Community & Economic Development Department www.adcogov.org



4430 South Adams County Parkway 1st Floor, Suite W2000B Brighton, CO 80601-8218 PHONE 720.523.6880 FAX 720.523.6967

EMAIL: epermitcenter@adcogov.org

Development Review Team Comments

Date: 8/31/2021

Project Number: PRC2021-00005

Project Name: Sherrelwood Village FDP Amendment & Filing 2 Preliminary

Commenting Division: Planner Review

Name of Reviewer: Greg Barnes

Date: 08/31/2021

Email: gjbarnes@adcogov.orgComplete

PLNO1: I do not see a circumstance that creates the need for the subdivision design standards waiver for double-frontage lots. The lots between Pecos and Osage Streets have a tract of land (Tract B) that preventsdouble-fronting lots. RESPONSE: Waiver removed

PLN02: Based on the criteria for approval, the preliminary plat and the waiver to exceed lot depth to width ratioboth conform to the criteria for approval. RESPONSE: Noted

Commenting Division: Development Engineering Review

Name of Reviewer: Greg Labrie

Date: 08/25/2021

Email: glabrie@adcogov.orgComplete

ENG1: Prior to scheduling the final plat/FDP BOCC hearing, the developer is required to submit for review and receive approval of all construction documents (construction plans and reports). Construction documents shall include, at a minimum, onsite and public improvements construction plans, drainage report, traffic impact study. Allconstruction documents must meet the requirements of the Adams County Development Standards and Regulations. The developer shall also enter into a Subdivision Improvement Agreement (SIA) with the County and provide a security bond for all public improvements. The developer shall submit to the Adams County Development Review Engineering division the following: Engineering Review Application, Engineering Review Fee, electronic copies of all construction documents and the SIA. The development review fee for this project shall be in accordance to the fee schedule as described on the Adams County website. RESPONSE: Engineering documents submitted as part of this submittal now including drainage and traffic reports. SIA also included.

ENG2: The engineering documentation required to be submitted for this project are as follows: Final Drainage Report (A preliminary drainage report was not submitted with case), A Drainage Pond Operation and Maintenance Manual, and a Final Traffic Impact Study. The final design of the construction plans for the public and site improvements shall incorporate the findings of the studies and be signed and stamped by a Professional Engineer registered with the state of Colorado. RESPONSE: A Phase III Drainage report, Operation and Maintenance manual, and Traffic Impact Study is provided amongst other engineering documents.

ENG3: Prior to the issuance of any construction or building permits, the developer shall enter into a Subdivision Improvements Agreement (SIA) with the County and provide a security bond for all public improvements. **RESPONSE: SIA provided**

ENG4: No building permits will be issued until all public improvements have been constructed, inspected and preliminarily accepted by the Adams County Public Works Dept. RESPONSE: Noted

ENG5: The developer is responsible for the repair or replacement of any broken or damaged section of curb gutterand sidewalk. RESPONSE: Noted

Commenting Division: Attorney Review

Name of Reviewer: Christine Fitch

Date: 08/10/2021

Email: Complete

RESPONSE: Noted

Commenting Division: Neighborhood Services Review

Name of Reviewer: Gail Moon

Date: 08/09/2021

Email: gmoon@adcogov.org

Complete

There are 2 OPEN violation cases for the properties involved. VIO2021-01604 for tall weeds, and VIO2021-01605 for persons camping on the property. There is a VERY active citizen that is communicating with the County Commissioner's office, and Craig Fitchett (DelWest Rep). Craig has been responding, but as of 8/09/2021 these violations still exist. Code Compliance will continue to follow up on these cases. RESPONSE: These issues are being resolved. The structure has been demolished and the site is being cleared. This should be completed by the end of October.

Commenting Division: ROW Review Name of Reviewer: David Dittmer

Date: 08/09/2021

Email: Complete

Addressing task complete.

RESPONSE: Noted

Commenting Division: Addressing Review

Name of Reviewer: David Dittmer

Date: 08/09/2021

Email: Complete

See address plat uploaded into case file

RESPONSE: Noted

Commenting Division: Attorney Review

Name of Reviewer: Christine Fitch

Date: 08/03/2021

Email: Comment

No Comment at this time. Request to review any resubmittal.

RESPONSE: Noted

Commenting Division: Economic Development Review

Name of Reviewer: Max Daffron

Date: 07/23/2021

Email: Complete

Additional rooftops help with retail attraction in adjacent areas

RESPONSE: Noted

PRC2021-00005 SHERRELWOOD VILLAGE FILING NO 2 - ROW COMMENTS

ROW1: Need to add "TRACTS" into Dedication Statement:

HAVE LAID OUT, PLATTED AND SUBDIVIDED THE SAME INTO LOTS, STREETS, TRACTS, ANDEASEMENTS AS SHOWN ON THIS PLAT....

Since Tracts are platted need to state, but they are not included in the dedicationstatement as it continues so they are not part of any dedication to Adams County. RESPONSE: Dedication statement revised

ROW2: Provide owners name and not just "OWNER", in the Tract Use Table. RESPONSE: Owners Name Added

ROW3: Revise the Ownership Signature Block and Affirmation:

Instead of "ITS" for office, need to have "AS"

Need to add By______, AS_____of *OWNER* in the Notary Affirmation

RESPONSE: Ownership certificate revised

ROW4: Missing Sherrelwood Court street name. RESPONSE: Street name added

ROW5: Provide complete easement outline for San Sewer encroachment into the ROW. RESPONSE: Easement linework added to plat.

Greg Barnes

From: Lisa Culpepper

Sent: Monday, August 9, 2021 1:57 PM

To: Greg Barnes

Subject: RE: For Review: Sherrelwood Village (PRC2021-00005)

TAXES ARE PAID IN FULL FOR THE YEAR. THANK YOU!

Very truly yours,

LISA L. CULPEPPER, JD TREASURER & PUBLIC TRUSTEE

"Doing only that which the law requires is barely doing the minimum.Do more."

PLEASE NOTE: I'm not at my desk for much of the day due to operational requirements in other areas of the office and building. IF I DO NOT RESPOND WITHIN TWO (2) HOURS, PLEASE CALL THE OFFICE. THANK YOU!

Adams County Treasurer & Public Trustee4430 S. Adams County Pkwy.

Brighton, CO 80601

Direct: 720.523.6162 | Office: 720-523-6160 www.adcotax.com Mon. – Fri. 7am-5pm



Adams County Mission

To responsibly serve the Adams County Community with integrity and innovation.

From: Greg Barnes <GJBarnes@adcogov.org> **Sent:** Thursday, August 5, 2021 10:02 AM **To:** Greg Barnes <GJBarnes@adcogov.org>

Subject: For Review: Sherrelwood Village (PRC2021-00005)

The Adams County Planning Commission and Board of County Commissioners are requesting comments on the following applications:

- 1. Preliminary plat for major subdivision to create approximately 47 lots on 3.3 acres;
- 2. Major amendment to the Final Development Plan for Sherrelwood Village;
- 3. Waiver from subdivision design standards to exceed lot depth to width ratio;
- 4. Waiver from subdivision design standards to create double-fronting lots.

This request is located at 7840 Pecos Street. The Assessor's Parcel Numbers are 0171928400003 and 0171933100009. You have been previously notified for comments on Case # PRC2021-00001. That application has since been canceled by the applicant. Any comments that were provided on the application willstill be provided to the Planning Commission and Board of County Commissioners for this new application.

RESPONSE: Noted

Greg Barnes

From: Loeffler - CDOT, Steven < steven.loeffler@state.co.us>

Sent: Wednesday, August 25, 2021 7:34 AM

To: Greg Barnes

Cc: David Dixon - CDOT

Subject: Re: For Review: Sherrelwood Village (PRC2021-00005)

Please be cautious: This email was sent from outside Adams County

Greg,

I have reviewed the referral for the Sherrelwood Village FDP Amendment and Filing 2 Preliminary Plat located at 7840 Pecos Street and have no objections. This development is off of the State Highway system.

Thank you for the opportunity to review this referral.

Steve Loeffler

Permits Unit-Region 1

P 303.757.9891 | F 303.757.9053 2829 W. Howard Pl. 2nd Floor, Denver, CO 80204 <u>steven.loeffler@state.co.us</u> | <u>www.codot.gov</u> | <u>www.cotrip.org</u>

On Thu, Aug 5, 2021 at 10:02 AM Greg Barnes < GJBarnes@adcogov.org > wrote:

The Adams County Planning Commission and Board of County Commissioners are requesting comments on the following applications:

- 1. Preliminary plat for major subdivision to create approximately 47 lots on 3.3 acres;
- 2. Major amendment to the Final Development Plan for Sherrelwood Village;
- 3. Waiver from subdivision design standards to exceed lot depth to width ratio;
- 4. Waiver from subdivision design standards to create double-fronting lots.

This request is located at 7840 Pecos Street. The Assessor's Parcel Numbers are 0171928400003 and 0171933100009. You have been previously notified for comments on Case # PRC2021-00001. That application has since been canceled by the applicant. Any comments that were provided on the application will still be provided to the Planning Commission and Board of County Commissioners for this new application.

RESPONSE: Noted



October 26, 2020

Alan Sielaff, AICP

Adams County Development Services DivisionTransmission via email: asielaff@adcogov.org

Re: Sherrelwood Village Subdivision (Filing No. 2)

Case No. PRC2020-00010

Part of the SW ¼ SE ¼ of Sec. 28 and NW ¼ NE ¼ of Sec. 33, T2S, R68W, 6th P.M.Water Division 1, Water District 2

Dear Alan Sielaff:

We have reviewed the above-referenced proposal to rezone two parcels located at 7996 and 8000 Pecos St from residential to planned unit development (PUD), a preliminary major subdivision, and a preliminary major PUD amendment to the Sherrelwood Village PUD to accommodate the new development into the existing PUD (located at 7840 Pecos St). The land area subject of this proposalis 3.29 acres, including 2.2 acres of additional land to the existing PUD (the combined land area being 10.351 acres). The proposal involves subdividing the subject land into two tracts, Tracts A and B, and 45 lots to allow for the development of 47 new townhomes. Our office previously commented on this subdivision proposal on June 17, 2020.

Water Supply Demand

Estimated water requirements and proposed uses were not provided for this subdivision.

Source of Water Supply

There are no permitted wells on the subject property. The proposed water supply source is serviceprovided by the City of Thornton ("City"). A letter from the City dated July 10, 2017 was previously provided in the referral materials for Sherrelwood Village Filing No. 1 (PRC2016-00008). The letterindicates that the City has adequate capacity to provide water to the development; however the City reserves the right to suspend issuance of new water taps and connections indefinitely due to drought, emergency, or lack of available water resources. Another letter from the City dated September 14, 2020 confirms that service is available for the proposed development provided that service connections are paid for by the developer and that the property owner comply with the City's ordinances.

According to an April 5, 2018 letter from the City they have numerous water rights that divert fromthe South Platte River and Clear Creek as well as transmountain and native rights from the Cache la Poudre River. They also operate several reservoirs along the South Platte River that are utilized to store and regulate these water rights. According to the letter, the Clear Creek and South Plattewater rights provide an annual firm yield of approximately 32,500 acre-feet. In addition, they are currently working on a project to transport their Cache la Poudre rights to Thornton. Once this project is complete Thornton estimates an annual firm yield of approximately 51,000 acre-feet total. In 2017, Thornton's total annual demand was approximately 25,000 acre-feet and the estimated annual demand for all existing commitments within the City service area is 30,000 acre-feet.

State Engineer's Office Opinion

Based upon the above and pursuant to sections 30-28-136(1)(h)(I) and 30-28-136(1)(h)(II), C.R.S., it is our opinion that the proposed water supply is adequate and can be provided without causing injury to decreed water rights, as long as the City is committed to supply water to the lots.

According to the submitted material, there is a pond on the subject property that will be expandedas part of the development to receive drainage from this development. The applicant should be aware that unless the structure(s) meet the requirements of a "storm water detention and infiltration facility" as defined in section 37-92-602(8), C.R.S, the structure may be subject to administration by this office. The applicant should review DWR's Administrative Statement Regarding the Management of Storm Water Detention Facilities and Post-Wildland Fire Facilities inColorado, to ensure that the notification, construction and operation of the proposed structure(s) meet statutory and administrative requirements. The applicant is encouraged to use Colorado Stormwater Detention and Infiltration Facility Notification Portal to meet the notification requirements.

If you or the applicant have any questions, please contact Wenli Dickinson at 303-866-3581 x 8206 or via email at wenli.dickinson@state.co.us.

Joan Willen

Sincerely,

Joanna Williams, P.E. Water Resources Engineer

Ec: Subdivision file no. 27178

RESPONSE: Noted

Karen Berry State Geologist

August 23, 2021

Greg Barnes Adams County Community & Economic Development GJBarnes@adcogov.org Location: SW SE Section 28, and NW NE Section 33, T2S, R68W, 6th P.M. 39.8416, -105.0052

Subject: Sherrelwood Village – FDP Amendment and Filing No. 2 Preliminary Plat

Case Number PRC2021-00005; Adams County, CO; CGS Unique No. AD-20-0020-2

Dear Greg:

Colorado Geological Survey has reviewed the Sherrelwood Village FDP Amendment and Filing No. 2 Preliminary Plat referral. I understand the applicant proposes 47 townhomes on 3.3 acres with physical address7840, 7996 and 8000 Pecos Street. CGS reviewed the existing Sherrelwood Village site at major subdivision (preliminary plat), PDP (PUD-P), and rezoning (R-1-C to PUD), project number PRC2015-00014, on September 28, 2015.

The site does not contain steep slopes, is located in an "Area of Minimal Flood Hazard," is not undermined, and is not exposed to or located within any identified geologic hazard areas that would preclude the proposed residential use and density. **Colorado Geological Survey therefore has no objection to approval of the proposed FDP amendment and plat.** Our previous Sherrelwood Village Filing 2 comments remain valid:

Mineral resource potential. According to the Atlas of Sand, Gravel, and Quarry Aggregate Resources, Colorado Front Range Counties (Schwochow et al, Colorado Geological Survey Special Publications 5-A, Plate 2, and 5-B, Arvada Quadrangle, 1974), the subject property does not contain a mapped aggregate resource. **RESPONSE:** Noted

Existing building, pavements, fencing, etc. All building materials, foundations, utilities, pavements, etc. associated with the existing improvements must be completely demolished, removed and disposed of offsite, not graded into the existing fill.

All fill material encountered during site grading and within utility trenches and building foundation excavations should be removed or, if suitable for reuse (free of debris, organics, and contamination), reworked and replaced as a properly water conditioned and compacted, clean structural fill. RESPONSE: Noted

Soil and bedrock engineering properties. According to available geologic mapping (Lindvall, R.M, 1979, Geologic map of the Arvada quadrangle, Adams, Denver, and Jefferson Counties, Colorado: U.S. Geological Survey, Geologic Quadrangle Map GQ-1453, scale 1:24,000), most of the site is underlain by loess (winddeposited sandy silt and clay). Loess deposits commonly exhibit collapse under wetting and loading but, depending on the clay content, can also exhibit shrink/swell (volume changes in response to changes in water content). The surficial soils are underlain at very shallow depths (near-surface toward theeastern portion of the site) by Denver formation interbedded sandstone, claystone, siltstone, shale and conglomerate. Claystone can exhibit low strength at high water content, very high swell potential and, if present at or near foundation depths, can cause significant damage to foundations and homes if notproperly identified and mitigated.

Building-specific geotechnical investigations and analysis will be needed, once building locations are finalized, to identify the depth and extent of fill material, determine depths to bedrock and seasonal groundwater levels, and to characterize soil and bedrock engineering properties such as expansion/consolidation potential, density, strength, and allowable bearing pressures. This information isneeded to determine subgrade preparation requirements, to design individual foundations, foundation perimeter drains and floor systems, and to determine the site's suitability for basements, if planned. RESPONSE: Noted

Corrosive soils. Adams County Soil Survey data indicate that local soils are moderately to highly corrosive to uncoated steel. Disturbance tends to increase corrosivity. The need for corrosion protection should be evaluated as part of the geotechnical investigation. On lots where groundwater levels are sufficiently deepto allow basement construction, epoxy-coated, fiberglass, plastic/composite, concrete, or otherwise corrosion-resistant or corrosion-proof window wells are recommended. RESPONSE: Noted

Thank you for the opportunity to review and comment on this project. If you have questions or require additional review, please call me at (303) 384-2643, or e-mail carlson@mines.edu.

Sincerel

Jill Carlson, C.E.G. Engineering Geologist

Greg Barnes

From: PlatReview < PlatReview@lumen.com>
Sent: Friday, August 6, 2021 7:22 AM

To: Greg Barnes

Subject: FW: For Review: Sherrelwood Village (PRC2021-00005)

Attachments: PRC2021-00005-rfc.pdf

Please be cautious: This email was sent from outside Adams County

Requester,

Our engineer has reviewed this plat and their comments are: "I have no objections or comments to this Plat" If you require signatures, you can contact the engineer CC'd on this email and if you have any further questions, please don't hesitate to reach out. RESPONSE: Noted

Thank you!

From: Easement, Nre < Nre. Easement@centurylink.com>

Sent: Thursday, August 5, 2021 11:07 AM **To:** PlatReview <PlatReview@lumen.com>

Subject: Fwd: For Review: Sherrelwood Village (PRC2021-00005)

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From: Greg Barnes < <u>GJBarnes@adcogov.org</u>>**Sent:** Thursday, August 5, 2021 11:02:00 AM **To:** Greg Barnes < <u>GJBarnes@adcogov.org</u>>

Subject: For Review: Sherrelwood Village (PRC2021-00005)

The Adams County Planning Commission and Board of County Commissioners are requesting comments on the following applications:

- 1. Preliminary plat for major subdivision to create approximately 47 lots on 3.3 acres;
- 2. Major amendment to the Final Development Plan for Sherrelwood Village;
- 3. Waiver from subdivision design standards to exceed lot depth to width ratio;
- 4. Waiver from subdivision design standards to create double-fronting lots.

This request is located at 7840 Pecos Street. The Assessor's Parcel Numbers are 0171928400003 and 0171933100009. You have been previously notified for comments on Case # PRC2021-00001. That application has since been canceled by the applicant. Any comments that were provided on the application willstill be provided to the Planning Commission and Board of County Commissioners for this new application.

Please forward any written comments on this application to the Community and Economic Development Department at 4430 South Adams County Parkway, Suite W2000A Brighton, CO 80601-8216 or call (720)523-6800 by 08/26/2021 in order that your comments may be taken into consideration in the review of thiscase. If you would like your comments included verbatim please send your response by way of e-mail to GJBarnes@adcogov.org.RESPONSE: Noted

Greg Barnes

From: Clayton Woodruff < Clayton. Woodruff@RTD-Denver.com>

Sent: Friday, August 27, 2021 9:14 AM

To: Greg Barnes

Subject: RE Sherrelwood Village PRC2021-00005

Please be cautious: This email was sent from outside Adams County

Greg,

The RTD has no new comments on this project RESPONSE: Noted

Thanks,

C. Scott WoodruffEngineer III

Regional Transportation District 1560 Broadway, Suite 700, FAS-73 | Denver, CO 80202

o 303.299.2943 | m 303-720-2025 clayton.woodruff@rtd-denver.com

RESPONSE: Noted



August 13, 2021

Greg Barnes

Adams County Community and Economic Development4430 South Adams County Parkway, Suite W2000A Brighton, CO 80601

RE: Sherrelwood Village, PRC2021-00005TCHD Case No. 7160

Dear Mr. Barnes,

Thank you for the opportunity to review and comment on the preliminary plat for the major subdivision to create 47 single-family attached dwelling units on 3.3 acres, major amendment to the final development plan, a waiver from the subdivision design standards to exceed lot depth to width ration, and a waiver from the subdivision design standards to create double-fronting lots located at 7840 Pecos Street. Tri-County HealthDepartment (TCHD) staff has reviewed the application for compliance with applicable environmental and public health regulations and principles of healthy community design. After reviewing the application, TCHD has the following comments.

Community design to support walking and bicycling

Because chronic diseases related to physical inactivity and obesity now rank among thecountry's greatest public health risks, TCHD encourages community designs that make it easy for people to include regular physical activity, such as walking and bicycling, in their daily routines. Because research shows that the way we design our communities can encourage regular physical activity, TCHD strongly supports community plans that incorporate pedestrian and bicycle amenities that support the use of a broader pedestrian and bicycle network.

In order to promote walking and bicycling through this development, TCHD encouragesthe applicant to consider the inclusion of the following as they design the community.

- A system of sidewalks, bike paths and open space trail networks that are well-designed and well-lit, safe, and attractive so as to promote bicycle and pedestrian use. RESPONSE: Sidewalks are provided on all proposed streets which connect to the single-family development to the south. Walks are also provided to a small amenity space for residents to access this space.
- Bicycle and pedestrian networks that provide direct connections between destinations in and adjacent to the community. RESPONSE: Walks are provided along both sides of the street. A safe crossing across Pecos street is also provided for with a signal.
- Where public transportation systems exist, direct pedestrian access should be provided to increase transit use and reduce unnecessary vehicle trips, and related vehicle emissions. The pedestrian/bicycle networks should be integrated with the existing and future transit plans for the area. RESPONSE: A solid fence is located along Pecos Street to assist with screening of both the buildings and parking. This is consistent with the fencing to the south along the single-family homes. Direct access thru the townhomes does not exist unless the fence is broken up, which lessens screening and privacy for units.
- Streets that are designed to be pedestrian/bike friendly and to reduce vehicle andpedestrian/bicycle fatalities. RESPONSE: Walks are provided along both sides of the street. A safe crossing across Pecos street is

also provided for with a signal.

• Bicycle facilities and racks are provided in convenient locations. RESPONSE: No bike racks are provided at this time. All units have 2 car garages

Healthy building design standards:

Building design can impact health in several ways including through the materials usedand the amount of volatile organic compounds (VOCs) or other harmful chemicals thatthey contain, the air and water quality, the amount of daylight available, and even by encouraging physical activity and social interaction. TCHD encourages the applicant toconsider incorporating design standards into the development to ensure a health- promoting environment. The applicant could pursue building certifications such as LEED, WELL Building Standard, Certified Healthy, or Living Building Challenge. RESPONSE: Noted

Connection to nearby bus stop or transit station:

It appears that the subject property is within 100 feet to bus stop Pecos Street and W79th Way. Since research has shown that people who use transit regularly gain tremendous health benefits, TCHD encourages the applicant to consider providing a safe and direct connection to the transit stop. This could include designing the onsitepedestrian facilities to easily facilitate walking from the site to the nearby transit stop. RESPONSE: A solid fence is located along Pecos Street to assist with screening of both the buildings and parking. This is consistent with the fencing to the south along the single-family homes. Direct access thru the townhomes does not exist unless the fence is broken up, which lessens screening and privacy for units.

Connection to nearby trails

TCHD recommends that the applicant provide a direct connection from the internal pedestrian circulation system to the adjacent trail on Orchard Drive that goes around the development site. RESPONSE: Per previous comments a connection to the park will not be provided.

Radon

Radon is a naturally occurring radioactive gas that is present at high levels in all parts of Colorado due to the presence of uranium in the soil. Radon can enter homes and long- term exposure causes lung cancer. In order to prevent radon from infiltrating the home, TCHD recommends designing new homes so that they are radon resistant. This includes laying a barrier beneath the flooring system, installing a gas-tight venting pipe from the gravel level through the roof, and sealing and caulking the foundation thoroughly. More information regarding radon and radon-resistant construction techniques can be found here:

Building Demolition

Fugitive Dust, Lead, and Asbestos

The application indicates that the existing vacant building on the site will be demolished.

https://www.epa.gov/radon/building-new-home-have- you-considered-radon. RESPONSE: Noted

The Colorado Department of Public Health and Environment Air Pollution ControlDivision (APCD) regulates air emissions. State air quality regulations require that precautions be taken prior to demolition of buildings to evaluate the presence of asbestos fibers that may present a health risk. If asbestos is present, actions must betaken to prevent their release into the environment. State regulations also address control of ozone depleting compounds (chlorofluorocarbons) that may be contained inair conditioning or refrigerating equipment. The applicant shall contact the APCD at

(303) 692-3100 for more information. Additional information is available at http://www.cdphe.state.co.us/ap/asbestos. RESPONSE: Noted

Buildings constructed prior to 1978 may contain lead paint. Environmental Protection Agency's (EPA) 2008 Lead-Based Paint Renovation, Repair and Painting (RRP) Rule (as amended in 2010 and 2011), aims to protect the public from lead-based paint hazards associated with renovation, repair and painting activities. These

activities can create hazardous lead dust when surfaces with lead paint, even from many decades ago, are disturbed. More information can be found here https://www.epa.gov/lead/lead-renovation-repair-and-painting-program-rules and https://www.epa.gov/lead. The applicant may contact, and the Environmental Protection Agency EPA at 1-800-424- 5323 for more information. RESPONSE: Noted

Attainable Housing

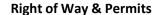
Access to safe, attainable housing is directly associated with positive physical andmental health outcomes and underlies one's ability to access jobs, food, medical services, and other essentials that are vital to well-being. Providing permanent supportive housing is an integral element of promoting health in our communities.TCHD supports projects that include an attainable housing component. RESPONSE: Noted

Please feel free to contact me at 720-200-1537 or pmoua@tchd.org if you have anyquestions about TCHD's comments.

Sincerely,

Pang Moua, MPP Land Use and Built Environment Specialist

cc: Sheila Lynch, Keith Homersham, TCHD





1123 West 3rd AvenueDenver, Colorado 80223

Telephone: 303.571.3306

Facsimile: 303. 571. 3284donna.l.george@xcelenergy.com

August 26, 2021

Adams County Community and Economic Development Department4430 South Adams County Parkway, 3rd Floor, Suite W3000 Brighton, CO 80601

Attn: Greg Barnes

Re: Sherrelwood Village Filing No. 2, Case # PRC2021-00005

Public Service Company of Colorado's (PSCo) Right of Way & Permits Referral Desk has reviewed the documentation for **Sherrelwood Village Filing No. 2** and has a concern that Lots 1-2 Block 7 and Lots 1-6 Block 6 don't appear to have dry utility easements as shown on all of the other lots for national gas and electric distribution facilities. RESPONSE: A 10' dry utility easement is located along Osage St and Sherrelwood Dr. While this easement does not directly connect to the lots mentioned above, we should be ok in this instance. Between the lots and this easement is Tract A, which is dedicated for utilities so it acts as a blanket easement for the running of services through the parking lot to the buildings.

The property owner/developer/contractor must complete the application process for any new natural gas or electric service, or modification to existing facilities via xcelenergy.com/InstallAndConnect, and additional easements will need to be acquired by separate document for new facilities (i.e. transformer) – be sure to contact the Designer and request that they connect with a Right-of-Way Agent. RESPONSE: Noted

Donna George
Right of Way and Permits
Public Service Company of Colorado dba Xcel Energy
Office: 303-571-3306 – Email: donna.l.george@xcelenergy.com

Adams County Planning Commission

Case Sherrelwood Village FDP Amendment and Filing 2 Preliminary PlatProject Number PRC2021-00005

My comments are still much the same as they were in 3 previous letters of opposition and concern about this Del west proposal. Such as the entire proposal is not harmonious nor compatible to this existing single Family neighborhood.

Del west has built housing now on 2 large former school sites, and are proposing to tear down an existing school site for this project. This has taken away Community playgrounds and open space for the kids in this area. RESPONSE: This project does not take away playgrounds or park space in this area. DelWest will be enhancing Sherrelwood Park in the future and assisting Hyland Hills.

Sherrelwood park is the last park in the entire neighborhood. This project will add over 100 new Families to a small acreage that had all been open access to Sherrelwood park. RESPONSE: No change in access to Sherrelwood Park is occurring. There was no access thru this school site previously.

Therefore, Del west should have some commitment to the Community to provide recreational/playground equipment to be located in the Sherrelwood park next door to this project. This should include,

- 1. A shelter house and/or a Community Center to accommodate at least a party of 100 people. The existing school that is being torn down, should of or could have been made into a Community Center, as we do not have any in this neighborhood. RESPONSE: We will take this into consideration as we partner with Hyland Hills on the new park improvements
- 2. Modern playground equipment able to accommodate children of all age groups and adult type activities aswell; such as exercise structures. RESPONSE: We will take this into consideration as we partner with Hyland Hills on the new park improvements
- 3. A swing structure that is ADA compliant, as well as other swings, slides and climbing and bridging structures. RESPONSE: We will take this into consideration as we partner with Hyland Hills on the new park improvements

In the change to a major subdivision to create 47 new lots, does that then change the tax liabilities to the individual home owners? RESPONSE: Each lot will have an owner that will be assessed a residential property tax, versus 2 lots with 47 rental units. The other structure would also be taxed as a residential use, but 47 rental Townhomes would be of a higher value than an individual townhome

This Developer does not yet give us the "affordable housing" he told us we were getting in his public meetings. RESPONSE: Housing will be market rate attainable housing. This was presented several times at public hearings.

Roger and Pat Hall 8121 Albert Ct Denver CO 80221

revised as directed

PROJ MGR: TMC PROJ ENG: DF CAD: JAC DATE: 6/28/2021

SHEET

OF **5**

SHERRELWOOD VILLAGE FILING NO. 2

PART OF THE NORTHEAST QUARTER SECTION 33 AND THE SOUTHEAST QUARTER OF SECTION 28, TOWNSHIP 2 SOUTH, RANGE 68 WEST OF THE SIXTH PRINCIPAL MERIDIAN, COUNTY OF ADAMS, STATE OF COLORADO

LEGAL DESCRIPTION AND DEDICATION STATEMENT

KNOW ALL PEOPLE BY THESE PRESENTS THAT THE UNDERSIGNED WARRANT THEY ARE THE OWNER OF A PARCEL OF LAND BEING TRACTS B & D, LOTS I THROUGH 4, BLOCK I, AND A PORTION OF LOT 8, BLOCK 2, SHERRELWOOD VILLAGE, A SUBDIVISION PLAT RECORDED AT RECEPTION NO. 2018000075940 TOGETHER WITH THAT PARCEL OF LAND, AS DESCRIBED IN THAT WARRANTY DEED RECORDED AT RECEPTION NO. 2019000073502 AND THAT PARCEL OF LAND, AS DESCRIBED IN THAT WARRANTY DEED RECORDED AT RECEPTION NO. 2019000075343, ALL IN THE RECORDS OF THE ADAMS COUNTY CLERK AND RECORDER'S OFFICE, LYING WITHIN THE SOUTHEAST QUARTER OF SECTION 28 AND THE NORTHEAST QUARTER OF SECTION 33, BOTH IN TOWNSHIP 2 SOUTH, RANGE 68 WEST OF THE SIXTH PRINCIPAL MERIDIAN, COUNTY OF ADAMS, STATE OF COLORADO, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

THE BEARINGS FOR THIS DESCRIPTION ARE BASED ON THE NORTH LINE OF THE NORTHEAST QUARTER OF SECTION 33, TOWNSHIP 2 SOUTH, RANGE 68 WEST OF THE SIXTH P.M., BEING ASSUMED TO BEAR N 89°30'30" E, FROM THE NORTH QUARTER CORNER OF SAID SECTION 33, BEING MONUMENTED BY A REBAR WITH A 3-1/4 INCH ALUMINUM CAP, STAMPED "PLS 23519" TO THE NORTHEAST CORNER OF SAID SECTION 33, BEING MONUMENTED BY A REBAR WITH A 3-1/4 INCH ALUMINUM CAP, STAMPED "PLS 7276", WITH ALL BEARINGS CONTAINED HEREIN RELATIVE THERETO.

COMMENCING AT THE NORTH QUARTER CORNER OF SAID SECTION 33, THENCE N 89°30'30" E, ALONG THE NORTH LINE OF THE NORTHEAST QUARTER OF SAID SECTION 33, A DISTANCE OF 50.00 FEET TO A POINT ON THE EAST LINE OF THE PECOS STREET RIGHT-OF-WAY, AS DEDICATED BY THAT RESOLUTION RECORDED IN BOOK 3270 AT PAGE 279, SAID ADAMS COUNTY RECORDS AND THE POINT OF BEGINNING:

THENCE N 00° 14'47" W, ALONG THE EAST LINE OF SAID PECOS STREET RIGHT-OF-WAY, AND ALONG A LINE BEING 50.00 FEET EAST OF AND PARALLEL TO THE WEST LINE OF THE SOUTHEAST QUARTER OF SAID SECTION 28, A DISTANCE OF 293.01 FEET TO A POINT ON THE NORTH LINE OF SAID PARCEL OF LAND DESCRIBED IN BOOK 3254 AT PAGE 139;

THENCE S 82°41'00" E, ALONG SAID NORTH LINE, A DISTANCE OF 8.12 FEET TO THE WEST CORNER OF PARCEL D, AS DESCRIBED IN THAT QUIT CLAIM DEED RECORDED IN BOOK 3251 AT PAGE 924;

THENCE ALONG THE SOUTH AND WEST LINES OF SAID PARCEL D, THE FOLLOWING TWO (2) COURSES:

- I. S 76°46'56" E, A DISTANCE OF 178.56 FEET;
- 2. S 21°38'59" E, ALONG THE EAST LINES OF SAID PARCEL DESCRIBED IN BOOK 3254 AT PAGE 139 AND SAID SHERRELWOOD VILLAGE PLAT, A DISTANCE OF 459.50 FEET TO THE EAST CORNER OF LOT 4, BLOCK 1, SAID SHERRELWOOD VILLAGE PLAT;

THENCE S 12°19'21" W, ALONG THE SOUTHEAST LINE OF SAID LOT 4, A DISTANCE OF 57.53 FEET TO A POINT ON THE NORTH LINE OF WEST 79TH WAY RIGHT-OF-WAY, AS DEDICATED BY SAID SHERRELWOOD VILLAGE PLAT AND A POINT OF NON-TANGENT CURVATURE;

THENCE ALONG THE NORTH LINE OF THE WEST 79TH WAY RIGHT-OF-WAY AND ALONG THE WEST LINE OF THE OSAGE STREET RIGHT-OF-WAY, AS DEDICATED BY SAID SHERRELWOOD VILLAGE PLAT, THE FOLLOWING THREE (3) COURSES:

- I. ALONG THE ARC OF A NON-TANGENT CURVE TO THE LEFT HAVING A RADIUS OF 38.00 FEET, A CENTRAL ANGLE OF 09°04'20" AND AN ARC LENGTH OF 6.02 FEET, THE CHORD OF WHICH BEARS N 85°25'57" W, A DISTANCE OF 6.01 FEET;
- 2. N 89°58'07" W, A DISTANCE OF 204.00 FEET TO A POINT OF CURVATURE;
- 3. ALONG THE ARC OF A CURVE TO THE LEFT HAVING A RADIUS OF 38.00 FEET, A CENTRAL ANGLE OF 90°00'00" AND AN ARC LENGTH OF 59.69 FEET;

THENCE N 00°01'53" E, A DISTANCE OF 11.47 FEET TO A POINT ON THE SOUTH LINE OF SAID TRACT B;

THENCE ALONG THE SOUTH AND WEST LINES OF SAID TRACT B THE FOLLOWING TWO (2) COURSES:

- N 89°58'07" W, A DISTANCE OF 90.00 FEET TO A POINT ON THE EAST LINE OF THE PECOS STREET RIGHT-OF-WAY, AS DEDICATED BY SAID SHERRELWOOD VILLAGE PLAT;
 N 00°01'53" E, ALONG SAID EAST LINE, A DISTANCE OF 30.01 FEET TO A POINT ON THE
- N 00°01'53" E, ALONG SAID EAST LINE, A DISTANCE OF 30.01 FEET TO A POINT ON THE SOUTH LINE OF THAT PARCEL OF LAND DESCRIBED IN SAID RECEPTION NO. 2019000073502;

THENCE ALONG THE SOUTH, EAST AND NORTH LINES OF SAID PARCEL OF LAND THE FOLLOWING THREE (3) COURSES:

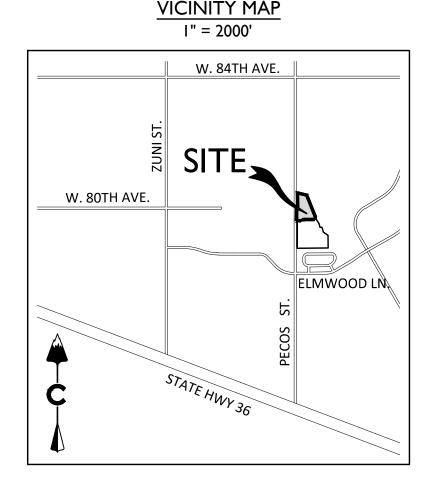
- I. S 89°30'30" W, ALONG A LINE BEING PARALLEL TO THE NORTH LINE OF THE NORTHEAST QUARTER OF SAID SECTION 33, A DISTANCE OF 20.00 FEET TO A POINT BEING 30.00 FEET EAST OF THE WEST LINE OF THE NORTHEAST QUARTER OF SAID SECTION 33;
- 2. N 00°01'53" E, ALONG A LINE BEING 30.00 FEET EAST OF AND PARALLEL TO THE WEST LINE OF THE NORTHEAST QUARTER OF SAID SECTION 33, A DISTANCE OF 208.00 FEET TO A POINT BEING 20.00 FEET SOUTH OF THE NORTH LINE OF THE NORTHEAST QUARTER OF SAID SECTION 33;
- 3. N 89°30'30" E, ALONG A LINE BEING 20.00 FEET SOUTH OF AND PARALLEL TO THE NORTH LINE OF THE NORTHEAST QUARTER OF SAID SECTION 33, A DISTANCE OF 20.00 FEET TO A POINT BEING 50.00 FEET EAST OF THE WEST LINE OF THE NORTHEAST QUARTER OF SAID SECTION 33, ALSO BEING A POINT ON THE EAST LINE OF THE PECOS STREET RIGHT-OF-WAY, AS DEDICATED BY SAID SHERRELWOOD VILLAGE PLAT;

THENCE N 00°01'53" E, ALONG SAID EAST LINE AND ALONG A LINE BEING 50.00 FEET EAST OF AND PARALLEL TO THE WEST LINE OF THE NORTHEAST QUARTER OF SAID SECTION 33 A DISTANCE OF 20.00 FEET TO THE POINT OF BEGINNING.

CONTAINING AN AREA OF 143,370 SQUARE FEET OR 3.291 ACRES, MORE OR LESS.

HAVE LAID OUT, PLATTED AND SUBDIVIDED THE SAME INTO LOTS, STREETS AND EASEMENTS AS SHOWN ON THIS PLAT UNDER THE NAME AND STYLE OF SHERRELWOOD VILLAGE FILING NO. 2. ALL PUBLIC STREETS ARE HEREBY DEDICATED TO ADAMS COUNTY FOR PUBLIC USE. THE UNDERSIGNED DOES HEREBY DEDICATE, GRANT AND CONVEY TO ADAMS COUNTY THOSE PUBLIC EASEMENTS AS SHOWN ON THE PLAT; AND FURTHER RESTRICTS THE USE OF ALL PUBLIC EASEMENT TO ADAMS COUNTY AND/OR ITS ASSIGNS, PROVIDED HOWEVER, THAT THE SOLE RIGHT AND AUTHORITY TO RELEASE OR QUITCLAIM ALL OR ANY SUCH PUBLIC EASEMENTS SHALL REMAIN EXCLUSIVELY VESTED IN ADAMS COUNTY.

SHEET I



LAND USE TABLE

TYPE	AREA (SF)	AREA (AC)
LOTS (47)	65,023	1.493
TRACTS (2)	46,028	1.056
R.O.W DEDICATED	32,319	0.742
TOTAL	143,370	3.291

owner specified

Specify "Owner" 7840 Pecos Investment

TRACT USE OWNERSHIP MAINTENANCE A OPEN SPACE, UTILITY, OWNER OWNER B OPEN SPACE, UTILITY, OWNER OWNER DRAINAGE & ACCESS

TRACT USE TABLE

Need to add "..Have Laid out and platted the same into Lots, streets, easements and tracts as...."

SHEET INDEX

language added to certificate

SHEET 1 COVER
SHEET 2 OVERALL BOUNDARY
SHEET 3 DETAIL
SHEET 4 DETAIL
SHEET 5 NOTES AND TABLES

since there are tracts, but they are not being dedicated to the county.

PUBLIC SERVICE COMPANY OF COLORADO NOTES

THESE EASEMENTS ARE DEDICATED TO ADAMS COUNTY FOR THE BENEFIT OF THE APPLICABLE UTILITY PROVIDERS FOR THE INSTALLATION, MAINTENANCE, AND REPLACEMENT OF ELECTRIC, GAS, TELEVISION, CABLE, AND TELECOMMUNICATIONS FACILITIES (DRY UTILITIES). UTILITY EASEMENTS SHALL ALSO BE GRANTED WITHIN ANY ACCESS EASEMENTS AND PRIVATE STREETS IN THE SUBDIVISION. PERMANENT STRUCTURES, IMPROVEMENTS, OBJECTS, BUILDINGS, WELLS, WATER METERS AND OTHER OBJECTS THAT MAY INTERFERE WITH THE UTILITY FACILITIES OR USE THEREOF (INTERFERING OBJECTS) SHALL NOT BE PERMITTED WITHIN SAID UTILITY EASEMENTS AND THE UTILITY PROVIDERS, AS GRANTEES, MAY REMOVE ANY INTERFERING OBJECTS AT NO COSTS TO SUCH GRANTEES, INCLUDING, WITHOUT LIMITATION, VEGETATION. PUBLIC SERVICE COMPANY OF COLORADO (PSCo) AND ITS SUCCESSORS RESERVE THE RIGHT TO REQUIRE ADDITIONAL EASEMENTS AND TO REQUIRE THE PROPERTY OWNER TO GRANT PSCo AN EASEMENT ON ITS STANDARD FORM.

CITY OF THORNTON NOTES

WATER AND SANITARY SEWER EASEMENTS ARE HEREBY GRANTED TO THE CITY OF THORNTON, AS SHOWN ON THIS PLAT, FOR THE PURPOSE TO CONSTRUCT, MAINTAIN, REPAIR, REPLACE, INSPECT AND OPERATE MAINS, TRANSMISSION, DISTRIBUTION AND SERVICE LINES AND APPURTENANCES OR OTHER IMPROVEMENTS FOR WHICH THE EASEMENTS WERE GRANTED, TOGETHER WITH A RIGHT OF ACCESS, ON, ALONG AND IN ALL OF THE EASEMENTS, AS MAY BE NECESSARY TO ACCOMPLISH THE INTENDED PURPOSES OF THE EASEMENT. THESE EASEMENTS SHALL BE EXCLUSIVE, HOWEVER UTILITIES MAY CROSS THE EXCLUSIVE EASEMENTS AT SUBSTANTIALLY 90 DEGREES.

OWNER

7840 PECOS INVESTMENTS LLC, A COLORADO LIMITED LIABILITY COMPANY

BY:	
as : revised	
<u>ACKNOWLEDGEMENT</u>	
STATE OF	
COUNTY OF	SS
THE FOREGOING WAS ACKNOWLEDGED B	EFORE ME THIS DAY
OF, 20, A.D.	By, Asof
BY:	7840 Pecos Investments
WITNESS MY HAND AND OFFICIAL SEAL:	COMPLETE NOTARY AFFIRMATION
NOTARY PUBLIC:	notary statement

PLANNING COMMISSION APPROVAL

MY COMMISSION EXPIRES:

CHAIR

APPROVED BY THE A	ADAMS C	COUNTY PLAI	NNING COM	MISSION ON THIS	DAY
OF	, 20	, A.D. AT	O'CLOCK _	M.	

BOARD OF COUNTY COMMISSIONERS APPROVAL

APPROVED BY THE ADAMS COUNTY BOARD OF COMMISSIONERS THIS	DAY
OF, 20, A.D. AT O'CLOCK _ M.	
CHAIR	

SURVEYOR'S CERTIFICATE

I HEREBY CERTIFY I WAS IN RESPONSIBLE CHARGE OF THE SURVEY WORK USED IN THE PREPARATION OF THIS PLAT; THE POSITIONS OF THE PLATTED POINTS SHOWN HEREON HAVE AN ACCURACY OF NOT LESS THAN (I) FOOT IN TEN THOUSAND (10,000) FEET PRIOR TO ADJUSTMENTS; AND ALL BOUNDARY MONUMENTS AND CONTROL CORNERS SHOWN HEREON WERE IN PLACE AS DESCRIBED IN APRIL 2020

THOMAS M. GIRARD
COLORADO PLS 38151
FOR AND ON BEHALF OF
CORE CONSULTANTS, INC



ADAMS COUNTY CLERK AND RECORDER'S CERTIFICATE

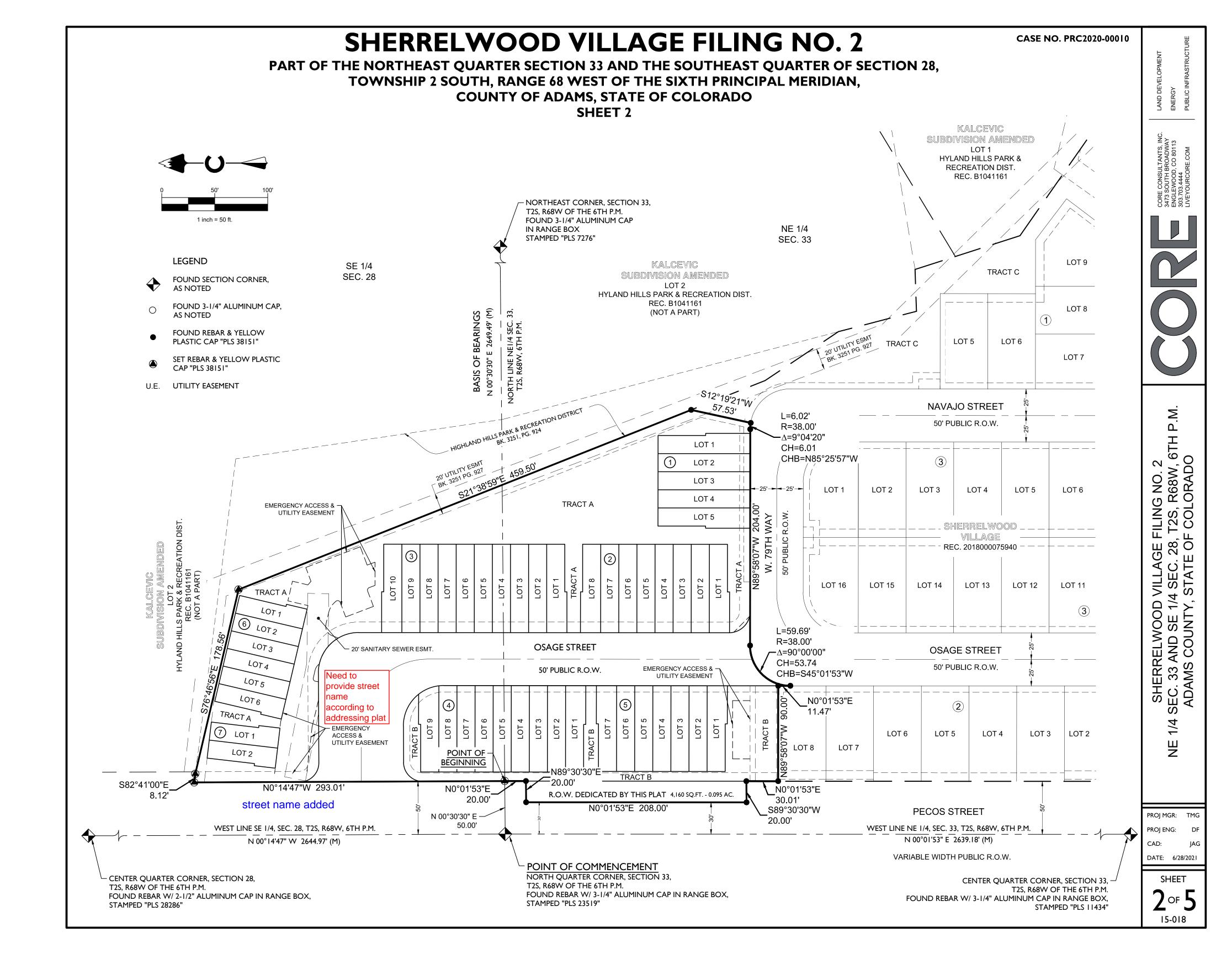
THIS PLAT WAS FILED FOR RECORD IN THE OFFICE OF THE AL	DAMS COUNTY
CLERK AND RECORDER IN THE STATE OF COLORADO AT	M. ON THE

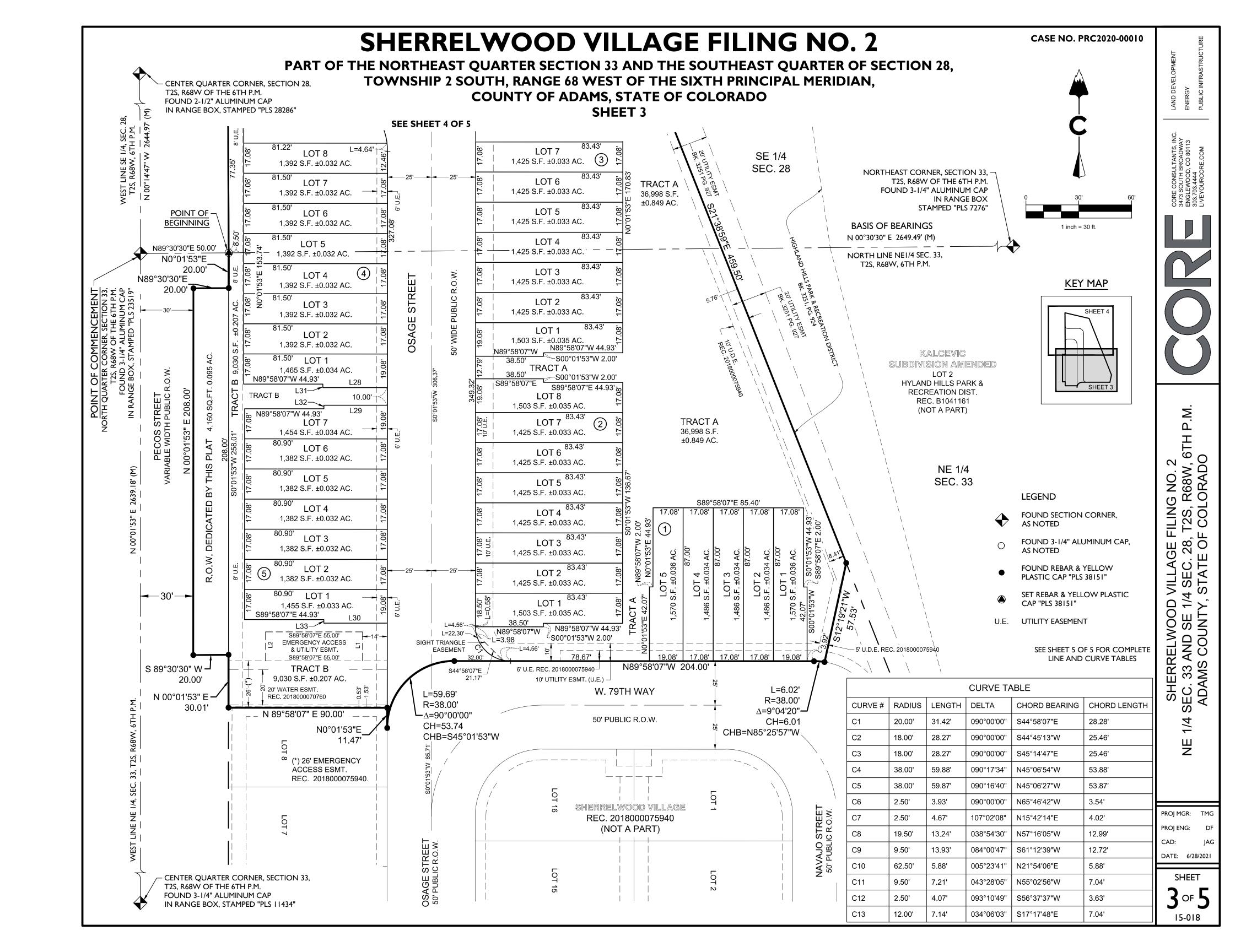
DAY OF	, 20	
COLINITY OLD	DIV AND DECORDED	

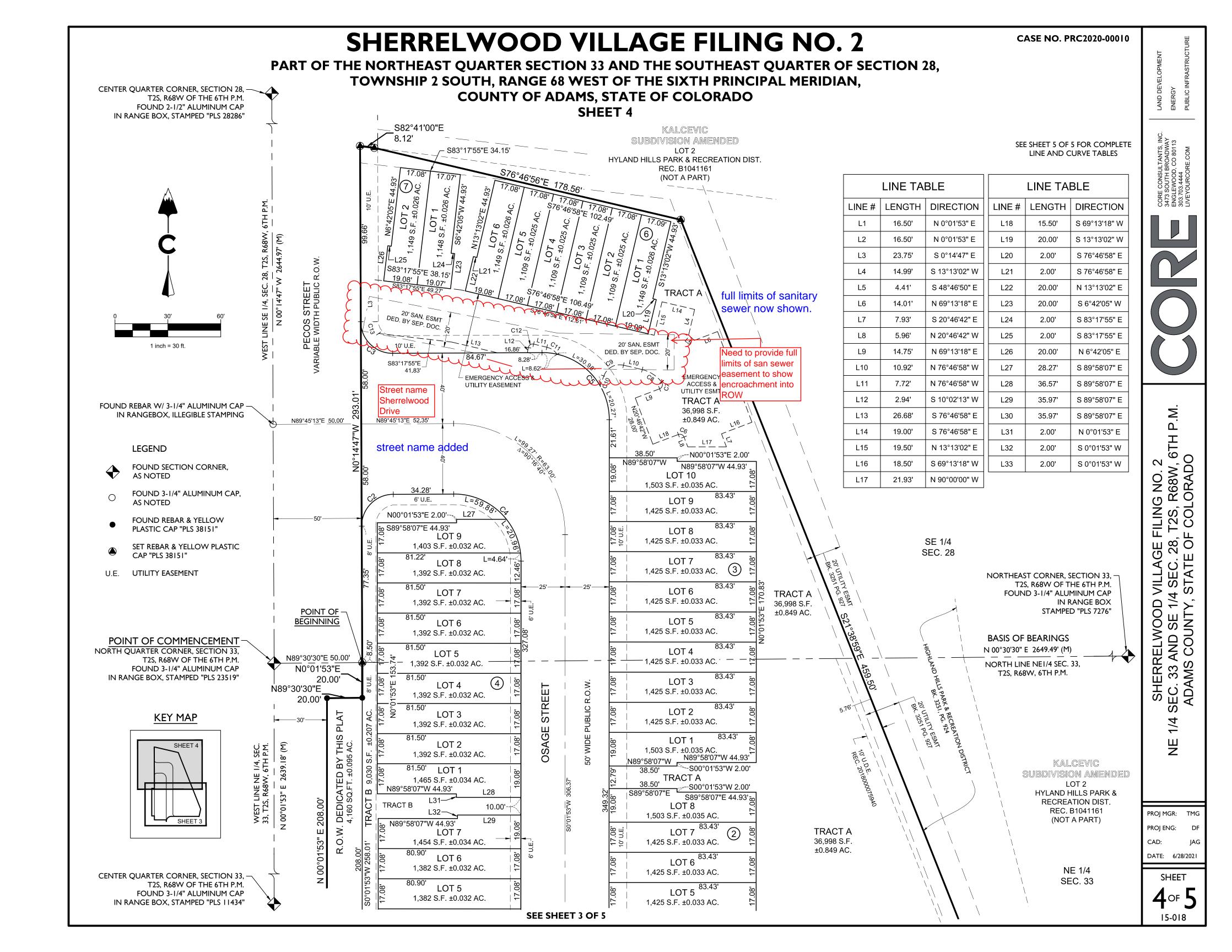
COOM CEEKK AND RECORDER	

COUNTY CLERK AND RECORDER

BY DEPUTY:







SHEET

DATE: 6/28/2021

15-018

PART OF THE NORTHEAST QUARTER SECTION 33 AND THE SOUTHEAST QUARTER OF SECTION 28, TOWNSHIP 2 SOUTH, RANGE 68 WEST OF THE SIXTH PRINCIPAL MERIDIAN, **COUNTY OF ADAMS, STATE OF COLORADO** SHEET 5

NOTES

- ACCORDING TO COLORADO LAW YOU MUST COMMENCE ANY LEGAL ACTION BASED UPON ANY DEFECT IN THIS SURVEY WITHIN THREE YEARS AFTER YOU FIRST DISCOVER SUCH DEFECT. IN NO EVENT MAY ANY ACTION BASED UPON ANY DEFECT IN THIS SURVEY BE COMMENCED MORE THAN TEN YEARS FROM THE DATE OF THE CERTIFICATION SHOWN HEREON.
- 2. THIS SURVEY DOES NOT REPRESENT A TITLE SEARCH BY CORE CONSULTANTS, INC. FOR RECORD DOCUMENTS AND DETERMINATION OF OWNERSHIP, EASEMENTS OF RECORD, RIGHTS-OF-WAY AND ENCUMBRANCES, CORE CONSULTANTS, INC. RELIED UPON TITLE COMMITMENT ORDER NO. 21000310549, PREPARED BY STEWART TITLE GUARANTY COMPANY, WITH AN EFFECTIVE DATE OF MAY 21, 2021 AT 5:30 PM
- 3. ANY PERSON WHO KNOWINGLY REMOVES, ALTERS OR DEFACES ANY PUBLIC LAND SURVEY MONUMENT OR LAND BOUNDARY MONUMENT OR ACCESSORY, COMMITS A CLASS TWO (2) MISDEMEANOR PURSUANT TO STATE STATUTE 18-4-508, C.R.S.
- BEARINGS FOR THIS SURVEY ARE BASED ON THE NORTH LINE OF THE NORTHEAST QUARTER OF SECTION 33, TOWNSHIP 2 SOUTH, RANGE 68 WEST OF THE SIXTH P.M., BEING ASSUMED TO BEAR N 89°30'30" E, FROM THE THE NORTH QUARTER CORNER OF SAID SECTION 33, BEING MONUMENTED BY A REBAR WITH A 3-1/4" ALUMINUM CAP IN RANGE BOX, STAMPED "PLS 23519", TO THE NORTHEAST CORNER OF SAID SECTION 33, BEING MONUMENTED BY A REBAR WITH A 3-1/4" ALUMINUM CAP IN RANGE BOX. PLS 7276. WITH ALL BEARINGS CONTAINED HEREIN RELATIVE THERETO.
- THE LINEAL UNIT USED IN THE PREPARATION OF THIS ALTA/NSPS LAND TITLE SURVEY IS THE U.S. SURVEY FOOT. PURSUANT TO C.R.S. 38-52-103(2) METRIC CONVERSION IS: ONE METER EQUALS 3937 / 1200 FEET.
- 6. DATE OF FIELD SURVEY: APRIL 9, 2020
- 7. THE GROSS LAND AREA OF THE SUBJECT PROPERTY IS 143,370 SQUARE FEET, OR 3.291 ACRES, MORE OR LESS.
- 8. RIGHT-OF-WAY FOR INGRESS AND EGRESS FOR SERVICE AND EMERGENCY VEHICLES IS GRANTED OVER, ACROSS, ON, AND THROUGH ANY AND ALL PRIVATE ROADS, WAYS, AND FIRE LANES NOW OR HEREAFTER ESTABLISHED ON THE DESCRIBED PROPERTY. THE SAME ARE HEREBY DESIGNATED AS FIRE LANES AND EMERGENCY AND SERVICE VEHICLE ROADS, AND SHALL BE POSTED "NO PARKING - FIRE LANE"
- THE PROPERTY LIES WITHIN ZONE X, "AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN, PER FEMA MAP NO. 08001C0584H, PANEL 584, REVISED MARCH 5, 2017.
- 10. REFER TO THE OPERATION AND MAINTENANCE MANUEL RECORDED APRIL 2, 2018 AT RECEPTION NO. 2018000026268 FOR ADDITIONAL DRAINAGE GUIDELINES.
- 11. TEN-FOOT (10') WIDE UTILITY EASEMENTS ALONG THE EAST SIDE OF THE OSAGE STREET RIGHT-OF-WAY AND ALONG THE NORTH SIDE OF THE W. 79TH WAY RIGHT-OF-WAY; SIX-FOOT (6') WIDE UTILITY EASEMENTS ALONG THE WEST SIDE OF THE OSAGE STREET RIGHT-OF-WAY; EIGHT-FOOT (8') WIDE UTILITY EASEMENTS ALONG THE EAST SIDE OF THE PECOS STREET RIGHT-OF-WAY ARE HEREBY DEDICATED ON PRIVATE PROPERTY ADJACENT TO THE FRONT LOT LINES OF EACH LOT IN THE SUBDIVISION. IN ADDITION, EIGHT-FOOT (8') WIDE DRY UTILITY EASEMENTS ARE HEREBY DEDICATED AROUND THE PERIMETER OF TRACTS, PARCELS AND/OR OPEN SPACE AREAS. THESE EASEMENTS ARE DEDICATED TO ADAMS COUNTY FOR THE BENEFIT OF THE APPLICABLE UTILITY PROVIDERS FOR THE INSTALLATION, MAINTENANCE, AND REPLACEMENT OF UTILITIES. UTILITY EASEMENTS SHALL ALSO BE GRANTED WITHIN ANY ACCESS EASEMENTS AND PRIVATE STREETS IN THE SUBDIVISION. PERMANENT STRUCTURES, IMPROVEMENTS, OBJECTS, BUILDINGS, WELLS, WATER METERS AND OTHER OBJECTS THAT MAY INTERFERE WITH THE UTILITY FACILITIES OR USE THEREOF (INTERFERING OBJECTS) SHALL NOT BE PERMITTED WITHIN SAID UTILITY EASEMENTS AND THE UTILITY PROVIDERS, AS GRANTEES, MAY REMOVE ANY INTERFERING OBJECTS AT NO COST TO SUCH GRANTEES, INCLUDING, WITHOUT LIMITATION, VEGETATION.
- 12. THE POLICY OF THE COUNTY REQUIRES THAT MAINTENANCE ACCESS SHALL BE PROVIDED TO ALL STORM DRAINAGE FACILITIES TO ASSURE CONTINUOUS OPERATIONAL CAPABILITY OF THE SYSTEM. THE PROPERTY OWNERS SHALL BE RESPONSIBLE FOR THE MAINTENANCE OF ALL DRAINAGE FACILITIES INCLUDING INLETS, PIPES, CULVERTS, CHANNELS, DITCHES, HYDRAULIC STRUCTURES, AND DETENTION BASINS LOCATED ON THEIR LAND UNLESS MODIFIED BY THE SUBDIVISION DEVELOPMENT AGREEMENT. SHOULD THE OWNER FAIL TO MAINTAIN SAID FACILITIES, THE COUNTY SHALL HAVE THE RIGHT TO ENTER SAID LAND FOR THE SOLE PURPOSE OF OPERATIONS AND MAINTENANCE. ALL SUCH MAINTENANCE COST WILL BE ASSESSED TO THE
- 13. STATEMENT RESTRICTING ACCESS: ACCESS RIGHTS ACROSS THE RIGHT-OF-WAY LINES OF MAJOR HIGHWAYS, PARKWAYS, STREETS OR FREEWAYS, ARE RESTRICTED WHERE REQUIRED AS A PROVISION OF APPROVAL.

