



**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 my negligent acts, errors or omissions on my part in preparing this report.

Engineer of Record Signature \_\_\_\_\_ Date \_\_\_\_\_

**OWNER'S STATEMENT**  
The Owner will comply with the requirements of the Grading and Erosion Control Plan.

Owner Signature \_\_\_\_\_ Date \_\_\_\_\_

**EL PASO COUNTY**  
County plan reviews provided only for general conformance with County Design Criteria. The County is not responsible for the accuracy and adequacy of the design, dimensions, and/or elevations which shall be confirmed at the job site. The County through the approval of this document assumes no responsibility for completeness and/or accuracy of this document.

Filed in accordance with the requirements of the El Paso County Land Development Code, Drainage Criteria, and Engineering Criteria Manual as amended.

County Project Engineer Signature \_\_\_\_\_ Date \_\_\_\_\_

Please update statements to match statements in this word document.

**REPORTING REQUIREMENTS**  
**ANTICIPATED STARTING AND COMPLETION TIME PERIOD OF SITE GRADING:** June 1, 2021 update to a future date.  
**EXPECTED DATE ON WHICH THE FINAL STABILIZATION WILL BE COMPLETED:** June 30, 2022  
**TOTAL AREA OF THE SITE TO BE CLEARED, EXCAVATED OR GRADED:** 6.0 acres  
**NAME OF RECEIVING WATERS:** East Fork of Sand Creek, discharging to Sand Creek which discharges to Fountain Creek  
**SOILS INFORMATION:** Truckton Sandy Loam (3-9% slopes) [NRCS Soil Survey]

Please copy and paste the general notes from the GEC Checklist.

Please change to "unless shown to be infeasible and specifically requested and approved."

Please change to "designed."

Please add ", creek or stream."

Please add "unless an approved State dewatering permit is in place."

Please change to "Owner/developer and their agents"

Missing 3rd paragraph, per GEC Checklist Item "j"

IP and CD's are not seen on Fig 4. Show their location on that Fig. FAE states that there is 1 IP and 0 CD's. Update FAE accordingly if you update plans.

Concrete Washout shown on FAE but not plans. Show location on plans and provide a detail here or remove from FAE.

VTC shown on Fig 4 and FAE but no detail shown here. Provide a detail. Make sure that the detail that you choose shows a min VTC length of 75ft.

- GENERAL NOTES**
- 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 offsite waters, including wetlands.
  - 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.
  - 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 Qualified Stormwater Manager or Certified Erosion Control Inspector and shall be located on site at all times during construction and shall be kept up to date with work progress and changes in the field.
  - Once the ESQCP is approved and a "Notice to Proceed" has been issued, the contractor may install the initial stage erosion and sediment control measures as indicated on the approved GEC. A Preconstruction Meeting between the contractor, engineer, and El Paso County will be held prior to any construction. It is the responsibility of the applicant to coordinate the meeting time and place with County staff.
  - Control measures must be installed prior to commencement of activities that may contribute pollutants to stormwater. Temporary sediment and erosion control measures for all slopes, channels, ditches, or any disturbed land area shall be completed immediately upon completion of the disturbance.
  - All temporary sediment and erosion control measures shall be maintained and remain in effective operating condition until permanent soil erosion control measures are implemented and final stabilization is established. All persons engaged in land disturbance activities shall assess the adequacy of control measures at the site and identify if changes to those control measures is needed to ensure the continued effective performance of the control measures. All changes to temporary sediment and erosion control measures must be incorporated into the Stormwater Management Plan prior to implementation.
  - Temporary stabilization shall be implemented on disturbed areas and stockpiles where ground disturbing construction activity has permanently ceased or temporarily ceased for longer than 14 days. An area that is going to remain in an interim state for more than 60 days shall also be stabilized.
  - Final stabilization must be implemented at all applicable construction sites. Final stabilization is achieved when all ground disturbing activities are complete and all disturbed areas either have a uniform vegetative cover with individual plan density of 70 percent of pre-disturbance levels established or equivalent permanent alternative stabilization method is implemented. All temporary sediment and erosion control measures shall be removed upon final stabilization and before permit closure.
  - All permanent stormwater management facilities shall be installed as defined in the approved plans. Any proposed changes that affect the hydrology or hydraulics of a permanent stormwater management structures must be approved by the ECM Administrator prior to implementation.
  - Any earth disturbance shall be conducted in such a manner so as to effectively minimize accelerated soil erosion and resulting sedimentation. All disturbances shall be designed, constructed, and completed so that the exposed area of any disturbed land shall be limited to the shortest practical period of time. Pre-existing vegetation shall be protected and maintained within 50 horizontal feet of a waters of the state, unless infeasible.
  - Compaction of soil must be prevented in areas designated for infiltration control measures or where final stabilization will be achieved by vegetative cover. Areas designated for infiltration control shall also be protected from sedimentation during construction until final stabilization is achieved.
  - Any temporary or permanent facility designed and constructed for the conveyance of stormwater around, through, or from the earth disturbance area shall be a stabilized conveyance designed to minimize erosion and the discharge of sediment off site.
  - 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. Concrete washout shall not be located in an area where shallow groundwater may be present, or within 50 feet of a surface water body.
  - Dewatering operations: uncontaminated groundwater may be discharged on site, but may not leave the site in the form of surface runoff.
  - Erosion control blanketing is to be used on slopes steeper than 3:1.
  - 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.
  - 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.
  - 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.
  - 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.
  - 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.
  - Bulk storage of petroleum products or other liquid chemicals in excess of 55 gallons shall have adequate secondary containment protection to contain all spills and prevent any spilled material from entering State Waters, including any surface or subsurface storm drainage system or facilities.
  - No persons shall cause the impediment of stormwater flow in the flow line of the curb and gutter or in the ditch flow line.
  - 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.
  - All construction traffic must enter/exit the site at approved construction access points.
  - Prior to actual construction the permittee shall verify the location of existing utilities.
  - A water source shall be available on site during earthwork operations and utilized as required to minimize dust from earthwork equipment and wind.
  - The soils report for this site has been prepared by National Resources Conservation Service and shall be considered a part of these plans.
  - At least ten (10) 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

