

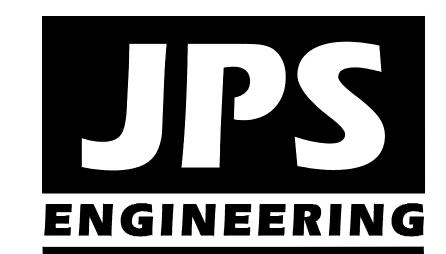
SETTLERS VIEW SUBDIVISION Construction Drawings El Paso County, Colorado

PREPARED FOR:

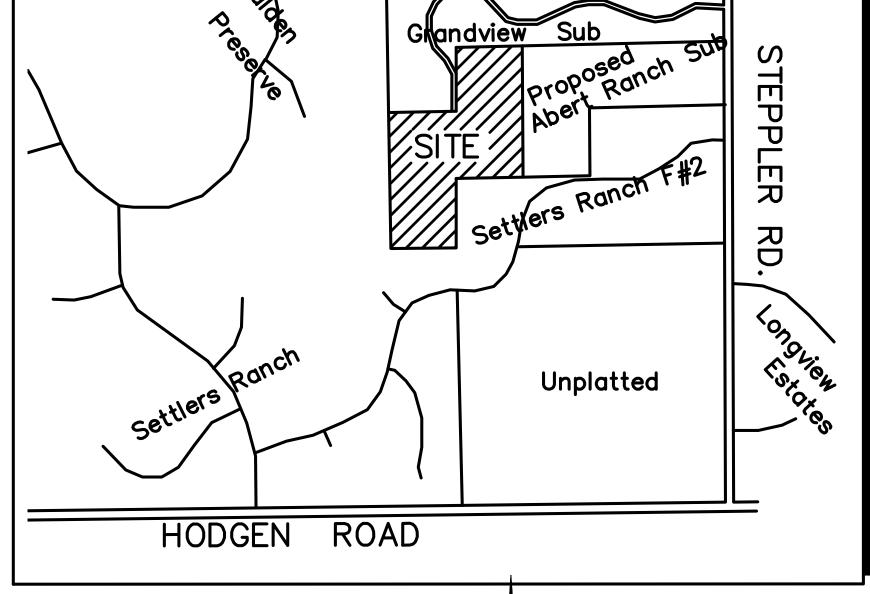
Brenda Brinkman

4507 Silver Nell Drive Colorado Springs, CO 80908

PREPARED BY:



19 East Willamette Avenue Colorado Springs, Colorado 80903 JANUARY 2019



SITE MAP NOT TO SCALE

NOTE: 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 TO BE ACCEPTABLE.

BASIS OF BEARINGS: THE WEST SUBDIVISION BOUNDARY FROM THE SOUTHWEST CORNER TO THE NORTHWEST CORNER WITH A BEARING OF NO0°13'31"W.

BENCHMARK: THE MONUMENT AT THE SOUTHEAST PROPERTY CORNER, HAVING AN ASSUMED ELEVATION OF 7650.0 DATUM IS NAVD '88.

AGENCIES/CONTACTS

DEVELOPER: 4507 SILVER NELL DRIVE COLORADO SPRINGS, CO 80908

COLORADO SPRINGS, CO 80903

MR. JOHN P. SCHWAB, P.E.

2880 INTERNATIONAL CIRCLE

MR. GILBERT LAFORCE, P.E.

COLORADO SPRINGS, CO 80910

(719) 477-9429

(719) 520-7945

EL PASO COUNTY PCD

MR. SEBASTIAN SCHWENDER

ELECTRIC DEPARTMENT: MOUNTAIN VIEW ELECTRIC ASSOCIATION JEROME W. HANNIGAN & 11140 E. WOODMEN ROAD PLANNER/ ASSOCIATES, INC. SURVEYOR:

COLORADO SPRINGS, CO 80908 19360 SPRING VALLEY ROAD MR. DAVE WALDNER MONUMENT, CO 80132 (719) 495-2283 (719) 481-8292TELEPHONE COMPANY:

CIVIL ENGINEER: JPS ENGINEERING, INC. 19 E. WILLAMETTE AVENUE

(LOCATORS) (719) 635-3674

TRI-LAKES MONUMENT FIRE FIRE DEPARTMENT: PROTECTION DISTRICT

CALL UTILITY NOTIFICATION CENTER OF COLORADO



SHEET INDEX

TITLE SHEET/VICINITY MAP/LOCATION MAP

GENERAL NOTES AND LEGEND

TYPICAL SECTIONS & DETAILS

SITE GRADING & EROSION CONTROL PLAN

EROSION CONTROL NOTES & DETAILS

DETENTION POND PLAN & DETAILS

SILVER NELL DRIVE PLAN & PROFILE

ELK BASIN COURT PLAN & PROFILE

ENGINEER:

DESIGN ENGINEER'S STATEMENT:

MY PART IN PREPARATION OF THESE DETAILED PLANS AND SPECIFICATIONS.

JOHN P. SCHWAB, P.E. #29891 DATE

OWNER/DEVELOPER'S STATEMENT:

I, THE OWNER/DEVELOPER HAVE READ AND WILL COMPLY WITH ALL OF THE REQUIREMENTS SPECIFIED IN THESE DETAILED PLANS AND SPECIFICATIONS.

BRENDA BRINKMAN DATE 4507 SILVER NELL DRIVE COLORADO SPRINGS, COLORADO 80908

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.

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

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

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

> SHEET G1 PCD File No. SF-18-041

BRENDA BRINKMAN **GAS DEPARTMENT:**

(719) 359-3716

BLACK HILLS ENERGY

QWEST COMMUNICATIONS (LOCATORS) (800) 922-1987

A.T. & T.

(719) 484-0911

LOCAL ROADS

& DRAINAGE:

COUNTY GENERAL 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
- D. CDOT M & S STANDARDS
- 4. NOT WITH STANDING 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 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 WITH CLASS B BEDDING UNLESS OTHERWISE NOTED AND APPROVED BY PCD.

C. COLORADO DEPARTMENT OF TRANSPORTATION (CDOT) STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION

- 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.
- 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.