CURVE TABLE					
CURVE#	RADIUS	LENGTH	DELTA	CHORD BEARING	CHORD LENGTH
C1	20.00'	31.42'	090°00'00"	S44°58'07"E	28.28'
C2	18.00'	28.27'	090°00'00"	S44°45'13"W	25.46'
C3	18.00'	28.27'	090°00'00"	S45°14'47"E	25.46'
C4	38.00'	59.88'	090°17'34"	N45°06'54"W	53.88'
C5	38.00'	59.87'	090°16'40"	N45°06'27"W	53.87'
C6	2.50'	3.93'	090°00'00"	N65°46'42"W	3.54'
C7	2.50'	4.67'	107°02'08"	N15°42'14"E	4.02'
C8	19.50'	13.24'	038°54'30"	N57°16'05"W	12.99'
C9	9.50'	13.93'	084°00'47"	S61°12'39"W	12.72'
C10	62.50'	5.88'	005°23'41"	N21°54'06"E	5.88'
C11	9.50'	7.21'	043°28'05"	N55°02'56"W	7.04'
C12	2.50'	4.07'	093°10'49"	S56°37'37"W	3.63'
C13	12.00'	7.14'	034°06'03"	S17°17'48"E	7.04'

LINE TABLE			LINE TABLE		
LINE#	LENGTH	DIRECTION	LINE#	LENGTH	DIRECTION
L1	16.50'	N 0°01'53" E	L18	15.50'	S 69°13'18" W
L2	16.50'	N 0°01'53" E	L19	20.00'	S 13°13'02" W
L3	23.75'	S 0°14'47" E	L20	2.00'	S 76°46'58" E
L4	14.99'	S 13°13'02" W	L21	2.00'	S 76°46'58" E
L5	4.41'	S 48°46'50" E	L22	20.00'	N 13°13'02" E
L6	14.01'	N 69°13'18" E	L23	20.00'	S 6°42'05" W
L7	7.93'	S 20°46'42" E	L24	2.00'	S 83°17'55" E
L8	5.96'	N 20°46'42" W	L25	2.00'	S 83°17'55" E
L9	14.75'	N 69°13'18" E	L26	20.00'	N 6°42'05" E
L10	10.92'	N 76°46'58" W	L27	28.27'	S 89°58'07" E
L11	7.72'	N 76°46'58" W	L28	36.57'	S 89°58'07" E
L12	2.94'	S 10°02'13" W	L29	35.97'	S 89°58'07" E
L13	26.68'	S 76°46'58" E	L30	35.97'	S 89°58'07" E
L14	19.00'	S 76°46'58" E	L31	2.00'	N 0°01'53" E
L15	19.50'	N 13°13'02" E	L32	2.00'	S 0°01'53" W
L16	18.50'	S 69°13'18" W	L33	2.00'	S 0°01'53" W
L17	21.93'	N 90°00'00" W			

Community & Economic Development Department Development Services Division www.adcogov.org



4430 South Adams County Parkway 1st Floor, Suite W2000B Brighton, CO 80601-8218 PHONE 720.523.6800 FAX 720.523.6967

Development Review Team Comments

Date: May 7, 2021

Project Number: PRC2021-00001

Project Name: Sherrelwood Village PUD Amendment - FDP

Due to the ongoing COVID-19 pandemic, all land use applications and resubmittals are to be delivered electronically to epermitcenter@adcogov.org. For additional information on department operations, please visit http://www.adcogov.org/CED.

Please note where "Section" or "DSR" is referenced, please refer to the appropriate section of the Adams County Development Standards and Regulations. These can be viewed online here: http://www.adcogov.org/development-standards-regulations.

Land Use and Development Applications can be accessed here: http://www.adcogov.org/current-planning-application-packets

Commenting Division: Planning Review

Name of Reviewer: Alan Sielaff, Planner II Email:

ASielaff@adcogov.org / 720-523-6817
Review Status: Resubmittal Required

PLN01: Request – Planned Unit Development - Final Development Plan (FDP) and Minor Subdivision toadd 47 single-family attached dwelling units on 3.3 acres to the existing Sherrelwood Village Planned Unit Development (PUD). RESPONSE: Noted

PLN02: Resubmittal format and general comments –

- 1. Please submit separate application packages for each application type with complete checklist items (Final Development Plan, Final Plat, and Plat Correction). While this will cause some duplication in required documents, applications are sometimes reviewed separately by different reviewers and the single PDF proved difficult to navigate. RESPONSE: Applications have been separated per county request.
- 2. Please also provide a cover sheet or table of contents for each application type to include anyadditional documents such as exhibits or historical documents and explanation of why they were included.

 RESPONSE: Table of contents provided for each application.
- 3. Overall many application documents need to be updated to reflect final development plan orplat submittal date. Specifics will be flagged below but please review as a whole to ensure consistency. RESPONSE: Documents updated to reflect FDP

PLN03: Application checklist items review – Planned Unit Development / Final Development Plan

1. Please note that the project name has been updated to "Sherrelwood Village PUD Amendment- FDP"

RESPONSE: Noted

- 2. Written narrative includes "Pecos Dr.", should this be Pecos St.? RESPONSE: Revised
- 3. Provided site plan was labeled as Preliminary Development Plan. Please update provided siteplan or remove. RESPONSE: Title revised
- 4. Proof of ownership/title report for properties included in this request has been requested to beupdated to within 30 days. RESPONSE: Title commitment updated
- 5. Water and sewer capacity had been verified by Thornton as of 9/14/2020. A statement is included in letter about not guaranteeing capacity indefinitely. It is recommended to update thisletter and for it to include a duration of the verification. The Division of Water Resources has stated Thornton has adequate water supply "as long as the City is committed to supply water". Be aware that our Subdivision regulations state in Section 5-04-05-06-04 (Proof of Adequate Supply) that prior to platting, the subdivider shall demonstrate that:
 - 1. The water rights associated with the property are sufficient to serve the proposedsubdivision based on the following standards:
 - a. 0.3 acre-feet per year per residence;
 - b. 0.05 acre-feet per year per 1,000 square feet of irrigated lawn, garden, or golfcourse;
 - c. 0.01 acre-feet per year per horse or similar livestock equivalent unit; and
 - d. Sufficient available water to supply the proposed non-residential uses based on the estimate from the subdivider of the proposed usage and analysis by the County.
 - 2. The subject land is served by a groundwater supply which is sufficient based on its priority date within the Colorado System of Water Rights Administration, the required volume can be extracted from this water right, the capacity of the water supply is sufficient to ensure no water supply shortages will occur due to variations in the hydrologic cycle, the delivery of the water supply to the development is adequate, and the water supply is dependable in quantity and quality based on a minimum useful lifeof three-hundred (300) years. A minimum 300-year useful life means the water supply from both a static and dynamic basis will be viable for a minimum 300-year period. The static analysis shall include evaluation of the volume of water that is appropriable for the proposed subdivision. The dynamic analysis shall evaluate whether the appropriable water supply is sustainable for three-hundred (300) years, giving consideration to the location and extent of the aquifer, as well as impacts caused by both current and future pumping by others from the aquifer. This requirement applies to individual wells and special district service plans.
 - If Thornton is unable to provide affirmation of the above, it is recommended toprovide a Water Supply Plan for review to the Division of Water Resources for additional confirmation of certainty development can be served. RESPONSE: Will serve letters have been revised per above comments.
- 6. Certificate of taxes paid as of April 2019. Please update for the 6 existing lots/tract of the filing 2area.

 RESPONSE: Certificate of taxes have been updated

PLN04: Application checklist items review –Subdivision-Minor/Final

- Provided application should be updated to indicate Subdivision, Final (provided copy is for preliminary) and with date of submittal or resubmittal, not May 2020 since original preliminary subdivision application was withdrawn. Form info should be updated too (47 townhomes ratherthan 48). RESPONSE: Application has been updated
- 2. A Subdivision Improvements Agreement (SIA) will be required with this plat for required public improvements. A word doc. template has been provided. **Please return completed version in word format only** for review by County Attorney's Office. **RESPONSE:** SIA provided in word doc format

- 3. School impact analysis dates to March 2020 with 48 unit, please update. RESPONSE: Updated per 47 units
- 4. Mineral Estate Notice as of Dec. 2019. Please provide updated form to within 30 days of application or resubmittal. RESPONSE: Updated

PLN05: Application checklist items review – Plat Correction

 No items flagged to be updated. This is a continued review of original PLT2020-00015 case puton hold until final subdivision plat was submitted. Staff redline document has been provided. Please provide as a separate resubmittal under case PLT2020-00015. RESPONSE: Redlines addresses

PLN06: FDP review

- 1. FDP Cover (Sheet 1 of 14) update title block to only include BoCC signature block. PlanningCommission does not vote on the final development plan. RESPONSE: Revised
- 2. FDP –Staff Review signature can be removed as well. RESPONSE: Revised
- 3. FDP Cover (Sheet 1 of 14) update/remove references to Preliminary Development Plan. RESPONSE: Revised
- 4. FDP Cover (Sheet 1 of 14) Fill in case number of PRC2021-00001 throughout FDP sheets. RESPONSE: Revised
- 5. FDP Site Plan (Sheet 2 of 14) consistent detail should be provided for entire PUD (building outlines, driveway and fencing location, sidewalks, etc. Utility detail is not necessary and can be removed. RESPONSE:
 Revised
- 6. FDP Site Plan (Sheet 2 of 14) while not required for FDP document, it is recommended to prepare an exhibit to review accessible parking requirements in Section 4-13-04-07 and cross check with applicable building codes for number and location of accessible spaces. Suggested to include language deferring parking requirements to general standards rather than specific parking lot layout of the PUD. Issue has led to need for PUD amendment to other developmentsupon review of building permits requiring additional parking area for accessible housing units. Because this PUD proposes more parking than required, this is not anticipated to be an issue. RESPONSE: Parking exhibit now provided
- 7. FDP General Notes (Sheet 3 of 14) ensure references to project name and subdivision plat are updated and consistent. RESPONSE: Revised
- 8. FDP General Notes (Sheet 3 of 14) letter H Public Land Dedication Fee. 1.4043 acres or \$75,605.68 fee in lieu is required as determined by Chapter 5 Subdivision Standards, Section 5-05 Land Dedication Standards. Please revise note to specify this is for Filing 2 only and include the original subdivision dedication (this would have already been paid and should also be reflected on this sheet). See attached calculation sheet based on Ch. 5 requirements. Fees will be required prior to final public hearings on the application. RESPONSE: Note revised. Fees to be provided prior to public hearing
- 9. FDP General Notes (Sheet 3 of 14) letter F discusses mailbox location for single family homes. How will the townhomes be served? RESPONSE: Townhomes will also be served via mailbox kiosks. Location provided on site plan.
- 10. FDP General Notes (Sheet 3 of 14) letter I states trash will be located in individual units. How will this function for the northern townhomes accessed by the parking area? RESPONSE: Units with access from the parking area will have a dumpster located for trash service.
- 11. FDP Open space plan (sheet 6 of 14) includes a shaded area labeled as "Tracts" but this doesnot

correspond to the revised subdivision plat for filing 2. Please clarify what areas not designated as right-of-way or active open space are and ensure consistency with other documents in FDP and Plat. RESPONSE: Filing 2 consists of 2 lots for the placement of 6 townhome buildings. Any space not taken up by these structures is shaded as either active open space or common open space. Common open space also includes parking. Right of way is shaded differently as well.

- 12. FDP Open space plan (sheet 6 of 14) is there only common area landscaping and parking area beyond building footprints and right-of-way area? Is there any private or semi-private yard fenced in yard space? The legend and symbology should be updated and should encompass the entire PUD area. Additional detail sheets may be helpful for single-family area and townhomearea. RESPONSE: There are no private fenced in yards for the townhome units. Fencing will be provided along Pecos for screening purposes.
- 13. FDP Landscape Plan (Sheet 8 of 14) both pages of landscape plan labeled as Sheet 8 of 14, oneshould be Sheet 7. RESPONSE: Revised
- 14. FDP Landscape Plan (Sheet 8 of 14) will 6 ft. fencing be provided to the rear of all units? Whatsize of private space will the provide units, and is fencing for yards the same as street frontage along Pecos St.? Level of detail is difficult to discern on this plan, please clarify and adjust if necessary. RESPONSE: Fencing will only be provided along Pecos for screening purposes. Units have access to common area landscape, but have no designated private fenced in areas.
- 15. FDP Townhome Architectural Standards (Sheet 14 of 14) please provide measurements on side elevation to eaves and pitch of roof to confirm the labeled mean height level meets the 35ft. maximum height by definition. RESPONSE: Additional dimensions added

PLN07: PDP conditions of approval from PRC2020-00010

- 1. Applicant is required to enter into formal agreement with Hyland Hills Park and Recreation District prior to approval of FDP for proposed improvements to Sherrelwood Park unless the district choses not to pursue park improvements with the applicant. Agreement has not been provided with initial submittal. Please provide update on progress towards this item. RESPONSE: Formal letter with Hyland Hills provided.
- 2. Bus stop boarding area is included on landscape plan, but not overall site plan. Include on siteplan and include sufficient detail to meet RTD design requirements or include note stating conformance or reference to provided design in engineering submittal. RESPONSE: RTD bus stop indicated in site plan.

Commenting Division: Development Engineering ReviewName of

Review: Greg Labrie, Senior Civil Engineer Email:

<u>GLabrie@adcogov.org</u> / 720-523-6824 **Review Status: Resubmittal Required**

The following comments may need to be adjusted as they are general in nature. An EGR case has been initiated however and coordination will mainly be handled through that process (EGR2021-00009).

ENG1: Flood Insurance Rate Map – FIRM Panel # (08001C0584H), Federal Emergency Management Agency, January 20, 2016. According to the above reference, the project site is NOT located within adelineated 100-year flood hazard zone; A floodplain use permit will not be required. RESPONSE: Noted.

ENG2: The project site is not located in a NRCO district. An environmental assessment is not required. RESPONSE: Noted.

ENG3; The project site is within the County's MS4 Stormwater Permit area. The applicant shall be responsible to ensure compliance with all Federal, State, and Local water quality construction requirements. The disturbance area of the project site will exceed 1 acre, the applicant shall be responsible to prepare the SWMP plan using the Adams County ESC Template, and obtain both a CountySWQ Permit and State Permit COR-030000. RESPONSE: SWMP prepared and submitted.

ENG4: The applicant plans to subdivide the property. In a subdivision case, the developer should know that prior to scheduling the final plat/FDP BOCC hearing, the developer is required to submit for reviewand receive approval of all construction documents (construction plans and reports). Construction documents shall include, at a minimum, onsite and public improvements construction plans, drainage report, traffic impact study. All construction documents must meet the requirements of the Adams County Development Standards and Regulations. The developer shall also enter into a Subdivision Improvement Agreement (SIA) with the County and provide a security bond for all public improvements. The developer shall submit to the Adams County Development Review Engineering division the following: Engineering Review Application, Engineering Review Fee, two (2) copies of all construction documents and the SIA. The development review fee for this project shall be in accordance to the fee schedule as described on the Adams County website. RESPONSE: Noted.

ENG5: The traffic impact study shall be submitted with the EGR application. RESPONSE: Traffic study provided with EGR application.

ENG6: No building permits will be issued until all public improvements have been constructed, inspected and preliminarily accepted by the County's Public Works Department. RESPONSE: Noted.

ENG7: There is an existing irrigation storm ditch on the west side of the proposed development. The applicant must coordinate with the City of Thornton to determine how to preserve the functionality of the ditch throughout the design and construction process of the proposed development. RESPONSE: Note added to site plan.

Commenting Division: Right-of-Way and Subdivision Plat Review **Name of Review:** Dvid Dittmer, Right-of-Way Agent**Email:**

DDittmer@adcogov.org / 720-523-6811
Review Status: Resubmittal Required

ROW1: Vicinity maps on sheet one of both surveys need to include all lands within two mile radius of site. RESPONSE: Vicinity Maps have been expanded

ROW2: Add case number PRC2021-00001 to upper right-hand corner of all sheets (remove any othercase number references or areas of insertion). RESPONSE: Case number added.

ROW3: Signature blocks need to include all Legal information of ownership, including Notary. If a corporation need to know the title of the signatory and the printed name along with signature, and this information must be included in Notary attestation. RESPONSE: signature blocks revised to include Notary info.

ROW4: Wet stamp all sheets. RESPONSE: All final sheets will be stamped

ROW5: Add Sheet numbers as 1 of 5 under title block.RESPONSE: Sheet numbers added

ROW6: Add match lines as necessary. RESPONSE: Revised

ROW7: Title commitment needs to be updated to within 30 days of new case application. Revise on all submissions.

RESPONSE: Title commitment updated

ROW8: Provide Tract Table and ownership information/maintenance responsibilities. All drainage and open space areas, and / or common areas need to be in a Tract. Any private access/roads need to be ina tract. This is a requirement of the Adams County Assessor's Office and they need to have survey callsprovided. RESPONSE:

ROW9: If Sanitary Easement has not been recorded, revise note to read "Sanitary Easement to berecorded by separate instrument". RESPONSE: Sanitary easement has been labeled as directed

ROW10: Provide clarity for area of emergency access and guest parking at area shown by redlines. RESPONSE: Data added to parking area for clarity

ROW11: Label utility easements and widths accordingly. RESPONSE: all widths have been annotated

ROW12: All common areas to be in Tracts and labeled accordingly. RESPONSE: revised

ROW13: Once Plats/Surveys approved need wet stamps by surveyor on all supporting sheets, and statement on Sheet one as provided. RESPONSE: all final sheets will be stamped

Commenting Division: External Agencies

Review Status: Comments provided, confirmation of any specific requests required

<u>EA1:</u> The following external agencies responded with a separate comment letter or email which will be provided in the following pages: ACFR, ACSO, CDOT, CDPHE, CDWR, City of Thornton, City of Westminster, CVWS, RTD, TCHD and Xcel Energy. RTD has reiterated design specifications for bus stop installation adjacent to the site, the Sheriff's Office has stated opposition to additional residential development in the area, and the City of Thornton has requested review of water and sanitary services. Agency comments are described in the staff report and may be recommended conditions or notes of approval for the applicant to adhere to if the development application is approved. RESPONSE: External agency comments have been added to this letter with responses provided.

Commenting Division: Public Comment

Review Status: Comments provided, response optional

<u>PC1:</u> As of the date of this comment letter, 8 public comments have been received and are provided in the following pages. Public comment will continue to be accepted moving forward and all comments willbe included in appendices to the staff report provided to the Planning Commission and Board of County Commissioners once public hearings are scheduled. Staff encourages the applicant work to address any identified issues to the best of their ability. RESPONSE: Noted. Our team will continue to address public concerns thru the site plan where possible and welcome further discussion with staff at BOCC.

Development Review Team Comments

Commenting Division: ROW Review
Name of Reviewer: David Dittmer

Date: 04/22/2021

Email: ddittmer@adcogov.org

Resubmittal Required

ROW1: Need a Title Commitment dated within 30 days of application. One provided dated 9 of 2019. Will not review submitted plats until this is provided for review and verification of encumbrances associated withthe subject lands. RESPONSE: Title commitment updated.

Commenting Division: Environmental Analyst Review

Name of Reviewer: Katie Keefe

Date: 04/20/2021

Email: kkeefe@adcogov.org

Complete

ENV1. A separate permit for inert fill for grading operations and site development must be obtained prior toimporting

fill material onto the project area.

RESPONSE: Noted

Commenting Division: Addressing Review

Name of Reviewer: David Dittmer

Date: 04/20/2021

Email: ddittmer@adcogov.org

Complete

See address plat uploaded into documents

RESPONSE: Noted

Commenting Division: Application Intake 3rd Review

Name of Reviewer: Kevin Mills

Date: 03/16/2021

Email: Complete

RESPONSE: Noted

Department of Public Works Infrastructure Management Division

Gordon Stevens

Construction Inspection Supervisor

O: 720-523-6965 | gstevens@adcogov.org, www.adcogov.org

C: 303-947-9633

This site has been reviewed on two other occasions by the Public Works staff, under Sherrelwood Village Fil. No. 2 and Elmwood Estates. I have attached the previous case comments above. All comments are still applicable. The Construction Plans must be submitted to and approved by the CEDD Engineering Staff. The Public Works staff will need to review these plans in their final format. The comments attached above are still applicable to this case as well. RESPONSE: Noted

Adams County Fire Rescue

Carla Gutierrez 7980 Elmwood Lane Denver, CO 80221 O: 303-539-6862

The changes do not impact the fire department approval, the fire code requirements are all beingmet. Attached is an updated comment letter.

The following information provides guidance on general fire code requirements typically applicable to new development projects. However, please be aware that this list is NOT all encompassing. It is the responsibility of the contractor to read this comment letter in its entirety and make sure that all requirements are satisfied.

Comments in blue below are specific to the documents reviewed. Comments in red below are specific to the documents reviewed and require a response.

Plan Specific Comments:

 All comments or concerns have been addressed. Amendment made to PUD appears to meets fire code requirements.

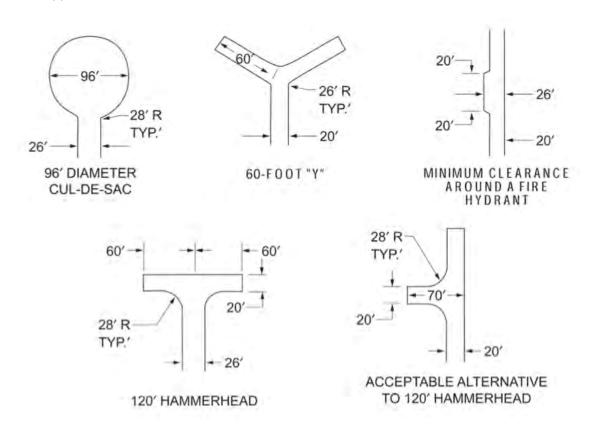
General:

- The 2018 International Fire Code is the current fire code adopted within the city and all development must be in compliance with its requirements. The 2018 IFC can be accessed online for free by going to https://codes.iccsafe.org/public/document/IFC2018. Amendments to this code can be located by going to http://www.adcogov.org/sites/default/files/Ordinance%20No.%204 1.pdf.
- 2. Site and building design and construction shall be in accordance with the provisions of the 2018 International Fire Code (IFC) as adopted by Adams County. All construction shall be in accordance with IFC Chapter 33, Fire Safety During Construction and Demolition.
- 3. Please be aware that these comments are subject to change as more information is received or if there are changes to the plans during subsequent reviews.

Access Requirements:

- 4. Approved access roads must be constructed prior to any vertical construction and/or to combustible materials being delivered to the site, whichever comes first. Temporary access roads are prohibited unless specifically approved by the Fire District. Fire apparatus access must be designed and maintained to support the imposed loads of fire apparatus (i.e. 85,000 lbs), and must have a surface that provides all-weather driving capabilities. Vehicle access shall be provided to within 150 feet of temporary or permanent fire department connections.
- 5. Fire apparatus access roads shall be a minimum of 24' wide or 26' when a hydrant is present or the building exceeds 30' in height.

- 6. Fire apparatus access roads shall be within 150' of all ground level exterior portions of the building.
- 7. Any dead-end fire apparatus access road in excess of 150' shall be provided with an approved turnaround.



- 8. Any temporary construction or permanent security gates shall be a minimum of 24 feet and a no parking fire lane sign shall be posted on the gate. The gates shall also have a Knox key switch installed for emergency operation if automatic. For information on how to order this, please go to https://www.acfpd.org/plan-submittals.html.
- 9. New and existing buildings shall have approved address numbers, building numbers, or approved building identification placed in a position that is plainly legible and visible from the street or road fronting the property. These numbers shall contrast with their background. Numbers shall be a minimum of 4 inches high with a minimum stroke width of 0.5 inch. Please be aware that the size of the number may need to be larger than 4 inches is not clearly visible from the street or road.
 - a. A temporary sign must be provided if the permanent signage is not yet installed.

Fire Protection Water Supply and Hydrants:

10. Water mains and all required hydrants shall be installed before the delivery of combustible materials to the site. Hydrants shall be maintained operational at all times

thereafter, unless alternate provisions for water supply are approved by the Fire District. Any private fire service mains and fire hydrants and all fire sprinkler service lines shall be installed by a State of Colorado Licensed Fire Suppression System Contractor - Underground Contractor and meet the requirements of National Fire Protection Association Standard 24. Plans for the underground fire sprinkler service line shall be submitted for review and approval to ACFR. A current list of registered contractors can be found by going to https://www.colorado.gov/dfpc/fire-suppression-system-contractors. Once installed, all underground fire sprinkler service lines must be inspected by an ACFR inspector before covering. Attached is a guideline for the inspections required for an underground fire sprinkler service line.

- 11. Unobstructed access to fire hydrants shall be maintained at all times. Fire department personnel shall not be deterred or hindered from gaining immediate access to fire protection equipment or fire hydrants. A 3-foot {radius} clear space shall be maintained around the circumference of fire hydrants. Within that 6-foot diameter circle and within a 6-foot-wide path leading to the 4.5-inch outlet of a hydrant, vegetation shall be no higher than 4 inches above grade. The unobstructed vertical clearance within that 6-foot circle and 6-foot approach path shall not be less than 7 feet, unless otherwise approved by the Fire District.
- 12. The FDC for each building with a fire sprinkler system must be located within 150 feet of a fire hydrant.
- 13. A fire hydrant shall be located within 400' (unsprinklered building) or 600' (fully sprinkled building) of all ground level exterior portions of the building.
- 14. The number and distribution of fire hydrants is based on the required fire flow. You may refer to Appendix C of the 2018 IFC for guidance.

FIRE-FLOW CALCULATION AREA (square feet)	AUTOMATIC SPRINKLER SYSTEM (Design Standard)	(gations per minute)	FLOW DURATION (hours)
0-3,600	No automatic sprinkler system	1,000	1
3,601 and greater	No automatic sprinkler system	Value in Table B105.1(2)	Duration in Table B105.1(2) at the required fire-flow rate
0-3,600	Section 903.3,1.3 of the International Fire Code or Section P2904 of the International Residential Code	500	V ₂
3,601 and greater	Section 903.3.1.3 of the International Fire Code or Section P2904 of the International Residential Code	1/2 value in Table B105.1(2)	1

TABLE B105.1(2) REFERENCE TABLE FOR TABLES B105.1(1) AND B105.2

FIRE-FLOW CALCULATION AREA (square feet)						FLOW DURATION	
Type IA and IB ^a Type IIA and IIIA ^a		Type IV and V-A ^a	Type IIB and IIIB ^a	Type V-B ^a	(gallons per minute)b	(hours)	
0-22,700	0-12,700	0-8,200	0-5,900	0-3,600	1,500		
22,701-30,200	12,701-17,000	8,201-10,900	5,901-7,900	3,601-4,800	1,750		
30,201-38,700	17,001-21,800	10,901-12,900	7,901-9,800	4,801-6,200	2,000	2	
38,701-48,300	21,801-24,200	12,901-17,400	9,801-12,600	6,201-7,700	2,250	2	
48,301-59,000	24,201-33,200	17,401-21,300	12,601-15,400	7,701-9,400	2,500		
59,001-70,900	33,201-39,700	21,301-25,500	15,401-18,400	9,401-11,300	2,750		
70,901-83,700	39,701-47,100	25,501-30,100	18,401-21,800	11,301-13,400	3,000		
83,701-97,700	47,101-54,900	30,101-35,200	21,801-25,900	13,401-15,600	3,250	2	
97,701-112,700	54,901-63,400	35,201-40,600	25,901-29,300	15,601-18,000	3,500	3	
112,701-128,700	63,401-72,400	40,601-46,400	29,301-33,500	18,001-20,600	3,750		
128,701-145,900	72,401-82,100	46,401-52,500	33,501-37,900	20,601-23,300	4,000		
145,901-164,200	82,101-92,400	52,501-59,100	37,901-42,700	23,301-26,300	4,250		
164,201-183,400	92,401-103,100	59,101-66,000	42,701-47,700	26,301-29,300	4,500		
183,401-203,700	103,101-114,600	66,001-73,300	47,701-53,000	29,301-32,600	4,750		
203,701-225,200	114,601-126,700	73,301-81,100	53,001-58,600	32,601-36,000	5,000		
225,201-247,700	126,701-139,400	81,101-89,200	58,601-65,400	36,001-39,600	5,250		
247,701-271,200	139,401-152,600	89,201-97,700	65,401-70,600	39,601-43,400	5,500		
271,201-295,900	152,601-166,500	97,701-106,500	70,601-77,000	43,401-47,400	5,750		
295,901-Greater	166,501-Greater	106,501-115,800	77,001-83,700	47,401-51,500	6,000	4	
_	_	115,801-125,500	83,701-90,600	51,501-55,700	6,250		
_	_	125,501-135,500	90,601-97,900	55,701-60,200	6,500		
_	_	135,501-145,800	97,901-106,800	60,201-64,800	6,750		
_	_	145,801-156,700	106,801-113,200	64,801-69,600	7,000		
_	_	156,701-167,900	113,201-121,300	69,601-74,600	7,250		
_	_	167,901-179,400	121,301-129,600	74,601-79,800	7,500		
_	_	179,401-191,400	129,601-138,300	79,801-85,100	7,750		
_	_	191,401-Greater	138,301-Greater	85,101-Greater	8,000		

For SI: 1 square foot = 0.0929 m², 1 gallon per minute = 3.785 L/m, 1 pound per square inch = 6.895 kPa.

TABLE B105.2 REQUIRED FIRE FLOW FOR BUILDINGS OTHER THAN ONE- AND TWO-FAMILY DWELLINGS, GROUP R-3 AND R-4 BUILDINGS AND TOWNHOUSES

AUTOMATIC SPRINKLER SYSTEM (Design Standard)	MINIMUM FIRE FLOW (gallons per minute)	FLOW DURATION (hours)
No automatic sprinkler system	Value in Table B105.1(2)	Duration in Table B105.1(2)
Section 903.3.1.1 of the International Fire Code	25% of the value in Table B105.1(2) ^a	Duration in Table B105.1(2) at the reduced flow rate
Section 903.3.1.2 of the International Fire Code	25% of the value in Table B105.1(2)b	Duration in Table B105.1(2) at the reduced flow rate

For SI: 1 gallon per minute = 3.785 L/m.

- a. The reduced fire flow shall be not less than 1,000 gallons per minute.
- b. The reduced fire flow shall be not less than 1,500 gallons per minute.

a. Types of construction are based on the International Building Code.

b. Measured at 20 psi residual pressure.

TABLE C102.1 REQUIRED NUMBER AND SPACING OF FIRE HYDRANTS^h

FIRE-FLOW REQUIREMENT (gpm)	MINIMUM NUMBER OF HYDRANTS	AVERAGE SPACING BETWEEN HYDRANTS ^{a, b, c, f, g} (feet)	MAXIMUM DISTANCE FROM ANY POINT ON STREET OR ROAD FRONTAGE TO A HYDRANT ^{d, f, g}
1,750 or less	1	500	250
1,751-2,250	2	450	225
2,251-2,750	3	450	225
2,751-3,250	3	400	225
3,251-4,000	4	350	210
4,001–5,000	5	300	180
5,001-5,500	6	300	180
5,501-6,000	6	250	150
6,001–7,000	7	250	150
7,001 or more	8 or more ^e	200	120

For SI: 1 foot = 304.8 mm, 1 gallon per minute = 3.785 L/m.

- a. Reduce by 100 feet for dead-end streets or roads.
- b. Where streets are provided with median dividers that cannot be crossed by fire fighters pulling hose lines, or where arterial streets are provided with four or more traffic lanes and have a traffic count of more than 30,000 vehicles per day, hydrant spacing shall average 500 feet on each side of the street and be arranged on an alternating basis.
- c. Where new water mains are extended along streets where hydrants are not needed for protection of structures or similar fire problems, fire hydrants shall be provided at spacing not to exceed 1,000 feet to provide for transportation hazards.
- d. Reduce by 50 feet for dead-end streets or roads.
- e. One hydrant for each 1,000 gallons per minute or fraction thereof.
- f. A 50-percent spacing increase shall be permitted where the building is equipped throughout with an approved automatic sprinkler system in accordance with Section 903.3.1.1 of the International Fire Code.
- g. A 25-percent spacing increase shall be permitted where the building is equipped throughout with an approved automatic sprinkler system in accordance with Section 903.3.1.2 or 903.3.1.3 of the International Fire Code or Section P2904 of the International Residential Code.
- h. The fire code official is authorized to modify the location, number and distribution of fire hydrants based on site-specific constraints and hazards.

Automatic Fire Sprinkler System:

As stated in Section 903.2.8 of the 2018 International Fire Code as adopted and amended by Adams County, an approved residential fire sprinkler system is REQUIRED. Please be aware that if a residential fire sprinkler system is going to be installed in accordance with NFPA 13D the fire sprinkler plans must be submitted to us for review under a separate permit. If the system will be a multipurpose system and designed and installed in accordance with IRC section P2904, plans shall be submitted to Adams County Building Division for review and permitting. If a P2904 system is to be installed, please provide us with a record of the Building Division's approval.

Other Helpful Information:

- 15. Please be aware that the fire code does not specify building fire rating or set-back requirements. These are located within the building code and therefore are out of our scope. This preliminary review does not approve anything covered under the building code. These requirements need to be verified with the County's Building and Planning Departments.
- 16. Please be aware that we are a separate entity from the County and anytime you submit to the county, you will need to submit to us separately utilizing a dropbox that you will be set up with.

- 17. The following reviews and permits are often needed for new development projects:
 - a. Site Development and Water Plans
 - i. Civil Plans
 - ii. Utility Plans
 - iii. Autoturn Exhibit (use attached apparatus specifications)
 - b. New Construction Building Plans
 - i. Architectural
 - ii. MEP
 - c. Fire Protection System Plans
 - i. Fire Alarm
 - ii. Fire Sprinkler
- 18. Site development plans must be reviewed and approved before plans for all buildings and fire protection systems are submitted to us for review and permitting. All fees {permit and impact) shall be paid at time of permit pick-up.





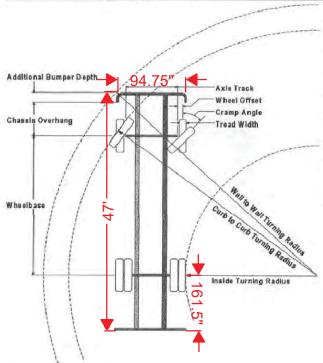
Turning Performance Analysis

Bid Number: 593

Department: Adams County Fire Rescue

Chassis: Arrow XT Chassis, PAP, PUC

Body: Aerial, Platform 100', PUC, Alum Body



Parameters:		
Inside Cramp Angle:	40°	
Axle Track:	82.92 in.	
Wheel Offset:	5.30 in.	
Tread Width:	17.50 in.	
Chassis Overhang:	68.99 in.	
Additional Bumper Depth:	16.00 in.	
Front Overhang:	84.99 in.	
Wheelbase:	277.50 in.	

Calculated Turning Radii:

Inside Turn: 26 ft. 5 in.
Curb to curb: 42 ft. 8 in.
Wall to wall: 49 ft. 0 in.

Comments:

Other Notes:

The front bumper extends 16 inches from the face of the cab.

The width is 19' with outriggers fully extended.

Angle of approach & departure:15 degree

Category Description:	OptionID:	Option Description:
Axle, Front, Custom	0090913	Axle, Front, Oshkosh TAK-4, Non Drive, 24,000 lb, Qtm/AXT/DCF
Wheels, Front	0019618	Wheels, Front, Alcoa, 22.50" x 13.00", Aluminum, Hub Pilot
Tires, Front	0582746	Tires, Front, Goodyear, G296 MSA, 445/65R22.50, 20 ply
Bumpers	0606536	Bumper, 16" Extended, Steel Painted, Arrow XT
Aerial Devices	0592931	Aerial, 100' Pierce Platform, 50 MPH Wind Rating, 150lb Tip Load Allowance
Notes:	0002001	Aerial, 100 Fierce Flationii, 30 MFTI Willia Rating, 130th Tip Load Allowance

Actual Inside cramp angle may be less due to highly specialized options.

Curb to Curb turning radius calculated for 9.00 inch curb.

Underground Fire Sprinkler Service Line Requirements

When installing an underground fire sprinkler system service line in our jurisdiction, the installing contractor shall be responsible for the following:

- 1. Notifying the authority having jurisdiction and the owner's representative of the time and date testing is to be performed
- 2. Performing all required acceptance tests below and completing and signing the contractor's material and test certificate(s)
 - O Visual: All underground piping and joints must be uncovered and exposed, with labeling of the pipe legible from grade. All thrust blocks will be visually inspected and must be uncovered and exposed to grade. Depth of bury of the pipe shall be measured and verified. All ductile iron, retaining rods, and other non-plastic components shall be externally coated for corrosion and poly wrapped.
 - O Hydrostatic Test: Underground piping will have to have passed the visual inspection first. The hydrostatic test will be at 200 psi or at 50 psi in excess of the system working pressure, whichever is greater, and shall maintain that pressure ±5 psi for 2 hours. Testing to be from the gate valve to the top of the spigot. Pressure loss shall be determined by a drop in gauge pressure or visual leakage. Only liquid filled gauge rated for over 200 PSI will be accepted. Time stamped picture of the gauge will need to be provided to the inspector to show when pressure was put on the line.
 - o Flush: Underground piping, from the water supply to the system riser, and lead-in connections to the system riser shall be completely flushed before connection is made to downstream fire protection system piping. This flush needs to be witnessed by ACFR staff. The flushing operation shall be continued for a sufficient time to ensure thorough cleaning. The minimum rate of flow shall be not less than one of the following:
 - Hydraulically calculated water demand rate of the system, including any hose requirements
 - Maximum flow rate available to the system under fire conditions
 - Flow necessary to provide a velocity of 10 ft/sec (preferred method)

Underground Pipe Size (in)	Required Flow Rate (gpm)	Hose/Pipe Sizes					
		21/5"	3*	4"	5°	6*	8*
4	390	1	1	1			
6	880	2	2	1	1	1	-
8	1560	4	3	2	1	1	1
10	2440	6	4	3	2	1	1
12	3520	8	6	4	2	2	1

Provision shall be made for the proper disposal of water used for flushing or testing. A mechanical method of securing the discharge flushing line(s), (like a Hose Monster, tube hitch adapter/Pipe Vice shall be used). The flushing discharge line shall be mechanically secured. The inspection will be failed immediately if the flushing line is not mechanically secured and creates a dangerous atmosphere. A diffuser attached to the end of the flushing line should be utilized.

- o Pitot Test: The contractor shall provide all equipment required to take a pitot reading to ensure that all street or isolation valves are open, and the required flow for base of riser is available.
- 3. After the riser has been flushed and hydrostatically tested, a blank cover shall be installed /secured to cover any/ all open-end risers.

Adams County Sheriff's Office

Sheriff Rick Reigenborn

The Adams County Sheriff's Office opposes the request, due to staffing we are unable to handle to possible additional calls for service. RESPONSE: Noted. We hope Adams County is successful with obtaining more staff.

CODOT

Steve Loeffler Permits Unit- Region 1

P 303.757.9891 | F 303.757.9053

2829 W. Howard Pl. 2nd Floor, Denver, CO 80204 steven.loeffler@state.co.us | www.codot.gov | www.cotrip.org

I have reviewed the referral for the Sherrelwood Village FDP and Minor Subdivision to add 47 single family attached dwellings on 3.3 acres on property located at 7996 and 8000 PecosStreet and have no objections. This development is off the state highway system. RESPONSE: Noted

Colorado Department of Public Health and Environment (CDPHE)

cdphe localreferral@state.co.us | colorado.gov/cdphe

Thank you for contacting the Colorado Department of Public Health and Environment (CDPHE). CDPHE's general comments are available here. We will continue to review this referral to determine whether additional comments are necessary. If additional comments are necessary, we will submit them by the referral deadline. RESPONSE: Noted

Colorado Geological Survey

Jill Carlson, C.E.G. Engineering Geologist (303) 384-2643, or e-mail carlson@mines.edu.

Colorado Geological Survey has reviewed the Sherrelwood Village Filing No. 2 rezone, preliminary major subdivision, and preliminary major PUD amendment referral. I understand the applicant proposes 48 townhomes on 2.2 acres located adjacent to and north of Sherrelwood Village, physical address 7996 and 8000Pecos Street. CGS reviewed the existing Sherrelwood Village site at major subdivision (preliminary plat), PDP(PUD-P), and rezoning (R-1-C to PUD), project number PRC2015-00014, on September 28, 2015.

The site does not contain steep slopes, is located in an "Area of Minimal Flood Hazard," is not undermined, and is not exposed to or located within any identified geologic hazard areas that would preclude the proposed residential use and density. Colorado Geological Survey therefore has no objection to approval of the proposed rezone, plat, and PUD amendment. RESPONSE: Noted

Mineral resource potential.

According to the Atlas of Sand, Gravel, and Quarry Aggregate Resources, Colorado Front Range Counties (Schwochow et al, Colorado Geological Survey Special Publications 5-A,Plate 2, and 5-B, Arvada Quadrangle, 1974), the subject property does not contain a mapped aggregate resource.

Existing building, pavements, fencing, etc.

All building materials, foundations, utilities, pavements, etc. associated with the existing improvements must be completely demolished, removed and disposed of offsite, not graded into the existing fill.

All fill material encountered during site grading and within utility trenches and building foundation excavations should be removed or, if suitable for reuse (free of debris, organics, and contamination), reworked and replaced as a properly water conditioned and compacted, clean structural fill.

Soil and bedrock engineering properties. According to available geologic mapping (Lindvall, R.M, 1979, Geologic map of the Arvada quadrangle, Adams, Denver, and Jefferson Counties, Colorado: U.S. Geological Survey, Geologic Quadrangle Map GQ-1453, scale 1:24,000), most of the site is underlain by loess (wind-deposited sandy silt and clay). Loess deposits commonly exhibit collapse under wetting and loading but, depending on the clay content, can also exhibit shrink/swell (volume changes in response to changes in water content). The surficial soils are underlain at very shallow depths (near-surface toward theeastern portion of the site) by Denver formation interbedded sandstone, claystone, siltstone, shale and conglomerate. Claystone can exhibit low strength at high water content, very high swell potential and, if present at or near foundation depths, can cause significant damage to foundations and homes if not properly identified and mitigated.

Building-specific geotechnical investigations and analysis will be needed, once building locations are finalized, to identify the depth and extent of fill material, determine depths to bedrock and seasonal groundwater levels, and to characterize soil and bedrock engineering properties such as expansion/consolidation potential, density, strength, and allowable bearing pressures. This information isneeded to determine subgrade preparation requirements, to design individual foundations, foundation perimeter drains and floor systems, and to determine the site's suitability for basements, if planned.

Corrosive soils.

Adams County Soil Survey data indicate that local soils are moderately to highly corrosive touncoated steel. Disturbance tends to increase corrosivity. The need for corrosion protection should be evaluated as part of the geotechnical investigation. On lots where groundwater levels are sufficiently deepto allow basement construction, epoxy-coated, fiberglass, plastic/composite, concrete, or otherwise corrosion-resistant or corrosion-proof window wells are recommended. RESPONSE: Noted

Crestview Water & Sanitation District

Mitchell T Terry District Manager 303-429-1881

Thank you for providing this Request for Comments. This project is just outside of our district boundaries and with that said, Crestview has no comments for this project. RESPONSE: Noted

Colorado Division of Water Resources - Department of Natural Resources

Wenli Dickinson
Water Resource Engineer
P 303.866.3581 x8206
1313 Sherman St, Suite 821, Denver, CO 80203 wenli.dickinson@state.co.us | dwr.colorado.gov

Since the water supply plan for the proposed subdivision has not changed, our comments are the sameas described in our October 26, 2020 letter. Please let me know if you have any questions. RESPONSE: Noted

October 26, 2020

Alan Sielaff, AICP
Adams County Development Services Division
Transmission via email: asielaff@adcogov.org

Dear Alan Sielaff:

We have reviewed the above-referenced proposal to rezone two parcels located at 7996 and 8000 Pecos St from residential to planned unit development (PUD), a preliminary major subdivision, anda preliminary major PUD amendment to the Sherrelwood Village PUD to accommodate the new development into the existing PUD (located at 7840 Pecos St). The land area subject of this proposal is 3.29 acres, including 2.2 acres of additional land to the existing PUD (the combined land area being 10.351 acres). The proposal involves subdividing the subject land into two tracts, Tracts A and B, and 45 lots to allow for the development of 47 new townhomes. Our office previously commented on this subdivision proposal on June 17, 2020.

Water Supply Demand

Estimated water requirements and proposed uses were not provided for this subdivision.

Source of Water Supply

There are no permitted wells on the subject property. The proposed water supply source is service provided by the City of Thornton ("City"). A letter from the City dated July 10, 2017 was previously provided in the referral materials for Sherrelwood Village Filing No. 1 (PRC2016-00008). The letterindicates that the City has adequate capacity to provide water to the development; however the City reserves the right to suspend issuance of new water taps and connections indefinitely due to drought, emergency, or lack of available water resources. Another letter from the City dated September 14, 2020 confirms that service is available for the proposed development provided that service connections are paid for by the developer and that the property owner comply with the City's ordinances.

According to an April 5, 2018 letter from the City they have numerous water rights that divert from the South Platte River and Clear Creek as well as transmountain and native rights from the Cache la Poudre River. They also operate several reservoirs along the South Platte River that are utilized to store and regulate these water rights. According to the letter, the Clear Creek and South Plattewater rights provide

an annual firm yield of approximately 32,500 acre-feet. In addition, they are currently working on a project to transport their Cache la Poudre rights to Thornton. Once this project is complete Thornton estimates an annual firm yield of approximately 51,000 acre-feet total. In 2017, Thornton's total annual demand was approximately 25,000 acre-feet and the estimated annual demand for all existing commitments within the City service area is 30,000 acre-feet.

State Engineer's Office Opinion

Based upon the above and pursuant to sections 30-28-136(1)(h)(I) and 30-28-136(1)(h)(II), C.R.S., it is our opinion that the proposed water supply is adequate and can be provided without causing injury to decreed water rights, as long as the City is committed to supply water to the lots.

According to the submitted material, there is a pond on the subject property that will be expanded as part of the development to receive drainage from this development. The applicant should be aware that unless the structure(s) meet the requirements of a "storm water detention and infiltration facility" as defined in section 37-92-602(8), C.R.S, the structure may be subject to administration by this office. The applicant should review <u>DWR's Administrative Statement Regarding the Management of Storm Water Detention Facilities and Post-Wildland Fire Facilities in Colorado</u>, to ensure that the notification, construction and operation of the proposed structure(s) meet statutory and administrative requirements. The applicant is encouraged to use <u>Colorado Stormwater Detention and Infiltration Facility Notification Portal</u> to meet the notification requirements.

Regional Transportation District

C. Scott WoodruffEngineer III 1560 Broadway, Suite 700, FAS-73 | Denver, CO 80202 o 303.299.2943 | m 303-720-2025 clayton.woodruff@rtd-denver.com

Attached you will find a question/comment regarding a bus stop we had requested back at the startof this project. All slopes of bus stops must be ADA compliant max 2% slope perpendicular to the flow line. RESPONSE: Bus stop provided per standards above.

Tri-County Health Department

Pang Moua, MPP Land Use and Built Environment Specialist

Thank you for the opportunity to review and comment on the Final Development Plan and Minor Subdivision to add 47 single-family attached dwelling units on 3.3 acres to the existing Sherrelwood Village Planned Unit Development located at 7996 and 8000Pecos Street. Tri-County Health Department (TCHD) staff previously reviewed the application for the Rezoning, Major Subdivision Plat, and Minor Amendment and responded in a letter dated July 6, 2020, with the following comments. TCHD has no further comments.

Community design to support walking and bicycling

Because chronic diseases related to physical inactivity and obesity now rank among thecountry's greatest public health risks, TCHD encourages community designs that make it easy for people to include regular physical activity, such as

walking and bicycling, in their daily routines. Because research shows that the way we design our communities can encourage regular physical activity, TCHD strongly supports community plans that incorporate pedestrian and bicycle amenities that support the use of a broader pedestrian and bicycle network.

In order to promote walking and bicycling through this development, TCHD encouragesthe applicant to consider the inclusion of the following as they design the community.

A system of sidewalks, bike paths and open space trail networks that are well-designed and well-lit, safe, and attractive so as to promote bicycle and pedestrian use.

Bicycle and pedestrian networks that provide direct connections betweendestinations in and adjacent to the community.

Where public transportation systems exist, direct pedestrian access should be provided to increase transit use and reduce unnecessary vehicle trips, and related vehicle emissions. The pedestrian/bicycle networks should be integrated with the existing and future transit plans for the area.

- Streets that are designed to be pedestrian/bike friendly and to reduce vehicle andpedestrian/bicycle fatalities.
- Bicycle facilities and racks are provided in convenient locations.

Healthy building design standards:

Building design can impact health in several ways including through the materials used and the amount of volatile organic compounds (VOCs) or other harmful chemicals that they contain, the air and water quality, the amount of daylight available, and even by encouraging physical activity and social interaction. TCHD encourages the applicant to consider incorporating design standards into the development to ensure a health- promoting environment. The applicant could pursue building certifications such as LEED, WELL Building Standard, Certified Healthy, or Living Building Challenge.

Connection to nearby bus stop or transit station:

It appears that the subject property is within 100 feet to bus stop Pecos Street and W79th Way. Since research has shown that people who use transit regularly gain tremendous health benefits, TCHD encourages the applicant to consider providing a safe and direct connection to the transit stop. This could include designing the onsite pedestrian facilities to easily facilitate walking from the site to the nearby transit stop.

Connection to nearby trails

TCHD recommends that the applicant provide a direct connection from the internal pedestrian circulation system to the adjacent trail on Orchard Drive that goes around the development site.

<u>Radon</u>

Radon is a naturally occurring radioactive gas that is present at high levels in all parts of Colorado due to the presence of uranium in the soil. Radon can enter homes and long- term exposure causes lung cancer. In order to prevent radon from infiltrating the home, TCHD recommends designing new homes so that they are radon resistant. This includes laying a barrier beneath the flooring system, installing a gas-tight venting pipe from the gravel level through the roof, and sealing and caulking the foundation thoroughly. More information regarding radon and radon-resistant construction techniques can be found here: https://www.epa.gov/radon/building-new-home-have-you-considered-

radon.

Building Demolition

Fugitive Dust, Lead, and Asbestos

The application indicates that the existing vacant building on the site will be demolished.

The Colorado Department of Public Health and Environment Air Pollution ControlDivision (APCD) regulates air emissions. State air quality regulations require that precautions be taken prior to demolition of buildings to evaluate the presence of

asbestos fibers that may present a health risk. If asbestos is present, actions must betaken to prevent their release into the environment. State regulations also address control of ozone depleting compounds (chlorofluorocarbons) that may be contained inair conditioning or refrigerating equipment. The applicant shall contact the APCD at (303) 692-3100 for more information. Additional information is available athttp://www.cdphe.state.co.us/ap/asbestos.

Buildings constructed prior to 1978 may contain lead paint. Environmental Protection Agency's (EPA) 2008 Lead-Based Paint Renovation, Repair and Painting (RRP) Rule (as amended in 2010 and 2011), aims to protect the public from lead-based paint hazards associated with renovation, repair and painting activities. These activities can create hazardous lead dust when surfaces with lead paint, even from many decades ago, are disturbed. More information can be found here https://www.epa.gov/lead/lead-renovation-repair-and-painting-program-rules and https://www.epa.gov/lead/lead-rules and https://www.epa.gov/lead/lead-rules and <a href="https://

Attainable Housing

Access to safe, attainable housing is directly associated with positive physical andmental health outcomes and underlies one's ability to access jobs, food, medical services, and other essentials that are vital to well-being. Providing permanent supportive housing is an integral element of promoting health in our communities.TCHD supports projects that include an attainable housing component. RESPONSE: These townhomes will be market rate and attainable.

City of Thornton - Planning

Collin Wahab, AICP
Senior Planner
303-538- 7379 or at collin.wahab@ThorntonCO.gov.

The City of Thornton has the following comments regarding the SherrelwoodVillage PUD application. Based on the response to the comments below, the City of Thornton may have additional comments or request for information. RESPONSE: Noted

City of Thornton - DEVELOPMENT ENGINEERING

CASSIE FREE, DEVELOPMENT ENGINEERING MANAGER, 303-538-7207

1. Water and Sewer service is in this area is provided by the City. All reviewof the water and sewer design needs to be submitted to the City of Thornton Development Engineering department for review and acceptance. Along with this review, exclusive water and sewer easements dedicated to the City of Thornton will be required. I would recommend that the engineer for the project reach out to myself to discuss the standard process and the requirements for the submittal but have made a short list below.

- 2. Construction Drawing submittal should include:
- a. Construction drawings of the water and sewer, refer to standardsand specifications on requirements
- b. Utility Report, refer to standards and specifications on requirements
- 3. Exclusive utility easement:
- a. Will need a legal and exhibit of the easement area to be submittedfor review along with a title commitment for the easement area. Upon review and acceptance of this legal/exhibit and title work, the City will provide standard easement package for review to the applicant. RESPONSE: We have reached out regarding these easements.

City of Westminster Community Development

John McConnell, AICP I Principal V: 303.658.2474

Thanks for allowing us to review this referral. The Community Development Department has no concerns or questions regarding this application. A few of us in my office think it will be sad to see such an interesting dome structure disappear, but the location seems to be very suitable for attached residential — especially with its proximity to Sherrelwood Park and elementary school. It would be really cool if the dome structure could somehow be incorporated into the neighborhood as a community space or something similar.

Thanks for the additional information. This is all very interesting – I bet the project has been a lot of challenging work for the staff. Good luck with the remainder of the process and please let us know ifanything new happens.

RESPONSE: Noted

Sean McCartney

I am responding to the "Request for Comments" email you sent out for the above mentioned address, or what I would call "The Igloo House." It is a shame this iconic structure will no longer be around. As Planners we all know the efforts required for preservation, so I understand. But has there been any community interest for saving the structure? Talk about a unique building. Do you happen to know the history of that structure and who might have designed it?

