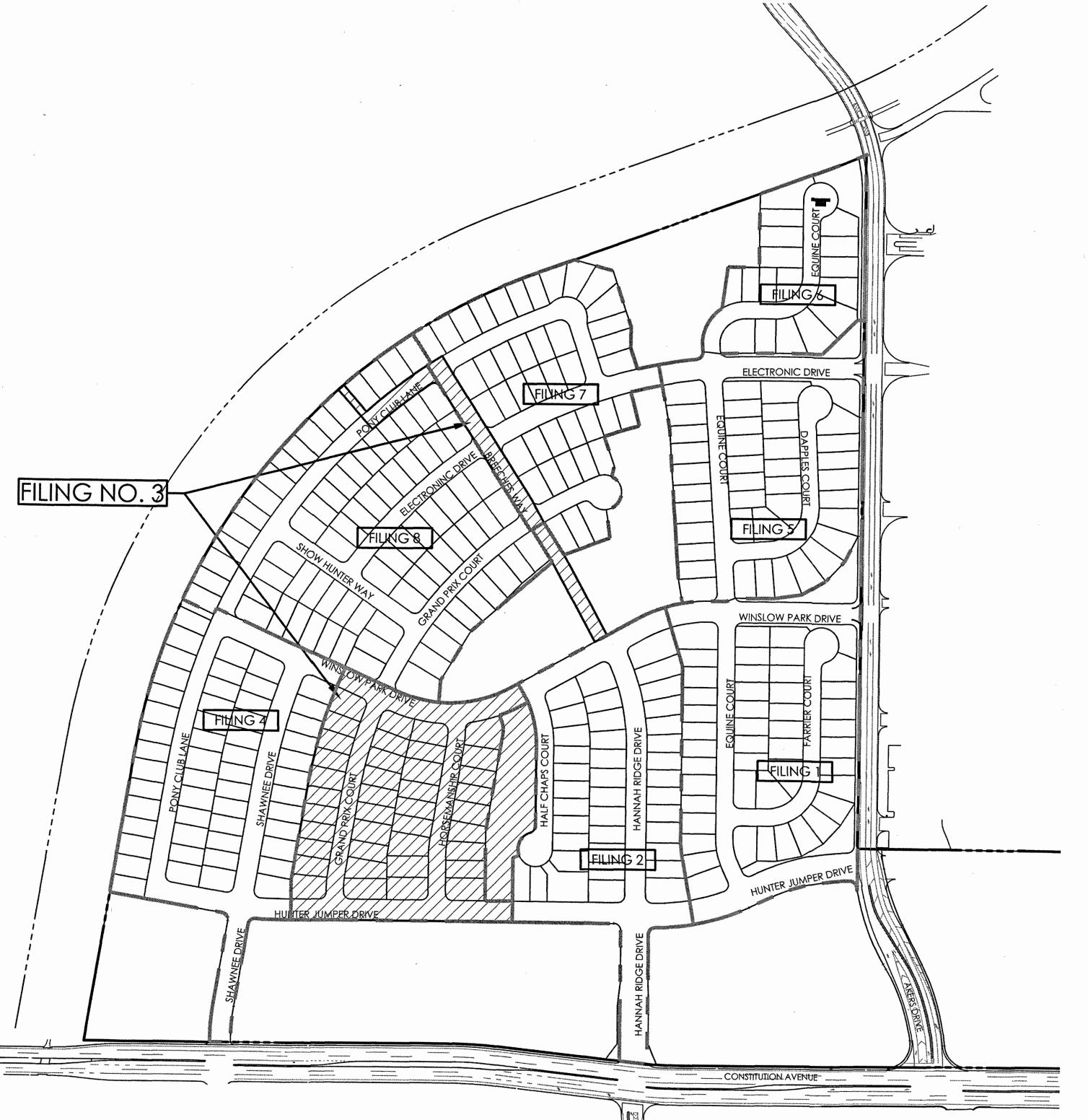
# CONSTRUCTION PLANS

HANNAH RIDGE AT FEATHERGRASS FILING NO. 3

EL PASO COUNTY, COLORADO



SITE MAP

AS-BUILT 12-7-2023

# **COMPANIES AND AGENCIES**

OWNER/DEVELOPER

ELITE PROPERTIES OF AMERICA, INC 6385 CORPORATE DRIVE, SUITE 200 COLORADO SPRINGS, CO 80919 (719) 592-9333

ENGINEER M.V.E., INC.

1903 LELARAY STREET, STE 200 COLORADO SPRINGS, CO 80909 (719) 635-5736

EL PASO COUNTY PLANNING

EPC PLANNING AND COMMUNITY DEVELOPMENT

2880 INTERNATIONAL CIRCLE, SUITE 110
COLORADO SPRINGS, CO 80910
(719) 520-6300

STREETS AND RIGHTS-OF-WAY

EPC DEPARTMENT OF PUBLIC WORKS 3275 AKERS DRIVE COLORADO SPRINGS, CO 80922 (719) 520-6460

NATURAL GAS

COLORADO SPRINGS UTILITIES
111 SOUTH CASCADE AVENUE
P.O. BOX 1103
COLORADO SPRINGS, CO 80947-1015
(719) 226-3218

**ELECTRIC** 

MOUNTAIN VIEW ELECTRIC ASSOCIATION 11140 EAST WOODMEN ROAD FALCON, CO 80831 (719) 495-2283

WATER & WASTEWATER
CHEROKEE METROPOLITAN DISTRICT

6250 PALMER PARK BOULEVARD COLORADO SPRINGS, CO 80915 (719) 597-5080

TELEPHONE

CENTURYLINK
555 TECH CENTER DRIVE SUITE 110
COLORADO SPRINGS, CO 80919
866.301.9889

ALCON	<b>FIRE</b>	<b>DEPA</b>	RTMENT	APPROVAL

NOTE: FIRE FLOW DEMAND IS 1500 GPM FOR A 3 HOUR DURATION AT A 20 PSI MINIMUM RESIDUAL MAIN LINE PRESSURE DURING PEAK DEMAND.

UPON DETAILED REVIEW OF THE AVAILABLE WATER SUPPLY, FIRE HYDRANT LOCATIONS AND HOSE LAY DISTANCES, THESE PLANS ARE HEREBY CONSIDERED APPROVED.

FIRE DEPARTMENT SIGNATURE:

DATE:\_\_\_\_

# CHEROKEE METROPOLITAN DISTRICT APPROVAL THE APPROVAL DATE ON THE PLAN(S) EXPIRES IN ONE (1) YEAR AND SHALL REQUIRE

RESUBMITTAL AND APPROVAL IF CONSTRUCTION DOES NOT BEGIN DURING THIS PERIOD.

CHEROKEE METROPOLITAN DISTRICT

\_\_\_\_ DATE\_\_11/01/17

SHEET INDEX (LINED OUT SHEETS NOT INCLUDED IN THIS SET FOR FILING NO. 3)

PLAN SET SHEET NO.	SHEET TITLE	MVE DRAWING NO.
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2	GENERAL NOTES & DETAILS	60970031-F3
3	GENERAL NOTES & DETAILS	60970032-F3
4	BREECHES WAY PLAN / PROFILE	60970040-F3
5	GRAND PRIX COURT PLAN / PROFILE	60970041-F3
	GRAND PRIX COURT PLAN / PROFILE	60970041-F3
	DAPPLES COURT PLAN / PROFILE	
<u> </u>	EQUINE COURT PLAN / PROFILE	60970043
	EQUINE COURT PLAN/PROFILE	60970044
10		<del>60970045</del>
	FARRIER COURT PLANT PROFILE	60970046
40	HALF CHAPS COURT PLAN / PROFILE	60970047
12	HANNAH RIDGE DRIVE PLAN / PROFILE	<del>60970048</del>
13	HORSEMANSHIP COURT PLAN / PROFILE	60970049-F3
14	HUNTER JUMPER DRIVE PLAN / PROFILE	60970050-F3
	HUNTER JUMPER DRIVE PLAN / PROFILE	60970051
. — 16	PONY CLUB LANE PLAN / PROFILE	<del>60970052</del>
17	PONY CLUB LANE PLAN / PROFILE	60970053-F3
18	SHOW-HUNTER-WAY-PLAN/-PROFILE	60970054
	SHAWNEE DRIVEPLAN / PROFILE	60970055
	ELECTRONIC-DRIVE-PLAN+PROFILE	60970056
24	ELECTRONIC DRIVE PLAN / PROFILE	6097005 <b>7</b>
22	WINSLOW PARK DRIVE PLAN / PROFILE	60970058-F3
<del>23</del>	WINSLOW PARK DRIVE PLAN / PROFILE	<del>60970059</del>
	CONSTITUTION AVENUE IMPROVEMENTS	<del>60970062</del>
25	MISC SANITARY SEWER PLAN / PROFILES	
<del>26</del>	PONY CLUB / BREECHES WAY STORM DRAIN	60970065-F3
	HANNAH RIDGE DRIVE STORM DRAIN	60970100
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	HUNTER JUMPER DRIVE STORM DRAIN	60970102-F3
20	SHAWNEE DRIVE STORM DRAIN	60970403
30	UNDER SADDLE / WINSLOW PARK STORM DRAIN	
31	MISC STORM DRAIN PLAN / PROFILES	60970066-F3
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33	TRIBUTARY DRAINAGE IMPROVEMENTS	60970090-F3
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<del>36</del>	STORM WATER QUALITY DETENTION BASINS	60970105
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	STORM WATER QUALITY DETENTION BASINS	<del>60970107</del>
39	STREET/STORM PHASING PLAN & NOTES	60970069-F3
40	STRIPING & SIGNAGE PLAN	60970094-F3
41	WATER PLANS COVER SHEET	
42	WATER PLAN (CONSTITUTION)	60970070-F3
43	WATER PLAN (SOUTHWEST)	<del></del>
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45	WATER PLAN (NORTHWEST)	60970074
46	WATER PLAN (NORTHEAST)	<del>60970075</del>
47	WATER PLAN / PROFILE (SHAWNEE DRIVE)	<del></del>
49	WATER PLAN / PROFILE (MISC PROPFILES)	<del>60970077</del>
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52	UTILITY SERVICE PLAN & NOTES	60970085-F3
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I, THE OWNER/DEVELOPER HAVE READ AND WILL COMPLY WITH ALL OF THE REQUIREMENTS SPECIFIED IN THESE DETAILED PLANS AND SPECIFICATIONS.

DOUGLAS M. STIMPLE
ELITE PROPERTIES OF AMERICA, INC
6385 CORPORATE DRIVE, SUITE 200
COLORADO SPRINGS, CO 80919

**ENGINEER'S STATEMENT** 

THESE DETAILED PLANS AND SPECIFICATIONS WERE PREPARED UNDER MY DIRECTION AND SUPERVISION. SAID DETAILED PLANS AND SPECIFICATIONS HAVE BEEN PREPARED ACCORDING TO THE CRITERIA ESTABLISHED BY THE COUNTY FOR DETAILED PLANS AND SPECIFICATIONS, AND SAID DETAILED PLANS AND SPECIFICATIONS ARE IN CONFORMITY WITH THE MASTER PLAN OF THE DRAINAGE BASIN. SAID DETAILED DRAINAGE PLANS AND SPECIFICATIONS MEET THE PURPOSES FOR WHICH THE PARTICULAR DRAINAGE FACILITY IS DESIGNED. I ACCEPT RESPONSIBILITY FOR ANY LIABILITY CAUSED BY ANY COLOURS OF THE DETAILED DRAINAGE PLANS OR OMISSIONS ON MY PART IN PREPARATION OF THE DETAILED DRAINAGE PLANS WILL STORY OF THE DETAILED DRAINAGE PLANS OR OMISSIONS.

DAVID R. GORMAN, POR AND ON BEHALF ON THE PROMISE THE

9/21/17 DATE

9-22-17

EL PASO COUNTY

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

FILED IN ACCORDANCE WITH THE REQUIREMENTS OF THE EL PASO COUNTY LAND DEVELOPMENT CODE, DRAINAGE CRITERIA MANUAL, VOLUMES 1 AND 2, AND ENGINEERING CRITERIA MANUAL AS AMENDED.

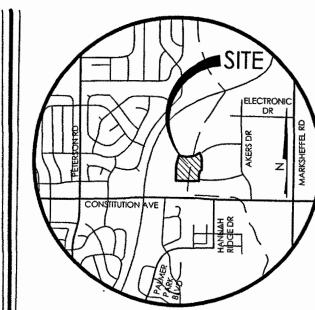


El Paso County Department of Public Works

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

THESE CONSTRUCTION DOCUMENTS WILL BE VALID FOR CONSTRUCTION FOR A PERIOD OF 2 YEARS FROM THE DATE SIGNED BY THE EL PASO COUNTY ENGINEER. IF CONSTRUCTION HAS NOT STARTED WITHIN THOSE 2 YEARS, THE PLANS MAY NEED TO BE RESUBMITTED FOR APPROVAL, INCLUDING PAYMENT OF REVIEW FEES AT THE PLANNING AND COMMUNITY DEVELOPMENT DIRECTOR'S DISCRETION.

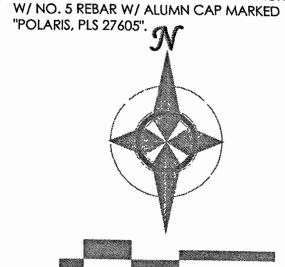
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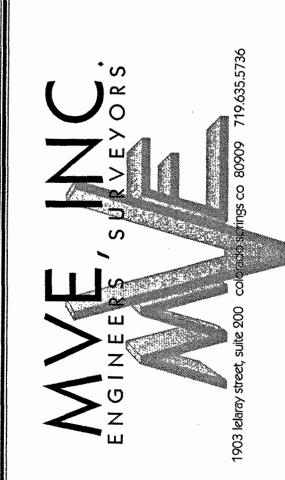
VICINITY MA

BENCHMARK
THE BENCHMARK FOR THESE PLANS IS THE TOP
OF #4 REBAR, PANEL POINT NO. 1, LOCATED ON
THE SOUTH EDGE OF CONSTITUTION AVE AND
THE WEST EDGE OF THE ROCK ISLAND TRAIL, 535
FEET WEST OF THE CENTERLINE OF SHAWNEE DR.
ELEVATION = 6486.63. (EPC DATUM ELEVATION

BASIS OF BEARINGS:
BEARING REFERRED TO HEREIN ARE BASED ON
THE SOUTH LINE OF TRACT FF, HANNAH RIDGE
AT FEATHERGRASS FILING NO. 1. ASSUMED TO
BEAR N89°39'18"W MONUMENTED AT EACH END
W/ NO. 5 REBAR W/ ALUMN CAP MARKED



0 100 200 1" = 200' 1:2,400



REVISIONS

DESIGNED BY DRAWN BY CHECKED BY	DRG TJW	8/22/2013
AS-BUILTS BY CHECKED BY		

HANNAH RIDGE AT FEATHERGRASS NO. 3

**COVER SHEET** 

MVE PROJECT 60970 MVE DRAWING 60970030-F3



#### EL PASO COUNTY STANDARD CONSTRUCTION NOTES

- 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. 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. 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. 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. 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. CONTRACTOR SHALL SCHEDULE A PRE-CONSTRUCTION MEETING WITH EL PASO COUNTY PLANNING AND COMMUNITY DEVELOPMENT (PCD) INSPECTIONS, PRIOR TO STARTING CONSTRUCTION.
- 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. 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. ALL STORM DRAIN PIPE SHALL BE CLASS III RCP UNLESS OTHERWISE NOTED AND APPROVED BY PCD.
- 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 CONSTRUCTION TRAFFIC MUST ENTER/EXIT THE SITE AT APPROVED CONSTRUCTION ACCESS POINTS.
- 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. SIGNING AND STRIPING SHALL COMPLY WITH EL PASO COUNTY DOT AND MUTCD CRITERIA. [IF APPLICABLE, ADDITIONAL SIGNING AND STRIPING NOTES WILL BE PROVIDED.]
- 14. CONTRACTOR SHALL OBTAIN ANY PERMITS REQUIRED BY EL PASO COUNTY DOT, INCLUDING WORK WITHIN THE RIGHT-OF-WAY AND SPECIAL TRANSPORT PERMITS.
- 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.

#### GENERAL NOTES

- 1. ALL CONSTRUCTION WITHIN EL PASO COUNTY PUBLIC RIGHT-WAYS SHALL BE IN ACCORDANCE WITH MOST CURRENT STANDARDS AND SPECIFICATIONS OF EL PASO COUNTY.
- 2. THE LOCATION OF EXISTING UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY AND MAY NOT INCLUDE ALL UTILITIES. THE EXCAVATING CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. THE CONTRACTOR AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY HIS FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UTILITIES.
- 3. BEFORE COMMENCING ANY EXCAVATION, CALL 1-800-922-1987 FOR EXISTING UTILITY LOCATIONS.
- 4. CONTRACTOR SHALL SCHEDULE AND HOLD A PRE-CONSTRUCTION MEETING A MINIMUM OF 48 HOURS PRIOR TO START OF CONSTRUCTION WITH CHEROKEE METROPOLITAN DISTRICT, EL PASO COUNTY, ENGINEER AND CONTRACTOR.
- 5. CONTRACTOR IS RESPONSIBLE FOR ALL OF HIS OPERATIONS ON THE SITE. CONTRACTOR SHALL OBSERVE ALL SAFETY AND OSHA REGULATIONS DURING CONSTRUCTION OPERATIONS. TRENCH WIDTHS AND SLOPE ANGLES SHALL BE DETERMINED BY THE CONTRACTOR IN THE FIELD AND OCCORDING TO SAFETY AND OSHA REGULATIONS.
- 6. ANY NECESSARY PERMITS SUCH AS SWMP, FUGITIVE DUST, ACCESS,
- C.O.E. 404, ESQCP PERMIT, ETC. SHALL BE OBTAINED PRIOR TO CONSTRUCTION.
- 7. SOIL FROSION CONTROL MEASURES FOR ALL SLOPES, CHANNELS, DITCHES, OR ANY DISTURBED LAND AREA SHALL BE COMPLETED WITHIN 21 CALENDAR DAYS AFTER FINAL GRADING, OR FINAL EARTH DISTURBANCE, HAS BEEN COMPLETED. DISTURBED AREAS AND STOCKPILES WHICH ARE NOT AT FINAL GRADE BUT WILL REMAIN DORMANT FOR LONGER THAN 30 DAYS SHALL ALSO BE MULCHED WITHIN 21 DAYS AFTER INTERIM GRADING. AN AREA THAT IS GOING TO REMAIN IN AN INTERIM STATE FOR MORE THAN 60 DAYS SHALL ALSO BE SEEDED. ALL TEMPORARY SOIL EROSION CONTROL MEASURES AND BMPS SHALL BE MAINTAINED UNTIL PERMANENT SOIL EROSION CONTROL MEASURES ARE IMPLEMENTED AND ESTABLISHED.
- 8. SOIL PREPARATION, SEEDING, AND MULCHING WILL BE REQUIRED ON ALL DISTURBED AREAS NOT SURFACED. THE FOLLOWING TYPES AND RATES SHALL BE USED:

GRASS	VARIETY	AMOUNT IN PLS Ibs. PER AC

SIDEOATS GRAMA	EL RENO	3.0 lbs.
WESTERN WHEATGRASS	BARTON	2.5 lbs.
SLENDER WHEAT GRASS	NATIVE	2.0 lbs.
LITTLE BLUESTEM	PASTURA	2.0 lbs.
SAND DROPSEED	NATIVE	0.5 lbs.
SWITCH GRASS	NEBRASKA 28	3.0 lbs.
WEEPING LOVE GRASS	MORPHA	1.0 lbs.

SUBMISSION AND APPROVAL OF AN ACCEPTABLE TRAFFIC CONTROL PLAN.

TOTAL 14.0 lbs.

9. SEEDING APPLICATION: DRILLED TO A DEPTH OF .25" TO .50" INTO SOIL WHERE POSSIBLE. BROADCAST AND RAKED TO COVER ON STEEPER THAN 3:1 SLOPES WHERE ACCESS IS LIMITED OR UNSAFE FOR EQUIPMENT.

10. THE CONTRACTOR SHALL RESTORE ALL ROADWAYS IMPACTED BY HIS CONSTRUCTION ACTIVITY. GRAVEL ROADWAYS, TO THE EXTENT CONSTRUCTION ACTIVITY WILL IMPACT THEM, SHALL HAVE THE GRAVEL STRIPPED. STOCKPILED AND REINSTALLED. NO ADDITIONAL COMPENSATION WILL BE MADE FOR THIS ACTIVITY. IN THE EVENT THE GRAVEL IS CONTAMINATED OR LOST, THE CONTRACTOR SHALL PROVIDE MAKEUP GRAVEL AT NO ADDITIONAL COST TO THE OWNER.

11. GRADING OF THE PROJECT SITE SHALL BE FINALIZED SUCH THAT ALL AREAS DRAIN FREELY AWAY FROM NEW MANHOLES.

12. ANY SIGNS, DELINEATOR POSTS, MAIL BOXES, NEWSPAPER BOXES AND OTHER APPURTENANCES REMOVED DURING CONSTRUCTION SHALL BE REPLACED IN THE SAME LOCATION AND IN AN ACCEPTABLE CONDITION AT NO ADDITIONAL COST TO THE OWNER.

13. IN THE EVENT THE CONTRACTOR REMOVES EXISTING FENCING, THE FENCING SHALL BE REINSTALLED IN A CONDITION, AS GOOD AS, OR BETTER THAN ORIGINALLY FOUND AT NO ADDITIONAL COST TO THE OWNER. CONTRACTOR SHALL COORDINATE ANY REQUIRED FENCE REMOVAL WITH THE LAND OWNER.

14. THE CONTRACTOR SHALL RESTORE DRAINAGE CONFIGURATIONS ALTERED AS A RESULT OF HIS CONSTRUCTION ACTIVITY.

15. SUFFICIENT CLEARANCE SHALL BE MAINTAINED BETWEEN THE EXCAVATION FOR THE NEW SANITARY SEWER FACILITIES AND ANY POWER OR TELEPHONE POLE OR GUY WIRE. IN CASES WHERE FAILURE OF A POLE IS POSSIBLE, THE CONTRACTOR SHALL CONTACT THE APPROPRIATE UTILITY FOR ASSISTANCE TO TEMPORARILY BRACE OR SUPPORT THE POLE AS REQUIRED.