PROJECT GENERAL NOTES:

- 1. EXISTING CONTOUR DATA PROVIDED BY OWNER CONSISTS OF AERIAL TOPOGRAPHIC SURVEY DATA PROVIDED BY LWA LAND SURVEYING. JPS ENGINEERING TAKES NO RESPONSIBILITY FOR THE ACCURACY OF EXISTING TOPOGRAPHIC MAPPING.
- 2. STATIONING IS AT CENTERLINE UNLESS OTHERWISE NOTED. ALL ELEVATIONS ARE AT EDGE OF ASPHALT (EOA) UNLESS OTHERWISE NOTED. ALL DIMENSIONS ARE FROM EDGE OF ASPHALT TO EDGE OF ASPHALT UNLESS OTHERWISE NOTED.
- 3. PROPOSED CONTOURS SHOWN ARE TO FINISHED GRADE.
- 4. LENGTHS SHOWN FOR STORM SEWER PIPES ARE TO CENTER OF MANHOLE.
- 5. CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL EXISTING STRUCTURES, DEBRIS, WASTE AND OTHER UNSUITABLE FILL MATERIAL FOUND WITHIN THE LIMITS OF EXCAVATION.
- 6. MATCH INTO EXISTING GRADES AT 3:1 MAX CUT AND FILL SLOPES.

CONSTRUCTION AND EARTHWORK ACTIVITIES WITHIN THE PROJECT SITE.

- 7. REVEGETATION OF ALL DISTURBED AREAS SHALL BE DONE WITH SPECIFIED SEED MIX WITHIN 60 DAYS AFTER FINE GRADING IS COMPLETE.
- 8. EROSION CONTROL SHALL CONSIST OF SILT FENCE AND HAY BALES AS SHOWN ON THE DRAWING, AND TOPSOIL WITH GRASS SEED, WHICH WILL BE WATERED UNTIL VEGETATION HAS BEEN REESTABLISHED.
- 9. THE EROSION CONTROL MEASURES OUTLINED ON THIS PLAN ARE THE RESPONSIBILITY OF THE DEVELOPER TO MONITOR AND REPLACE, REGRADE, AND REBUILD AS NECESSARY UNTIL VEGETATION IS REESTABLISHED.
- 10. EROSION CONTROL MEASURES SHALL BE IMPLEMENTED IN A MANNER THAT WILL PROTECT ADJACENT PROPERTIES AND PUBLIC FACILITIES FROM THE ADVERSE EFFECTS OF EROSION AND SEDIMENTATION AS A RESULT OF
- 11. ADDITIONAL EROSION CONTROL MEASURES MAY BE REQUIRED AS DETERMINED BY SITE CONDITIONS.
- 12. THE CONTRACTOR WILL TAKE THE NECESSARY PRECAUTIONS TO PROTECT EXISTING UTILITIES FROM DAMAGE DUE TO THIS OPERATION. ANY DAMAGE TO THE UTILITIES WILL BE REPAIRED AT THE CONTRACTOR'S EXPENSE, AND ANY SERVICE DISRUPTION WILL BE SETTLED BY THE CONTRACTOR.
- 13. ALL BACKFILL, SUB-BASE, AND/OR BASE COURSE MATERIAL SHALL BE COMPACTED PER EL PASO COUNTY AND CDOT STANDARDS AND SPECIFICATIONS.
- 14. ALL FINISHED GRADES SHALL HAVE A MINIMUM 1.0% SLOPE TO PROVIDE POSITIVE DRAINAGE.
- 16. CONTRACTOR SHALL OBTAIN ALL REQUIRED PERMITS PRIOR TO BEGINNING WORK.
- 17. ELECTRONIC FILE OF SITE DRAWING IS AVAILABLE FROM ENGINEER FOR CONSTRUCTION STAKING PURPOSES.

15. WHERE PROPOSED SLOPES CONFLICT WITH PROPOSED SPOT ELEVATIONS, SPOT ELEVATIONS SHALL GOVERN.

DESIGN DATA

ROAD CLASSIFICATION: RURAL	LOCAL RESIDENTIAL
DESIGN SPEED:	30 MPH
POSTED SPEED:	30 MPH
ROADWAY WIDTH (GRAVEL):	28' EOA-EOA
MIN. HORIZONTAL RADIUS:	300
MIN. GRADE:	1.0%
MAX. GRADE:	8.0%
MIN. K-VALUE (CREST):	19
MIN. K-VALUE (SAG):	37
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GENERAL DRAINAGE NOTES:

- 1. FINAL LOT AND HOME SITE GRADING IS THE RESPONSIBILITY OF THE INDIVIDUAL LOT OWNERS AND BUILDERS.
- 2. INDIVIDUAL BUILDERS SHALL PROVIDE POSITIVE DRAINAGE AWAY FROM STRUCTURES AND ACCOUNT FOR POTENTIAL CROSS-LOT DRAINAGE IMPACTS WITHIN EACH LOT.
- 3. BUILDERS AND PROPERTY OWNERS SHALL IMPLEMENT & MAINTAIN EROSION CONTROL BEST MANAGEMENT PRACTICES FOR PROTECTION OF DOWNSTREAM PROPERTIES AND FACILITIES INCLUDING PROTECTION OF EXISTING GRASS BUFFER STRIPS ALONG THE DOWNSTREAM PROPERTY BOUNDARIES.

COUNTY 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 MARKINGS.
- 3. ANY DEVIATION FROM THE STRIPING AND SIGNING PLAN SHALL BE APPROVED BY EL PASO COUNTY DEVELOPMENT SERVICES.
- 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 SLIPBASE 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 SERVICES (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 TRANSPORTATION PRIOR TO ANY SIGNAGE OR STRIPING WORK WITHIN AN EXISTING EL PASO COUNTY ROADWAY.

JPS ENGINEERING

19 E. Willamette Ave. Colorado Springs, CO 80903

PH: 719-477-9429 FAX: 719-471-0766 www.jpsengr.com



CALL UTILITY NOTIFICATION CENTER OF COLORADO
-800-922-1987

ALL 2-BUSINESS DAYS IN ADVANCE ORE YOU DIG, GRADE, OR EXCAVATE OR THE MARKING OF UNDERGROUND

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 REVISION
 BY
 DATE

 COMMENTS
 JPS
 2/13/18
 CALL

 COMMENTS
 JPS
 7/31/18
 1 — 8

 AT SUBMITTAL
 JPS
 1/30/19
 CALL

 PEFOR
 FOR
 FOR

ENERAL NOTES & LEGEND

HORZ. SCALE:

N/A

VERT. SCALE:

N/A

DESIGNED:

JPS

CHECKED:

LWA

CREATED:

01/30/12

PROJECT NO:
081104

DRAWN:

MSP

MSP

MSP

MSP

MSP

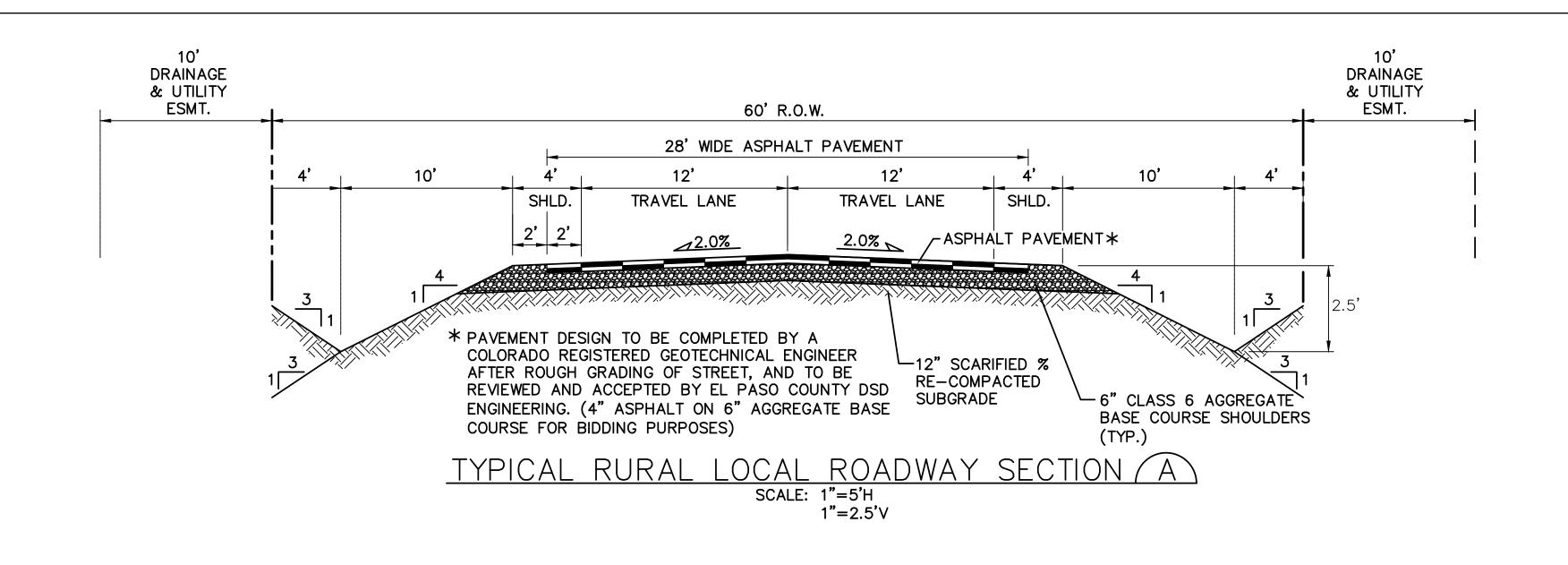
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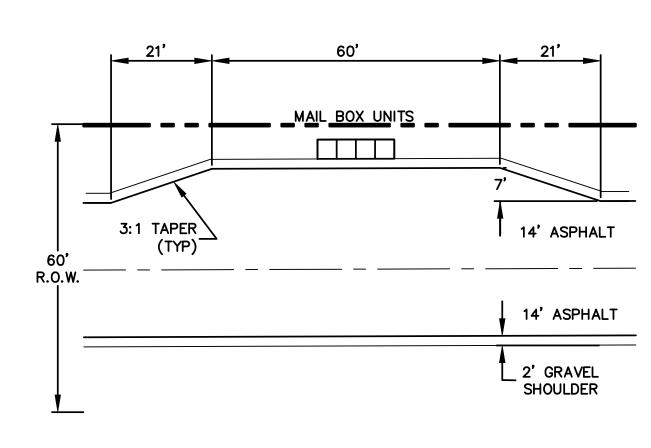
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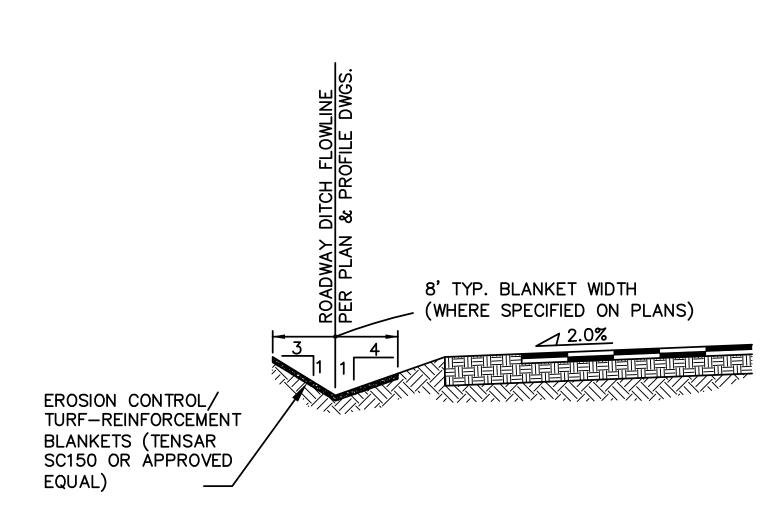
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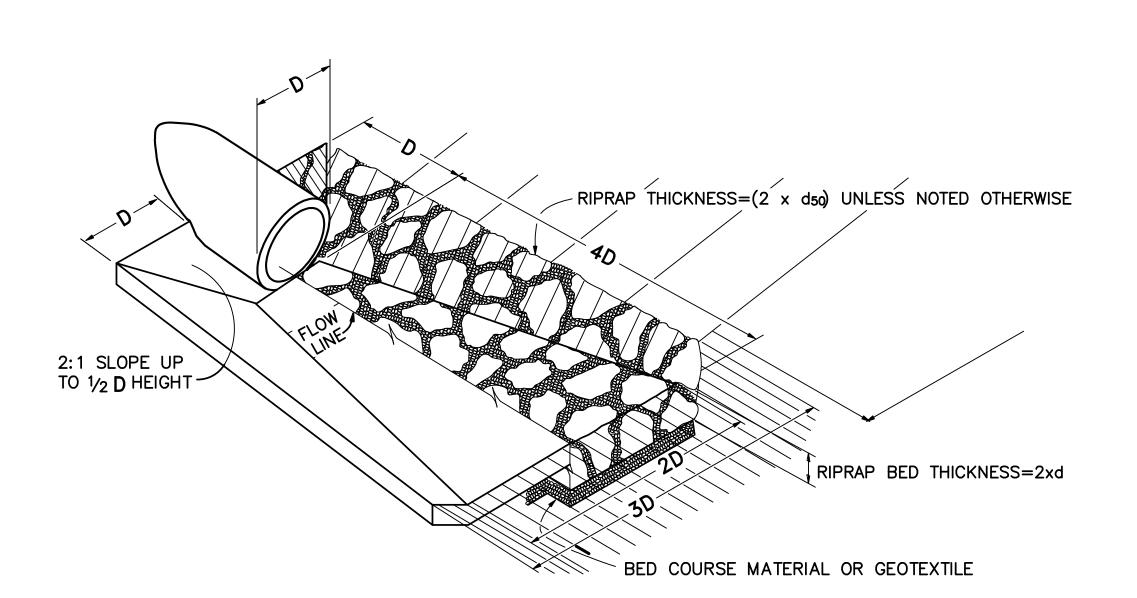