I'm sure if the site were larger there could be a more concerted effort to adaptively reuse the structure, similar to what they did on the old Elitches site. RESPONSE: Structure removed.

Right of Way and Permits

Public Service Company of Colorado dba Xcel Energy

Donna George

Office: 303-571-3306 - Email: donna.l.george@xcelenergy.com

Public Service Company of Colorado's (PSCo) Right of Way & Permits Referral Desk has reviewed the documentation for Sherrelwood Village PUD Amendment – FDPand has no particular concerns.

Please be aware PSCo owns and operates existing overhead and underground electric distribution facilities within the subject property. The property owner/developer/ contractor must complete the application process for any new natural gas or electric service, or *modification* to existing facilities including relocation and/or removal via xcelenergy.com/InstallAndConnect. It is then the responsibility of the developer to contact the Designer assigned to the project for approval of design details.

Additional easements may need to be acquired by separate document for new facilities (i.e. transformers) - be sure to contact the Designer and request that they connect witha Right-of-Way and Permits Agent in this event.

As a safety precaution, PSCo would like to remind the developer to call the Utility Notification Center by dialing 811 for utility locates prior to construction. RESPONSE: Noted

END OF RESPONSES

Community & Economic Development Department www.adcogov.org

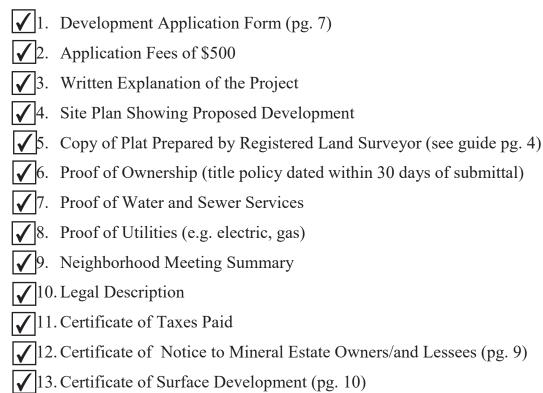


1st Floor, Suite W2000 Brighton, CO 80601-8204 PHONE 720.523.6800 FAX 720.523.6998

WAIVER FROM SUBDIVISION DESIGN STANDARDS

Application submittals must include all documents on this checklist as well as this page. Please use the reference guide (pg. 2) included in this packet for more information on each submittal item.

All submittals shall include one (1) hard copy of all documents and one (1) electronic copy with all documents combined in a single PDF. For hard copies, each document shall be labeled or tabbed with the corresponding checklist number.



Community & Economic Development Department www.adcogov.org



4430 South Adams County Parkway 1st Floor, Suite W2000 Brighton, CO 80601-8204 PHONE 720.523.6800 FAX 720.523.6998

DEVELOPMENT APPLICATION FORM

Application Type	:		
Subo	ceptual Review Preliminary PUD division, Preliminary Final PUD division, Final Rezone Correction/ Vacation Special Use	Tempora Variance Condition X Other: W	
PROJECT NAME	Sherrelwood Village Filing No. 2 - Waiver	for Lot Depth to	Width Ratio
APPLICANT			
Name(s):	Delwest Development Corp/Craig Fitchett	Phone #:	720-708-4065
Address:	155 S Madison St, Suite 326		
City, State, Zip:	Denver, CO 80209		
2nd Phone #:	720-276-6098	Email:	cfitchett@delwest.com
OWNER			
Name(s):	Joe DelZotto	Phone #:	720-708-4065
Address:	155 S Madison St., Suite 326		
City, State, Zip:	Denver, CO 80209		
2nd Phone #:	303-888-8048	Email:	jad@delwest.com
TECHNICAL REF	PRESENTATIVE (Consultant, Engir	neer, Survey	vor, Architect, etc.)
Name:	Tom Girard	Phone #:	303-730-5976
Address:	3473 S. Broadway		
City, State, Zip:	Englewood, CO 80113		
2nd Phone #:		Email:	tgirard@liveyourcore.com

DESCRIPTION OF SITE

Address:	7840 Pecos, 7996 Pecos and 8000 Pecos
City, State, Zip:	Denver, CO 80221
Area (acres or square feet):	450,875 SF / 10.351 Ac
Tax Assessor Parcel Number	7840 Pecos-017193310016; 7996 Pecos-0171933100009 and 8000 Pecos St-0171928400003
Existing Zoning:	PUD
Existing Land Use:	7996 Pecos - Vacant PUD; 8000 Pecos - abondoned school; 7840 Pecos PUD
Proposed Land Use:	PUD with 47 Townhomes
Have you attende	d a Conceptual Review? YES x NO NO
If Yes, please list	PRE#: 201900091
under the author pertinent requirem Fee is non-refund	at I am making this application as owner of the above described property or acting rity of the owner (attached authorization, if not owner). I am familiar with all nents, procedures, and fees of the County. I understand that the Application Review dable. All statements made on this form and additional application materials are my knowledge and belief.
Name:	W. Craig Fitchett Date: 07/06/2021
	Owner's Printed Name
Name:	Owner's Signature



Narrative Waiver from Subdivision Design Standards Lot Depth to Width Ratio

Delwest Development Corporation is requesting a waiver from Adams County Subdivision Design, Improvements and Dedication Standards section 5-03-03-06 for lot depth to width ratio. Subdivision standards state a maximum 3:1 lot depth to width ratio. We request a waiver from this allowing a maximum of 5.2:1 lot depth to width ratio that accommodates an 87' depth to 17' width lot.

This subdivision is proposing townhome lots in which the side lot line is on the building edge and shared with the adjacent townhome. This makes it harder to achieve 3:1 depth to width ratio than a single-family lot where side setbacks are required.

As part of the Sherrelwood Village Filing No. 2 Major Subdivision, Osage Street will be extended to the north and intersect with Sherrelwood Drive which provides access to Pecos Street. Since these streets are established from offsite, there are limited options for homesites in this compact parcel of land. To take advantage of the developable land we are proposing deeper lots to better utilize the space. This creates a larger depth to width ratio than is allowed in the subdivision standards.

These deeper lots will accommodate driveways for standard sized parking, tandem garages holding 2 cars per unit, and 8' rear patios. These deeper units increase the amount of off-street parking provided and decreases the demand for street parking which serves the subdivision to a greater extent. Strict compliance with the 3:1 regulation would make it difficult for the townhomes to provide both adequate parking and the square footage necessary for families to live in these market rate townhomes. This waiver will not have the effect of nullifying the purpose of these subdivision standards and regulations.

Sincerely,

W. Craig Fitchett

Director of Acquisitions & Business Development, Delwest



Narrative PUD-PDP Amendment 1

Delwest Development Corporation is proposing to amend their current Sherrelwood Village PUD-PDP to include approximately 47 new townhomes on 3.3 Acres of additional land adjacent and to the north of the single-family homes we are currently building.

7996 and 8000 Pecos St were purchased to offer a lower, more "workforce" focused priced housing solution for the community than a new traditional single-family home. Delwest has repurposed several Westminster Schools blighted properties. We will be demolishing a vacant, blighted building, the former Children's Outreach Project, and building new attainable housing stock.

Within this PUD amendment, several features of the site exhibit superior design over County requirements as described below:

With the addition of Townhomes to the PUD, we are required to provide 3.3 Acres of open space with 25% of that being active open space. This PUD now provides 4.4 Ac of open space with 1.0 Ac of that being active open space which exceeds the requirements. Within the active open space we are providing a play structure and seating areas by the townhomes for family gathering. This is in addition to the shade structure and seating provided near the single-family homes. Walkways connect both active open space areas to the rest of the neighborhood.

To the east of the project site sits Sherrelwood Park which is a fantastic community amenity. To enhance this park even further we have been working with Hyland Hills to create an outdoor amenity space within the park itself in exchange for using offsite detention. This amenity will be an additional gathering place for the community that everybody can use. Ongoing coordination with Hyland Hills and neighbors will determine the final amenity, whether it be a shade structure, playground, or other type of activity area.

The townhome addition to the PUD will have little to no impact on public infrastructure. Delwest is responsible for all onsite infrastructure and associated costs. This includes the stoplight at Sherrelwood Dr which connects into the townhomes area and down into the single-family portion. This improves access to the current subdivision by creating a loop, with 2 access points on Pecos St and especially enhances ingress and egress to and from southbound traffic. Residents will also have a safe location to cross Pecos St.



Additional parking will be provided as part of the townhome addition to the PUD. Each unit will have a 2-car tandem garage which meets the minimum parking requirement of parking. This townhome addition also provides 22 guest spaces in parking lots and 40 driveways spaces in front of units for a total of 62 guest spaces. This an improvement over the required 24 guest spaces.

We at Delwest are excited to have the opportunity to enhance this neighborhood and bring market rate housing to the area. We look forward to working with the community and staff moving forward.

Sincerely,

W. Craig Fitchett

Director of Acquisitions & Business Development, Delwest

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SHERRELWOOD VILLAGE

PLANNED UNIT DEVELOPMENT - FINAL DEVELOPMENT PLAN - AMENDMENT 1

PART OF THE NORTHEAST QUARTER SECTION 33 AND THE SOUTHEAST QUARTER OF SECTION 28, TOWNSHIP 2 SOUTH, RANGE 68 WEST OF THE SIXTH PRINCIPAL MERIDIAN, ADAMS COUNTY, COLORADO

PROJECT NO:

LEGAL DESCRIPTION

A PARCEL OF LAND BEING SHERRELWOOD VILLAGE, A SUBDIVISION PLAT RECORDED AT RECEPTION NO. 2018000075940 AND THAT PARCEL OF LAND, AS DESCRIBED IN THAT DEED RECORDED AT RECEPTION NO. 2019000075343 TOGETHER WITH THAT PARCEL OF LAND, AS DESCRIBED IN THAT DEED RECORDED AT RECEPTION NO. 2019000073502 ALL IN THE RECORDS OF THE ADAMS COUNTY CLERK AND RECORDER'S OFFICE, LYING WITHIN PORTIONS OF THE SOUTHEAST QUARTER OF SECTION 28 AND THE NORTHEAST QUARTER OF SECTION 33, BOTH IN TOWNSHIP 2 SOUTH, RANGE 68 WEST OF THE SIXTH PRINCIPAL MERIDIAN, COUNTY OF ADAMS, STATE OF COLORADO, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

THE BEARINGS FOR THIS DESCRIPTION ARE BASED ON THE NORTH LINE OF THE NORTHEAST QUARTER OF SECTION 33, TOWNSHIP 2 SOUTH, RANGE 68 WEST OF THE SIXTH P.M., BEING ASSUMED TO BEAR N 89°30'30" E, FROM THE NORTH QUARTER CORNER OF SAID SECTION 33, BEING MONUMENTED BY A REBAR WITH A 3-1/4 INCH ALUMINUM CAP, STAMPED "PLS 23519" TO THE NORTHEAST CORNER OF SAID SECTION 33, BEING MONUMENTED BY A REBAR WITH A 3-1/4 INCH ALUMINUM CAP, STAMPED "PLS 7276", WITH ALL BEARINGS CONTAINED HEREIN RELATIVE THERETO.

COMMENCING AT THE NORTH QUARTER CORNER OF SAID SECTION 33, THENCE N 89°30'30" E, ALONG THE NORTH LINE OF THE NORTHEAST QUARTER OF SAID SECTION 33, A DISTANCE OF 50.00 FEET TO A POINT ON THE EAST LINE OF THE PECOS STREET RIGHT-OF-WAY, AS DEDICATED BY THAT RESOLUTION RECORDED IN BOOK 3270 AT PAGE 279, SAID ADAMS COUNTY RECORDS AND THE POINT OF BEGINNING:

THENCE N 00°14'47" W, ALONG THE EAST LINE OF SAID PECOS STREET RIGHT-OF-WAY, AND ALONG A LINE BEING 50.00 FEET EAST OF AND PARALLEL TO THE WEST LINE OF THE SOUTHEAST QUARTER OF SAID SECTION 28, A DISTANCE OF 293.01 FEET TO A POINT ON THE NORTH LINE OF SAID PARCEL OF LAND DESCRIBED AT RECEPTION NO. 2019000075343;

THENCE S 82°41'00" E, ALONG SAID NORTH LINE, A DISTANCE OF 8.10 FEET TO THE WEST CORNER OF PARCEL D, AS DESCRIBED IN THAT QUIT CLAIM DEED RECORDED IN BOOK 3251 AT PAGE 924; THENCE ALONG THE SOUTH AND WEST LINES OF SAID PARCEL D, THE FOLLOWING THREE (3) COURSES:

- 1. S 76°46'55" E, A DISTANCE OF 178.58 FEET;
- 2. S 21°38'59" E, ALONG THE EAST LINES OF SAID PARCEL DESCRIBED AT RECEPTION NO. 2019000075343 AND SAID SHERRELWOOD VILLAGE PLAT, A DISTANCE OF 534.54 FEET;
- 3. S 33°40'19" E, ALONG THE EAST LINE OF SAID SHERRELWOOD VILLAGE PLAT, A DISTANCE OF

THENCE ALONG THE EAST AND SOUTH LINES OF SAID SHERRELWOOD VILLAGE PLAT, THE FOLLOWING SIX (6) COURSES:

- 1. S 14°37'52" E, A DISTANCE OF 76.08 FEET;
- N 88°03'04" E, A DISTANCE OF 39.50 FEET
 S 17°49'46" E, A DISTANCE OF 104.05 FEET;
- 4. S 55°05'47" E, A DISTANCE OF 104.05 FEET;
- 5. S 01°01'29" E, A DISTANCE OF 259.37 FEET, TO A POINT ON THE NORTH LINE OF ELMWOOD PARK SUBDIVISION, A SUBDIVISION PLAT RECORDED AT RECEPTION NO. C0184761, SAID ADAMS COUNTY RECORDS;
- 6. S 89°32'44" W, ALONG SAID NORTH LINE, A DISTANCE OF 611.65 FEET TO A POINT BEING 50.00 FEET EAST OF THE WEST LINE OF THE NORTHEAST QUARTER OF SAID SECTION 33 ALSO BEING A POINT ON THE EAST LINE OF THE PECOS STREET RIGHT-OF-WAY, AS DEDICATED BY SAID SHERRELWOOD VILLAGE PLAT;

THENCE N 00°01'53" E, ALONG SAID EAST LINE AND ALONG A LINE BEING 50.00 FEET EAST OF AND PARALLEL TO THE WEST LINE OF THE NORTHEAST QUARTER OF SAID SECTION 33, A DISTANCE OF 586.62 FEET TO A POINT ON THE SOUTH LINE OF THAT PARCEL OF LAND DESCRIBED IN SAID WARRANTY DEED RECORDED AT RECEPTION NO. 2019000073502;

THENCE ALONG THE SOUTH, EAST AND NORTH LINES OF SAID PARCEL OF LAND THE FOLLOWING THREE (3) COURSES:

- S 89°30'30" W, ALONG A LINE BEING PARALLEL TO THE NORTH LINE OF THE NORTHEAST QUARTER OF SAID SECTION 33, A DISTANCE OF 20.00 FEET TO A POINT BEING 30.00 FEET EAST OF THE WEST LINE OF THE NORTHEAST QUARTER OF SAID SECTION 33;
- N 00°01'53" E, ALONG A LINE BEING 30.00 FEET EAST OF AND PARALLEL TO THE WEST LINE OF THE NORTHEAST QUARTER OF SAID SECTION 33, A DISTANCE OF 208.00 FEET TO A POINT BEING 20.00 FEET SOUTH OF THE NORTH LINE OF THE NORTHEAST QUARTER OF SAID SECTION 33;
- 3. N 89°30'30" E, ALONG A LINE BEING 20.00 FEET SOUTH OF AND PARALLEL TO THE NORTH LINE OF THE NORTHEAST QUARTER OF SAID SECTION 33, A DISTANCE OF 20.00 FEET TO A POINT BEING 50.00 FEET EAST OF THE WEST LINE OF THE NORTHEAST QUARTER OF SAID SECTION 33, ALSO BEING A POINT ON THE EAST LINE OF THE PECOS STREET RIGHT-OF-WAY, AS DEDICATED BY SAID SHERRELWOOD VILLAGE PLAT;

THENCE N 00°01'53" E, ALONG SAID EAST LINE AND ALONG A LINE BEING 50.00 FEET EAST OF AND PARALLEL TO THE WEST LINE OF THE NORTHEAST QUARTER OF SAID SECTION 33 A DISTANCE OF 20.00 FEET TO THE POINT OF BEGINNING.

CONTAINING AN AREA OF 450,875 SQUARE FEET OR 10.351 ACRES, MORE OR LESS.



PLANNER

Terracina Design 10200 E. Girard Avenue, Ste. A314 Denver, Colorado 80231 Contact: Layla Rosales (303) 632-8867

ARCHITECT

Lawrence Architecture Inc. 2686 Alamo Avenue Littleton, Colorado 80120 Contact: Rick Lawrence (303) 794-8798

APPLICANT

VICINITY MAP

SCALE: 1"= 1000'

DelWest Development Corp. 155 South Madison St. Ste. 326 Denver, Colorado 80209 Contact: Derrell Schreiner (720) 708-4065

ENGINEER/SURVEY

Core Consultants 1950 W Littleton Blvd. Ste. 109 Littleton, Colorado 80120 Contact: Dave Forbes (303) 703-4444

SHEET INDEX

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CERTIFICATE OF OWNERSHIP

Delwest Development Corp, A Colorado Corporation, being the owner of Sherrelwood Village located in the county of Adams, State of Colorado, hereby submit this Planned Unit Development - Preliminary Development Plan and agree to perform under the terms noted hereon.

Owner's Signature		
State of County City)) ss	
The foregoing owners	ship certificate was acknowledged before me this	day of
20		
Notary Public		
My Commission Expi	res:	

BOARD OF COUNTY COMMISSIONERS APPROVAL

Approve	ed by the Adams Cou	nty Board of County Commissioners
this	day of	, 20
Chair		

CLERK & RECORDERS CERTIFICATE

•	ent Plan was filed for record	
-	in the State of Colorado at _	m. on the
uay oi	_ 20	
County Clerk and Recorder		
		
County Clerk and Recorder By Deputy		

ADDITIONS AND DELETIONS

County (Commissio	oners at th	e time of	approval		

The following Additions and Deletions in the PUD were made by the Board of

SHEET TITLE

COVER SHEET

SHEET NUMBER

1 OF 14



PROJECT NAME

ERRELWOOD VILLAGE
DEVELOPMENT PLAN- AMENDMENT 1

10-16-2020

NOT FOR

CONSTRUCTION

Case No. PRC2021-00001

SHERRELWOOD VILLAGE

PLANNED UNIT DEVELOPMENT - FINAL DEVELOPMENT PLAN - AMENDMENT 1

PART OF THE NORTHEAST QUARTER SECTION 33 AND THE SOUTHEAST QUARTER OF SECTION 28, TOWNSHIP 2 SOUTH, RANGE 68 WEST OF THE SIXTH
PRINCIPAL MERIDIAN, ADAMS COUNTY, COLORADO
PROJECT NO:

GENERAL NOTES

A. SITE COMPLIANCE NOTE:

- 1. A CERTIFICATE OF OCCUPANCY SHALL NOT BE ISSUED BY ADAMS COUNTY UNTIL ALL ON-SITE AND PUBLIC IMPROVEMENTS SUCH AS GRADING, DRAINAGE, SIDEWALKS, CURB AND GUTTER, SPECIALTY PAVING AND ALLOTHER FEATURES THAT APPEAR ON THE APPROVED SITE PLAN ARE COMPLETED.
- 2. SURFACED ACCESS ROADS OR STREETS CAPABLE OF WITHSTANDING THE IMPOSED LOADS OF FIRE APPARATUS AND ALL REQUIRED FIRE HYDRANTS SHALL BE INSTALLED AND MADE SERVICEABLE PRIOR TO AND DURING ALL CONSTRUCTION.
- 3. RIGHT-OF-WAY FOR INGRESS AND EGRESS FOR EMERGENCY VEHICLES IS GRANTED OVER, ACROSS, ON AND THROUGH ANY AND ALL PROVIDED DRIVES.
- 4. ADAMS COUNTY IS NOT RESPONSIBLE FOR PRIVATE LANDSCAPING, STRUCTURES AND FACILITIES (WALLS, FENCES, ETC.) WITHIN STORM AND SANITARY SEWER EASEMENTS.
- 5. ON-SITE STORM DRAINAGE FACILITIES AND LANDSCAPING SHALL BE OWNED AND MAINTAINED BY THE PROPERTY OWNER; ITS SUCCESSORS AND/OR ASSIGNS.

B. LIGHTING NOTE:

- 1. IN THE INTEREST OF COMPATIBILITY OF SURROUNDING LAND USES, ILLUMINATION OF ANY KIND ON PRIVATE PROPERTY SHALL BE DIRECTED AND CONTROLLED IN SUCH A MANNER SO THAT THERE SHALL BE NO DIRECT RAYS OF LIGHT WHICH EXTEND BEYOND THE BOUNDARIES OF THE PROPERTY FROM WHERE IT ORIGINATES.
- 2. OPERATIONS AND MAINTENANCE OF ALL STREET LIGHTS SHALL BE THE RESPONSIBILITY OF THE HOMEOWNERS ASSOCIATION, DEVELOPER, OR THEIR ASSIGNS.

C. MAINTENANCE RESPONSIBILITY NOTES:

- 1. THE OWNERS OF THE SINGLE FAMILY LOTS, THEIR SUCCESSORS, HEIRS AND ASSIGNS SHALL BE RESPONSIBLE FOR THE PROPER MAINTENANCE OF THE AREA SUBJECT TO AN APPROVED SITE PLAN. THAT AREA SHALL BE DEEMED TO INCLUDE AN AREA MEASURED FROM THE BACK OF THE CURB LINE TO, AND INCLUDING ALL AREAS SUBJECT TO THE APPROVED SITE PLAN AND DRAINAGE REPORT.
- 2. THE TOWNHOME LANDSCAPE AREA WITHIN LOTS 1 AND 2 OF SHERRELWOOD VILLAGE FIRST AMENDMENT OF THE PLAT WILL BE MAINTAINED BY THE HOA.
- 3. LANDSCAPING SHALL BE CONTINUOUSLY MAINTAINED INCLUDING NECESSARY WATERING, WEEDING, PRUNING, PEST CONTROL, AND REPLACEMENT OF DEAD OR DISEASED PLANT MATERIAL. REPLACEMENT FOR DEAD OR DISEASED PLANT MATERIAL SHALL BE THE SAME TYPE OF PLANT MATERIAL AS SET FORTH IN THE APPROVED SITE PLAN; FOR EXAMPLE A TREE MUST REPLACE A TREE, A SHRUB MUST REPLACE A SHRUB, A GROUND COVER MUST REPLACE A GROUND COVER, ETC.. REPLACEMENT SHALL OCCUR IN THE NEXT PLANTING SEASON, BUT IN ANY EVENT, SUCH REPLACEMENT TIME SHALL NOT EXCEED ONE (1) YEAR. ANY REPLACEMENT WHICH CONFORMS TO THE REQUIREMENTS OF THIS SECTION, SHALL NOT BE CONSIDERED AN AMENDMENT TO THE SITE PLAN.

D. SIGNAGE NOTE:

1. APPROVAL OF A SIGN PERMIT IS REQUIRED WHICH WILL INCLUDE A SITE PLAN TO VERIFY ANY POSSIBLE CONFLICTS WITH SIGHT TRIANGLES AND UTILITY EASEMENTS.

E. DOWNSPOUT NOTE:

1. NO ROOF DOWNSPOUT OUTFALLS WILL BE ALLOWED TO DRAIN OVER SIDEWALKS, BIKE PATHS, OR ANY PEDESTRIAN ROUTE.

F. MAILBOX LOCATION:

1. MAILBOXES SHALL BE LOCATED ON OSAGE STREET, ADJACENT TO TRACT A FOR SINGLE FAMILY HOMES. MAILBOXES WILL BE CENTRALLY LOCATED FOR THE TOWNHOMES. EXACT LOCATION AND CONFIGURATION TO BE DETERMINED BY UNITED STATES POSTAL SERVICE REQUIREMENTS AND GUIDELINES.

G. FENCING:

- 1. SIX FOOT HEIGHT PRIVACY FENCE IS PROVIDED ON THE PDP. HOWEVER, HOMEOWNERS ADJACENT TO OPEN SPACE MAY INSTALL 42" HEIGHT OPEN RAIL OR OPAQUE FENCING.
- 2. PRIVATE LOT OWNERS WILL BE ALLOWED TO INSTALL SIX FOOT HEIGHT PRIVACY FENCE ALONG SIDE AND REAR LOT LINES WHERE ADJACENT TO NEIGHBORING LOTS. WING WALL PRIVACY FENCE MAY BE INSTALLED FROM THE SIDE YARD FENCE TO THE FRONT CORNER OF THE HOUSE. FENCING MAY NOT BE PLACED ANY FURTHER FORWARD ON THE LOT THAN THE FRONT CORNERS OF THE MAIN LIVING AREA OF THE HOME, INCLUDING THE GARAGE
- 3. FENCING MAY NOT BE PAINTED ANY COLORS. ONLY A SEALANT PRODUCT TO PROTECT THE WOOD MAY BE USED AS LONG AS IT DOES NOT ALTER THE NATURAL COLOR OF THE WOOD.

H. PUBLIC LAND DEDICATION FEE.

1. PER CHAPTER 5 OF THE COUNTY'S DEVELOPMENT STANDARDS AND REGULATIONS, THE DEVELOPER IS REQUIRED TO DEDICATE LAND TO SUPPORT NEW OR EXPANDED PARKS AND SCHOOLS TO SERVE THE RESIDENTS OF THE PROPOSED SUBDIVISION. AS AN ALTERNATIVE TO LAND DEDICATION, THE BOARD OF COUNTY COMMISSIONERS MAY REQUIRE THE PAYMENT OF CASH-IN-LIEU. PER THE MARKET VALUE CALCULATIONS IN CHAPTER 5 OF THE COUNTY'S SUBDIVISION REGULATIONS, \$______, OR _____, ACRES OF LAND, IS REQUIRED TO SATISFY THE NEIGHBORHOOD PARK REQUIREMENT. THE DEVELOPER HAS AGREED TO CONTRIBUTE \$50,000 TO HYLAND HILLS PARKS AND RECREATION TO CONSTRUCT IMPROVEMENTS IN THE ADJACENT SHERRELWOOD PARK. A CREDIT IN THE AMOUNT OF \$50,000 FOR THE IMPROVEMENTS LOCATED IN SHERRELWOOD PARK SHALL BE APPLIED TO THE REQUIRED PUBLIC LAND DEDICATION REQUIREMENTS (CASH-IN-LIEU) FOR NEIGHBORHOOD PARKS.

I. TRASH NOTE:

1. TRASH SHALL BE LOCATED IN INDIVIDUAL UNITS VIA TRASH CONTAINERS.

SHEET TITLE

GENERAL NOTES

SHEET NUMBER

3 OF 14



PROJECT NAME

SHERRELWOOD VILLAGE FINAL DEVELOPMENT PLAN- AMENDMENT 1 ADAMS COUNTY, COLORADO

ISSUE DATE

10-16-2020

NOT FOR CONSTRUCTION

SHEET TITLE

NARRATIVE

4 OF 14



PROJECT NAME

C ENDM

ISSUE DATE

10-16-2020

NOT FOR CONSTRUCTION

NARRATIVE

A. EXPLANATION OF THE CHARACTERISTICS OF THE PUD AND ITS POTENTIAL IMPACT ON THE SURROUNDING AREA:

SHERRELWOOD VILLAGE PUD CONSISTS OF APPROXIMATELY 10.4 ACRES IN ADAMS COUNTY, COLORADO. THE SITE IS BOUNDED BY RESIDENTIAL HOMES TO THE WEST AND SOUTH, SHERRELWOOD ELEMENTARY AND PARK TO THE EAST AND VACANT LAND AND PRIVATE BUSINESS TO THE NORTH. SHERRELWOOD VILLAGE IMPROVEMENTS INCLUDE 41 SINGLE FAMILY DETACHED HOMES, 47 TOWNHOME UNITS, ROADWAYS AND OPEN SPACE. THE CONDITION OF THIS SITE IS SUITABLE FOR BOTH SINGLE FAMILY RESIDENTIAL UNITS AND TOWNHOME UNITS WITHOUT ANY LIMITATIONS OR RESTRICTIONS.

EXPECTED DENSITIES AND LAND COVERAGE:

SHERRELWOOD VILLAGE CONSISTS OF 41 SINGLE FAMILY DETACHED LOTS AND 47 TOWNHOMES UNITS ON 10.4 ACRES FOR A MAXIMUM DENSITY OF 8.5 DU/AC.

NUMBER, TYPE AND SIZE OF BUILDING UNITS:

FORTY-ONE (41) SINGLE FAMILY DETACHED LOTS AND FORTY-SEVEN (47) TOWNHOMES ARE PROPOSED IN THE SHERRELWOOD VILLAGE PDP. THE HOMES WILL BE ONE AND TWO STORY FRONT LOADED WITH A STANDARD TWO CAR GARAGE. THE SIZES OF THE HOMES WILL VARY FROM 1,300 TO 2,000 SQUARE FEET FOR SINGLE FAMILY AND 1,700 TO 2,300 SQUARE FEET FOR TOWNHOMES.

PROVISIONS FOR PARKING:

EACH SINGLE FAMILY HOME WILL HAVE A TWO CAR ATTACHED GARAGE AND AN OFF-STREET DRIVEWAY. EACH TOWNHOME UNIT WILL HAVE A 2 CAR TANDEM GARAGE. MOST TOWNHOME UNITS HAVE DRIVEWAYS ALONG WITH (22) OFF STREET PARKING SPACES FOR GUESTS. THESE FRONT ACCESSED GARAGES AND DRIVEWAYS WILL EASILY ACCOMMODATE THE MINIMUM REQUIRED TWO (2) PARKING SPACES PER HOME AND (1) GUEST SPACE FOR EVERY 2 TOWNHOMES.

CIRCULATION AND ROAD PATTERNS:

TWO (2) PUBLIC LOCAL STREETS, A LOOP ROAD AND ONE WITH A CUL-DE-SAC ARE PROVIDED ALLOWING EASY ACCESS TO ALL HOMES. TWO PRIMARY ACCESSES ARE PROVIDED OFF OF PECOS STREET ELMWOOD LANE AND SHERRELWOOD DRIVE. ACCESS TO REGIONAL TRANSPORTATION ROUTES IS VIA PECOS. ALL STREETS WILL HAVE ATTACHED CONCRETE SIDEWALKS AND WILL MEET THE CURRENT STANDARDS FOR STREET CONSTRUCTION WITHIN ADAMS COUNTY. A CONCRETE TRAIL CONNECTION WILL BE PROVIDED TO CONNECT THE DEVELOPMENT TO THE PARK AND PUBLIC SCHOOL TO THE EAST.

OWNERSHIP AND MAINTENANCE OF COMMON AREAS:

LANDSCAPE EASEMENT ALONG PECOS ST WILL BE OWNED AND MAINTAINED BY THE HOA

TRACTS A AND C. INCLUDING THE LANDSCAPE WITHIN TOWNHOME LOTS WILL BE OWNED AND MAINTAINED BY THE HOA, ITS SUCCESSORS AND/OR ASSIGNS.

TYPE, LOCATION, EXAMPLES OF COPY AND CONSTRUCTION SIGNS.

PERMANENT SIGNS

THE COMMUNITY MAY HAVE ONE ENTRY MONUMENT SIGN LOCATED WITHIN TRACT A; SETBACK AT LEAST EIGHT (8) FEET FROM THE FRONT PROPERTY LINE (ROW) AND EQUAL TO THE HEIGHT OF THE SIGN FROM SIDE AND REAR PROPERTY LINES. THE MONUMENT WILL BE A MAXIMUM OF SIX (6) FEET IN HEIGHT AND TEN(10) FEET IN LENGTH WITH A MAX SIGN AREA OF THIRTY (30) SQUARE FEET PER SIGN FACE. THE MONUMENT MAY BE INTERNALLY LIGHTED OR HAVE ACCENT LANDSCAPE LIGHTING AND INCLUDE LANDSCAPING OF 2.5 SQUARE FEET PER SQUARE FOOT OF SIGN AREA. THE ENTRY MONUMENT WILL BE OWNED AND MAINTAINED BY THE PROPERTY OWNER, ITS SUCCESSORS AND/OR ASSIGNS.

TEMPORARY MARKETING SIGNS:

INTERIM PROJECT ID - ONE (1) THIRTY-TWO (32) SF (PER SIGN FACE) FREESTANDING MARKETING SIGN, NOT EXCEEDING TWELVE (12) FEET IN HEIGHT IS PERMITTED WITHIN TRACT A. THE SIGN WILL BE REMOVED UPON BUILD OUT OF THE DEVELOPMENT.

MARKETING BANNERS:

UP TO TWO (2) MARKETING BANNERS WITH A MAXIMUM OF THIRTY-TWO (32) SF OF SIGN AREA TO BE MOUNTED ON TEMPORARY OR PERMANENT SITE WALLS, SIGNS MAY NOT BE MOUNTED ON FENCES. MARKETING BANNERS MAY BE INCORPORATED INTO CONSTRUCTION SCREENING.

TYPE AND ALLOCATION OF ALL USES INCLUDING PERMITTED USES, USE AS PERMITTED AFTER AMENDMENT TO THE PUD AND PROHIBITED USES:

PERMITTED USES WITHIN SHERRELWOOD VILLAGE INCLUDE SINGLE FAMILY DETACHED RESIDENTIAL, TOWNHOMES, OPEN SPACE AND HOME BASED OCCUPATIONS AS PERMITTED BY ADAMS COUNTY. TEMPORARY USES INCLUDE OPEN SPACE AND LANDSCAPE IMPROVEMENTS, CONSTRUCTION OFFICES, SALES CENTER AND RELATED IMPROVEMENTS, SALES CENTERS AND TEMPORARY CONSTRUCTION TRAILERS REQUIRE PERMITS FROM ADAMS COUNTY PRIOR TO LOCATING ON THE PROPERTY.

ANY STANDARDS AND ALLOWANCES FOR TOWNHOMES NOT EXPLICITLY LISTED IN THIS PUD SHALL FOLLOW R-3 ZONING

LOCATION AND TYPES OF LANDSCAPING AND MAINTENANCE PROVISIONS:

PRIVATE LOT OWNERS SHALL BE RESPONSIBLE FOR THE MAINTENANCE OF THEIR PROPERTY. ADAMS COUNTY IS NOT RESPONSIBLE FOR REPAIRING OR MAINTAINING LANDSCAPING THAT IS DAMAGED AS A RESULT OF ROADWAY MAINTENANCE ACTIVITIES, INCLUDING BUT NOT LIMITED TO DE-ICING CHEMICALS AND STREET REPAIRS.

DESCRIPTION OF BUILDING ENVELOPES INCLUDING SQUARE FOOTAGE AND/OR MINIMUM SETBACKS, HEIGHT AND GENERAL **EXTERNAL CHARACTERISTICS:**

THERE ARE 41 SINGLE FAMILY DETACHED RESIDENTIAL AND 47 TOWNHOME UNITS IN THIS PDP. SETBACKS, BUILDING HEIGHT AND SQUARE FOOTAGES SHALL BE CONSISTENT WITH THE DEVELOPMENT STANDARDS TABLE ON SHEET 6.

K. COVENANTS, CONDITIONS & RESTRICTIONS TO BE IMPOSED ON THE PUD:

ARCHITECTURAL AND LANDSCAPE DESIGN GUIDELINES WILL BE DEVELOPED FOR SHERRELWOOD VILLAGE THROUGH THE COVENANTS, CONDITIONS & RESTRICTIONS (CC&R'S); TO BE ADMINISTERED BY THE ESTABLISHED ASSOCIATION OR DISTRICT.

ADDITIONAL CONTROLS SUCH AS ARCHITECTURAL CONTROL COMMITTEE OF A PROPERTY OWNER'S ASSOCIATION:

THE COMMUNITY WILL HAVE AN ASSOCIATION OR DISTRICT THAT WILL ENFORCE THE DESIGN STANDARDS THROUGH THE CC&RS.

M. UTILITY SERVICE PROVIDERS:

THE CITY OF THORNTON WILL PROVIDE WATER AND SANITARY SEWER: XCEL ENERGY PROVIDES GAS AND ELECTRIC SERVICES TO THE SITE.

ESTIMATED TIMETABLE FOR DEVELOPMENT:

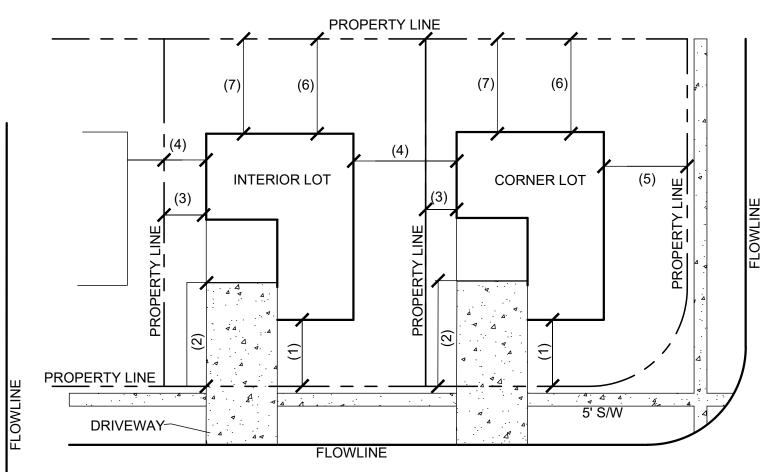
THE ESTIMATED LENGTH OF TIME FOR BUILD-OUT IS BETWEEN TWO (2) AND THREE (3) YEARS.

O. ANY OTHER PERTINENT FACTORS CONCERNING DEVELOPMENT:

ADAMS COUNTY FIRE PROTECTION DISTRICT SERVICES THE PROPERTY.

TOWNHOME BUILDING

DRIVEWAY



TYPICAL SINGLE FAMILY SETBACK DETAIL NTS

SINGLE FAMILY LOT SETBACKS

- (1) 10' FRONT SETBACK (2) 18' GARAGE SETBACK
- (3) 5' SIDE SETBACK

(3)

- (4) 10' BUILDING SEPARATION
- (5) 10' SIDE ON STREET SETBACK
- (6) 10' REAR SETBACK
- (6) 30' REAR SETBACK (BLOCK 1: LOTS 11-21) (7) REAR PORCH SETBACK MAY ENCROACH
- (7) REAR PORCH SETBACK MAY ENCROACH INTO REAR SETBACK BY 8'. CANNOT BE LOCATED OVER AN EASEMENT.

SINGLE FAMILY ACCESSORY STRUCTURE SETBACKS

5' REAR SETBACK 5' SIDE SETBACK

10' SIDE ON STREET SETBACK

TYPICAL TOWNHOME SETBACK DETAIL NTS

PROPERTY LINE

(2)

TOWNHOME LOT SETBACKS

(1)

(1) 15' FRONT SETBACK

FLOWLINE

- (2) 5' SIDE SETBACK
 (3) 10' SIDE ON STREET SETBACK
- (4) 10' REAR SETBACK
- (5) REAR PORCH MAY ENCROACH INTO
- REAR SETBACK BY 8'
 (6) 10' BUILDING SEPARATION
- (7) 8' PORCH SETBACK

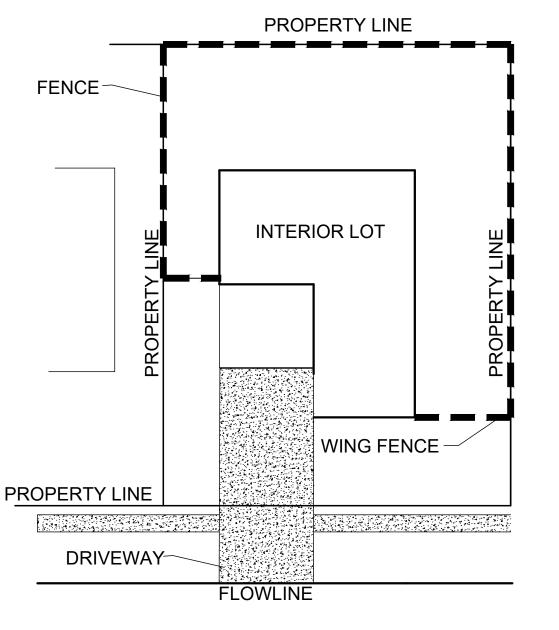
DEVELOPMENT SUMMARY						
LAND USE	ACRES	% ACRES	UNITS	DU/AC		
TOWNHOMES	1.5	25.2%	47			
OPEN SPACE - TRACTS	1.7	29.6%				
OPEN SPACE - RIGHT OF WAY	2.7	45.2%				
TOTAL	5.9	100.0%	47	8.0		

DEVELOPMENT STANDARDS		
USE	SINGLE FAMILY DETACHED HOME	TOWNHOMES
MINIMUM LOT AREA	4,000 S.F.	N/A
MINIMUM FLOOR AREA	1,500 S.F.	1,700 S.F.
MINIMUM LOT WIDTH, (CORNER LOT)	45' (50')	N/A
MAXIMUM LOT COVERAGE	70%	70%
BUILDING COVERAGE		70% MAX
MAXIMUM DENSITY	41 LOTS	47 LOTS
MAXIMUM BUILDING HEIGHT:		
PRIMARY	30'	35'
(ACCESSORY)	(18')	(N/A)

^{*} ANY STANDARDS AND ALLOWANCES NOT EXPLICITLY LISTED IN THIS PUD SHALL FOLLOW R-3 ZONING

NOTES:

- (A) BAY WINDOWS, CANTILEVERS, CHIMNEYS, EXTERIOR POSTS, SOLAR PANELS, MECHANICAL EQUIPMENT, LIGHT FIXTURES AND OTHER SIMILAR ARCHITECTURAL FEATURES MAY ENCROACH TWO (2) FEET INTO SETBACKS. IN NO INSTANCE MAY AN ENCROACHMENT CROSS A PROPERTY LINE OR UTILITY EASEMENT.
- (B) SETBACKS ARE MEASURED TO RIGHT OF WAY OR PROPERTY LINE.
- (C) ACCESSORY STRUCTURES ARE NOT PERMITTED IN FRONT YARDS
- (D) 'FRONT YARD' SHALL BE CONSIDERED THAT AREA DEFINED BY THE WIDTH OF THE LOT AND THE DEPTH FROM THE RIGHT-OF-WAY LINE TO FRONT WALL OF THE PRINCIPAL STRUCTURE.



TYPICAL SINGLE FAMILY FENCE DETAIL

Case No. PRC2021-00001

DEVELOPMENT STANDARDS

5 OF 14

SHEET TITLE

SHEET NUMBER

Lefracina Oesign 10200 E. Girard Ave, A-314 Denver, CO 80231 ph: 303.632.8867

PROJECT NAME

RELWOOD VILLAGE ELOPMENT PLAN- AMENDMENT 1

ISSUE DATE

10-16-2020

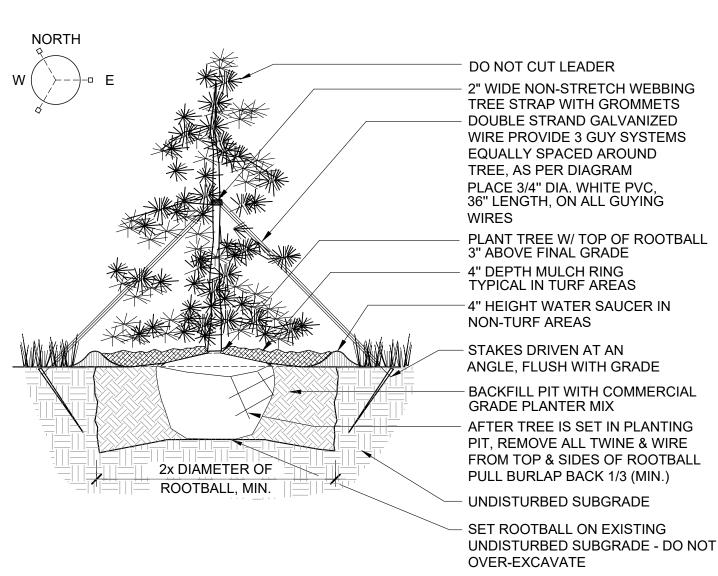
NOT FOR CONSTRUCTION

SHERRELWOOD VILLAGE

PLANNED UNIT DEVELOPMENT - FINAL DEVELOPMENT PLAN - AMENDMENT 1

PART OF THE NORTHEAST QUARTER SECTION 33 AND THE SOUTHEAST QUARTER OF SECTION 28, TOWNSHIP 2 SOUTH, RANGE 68 WEST OF THE SIXTH PRINCIPAL MERIDIAN, ADAMS COUNTY, COLORADO PROJECT NO:

PRUNE DAMAGED OR DEAD WOOD DO NOT CUT LEADER 12 GAUGE GALV. WIRE WITH 3/4" DIA. WHITE PVC ON ENTIRE LENGTH OF EACH WIRE 2" WIDE NON-STRETCH WEBBING TREE STRAP WITH GROMMETS 8' L x 2" DIA. LODGEPOLE PINE POSTS ALIGN NW/SE, 2 PER TREE SET MIN 18" INTO UNDISTURBED SUBGRADE WRAP ENTIRE SURFACE OF TRUNK UP TO SECOND BRANCH WITH SPECIFIED WRAPPING SECURED @ TOP AND BOTTOM & AT TWO FOOT INTERVALS. PLANT TREE W/ TOP OF ROOTBALL 2"-4" ABOVE FINAL GRADE MULCH RING, MIN. 48" IN DIA., 4" IN 4" HEIGHT WATER SAUCER IN NON-SOD AREAS BACKFILL PIT WITH COMMERCIAL GRADE PLANTER MIX AFTER TREE IS SET IN PLANTING PIT, REMOVE ALL TWINE & WIRE FROM TOP & SIDES OF ROOTBALL PULL BURLAP BACK 1/3 (MIN.) 2x DIAMETER OF SET ROOTBALL ON UNDISTURBED ROOTBALL, MIN. SUBGRADE-DO NOT OVER-EXCAVATE



1. INSTALL SPECIFIED MULCH TO DRIPLINE OF TREE WHERE PLANTED IN LAWN AREAS.

2. DO NOT PROVIDE WATER BASIN IN IRRIGATED LAWN AREAS.

EVERGREEN TREE PLANTING

NOT TO SCALE



HPS
Traditional Basic - 70 W - post top⁶
Traditional Basic - 100 W - post top⁶
Traditional Basic - 150 W - post top⁶
Traditional Basic - 150 W - post top⁶ ESLTB07HK 53987
ESLTB10HK 54008
ESLTB15HK 216477
ESLTB07HZ 214340 D:
ESLTB10HZ 106552 D:
ESLTB15HZ 106553 D:

NOT TO SCALE

Notes:

1. C/Us include the luminaire, photo control, and the correct lamp type.

2. Design only 70, 100, and 150-Watt lamps. Design only 120 V lighting systems.

3. Design Traditional poles, arms, etc., using sections PL-INDEX, AM-INDEX and ODL REF-INDEX.

 Name
 Action
 Replaces
 Approved
 File
 OUTDOOR LIGHTING MANUAL

 Jan-17
 Jan-18
 ML
 LM-13.00
 Page
 LM-13.00

TRACER WIRE CONDUIT TO NEXT SECONDARY DEVICE

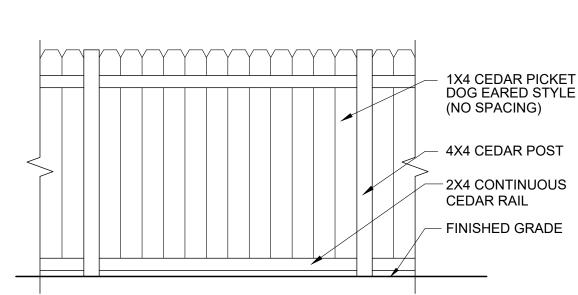
ALUMINUM POLE - TENON TOP

POST TOP LUMINAIRES DIRECT BURIED

ACORN ACORN ACORN TRADITIONAL TRADITIONAL LUMINARIE LUMI

STREET LIGHTING DETAIL

NOT TO SCALE

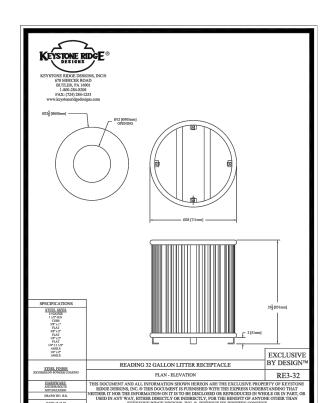


TRASH CAN

6 HT. PRIVACY FENCE

6' CONCRETE TRAIL

NOT TO SCALE



5 DEPTH SAWCUT JOINTS EVERY 10" AND EXPANSION JOINTS EVERY 100"

CONGRETE TRAIL TYPICAL

SECTION

LEVEL CLEAR ZONE

NOT TO SCALE

NOT TO SCALE Case No. PRC2021-00001

NOT TO SCALE

PATENT NO DES. 376,270

RE26

ALL IMAGES ARE CONCEPTUAL. FINAL STRUCTURES TO BE DETERMINED

USED IN ANY WAY, EITHER DIRECTLY OR INDIRECTLY, FOR THE BENEFIT OF ANYONE OTHER THAN KEYSTONE RIDGE DESIGNS. INC. ® WITHOUT ITS WRITTEN CONSENT.

READING 6' BENCH WITH BACK

STEEL FINISH (SHIELD® POWDER COA)

6' BENCH

DECIDUOUS TREE PLANTING

9 OF 14

SHEET TITLE

LANDSCAPE DETAILS

SHEET NUMBER

PROJECT NAME

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ENDMENT COLORADO S FINA

ISSUE DATE

10-16-2020

NOT FOR CONSTRUCTION

NOT FOR

LANDSCAPE NOTES

- 1. THE HOMEOWNERS OR THEIR SUCCESSORS AND ASSIGNS SHALL MAINTAIN ALL IRRIGATION AND LANDSCAPING WITHIN EACH RESPECTIVE LOT, SEE ALSO 'GENERAL NOTES' 'C' INCLUSIVE.
- 2. FRONT AND SIDE SETBACKS: THE ENTIRE FRONT AND SIDE SETBACKS SHALL BE LANDSCAPED, EXCEPT FOR DRIVEWAYS.
- BACK YARD SETBACK: A MINIMUM OF THIRTY PERCENT (30%) OF THE BACK YARD SHALL BE LANDSCAPED IN SINGLE FAMILY LOTS
- REQUIRED GROUND COVER: A MINIMUM OF THIRTY PERCENT (30%) OF THE REQUIRED FRONT AND SIDE LANDSCAPE AREA MUST BE COVERED BY LIVING GROUND MATERIAL, SUCH AS LOW GROWING GROUND COVER, SHRUBS, OR GRASS, WITHIN ONE (1) YEAR FOLLOWING OCCUPANCY AND THEREAFTER.
- REQUIRED TREES AND SHRUBS: A MINIMUM OF ONE (1) LARGE TREE AND FIVE (5) SHRUBS, OR TWO (2) ORNAMENTAL TREES AND FIVE (5) SHRUBS, SHALL BE REQUIRED FOR EACH SINGLE FAMILY LOT. EVERGREENS SHALL BE CONSIDERED ORNAMENTAL.
- MINIMUM SIZE REQUIREMENTS: MINIMUM SIZE REQUIREMENTS FOR TREES AND SHRUBS SHALL BE:

PLANT TYPE	MATURE HEIGHT	MINIMUM PLANT SIZE AT PLANTING
ORNAMENTALS	LESS THAN 20'	1" TO 1-1/2"
LARGE DECIDUOUS	OVER 20'	2" TO 2-1/2"
EVERGREENS (SM.)	LESS THAN 20'	5' TALL
EVERGREENS (LG.)	OVER 20'	6' TALL
LOW SHRUBS	1' TO 3'	5 GALLON
UPRIGHT SHRUBS	3' TO 10'	5 GALLON

- CONTRACTOR TO CONTACT THE UTILITY NOTIFICATION CENTER OF COLORADO BEFORE DIGGING, INCLUDING BUT NOT LIMITED TO, TRENCHING AND SHRUB AND TREE PLANTING PITS. IF UTILITIES OCCUR AT LOCATIONS OF PROPOSED SHRUBS, OR WITHIN EIGHT (8) FEET OF PROPOSED TREES, THE CONTRACTOR SHALL REPORT SUCH CONDITIONS TO THE OWNER'S REPRESENTATIVE. DAMAGE TO EXISTING UTILITIES BY THE LANDSCAPE CONTRACTOR IS THE RESPONSIBILITY OF THE LANDSCAPE CONTRACTOR.
- ALL SHRUB BEDS TO BE CONTAINED WITH GREEN 4" DEPTH, 3/16" THICK PRO STEEL EDGING. 9. INSTALL 3" DEPTH OF 3/4" CRUSHED GRANITE MULCH OVER SPUNBOND POLYESTER FABRIC IN ALL
- 10. BLUEGRASS TURF AREAS, NATIVE GRASS AREAS AND SHRUB BEDS SHALL BE PREPARED WITH ASPEN RICH COMPOST OR AN APPROVED EQUAL AT A RATE OF 3 CUBIC YARDS PER 1,000 SQUARE FEET. THIS PREPARATION SHALL BE THOROUGHLY INCORPORATED INTO THE TOP 6" OF SOIL
- 11. TURF AND SHRUB BEDS SHALL BE IRRIGATED WITH AN UNDERGROUND AUTOMATED IRRIGATION SYSTEM AND SHALL PROVIDE HEAD TO HEAD COVERAGE. NATIVE SEED AREAS DO NOT REQUIRE PERMANENT IRRIGATION.

LANDSCAPE INSTALLATION & MAINTENANCE CHART

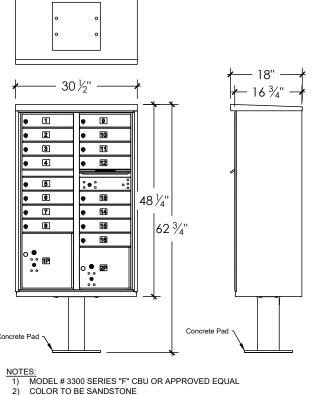
INSTALLATION AND MAINTENANCE					
AREA	INSTALLATION	MAINTENANCE			
TOWNHOME LOTS 1-2	OWNER/DEVELOPER	НОА			
TRACT A AND C	OWNER/DEVELOPER	НОА			
LANDSCAPE ADJACENT TO:					
BLOCK 1: LOTS 1-21	BUILDER	HOMEOWNER			
BLOCK 2: LOTS 1-8	BUILDER	HOMEOWNER			
BLOCK 3: LOTS 1-16	BUILDER	HOMEOWNER			
NORTH PECOS STREET	OWNER/DEVELOPER	НОА			
LANDSCAPE EASEMENT ALONG PECOS ST	OWNER/DEVELOPER	НОА			

PLANT LIST

QTY	SYM	SCIENTIFIC NAME	COMMON NAME	SIZE	QUALITY
DECIDUOUS SHADE TRI	EES			_	
4	CSW	CATALPA SPECIOSA	WESTERN CATALPA	2.5" CAL	B&B, SPECIMEN QUALITY
2	QRO	QUERCUS ROBUR	ENGLISH OAK	2.5" CAL	B&B, SPECIMEN QUALITY
2	QMO	QUERCUS MACROCARPA	BUR OAK	2.5" CAL	B&B, SPECIMEN QUALITY
2	PAL	POPULUS X ACUMINATA	LANCELEAF COTTONWOOD	2.5" CAL	B&B, SPECIMEN QUALITY
DECIDUOUS ORNAMEN	NTAL TREES				
13	AGA	AMELANCHIER X GRANDIFLORA 'AUTUMN BRILLIANCE'	AUTUMN BRILLANCE SERVICEBERRY	2" CAL	B&B, SPECIMEN QUALITY
11	MSS	MALUS X 'SPRING SNOW'	SPRING SNOW CRABAPPLE	2" CAL	B&B, SPECIMEN QUALITY
EVERGREEN TREES	•				
2	PN	PINUS NIGRA	AUSTRIAN PINE	8' HT	B&B, SPECIMEN QUALITY
1	PE	PINUS EDULIS	PINON PINE	8' HT	B&B, SPECIMEN QUALITY
EVERGREEN SHURBS					
46	JSM	JUNIPERUS SCOPULORUM 'MEDORA'	MEDORA JUNIPER	5 GAL	CONT.
DECIDUOUS SHRUBS					
32	ССВ	CARYOPTERIS X CLANDONENSIS 'BLUE MIST'	BLUE MIST SPIRAEA	5 GAL	CONT.
15	PAR	PEROVSKIA ATRIPLICIFOLIA	RUSSIAN SAGE	5 GAL	CONT.
11	PCP	PRUNUS X CISTENA	PURPLE-LEAF SAND CHERRY	5 GAL	CONT.
18	PFM	POTENTILLA FRUTICOSA GOLD DROP	GOLD DROP POTENTILLA	5 GAL	CONT.
32	SJM	SPIREA JAPONICA, MAGIC CARPET	SPIREA, MAGIC CARPET	5 GAL	CONT.
GRASSES	•			•	
98	PAH	PENNISETUM ALOPECUROIDES 'HAMELN'	DWARF FOUNTAIN GRASS	5 GAL	CONT.
59	PVS	PANNICUM VIRGATUM, SHENANDOAH	SWITCHGRASS, SHENANDOAH	5 GAL	CONT.

