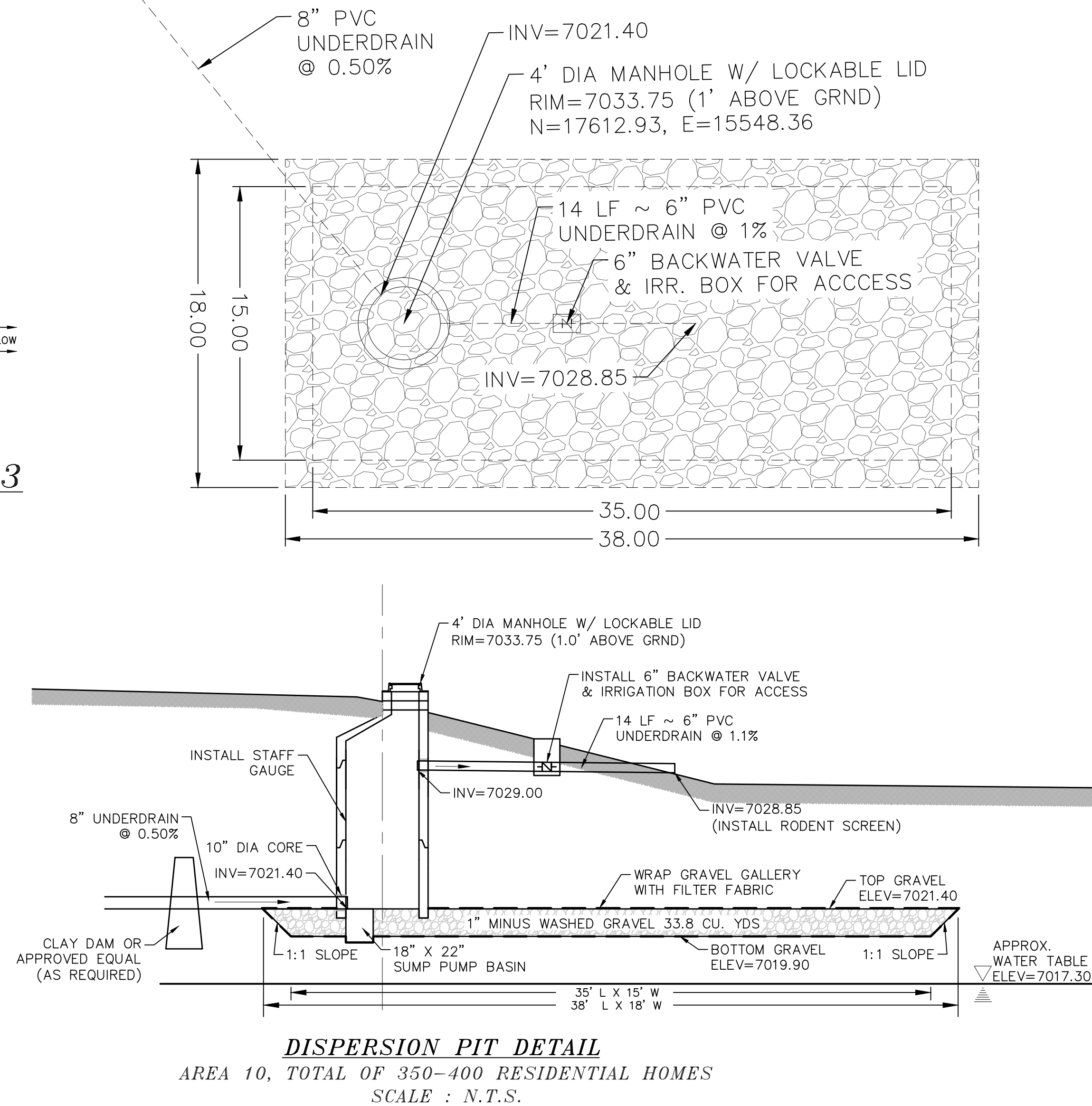
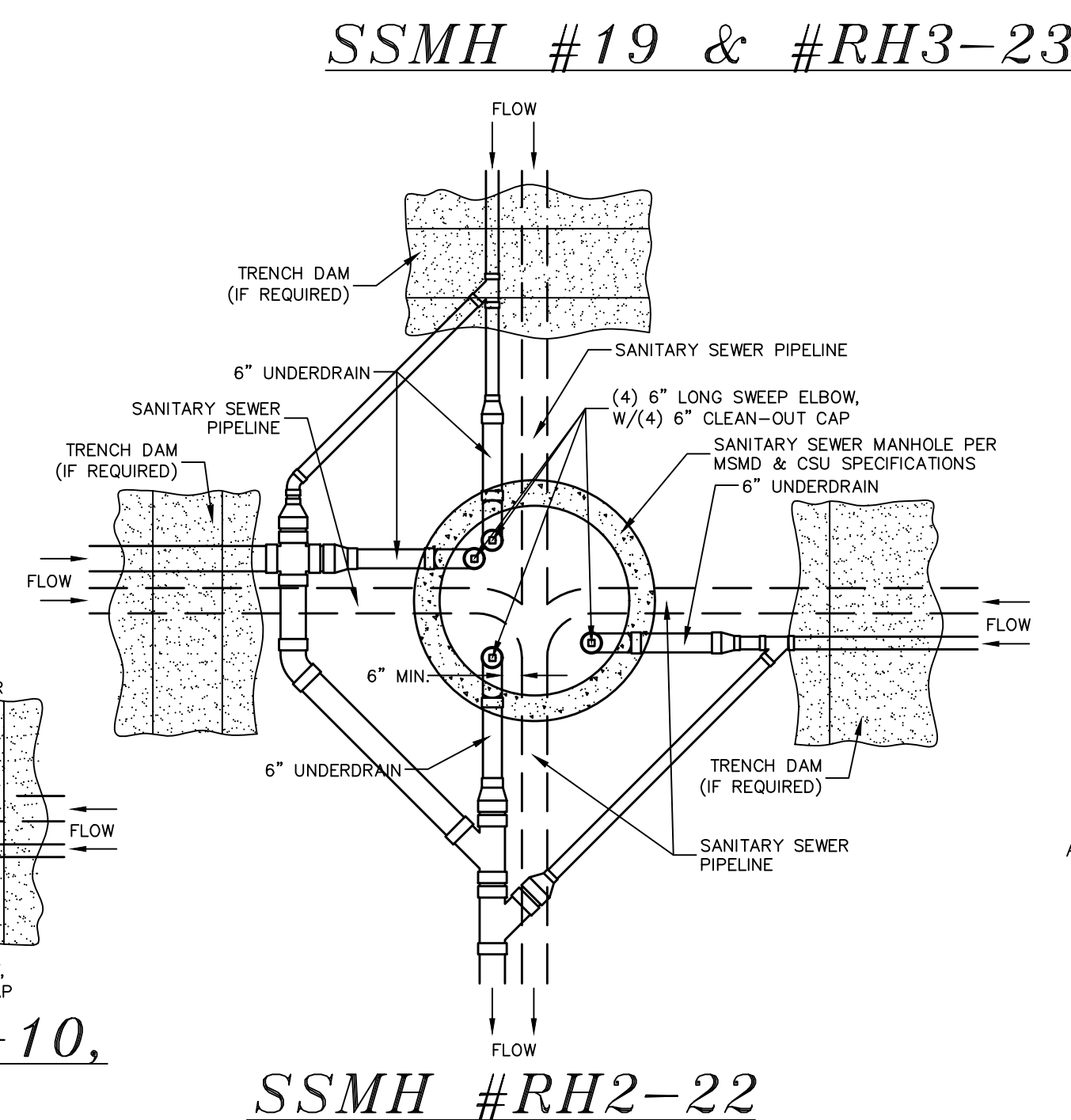
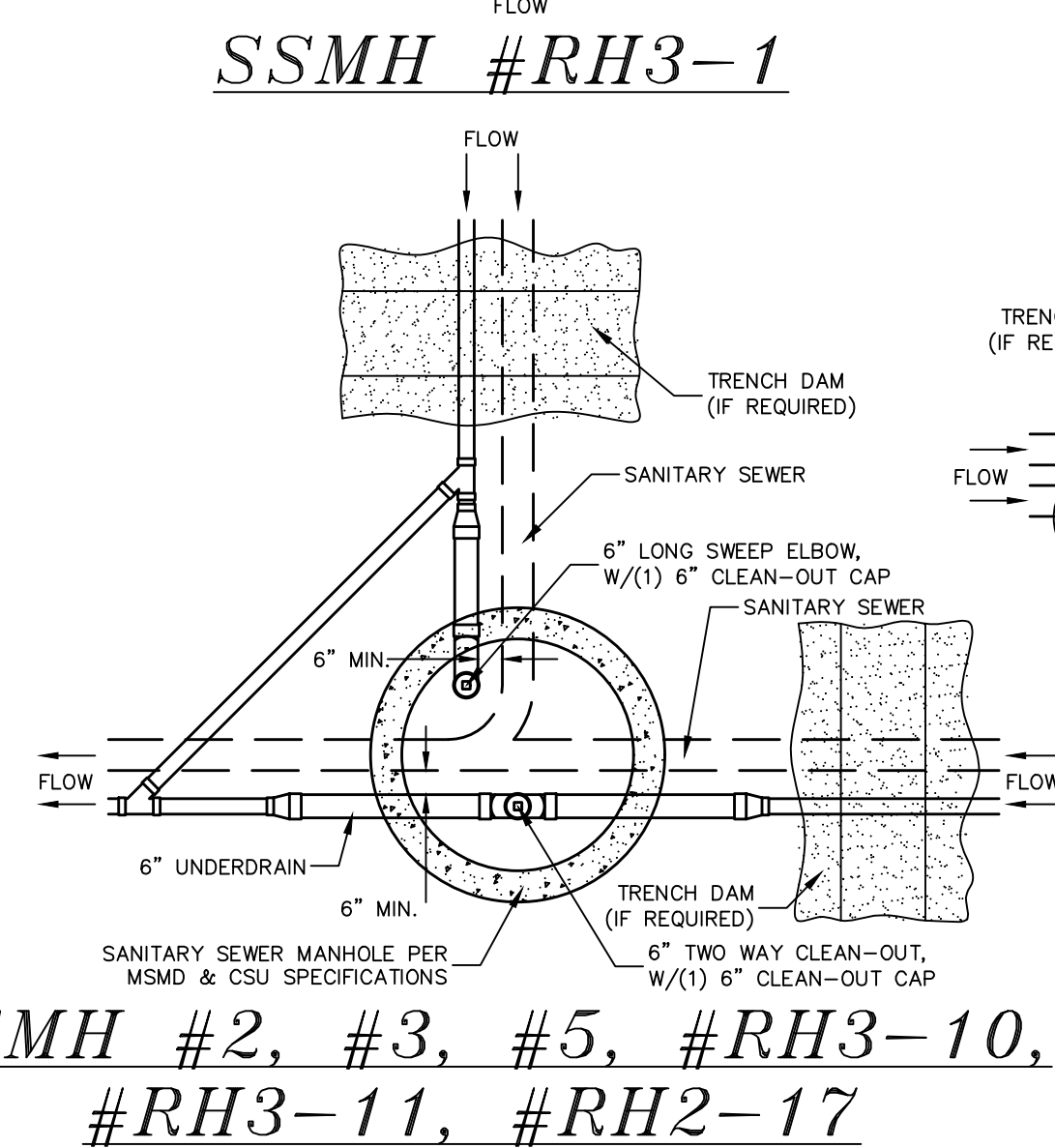
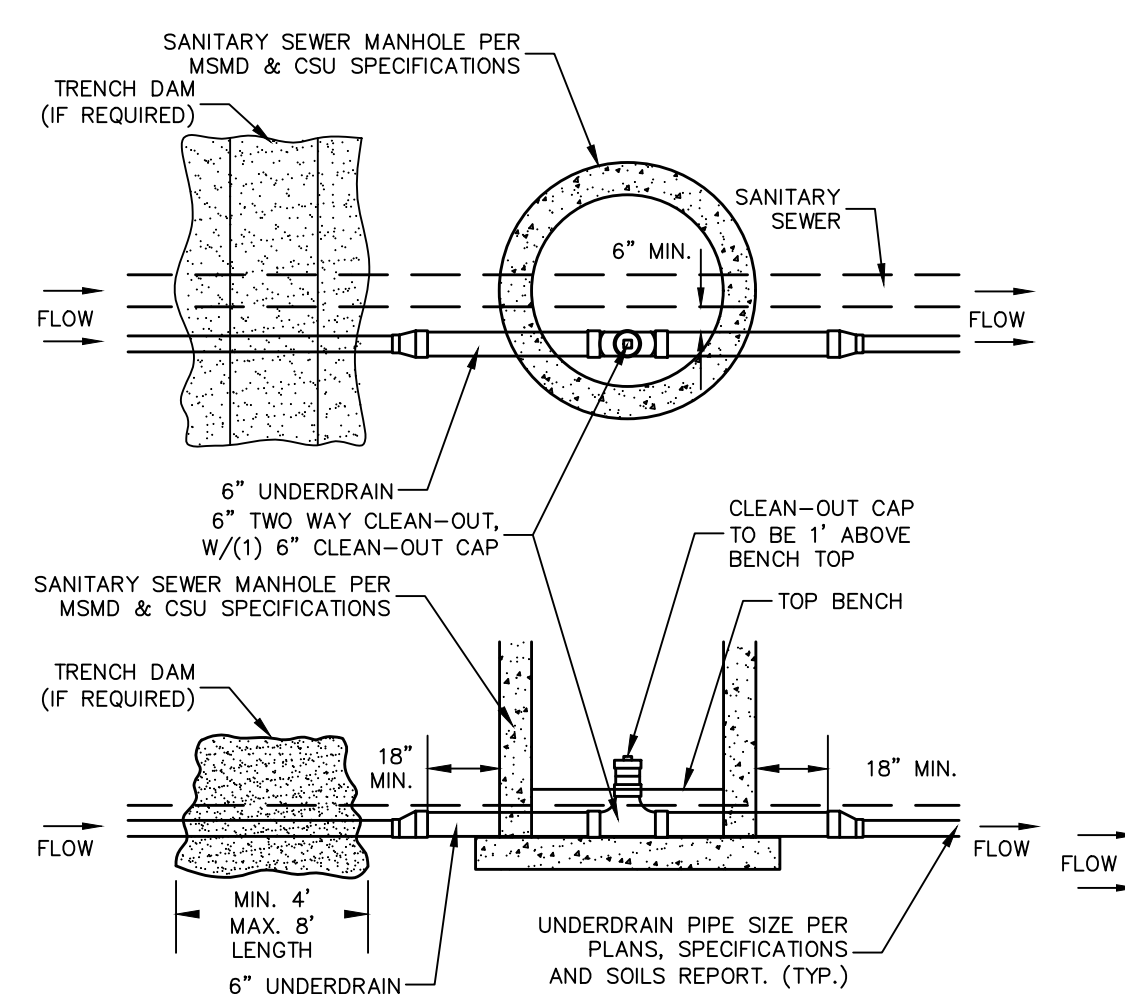
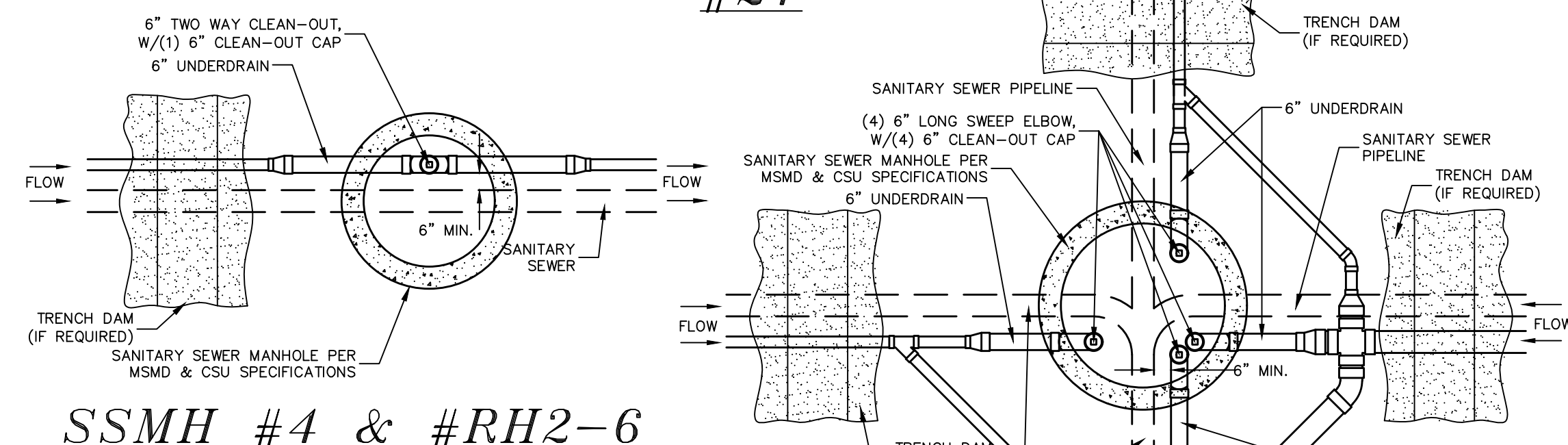
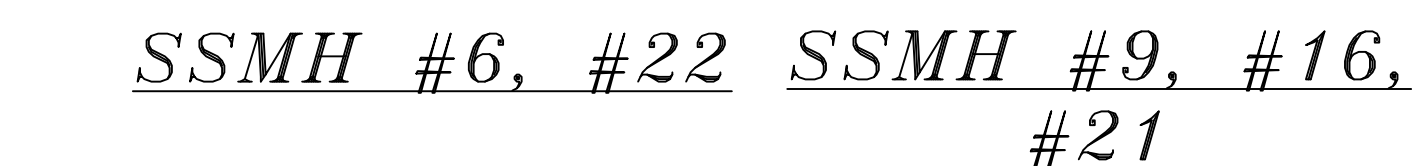
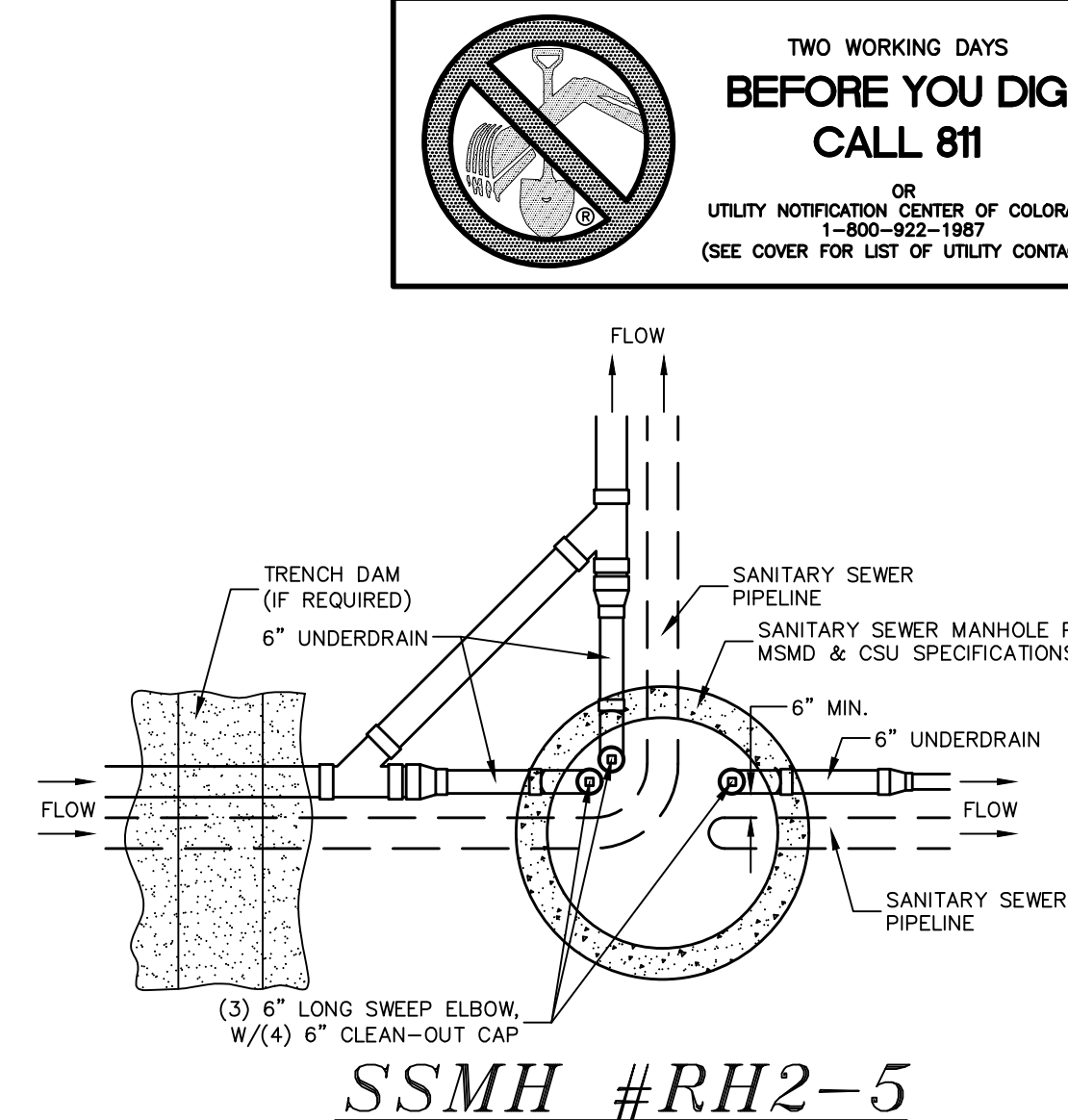
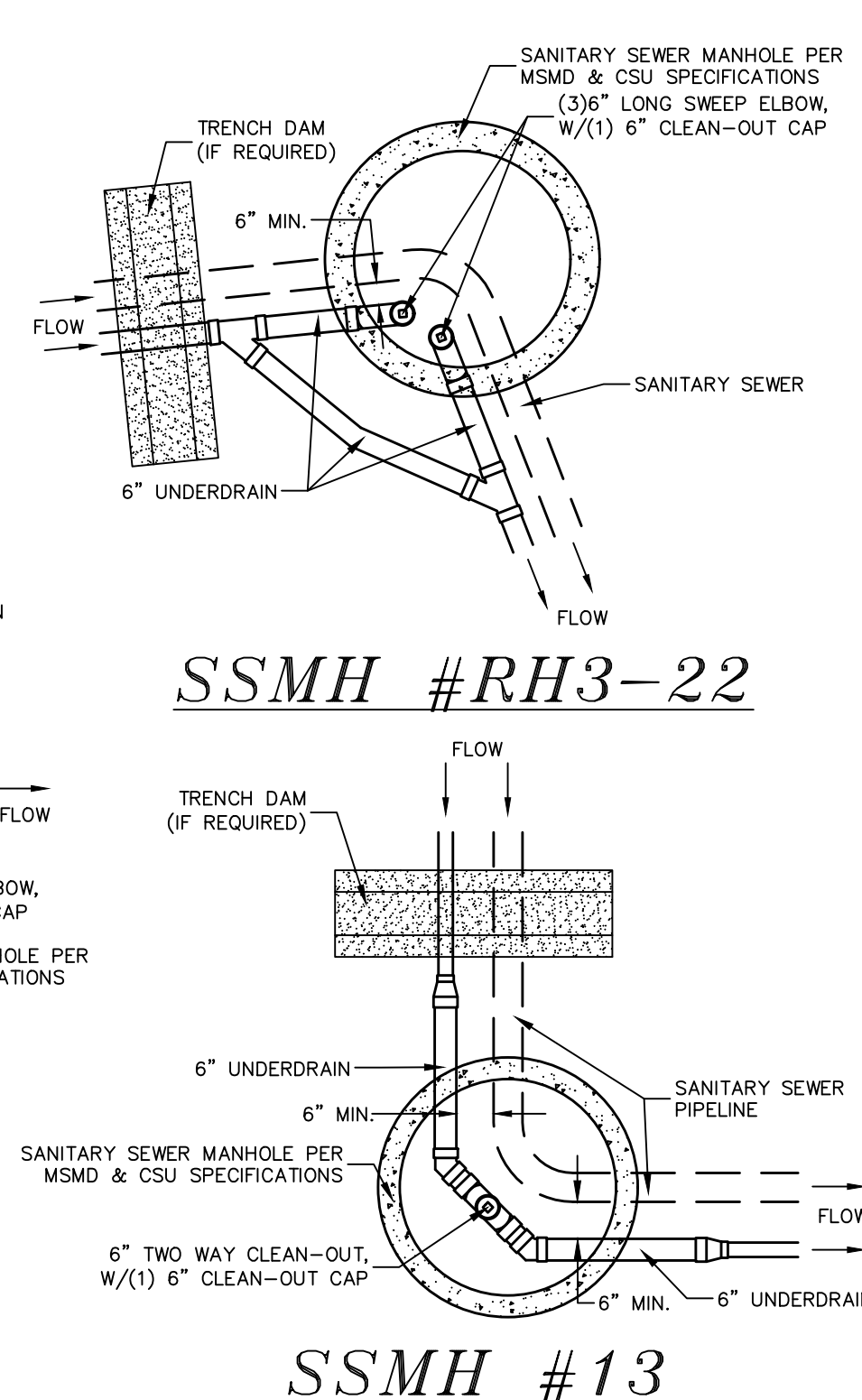
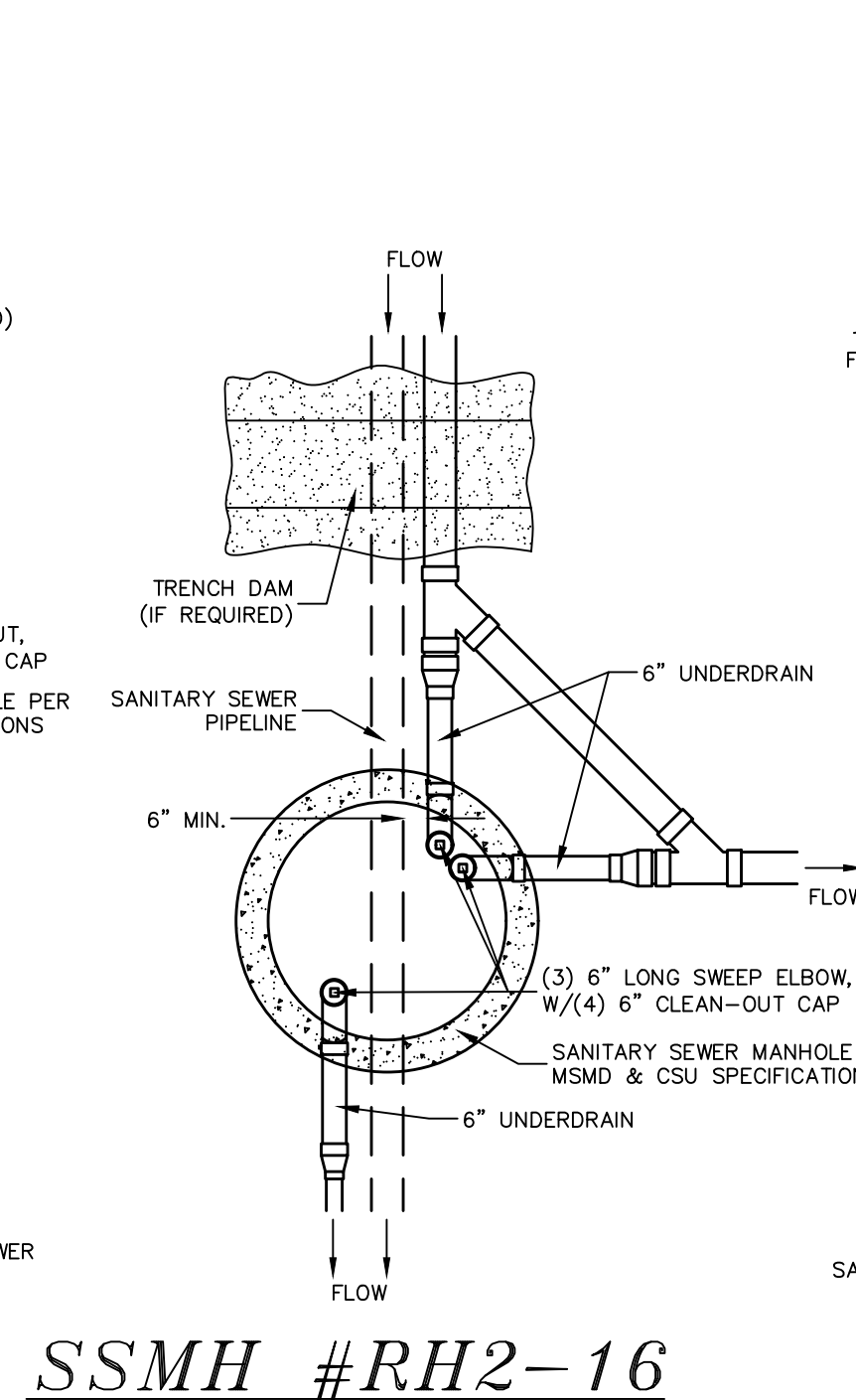
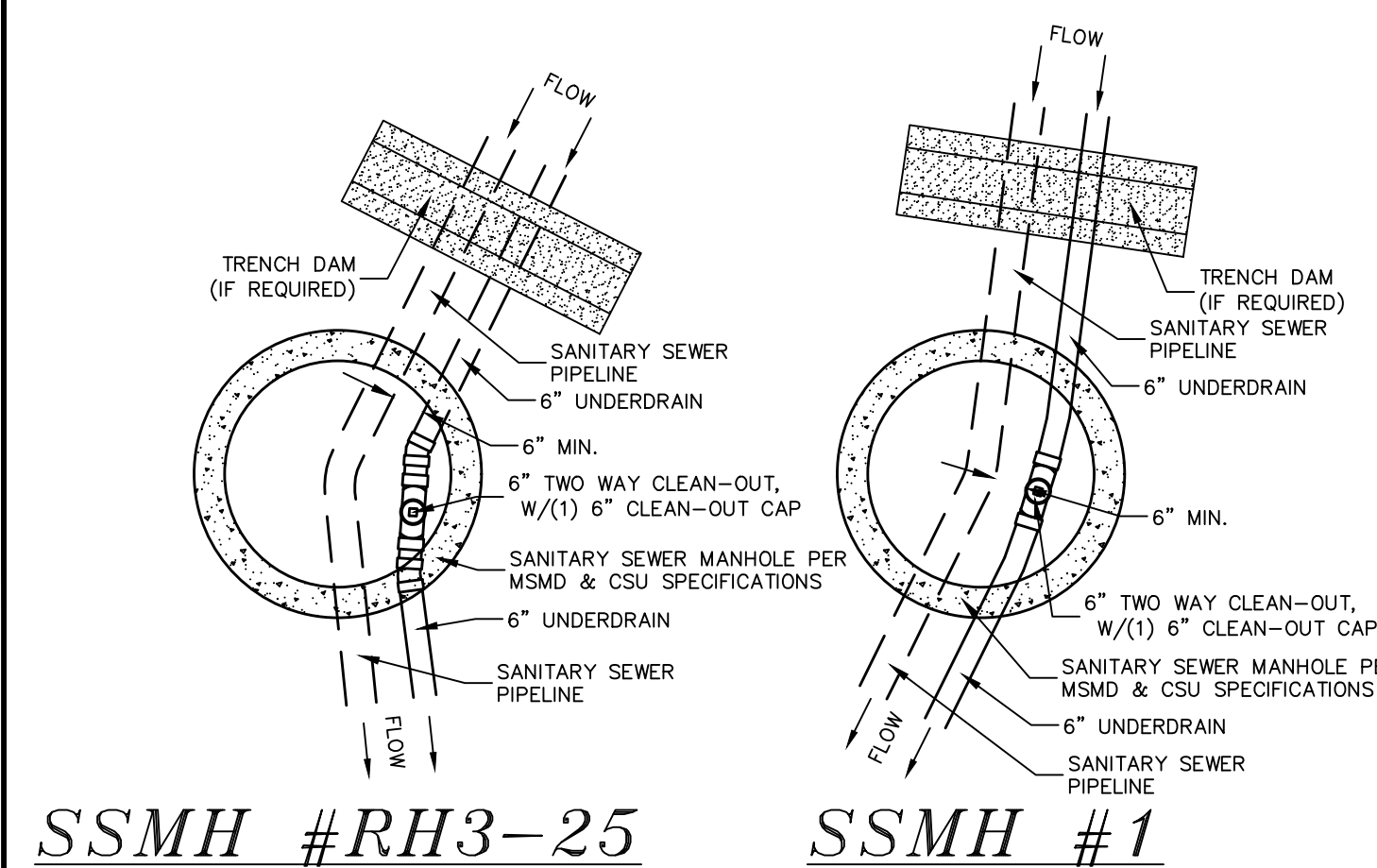


