# BENCHMARKS

PROJECT BENCHMARK: THE PUBLISHED VALUES OF COLORADO SPRINGS UTILITIES FIMS MONUMENT "F 81". EL=6272.26 (NGVD29)

SITE BENCHMARK: A CHISELED "X" CUT IN SOUTH EDGE OF THE CONCRETE ISLAND NORTH OF THE MALL. CONTROL POINT #100. EL=6268.47' (NGVD29)

### BASIS OF BEARINGS

BASIS OF BEARINGS: BEARINGS ARE BASED ON THE NORTH LINE OF SECTION 17 TOWNSHIP 14 SOUTH, RANGE 65 WEST OF THE 6TH PRINCIPAL MERIDIAN; BEING MONUMENTED ON THE WEST END BY A 3.25" ALUMINUM CAP STAMPED "PLS 22573" AND ON THE EAST END BY A 3.25" ALUMINUM CAP STAMPED "LS 13830", BEARING N89°43'09"E WITH A DISTANCE OF 2651.73 FEET. UNITS SHOWN ARE IN US SURVEY FEET.

### FLOOD ZONE:

THIS PROPERTY IS IN FLOOD ZONE "X", AREAS DETERMINED TO BE OUTSIDE 500-YEAR FLOODPLAIN, ACCORDING TO FEMA FLOOD INSURANCE RATE MAP 08041C0754 F WITH AN EFFECTIVE DATE OF MARCH 17. 1997

### LEGAL DESCRIPTION

A TRACT OF LAND LOCATED IN SECTION 17, TOWNSHIP 14 SOUTH, RANGE 65 WEST OF THE SIXTH PRINCIPAL MERIDIAN, COUNTY OF EL PASO, STATE OF COLORADO, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE NORTHWEST CORNER OF SAID SECTION 17, MONUMENTED BY A 3.25" ALUMINUM CAP "PLS 22573", FROM WHICH THE NORTH QUARTER CORNER MONUMENTED BY A 3.25" ALUMINUM CAP STAMPED "LS 13830", BEARS N89'43'09"E, A DISTANCE OF 2651.73 FEET (BASIS OF BEARINGS); THENCE ALONG THE NORTH LINE OF THE NORTHWEST QUARTER OF SAID SECTION 17, N89'43'09"E, A DISTANCE OF 215.38 FEET; THENCE SO0°16'51"E, A DISTANCE OF 50.00 FEET TO THE NORTHWESTERLY CORNER OF AN UNPLATTED LOT AS DEPICTED AT RECEPTION NUMBER 201095074 AND THE POINT OF BEGINNING: THENCE FROM THE POINT OF BEGINNING, N89'43'09"E, A DISTANCE OF 194.35 FEET, PARALLEL WITH SAID NORTH LINE, TO THE NORTHWEST CORNER OF LOT 1, SPACE VILLAGE FILING NO. 2 AS DEPICTED IN PLAT BOOK B4 PAGE 177; THENCE SOO'16'19"E, A DISTANCE OF 160.89 FEET, DEPARTING SAID NORTH LINE. ALONG THE WEST LINE OF SAID LOT 1. TO THE SOUTHWEST CORNER OF SAID LOT 1; THENCE N89'44'22"E, A DISTANCE OF 124.49 FEET, ALONG THE SOUTH LINE OF SAID LOT 1, TO A POINT ON THE WEST LINE OF AN UNPLATTED LOT AS DEPICTED AT RECEPTION NUMBER 204188107; THENCE SOO'26'52"E, A DISTANCE OF 128.86 FEET, ALONG THE WEST LINE OF SAID UNPLATTED LOT. TO THE NORTHEASTERLY CORNER OF COWPERWOOD SAIC AS DEPICTED AT RECEPTION NUMBER 205122346; THENCE S53°13'42"W, A DISTANCE OF 455.13 FEET, ALONG THE NORTHWEST LINE OF SAID COWPERWOOD SAIC, TO THE SOUTHEAST CORNER OF PETERSON OFFICE PROJECT AS DEPICTED IN PLAT BOOK D4, PAGE 129; THENCE N33'32'13"W, A DISTANCE OF 89.69 FEET, ALONG THE EASTERLY LINE OF SAID PETERSON OFFICE PROJECT;

THENCE N53°29'26"E, A DISTANCE OF 75.71 FEET, ALONG THE

- NORTHEASTERLY LINE OF SAID PETERSON OFFICE PROJECT; THENCE ALONG THE NORTHERLY LINE OF SAID PETERSON OFFICE PROJECT THE FOLLOWING THREE (3) COURSES:
- 1. S89"11'03"W, A DISTANCE OF 5.73 FEET;
- 2.N53°21'20"E. A DISTANCE OF 0.81 FEET;
- 3.S89'16'39"W, A DISTANCE OF 142.27 FEET, TO THE NORTHWEST CORNER OF SAID PETERSON OFFICE PROJECT AND TO THE EASTERLY RIGHT OF WAY OF PETERSON ROAD;

THENCE NO0'43'21"W, A DISTANCE OF 241.44 FEET, ALONG SAID RIGHT OF WAY THENCE N42°20'43"E, A DISTANCE OF 271.74 FEET. TO THE POINT OF

BEGINNING: CONTAINING 4.132 ACRES OR 180.028 SQUARE FEET MORE OR LESS

1. Include the construction details for the underground water quality/detention facility as part of the Grading and Erosion Control Plan set.

### 2. Include a sheet index

3. Include Point of Contact Information such as the Owner, Design Engineer, Contractor, EPC Planning and Community Development, Utility Companies, etc.

# GRADING AND FROSION CONTROL PLAN SPACE VILLAGE FILING NO. 3 Replace with the Design Engineer name and P.E Number O Harding N Replace with actual information Bestway Transfer O Title Name, **Business Name** Include "El Paso County, Colorado" as Covert Ops Paintball O Addre a subheader Add as a third paragraph 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 VICINITY MAP NOT TO SCALE CONSTRUCTION & EROSION CONTROL SCHEDULE: Replace with: Jennifer Irvine, P.E. SILT FENCE SHALL BE INSTALLED IN THE PROPOSED LOCATIONS FOR PERIMETER County Engineer/ECM Administrator CONTROL. THE TEMPORARY SEDIMENT BASINS SHALL BE INSTALLED.

- 2. DEMOLITION, CLEARING AND GRUBBING SHALL BE COMPLETED.
- 3. SITE GRADING SHALL BE COMPLETED AND FOLLOWED UP BY UTILITY AND PAVING CONSTRUCTION ALONG WITH REDISTRIBUTION OF STRIPPINGS. IF UTILITY AND PAVING CONSTRUCTION IS DELAYED, TEMPORARY COVER CROP SHALL BE SEEDED.
- 4. ONCE STORM SEWER IS FINISHED, INLET PROTECTION SHALL BE INSTALLED.
- 5. EROSION CONTROL SHALL BE INSPECTED AND MAINTAINED UNTIL FINAL GRADING, LANDSCAPING AND STABILIZATION IS ACHIEVED. ONCE FINAL STABILIZATION HAS BEEN ACHIEVED, SEDIMENT CONTROLS SHALL BE REMOVED.

### **GENERAL EROSION CONTROL NOTES:**

- ANY LAND DISTURBANCE BY ANY OWNER, DEVELOPER, BUILDER, CONTRACTOR, OR OTHER PERSON SHALL COMPLY WITH THE BASIC GRADING, EROSION AND STORMWATER QUALITY CONTROL REQUIREMENTS AND GENERAL PROHIBITIONS NOTED IN THE DRAINAGE CRITERIA MANUAL VOLUME II.
- 2. SEDIMENT (MUD AND DIRT) TRANSPORTED ONTO A PUBLIC ROAD, REGARDLESS OF THE SIZE OF THE SITE. SHALL BE CLEANED IMMEDIATELY.
- 3. CONCRETE WASH WATER SHALL NOT BE DISCHARGED TO OR ALLOWED TO RUNOFF TO STATE WATERS, INCLUDING ANY SURFACE OR SUBSURFACE STORM DRAINAGE SYSTEM OR FACILITIES.
- 4. SOIL EROSION CONTROL MEASURES FOR ALL SLOPES, CHANNELS, DITCHES, OR ANY DISTURBED LAND AREA SHALL BE COMPLETED WITHIN TWENTY-ONE (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 THIRTY (30) DAYS SHALL ALSO BE MULCHED WITHIN TWENTY-ONE (21) DAYS AFTER INTERIM GRADING. AN AREA THAT IS GOING TO REMAIN IN AN INTERIM STATE FOR MORE THAN SIXTY (60) DAYS SHALL ALSO BE SEEDED. ALL TEMPORARY SOIL EROSION CONTROL MEASURES AND BMP'S SHALL BE MAINTAINED UNTIL PERMANENT SOIL EROSION CONTROL MEASURES ARE IMPLEMENTED.
- 5. THE PLAN SHALL NOT SUBSTANTIALLY CHANGE THE DEPTH OF COVER, OR ACCESS EXISTING UTILITY LINES. ACCEPTANCE OF THIS PLAN DOES NOT CONSTITUTE APPROVAL TO GRADE IN ANY UTILITY EASEMENT OR RIGHT-OF-WAY. APPROVALS TO GRADE WITHIN UTILITY EASEMENTS MUST BE OBTAINED FROM THE APPROPRIATE UTILITY COMPANY. IT IS NOT PERMISSIBLE FOR ANY PERSON TO MODIFY THE GRADE OF THE EARTH ON ANY UTILITY EASEMENT OR UTILITY RIGHT-OF-WAY WITHOUT THEIR WRITTEN APPROVAL. THE PLAN SHALL NOT INCREASE OR DIVERT WATER TOWARDS UTILITY FACILITIES. ANY CHANGES TO EXISTING UTILITY FACILITIES TO ACCOMMODATE THE PLAN MUST BE APPROVED BY THE AFFECTED UTILITY OWNER PRIOR TO IMPLEMENTING THE PLAN. THE COST TO RELOCATE OR PROTECT EXISTING UTILITIES OR TO PROVIDE INTERIM ACCESS IS THE APPLICANT'S EXPENSE.