Please change to "Control measures"

Additional erosion control details on maintenance and installation are located in Attachment 3 to the SWMP/GESQCP Narrative

**IP-1. BLOCK AND ROCK SOCK SUMP OR ON GRADE INLET PROTECTION**

**BLOCK AND CURB SOCK INLET PROTECTION INSTALLATION NOTES**

- SEE ROCK SOCK DESIGN DETAIL FOR INSTALLATION REQUIREMENTS.
- CONCRETE "CINDER" BLOCKS SHALL BE LAID ON THEIR SIDES AROUND THE INLET IN A SINGLE ROW, ABUTTING ONE ANOTHER WITH THE OPEN END FACING AWAY FROM THE CURB.
- GRAVEL BARS SHALL BE PLACED AROUND CONCRETE BLOCKS, CLOSELY ABUTTING ONE ANOTHER AND JOINED TOGETHER IN ACCORDANCE WITH ROCK SOCK DESIGN DETAIL.

**IP-3. ROCK SOCK SUMP/AREA INLET PROTECTION**

**ROCK SOCK SUMP/AREA INLET PROTECTION INSTALLATION NOTES**

- SEE ROCK SOCK DESIGN DETAIL FOR INSTALLATION REQUIREMENTS.
- STRAW WATTLES/SEDIMENT CONTROL LOGS MAY BE USED IN PLACE OF ROCK SOCKS FOR INLETS IN PERVIOUS AREAS. INSTALL PER SEDIMENT CONTROL LOG DETAIL.

**IP-2. CURB ROCK SOCKS UPSTREAM OF INLET PROTECTION**

**CURB ROCK SOCK INLET PROTECTION INSTALLATION NOTES**

- SEE ROCK SOCK DESIGN DETAIL INSTALLATION REQUIREMENTS.
- PLACEMENT OF THE SOCK SHALL BE APPROXIMATELY 30 DEGREES FROM PERPENDICULAR IN THE OPPOSITE DIRECTION OF FLOW.
- SOCKS ARE TO BE FLUSH WITH THE CURB AND SPACED A MINIMUM OF 5 FEET APART.
- AT LEAST TWO CURB SOCKS IN SERIES ARE REQUIRED UPSTREAM OF ON-GRADE INLETS.

**IP-4. SILT FENCE FOR SUMP INLET PROTECTION**

**SILT FENCE INLET PROTECTION INSTALLATION NOTES**

- SEE SILT FENCE DESIGN DETAIL FOR INSTALLATION REQUIREMENTS.
- POSTS SHALL BE PLACED AT EACH CORNER OF THE INLET AND AROUND THE EDGES AT A MAXIMUM SPACING OF 3 FEET.
- STRAW WATTLES/SEDIMENT CONTROL LOGS MAY BE USED IN PLACE OF SILT FENCE FOR INLETS IN PERVIOUS AREAS. INSTALL PER SEDIMENT CONTROL LOG DETAIL.