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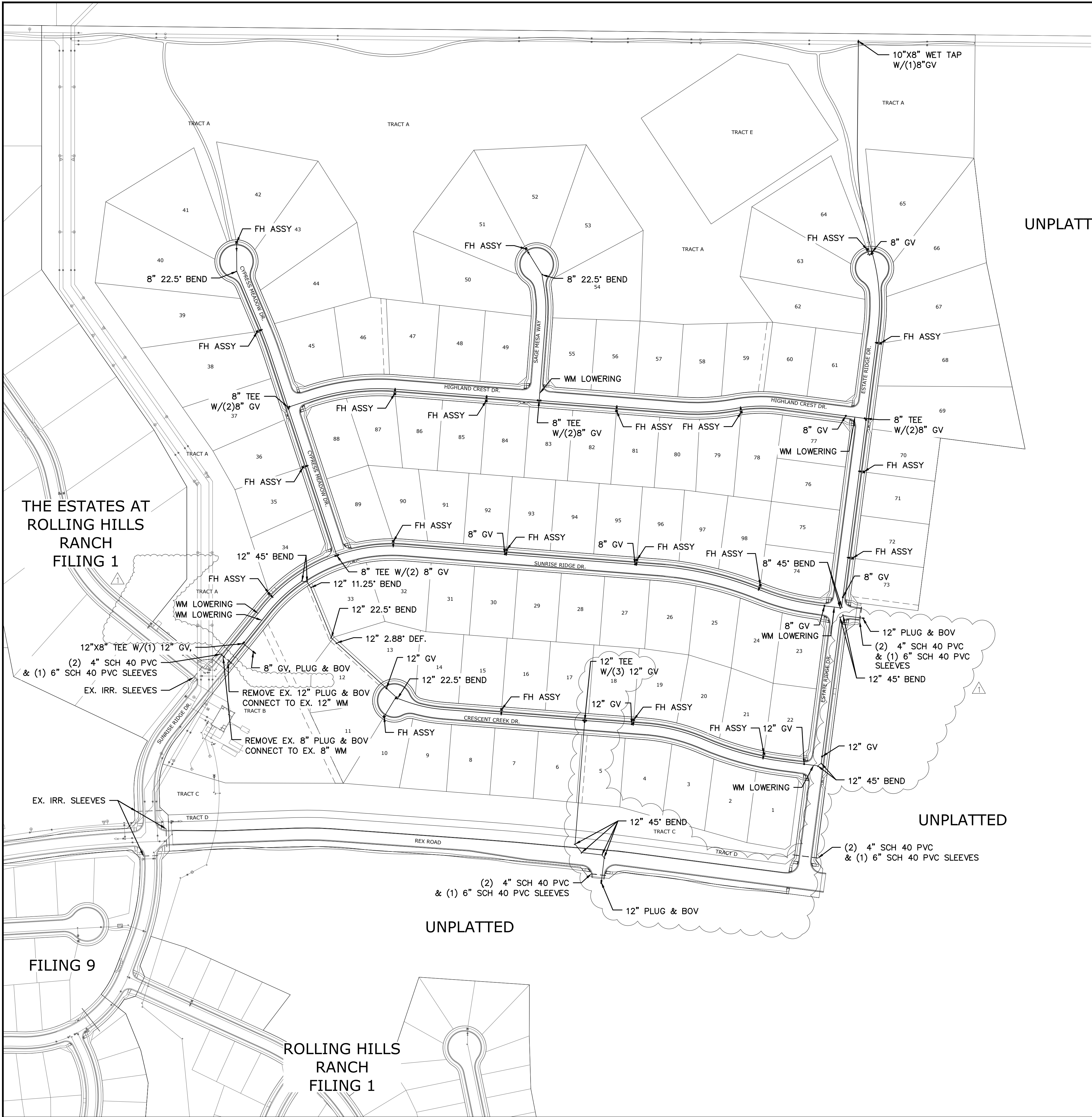
Log		Init.		Date		
9/13/2021						
LIGHT POLES SS SERVES WATER SERVES REX ROAD 8 1/2" VM (S4 1,2,6,7,8,9,10,11,12,14,15,16,22,23,24,26,27,28,30,31,34,35,38)						
1		2		3		
No.		Revisions				
TECH CONTRACTORS 11886 STAPLETON DRIVE FALCON, CO 80831 TELEPHONE: 719.495.7444 FAX: 719.495.2457						
 MERIDIAN RANCH						
THE ESTATES AT ROLLING HILLS RANCH FILING 2 STREET AND UTILITY PLANS OVERALL UNDERDRAIN						
Drawn by	Log	Checked by	TAK	Date		
AS SHOWN				SEPT 2020		
Scale	28 of 44					
						



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 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. UNDER DRAIN MAIN LINES SHALL HAVE CONTINUOUS POSITIVE DRAINAGE TO THE POINT OF DISCHARGE INTO A BELOW GRADE AN APPROVED UNDERDRAIN INFILTRATION STRUCTURE WHEREVER POSSIBLE. 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.

	Scale	AS SHOWN	Drawn by LOG	THE ESTATES AT ROLLING HILLS RANCH FILING 2 STREET AND UTILITY PLANS UNDERDRAIN DETAILS	 MERIDIAN RANCH	TECH CONTRACTORS 11886 STAPLETON DRIVE FALCON, CO 80831 TELEPHONE: 719.495.7444 FAX: 719.495.2457	1	LIGHT POLES SS SERVICIES, WATER SERVICES, REX ROAD & 12' WMI (S1 1.2,6.7,8,10,11,12,14,15,16,22,23,24,26,27,28,29,30,31,34,35,36,38)	9/19/2021	LOG				
										2				
										3				
	29 of 44	Date 2020 SEPT	Checked by TAK								No.	Revisions	Date	Init.



NOTE:
CONTRACTOR SHALL PROTECT ALL EXISTING UTILITIES.
EX. UTILITIES SEE CONSTRUCTION DRAWINGS FOR:
1)ESTATES FILING 2 AT MERIDIAN RANCH
2)ESTATES FILING 3 AT MERIDIAN RANCH
3)GUTHRIE RAW WATER EXTENSION THE VISTAS FILING 1 OFFSITE
4)MERIDIAN RANCH FILING 9
5)LONDONDERRY DRIVE/LAMBERT ROAD CONSTRUCTION DRAWINGS
6)MSMD PUMP STATION AND WATER TANK WATER TRANSMISSION LINES AND ROAD
7)THE ESTATES AT ROLLING HILLS RANCH FILING 1
8)ROLLING HILLS RANCH FILING 1

NOTE:
8" WM UNLESS OTHERWISE LABELED.