MAILBOX KIOSK DETAIL STA: 16+50 2

SCALE: 1" = 20'



TYPICAL DITCH SECTION WITH EROSION CONTROL BLANKETS B
SCALE : NTS



TYPICAL RIPRAP APRON/
CULVERT OUTLET PAVING 1

NOT TO SCALE

SETTLERS VIEW SUBDIVISION

ΒY	SdC	Sdf	Sdf	
REVISION	COUNTY COMMENTS	COUNTY COMMENTS	🔇 FINAL PLAT SUBMITTAL	
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ENGINEERING

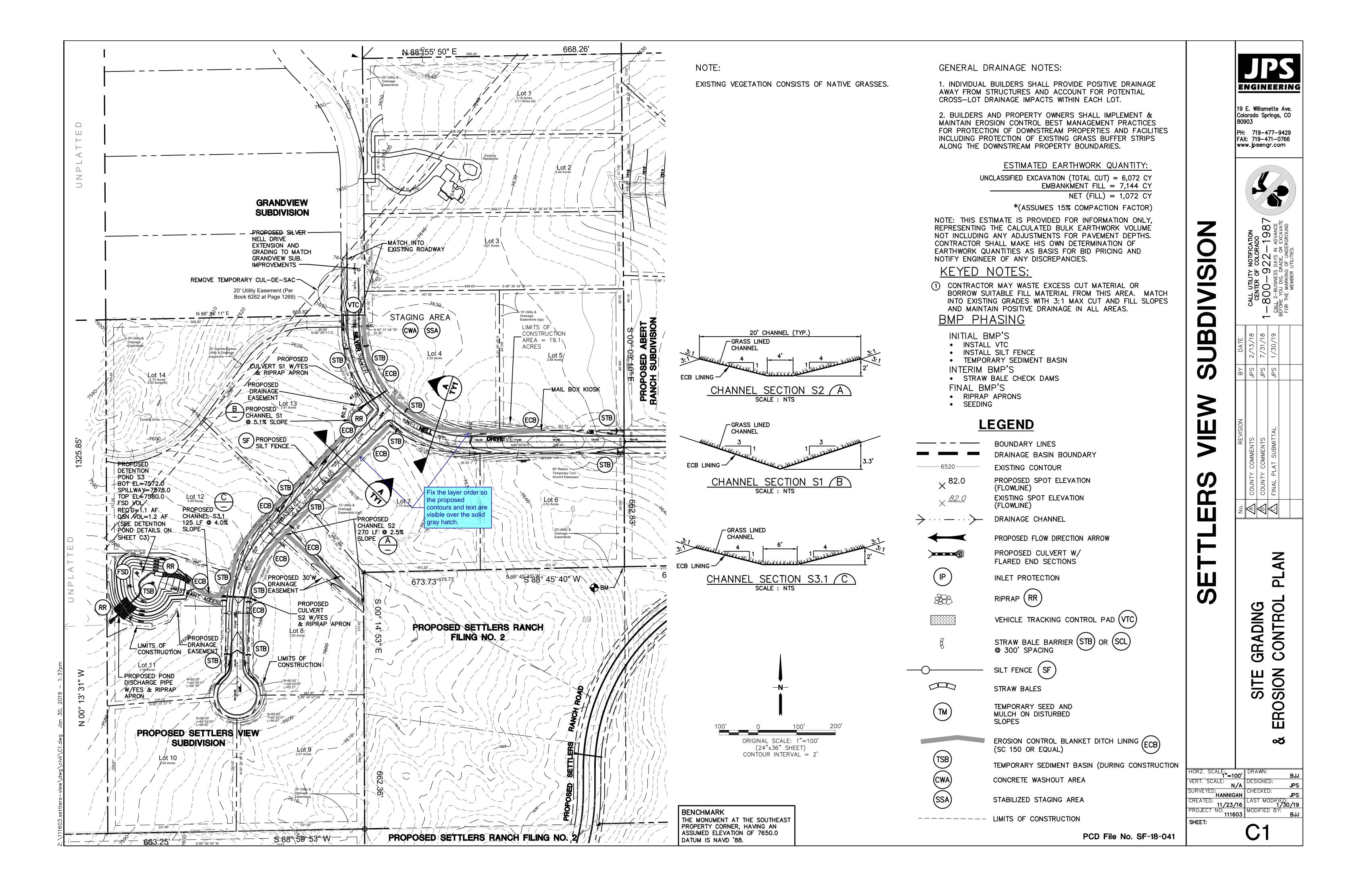
19 E. Willamette Ave.

Colorado Springs, CO 80903

PH: 719-477-9429 FAX: 719-471-0766 www.jpsengr.com

> TYPICAL SECTIONS AND DETAILS

	HORZ. SCALE: 1"=5'	DRAWN:
	VERT. SCALE: AS SHOWN	DESIGNED:
	SURVEYED: HANNIGAN	CHECKED:
	CREATED: 11/23/16	LAST MODIFIED:
	PROJECT NO: 111603	MODIFIED BY:
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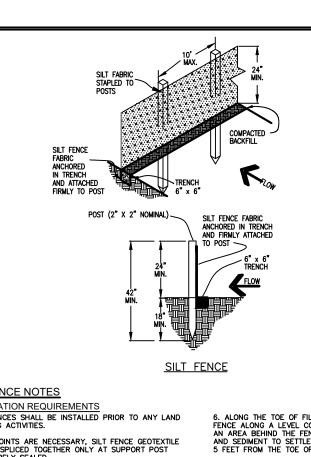
Standard Notes for El Paso County Grading and Erosion Control Plans