**GENERAL INLET PROTECTION INSTALLATION NOTES**

- SEE PLAN VIEW FOR:
  - LOCATION OF INLET PROTECTION.
  - TYPE OF INLET PROTECTION (IP-1, IP-2, IP-3, IP-4, IP-5, IP-6)
- INLET PROTECTION SHALL BE INSTALLED PROMPTLY AFTER INLET CONSTRUCTION OR PAVING IS COMPLETE (TYPICALLY WITHIN 48 HOURS). IF A RAINFALL/RUNOFF EVENT IS FORECAST, INSTALL INLET PROTECTION PRIOR TO ONSET OF EVENT.
- 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.

**INLET PROTECTION MAINTENANCE NOTES**

- 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.
- FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.
- WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.
- SEDIMENT ACCUMULATED UPSTREAM OF INLET PROTECTION SHALL BE REMOVED AS NECESSARY TO MAINTAIN BMP EFFECTIVENESS, TYPICALLY WHEN STORAGE VOLUME REACHES 50% OF CAPACITY, A DEPTH OF 6" WHEN SILT FENCE IS USED, OR 1/3 OF THE HEIGHT FOR STRAW BALES.
- INLET PROTECTION IS TO REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS PERMANENTLY STABILIZED, UNLESS THE LOCAL JURISDICTION APPROVES EARLIER REMOVAL OF INLET PROTECTION IN STREETS.
- WHEN INLET PROTECTION AT AREA INLETS IS REMOVED, THE DISTURBED AREA SHALL BE COVERED WITH TOP SOIL, SEEDED AND MULCHED, OR OTHERWISE STABILIZED IN A MANNER APPROVED BY THE LOCAL JURISDICTION.

(DETAIL ADAPTED FROM TOWN OF PARKER, COLORADO AND CITY OF 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.**

**NOTE: THE DETAILS INCLUDED WITH THIS FACT SHEET SHOW COMMONLY USED, CONVENTIONAL METHODS OF INLET PROTECTION IN THE DENVER METROPOLITAN AREA. THERE ARE MANY PROPRIETARY INLET PROTECTION METHODS ON THE MARKET. UDFCD NEITHER ENDORSES NOR DISCOURAGES USE OF PROPRIETARY INLET PROTECTION; HOWEVER, IN THE EVENT PROPRIETARY METHODS ARE USED, THE APPROPRIATE DETAIL FROM THE MANUFACTURER MUST BE INCLUDED IN THE SWMP AND THE BMP MUST BE INSTALLED AND MAINTAINED AS SHOWN IN THE MANUFACTURER'S DETAILS.**

**NOTE: SOME MUNICIPALITIES DISCOURAGE OR PROHIBIT THE USE OF STRAW BALES FOR INLET PROTECTION. CHECK WITH LOCAL JURISDICTION TO DETERMINE IF STRAW BALE INLET PROTECTION IS ACCEPTABLE.**

**CD-1. CHECK DAM**

**CHECK DAM INSTALLATION NOTES**

- SEE PLAN VIEW FOR:
  - LOCATION OF CHECK DAMS.
  - CHECK DAM TYPE (CHECK DAM OR REINFORCED CHECK DAM).
  - LENGTH (L), CREST LENGTH (CL), AND DEPTH (D).
- CHECK DAMS INDICATED ON INITIAL SWMP SHALL BE INSTALLED AFTER CONSTRUCTION FENCE, BUT PRIOR TO ANY UPSTREAM LAND DISTURBING ACTIVITIES.
- RIPRAP UTILIZED FOR CHECK DAMS SHOULD BE OF APPROPRIATE SIZE FOR THE APPLICATION. TYPICAL TYPES OF RIPRAP USED FOR CHECK DAMS ARE TYPE M (D50 12") OR TYPE L (D50 9").
- RIPRAP PAD SHALL BE TRENCHED INTO THE GROUND A MINIMUM OF 1".
- THE ENDS OF THE CHECK DAM SHALL BE A MINIMUM OF 1' 6" HIGHER THAN THE CENTER OF THE CHECK DAM.

**CHECK DAM MAINTENANCE NOTES**

- 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.
- FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.
- WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.
- SEDIMENT ACCUMULATED UPSTREAM OF THE CHECK DAMS SHALL BE REMOVED WHEN THE SEDIMENT DEPTH IS WITHIN 1/2 OF THE HEIGHT OF THE CREST.
- CHECK DAMS ARE TO REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS STABILIZED AND APPROVED BY THE LOCAL JURISDICTION.
- WHEN CHECK DAMS ARE REMOVED, EXCAVATIONS SHALL BE FILLED WITH SUITABLE COMPACTED BACKFILL. DISTURBED AREA SHALL BE SEEDED AND MULCHED AND COVERED WITH GEOTEXTILE OR OTHERWISE STABILIZED IN A MANNER APPROVED BY THE LOCAL JURISDICTION.