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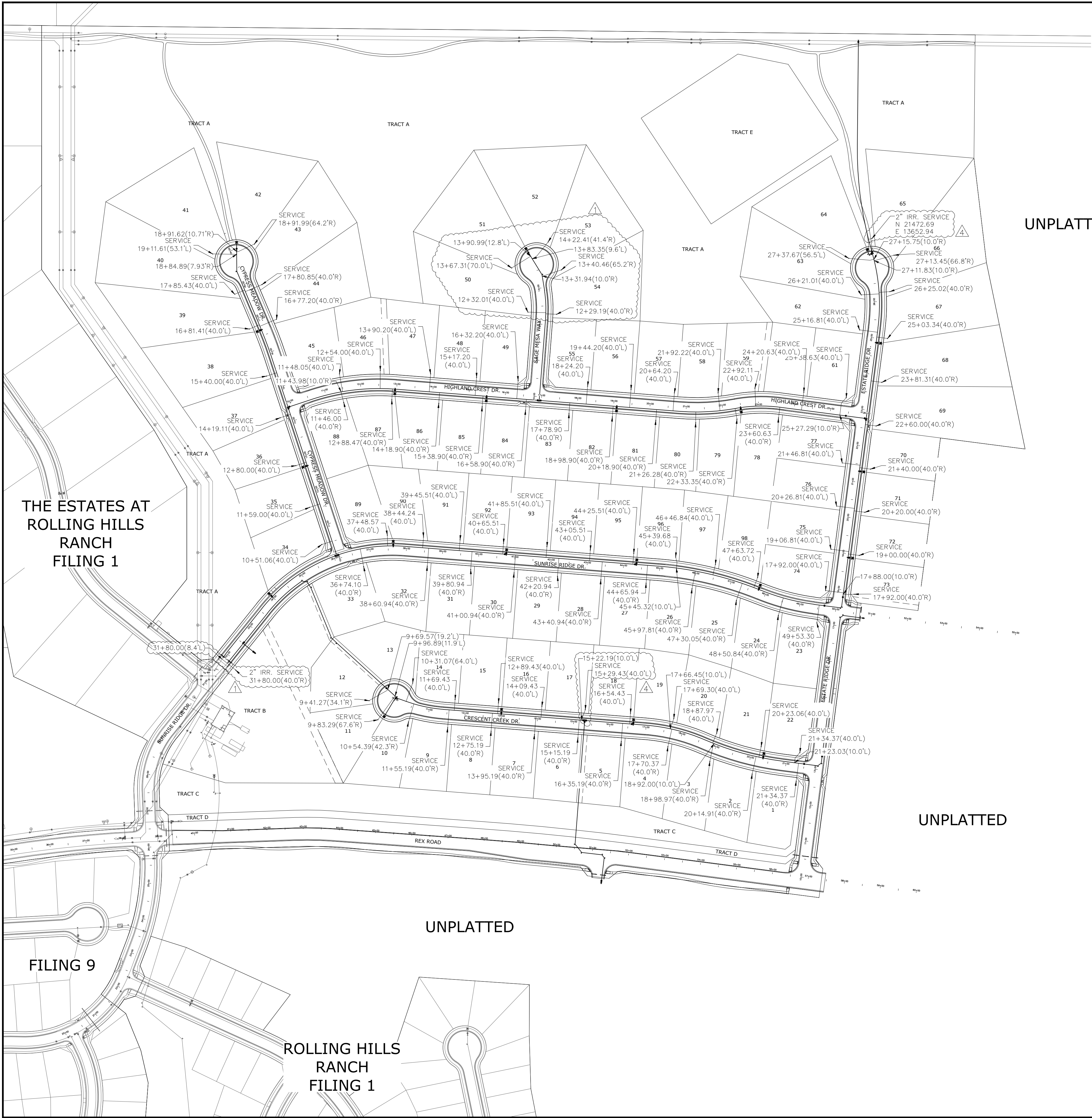
GRAPHIC SCALE

(IN FEET)

1 inch = 150 ft.

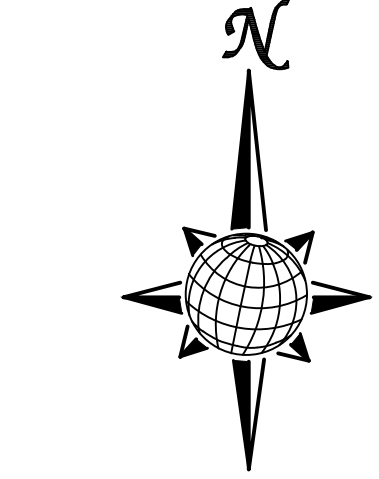
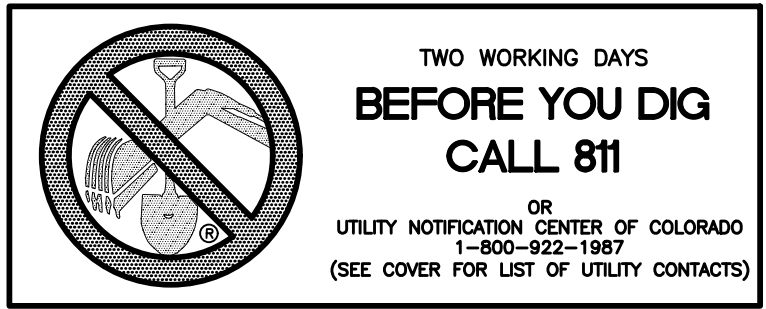
RESIDENTIAL HOME
4,800 SQ. FT. (MAX)
VB CONSTRUCTION
REQ'D FIRE FLOW: 1750 GPM
HYDRANT SPACING: 500' (MAX)
HOSE LAY DIST.: 250' (MAX)
NON-SPRINKLER

	Scale AS SHOWN	Drawn by LOG	THE ESTATES AT ROLLING HILLS RANCH FILING 2 STREET AND UTILITY PLANS OVERALL WATER	 MERIDIAN RANCH	TECH CONTRACTORS 11886 STAPLETON DRIVE FALCON, CO 80831 TELEPHONE: 719.495.7444 FAX: 719.495.2457	1	LIGHT POLES SS SEREVIES WATER SERVICES REX ROAD & 12" WM (SH 1,2,6,7,8,9,10,11,12,14,15,16,22,23,24,26,27,28,30,31,34,35,36,38)	LOG	9/13/2021		
		Checked by TAK				2					
		Date SEPT 2020				30 of 44	3				
							No.	Revisions	Date	Init.	Appr.





NOTE:
CONTRACTOR SHALL PROTECT ALL EXISTING UTILITIES.
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2)ESTATES FILING 3 AT MERIDIAN RANCH
3)GUTHRIE RAW WATER EXTENSION THE VISTAS FILING 1 OFFSITE
4)MERIDIAN RANCH FILING 9
5)LONDONDERRY DRIVE/LAMBERT ROAD CONSTRUCTION DRAWINGS
6)MSND PUMP STATION AND WATER TANK WATER TRANSMISSION LINES AND ROAD
7)THE ESTATES AT ROLLING HILLS RANCH FILING 1
8)ROLLING HILLS RANCH FILING 1

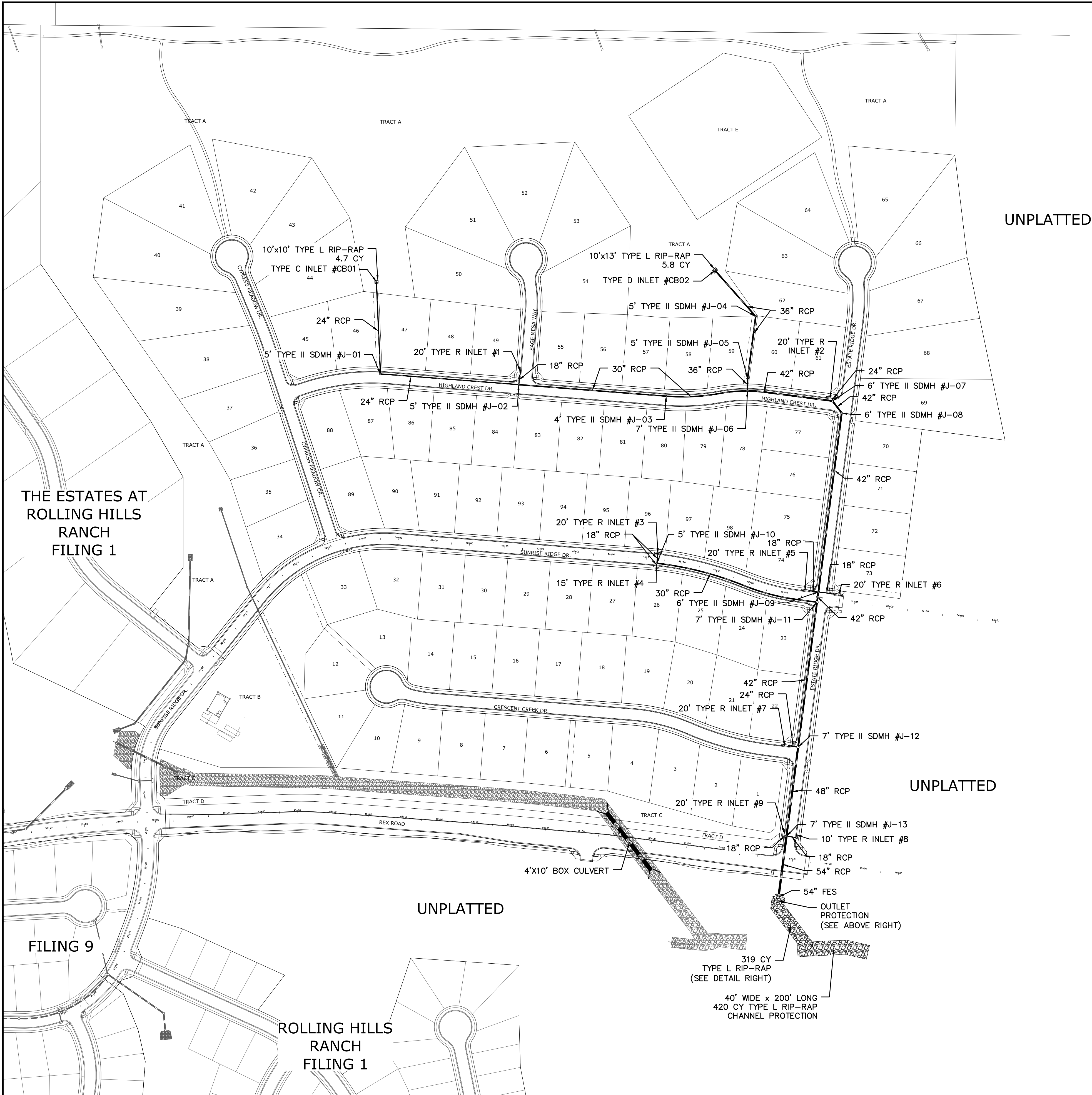
NOTE:
1" WATER SERVICE UNLESS OTHERWISE LABELED.



GRAPHIC SCALE
(IN FEET)
1 inch = 150 ft.

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

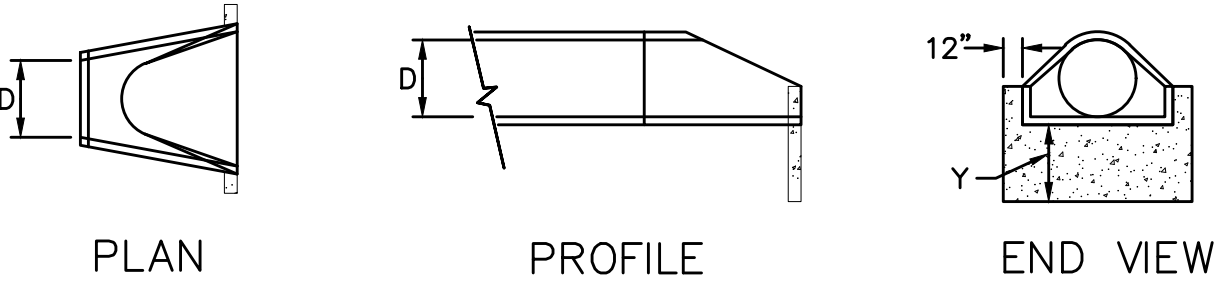
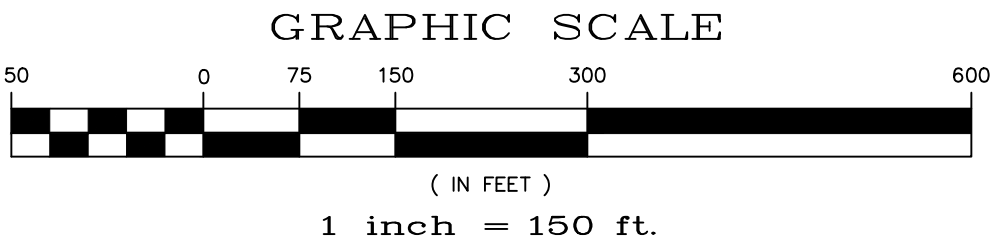
<div><div>Scale AS SHOWN</div><div>31 of 44</div></div>	<div>Drawn by LOG</div>	<div>Checked by TAK</div>	<div>Date SEPT 2020</div>	<div>THE ESTATES AT ROLLING HILLS RANCH FILING 2 STREET AND UTILITY PLANS OVERALL WATER SERVICES</div>	<div><div>MERIDIAN RANCH</div></div>	<div>TECH CONTRACTORS 11886 STAPLETON DRIVE FALCON, CO 80831 TELEPHONE: 719.495.7444 FAX: 719.495.2457</div>	<div>1 LIGHT POLES, SS SERVES, WATER SERVICES, REX ROAD & 17" WM (S4 12.6, 7.8, 9.10, 11.12, 14.15, 16, 22.23, 24.26, 27.28, 29.30, 31.34, 35.36, 38)</div>	<div>9/13/2021</div>	<div>LOG</div>	<div></div>	



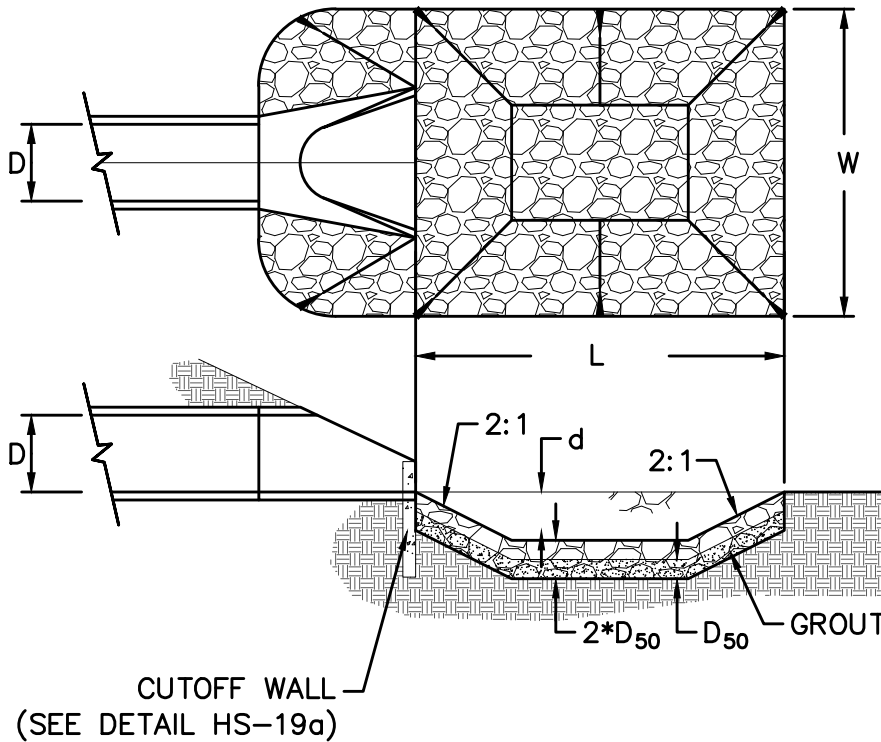
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2)ESTATES FILING 3 AT MERIDIAN RANCH
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8)ROLLING HILLS RANCH FILING 1

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



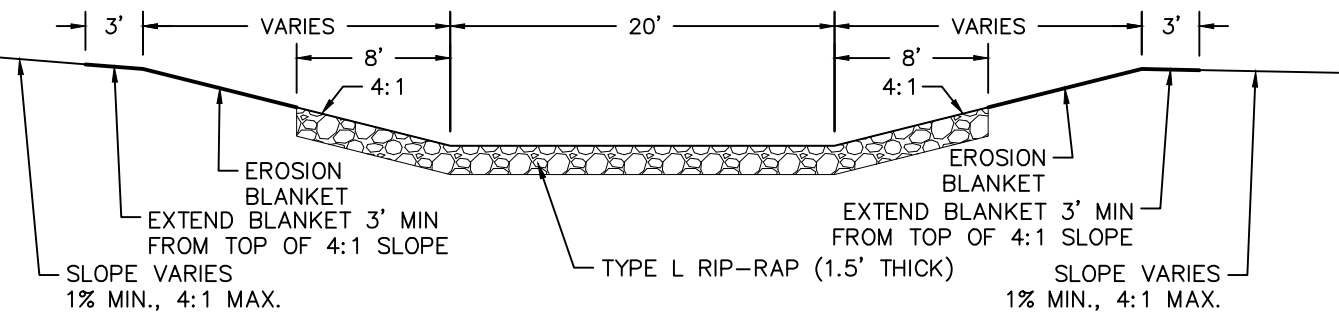
CUTOFF WALL
(SEE DETAIL HS-19a)

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.
 - 3. Grout the lower half of the rip-rap to a depth equal to D₅₀.

STORM #1
OUTLET PROTECTION DETAIL

PIPE OUTLET	L	W	d	TYPE	D ₅₀	CY	Y	NOTES
STORM #1 54"	20.0	20.0	2.25	M	1.0'	37.3	4.0'	SEE ABOVE



CHANNEL RIP-RAP
CROSS SECTION
NTS

Log	9/13/2021	Init.	Date
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2			
3			

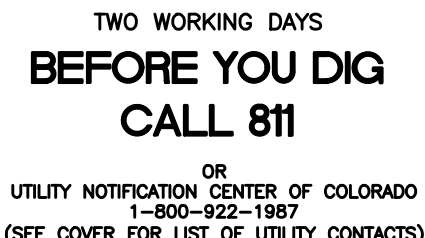
TECH CONTRACTORS
11886 STAPLETON DRIVE
FALCON, CO 80831
TELEPHONE: 719.495.7444
FAX: 719.495.2457

THE ESTATES AT
ROLLING HILLS RANCH FILING 2
STREET AND UTILITY PLANS
OVERALL STORM DRAIN

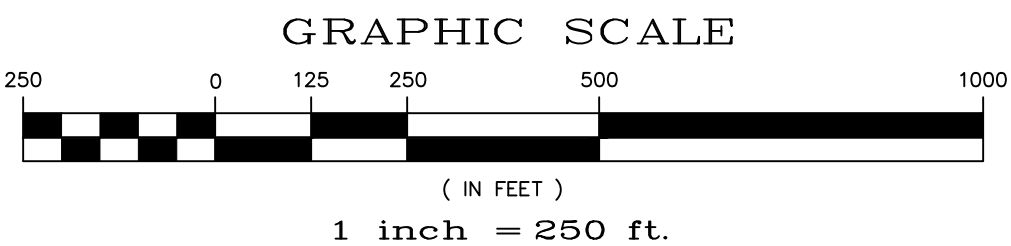
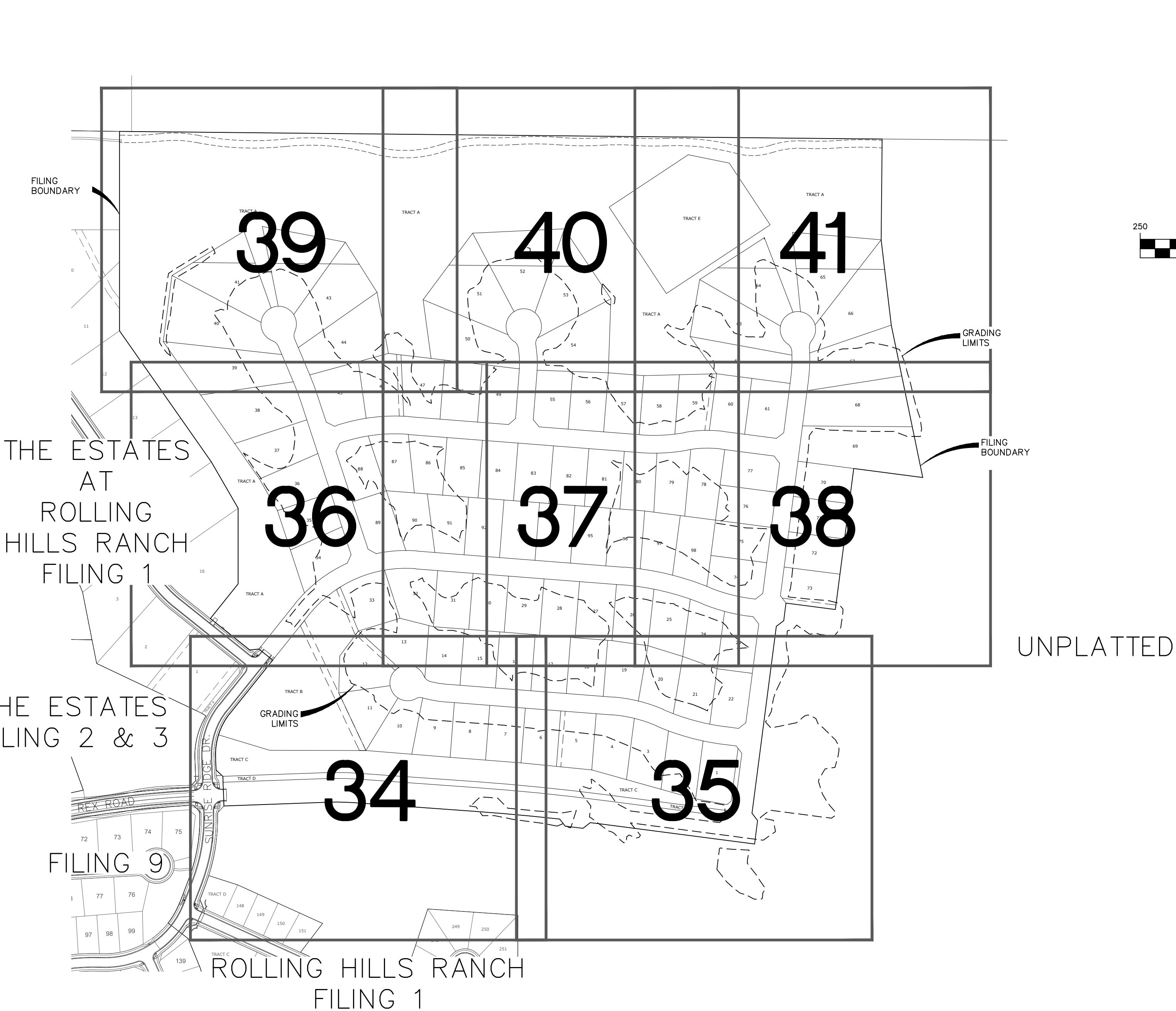
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AS SHOWN				SEPT 2020
Scale				32 of 44