PROJECT NO: **PLAY STRUCTURE**

IMAGES FOR REFERENCE ONLY



2) COLOR TO BE SANDSTONE

(16) MAILBOXES, (1) OUTGOING, (2) PARCEL LOCKERS SALSBURY INDUSTRIES 1010 E. 62ND STREET

P: (800) 624-5269 ENGINEERING@MAILBOXES.COM MAIL KIOSK

TOWNHOME LANDSCAPE REQUIREMENTS

TOWNHOME LANDSCAPING AREA					
AREA (SF)	TREES REQUIRED (1/1500SF)	TREES PROVIDED	SHRUBS REQUIRED (2/1500 SF)	SHRUBS PROVIDED	
44,926	30	38	60	83	

REQUIRED LOT LANDSCAPING							
AREA	LOT AREA	REQUIRED LANDSCAPING (10% OF LOT AREA)	· · · · · · · · · · · · · · · · · · ·		F P	ROW LANDSCAPE AREA PROVIDED	
TOWNHOMES	111,000	11,100	44,926	5,550		8,100	
STREE FRONTAGE LANDSCAPING							
	AREA	LENGTH (LF) D	EPTH OF LANDSCAPE (LF)	TREES REQUIRED TREES	PROVIDED	SHRUBS REQUIRED	SHRUBS PROVIDED

NOTES:

1. OPTION 4 REQUIRES 2 TREES AND 5 SHRUBS EVERY 40 LF

TOWNHOME LOTS (OPTION 4)

2. SHRUB EQUIVALENT: (1) 5 GAL SHRUB = (3) 1 GAL GRASSES

SHEET TITLE

LANDSCAPE **DETAILS**

SHEET NUMBER

11 OF 14



PROJECT NAME

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ISSUE DATE

10-16-2020

NOT FOR CONSTRUCTION

ALL IMAGES ARE CONCEPTUAL. FINAL STRUCTURES TO BE DETERMINED

Case No. PRC2021-00001

SHERRELWOOD VILLAGE

PLANNED UNIT DEVELOPMENT - FINAL DEVELOPMENT PLAN - AMENDMENT 1

PART OF THE NORTHEAST QUARTER SECTION 33 AND THE SOUTHEAST QUARTER OF SECTION 28, TOWNSHIP 2 SOUTH, RANGE 68 WEST OF THE SIXTH PRINCIPAL MERIDIAN, ADAMS COUNTY, COLORADO PROJECT NO:

LANDSCAPE LEGEND

SHRUBS

ORNAMENTAL GRASSES

DECK/ DECK/ DECK/ DECK/ DECK/ DECK/ DECK/ DECK/ PATIO PATIO PATIO PATIO PATIO PATIO PATIO **PATIO** CONCRETE SIDEWALK PROPERTY LINE TANDEM GARAGE, FLOWLINE TYP. FRONT PORCH, TYP. CONCRETE DRIVEWAY, TYP. PROPERTY LINE **FLOWLINE** -ATTACHED WALK SAMPLE TOWNHOME LAYOUT

*ACTUAL PLANS MAY VARY & WILL COMPLY WITH THE STANDARDS HEREON

Scale: 1"= 20'-0" O Calse No. PRC2021-00901 SHEET TITLE

SAMPLE HOUSE **EXHIBIT**

SHEET NUMBER

12 OF 14

PROJECT NAME

ISSUE DATE

10-16-2020

NOT FOR CONSTRUCTION

PLANNED UNIT DEVELOPMENT - FINAL DEVELOPMENT PLAN - AMENDMENT 1

PART OF THE NORTHEAST QUARTER SECTION 33 AND THE SOUTHEAST QUARTER OF SECTION 28, TOWNSHIP 2 SOUTH, RANGE 68 WEST OF THE SIXTH PRINCIPAL MERIDIAN, ADAMS COUNTY, COLORADO

SINGLE FAMILY ARCHITECTURAL STANDARDS

PROJECT NO:

- a. A minimum of thirty percent (30%) of the homes in Roush Village (14 homes) shall have an area equivalent to at least 20 percent of the first floor front façade elevation (excluding window and door areas and related trim areas) clad in brick, stone, stucco, or other approved masonry materials.
- c. Material diversity is required. A minimum of two different materials shall be incorporated in each elevation. Variations of the same material (scallops, fish-scale, lap siding, board and batten) of the same or different color will be considered different materials. The coverage of the second material does not need to be evenly distributed.
- d. Each elevation shall have a minimum window area of 20 square feet. Garage, basement or entry door windows shall not be used to satisfy the window requirement. There shall be no windowless elevations.

1.2 Roofs

- a. The homes shall have a minimum pitch on the predominant roof planes of at least 4:12 (excluding dormers, porch roofs, and other extensions).
- b. Acceptable roofing materials includes architectural grade composition roofing.
- c. All rooftop equipment, including without limitation HVAC units, swamp coolers and antennas, shall not be placed on the street facing portion of the roof. This standard does not apply to those items listed below.
- d. Piping, venting, flashing, solar panel frames, and other rooftop equipment exposed to view shall be finished to match the roof surface color or otherwise designed to blend with the roof surface.

b. All facades shall have durable siding materials which may include vinyl, cement fiber, engineered wood composite, stucco, rust resistant architectural metals or a combination of the above.

- a. Each window that is not located in a portion of the wall clad in masonry shall have either:
- i. A minimum four-inch nominal wide wood trim border.
- ii. Shutters a minimum of 12-inches wide.
- b. Window frames other than wood shall be either anodized, electrostatically-painted, vinyl clad or vinyl. Unpainted aluminum window frames are prohibited except for basement windows. Wood frames shall be painted, sealed or stained.
- c. Each door that is not located in a portion of the wall clad in masonry shall have a minimum four-inch nominal wide wood trim border.





SINGLE FAMILY (MODEL 1)

- 1,480 S.F.
- 3 BEDROOMS
- 2.5 BATHROOMS

4 BEDROOMS

• 2 GARAGE STALLS (TANDEM)

MODEL 1 ELEVATION A

MODEL 2 ELEVATION A

ACTUAL ELEVATIONS WILL VARY & WILL COMPLY WITH THE STANDARDS HEREON



MODEL 1 ELEVATION B

ACTUAL ELEVATIONS WILL VARY & WILL COMPLY WITH THE STANDARDS HEREON



ACTUAL ELEVATIONS WILL VARY & WILL COMPLY WITH THE STANDARDS HEREON



MODEL 2 ELEVATION B

ACTUAL ELEVATIONS WILL VARY & WILL COMPLY WITH THE STANDARDS HEREON

SHEET TITLE

SINGLE FAMILY ARCHITECTURA STANDARDS

SHEET NUMBER

13 OF 14

PROJECT NAME

ISSUE DATE

10-16-2020

NOT FOR CONSTRUCTION

Case No. PRC2021-00001

SHERRELWOOD VILLAGE

PLANNED UNIT DEVELOPMENT - FINAL DEVELOPMENT PLAN - AMENDMENT 1

PART OF THE NORTHEAST QUARTER SECTION 33 AND THE SOUTHEAST QUARTER OF SECTION 28, TOWNSHIP 2 SOUTH, RANGE 68 WEST OF THE SIXTH PRINCIPAL MERIDIAN, ADAMS COUNTY, COLORADO

TOWNHOME ARCHITECTURAL STANDARDS

PROJECT NO:

- 1.1 Facades
 a. Each unit shall have 75 percent of the first floor front façade elevation (excluding window and door areas and related trim areas) clad in brick, stone, stucco, or other approved masonry materials.
 - b. All facades shall have durable siding materials which may include vinyl, cement fiber, engineered wood composite, stucco, rust resistant architectural metals or a combination of the above.
 - c. Material diversity is required. A minimum of two different materials shall be incorporated in each elevation. Variations of the same material (scallops, fish-scale, lap siding, board and batten) of the same or different color will be considered different materials. The coverage of the second material does not need to be evenly distributed.
 - d. Each unit elevation shall have a minimum window area of 100 square feet. Garage, basement or entry door windows shall not be used to satisfy the window requirement. There shall be no windowless elevations.
- - a. Each unit shall have a minimum pitch on the predominant roof planes of at least 1:7 (excluding dormers, porch roofs, and other extensions).
 - b. Acceptable roofing materials includes architectural grade composition roofing.
 - c. All rooftop equipment, including without limitation HVAC units, swamp coolers and antennas, shall not be placed on the street facing portion of the roof. This standard does not apply to those items listed below.
 - d. Piping, venting, flashing, solar panel frames, and other rooftop equipment exposed to view shall be finished to match the roof surface color or otherwise designed to blend with the roof surface.
- 1.3 Windows and Doors
 - a. Each window that is not located in a portion of the wall clad in masonry shall have:
 - i. A minimum two-inch nominal wide wood trim border.
 - ii. Window frames other than wood shall be either anodized, electrostatically-painted, vinyl clad or vinyl. Unpainted aluminum window frames are prohibited. Wood frames shall be painted, sealed or stained.
 - ij. Each door that is not located in a portion of the wall clad in masonry shall have a minimum two-inch nominal wide border.



TYPICAL TOWNHOME UNIT

- 1,700-2,300 S.F.
- 3 BEDROOMS
- 2.5 BATHROOMS
- 2 GARAGE STALLS

SHEET TITLE

TOWNHOME

ARCHITECTURAL STANDARDS

SHEET NUMBER

14 OF 14

PROJECT NAME

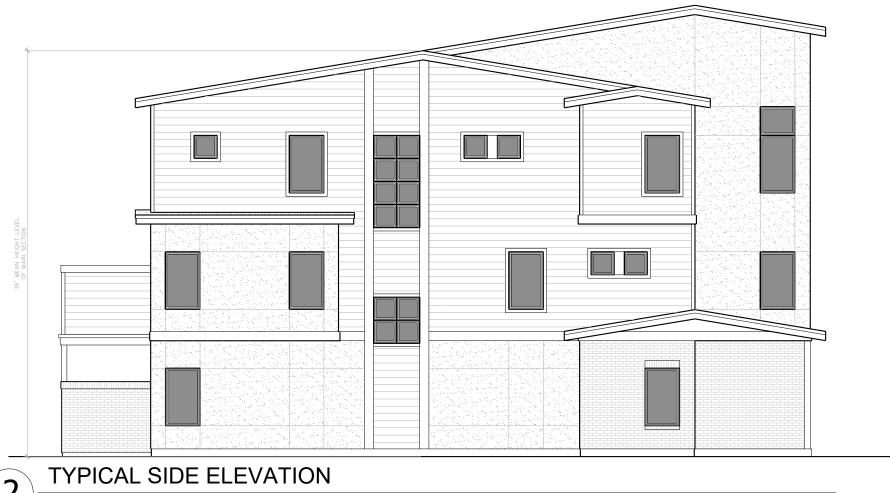
ISSUE DATE

10-16-2020

NOT FOR CONSTRUCTION

TYPICAL FRONT ELEVATION

ACTUAL ELEVATIONS WILL VARY & WILL COMPLY WITH THE STANDARDS HEREON



Community & Economic Development Department www.adcogov.org



4430 South Adams County Parkway 1st Floor, Suite W2000 Brighton, CO 80601-8204 PHONE 720.523.6800 FAX 720.523.6998

DEVELOPMENT APPLICATION FORM

Application Type:							
Conceptual Review Preliminary PUD Temporary Use Subdivision, Preliminary Final PUD Variance Subdivision, Final Rezone Conditional Use Plat Correction/ Vacation Special Use Other:							
PROJECT NAME	PROJECT NAME: Sherrelwood Village Filing No. 2						
APPLICANT							
Name(s):	Delwest Development Corp/Craig Fitchett	Phone #:	720-708-4065				
Address:	155 S Madison St, Suite 326						
City, State, Zip:	Denver, CO 80209						
2nd Phone #:	720-276-6098	Email:	cfitchett@delwest.com				
OWNER							
Name(s):	Joe DelZotto	Phone #:	720-708-4065				
Address:	155 S Madison St., Suite 326						
City, State, Zip:	Denver, CO 80209						
2nd Phone #:	303-888-8048	Email:	jad@delwest.com				
TECHNICAL REPRESENTATIVE (Consultant, Engineer, Surveyor, Architect, etc.)							
Name:	Tom Girard	Phone #:	303-730-5976				
Address:	3473 S. Broadway						
City, State, Zip:	Englewood, CO 80113						
2nd Phone #:		Email:	tgirard@liveyourcore.com				

DESCRIPTION OF SITE

Address:	7840 Pecos, 7996 Pecos and 8000 Pecos			
City, State, Zip:	Denver, CO 80221			
Area (acres or square feet):	450,875 SF / 10.351 Ac			
Tax Assessor Parcel Number	7840 Pecos-017193310016; 7996 Pecos-0171933100009 and 8000 Pecos St-0171928400003			
Existing Zoning:	PUD			
Existing Land Use:	7996 Pecos - Vacant PUD; 8000 Pecos - abondoned school; 7840 Pecos PUD			
Proposed Land Use:	PUD with 47 Townhomes			
Have you attende	d a Conceptual Review? YES x			
If Yes, please list	PRE#: 201900091			
under the author pertinent requirem Fee is non-refund	at I am making this application as owner of the above described property or acting ity of the owner (attached authorization, if not owner). I am familiar with all nents, procedures, and fees of the County. I understand that the Application Review dable. All statements made on this form and additional application materials are my knowledge and belief.			
Name:	W. Craig Fitchett Date: 07/06/2021			
Name:	Owner's Printed Name Owner's Signature			



Narrative Subdivision

Delwest Development Corporation is proposing to amend their current Sherrelwood Village PUD-PDP to include approximately 47 new townhomes on 3.3 Acres of additional land adjacent and to the north of the single-family homes we are currently building.

7996 and 8000 Pecos St were purchased to offer a lower, more "workforce" focused priced housing solution for the community than a new traditional single-family home. Delwest has repurposed several Westminster Schools blighted properties. We will be demolishing a vacant, blighted building, the former Children's Outreach Project, and building new attainable housing stock.

In order to plat the townhomes, we are proposing a subdivision that combines Lot 1:Block 4 from the plat correction of Sherrelwood Village Filing 1 with the properties of 7996 and 8000 Pecos St. This creates a 3.3 Ac parcel that include 47 lots, 2 tracts and right of way for Osage St, Sherrelwood Dr., and Pecos St.

We at Delwest are excited to have the opportunity to enhance this neighborhood and bring market rate housing to the area. We look forward to working with the community and staff moving forward.

Sincerely,

W. Craig Fitchett

Director of Acquisitions & Business Development, Delwest

PROJ MGR: DRL PROJ ENG: CAD:

SHEET

DATE: 9/07/2021

OF 15-018

SHERRELWOOD VILLAGE FILING NO. 2

PART OF THE NORTHEAST QUARTER SECTION 33 AND THE SOUTHEAST QUARTER OF SECTION 28, TOWNSHIP 2 SOUTH, RANGE 68 WEST OF THE SIXTH PRINCIPAL MERIDIAN,

COUNTY OF ADAMS, STATE OF COLORADO

SHEET I

LEGAL DESCRIPTION AND DEDICATION STATEMENT

KNOW ALL PEOPLE BY THESE PRESENTS THAT THE UNDERSIGNED WARRANT THEY ARE THE OWNER OF A PARCEL OF LAND BEING TRACTS B & D, LOTS I THROUGH 4, BLOCK I, AND A PORTION OF LOT 8, BLOCK 2, SHERRELWOOD VILLAGE, A SUBDIVISION PLAT RECORDED AT RECEPTION NO. 2018000075940 TOGETHER WITH THAT PARCEL OF LAND, AS DESCRIBED IN THAT WARRANTY DEED RECORDED AT RECEPTION NO. 2019000073502 AND THAT PARCEL OF LAND, AS DESCRIBED IN THAT WARRANTY DEED RECORDED AT RECEPTION NO. 2019000075343, ALL IN THE RECORDS OF THE ADAMS COUNTY CLERK AND RECORDER'S OFFICE, LYING WITHIN THE SOUTHEAST QUARTER OF SECTION 28 AND THE NORTHEAST QUARTER OF SECTION 33, BOTH IN TOWNSHIP 2 SOUTH, RANGE 68 WEST OF THE SIXTH PRINCIPAL MERIDIAN, COUNTY OF ADAMS, STATE OF COLORADO, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

THE BEARINGS FOR THIS DESCRIPTION ARE BASED ON THE NORTH LINE OF THE NORTHEAST QUARTER OF SECTION 33, TOWNSHIP 2 SOUTH, RANGE 68 WEST OF THE SIXTH P.M., BEING ASSUMED TO BEAR N 89°30'30" E, FROM THE NORTH QUARTER CORNER OF SAID SECTION 33, BEING MONUMENTED BY A REBAR WITH A 3-1/4 INCH ALUMINUM CAP, STAMPED "PLS 23519" TO THE NORTHEAST CORNER OF SAID SECTION 33, BEING MONUMENTED BY A REBAR WITH A 3-1/4 INCH ALUMINUM CAP, STAMPED "PLS 7276", WITH ALL BEARINGS CONTAINED HEREIN RELATIVE THERETO.

COMMENCING AT THE NORTH QUARTER CORNER OF SAID SECTION 33, THENCE N 89°30'30" E. ALONG THE NORTH LINE OF THE NORTHEAST QUARTER OF SAID SECTION 33, A DISTANCE OF 50.00 FEET TO A POINT ON THE EAST LINE OF THE PECOS STREET RIGHT-OF-WAY, AS DEDICATED BY THAT RESOLUTION RECORDED IN BOOK 3270 AT PAGE 279, SAID ADAMS COUNTY RECORDS AND THE POINT OF BEGINNING:

THENCE N 00°14'47" W, ALONG THE EAST LINE OF SAID PECOS STREET RIGHT-OF-WAY, AND ALONG A LINE BEING 50.00 FEET EAST OF AND PARALLEL TO THE WEST LINE OF THE SOUTHEAST OUARTER OF SAID SECTION 28. A DISTANCE OF 293.01 FEET TO A POINT ON THE NORTH LINE OF SAID PARCEL OF LAND DESCRIBED IN BOOK 3254 AT PAGE 139;

THENCE S 82°41'00" E, ALONG SAID NORTH LINE, A DISTANCE OF 8.12 FEET TO THE WEST CORNER OF PARCEL D, AS DESCRIBED IN THAT QUIT CLAIM DEED RECORDED IN BOOK 3251 AT

THENCE ALONG THE SOUTH AND WEST LINES OF SAID PARCEL D, THE FOLLOWING TWO (2) **COURSES:**

- I. S 76°46'56" E, A DISTANCE OF 178.56 FEET;
- 2. S 21°38'59" E, ALONG THE EAST LINES OF SAID PARCEL DESCRIBED IN BOOK 3254 AT PAGE 139 AND SAID SHERRELWOOD VILLAGE PLAT, A DISTANCE OF 459.50 FEET TO THE EAST CORNER OF LOT 4, BLOCK I, SAID SHERRELWOOD VILLAGE PLAT;

THENCE S 12°19'21" W, ALONG THE SOUTHEAST LINE OF SAID LOT 4, A DISTANCE OF 57.53 FEET TO A POINT ON THE NORTH LINE OF WEST 79TH WAY RIGHT-OF-WAY, AS DEDICATED BY SAID SHERRELWOOD VILLAGE PLAT AND A POINT OF NON-TANGENT CURVATURE;

THENCE ALONG THE NORTH LINE OF THE WEST 79TH WAY RIGHT-OF-WAY AND ALONG THE WEST LINE OF THE OSAGE STREET RIGHT-OF-WAY, AS DEDICATED BY SAID SHERRELWOOD VILLAGE PLAT, THE FOLLOWING THREE (3) COURSES:

- I. ALONG THE ARC OF A NON-TANGENT CURVE TO THE LEFT HAVING A RADIUS OF 38.00 FEET, A CENTRAL ANGLE OF 09°04'20" AND AN ARC LENGTH OF 6.02 FEET, THE CHORD OF WHICH BEARS N 85°25'57" W, A DISTANCE OF 6.01 FEET;
- 2. N 89°58'07" W, A DISTANCE OF 204.00 FEET TO A POINT OF CURVATURE;
- 3. ALONG THE ARC OF A CURVE TO THE LEFT HAVING A RADIUS OF 38.00 FEET, A CENTRAL ANGLE OF 90°00'00" AND AN ARC LENGTH OF 59.69 FEET;

THENCE N 00°01'53" E, A DISTANCE OF 11.47 FEET TO A POINT ON THE SOUTH LINE OF SAID TRACT B;

THENCE ALONG THE SOUTH AND WEST LINES OF SAID TRACT B THE FOLLOWING TWO (2) COURSES: I. N 89°58'07" W, A DISTANCE OF 90.00 FEET TO A POINT ON THE EAST LINE OF THE PECOS

- STREET RIGHT-OF-WAY, AS DEDICATED BY SAID SHERRELWOOD VILLAGE PLAT; 2. N 00°01'53" E, ALONG SAID EAST LINE, A DISTANCE OF 30.01 FEET TO A POINT ON THE
- SOUTH LINE OF THAT PARCEL OF LAND DESCRIBED IN SAID RECEPTION NO. 2019000073502;

THENCE ALONG THE SOUTH, EAST AND NORTH LINES OF SAID PARCEL OF LAND THE **FOLLOWING THREE (3) COURSES:**

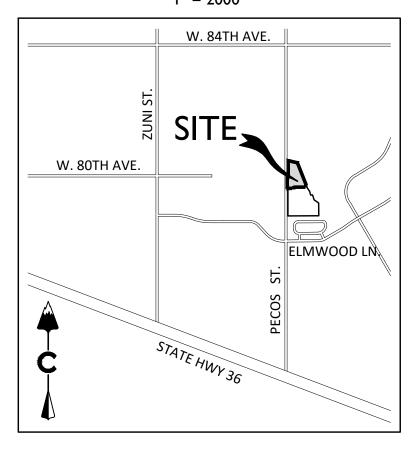
- I. S 89°30'30" W, ALONG A LINE BEING PARALLEL TO THE NORTH LINE OF THE NORTHEAST QUARTER OF SAID SECTION 33, A DISTANCE OF 20.00 FEET TO A POINT BEING 30.00 FEET EAST OF THE WEST LINE OF THE NORTHEAST QUARTER OF SAID SECTION 33;
- 2. N 00°01'53" E, ALONG A LINE BEING 30.00 FEET EAST OF AND PARALLEL TO THE WEST LINE OF THE NORTHEAST QUARTER OF SAID SECTION 33, A DISTANCE OF 208.00 FEET TO A POINT BEING 20.00 FEET SOUTH OF THE NORTH LINE OF THE NORTHEAST QUARTER OF
- N 89°30'30" E, ALONG A LINE BEING 20.00 FEET SOUTH OF AND PARALLEL TO THE NORTH LINE OF THE NORTHEAST OUARTER OF SAID SECTION 33. A DISTANCE OF 20.00 FEET TO A POINT BEING 50.00 FEET EAST OF THE WEST LINE OF THE NORTHEAST QUARTER OF SAID SECTION 33. ALSO BEING A POINT ON THE EAST LINE OF THE PECOS STREET RIGHT-OF-WAY. AS DEDICATED BY SAID SHERRELWOOD VILLAGE PLAT:

THENCE N 00°01'53" E, ALONG SAID EAST LINE AND ALONG A LINE BEING 50.00 FEET EAST OF AND PARALLEL TO THE WEST LINE OF THE NORTHEAST QUARTER OF SAID SECTION 33 A DISTANCE OF 20.00 FEET TO THE POINT OF BEGINNING.

CONTAINING AN AREA OF 143,370 SQUARE FEET OR 3.291 ACRES, MORE OR LESS.

HAVE LAID OUT AND PLATTED THE SAME INTO LOTS, STREETS, EASEMENTS AND TRACTS AS SHOWN ON THIS PLAT UNDER THE NAME AND STYLE OF SHERRELWOOD VILLAGE FILING NO. 2. ALL PUBLIC STREETS ARE HEREBY DEDICATED TO ADAMS COUNTY FOR PUBLIC USE. THE UNDERSIGNED DOES HEREBY DEDICATE, GRANT AND CONVEY TO ADAMS COUNTY THOSE PUBLIC EASEMENTS AS SHOWN ON THE PLAT; AND FURTHER RESTRICTS THE USE OF ALL PUBLIC EASEMENT TO ADAMS COUNTY AND/OR ITS ASSIGNS, PROVIDED HOWEVER, THAT THE SOLE RIGHT AND AUTHORITY TO RELEASE OR QUITCLAIM ALL OR ANY SUCH PUBLIC EASEMENTS SHALL REMAIN EXCLUSIVELY VESTED IN ADAMS COUNTY.

VICINITY MAP I'' = 2000'



LAND USE TABLE

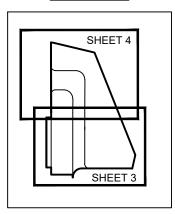
TYPE	AREA (SF)	AREA (AC)
LOTS (47)	65,023	1.493
TRACTS (2)	46,028	1.056
R.O.W DEDICATED	32,319	0.742
TOTAL	143,370	3.291

TRACT USE TABLE

TRACT	USE	OWNERSHIP	MAINTENANCE
Α	OPEN SPACE, UTILITY, DRAINAGE & ACCESS	OWNER	OWNER
В	OPEN SPACE, UTILITY, DRAINAGE & ACCESS	OWNER	OWNER

KEY MAP

OWNER = 7840 PECOS INVESTMENTS, LLC



SHEET INDEX

SHEET 1 COVER SHEET 2 OVERALL BOUNDARY SHEET 3 DETAIL SHEET 4 DETAIL SHEET 5 NOTES AND TABLES

PUBLIC SERVICE COMPANY OF COLORADO NOTES

THESE EASEMENTS ARE DEDICATED TO ADAMS COUNTY FOR THE BENEFIT OF THE APPLICABLE UTILITY PROVIDERS FOR THE INSTALLATION, MAINTENANCE, AND REPLACEMENT OF ELECTRIC, GAS, TELEVISION, CABLE, AND TELECOMMUNICATIONS FACILITIES (DRY UTILITIES). UTILITY EASEMENTS SHALL ALSO BE GRANTED WITHIN ANY ACCESS EASEMENTS AND PRIVATE STREETS IN THE SUBDIVISION. PERMANENT STRUCTURES, IMPROVEMENTS, OBJECTS, BUILDINGS, WELLS, WATER METERS AND OTHER OBJECTS THAT MAY INTERFERE WITH THE UTILITY FACILITIES OR USE THEREOF (INTERFERING OBJECTS) SHALL NOT BE PERMITTED WITHIN SAID UTILITY EASEMENTS AND THE UTILITY PROVIDERS, AS GRANTEES, MAY REMOVE ANY INTERFERING OBJECTS AT NO COSTS TO SUCH GRANTEES, INCLUDING, WITHOUT LIMITATION, VEGETATION. PUBLIC SERVICE COMPANY OF COLORADO (PSCo) AND ITS SUCCESSORS RESERVE THE RIGHT TO REQUIRE ADDITIONAL EASEMENTS AND TO REQUIRE THE PROPERTY OWNER TO GRANT PSCo AN EASEMENT ON ITS STANDARD FORM.

CITY OF THORNTON NOTES

WATER AND SANITARY SEWER EASEMENTS ARE HEREBY GRANTED TO THE CITY OF THORNTON, AS SHOWN ON THIS PLAT, FOR THE PURPOSE TO CONSTRUCT, MAINTAIN, REPAIR, REPLACE, INSPECT AND OPERATE MAINS, TRANSMISSION, DISTRIBUTION AND SERVICE LINES AND APPURTENANCES OR OTHER IMPROVEMENTS FOR WHICH THE EASEMENTS WERE GRANTED. TOGETHER WITH A RIGHT OF ACCESS. ON, ALONG AND IN ALL OF THE EASEMENTS, AS MAY BE NECESSARY TO ACCOMPLISH THE INTENDED PURPOSES OF THE EASEMENT. THESE EASEMENTS SHALL BE EXCLUSIVE, HOWEVER UTILITIES MAY CROSS THE EXCLUSIVE EASEMENTS AT SUBSTANTIALLY 90

вт:	·
AS:	
ACKNO	WLEDGEMENT
STATE OF	=
COUNTY	OF)
THE FOR	EGOING WAS ACKNOWLEDGED BEFORE ME THIS DAY
OF	, 20, A.D.
BY:	
AS: 7840 PEC	OS INVESTMENTS LLC, A COLORADO LIMITED LIABILITY COMPANY
WITNESS	MY HAND AND OFFICIAL SEAL:
NOTARY	PUBLIC:
MY COMI	MISSION EXPIRES:
PLANN	IING COMMISSION APPROVAL
APPROVE	d by the adams county planning commission on this
OF	, 20, A.D. AT O'CLOCK _ M.

BOARD OF COUNTY COMMISSIONERS APPROVAL

APPROVED BY TH	E ADAMS CO	DUNTY BO	ARD OF CON	MISSIONERS THIS $_$	DA`
OF		A.D. AT	O'CLOCK _	_ M.	

SURVEYOR'S CERTIFICATE

I HEREBY CERTIFY I WAS IN RESPONSIBLE CHARGE OF THE SURVEY WORK USED IN THE PREPARATION OF THIS PLAT: THE POSITIONS OF THE PLATTED POINTS SHOWN HEREON HAVE AN ACCURACY OF NOT LESS THAN (I) FOOT IN TEN THOUSAND (10,000) FEET PRIOR TO ADJUSTMENTS; AND ALL BOUNDARY MONUMENTS AND CONTROL CORNERS SHOWN HEREON WERE IN PLACE AS DESCRIBED IN APRIL 2020

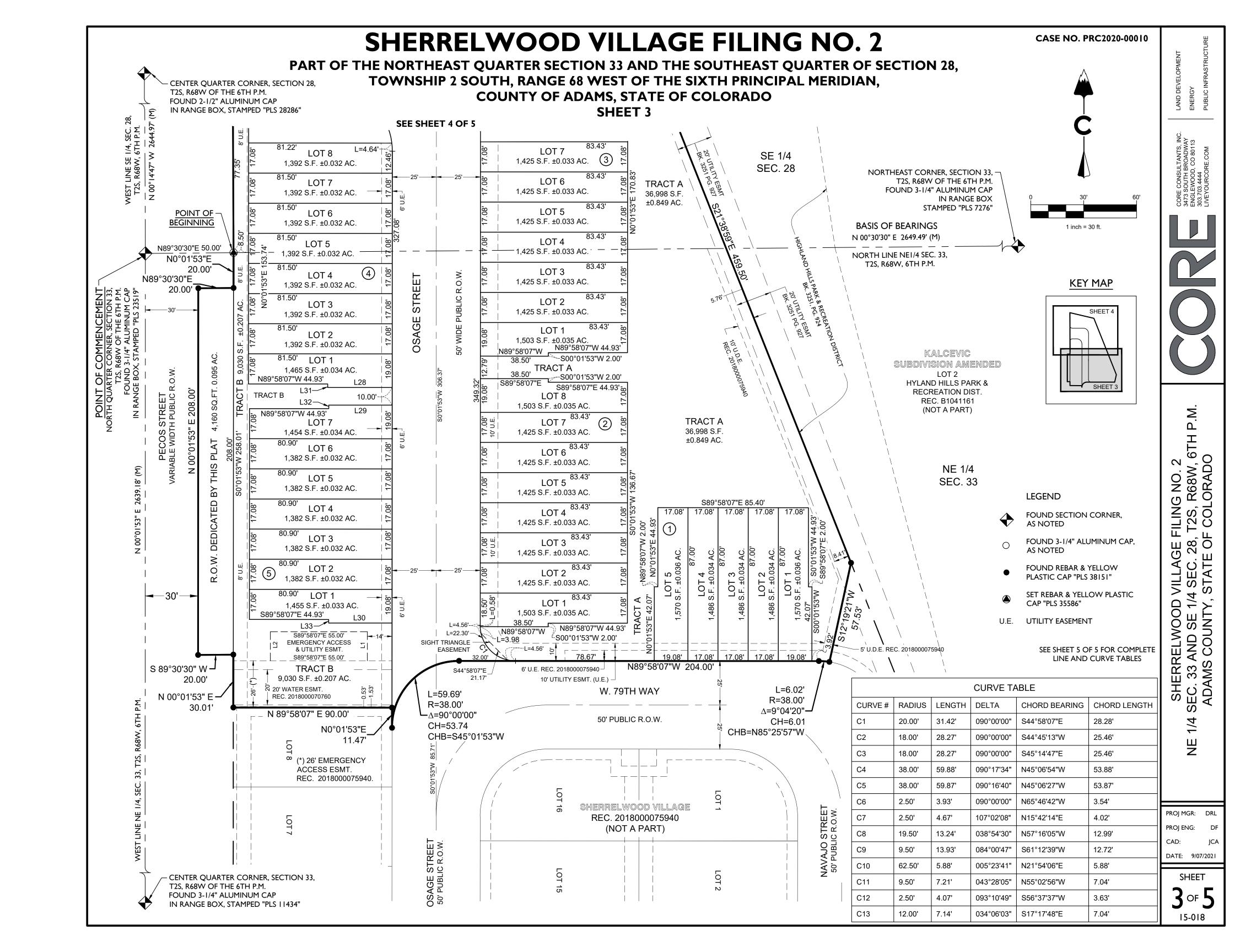
DAVID R. LUTZ **COLORADO PLS 35586** FOR AND ON BEHALF OF CORE CONSULTANTS, INC

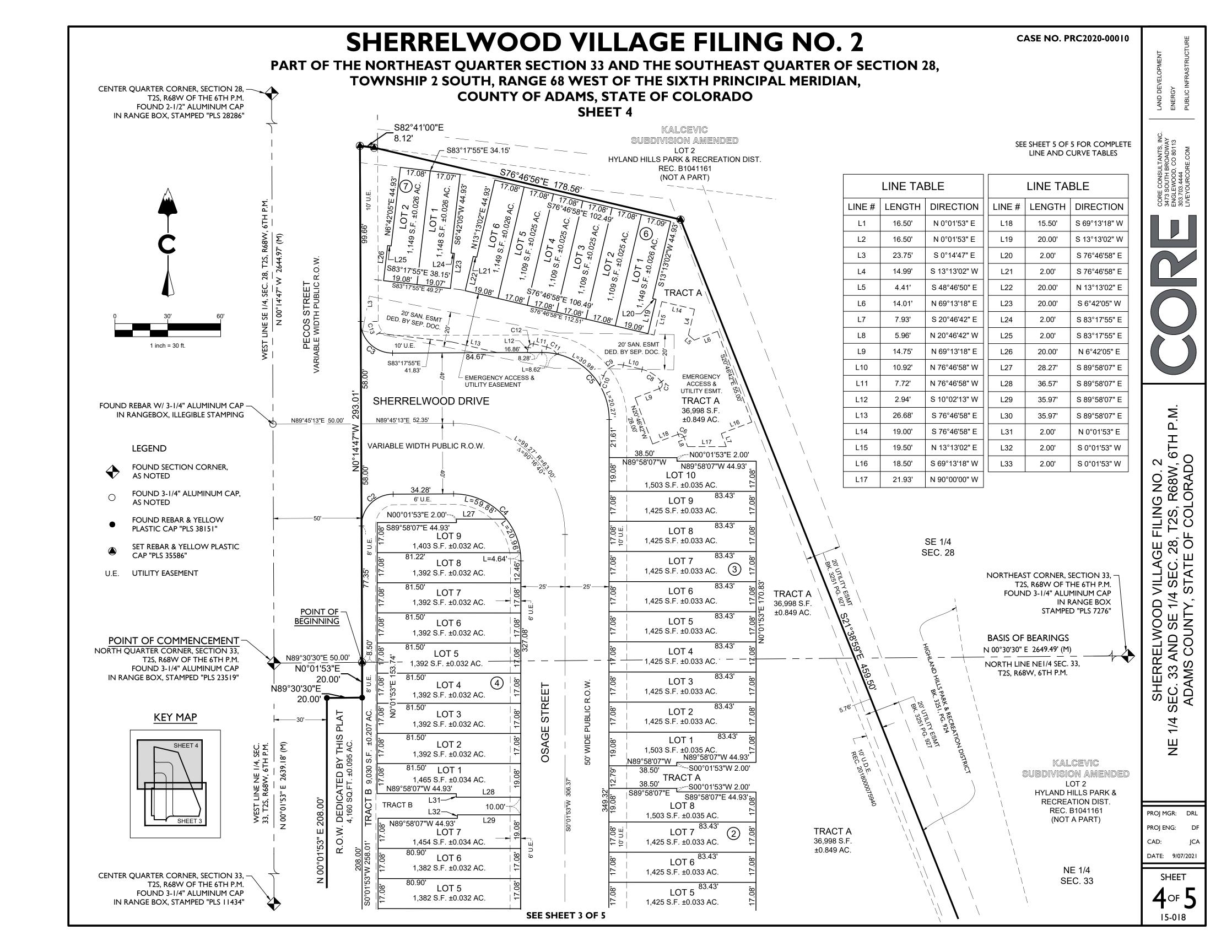
BY DEPUTY:

CHAIR

ADAMS COUNTY CLERK AND RECORDER'S CERTIFICATE

THIS PLAT WAS FILED FOR RECORD IN THE OFFICE OF THE ADAMS COUNTY
CLERK AND RECORDER IN THE STATE OF COLORADO ATM. ON THE
DAY OF, 20
COUNTY CLERK AND RECORDER
RECEPTION NO.





PROJ MGR: DRL PROJ ENG:

DATE: 9/07/2021

SHEET 15-018

PART OF THE NORTHEAST QUARTER SECTION 33 AND THE SOUTHEAST QUARTER OF SECTION 28, TOWNSHIP 2 SOUTH, RANGE 68 WEST OF THE SIXTH PRINCIPAL MERIDIAN, **COUNTY OF ADAMS, STATE OF COLORADO** SHEET 5

NOTES

- ACCORDING TO COLORADO LAW YOU MUST COMMENCE ANY LEGAL ACTION BASED UPON ANY DEFECT IN THIS SURVEY WITHIN THREE YEARS AFTER YOU FIRST DISCOVER SUCH DEFECT. IN NO EVENT MAY ANY ACTION BASED UPON ANY DEFECT IN THIS SURVEY BE COMMENCED MORE THAN TEN YEARS FROM THE DATE OF THE CERTIFICATION SHOWN HEREON.
- 2. THIS SURVEY DOES NOT REPRESENT A TITLE SEARCH BY CORE CONSULTANTS, INC. FOR RECORD DOCUMENTS AND DETERMINATION OF OWNERSHIP, EASEMENTS OF RECORD, RIGHTS-OF-WAY AND ENCUMBRANCES, CORE CONSULTANTS, INC. RELIED UPON TITLE COMMITMENT ORDER NO. RND70700124-3, PREPARED BY OLD REPUBLIC NATIONAL TITLE INSURANCE COMPANY, WITH AN EFFECTIVE DATE OF 05/07/2021 AT 5:00 PM
- 3. ANY PERSON WHO KNOWINGLY REMOVES, ALTERS OR DEFACES ANY PUBLIC LAND SURVEY MONUMENT OR LAND BOUNDARY MONUMENT OR ACCESSORY, COMMITS A CLASS TWO (2) MISDEMEANOR PURSUANT TO STATE STATUTE 18-4-508, C.R.S.
- BEARINGS FOR THIS SURVEY ARE BASED ON THE NORTH LINE OF THE NORTHEAST QUARTER OF SECTION 33, TOWNSHIP 2 SOUTH, RANGE 68 WEST OF THE SIXTH P.M., BEING ASSUMED TO BEAR N 89°30'30" E, FROM THE THE NORTH QUARTER CORNER OF SAID SECTION 33, BEING MONUMENTED BY A REBAR WITH A 3-1/4" ALUMINUM CAP IN RANGE BOX, STAMPED "PLS 23519", TO THE NORTHEAST CORNER OF SAID SECTION 33, BEING MONUMENTED BY A REBAR WITH A 3-1/4" ALUMINUM CAP IN RANGE BOX, PLS 7276, WITH ALL BEARINGS CONTAINED HEREIN RELATIVE THERETO.
- THE LINEAL UNIT USED IN THE PREPARATION OF THIS ALTA/NSPS LAND TITLE SURVEY IS THE U.S. SURVEY FOOT. PURSUANT TO C.R.S. 38-52-103(2) METRIC CONVERSION IS: ONE METER EQUALS 3937 / 1200 FEET.
- 6. DATE OF FIELD SURVEY: APRIL 9, 2020
- 7. THE GROSS LAND AREA OF THE SUBJECT PROPERTY IS 143,370 SQUARE FEET, OR 3.291 ACRES,
- 8. RIGHT-OF-WAY FOR INGRESS AND EGRESS FOR SERVICE AND EMERGENCY VEHICLES IS GRANTED OVER, ACROSS, ON, AND THROUGH ANY AND ALL PRIVATE ROADS, WAYS, AND FIRE LANES NOW OR HEREAFTER ESTABLISHED ON THE DESCRIBED PROPERTY. THE SAME ARE HEREBY DESIGNATED AS FIRE LANES AND EMERGENCY AND SERVICE VEHICLE ROADS, AND SHALL BE POSTED "NO PARKING - FIRE LANE"
- THE PROPERTY LIES WITHIN ZONE X, "AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN, PER FEMA MAP NO. 08001C0584H, PANEL 584, REVISED MARCH 5, 2017.
- 10. REFER TO THE OPERATION AND MAINTENANCE MANUEL RECORDED APRIL 2, 2018 AT RECEPTION NO. 2018000026268 FOR ADDITIONAL DRAINAGE GUIDELINES.
- 11. TEN-FOOT (10') WIDE UTILITY EASEMENTS ALONG THE EAST SIDE OF THE OSAGE STREET RIGHT-OF-WAY AND ALONG THE NORTH SIDE OF THE W. 79TH WAY RIGHT-OF-WAY; SIX-FOOT (6') WIDE UTILITY EASEMENTS ALONG THE WEST SIDE OF THE OSAGE STREET RIGHT-OF-WAY; EIGHT-FOOT (8') WIDE UTILITY EASEMENTS ALONG THE EAST SIDE OF THE PECOS STREET RIGHT-OF-WAY ARE HEREBY DEDICATED ON PRIVATE PROPERTY ADJACENT TO THE FRONT LOT LINES OF EACH LOT IN THE SUBDIVISION. IN ADDITION, EIGHT-FOOT (8') WIDE DRY UTILITY EASEMENTS ARE HEREBY DEDICATED AROUND THE PERIMETER OF TRACTS, PARCELS AND/OR OPEN SPACE AREAS. THESE EASEMENTS ARE DEDICATED TO ADAMS COUNTY FOR THE BENEFIT OF THE APPLICABLE UTILITY PROVIDERS FOR THE INSTALLATION, MAINTENANCE, AND REPLACEMENT OF UTILITIES. UTILITY EASEMENTS SHALL ALSO BE GRANTED WITHIN ANY ACCESS EASEMENTS AND PRIVATE STREETS IN THE SUBDIVISION. PERMANENT STRUCTURES, IMPROVEMENTS, OBJECTS, BUILDINGS, WELLS, WATER METERS AND OTHER OBJECTS THAT MAY INTERFERE WITH THE UTILITY FACILITIES OR USE THEREOF (INTERFERING OBJECTS) SHALL NOT BE PERMITTED WITHIN SAID UTILITY EASEMENTS AND THE UTILITY PROVIDERS, AS GRANTEES, MAY REMOVE ANY INTERFERING OBJECTS AT NO COST TO SUCH GRANTEES, INCLUDING, WITHOUT LIMITATION, VEGETATION.
- 12. THE POLICY OF THE COUNTY REQUIRES THAT MAINTENANCE ACCESS SHALL BE PROVIDED TO ALL STORM DRAINAGE FACILITIES TO ASSURE CONTINUOUS OPERATIONAL CAPABILITY OF THE SYSTEM. THE PROPERTY OWNERS SHALL BE RESPONSIBLE FOR THE MAINTENANCE OF ALL DRAINAGE FACILITIES INCLUDING INLETS, PIPES, CULVERTS, CHANNELS, DITCHES, HYDRAULIC STRUCTURES, AND DETENTION BASINS LOCATED ON THEIR LAND UNLESS MODIFIED BY THE SUBDIVISION DEVELOPMENT AGREEMENT. SHOULD THE OWNER FAIL TO MAINTAIN SAID FACILITIES. THE COUNTY SHALL HAVE THE RIGHT TO ENTER SAID LAND FOR THE SOLE PURPOSE OF OPERATIONS AND MAINTENANCE. ALL SUCH MAINTENANCE COST WILL BE ASSESSED TO THE PROPERTY OWNERS.
- 13. STATEMENT RESTRICTING ACCESS: ACCESS RIGHTS ACROSS THE RIGHT-OF-WAY LINES OF MAJOR HIGHWAYS, PARKWAYS, STREETS OR FREEWAYS, ARE RESTRICTED WHERE REQUIRED AS A PROVISION OF APPROVAL.

OUDVE TABLE					
			CURVE TA	ABLE	
CURVE#	RADIUS	LENGTH	DELTA	CHORD BEARING	CHORD LENGTH
C1	20.00'	31.42'	090°00'00"	S44°58'07"E	28.28'
C2	18.00'	28.27'	090°00'00"	S44°45'13"W	25.46'
C3	18.00'	28.27'	090°00'00"	S45°14'47"E	25.46'
C4	38.00'	59.88'	090°17'34"	N45°06'54"W	53.88'
C5	38.00'	59.87'	090°16'40"	N45°06'27"W	53.87'
C6	2.50'	3.93'	090°00'00"	N65°46'42"W	3.54'
C7	2.50'	4.67'	107°02'08"	N15°42'14"E	4.02'
C8	19.50'	13.24'	038°54'30"	N57°16'05"W	12.99'
C9	9.50'	13.93'	084°00'47"	S61°12'39"W	12.72'
C10	62.50'	5.88'	005°23'41"	N21°54'06"E	5.88'
C11	9.50'	7.21'	043°28'05"	N55°02'56"W	7.04'
C12	2.50'	4.07'	093°10'49"	S56°37'37"W	3.63'
C13	12.00'	7.14'	034°06'03"	S17°17'48"E	7.04'

	LINE TABLE			LINE TABLE		
LINE#	LENGTH	DIRECTION	LINE#	LENGTH	DIRECTION	
L1	16.50'	N 0°01'53" E	L18	15.50'	S 69°13'18" W	
L2	16.50'	N 0°01'53" E	L19	20.00'	S 13°13'02" W	
L3	23.75'	S 0°14'47" E	L20	2.00'	S 76°46'58" E	
L4	14.99'	S 13°13'02" W	L21	2.00'	S 76°46'58" E	
L5	4.41'	S 48°46'50" E	L22	20.00'	N 13°13'02" E	
L6	14.01'	N 69°13'18" E	L23	20.00'	S 6°42'05" W	
L7	7.93'	S 20°46'42" E	L24	2.00'	S 83°17'55" E	
L8	5.96'	N 20°46'42" W	L25	2.00'	S 83°17'55" E	
L9	14.75'	N 69°13'18" E	L26	20.00'	N 6°42'05" E	
L10	10.92'	N 76°46'58" W	L27	28.27'	S 89°58'07" E	
L11	7.72'	N 76°46'58" W	L28	36.57'	S 89°58'07" E	
L12	2.94'	S 10°02'13" W	L29	35.97'	S 89°58'07" E	
L13	26.68'	S 76°46'58" E	L30	35.97'	S 89°58'07" E	
L14	19.00'	S 76°46'58" E	L31	2.00'	N 0°01'53" E	
L15	19.50'	N 13°13'02" E	L32	2.00'	S 0°01'53" W	
L16	18.50'	S 69°13'18" W	L33	2.00'	S 0°01'53" W	
L17	21.93'	N 90°00'00" W				

Community & Economic Development Department www.adcogov.org



4430 South Adams County Parkway 1st Floor, Suite W2000 Brighton, CO 80601-8204 PHONE 720.523.6800 FAX 720.523.6998

Application Type:							
Conceptual Review Preliminary PUD Temporary Use Subdivision, Preliminary Final PUD Variance Subdivision, Final Rezone Conditional Use Plat Correction/ Vacation Special Use Other: PROJECT NAME: Sherrelwood Village Filing No. 2							
	one control of the co						
APPLICANT							
Name(s):	Delwest Development Corp./Craig Fitchett	Phone #:	720-708-4065				
Address:	155 S Madison St. Suite 155						
City, State, Zip:	Denver, CO 80209						
2nd Phone #:	720-276-6098	Email:	cfitchett@delwest.com				
OWNER							
Name(s):	Joseph DelZotto	Phone #:	720-708-4065				
Address:	155 S Madison St. Suite 155						
City, State, Zip:	Denver,CO 80209						
2nd Phone #:	303-888-8048	Email:	jad@delwest.com				
TECHNICAL REPRESENTATIVE (Consultant, Engineer, Surveyor, Architect, etc.)							
Name:	Tom Girard	Phone #:	303-829-9005				
Address:	1950 W Littleton Blvd. Suite 109						
City, State, Zip:							
2nd Phone #:	303-730-5976	Email:	girard@corecivil.com				

DESCRIPTION OF SITE

Address:	7840 Pecos St. , 7996 Pecos St. and 8000 Pecos St.					
City, State, Zip:	Denver, CO 80221					
Area (acres or square feet):	450,875 sq ft / 10.351 acres					
Tax Assessor Parcel Number	7840 Pecos St - 0171933100016, 7996 Pecos St 0171933100009, 8000 Pecos St 0171928400003					
Existing Zoning:	7996 and 8000 Pecos - R1C and 7840 Pecos - PUD					
Existing Land Use:	7996 Pecos - vacant, 8000 Pecos - abandoned school, 7840 Pecos - PUD					
Proposed Land Use:	PUD with additional 48 townhomes					
Have you attended	ed a Conceptual Review? YES X NO NO					
If Yes, please list	PRE#: 201900091					
under the autho pertinent requirer Fee is non-refun	nat I am making this application as owner of the above described property or acting rity of the owner (attached authorization, if not owner). I am familiar with all nents, procedures, and fees of the County. I understand that the Application Review dable. All statements made on this form and additional application materials are f my knowledge and belief.					
Name:	CAG FIRHEIT Date: 12/23/19					
Name:	Owner's Printed Name Owner's Signature					

- We've been in business for a long time, 1993 seems like a long time to me. We've seen a lot of ups and downs in the building industry and we've pivoted in the last 5 years. We build affordable housing for people.
- With the average house going for \$600k we can offer housing for less than \$400k.
 We are going to open up opportunities for a massive supply of buyers that have nowhere to go.
- We didn't create the buyers or the traffic, but what we do is say there's a great amenity, lets take advantage of it. Let's make it better, lets make it safer and let's make this vacant land into something that will enrich lives and enrich the community.
- You bring up my daughter, she is an architectural student at CU, and she loves going on city walks with me. We really appreciate cities like NY where you can get to central park, you see these great pocket parks that are great gathering areas and a place to commune but they are surrounded by these high rises. It gives people a great way to live in the sense that they have a place to walk and gather.
- As we move forward, I really want to work with the community to create the best options for everyone.

Pat Hall (Messaged Questions/Comments)

- Listeners need to know this is a zoning change request to the County as a first effort.
- I want to know who is paying for the playground?
- No housing shortages in this neighborhood...
- Just build 4 new houses on this property.
- This is NOT blighted property and I have not heard of any vandalism...Is this a scare tactic?
- Where is this affordable housing?
- This is not NY City
- You won't be living here right?

-End of Meeting-

In attendance were Layla Rosales and Mike Weiher from Terracina Design, Craig Fitchett, Derrell Schreiner, and Bree Neely from Delwest, Alan Sielaff from Adams County, and local residents Marilyn Shea, Andrew Dauernheim, Kelly & Mike Adolf, Joseph Valasquez, Sarah Garner, and Pat Hall.



Narrative Plat Correction

Delwest Development Corporation is proposing to amend their current Sherrelwood Village PUD-PDP to include approximately 47 new townhomes on 3.3 Acres of additional land adjacent and to the north of the single-family homes we are currently building.

7996 and 8000 Pecos St were purchased to offer a lower, more "workforce" focused priced housing solution for the community than a new traditional single-family home. Delwest has repurposed several Westminster Schools blighted properties. We will be demolishing a vacant, blighted building, the former Children's Outreach Project, and building new attainable housing stock.

In order to plat the proposed townhomes, we are proposing a plat correction to Sherrelwood Village Filing 1. This plat correction converts Lots 1-4 of Block 1 and Tracts B&D into one lot known as Lot 1:Block 4. By creating 1 lot in this location, this allows us to then do a plat amendment to Sherrelwood Village in which Lot 1 is combined with the properties mentioned above to create lots for townhomes.

We at Delwest are excited to have the opportunity to enhance this neighborhood and bring market rate housing to the area. We look forward to working with the community and staff moving forward.

Sincerely,

W. Craig Fitchett

Director of Acquisitions & Business Development, Delwest

PART OF THE NORTHEAST QUARTER SECTION 33, TOWNSHIP 2 SOUTH, RANGE 68 WEST OF THE SIXTH PRINCIPAL MERIDIAN, **COUNTY OF ADAMS, STATE OF COLORADO**

LEGAL DESCRIPTION AND DEDICATION STATEMENT

KNOW ALL PEOPLE BY THESE PRESENTS THAT THE UNDERSIGNED WARRANT THEY ARE THE OWNERS OF ALL LOTS AND TRACTS OF SHERRELWOOD VILLAGE, A SUBDIVISION PLAT RECORDED AT RECEPTION NO. 2018000075940, SITUATED IN THE NORTHEAST OUARTER OF SECTION 33, TOWNSHIP 2 SOUTH, RANGE 68 WEST OF THE SIXTH P.M. MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEARINGS FOR THIS DESCRIPTION ARE BASED ON THE NORTH LINE OF THE NORTHEAST QUARTER OF SECTION 33, TOWNSHIP 2 SOUTH, RANGE 68 WEST OF THE SIXTH P.M., BEING ASSUMED TO BEAR N 89°30'30" E, FROM THE NORTH QUARTER CORNER OF SAID SECTION 33, BEING A 3-1/4" ALUMINUM CAP IN RANGE BOX, PLS 23519 TO THE NORTHEAST CORNER OF SAID SECTION 33 BEING A 3-1/4" ALUMINUM CAP IN RANGE BOX, PLS 7276 WITH ALL BEARINGS CONTAINED HEREIN RELATIVE THERETO;

COMMENCING AT THE NORTH QUARTER CORNER OF SAID SECTION 33, THENCE N 89°30'30" E, ALONG SAID NORTH LINE, A DISTANCE OF 30.00 FEET TO A POINT ON THE EAST LINE OF THE PECOS STREET RIGHT-OF-WAY, AND THE POINT OF BEGINNING;

THENCE N 89°30'30" E, ALONG THE NORTH LINE OF SAID NORTHEAST QUARTER, ALSO BEING THE SOUTH LINE OF THAT PARCEL OF LAND RECORDED IN RECEPTION NO. 2019000075343. IN RECORDS OF THE ADAMS COUNTY CLERK AND RECORDER. A DISTANCE OF 299.36 FEET TO A POINT ON THE WEST LINE OF THAT PARCEL OF LAND RECORDED IN BOOK 3251 AT PAGE 924, SAID ADAMS COUNTY RECORDS:

THENCE ALONG THE WEST LINES OF SAID PARCEL OF LAND, THE FOLLOWING TWO (2) **COURSES:**

- I. S 21°38'59" E, A DISTANCE OF 266.92 FEET;
- 2. \$ 33°40'19" E, A DISTANCE OF 83.13 FEET TO A POINT ON THE WEST LINE OF LOT 2, KALCEVIC SUBDIVISION AMENDED, AS RECORDED AT RECEPTION NO. B1041161, SAID ADAMS COUNTY RECORDS;

THENCE ALONG THE WEST LINES OF LOT 2 AND LOT 1, SAID KALCEVIC SUBDIVISION AMENDED, THE FOLLOWING FOUR (4) COURSES:

- I. S 14°37'52" E, A DISTANCE OF 76.08 FEET;
- 2. N 88°03'04" E, A DISTANCE OF 39.50 FEET;
- 3. S 17°49'46" E, A DISTANCE OF 104.05 FEET;
- 4. S 55°05'47" E, A DISTANCE OF 112.26 FEET;

THENCE S 01°01'29" E, A DISTANCE OF 259.37 FEET TO A POINT ON THE NORTH LINE OF THE ELMWOOD PARK SUBDIVISION, AS RECORDED AT RECEPTION NO. CO184761, SAID ADAMS COUNTY RECORDS;

THENCE \$ 89°32'44" W, ALONG THE NORTH LINE OF SAID ELMWOOD PARK SUBDIVISION, A DISTANCE OF 631.65 FEET TO A POINT ON THE EAST LINE OF THE PECOS STREET RIGHT-OF-WAY;

THENCE N 00°01'53" E, ALONG SAID EAST LINE OF THE PECOS STREET RIGHT-OF-WAY, A DISTANCE OF 586.61 FEET TO THE SOUTHWEST CORNER OF THAT EXCEPTION PARCEL RECORDED AT RECEPTION NO. 2019000073502 OF SAID ADAMS COUNTY RECORDS;

THENCE N 89°30'30" E, ALONG THE SOUTH LINE OF SAID EXCEPTION PARCEL, A DISTANCE OF 208.00 FEET TO THE SOUTHEAST CORNER OF SAID EXCEPTION PARCEL;

THENCE N 00°01'53" E, ALONG A LINE BEING PARALLEL TO THE WEST LINE OF THE NORTHEAST OUARTER OF SAID SECTION 33. A DISTANCE OF 208.00 FEET TO A POINT BEING 20.00 FEET SOUTH OF THE NORTH LINE OF THE NORTHEAST QUARTER OF SAID

THENCE S 89°30'30" W, ALONG A LINE BEING 20.00 FEET SOUTH OF AND PARALLEL TO THE NORTH LINE OF THE NORTHEAST QUARTER OF SAID SECTION 33, A DISTANCE OF 208.00 FEET TO THE NORTHWEST CORNER OF SAID EXCEPTION PARCEL AND A POINT ON THE EAST LINE OF THE PECOS STREET RIGHT-OF-WAY;

THENCE N 00°01'53" E, ALONG THE EAST LINE OF SAID PECOS STREET RIGHT-OF-WAY, A DISTANCE OF 20.00 FEET TO THE POINT OF BEGINNING.

LESS AND EXCEPT THOSE PORTIONS OF RIGHT-OF-WAY, AS DEDICATED BY SHERRELWOOD VILLAGE, A SUBDIVISION PLAT RECORDED AT 2018000075940.

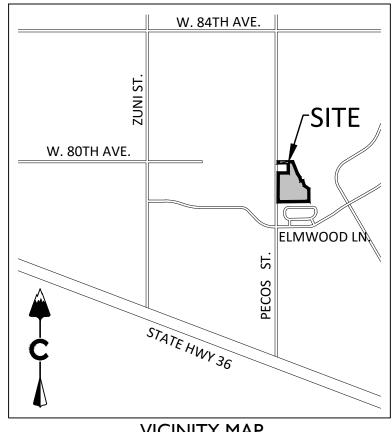
CONTAINING 346.058 SOUARE FEET, OR 7.944 ACRES, MORE OR LESS.

HAVE LAID OUT, PLATTED AND SUBDIVIDED THE SAME INTO LOTS, TRACTS AND BLOCKS AS SHOWN ON THIS PLAT UNDER THE NAME AND STYLE OF SHERRELWOOD VILLAGE FILING NO. 1 - PLAT CORRECTION NO. 1 AND BY THESE PRESENTS DO HEREBY DEDICATE TO THE COUNTY OF ADAMS, COLORADO, FOR THE PERPETUAL USE OF THE PUBLIC, THE STREETS AND EASEMENTS AS SHOWN HEREON AND NOT PREVIOUSLY DEDICATED TO THE PUBLIC.