Revised 7/07/10

- 1. Construction may not commence until a Construction Permit is obtained from Planning and Community Development Department and a Preconstruction Conference is held with Planning and Community Development Department Inspectors.
- 2. Stormwater discharges from construction sites shall not cause or threaten to cause pollution, contamination, or degradation of State Waters. All work and earth disturbance shall be done in a manner that minimizes pollution of any on-site or off site waters, including wetlands.
- 3. Notwithstanding anything depicted in these plans in words or graphic representation, all design and construction related to roads, storm drainage and erosion control shall conform to the standards and requirements of the most recent version of the relevant adopted El Paso County standards, including the Land Development Code, the Engineering Criteria Manual, the Drainage Criteria Manual, and the Drainage Criteria Manual Volume 2. Any deviations to regulations and standards must be requested, and approved, in writing.
- 4. A separate Stormwater Management Plan (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 PCD inspections staff.
- 6. Soil erosion control measures for all slopes, channels, ditches, or any disturbed land area shall be completed within 21 calendar days after final grading, or final earth disturbance, has been completed. Disturbed areas and stockpiles which are not at final grade but will remain dormant for longer than 30 days shall also be mulched within 21 days after interim grading. An area that is going to remain in an interim state for more than 60 days shall also be seeded. All temporary soil erosion control measures and BMPs shall be maintained until permanent soil erosion control measures are implemented and established.
- 7. Temporary soil erosion control facilities shall be removed and earth disturbance areas graded and stabilized with permanent soil erosion control measures pursuant to standards and specification prescribed in the DCM Volume II and the Engineering Criteria Manual (ECM) appendix I.
- 8. All persons engaged in earth disturbance shall implement and maintain acceptable soil erosion and sediment control measures including BMPs in conformance with the erosion control technical standards of the Drainage Criteria Manual (DCM) Volume II and in accordance with the Stormwater Management Plan (SWMP).
- 9. All temporary erosion control facilities including BMPs and all permanent facilities intended to control erosion of any earth disturbance operations, shall be installed as defined in the approved plans, the SWMP and the DCM Volume II and maintained throughout the duration of the earth
- 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
- 11. Any temporary or permanent facility designed and constructed for the conveyance of stormwater around, through, or from the earth disturbance area shall be designed to limit the discharge to a non-erosive velocity.
- 12. Concrete wash water shall be contained and disposed of in accordance with the SWMP. No wash water shall be discharged to or allowed to runoff to State Waters, including any surface or subsurface storm drainage system or facilities.
- 13. Erosion control blanketing is to be used on slopes steeper than 3:1.
- 14. Building, construction, excavation, or other waste materials shall not be temporarily placed or stored in the street, alley, or other public way, unless in accordance with an approved Traffic Control Plan. BMP's may be required by El Paso County Engineering if deemed necessary, based on specific conditions and circumstances.
- 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
- 17. The owner, site developer, contractor, and/or their authorized agents shall be responsible for the removal of all construction debris, dirt, trash, rock, sediment, and sand that may accumulate in the storm sewer or other drainage conveyance system and stormwater appurtenances as a result of site development.
- 18. The quantity of materials stored on the project site shall be limited, as much as practical, to that quantity required to perform the work in an orderly sequence. All materials stored on-site shall be stored in a neat, orderly manner, in their original containers, with original manufacturer's labels.
- 19. No chemicals are to be used by the contractor, which have the potential to be released in stormwater unless permission for the use of a specific chemical is granted in writing by the ECM Administrator. In granting the use of such chemicals, special conditions and monitoring may be required.
- 20. Bulk storage structures for petroleum products and other chemicals shall have adequate protection so as to contain all spills and prevent any spilled material from entering State Waters, including any surface or subsurface storm drainage system or facilities.
- 21. No person shall cause the impediment of stormwater flow in the flow line of the curb and gutter or in the ditchline.
- 22. Individuals shall comply with the "Colorado Water Quality Control Act" (Title 25, Article 8, CRS), and the "Clean Water Act" (33 USC 1344), in addition to the requirements included in the DCM Volume II and the ECM Appendix I. All appropriate permits must be obtained by the contractor prior to construction (NPDES, Floodplain, 404, fugitive dust, etc.). In the event of conflicts between these requirements and laws, rules, or regulations of other Federal, State, or County agencies, the more restrictive laws, rules, or regulations shall apply.
- 23. All construction traffic must enter/exit the site at approved construction access points.
- 24. Prior to actual construction the permitee shall verify the location of existing utilities.
- 25. A water source shall be available on site during earthwork operations and utilized as required to minimize dust from earthwork equipment and wind.
- 26. The soils report for this site shall be considered a part of these plans.
- 27. At least ten days prior to the anticipated start of construction, for projects that will disturb 1 acre or more, the owner or operator of construction activity shall submit a permit application for stormwater discharge to the Colorado Department of Public Health and Environment, Water Quality Division. The application contains certification of completion of a stormwater management plan (SWMP), of which this grading and erosion control plan may be a part. For information or application materials contact:

Colorado Department of Public Health and Environment Water Quality Control Division **WQCD** - Permits 4300 Cherry Creek Drive South Denver, CO 80246-1530 Attn: Permits Unit

NOTWITHSTANDING ANY DETAILS, NOTES OR PLANS SHOWN ON THESE DRAWINGS, ALL EROSION CONTROL DESIGNS AND INSTALLATIONS SHALL CONFORM TO EL PASO COUNTY STANDARDS AND POLICIES UNLESS OTHERWISE APPROVED IN WRITING.



ILT FENCE NOTES INSTALLATION REQUIREMENTS

I. SILT FENCES SHALL BE INSTALLED PRIOR TO ANY LAND
DISTURBING ACTIVITIES. . METAL POSTS SHALL BE "STUDDED TEE" OR "U" TYPE ITH MINIMUM WEIGHT OF 1.33 POUNDS PER LINEAR FOOT. OOD POSTS SHALL HAVE A MINIMUM DIAMETER OR CROSS ECTION DIMENSION OF 2 INCHES. 4. THE FILTER MATERIAL SHALL BE FASTENED SECURELY TO METAL OR WOOD POSTS USING WIRE TIES, OR TO WOOD STS WITH 3/4" LONG #9 HEAVY—DUTY STAPLES. THE T FENCE GEOTEXTILE SHALL NOT BE STAPLED . WHILE NOT REQUIRED, WIRE MESH FENCE MAY BE USED O SUPPORT THE GEOTEXTILE. WIRE FENCE SHALL BE ASTENED SECURELY TO THE UPSLOPE SIDE OF THE POSTS USING HEAVY-DUTY WIRE STAPLES AT LEAST 3/4" LONG, TIE WIRES OR HOG RINGS. THE WIRE SHALL EXTENDINTO THE TRENCH A MINIMUM OF 6" AND SHALL NOT EXTEND MORE THAN 3' ABOVE THE ORIGINAL GROUND SURFACE.

City of Colorado Springs Stormwater Quality

INSTALLATION REQUIREMENTS

1. STRAW BALE BARRIERS SHALL BE INSTALLED PRIOR TO ANY LAND DISTURBING ACTIVITIES.

3. BALES ARE TO BE PLACED IN A SINGLE ROW WITH THE END OF THE BALES TIGHTLY ABUTTING ONE ANOTHER.

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.