1. 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.
2. 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.
3. 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. MANAGEMENT OF THE SWMP DURING CONSTRUCTION IS THE RESPONSIBILITY OF THE DESIGNATED QUALIFIED STORMWATER MANAGER OR CERTIFIED EROSION CONTROL INSPECTOR. THE SWMP SHALL BE LOCATED ON SITE AT ALL TIMES AND SHALL BE KEPT UP TO DATE WITH WORK PROGRESS AND CHANGES IN THE FIELD.
4. ONCE THE ESQCP IS APPROVED AND A "NOTICE TO PROCEED" HAS BEEN ISSUED, THE CONTRACTOR MAY INSTALL THE INITIAL STAGE EROSION AND SEDIMENT CONTROL MEASURES AS INDICATED ON THE APPROVED 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 STAFF.
5. CONTROL MEASURES MUST BE INSTALLED PRIOR COMMENCEMENT OF ACTIVITIES THAT COULD CONTRIBUTE POLLUTANTS TO STORMWATER. CONTROL MEASURES FOR ALL SLOPES, CHANNELED DITCHES, AND DISTURBED LAND AREAS SHALL BE INSTALLED IMMEDIATELY UPON COMPLETION OF THE DISTURBANCE.
6. ALL TEMPORARY SEDIMENT AND EROSION CONTROL MEASURES SHALL BE MAINTAINED AND REMAIN IN EFFECTIVE OPERATING CONDITION UNTIL PERMANENT SOIL EROSION CONTROL MEASURES ARE IMPLEMENTED AND FINAL STABILIZATION OF THE SWMP DURING CONSTRUCTION IS THE RESPONSIBILITY OF THE DESIGNATED QUALIFIED STORMWATER MANAGER OR CERTIFIED EROSION CONTROL INSPECTOR. IF CHANGES TO THOSE CONTROL MEASURES ARE NEEDED TO ENSURE THE CONTINUED EFFECTIVE PERFORMANCE OF THE CONTROL MEASURES. ALL CHANGES TO TEMPORARY SEDIMENT AND EROSION CONTROL MEASURES MUST BE INCORPORATED INTO THE STORMWATER MANAGEMENT PLAN.
7. TEMPORARY STABILIZATION SHALL BE IMPLEMENTED ON DISTURBED AREAS AND STOCKPILES WHERE GROUND DISTURBING CONSTRUCTION ACTIVITY HAS PERMANENTLY CEASED OR TEMPORARILY CEASED FOR LONGER THAN 14 DAYS.
8. FINAL STABILIZATION MUST BE IMPLEMENTED AT ALL APPLICABLE CONSTRUCTION SITES. FINAL STABILIZATION IS ACHIEVED WHEN ALL GROUND DISTURBING ACTIVITIES ARE COMPLETE AND ALL DISTURBED AREAS EITHER HAVE A UNIFORM VEGETATIVE COVER WITH INDIVIDUAL PLANT DENSITY OF 70 PERCENT OF PRE-DISTURBANCE LEVELS ESTABLISHED OR EQUIVALENT PERMANENT ALTERNATIVE STABILIZATION METHOD IS IMPLEMENTED. ALL TEMPORARY SEDIMENT AND EROSION CONTROL MEASURES SHALL BE REMOVED UPON FINAL STABILIZATION AND BEFORE PERMIT CLOSURE.
9. ALL PERMANENT STORMWATER MANAGEMENT FACILITIES SHALL BE INSTALLED AS DESIGNED IN THE APPROVED PLANS. ANY PROPOSED CHANGES THAT EFFECT THE DESIGN OR FUNCTION OF PERMANENT STORMWATER MANAGEMENT STRUCTURES MUST BE APPROVED BY THE ECM ADMINISTRATOR PRIOR TO IMPLEMENTATION.
10. EARTH DISTURBANCES SHALL BE CONDUCTED IN SUCH A MANNER SO AS TO EFFECTIVELY MINIMIZE 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. PRE-EXISTING VEGETATION SHALL BE PROTECTED AND MAINTAINED WITHIN 50 HORIZONTAL FEET OF A WATERS OF THE STATE UNLESS SHOWN TO BE INFEASIBLE AND SPECIFICALLY REQUESTED AND APPROVED.
11. COMPACTION OF SOIL MUST BE PREVENTED IN AREAS DESIGNATED FOR INFILTRATION CONTROL MEASURES OR WHERE FINAL STABILIZATION WILL BE ACHIEVED BY VEGETATIVE COVER. AREAS DESIGNATED FOR INFILTRATION CONTROL MEASURES SHALL ALSO BE PROTECTED FROM SEDIMENTATION DURING CONSTRUCTION UNTIL FINAL STABILIZATION IS ACHIEVED. IF COMPACTION PREVENTION IS NOT FEASIBLE DUE TO SITE CONSTRAINTS, ALL AREAS DESIGNATED FOR INFILTRATION AND VEGETATION CONTROL MEASURES MUST BE LOOSENEED PRIOR TO INSTALLATION OF THE CONTROL MEASURE(S).
12. ANY TEMPORARY OR PERMANENT FACILITY DESIGNED AND CONSTRUCTED FOR THE CONVEYANCE OF STORMWATER AROUND, THROUGH, OR FROM THE EARTH DISTURBANCE AREA SHALL BE A STABILIZED CONVEYANCE DESIGNED TO MINIMIZE EROSION AND THE DISCHARGE OF SEDIMENT OFF SITE.
13. CONCRETE WASH WATER SHALL BE CONTAINED AND DISPOSED OF IN ACCORDANCE WITH THE SWMP. NO WASH WATER SHALL BE DISCHARGED TO OR ALLOWED TO ENTER STATE WATERS, INCLUDING ANY SURFACE OR SUBSURFACE STORM DRAINAGE SYSTEM OR FACILITIES. CONCRETE WASHOUTS SHALL NOT BE LOCATED IN AN AREA WHERE SHALLOW GROUNDWATER MAY BE PRESENT, OR WITHIN 50 FEET OF A SURFACE WATER BODY, CREEK OR STREAM.
14. DURING DEWATERING OPERATIONS OF UNCONTAMINATED GROUND WATER MAY BE DISCHARGED ON SITE, BUT SHALL NOT LEAVE THE SITE IN THE FORM OF SURFACE RUNOFF UNLESS AN APPROVED STATE DEWATERING PERMIT IS IN PLACE.
15. EROSION CONTROL BLANKETING OR OTHER PROTECTIVE COVERING SHALL BE USED ON SLOPES STEEPER THAN 3:1.
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. 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. CONTROL MEASURES MAY BE REQUIRED BY EL PASO COUNTY ENGINEERING IF DEEMED NECESSARY, BASED ON SPECIFIC CONDITIONS AND CIRCUMSTANCES.
18. TRACKING OF SOILS AND CONSTRUCTION DEBRIS OFF-SITE SHALL BE MINIMIZED. MATERIALS TRACKED OFF-SITE SHALL BE CLEANED UP AND PROPERLY DISPOSED OF IMMEDIATELY.
19. THE OWNER/DEVELOPER SHALL BE RESPONSIBLE FOR THE REMOVAL OF ALL CONSTRUCTION DEBRIS, DIRT, TRASH, ROCK, SEDIMENT, SOIL, AND SAND THAT MAY ACCUMULATE IN ROADS, STORM DRAINS AND OTHER DRAINAGE CONVEYANCE SYSTEMS AND STORMWATER APPURTENANCES AS A RESULT OF SITE DEVELOPMENT.
20. 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.
21. NO CHEMICAL(S) HAVING THE POTENTIAL TO BE RELEASED IN STORMWATER ARE TO BE STORED OR USED ON-SITE UNLESS PERMISSION FOR THE USE OF SUCH CHEMICAL(S) IS GRANTED IN WRITING BY THE ECM ADMINISTRATOR. IN GRANTING APPROVAL FOR THE USE OF SUCH CHEMICAL(S), SPECIAL CONDITIONS AND MONITORING MAY BE REQUIRED.
22. BULK STORAGE OF ALLOWED PETROLEUM PRODUCTS OR OTHER ALLOWED LIQUID CHEMICALS IN EXCESS OF 55 GALLONS SHALL REQUIRE ADEQUATE SECONDARY CONTAINMENT PROTECTION TO CONTAIN ALL SPILLS AND TO PREVENT ANY SPILLED MATERIALS FROM ENTERING STATE WATERS, ANY SURFACE OR SUBSURFACE STORM DRAINAGE SYSTEM OR OTHER FACILITIES.
23. NO PERSON SHALL CAUSE THE IMPEDIMENT OF STORMWATER FLOW IN THE CURB AND GUTTER OR DITCH EXCEPT WITH APPROVED SEDIMENT CONTROL MEASURES.
24. OWNER/DEVELOPER AND THEIR AGENTS 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 OF THE LAND DEVELOPMENT CODE, DCM VOLUME II AND THE ECM APPENDIX I. ALL APPROPRIATE PERMITS MUST BE OBTAINED BY THE CONTRACTOR PRIOR TO CONSTRUCTION (1041, NPDES, FLOODPLAIN, 404, FUGITIVE DUST, ETC.). IN THE EVENT OF CONFLICTS BETWEEN THESE REQUIREMENTS AND OTHER LAWS, RULES, OR REGULATIONS OF OTHER FEDERAL, STATE, LOCAL, OR COUNTY AGENCIES, THE MOST RESTRICTIVE LAWS, RULES, OR REGULATIONS SHALL APPLY.
25. ALL CONSTRUCTION TRAFFIC MUST ENTER/EXIT THE SITE ONLY AT APPROVED CONSTRUCTION ACCESS POINTS.
26. PRIOR TO CONSTRUCTION THE PERMITTEE SHALL VERIFY THE LOCATION OF EXISTING UTILITIES.
27. A WATER SOURCE SHALL BE AVAILABLE ON SITE DURING EARTHWORK OPERATIONS AND SHALL BE UTILIZED AS REQUIRED TO MINIMIZE DUST FROM EARTHWORK EQUIPMENT AND WIND.
28. THE SOILS REPORT FOR THIS SITE HAS BEEN PREPARED BY ENTECH ENGINEERING, INC. AND SHALL BE CONSIDERED A PART OF THESE PLANS.
29. AT LEAST TEN DAYS PRIOR TO THE ANTICIPATED START OF CONSTRUCTION, FOR PROJECTS THAT WILL DISTURB ONE (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 APPLICANT MUST OBTAIN 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:

NET YARDS	BALANCE	
TOTAL STRIPPINGS	48.3 AC.	25,975 CY
	<u>CUT</u>	<u>FILL</u>
NET YARDS	88,100 CY	88,100 CY
20% COMPACTION FACTOR		



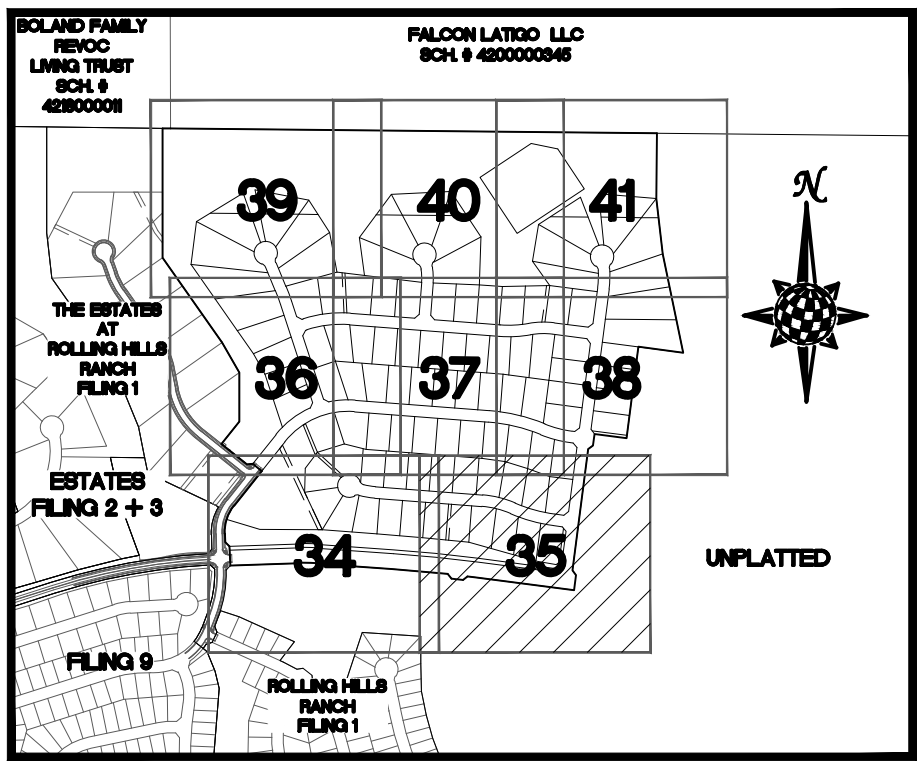
- 1) EXISTING VEGETATION ON THE PROJECT SITE AND THE IN SURROUNDING AREAS CONSISTS OF A MIXTURE OF NATIVE GRASSES AND WEEDS WITH COVERAGE APPROXIMATING 70% DENSITY UNLESS OTHERWISE NOTED. SOME AREAS HAVE NEGLIGIBLE VEGETATIVE GROWTH AT THIS TIME AS THE SITE WAS PREVIOUSLY GRADED AND RE-SEEDING OR USED AS A BUILDERS' STOCKPILE LOCATION. AREAS PREVIOUSLY GRADED HAS BEEN RE-SEEDING WITH THE APPROVED COUNTY SEED MIX.
- 2) MATERIAL STORAGE, TOPSOIL STOCKPILES(UDFCD: MM-2), STAGING (UDFCD: SM-6), CONCRETE WASHOUT AND WASTE AREAS SHALL BE IDENTIFIED BY THE CONTRACTOR PRIOR TO START OF CONSTRUCTION AND ADJUSTED AS NECESSARY. IDENTIFICATION SHALL BE LOCATED IN THE SWMP AS WELL AS ANY DETAILS NECESSARY.
- 3) THERE IS NO CONCRETE BATCH PLANT ASSOCIATED WITH THIS PROJECT.
- 4) NO SLOPES GREATER THAN 3:1 ARE EXPECTED ON THIS SITE. SLOPES GREATER THAN 3:1 REQUIRE EROSION CONTROL BLANKET.



	Scale	Drawn by LQJ Checked by TJK Date SEPT 2020	THE ESTATES AT ROLLING HILLS RANCH FILLING 2 GRADING+EROSION CONTROL PLAN GRADING INDEX SHEET	 MERIDIAN RANCH	TECH CONTRACTORS 11886 STAPLETON DRIVE FALCON, CO 80831 TELEPHONE: 719.495.7444 FAX: 719.495.2457	1	LIGHT POLES, SS SERVICES, WATER SERVICES, REAR ROAD & 12" WM (SH 1,2,6,7,8,9,10,11,12,14,15,16,22,23,24,26,27,28,29,30,31,34,35,36,38)	9/3/2021	LQJ	
	AS SHOWN					2				
	33 of 44					3				
						No.	Revisions	Date	Instr.	Appr.

SEE SHEET 37

SEE SHEET 38

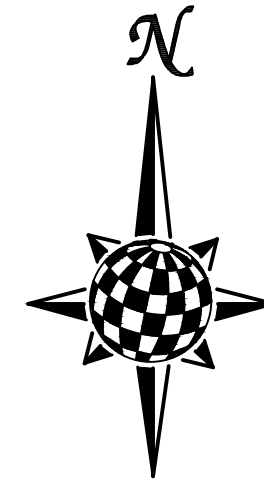


INDEX MAP

N.T.S.

LEGEND

SYMBOL	ACRONYM	DESCRIPTION
		STRAW BALES
		EROSION WATTLES PER DETAIL SHEET 44
		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 44
		PROPERTY BOUNDARY/CONSTRUCTION BOUNDARY
		EXISTING CONTOUR (10')
		EXISTING CONTOUR (2')
		PROPOSED CONTOUR (10')
		PROPOSED CONTOUR (2')
		LIMITS OF GRADING/CONSTRUCTION BOUNDARY
		FLOW DIRECTION
		GRADE
		LOT NUMBER



GRAPHIC SCALE

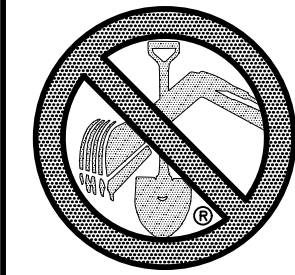


(IN FEET)

1 inch = 50 ft.

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 43.