PUBLIC SERVICE COMPANY OF COLORADO NOTES

THESE EASEMENTS ARE DEDICATED TO ADAMS COUNTY FOR THE BENEFIT OF THE APPLICABLE UTILITY PROVIDERS FOR THE INSTALLATION, MAINTENANCE, AND REPLACEMENT OF ELECTRIC, GAS, TELEVISION, CABLE, AND TELECOMMUNICATIONS FACILITIES (DRY UTILITIES). UTILITY EASEMENTS SHALL ALSO BE GRANTED WITHIN ANY ACCESS EASEMENTS AND PRIVATE STREETS IN THE SUBDIVISION. PERMANENT STRUCTURES, IMPROVEMENTS, OBJECTS, BUILDINGS, WELLS, WATER METERS AND OTHER OBJECTS THAT MAY INTERFERE WITH THE UTILITY FACILITIES OR USE THEREOF (INTERFERING OBJECTS) SHALL NOT BE PERMITTED WITHIN SAID UTILITY EASEMENTS AND THE UTILITY PROVIDERS, AS GRANTEES, MAY REMOVE ANY INTERFERING OBJECTS AT NO COSTS TO SUCH GRANTEES, INCLUDING, WITHOUT LIMITATION, VEGETATION. PUBLIC SERVICE COMPANY OF COLORADO (PSCo) AND ITS SUCCESSORS RESERVE THE RIGHT TO REQUIRE ADDITIONAL EASEMENTS AND TO REQUIRE THE PROPERTY OWNER TO GRANT PSCo AN EASEMENT ON ITS STANDARD FORM.

SHEET I OF 3



VICINITY MAP I'' = 2000'

OWNER

ACKNOWLEDGEMENT COUNTY OF _____ THE FOREGOING WAS ACKNOWLEDGED BEFORE ME THIS DAY OF _____, 20___, A.D.

ELMWOOD POINTE LLC, A COLORADO LIMITED LIABILITY COMPANY

OWNER

7840 PECOS INVESTMENTS LLC, A COLORADO LIMITED LIABILITY COMPANY

NOTARY PUBLIC:

MY COMMISSION EXPIRES:

ACKNOWLEDGEMENT

STATE OF COUNTY OF

WITNESS MY HAND AND OFFICIAL SEAL:

THE FOREGOING WAS ACKNOWLEDGED BEFORE ME THIS DAY

OF , 20 , A.D.

WITNESS MY HAND AND OFFICIAL SEAL:

NOTARY PUBLIC: MY COMMISSION EXPIRES:

PURPOSE OF PLAT CORRECTION

THE PURPOSE OF THIS PLAT CORRECTION IS TO REMOVE TRACTS B AND D; AND RECONFIGURE LOTS 1, 2, 3 & 4 OF BLOCK 1 AND A PORTION OF LOT 8, BLOCK 2 OF SHERRELWOOD VILLAGE, A SUBDIVISION PLAT RECORDED AT RECEPTION NO. 2018000075940, IN THE RECORDS OF THE ADAMS COUNTY CLERK AND RECORDER'S OFFICE, INTO ONE, CONTIGUOUS LOT.

LAND USE TABLE

TYPE	AREA (SF)	AREA (AC)
TRACTS A & C	30,019	0.689
LOTS (42)	231,957	5.325
INTERNAL R.O.W.	84,082	1.930
TOTAL	346,058	7.944

TRACT USE TABLE

TRACT	USE	OWNERSHIP	MAINTENANCE
Α	OPEN SPACE, UTILITY	OWNER	OWNER
С	OPEN SPACE, UTILITY, DRAINAGE & ACCESS	OWNER	OWNER

TRACT NOTE

TRACTS B AND D HAVE BEEN REMOVED BY THIS PLAT CORRECTION. TRACTS A AND C, THEIR USES AND OWNERSHIP REMAIN UNCHANGED.

CITY OF THORNTON NOTES

WATER AND SANITARY SEWER EASEMENTS ARE HEREBY GRANTED TO THE CITY OF THORNTON, AS SHOWN ON THIS PLAT, FOR THE PURPOSE TO CONSTRUCT, MAINTAIN, REPAIR, REPLACE, INSPECT AND OPERATE MAINS, TRANSMISSION, DISTRIBUTION AND SERVICE LINES AND APPURTENANCES OR OTHER IMPROVEMENTS FOR WHICH THE EASEMENTS WERE GRANTED, TOGETHER WITH A RIGHT OF ACCESS, ON, ALONG AND IN ALL OF THE EASEMENTS, AS MAY BE NECESSARY TO ACCOMPLISH THE INTENDED PURPOSES OF THE EASEMENT. THESE EASEMENTS SHALL BE EXCLUSIVE, HOWEVER UTILITIES MAY CROSS THE EXCLUSIVE EASEMENTS AT SUBSTANTIALLY 90 DEGREES.

COMMUNITY AND ECONOMIC DEVELOPMENT APPROVAL

APPROVED BY THE	ADAMS COUNTY	COMMUNITY AN	ND ECONOMIC D	EVELOPMENT
DEPARTMENT THIS	DAY			

OF ______, 20____, A.D. AT ____ O'CLOCK _ M.

SURVEYOR'S CERTIFICATE

DEVELOPMENT SERVICES MANAGER

I HEREBY CERTIFY I WAS IN RESPONSIBLE CHARGE OF THE SURVEY WORK USED IN THE PREPARATION OF THIS PLAT; THE POSITIONS OF THE PLATTED POINTS SHOWN HEREON HAVE AN ACCURACY OF NOT LESS THAN (I) FOOT IN TEN THOUSAND (10,000) FEET PRIOR TO ADJUSTMENTS: AND ALL BOUNDARY MONUMENTS AND CONTROL CORNERS SHOWN HEREON WERE IN PLACE AS DESCRIBED ON SEPTEMBER 29, 2021

DAVID R. LUTZ **COLORADO PLS 35586** FOR AND ON BEHALF OF CORE CONSULTANTS, INC

ADAMS COUNTY CLERK AND RECORDER'S CERTIFICATE

THIS PLAT WAS FILED FOR RECORD IN THE OFFICE OF THE ADAMS COUNTY

CLERK AND RECORDER IN THE STATE OF COLORADO AT .M. ON THE

DAY OF ______, 20___.

BY DEPUTY:

COUNTY CLERK AND RECORDER

RECEPTION NO.

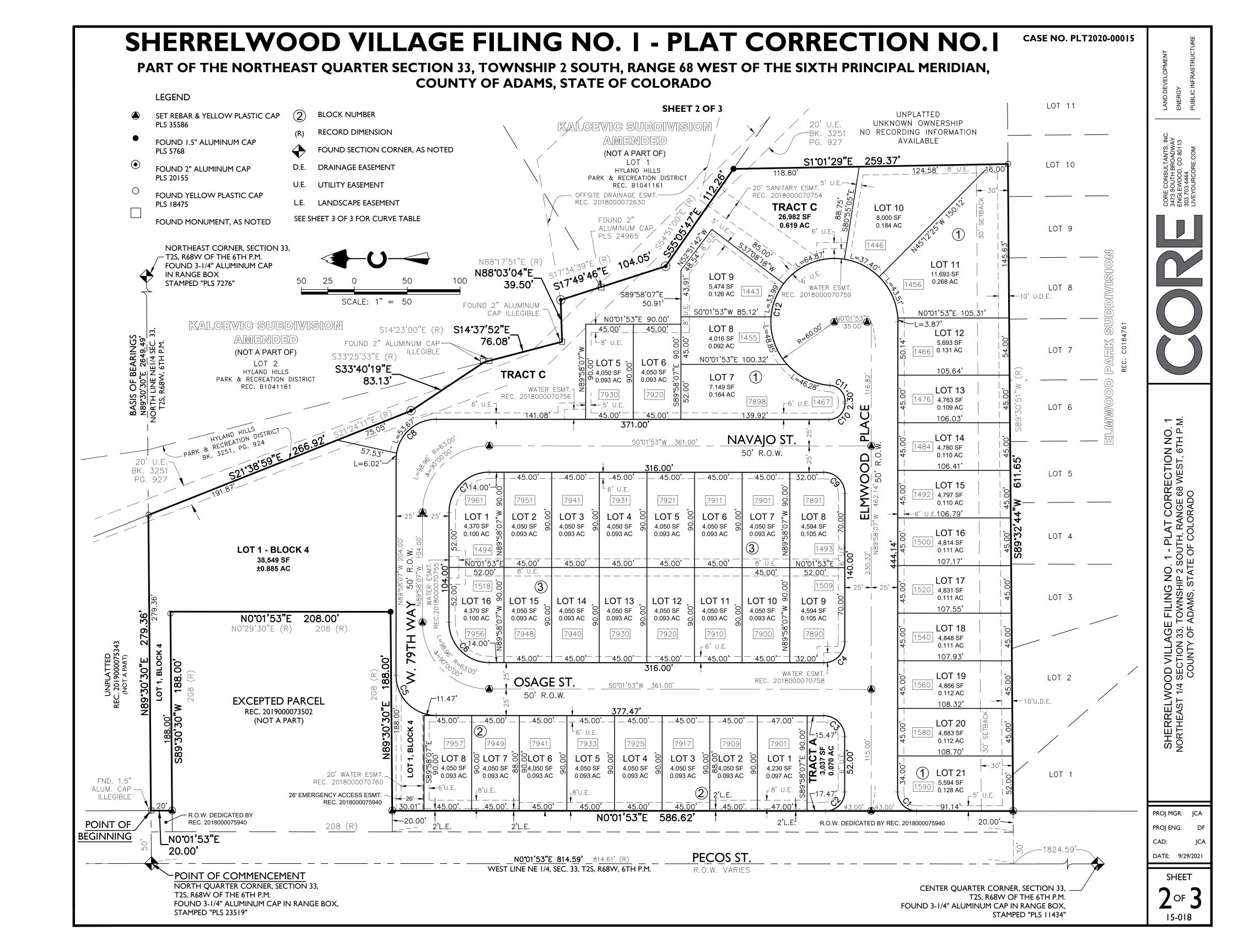
SHEET

PROJ MGR: JCA

DATE: 9/29/2021

PROJ ENG:

OF 15-018



SHEET

DATE: 9/29/2021

15-018

PART OF THE NORTHEAST QUARTER SECTION 33, TOWNSHIP 2 SOUTH, RANGE 68 WEST OF THE SIXTH PRINCIPAL MERIDIAN, **COUNTY OF ADAMS, STATE OF COLORADO**

SHEET 3 OF 3

NOTES

- I. ACCORDING TO COLORADO LAW YOU MUST COMMENCE ANY LEGAL ACTION BASED UPON ANY DEFECT IN THIS SURVEY WITHIN THREE YEARS AFTER YOU FIRST DISCOVER SUCH DEFECT. IN NO EVENT MAY ANY ACTION BASED UPON ANY DEFECT IN THIS SURVEY BE COMMENCED MORE THAN TEN YEARS FROM THE DATE OF THE CERTIFICATION SHOWN HEREON.
- 2. THIS SURVEY DOES NOT REPRESENT A TITLE SEARCH BY CORE CONSULTANTS, INC. FOR RECORD DOCUMENTS AND DETERMINATION OF OWNERSHIP, EASEMENTS OF RECORD, RIGHTS-OF-WAY AND ENCUMBRANCES, CORE CONSULTANTS, INC. RELIED UPON TITLE COMMITMENT ORDER NO. 21000310549, PREPARED BY STEWART TITLE GUARANTY COMPANY, WITH AN EFFECTIVE DATE OF MAY 21, 2021 AT 5:30 PM.
- 3. ANY PERSON WHO KNOWINGLY REMOVES, ALTERS OR DEFACES ANY PUBLIC LAND SURVEY MONUMENT OR LAND BOUNDARY MONUMENT OR ACCESSORY, COMMITS A CLASS TWO (2) MISDEMEANOR PURSUANT TO STATE STATUTE 18-4-508, C.R.S.
- 4. BEARINGS FOR THIS SURVEY ARE BASED ON THE NORTH LINE OF THE NORTHEAST QUARTER OF SECTION 33, TOWNSHIP 2 SOUTH, RANGE 68 WEST OF THE SIXTH P.M., BEING ASSUMED TO BEAR N 89°30'30" E, FROM THE THE NORTH QUARTER CORNER OF SAID SECTION 33, BEING A 3-1/4" ALUMINUM CAP IN RANGE BOX, STAMPED "PLS 23519", TO THE NORTHEAST CORNER OF SAID SECTION 33, BEING A 3-1/4" ALUMINUM CAP IN RANGE BOX, PLS 7276, WITH ALL BEARINGS CONTAINED HEREIN RELATIVE THERETO.
- 5. THE LINEAL UNIT USED IN THIS SURVEY IS THE U.S. SURVEY FOOT.
- 6. DATE OF FIELD SURVEY: APRIL 13, 2015
- 7. THE GROSS LAND AREA OF THE SUBJECT PROPERTY IS 346,058 SQUARE FEET, OR 7.944 ACRES, MORE OR LESS.
- 8. RIGHT-OF-WAY FOR INGRESS AND EGRESS FOR SERVICE AND EMERGENCY VEHICLES IS GRANTED OVER, ACROSS, ON, AND THROUGH ANY AND ALL PRIVATE ROADS, WAYS, AND FIRE LANES NOW OR HEREAFTER ESTABLISHED ON THE DESCRIBED PROPERTY. THE SAME ARE HEREBY DESIGNATED AS FIRE LANES AND EMERGENCY AND SERVICE VEHICLE ROADS, AND SHALL BE POSTED "NO PARKING - FIRE LANE"
- 9. THE PROPERTY LIES WITHIN ZONE X, "AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN, PER FEMA MAP NO. 08001 C0584H, PANEL 584, REVISED MARCH 5, 2017.
- 10. THE APPROVED STORMWATER OPERATIONS AND MAINTENANCE MANUAL IS ON FILE WITH THE ADAMS COUNTY CLERK AND RECORDER'S OFFICE AT RECEPTION NO. 2018000026268
- 11. THE OWNER WILL BE RESPONSIBLE FOR THE MAINTENANCE ON TRACTS A & C, AS SHOWN HEREON.
- 12. ADAMS COUNTY IS HEREBY GRANTED ACCESS ACROSS TRACT C FOR ACCESS AND MAINTENANCE PURPOSES RELATED TO DRAINAGE AND OFF SITE DRAINAGE FACILITIES.
- 13. THE TWO-FOOT LANDSCAPE EASEMENTS LYING WITHIN LOTS 1, 2, 7 AND 8, BLOCK 2, AS SHOWN HEREON, ARE FOR LANDSCAPING PURPOSES ONLY AND ARE HEREBY DEDICATED TO THE OWNER(S) FOR OPERATION AND MAINTENANCE.
- 14. THE POLICY OF THE COUNTY REQUIRES THAT MAINTENANCE ACCESS SHALL BE PROVIDED TO ALL STORM DRAINAGE FACILITIES TO ASSURE CONTINUOUS OPERATIONAL CAPABILITY OF THE SYSTEM. THE PROPERTY OWNERS SHALL BE RESPONSIBLE FOR THE MAINTENANCE OF ALL DRAINAGE FACILITIES INCLUDING INLETS, PIPES, CULVERTS, CHANNELS, DITCHES, HYDRAULIC STRUCTURES, AND DETENTION BASINS LOCATED ON THEIR LAND UNLESS MODIFIED BY THE SUBDIVISION DEVELOPMENT AGREEMENT. SHOULD THE OWNER FAIL TO MAINTAIN SAID FACILITIES, THE COUNTY SHALL HAVE THE RIGHT TO ENTER SAID LAND FOR THE SOLE PURPOSE OF OPERATIONS AND MAINTENANCE. ALL SUCH MAINTENANCE COST WILL BE ASSESSED TO THE PROPERTY OWNERS.
- 15. STATEMENT RESTRICTING ACCESS: ACCESS RIGHTS ACROSS THE RIGHT-OF-WAY LINES OF MAIOR HIGHWAYS. PARKWAYS. STREETS OR FREEWAYS. ARE RESTRICTED WHERE REQUIRED AS A PROVISION OF APPROVAL.

CURVE TABLE					
CURVE #	LENGTH	RADIUS	DELTA	CHORD	CHORD BEARING
C1	28.27	18.00	90°00'00"	25.46	S45°01'53"W
C2	28.27	18.00	90°00'00"	25.46	S44*58'07"E
С3	31.42	20.00	90°00'00"	28.28	N45°01'53"E
C4	31.42	20.00	90°00'00"	28.28	S44*58'07"E
C5	59.69	38.00	90°00'00"	53.74	S45°01'53"W
C6	59.69	38.00	90°00'00"	53.74	S45°01'53"W
C7	59.69	38.00	90°00'00"	53.74	S44*58'07"E
C8	59.69	38.00	90°00'00"	53.74	N44°58'07"W
С9	31.42	20.00	90°00'00"	28.28	S45°01'53"W
C10	23.56	15.00	90°00'00"	21.21	S44*58'07"E
C11	22.56	15.00	86°10'39"	20.49	N46*56'34"E
C12	278.77	60.00	266°12'24"	87.61	N43°02'33"W

May 27, 2021



Adams County Planning & Development Department 4430 South Adams County Parkway Brighton, CO 80601-8216

To Whom It May Concern:

RE: Proposed Development at 8000 N. Pecos Street, Denver, CO 80221

Westminster Public Schools recently sold district property located at 8000 N. Pecos Street to DelWest Development Corporation in unincorporated Adams County. DelWest worked collaboratively with the District in the past when developing a previously sold property that directly adjoins the current property under consideration. The District welcomes infill development within its boundaries and, while the District takes no position on the specific plans, we believe that a community should include a wide choice of high-quality housing to meet the resident's needs. DelWest continues to demonstrate a willingness to design developments in consultation with the community and has taken affordability into consideration with its planning. This remains important to the District.

In reviewing the current proposal for 47 townhomes on the site, we have determined that the impact of the proposed development on the District would be minimal. Currently, the District has the capacity to absorb students generated by this project within its existing schools. Using an average number of students generated by housing type, based on information provided by Unique Properties, the District has conservatively calculated the following student yield:

Number of Bedrooms	Number of New Units of that Size	Average Number of School-Aged Residents Per Unit	New School-Aged Residents
3	47	x 0.153	= 8 (low end estimate)
3	47	x 0.3	= 15 (high end estimate)

In considering the minimal impact to the District by new students who may reside in the development, the District believes it is important to focus on the quality of the development and the degree to which it will revitalize the community in the years ahead. The District believes development on the south end of the District will provide suitable living accommodations for the citizens of the community and, in general, will have an overall positive impact on the existing neighborhood.

Sincerely,

Chief Operating Officer

Westminster Public Schools



ADAMS COUNTY FIRE RESCUE

FIRE PREVENTION BUREAU

7980 Elmwood Lane Denver, CO 80221

(303) 539-6862 / email: :fireprevention@acfpd.org

Melissa Hale 155 South Madison St Suite 326 Denver, CO 80209 720-819-1004 melissa@delwest.com

May 13, 2020

RE: 7840, 7996, and 8000 Pecos St Denver, CO 80221

Ms. Hale,

The addresses of 7840, 7996, and 8000 Pecos St Deriver, CO 80221 are within the Adams County Fire Protection District's jurisdiction and will be covered by its services. We will need to complete a site development plan review to go along with this letter. The site development plan review needs to include a full set of civil plans and an auto turn exhibit. If you have any questions regarding this location, please call 303-539-6862 and we will be able to answer your questions.

Sincerely,

Chris Wilder Fire Marshal

Adams County Fire Protection District

Gristyland Wille

SOUTHEAST QUARTER, SECTION 28 & NORTHEAST QUARTER, SECTION 33. ALL IN TOWNSHIP 2 SOUTH, RANGE 68 WEST OF THE 6TH P.M., COUNTY OF ADAMS, COLORADO

LEGAL DESCRIPTION:

A PARCEL OF LAND BEING SHERRELWOOD VILLAGE, A SUBDIVISION PLAT RECORDED AT RECEPTION NO. 2018000075940 AND THAT PARCEL OF LAND, AS DESCRIBED IN THAT WARRANTY DEED RECORDED AT RECEPTION NO. 2015000053449 TOGETHER WITH THAT PARCEL OF LAND, AS DESCRIBED IN THAT QUIT CLAIM DEED RECORDED IN BOOK 3254 AT PAGE 139, ALL IN THE RECORDS OF THE ADAMS COUNTY CLERK AND RECORDER'S OFFICE, LYING WITHIN PORTIONS OF THE SOUTHEAST QUARTER OF SECTION 28 AND THE NORTHEAST QUARTER OF SECTION 33, BOTH IN TOWNSHIP 2 SOUTH, RANGE 68 WEST OF THE SIXTH PRINCIPAL MERIDIAN, COUNTY OF ADAMS, STATE OF COLORADO, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

THE BEARINGS FOR THIS DESCRIPTION ARE BASED ON THE NORTH LINE OF THE NORTHEAST QUARTER OF SECTION 33, TOWNSHIP 2 SOUTH, RANGE 68 WEST OF THE SIXTH P.M., BEING ASSUMED TO BEAR N 89°30'30" E, FROM THE NORTH QUARTER CORNER OF SAID SECTION 33, BEING MONUMENTED BY A REBAR WITH A 3-1/4 INCH ALUMINUM CAP, STAMPED "PLS 23519" TO THE NORTHEAST CORNER OF SAID SECTION 33, BEING MONUMENTED BY A REBAR WITH A 3-1/4 INCH ALUMINUM CAP, STAMPED "PLS 7276", WITH ALL BEARINGS CONTAINED HEREIN RELATIVE THERETO.

COMMENCING AT THE NORTH QUARTER CORNER OF SAID SECTION 33, THENCE N 89°30'30" E, ALONG THE NORTH LINE OF THE NORTHEAST QUARTER OF SAID SECTION 33, A DISTANCE OF 50.00 FEET TO A POINT ON THE EAST LINE OF THE PECOS STREET RIGHT-OF-WAY, AS DEDICATED BY THAT RESOLUTION RECORDED IN BOOK 3270 AT PAGE 279, SAID ADAMS COUNTY RECORDS AND THE POINT OF BEGINNING: THENCE N 00°14'47" W, ALONG THE EAST LINE OF SAID PECOS STREET RIGHT-OF-WAY, AND ALONG A LINE BEING 50.00 FEET EAST OF AND PARALLEL TO THE WEST LINE OF THE SOUTHEAST QUARTER OF SAID SECTION 28, A DISTANCE OF 293.01 FEET TO A POINT ON THE NORTH LINE OF SAID PARCEL OF LAND DESCRIBED IN BOOK 3254 AT PAGE 139:

THENCE S 82°41'00" E, ALONG SAID NORTH LINE, A DISTANCE OF 8.10 FEET TO THE WEST CORNER OF PARCEL D, AS DESCRIBED IN THAT QUIT CLAIM DEED RECORDED IN BOOK 3251 AT PAGE 924; THENCE ALONG THE SOUTH AND WEST LINES OF SAID PARCEL D, THE FOLLOWING THREE (3) COURSES:

- S 76°46'55" E, A DISTANCE OF 178,58 FEET: 1.
- S 21°38'57" E, ALONG THE EAST LINES OF SAID PARCEL DESCRIBED IN BOOK 3254 AT PAGE 139 AND SHERRELWOOD VILLAGE PLAT, A DISTANCE OF 534.54 FEET;
- S 33°40'19" E, ALONG THE EAST LINE OF SAID SHERRELWOOD VILLAGE PLAT, A DISTANCE OF 83.14 FEET;

THENCE ALONG THE EAST AND SOUTH LINES OF SAID SHERRELWOOD VILLAGE PLAT, THE FOLLOWING SIX (6) COURSES:

- 1. S 14°37'52" E, A DISTANCE OF 76.07 FEET;
- N 88°03'04" E, A DISTANCE OF 39.50 FEET 2.
- S 17°49'46" E, A DISTANCE OF 104.05 FEET;
- S 55°05'47" E. A DISTANCE OF 112.26 FEET:
- S 01°01'29" E, A DISTANCE OF 259.37 FEET, TO A POINT ON THE NORTH LINE OF ELMWOOD PARK SUBDIVISION. A SUBDIVISION PLAT RECORDED AT RECEPTION NO. C0184761, SAID ADAMS COUNTY RECORDS:
- S 89°32'44" W, ALONG SAID NORTH LINE, A DISTANCE OF 611.65 FEET TO A POINT BEING 50.00 FEET EAST OF THE WEST LINE OF THE NORTHEAST QUARTER OF SAID SECTION 33 ALSO BEING A POINT ON THE EAST LINE OF THE PECOS STREET RIGHT-OF-WAY, AS DEDICATED BY SAID SHERRELWOOD VILLAGE PLAT:

NOTE: THIS DOES NOT REPRESENT A MONUMENTED SURVEY. IT IS INTENDED ONLY TO DEPICT THE ATTACHED DESCRIPTION

PROJECT: 15-018

DR: J. ANTON

DATE: 11/05/2019

DS: T. GIRARD

SHEET 1 OF 4

P.M. T. GIRARD





CIVIL ENGINEERING DEVELOPMENT CONSULTING NATURAL RESOURCES LAND SURVEYING

1950 W. Littleton Bivd., Ste. 109 Littleton, CO 80120

SOUTHEAST QUARTER, SECTION 28 & NORTHEAST QUARTER, SECTION 33, ALL IN TOWNSHIP 2 SOUTH, RANGE 68 WEST OF THE 6TH P.M., COUNTY OF ADAMS, COLORADO

LEGAL DESCRIPTION CONTINUED:

THENCE N 00°01'53" E, ALONG SAID EAST LINE AND ALONG A LINE BEING 50.00 FEET EAST OF AND PARALLEL TO THE WEST LINE OF THE NORTHEAST QUARTER OF SAID SECTION 33, A DISTANCE OF 586.62 FEET TO A POINT ON THE SOUTH LINE OF THAT PARCEL OF LAND DESCRIBED IN SAID WARRANTY DEED RECORDED AT RECEPTION NO. 2015000053449;

THENCE ALONG THE SOUTH, EAST AND NORTH LINES OF SAID PARCEL OF LAND THE FOLLOWING THREE (3) COURSES:

- S 89°30'30" W, ALONG A LINE BEING PARALLEL TO THE NORTH LINE OF THE NORTHEAST QUARTER OF SAID SECTION 33, A DISTANCE OF 20.00 FEET TO A POINT BEING 30.00 FEET EAST OF THE WEST LINE OF THE NORTHEAST QUARTER OF SAID SECTION 33;
- N 00°01'53" E, ALONG A LINE BEING 30.00 FEET EAST OF AND PARALLEL TO THE WEST LINE OF THE NORTHEAST QUARTER OF SAID SECTION 33, A DISTANCE OF 208.00 FEET TO A POINT BEING 20.00 FEET SOUTH OF THE NORTH LINE OF THE NORTHEAST QUARTER OF SAID SECTION 33;
- 3. N 89°30'30" E, ALONG A LINE BEING 20.00 FEET SOUTH OF AND PARALLEL TO THE NORTH LINE OF THE NORTHEAST QUARTER OF SAID SECTION 33, A DISTANCE OF 20.00 FEET TO A POINT BEING 50.00 FEET EAST OF THE WEST LINE OF THE NORTHEAST QUARTER OF SAID SECTION 33, ALSO BEING A POINT ON THE EAST LINE OF THE PECOS STREET RIGHT-OF-WAY, AS DEDICATED BY SAID SHERRELWOOD VILLAGE PLAT;

THENCE N 00°01'53" E, ALONG SAID EAST LINE AND ALONG A LINE BEING 50.00 FEET EAST OF AND PARALLEL TO THE WEST LINE OF THE NORTHEAST QUARTER OF SAID SECTION 33 A DISTANCE OF 20.00 FEET TO THE POINT OF BEGINNING.

CONTAINING AN AREA OF 450,875 SQUARE FEET OR 10.351 ACRES, MORE OR LESS.

THOMAS M. GIRARD COLORADO PLS 38151 FOR AND ON BEHALF OF CORE CONSULTANTS, INC.



NOTE: THIS DOES NOT REPRESENT A MONUMENTED SURVEY. IT IS INTENDED ONLY TO DEPICT THE ATTACHED DESCRIPTION

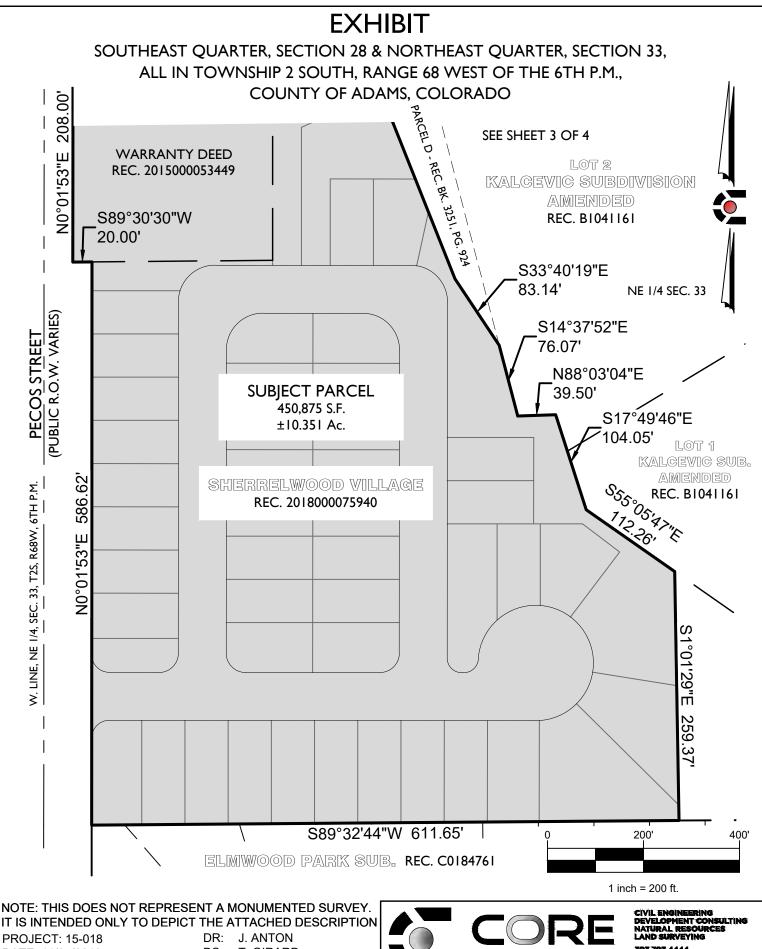
PROJECT: 15-018 DATE: 11/05/2019 SHEET 2 OF 4 DR: J. ANTON DS: T. GIRARD

P.M. T. GIRARD





EXHIBIT SOUTHEAST QUARTER, SECTION 28 & NORTHEAST QUARTER, SECTION 33, ALL IN TOWNSHIP 2 SOUTH, RANGE 68 WEST OF THE 6TH P.M., COUNTY OF ADAMS, COLORADO S82°41'00"E SE 1/4 SEC. 28 8.10' S76°46'55"E 178.58' 20' DEDICATED R.O.W. LOT 2 BK. 3270, PG. 279 KALGEVIC SUBDIVISION AMENDED R68W, 6TH P.M. REC. B1041161 **QUIT CLAIM DEED** (PUBLIC R.O.W. VARIES) SE 1/4, SEC. 28, T2S, **BOOK 3254, PAGE 139** PECOS STREET NE COR. SEC 33, POINT OF COMMENCEMENT FND. 3-1/4" ALUM. CAP N 1/4 COR. SEC 33, STAMPED "PLS 7276" FND. 3-1/4" ALUM. CAP **STAMPED "PLS 23519"** BASIS OF BEARINGS POINT OF BEGINNING N 89°30'30" E N. LINE, NE 1/4, SEC. 33. N0°01'53"E T2S, R68W, 6TH P.M. N89°30'30"E 20.00' 50.00' SUBJECT PARCEL N89°30'30"E 208.00 LOT 2 450,875 S.F. 20.00' KALCEVIC ±10.351 Ac. LINE, NE 1/4, SEC. 33, T2S, R68W, 6TH P.M. SUBDIVISION WARRANTY DEED AMENDED N0°01'53"E REC. 2015000053449 REC. B1041161 NE 1/4 SEC. 33 S89°30'30"W 20.00' S33°40'19"E 83.14' S14°37'52"E Š. 76.07' SHERRELWOOD VILLAGE REC. 2018000075940 N88°03'04"E 200' 100' 39.50' SEE SHEET 4 OF 4 1 inch = 100 ft. NOTE: THIS DOES NOT REPRESENT A MONUMENTED SURVEY. CIVIL ENGINEERING DEVELOPMENT CONSULTING NATURAL RESOURCES IT IS INTENDED ONLY TO DEPICT THE ATTACHED DESCRIPTION DR: J. ANTON PROJECT: 15-018 DATE: 11/05/2019 DS: T. GIRARD 1950 W. Littleton Bi Littleton, CO 80120 SHEET 3 OF 4 P.M. T. GIRARD



DATE: 11/05/2019 DS: T. GIRARD SHEET 4 OF 4 P.M. T. GIRARD



1950 W. Littleton Bi Littleton, CO 80120

SOUTHEAST QUARTER, SECTION 28 & NORTHEAST QUARTER, SECTION 33, TOWNSHIP 2 SOUTH, RANGE 68 WEST OF THE 6TH P.M., COUNTY OF ADAMS, COLORADO

LEGAL DESCRIPTION:

A PARCEL OF LAND BEING TRACTS B & D, LOTS 1 THROUGH 4, BLOCK 1, AND A PORTION OF LOT 8, BLOCK 2, SHERRELWOOD VILLAGE, A SUBDIVISION PLAT RECORDED AT RECEPTION NO. 2018000075940 TOGETHER WITH THAT PARCEL OF LAND DESCRIBED IN THAT WARRANTY DEED RECORDED AT RECEPTION NO. 2019000073502 AND THAT PARCEL OF LAND DESCRIBED IN THAT WARRANTY DEED RECORDED AT RECEPTION NO. 2019000075343, ALL IN THE RECORDS OF THE ADAMS COUNTY CLERK AND RECORDER'S OFFICE, LYING WITHIN THE SOUTHEAST QUARTER OF SECTION 28 AND THE NORTHEAST QUARTER OF SECTION 33, TOWNSHIP 2 SOUTH, RANGE 68 WEST OF THE SIXTH PRINCIPAL MERIDIAN, COUNTY OF ADAMS, STATE OF COLORADO, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

THE BEARINGS FOR THIS DESCRIPTION ARE BASED ON THE NORTH LINE OF THE NORTHEAST QUARTER OF SECTION 33, TOWNSHIP 2 SOUTH, RANGE 68 WEST OF THE SIXTH P.M., BEING ASSUMED TO BEAR N 89°30'30" E, FROM THE NORTH QUARTER CORNER OF SAID SECTION 33, BEING MONUMENTED BY A REBAR WITH A 3-1/4 INCH ALUMINUM CAP, STAMPED "PLS 23519" TO THE NORTHEAST CORNER OF SAID SECTION 33, BEING MONUMENTED BY A REBAR WITH A 3-1/4 INCH ALUMINUM CAP, STAMPED "PLS 7276", WITH ALL BEARINGS CONTAINED HEREIN RELATIVE THERETO.

COMMENCING AT THE NORTH QUARTER CORNER OF SAID SECTION 33, THENCE N 89°30'30" E, ALONG THE NORTH LINE OF THE NORTHEAST QUARTER OF SAID SECTION 33, A DISTANCE OF 50.00 FEET TO A POINT ON THE EAST LINE OF THE PECOS STREET RIGHT-OF-WAY AS DEDICATED BY THAT RESOLUTION RECORDED IN BOOK 3270 AT PAGE 279, SAID ADAMS COUNTY RECORDS, ALSO BEING THE NORTHWEST CORNER OF SAID SHERRELWOOD VILLAGE PLAT AND THE SOUTHWEST CORNER OF THAT PARCEL OF LAND DESCRIBED IN SAID DEED, RECEPTION NO. 2019000075343 AND THE POINT OF BEGINNING;

THENCE N 00°14'47" W, ALONG THE EAST LINE OF SAID PECOS STREET RIGHT-OF-WAY, AND THE WEST LINE OF SAID DEED, RECEPTION NO. 2019000075343, ALONG A LINE BEING 50.00 FEET EAST OF AND PARALLEL TO THE WEST LINE OF THE SOUTHEAST QUARTER OF SAID SECTION 28, A DISTANCE OF 293.01 FEET TO THE NORTHWEST CORNER OF SAID DEED, RECEPTION NO. 2019000075343;

THENCE S 82°41'00" E, CONTINUING ALONG THE PECOS STREET ROW AND THE NORTH LINE OF SAID DEED, A DISTANCE OF 8.10 FEET TO A POINT ON THE EAST LINE OF SAID PECOS STREET RIGHT-OF-WAY AND THE WEST CORNER OF PARCEL D, AS DESCRIBED IN THAT QUIT CLAIM DEED RECORDED IN BOOK 3251 AT PAGE 924. SAID COUNTY RECORDS:

THENCE ALONG THE SOUTH AND WEST LINES OF SAID PARCEL D THE FOLLOWING THREE (3) COURSES:

- 1. S 76°46'55" E, A DISTANCE OF 178.58 FEET;
- S 21°38'59" E, ALONG THE EAST LINES OF SAID DEED, RECEPTION NO. 2019000075343 AND THE EAST LINE OF SAID SHERRELWOOD VILLAGE PLAT, A DISTANCE OF 459.50 FEET TO THE EAST CORNER OF LOT 4, BLOCK 1;

THENCE S 12°19'21" W, ALONG THE SOUTHEAST LINE OF SAID LOT 4, BLOCK 1, A DISTANCE OF 57.53 FEET TO A POINT ON THE NORTH LINE OF WEST 79TH WAY RIGHT-OF-WAY, AS DEDICATED BY SAID SHERRELWOOD VILLAGE PLAT AND A POINT OF NON-TANGENT CURVATURE:

THENCE ALONG THE NORTH LINE OF THE WEST 79TH WAY RIGHT-OF-WAY THE FOLLOWING THREE (3) COURSES:

1. ALONG THE ARC OF A NON-TANGENT CURVE TO THE LEFT HAVING A RADIUS OF 38.00 FEET, A CENTRAL ANGLE OF 09°04'20" AND AN ARC LENGTH OF 6.02 FEET, THE CHORD OF WHICH BEARS N 85°25'57" W, A DISTANCE OF 6.01 FEET;

NOTE: THIS DOES NOT REPRESENT A MONUMENTED SURVEY.

IT IS INTENDED ONLY TO DEPICT THE ATTACHED DESCRIPTION

PROJECT: 15-018 DR: J. ANTON
DATE: 05/05/2020 DS: T. GIRARD
SHEET 1 OF 4 P.M. T. GIRARD



SOUTHEAST QUARTER, SECTION 28 & NORTHEAST QUARTER, SECTION 33, TOWNSHIP 2 SOUTH, RANGE 68 WEST OF THE 6TH P.M., COUNTY OF ADAMS, COLORADO

LEGAL DESCRIPTION CONTINUED:

- 2. N 89°58'07" W, A DISTANCE OF 204.00 FEET TO A POINT OF CURVATURE;
- 3. ALONG THE ARC OF A CURVE TO THE LEFT HAVING A RADIUS OF 38.00 FEET, A CENTRAL ANGLE OF 90°00'00" AND AN ARC LENGTH OF 59.69 FEET;

THENCE N 00°01'53" E, A DISTANCE OF 11.47 FEET TO A POINT ON THE SOUTH LINE OF SAID TRACT B, SHERRELWOOD VILLAGE;

THENCE ALONG THE SOUTH AND WEST LINES OF SAID TRACT B THE FOLLOWING TWO (2) COURSES:

- 1. N 89°58'07" W, A DISTANCE OF 90.00 FEET TO A POINT ON THE WEST LINE OF SAID SHERRELWOOD VILLAGE PLAT, ALSO BEING THE EAST LINE OF SAID PECOS STREET RIGHT-OF-WAY;
- 2. N 00°01'53" E, ALONG SAID WEST LINE, A DISTANCE OF 30.01 FEET TO A POINT ON THE SOUTH LINE OF THAT PARCEL OF LAND DESCRIBED IN SAID DEED RECORDED AT RECEPTION NO. 2019000073502;

THENCE ALONG THE SOUTH, EAST AND NORTH LINES OF SAID DEED, ALSO BEING THE EAST LINE OF THE PECOS STREET RIGHT-OF-WAY THE FOLLOWING THREE (3) COURSES:

- 1. S 89°30'30" W, ALONG A LINE BEING PARALLEL TO THE NORTH LINE OF THE NORTHEAST QUARTER OF SAID SECTION 33, A DISTANCE OF 20.00 FEET TO A POINT BEING 30.00 FEET EAST OF THE WEST LINE OF THE NORTHEAST QUARTER OF SAID SECTION 33:
- 2. N 00°01'53" E, ALONG A LINE BEING 30.00 FEET EAST OF AND PARALLEL TO THE WEST LINE OF THE NORTHEAST QUARTER OF SAID SECTION 33, A DISTANCE OF 208.00 FEET TO A POINT BEING 20.00 FEET SOUTH OF THE NORTH LINE OF THE NORTHEAST QUARTER OF SAID SECTION 33;
- 3. N 89°30'30" E, ALONG A LINE BEING 20.00 FEET SOUTH OF AND PARALLEL TO THE NORTH LINE OF THE NORTHEAST QUARTER OF SAID SECTION 33, A DISTANCE OF 20.00 FEET TO A POINT ON THE WEST LINE OF SAID SHERRELWOOD VILLAGE PLAT, ALSO BEING THE EAST LINE OF THE PECOS STREET RIGHT-OF-WAY AS DEDICATED BY SAID SHERRELWOOD VILLAGE PLAT, BEING 50.00 FEET EAST OF THE WEST LINE OF THE NORTHEAST QUARTER OF SAID SECTION 33;

THENCE N $00^{\circ}01'53$ " E, ALONG SAID EAST LINE OF THE PECOS STREET RIGHT-OF-WAY, BEING 50.00 FEET EAST OF AND PARALLEL TO THE WEST LINE OF THE NORTHEAST QUARTER OF SAID SECTION 33, A DISTANCE OF 20.00 FEET TO THE NORTHWEST CORNER OF SAID SHERRELWOOD VILLAGE PLAT, AND THE POINT OF BEGINNING.

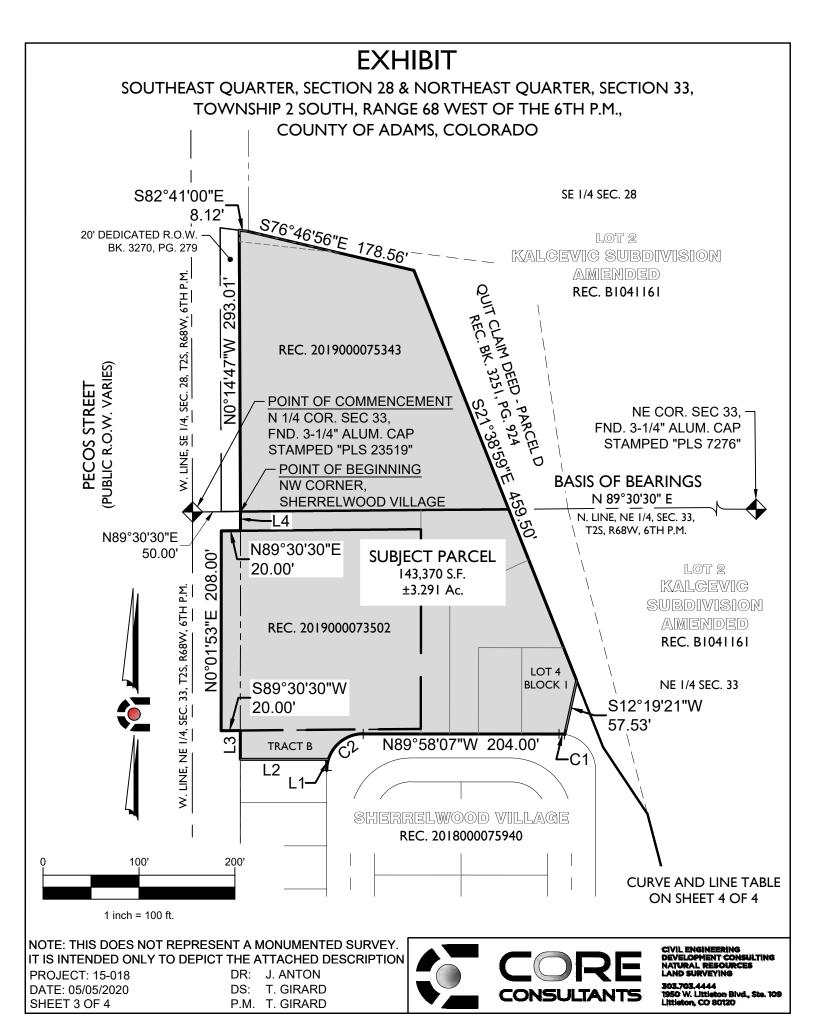
CONTAINING AN AREA OF 143,370 SQUARE FEET OR 3.291 ACRES, MORE OR LESS.

THOMAS M. GIRARD COLORADO PLS 38151 FOR AND ON BEHALF OF CORE CONSULTANTS, INC. 38151 38151 SOUND ON ALLAND

NOTE: THIS DOES NOT REPRESENT A MONUMENTED SURVEY. IT IS INTENDED ONLY TO DEPICT THE ATTACHED DESCRIPTION

PROJECT: 15-018 DR: J. ANTON
DATE: 05/05/2020 DS: T. GIRARD
SHEET 2 OF 4 P.M. T. GIRARD





SOUTHEAST QUARTER, SECTION 28 & NORTHEAST QUARTER, SECTION 33, TOWNSHIP 2 SOUTH, RANGE 68 WEST OF THE 6TH P.M., COUNTY OF ADAMS, COLORADO

LINE TABLE				
LINE#	LENGTH	DIRECTION		
L1	11.47'	N 0°01'53" E		
L2	90.00'	N 89°58'07" W		
L3	30.01'	N 0°01'53" E		
L4	20.00'	N 0°01'53" E		

CURVE TABLE					
CURVE#	LENGTH	RADIUS	DELTA	CHORD BEARING	CHORD LENGTH
C1	6.02'	38.00'	9°04'20"	N85°25'57"W	6.01'
C2	59.69'	38.00'	90°00'00"	S45°01'53"W	53.74'

NOTE: THIS DOES NOT REPRESENT A MONUMENTED SURVEY. IT IS INTENDED ONLY TO DEPICT THE ATTACHED DESCRIPTION

 PROJECT: 15-018
 DR:
 J. ANTON

 DATE: 05/05/2020
 DS:
 T. GIRARD

 SHEET 4 OF 4
 P.M. T. GIRARD



CIVIL ENGINEERING DEVELOPMENT CONSULTING NATURAL RESOURCES LAND SURVEYING

303,703,4444 1950 W. Littleton Blvd., Ste. 109 Littleton, CO 80120

NORTHEAST QUARTER, SECTION 33, TOWNSHIP 2 SOUTH, RANGE 68 WEST OF THE 6TH P.M., COUNTY OF ADAMS, COLORADO

LEGAL DESCRIPTION:

A PARCEL OF LAND BEING TRACTS B & D, LOTS 1 THROUGH 4, BLOCK 1, AND A PORTION OF LOT 8, BLOCK 2, SHERRELWOOD VILLAGE, A SUBDIVISION PLAT RECORDED AT RECEPTION NO. 2018000075940 IN THE RECORDS OF THE ADAMS COUNTY CLERK AND RECORDER'S OFFICE, LYING WITHIN THE NORTHEAST QUARTER OF SECTION 33, TOWNSHIP 2 SOUTH, RANGE 68 WEST OF THE SIXTH PRINCIPAL MERIDIAN, COUNTY OF ADAMS, STATE OF COLORADO, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

THE BEARINGS FOR THIS DESCRIPTION ARE BASED ON THE NORTH LINE OF THE NORTHEAST QUARTER OF SECTION 33, TOWNSHIP 2 SOUTH, RANGE 68 WEST OF THE SIXTH P.M., BEING ASSUMED TO BEAR N 89°30'30" E, FROM THE NORTH QUARTER CORNER OF SAID SECTION 33, BEING MONUMENTED BY A REBAR WITH A 3-1/4 INCH ALUMINUM CAP, STAMPED "PLS 23519" TO THE NORTHEAST CORNER OF SAID SECTION 33, BEING MONUMENTED BY A REBAR WITH A 3-1/4 INCH ALUMINUM CAP, STAMPED "PLS 7276", WITH ALL BEARINGS CONTAINED HEREIN RELATIVE THERETO.

COMMENCING AT THE NORTH QUARTER CORNER OF SAID SECTION 33, THENCE N 89°30'30" E, ALONG THE NORTH LINE OF THE NORTHEAST QUARTER OF SAID SECTION 33, A DISTANCE OF 50.00 FEET TO A POINT ON THE EAST LINE OF THE PECOS STREET RIGHT-OF-WAY, ALSO BEING THE NORTHWEST CORNER OF SAID SHERRELWOOD VILLAGE PLAT AND THE POINT OF BEGINNING:

THENCE ALONG THE NORTH AND EAST LINES OF SAID SHERRELWOOD VILLAGE PLAT, THE FOLLOWING TWO (2) COURSES:

- 1. N 89°30'30" E, A DISTANCE OF 279.36 FEET;
- 2. S 21°38'59" E, A DISTANCE OF 191.87 FEET TO THE EAST CORNER OF LOT 4, BLOCK 1;

THENCE S 12°19'21" W, ALONG THE SOUTHEAST LINE OF SAID LOT 4, BLOCK 1, A DISTANCE OF 57.53 FEET TO A POINT ON THE NORTH LINE OF WEST 79TH WAY RIGHT-OF-WAY, AS DEDICATED BY SAID SHERRELWOOD VILLAGE PLAT AND A POINT OF NON-TANGENT CURVATURE:

THENCE ALONG THE NORTH LINE OF SAID WEST 79TH WAY RIGHT-OF-WAY THE FOLLOWING THREE (3) COURSES:

- ALONG THE ARC OF A NON-TANGENT CURVE TO THE LEFT HAVING A RADIUS OF 38.00 FEET, A
 CENTRAL ANGLE OF 09°04'20" AND AN ARC LENGTH OF 6.02 FEET, THE CHORD OF WHICH BEARS
 N 85°25'57" W, A DISTANCE OF 6.01 FEET;
- N 89°58'07" W, A DISTANCE OF 204.00 FEET TO A POINT OF CURVATURE;
- 3. ALONG THE ARC OF A CURVE TO THE LEFT HAVING A RADIUS OF 38.00 FEET, A CENTRAL ANGLE OF 90°00'00" AND AN ARC LENGTH OF 59.69 FEET TO A POINT ON THE WEST LINE OF SAID LOT 8;

THENCE N 00°01'53" E, A DISTANCE OF 11.47 FEET TO A POINT ON THE SOUTH LINE OF SAID TRACT B; THENCE ALONG THE SOUTH AND WEST LINES OF SAID TRACT B THE FOLLOWING TWO (2) COURSES:

- N 89°58'07" W, A DISTANCE OF 90.00 FEET TO A POINT ON THE WEST LINE OF SAID SHERRELWOOD VILLAGE PLAT, ALSO BEING THE EAST LINE OF SAID PECOS STREET RIGHT-OF-WAY, AS DEDICATED BY SAID SHERRELWOOD VILLAGE PLAT;
- 2. N 00°01'53" E, ALONG SAID EAST LINE, A DISTANCE OF 30.01 FEET TO A POINT ON THE SOUTH LINE OF THAT PARCEL OF LAND DESCRIBED IN SAID RECEPTION NO. 2019000073502;

NOTE: THIS DOES NOT REPRESENT A MONUMENTED SURVEY.
IT IS INTENDED ONLY TO DEPICT THE ATTACHED DESCRIPTION

PROJECT: 15-018 DR: J. ANTON
DATE: 05/05/2020 DS: T. GIRARD
SHEET 1 OF 3 P.M. T. GIRARD



NORTHEAST QUARTER, SECTION 33, TOWNSHIP 2 SOUTH, RANGE 68 WEST OF THE 6TH P.M., COUNTY OF ADAMS, COLORADO

LEGAL DESCRIPTION CONTINUED:

THENCE ALONG THE SOUTH, EAST AND NORTH LINES OF SAID PARCEL OF LAND,, THE FOLLOWING THREE (3) COURSES:

- N 89°30'30" E, ALONG A LINE BEING PARALLEL TO THE NORTH LINE OF THE NORTHEAST QUARTER OF SAID SECTION 33, A DISTANCE OF 188.00 FEET TO A POINT ON THE WEST LINE OF LOT 1, BLOCK 1 SAID SHERRELWOOD VILLAGE PLAT;
- 2. N 00°01'53" E, ALONG SAID WEST LINE, A DISTANCE OF 208.00 FEET TO THE SOUTHEAST CORNER OF SAID TRACT D;
- 3. S 89°30'30" W, ALONG THE SOUTH LINE OF SAID TRACT D, A DISTANCE OF 188.00 FEET TO A POINT ON THE WEST LINE OF SAID SHERRELWOOD VILLAGE PLAT, AND THE EAST LINE OF SAID PECOS STREET RIGHT-OF-WAY, BEING 50.00 FEET EAST OF THE WEST LINE OF THE NORTHEAST QUARTER OF SAID SECTION 33:

THENCE N 00°01'53" E, ALONG SAID EAST LINE, BEING 50.00 FEET EAST OF AND PARALLEL TO THE WEST LINE OF THE NORTHEAST QUARTER OF SAID SECTION 33, A DISTANCE OF 20.00 FEET TO THE NORTHWEST CORNER OF SAID SHERRELWOOD VILLAGE PLAT, AND THE POINT OF BEGINNING.

CONTAINING AN AREA OF 38,549 SQUARE FEET OR 0.885 ACRES, MORE OR LESS.

THOMAS M. GIRARD COLORADO PLS 38151 FOR AND ON BEHALF OF CORE CONSULTANTS, INC.



NOTE: THIS DOES NOT REPRESENT A MONUMENTED SURVEY. IT IS INTENDED ONLY TO DEPICT THE ATTACHED DESCRIPTION

PROJECT: 15-018 DR: J. ANTON
DATE: 05/05/2020 DS: T. GIRARD
SHEET 2 OF 3 P.M. T. GIRARD



n. CO 80120

EXHIBIT NORTHEAST QUARTER, SECTION 33, TOWNSHIP 2 SOUTH, RANGE 68 WEST OF THE 6TH P.M., COUNTY OF ADAMS, COLORADO SE 1/4 SEC. 28 POINT OF COMMENCEMENT N 1/4 COR. SEC 33, REC. 2019000075343 FND. 3-1/4" ALUM. CAP NE COR. SEC 33, STAMPED "PLS 23519" FND. 3-1/4" ALUM. CAP BASIS OF BEARINGS STAMPED "PLS 7276" POINT OF BEGINNING N. LINE, NE 1/4, SEC. 33 **NW CORNER** N 89°30'30" E SHERRELWOOD VILLAGE N89°30'30"E 279.36' TRACT D N89°30'30"E (1)50.00' S89°30'30"W 188.00' LOT I N0°01'53"E 20.00 SUBJECT PARCEL 38.549 S.F. T2S, R68W, 6TH P.M. ±0.885 Ac. NE 1/4 SEC. 33 PUBLIC R.O.W. VARIES) LOT 2 PECOS STREET SHERRELWOOD VILLAGE REC. 2019000073502 REC. 2018000075940 W. LINE, NE 1/4, SEC. 33, LOT 3 LOT 4 N89°30'30"E 188.00' N89°58'07"W 204.00' N0°01'53"E TRACT B W. 79TH WAY 30.01' N89°58'07"W (50' PUBLIC R.O.W.) 90.00' N0°01'53"E SHERRELWOOD VILLAGE 11.47' REC. 2018000075940 **CURVE TABLE** 60' 120' CURVE# LENGTH **RADIUS DELTA CHORD BEARING CHORD LENGTH** 6.02' 38.00 9°04'20" C1 N85°25'57"W 6.01' 1 inch = 60 ft. C2 59.69 38.00 90°00'00" S45°01'53"W 53.74' NOTE: THIS DOES NOT REPRESENT A MONUMENTED SURVEY.

IT IS INTENDED ONLY TO DEPICT THE ATTACHED DESCRIPTION

PROJECT: 15-018 DR: J. ANTON DATE: 05/05/2020 DS: T. GIRARD SHEET 3 OF 3 P.M. T. GIRARD



littleton CO 80120

NORTHEAST QUARTER, SECTION 33, TOWNSHIP 2 SOUTH, RANGE 68 WEST OF THE 6TH P.M., COUNTY OF ADAMS, COLORADO

LEGAL DESCRIPTION:

A PARCEL OF LAND BEING A PORTION OF SHERRELWOOD VILLAGE, A SUBDIVISION PLAT RECORDED AT RECEPTION NO. 2018000075940 IN THE RECORDS OF THE ADAMS COUNTY CLERK AND RECORDER'S OFFICE, LYING WITHIN THE NORTHEAST QUARTER OF SECTION 33, TOWNSHIP 2 SOUTH, RANGE 68 WEST OF THE SIXTH PRINCIPAL MERIDIAN, COUNTY OF ADAMS, STATE OF COLORADO, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

THE BEARINGS FOR THIS DESCRIPTION ARE BASED ON THE NORTH LINE OF THE NORTHEAST QUARTER OF SECTION 33, TOWNSHIP 2 SOUTH, RANGE 68 WEST OF THE SIXTH P.M., BEING ASSUMED TO BEAR N 89°30'30" E, FROM THE NORTH QUARTER CORNER OF SAID SECTION 33, BEING MONUMENTED BY A REBAR WITH A 3-1/4 INCH ALUMINUM CAP, STAMPED "PLS 23519" TO THE NORTHEAST CORNER OF SAID SECTION 33, BEING MONUMENTED BY A REBAR WITH A 3-1/4 INCH ALUMINUM CAP, STAMPED "PLS 7276", WITH ALL BEARINGS CONTAINED HEREIN RELATIVE THERETO.