### GENERAL NOTES:

- 1. ALL DISTURBED AREAS NOT COVERED BY PAVEMENT OR SEED/MULCH SHALL BE PERMANENTLY LANDSCAPED ACCORDING TO THE LANDSCAPE PLAN.
- 2. SEEDED AREAS TO HAVE PBSI LOW GROW NATIVE MIX (40 POUNDS PER ACRE), CONSISTING OF 25% IDAHO FESCUE, 25% SANDBERG BLUEGRASS, 25% ROCKY MOUNTAIN FESCUE, AND 25% CANBY BLUEGRASS.
- 3. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THIS PLAN THROUGHOUT CONSTRUCTION AND PERFORMING INSPECTIONS/MAINTANCE PER THE CDPHE PERMIT, UNTIL SUCH TIME THE PERMIT IS CLOSED.
- 4. THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION AND EXISTING DRAWINGS. THE SURVEYOR MAKES NO GUARANTEES THAT THE UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN-SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED, ALTHOUGH THE SURVEYOR DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES. THIS INCLUDES PRIVATE AND PUBLIC UTILITIES.
- 5. STORMWATER QUALITY IS PROVIDED FOR THIS SITE VIA TWO DETENTION PONDS.
- 6. NO WETLANDS WERE OBSERVED WITHIN THE LIMITS OF CONSTRUCTION FOR THE PROJECT.
- 7. IF REQUIRED, THE CONTRACTOR SHALL OBTAIN ALL LOCAL AND STATE PERMITS AND AUTHORIZATION TO DISCHARGE DEWATERING ACTIVITIES. GROUNDWATER SHALL BE SAMPLED AND SENT TO AN APPROVED LABORATORY FOR TESTING PRIOR TO BEING DISCHARGED. TESTING SHALL BE IN ACCORDANCE WITH PERMIT FOR STORMWATER DISCHARGE.
- 8. DEDICATED ASPHALT OR CONCRETE BATCH PLANTS ARE NOT ANTICIPATED TO BE LOCATED ON THIS PROJECT SITE.
- 9. ALL EROSION CONTROL MEASURES TO BE INSTALLED PER DETAILS AND SPECIFICATIONS SHOWN WITHIN THESE PLANS OR THE STORMWATER MANAGEMENT PLAN (SWMP) REPORT.

SITE INFORMATION ANTICIPATED SITE GRADING MARCH 2018 START DATE ANTICIPATED SITE GRADING SEPTEMBER 2018 COMPLETION DATE FINAL STABILIZATION DATE OCTOBER 2018 TOTAL DISTURBED AREA 1.77 AC TOTAL SITE AREA 4.13 AC NRCS NAME - TRUCKTON SANDY LOAM SOIL INFORMATION (HYDROLOGIC GROUP A) WEL DRAINED SANDY TO COARSE SANDY LOAM FOUNTAIN CREEK RECEIVING WATERS

# EL PASO COUNTY NOTES

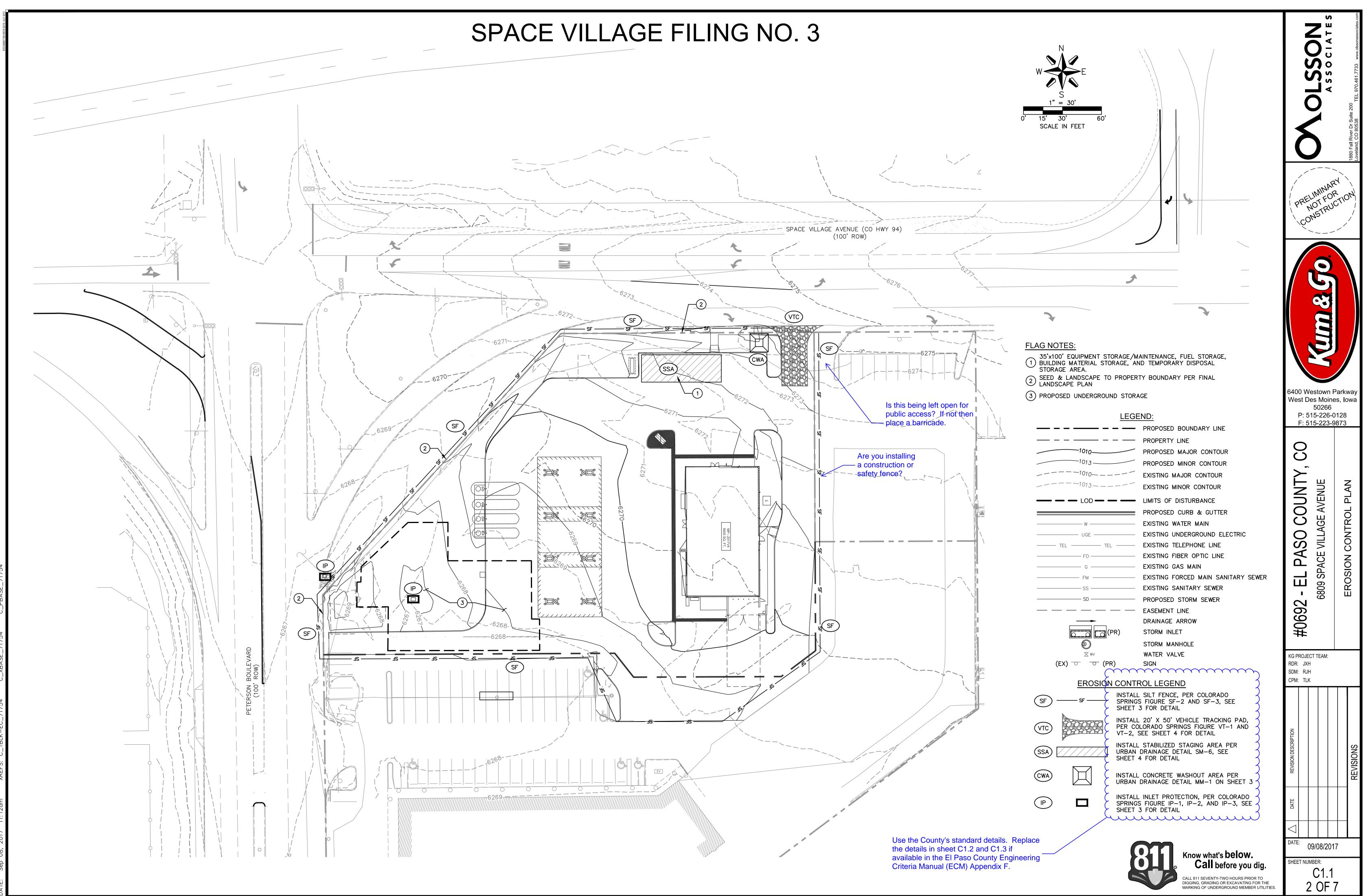
- CONSTRUCTION MAY NOT COMMENCE UNTIL A CONSTRUCTION PERMIT IS OBTAINED FROM DEVELOPMENT SERVICES AND A PRECONSTRUCTION CONFERENCE IS HELD WITH DEVELOPMENT SERVICES INSPECTIONS.
- 2. STORMWATER DISCHARGES FROM CONSTRUCTION SITES SHALL NOT CAUSE OR THREATEN TO CAUSE POLLUTION, CONTAMINATION, OR DEGRADATION OF STATE WATERS. ALL WORK AND EARTH DISTURBANCE SHALL BE DONE IN A MANNER THAT MINIMIZES POLLUTION OF ANY ON-SITE OR OFF SITE WATERS, INCLUDING WETLANDS.
- 3. NOTWITHSTANDING ANYTHING DEPICTED IN THESE PLANS IN WORDS OR GRAPHIC REPRESENTATION ALL DESIGN AND CONSTRUCTION RELATED TO ROADS, STORM DRAINAGE AND EROSION CONTROL SHALL CONFORM TO THE STANDARDS AND REQUIREMENTS OF THE MOST RECENT VERSION OF THE RELEVANT ADOPTED EL PASO COUNTY STANDARDS, INCLUDING THE LAND DEVELOPMENT CODE, THE ENGINEERING CRITERIA MANUAL, THE DRAINAGE CRITERIA MANUAL, AND THE DRAINAGE CRITERIA MANUAL VOLUME 2. ANY DEVIATIONS TO REGULATIONS AND STANDARDS MUST BE REQUESTED, AND APPROVED, IN WRITING.
- 4. A SEPARATE STORMWATER MANAGEMENT PLAN (SWMP) FOR THIS PROJECT SHALL BE COMPLETED AND AN EROSION AND STORMWATER QUALITY CONTROL PERMIT (ESQCP) ISSUED PRIOR TO COMMENCING CONSTRUCTION. DURING CONSTRUCTION THE SWMP IS THE RESPONSIBILITY OF THE DESIGNATED STORMWATER MANAGER, SHALL BE LOCATED ON SITE AT ALL TIMES AND SHALL BE KEPT UP TO DATE WITH WORK PROGRESS AND CHANGES IN THE FIELD.
- 5. ONCE THE ESQCP HAS BEEN ISSUED, THE CONTRACTOR MAY INSTALL THE INITIAL STAGE EROSION AND SEDIMENT CONTROL BMPS AS INDICATED ON THE GEC. A PRECONSTRUCTION MEETING BETWEEN THE CONTRACTOR, ENGINEER, AND EL PASO COUNTY WILL BE HELD PRIOR TO ANY CONSTRUCTION. IT IS THE RESPONSIBILITY OF THE APPLICANT TO COORDINATE THE MEETING TIME AND PLACE WITH COUNTY 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 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.