(DETAILS ADAPTED FROM DOUGLAS COUNTY, 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.**

**Colorado Springs Utilities**  
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**ENVIRONMENT, HEALTH, & SAFETY DEPARTMENT**

**TECHNICAL SERVICES SECTION**  
P.O. Box 1103, Mail Code 940  
COLORADO SPRINGS, CO 80947  
(719)668-8688

**TITLE PAGE**  
**EROSION AND STORMWATER QUALITY CONTROL PLAN**

**GPAP Staging Area**

Project No:	See SWMP	Figure	
Prepared By:	RSC	1	
Date:	May, 2021	of	4

Please add "PCD File No. PPR-21-050"

5 total Figures



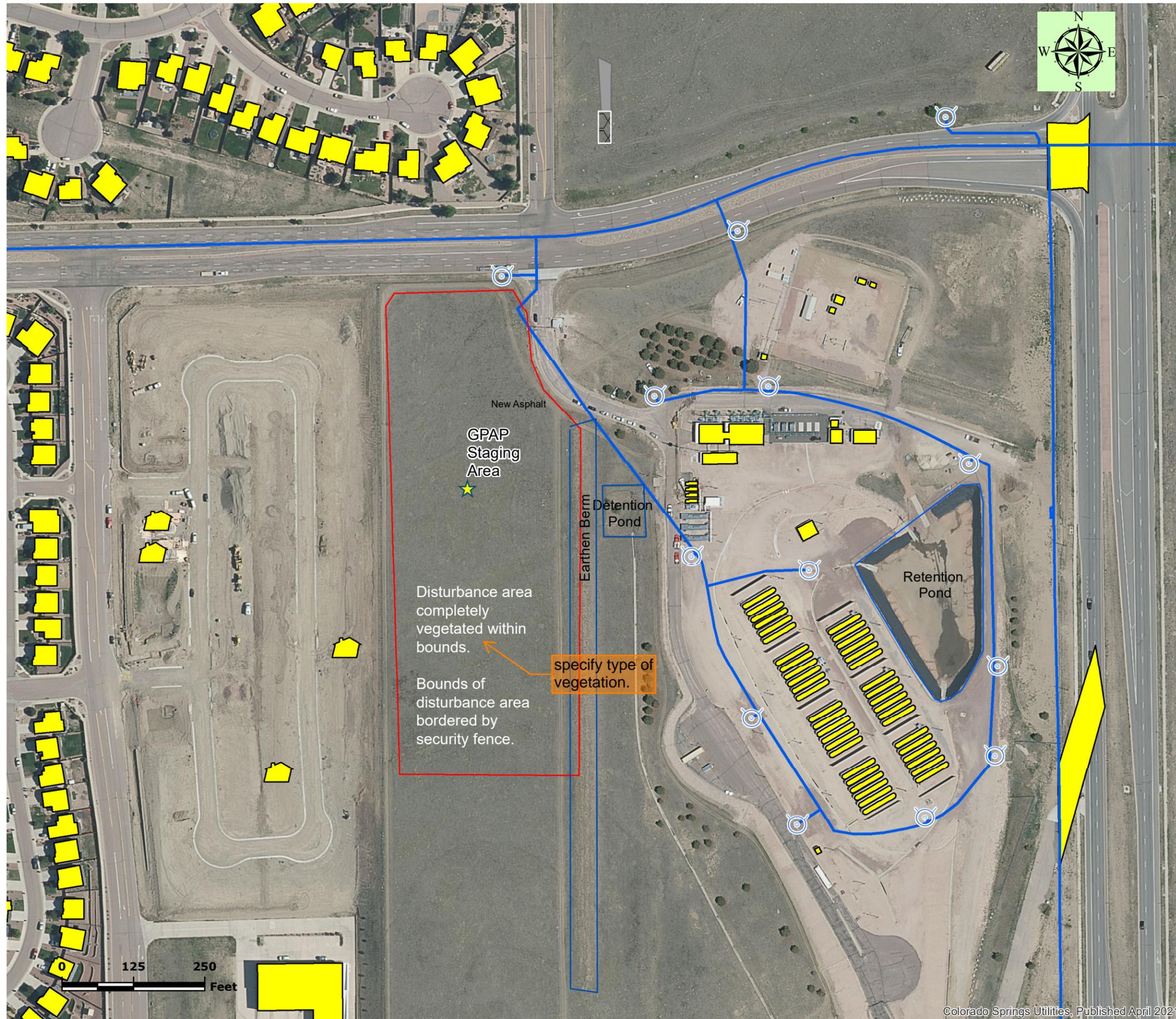
# Colorado Springs Utilities

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Environmental Services Department  
121 South Tejon Street, Fourth Floor  
Colorado Springs, Colorado 80903

**Legend:**

-  Construction Project Location
-  Boundary of Planned Construction Disturbance
-  Hydrant
-  NonPotablePipe
-  PotablePipe
-  RawPipe
-  Existing Water Service Line
-  Construction Project Impervious Areas



specify type of vegetation.