COMMENCING AT THE NORTH QUARTER CORNER OF SAID SECTION 33, THENCE S 10°57'17" E, A DISTANCE OF 262.37 FEET TO THE NORTHWEST CORNER OF LOT 8, BLOCK 2, SAID SHERRELWOOD VILLAGE PLAT AND THE POINT OF BEGINNING;

THENCE S 89°58'07" E, ALONG THE NORTH LINE OF SAID LOT 8, A DISTANCE OF 90.00 FEET;

THENCE S 00°01'53" W, A DISTANCE OF 11.47 FEET TO A POINT ON THE WEST LINE OF THE OSAGE STREET RIGHT-OF-WAY AND A POINT OF NON-TANGENT CURVATURE:

THENCE ALONG THE WEST LINE OF THE OSAGE STREET RIGHT-OF-WAY AND ALONG THE NORTH LINE OF THE WEST 79TH WAY RIGHT-OF-WAY, AS DEDICATED BY SAID SHERRELWOOD VILLAGE PLAT, THE FOLLOWING THREE (3) COURSES:

- ALONG THE ARC OF A NON-TANGENT CURVE TO THE RIGHT HAVING A RADIUS OF 38.00 FEET, A CENTRAL ANGLE OF 90°00'00" AND AN ARC LENGTH OF 59.69 FEET, THE CHORD OF WHICH BEARS N 45°01'53" E, A DISTANCE OF 53.74 FEET.
- 2. S 89°58'07" E, A DISTANCE OF 204.00 FEET TO A POINT OF CURVATURE;
- 3. ALONG THE ARC OF A CURVE TO THE RIGHT HAVING A RADIUS OF 38.00 FEET, A CENTRAL ANGLE OF 09°04'20" AND AN ARC LENGTH OF 6.02 FEET TO THE SOUTHEAST CORNER OF LOT 4, BLOCK 1, SAID SHERRELWOOD VILLAGE PLAT;

THENCE N 12°19'21" E, ALONG THE SOUTHEAST LINE OF SAID LOT 4, A DISTANCE OF 57.53 FEET TO A POINT ON THE EAST LINE SAID SHERRELWOOD VILLAGE PLAT;

THENCE ALONG THE EAST, SOUTH AND WEST LINES OF SAID SHERRELWOOD VILLAGE PLAT, THE FOLLOWING NINE (9) COURSES:

- 1. S 21°38'59" E, A DISTANCE OF 75.05 FEET;
- 2. S 33°40'19" E, A DISTANCE OF 83.13 FEET;
- 3. S 14°37'52" E, A DISTANCE OF 76.08 FEET;
- 4. N 88°03'04" E, A DISTANCE OF 39.50 FEET;
- 5. S 01°01'29" E, A DISTANCE OF 259.37 FEET TO A POINT ON THE NORTH LINE OF THE ELMWOOD PARK SUBDIVISION, RECORDED AT RECEPTION NO. C0184761, SAID COUNTY RECORDS;
- 6. S 89°32'44" W, ALONG SAID NORTH LINE, A DISTANCE OF 611.65 FEET TO THE SOUTHWEST CORNER OF SAID SHERRELWOOD VILLAGE PLAT, AND THE EAST LINE OF THE PECOS STREET RIGHT-OF-WAY, AS DEDICATED BY SAID SHERRELWOOD VILLAGE PLAT:
- 7. N 00°01'53" E, ALONG SAID EAST LINE, A DISTANCE OF 556.60 FEET TO THE POINT OF BEGINNING.

CONTAINING AN AREA OF 307,507 SQUARE FEET OR 7.059 ACRES, MORE OR LESS.

THOMAS M. GIRARD COLORADO PLS 38151 FOR AND ON BEHALF OF CORE CONSULTANTS, INC.

NOTE: THIS DOES NOT REPRESENT A MONUMENTED SURVEY. IT IS INTENDED ONLY TO DEPICT THE ATTACHED DESCRIPTION

PROJECT: 15-018 DR: J. ANTON
DATE: 05/05/2020 DS: T. GIRARD
SHEET 1 OF 3 P.M. T. GIRARD

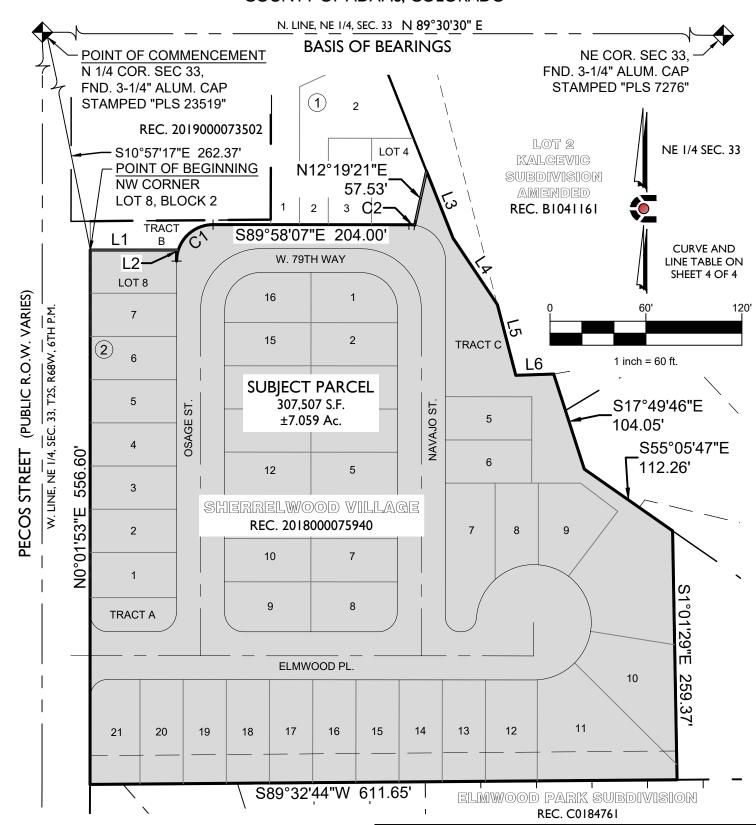


CIVIL ENGINEERING
DEVELOPMENT CONSULTING
NATURAL RESOURCES
LAND SURVEYING
303.703.4444
1950 W. Littleton Blvd., Ste. 109

Littleton, CO 80120

NAL LAND

NORTHEAST QUARTER, SECTION 33, TOWNSHIP 2 SOUTH, RANGE 68 WEST OF THE 6TH P.M., COUNTY OF ADAMS, COLORADO



NOTE: THIS DOES NOT REPRESENT A MONUMENTED SURVEY. IT IS INTENDED ONLY TO DEPICT THE ATTACHED DESCRIPTION

 PROJECT: 15-018
 DR:
 J. ANTON

 DATE: 05/05/2020
 DS:
 T. GIRARD

 SHEET 2 OF 3
 P.M. T. GIRARD



CIVIL ENGINEERING DEVELOPMENT CONSULTING NATURAL RESOURCES LAND SURVEYING

303.703.4444 1950 W. Littleton Bivd., Ste. 109 Littleton, CO 80120

NORTHEAST QUARTER, SECTION 33, TOWNSHIP 2 SOUTH, RANGE 68 WEST OF THE 6TH P.M., COUNTY OF ADAMS, COLORADO

LINE TABLE				
LINE#	LENGTH	DIRECTION		
L1	90.00'	S 89°58'07" E		
L2	11.47'	S 0°01'53" W		
L3	75.05'	S 21°38'59" E		
L4	83.13'	S 33°40'19" E		
L5	76.08'	S 14°37'52" E		
L6	39.50'	N 88°03'04" E		

CURVE TABLE							
CURVE#	LENGTH	RADIUS	DELTA	CHORD BEARING	CHORD LENGTH		
C1	59.69'	38.00'	90°00'00"	N45°01'53"E	53.74'		
C2	6.02'	38.00'	9°04'20"	S85°25'57"E	6.01'		

NOTE: THIS DOES NOT REPRESENT A MONUMENTED SURVEY. IT IS INTENDED ONLY TO DEPICT THE ATTACHED DESCRIPTION

PROJECT: 15-018 DR: J. ANTON
DATE: 05/05/2020 DS: T. GIRARD
SHEET 3 OF 3 P.M. T. GIRARD





Land Title Guarantee Company Customer Distribution



PREVENT FRAUD - Please remember to call a member of our closing team when initiating a wire transfer or providing wiring instructions.

Order Number: RND70700124-3 Date: 05/14/2021

Property Address: 7996 AND 8000 PECOS STREET AND 7957 OSAGE, DENVER, CO 80221

PLEASE CONTACT YOUR CLOSER OR CLOSER'S ASSISTANT FOR WIRE TRANSFER INSTRUCTIONS

For Closing Assistance For Title Assistance

SANDY JOHNSON

5975 GREENWOOD PLAZA BLVD GREENWOOD VILLAGE, CO 80111

(303) 850-4126 (Work) **sajohnson@ltgc.com**

Agent for Seller

TERRACINA DESIGN Attention: MICHAEL WEIHER 10200 E GIRARD AVE #A314 DENVER, CO 80231 (303) 632-8867 (Work) mweiher@terracinadesign.com

Delivered via: Electronic Mail



Land Title Guarantee Company Estimate of Title Fees

Order Number: <u>RND70700124-3</u> Date: <u>05/14/2021</u>

Property Address: 7996 AND 8000 PECOS STREET AND 7957 OSAGE, DENVER, CO 80221

Parties: DELWEST DEVELOPMENT CORP., A COLORADO CORPORATION

DELWEST DEVELOPMENT CORP, A COLORADO CORPORATION, AS TO THAT PORTION OF LAND DESCRIBED IN WARRANTY DEEDS RECORDED SEPTEMBER 5, 2019 UNDER RECEPTION NO. 2019000073502 AND SEPTEMBER 10, 2019 UNDER RECEPTION NO. 2019000075343 AND ELMWOOD POINTE LLC, A COLORADO LIMITED LIABILITY COMPANY, AS TO THAT PORTION OF LAND DESCRIBED IN QUIT CLAIM DEED RECORDED JUNE 10, 2019 UNDER RECEPTION NO. 2019000044105 AND SHIRLEY DUNOMES, AS TO THAT PORTION OF LAND DESCRIBED IN WARRANTY DEED RECORDED MARCH 31, 2020 UNDER RECEPTION NO. 2020000029034 AND 7840 PECOS INVESTMENTS LLC, A COLORADO LIMITED LIABILITY COMPANY, AS TO THAT PORTION OF LAND DESCRIBED IN SPECIAL WARRANTY DEED RECORDED DECEMBER 16, 2018 UNDER RECEPTION NO. 20150000104930

Visit Land Title's Website at www.ltgc.com for directions to any of our offices.

Estimate of Title insurance Fees					
"TBD" Commitment	\$423.00				
RESEARCH INCOME-COMML	\$270.00				
TBD - TBD Income	\$-693.00				
	Total \$0.00				
If Land Title Guarantee Company will be closing this transaction, the fees listed above will be collected at closing.					
Thank you for your order!					

Note: The documents linked in this commitment should be reviewed carefully. These documents, such as covenants conditions and restrictions, may affect the title, ownership and use of the property. You may wish to engage legal assistance in order to fully understand and be aware of the implications of the effect of these documents on your property.

Chain of Title Documents:

Adams county recorded 06/10/2019 under reception no. 2019000044105

Adams county recorded 09/05/2019 under reception no. 2019000073502

Adams county recorded 09/10/2019 under reception no. 2019000075343

<u>Adams county recorded 12/16/2015 under reception no.</u> 20150000104930

Adams county recorded 03/31/2020 under reception no. 2020000029031

Plat Map(s):							
Adams county recorded 09/18/2018 under reception no. 2018000075940							

Old Republic National Title Insurance Company

Schedule A

Order Number: RND70700124-3

Property Address:

7996 AND 8000 PECOS STREET AND 7957 OSAGE, DENVER, CO 80221

1. Effective Date:

05/07/2021 at 5:00 P.M.

2. Policy to be Issued and Proposed Insured:

"TBD" Commitment \$0.00

Proposed Insured:

DELWEST DEVELOPMENT CORP., A COLORADO

CORPORATION

3. The estate or interest in the land described or referred to in this Commitment and covered herein is:

A FEE SIMPLE

4. Title to the estate or interest covered herein is at the effective date hereof vested in:

DELWEST DEVELOPMENT CORP, A COLORADO CORPORATION, AS TO THAT PORTION OF LAND DESCRIBED IN WARRANTY DEEDS RECORDED SEPTEMBER 5, 2019 UNDER RECEPTION NO. 2019000073502 AND SEPTEMBER 10, 2019 UNDER RECEPTION NO. 2019000075343 AND ELMWOOD POINTE LLC, A COLORADO LIMITED LIABILITY COMPANY, AS TO THAT PORTION OF LAND DESCRIBED IN QUIT CLAIM DEED RECORDED JUNE 10, 2019 UNDER RECEPTION NO. 2019000044105 AND SHIRLEY DUNOMES, AS TO THAT PORTION OF LAND DESCRIBED IN WARRANTY DEED RECORDED MARCH 31, 2020 UNDER RECEPTION NO. 2020000029034 AND 7840 PECOS INVESTMENTS LLC, A COLORADO LIMITED LIABILITY COMPANY, AS TO THAT PORTION OF LAND DESCRIBED IN SPECIAL WARRANTY DEED RECORDED DECEMBER 16, 2018 UNDER RECEPTION NO. 20150000104930

5. The Land referred to in this Commitment is described as follows:

A PARCEL OF LAND BEING TRACTS B & D, LOTS 1 THROUGH 4, BLOCK 1 AND A PORTION OF LOT 8, BLOCK 2, SHERRELWOOD VILLAGE, A SUBDIVISION PLAT RECORDED AT RECEPTION NO. 2018000075940 TOGETHER WITH THAT PARCEL OF LAND DESCRIBED IN THAT WARRANTY DEED RECORDED AT RECEPTION NO. 2019000073502 AND THAT PARCEL OF LAND DESCRIBED IN THAT WARRANTY DEED RECORDED AT RECEPTION NO. 2019000075343, ALL IN THE RECORDS OF THE ADAMS COUNTY CLERK AND RECORDER'S OFFICE, LYING WTHIN THE SOUTHEAST QUARTER OF SECTION 28 AND THE NORTHEAST QUARTER OF SECTION 33, TOWNSHIP 2 SOUTH, RANGE 68 WEST OF THE SIXTH PRINCIPAL MERIDIAN, COUNTY OF ADAMS, STATE OF COLORADO, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

THE BEARINGS FOR THIS DESCRIPTION ARE BASED ON THE NORTH LINE OF THE NORTHEAST QUARTER OF SECTION 33, TOWNSHIP 2 SOUTH, RANGE 68 WEST OF THE SIXTH PRINCIPAL MERIDIAN, BEING ASSUMED TO BEAR N 89°30'30" E, FROM THE NORTH QUARTER CORNER OF SAID SECTION 33, BEING MONUMENTED BY A REBAR WITH A 3-1/4 INCH ALUMINUM CAP, STAMPED "PLS 23519" TO THE NORTHEAST CORNER OF SAID SECTION 33, BEING MONUMENTED BY A REBAR WITH A 3-1/4 INCH ALUMINUM CAP STAMPED "PLS 7276", WITH ALL BEARINGS CONTAINED HEREIN RELATIVE THERETO.

COMMENCING AT THE NORTH QUARTER OF SAID SECTION 33, THENCE N 89°30'30" E, ALONG THE NORTH LINE OF THE NORTHEAST QUARTER OF SAID SECTION 33, A DISTANCE OF 50.00 FEET TO A POINT ON THE EAST LINE OF THE PECOS STREET RIGHT-OF-WAY AS DEDICATED BY THAT RESOLUTION RECORDED IN BOOK 3270 AT PAGE 279, SAID ADAMS COUNTY RECORDS, ALSO BEING

Old Republic National Title Insurance Company

Schedule A

Order Number: <u>RND70700124-3</u>

THE NORTHWEST CORNER OF SAID SHERRELWOOD VILLAGE PLAT AND THE SOUTHWEST CORNER OF THAT PARCEL OF LAND DESCRIBED IN SAID DEED, RECEPTION NO. 2019000075343 AND THE POINT OF BEGINNING:

THENCE N 00°14'47" W, ALONG THE EAST LINE OF SAID PECOS STREET RIGHT-OF-WAY, AND THE WEST LINE OF SAID DEED, RECEPTION NO. 2019000075343, ALONG A LINE BEING 50.00 FEET EAST OF AND PARALLEL TO THE WEST LINE OF THE SOUTHEAST QUARTER OF SAID SECTION 28, A DISTANCE OF 293.01 FEET TO THE NORTHWEST CORNER OF SAID DEED, RECEPTION NO. 2019000075343; THENCE S 82°41'00" E, CONTINUING ALONG THE PECOS STREET RIGHT-OF-WAY AND THE NORTH LINE OF SAID DEED, A DISTANCE OF 8.10 FEET TO A POINT ON THE EAST LINE OF SAID PECOS STREET RIGHT-OF-WAY AND THE WEST CORNER OF PARCEL D, AS DESCRIBED IN THAT QUIT CLAIM DEED RECORDED IN BOOK 3251 AT PAGE 924, SAID COUNTY RECORDS;

THENCE ALONG THE SOUTH AND WEST LINES OF SAID PARCEL D THE FOLLOWING THREE (3) COURSES:

- 1. S 76°46'55" E, A DISTANCE OF 178.58 FEET;
- 2. S 21°38'59" E, ALONG THE EAST LINES OF SAID DEED, RECEPTION NO. 2019000075343 AND THE EAST LINE OF SAID SHERRELWOOD VILLAGE PLAT, A DISTANCE OF 459.50 FEET TO THE EAST CORNER OF LOT 4, BLOCK 1;

THENCE S 12°19'21" W, ALONG THE SOUTHEAST LINE OF SAID LOT 4, BLOCK 1, A DISTANCE OF 57.53 FEET TO A POINT ON THE NORTH LINE OF WEST 79TH WAY RIGHT-OF-WAY, AS DEDICATED BY SAID SHERRELWOOD VILLAGE PLAT AND A POINT OF NON-TANGENT CURVATURE:

THENCE ALONG THE NORTH LINE OF THE WEST 79TH WAY RIGHT-OF-WAY THE FOLLOWING THREE (3) COURSES:

- 1. ALONG THE ARC OF A NON-TANGENT CURVE TO THE LEFT HAVING A RADIUS OF 38.00 FEET, A CENTRAL ANGLE OF 09°04'20" AND AN ARC LENGTH OF 6.02 FEET, THE CHORD OF WHICH BEARS N 85°27'57" W, A DISTANCE OF 6.01 FEET;
- 2. N 89°58'07" W, A DISTANCE OF 204.00 FEET TO A POINT OF CURVATURE;
- 3. ALONG THE ARC OF A CURVE TO THE LEFT HAVING A RADIUS OF 38.00 FEET, A CENTRAL ANGLE OF 90°00'00" AND AN ARC LENGTHOF 59.69 FEET;
- THENCE N 00°01'53" E, A DISTANCE OF 11.47 FEET TO A POINT ON THE SOUTH LINE OF SAID TRACT B, SHERRELWOOD VILLAGE;
- THENCE ALONG THE SOUTH AND WEST LINES OF SAID TRACT B THE FOLLOWING TWO (2) COURSES: 1. N 89°58'07" W, A DISTANCE OF 90.00 FEET TO A POINT ON THE WEST LINE OF SAID SHERRELWOOD VILLAGE PLAT, ALSO BEING THE EAST LINE OF SAID PECOS STREET RIGHT-OF-WAY;
- 2. N 00°01'53" E, ALONG SAID WEST LINE, A DISTANCE OF 30.01 FEET TO A POINT ON THE SOUTH LINE OF THAT PARCEL OF LAND DESCRIBED IN SAID DEED RECORDED AT RECEPTION NO. 2019000073502; THENCE ALONG THE SOUTH, EAST AND NORTH LINES OF SAID DEED, ALSO BEING THE SOUTH LINE OF THE PECOS STREET RIGHT-OF-WAY THE FOLLOWING THREE (3) COURSES:
- 1. S 89°30'30" W, ALONG A LINE BEING PARALLEL TO THE NORTH LINE OF THE NORTHEAST QUARTER OF SAID SECTION 33, A DISTANCE OF 20.00 FEET TO A POINT BEING 30.00 FEET EAST OF THE WEST LINE OF THE NORTHEAST QUARTER OF SAID SECTION 33;
- 2. N 00°01'53" E, ALONG A LINE BEING 30.00 FEET EAST OF AND PARALLEL TO THE WEST LINE OF THE NORTHEAST QUARTER OF SAID SECTION 33, A DISTANCE OF 208.00 FEET TO A POINT BEING 20.00 FEET SOUTH OF THE NORTH LINE OF THE NORTHEAST QUARTER OF SAID SECTION 33;
- 3. N 89°30'30" E, ALONG A LINE BEING 20.00 FEET SOUTH OF AND PARALLEL TO THE NORTH LINE OF THE NORTHEAST QUARTER OF SAID SECTION 33, A DISTANCE OF OF 20.00 FEET TO A POINT ON THE WEST LINE OF SAID SHERRELWOOD VILLAGE PLAT, ALSO BEING THE EAST LINE OF THE PECOS STREET RIGHT-OF-WAY AS DEDICATED BY SAID SHERRELWOOD VILLAGE PLAT, BEING 50.00 FEET EAST OF THE WEST LINE OF THE NORTHEAST QUARTER OF SAID SECTION 33;

THENCE N 00°01'53" E, ALONG SAID EAST LINE OF THE PECOS STREET RIGHT-OF-WAY, BEING 50.00 FEET EAST OF AND PARALLEL TO THE WEST LINE OF THE NORTHEAST QUARTER OF SAID SECTION

Old Republic National Title Insurance Company

Schedule A

Order Number: RND70700124-3

33, A DISTANCE OF 20.00 FEET TO THE NORTHWEST CORNER OF SAID SHERRELWOOD VILLAGE PLAT, AND THE POINT OF BEGINNING.

LEGAL DESCRIPTION PREPARED BY: THOMAS M GIRARAD COLORADO PLS 38151 FOR AND ON BEHALF OF CORE CONSULTANTS, INC. 1950 W LITTLETON BLVD., STE. 109 LITTLETON, CO 80120

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Old Republic National Title Insurance Company Schedule B, Part I (Requirements)

Order Number: RND70700124-3

All of the following Requirements must be met:

This proposed Insured must notify the Company in writing of the name of any party not referred to in this Commitment who will obtain an interest in the Land or who will make a loan on the Land. The Company may then make additional Requirements or Exceptions.

Pay the agreed amount for the estate or interest to be insured.

Pay the premiums, fees, and charges for the Policy to the Company.

Documents satisfactory to the Company that convey the Title or create the Mortgage to be insured, or both, must be properly authorized, executed, delivered, and recorded in the Public Records.

THIS COMMITMENT IS FOR INFORMATION ONLY, AND NO POLICY WILL BE ISSUED PURSUANT HERETO.

Old Republic National Title Insurance Company

Schedule B, Part II

(Exceptions)

Order Number: RND70700124-3

This commitment does not republish any covenants, condition, restriction, or limitation contained in any document referred to in this commitment to the extent that the specific covenant, conditions, restriction, or limitation violates state or federal law based on race, color, religion, sex, sexual orientation, gender identity, handicap, familial status, or national origin.

- 1. Any facts, rights, interests, or claims thereof, not shown by the Public Records but that could be ascertained by an inspection of the Land or that may be asserted by persons in possession of the Land.
- 2. Easements, liens or encumbrances, or claims thereof, not shown by the Public Records.
- Any encroachment, encumbrance, violation, variation, or adverse circumstance affecting the Title that would be disclosed by an accurate and complete land survey of the Land and not shown by the Public Records.
- 4. Any lien, or right to a lien, for services, labor or material heretofore or hereafter furnished, imposed by law and not shown by the Public Records.
- Defects, liens, encumbrances, adverse claims or other matters, if any, created, first appearing in the
 public records or attaching subsequent to the effective date hereof but prior to the date of the proposed
 insured acquires of record for value the estate or interest or mortgage thereon covered by this
 Commitment.
- 6. (a) Taxes or assessments that are not shown as existing liens by the records of any taxing authority that levies taxes or assessments on real property or by the Public Records; (b) proceedings by a public agency that may result in taxes or assessments, or notices of such proceedings, whether or not shown by the records of such agency or by the Public Records.
- 7. (a) Unpatented mining claims; (b) reservations or exceptions in patents or in Acts authorizing the issuance thereof; (c) water rights, claims or title to water.
- 8. EXISTING LEASES AND TENANCIES, IF ANY.
- 9. RIGHTS OF THE PUBLIC IN AND TO ANY PORTION OF THE SUBJECT PROPERTY LYING WITHIN THE RIGHT OF WAY OF PECOS STREET.
- 10. TERMS, CONDITIONS, PROVISIONS, BURDENS, OBLIGATIONS AND EASEMENTS AS SET FORTH AND GRANTED IN EXCLUSIVE EASEMENT FOR PIPELINE RECORDED DECEMBER 29, 1986 UNDER RECEPTION NO. B705776.
- 11. TERMS, CONDITIONS, PROVISIONS, BURDENS AND OBLIGATIONS OF EASEMENT DESCRIBED WARRANTY DEED RECORDED APRIL 10, 1963 IN BOOK 1058 AT PAGE 371.
- 12. TERMS, CONDITIONS, PROVISIONS, BURDENS AND OBLIGATIONS OF EASEMENTS DESCRIBED IN DEED RECORDED DECEMBER 29, 1986 IN BOOK 3251 AT PAGE 924.
- 13. TERMS, CONDITIONS AND PROVISIONS OF OPERATION AND MAINTENANCE MANUAL RECORDED APRIL 02, 2018 AT RECEPTION NO. <u>20180000026268</u>.
- 14. TERMS, CONDITIONS AND PROVISIONS OF RESOLUTION 2018-533 RECORDED AUGUST 16, 2018 AT RECEPTION NO. 2018000066629.

Old Republic National Title Insurance Company Schedule B, Part II

(Exceptions)

Order Number: RND70700124-3

- 15. TERMS, CONDITIONS AND PROVISIONS OF RESOLUTION 20108-534 RECORDED AUGUST 16, 2018 AT RECEPTION NO. 2018000066681.
- 16. TERMS, CONDITIONS AND PROVISIONS OF PERMANENT DRAINAGE EASEMENT RECORDED SEPTEMBER 06, 2018 AT RECEPTION NO. <u>2018000072630</u> AND RECORDED APRIL 9, 2019 UNDER RECEPTION NO. <u>2019000025839</u>.
- 17. EASEMENTS, CONDITIONS, COVENANTS, RESTRICTIONS, RESERVATIONS AND NOTES ON THE PLAT OF SHERRELWOOD VILLAGE RECORDED SEPTEMBER 18, 2018 UNDER RECEPTION NO. 2018000075940.
 - AFFIDAVIT OF PLAT CORRECTION RECORDED SEPTEMBER 4, 2019 UNDER RECEPTION NO. **2019000073330**.
- 18. TERMS, CONDITIONS AND PROVISIONS OF SHERRELWOOD VILLAGE PLANNED UNIT DEVELOPMENT-FINAL DEVELOPMENT PLAN RECORDED SEPTEMBER 18, 2018 AT RECEPTION NO. **2018000075941**.
- 19. TERMS, CONDITIONS, PROVISIONS, BURDENS AND OBLIGATIONS AS SET FORTH IN COUNSTRUCTION AND DRAINAGE EASEMENT AGREEMENT RECORDED AUGUST 07, 2019 UNDER RECEPTION NO. 2019000063643.
- 20. RESTRICTIVE COVENANTS, WHICH DO NOT CONTAIN A FORFEITURE OR REVERTER CLAUSE, BUT OMITTING ANY COVENANTS OR RESTRICTIONS, IF ANY, BASED UPON RACE, COLOR, RELIGION, SEX, SEXUAL ORIENTATION, FAMILIAL STATUS, MARITAL STATUS, DISABILITY, HANDICAP, NATIONAL ORIGIN, ANCESTRY, OR SOURCE OF INCOME, AS SET FORTH IN APPLICABLE STATE OR FEDERAL LAWS, EXCEPT TO THE EXTENT THAT SAID COVENANT OR RESTRICTION IS PERMITTED BY APPLICABLE LAW, AS CONTAINED IN INSTRUMENT RECORDED NOVEMBER 08, 2019, UNDER RECEPTION NO. 2019000096873 AND FIRST SUPPLEMENTAL DECLARATION RECORDED MARCH 23, 2020 UNDER RECEPTION NO. 2020000024705.
- 21. TERMS, CONDITIONS, PROVISIONS, BURDENS AND OBLIGATIONS AS SET FORTH IN LIMITED AMENDMENT TO THE DECLARATION OF COVENANTS, CONDITIONS AND RESTRICTIONS FOR ELMWOOD ESTATES (A PLANNED COMMUNITY) RECORDED MAY 07, 2020 UNDER RECEPTION NO. 2020000041819.
- 22. DEED OF TRUST, ASSIGNMENT OF LEASES AND RENTS, SECURITY AGREEMENT AND FIXTURE FILING, FROM ELMWOOD POINTE, LLC, A COLORADO LIMITED LIABILITY COMPANY TO THE PUBLIC TRUSTEE OF ADAMS COUNTY, COLORADO FOR THE USE OF MIDFIRST BANK, A FEDERALLLY CHARTERED SAVINGS ASSOCIATION AND ITS SUCCESSORS AND ASSIGNS TO SECURE THE SUM OF \$12,202,280.00 RECORDED JUNE 10, 2019, UNDER RECEPTION NO. 2019000044106.
- 23. DEED OF TRUST TO THE PUBLIC TRUSTEE, SECURITY AGREEMENT, AND FINANCING STATEMENT DATED DECEMBER 26, 2019, FROM DELWEST DEVELOPMENT CORP., A COLORADO CORPORATION TO THE PUBLIC TRUSTEE OF ADAMS COUNTY, COLORADO FOR THE USE OF MERCY LOAN FUND, A A COLORADO NON-PROFIT CORPORATION TO SECURE THE SUM OF \$1,250,000.00 RECORDED DECEMBER 30, 2019, UNDER RECEPTION NO. 2019000114918.

Old Republic National Title Insurance Company Schedule B, Part II

(Exceptions)

Order Number: RND70700124-3

- 24. DEED OF TRUST DATED MARCH 27, 2020 FROM SHIRLEY DUNOMES TO THE PUBLIC TRUSTEE OF ADAMS COUNTY FOR THE USE OF MORTGAGE ELECTRONIC REGISTRATION SYSTEMS, INC. UNITED WHOLESALE MORTGAGE TO SECURE THE SUM OF \$459,900.00, AND ANY OTHER AMOUNTS PAYABLE UNDER THE TERMS THEREOF, RECORDED MARCH 31, 2020, UNDER RECEPTION NO. 2020000029032.
- 25. TERMS, CONDITIONS, PROVISIONS, BURDENS AND OBLIGATIONS AS SET FORTH IN RESOLUTION APPROVING APPLICATION IN CASE #PRC2020-00010; SHERRELWOOD VILLAGE PUD AMENDMENT RECORDED MARCH 11, 2021 UNDER RECEPTION NO. 2021000029929.



LAND TITLE GUARANTEE COMPANY DISCLOSURE STATEMENTS

Note: Pursuant to CRS 10-11-122, notice is hereby given that:

- (A) The Subject real property may be located in a special taxing district.
- (B) A certificate of taxes due listing each taxing jurisdiction will be obtained from the county treasurer of the county in which the real property is located or that county treasurer's authorized agent unless the proposed insured provides written instructions to the contrary. (for an Owner's Policy of Title Insurance pertaining to a sale of residential real property).
- (C) The information regarding special districts and the boundaries of such districts may be obtained from the Board of County Commissioners, the County Clerk and Recorder, or the County Assessor.

Note: Effective September 1, 1997, CRS 30-10-406 requires that all documents received for recording or filing in the clerk and recorder's office shall contain a top margin of at least one inch and a left, right and bottom margin of at least one half of an inch. The clerk and recorder may refuse to record or file any document that does not conform, except that, the requirement for the top margin shall not apply to documents using forms on which space is provided for recording or filing information at the top margin of the document.

Note: Colorado Division of Insurance Regulations 8-1-2 requires that "Every title entity shall be responsible for all matters which appear of record prior to the time of recording whenever the title entity conducts the closing and is responsible for recording or filing of legal documents resulting from the transaction which was closed". Provided that Land Title Guarantee Company conducts the closing of the insured transaction and is responsible for recording the legal documents from the transaction, exception number 5 will not appear on the Owner's Title Policy and the Lenders Policy when issued.

Note: Affirmative mechanic's lien protection for the Owner may be available (typically by deletion of Exception no. 4 of Schedule B, Section 2 of the Commitment from the Owner's Policy to be issued) upon compliance with the following conditions:

- (A) The land described in Schedule A of this commitment must be a single family residence which includes a condominium or townhouse unit.
- (B) No labor or materials have been furnished by mechanics or material-men for purposes of construction on the land described in Schedule A of this Commitment within the past 6 months.
- (C) The Company must receive an appropriate affidavit indemnifying the Company against un-filed mechanic's and material-men's liens.
- (D) The Company must receive payment of the appropriate premium.
- (E) If there has been construction, improvements or major repairs undertaken on the property to be purchased within six months prior to the Date of Commitment, the requirements to obtain coverage for unrecorded liens will include: disclosure of certain construction information; financial information as to the seller, the builder and or the contractor; payment of the appropriate premium fully executed Indemnity Agreements satisfactory to the company, and, any additional requirements as may be necessary after an examination of the aforesaid information by the Company.

No coverage will be given under any circumstances for labor or material for which the insured has contracted for or agreed to pay.

Note: Pursuant to CRS 10-11-123, notice is hereby given:

This notice applies to owner's policy commitments disclosing that a mineral estate has been severed from the surface estate, in Schedule B-2.

- (A) That there is recorded evidence that a mineral estate has been severed, leased, or otherwise conveyed from the surface estate and that there is substantial likelihood that a third party holds some or all interest in oil, gas, other minerals, or geothermal energy in the property; and
- (B) That such mineral estate may include the right to enter and use the property without the surface owner's permission.

Note: Pursuant to CRS 10-1-128(6)(a), It is unlawful to knowingly provide false, incomplete, or misleading facts or information to an insurance company for the purpose of defrauding or attempting to defraud the company. Penalties may include imprisonment, fines, denial of insurance, and civil damages. Any insurance company or agent of an insurance company who knowingly provides false, incomplete, or misleading facts or information to a policyholder or claimant for the purpose of defrauding or attempting to defraud the policyholder or claimant with regard to a settlement or award payable from insurance proceeds shall be reported to the Colorado Division of Insurance within the Department of Regulatory Agencies.

Note: Pursuant to Colorado Division of Insurance Regulations 8-1-3, notice is hereby given of the availability of a closing protection letter for the lender, purchaser, lessee or seller in connection with this transaction.

Note: Pursuant to CRS 10-1-11(4)(a)(1), Colorado notaries may remotely notarize real estate deeds and other documents using real-time audio-video communication technology. You may choose not to use remote notarization for any document.



JOINT NOTICE OF PRIVACY POLICY OF LAND TITLE GUARANTEE COMPANY, LAND TITLE GUARANTEE COMPANY OF SUMMIT COUNTY LAND TITLE INSURANCE CORPORATION AND OLD REPUBLIC NATIONAL TITLE INSURANCE COMPANY

This Statement is provided to you as a customer of Land Title Guarantee Company as agent for Land Title Insurance Corporation and Old Republic National Title Insurance Company.

We want you to know that we recognize and respect your privacy expectations and the requirements of federal and state privacy laws. Information security is one of our highest priorities. We recognize that maintaining your trust and confidence is the bedrock of our business. We maintain and regularly review internal and external safeguards against unauthorized access to your non-public personal information ("Personal Information").

In the course of our business, we may collect Personal Information about you from:

- applications or other forms we receive from you, including communications sent through TMX, our web-based transaction management system;
- your transactions with, or from the services being performed by us, our affiliates, or others;
- a consumer reporting agency, if such information is provided to us in connection with your transaction;

and

• The public records maintained by governmental entities that we obtain either directly from those entities, or from our affiliates and non-affiliates.

Our policies regarding the protection of the confidentiality and security of your Personal Information are as follows:

- We restrict access to all Personal Information about you to those employees who need to know that information in order to provide products and services to you.
- We may share your Personal Information with affiliated contractors or service providers who provide services in the course of our business, but only to the extent necessary for these providers to perform their services and to provide these services to you as may be required by your transaction.
- We maintain physical, electronic and procedural safeguards that comply with federal standards to protect your Personal Information from unauthorized access or intrusion.
- Employees who violate our strict policies and procedures regarding privacy are subject to disciplinary action.
- We regularly assess security standards and procedures to protect against unauthorized access to Personal Information.

WE DO NOT DISCLOSE ANY PERSONAL INFORMATION ABOUT YOU WITH ANYONE FOR ANY PURPOSE THAT IS NOT STATED ABOVE OR PERMITTED BY LAW.

Consistent with applicable privacy laws, there are some situations in which Personal Information may be disclosed. We may disclose your Personal Information when you direct or give us permission; when we are required by law to do so, for example, if we are served a subpoena; or when we suspect fraudulent or criminal activities. We also may disclose your Personal Information when otherwise permitted by applicable privacy laws such as, for example, when disclosure is needed to enforce our rights arising out of any agreement, transaction or relationship with you.

Our policy regarding dispute resolution is as follows: Any controversy or claim arising out of or relating to our privacy policy, or the breach thereof, shall be settled by arbitration in accordance with the rules of the American Arbitration Association, and judgment upon the award rendered by the arbitrator(s) may be entered in any court having jurisdiction thereof.



Commitment For Title Insurance Issued by Old Republic National Title Insurance Company

NOTICE

IMPORTANT—READ CAREFULLY: THIS COMMITMENT IS AN OFFER TO ISSUE ONE OR MORE TITLE INSURANCE POLICIES. ALL CLAIMS OR REMEDIES SOUGHT AGAINST THE COMPANY INVOLVING THE CONTENT OF THIS COMMITMENT OR THE POLICY MUST BE BASED SOLELY IN CONTRACT.

THIS COMMITMENT IS NOT AN ABSTRACT OF TITLE, REPORT OF THE CONDITION OF TITLE, LEGAL OPINION, OPINION OF TITLE, OR OTHER REPRESENTATION OF THE STATUS OF TITLE. THE PROCEDURES USED BY THE COMPANY TO DETERMINE INSURABILITY OF THE TITLE, INCLUDING ANY SEARCH AND EXAMINATION, ARE PROPRIETARY TO THE COMPANY, WERE PERFORMED SOLELY FOR THE BENEFIT OF THE COMPANY, AND CREATE NO EXTRACONTRACTUAL LIABILITY TO ANY PERSON, INCLUDING A PROPOSED INSURED.

THE COMPANY'S OBLIGATION UNDER THIS COMMITMENT IS TO ISSUE A POLICY TO A PROPOSED INSURED IDENTIFIED IN SCHEDULE A IN ACCORDANCE WITH THE TERMS AND PROVISIONS OF THIS COMMITMENT. THE COMPANY HAS NO LIABILITY OR OBLIGATION INVOLVING THE CONTENT OF THIS COMMITMENT TO ANY OTHER PERSON.

COMMITMENT TO ISSUE POLICY

Subject to the Notice; Schedule B, Part I—Requirements; Schedule B, Part II—Exceptions; and the Commitment Conditions, Old Republic National Title Insurance Company, a Minnesota corporation (the "Company"), commits to issue the Policy according to the terms and provisions of this Commitment. This Commitment is effective as of the Commitment Date shown in Schedule A for each Policy described in Schedule A, only when the Company has entered in Schedule A both the specified dollar amount as the Proposed Policy Amount and the name of the Proposed Insured. If all of the Schedule B, Part I—Requirements have not been met within 6 months after the Commitment Date, this Commitment terminates and the Company's liability and obligation end.

COMMITMENT CONDITIONS

1. DEFINITIONS

- (a) "Knowledge" or "Known": Actual or imputed knowledge, but not constructive notice imparted by the Public Records.
- (b)"Land": The land described in Schedule A and affixed improvements that by law constitute real property. The term "Land" does not include any property beyond the lines of the area described in Schedule A, nor any right, title, interest, estate, or easement in abutting streets, roads, avenues, alleys, lanes, ways, or waterways, but this does not modify or limit the extent that a right of access to and from the Land is to be insured by the Policy.
- (c) "Mortgage": A mortgage, deed of trust, or other security instrument, including one evidenced by electronic means authorized by law.
- (d) "Policy": Each contract of title insurance, in a form adopted by the American Land Title Association, issued or to be issued by the Company pursuant to this Commitment.
- (e) "Proposed Insured": Each person identified in Schedule A as the Proposed Insured of each Policy to be issued pursuant to this Commitment.
- (f) "Proposed Policy Amount": Each dollar amount specified in Schedule A as the Proposed Policy Amount of each Policy to be issued pursuant to this Commitment
- (g)"Public Records": Records established under state statutes at the Commitment Date for the purpose of imparting constructive notice of matters relating to real property to purchasers for value and without Knowledge.
- (h) "Title": The estate or interest described in Schedule A.
- 2. If all of the Schedule B, Part I—Requirements have not been met within the time period specified in the Commitment to Issue Policy, Commitment terminates and the Company's liability and obligation end.
- 3. The Company's liability and obligation is limited by and this Commitment is not valid without:
 - (a)the Notice;
 - (b)the Commitment to Issue Policy;
 - (c) the Commitment Conditions;
 - (d)Schedule A;
 - (e)Schedule B, Part I—Requirements; and
 - (f) Schedule B, Part II—Exceptions; and
 - (g)a counter-signature by the Company or its issuing agent that may be in electronic form.

4. COMPANY'S RIGHT TO AMEND

The Company may amend this Commitment at any time. If the Company amends this Commitment to add a defect, lien, encumbrance, adverse claim, or other matter recorded in the Public Records prior to the Commitment Date, any liability of the Company is limited by Commitment Condition 5. The Company shall not be liable for any other amendment to this Commitment.

5. LIMITATIONS OF LIABILITY

- (a)The Company's liability under Commitment Condition 4 is limited to the Proposed Insured's actual expense incurred in the interval between the Company's delivery to the Proposed Insured of the Commitment and the delivery of the amended Commitment, resulting from the Proposed Insured's good faith reliance to:
 - i. comply with the Schedule B, Part I—Requirements;
 - ii. eliminate, with the Company's written consent, any Schedule B, Part II-Exceptions; or
 - iii. acquire the Title or create the Mortgage covered by this Commitment.
- (b) The Company shall not be liable under Commitment Condition 5(a) if the Proposed Insured requested the amendment or had Knowledge of the matter and did not notify the Company about it in writing.
- (c) The Company will only have liability under Commitment Condition 4 if the Proposed Insured would not have incurred the expense had the Commitment included the added matter when the Commitment was first delivered to the Proposed Insured.
- (d)The Company's liability shall not exceed the lesser of the Proposed Insured's actual expense incurred in good faith and described in Commitment Conditions 5(a)(i) through 5(a)(iii) or the Proposed Policy Amount.
- (e) The Company shall not be liable for the content of the Transaction Identification Data, if any.

- (f) In no event shall the Company be obligated to issue the Policy referred to in this Commitment unless all of the Schedule B, Part I—Requirements have been met to the satisfaction of the Company.
- (g)In any event, the Company's liability is limited by the terms and provisions of the Policy.

6. LIABILITY OF THE COMPANY MUST BE BASED ON THIS COMMITMENT

- (a)Only a Proposed Insured identified in Schedule A, and no other person, may make a claim under this Commitment.
- (b) Any claim must be based in contract and must be restricted solely to the terms and provisions of this Commitment.
- (c) Until the Policy is issued, this Commitment, as last revised, is the exclusive and entire agreement between the parties with respect to the subject matter of this Commitment and supersedes all prior commitment negotiations, representations, and proposals of any kind, whether written or oral, express or implied, relating to the subject matter of this Commitment.
- (d)The deletion or modification of any Schedule B, Part II—Exception does not constitute an agreement or obligation to provide coverage beyond the terms and provisions of this Commitment or the Policy.
- (e) Any amendment or endorsement to this Commitment must be in writing and authenticated by a person authorized by the Company.
- (f) When the Policy is issued, all liability and obligation under this Commitment will end and the Company's only liability will be under the Policy.

7. IF THIS COMMITMENT HAS BEEN ISSUED BY AN ISSUING AGENT

The issuing agent is the Company's agent only for the limited purpose of issuing title insurance commitments and policies. The issuing agent is not the Company's agent for the purpose of providing closing or settlement services.

8. PRO-FORMA POLICY

The Company may provide, at the request of a Proposed Insured, a pro-forma policy illustrating the coverage that the Company may provide. A pro-forma policy neither reflects the status of Title at the time that the pro-forma policy is delivered to a Proposed Insured, nor is it a commitment to insure.

9. ARBITRATION

The Policy contains an arbitration clause. All arbitrable matters when the Proposed Policy Amount is \$2,000,000 or less shall be arbitrated at the option of either the Company or the Proposed Insured as the exclusive remedy of the parties. A Proposed Insured may review a copy of the arbitration rules at http://www.alta.org/arbitration.

IN WITNESS WHEREOF, Land Title Insurance Corporation has caused its corporate name and seal to be affixed by its duly authorized officers on the date shown in Schedule A to be valid when countersigned by a validating officer or other authorized signatory.

Issued by:

Land Title Guarantee Company 3033 East First Avenue Suite 600 Denver, Colorado 80206 303-321-1880



OLD REPUBLIC NATIONAL TITLE INSURANCE COMPANY

A Stock Company 400 Second Avenue South, Minneapolis, Minnesota 55401 (612) 371-1111

David Wold Secre

Senior Vice President

This page is only a part of a 2016 ALTA® Commitment for Title Insurance issued by Land Title Insurance Corporation. This Commitment is not valid without the Notice; the Commitment to Issue Policy; the Commitment Conditions; Schedule A; Schedule B, Part I—Requirements; and Schedule B, Part II—Exceptions; and a counter-signature by the Company or its issuing agent that may be in electronic form.

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Stewart Title Guaranty Company Commercial Services (Denver) 55 Madison Street, Suite 400 Denver, CO 80206

Date: May 28, 2021 **File Number:** 21000310549

Property: Sherrlwood Village Plat Correction 1, CO

Please direct all Title inquiries to:

Darrick Fehringer

Phone: (303) 780-4050

Email Address: darrick.fehringer@stewart.com

REQUESTED BY: OWNERS:

Terracina Design

Elmwood North LLC, a Colorado limited liability company,
7840 Pecos Investments LLC, a Colorado limited liability

company

Shirley Dunomes

ATTACHED PLEASE FIND THE FOLLOWING:

Linked Informational Commitment



ALTA COMMITMENT FOR TITLE INSURANCE

ISSUED BY STEWART TITLE GUARANTY COMPANY

NOTICE

IMPORTANT - READ CAREFULLY: THIS COMMITMENT IS AN OFFER TO ISSUE ONE OR MORE TITLE INSURANCE POLICIES. ALL CLAIMS OR REMEDIES SOUGHT AGAINST THE COMPANY INVOLVING THE CONTENT OF THIS COMMITMENT OR THE POLICY MUST BE BASED SOLELY IN CONTRACT.

THIS COMMITMENT IS NOT AN ABSTRACT OF TITLE, REPORT OF THE CONDITION OF TITLE, LEGAL OPINION, OPINION OF TITLE, OR OTHER REPRESENTATION OF THE STATUS OF TITLE. THE PROCEDURES USED BY THE COMPANY TO DETERMINE INSURABILITY OF THE TITLE, INCLUDING ANY SEARCH AND EXAMINATION, ARE PROPRIETARY TO THE COMPANY, WERE PERFORMED SOLELY FOR THE BENEFIT OF THE COMPANY, AND CREATE NO EXTRACONTRACTUAL LIABILITY TO ANY PERSON, INCLUDING A PROPOSED INSURED.

THE COMPANY'S OBLIGATION UNDER THIS COMMITMENT IS TO ISSUE A POLICY TO A PROPOSED INSURED IDENTIFIED IN SCHEDULE A IN ACCORDANCE WITH THE TERMS AND PROVISIONS OF THIS COMMITMENT. THE COMPANY HAS NO LIABILITY OR OBLIGATION INVOLVING THE CONTENT OF THIS COMMITMENT TO ANY OTHER PERSON.

COMMITMENT TO ISSUE POLICY

Subject to the Notice; Schedule B, Part I - Requirements; Schedule B, Part II - Exceptions; and the Commitment Conditions, STEWART TITLE GUARANTY COMPANY, a Texas corporation (the "Company"), commits to issue the Policy according to the terms and provisions of this Commitment. This Commitment is effective as of the Commitment Date shown in Schedule A for each Policy described in Schedule A, only when the Company has entered in Schedule A both the specified dollar amount as the Proposed Policy Amount and the name of the Proposed Insured.

If all of the Schedule B, Part I - Requirements have not been met within six months after the Commitment Date, this Commitment terminates and the Company's liability and obligation end.

Countersigned by:

Stewart Title Guaranty Company
55 Madison Street Suite 400

Authorized Countersignature

55 Madison Street, Suite 400 Denver, CO 80206 (303) 331-0333 Agent ID: 06J050 TEGUARANTA COMPORAÇÃO PEXAS PE

Frederick H. Eppinger President and CEO

> David Hisey Secretary



COMMITMENT CONDITIONS

1. DEFINITIONS

- (a) "Knowledge" or "Known": Actual or imputed knowledge, but not constructive notice imparted by the Public Records.
- (b) "Land": The land described in Schedule A and affixed improvements that by law constitute real property. The term "Land" does not include any property beyond the lines of the area described in Schedule A, nor any right, title, interest, estate, or easement in abutting streets, roads, avenues, alleys, lanes, ways, or waterways, but this does not modify or limit the extent that a right of access to and from the Land is to be insured by the Policy.
- (c) "Mortgage": A mortgage, deed of trust, or other security instrument, including one evidenced by electronic means authorized by law.
- (d) "Policy": Each contract of title insurance, in a form adopted by the American Land Title Association, issued or to be issued by the Company pursuant to this Commitment.
- (e) "Proposed Insured": Each person identified in Schedule A as the Proposed Insured of each Policy to be issued pursuant to this Commitment.
- (f) "Proposed Policy Amount": Each dollar amount specified in Schedule A as the Proposed Policy Amount of each Policy to be issued pursuant to this Commitment.
- (g) "Public Records": Records established under state statutes at the Commitment Date for the purpose of imparting constructive notice of matters relating to real property to purchasers for value and without Knowledge.
- (h) "Title": The estate or interest described in Schedule A.
- 2. If all of the Schedule B, Part I Requirements have not been met within the time period specified in the Commitment to Issue Policy, this Commitment terminates and the Company's liability and obligation end.
- 3. The Company's liability and obligation is limited by and this Commitment is not valid without:
 - (a) the Notice;
 - (b) the Commitment to Issue Policy;
 - (c) the Commitment Conditions;
 - (d) Schedule A;
 - (e) Schedule B, Part I Requirements;
 - (f) Schedule B, Part II Exceptions; and
 - (g) a countersignature by the Company or its issuing agent that may be in electronic form.

4. COMPANY'S RIGHT TO AMEND

The Company may amend this Commitment at any time. If the Company amends this Commitment to add a defect, lien, encumbrance, adverse claim, or other matter recorded in the Public Records prior to the Commitment Date, any liability of the Company is limited by Commitment Condition 5. The Company shall not be liable for any other amendment to this Commitment.

5. LIMITATIONS OF LIABILITY

- (a) The Company's liability under Commitment Condition 4 is limited to the Proposed Insured's actual expense incurred in the interval between the Company's delivery to the Proposed Insured of the Commitment and the delivery of the amended Commitment, resulting from the Proposed Insured's good faith reliance to:
 - (i) comply with the Schedule B, Part I Requirements;
 - (ii) eliminate, with the Company's written consent, any Schedule B, Part II Exceptions; or
 - (iii) acquire the Title or create the Mortgage covered by this Commitment.
- (b) The Company shall not be liable under Commitment Condition 5(a) if the Proposed Insured requested the amendment or had Knowledge of the matter and did not notify the Company about it in writing.
- (c) The Company will only have liability under Commitment Condition 4 if the Proposed Insured would not have incurred the expense had the Commitment included the added matter when the Commitment was first delivered to the Proposed Insured.



- (d) The Company's liability shall not exceed the lesser of the Proposed Insured's actual expense incurred in good faith and described in Commitment Conditions 5(a)(i) through 5(a)(iii) or the Proposed Policy Amount.
- (e) The Company shall not be liable for the content of the Transaction Identification Data, if any.
- (f) In no event shall the Company be obligated to issue the Policy referred to in this Commitment unless all of the Schedule B, Part I Requirements have been met to the satisfaction of the Company.
- (g) In any event, the Company's liability is limited by the terms and provisions of the Policy.

6. LIABILITY OF THE COMPANY MUST BE BASED ON THIS COMMITMENT

- (a) Only a Proposed Insured identified in Schedule A, and no other person, may make a claim under this Commitment.
- (b) Any claim must be based in contract and must be restricted solely to the terms and provisions of this Commitment.
- (c) Until the Policy is issued, this Commitment, as last revised, is the exclusive and entire agreement between the parties with respect to the subject matter of this Commitment and supersedes all prior commitment negotiations, representations, and proposals of any kind, whether written or oral, express or implied, relating to the subject matter of this Commitment.
- (d) The deletion or modification of any Schedule B, Part II Exception does not constitute an agreement or obligation to provide coverage beyond the terms and provisions of this Commitment or the Policy.
- (e) Any amendment or endorsement to this Commitment must be in writing and authenticated by a person authorized by the Company.
- (f) When the Policy is issued, all liability and obligation under this Commitment will end and the Company's only liability will be under the Policy.

7. IF THIS COMMITMENT HAS BEEN ISSUED BY AN ISSUING AGENT

The issuing agent is the Company's agent only for the limited purpose of issuing title insurance commitments and policies. The issuing agent is not the Company's agent for the purpose of providing closing or settlement services.

8. PRO-FORMA POLICY

The Company may provide, at the request of a Proposed Insured, a pro-forma policy illustrating the coverage that the Company may provide. A pro-forma policy neither reflects the status of Title at the time that the pro-forma policy is delivered to a Proposed Insured, nor is it a commitment to insure.

9. ARBITRATION

The Policy contains an arbitration clause. All arbitrable matters when the Proposed Policy Amount is \$2,000,000 or less shall be arbitrated at the option of either the Company or the Proposed Insured as the exclusive remedy of the parties. A Proposed Insured may review a copy of the arbitration rules at http://www.alta.org/arbitration.

STEWART TITLE GUARANTY COMPANY

All notices required to be given the Company and any statement in writing required to be furnished the Company shall be addressed to it at P.O. Box 2029, Houston, Texas 77252-2029.



ALTA COMMITMENT FOR TITLE INSURANCE SCHEDULE A

ISSUED BY STEWART TITLE GUARANTY COMPANY

Transaction Identification Data for reference only:

Issuing Agent: Stewart Title Guaranty Company

Issuing Office: 55 Madison Street, Suite 400, Denver, CO 80206

Issuing Office's ALTA® Registry ID: 1027978 Loan ID Number: N/A

Commitment Number: 21000310549 Issuing Office File Number: 21000310549

Property Address: Sherrlwood Village Plat Correction 1, CO

Revision Number:

1. Commitment Date: May 21, 2021 at 5:30 P.M.

(a) ALTA Owner's Policy

2. Policy to be issued:

(b) ALTA Loan Policy

3. The estate or interest in the Land described or referred to in this Commitment is:

Fee Simple

4. The Title is, at the Commitment Date, vested in:

Elmwood North LLC, a Colorado limited liability company, as to Parcel I, 7840 Pecos Investments LLC, a Colorado limited liability company, as to Parcel II, Shirley Dunomes, as to Parcel III.

5. The Land is described as follows:

Authorized Countersignature

SEE EXHIBIT "A" ATTACHED HERETO AND MADE A PART HEREOF

STEWART TITLE GUARANTY COMPANY

STATEMENT OF CHARGES

These charges are due and payable before a policy can be issued See Attached Statement of Charges

This page is only a part of a 2016 ALTA® Commitment for Title Insurance. This Commitment is not valid without the Notice; the Commitment to Issue Policy; the Commitment Conditions; Schedule A; Schedule B, Part I - Requirements; and Schedule B, Part II - Exceptions; and a countersignature by the Company or its issuing agent that may be in electronic form.

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Proposed Policy Amount

ALTA COMMITMENT FOR TITLE INSURANCE SCHEDULE A

ISSUED BY STEWART TITLE GUARANTY COMPANY

EXHIBIT "A" SCHEDULE A

LEGAL DESCRIPTION

A portion of the land described on Plat of SHERRELWOOD VILLAGE, recorded September 18, 2018 at Reception No. 2018000075940:

Bearings for this description are based on the North line of the Northeast Quarter of Section 33, Township 2 South, Range 68 West of the Sixth P.M., being assumed to bear N 89°30'30" E, from the North Quarter Corner of said Section 33, being a 3-1/4" aluminum cap in Range Box, PLS 7276 with all bearings contained herein relative thereto;

Commencing at the North quarter corner of said Section 33,

Thence N 89°30'30" E, along said North line, a distance of 30.00 Feet to a point on the East line of the Pecos Street Right-of-Way, and the Point of Beginning;

Thence N 89°30'30" E, along the North line of said Northeast quarter, also being the South line of that parcel of land recorded in <u>Book 3254 at Page 139</u> in the records of the Adams County Clerk and Recorder, a distance of 299.36 Feet to a point on the West line of that parcel of land recorded in <u>Book 3251 at Page 924</u>, said Adams County Records;

Thence along the West lines of said parcel of land, the following Two (2) courses:

- 1. S 21°38'59" E, a distance of 266.92 Feet;
- 2. S 33°40'19" E, a distance of 83.13 Feet to a point on the West line of Lot 2, Kalcevic Subdivision Amended, as recorded at Reception No. B1041161, said Adams County Records;

Thence along the West lines of Lot 2 and Lot 1, Said Kalcevic Subdivision amended, the following Four (4) courses:

- 1. S 14°37'52" E, a distance of 76.08 Feet;
- 2. N 88°03'04" E, a distance of 39.50 Feet;
- 3. S 17°49'46" E, a distance of 104.05 Feet;
- 4. S 55°05'47" E, a distance of 112.26 Feet;

Thence S 01°01'29" E, a distance of 259.37 to a point on the North Line of the Elmwood Park Subdivision, as recorded at Reception No. CO184761, said Adams County Records;

Thence S 89°32'44" W, along the North line of said Elmwood Park Subdivision, a distance of 631.65 feet to a point on the East line of the Pecos Street Right-of-Way;

Thence N 00°01'53" E, along said East line of the Pecos Street Right-of-Way, a distance of 586.61 Feet to the Southwest corner of that exception parcel recorded in <u>Book 746</u>, at <u>Page 180</u> of Said Adams County Records;

Thence N 89°30'30" E, along the South line of said exception parcel, a distance of 208.00 Feet to the Southeast corner of said exception parcel;

Thence N 00°01'53" E, along a line being parallel to the West line of the Northeast quarter of said Section 33, a distance of 208.00 feet to a point being 20.00 Feet South of the North line of the Northeast quarter of Said Section 33;

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CO ALTA Commitment For Title Insurance Schedule 8-1-16 (4-2-18)

Page 2 of 4



ALTA COMMITMENT FOR TITLE INSURANCE SCHEDULE A

ISSUED BY STEWART TITLE GUARANTY COMPANY

Thence S 89°30'30" W, along a line being 20.00 Feet South of and parallel to the North line of the Northeast quarter of said said Section 33, a distance of 208.00 Feet to the Northwest corner of said exception parcel and a point on the East line of the Pecos Street Right-of-Way;

Thence N 00°01'53" E, along the East line of said Pecos Street Right-of-Way, a distance of 20.00 Feet to the Point of Beginning.
County of Adams,
State of Colorado.