16. NO EXCAVATED MATERIAL SHALL BE PLACED UNDER OVERHEAD ELECTRIC CONDUCTORS OR AROUND POLES OR TEMPORARILY STORED UNDER LINES WITHOUT FIRST CONSULTING WITH THE ELECTRIC UTILITY TO DETERMINE IF ADEQUATE CLEARANCES WILL BE RETAINED. NO PERSON, TOOL OR EQUIPMENT SHALL OPERATE CLOSER THAN 10 FEET TO ANY PORTION OF ANY ENERGIZED LINE WITHOUT FIRST COMPLYING WITH THE PROVISIONS OF COLORADO REVISED STATUTES 1973, SECTION 1, TITLE 9, ARTICLE 2.5. 102 AND 103.

17. PORTIONS OF THE PROJECT LIE WITHIN COUNTY ROAD RIGHTS-OF-WAY. TRAFFIC CONTROL SHALL BE UNDERTAKEN IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES AND REQUIREMENTS SET FORTH BY THE EL PASO COUNTY DEPARTMENT OF TRANSPORTATION (DOT) WITHIN THEIR PERMIT PROVISIONS AS APPROPRIATE.

18. THE CONTRACTOR SHALL CONTACT THE EL PASO COUNTY DEPARTMENT OF PUBLIC WORKS' REPRESENTATIVE 48 HOURS PRIOR TO CONSTRUCTION IN COUNTY ROAD RIGHTS-OF-WAY. (EL PASO COUNTY DEPARTMENT OF PUBLIC WORKS, 3275 AKERS DRIVE, COLORADO SPRINGS, CO 80922. (719) 520-6460).

19. THE CONTRACTOR SHALL PROVIDE A TRAFFIC CONTROL PLAN IN ACCORDANCE WITH THE PROVISIONS OF THE EL PASO COUNTY DOT UTILITY PERMIT. APPROVAL OF THE TRAFFIC CONTROL PLAN FOR ALL WORK CONTAINED WITHIN THE COUNTY RIGHTS-OF-WAY SHALL BE OBTAINED PRIOR TO THE INITIATION OF ANY CONSTRUCTION WITHIN THE RESPECTIVE RIGHT-OF-WAY. 20. COMPLETE CLOSURE OF ANY COUNTY ROAD SHALL NOT BE ALLOWED UNLESS APPROVED IN ADVANCE BY EL PASO COUNTY DOT. ANY CLOSURES PROPOSED SHALL ONLY BE CONSIDERED AFTER

21. ASPHALT DESIGN SHALL BE ACCORDING TO GEOTECHNICAL TESTING AND DESIGN TO BE COMPLETED FOLLOWING ROUGH GRADING. THE DESIGN AND TESTING SHALL BE COMPLETED IN ACCORDANCE WITH EPC STANDARDS AND APPROVED BY EPC PRIOR TO PAVING.

EL PASO COUNTY STANDARD GRADING & EROSION CONTROL NOTES:

- 1. CONSTRUCTION MAY NOT COMMENCE UNTIL A CONSTRUCTION PERMIT IS OBTAINED FROM PLANNING AND COMMUNITY DEVELOPMENT AND A PRECONSTRUCTION CONFERENCE IS HELD WITH PLANNING AND COMMUNITY DEVELOPMENT INSPECTIONS.
- 2.STORMWATER DISCHARGES FROM CONSTRUCTION SITES SHALL NOT CAUSE OR THREATEN TO CAUSE POLLUTION, CONTAMINATION, OR DEGRADATION OF STATE WATERS. ALL WORK AND EARTH DISTURBANCE SHALL BE DONE IN A MANNER THAT MINIMIZES POLLUTION OF ANY ON-SITE OR OFF SITE WATERS, INCLUDING WETLANDS.
- 3.NOTWITHSTANDING ANYTHING DEPICTED IN THESE PLANS IN WORDS OR GRAPHIC REPRESENTATION, ALL DESIGN AND CONSTRUCTION RELATED TO ROADS, STORM DRAINAGE AND EROSION CONTROL SHALL CONFORM TO THE STANDARDS AND REQUIREMENTS OF THE MOST RECENT VERSION OF THE RELEVANT ADOPTED EL PASO COUNTY STANDARDS, INCLUDING THE LAND DEVELOPMENT CODE, THE ENGINEERING CRITERIA MANUAL, THE DRAINAGE CRITERIA MANUAL, AND THE DRAINAGE CRITERIA MANUAL VOLUME 2. ANY DEVIATIONS FROM REGULATIONS AND STANDARDS MUST BE REQUESTED, AND APPROVED, IN WRITING.
- 4.A SEPARATE STORMWATER MANAGEMENT PLAN (SMWP) FOR THIS PROJECT SHALL BE COMPLETED AND AN EROSION AND STORMWATER QUALITY CONTROL PERMIT (ESQCP) ISSUED PRIOR TO COMMENCING CONSTRUCTION. DURING CONSTRUCTION THE SWMP IS THE RESPONSIBILITY OF THE DESIGNATED STORMWATER MANAGER, SHALL BE LOCATED ON SITE AT ALL TIMES AND SHALL BE KEPT UP TO DATE WITH WORK PROGRESS AND CHANGES IN THE FIELD.
- 5.ONCE THE ESQCP HAS BEEN ISSUED, THE CONTRACTOR MAY INSTALL THE INITIAL STAGE EROSION AND SEDIMENT CONTROL BMPS AS INDICATED ON THE GEC. A PRECONSTRUCTION MEETING BETWEEN THE CONTRACTOR, ENGINEER, AND EL PASO COUNTY WILL BE HELD PRIOR TO ANY CONSTRUCTION. IT IS THE RESPONSIBILITY OF THE APPLICANT TO COORDINATE THE MEETING TIME AND PLACE WITH COUNTY DSD INSPECTIONS STAFF.
- 6.SOIL EROSION CONTROL MEASURES FOR ALL SLOPES, CHANNELS, DITCHES, OR ANY DISTURBED LAND AREA SHALL BE COMPLETED WITHIN 21 CALENDAR DAYS AFTER FINAL GRADING, OR FINAL EARTH DISTURBANCE, HAS BEEN COMPLETED. DISTURBED AREAS AND STOCKPILES WHICH ARE NOT AT FINAL GRADE BUT WILL REMAIN DORMANT FOR LONGER THAN 30 DAYS SHALL ALSO BE MULCHED WITHIN 21 DAYS AFTER INTERIM GRADING. AN AREA THAT IS GOING TO REMAIN IN AN INTERIM STATE FOR MORE THAN 60 DAYS SHALL ALSO BE SEEDED. ALL TEMPORARY SOIL EROSION CONTROL MEASURES AND BMPS SHALL BE MAINTAINED UNTIL PERMANENT SOIL EROSION CONTROL MEASURES ARE IMPLEMENTED AND ESTABLISHED.
- 7. TEMPORARY SOIL EROSION CONTROL FACILITIES SHALL BE REMOVED AND EARTH DISTURBANCE AREAS GRADED AND STABILIZED WITH PERMANENT SOIL EROSION CONTROL MEASURES PURSUANT TO STANDARDS AND SPECIFICATION PRESCRIBED IN THE DCM VOLUME II AND THE ENGINEERING CRITERIA MANUAL (ECM) APPENDIX I.
- 8.ALL PERSONS ENGAGED IN EARTH DISTURBANCE SHALL IMPLEMENT AND MAINTAIN ACCEPTABLE SOIL EROSION AND SEDIMENT CONTROL MEASURES INCLUDING BMPS IN CONFORMANCE WITH THE EROSION CONTROL TECHNICAL STANDARDS OF THE DRAINAGE CRITERIA MANUAL (DCM) VOLUME II AND IN ACCORDANCE WITH THE STORMWATER MANAGEMENT PLAN (SWMP).
- 9.ALL TEMPORARY EROSION CONTROL FACILITIES INCLUDING BMPS AND ALL PERMANENT FACILITIES INTENDED TO CONTROL EROSION OF ANY EARTH DISTURBANCE OPERATIONS, SHALL BE INSTALLED AS DEFINED IN THE APPROVED PLANS, THE SWMP AND THE DCM VOLUME II AND MAINTAINED THROUGHOUT THE DURATION OF THE EARTH DISTURBANCE OPERATION.
- 10.ANY EARTH DISTURBANCE SHALL BE CONDUCTED IN SUCH A MANNER SO AS TO EFFECTIVELY REDUCE ACCELERATED SOIL EROSION AND RESULTING SEDIMENTATION. ALL DISTURBANCES SHALL BE DESIGNED, CONSTRUCTED, AND COMPLETED SO THAT THE EXPOSED AREA OF ANY DISTURBED LAND SHALL BE LIMITED TO THE SHORTEST PRACTICAL PERIOD OF TIME.
- 11.ANY TEMPORARY OR PERMANENT FACILITY DESIGNED AND CONSTRUCTED FOR THE CONVEYANCE OF STORMWATER AROUND, THROUGH, OR FROM THE EARTH DISTURBANCE AREA SHALL BE DESIGNED TO LIMIT THE DISCHARGE TO A NON-EROSIVE VELOCITY
- 12.CONCRETE WASH WATER SHALL BE CONTAINED AND DISPOSED OF IN ACCORDANCE WITH THE SWMP. NO WASH WATER SHALL BE DISCHARGED TO OR ALLOWED TO RUNOFF TO STATE WATERS, INCLUDING ANY SURFACE OR SUBSURFACE STORM DRAINAGE SYSTEM OR FACILITIES.
- 13.EROSION CONTROL BLANKETING SHALL BE USED ON SLOPES STEEPER THAN 3:1.
- 14.BUILDING, CONSTRUCTION, EXCAVATION, OR OTHER WASTE MATERIALS SHALL NOT BE TEMPORARILY PLACED OR STORED IN THE STREET, ALLEY, OR OTHER PUBLIC WAY, UNLESS IN ACCORDANCE WITH AN APPROVED TRAFFIC CONTROL PLAN. BMP'S MAY BE REQUIRED BY EL PASO COUNTY ENGINEERING IF DEEMED NECESSARY, BASED ON SPECIFIC CONDITIONS AND CIRCUMSTANCES.
- 15. VEHICLE TRACKING OF SOILS AND CONSTRUCTION DEBRIS OFF-SITE SHALL BE MINIMIZED. MATERIALS TRACKED OFFSITE SHALL BE CLEANED UP AND PROPERLY DISPOSED OF IMMEDIATELY.
- 16.CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL OF ALL WASTES FROM THE CONSTRUCTION SITE FOR DISPOSAL IN ACCORDANCE WITH LOCAL AND STATE REGULATORY REQUIREMENTS. NO CONSTRUCTION DEBRIS, TREE SLASH, BUILDING MATERIAL WASTES OR UNUSED BUILDING MATERIALS SHALL BE BURIED, DUMPED, OR DISCHARGED AT THE SITE.
- 17.THE OWNER, SITE DEVELOPER, CONTRACTOR, AND/OR THEIR AUTHORIZED AGENTS SHALL BE RESPONSIBLE FOR THE REMOVAL OF ALL CONSTRUCTION DEBRIS, DIRT, TRASH, ROCK, SEDIMENT, AND SAND THAT MAY ACCUMULATE IN THE STORM SEWER OR OTHER DRAINAGE CONVEYANCE SYSTEM AND STORMWATER APPURTENANCES AS A RESULT OF SITE DEVELOPMENT.
- 18.THE QUANTITY OF MATERIALS STORED ON THE PROJECT SITE SHALL BE LIMITED, AS MUCH AS PRACTICAL, TO THAT QUANTITY REQUIRED TO PERFORM THE WORK IN AN ORDERLY SEQUENCE. ALL MATERIALS STORED ON-SITE SHALL BE STORED IN A NEAT, ORDERLY MANNER, IN THEIR ORIGINAL CONTAINERS, WITH ORIGINAL MANUFACTURER'S LABELS.
- 19.NO CHEMICALS ARE TO BE USED BY THE CONTRACTOR, WHICH HAVE THE POTENTIAL TO BE RELEASED IN STORMWATER UNLESS PERMISSION FOR THE USE OF A SPECIFIC CHEMICAL IS GRANTED IN WRITING BY THE ECM ADMINISTRATOR. IN GRANTING THE USE OF SUCH CHEMICALS, SPECIAL CONDITIONS AND MONITORING MAY BE REQUIRED.
- 20. BULK STORAGE STRUCTURES FOR PETROLEUM PRODUCTS AND OTHER CHEMICALS SHALL HAVE ADEQUATE PROTECTION SO AS TO CONTAIN ALL SPILLS AND PREVENT ANY SPILLED MATERIAL FROM ENTERING STATE WATERS, INCLUDING ANY SURFACE OR SUBSURFACE STORM DRAINAGE SYSTEM OR FACILITIES.
- 21. NO PERSON SHALL CAUSE THE IMPEDIMENT OF STORMWATER FLOW IN THE FLOW LINE OF THE CURB AND GUTTER OR IN THE DITCHLINE.
- 22. INDIVIDUALS SHALL COMPLY WITH THE "COLORADO WATER QUALITY CONTROL ACT" (TITLE 25, ARTICLE 8, CRS), AND THE "CLEAN WATER ACT" (33 USC 1344), IN ADDITION TO THE REQUIREMENTS INCLUDED IN THE DCM VOLUME II AND THE ECM APPENDIX I. ALL APPROPRIATE PERMITS MUST BE OBTAINED BY THE CONTRACTOR PRIOR TO CONSTRUCTION (NPDES, FLOODPLAIN, 404, FUGITIVE DUST, ETC.). IN THE EVENT OF CONFLICTS BETWEEN THESE REQUIREMENTS AND LAWS, RULES, OR REGULATIONS OF OTHER FEDERAL, STATE, OR COUNTY AGENCIES, THE MORE RESTRICTIVE LAWS, RULES, OR REGULATIONS SHALL APPLY.
- 23. ALL CONSTRUCTION TRAFFIC MUST ENTER/EXIT THE SITE AT APPROVED CONSTRUCTION ACCESS POINTS.
- 24. PRIOR TO ACTUAL CONSTRUCTION THE PERMITTEE SHALL VERIFY THE LOCATION OF EXISTING UTILITIES.
- 25. A WATER SOURCE SHALL BE AVAILABLE ON SITE DURING EARTHWORK OPERATIONS AND UTILIZED AS REQUIRED TO MINIMIZE DUST FROM EARTHWORK EQUIPMENT AND WIND.
- 26. THE SOILS REPORT FOR THIS SITE HAS BEEN PREPARED BY ENTECH ENGINEERING, INC. AND SHALL BE CONSIDERED A PART OF THESE
- 27. AT LEAST TEN DAYS PRIOR TO THE ANTICIPATED START OF CONSTRUCTION, FOR PROJECTS THAT WILL DISTURB 1 ACRE OR MORE, THE OWNER OR OPERATOR OF CONSTRUCTION ACTIVITY SHALL SUBMIT A PERMIT APPLICATION FOR STORMWATER DISCHARGE TO THE COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT, WATER QUALITY DIVISION. THE APPLICATION CONTAINS CERTIFICATION OF COMPLETION OF A STORMWATER MANAGEMENT PLAN (SWMP), OF WHICH THIS GRADING AND EROSION CONTROL PLAN MAY BE A PART. FOR INFORMATION OR APPLICATION MATERIALS CONTACT:

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

## **ABBREVIATIONS**

**END TAPER** 

	<u> </u>		
	ELEVATION	EC	EDGE OF CONCRETE
;	POINT OF CURVATURE	ROW	RIGHT-OF-WAY
	POINT OF INTERSECTION	R	RADIUS
	POINT OF TANGENCY	T	TANGENT
CR	POINT OF CURVE RETURN	L	LENGTH
С	POINT OF REVERSE CURVATURE	LF	LINEAR FEET
'C	POINT OF VERTICAL CURVATURE	CL	CENTERLINE
Ί	POINT OF VERTICAL INTERSECTION	X.XX' R	DIMENSION RIGHT OF C
T	POINT OF VERTICAL TANGENCY	X.XX' L	DIMENSION LEFT OF CL
3	GRADE BREAK	PL	PROPERTY LINE
SP.	CORRUGATED STEEL PIPE	PVRC	POINT OF VERTICAL REV
P	REINFORCED CONCRETE PIPE		CURVATURE
3C	CONCRETE BOX CULVERT	VC	VERTICAL CURVE
С	TOP BACK CURB	AP	ANGLE POINT
	TOP OF CURB	STA	STATION
	BEGIN TAPER	INV	INVERT

## **SANITARY SEWER CONSTRUCTION NOTES:**

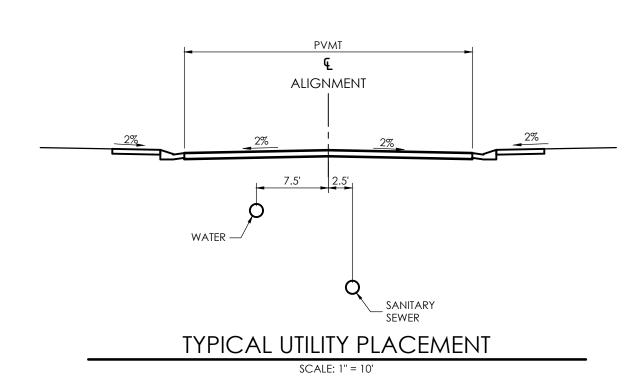
- 1. ALL MATERIALS AND WORKMANSHIP SHALL BE IN CONFORMANCE WITH CHEROKEE METROPOLITAN DISTRICT STANDARD AND THE CITY OF COLORADO SPRINGS CONSTRUCTION STANDARDS UNLESS NOTED OTHERWISE. IN THE EVENT OF CONFLICTING STANDARDS CHEROKEE
- METROPOLITAN DISTRICT STANDARDS SHALL GOVERN. 2. SANITARY SEWER PIPE SHALL CONFORM TO ASTM D3034 SDR35 PVC.
- 3. CONTRACTOR SHALL FIELD VERIFY LOCATION AND ELEVATION OF EXISTING INVERTS PRIOR TO INSTALLATION OF NEW SANITARY SEWER
- 4. THE CONTRACTOR ASSUMES RESPONSIBILITY FOR THE PROTECTION OF ALL UTILITIES DURING THE WORK. PRIOR TO ANY EXCAVATION, CONTACT THE UTILITY NOTIFICATION CENTER OF COLORADO AT (800) 922-1987 AT LEAST TWO WORKING DAYS PRIOR TO DIGGING.
- 5. INFILTRATION AND EXFILTRATION TESTS CONDUCTED BY AND AT THE EXPENSE OF THE CONTRACTOR SHALL BE PERFORMED ON A REPRESENTATIVE PORTION OF THE PROJECT IN ACCORDANCE WITH SECTION 7.04 OF THE CITY OF COLORADO SPRINGS CONSTRUCTION
- 6. ALL SANITARY SEWER MANHOLES, LIDS, BASES AND OTHER APPURTENANCES SHALL BE IN ACCORDANCE WITH (IAW) COLORADO SPRINGS DETAILS STANDARD MANHOLE DETAIL 1. EXCEPT AS NOTED ON THESE PLANS. WHERE REQUIRED ON THESE PLANS, WATER TIGHT MANHOLES,

8. SANITARY SEWER SERVICE LINES SHALL BE LOCATED PER THE DETAIL ON THE UTILITY SERVICE PLAN, OR AT THE DIRECTION OF THE

- LIDS AND CONNECTIONS SHALL BE PROVIDED IAW COLORADO SPRINGS STANDARDS. 7. WHERE NECESSARY, THE CONTRACTOR SHALL PROVIDE 3 DEGREE BENDS ON ALL CURVILINEAR SANITARY SEWER PIPE.
- CONSTRUCTION MANAGER. 9. OVERLOT GRADING AND STREET SUBGRADE MUST BE WITHIN ± ONE (1) FOOT PRIOR TO ANY UTILITY INSTALLATION. 10. WHILE CONSTRUCTING THE SANITARY SEWER SYSTEM THE CONTRACTOR SHALL HAVE IN HIS POSSESSION AT LEAST ONE "APPROVED FOR
- CONSTRUCTION" SET OF UPDATED PLANS AT ALL TIMES. APPROVED FILED MODIFICATIONS TO PLAN SETS SHALL BE CLEARLY IDENTIFIED IN RED INK ON THE PLANS BY THE CONTRACTOR PER FIELD CONSTRUCTION. THESE AS-BUILT CHANGES SHALL BE DATED AND SUBMITTED TO THE ENGINEER OF RECORD. THE ENGINEER OF RECORD SHALL PREPARE A COMPLETE SET OF "AS CONSTRUCTED" DRAWINGS AND DELIVER THE SETS TO THE CHEROKEE METROPOLITAN DISTRICT PRIOR TO FINAL ACCEPTANCE OF THE SANITARY SEWER SYSTEM.
- 11. CONTRACTOR TO CONSTRUCT ALL MANHOLES AND STRUCTURES TO FINISHED GRADE. 12. UPON COMPLETION OF CONSTRUCTION AND PRIOR TO ACCEPTANCE BY THE DISTRICT, TWO (2) COPIES OF "AS-CONSTRUCTED" PLANS
- AND TWO (2) SETS OF ELECTRONIC DATA FILES OF THE PLANS SHALL BE SUBMITTED TO THE DISTRICT FOR RECORD.
- A.THE TWO (2) COPIES SHALL BE COMPLETE WITH ALL "AS-CONSTRUCTED" INFORMATION TOGETHER WITH A CERTIFICATION BY THE PARTY RESPONSIBLE FOR CONSTRUCTION THAT ALL DATA THEREON IS ACCURATE AND REPRESENTS ACTUAL CONSTRUCTED CONDITIONS.
- B. THE TWO PLAN SETS SHALL BE SUBMITTED ON SHEETS THAT ARE 24" X 36" IN SIZE. C.THE PLAN SET SHALL BE ON A DURABLE MEDIA THAT CAN BE RUN THROUGH PHOTOCOPYING EQUIPMENT.
- D.THE TWO ELECTRONIC DATA FORMATS SHALL BE SUBMITTED. THE FIRST ELECTRONIC DATA FILE SET SHALL BE IN AUTOCAD 2006 OR NEWER FORMAT WITH NO EXTERNAL REFERENCE DRAWINGS. ALL EXTERNAL REFERENCES MUST BE BOUND INTO THE DRAWING SET. THE
- SECOND SET OF ELECTRONIC DATA FILES SHALL BE IN ADOBE ACROBAT .PDF FORMAT. E. "AS-CONSTRUCTED" PLANS SHALL BE SUBMITTED WITHIN TWO WEEKS OF COMPLETION OF THE WATER AND/OR SANITARY SEWER UTILITIES. F. NO AUTHORIZATION TO CONNECT TO THE SYSTEM OR DISCHARGE TO THE SYSTEM WILL BE ALLOWED UNTIL THE "AS-CONSTRUCTED"
- DOCUMENTS HAVE BEEN RECEIVED AND ACCEPTED BY THE DISTRICT. G. ALL PLANS, SPECIFICATIONS AND SUPPORTING DOCUMENTS SHALL BE PREPARED BY OR UNDER THE DIRECT SUPERVISION OF A PROFESSIONAL ENGINEER LICENSED TO PRACTICE IN THE STATE OF COLORADO. ALL PLANS AND SPECIFICATIONS SHALL BEAR THE SEAL AND SIGNATURE OF SAID LICENSED PROFESSIONAL ENGINEER.