CONTRACTOR SHALL PROTECT ALL EXISTING UTILITIES.
EX. UTILITIES SEE CONSTRUCTION DRAWINGS FOR:
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3)GUTHRIE RAW WATER EXTENSION THE VISTAS FILING 1 OFFSITE
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6)MSMD PUMP STATION AND WATER TANK WATER TRANSMISSION LINES AND ROAD
7)THE ESTATES AT ROLLING HILLS RANCH FILING 1
8)ROLLING HILLS RANCH FILING 1



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)

Log	Date	Init.	Appr.	Date
9/13/2021				

No.	Revisions
1	
2	
3	

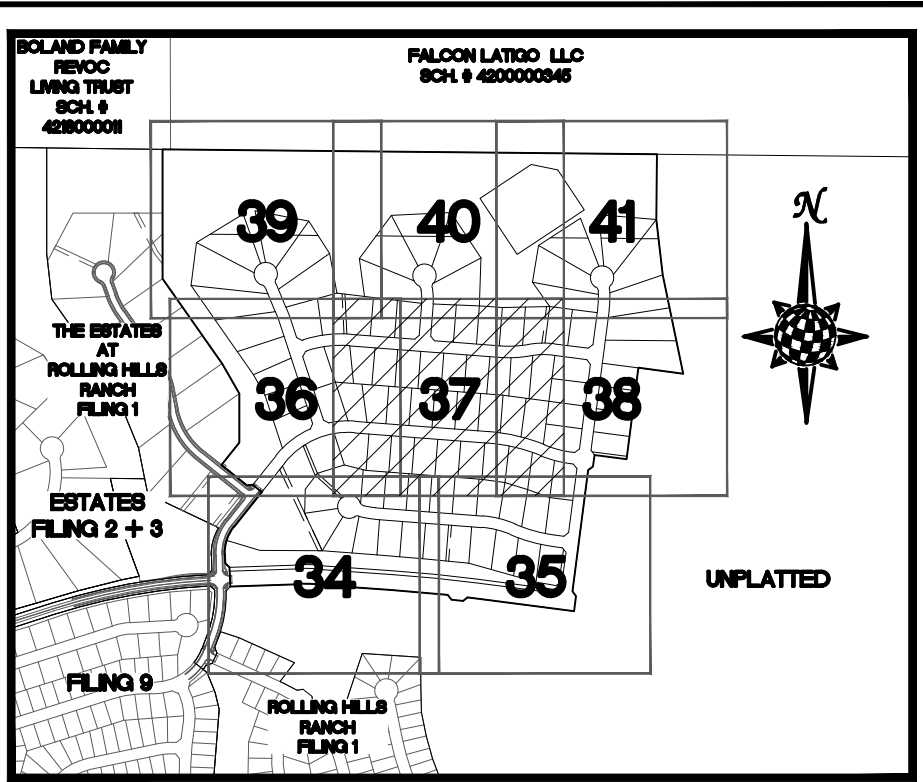
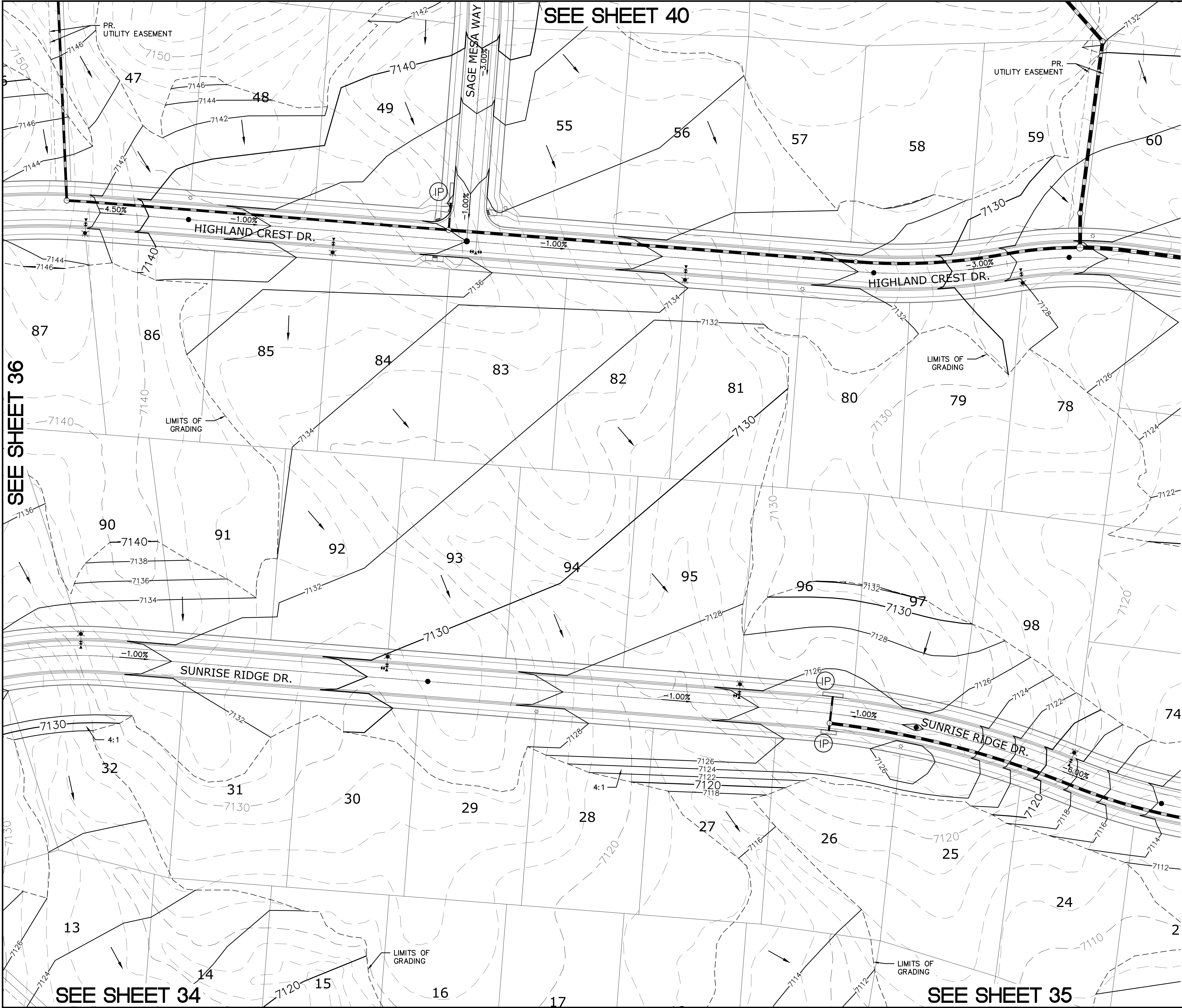
TECH CONTRACTORS
11886 STAPLETON DRIVE
FALCON, CO 80831
TELEPHONE: 719.495.7444
FAX: 719.495.2457



THE ESTATES AT
ROLLING HILLS RANCH FILING 2
GRADING/EROSION CONTROL PLAN
GRADING LAYOUT

Scale	Drawn by	Log	Checked by	TAK	Date
AS SHOWN					SEPT 2020
35 of 44					

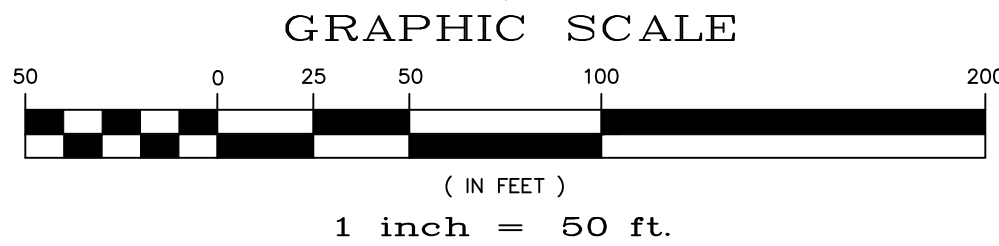
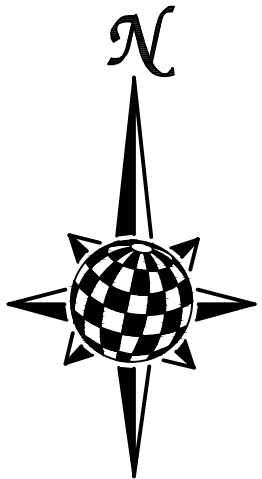




INDEX MAP
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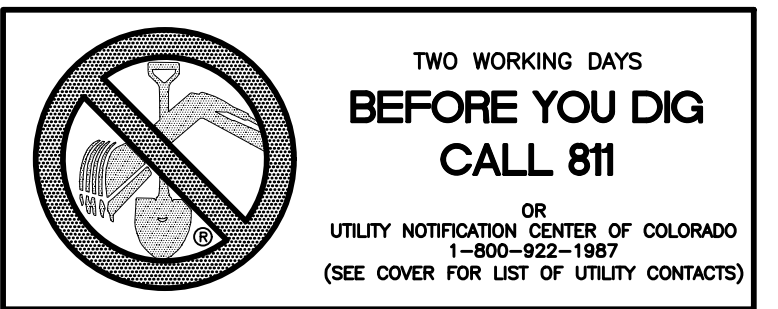
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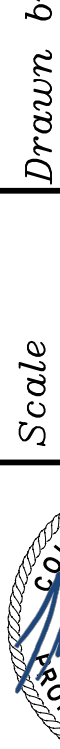
SYMBOL	ACRONYM	DESCRIPTION
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		EROSION CONTROL BLANKET PER DETAIL ECB-1 & ECB-2 DCM VOL. 2
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		EXISTING CONTOUR (10')
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		PROPOSED CONTOUR (10')
		PROPOSED CONTOUR (2')
		LIMITS OF GRADING/CONSTRUCTION BOUNDARY
		FLOW DIRECTION
		GRADE
		LOT NUMBER

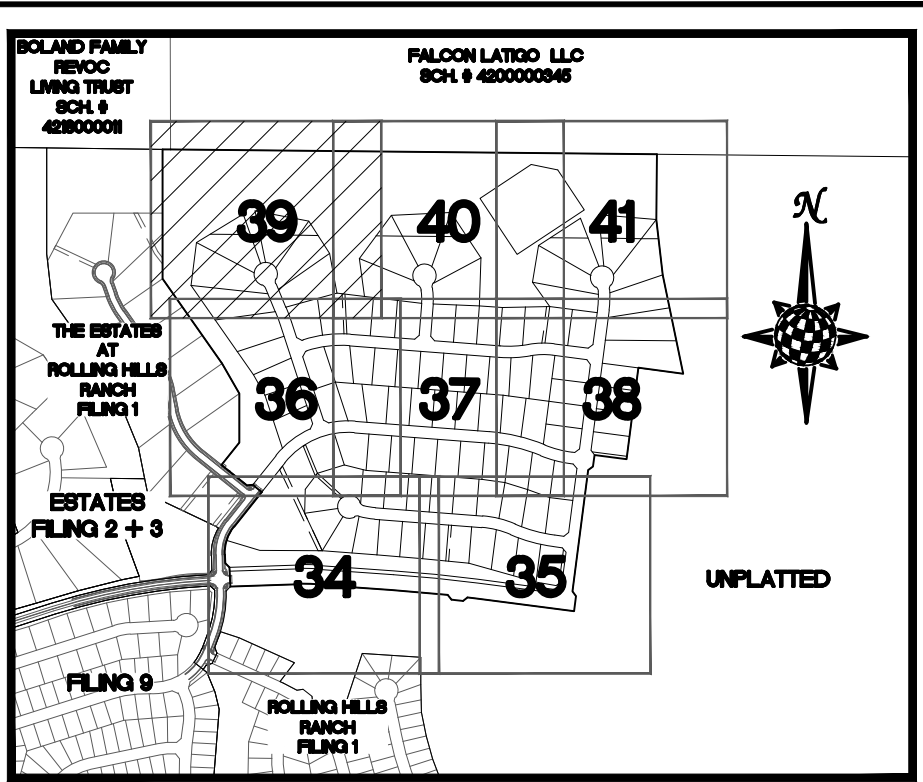
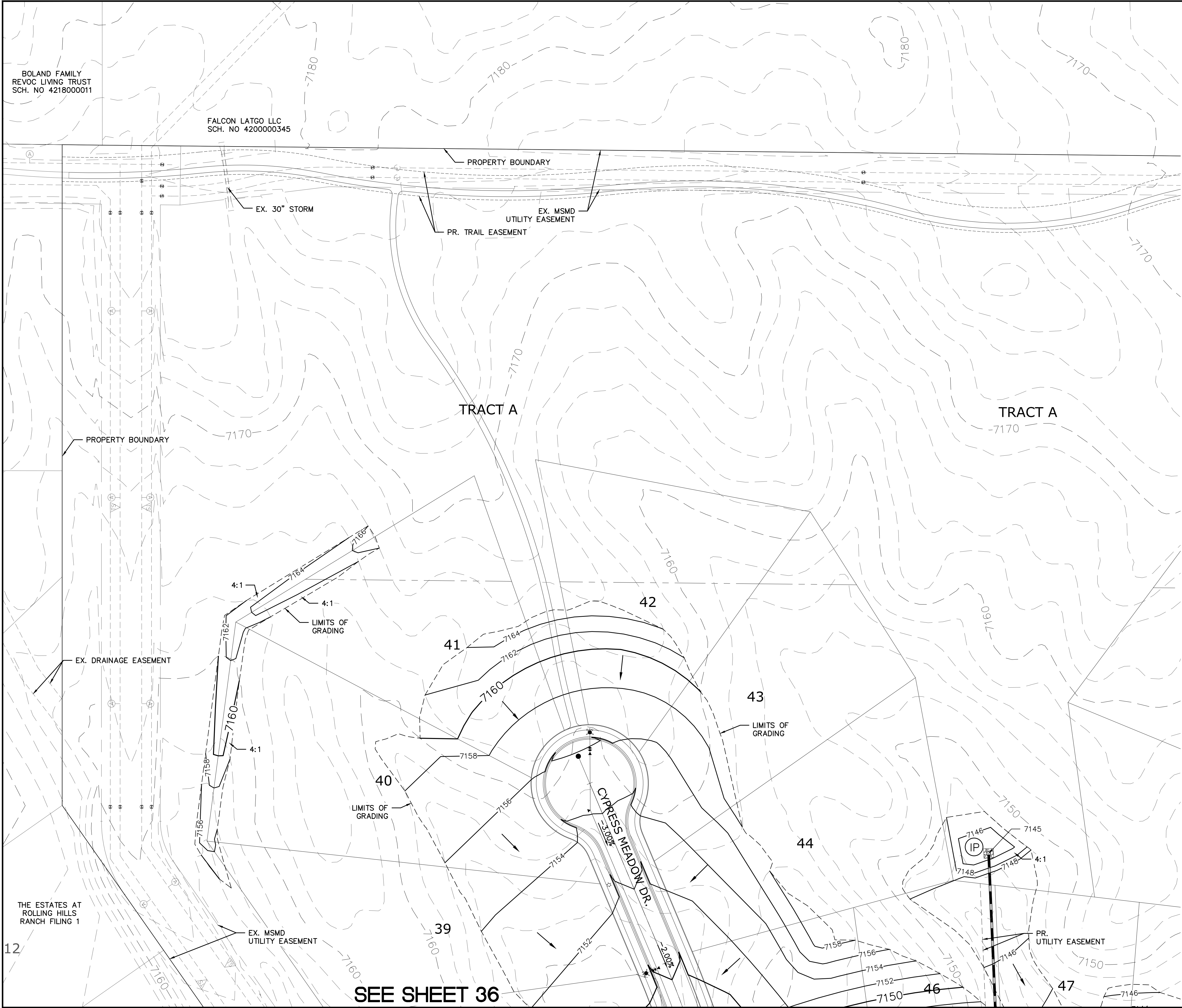


NOTE:
ALL CONTOURS SHOWN WITHIN THE PLAN SET ARE TO FINISHED SURFACE. ALL STREET SECTIONS ARE TO BE GRADED TO ROUGH SUB-GRADE AS SHOWN IN THEIR RESPECTIVE TYPICAL STREET SECTION SHOWN ON SHEET 43.

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6)MSMD PUMP STATION AND WATER TANK WATER TRANSMISSION LINES AND ROAD
7)THE ESTATES AT ROLLING HILLS RANCH FILING 1
8)ROLLING HILLS RANCH FILING 1



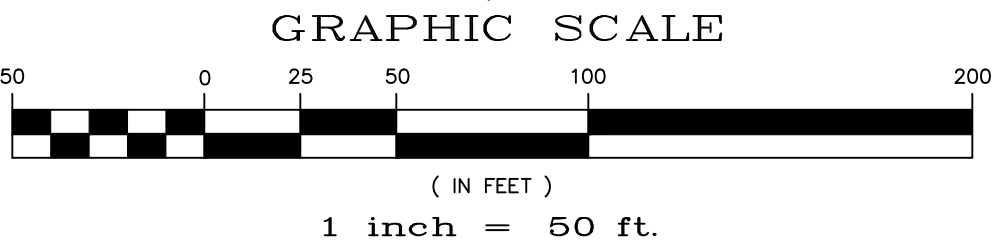
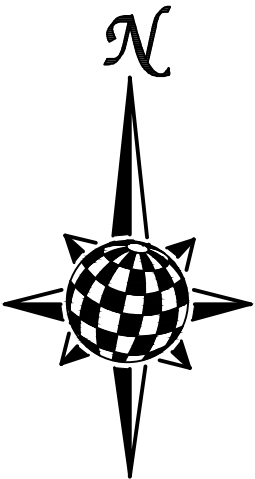
Scale AS SHOWN		Drawn by LOG		THE ESTATES AT ROLLING HILLS RANCH FILING 2 GRADING/EROSION CONTROL PLAN		 MERIDIAN RANCH		TECH CONTRACTORS 11886 STAPLETON DRIVE FALCON, CO 80831 TELEPHONE: 719.495.7444 FAX: 719.495.2457		1 LIGHT POLES, SS SERVICES, WATER SERVICES, REAR ROAD & 12" MM (SH-1,2,6,7,8,9,10,11,12,14,15,16,22,23,24,26,27,28,30,31,34,35,36,38)		LOG		9/13/2021					
		Checked by TAK		GRADING LAYOUT						2									
37 of 44		Date SEPT 2020								3									
																			
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INDEX MAP
N.T.S.

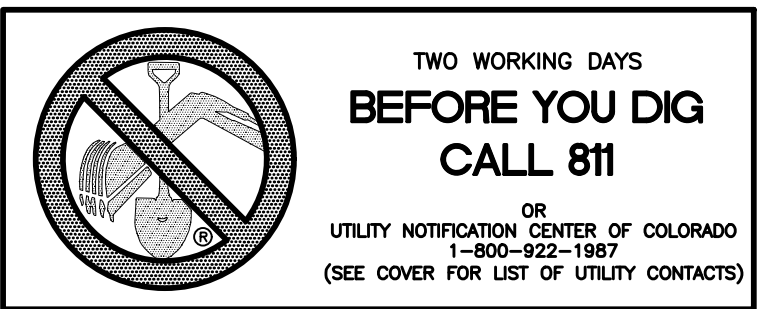
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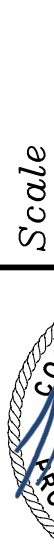
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		GRADE
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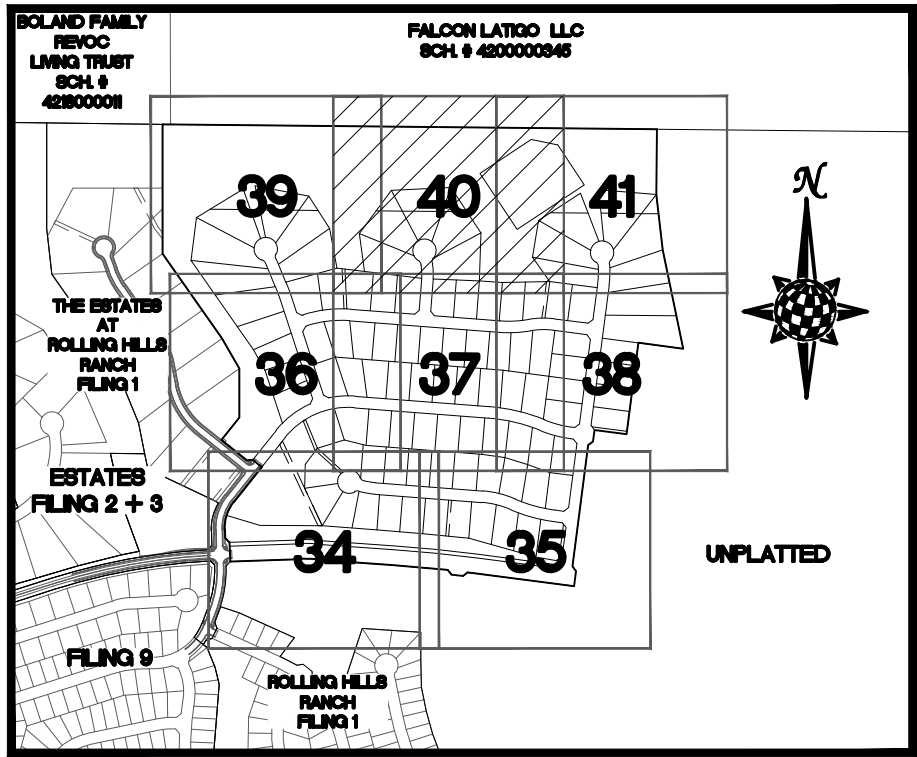
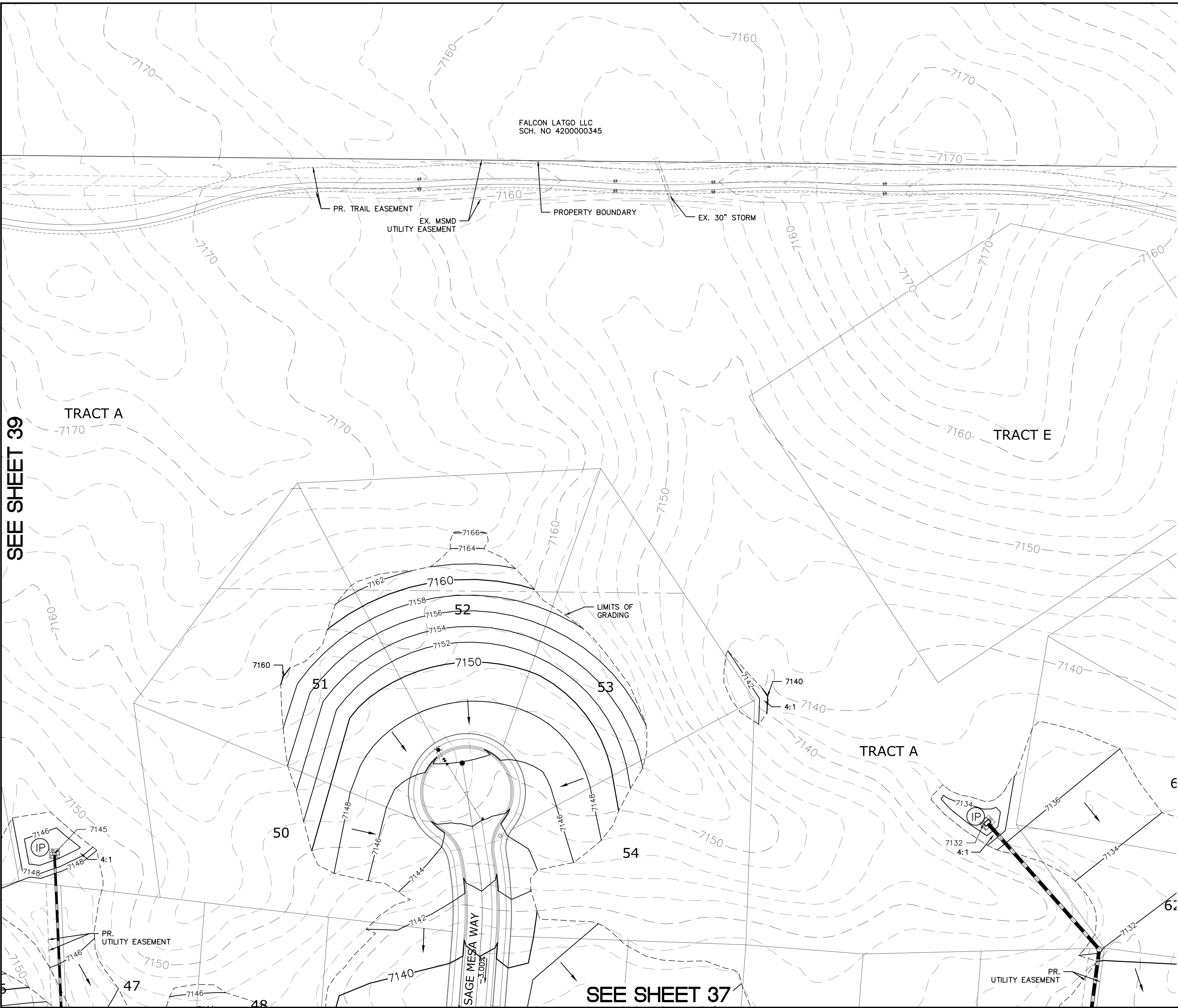