ENGINEER'S STATEMENT: THIS GRADING AND EROSION CONTROL PLAN WAS PREPARED UNDER MY DIRECTION AND SUPERVISION AND IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. SAID PLAN HAS BEEN PREPARED ACCORDING TO THE CRITERIA ESTABLISHED BY THE COUNTY FOR GRADING AND EROSION CONTROL PLANS. I ACCEPT RESPONSIBILITY FOR ANY LIABILITY CAUSED BY ANY NEGLIGENT ACTS, ERRORS OR OMISSIONS ON MY PART IN PREPARING THIS PLAN.		S S O C I A T E S	TEL 970.461.7733 www dissonassociates on
NAME DATE	5	<b>」</b> ∛ )	
OWNER'S STATEMENT:	5		1880 Fall River Dr Suite 200 Loveland, CO 80538
NAME DATE			
EL PASO COUNTY: COUNTY PLAN REVIEW IS PROVIDED ONLY FOR GENERAL CONFORMANCE WITH COUNTY DESIGN CRITERIA. THE COUNTY IS NOT RESPONSIBLE FOR THE ACCURACY AND ADEQUACY OF THE DESIGN, DIMENSIONS, AND/ OR ELEVATIONS WHICH SHALL BE CONFIRMED AT THE JOB SITE. THE COUNTY THROUGH THE APPROVAL OF THIS DOCUMENT ASSUMES NO RESPONSIBILITY FOR COMPLETENESS AND/ OR ACCURACY OF THIS DOCUMENT.	PREL	IMINAR OTFOR	TION
FILED IN ACCORDANCE WITH THE REQUIREMENTS OF THE EL PASO COUNTY LAND DEVELOPMENT CODE, DRAINAGE CRITERIA, AND ENGINEERING CRITERIA MANUAL AS AMENDED.			
TOMMY HOFF, P.E. COUNTY ENGINEER NOTICE: THIS PROPERTY MAY BE IMPACTED BY NOISE AND OTHER SIMILAR SENSORY EFFECTS OF FLIGHT		m&Go	
BY AIRCRAFT USED IN THE UNITED STATES AIR FORCE ACADEMY'S AIRMANSHIP PROGRAM. THIS NOTICE SHALL REMAIN IN EFFECT UNTIL THE AIR FORCE ACADEMY SHALL CEASE TO BE USED FOR FLIGHT TRAINING PURPOSES. THIS NOTICE SHALL RUN WITH THE LAND.			es, Iowa
<ol> <li>VEHICLE TRACKING OF SOILS AND CONSTRUCTION DEBRIS OFF-SITE SHALL BE MINIMIZED. MATERIALS TRACKED OFFSITE SHALL BE CLEANED UP AND PROPERLY DISPOSED OF IMMEDIATELY.</li> <li>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.</li> <li>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.</li> <li>THE QUANTITY OF MATERIALS STORED ON THE PROJECT SITE SHALL BE LIMITED, AS MUCH AS PRACITCAL, 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.</li> <li>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.</li> <li>BULK STORAGE STRUCTURES FOR PETROLEUM PRODUCTS AND OTHER CHEMICALS SHALL HAVE ADEQUATE PROTECTION SO AS TO CONTAIN ALL SPILLS AND PREVENT AMY SPILLED MATERIAL FROM ENTERING STATE WATERS, INCLUDING ANY SURFACE OR SUBSURFACE STORM DRAINAGE SYSTEM OR FACILITIES.</li> <li>NO PERSON SHALL CAUSE THE IMPEDIMENT OF STORMWATER FLOW IN THE FLOW LINE OF THE CURB AND GUTTER OR IN THE DITCHLINE.</li> <li>INDIVIDUALS SHALL CAUSE THE IMPEDIMENT OF STORMWATER FLOW IN THE FLOW LINE OF THE CURB AND GUTTER OR IN THE DITCHLINE.</li> <li>INDIVIDUALS SHALL COMPLY WITH THE 'COLORADO WATER QUALITY CONT</li></ol>	#0692 - EL PASO COUNTY, CO	6809 SPACE VILLAGE AVENUE	
23. ALL CONSTRUCTION TRAFFIC MUST ENTER/EXIT THE SITE AT APPROVED CONSTRUCTION ACCESS POINTS.	RDR: JXH SDM: RJH CPM: TLK		
24. PRIOR TO ACTUAL CONSTRUCTION THE PERMITEE SHALL VERIFY THE LOCATION OF EXISTING UTILITIES.			
25. A WATER SOURCE SHALL BE AVAILABLE ON SITE DURING EARTHWORK OPERATIONS AND UTILIZED AS REQUIRED TO MINIMIZE DUST FROM EARTHWORK EQUIPMENT AND WIND.			
26. THE SOILS REPORT FOR THIS SITE HAS BEEN PREPARED BY OLSSON ASSOCIATES AND SHALL BE CONSIDERED A PART OF THESE PLANS.	CRIPTION		
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:	E REVISION DESCRIPTION		REVISIONS
COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT WATER QUALITY CONTROL DIVISION WQCD – PERMITS 4300 CHERRY CREEK DRIVE SOUTH	DATE		
DENVER, CO 80246-1530 ATTN: PERMITS UNIT		9/08/201	<b>⊥</b> 7
Add "PCD Project No. PPR-17-041"	SHEET NUM	BER: <b>C0.0</b>	

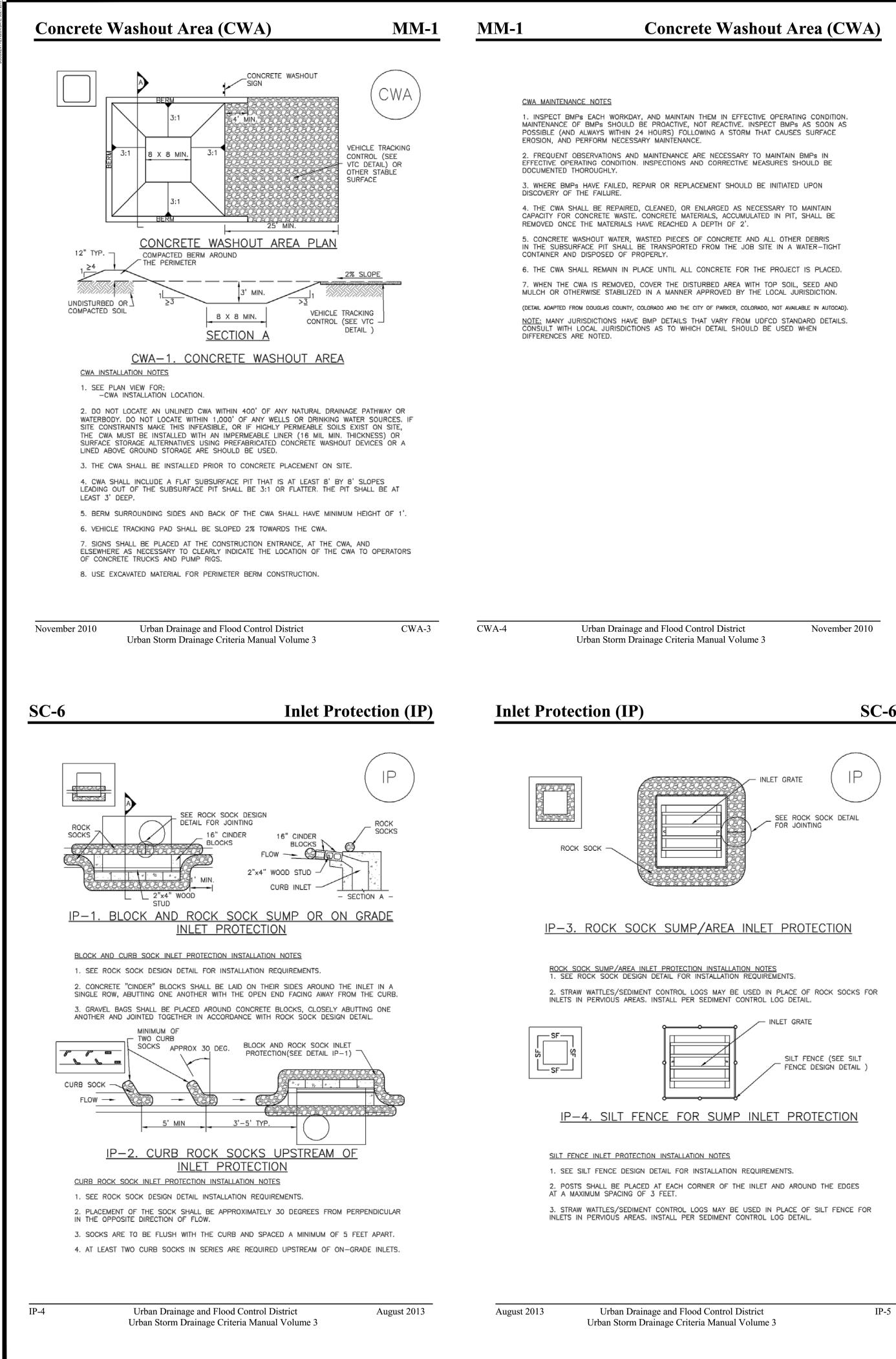
DIGGING, GRADING OR EXCAVATING FOR THE

MARKING OF UNDERGROUND MEMBER UTILITIES.