## SWMP SITE DETAIL MAP GPAP Staging Area

**Project No:** WO#

**Prepared By:** R. Sebastian-Coleman

**Date:** May, 2021

**Figure  
Number  
2**



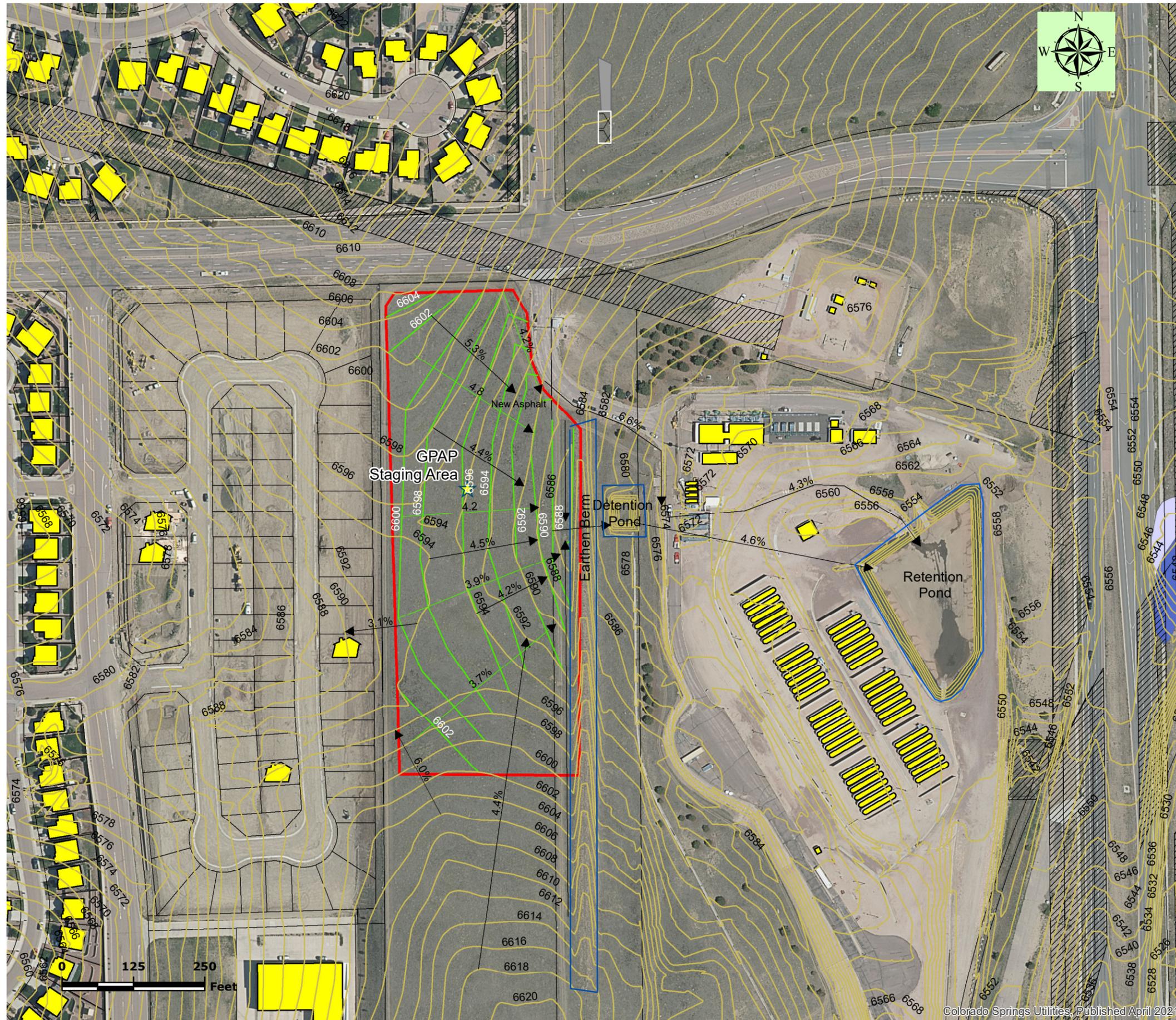
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Colorado Springs, Colorado 80903

### Legend:

-  Construction Project Location
- Surface Flow**
- Construction Stage**
-  Pre-Construction
-  Post-Construction
-  Existing Contours (2ft Intervals)
-  Proposed Contour Changes (2ft Intervals)
-  Boundary of Construction Project
-  Property Boundaries
-  Utility Easements
-  Impervious Areas at Project Site
-  10 Year FEMA Flood Zone
-  100 Year FEMA Flood Zone
-  500 Year FEMA Flood Zone
-  City Streamside Overlay