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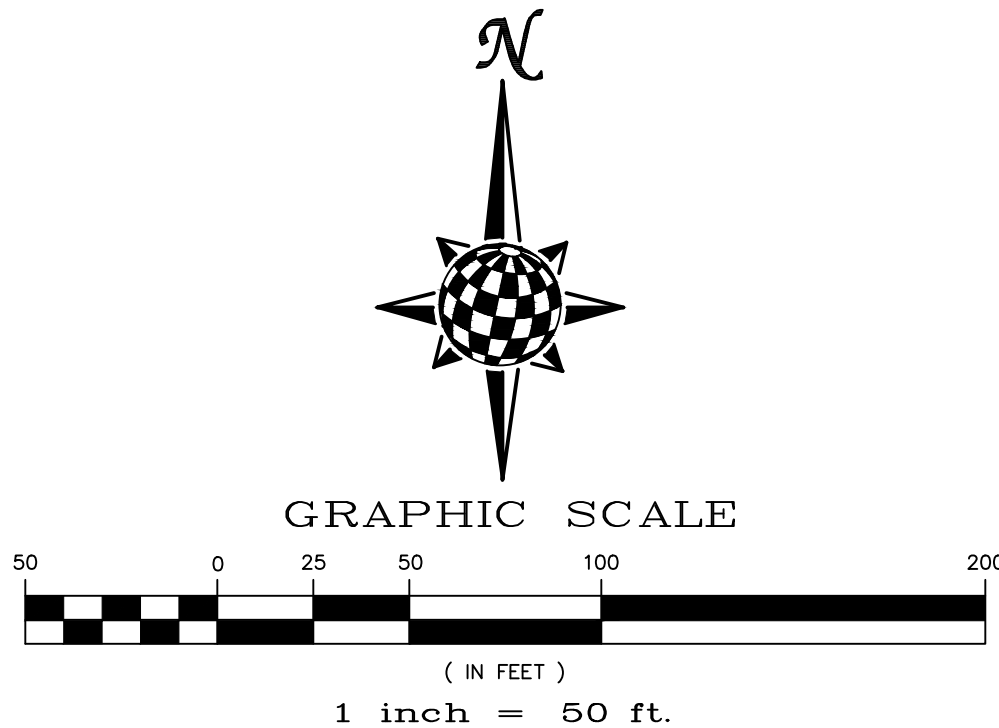


Scale AS SHOWN		Drawn by LOG		THE ESTATES AT ROLLING HILLS RANCH FILING 2 GRADING/EROSION CONTROL PLAN		 MERIDIAN RANCH		TECH CONTRACTORS 11886 STAPLETON DRIVE FALCON, CO 80831 TELEPHONE: 719.495.7444 FAX: 719.495.2457		1 LIGHT POLES SS SEREVIES WATER SERVICES REX ROAD 8.12' MM (S4 1.2, 6.7, 8.9, 10.1, 11.2, 14.1, 15.16, 22.23, 24.26, 27.28, 30.31, 34.35, 38)		LOG		9/13/2021					
		Checked by TAK		GRADING LAYOUT						2									
39 of 44		Date SEPT 2020								3									
																			



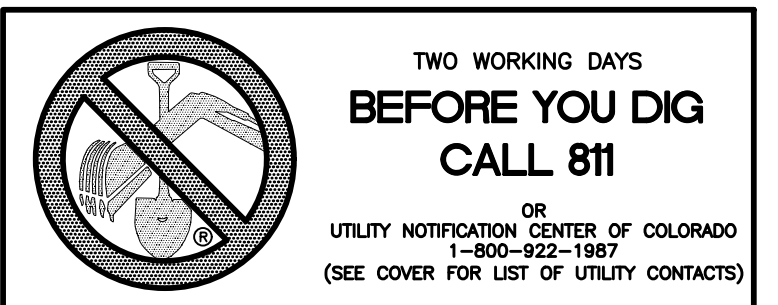
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8)ROLLING HILLS RANCH FILING 1



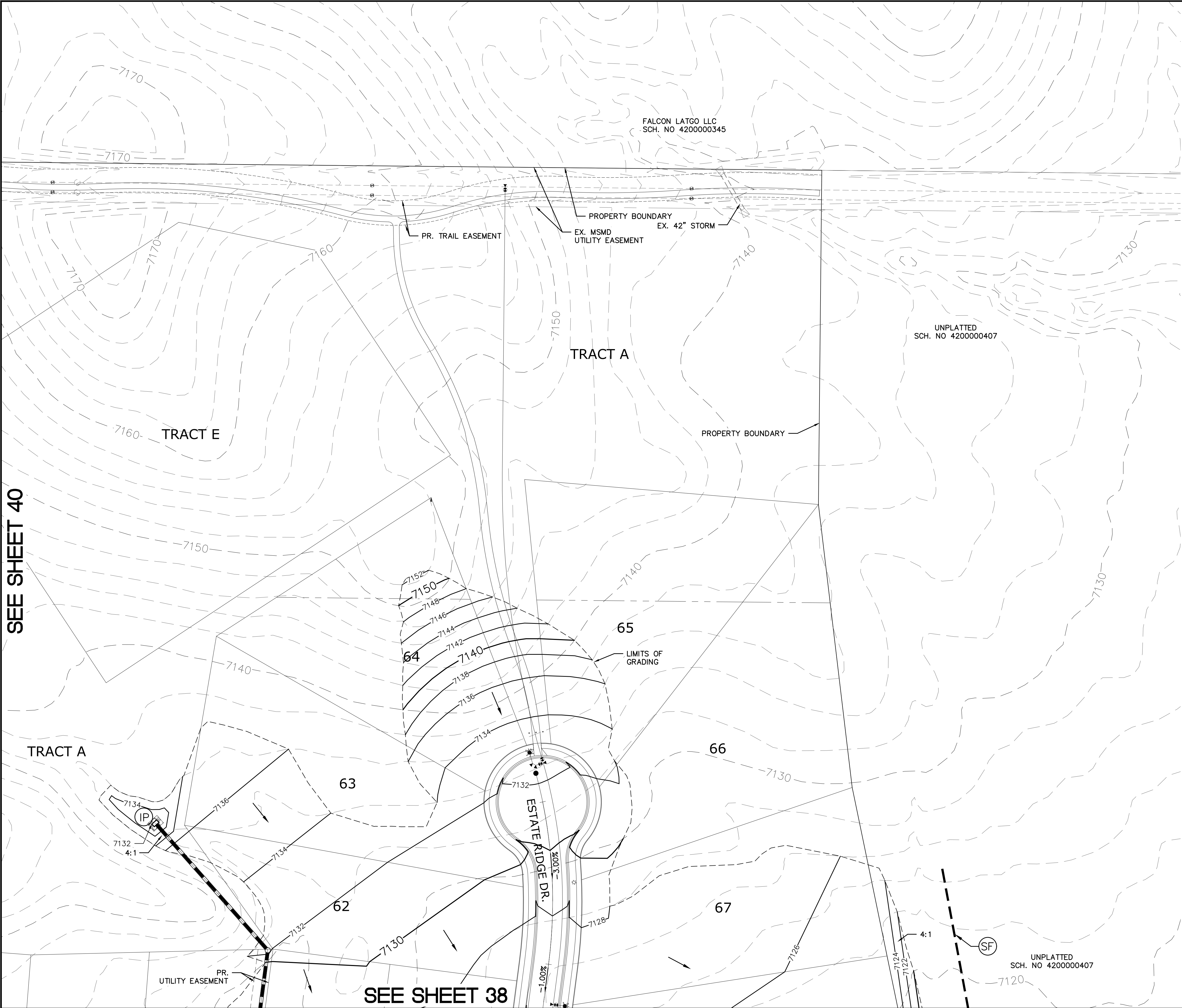
		Scale AS SHOWN		Drawn by Log	THE ESTATES AT ROLLING HILLS RANCH FILING 2 GRADING-EROSION CONTROL PLAN		 MERIDIAN RANCH		TECH CONTRACTORS 11886 STAPLETON DRIVE FALCON, CO 80831 TELEPHONE: 719.495.7444 FAX: 719.495.2457		1 LIGHT POLES, SS SEREVIES, WATER SERVICES, REX ROAD & 12' W/M (S4 1.2, 6.9, 10, 11, 12, 14, 15, 16, 22, 23, 24, 26, 27, 28, 29, 30, 31, 34, 35, 36, 38)		9/13/2021		Log								
					Checked by TAK		GRADING LAYOUT				2												
40 of 44					Date		SEPT 2020				3												
												No.		Revisions		Date		Invt.		Appr.		Date	

SEE SHEET 39

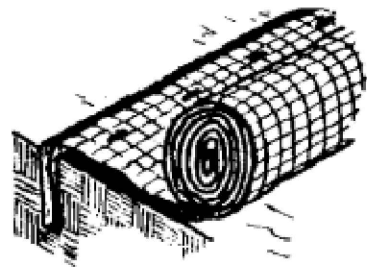
SEE SHEET 41

SEE SHEET 37

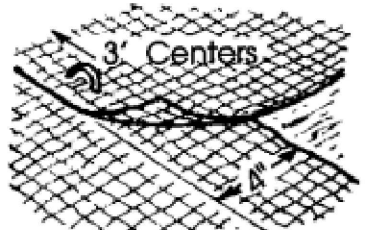
SEE SHEET 40



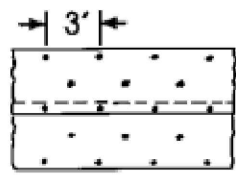
From: Virginia Soil and Water Conservation Commission, 1985



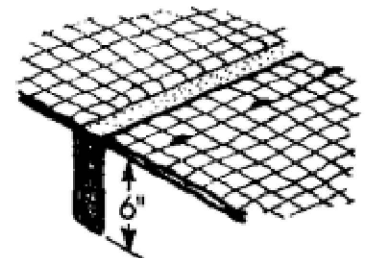
Anchor Slot: Bury the up-channel end of the net in a 6" deep trench. Tamp the soil firmly. Staple at 12" intervals across the net.



Overlap: Overlap edges of the strips at least 4". Staple every 3 feet down the center of the strip.

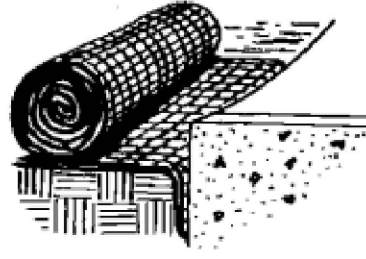


Joining Strips: Insert the new roll of net in a trench, as with the Anchor Slot. Overlap the up-channel side of the structure. Fill the trench and tamp firmly. Staple the end of the previous roll just below the anchor slot and at the end at 12" intervals.



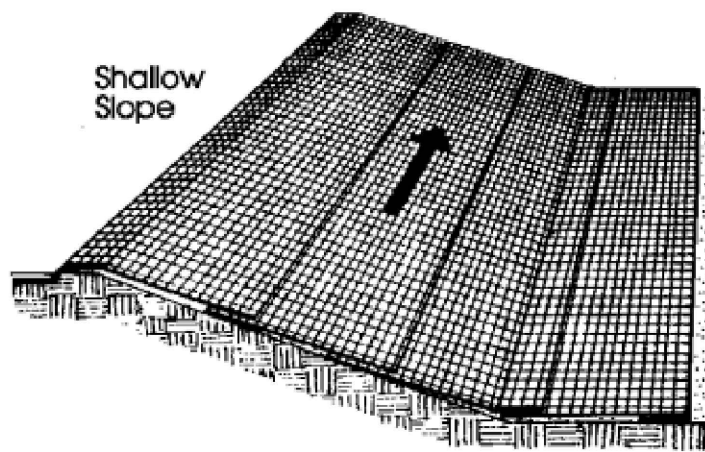
Check Slots: On erodible soils or steep slopes, check slots should be made every 15 feet. Insert a fold of the net into a 6" trench and tamp firmly. Staple at 12" intervals across the net. Lay the net smoothly on the surface of the soil - do not stretch the net, and do not allow wrinkles.

Anchoring Ends At Structures: Place the end of the net in a 6" slot on the up-channel side of the structure. Fill the trench and tamp firmly. Roll the net up the channel. Place staples at 12" intervals along the anchor end of the net.



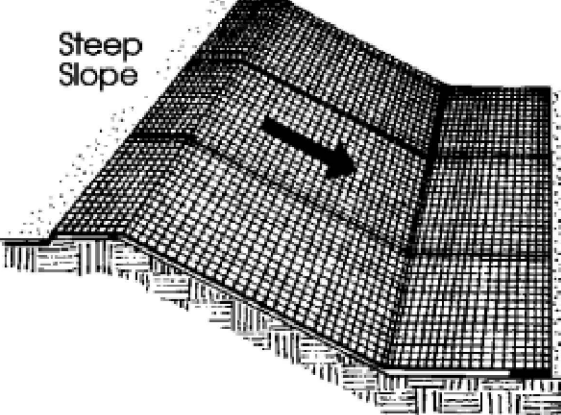
City of Colorado Springs
Storm Water Quality

Figure ECB-2
Erosion Control Blanket
Installation Requirements



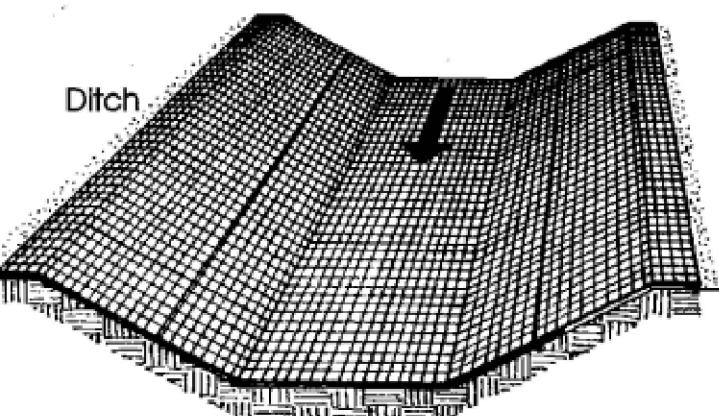
On shallow slopes, strips of netting may be applied across the slope.

Where there is a berm at the top of the slope, bring the netting over the berm and anchor it behind the berm.



On steep slopes, apply strips of netting parallel to the direction of flow and anchor securely.

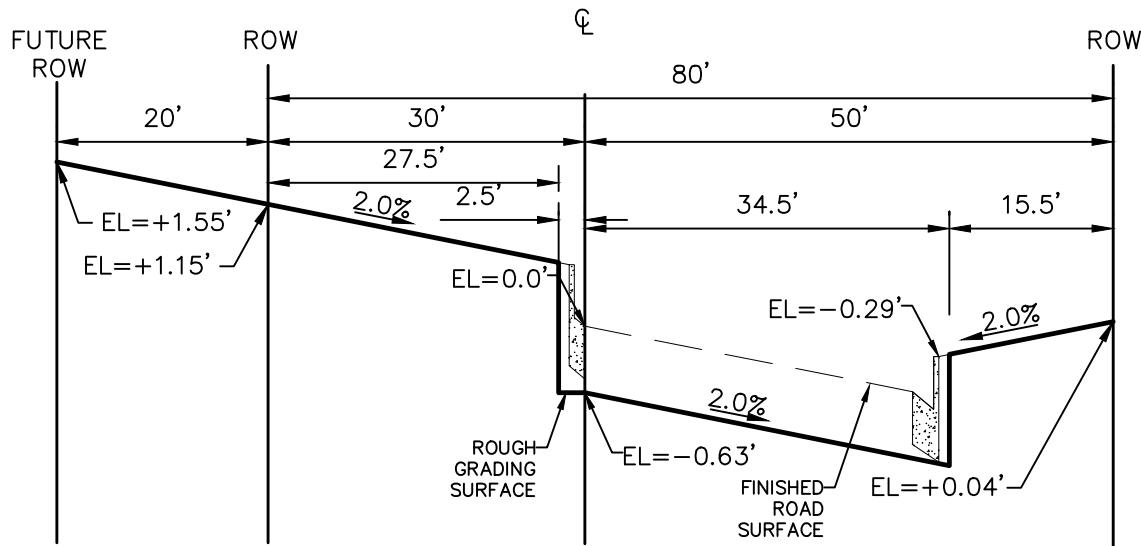
Bring netting down to a level area before terminating the installation. Turn the end under 6" and staple at 12" intervals.



In ditches, apply netting parallel to the direction of flow. Use check slots every 15 feet. Do not join strips in the center of the ditch.