1 OF 1

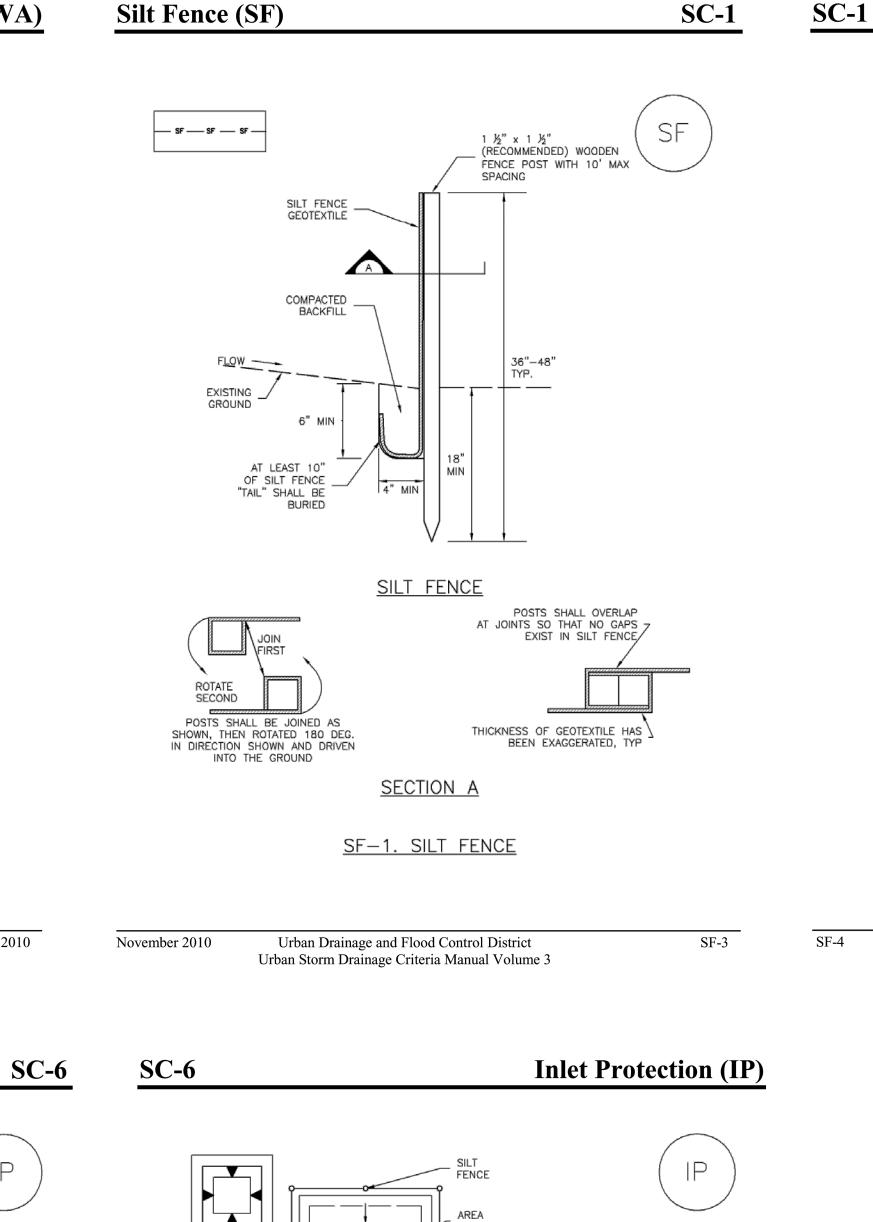


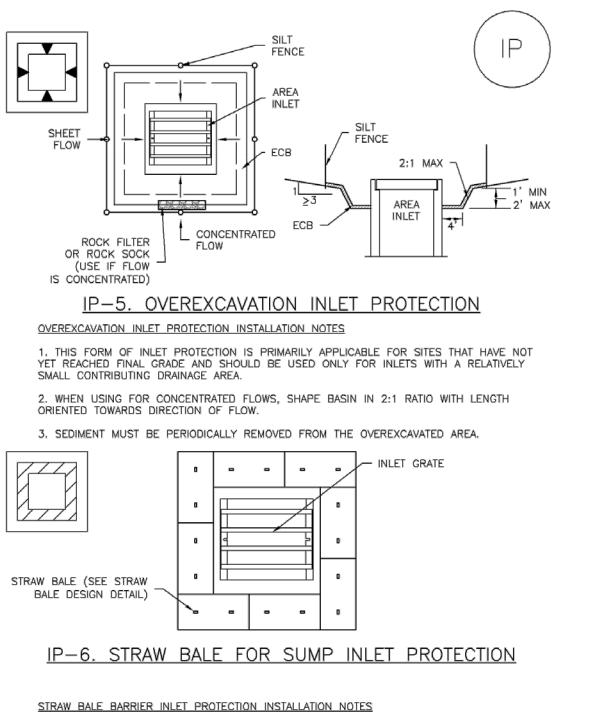
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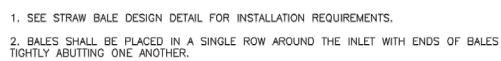


Silt Fence (SF)

**SC-1** 







IP-6

Urban Drainage and Flood Control District Urban Storm Drainage Criteria Manual Volume 3 August 2013

August 2013

DOCUMENTED THOROUGHLY.

# Silt Fence (SF)

SILT FENCE INSTALLATION NOTES

TRENCH BY HAND.

DOWN THE STAKE.

TEARING, OR COLLAPSE.

SEDIMENT CONTROL BMP.

DIFFERENCES ARE NOTED.

1. SILT FENCE MUST BE PLACED AWAY FROM THE TOE OF THE SLOPE TO ALLOW FOR WATER PONDING. SILT FENCE AT THE TOE OF A SLOPE SHOULD BE INSTALLED IN A FLAT LOCATION AT LEAST SEVERAL FEET (2-5 FT) FROM THE TOE OF THE SLOPE TO ALLOW ROOM FOR PONDING AND DEPOSITION.

2. A UNIFORM 6" X 4" ANCHOR TRENCH SHALL BE EXCAVATED USING TRENCHER OR SILT

FENCE INSTALLATION DEVICE. NO ROAD GRADERS, BACKHOES, OR SIMILAR EQUIPMENT SHALL BE USED.

3. COMPACT ANCHOR TRENCH BY HAND WITH A "JUMPING JACK" OR BY WHEEL ROLLING. COMPACTION SHALL BE SUCH THAT SILT FENCE RESISTS BEING PULLED OUT OF ANCHOR

4. SILT FENCE SHALL BE PULLED TIGHT AS IT IS ANCHORED TO THE STAKES. THERE SHOULD BE NO NOTICEABLE SAG BETWEEN STAKES AFTER IT HAS BEEN ANCHORED TO THE STAKES. 5. SILT FENCE FABRIC SHALL BE ANCHORED TO THE STAKES USING 1" HEAVY DUTY STAPLES OR NAILS WITH 1" HEADS. STAPLES AND NAILS SHOULD BE PLACED 3" ALONG THE FABRIC

6. AT THE END OF A RUN OF SILT FENCE ALONG A CONTOUR, THE SILT FENCE SHOULD BE TURNED PERPENDICULAR TO THE CONTOUR TO CREATE A "J-HOOK." THE "J-HOOK" EXTENDING PERPENDICULAR TO THE CONTOUR SHOULD BE OF SUFFICIENT LENGTH TO KEEP RUNOFF FROM FLOWING AROUND THE END OF THE SILT FENCE (TYPICALLY 10' - 20'). 7. SILT FENCE SHALL BE INSTALLED PRIOR TO ANY LAND DISTURBING ACTIVITIES.

SILT FENCE MAINTENANCE NOTES 1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION.

MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.

2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.

3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.

4. SEDIMENT ACCUMULATED UPSTREAM OF THE SILT FENCE SHALL BE REMOVED AS NEEDED TO MAINTAIN THE FUNCTIONALITY OF THE BMP, TYPICALLY WHEN DEPTH OF ACCUMULATED SEDIMENTS IS APPROXIMATELY 6".

5. REPAIR OR REPLACE SILT FENCE WHEN THERE ARE SIGNS OF WEAR, SUCH AS SAGGING,

6. SILT FENCE IS TO REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS STABILIZED AND APPROVED BY THE LOCAL JURISDICTION, OR IS REPLACED BY AN EQUIVALENT PERIMETER

7. WHEN SILT FENCE IS REMOVED, ALL DISTURBED AREAS SHALL BE COVERED WITH TOPSOIL, SEEDED AND MULCHED OR OTHERWISE STABILIZED AS APPROVED BY LOCAL JURISDICTION.