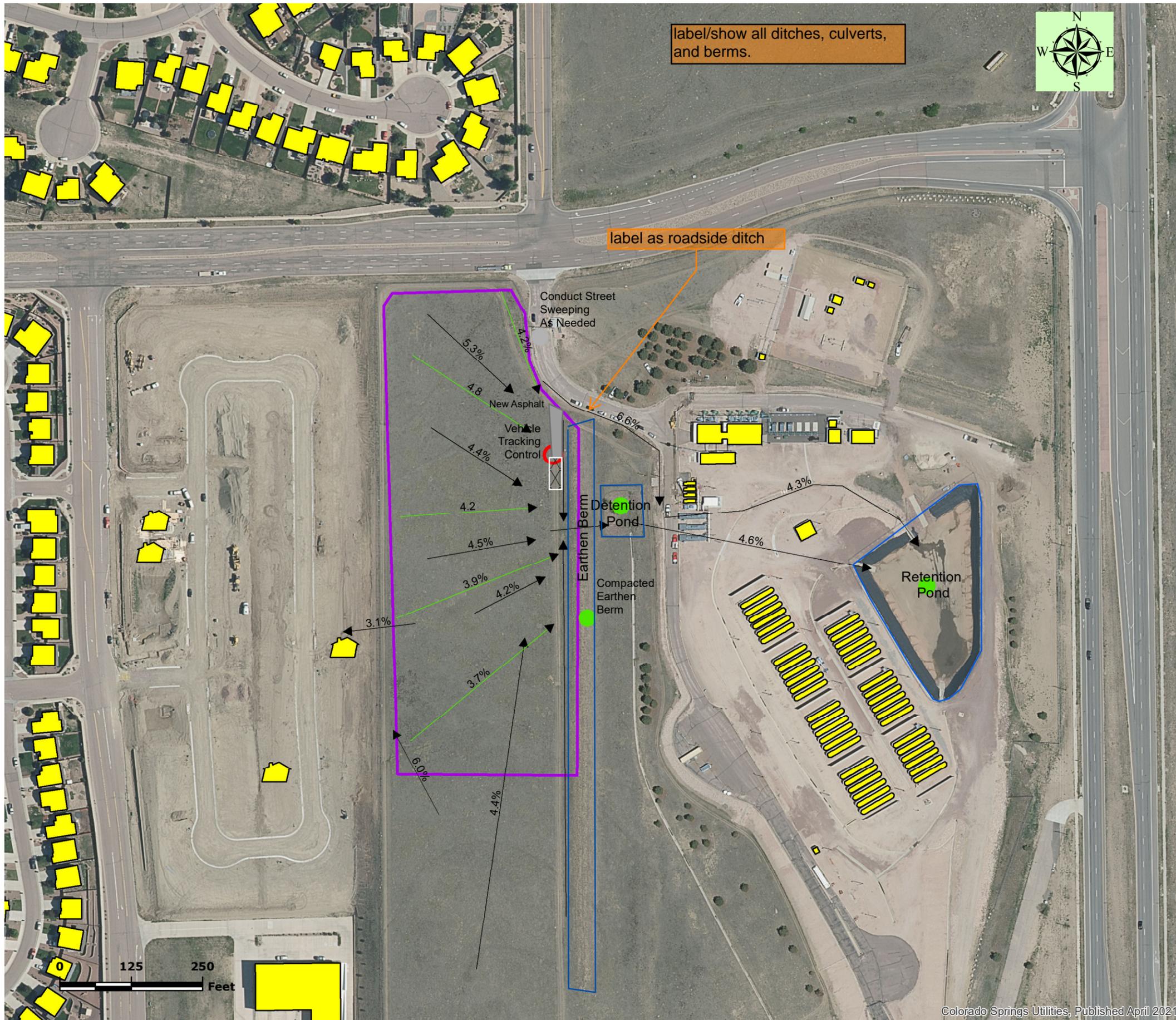
## SWMP SITE TOPOGRAPHY GPAP Staging Area

**Project No:** WO#

**Prepared By:** R. Sebastian-Coleman

**Date:** May, 2021

**Figure  
Number**  
**3**



Environmental Services Department  
121 South Tejon Street, Fourth Floor  
Colorado Springs, Colorado 80903

- Legend:**
- Control Measures - Is Action Needed?
- Install Before Disturbance Begins
  - N/A
  - No
  - Yes
- Construction Stage
- Pre-Construction
  - Post-Construction
- Pollutant Source - Present?
- No
  - Yes
- Disturbance Area - Current Status
- Construction
  - Finally Stabilized
  - Not Started
  - Other
  - Restoration / Stabilization
  - Waterway\_Buffer50ft