13. TRACER WIRE IS TO BE INSTALLED WITH ALL SANITARY SEWER MAIN LINES AND SERVICES (FROM MAIN LINE TO THE BUILDING STRUCTURE). ALL NONMETALLIC PIPES SHALL HAVE A TRACER WIRE ATTACHED TO ITS TOP DURING CONSTRUCTION. THE TRACER WIRE SHALL BE #12 AWG INSULATED COPPER WIRE WITH NO. 12 TYPE COPPER CONNECTORS AND SHALL BE PERMANENTLY AFFIXED TO THE TOP OF THE PIPE USING TAPE AT 4' INTERVALS. ALL POINTS OF CONNECTION SHALL BE PROTECTED FROM CORROSION BY AN EPOXY OR SILICON COATING. ROUTE TRACER WIRE TO SURFACE AT ALL MANHOLES AND CLEANOUT LOCATIONS

- FOR PIPELINES 1.04% OR LESS GRADE THE FOLLOWING ADDITIONAL INSTALLATION PRACTICES SHALL BE USED.
- (a) THE BOTTOM OF THE PIPE TRENCH SHALL BE PLATE TAMPED PRIOR TO THE INSTALLATION OF ANY PIPE OR BEDDING MATERIAL.
- (b) SELECT BEDDING MATERIAL SHALL BE INSTALLED PER CHAPTER 2 OF THE "COLORADO SPRINGS UTILITIES, WASTEWATER STANDARDS".
- c) TRENCH BACKFILL MATERIAL SHALL BE INSTALLED PER CHAPTER 2 OF THE "COLORADO SPRINGS UTILITIES, WASTEWATER STANDARDS".
- d) PIPELINES HAVING A SLOPE OF LESS THAN 1.04% SHALL BE "AS CONSTRUCTED" BY A LICENSED SURVEYOR OR AN APPOINTED REPRESENTATIVE UNDER HIS DIRECT SUPERVISION. THE "AS CONSTRUCTED" MANHOLE INVERTS SHALL BE RECORDED ON THE RECORD DRAWING(S) AND SUBMITTED TO CHEROKEE METROPOLITAN DISTRICT.



# LEGEND AD JACENT PROPERTY LINE INDEX CONTOUR . . INTERMEDIATE CONTOUR. TEST HOLE LOCATION CURB AND GUTTER UNDERGROUND ELEC LINE . . . \_ \_ UGE \_ \_ \_ \_ TELEPHONE RISER . .

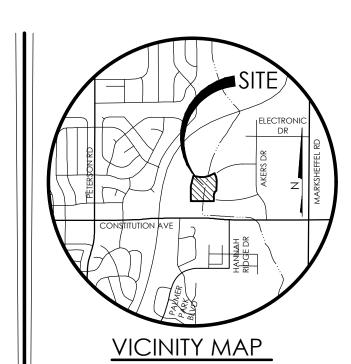
**PROPOSED** INDEX CONTOUR INTERMEDIATE CONTOUR SPOT ELEVATION FINISHED GRADE FACE WALL RFTAINING WAI SIDEWALK DETENTION POND OUTLET.

## EXISTING TOPOGRAPHIC MAP NOTES:

1.) THE EXISTING TOPOGRAPHY SHOWN ON THIS PLAN WAS PRODUCED BY CARRERA MAPPING INC. FROM AN AERIAL SURVEY FLOWN NOVEMBER 19, 2004 USING GROUND CONTROL BY M.V.E., INC. AKERS DRIVE TOPOGRAPHY IS SPLICED IN FROM THE AKERS DRIVE DESIGN PLANS BY M.V.E., INC. DATED SEPTEMBER 20, 2006.

2.) ALL EXISTING UTILITIES SHOWN ON THIS SURVEY ARE FROM UTILITY MAIN LOCATION RECORD MAPS OBTAINED FROM THE RESPECTIVE LITHLITY COMPANIES AND SURFACE EVIDENCE AS SURVEYED IN THE FIELD. THE LOCATION OF UTILITIES AS SHOWN ARE APPROXIMATE. ALL UTILITIES MAY NOT BE SHOWN OR MAY NOT HAVE BEEN LOCATED. BELOW GROUND UTILITY LOCATIONS WERE NOT PERFORMED.

3.) VERTICAL CONTOUR INTERVAL FOR THIS MAP IS 2 FOOT.



THE BENCHMARK FOR THESE PLANS IS THE TOP OF #4 REBAR, PANEL POINT NO. 1, LOCATED ON THE SOUTH EDGE OF CONSTITUTION AVE AND THE WEST EDGE OF THE ROCK ISLAND TRAIL, 535 FEET WEST OF THE CENTERLINE OF SHAWNEE DR. ELEVATION = 6486.63. (EPC DATUM ELEVATION

= 6485.29). **BASIS OF BEARINGS:** BEARING REFERRED TO HEREIN ARE BASED ON THE SOUTH LINE OF TRACT FF, HANNAH RIDGE AT FEATHERGRASS FILING NO. 1. ASSUMED TO BEAR N89°39'18"W MONUMENTED AT EACH END W/ NO. 5 REBAR W/ ALUMN CAP MARKED "POLARIS, PLS 27605".



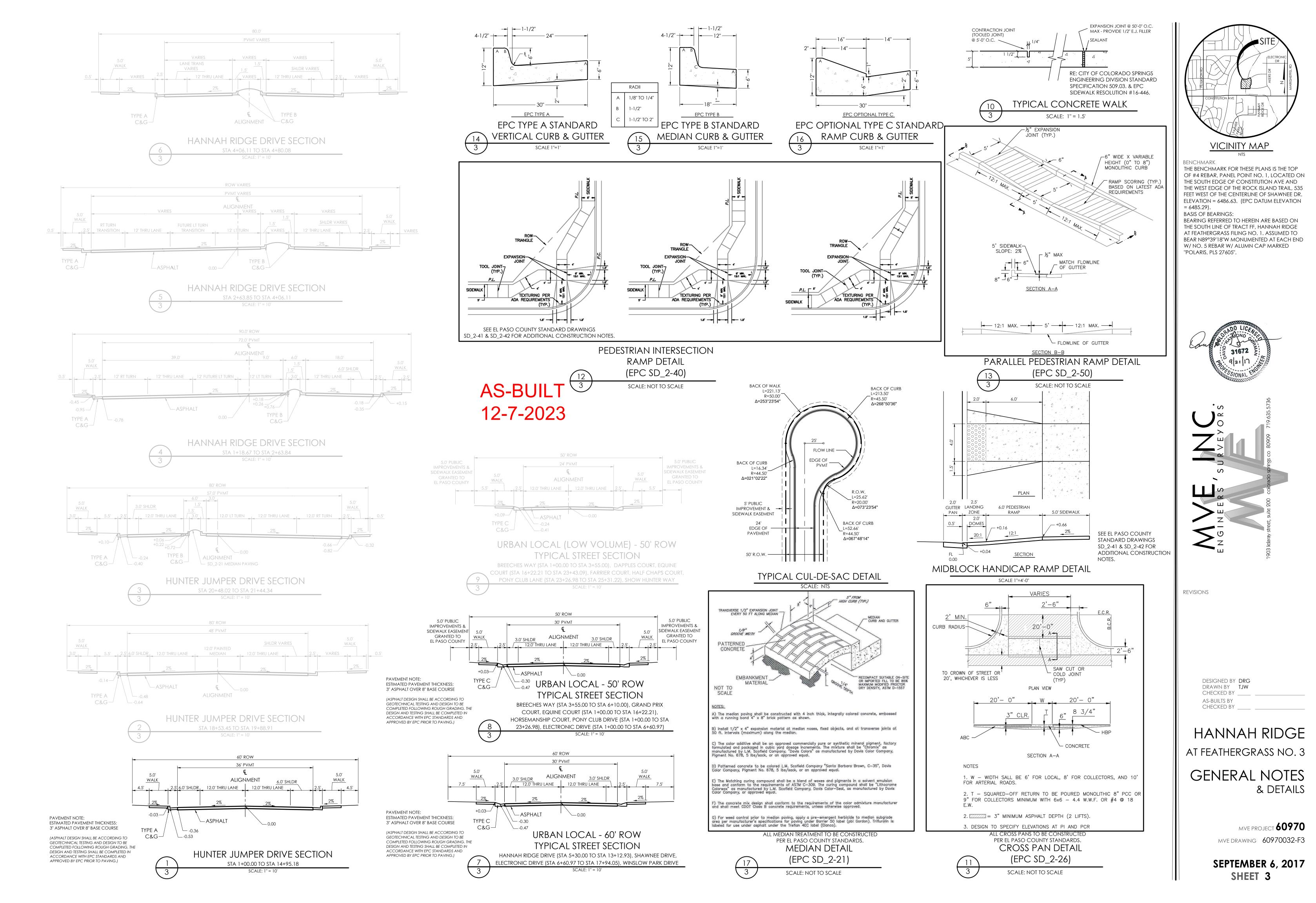
REVISIONS

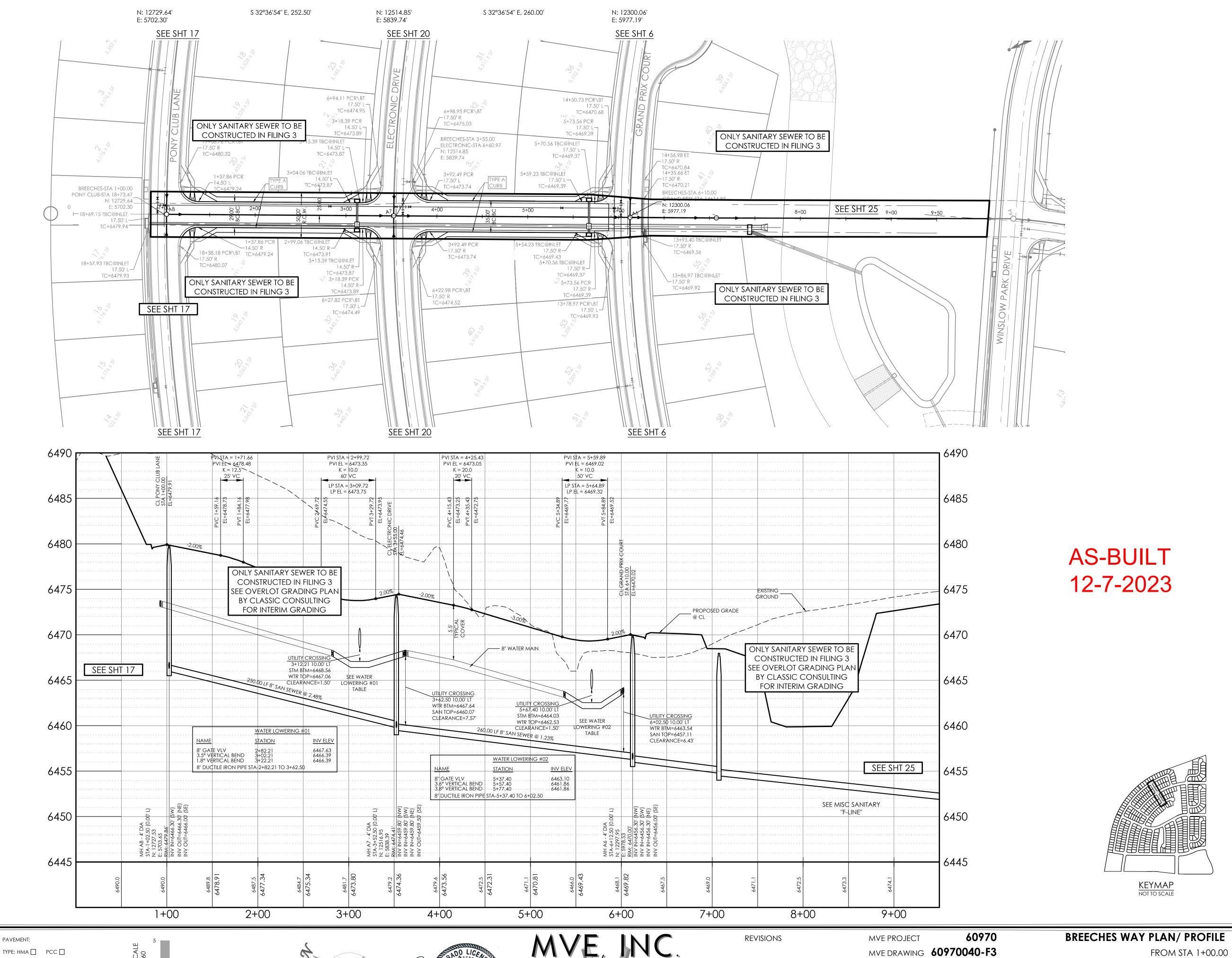
DESIGNED BY DRG DRAWN BY TJW CHECKED BY AS-BUILTS BY CHECKED BY

HANNAH RIDGE AT FEATHERGRASS NO. 3

GENERAL NOTES

MVE DRAWING 60970031-F3





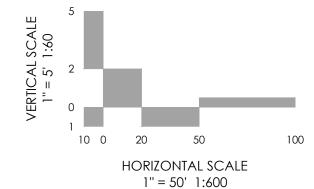
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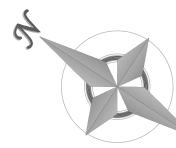
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**DESIGN DATA:** SIDEWALKS: WIDTH\_ LOCATION: Attached Detached 🗌

COMPOSITE SECTION: DESIGN SPEED \_\_ CURB TYPE: AX B C C SUBGRADE STABILIZATION: ROW WIDTH: 50' FL-FL VARIES STREET TYPE: LOCAL LOW VOLUME TYPE \_\_\_\_\_ THICKNESS \_\_\_\_\_

PAVEMENT:





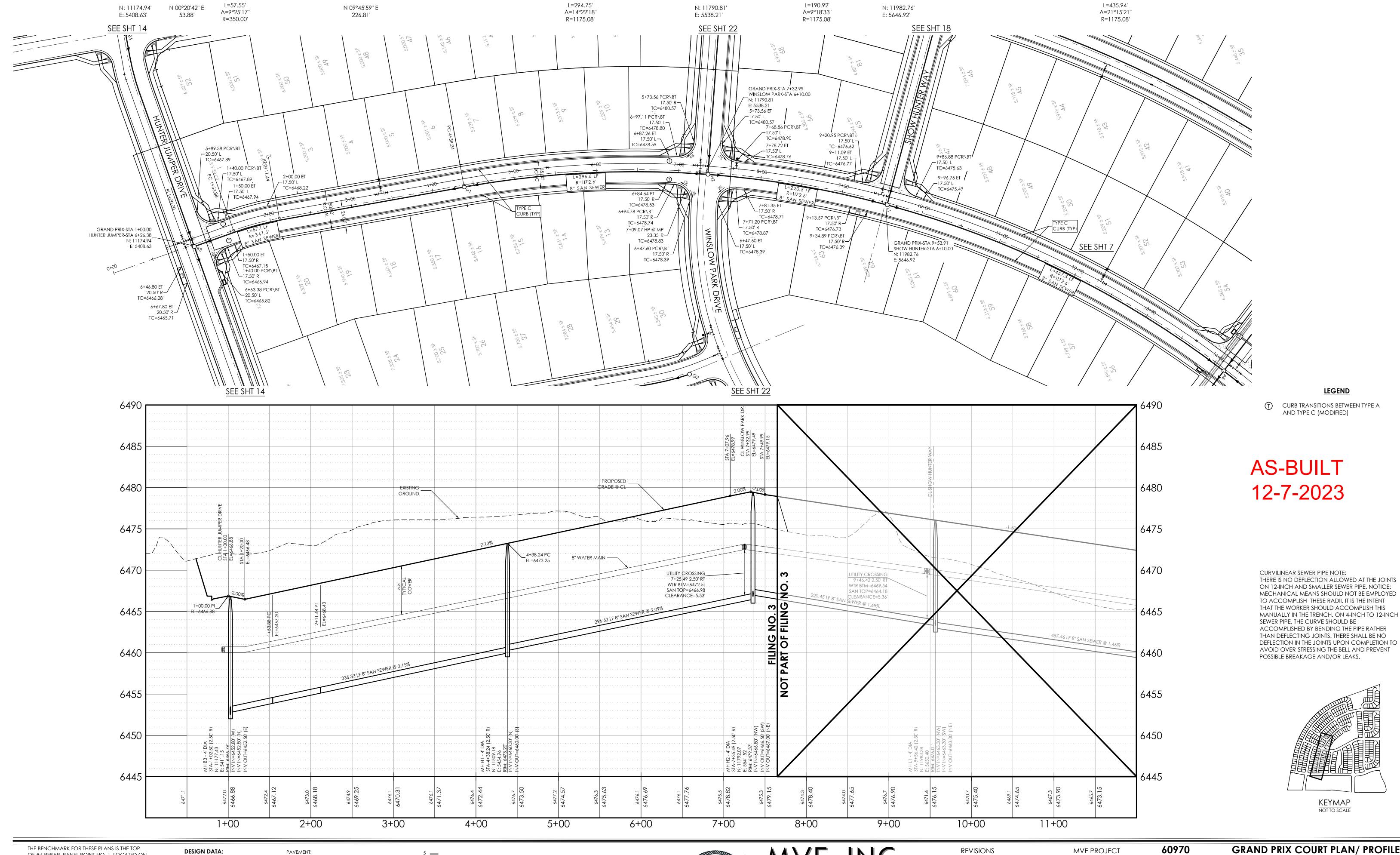




CHECKED BY \_\_\_\_\_

SEPTMEBER 6, 2017 DESIGNED BY TJW DRAWN BY TJW 8/22/2013 CHECKED BY \_\_\_\_\_ AS-BUILTS BY

TO STA 6+10.00 HANNAH RIDGE AT FEATHERGRASS NO. 3



L=294.75'

OF #4 REBAR, PANEL POINT NO. 1, LOCATED ON THE SOUTH EDGE OF CONSTITUTION AVE AND THE WEST EDGE OF THE ROCK ISLAND TRAIL, 535 FEET WEST OF THE CENTERLINE OF SHAWNEE DR. ELEVATION = 6486.63. (EPC DATUM ELEVATION = 6485.29).

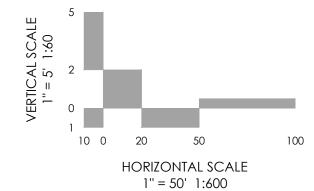
BASIS OF BEARINGS: BEARING REFERRED TO HEREIN ARE BASED ON THE SOUTH LINE OF TRACT FF, HANNAH RIDGE AT FEATHERGRASS FILING NO. 1. ASSUMED TO BEAR N89°39'18"W MONUMENTED AT EACH END W/ NO. 5 REBAR W/ ALUMN CAP MARKED "POLARIS, PLS 27605".

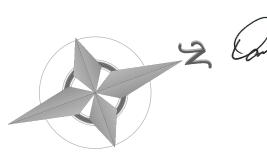
SIDEWALKS: WIDTH\_\_\_\_ LOCATION: Attached Detached 🗌 DESIGN SPEED\_

COMPOSITE SECTION: CURB TYPE: A B CX SUBGRADE STABILIZATION: LOCAL TYPE \_\_\_\_\_ THICKNESS \_\_\_\_\_

TYPE: HMA PCC

MECHANICAL







suite 200 1903 lelaray street colorado springs co 80909 719.635.5736 www.mvecivil.com

**MVE PROJECT** MVE DRAWING 60970041-F3

CHECKED BY \_\_\_\_\_

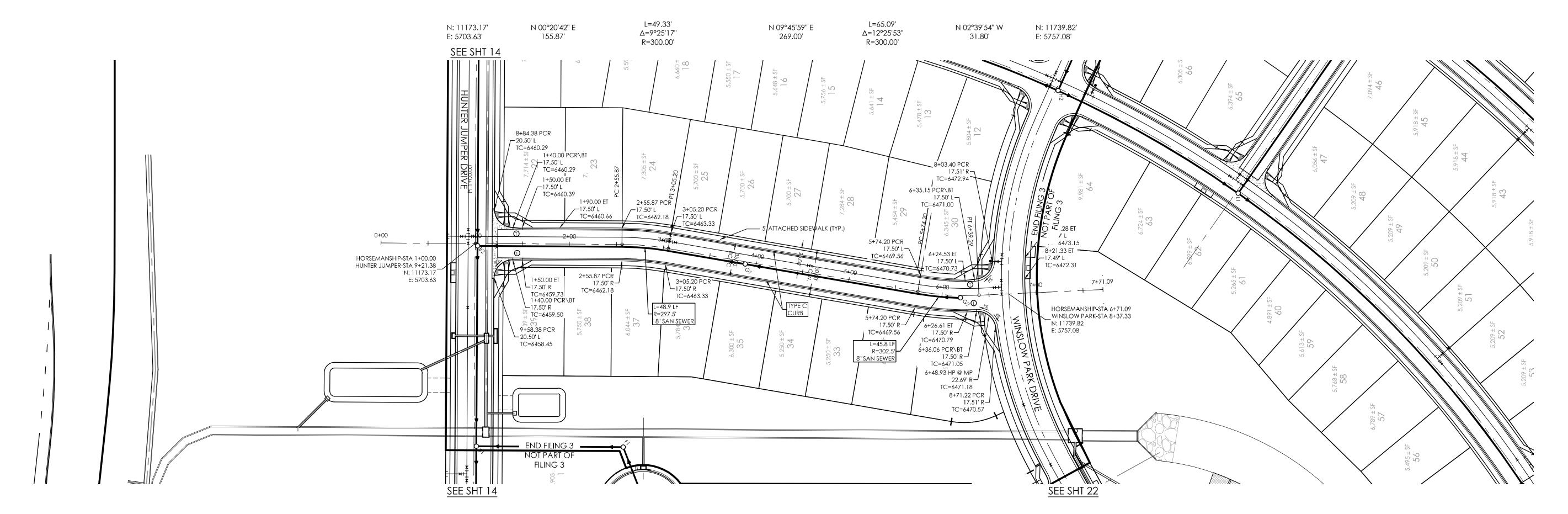
L=435.94'

SEPTEMBER 6, 2017 DESIGNED BY TJW DRAWN BY TJW 8/22/2013 CHECKED BY \_\_\_\_\_ AS-BUILTS BY

GRAND PRIX COURT PLAN/ PROFILE

FROM STA 1+00.00 TO STA 12+00.00

HANNAH RIDGE AT FEATHERGRASS NO. 3



PROPOSED GRADE

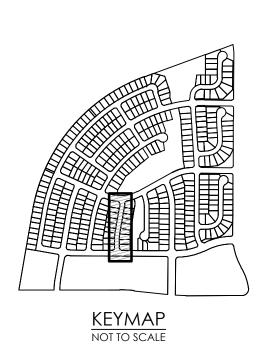
/--- 8" WATER MAIN

5+00

# **LEGEND**

T CURB TRANSITIONS BETWEEN TYPE A AND TYPE C (MODIFIED)

**CURVILINEAR SEWER PIPE NOTE:** THERE IS NO DEFLECTION ALLOWED AT THE JOINTS ON 12-INCH AND SMALLER SEWER PIPE. NOTICE: MECHANICAL MEANS SHOULD NOT BE EMPLOYED TO ACCOMPLISH THESE RADII. IT IS THE INTENT THAT THE WORKER SHOULD ACCOMPLISH THIS MANUALLY IN THE TRENCH. ON 4-INCH TO 12-INCH SEWER PIPE, THE CURVE SHOULD BE ACCOMPLISHED BY BENDING THE PIPE RATHER THAN DEFLECTING JOINTS. THERE SHALL BE NO DEFLECTION IN THE JOINTS UPON COMPLETION TO AVOID OVER-STRESSING THE BELL AND PREVENT POSSIBLE BREAKAGE AND/OR LEAKS.