City of Colorado Springs

INSTALLATION REQUIREMENTS

. THE OUTLET OF THE BASIN SHALL BE DESIGNED O DRAIN ITS VOLUME IN 40 HOURS.

BASIN. BAFFLES MAY BE NEEDED TO INCREASE THE FLOW LENGTH AND SETTLING TIME.

6. EMBANKMENT IS TO BE COMPACTED TO AT LEAST 90% OF MAXIMUM DENSITY AND WITHIN 2% OF OPTIMUM MOISTURE CONTENT ACCORDING TO ASTM D 698.

7. WHEN A BASIN IS INSTALLED NEAR A RESIDENTIAL AREA, FOR SAFETY REASONS, A SIGN SHALL BE POSTED AND THE AREA SECURED WITH A

City of Colorado Springs

Stormwater Quality

B" (OR LARGER) PVC 90° ELBOW

STRAW BALE BARRIER

SEDIMENT BASIN

SEDMENT BASIN NOTES

7. THE HEIGHT OF THE SILT FENCE FROM THE GROUND SURFACE SHALL BE MINIMUM OF 24 INCHES AND SHALL NOT EXCEED 36 INCHES; HIGHER FENCES MAY INPOUND VOLUMES OF WATER SUFFICIENT TO CAUSE FAILURE OF THE STRUCTURE. Silt Fence

Figure VT-2 Vehicle Tracking City of Colorado Springs Stormwater Quality Application Examples

MAINTENANCE REQUIREMENTS

1. REGULAR INSPECTIONS ARE TO BE MADE OF ALL STABILIZED AREAS, ESPECIALLY AFTER STORM

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.

5. OTHER ASSOCIATED SEDIMENT CONTROL MEASURES ARE TO BE INSPECTED TO ENSURE GOOD WORKING

STORM SEWER INLET PROTECTION IS TO BE IN PLACE, INSPECTED, AND CLEANED IF NECESSARY.

MAINTENANCE REQUIREMENTS 1. REGULAR INSPECTIONS ARE TO BE MADE OF ALL CHECK DAMS, ESPECIALLY AFTER STORM EVENTS.

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. WHEN CHECK DAMS ARE REMOVED THE CHANNEL LINING OR VEGETATION IS TO BE RESTORED.

Check Dam

<u>PLAN</u>

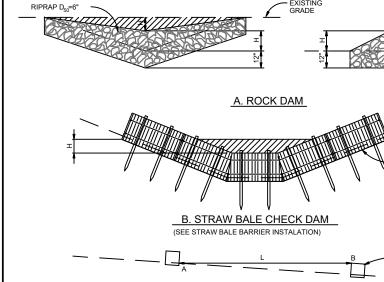
SECTION

VEHICLE TRACKING

VEHICLE TRACKING NOTES

1. ALL ENTRANCES TO THE CONSTRUCTION SITE ARE TO BE STABILIZED PRIOR TO CONSTRUCTION

INSTALLATION REQUIREMENTS



L= THE DISTANCE SUCH THAT POINTS A AND B ARE AT THE SAME ELEVATION.

4. STRAW BALE BARRIERS SHALL BE REMOVED WHEN ADEQUATE VEGETATIVE COVER IS ATTAINED AS APPROVED BY THE CITY. 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

Figure SBB-2

Straw Bale Barrier

Construction Detail and Maintenand Requirements

MAINTENANCE REQUIREMENTS

| DESIGN VOLUME=1.2 AF

W/3 COLUMNS OF 5/8" HOLES

Sediment Basin

Construction Detail and Maintenance Requirements

8" RISER

INV=7572.0

TOP=7578.0

City of Colorado Springs Stormwater Quality

Construction Detail and Maintenand Requirements

C. SPACING CHECK DAMS

CHECK DAM

CHECK DAM NOTES

SEEDING MIX:

PERIODIC SITE INSPECTIONS

SEEDING MIX:		AMOUNT IN PLS
<u>GRASS</u>	VARIETY	LBS. PER ACRE
CRESTED WHEAT GRASS PERENIAL RYE WESTERN WHEATGRASS SMOOTH BROME GRASS SIDEOATS GRAMA	LINN	2.0 LBS. 3.0 LBS.

TOTAL: 16.5 LBS.

SEEDING & FERTILIZER APPLICATION: DRILL SEED OR HYDRO-SEED PER

CDOT SPEC. SECTION 212.

CONFORM TO CDOT MULCHING APPLICATION: SPEC-SECTION 213.

SEDIMENT CONTROL MAINTENANCE PROGRAM:

FREQUENCY BI-WEEKLY

APRIL, 2019

WITHIN 21 DAYS OF GRADING RE-VEGETATION OF EXPOSED SOILS SEDIMENT REMOVAL FROM BMP'S REMOVAL OF BMP'S AFTER STABILIZATION ACHIEVED

1 AND AFTER ANY PRECIPITATION OR SNOW MELT EVENT THAT CAUSES SURFACE EROSION.

2ACCUMULATED SEDIMENT AND DEBRIS SHALL BE REMOVED WHEN THE SEDIMENT LEVEL REACHES ONE HALF THE HEIGHT OF THE BMP OR AT ANY TIME THAT SEDIMENT OR DEBRIS ADVERSELY IMPACTS THE FUNCTION OF THE BMP.

ESTIMATED TIME SCHEDULE:

INSTALL BMP'S ROADWAY GRADING SEPTEMBER, 2019 SEEDING & MULCHING SEPTEMBER, 2020 STABILIZATION

19 E. Willamette Ave. Colorado Springs, CO

PH: 719-477-9429





COLORADO

COLORADO

22-198

DAYS IN ADVAN

RADE, OR EXCAV

OF UNDERGROUP

UTILITIES. FP O SSI CALL UTILITY
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$\overline{\mathbb{R}}$	COUNTY COMMENTS	Sdf	JPS 7/31/18	
\bigcirc	FINAL PLAT SUBMITTAL	SdC	JPS 1/30/19	