Label/show inlets and show IP

- Notes:
1. Specific locations of staging areas, stockpiles, and any other material storage will be determined by site crew. These locations will be marked and updated on this plan throughout construction. Due to the nature of the project, it is expected that some or all of these items may be located in several areas and may be moved daily.
  2. Stockpiles should be protected with straw wattles or rock-socks on the downhill side of the stockpile when crews are not at the site.
  3. Inlet Protection BMPs only need to be present while disturbances from main construction are present within each inlet's drainage area.
  4. Once construction begins, if additional BMPs are needed, locations should be identified on the inspection report map updates.
  5. Street sweeping will be performed as needed. Areas in need will be marked on this map.
  6. No concrete asphalt batch plants nor concretewashout performed on site.
  7. No vegetation to be re-established as site will be used as staging area.

**SWMP  
EROSION CONTROL -  
PLANNED CONTROL MEASURES  
GPAP Staging Area**

**Project No:** WO#

**Prepared By:** R. Sebastian-Coleman

**Date:** May, 2021

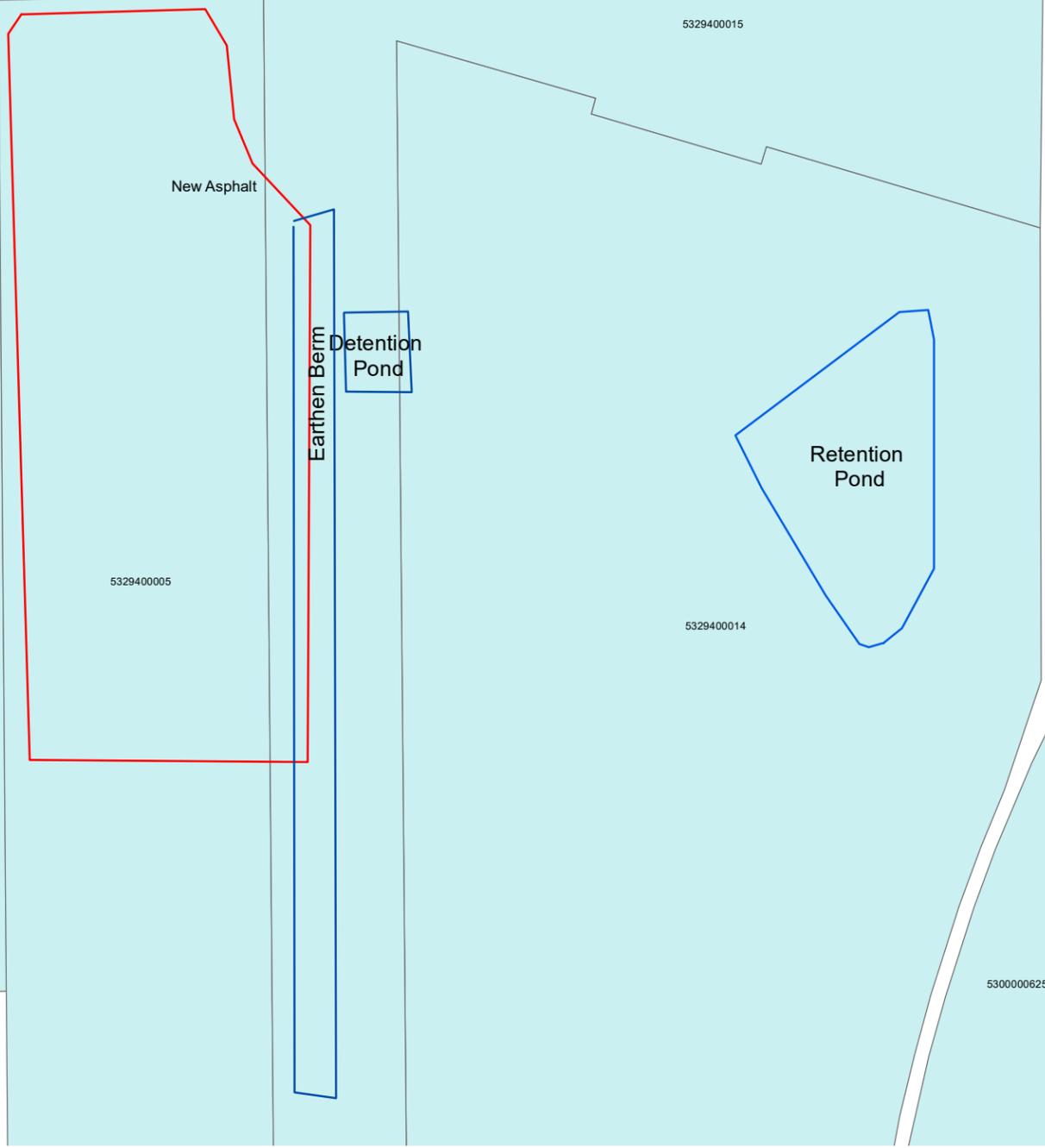
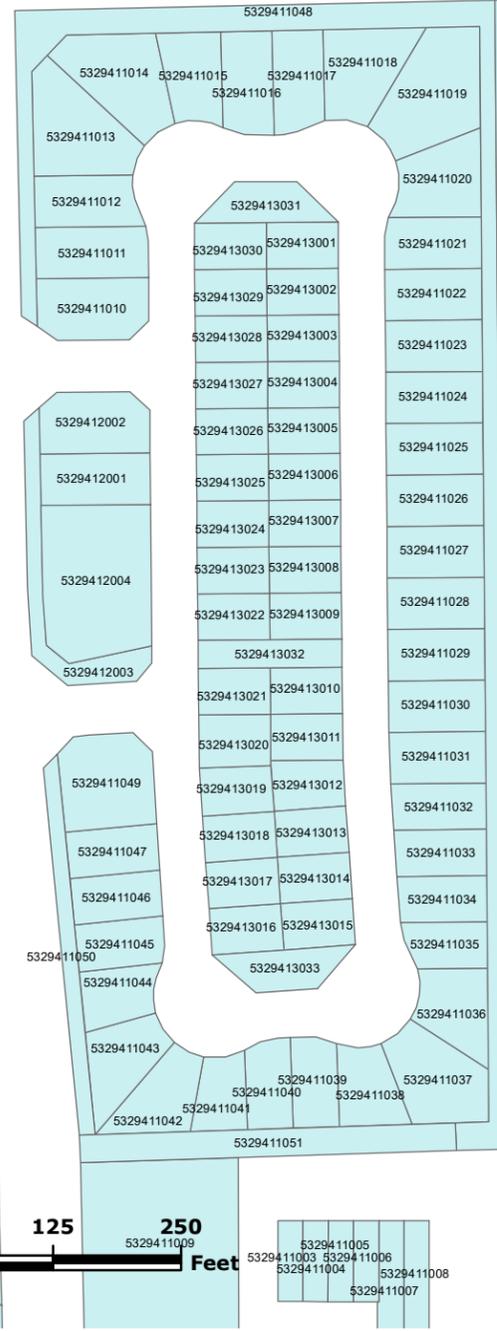
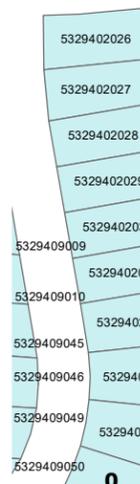
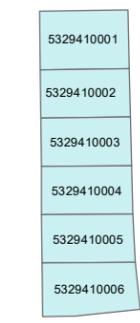
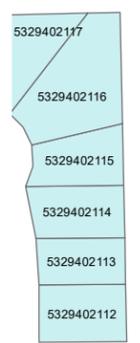
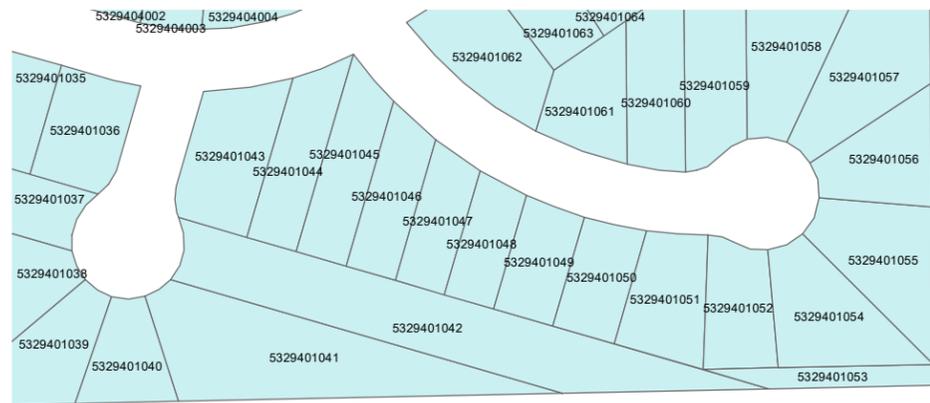
**Figure  
Number  
4**



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- Legend:**
- Boundary of Planned Construction Disturbance
  - Parcels and Tax Schedule Numbers

## SWMP TAX SCHEDULE NUMBER OF ADJACENT PARCELS GPAP Staging Area

**Project No:** WO#

**Prepared By:** R. Sebastian-Coleman

**Date:** May, 2021

**Figure  
Number**

**5**