MORE PARTICULARLY DESCRIBED AS:

PARCEL I: Lots 1 through 4, Block 1, SHERRELWOOD VILLAGE, County of Adams, State of Colorado.

PARCEL II: Tract B and Tract D, SHERRELWOOD VILLAGE, County of Adams, State of Colorado.

PARCEL III: Lot 8, Block 2, SHERRELWOOD VILLAGE, County of Adams, State of Colorado.



ALTA COMMITMENT FOR TITLE INSURANCE SCHEDULE A

ISSUED BY STEWART TITLE GUARANTY COMPANY

STATEMENT OF CHARGES

Informational Commitment

FEE: \$500.00

Tax Information:

(Sch. # 0171933124035 0171933124036 0171933124037 0171933124038 0171933124039 0171933124057 0171933124058):



ALTA COMMITMENT FOR TITLE INSURANCE SCHEDULE B PART I

ISSUED BY STEWART TITLE GUARANTY COMPANY

Requirements

File No.: 21000310549

All of the following Requirements must be met:

- 1. The Proposed Insured must notify the Company in writing of the name of any party not referred to in this Commitment who will obtain an interest in the Land or who will make a loan on the Land. The Company may then make additional Requirements or Exceptions.
- 2. Pay the agreed amount for the estate or interest to be insured.
- 3. Pay the premiums, fees, and charges for the Policy to the Company.
- 4. Documents satisfactory to the Company that convey the Title or create the Mortgage to be insured, or both, must be properly authorized, executed, delivered, and recorded in the Public Records.
- 5. Proper instrument(s) creating the estate or interest to be insured must be executed and duly filed for record:

NONE

NOTE: This product is for informational purposes only. It is not a title insurance product and does not provide any form of coverage. This product is not a guarantee or assurance and does not warrant, or otherwise insure any condition, fact or circumstance. This product does not obligate this Company to issue any policies of title insurance for any subsequent transaction based on the information provided or involving the property described herein. This Company's sole liability for any error(s) relating to this product is limited to the amount that was paid for this product.



ALTA COMMITMENT FOR TITLE INSURANCE SCHEDULE B PART II

ISSUED BY STEWART TITLE GUARANTY COMPANY

Exceptions

File No.: 21000310549

THIS COMMITMENT DOES NOT REPUBLISH ANY COVENANT, CONDITION, RESTRICTION, OR LIMITATION CONTAINED IN ANY DOCUMENT REFERRED TO IN THIS COMMITMENT TO THE EXTENT THAT THE SPECIFIC COVENANT, CONDITION, RESTRICTION, OR LIMITATION VIOLATES STATE OR FEDERAL LAW BASED ON RACE, COLOR, RELIGION, SEX, SEXUAL ORIENTATION, GENDER IDENTITY, HANDICAP, FAMILIAL STATUS, OR NATIONAL ORIGIN.

The Policy will not insure against loss or damage resulting from the terms and provisions of any lease or easement identified in Schedule A, and will include the following Exceptions unless cleared to the satisfaction of the Company:

- 1. Rights or claims of parties in possession, not shown by the public records.
- 2. Easements, or claims of easements, not shown by the public records.
- 3. Any encroachment, encumbrance, violation, variation, or adverse circumstance affecting the title that would be disclosed by an accurate and complete land survey of the Land and not shown by the public records.
- 4. Any lien, or right to a lien, for services, labor or material heretofore or hereafter furnished, imposed by law and not shown by the public records.
- 5. Any defect, lien, encumbrance, adverse claim, or other matter that appears for the first time in the Public Records or is created, attaches, or is disclosed between the Commitment Date and the date on which all of the Schedule B, Part I Requirements are met.
- 6. (a) Unpatented mining claims; (b) reservations or exceptions in patents or in Acts authorizing the issuance thereof; (c) minerals of whatsoever kind, subsurface and surface substances, in, on, under and that may be produced from the Land, together with all rights, privileges, and immunities relating thereto, whether or not the matters excepted under (a), (b) or (c) are shown by the Public Records or listed in Schedule B.
- 7. Water rights, claims or title to water.
- 8. Any and all unpaid taxes and assessments and any unredeemed tax sales.
- 9. Terms, conditions, provisions, burdens and obligations of Easements described in Deed recorded December 29, 1986, in Book 3251 at Page 924.
- 10. Operation and Maintenance Manual for Sherrelwood Village recorded April 2, 2018, at Reception No. 2018000026268.
- 11. Resolution 2018-533 Approving Application in Case #PRC2016-00008, recorded August 16, 2018, at Reception No. 2018000066629.
- 12. Resolution 20108-534 Approving Subdivision Improvements Agreement, recorded August 16, 2018, at Reception No. 2018000066681.



ALTA COMMITMENT FOR TITLE INSURANCE SCHEDULE B PART II

ISSUED BY STEWART TITLE GUARANTY COMPANY

Exceptions

- Deed of Perpetual Underground Waterline Easement, recorded August 30, 2018, at <u>Reception No.</u> 2018000070760.
- 14. Planned Unit Development Plan, recorded September 18, 2018, at Reception No. 2018000075941.
- Easements, notes, restrictions and rights-of-way, as set forth on the plat of Sherrelwood Village, recorded September 18, 2018, at <u>Reception No. 2018000075940</u>.
 NOTE: Affidavit of plat Correction, recorded September 4, 2019, at <u>Reception No. 2019000073330</u>.
- Construction and Drainage Easement Agreement, recorded September 7, 2019, at Reception No. 201900063643.
- 17. Declaration of Covenants, Conditions, and Restrictions, recorded November 11, 2019, at <u>Reception No. 201900096873</u>.

NOTE: First Supplemental Declaration, recorded March 23, 2020, at Reception No. 2020000024705. NOTE: Limited Amendment, recorded May 7, 2020, at Reception No. 2020000041819.

- - NOTE: As to Parcel III.
- 19. Resolution 2021-177 Approving Application in Case #PRC2020-0001- recorded March 11, 2021 at Reception No. 2021000029929.
- Deed of Trust dated May 10, 2021, executed by Elmwood North LLC, a Colorado limited liability company, to the Public Trustee of Adams County, securing indebtedness in the amount of \$1,080,000.00, in favor of First American State Bank, recorded May 13, 2021, as <u>Reception No. 2021000058942</u>. NOTE: As to Parcel I.
- 21. Existing leases and tenancies.

NOTE: Upon receipt by the Company of the Commercial Lien Affidavit, this exception may be modified or deleted.





Stewart Title Guaranty Company -Commercial Services 55 Madison Street, Suite 400 Denver, CO 80206 Phone Fax

MINERAL DISCLOSURE

To comply with the provisions of C.R.S. 10-11-123, the Company makes the following disclosure:

- a. That there is recorded evidence that a mineral estate has been severed, leased or otherwise conveyed from the surface estate and that there is a substantial likelihood that a third party holds some or all interest in oil, gas, other minerals, or geothermal energy in the property; and
- b. That such mineral estate may include the right to enter and use the property without the surface owner's permission.

NOTE: THIS DISCLOSURE APPLIED ONLY IF SCHEDULE B, SECTION 2 OF THE TITLE COMMITMENT HEREIN INCLUDES AN EXCEPTION FOR SEVERED MINERALS.

File Number: 21000310549

CO Disclosures Comrcl

STG Privacy Notice Stewart Title Companies

WHAT DO THE STEWART TITLE COMPANIES DO WITH YOUR PERSONAL INFORMATION?

Federal and applicable state law and regulations give consumers the right to limit some but not all sharing. Federal and applicable state law regulations also require us to tell you how we collect, share, and protect your personal information. Please read this notice carefully to understand how we use your personal information. This privacy notice is distributed on behalf of the Stewart Title Guaranty Company and its title affiliates (the Stewart Title Companies), pursuant to Title V of the Gramm-Leach-Billey Act (GLBA).

The types of personal information we collect and share depend on the product or service that you have sought through us. This information can include social security numbers and driver's license number.

All financial companies, such as the Stewart Title Companies, need to share customers' personal information to run their everyday business—to process transactions and maintain customer accounts. In the section below, we list the reasons that we can share customers' personal information; the reasons that we choose to share; and whether you can limit this sharing.

Reasons we can share your personal information.	Do we share	Can you limit this sharing?
For our everyday business purposes— to process your transactions and maintain your account. This may include running the business and managing customer accounts, such as processing transactions, mailing, and auditing services, and responding to court orders and legal investigations.	Yes	No
For our marketing purposes— to offer our products and services to you.	Yes	No
For joint marketing with other financial companies	No	We don't share
For our affiliates' everyday business purposes— information about your transactions and experiences. Affiliates are companies related by common ownership or control. They can be financial and non-financial companies. Our affiliates may include companies with a Stewart name; financial companies, such as Stewart Title Company	Yes	No
For our affiliates' everyday business purposes— information about your creditworthiness.	No	We don't share
For our affiliates to market to you — For your convenience, Stewart has developed a means for you to opt out from its affiliates marketing even though such mechanism is not legally required.	Yes	Yes, send your first and last name, the email address used in your transaction, your Stewart file number and the Stewart office location that is handling your transaction by email to optout@stewart.com or fax to 1-800-335-9591.
For non-affiliates to market to you. Non-affiliates are companies not related by common ownership or control. They can be financial and non-financial companies.	No	We don't share

We may disclose your personal information to our affiliates or to non-affiliates as permitted by law. If you request a transaction with a non-affiliate, such as a third party insurance company, we will disclose your personal information to that non-affiliate. [We do not control their subsequent use of information, and suggest you refer to their privacy notices.]

SHARING PRACTICES

How often do the Stewart Title Companies notify me about their practices?	We must notify you about our sharing practices when you request a transaction.
How do the Stewart Title Companies protect my personal information?	To protect your personal information from unauthorized access and use, we use security measures that comply with federal law. These measures include computer, file, and building safeguards.
How do the Stewart Title Companies collect my personal information?	We collect your personal information, for example, when you request insurance-related services provide such information to us We also collect your personal information from others, such as the real estate agent or lender involved in your transaction, credit reporting agencies, affiliates or other companies.
What sharing can I limit?	Although federal and state law give you the right to limit sharing (e.g., opt out) in certain instances, we do not share your personal information in those instances.

Contact us: If you have any questions about this privacy notice, please contact us at: Stewart Title Guaranty Company, 1360 Post Oak Blvd., Ste. 100, Privacy Officer, Houston, Texas 77056

Effective Date: January 1, 2020

Privacy Notice for California Residents

Pursuant to the California Consumer Privacy Act of 2018 ("CCPA"), Stewart Information Services Corporation and its subsidiary companies (collectively, "Stewart") are providing this **Privacy Notice for California Residents** ("CCPA Notice"). This CCPA Notice supplements the information contained in Stewart's existing privacy notice and applies solely to all visitors, users and others who reside in the State of California or are considered California Residents ("consumers" or "you"). Terms used but not defined shall have the meaning ascribed to them in the CCPA.

Information Stewart Collects

Stewart collects information that identifies, relates to, describes, references, is capable of being associated with, or could reasonably be linked, directly or indirectly, with a particular consumer, household, or device. Most of the information that Stewart collects in the course of its regular business is already protected pursuant to the Gramm-Leach-Bliley Act (GLBA). Additionally, much of this information comes from government records or other information already in the public domain. Personal information under the CCPA does not include:

- · Publicly available information from government records.
- Deidentified or aggregated consumer information.
- Certain personal information protected by other sector-specific federal or California laws, including but not limited to the Fair Credit Reporting Act (FCRA), GLBA and California Financial Information Privacy Act (FIPA).

Specifically, Stewart has collected the following categories of personal information from consumers within the last twelve (12) months:

Category	Examples	Collected?
A. Identifiers.	A real name, alias, postal address, unique personal identifier, online identifier, Internet Protocol address, email address, account name, Social Security number, driver's license number, passport number, or other similar identifiers.	YES
B. Personal information categories listed in the California Customer Records statute (Cal. Civ. Code § 1798.80(e)).	A name, signature, Social Security number, physical characteristics or description, address, telephone number, passport number, driver's license or state identification card number, insurance policy number, education, employment, employment history, bank account number, credit card number, debit card number, or any other financial information, medical information, or health insurance information. Some personal information included in this category may overlap with other categories.	YES
C. Protected classification characteristics under California or federal law.	Age (40 years or older), race, color, ancestry, national origin, citizenship, religion or creed, marital status, medical condition, physical or mental disability, sex (including gender, gender identity, gender expression, pregnancy or childbirth and related medical conditions), sexual orientation, veteran or military status, genetic information (including familial genetic information).	YES
D. Commercial information.	Records of personal property, products or services purchased, obtained, or considered, or other purchasing or consuming histories or tendencies.	YES
E. Biometric information.	Genetic, physiological, behavioral, and biological characteristics, or activity patterns used to extract a template or other identifier or identifying information, such as, fingerprints, faceprints, and voiceprints, iris or retina scans, keystroke, gait, or other physical patterns, and sleep, health, or exercise data.	YES
F. Internet or other similar network activity.	Browsing history, search history, information on a consumer's interaction with a website, application, or advertisement.	YES
G. Geolocation data.	Physical location or movements.	YES
H. Sensory data.	Audio, electronic, visual, thermal, olfactory, or similar information.	YES
I. Professional or employment-related information.	Current or past job history or performance evaluations.	YES
J. Non-public education information (per the Family Educational Rights and Privacy Act (20 U.S.C. Section 1232g, 34 C.F.R. Part 99)).	Education records directly related to a student maintained by an educational institution or party acting on its behalf, such as grades, transcripts, class lists, student schedules, student identification codes, student financial information, or student disciplinary records.	YES
K. Inferences drawn from other personal information.	Profile reflecting a person's preferences, characteristics, psychological trends, predispositions, behavior, attitudes, intelligence, abilities, and aptitudes.	YES

Stewart obtains the categories of personal information listed above from the following categories of sources:

- Directly and indirectly from customers, their designees or their agents (For example, realtors, lenders, attorneys, etc.)
- Directly and indirectly from activity on Stewart's website or other applications.
- From third-parties that interact with Stewart in connection with the services we provide.

Use of Personal Information

Stewart may use or disclose the personal information we collect for one or more of the following purposes:

- To fulfill or meet the reason for which the information is provided.
- To provide, support, personalize, and develop our website, products, and services.
- To create, maintain, customize, and secure your account with Stewart.
- · To process your requests, purchases, transactions, and payments and prevent transactional fraud.
- To prevent and/or process claims.
- To assist third party vendors/service providers who complete transactions or perform services on Stewart's behalf.
- · As necessary or appropriate to protect the rights, property or safety of Stewart, our customers or others.
- To provide you with support and to respond to your inquiries, including to investigate and address your concerns and monitor and improve our responses.
- To personalize your website experience and to deliver content and product and service offerings relevant to your interests, including targeted offers and ads through our website, third-party sites, and via email or text message (with your consent, where required by law).
- To help maintain the safety, security, and integrity of our website, products and services, databases and other technology assets, and business.
- To respond to law enforcement or regulator requests as required by applicable law, court order, or governmental
 regulations.
- · Auditing for compliance with federal and state laws, rules and regulations.
- Performing services including maintaining or servicing accounts, providing customer service, processing or fulfilling
 orders and transactions, verifying customer information, processing payments, providing advertising or marketing
 services or other similar services.
- To evaluate or conduct a merger, divestiture, restructuring, reorganization, dissolution, or other sale or transfer of some
 or all of our assets, whether as a going concern or as part of bankruptcy, liquidation, or similar proceeding, in which
 personal information held by us is among the assets transferred.

Stewart will not collect additional categories of personal information or use the personal information we collected for materially different, unrelated, or incompatible purposes without providing you notice.

Disclosure of Personal Information to Affiliated Companies and Nonaffiliated Third Parties

Stewart does not sell your personal information to nonaffiliated third parties. Stewart may share your information with those you have designated as your agent in the course of your transaction (for example, a realtor or a lender). Stewart may disclose your personal information to a third party for a business purpose. Typically, when we disclose personal information for a business purpose, we enter a contract that describes the purpose and requires the recipient to both keep that personal information confidential and not use it for any purpose except performing the contract.

We share your personal information with the following categories of third parties:

- Service providers and vendors (For example, search companies, mobile notaries, and companies providing credit/debit card processing, billing, shipping, repair, customer service, auditing, marketing, etc.)
- Affiliated Companies
- · Litigation parties and attorneys, as required by law.
- Financial rating organizations, rating bureaus and trade associations.
- · Federal and State Regulators, law enforcement and other government entities

In the preceding twelve (12) months, Stewart has disclosed the following categories of personal information for a business purpose:

- Category A: Identifiers
- Category B: California Customer Records personal information categories
- Category C: Protected classification characteristics under California or federal law
- Category D: Commercial Information
- Category E: Biometric Information
- Category F: Internet or other similar network activity
- Category G: Geolocation data
- Category H: Sensory data
- Category I: Professional or employment-related information
- Category J: Non-public education information
- Category K: Inferences

Consumer Rights and Choices

The CCPA provides consumers (California residents) with specific rights regarding their personal information. This section describes your CCPA rights and explains how to exercise those rights.

Access to Specific Information and Data Portability Rights

You have the right to request that Stewart disclose certain information to you about our collection and use of your personal information over the past 12 months. Once we receive and confirm your verifiable consumer request, Stewart will disclose to you:

- The categories of personal information Stewart collected about you.
- The categories of sources for the personal information Stewart collected about you.
- Stewart's business or commercial purpose for collecting that personal information.
- The categories of third parties with whom Stewart shares that personal information.
- The specific pieces of personal information Stewart collected about you (also called a data portability request).
- If Stewart disclosed your personal data for a business purpose, a listing identifying the personal information categories
 that each category of recipient obtained.

Deletion Request Rights

You have the right to request that Stewart delete any of your personal information we collected from you and retained, subject to certain exceptions. Once we receive and confirm your verifiable consumer request, Stewart will delete (and direct our service providers to delete) your personal information from our records, unless an exception applies.

Stewart may deny your deletion request if retaining the information is necessary for us or our service providers to:

- 1. Complete the transaction for which we collected the personal information, provide a good or service that you requested, take actions reasonably anticipated within the context of our ongoing business relationship with you, or otherwise perform our contract with you
- 2. Detect security incidents, protect against malicious, deceptive, fraudulent, or illegal activity, or prosecute those responsible for such activities.
- 3. Debug products to identify and repair errors that impair existing intended functionality.
- 4. Exercise free speech, ensure the right of another consumer to exercise their free speech rights, or exercise another right provided for by law.
- 5. Comply with the California Electronic Communications Privacy Act (Cal. Penal Code § 1546 seq.).
- 6. Engage in public or peer-reviewed scientific, historical, or statistical research in the public interest that adheres to all other applicable ethics and privacy laws, when the information's deletion may likely render impossible or seriously impair the research's achievement, if you previously provided informed consent.
- 7. Enable solely internal uses that are reasonably aligned with consumer expectations based on your relationship with us.
- 8. Comply with a legal obligation.
- 9. Make other internal and lawful uses of that information that are compatible with the context in which you provided it.

Exercising Access, Data Portability, and Deletion Rights

To exercise the access, data portability, and deletion rights described above, please submit a verifiable consumer request to us either:

- Calling us Toll Free at 1-866-571-9270
- Emailing us at Privacyrequest@stewart.com
- Visiting http://stewart.com/ccpa

Only you, or someone legally authorized to act on your behalf, may make a verifiable consumer request related to your personal information. You may also make a verifiable consumer request on behalf of your minor child.

To designate an authorized agent, please contact Stewart through one of the methods mentioned above.

You may only make a verifiable consumer request for access or data portability twice within a 12-month period. The verifiable consumer request must:

- Provide sufficient information that allows us to reasonably verify you are the person about whom we collected personal
 information or an authorized representative.
- Describe your request with sufficient detail that allows us to properly understand, evaluate, and respond to it.

Stewart cannot respond to your request or provide you with personal information if we cannot verify your identity or authority to make the request and confirm the personal information relates to you.

Making a verifiable consumer request does not require you to create an account with Stewart.

Response Timing and Format

We endeavor to respond to a verifiable consumer request within forty-five (45) days of its receipt. If we require more time (up to an additional 45 days), we will inform you of the reason and extension period in writing.

A written response will be delivered by mail or electronically, at your option.

Any disclosures we provide will only cover the 12-month period preceding the verifiable consumer request's receipt. The response we provide will also explain the reasons we cannot comply with a request, if applicable. For data portability requests, we will select a format to provide your personal information that is readily useable and should allow you to transmit the information from one entity to another entity without hindrance.

Stewart does not charge a fee to process or respond to your verifiable consumer request unless it is excessive, repetitive, or manifestly unfounded. If we determine that the request warrants a fee, we will tell you why we made that decision and provide you with a cost estimate before completing your request.

Non-Discrimination

Stewart will not discriminate against you for exercising any of your CCPA rights. Unless permitted by the CCPA, we will not:

- · Deny you goods or services.
- Charge you a different prices or rates for goods or services, including through granting discounts or other benefits, or imposing penalties.
- Provide you a different level or quality of goods or services.
- Suggest that you may receive a different price or rate for goods or services or a different level or quality of goods or services.

Changes to Our Privacy Notice

Stewart reserves the right to amend this privacy notice at our discretion and at any time. When we make changes to this privacy notice, we will post the updated notice on Stewart's website and update the notice's effective date. Your continued use of Stewart's website following the posting of changes constitutes your acceptance of such changes.

Contact Information

If you have questions or comments about this notice, the ways in which Stewart collects and uses your information described here, your choices and rights regarding such use, or wish to exercise your rights under California law, please do not hesitate to contact us at:

Phone: Toll Free at 1-866-571-9270

Website: http://stewart.com/ccpa

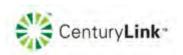
Email: Privacyrequest@stewart.com

Postal Address: Stewart Information Services Corporation

Attn: Mary Thomas, Deputy Chief Compliance Officer

1360 Post Oak Blvd., Ste. 100, MC #14-1

Houston, TX 77056



5325 Zuni, Room 728 Denver, CO, 80221 September 29, 2020

Rose Gallucci Delwest Development Corp 155 South Madison St. Suite 326 Denver, CO 80209 D: 720-708-4065

F: 303-974*5239 E: rose@delwest.com W: www.delwest.com

RE: 7996 N. Pecos St and 8000 N. Pecos St. in Unincorporated Adams County, State of Colorado.

Recently you approached CenturyLink about providing a "Will Serve" letter to serve 7996 N. Pecos St and 8000 N. Pecos St. in Unincorporated Adams County, State of Colorado. CenturyLink appreciates the opportunity to provide Delwest Development Corp. with its future communication needs.

In response to the request for a commitment to serve, CenturyLink will work with Delwest Development Corp. on determining what the needs will be. Upon such determination, CenturyLink will undertake an analysis of the construction required and the cost to complete that construction. It is only at that point and given the prevailing Tariffs that CenturyLink will make a determination on whether it can or cannot provide service.

As you may or may not know, many of the telecommunications services provided by CenturyLink are regulated and the services you request will be provided for under the tariffs on file with the Colorado Public Utilities Commission.

If there are any further questions, or if I can be of any help, please do not hesitate to call me on 720-578-3560.

Regards,

Robert Davis Sr. Local Network Engineer 5325 Zuni Street, Room 728 Denver, CO 80221 720-548-3560 Robert.Davis@CenturyLink.com



September 29, 2020

Delwest Development Corporation C/O Derrell Schreiner 155 S Madison St Suite 326 Denver CO 80209

RE: Elmwood North

7996 N Pecos St., 8000 N Pecos St

Denver, CO 80221

Dear Derrell Schreiner:

Please accept this letter as confirmation of Comcast Cable Corporation ability to provide cable service to the captioned location. The project consists of 50 townhomes. The provision of service is contingent upon successful negotiations of an agreement between the developer and Comcast Cable Corporation.

If you have any questions at all, please contact Brian Jones at (303) 603-5661, or me with the information below.

Sincerely,

Sean Hofer Xfinity Communities 303-603-2019 Sean hofer@cable.comcast.com

This letter is not intended to give rise to binding obligations for either party. Any contractual relationship between the parties will be the result of formal negotiations and will only become effective upon execution of the contract by representatives of the parties authorized to enter into such agreements. During any negotiations, each party will bear its own costs and will not be responsible for any costs or expenses of the other party, unless separately agreed to in writing.



Thornton Infrastructure Maintenance Center 12450 Washington Street Thornton, CO 80241 www.ThorntonCO.gov

Infrastructure Department Water Resources Division PH 720-977-6600

May 17, 2021

Rose Gallucci Delwest Development Corp. 155 S. Madison St. Ste. 326 Denver, CO 80209

RE: City Water and Wastewater Service for 8000 N Pecos St and 7996 Pecos St

Dear Ms. Galucci,

This letter is to confirm that currently there is adequate capacity in the City of Thornton (City) water and wastewater systems to serve the above-identified property subject to the limitations stated below. However, please be aware that the City does not guarantee capacity of proposed developments indefinitely or capacity for future developments. System capacity must be verified at the time of development.

The extension of City water and wastewater mains and service connections necessary to serve this property shall be installed at the expense of the property owner/developer. The design and installation of all water and wastewater improvements shall conform to all ordinances and regulations, codes and specifications in effect at the time of development. Also, the property owner shall comply with all the requirements of any utility extension agreements or other agreements that may affect this property. This property will need to comply with the most current ordinances applicable to water and sewer rates and charges.

System capacity is based on a use consistent with development plans and can be affected by drought, emergency or lack of available water resources. The City has the authority to and may suspend the issuance of new water taps and connections to the City water mains for an indefinite period of time for these reasons, and/or take other emergency measures that may affect the availability of water service.

This letter is valid for a period of one (1) year from the date of this letter.

Please contact me at 720-977-6600 or Emily.Hunt@ThorntonCO.gov if you have any questions.

Sincerely,

Emily Hunt

Deputy Infrastructure Director – Water

EH/

cc: Cassie Free, Development Engineering Manager

Todd Rullo, Deputy Infrastructure Director – Operations



WILL SERVE LETTER

October 1, 2020

Derrell Schreiner Delwest Development Corp 155 S. Monroe St Suite 326 Denver CO 80209.

Re: Sherrelwood Village

Dear Derrell,

This letter is to confirm that Xcel Energy is your utility provider for natural gas and electrical service. In accordance with our tariffs, on file with and approved by the Colorado Public Utilities Commission, gas and electric facilities can be made available to serve the project at Sherrelwood Village.

Your utility service(s) will be provided after the following steps are completed:

- Application submitted to Public Service's "Builders Call Line (BCL)" once your application is accepted you will be assigned a design department representative who will be your primary point of contact
- *Utility design is completed* you must provide your design representative with the site plan, the one line diagrams, and panel schedules for electric and gas loads if applicable
- All documents provided by design representative are signed and returned
- Payment is received
- Required easements are granted you must sign and return applicable easement documents to your Right-of-Way agent
- Site is ready for utility construction

A scheduled in-service date will be provided once these requirements have been met.

It is important to keep in mind that the terms and conditions of utility service, per our tariffs, require that you provide adequate space and an easement on your property for all gas and electric facilities required to serve your project, including but not limited to gas and electrical lines and meters, transformers, and pedestals. General guidelines for these requirements can be found at Site Requirements. PDFs/Xcel-Energy-Standard-For-Electric-Installation-and-Use.pdf Easement requirements can be found at Utility Design and Layout.

Xcel Energy looks forward to working with you on your project and if I can be of further assistance, please contact me at the phone number or email listed below.

Sincerely,

Patrick Quinn Xcel Energy Designer

Mailing address: Public Service Company of Colorado 5460 W 60th Ave Arvada, CO 80003



Account	Parcel Number	Receipt Date	Effective Date	Receipt Number
R0198066	0171933124039	May 7, 2020	Apr 30, 2020	2020-05-05-SO-7212

ELMWOOD POINTE LLC 155 S MADISON ST STE 326 DENVER, CO 80209-3069

Situs Address Payor

1485 W 79TH WAY ELMWOOD POINTE LLC

155 S MADISON ST STE 326 DENVER, CO 80209-3069

Legal Description

SHERRELWOOD VILLAGE BLK 1 LOT 4

Property CodeActualAssessedYearAreaMill LevyVACANT RESIDENTIAL - 010017,5865,1002019490119.274

Payments Received

Check Multi-Account Payment

Check Number 7757

Payor Delwest Development Corporation

Paymer	nts Applied				
Year	Charges	Billed	Prior Payments	New Payments	Balance
2019	Tax Charge	\$608.30	\$0.00	\$608.30	\$0.00
				\$608.30	\$0.00
Balance Due as of Apr 30, 2020					\$0.00

WE ARE EXPANDING TO SERVE YOU BETTER! WATCH FOR NEW LOCATIONS ON OUR WEBSITE!

4430 S ADAMS COUNTY PKWY C2436 BRIGHTON CO 80601 MON - FRI 7 AM - 5 PM

720-523-6160



Account	Parcel Number	Receipt Date	Effective Date	Receipt Number
R0198065	0171933124038	May 7, 2020	Apr 30, 2020	2020-05-05-SO-7212

ELMWOOD POINTE LLC 155 S MADISON ST STE 326 DENVER, CO 80209-3069

Situs Address Payor

1493 W 79TH WAY ELMWOOD POINTE LLC

155 S MADISON ST STE 326 DENVER, CO 80209-3069

Legal Description

SHERRELWOOD VILLAGE BLK 1 LOT 3

Property CodeActualAssessedYearAreaMill LevyVACANT RESIDENTIAL - 010017,5865,1002019490119.274

Payments Received

Check Multi-Account Payment

Check Number 7757

Payor Delwest Development Corporation

Paymer	nts Applied				
Year	Charges	Billed	Prior Payments	New Payments	Balance
2019	Tax Charge	\$608.30	\$0.00	\$608.30	\$0.00
				\$608.30	\$0.00
Balance Due as of Apr 30, 2020					\$0.00

WE ARE EXPANDING TO SERVE YOU BETTER! WATCH FOR NEW LOCATIONS ON OUR WEBSITE!

4430 S ADAMS COUNTY PKWY C2436 BRIGHTON CO 80601 MON - FRI 7 AM - 5 PM

720-523-6160



Account	Parcel Number	Receipt Date	Effective Date	Receipt Number
R0198064	0171933124037	May 7, 2020	Apr 30, 2020	2020-05-05-SO-7212

ELMWOOD POINTE LLC 155 S MADISON ST STE 326 DENVER, CO 80209-3069

Situs Address Payor

1501 W 79TH WAY ELMWOOD POINTE LLC

155 S MADISON ST STE 326 DENVER, CO 80209-3069

Legal Description

SHERRELWOOD VILLAGE BLK 1 LOT 2

Property CodeActualAssessedYearAreaMill LevyVACANT RESIDENTIAL - 010017,5865,1002019490119.274

Payments Received

Check Multi-Account Payment

Check Number 7757

Payor Delwest Development Corporation

Paymer	nts Applied				
Year	Charges	Billed	Prior Payments	New Payments	Balance
2019	Tax Charge	\$608.30	\$0.00	\$608.30	\$0.00
				\$608.30	\$0.00
Balance Due as of Apr 30, 2020					\$0.00

WE ARE EXPANDING TO SERVE YOU BETTER! WATCH FOR NEW LOCATIONS ON OUR WEBSITE!

4430 S ADAMS COUNTY PKWY C2436 BRIGHTON CO 80601 MON - FRI 7 AM - 5 PM

720-523-6160



Account	Parcel Number	Receipt Date	Effective Date	Receipt Number
R0198063	0171933124036	May 7, 2020	Apr 30, 2020	2020-05-05-SO-7212

ELMWOOD POINTE LLC 155 S MADISON ST STE 326 DENVER, CO 80209-3069

Situs Address Payor

1517 W 79TH WAY ELMWOOD POINTE LLC

155 S MADISON ST STE 326 DENVER, CO 80209-3069

Legal Description

SHERRELWOOD VILLAGE BLK 1 LOT 1

Property CodeActualAssessedYearAreaMill LevyVACANT RESIDENTIAL - 010017,5865,1002019490119.274

Payments Received

Check Multi-Account Payment

Check Number 7757

Payor Delwest Development Corporation

Paymer	nts Applied				
Year	Charges	Billed	Prior Payments	New Payments	Balance
2019	Tax Charge	\$608.30	\$0.00	\$608.30	\$0.00
				\$608.30	\$0.00
Balance Due as of Apr 30, 2020					\$0.00

WE ARE EXPANDING TO SERVE YOU BETTER! WATCH FOR NEW LOCATIONS ON OUR WEBSITE!

4430 S ADAMS COUNTY PKWY C2436 BRIGHTON CO 80601 MON - FRI 7 AM - 5 PM

720-523-6160



Account	Parcel Number	Receipt Date	Effective Date	Receipt Number
R0067193	0171933100009	May 7, 2020	Apr 30, 2020	2020-05-05-SO-7212

DELWEST DEVELOPMENT CORP 155 S MADISON ST STE 326 DENVER, CO 80209-3069

Situs Address Payor

7996 PECOS ST DELWEST DEVELOPMENT CORP

155 S MADISON ST STE 326 DENVER, CO 80209-3069

Legal Description

SECT, TWN, RNG: 33-2-68 DESC: BEG AT A PT ON E LN N PECOS ST 20 FT S OF N LN SEC 33 TH S ALG E LN PECOS ST 208 FT TH E 208 FT TH N AT R/A 208 FT M/L TO A PT 20 FT S OF N LN SD SEC TH W 208 FT M/L TO POB 1A

 Property Code
 Actual
 Assessed
 Year
 Area
 Mill Levy

 VACANT RESIDENTIAL - 0100
 209,088
 60,640
 2019
 490
 119.274

Payments Received

Check Multi-Account Payment

Check Number 7757

Payor Delwest Development Corporation

Paymen	nts Applied				
Year	Charges	Billed	Prior Payments	New Payments	Balance
2019	Tax Charge	\$7,232.78	\$0.00	\$7,232.78	\$0.00
				\$7,232.78	\$0.00
Balance Due as of Apr 30, 2020					

WE ARE EXPANDING TO SERVE YOU BETTER! WATCH FOR NEW LOCATIONS ON OUR WEBSITE!

4430 S ADAMS COUNTY PKWY C2436 BRIGHTON CO 80601 MON - FRI 7 AM - 5 PM

720-523-6160



Account	Parcel Number	Receipt Date	Effective Date	Receipt Number
R0060226	0171928400003	May 7, 2020	Apr 30, 2020	2020-05-05-SO-7212

DELWEST DEVELOPMENT CORP 155 S MADISON ST STE 326 DENVER, CO 80209-3069

Situs Address

8000 PECOS ST

DELWEST DEVELOPMENT CORP
155 S MADISON ST STE 326
DENVER, CO 80209-3069

Legal Description

SECT,TWN,RNG:28-2-68 DESC: PT OF SE4 OF SEC 28 DESC AS FOLS BEG AT N4 COR OF SEC 33 TH E 30 FT TO TRUE POB TH N 295/42 FT TH S 82D 26M E 20/18 FT TH S 82D 26M E 8/04 FT TH S 76D 32M E 178/58 FT TH S 21D 24M E 268/24 FT TH W 299/53 FT TO TRUE POB EXC RD 1/48SECT, TWN, RNG 33-2-68 DESC: BEG AT THE N4 COR OF SEC 33 TH N 89D 55M 33S E A DIST OF 30 FT TO A PT SD PT BEING THE POB TH THE FOL COURSES AND DIST N 00D 00M 00S E 295/42 FT S 82D 26M 14S E 20/18 FT S 82D 26M 14S E 8/04 FT S 76D 32M 09S E 178/58 FT S 21D 24M 11S E 268/24 FT S 89D 55M 33S W 299/53 FT TO THE POB 1/48A

Property Code	Actual	Assessed	Year	Area	Mill Levy
COMM LND SPEC PURPOS - 2130	117,792	34,160	2019	490	119.274
SPECIAL PURPOSE - 2230	312	90	2019	490	119.274
SCHOOL DIST LND - 9142	259,350	75,210	2019	490	119.274
SCHOOL DIST IMPROV - 9242	688	200	2019	490	119.274
D					

Payments Received

Check Multi-Account Payment

Check Number 7757

Payor Delwest Development Corporation

Paymer	nts Applied				
Year	Charges	Billed	Prior Payments	New Payments	Balance
2019	Tax Charge	\$4,085.14	\$20.00	\$4,065.14	\$0.00
				\$4,065.14	\$0.00
Balance Due as of Apr 30, 2020					\$0.00

WE ARE EXPANDING TO SERVE YOU BETTER! WATCH FOR NEW LOCATIONS ON OUR WEBSITE!

4430 S ADAMS COUNTY PKWY C2436 BRIGHTON CO 80601 MON - FRI 7 AM - 5 PM

720-523-6160

CERTIFICATION OF NOTICE TO MINERAL ESTATE OWNERS

I/We, Delwest D	evelopment C	Corp.		
(the "Applicant") by sig	ning below, he	reby declare	and certify as fo	llows:
With respect to the prop	erty located at:			
Physical Address:	7996 Pecos	St. Denver,	CO 80221	
Legal Description:	SECT, TWN, RNG: PECOS ST 208 FT	33-2-68 DESC. DEC	AT A DE ONE	PECOS ST 20 FT S OF N LN SEC 33 TH S ALG E LN O A PT 20 FT S OF N LN SD SEC TH W 208 FT M/L
Parcel #(s):	TO POB IA			and the second s
	0171933100	00009		
(PLEASE CHECK ONE):				
On the	day of		20	
before the i	nitial public he	aring notice	of application 6	which is not less than thirty days or surface development was provided
to mineral e	estate owners p	ursuant to sec	tion 24-65.5-10	or surface development was provided of the Colorado Revised Statutes;
			Or	
I/ we have s	searched the rec	cords of the A	dams County T	ax Assessor and the Adams County
The second secon	too or der for the	above identi	fied parcel and l	have found that no mineral estate
owner is ide	entified therein.			militar estate
Date: 6/1/2021	Applicant:	Pelwest I	Development Co	rp.
	By:	11/	telil	4
		craig Fitchett	munic	
	Address:		0: 0 :: 0	
	Address.	100000000000000000000000000000000000000	on St. Suite 326	
STATE OF COLORADO))	Denver, CO	30209	
OTHE OF COLORADO	, ,			
COUNTY OF ADAMS	,			
COUNTY OF ADAMS)			
Subscribed and swo	rn to before me	e this 154 da	av of \	2021
Delwast Develop	ment Corp.		June	, 20 <u>21</u> , by
	1			Lola R Calhoun
Witness my hand an	d official seal.			NOTARY PUBLIC STATE OF COLORADO
My Commission expires	10/8/20	Not Not	ary Public	NOTARY ID 20204035139 MY COMMISSION EXPIRES OCTOBER 8, 2024
12. 2			j i dollo	
After Recording Return	To:	Nan	ne and Address of F	Person Preparing Legal Description

A recorded copy of this Certification shall be submitted to the Adams County Community and Economic Development Department with all applicable land use applications.

APPLICANT'S CERTIFICATION CONCERNING QUALIFYING SURFACE DEVELOPMENT, PURSUANT TO C.R.S. §24-65.5-103.3 (1)(b) I/We, Delwest Development Corp. , (the "Applicant") by signing below, hereby declare and certify as follows: Concerning the property located at: 7996 Pecos St. Denver, CO 80221 Physical Address: Legal Description: SECT, TWN, RNG:33-2-68 DESC: BEG AT A PT ON E LN N PECOS ST 20 FT S OF N LN SEC 33 TH S ALG E LN PEC OS ST 208 FT TH E 208 FT TH N AT R/A 208 FT M/L TO A PT 20 FT S OF N LN SD SEC TH W 208 FT M/L TO Parcel #(s): 01719331000009 With respect to qualifying surface developments, that (PLEASE CHECK ONE): X No mineral estate owner has entered an appearance or filed an objection to the proposed application for development within thirty days after the initial public hearing on the application; or The Applicant and any mineral estate owners who have filed an objection to the proposed application for development or have otherwise filed an entry of appearance in the initial public hearing regarding such application no later than thirty days following the initial public hearing on the application have executed a surface use agreement related to the property included in the application for development, the provisions of which have been incorporated into the application for development or are evidenced by a memorandum or otherwise recorded in the records of the clerk and recorder of the county in which the property is located so as to provide notice to transferees of the Applicant, who shall be bound by such surface use agreements; or The application for development provides: Access to mineral operations, surface facilities, flowlines, and pipelines in support of such operations existing when the final public hearing on the application for development is held by means of public roads sufficient to withstand trucks and drilling equipment or thirty-foot-wide access easements: An oil and gas operations area and existing well site locations in (ii) accordance with section 24-65.5-103.5 of the Colorado Revised Statutes; and That the deposit for incremental drilling costs described in section 24-(iii) 65.5-103.7 of the Colorado Revised Statutes has been made. Date: 6/1/2021 Delwest Development Corp Applicant: After Recording Return To: By: Print Name: Craig Fitchett Address: 155 S Madison St, Suite 326

Denver, CO 80209

STATE OF COLORADO)	
COUNTY OF ADAMS)	
Subscribed and sworn to before me this Delwest Development Corp.	day of June, 20 <u>21</u> , by
Witness my hand and official seal.	
My Commission expires: 10/8/2004	Dola & Call
Lola R Calhoun	Notary Public
NOTARY PUBLIC	Nama and Addison CD
STATE OF COLORADO NOTARY ID 20204035139 MY COMMISSION EXPIRES OCTOBER 8, 2024	Name and Address of Person Preparing Legal Description:
The state of the s	

A recorded copy of this Certification shall be submitted to the Adams County Community and Economic Development Department within thirty days after the initial public hearing on all applicable land use applications.

CERTIFICATION OF NOTICE TO MINERAL ESTATE OWNERS

		evelopment Col				
(the "A	oplicant") by sig	ning below, here	by declare an	d certify as	follows:	
With res	spect to the prop	erty located at:				
Ph	ysical Address:	8000 Pecos S	t Denver C	O 80221		
Le	gal Description:	SUB: PERL MACK M	ANOR SEVENTH	FILING BLK: 37	DESC: N 24 FT OF LOT 21 ALL LOTS	22 THRII 24
Pa	rcel #(s):	01719284000	03			
(PLEASE	CHECK ONE):	01710204000	05			
	On the	day of		20	_, which is not less than th	
	before the i	nitial public hear	ring, notice of	f application	for surface development w	rty days
	to mineral	estate owners pur	rsuant to secti	on 24-65.5-	103 of the Colorado Revise	d Statutes:
v			0	r		
<u>X</u>	I/We have s	searched the reco	ords of the Ad	ams County	Tax Assessor and the Adar	ns County
	CICIK and r	recorder for the a	above identifie	ed parcel an	d have found that no minera	al estate
	owner is ide	entified therein.				
Date: 6/	1/2021	Applicant:	Delwest De	velopment	Corp.	
		-11	1 +//	•	111	_
		By:	11/1/	11	all to	
		Print Name:	Craig Fitchett	100		
		Address:	155 S. Madisor	n St. Suite 326		
	24. S. A. C. C. C. C.		Denver, CO 80	209		
STATE	OF COLORADO))				
COLNE	WOE IDING) /				
COUNT	Y OF ADAMS) /				
Sul	soribad and assu	t - C	6A.			
Sul	Scribed and swi	orn to before me	thisday	y of Jun	e , 20 ZI , by	
20	west Devel	opmust com			Lola R Calhoun	
Wit	ness my hand ar	nd official seal			NOTARY PUBLIC STATE OF COLORADO	1
	mess my nand an	id Official Scal.		10/0	NOTARY ID 20204035130	1
My Con	nmission expires	10/0/2020	1. 1	MYCO	OMMISSION EXPIRES OCTOBER 8, 2024	
	mosion expires	19/1/2024	Note	ry Public	Call	_
			nota	ny rubiic		
Afte	r Recording Return	To:	Name	and Address	of Person Preparing Legal Descr	ription:

A recorded copy of this Certification shall be submitted to the Adams County Community and Economic Development Department with all applicable land use applications.

APPLICANT'S CERTIFICATION CONCERNING QUALIFYING SURFACE DEVELOPMENT, PURSUANT TO C.R.S. §24-65.5-103.3 (1)(b) I/We. Delwest Development Corp. , (the "Applicant") by signing below, hereby declare and certify as follows: Concerning the property located at: 8000 Pecos St. Denver, CO 80221 Legal Description: SUB: PERL MACK MANOR SEVENTH FILING BLK: 37 DESC: N 24 FT OF LOT 21 ALL LOTS 22 THRU 24 Parcel #(s): 0171928400003 With respect to qualifying surface developments, that (PLEASE CHECK ONE): No mineral estate owner has entered an appearance or filed an objection to the X proposed application for development within thirty days after the initial public hearing on the application; or The Applicant and any mineral estate owners who have filed an objection to the proposed application for development or have otherwise filed an entry of appearance in the initial public hearing regarding such application no later than thirty days following the initial public hearing on the application have executed a surface use agreement related to the property included in the application for development, the provisions of which have been incorporated into the application for development or are evidenced by a memorandum or otherwise recorded in the records of the clerk and recorder of the county in which the property is located so as to provide notice to transferees of the Applicant, who shall be bound by such surface use agreements; or The application for development provides: Access to mineral operations, surface facilities, flowlines, and pipelines in support of such operations existing when the final public hearing on the application for development is held by means of public roads sufficient to withstand trucks and drilling equipment or thirty-foot-wide access easements: An oil and gas operations area and existing well site locations in (ii) accordance with section 24-65.5-103.5 of the Colorado Revised Statutes; and That the deposit for incremental drilling costs described in section 24-(iii) 65.5-103.7 of the Colorado Revised Statutes has been made. Date: 6/1/2021 Applicant: Delwest Development Corp After Recording Return To: By: Craig Fitchett Print Name: 155 S Madison St, Suite 326 Address:

Denver, CO 80209

STATE OF COLORADO)	
COUNTY OF ADAMS))	
Subscribed and sworn to before Delust Development C	re me this day of	, 20 <u></u> , by
Witness my hand and official	seal.	
My Commission expires: 10	- Commercial Commercia	-
Lola R Calhoun NOTARY PUBLIC STATE OF COLORAD NOTARY ID 2020403513 MY COMMISSION EXPIRES OCTOBI	Name and Address of	f Person Preparing Legal Description:
	A CONTRACTOR OF THE PARTY OF TH	

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APPLICANT'S CERTIFICATION CONCERNING QUALIFYING SURFACE DEVELOPMENT, PURSUANT TO C.R.S. §24-65.5-103.3 (1)(b) Delwest Development Corp. I/We, , (the "Applicant") by signing below, hereby declare and certify as follows: Concerning the property located at: Physical Address: 8000 Pecos St. Denver, CO 80209 SUB:PERL MACK MANOR SEVENTH FILING BLK:37 DESC: N 24 FT OF LOT 21 ALL LOTS 22 THRU Legal Description: 0171928400003 Parcel #(s): With respect to qualifying surface developments, that (PLEASE CHECK ONE): X No mineral estate owner has entered an appearance or filed an objection to the proposed application for development within thirty days after the initial public hearing on the application; or The Applicant and any mineral estate owners who have filed an objection to the proposed application for development or have otherwise filed an entry of appearance in the initial public hearing regarding such application no later than thirty days following the initial public hearing on the application have executed a surface use agreement related to the property included in the application for development, the provisions of which have been incorporated into the application for development or are evidenced by a memorandum or otherwise recorded in the records of the clerk and recorder of the county in which the property is located so as to provide notice to transferees of the Applicant, who shall be bound by such surface use agreements; or The application for development provides: Access to mineral operations, surface facilities, flowlines, and pipelines in (i) support of such operations existing when the final public hearing on the application for development is held by means of public roads sufficient to withstand trucks and drilling equipment or thirty-foot-wide access easements: An oil and gas operations area and existing well site locations in (ii) accordance with section 24-65.5-103.5 of the Colorado Revised Statutes; and That the deposit for incremental drilling costs described in section 24-(iii) 65.5-103.7 of the Colorado Revised Statutes has been made. 12/23/19 Date: Delwest Development Corp Applicant: After Recording Return To: By: Print Name: Craig Fitchett Address: 155 S Madison St. Suite 326 Denver, CO 80209

Witness my hand and official seal. My Commission expires: $7-14-2$	3 Delya Karper Notary Public	DEBRA L FARNEY NOTARY PUBLIC STATE OF COLORADO Notary ID 19954007439 My Commission Expires 07/14/2023
Subscribed and sworn to before me the	aisday of	, 20, by
COUNTY OF ADAMS)		
STATE OF COLORADO)		

Name and Address of Person Preparing Legal Description:

A recorded copy of this Certification shall be submitted to the Adams County Community and Economic Development Department within thirty days after the initial public hearing on all applicable land use applications.



December 6, 2020

Ms. Melissa Hale Delwest Development Corp. 155 South Madison Street Suite 326 Denver. CO 80209

Re: Elmwood North Traffic Study

Adams County, Colorado

Dear Ms. Hale:

This letter documents a traffic study prepared for a proposed Elmwood North residential neighborhood project to be located at the Pecos Street and 79th Way intersection in Adams County, Colorado. The development is located along the east side of Pecos Street, approximately halfway between US-36 and 84th Avenue. The residential neighborhood development currently proposes 41 single family detached homes and 48 multi-family townhome units. A vicinity map illustrating the location of the project site is attached in **Figure 1**.

The surrounding area primarily consists of single-family residences with a multifamily building located on the northwest corner of the 79th Way and Pecos Street intersection. Sherrelwood Park and Sherrelwood Elementary School are located to the northeast of the project. The proposed development is located approximately 0.7 miles north of US Highway 36 and 1.8 miles west of Interstate 25. The site area within the project study area is shown in the aerial of attached **Figure 2**. A site plan for the proposed development is also attached.

The purpose of this letter is to identify the amount of traffic associated with this proposed development based on the expected trip generation, trip distribution, and traffic assignment. An operational analysis and vehicle queue calculations for the proposed Elmwood North project were performed. Project traffic was assigned to the key intersections and project driveways within the study limits. It is expected that project construction will be completed within the next year; therefore, analysis was performed for the 2022 short term build out horizon as well as the 2040 long-term twenty-year horizon.

Existing Roadway Network and Traffic Counts

Regional access to the Elmwood North project is provided by Interstate 25 and US Highway 36. Primary access will be provided by Pecos Street. Direct access to the site will be provided by two full movements accesses on the east side of Pecos Street, one to align with existing Sherrelwood Drive, and the other is already constructed approximately halfway between 79th Way and Elmwood Lane. The following intersections were analyzed in this traffic study letter in accordance with Adams County standards and requirements:

- Sherrelwood Drive and Pecos Street (Northern Access)
- 79th Way and Pecos Street
- Elmwood Place and Pecos Street (Southern Access)



Pecos Street extends north-south with a two-way left turn lane and two through lanes in each direction with a speed limit of 35 miles per hour adjacent to the site. Sherrelwood Drive extends east-west with one through lane in each direction and has a posted speed limit of 25 miles per hour in the vicinity of the site. 79th Way extends east-west with one through lane in each direction and a posted speed limit of 25 miles per hour in the vicinity of the site. The intersection of Sherrelwood Drive and Pecos Street is signalized, which operates with permitted only left turn phasing in the northbound approach. The intersection of 79th Way and Pecos Street operates with stop control on the eastbound approach. The existing lane configuration and control of the key intersections is shown in attached **Figure**

Morning and afternoon peak hour turning movement counts were performed at the key intersections on Tuesday, March 10, 2020. The weekday counts were conducted in 15-minute intervals during the morning and afternoon peak hours of adjacent street traffic from 7:00 AM to 9:00 AM and 4:00 PM to 6:00 PM. The existing peak hour counts of the key intersections are shown in attached **Figure 4**, with count sheets attached as well.

Trip Generation

Site-generated traffic estimates are determined through a process known as trip generation. Rates and equations are applied to the proposed land use to estimate traffic generated by the development during a specific time interval. The acknowledged source for trip generation rates is the *Trip Generation Manual* published by the Institute of Transportation Engineers (ITE). ITE has established trip rates in nationwide studies of similar land uses. Trip generation is based on the ITE Trip Generation, 10th Edition (most current edition) fitted curve equations for Single-Family Detached Housing (ITE Code 210), and Multifamily Housing (Low-Rise) (ITE 220).

The following summarizes the anticipated trip generation for the proposed development (trip generation calculations are attached). Project generated traffic volumes are identified on a weekday daily as well as on a morning peak hour and afternoon peak hour basis. The morning peak hour is the highest one-hour time period of adjacent street traffic during four consecutive 15-minute intervals during the morning rush hour, between 7:00 am and 9:00 am. The afternoon peak hour is the highest one-hour time period of four consecutive 15-minute intervals between the hours of 4:00 pm and 6:00 pm representing the afternoon rush hour. As summarized in **Table 1**, the proposed Elmwood North project is anticipated to generate 780 weekday daily trips with 58 trips (13 in and 45 out) occurring during the morning peak hour, and 74 trips (47 in and 27 out) occurring during the afternoon peak hour.

Table 1 – Elmwood North Trip Generation

	Daily		Wee	kday Ve	ehicle 1	rips	
	Vehicle	AM	l Peak F	lour	PM	Peak I	Hour
Land Use and Size	Trips	In	Out	Total	In	Out	Total
Single-Family Detached Housing (210) – 41 Dwelling Units	458	7	27	34	27	16	43
Multifamily Housing (Low-Rise) (220) – 48 Dwelling Units	322	6	18	24	20	11	31
Total Trips	780	13	45	58	47	27	74



Project Access

Primary access will be provided by two full movements accesses, both along the east side of Pecos Street. The proposed northern access will align with the existing Sherrelwood Drive and Pecos Street signalized intersection. The proposed southern driveway along Pecos Street is already constructed, named Elmwood Place, and is approximately 550 feet south of 79th Way.

Distribution, Assignment, and Total Traffic

Trip distribution of the anticipated project traffic was identified based on the area street system characteristics, surrounding demographic information, and the access system for the project. Traffic assignment was obtained by applying the project trip distribution to the estimated full project traffic generation of the proposed development. Attached **Figure 5** illustrates the expected trip distribution, while **Figure 6** illustrates the traffic assignment for the proposed Elmwood North project on the surrounding street network and key intersections. Site traffic volumes were added to the 2022 and 2040 background volumes to represent estimated build-out year and long-term traffic conditions. These total traffic volumes for 2022 and 2040 are illustrated in **Figure 7** and **Figure 8**.

Traffic Operations Analysis

Kimley-Horn's analysis of traffic operations in the site vicinity was conducted to determine potential capacity deficiencies at the project key intersections for the 2022 build-out and 2040 long term horizons. The acknowledged source for determining overall capacity is the *Highway Capacity Manual*¹. Capacity analysis results are listed in terms of Level of Service (LOS). LOS is a qualitative term describing operating conditions a driver will experience while traveling on a particular street or highway during a specific time interval. It ranges from A (very little delay) to F (long delays and congestion). For intersections and roadways in this study area, typical traffic study practice identifies overall intersection LOS D and movement or approach LOS E as the minimum thresholds for acceptable operations. The following **Table 2** shows the definition of level of service for signalized and unsignalized intersections.

Level of Service	Signalized Intersection Average Total Delay (sec/veh)	Unsignalized Intersection Average Total Delay (sec/veh)
Α	≤ 10	≤ 10
В	> 10 and ≤ 20	> 10 and ≤ 15
С	> 20 and ≤ 35	> 15 and ≤ 25
D	> 35 and ≤ 55	> 25 and ≤ 35
E	> 55 and ≤ 80	> 35 and ≤ 50
F	> 80	> 50

Table 2 - Level of Service Definitions

Definitions provided from the Highway Capacity Manual, Sixth Edition, Transportation Research Board, 2016.

¹ Transportation Research Board, Highway Capacity Manual, Sixth Edition, Washington DC, 2016.



Project Intersections Operational Analysis

With the configuration of the project intersection in the opening year of 2022, the signalized intersection of Sherrelwood Drive and Pecos Street operates at LOS A, and all movements at the stop-controlled intersections are anticipated to operate acceptably with LOS C or better during the weekday peak hours with the addition of Elmwood North project traffic. By 2040, the signalized intersection of Sherrelwood Drive and Pecos Street is anticipated to continue operating at LOS A, and all movements at the stop-controlled intersections are expected to continue to operate acceptably with LOS D or better during the peak hours.

The traffic signal at the Sherrelwood Drive/Pecos Street intersection is operating at optimized traffic signal timing today. The cycle length is two (2) minutes (120 seconds) which is typical throughout the Denver Metro Area. There is very little eastbound Sherrelwood Drive traffic, so the time allocated for overall intersection in the two (2) minutes (120 seconds) is 100 seconds to northbound and southbound Pecos Street and 20 seconds to eastbound Sherrelwood Drive. This timing is appropriate and best for this intersection, and we would not recommend any changes to the timing. Further, actuation is present, and it is working based on observations. The operational analysis is shown in **Table 3**.

Single shared movement lanes are expected to be sufficient for traffic exiting both project driveways. The northern access at the intersection of Sherrelwood Drive and Pecos Street will be incorporated into the existing signal. The exiting approach at the intersection of Elmwood Place and Pecos Street should provide a R1-1 "STOP" sign. Also, although the current eastbound approach at the intersection of Sherrelwood Drive and Pecos Street operates acceptably as a shared left/right turn lane, the eastbound approach could be striped to include a shared left turn/through lane and an exclusive right turn lane if desired. This is how the eastbound approach is operating in the field and it would keep the possibility of a left turning vehicle from a blocking a driver wishing to turn right.