(DETAIL ADAPTED FROM TOWN OF PARKER, COLORADO AND CITY OF AURORA, NOT AVAILABLE IN AUTOCAD) NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN

> Urban Drainage and Flood Control District Urban Storm Drainage Criteria Manual Volume 3

November 2010

**SC-6** 

# **Inlet Protection (IP)**

FLOW ----D (12" MIN.) -CULVERT END SECTION BACKFILL UPSTREAM ROCK - ROCK SOCK OF WATTLE SOCK CULVERT INLET PROTECTION SECTION A <u>PLAN</u> <sup>10" MIN.</sup> KEY IN ROCK SOCK O" ON BEDROCK, PAVEMENT OR RIPRAP KEY IN ROCK SOCK 2" ON EARTH SECTION B CIP-1. CULVERT INLET PROTECTION CULVERT INLET PROTECTION INSTALLATION NOTES 1. SEE PLAN VIEW FOR -LOCATION OF CULVERT INLET PROTECTION. 2. SEE ROCK SOCK DESIGN DETAIL FOR ROCK GRADATION REQUIREMENTS AND JOINTING CULVERT INLET PROTECTION MAINTENANCE NOTES 1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE. 2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE

3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.

4. SEDIMENT ACCUMULATED UPSTREAM OF THE CULVERT SHALL BE REMOVED WHEN THE SEDIMENT DEPTH IS ½ THE HEIGHT OF THE ROCK SOCK.

5. CULVERT INLET PROTECTION SHALL REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS PERMANENTLY STABILIZED AND APPROVED BY THE LOCAL JURISDICTION. (DETAILS ADAPTED FROM AURORA, COLORADO, NOT AVAILABLE IN AUTOCAD)

NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.

> Urban Drainage and Flood Control District Urban Storm Drainage Criteria Manual Volume 3

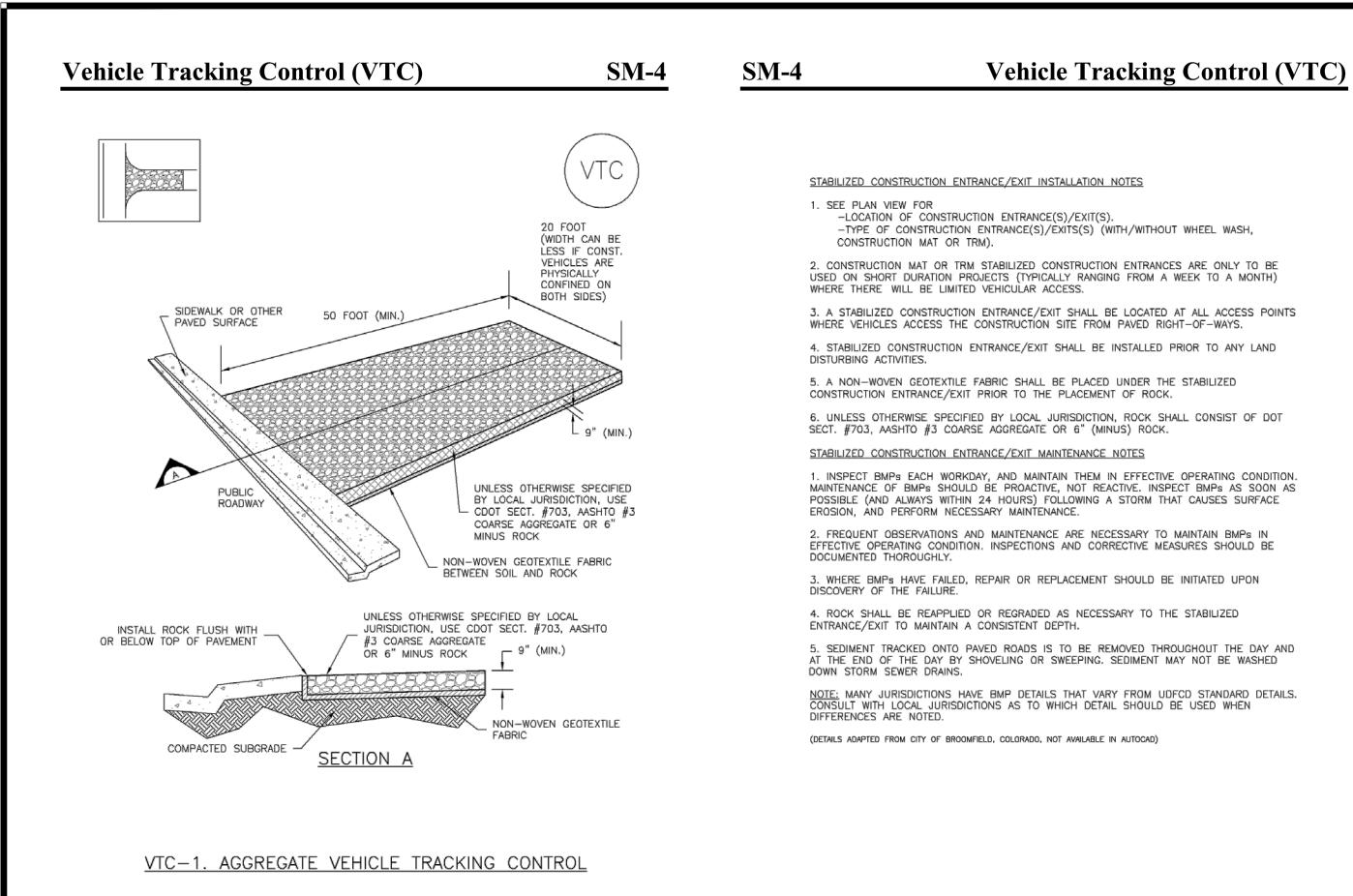


# Know what's **below.**

Call before you dig

CALL 811 SEVENTY-TWO HOURS PRIOR TO DIGGING, GRADING OR EXCAVATING FOR THE MARKING OF UNDERGROUND MEMBER UTILITIES.

REININARY PREINTFORCTION CONSTRUCTION CON
West Des Moines, Iowa 50266 P: 515-226-0128 F: 515-223-9873 OD 'ALNO ON A CONNA' BOO 'ANDO ONAL' BASO CONNA' BOO 'ANDO OS BASO BASO ANDO BOO BASO ANDO BASO ANDO ON A CONTROL DE TANK CPM: TLK INNA BIN: RJH CPM: TLK INNA INNA BIN: RJH CPM: TLK INNA INNA INNA INNA INNA INNA INNA INN
P: 515-223-9873 O 'A O 'A
RDR: JXH SDM: RJH CPM: TLK INNERSINAL SHEET NUMBER:
Here       Here         Here       Here         DATE:       09/08/2017         SHEET NUMBER:
DATE: 09/08/2017 SHEET NUMBER:
U9/U8/2017 SHEET NUMBER:
3 OF 7



November 2010 Urban Drainage and Flood Control District Urban Storm Drainage Criteria Manual Volume 3

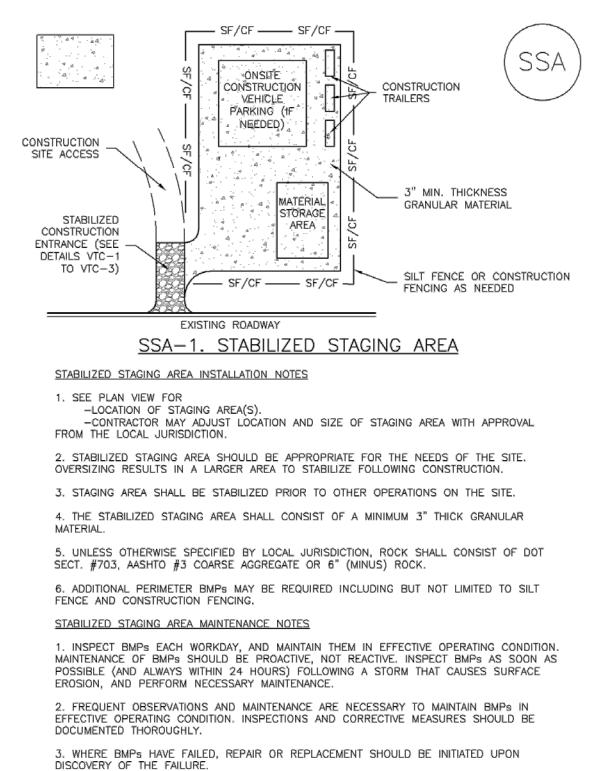
VTC-3

VTC-6

Urban Drainage and Flood Control District Urban Storm Drainage Criteria Manual Volume 3