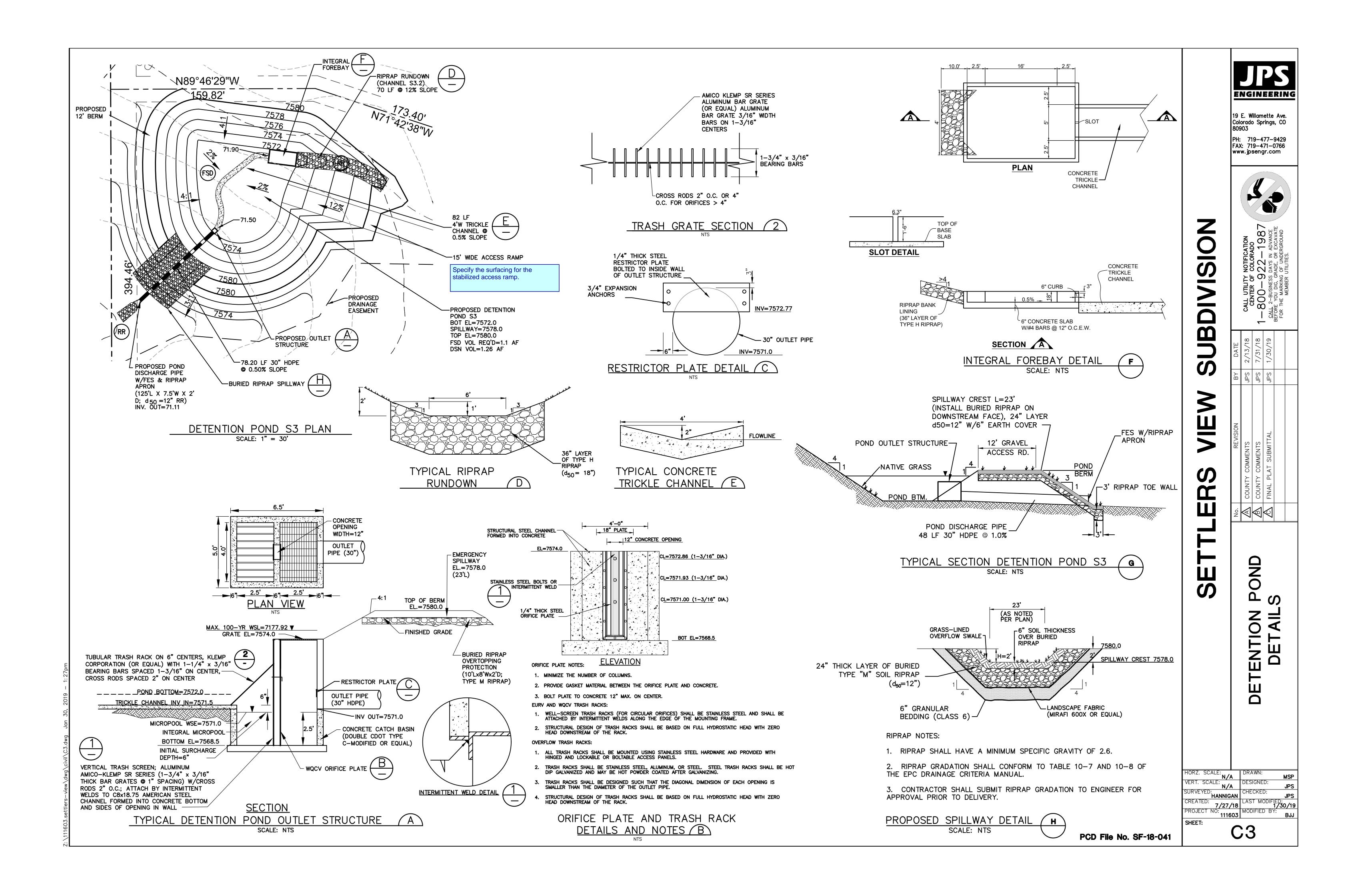
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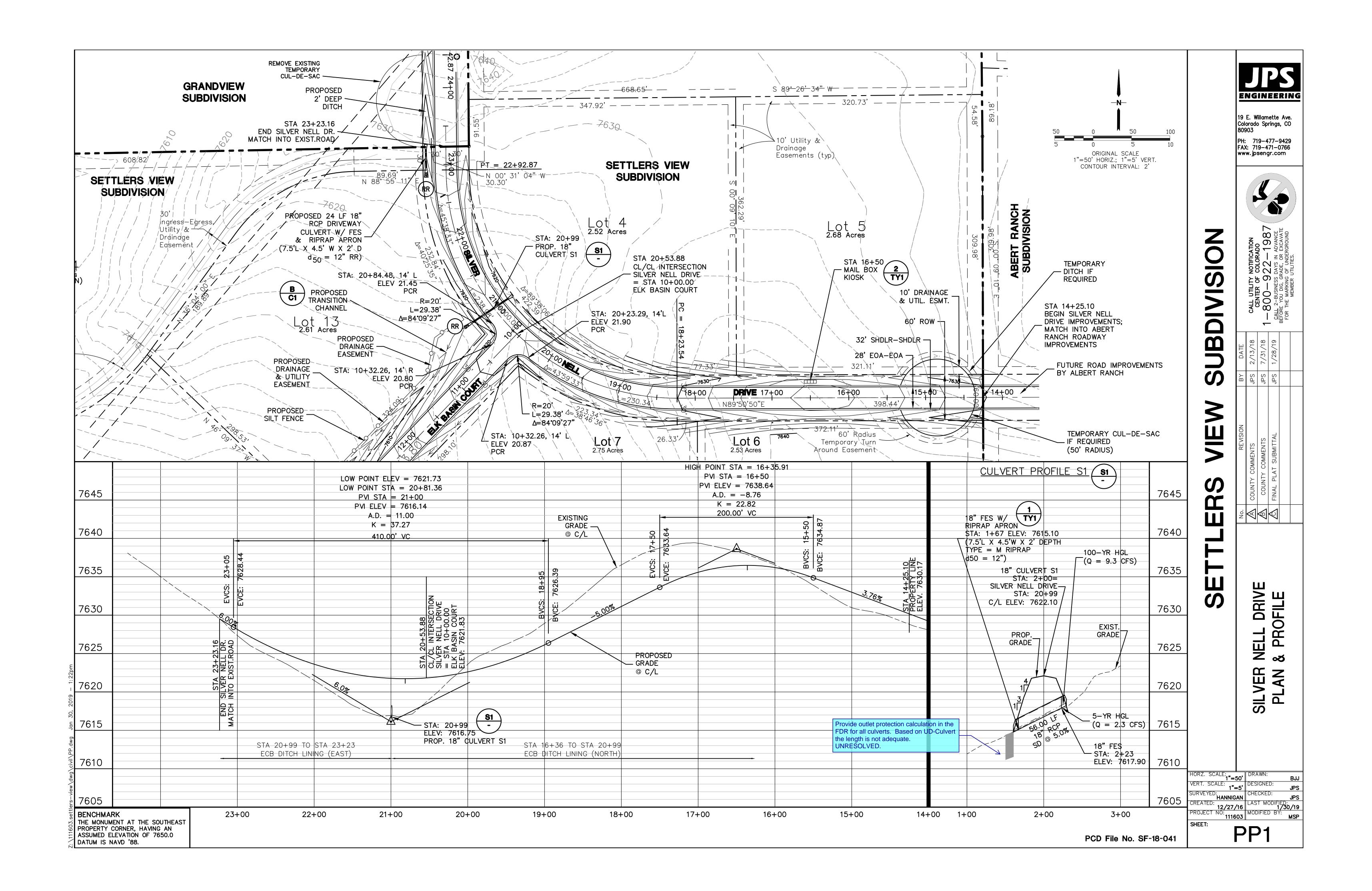
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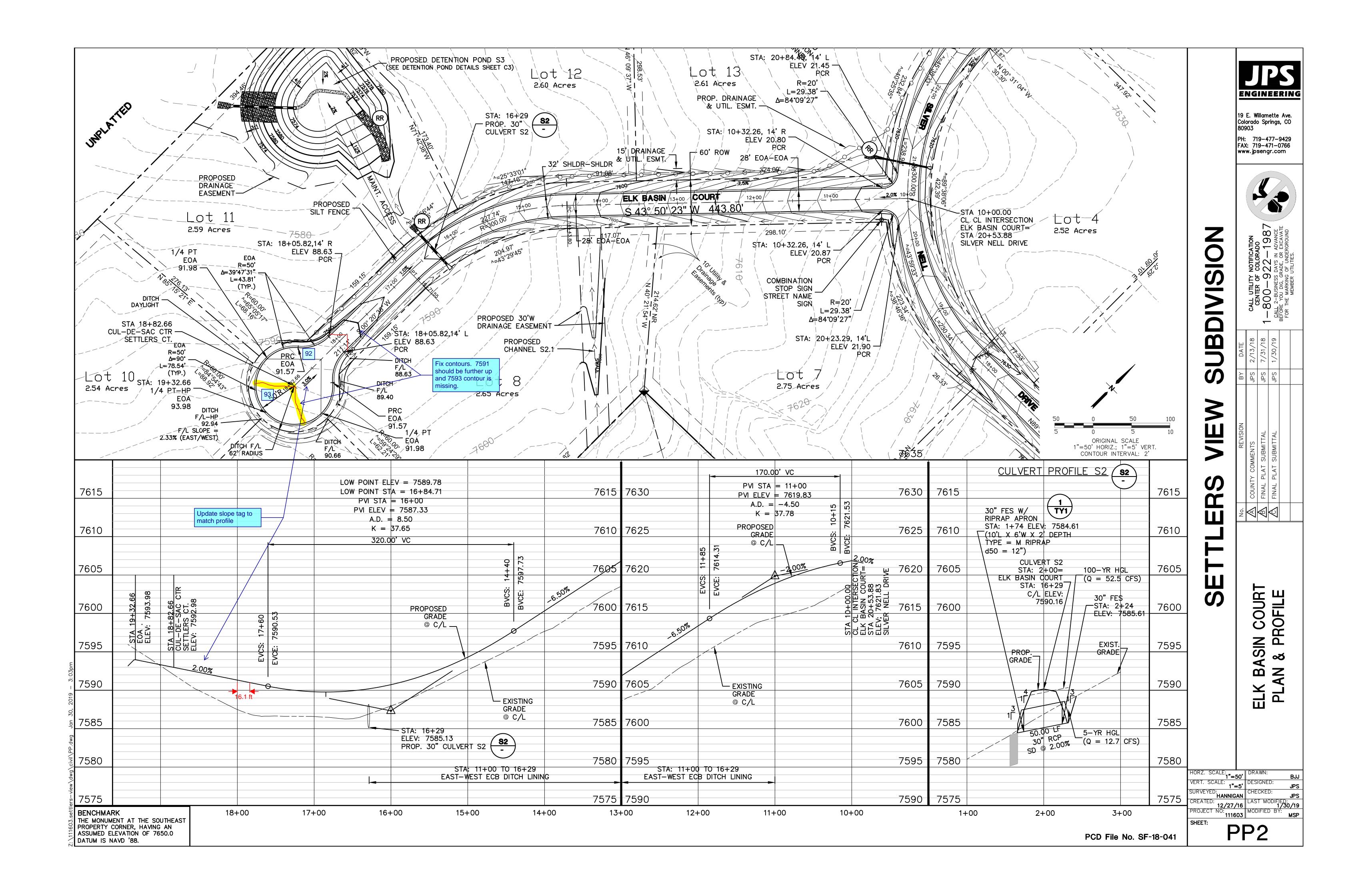
PCD File No. SF-18-041