# **AS-BUILT** 12-7-2023

6480

6475

6470

6465

6460

6455

6450

6445

6440

6435

REVISIONS

EXISTING

GROUND

7+00

THE BENCHMARK FOR THESE PLANS IS THE TOP OF #4 REBAR, PANEL POINT NO. 1, LOCATED ON THE SOUTH EDGE OF CONSTITUTION AVE AND THE WEST EDGE OF THE ROCK ISLAND TRAIL, 535 FEET WEST OF THE CENTERLINE OF SHAWNEE DR. ELEVATION = 6486.63. (EPC DATUM ELEVATION = 6485.29).

BASIS OF BEARINGS: BEARING REFERRED TO HEREIN ARE BASED ON THE SOUTH LINE OF TRACT FF, HANNAH RIDGE AT FEATHERGRASS FILING NO. 1. ASSUMED TO BEAR N89°39'18"W MONUMENTED AT EACH END

W/ NO. 5 REBAR W/ ALUMN CAP MARKED

"POLARIS, PLS 27605".

**DESIGN DATA:** SIDEWALKS: WIDTH\_\_\_ LOCATION: Attached Detached 🗌 DESIGN SPEED \_\_ CURB TYPE: A B CX

STREET TYPE: LOCAL

TYPE: HMA PCC COMPOSITE SECTION: SUBGRADE STABILIZATION: ROW WIDTH: \_\_\_\_\_50' \_\_\_ FL-FL \_32.33' MECHANICAL TYPE \_\_\_\_\_ THICKNESS \_\_\_\_\_

PAVEMENT:

3.55° VERT DEFLECTION 1+27.50 8" GATE VLV 1+47.50 8" DUCTILE IRON PIPE STA-0+92.50 TO 1+47.50

SEE WATER LOWERING #4 TABLE

STA - STA -

1+00

6470

6465

6460

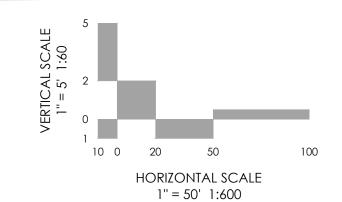
6455

6450

6445

6440

6435



2+00

STM BTM=6454.35

WTR TOP=6453.57

CLEARANCE=0.78'



4+00

STA-STA-IN STA-IN STA-

3+00



6+00

60970 **MVE PROJECT** MVE DRAWING 60970049-F3

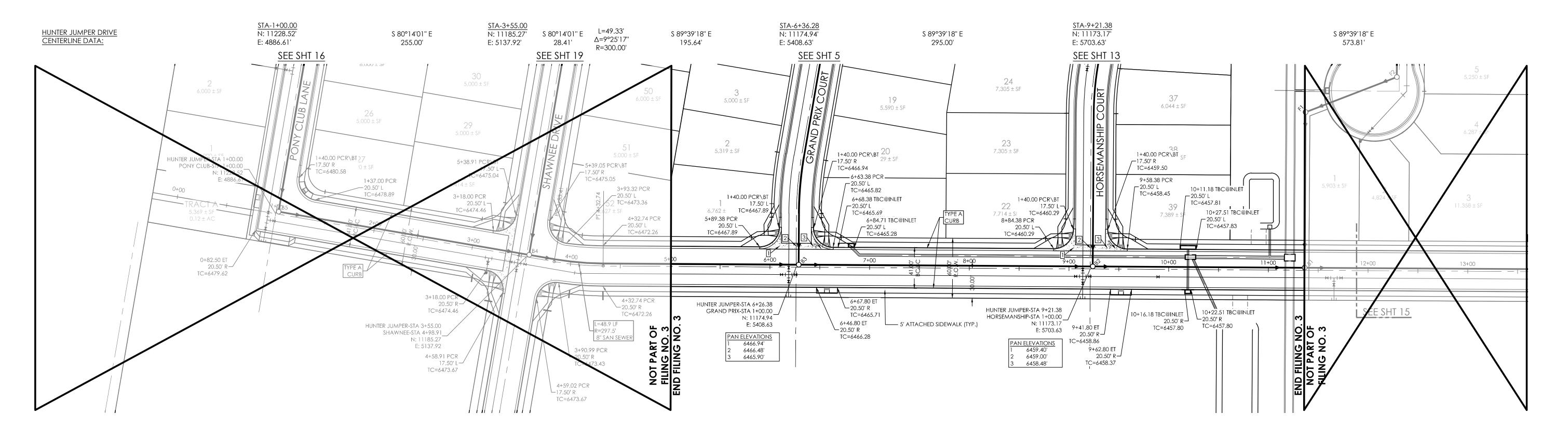
SEPTEMBER 6, 2017

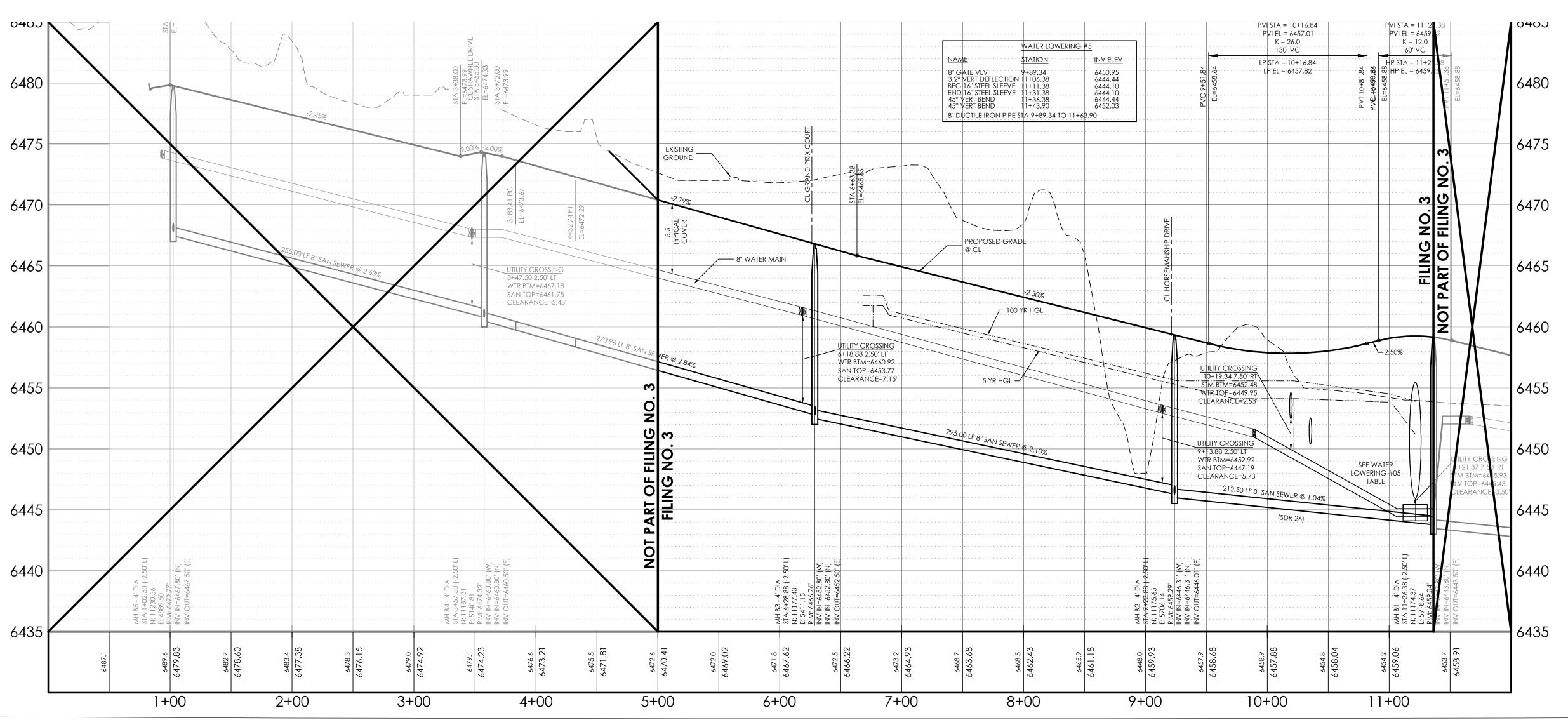
DESIGNED BY TJW DRAWN BY TJW 8/22/2013 CHECKED BY \_\_\_\_\_ AS-BUILTS BY CHECKED BY \_\_\_\_\_

# HORSEMANSHIP COURT PLAN/ PROFILE

FROM STA 1+00.00 TO STA 6+71.09

HANNAH RIDGE AT FEATHERGRASS NO. 3





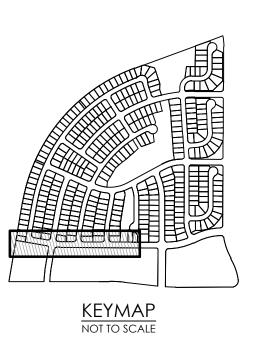
# AS-BUILT 12-7-2023

NOTES:

SEE STREET / STORM DRAIN PHASING PLAN FOR PHASED CONSTRUCTION LIMITS.

SEE UTILITY PHASING PLAN FOR PHASED CONSTRUCTION LIMITS AND REQUIRED INTERIM MEASURES.

CURVILINEAR SEWER PIPE NOTE:
THERE IS NO DEFLECTION ALLOWED AT THE JOINTS
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MECHANICAL MEANS SHOULD NOT BE EMPLOYED
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ACCOMPLISHED BY BENDING THE PIPE RATHER
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THE SOUTH LINE OF TRACT FF, HANNAH RIDGE
AT FEATHERGRASS FILING NO. 1. ASSUMED TO
BEAR N89°39'18"W MONUMENTED AT EACH END
W/ NO. 5 REBAR W/ ALUMN CAP MARKED
"POLARIS, PLS 27605".

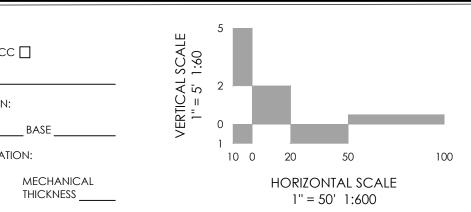
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SIDEWALKS: WIDTH 5'

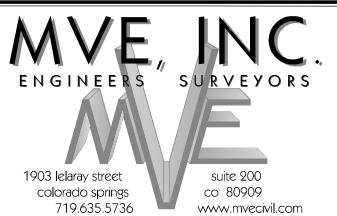
LOCATION: Attached Detached Detached

PAVEMENT:

TYPE: HMA PCC







MVE PROJECT 60970 MVE DRAWING 60970050-F3

REVISIONS

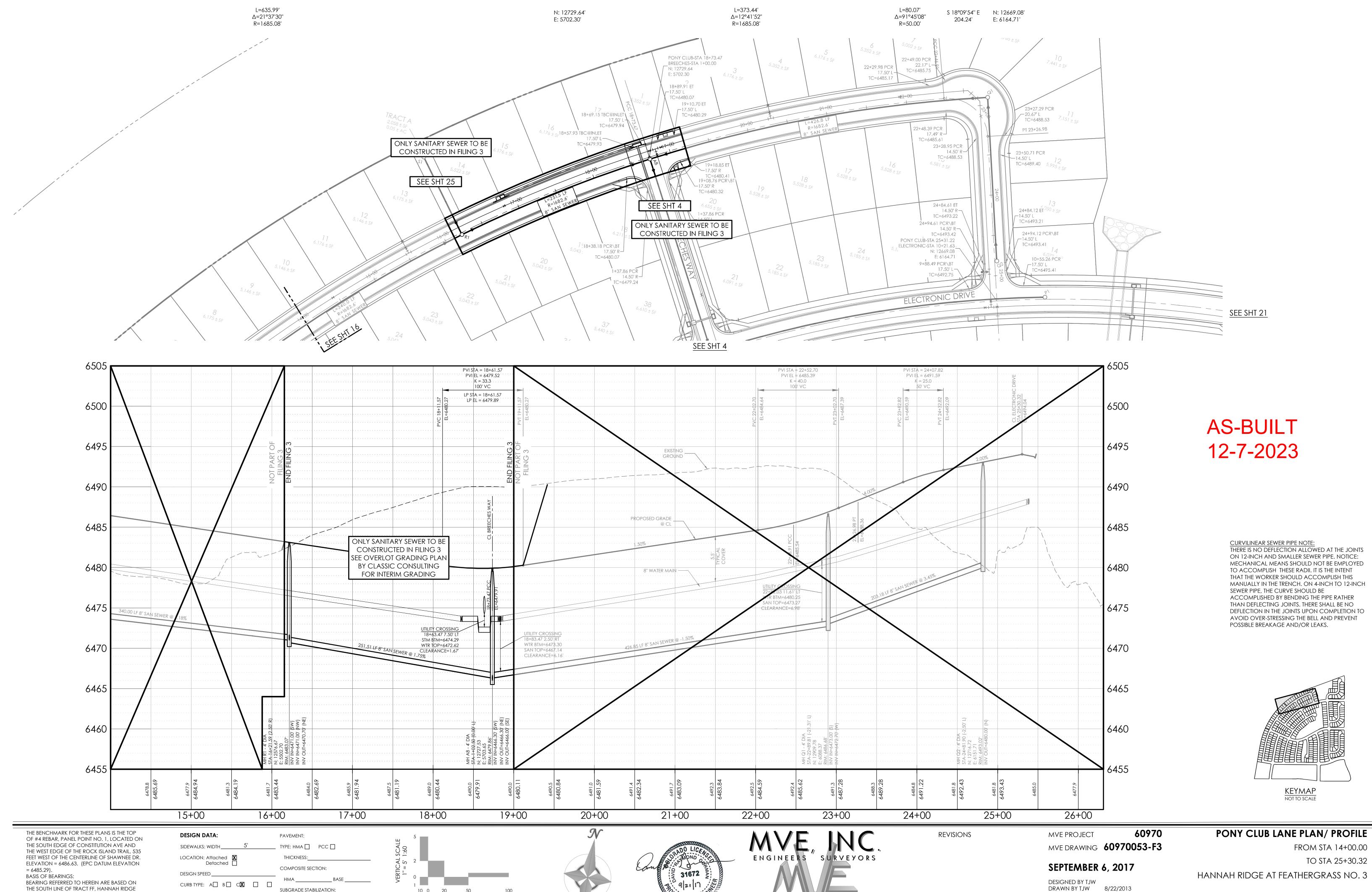
# SEPTEMBER 6, 2017

DESIGNED BY TJW
DRAWN BY TJW
CHECKED BY \_\_\_\_\_
AS-BUILTS BY
CHECKED BY \_\_\_\_\_

HUNTER JUMPER DRIVE PLAN/ PROFILE

HANNAH RIDGE AT FEATHERGRASS NO. 3

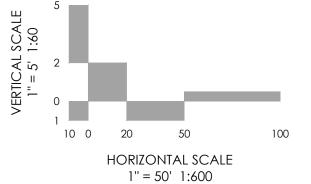
FROM STA 1+00.00 TO STA 12+00.00



AT FEATHERGRASS FILING NO. 1. ASSUMED TO BEAR N89°39'18"W MONUMENTED AT EACH END

LOCAL W/ NO. 5 REBAR W/ ALUMN CAP MARKED "POLARIS, PLS 27605".