# **Stabilized Staging Area (SSA)**



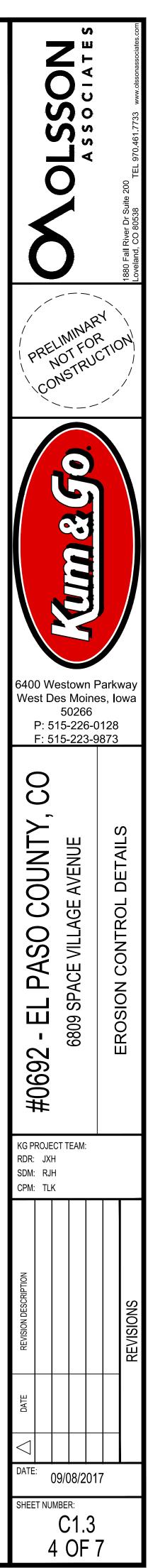


4. ROCK SHALL BE REAPPLIED OR REGRADED AS NECESSARY IF RUTTING OCCURS OR UNDERLYING SUBGRADE BECOMES EXPOSED.

November 2010

November 2010

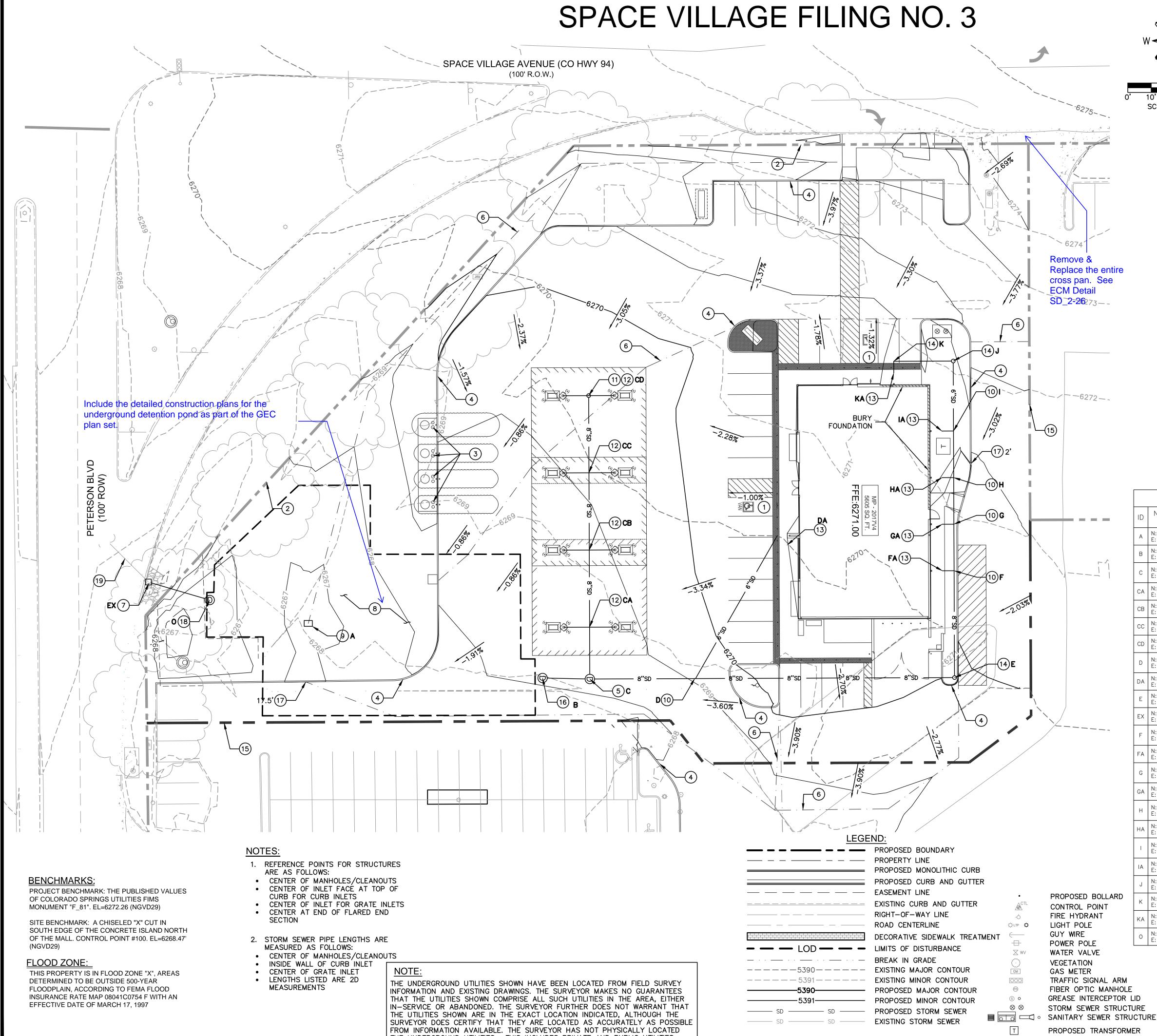
Urban Drainage and Flood Control District Urban Storm Drainage Criteria Manual Volume 3 SSA-3





Know what's **below. Call** before you dig.

CALL 811 SEVENTY-TWO HOURS PRIOR TO DIGGING, GRADING OR EXCAVATING FOR THE MARKING OF UNDERGROUND MEMBER UTILITIES.



THE UNDERGROUND UTILITIES. THIS INCLUDES PRIVATE AND PUBLIC UTILITIES.

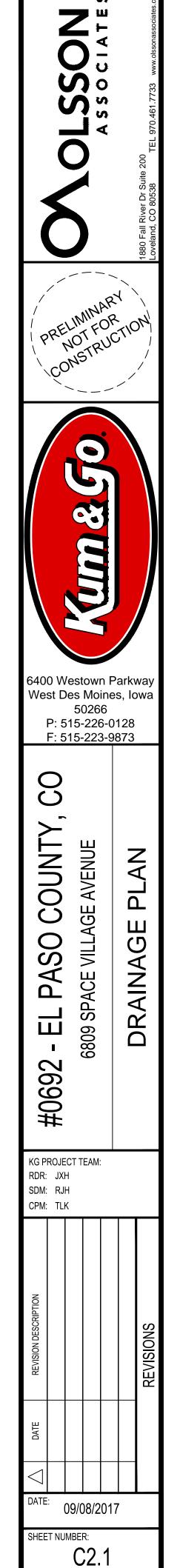
SCALE IN FEET

# FLAG NOTES:

- 1 ADA ACCESSIBLE STALL (NOT TO EXCEED 2.00% GRADE IN ANY DIRECTION)
- (2) MATCH EXISTING GRADE, MAX 3:1 (CONTRACTOR TO VERIFY)
- 3 ALL LIDS FOR UNDERGROUND TANKS TO BE 1" ABOVE FINISHED GRADE
- (4) PROPOSED 6" INTEGRAL CURB
- 5 INSTALL 48" STORM SEWER MANHOLE
- (6) PROPOSED BREAK IN GRADE
- (7) PROPOSED TYPE 'C' GRATED INLET WITH STANDARD GRATE
- (8) PROPOSED UNDERGROUND STORAGE
- (9) INSTALL 2'x3' ADS AREA INLET
- (10) INSTALL STORM SEWER WYE
- 1 INSTALL STORM SEWER WYE AND CLEANOUT WITH WATERTIGHT TRAFFIC RATED LID
- (12) CONNECT TO CANOPY DOWNSPOUT
- (13) CONNECT TO BUILDING DOWNSPOUT, SEE ARCHITECTURAL PLANS FOR DOWNSPOUT LOCATIONS
- (14) INSTALL STORM SEWER BEND
- (15) SAWCUT EXISTING PAVEMENT, MATCH EXISTING
- (16) CONNECT TO UNDERGROUND DETENTION SYSTEM
- (17) CURB CUT, WIDTH PER PLAN
- (18) INSTALL FLOW CONTROL MANHOLE
- (19) EXISTING 24" RCP

STORM STRUCTURE TABLE							
ID	NORTHING EASTING	RIM/GROUND/ TOC ELEV.*	INVERT IN	INVERT OUT			
А	N:1366998.08 E:3227568.08	6266.50					
В	N:1366974.74 E: 3227668.23	6267.64	8"(E)=6264.10				
С	N:1366974.30 E: 3227688.42	6268.21	8"(N)=6264.45 8"(E)=6264.45	8"(W)=6264.45			
СА	N: 1366996.46 E: 3227688.33		8"(N)=6264.67	8"(S)=6264.67			
СВ	N:1367029.46 E:3227688.19		8"(N)=6265.00	8"(S)=6265.00			
СС	N:1367062.46 E:3227688.06		8"(N)=6265.33	8"(S)=6265.33			
CD	N:1367095.46 E:3227687.93	6269.31		8" (S)=6265.66			
D	N: 1366974.48 E: 3227733.62		8"(E)=6264.90 6"(NE)=6265.28	8"(W)=6264.90			
DA	N:1367035.57 E:3227768.56			6" (SW)=6266.33			
Е	N: 1366974.93 E: 3227844.31	6268.13	8"(N)=6266.00	8"(W)=6266.00			
ΕX	N: 1367015.77 E: 3227499.73	6266.54	12"(E)=6263.60				
F	N: 1367020.59 E: 3227844.13		8"(N)=6266.46 6"(W)=6266.63	8"(S)=6266.46			
FA	N: 1367020.57 E: 3227839.13			6"(E)=6266.70			
G	N: 1367040.50 E: 3227844.05		8"(N)=6266.66 6"(W)=6266.83	8" (S)=6266.66			
GA	N:1367040.48 E:3227839.05			6"(E)=6266.90			
Н	N: 1367060.42 E: 3227843.97		8" (N)=6266.86 6" (W)=6268.03	8" (S)=6266.86			
HA	N:1367060.40 E:3227838.97			6"(E)=6268.10			
I	N: 1367080.33 E: 3227843.89		6"(N)=6267.23 6"(W)=6268.23	8" (S)=6267.06			
IA	N: 1367080.31 E: 3227838.89			6"(E)=6268.30			
J	N: 1367110.25 E: 3227843.77	6269.61	6"(W)=6267.67	6"(S)=6267.67			
К	N: 1367110.14 E: 3227818.33		6"(S)=6268.06	6"(E)=6268.06			
KA	N: 1367105.14 E: 3227818.35			6"(N)=6268.13			
0	N: 1367008.08 E: 3227525.95	6268.57		12"(W)=6263.70			