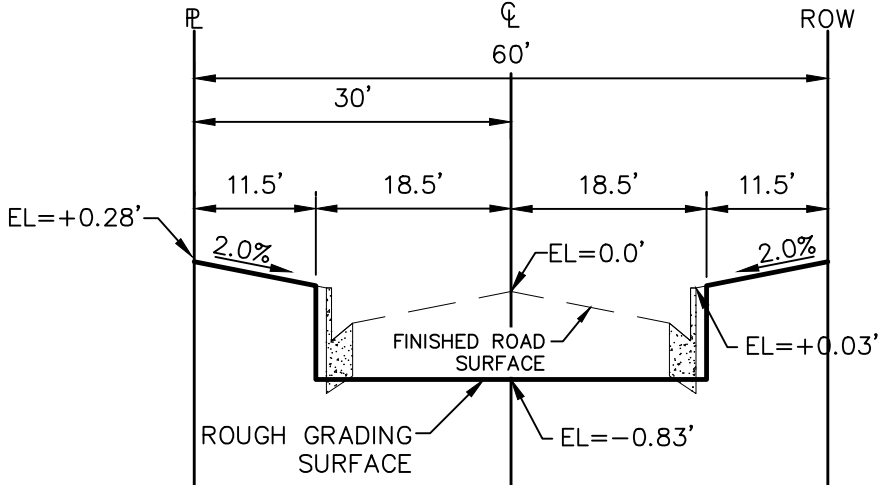
City of Colorado Springs
Storm Water Quality

Figure ECB-1
Erosion Control Blanket
Application Examples



REX ROAD TYPICAL
TEMP. MINOR ARTERIAL STREET SECTION

80' ROW(100' FUTURE)
NTS



TYPICAL RESIDENTIAL STREET SECTION

60' ROW
NTS

STEPS FOR CONSTRUCTION

THE ANTICIPATED START FOR THIS PROJECT IS DECEMBER 2020 WITH AN ANTICIPATED COMPLETION DATE OF OCTOBER 2022. BELOW IS A BRIEF OUTLINE OF THE CONSTRUCTION SEQUENCE FOR THIS PROJECT.

- * INSTALL INITIAL BMP'S
- * OVERLOT GRADING
- * SANITARY SEWER
- * WATER
- * STORM SEWER AND CULVERTS
- * ELECTRIC
- * GAS
- * PHONE & CABLE TV
- * FINISHED ROAD GRADING AND PAVING
- * FINAL STABILIZATION

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, FILTREXX 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.

EROSION AND SEDIMENT CONTROL STAGE TABLE

Stage	Description	Control Measures	Begin Date	End Date
Stage 1	Overlot Grading	Perimeter Control Temporary Sed. Basins Swale Checks as needed Surface Roughening	December 2020	March 2021
Stage 2	Underground utilities Surface Improvements	Perimeter Control Inlet Protection	March 2021	June 2021
Stage 3	Home Construction	Inlet Protection Individual Lot Perimeter Control	June 2021	
Final Stabilization	Permit Close	Final Stabilization Permanent Measures	October 2022	

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.

THERE ARE NO DEDICATED ASPHALT OR CONCRETE BATCH PLANTS PLANNED FOR THIS SITE.

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

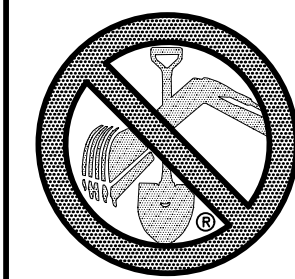
A THOROUGH INSPECTION OF THE STORMWATER MANAGEMENT SYSTEM SHALL BE PERFORMED EVERY 14 DAYS AS WELL AS AFTER ANY RAIN OR SNOWMELT EVENT THAT CAUSES SURFACE EROSION:
* EROSION OF V-NOTCH SWALES, CHANNELS AND SIDE SLOPES SHALL BE REPAIRED.
* WHEN THE CHECK DAMS HAVE SILTED UP TO HALF THEIR HEIGHT, THE SILT SHALL BE REMOVED, CHANNEL GRADE REESTABLISHED, AND SIDE SLOPES RE-SEEDDED 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 DOM VOLUME 2, FIGURE MU-1, FOUND ON PAGE 3-30.

BELOW IS THE ACCEPTED GRASS MIX FOR SANDY SOILS:

GRASS	VARIETY	AMOUNT IN LBS. PER. ACRE
SIDEOTA'S 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



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MULCHING NOTES

INSTALLATION REQUIREMENTS

1. ALL DISTURBED AREAS MUST BE MULCHED WITHIN 21 DAYS AFTER FINAL GRADE AND SEEDING AREAS ARE TO BE MULCHED WITHIN 24 HOURS AFTER SEEDING.
2. MATERIAL USED FOR MULCH CAN BE CERTIFIED CLEAN, WEED- AND SEED-FREE LONG STEMMED FIELD OR MARSH HAY, OR STRAW OF OATS, BARLEY, WHEAT, RYE, OR TRITICALE CERTIFIED BY THE COLORADO DEPARTMENT OF AGRICULTURE WEED FREE FORAGE CERTIFICATION PROGRAM.
3. HYDRAULIC MULCHING MATERIAL SHALL CONSIST OF VIRGIN WOOD FIBER MANUFACTURED FROM CLEAN WHOLE WOOD CHIPS. WOOD CHIPS CANNOT CONTAIN ANY GROWTH OR GERMINATION INHIBITORS OR BE PRODUCED FROM RECYCLED MATERIAL. GRAVEL CAN ALSO BE USED.
4. MULCH IS TO BE APPLIED EVENLY AT A RATE OF 2 TONS PER ACRE.
5. MULCH IS TO BE ANCHORED EITHER BY CRIMPING (TUCKING MULCH FIBERS 4 INCHES INTO THE SOIL) USING NETTING (USED ON SMALL AREAS WITH STEEP SLOPES), OR WITH A TACKIFIER.
6. HYDRAULIC MULCHING AND TACKIFIERS ARE NOT TO BE USED IN THE PRESENCE OF FREE SURFACE WATER.

MAINTENANCE REQUIREMENTS

1. REGULAR INSPECTIONS ARE TO BE MADE OF ALL MULCHED AREAS.
2. MULCH IS TO BE REPLACED IMMEDIATELY IN THOSE AREAS IT HAS BEEN REMOVED, AND IF NECESSARY THE AREA SHOULD BE RESEEDDED.

City of Colorado Springs
Stormwater Quality

Figure MU-1
Mulching
Construction Detail and Maintenance
Requirements

RECOMMENDED ANNUAL GRASSES

SPECIES (COMMON NAME)	GROWTH SEASON	SEEDING DATE	POUNDS OF PURE LIVE SEED (PLS) (PLS/ACRE)	PLANTING DEPTH (INCHES)
1. OATS	COOL	MARCH 16 - APRIL 30	35-50	1-2
2. SPRING WHEAT	COOL	MARCH 16 - APRIL 30	25-35	1-2
3. SPRING BARLEY	COOL	MARCH 16 - APRIL 30	25-35	1-2
4. ANNUAL RYEGRASS	COOL	MARCH 16 - JUNE 30	10-15	1-2
5. MILLET	WARM	MAY 16 - JULY 15	3-15	1/2-3/4
6. SUDANGRASS	WARM	MAY 16 - JULY 15	5-10	1/2-3/4
7. SORGHUM	WARM	MAY 16 - JULY 15	5-10	1/2-3/4
8. WINTER WHEAT	COOL	SEPTEMBER 1 - 30	20-35	1-2
9. WINTER BARLEY	COOL	SEPTEMBER 1 - 30	20-35	1-2
10. WINTER RYE	COOL	SEPTEMBER 1 - 30	20-35	1-2
11. TRITICALE	COOL	SEPTEMBER 1 - 30	25-40	1-2

THIS TABLE WAS TAKEN FROM UDFOCD FOR RECOMMENDED ANNUAL GRASSES FOR THE DENVER METROPOLITAN AREA. THIS TABLE MAY BE USED UNLESS A SITE-SPECIFIC SEED MIX IS REQUESTED AND APPROVED.

TABLE TS-1

TEMPORARY SEEDING NOTES

INSTALLATION REQUIREMENTS

1. DISTURBED AREAS ARE TO BE SEEDDED WITHIN 21 DAYS AFTER CONSTRUCTION ACTIVITY OR GRADING ENDS IF SEASON ALLOWS.
2. IF NECESSARY, SOIL IS TO BE CONDITIONED FOR PLANT GROWTH BY APPLYING TOPSOIL, FERTILIZER, OR LIME.
3. SOIL IS TO BE TILLED IMMEDIATELY PRIOR TO APPLYING SEEDS. COMPACT SOILS ESPECIALLY NEED TO BE LOOSENEED.
4. SEEDDED DEPTH IS TO BE 4 INCHES FOR SLOPES FLATTER THAN 2:1, AND 1 INCH FOR SLOPES STEEPER THAN 2:1.
5. ANNUAL GRASSES LISTED IN TABLE TS-1 ARE TO BE USED FOR TEMPORARY SEEDING. SEED MIXES ARE NOT TO CONTAIN ANY NOXIOUS WEED SEEDS INCLUDING RUSSIAN OR CANADIAN THISTLE, KNAWEED, PURPLE LOOSESTRIFE, EUROPEAN BINDWEED, JOHNSON GRASS, AND LEAFY SPURGE.
6. TABLE TS-1 ALSO PROVIDES REQUIREMENTS FOR SEEDING RATES, SEEDING DATES, AND PLANTING DEPTHS FOR THE APPROVED TYPES OF ANNUAL GRASSES.
7. SEEDING IS TO BE APPLIED USING MECHANICAL TYPE DRILLS EXCEPT WHERE SLOPES ARE STEEP OR ACCESS IS LIMITED THEN HYDRAULIC SEEDING MAY BE USED.
8. ALL SEEDDED AREAS ARE TO BE MULCHED (SEE FACTSHEET ON MULCHING).
9. IF HYDRAULIC SEEDING IS USED THEN HYDRAULIC MULCHING SHALL BE DONE SEPARATELY TO AVOID SEEDS BECOMING ENCAPSULATED IN THE MULCH.

MAINTENANCE REQUIREMENTS

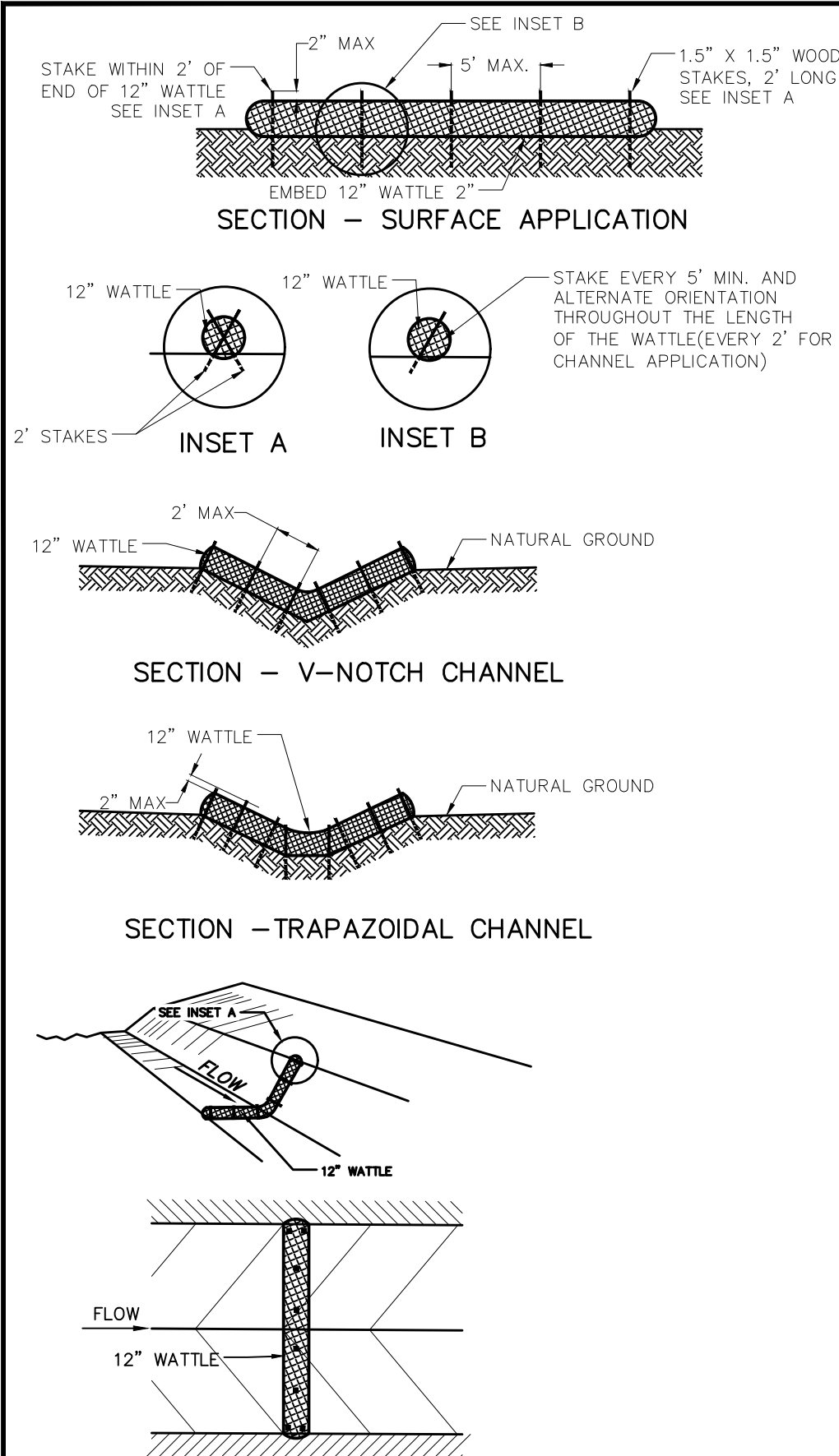
1. REGULAR INSPECTIONS ARE TO BE MADE OF ALL SEEDDED AREAS TO ENSURE GROWTH.
2. AREAS WHERE GROWTH IS NOT OCCURRING QUICKLY OR THE MULCH HAS BEEN REMOVED SHALL BE RE-SEEDDED AS SOON AS POSSIBLE AND RE-MULCHED IF NEEDED.
3. SEEDDED AREAS ARE NOT TO BE DRIVEN OVER WITH CONSTRUCTION EQUIPMENT OR VEHICLES.

City of Colorado Springs
Stormwater Quality

Figure TS-1
Temporary Seeding
Construction Detail and Maintenance
Requirements

Scale	AS SHOWN	43 of 44	Scale	AS SHOWN	43 of 44
Drawn by	Log	Checked by	TAK	Date	SEPT 2020
THE ESTATES AT ROLLING HILLS RANCH-FILING 2			GRADING-EROSION CONTROL PLAN		
GRADING-EROSION CONTROL PLAN			GRADING DETAIL SHEET		
TECH CONTRACTORS 11886 STAPLETON DRIVE FALCON, CO 80831 TELEPHONE 719.495.7444 FAX 719.495.2457			MERIDIAN RANCH		
LIGHT POLES SS SERVES WATER SERVES REX ROAD 8.12' MM (SH 1.2,6.7,8.9,10.11,12,14,15,16,22,23,24,26,27,28,30,31,34,35,36,38)			Date 9/13/2021 Init. Appr.		
Loa			Date		





NOTES:

USE 2 FT WOODEN STATES WITH A 1.5 IN BY 1.5 IN NOMINAL CROSS SECTION.

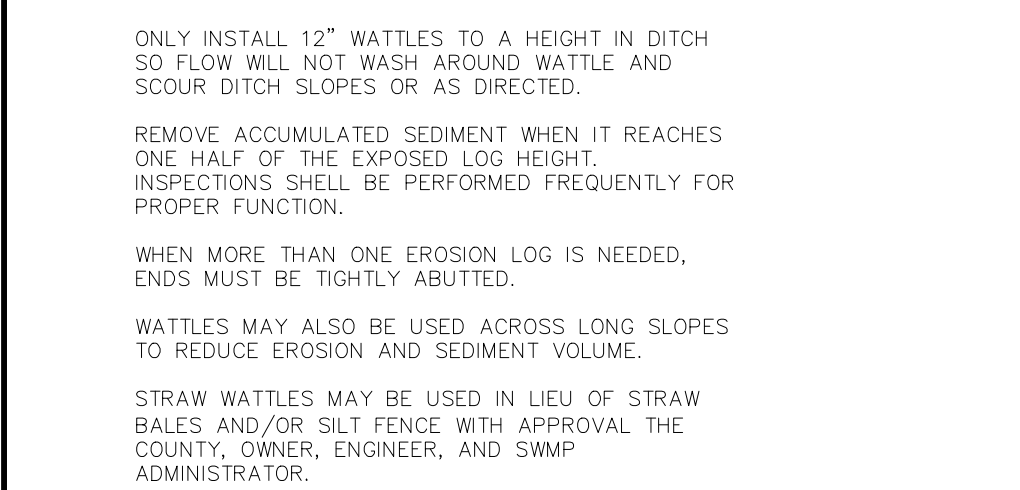
ONLY INSTALL 12" WATTLES TO A HEIGHT IN DITCH SO FLOW WILL NOT WASH AROUND WATTLE AND SCOUR DITCH SLOPES OR AS DIRECTED.

REMOVE ACCUMULATED SEDIMENT WHEN IT REACHES ONE HALF OF THE EXPOSED LOG HEIGHT. INSPECTIONS SHALL BE PERFORMED FREQUENTLY FOR PROPER FUNCTION.

WHEN MORE THAN ONE EROSION LOG IS NEEDED, ENDS MUST BE TIGHTLY ABUTTED.

WATTLES MAY ALSO BE USED ALONG LONG SLOPES TO REDUCE EROSION AND SEDIMENT VOLUME.

STRAW WATTLES MAY BE USED IN LIEU OF STRAW BALES AND/OR SILT FENCE WITH APPROVAL THE COUNTY, OWNER, ENGINEER, AND SWMP ADMINISTRATOR.