SUBGRADE STABILIZATION: MECHANICAL TYPE \_\_\_\_\_ THICKNESS \_\_\_\_\_

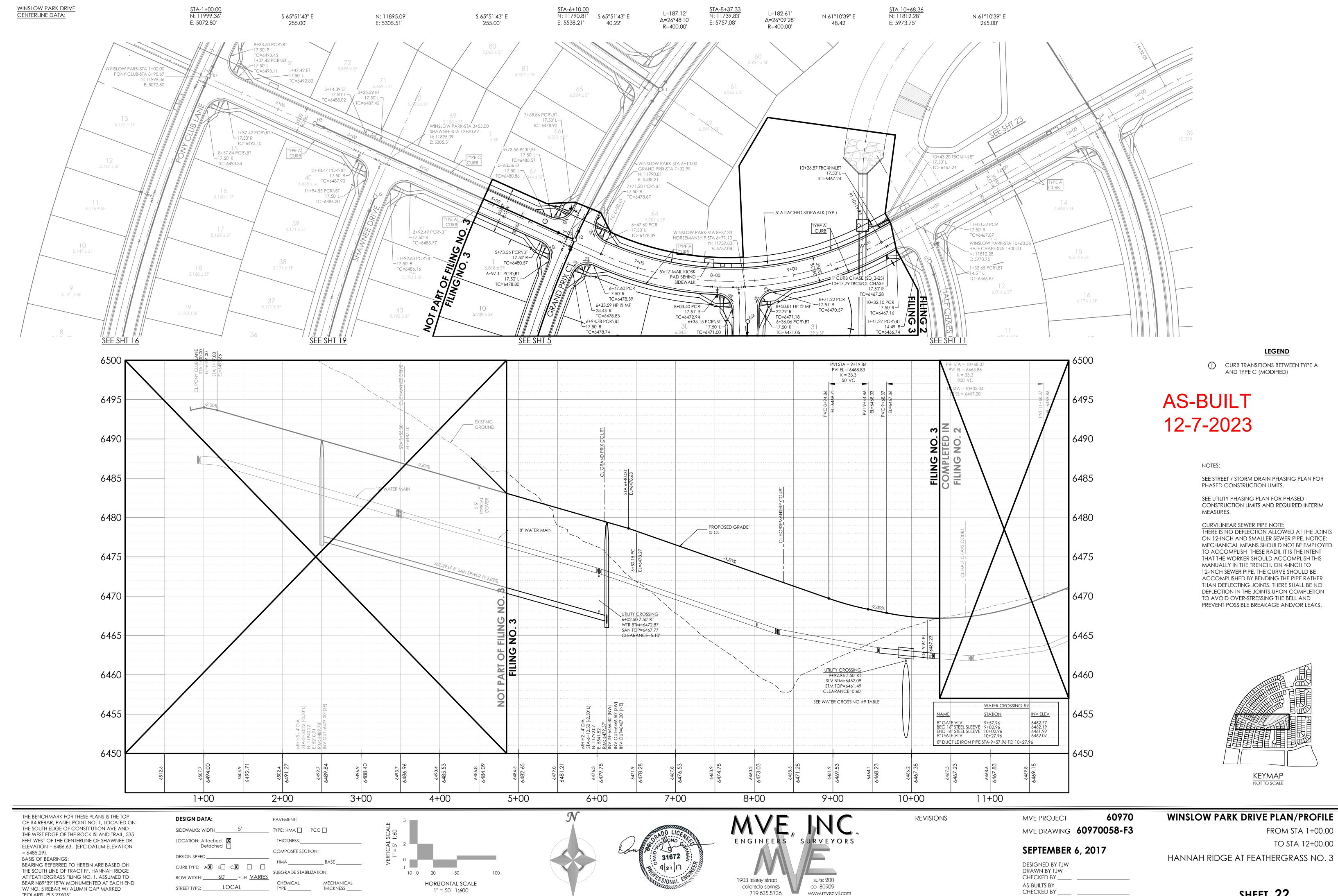




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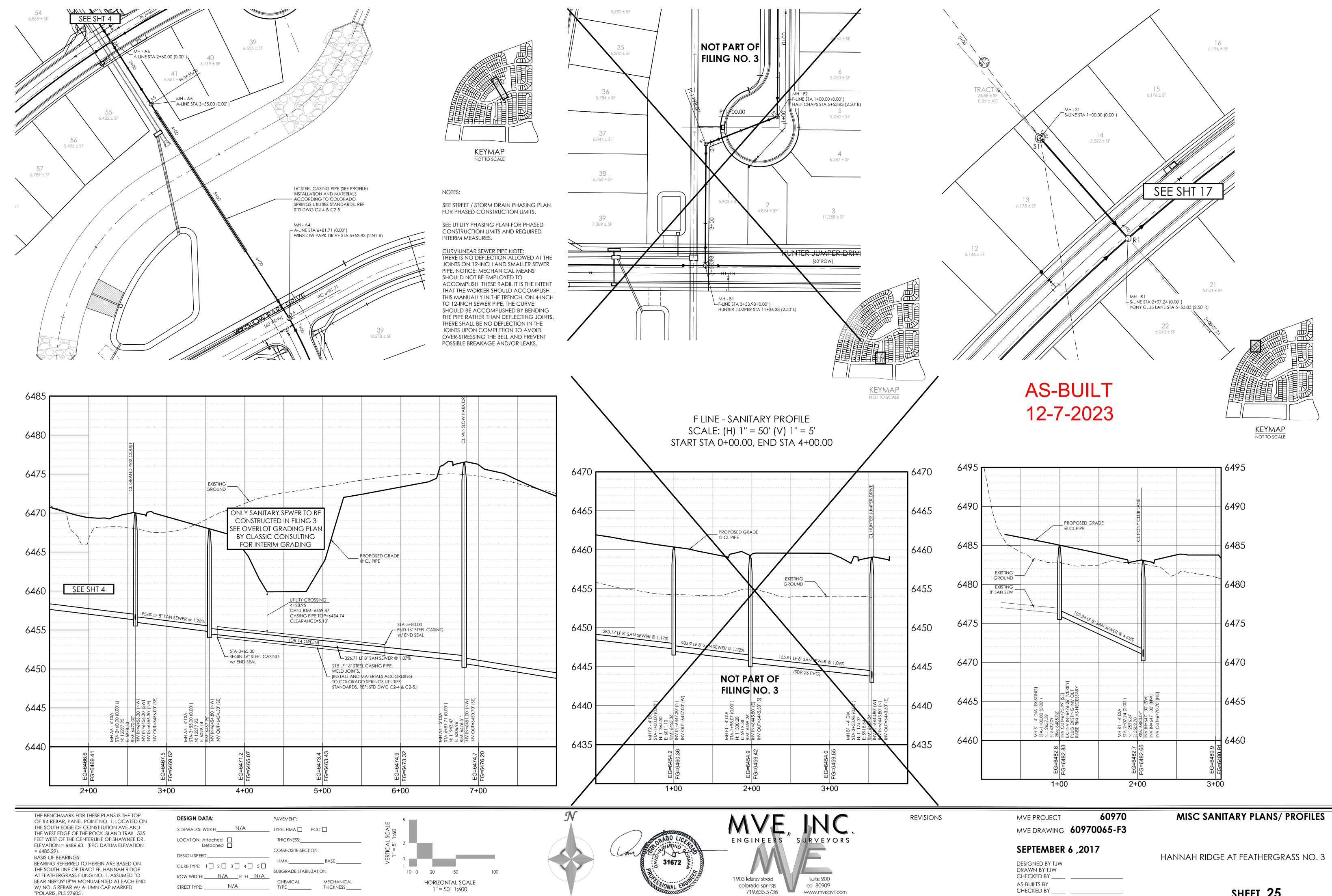
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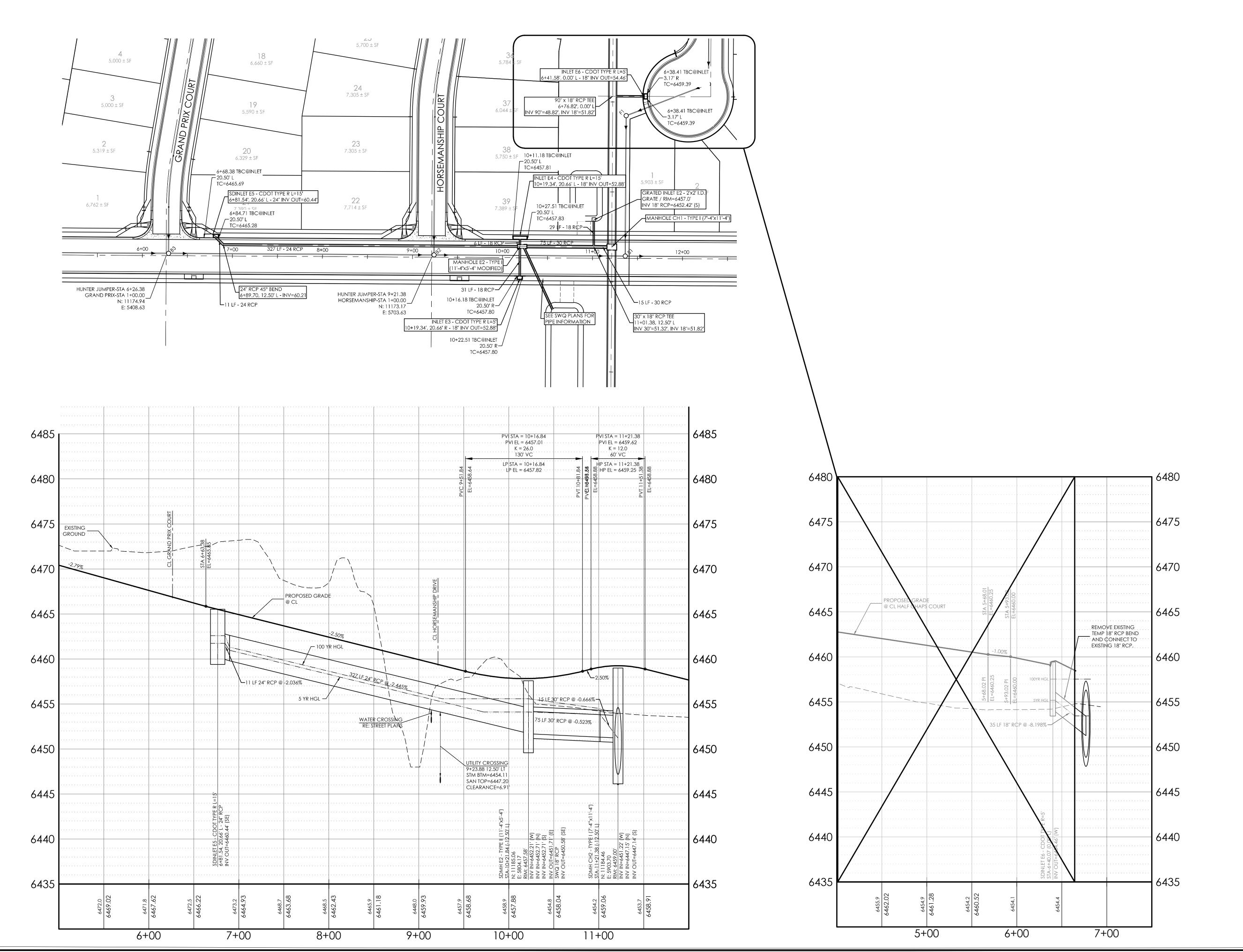
CHECKED BY \_\_\_\_\_



"POLARIS, PLS 27605".

L=182.61'





**AS-BUILT** 12-7-2023

THE BENCHMARK FOR THESE PLANS IS THE TOP OF #4 REBAR, PANEL POINT NO. 1, LOCATED ON THE SOUTH EDGE OF CONSTITUTION AVE AND THE WEST EDGE OF THE ROCK ISLAND TRAIL, 535 FEET WEST OF THE CENTERLINE OF SHAWNEE DR. ELEVATION = 6486.63. (EPC DATUM ELEVATION = 6485.29).

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**DESIGN DATA:** SIDEWALKS: WIDTH\_\_\_\_ LOCATION: Attached Detached 🗌 DESIGN SPEED \_\_\_

STREET TYPE: LOCAL

TYPE: HMA PCC COMPOSITE SECTION: CURB TYPE: 1 🗶 2 🗌 3 🗍 4 🗍 5 🗍 SUBGRADE STABILIZATION: MECHANICAL

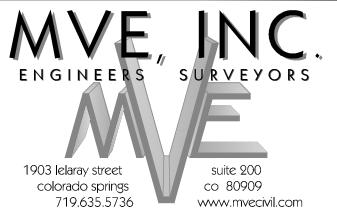
PAVEMENT:

TYPE THICKNESS \_\_\_\_\_

10 0 20 HORIZONTAL SCALE 1" = 50' 1:600







60970 **MVE PROJECT** MVE DRAWING 60970102-F3

REVISIONS

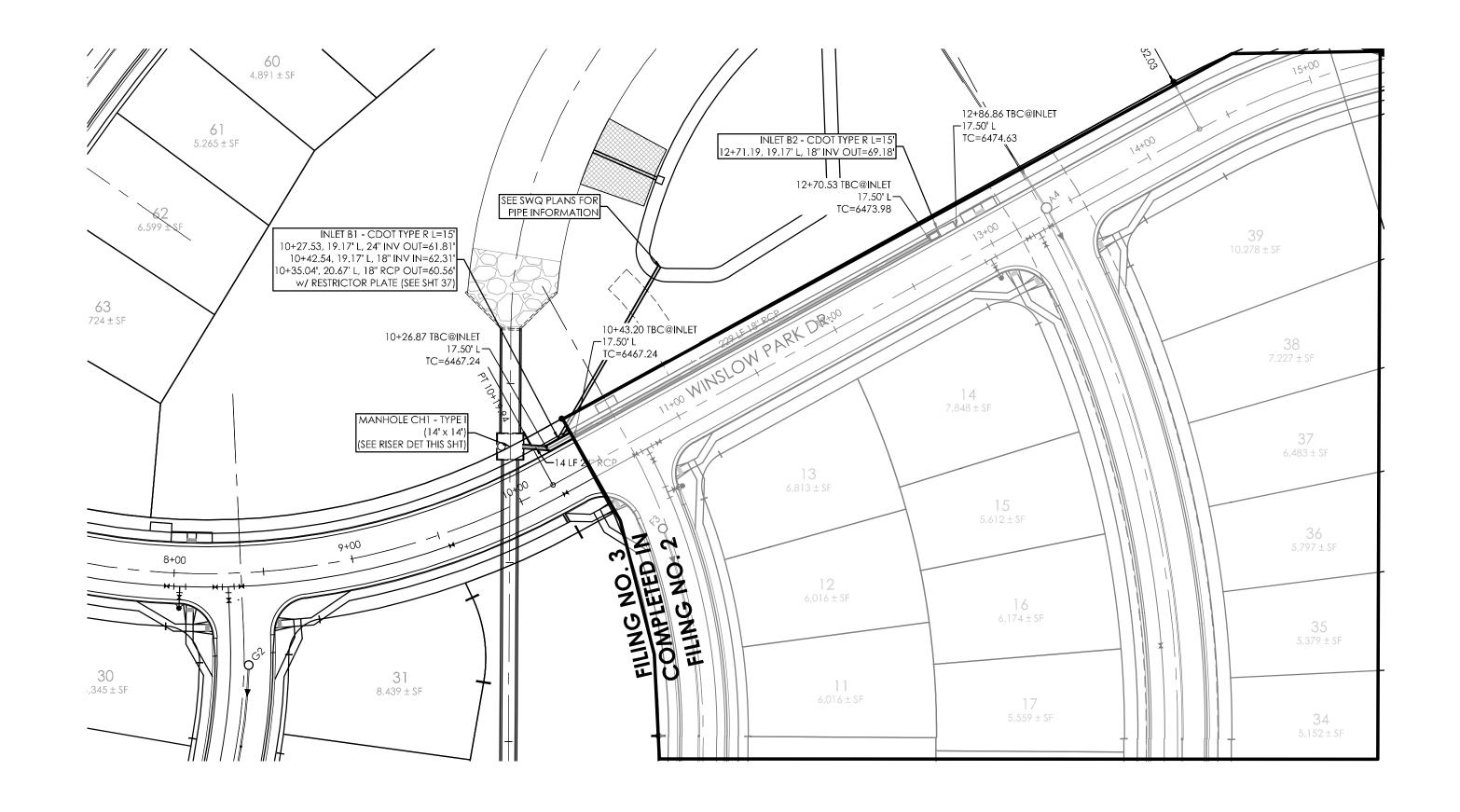
SEPTEMBER 6, 2017

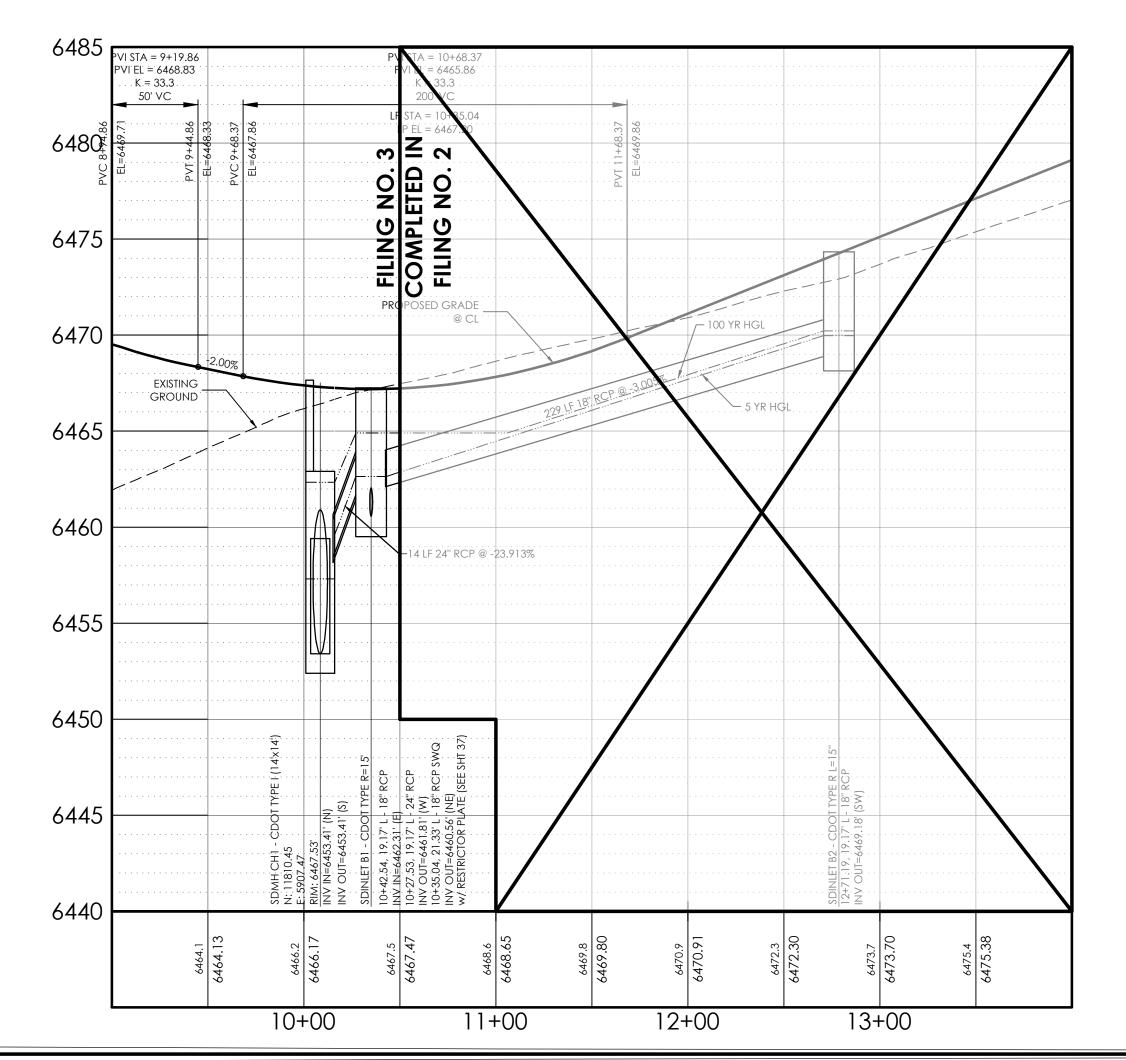
DESIGNED BY TJW DRAWN BY TJW CHECKED BY \_\_\_\_ AS-BUILTS BY

CHECKED BY \_\_\_\_\_

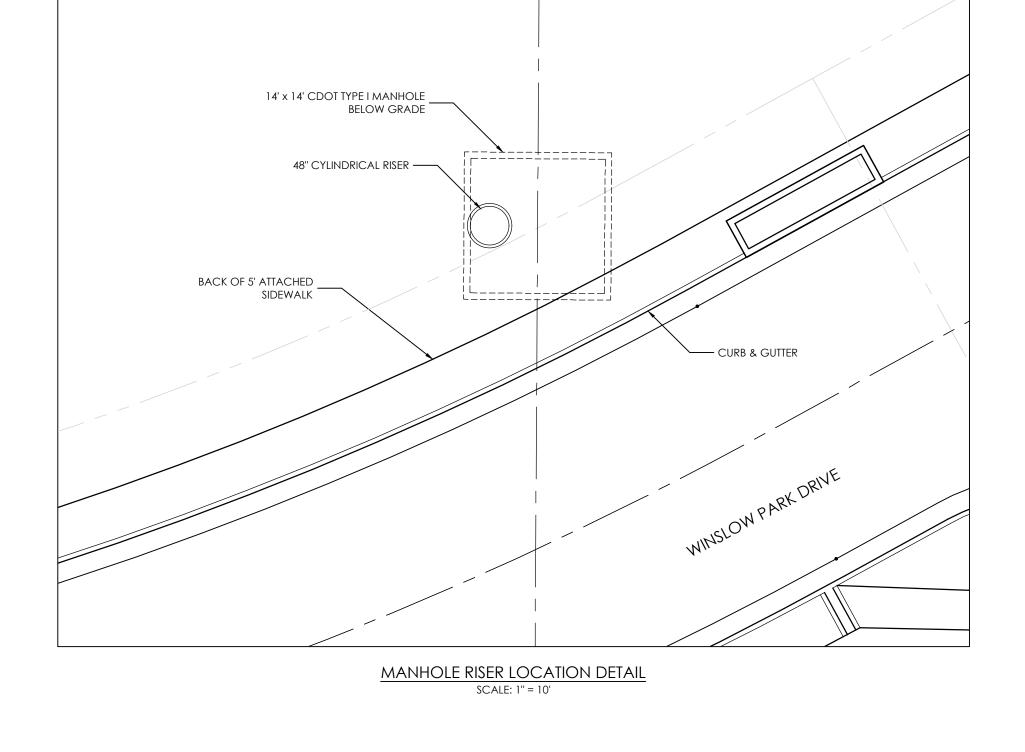
**HUNTER JUMPER DRIVE STORM DRAIN** 

FROM STA 6+81.54 TO STA 11+21.38 HANNAH RIDGE AT FEATHERGRASS NO. 3





AS-BUILT 12-7-2023



THE BENCHMARK FOR THESE PLANS IS THE TOP
OF #4 REBAR, PANEL POINT NO. 1, LOCATED ON
THE SOUTH EDGE OF CONSTITUTION AVE AND

THE SOUTH EDGE OF CONSTITUTION AVE AND THE WEST EDGE OF THE ROCK ISLAND TRAIL, 535 FEET WEST OF THE CENTERLINE OF SHAWNEE DR. ELEVATION = 6486.63. (EPC DATUM ELEVATION = 6485.29).

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BEAR N89°39'18"W MONUMENTED AT EACH END
W/ NO. 5 REBAR W/ ALUMN CAP MARKED
"POLARIS, PLS 27605".

DESIGN DATA:
SIDEWALKS: WIDTH\_\_\_\_

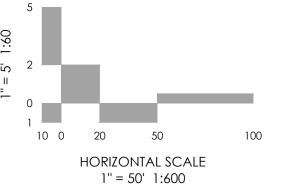
STREET TYPE: LOCAL

PAVEMENT:

TYPE: HMA PCC SUBGRADE STABILIZATION:

CHEMICAL MECHANICAL

TYPE \_\_\_\_\_ THICKNESS \_\_\_\_\_









REVISIONS

MVE PROJECT 60970 MVE DRAWING 60970104-F3

SEPTEMBER 6, 2017

CHECKED BY \_\_\_\_

DESIGNED BY TJW
DRAWN BY TJW
CHECKED BY \_\_\_\_\_

AS-BUILTS BY

STORM DRAIN

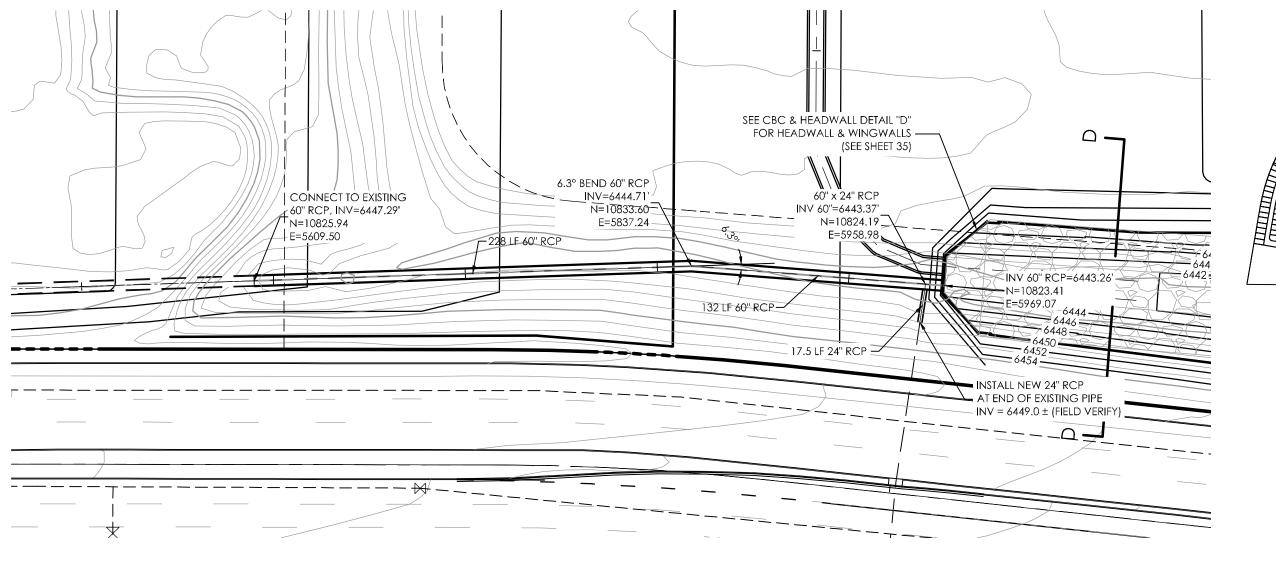
HANNAH RIDGE AT FEATHERGRASS NO. 3

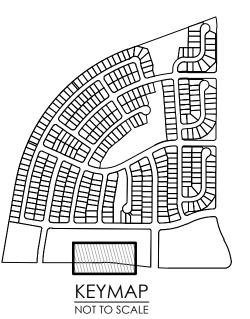
WINSLOW PARK

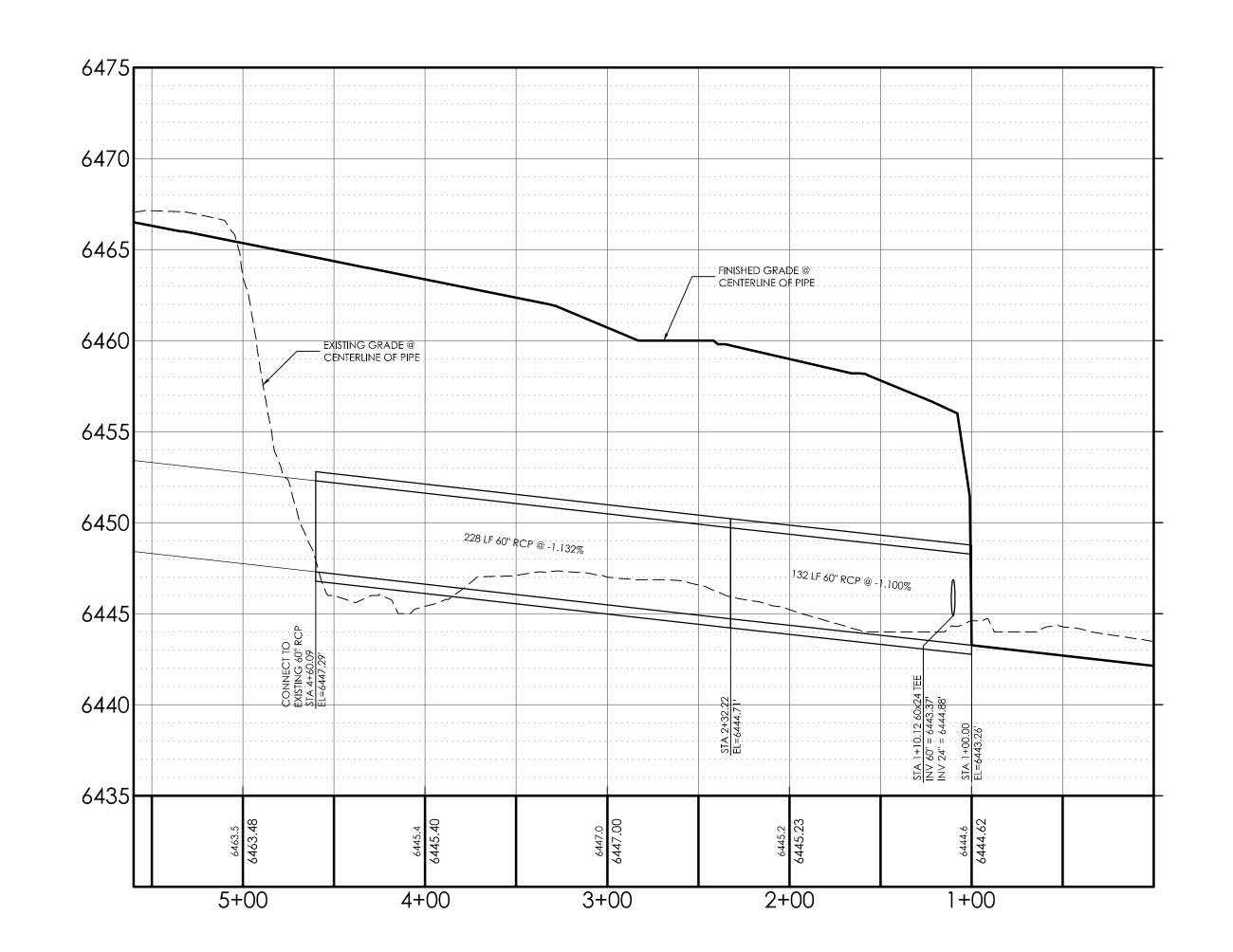
SHEET 30

MVE DR.

AVE DRAWING 609/0104







60" RCP EXTENSION

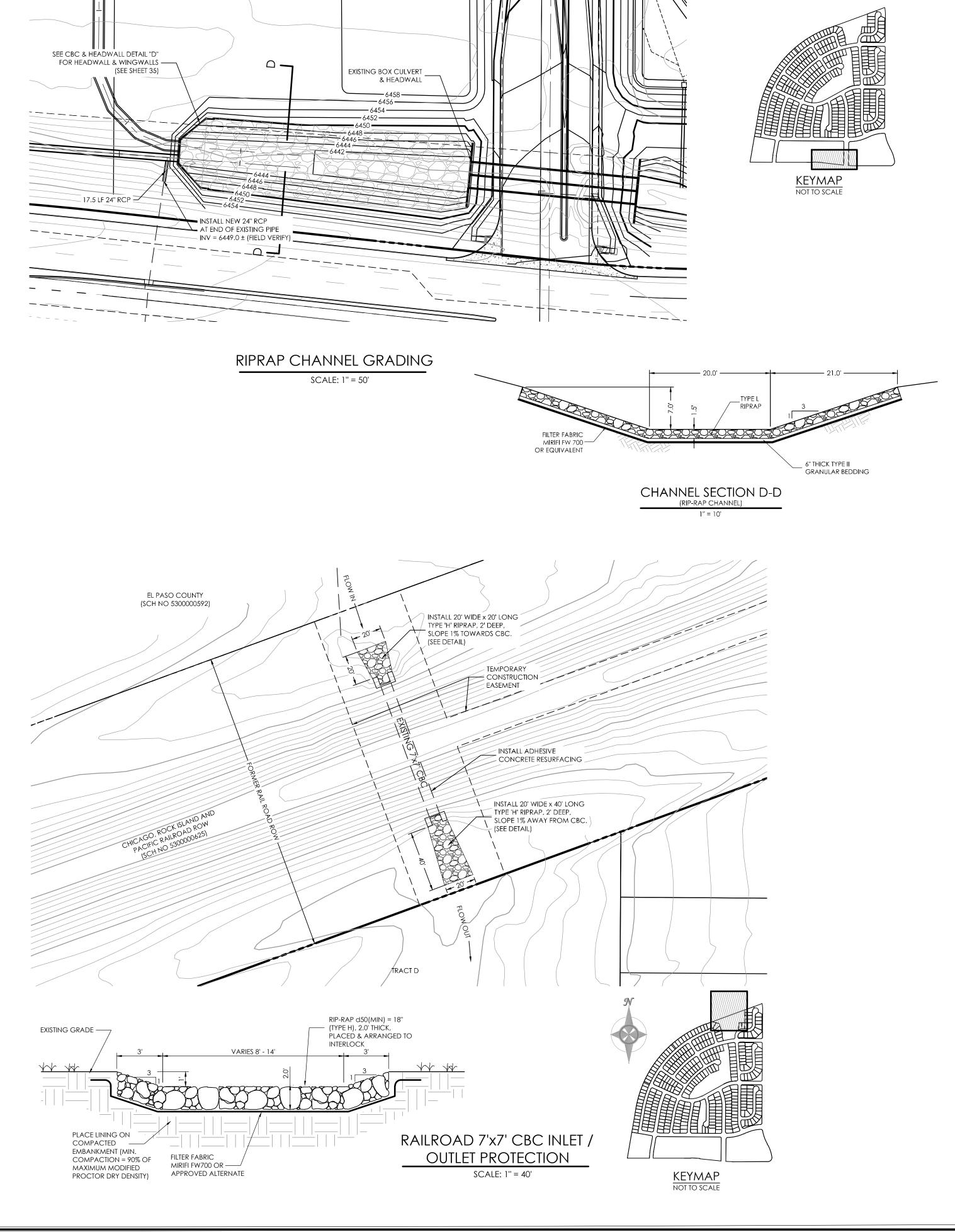
SCALE: 1" = 50'

TYPE: HMA PCC

MECHANICAL

12-7-2023

**AS-BUILT** 

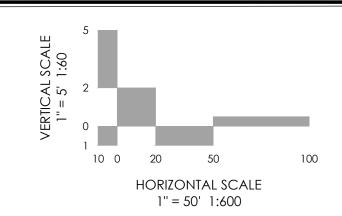


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**DESIGN DATA:** PAVEMENT: SIDEWALKS: WIDTH N/A LOCATION: Attached Detached 🗌 DESIGN SPEED \_\_

COMPOSITE SECTION: CURB TYPE: 1 2 3 4 5 5 SUBGRADE STABILIZATION: ROW WIDTH: N/A FL-FL N/A TYPE THICKNESS \_\_\_\_\_









60970 **MVE PROJECT** MVE DRAWING 60970066-F3

REVISIONS

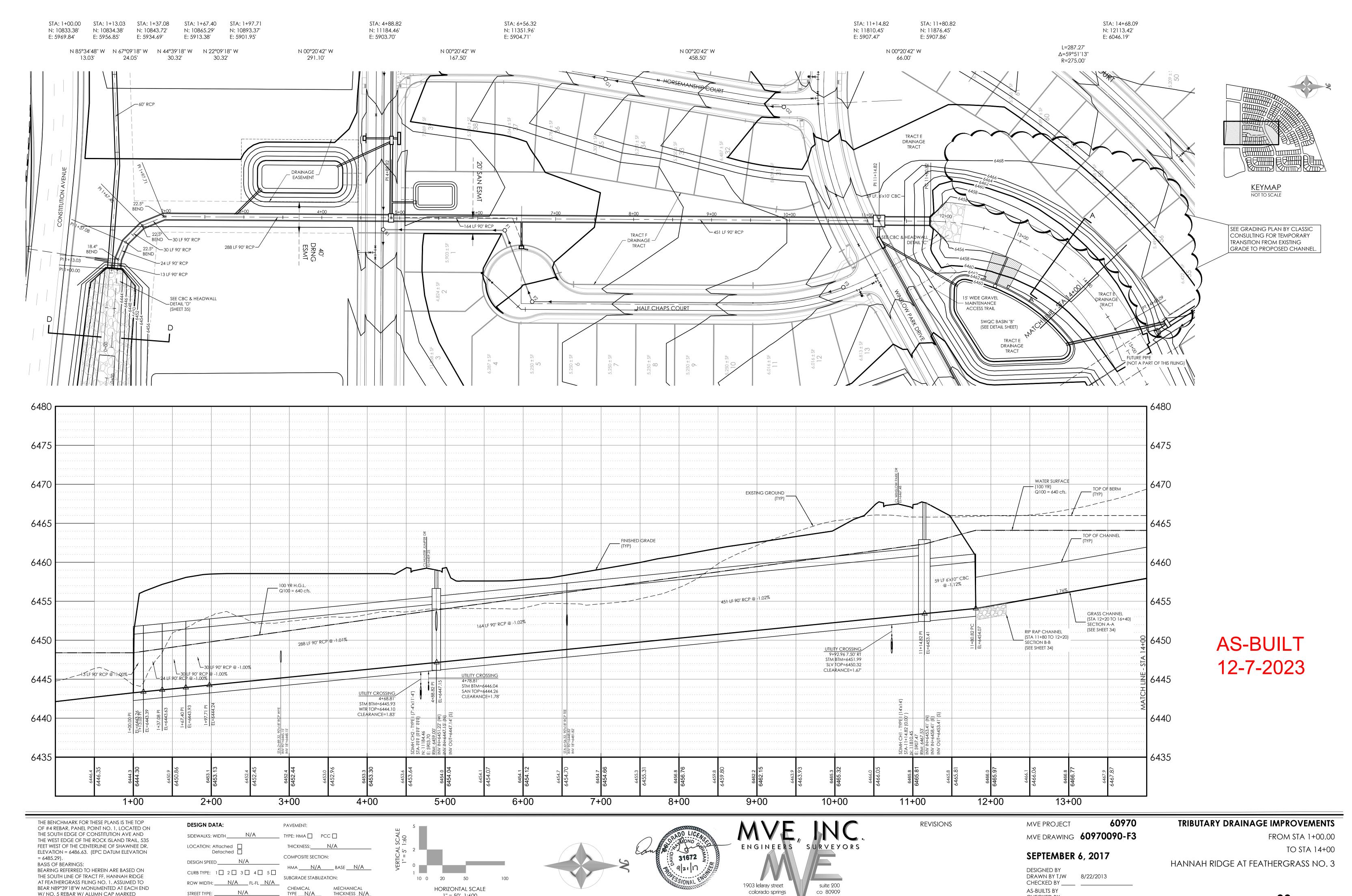
SEPTEMBER 6, 2017

DESIGNED BY TJW DRAWN BY TJW CHECKED BY \_ AS-BUILTS BY

CHECKED BY \_\_\_\_\_

MISC STORM PLANS/ PROFILES

HANNAH RIDGE AT FEATHERGRASS NO. 3



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W/ NO. 5 REBAR W/ ALUMN CAP MARKED

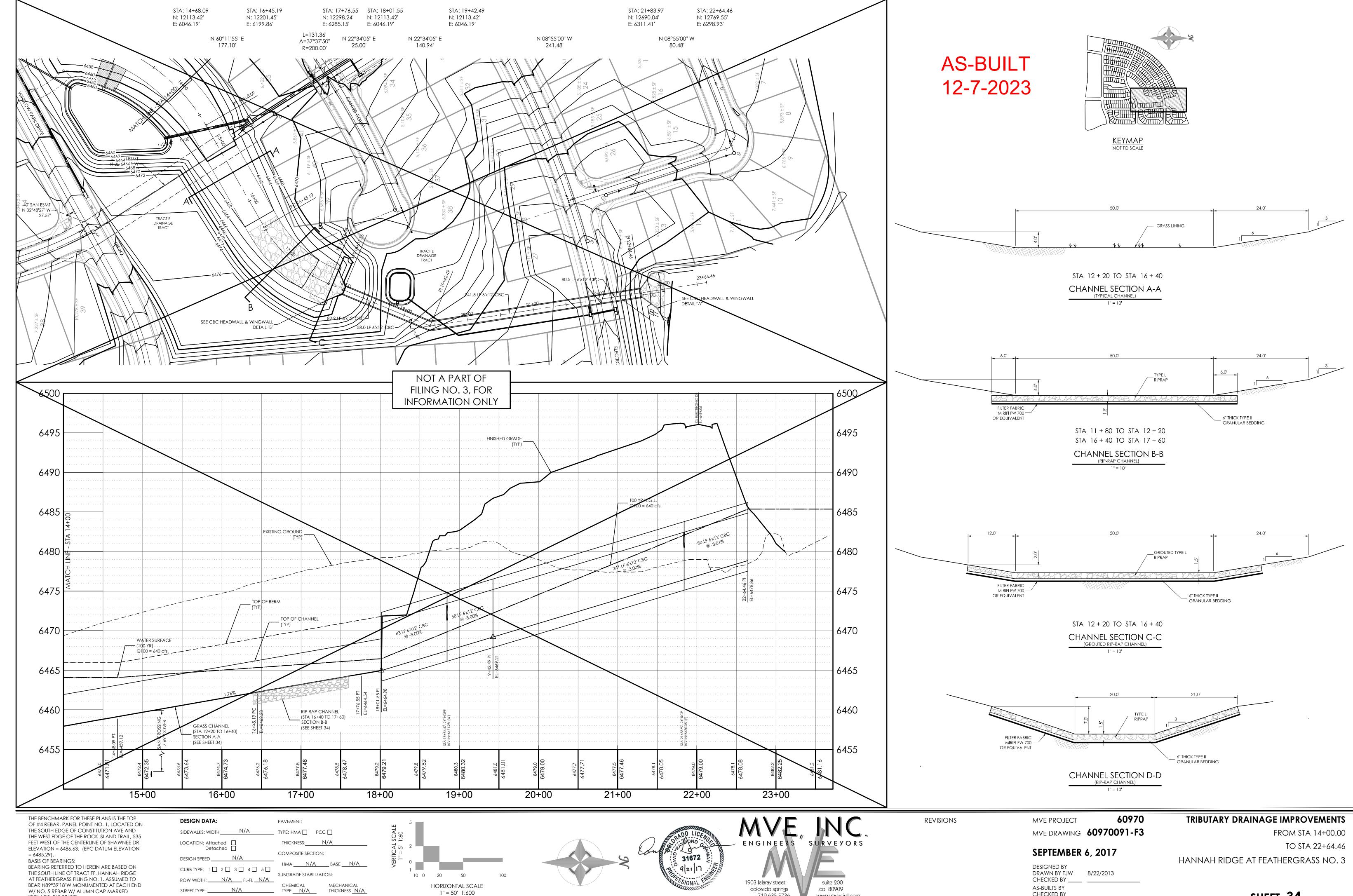
"POLARIS, PLS 27605".

TYPE N/A THICKNESS N/A

1" = 50' 1:600

SHEET 33

CHECKED BY \_\_\_\_\_



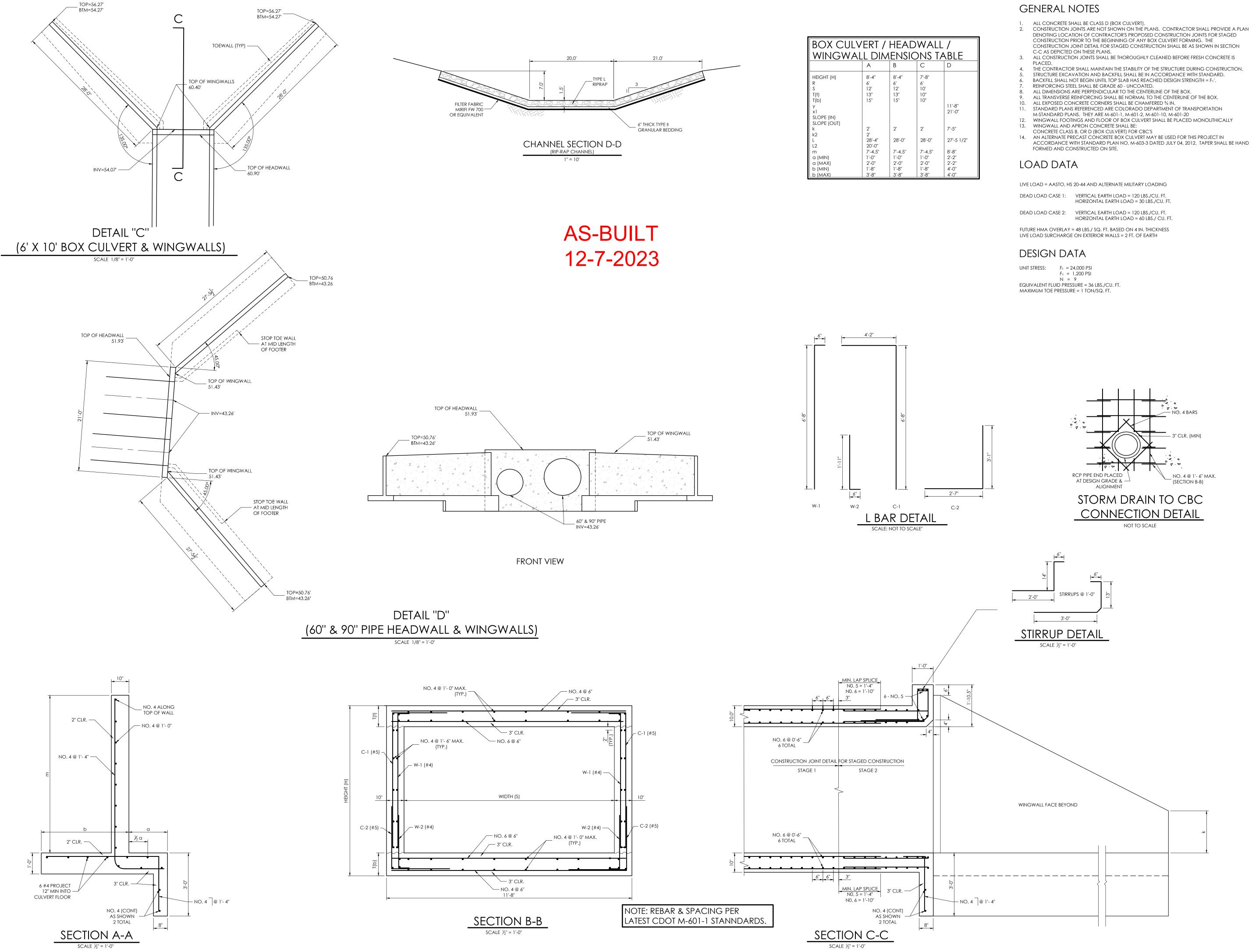
"POLARIS, PLS 27605".

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SHEET 34

CHECKED BY \_\_\_\_\_









**VICINITY MAP** 

THE BENCHMARK FOR THESE PLANS IS THE TOP

THE SOUTH EDGE OF CONSTITUTION AVE AND

OF #4 REBAR, PANEL POINT NO. 1, LOCATED ON

THE WEST EDGE OF THE ROCK ISLAND TRAIL, 535 FEET WEST OF THE CENTERLINE OF SHAWNEE DR.

ELEVATION = 6486.63. (EPC DATUM ELEVATION

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AT FEATHERGRASS FILING NO. 1. ASSUMED TO BEAR N89°39'18"W MONUMENTED AT EACH END

W/ NO. 5 REBAR W/ ALUMN CAP MARKED

BENCHMARK

= 6485.29).

BASIS OF BEARINGS:

"POLARIS, PLS 27605".