STORM PIPE TABLE				
NAME	SIZE	LENGTH	SLOPE	
B-C	8"	20.19'	1.71%	
C-CA	8"	22.16'	1.00%	
C-D	8"	45.20 <b>'</b>	1.00%	
CA-CB	8"	33.00'	1.00%	
CB-CC	8"	33.00'	1.00%	
CC-CD	8"	33.00'	1.00%	
D-DA	6"	70.37'	1.50%	
D-E	8"	110.70'	1.00%	
E-F	8"	45.66'	1.00%	
EX-0	12"	27.32'	0.37%	
F-FA	6"	5.00'	1.50%	
F-G	8"	19.92'	1.00%	
G-GA	6"	5.00'	1.50%	
G-H	8"	19.92'	1.00%	
H-HA	6"	5.00'	1.50%	
H–I	8"	19.91'	1.00%	
I-IA	6"	5.00'	1.50%	
I-J	6"	29.91'	1.50%	
J–K	6"	25.44'	1.50%	
K-KA	6"	5.00'	1.50%	



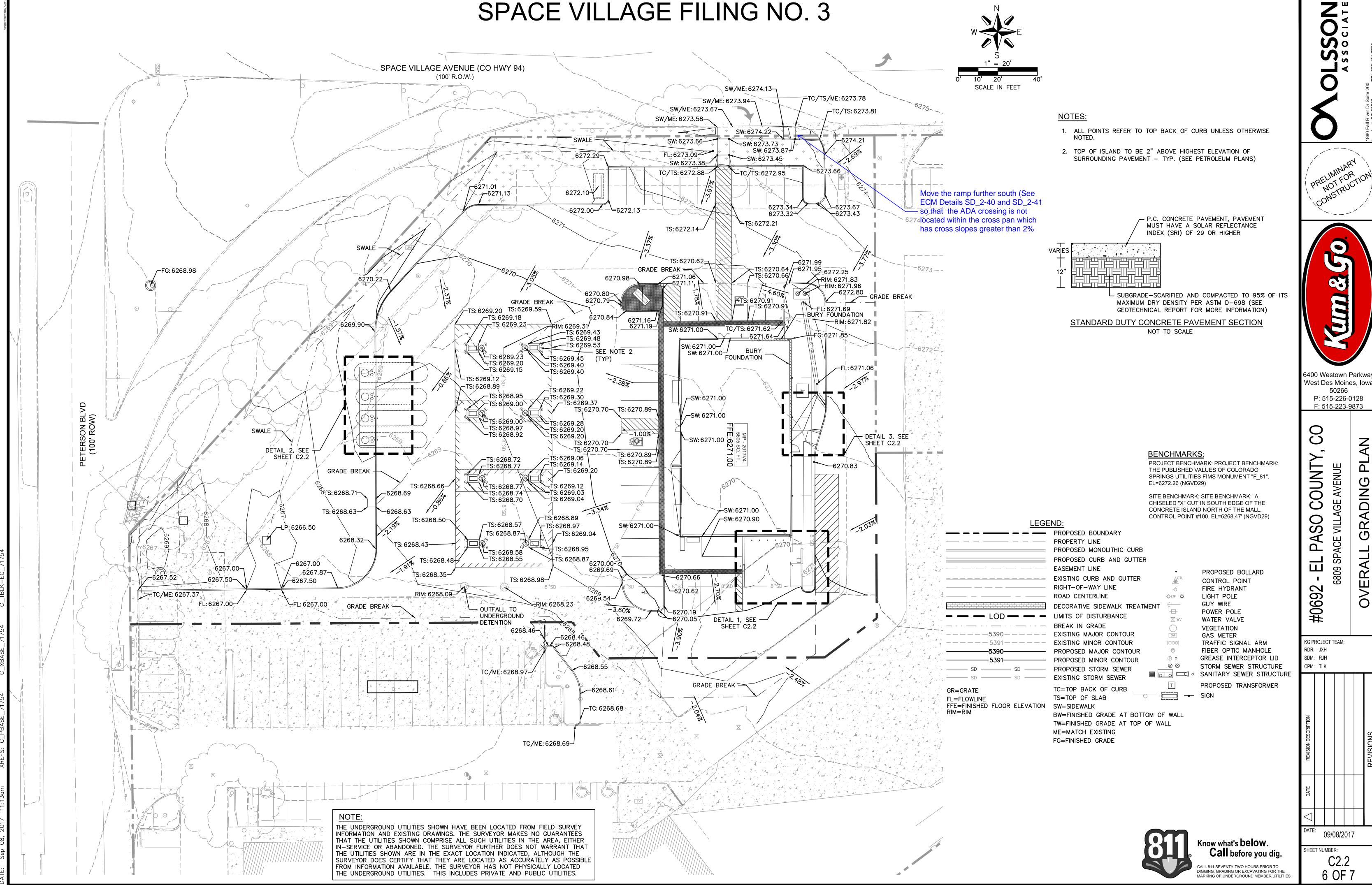
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CALL 811 SEVENTY-TWO HOURS PRIOR TO DIGGING, GRADING OR EXCAVATING FOR THE MARKING OF UNDERGROUND MEMBER UTILITIES.

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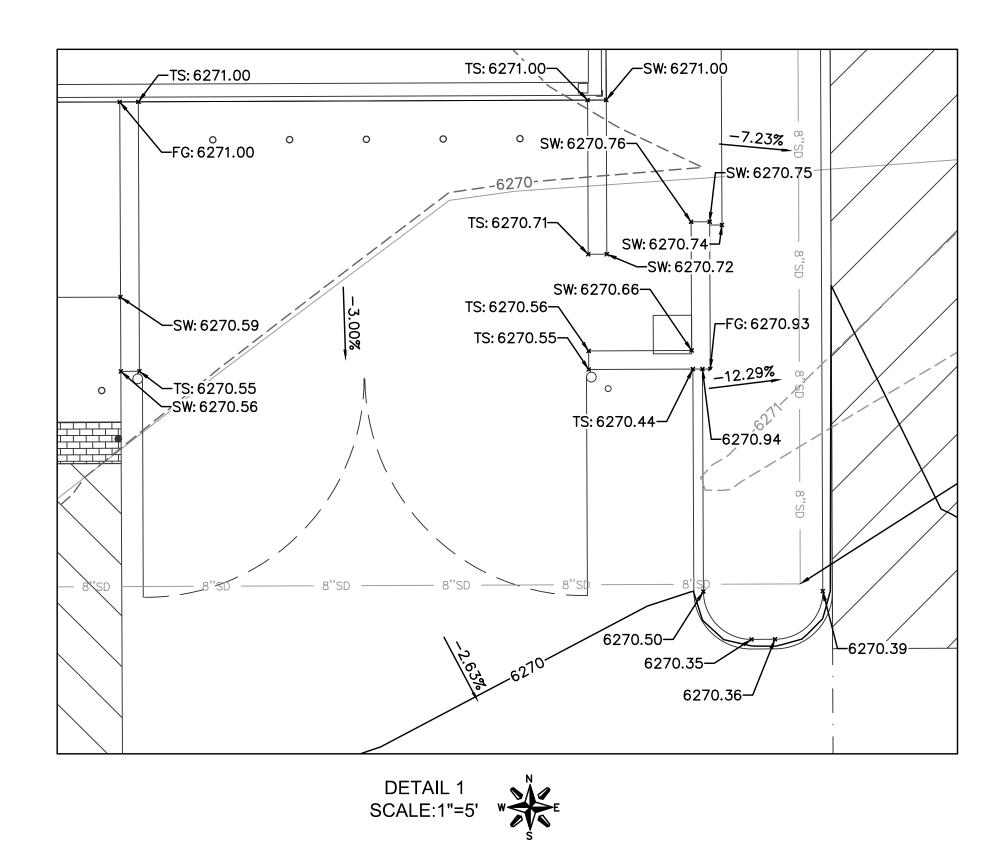
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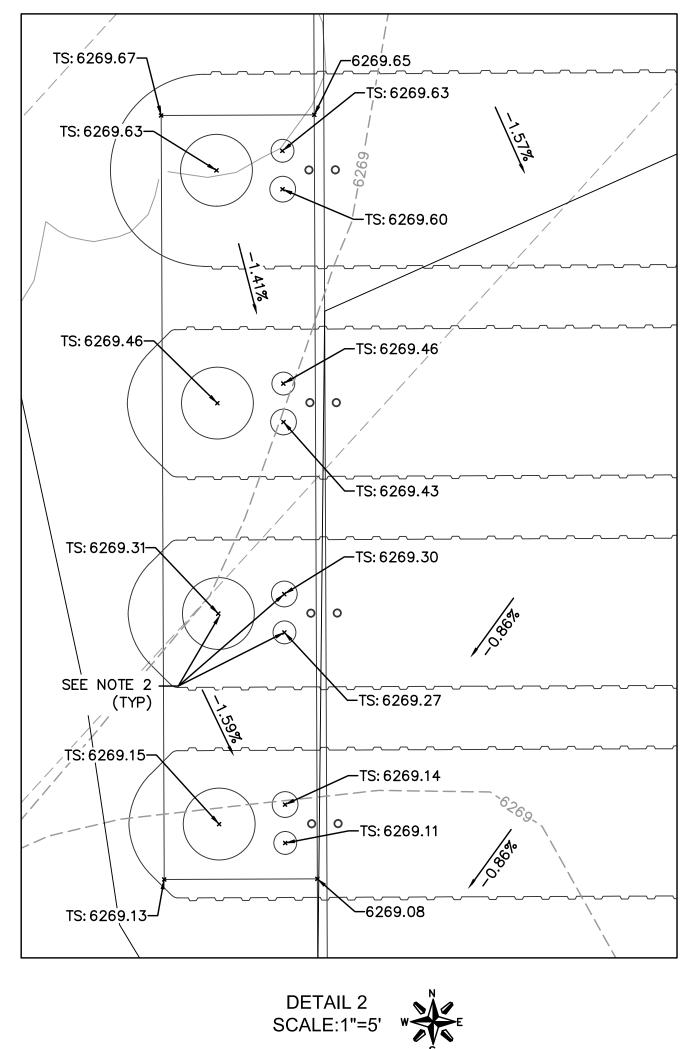
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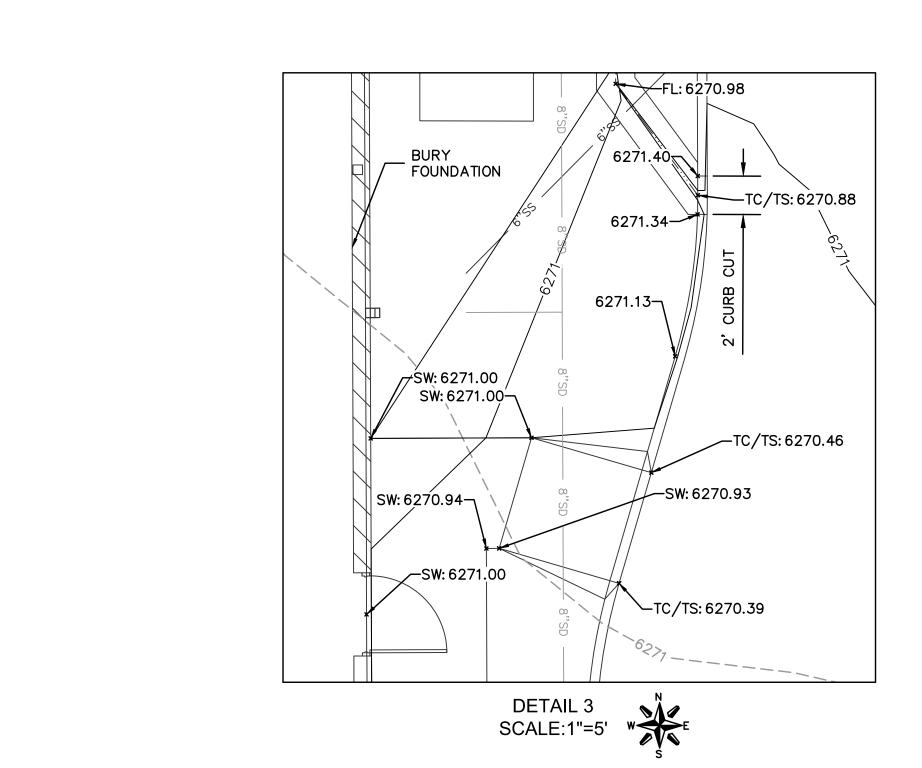
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# SPACE VILLAGE FILING NO. 3