PLAN VIEW

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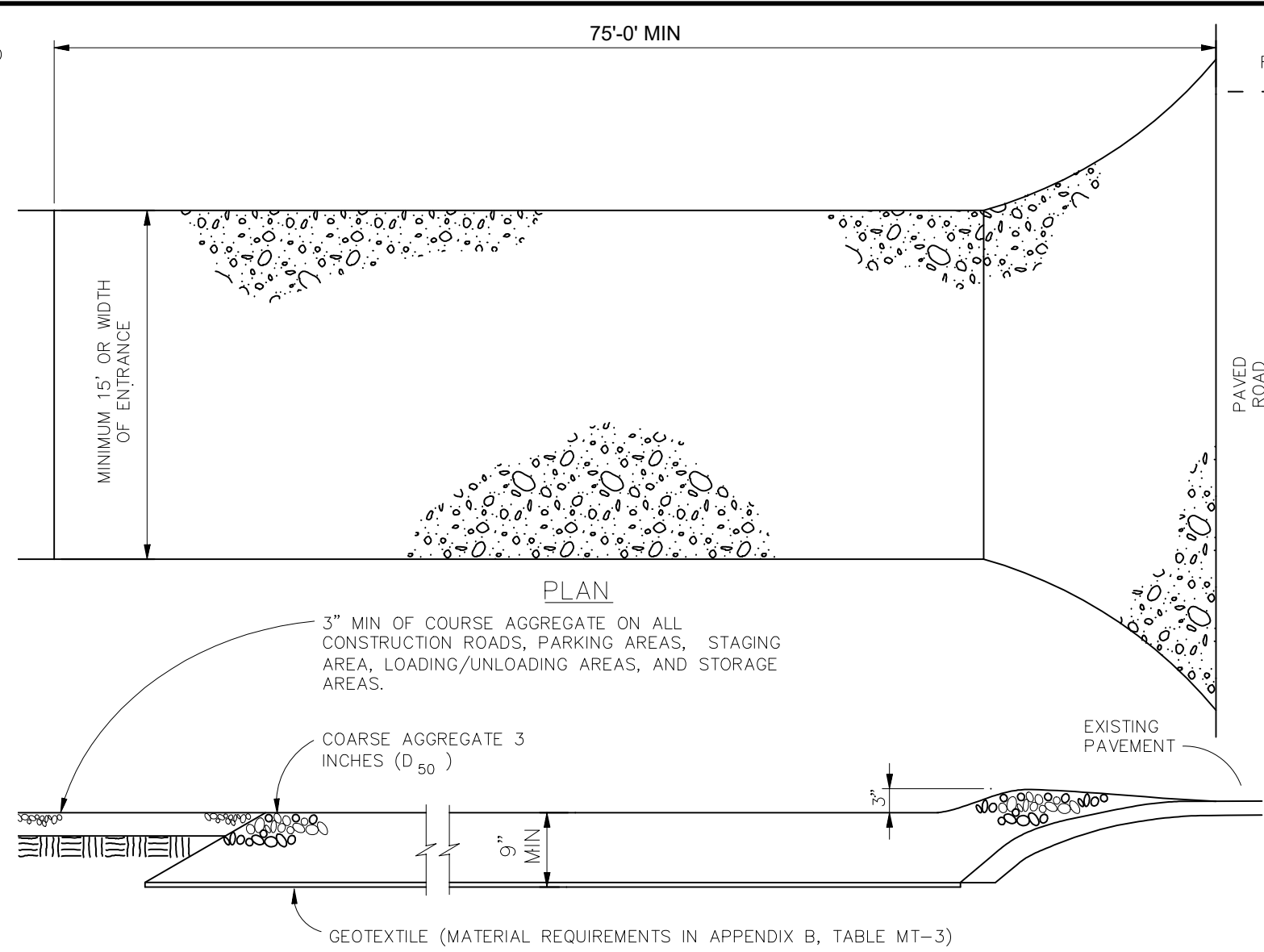
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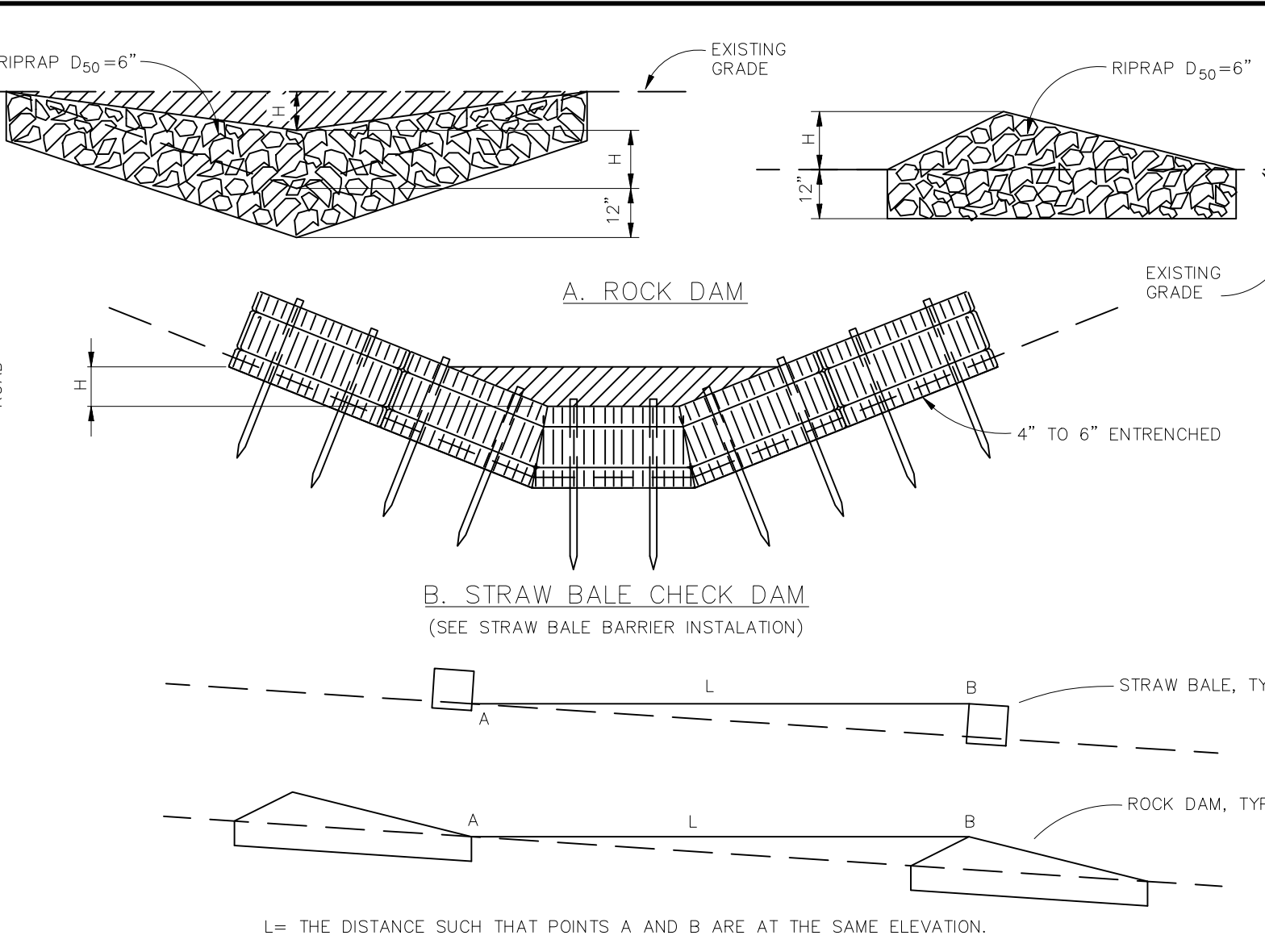
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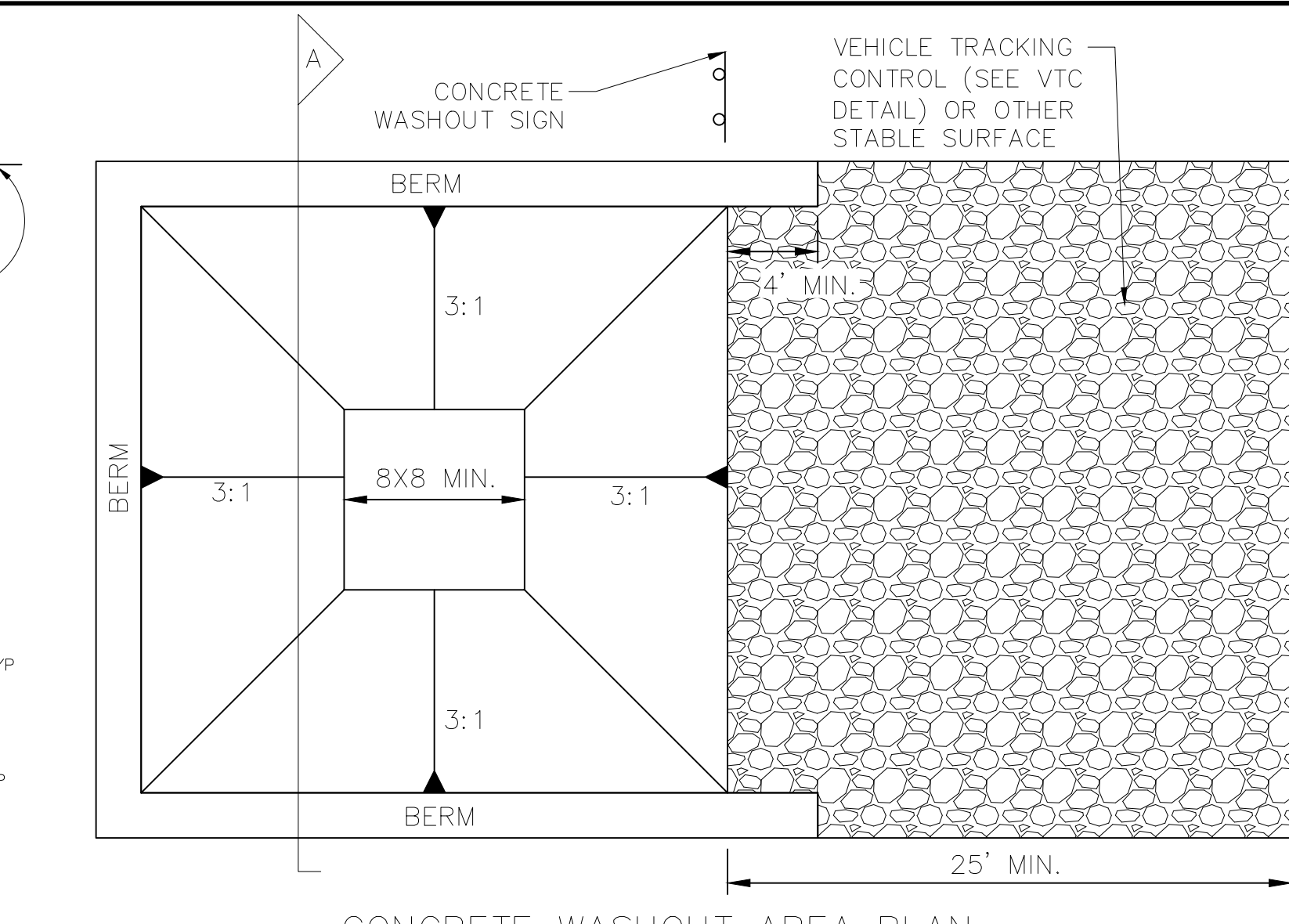
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INSTALLATION REQUIREMENTS

1. ALL ENTRANCES TO THE CONSTRUCTION SITE ARE TO BE STABILIZED PRIOR TO CONSTRUCTION BEGINNING.
2. 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 SLIGHT OVERLAP.
3. AREAS TO BE STABILIZED ARE TO BE PROPERLY GRADED AND COMPACTED PRIOR TO LAYING DOWN GEOTEXTILE AND STONE.
4. CONSTRUCTION ROADS, PARKING AREAS, LOADING/UNLOADING ZONES, STORAGE AREAS, AND STAGING AREAS ARE TO BE STABILIZED.
5. 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

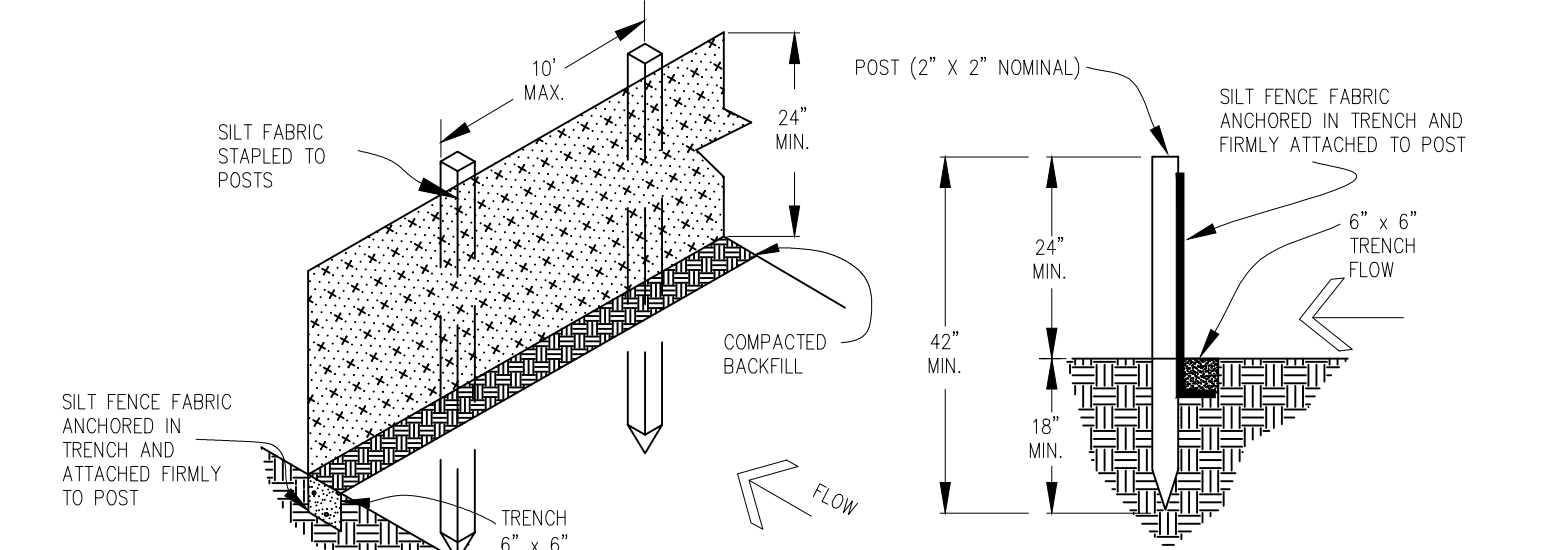
1. REGULAR INSPECTIONS ARE TO BE MADE OF ALL STABILIZED AREAS, ESPECIALLY AFTER STORM EVENTS.
2. STONES ARE TO BE REAPPLIED PERIODICALLY AND WHEN REPAIR IS NECESSARY.
3. SEDIMENT TRACKED ONTO PAVED ROADS IS TO BE REMOVED DAILY BY SHOVELING OR SWEEPING. SEDIMENT IS NOT TO BE WASHED DOWN STORM SEWER DRAINS.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

INSTALLATION REQUIREMENTS

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

MAINTENANCE REQUIREMENTS

1. REGULAR INSPECTIONS ARE TO BE MADE OF ALL CHECK DAMS, ESPECIALLY AFTER STORM EVENTS.
2. REPLACE STONE AS NECESSARY TO MAINTAIN THE CORRECT HEIGHT OF THE DAM.
3. 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.
4. CHECK DAMS ARE TO REMAIN IN PLACE AND OPERATIONAL UNTIL THE DRAINAGE AREA AND CHANNEL ARE PERMANENTLY STABILIZED.
5. WHEN CHECK DAMS ARE REMOVED THE CHANNEL LINING OR VEGETATION IS TO BE RESTORED.



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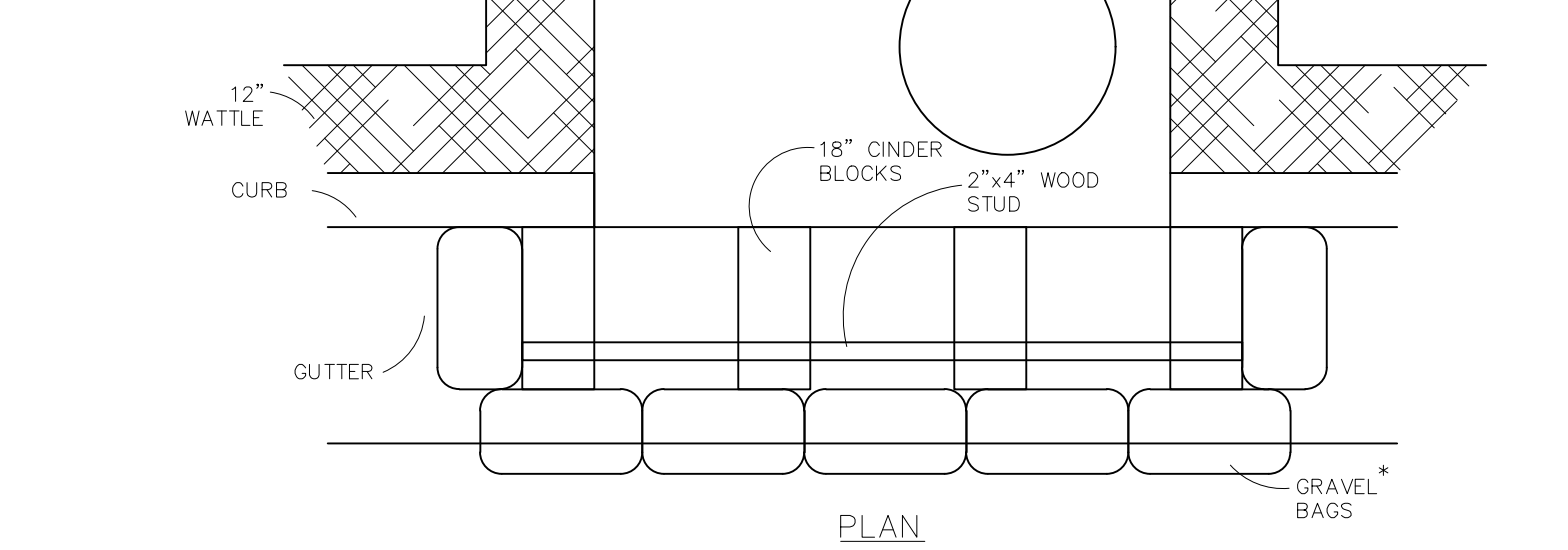
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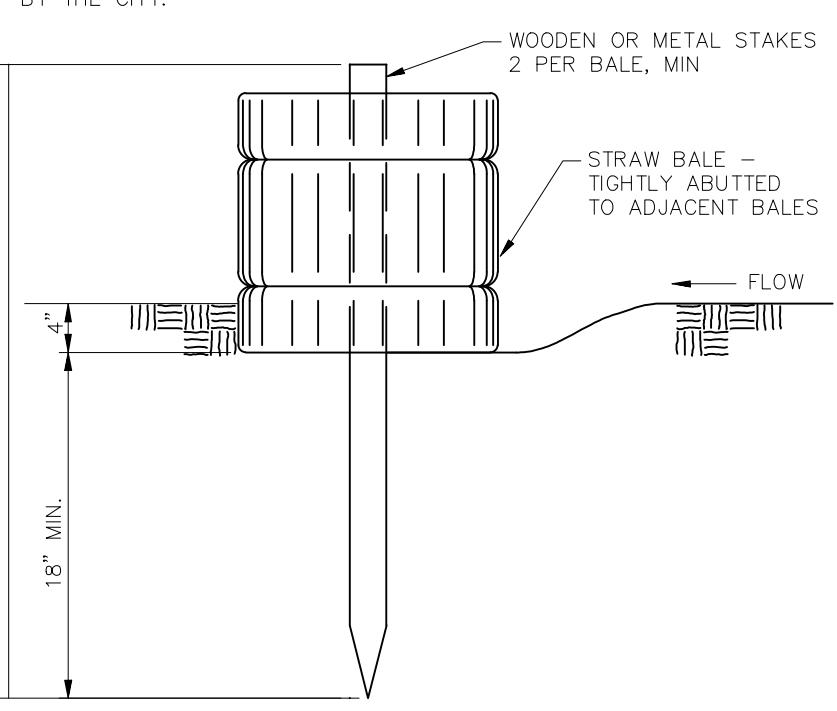
STRAW BALE BARRIER NOTES

INSTALLATION REQUIREMENTS

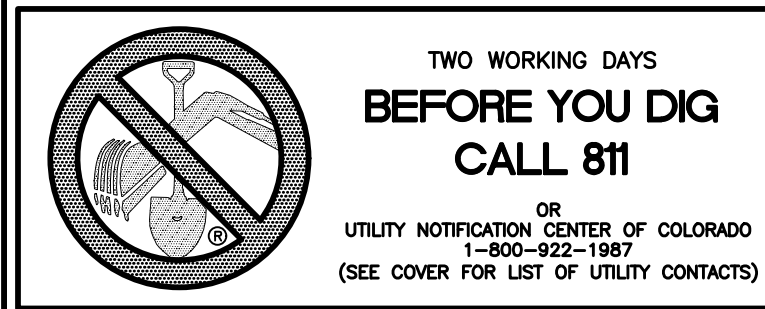
1. STRAW BALE BARRIERS SHALL BE INSTALLED PRIOR TO ANY LAND DISTURBING ACTIVITIES.
2. BALES SHALL CONSIST OF APPROXIMATELY 5 CUBIC FEET OF CERTIFIED WEED FREE HAY OR STRAW AND WEIGH NOT LESS THAN 35 POUNDS.
3. BALES ARE TO BE PLACED IN A SINGLE ROW WITH THE END OF THE BALES TIGHTLY ABUTTING ONE ANOTHER.
4. 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.
5. 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.
6. 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.
7. GAPS BETWEEN BALES ARE TO BE CHINKED (FILLED BY WEDGING) WITH STRAW OR THE SAME MATERIAL OF THE BALE.
8. END BALES ARE TO EXTEND UPSLOPE SO THE TRAPPED RUNOFF CANNOT FLOW AROUND THE ENDS OF THE BARRIER.

MAINTENANCE REQUIREMENTS

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



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* 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.

Log	Date	Appr.	Date	Revisions	No.
9/13/2021					
1	2	3			
TECH CONTRACTORS 11886 STAPLETON DRIVE FALCON, CO 80831 TELEPHONE 719.495.7444 FAX 719.495.2457					
MERIDIAN RANCH					
THE ESTATES AT ROLLING HILLS RANCH FILING 2 GRADING/EROSION CONTROL PLAN GRADING DETAIL SHEET					
Drawn by	Log	Checked by	TAK	Date	8/27/2020
Scale	AS SHOWN	44	of	44	
COLORADO PROFESSIONAL ENGINEER 31429 8-28-2010					