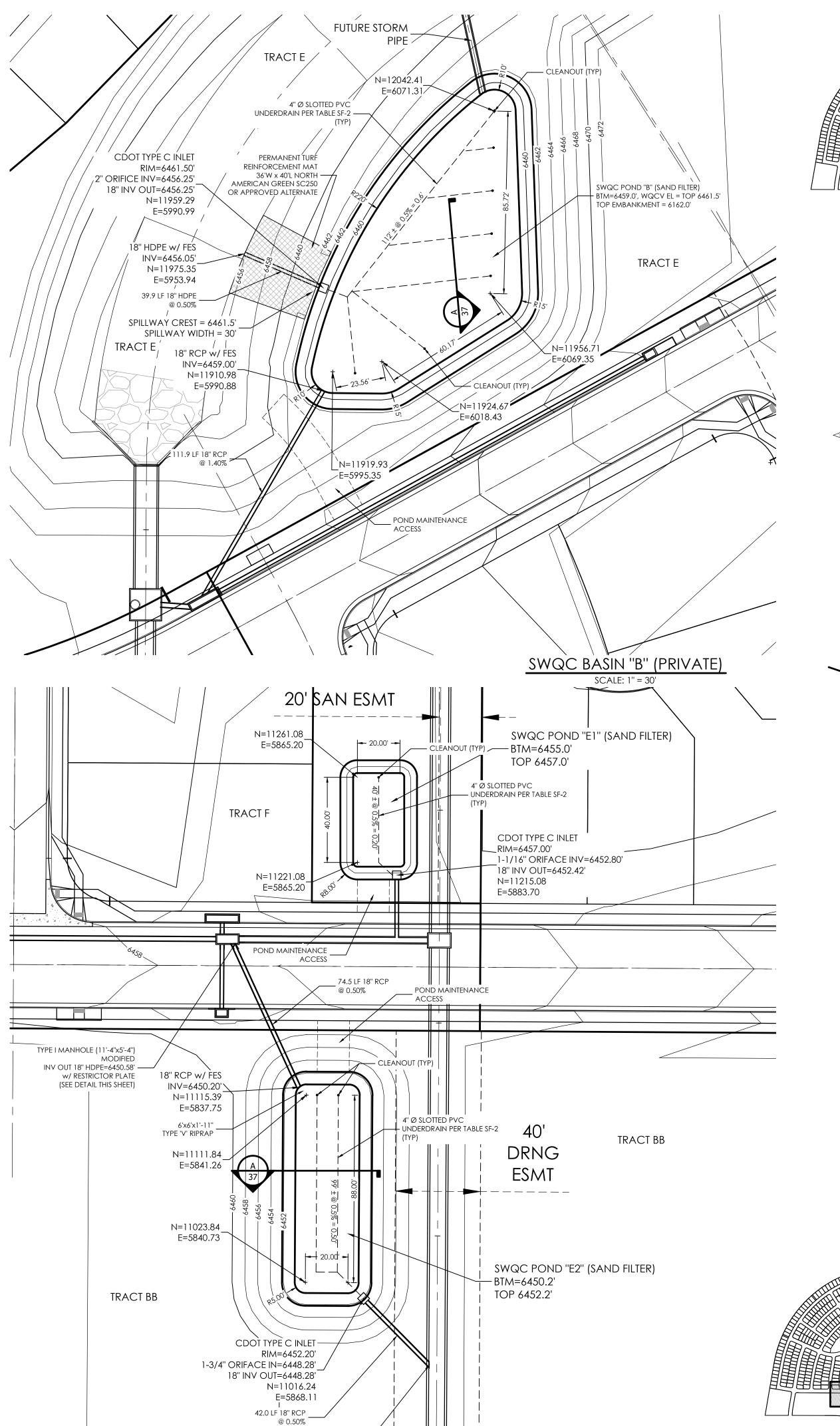
REVISIONS

DESIGNED BY DRAWN BY CHECKED BY	 8/22/2013
AS-BUILTS BY CHECKED BY	 

HANNAH RIDGE AT FEATHERGRASS NO. 3

**BOX CULVERT** & HEADWALL DETAILS

> MVE PROJECT 60970 MVE DRAWING 60970093-F3



90"x18" RCP WYE

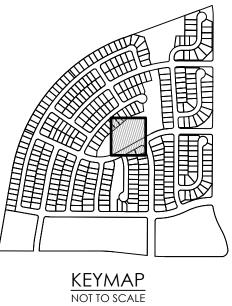
INV 90"=6445.15"

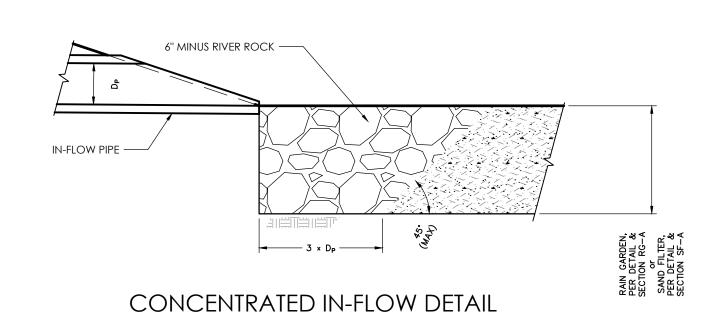
INV 18"=6448.15"

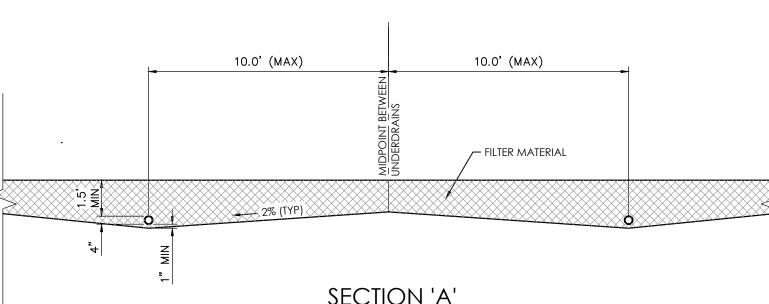
90" RCP STA-2+89.32

SWQC BASINS "E1" & "E2" (PRIVATE)

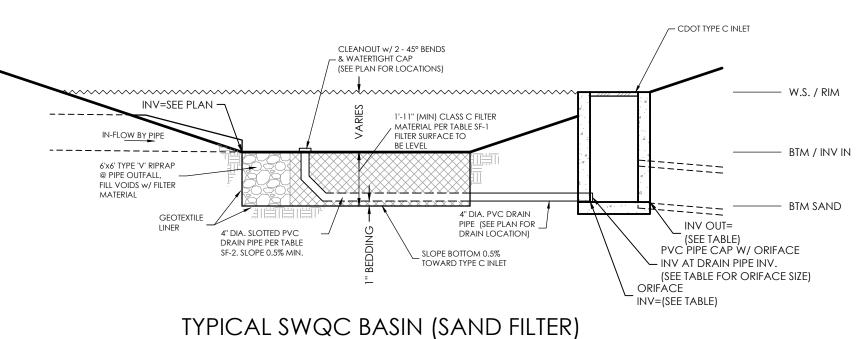
KEYMAP NOT TO SCALE







# SECTION 'A' SCALE: 1" = 4'



_									
	SAND FILTER DATA TABLE								
Ī	SAND FILTER BASIN	BASE AREA (SQUARE FEET)	FILTER BASIN VOLUME (FT <sup>3</sup> )	FILTER BASIN BTM/INV IN ELEV	POND DEPTH (FT)	TOP OF BOX ELEVATION (W.S.)	OUTLET ORIFICE DIAMETER (IN)	INV OUT ELEV	RESTRICTOR PLATE HEIGHT (FT)
	В	8,839	25,961	6459.00	2.5	6461.50	2"	6456.25	0.70
	E1	1,053	3,014	6455.00	2.0	6457.00	1-1/16"	6452.42	N/A
	E2	2,919	7,425	6450.20	2.0	6452.20	1-3/4"	6448.28	0.66

SCALE: N.T.S.

**AS-BUILT** 12-7-2023



CONTROL DISTRICT (UDFCD), URBAN STORM DRAINAGE CRITERIÀ MANUAL VOLUME 3, SECTION T-6, FOR FULL SET OF SAND FILTER
DETAILS AND SPECIFICATIONS AS

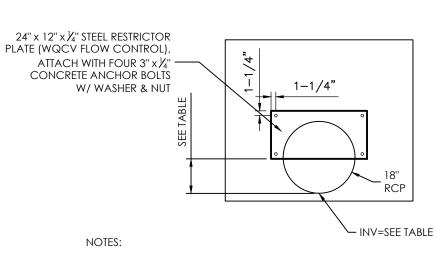
- FILTER MATERIAL CLASS B or CLASS C FILTER MATERIAL, PER SOIL MATERIAL GRADATION TABLE
- PERMEABLE GEOTEXTILE SEPARATOR
  FABRIC TENCATE MIRAFI 170N, OR
  EQUAL, PER UDFCD TABLE SF-3.
- CONCENTRATED INFLOW PER CONCENTRATED INFLOW DETAIL **SLOTTED PIPE** - CONTECH A-2000, OR EQUAL, PER PIPE SPECIFICATION TABLE

#### SOIL MATERIAL GRADATION TABLE (SOURCE: UDFCD BIORETENTION (RG) TABLE B-1 & SAND FILTER BASIN (SFB) TABLE

	% PASSING				
STANDARD SIEVE SIZE	GROWING	FILTER MATERIAL <sup>(3)</sup>			
	MEDIA <sup>(1)(2)</sup>	CLASS B	CLASS C		
1-1/2"		100			
3/4"			100		
NO. 4	100	20-60	60-100		
NO. 10	85-100				
NO. 50		10-30	10-30		
NO. 100			0-10		
NO. 200	80-90	0-3	0-3		
NO. 230	3-17				

(1)RAIN GARDEN ONLY (2)LESS THAN 1.5% ORGANIC MATERIAL (3)APPLIES TO BOTH SAND FILTER BASIN AND RAIN GARDEN

TABLE SF-2 (SLOTTED PIPE DIMENSIONS)					
PIPE Ø	SLOT LENGTH	SLOT WIDTH	SLOT CENTERS	OPEN AREA (PER SF)	
4''	1-1/16"	0.032"	0.413"	1.90 SQ. IN.	

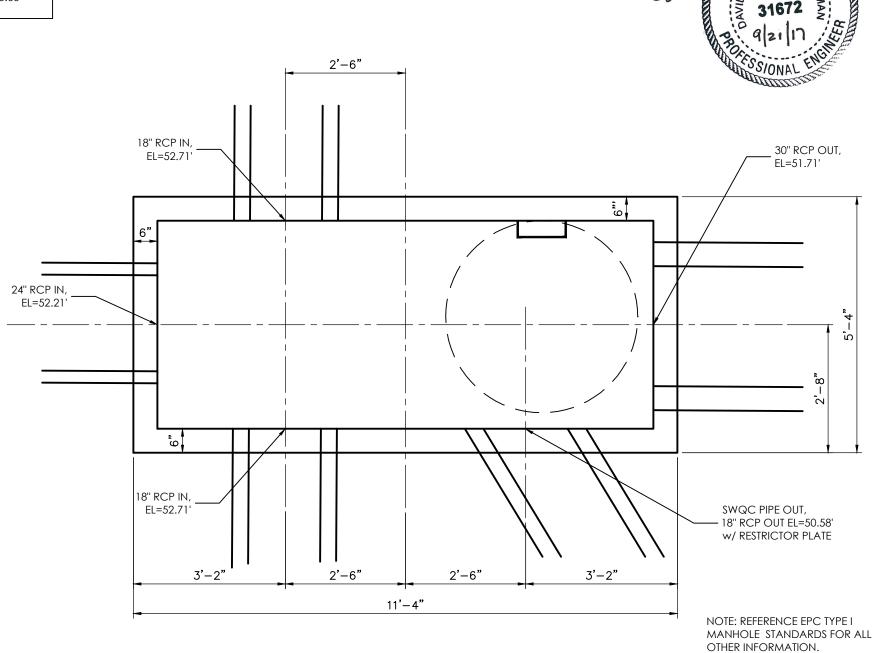


1. ORIFICE AND RESTRICTOR PLATES SHALL BE HOT DIPPED GALVANIZED AFTER FABRICATION.

3. ALL ORIFICE PLATES SHALL BE MOUNTED WITH 3"  $\times 1/4$ " STAINLESS STEEL CONCRETE ANCHOR BOLTS W/ WASHERS, AND NUTS AS

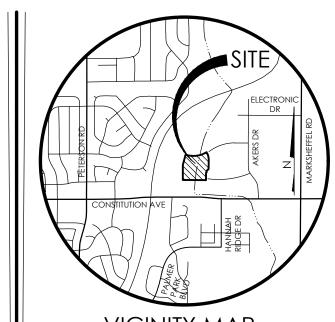
# MANHOLE / INLET RESTRICTOR PLATE DET.

SCALE: 1" = 2.0'



MODIFIED TYPE I MANHOLE

SCALE: 1" = 2'-0"

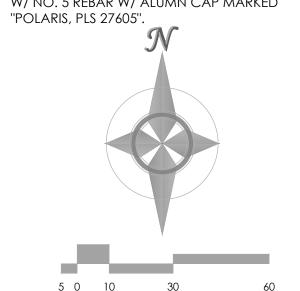


# VICINITY MAP

BENCHMARK THE BENCHMARK FOR THESE PLANS IS THE TOP OF #4 REBAR, PANEL POINT NO. 1, LOCATED ON THE SOUTH EDGE OF CONSTITUTION AVE AND THE WEST EDGE OF THE ROCK ISLAND TRAIL, 535 FEET WEST OF THE CENTERLINE OF SHAWNEE DR. ELEVATION = 6486.63. (EPC DATUM ELEVATION = 6485.29).

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1" = 30' 1:360

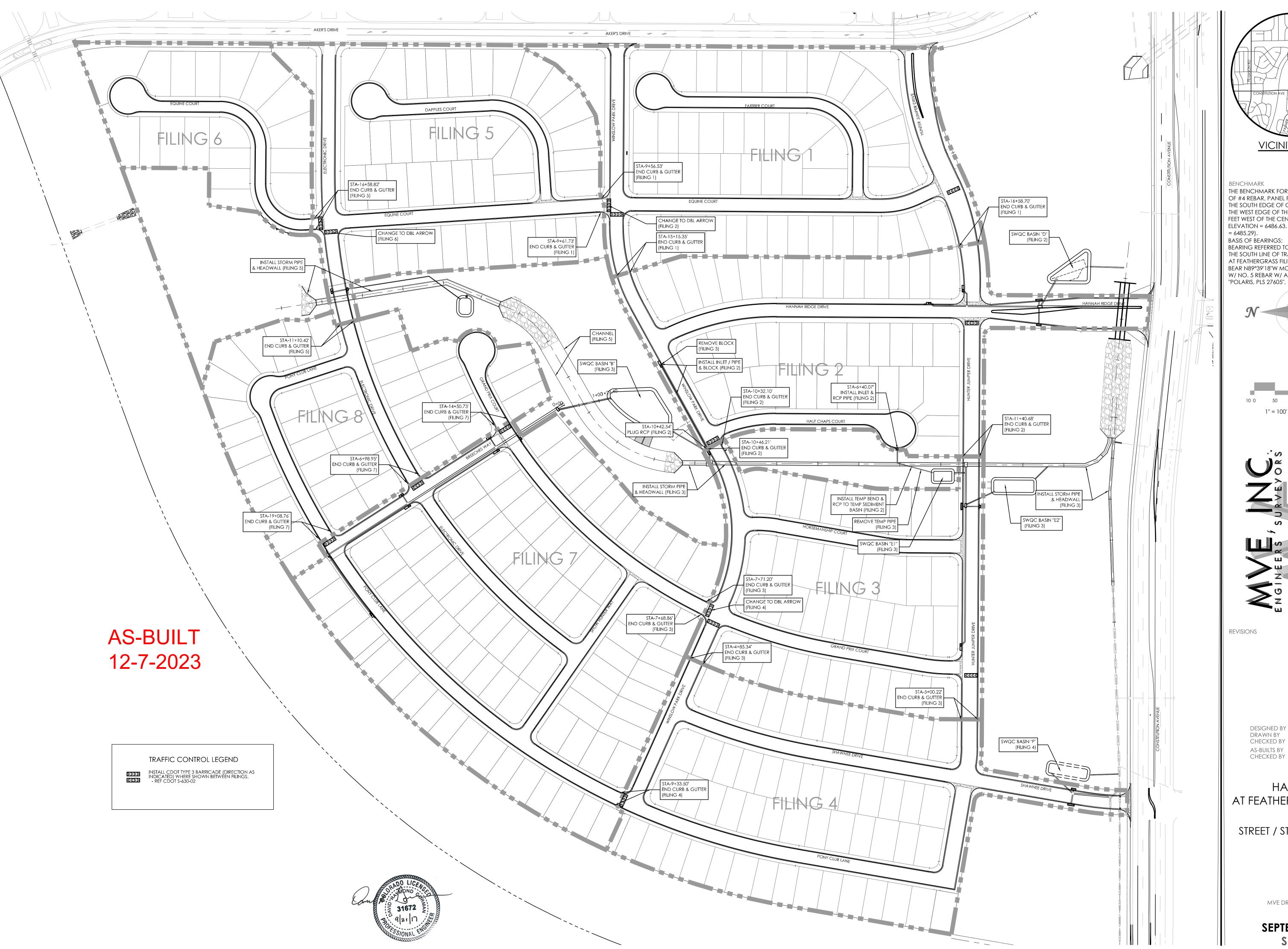
REVISIONS

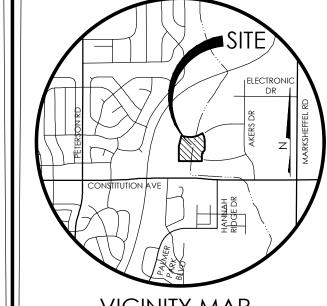
DESIGNED BY DRAWN BY CHECKED BY	 8/22/2013
AS-BUILTS BY	

HANNAH RIDGE AT FEATHERGRASS NO. 3

STORM WATER QUALITY BASIN DETAILS

> MVE PROJECT 60970 MVE DRAWING 60970106-F3



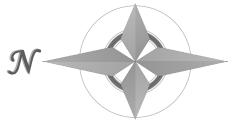


BENCHMARK

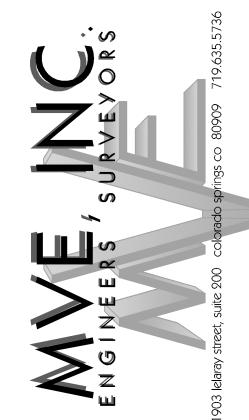
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1" = 100' 1:1,200

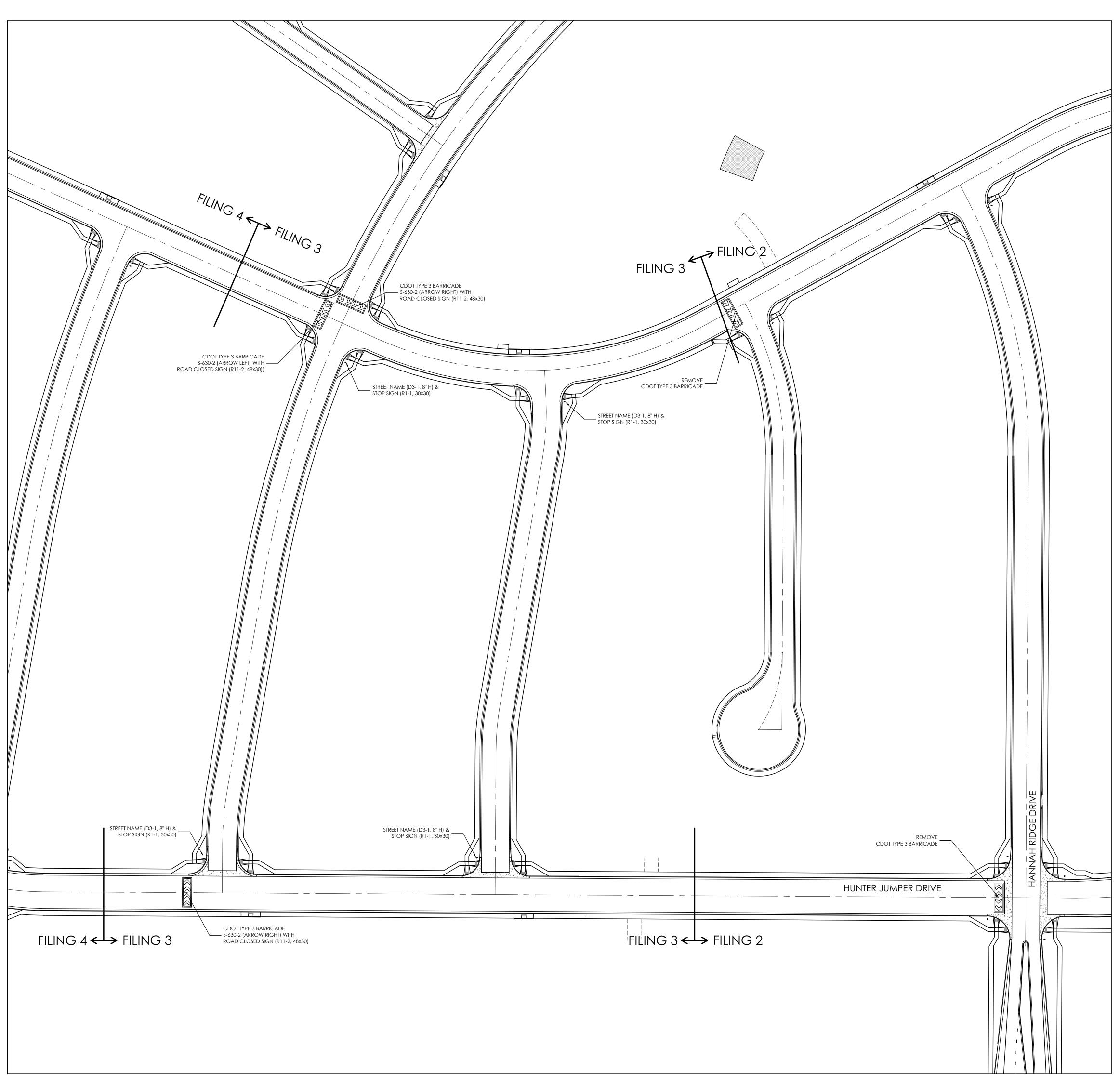


DESIGNED BY DRG DRAWN BY TJW CHECKED BY AS-BUILTS BY CHECKED BY

HANNAH RIDGE AT FEATHERGRASS NO. 3

STREET / STORM PHASING PLAN & NOTES

> MVE PROJECT 60970 MVE DRAWING 60970069-F3

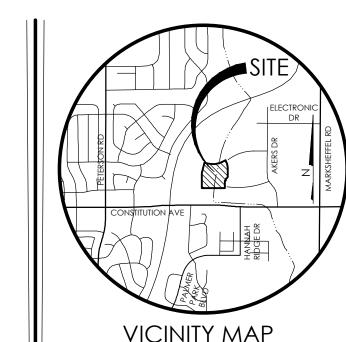


# EL PASO COUNTY STANDARD SIGNING AND STRIPING NOTES

- 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
- 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.
- 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 SLIPBASE DESIGN.
   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 (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 PUBLIC SERVICE DEPARTMENT (PSD) PRIOR TO ANY SIGNAGE OR STRIPING WORK WITHIN AN EXISTING EL PASO COUNTY ROADWAY.