# NOTES:

- 1. ALL POINTS REFER TO TOP BACK OF CURB UNLESS OTHERWISE NOTED.
- 2. ALL UNDERGROUND TANK LIDS SHALL BE PLACED 1" ABOVE SURROUNDING PAVEMENT. ELEVATIONS PROVIDED AT THE

UNDERGROUND TANK LIDS REFERENCE THE TOP OF PAVEMENT.

**BENCHMARKS**:

PROJECT BENCHMARK: PROJECT BENCHMARK: THE PUBLISHED VALUES OF COLORADO SPRINGS UTILITIES FIMS MONUMENT "F\_81". EL=6272.26 (NGVD29)

SITE BENCHMARK: SITE BENCHMARK: A CHISELED "X" CUT IN SOUTH EDGE OF THE CONCRETE ISLAND NORTH OF THE MALL. CONTROL POINT #100. EL=6268.47' (NGVD29) TS=TOP OF SLAB SW=SIDEWALK BW=FINISHED GRADE AT BOTTOM OF WALL TW=FINISHED GRADE AT TOP OF WALL ME=MATCH EXISTING FG=FINISHED GRADE GR=GRATE FL=FLOWLINE FFE=FINISHED FLOOR ELEVATION RIM=RIM

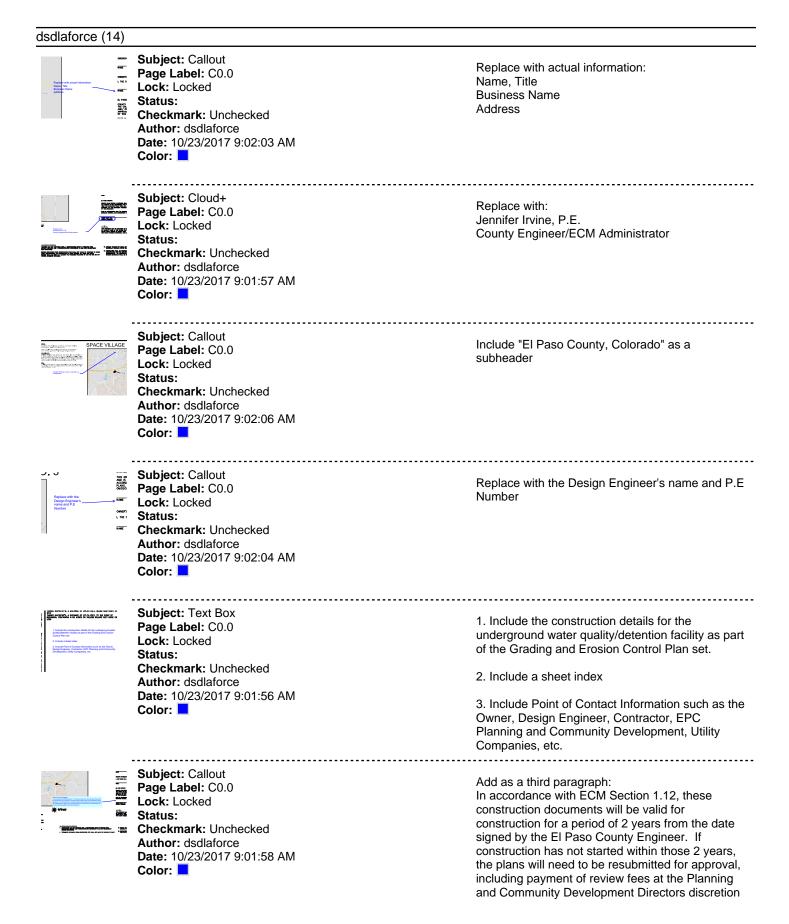


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CALL 811 SEVENTY-TWO HOURS PRIOR TO DIGGING, GRADING OR EXCAVATING FOR THE MARKING OF UNDERGROUND MEMBER UTILITIES.

SSOCIATI 0 (um & Go 6400 Westown Parkway West Des Moines, Iowa 50266 P: 515-226-0128 F: 515-223-9873 00 AN Ц COUNTY AGE AVENUE GRADING AGE PASO VILL PACE  $\square$ TAILEI Ш  $\overline{\mathbf{S}}$ 6809 #0692 Ш  $\square$ KG PROJECT TEAM: RDR: JXH SDM: RJH CPM: TLK DATE: 09/08/2017 SHEET NUMBER: C2.3 7 OF 7

# Markup Summary



	Subject: Cloud+ Page Label: C0.0 Lock: Locked Status: Checkmark: Unchecked Author: dsdlaforce Date: 10/23/2017 9:02:05 AM Color:	Add the following to the title: GRADING AND EROSION CONTROL PLAN
WW FRAME Sector of the save south and south like Add YPCD Report No. PPR-1704*	Subject: Text Box Page Label: C0.0 Lock: Locked Status: Checkmark: Unchecked Author: dsdlaforce Date: 10/23/2017 9:02:07 AM Color:	Add "PCD Project No. PPR-17-041"
	Subject: Callout Page Label: C1.1 Lock: Locked Status: Checkmark: Unchecked Author: dsdlaforce Date: 10/23/2017 9:02:09 AM Color:	Is this being left open for public access? If not then place a barricade.
	Subject: Cloud+ Page Label: C1.1 Lock: Locked Status: Checkmark: Unchecked Author: dsdlaforce Date: 10/23/2017 9:02:11 AM Color:	Use the County's standard details. Replace the details in sheet C1.2 and C1.3 if available in the El Paso County Engineering Criteria Manual (ECM) Appendix F.
Are you installing a construction or 	Subject: Callout Page Label: C1.1 Lock: Locked Status: Checkmark: Unchecked Author: dsdlaforce Date: 10/23/2017 9:02:08 AM Color:	Are you installing a construction or safety fence?
	Subject: Callout Page Label: C2.1 Lock: Locked Status: Checkmark: Unchecked Author: dsdlaforce Date: 10/23/2017 9:02:13 AM Color:	Include the detailed construction plans for the underground detention pond as part of the GEC plan set.



Subject: Callout Page Label: C2.1 Lock: Locked Status: Checkmark: Unchecked Author: dsdlaforce Date: 10/23/2017 9:02:12 AM Color:

Remove & Replace the entire cross pan. See ECM Detail SD\_2-26

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Subject: Callout Page Label: C2.2 Lock: Locked Status: Checkmark: Unchecked Author: dsdlaforce Date: 10/23/2017 9:02:14 AM Color:

Move the ramp further south (See ECM Details SD\_2-40 and SD\_2-41 so that the ADA crossing is not located within the cross pan which has cross slopes greater than 2%