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. flow. Use check slots every City of Colorado Springs Erosion Control Blanket
Application Examples Storm Water Quality

7/26/18 LAST MODIFIED BY:
PROJECT NO: MODIFIED BY:







Markup Summary

dsdlaforce (12) Subject: Callout Fix the layer order so the proposed contours and Page Label: 4 text are visible over the solid gray hatch. Author: dsdlaforce Date: 2/13/2019 4:20:13 PM Color: Subject: Callout Provide outlet protection calculation in the FDR for Page Label: 7 all culverts. Based on UD-Culvert the length is not Author: dsdlaforce adequate. Date: 2/13/2019 4:47:13 PM UNRESOLVED. Color: Subject: Length Measurement 16.1 ft Page Label: 8 Author: dsdlaforce Date: 2/14/2019 1:40:40 PM Color: Subject: Highlight Page Label: 8 Author: dsdlaforce Date: 2/14/2019 1:42:59 PM Color: Subject: Pen 7 Page Label: 8 Author: dsdlaforce Date: 2/14/2019 1:43:13 PM Color: Subject: Text Box 93 Page Label: 8 Author: dsdlaforce Date: 2/14/2019 1:43:43 PM Color: Subject: Text Box 92 Page Label: 8 Author: dsdlaforce Date: 2/14/2019 1:43:54 PM Color: Subject: Pen Page Label: 8 Author: dsdlaforce Date: 2/14/2019 1:45:54 PM Color:



Subject: Pen Page Label: 8 Author: dsdlaforce

Date: 2/14/2019 1:45:56 PM

Color:



Subject: Callout Page Label: 8 Author: dsdlaforce Date: 2/14/2019 1:46:26 PM

Color:



Subject: Callout Page Label: 8 Author: dsdlaforce

Color:

Update slope tag to match profile

Fix contours. 7591 should be further up and 7593

contour is missing.



Subject: Text Box Page Label: 6 Author: dsdlaforce

Date: 2/14/2019 2:23:18 PM

Date: 2/14/2019 1:47:01 PM

Color:

Specify the surfacing for the stabilized access

ramp.