# AS-BUILT 12-7-2023





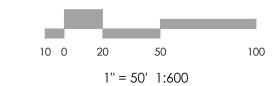
BENCHMARK

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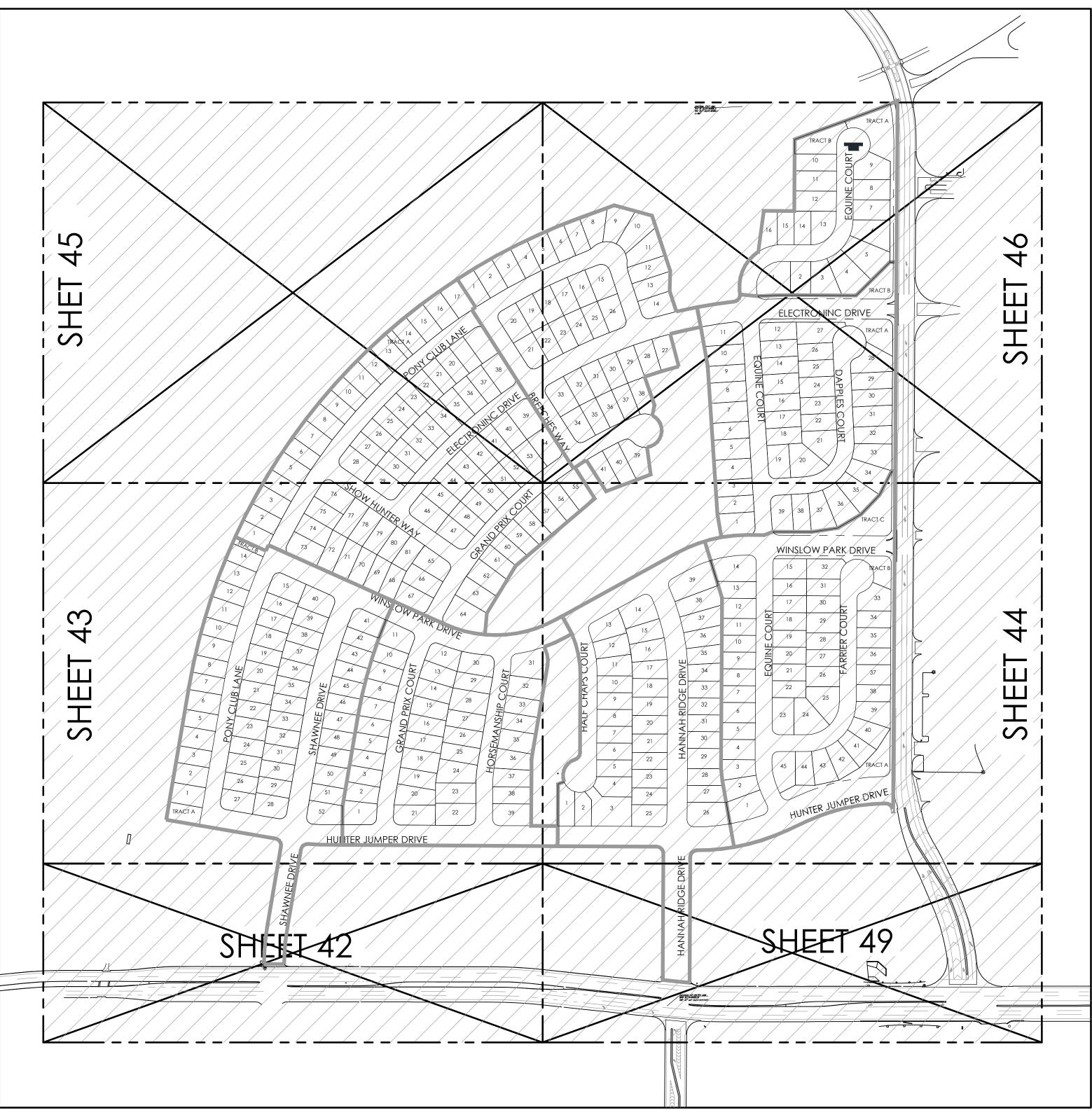
REVISIONS

DESIGNED BY
DRAWN BY
CHECKED BY
AS-BUILTS BY
CHECKED BY

HANNAH RIDGE AT FEATHERGRASS NO. 3

> STRIPING AND SIGNAGE PLAN

> > MVE PROJECT 60970 MVE DRAWING 60970094-F3



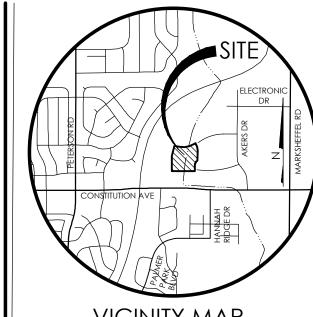


## WATER SYSTEM CONSTRUCTION NOTES:

- 1. ALL MATERIALS AND WORKMANSHIP SHALL BE IN CONFORMANCE WITH CHEROKEE METROPOLITAN DISTRICT STANDARDS AND THE CITY OF COLORADO SPRINGS CONSTRUCTION STANDARDS UNLESS NOTED OTHERWISE. IN THE EVENT OF CONFLICTING STANDARDS CHEROKEE METROPOLITAN DISTRICT STANDARDS SHALL GOVERN.
- 2. ALL WATER SYSTEM MAINS PIPE MATERIAL SHALL BE POLYVINYL CHLORIDE (PVC) CLASS 200 (DR-14) PER AWWA C-900 AND ASTM D241 SPECIFICATIONS, EXCEPT WHERE NOTED. SPECIFICALLY, SECTIONS OF WATER PIPE THAT CROSS UNDER MAJOR DRAINAGE WAYS (SAND CREEK) R MAJOR THOROUGHFARES SHALL BE DUCTILE IRON PIPE.
- 3. ALL FITTINGS SHALL BE CONSTRUCTED OF GRAY-IRON MATERIAL AND FURNISHED WITH MECHANICAL JOINT ENDS. ALL FITTINGS SHALL HAVE A MINIMUM PRESSURE RATING OF 250 PSI AND SHALL BE WRAPPED WITH A 9-MIL THICKNESS POLYETHYLENE MATERIAL PER AWWA
- 4. ALL WATER PIPES SHALL BE INSTALLED AT A MINIMUM DEPTH OF FIVE (5) FEET BELOW FINISHED GRADE.
- 5. ALL BENDS, TEE, FIRE HYDRANTS, BLOW-OFFS, AND PLUGS AT DEAD END MAINS SHALL BE INSTALLED WITH CONCRETE THRUST BLOCKS.
- 6. FIRE HYDRANT ASSEMBLIES SHALL INCLUDE ALL PIPES, FITTINGS, VALVES, APPURTENANCES, MATERIALS AND LABOR THAT ARE NECESSARY TO INSTALL A COMPLETE AND USEABLE FIRE HYDRANT. FIRE HYDRANT ASSEMBLIES SHALL BE ONE OF THE FOLLOWING TYPES:
- A.MUELLER CENTURION, MODEL A-473
- B. KENNEDY VALVE C.AMERICAN AVK
- D.OR ENGINEER/DISTRICT APPROVED EQUAL.
- 7. VALVE BOXES SHALL BE TYLER SLIP; TYPE "C" CAST IRON VALVE BOX ASSEMBLY SERIES 6860 WITH NO. 160 OVAL BASE OR APPROVED
- 8. CONTRACTOR SHALL PRESSURE TEST AND DISINFECT THE SYSTEM PRIOR TO CONNECTING TO EXISTING MAINS.
- 9. ALL WATER SYSTEM COMPONENTS SHALL BE FLUSHED AND CHLORINATED PER AWWA C-601, "DISINFECTING WATER MAINS" PRIOR TO ACCEPTANCE. THE CONTRACTOR SHALL PRODUCE A 25 MG/L SOLUTION BY ADHERING CHLORINE TABLETS TO THE PIPE SECTION WITH PERMATEX CLEAR TRV INSIDE THE SYSTEM. CHLORINATION SHALL OCCUR PRIOR TO HYDROSTATIC TESTING. THE CONTRACTOR SHALL OBTAIN A BACTERIOLOGICAL SAMPLE AFTER THE SYSTEM HAS BEEN FLUSHED. A CLEAN BACTERIOLOGICAL SAMPLE MUST BE OBTAINED PRIOR TO THE SYSTEM BEING PLACED INTO SERVICE.
- 10. HYDROSTATIC TESTING: ALL WATER SYSTEM MAINS SHALL BE FIELD PRESSURE TESTED TO A MINIMUM OF 150 PSI OR 11/2 TIMES THE STATIC OPERATING PRESSURE, WHICH EVER IS GREATER. MAXIMUM ALLOWABLE LEAKAGE FOR EACH SECTION OF PIPE BETWEEN LINE VALVES SHALL NOT EXCEED THE FOLLOWING: \*10 GALLONS PER INCH OF PIPE DIAMETER PER MILE PER DAY.
- 11. ALL VALVES SHALL CONFORM TO OPEN LEFT CONVENTION PER CHEROKEE METROPOLITAN DISTRICT STANDARDS. SERVICE LINE STOP VALVES/BOXES SHALL BE LOCATED A MINIMUM OF 7 FEET BEYOND THE PROPERTY LINE OR PER THE SERVICE DETAIL ON THE UTILITY SERVICE PLAN. ALL OTHER VALVES SHALL BE LOCATED PER THESE PLANS.
- 12. WHEN IT IS NECESSARY TO RAISE OR LOWER WATER MAINS AT OTHER UTILITY CROSSINGS THE CONTRACTOR SHALL INSURE A MINIMUM CLEARANCE OF 18" WHERE POSSIBLE BETWEEN THE OUTSIDE DIAMETER OF PIPES.
- 13. WHILE CONTRUCTING THE WATER SYSTEM THE CONTRACTOR SHALL HAVE IN HIS POSSESSION AT LEAST ONE "APPROVED FOR CONSTRUCTION: SET OF UPDATED PLANS AT ALL TIMES. APPROVED FIELD MODIFICATIONS TO PLAN SETS SHALL BE CLEARLY IDENTIFIED IN RED INK ON THE PLANS BY THE CONTRACTOR PER FIELD CONSTRUCTION. THESE AS-BUILT CHANGES SHALL BE DATED AND SUBMITTED TO THE ENGINEER OF RECORD. THE ENGINEER OF RECORD SHALL PREPARE A COMPLETE SET OF "AS CONSTRUCTED" DRAWINGS AND DELIVER THE SETS TO THE CHEROKEE METROPOLITAN DISTRICT PRIOR TO FINAL ACCEPTANCE OF THE WATER SYSTEM.
- 14. COMPACTION TESTING RESULTS OF ALL TRENCHES AND BEDDING MATERIAL SHALL BE SUBMITTED TO THE ENGINEER OF RECORD PRIOR TO ACCEPTANCE OF THE WATER SYSTEM.
- 15. PRIOR TO TAPPING ANY EXISTING WATER MAIN THE CONTRACTOR SHALL SUBMIT AND RECEIVE APPROVAL FOR SAID TAP IN ACCORDANCE WITH THE CHEROKEE METROPOLITAN DISTRICT STANDARDS.
- 16. PVC PIPE MUST BE PRESSURIZED PRIOR TO TAPPING.
- 17. THE WATER SYSTEM CONTRACTOR SHALL INSTALL ALL IRRIGATION TAPS AND METERS PER THESE PLANS.
- 18. FIRE FLOW DEMAND IS 1500 GPM FOR A 3 HOUR DURATION AT A 20-PSI MINIMUM RESIDUAL MAIN LINE PRESSURE.
- 19. ALL NONMETALLIC PIPES SHALL HAVE A TRACER WIRE ATTACHED TO ITS TOP DURING CONSTRUCTION. THE TRACER WIRE SHALL BE #12 AWG INSULATED COPPER WIRE WITH NO. 12 TYPE COPPER CONNECTORS AND SHALL BE PERMANENTLY AFFIXED TO THE TOP OF THE PIPE USING TAPE AT 4' INTERVALS. THE TRACER WIRE SHALL ALSO BE PERMANENTLY CONNECTED TO ALL FIRE HYDRANT TEE, METALLIC PIPE BENDS, MAIN VALVE AND OTHER METALLIC FITTINGS AND APPURTENANCES. ALL POINTS OF CONNECTION SHALL BE PROTECTED FROM CORROSION BY AN EPOXY OR SILICON COATING. GROUND TRACER WIRES TO SURFACE AT ALL VALVE BOXES.
- 20. THE CONTRACTOR ASSUMES RESPONSIBILITY FOR THE PROTECTION OF ALL UTILITIES DURING THE WORK. PRIOR TO ANY EXCAVATION, CONTACT THE UTILITY NOTIFICATION CENTER OF COLORADO AT (800) 922-1987 AT LEAST TWO WORKING DAYS PRIOR TO DIGGING.
- 21. ALL VALVES SHALL BE INSTALLED IN ACCORDANCE WITH COLORADO SPRINGS STANDARDS EXCEPT FOR NOTE 11 ABOVE. SPACING SHALL BE EQUIDISTANT FROM TEES, ELBOWS, BENDS AND OTHER APPURTENANCES AT 3 FOOT WHERE POSSIBLE.
- 22. HIGH DEFLECTION COUPLINGS ARE NOT TO BE USED IN THE INSTALLATION OF CURVILINEAR WATER PIPE.
- 23. TAPS WILL NOT BE RELEASE UNTIL THE FOLLOWING CONDITIONS ARE MET:
  - A.WATER AND SEWER LINES ARE INSTALLED AND PRESSURE TESTED TO THE DISTRICT STANDARDS. ALL 2X4 MARKERS ARE INTACT AND
- B. AS CONSTRUCTED DRAWINGS HAVE BEEN SUBMITTED TO THE DISTRICT. DRAWINGS TO INCLUDE ANY CHANGES FROM CONSTRUCTION DRAWINGS. THE LENGTH, DEPTH, GRADE AND LOCATION OF ALL SEWER SERVICES. THE LENGTH DEPTH AND LOCATION OF WATER SERVICES.
- C.ALL ELECTRIC AND GAS UTILITIES ARE INSTALLED.
- D. THE FIRST LIFT OF HOT MIX ASPHALT MUST BE INSTALLED.
- 24. CONTRACTOR IS TO NOTIFY CHEROKEE METROPOLITAN DISTRICTS' INSPECTOR 24 HOURS PRIOR TO ALL STORM SEWER CRITICAL CROSSING OVER WATER AND SEWER LINES, TO VERIFY CLEARANCE.
- 25. FIRE HYDRANTS MUST BE PAINTED, BLUE CAPS AND BONNETS; WHITE BARREL SECTIONS. COLOR CODES ARE AS FOLLOWS: CHEROKEE BLUE, PRODUCT NUMBER 58155; CHEROKEE WHITE, PRODUCT NUMBER 58101, BOTH GLOSS OIL BASE EXTERIOR DEVOE-BAROX. CAN BE PURCHASED AT THE PAINT SPOT 5849 PALMER PARK BLVD COLORADO SPRINGS, CO 80915, OR EQUAL BRAND.

CURVILINEAR PIPELINE: THERE IS NO DEFLECTION ALLOWED AT THE JOINTS ON 12-INCH AND SMALLER PIPE. NOTICE: MECHANICAL MEANS SHOULD NOT BE EMPLOYED TO ACCOMPLISH THESE RADII. IT IS THE INTENT THAT THE WORKER SHOULD ACCOMPLISH THIS MANUALLY IN THE TRENCH. ON 4-INCH TO 12-INCH PIPE, THE CURVE SHOULD BE ACCOMPLISHED BY BENDING THE PIPE RATHER THAN DEFLECTING JOINTS. THERE SHALL BE NO DEFLECTION IN THE JOINTS UPON COMPLETION TO AVOID OVER-STRESSING THE BELL AND PREVENT POSSIBLE BREAKAGE AND/OR



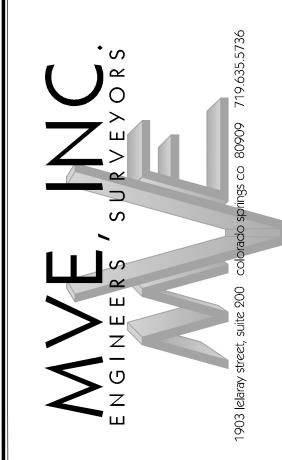


BENCHMARK THE BENCHMARK FOR THESE PLANS IS THE TOP OF #4 REBAR, PANEL POINT NO. 1, LOCATED ON THE SOUTH EDGE OF CONSTITUTION AVE AND THE WEST EDGE OF THE ROCK ISLAND TRAIL, 535 FEET WEST OF THE CENTERLINE OF SHAWNEE DR. ELEVATION = 6486.63. (EPC DATUM ELEVATION = 6485.29).

BASIS OF BEARINGS: BEARING REFERRED TO HEREIN ARE BASED ON THE SOUTH LINE OF TRACT FF, HANNAH RIDGE AT FEATHERGRASS FILING NO. 1. ASSUMED TO BEAR N89°39'18"W MONUMENTED AT EACH END W/ NO. 5 REBAR W/ ALUMN CAP MARKED "POLARIS, PLS 27605".



1" = ###' 1:#####



REVISIONS

DESIGNED BY DRG DRAWN BY TJW CHECKED BY AS-BUILTS BY CHECKED BY

HANNAH RIDGE AT FEATHERGRASS NO. 3

> WATER PLANS **COVER SHEET**

MVE PROJECT 60970 MVE DRAWING 60970070-F3



8/22/2013

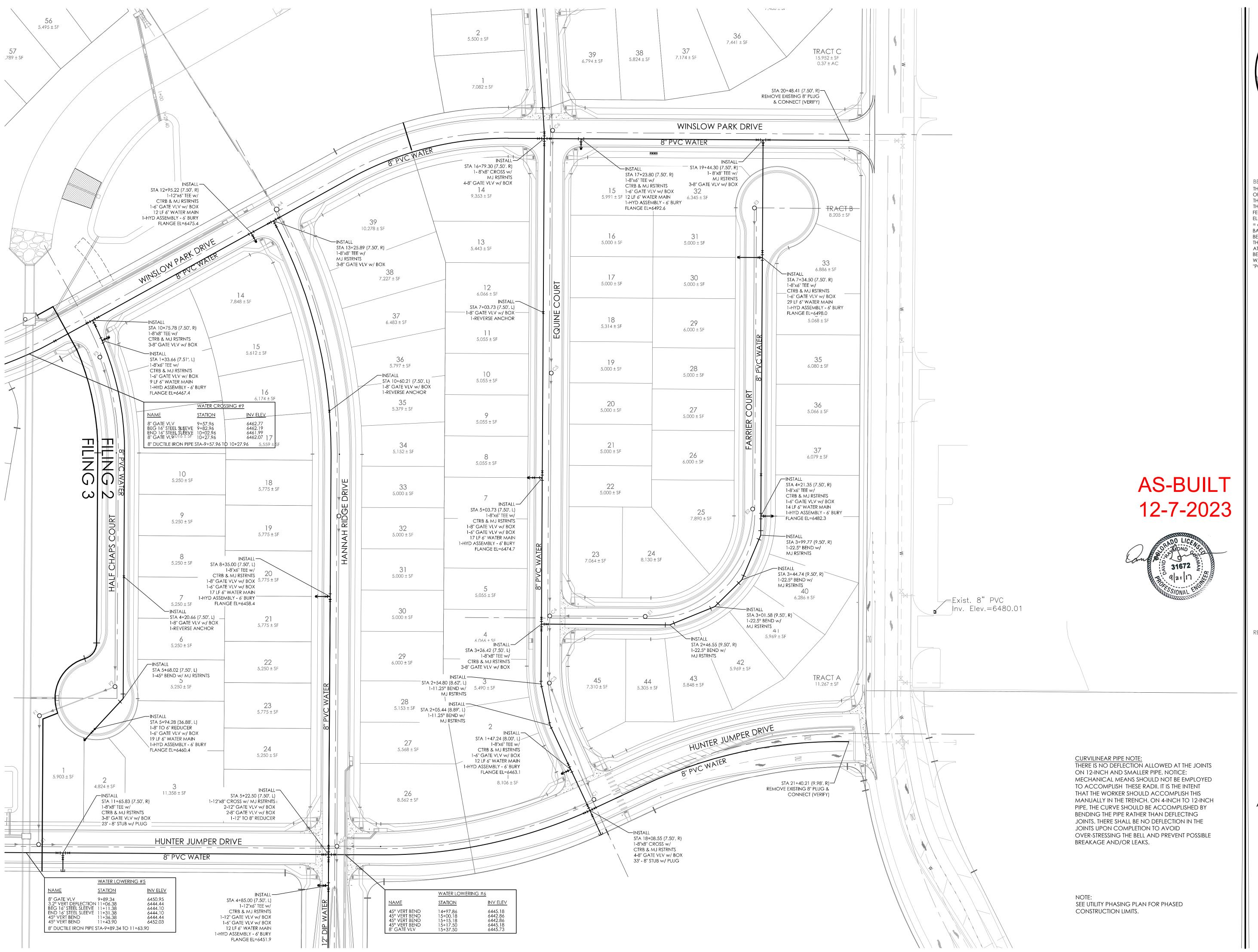
**SOUTHWEST** 

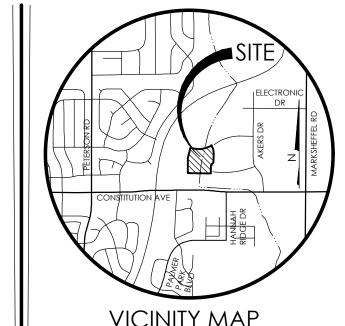
**AS-BUILT** 

12-7-2023

**CURVILINEAR PIPE NOTE:** 

BREAKAGE AND/OR LEAKS.



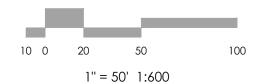


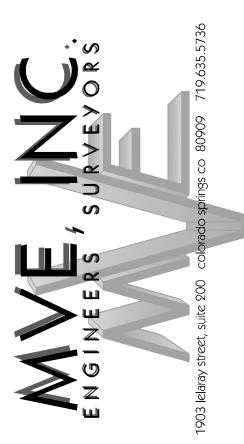
BENCHMARK

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REVISIONS

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HANNAH RIDGE AT FEATHERGRASS NO. 3

> **WATER PLAN SOUTHEAST**

MVE PROJECT 60970 MVE DRAWING 60970073-F3