2020 Existing Traffic 2022 Total Traffic 2040 Total Traffic AM Peak **PM Peak** AM Peak **PM Peak** AM Peak **PM Peak** Hour Hour Hour Hour Hour Hour Delay Delay Delay Delay Delay Delay (sec/ (sec/ (sec/ (sec/ LOS (sec/ (sec/ LOS LOS LOS LOS LOS **Access and Movement** veh) veh) veh) veh) veh) veh) Sherrelwood Dr & Pecos 5.5 Α 4.2 Α 4.8# A# 3.1# A# 4.7# A# 3.2# A# 79th Way & Pecos St Eastbound Approach 10.8 В 11.8 10.9 11.9 В В 12.5 В В В 11.0 Northbound Left 8.4 Α 7.9 Α 8.4 Α 7.9 Α 8.6 Α 8.0 Α **Elmwood Place & Pecos** 25.8 Westbound Approach 9.8 22.7 С 9.9 D Α Α

8.2

12.2

В

Table 3 - Project Intersections LOS Results

Proposed full movement westbound leg included

Southbound Left

13.0

В

8.4



Vehicle Queuing Analysis

Queuing analysis was conducted for the study area intersections per Adams County standards and requirements. Results were obtained from the 95th percentile queue lengths obtained from the Synchro analysis. Queue length calculations are provided within the level of service operational sheets attached for the unsignalized intersections and in separate reports for the signalized intersection. Results of the queuing analysis and recommendations at the study area intersections are provided in **Table 4**.

Intersection Turn Lane	Existing Turn Lane Length (feet)	2022 Calculated Queue (feet)	2022 Recommended Length (feet)	2040 Calculated Queue (feet)	2040 Recommended Length (feet)
Sherrelwood Dr & Pecos St					
Eastbound Approach	С	31'	С	18'	С
Westbound Approach	DNE	0'	С	0'	С
Northbound Left	TWLTL	31'	TWLTL	37'	TWLTL
Southbound Left	TWLTL	9'	TWLTL	9'	TWLTL
79th Way & Pecos St					
Eastbound Approach	С	25'	С	25'	С
Northbound Left	TWLTL	25'	TWLTL	25'	TWLTL
Elmwood Place & Pecos St					
Westbound Approach	DNE	25'	С	25'	С
Southbound Left	TWLTL	25'	TWLTL	25'	TWLTL

Table 4 – Turn Lane Queuing Analysis Results

As shown in **Table 4** representing the queuing results, all anticipated queues are accommodated or managed within existing turn bay lengths with project traffic in the 2040 project build out year and long-term horizon.

Conclusion and Recommendations

The two project driveways, with the northern access being the east leg of the Sherrelwood Drive/Pecos Street intersection and southern access being Elmwood Place/Pecos Street are expected to operate acceptably during the peak hours in 2022 and 2040. Single shared movement lanes are expected to be sufficient for exiting both project driveways. The exiting approach at the intersection of Sherrelwood Drive and Pecos Street should be incorporated in the existing signal, which may require a new signal pole on the northwest corner of the intersection with a mast arm across the east leg. The exiting approach at Elmwood Place and Pecos Street should provide a R1-1 "STOP" sign. The recommended intersection lane configurations and control for the project buildout and long-term horizon are illustrated in **Figure 9**.

Likewise, it is recommended that the existing RTD Route 6 bus stop located along project frontage of northbound Pecos Street at 79th Way be maintained with development of the project.

In summary, this traffic study letter provides project traffic generation estimates, trip distribution, traffic assignment, and future traffic volume projections operational analysis to

C = Continuous Lane, DNE = Does Not Exist, TWLTL = Two-Way Left Turn Lane



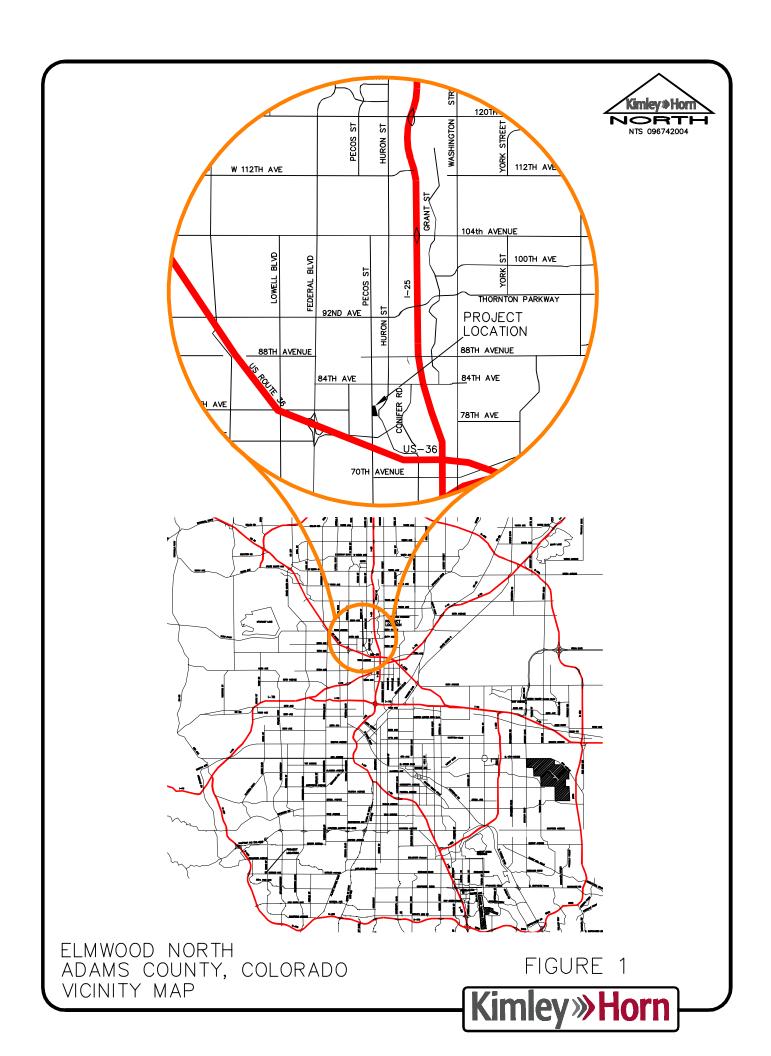
identify potential Elmwood North project traffic related impacts on the local street system. Based on the analysis presented in this study, Kimley-Horn believes the proposed Elmwood North project will be incorporated acceptably in the existing and proposed surrounding street network. If you have any questions or require anything further, please feel free to call.

Sincerely,

KIMLEY-HORN AND ASSOCIATES, INC.

Curtis D. Rowe, P.E., PTOE

Vice President



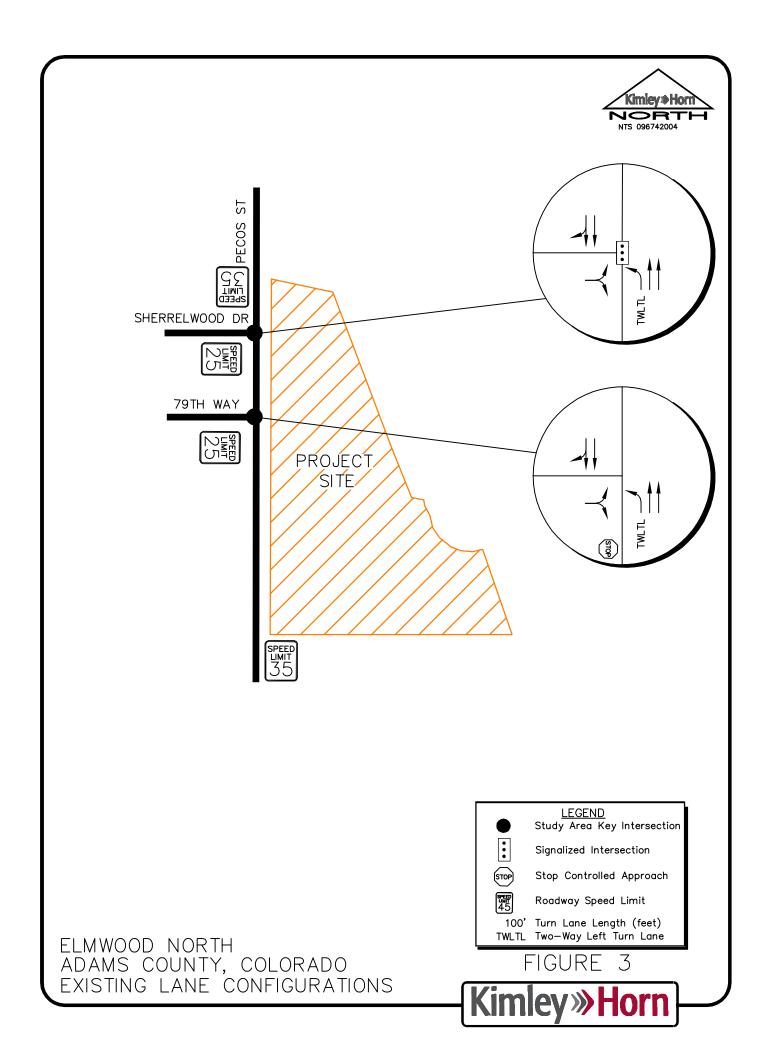


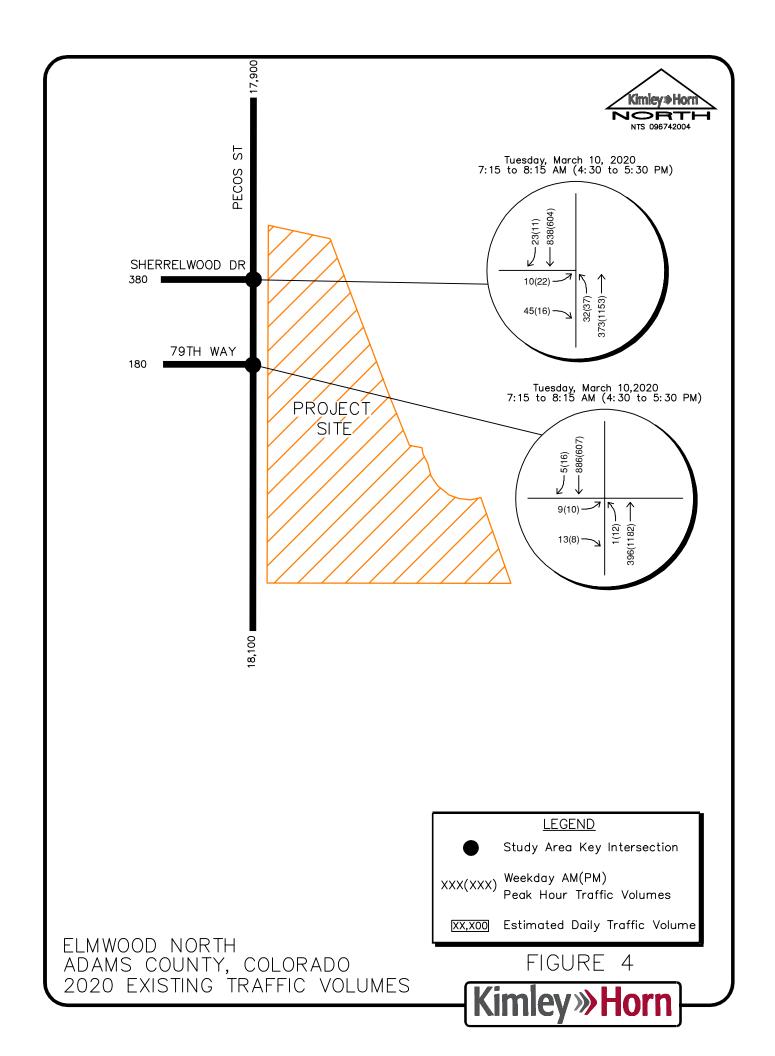


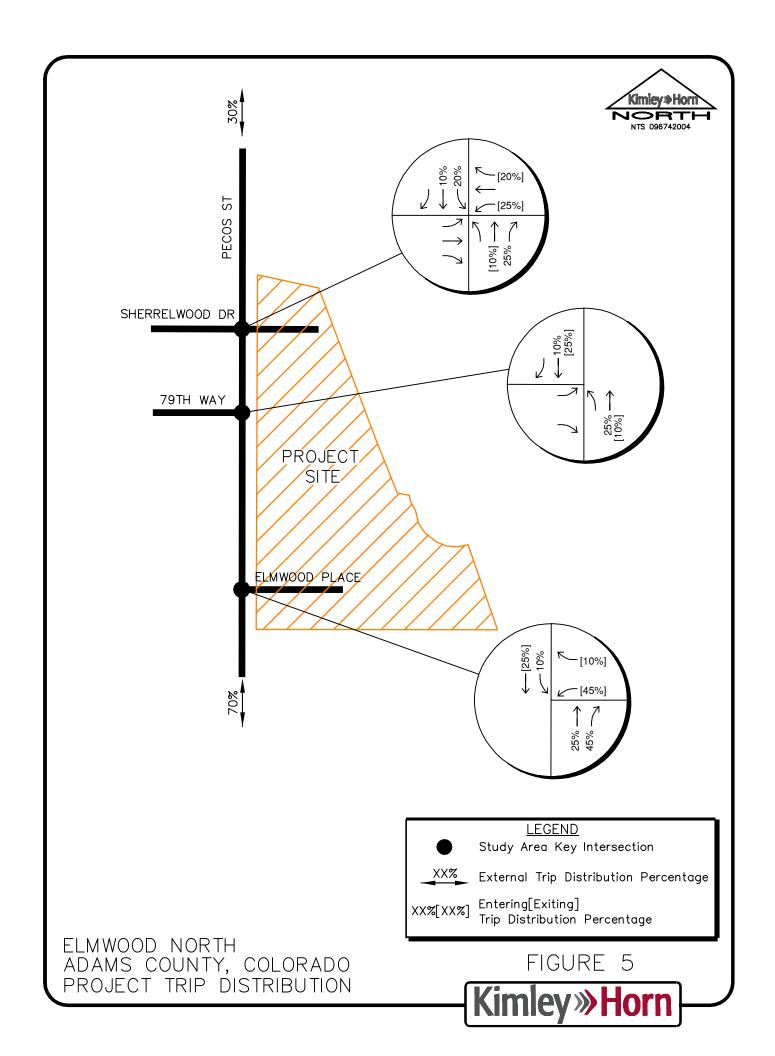
ELMWOOD NORTH ADAMS COUNTY, COLORADO SITE AREA

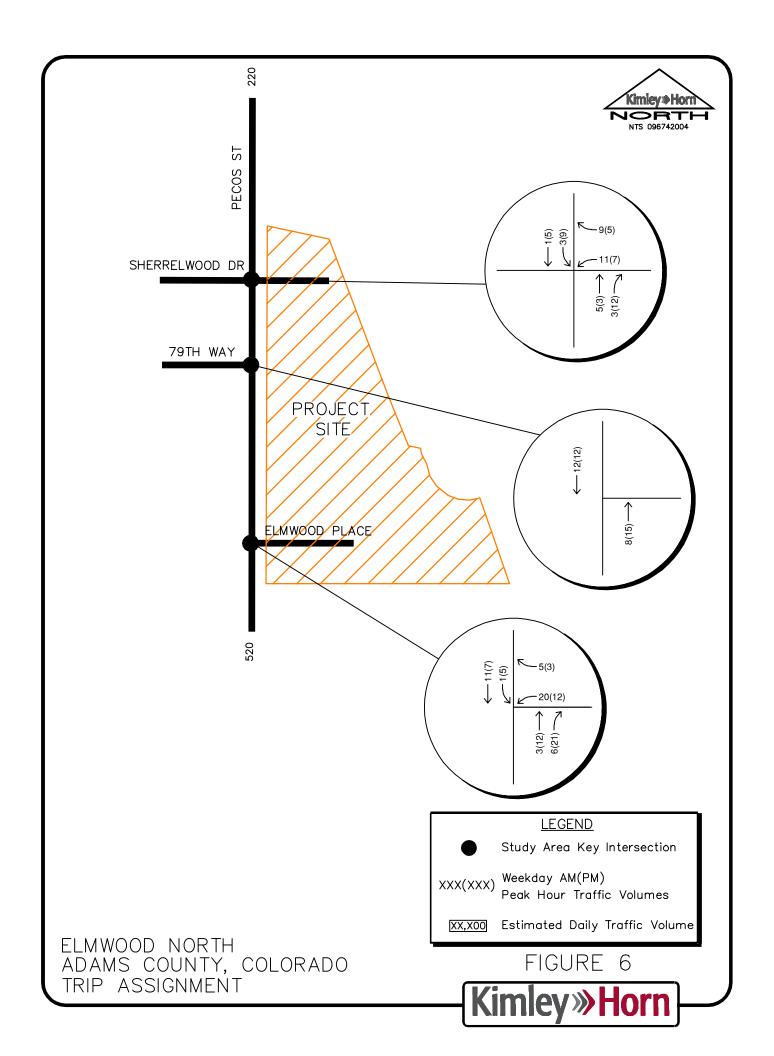
FIGURE 2

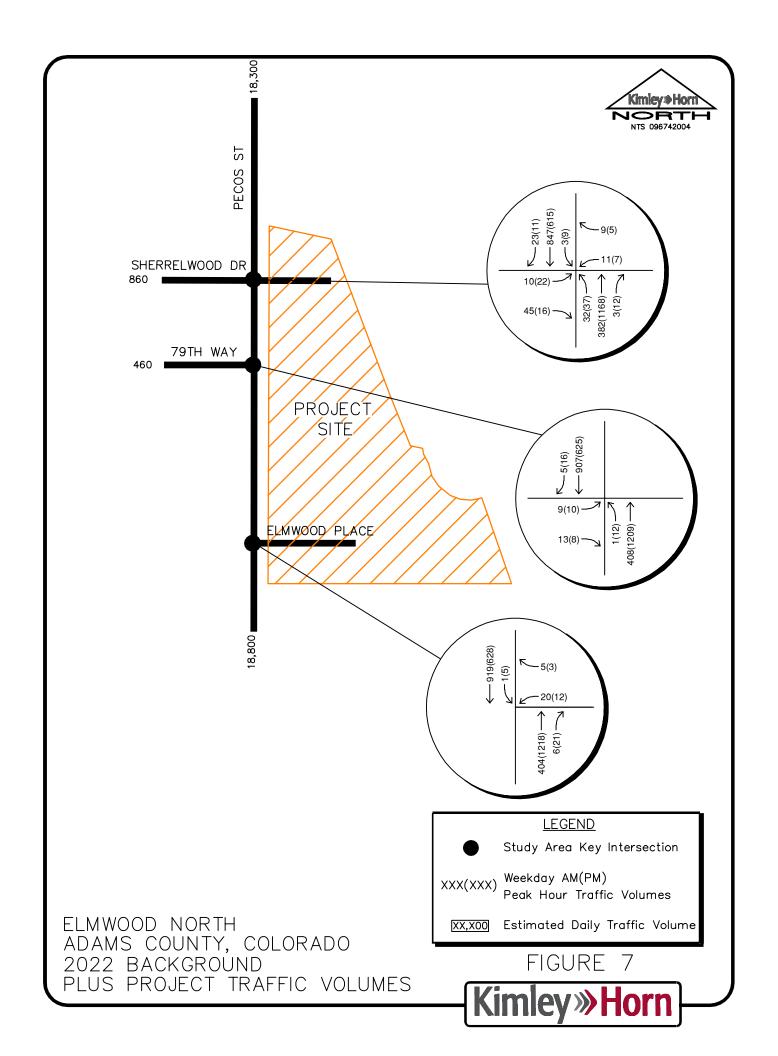


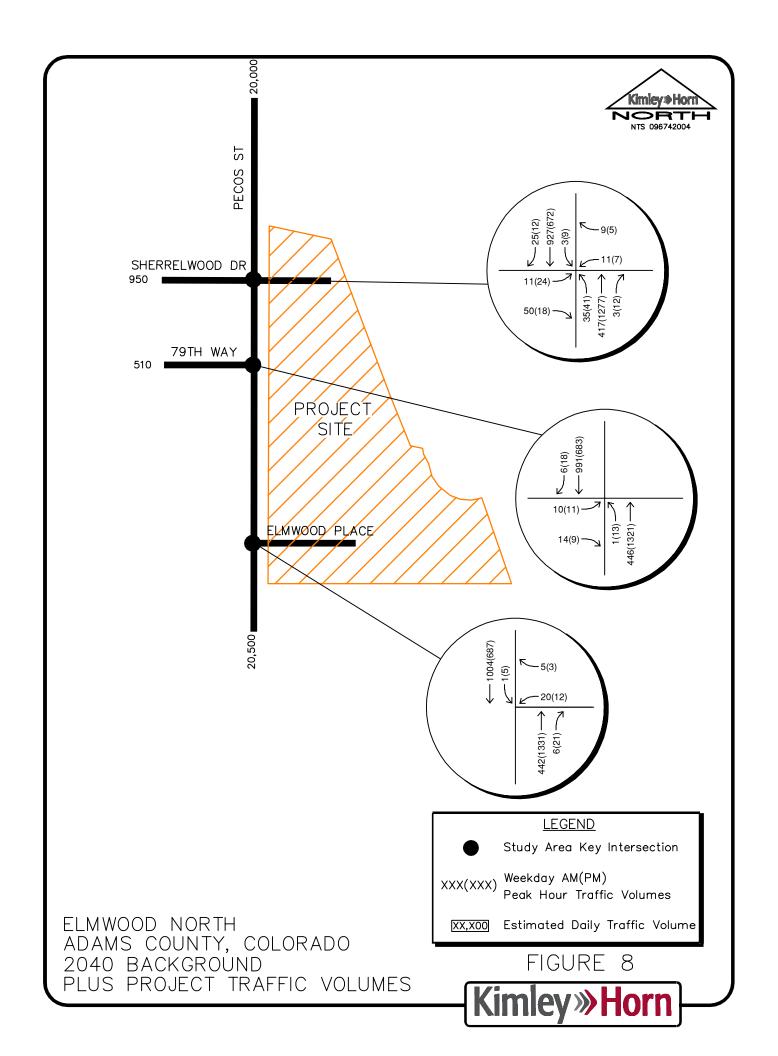


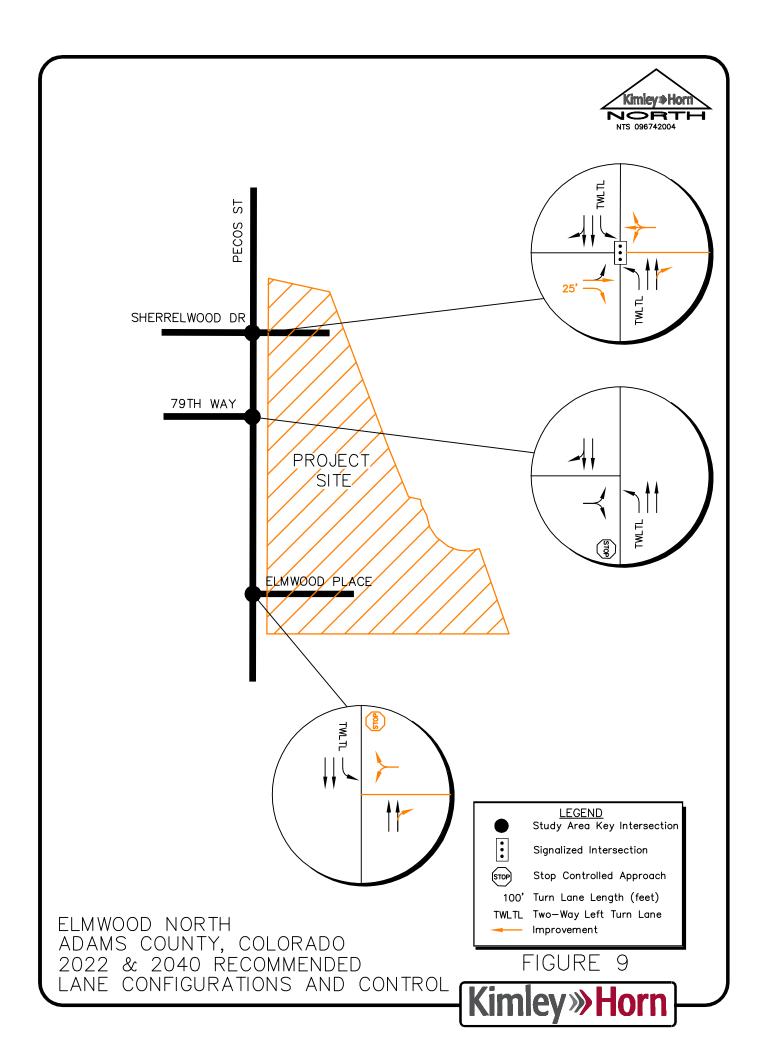














Adams, CO Elmwood North AM Peak 79th Way and Pecos St File Name: 79th and Pecos AM

Site Code : IPO 494 Start Date : 3/10/2020

Page No : 1

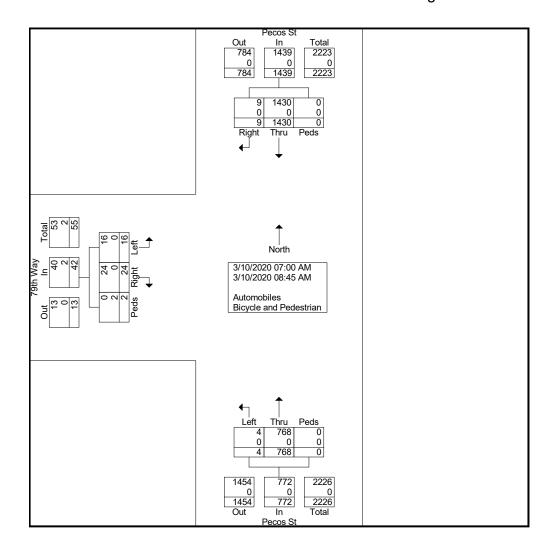
Groups Printed- Automobiles - Bicycle and Pedestrian

				Groups Pr	intea- Aut	omobiles	- Bicycie	and Pedes	ırıan				
		79th	Way				os St			Pec	os St		
		Eastl	bound			North	bound				bound		
Start Time	Left	Right	Peds	App. Total	Left	Thru	Peds	App. Total	Thru	Right	Peds	App. Total	Int. Total
07:00 AM	2	4	0	6	0	59	0	59	185	3	0	188	253
07:15 AM	1	3	0	4	0	78	0	78	216	1	0	217	299
07:30 AM	4	4	0	8	1	97	0	98	225	0	0	225	331
07:45 AM	2	2	2	6	0	111	0	111	233	1	0	234	351
Total	9	13	2	24	1	345	0	346	859	5	0	864	1234
08:00 AM	2	4	0	6	0	110	0	110	212	3	0	215	331
08:15 AM	2	4	0	6	2	113	0	115	134	1	0	135	256
08:30 AM	1	2	0	3	1	109	0	110	134	0	0	134	247
08:45 AM	2	1	0	3	0	91	0	91	91	0	0	91	185
Total	7	11	0	18	3	423	0	426	571	4	0	575	1019
· ·													
Grand Total	16	24	2	42	4	768	0	772	1430	9	0	1439	2253
Apprch %	38.1	57.1	4.8		0.5	99.5	0		99.4	0.6	0		
Total %	0.7	1.1	0.1	1.9	0.2	34.1	0	34.3	63.5	0.4	0	63.9	
Automobiles	16	24	0	40	4	768	0	772	1430	9	0	1439	2251
% Automobiles	100	100	0	95.2	100	100	0	100	100	100	0	100	99.9
Bicycle and Pedestrian	0	0	2	2	0	0	0	0	0	0	0	0	2
% Bicycle and Pedestrian	0	0	100	4.8	0	0	0	0	0	0	0	0	0.1



Adams, CO Elmwood North AM Peak 79th Way and Pecos St File Name: 79th and Pecos AM

Site Code : IPO 494 Start Date : 3/10/2020



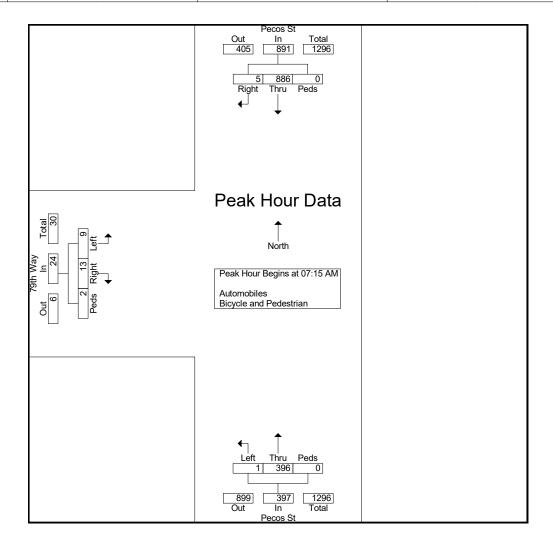


Adams, CO Elmwood North AM Peak 79th Way and Pecos St

File Name: 79th and Pecos AM

Site Code : IPO 494 Start Date : 3/10/2020

		79th	Way			Pec	os St			Pec	os St		
		East	bound			North	bound			South	bound		
Start Time	Left	Right	Peds	App. Total	Left	Thru	Peds	App. Total	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysi	is From 07	7:00 AM t	o 08:45 A	AM - Peak 1	of 1								
Peak Hour for Enti	re Interse	ction Beg	ins at 07	:15 AM									
07:15 AM	1	3	0	4	0	78	0	78	216	1	0	217	299
07:30 AM	4	4	0	8	1	97	0	98	225	0	0	225	331
07:45 AM	2	2	2	6	0	111	0	111	233	1	0	234	351
MA 00:80	2	4	0	6	0	110	0	110	212	3	0	215	331
Total Volume	9	13	2	24	1	396	0	397	886	5	0	891	1312
% App. Total	37.5	54.2	8.3		0.3	99.7	0		99.4	0.6	0		
PHF	.563	.813	.250	.750	.250	.892	.000	.894	.951	.417	.000	.952	.934





Adams, CO Elmwood North PM Peak 79th Way and Pecos St File Name: 79th and Pecos PM

Site Code : IPO 494 Start Date : 3/10/2020

Page No : 1

Groups Printed- Automobiles - Bicycle and Pedestrian

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			Way				os St				os St		
			oound				bound				bound		
Start Time	Left	Right	Peds	App. Total	Left	Thru	Peds	App. Total	Thru	Right	Peds	App. Total	Int. Total
04:00 PM	3	1	0	4	4	290	0	294	175	1	0	176	474
04:15 PM	1	1	2	4	1	307	0	308	136	3	0	139	451
04:30 PM	0	5	3	8	4	282	0	286	153	6	0	159	453
04:45 PM	3	3	1	7	4	274	0	278	141	3	0	144	429
Total	7	10	6	23	13	1153	0	1166	605	13	0	618	1807
05:00 PM	3	0	0	3	2	288	0	290	156	3	0	159	452
05:15 PM	4	0	0	4	2	338	0	340	157	4	0	161	505
05:30 PM	5	2	0	7	5	252	0	257	137	5	0	142	406
05:45 PM	0	4	0	4	3	258	0	261	141	2	0	143	408
Total	12	6	0	18	12	1136	0	1148	591	14	0	605	1771
Grand Total	19	16	6	41	25	2289	0	2314	1196	27	0	1223	3578
Apprch %	46.3	39	14.6		1.1	98.9	0		97.8	2.2	0		
Total %	0.5	0.4	0.2	1.1	0.7	64	0	64.7	33.4	8.0	0	34.2	
Automobiles	19	16	0	35	25	2289	0	2314	1196	27	0	1223	3572
% Automobiles	100	100	0	85.4	100	100	0	100	100	100	0	100	99.8
Bicycle and Pedestrian	0	0	6	6	0	0	0	0	0	0	0	0	6
% Bicycle and Pedestrian	0	0	100	14.6	0	0	0	0	0	0	0	0	0.2

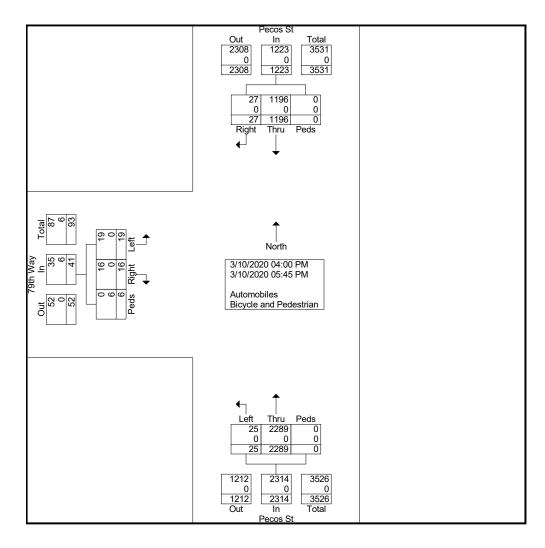


Adams, CO Elmwood North PM Peak

79th Way and Pecos St

File Name: 79th and Pecos PM

Site Code : IPO 494 Start Date : 3/10/2020





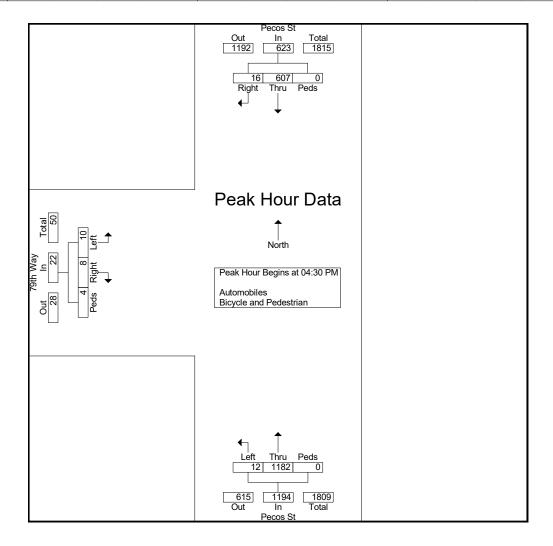
Adams, CO Elmwood North PM Peak

79th Way and Pecos St

File Name: 79th and Pecos PM

Site Code : IPO 494 Start Date : 3/10/2020

		79th	Way			Pec	os St			Pec	os St		
		East	bound			North	bound			South	nbound		
Start Time	Left	Right	Peds	App. Total	Left	Thru	Peds	App. Total	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysi	is From 04	1:00 PM t	o 05:45 F	PM - Peak 1	of 1								
Peak Hour for Enti	re Interse	ction Beg	ins at 04	:30 PM									
04:30 PM	0	5	3	8	4	282	0	286	153	6	0	159	453
04:45 PM	3	3	1	7	4	274	0	278	141	3	0	144	429
05:00 PM	3	0	0	3	2	288	0	290	156	3	0	159	452
05:15 PM	4	0	0	4	2	338	0	340	157	4	0	161	505
Total Volume	10	8	4	22	12	1182	0	1194	607	16	0	623	1839
% App. Total	45.5	36.4	18.2		1	99	0		97.4	2.6	0		
PHF	.625	.400	.333	.688	.750	.874	.000	.878	.967	.667	.000	.967	.910





Adams, CO Elmwood North AM Peak Sherrelwood Dr and Pecos St File Name: Sherrelwood and Pecos AM

Site Code : IPO 494 Start Date : 3/10/2020

Page No : 1

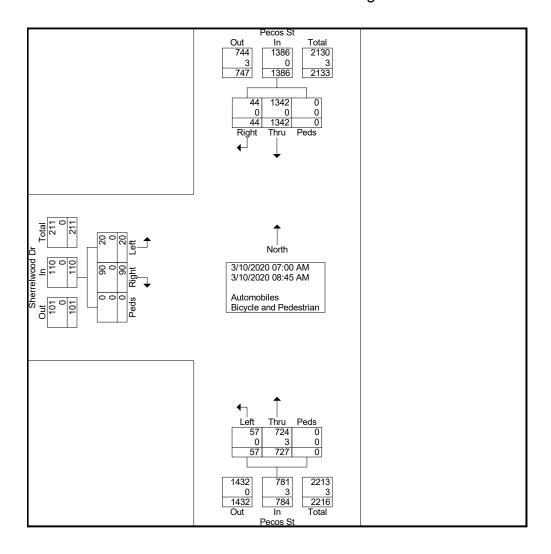
Groups Printed- Automobiles - Bicycle and Pedestrian

			wood Dr		mod 7 det	Pec	os St	and rodge			os St		
Start Time	Left		Peds	App. Total	Left	North Thru	Peds	App. Total	Thru		bound Peds	App. Total	Int. Total
		Right								Right		- ' '	
07:00 AM	0	11	0	11	0	59	0	59	178	6	0	184	254
07:15 AM	2	14	0	16	4	77	0	81	201	4	0	205	302
07:30 AM	2	8	0	10	5	96	0	101	218	4	0	222	333
07:45 AM	2	10	0	12	11	101	0	112	214	6	0	220	344
Total	6	43	0	49	20	333	0	353	811	20	0	831	1233
08:00 AM	4	13	0	17	12	99	0	111	205	9	0	214	342
08:15 AM	2	10	0	12	5	113	0	118	123	6	0	129	259
08:30 AM	7	14	0	21	16	93	0	109	123	8	0	131	261
08:45 AM	1	10	0	11	4	89	0	93	80	1	0	81	185
Total	14	47	0	61	37	394	0	431	531	24	0	555	1047
Grand Total	20	90	0	110	57	727	0	784	1342	44	0	1386	2280
Apprch %	18.2	81.8	0		7.3	92.7	0		96.8	3.2	0		
Total %	0.9	3.9	0	4.8	2.5	31.9	0	34.4	58.9	1.9	0	60.8	
Automobiles	20	90	0	110	57	724	0	781	1342	44	0	1386	2277
% Automobiles	100	100	0	100	100	99.6	0	99.6	100	100	0	100	99.9
Bicycle and Pedestrian	0	0	0	0	0	3	0	3	0	0	0	0	3
% Bicycle and Pedestrian	0	0	0	0	0	0.4	0	0.4	0	0	0	0	0.1



Adams, CO Elmwood North AM Peak Sherrelwood Dr and Pecos St File Name: Sherrelwood and Pecos AM

Site Code : IPO 494 Start Date : 3/10/2020

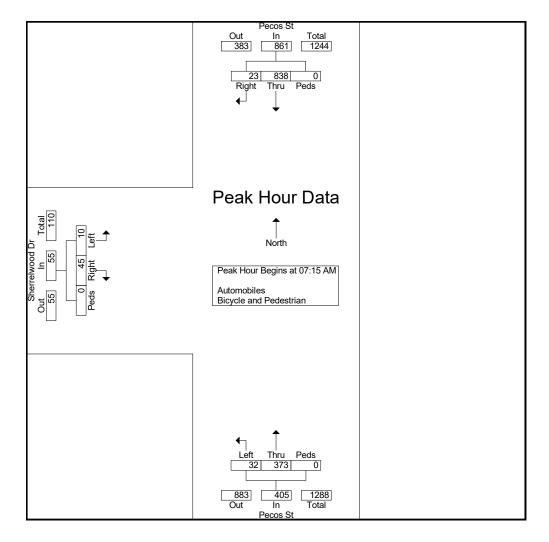




Adams, CO Elmwood North AM Peak Sherrelwood Dr and Pecos St File Name: Sherrelwood and Pecos AM

Site Code : IPO 494 Start Date : 3/10/2020

		Sherrel	wood Dr			Pec	os St			Pec	os St		
		East	oound			North	bound			South	bound		
Start Time	Left	Right	Peds	App. Total	Left	Thru	Peds	App. Total	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysi	is From 07	7:00 AM to	o 08:45 A	AM - Peak 1	of 1					•			
Peak Hour for Enti	ire Interse	ction Beg	ins at 07	:15 AM									
07:15 AM	2	14	0	16	4	77	0	81	201	4	0	205	302
07:30 AM	2	8	0	10	5	96	0	101	218	4	0	222	333
07:45 AM	2	10	0	12	11	101	0	112	214	6	0	220	344
08:00 AM	4	13	0	17	12	99	0	111	205	9	0	214	342
Total Volume	10	45	0	55	32	373	0	405	838	23	0	861	1321
% App. Total	18.2	81.8	0		7.9	92.1	0		97.3	2.7	0		
PHF	.625	.804	.000	.809	.667	.923	.000	.904	.961	.639	.000	.970	.960





Adams, CO Elmwood North PM Peak Sherrelwood Dr and Pecos St File Name: Sherrelwood and Pecos PM

Site Code : IPO 494 Start Date : 3/10/2020

Page No : 1

Groups Printed- Automobiles - Bicycle and Pedestrian

		Sherrel	wood Dr		intou- Aut		os St	and Pedes	шап	Pec	os St		
		Easth				North	bound				bound		
Start Time	Left	Right	Peds	App. Total	Left	Thru	Peds	App. Total	Thru	Right	Peds	App. Total	Int. Total
04:00 PM	12	13	0	25	13	279	0	292	160	11	0	171	488
04:15 PM	11	5	0	16	9	300	0	309	127	3	0	130	455
04:30 PM	5	4	0	9	9	274	0	283	158	6	0	164	456
04:45 PM	5	5	0	10	8	268	0	276	135	1	0	136	422
Total	33	27	0	60	39	1121	0	1160	580	21	0	601	1821
05:00 PM	5	6	0	11	11	280	0	291	153	2	0	155	457
05:15 PM	7	1	0	8	9	331	0	340	158	2	0	160	508
05:30 PM	1	3	0	4	11	242	0	253	142	3	0	145	402
05:45 PM	3	5	0	8	7	258	0	265	135	5	0	140	413
Total	16	15	0	31	38	1111	0	1149	588	12	0	600	1780
·				,				·					
Grand Total	49	42	0	91	77	2232	0	2309	1168	33	0	1201	3601
Apprch %	53.8	46.2	0		3.3	96.7	0		97.3	2.7	0		
Total %	1.4	1.2	0	2.5	2.1	62	0	64.1	32.4	0.9	0	33.4	
Automobiles	49	42	0	91	77	2229	0	2306	1167	33	0	1200	3597
% Automobiles	100	100	0	100	100	99.9	0	99.9	99.9	100	0	99.9	99.9
Bicycle and Pedestrian	0	0	0	0	0	3	0	3	1	0	0	1	4
% Bicycle and Pedestrian	0	0	0	0	0	0.1	0	0.1	0.1	0	0	0.1	0.1

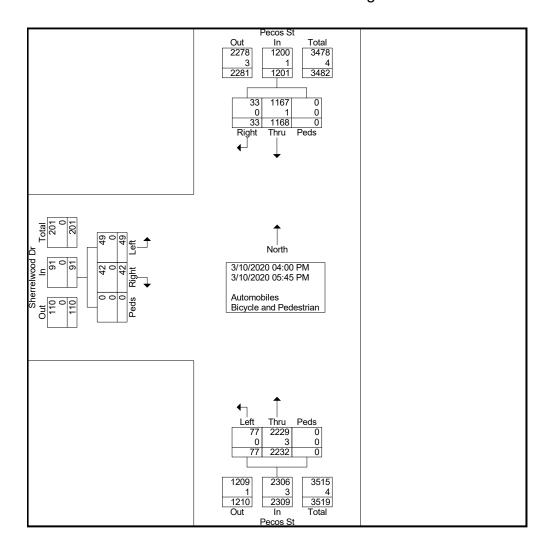


Adams, CO **Elmwood North** PM Peak

Sherrelwood Dr and Pecos St

File Name: Sherrelwood and Pecos PM

Site Code : IPO 494 Start Date : 3/10/2020

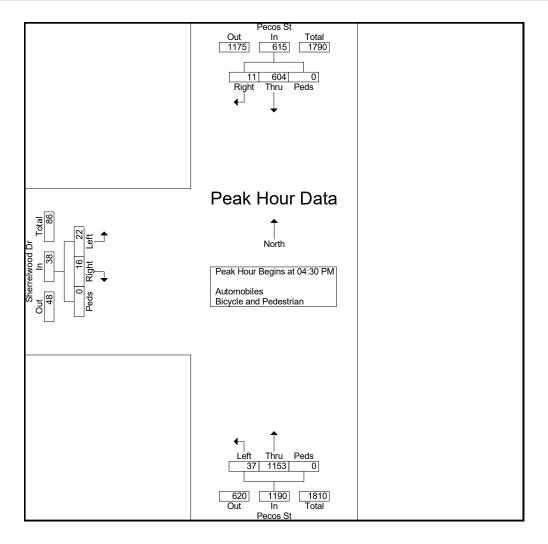




Adams, CO Elmwood North PM Peak Sherrelwood Dr and Pecos St File Name: Sherrelwood and Pecos PM

Site Code : IPO 494 Start Date : 3/10/2020

		Sherrel	wood Dr			Pec	os St			Pec	os St		
		Eastl	oound			North	bound			South	bound		
Start Time	Left	Right	Peds	App. Total	Left	Thru	Peds	App. Total	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysi	is From 0	4:00 PM t	o 05:45 l	PM - Peak 1	of 1				•			•	
Peak Hour for Enti	ire Interse	ction Beg	ins at 04	:30 PM									
04:30 PM	5	4	0	9	9	274	0	283	158	6	0	164	456
04:45 PM	5	5	0	10	8	268	0	276	135	1	0	136	422
05:00 PM	5	6	0	11	11	280	0	291	153	2	0	155	457
05:15 PM	7	1	0	8	9	331	0	340	158	2	0	160	508
Total Volume	22	16	0	38	37	1153	0	1190	604	11	0	615	1843
% App. Total	57.9	42.1	0		3.1	96.9	0		98.2	1.8	0		
PHF	.786	.667	.000	.864	.841	.871	.000	.875	.956	.458	.000	.938	.907





Project	Elmwood North				
Subject	Trip Generation fo	r Single-Family De	tached Housing		
Designed by	TES	Date	April 01, 2020	Job No.	96742004.000
Checked by		Date		Sheet No.	of

TRIP GENERATION MANUAL TECHNIQUES

ITE Trip Generation Manual 10th Edition, Fitted Curve Equations

Land Use Code - Single-Family Detached Housing (210)

Independent Variable - Dwelling Units (X)

$$X = 41$$

T = Average Vehicle Trip Ends

Peak Hour of Adjacent Street Traffic, One Hour Between 7 and 9 a.m. (200 Series Page 3)

Average Weekday Directional Distribution: 25% ent. 75% exit. T = 34 Average Vehicle Trip Ends (T) = 0.71 * (41) + 4.80 7 entering 26 exiting

7 + 27 = 34

Peak Hour of Adjacent Street Traffic, One Hour Between 4 and 6 p.m. (200 Series Page 4)

Average Weekday Directional Distribution: 63% ent. exit. Average Vehicle Trip Ends Ln(T) = 0.96 Ln(X) + 0.2043 Ln(T) = 0.96 *27 Ln(41) + 0.20 entering 16 exiting 27 16 43

Peak Hour of Generator, Saturday (200 Series Page 8)

Average Saturday Directional Distribution: 54% ent. 46% exit. (T) = 0.84 (X) + 17.99 T = 52 Average Vehicle Trip Ends (T) = 0.84 * (41) + 17.99 28 entering 24 exiting

28 + 24 = 52

Weekday (200 Series Page 2)

229 + 229 = 458



Project	Elmwood North						
Subject	Trip Generation for	r Multifamily Housi	ing (Low-Rise)				
Designed by	TES	Date	April 01, 2020	Job No.	96	742004	.000
Checked by		Date		Sheet No.	1	of	1

TRIP GENERATION MANUAL TECHNIQUES

ITE Trip Generation Manual 10th Edition, Fitted Curve Equations

Land Use Code - Multifamily Housing (Low-Rise) (220)

Independent Variable - Dwelling Units (X)

X = 48

T = Average Vehicle Trip Ends

Peak Hour of Adjacent Street Traffic, One Hour Between 7 and 9 a.m. (Series 200 Page 32)

6 + 18 = 24

Peak Hour of Adjacent Street Traffic, One Hour Between 4 and 6 p.m. (Series 200 Page 33)

Directional Distribution: 63% ent. 37% exit. Ln(T) = 0.89 Ln(X) - 0.02 T = 31 Average Vehicle Trip Ends Ln(T) = 0.89 * Ln(48.0) - 0.02 20 entering 11 exiting 20 + 11 = 31

Weekday (Series 200 Page 31)

161

Peak Hour of Generator, Saturday (Series 200 Page 37)

8 + 10 = not ok

161

322

Timings 1: Pecos St & Sherrelwood Dr

	٠	4	†	ţ	
Lane Group	EBL	NBL	NBT	SBT	
Lane Configurations	W	ሻ	^	ħβ	
Traffic Volume (vph)	10	32	373	838	
Future Volume (vph)	10	32	373	838	
Turn Type	Prot	Perm	NA	NA	
Protected Phases	4		2	6	
Permitted Phases		2			
Detector Phase	4	2	2	6	
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	
Minimum Split (s)	24.5	24.5	24.5	24.5	
Total Split (s)	30.0	60.0	60.0	60.0	
Total Split (%)	33.3%	66.7%	66.7%	66.7%	
Yellow Time (s)	4.5	4.5	4.5	4.5	
All-Red Time (s)	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	
Total Lost Time (s)	6.5	6.5	6.5	6.5	
Lead/Lag					
Lead-Lag Optimize?					
Recall Mode	None	C-Max	C-Max	C-Max	
Act Effct Green (s)	7.1	73.6	73.6	73.6	
Actuated g/C Ratio	0.08	0.82	0.82	0.82	
v/c Ratio	0.40	0.10	0.14	0.32	
Control Delay	21.8	3.4	2.6	3.1	
Queue Delay	0.0	0.0	0.0	0.0	
Total Delay	21.8	3.4	2.6	3.1	
LOS	C	Α	A	А	
Approach Delay	21.8		2.6	3.1	
Approach LOS	C		A	A	
•			,,	,,	
Intersection Summary					
Cycle Length: 90					
Actuated Cycle Length: 90				.	_
Offset: 0 (0%), Referenced	d to phase 2	2:NBTL ar	nd 6:SBT	, Start of	Green
Natural Cycle: 50					
Control Type: Actuated-Co	ordinated				
Maximum v/c Ratio: 0.40					
Intersection Signal Delay:					ntersection LOS: A
Intersection Capacity Utiliz	zation 41.6%	6		I	CU Level of Service A
Analysis Period (min) 15					
Splits and Phases: 1: Po	ecos St & S	herrelwo	nd Dr		
	0003 OL & 3	TIGHT GIWO	סט טו		
Ø2 (R)					
60 s					
1	· · · · ·			-	
▼ Ø6 (R)					

	•	•	4	†	↓	4
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	¥		ሻ	^	†	J=11
Traffic Volume (veh/h)	10	45	32	373	838	23
Future Volume (veh/h)	10	45	32	373	838	23
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00	•		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No	1.00	1.00	No	No	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1870	1870	1870	1870
Adj Flow Rate, veh/h	16	56	48	405	873	36
Peak Hour Factor	0.63	0.80	0.67	0.92	0.96	0.64
					0.90	
Percent Heavy Veh, %	0	0	2	2		2
Cap, veh/h	20	71	528	2837	2777	115
Arrive On Green	0.06	0.06	0.80	0.80	0.80	0.80
Sat Flow, veh/h	357	1249	614	3647	3571	143
Grp Volume(v), veh/h	73	0	48	405	446	463
Grp Sat Flow(s), veh/h/ln	1628	0	614	1777	1777	1845
Q Serve(g_s), s	4.0	0.0	2.1	2.3	6.1	6.1
Cycle Q Clear(g_c), s	4.0	0.0	8.1	2.3	6.1	6.1
Prop In Lane	0.22	0.77	1.00			0.08
Lane Grp Cap(c), veh/h	93	0	528	2837	1419	1473
V/C Ratio(X)	0.78	0.00	0.09	0.14	0.31	0.31
Avail Cap(c_a), veh/h	425	0	528	2837	1419	1473
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
	41.9	0.00	3.5	2.1	2.4	2.4
Uniform Delay (d), s/veh						
Incr Delay (d2), s/veh	13.4	0.0	0.3	0.1	0.6	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	0.0	0.2	0.5	1.4	1.4
Unsig. Movement Delay, s/ve						
LnGrp Delay(d),s/veh	55.2	0.0	3.9	2.2	3.0	3.0
LnGrp LOS	E	Α	Α	Α	Α	Α
Approach Vol, veh/h	73			453	909	
Approach Delay, s/veh	55.2			2.4	3.0	
Approach LOS	E			Α	А	
		0				0
Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		78.4		11.6		78.4
Change Period (Y+Rc), s		6.5		6.5		6.5
Max Green Setting (Gmax), s		53.5		23.5		53.5
Max Q Clear Time (g_c+l1), s	3	10.1		6.0		8.1
Green Ext Time (p_c), s		3.4		0.2		6.7
Intersection Summary						
HCM 6th Ctrl Delay			5.5			
HCM 6th LOS			3.5 A			
			A			
Notes						

User approved volume balancing among the lanes for turning movement.

Timings 1: Pecos St & Sherrelwood Dr

	٠	•	†	↓				
Lane Group	EBL	NBL	NBT	SBT				
Lane Configurations	W	ሻ	^	↑ ⊅				
Traffic Volume (vph)	22	37	1153	604				
Future Volume (vph)	22	37	1153	604				
Turn Type	Prot	Perm	NA	NA				
Protected Phases	4		2	6				
Permitted Phases		2						
Detector Phase	4	2	2	6				
Switch Phase								
Minimum Initial (s)	5.0	5.0	5.0	5.0				
Minimum Split (s)	24.5	24.5	24.5	24.5				
Total Split (s)	28.0	92.0	92.0	92.0				
Total Split (%)	23.3%	76.7%	76.7%	76.7%				
Yellow Time (s)	4.5	4.5	4.5	4.5				
All-Red Time (s)	2.0	2.0	2.0	2.0				
Lost Time Adjust (s)	0.0	0.0	0.0	0.0				
Total Lost Time (s)	6.5	6.5	6.5	6.5				
Lead/Lag	0.5	0.5	0.5	0.5				
Lead-Lag Optimize?								
Recall Mode	None	C-Max	C-Max	C-Max				
	None 7.7	103.0		103.0				
Act Effct Green (s)			103.0					
Actuated g/C Ratio	0.06	0.86	0.86	0.86				
v/c Ratio	0.39	0.07	0.44	0.22				
Control Delay	41.7	2.5	3.2	2.2				
Queue Delay	0.0	0.0	0.0	0.0				
Total Delay	41.7	2.5	3.2	2.2				
LOS	D	Α	Α	Α				
Approach Delay	41.7		3.2	2.2				
Approach LOS	D		Α	Α				
Intersection Summary								
Cycle Length: 120								
Actuated Cycle Length: 12	0							
Offset: 0 (0%), Referenced	I to phase 2	:NBTL ar	nd 6:SBT	Start of	Green			
Natural Cycle: 60								
Control Type: Actuated-Co	ordinated							
Maximum v/c Ratio: 0.44								
Intersection Signal Delay:	3.8			li	ntersection LOS: A			
Intersection Capacity Utiliz		6			CU Level of Service A			
Analysis Period (min) 15								
Splits and Phases: 1: Pe	ecos St & S	herrelwo	od Dr					
1 Ø2 (R)						_ ♪	Ø4	
92 s						28 s	דע	
1								
● Ø6 (R)								
725								

	۶	•	4	†	↓	4
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	¥		ች	^	†	
Traffic Volume (veh/h)	22	16	37	1153	604	11
Future Volume (veh/h)	22	16	37	1153	604	11
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	.,,,,,
Adj Sat Flow, veh/h/ln	1900	1900	1870	1870	1870	1870
Adj Flow Rate, veh/h	28	24	44	1325	629	24
Peak Hour Factor	0.79	0.67	0.84	0.87	0.96	0.46
Percent Heavy Veh, %	0.79	0.07	2	2	2	2
Cap, veh/h	36	31	698	3026	2972	113
•						
Arrive On Green	0.04	0.04	0.85	0.85	0.85	0.85
Sat Flow, veh/h	892	764	779	3647	3584	133
Grp Volume(v), veh/h	53	0	44	1325	320	333
Grp Sat Flow(s), veh/h/ln	1688	0	779	1777	1777	1846
Q Serve(g_s), s	3.7	0.0	1.3	10.6	3.9	3.9
Cycle Q Clear(g_c), s	3.7	0.0	5.2	10.6	3.9	3.9
Prop In Lane	0.53	0.45	1.00			0.07
Lane Grp Cap(c), veh/h	68	0	698	3026	1513	1572
V/C Ratio(X)	0.78	0.00	0.06	0.44	0.21	0.21
Avail Cap(c_a), veh/h	302	0	698	3026	1513	1572
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	57.1	0.0	2.1	2.1	1.6	1.6
Incr Delay (d2), s/veh	17.4	0.0	0.2	0.5	0.3	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.2	0.0	0.0	0.0
	1.9	0.0	0.0	2.1	0.0	0.0
%ile BackOfQ(50%),veh/ln		0.0	U.Z	Z. I	0.9	0.9
Unsig. Movement Delay, s/veh		0.0	0.0	0.0	4.0	4.0
LnGrp Delay(d),s/veh	74.4	0.0	2.3	2.6	1.9	1.9
LnGrp LOS	<u>E</u>	Α	Α	Α	Α	A
Approach Vol, veh/h	53			1369	653	
Approach Delay, s/veh	74.4			2.6	1.9	
Approach LOS	Е			Α	Α	
Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		108.7		11.3		108.7
, , ,						
Change Period (Y+Rc), s		6.5		6.5		6.5
Max Green Setting (Gmax), s		85.5		21.5		85.5
Max Q Clear Time (g_c+I1), s		12.6		5.7		5.9
Green Ext Time (p_c), s		15.2		0.1		4.4
Intersection Summary						
HCM 6th Ctrl Delay			4.2			
HCM 6th LOS			Α			
Notes						

User approved volume balancing among the lanes for turning movement.

Timings 1: Pecos St & Sherrelwood Dr

	۶	4	†	↓		
Lane Group	EBL	NBL	NBT	SBT		
Lane Configurations	¥/	*	^	† ‡		
Traffic Volume (vph)	10	32	377	846		
Future Volume (vph)	10	32	377	846		
Turn Type	Prot	Perm	NA	NA		
Protected Phases	4		2	6		
Permitted Phases		2				
Detector Phase	4	2	2	6		
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0		
Minimum Split (s)	24.5	24.5	24.5	24.5		
Total Split (s)	30.0	60.0	60.0	60.0		
Total Split (%)	33.3%	66.7%	66.7%	66.7%		
Yellow Time (s)	4.5	4.5	4.5	4.5		
All-Red Time (s)	2.0	2.0	2.0	2.0		
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		
Total Lost Time (s)	6.5	6.5	6.5	6.5		
Lead/Lag	0.0	0.0	0.0	0.0		
Lead-Lag Optimize?						
Recall Mode	None	C-Max	C-Max	C-Max		
Act Effct Green (s)	7.1	73.6	73.6	73.6		
Actuated g/C Ratio	0.08	0.82	0.82	0.82		
v/c Ratio	0.40	0.10	0.14	0.32		
Control Delay	21.8	3.4	2.6	3.1		
Queue Delay	0.0	0.0	0.0	0.0		
Total Delay	21.8	3.4	2.6	3.1		
LOS	C	Α	A	Α		
Approach Delay	21.8	, ,	2.6	3.1		
Approach LOS	C		A	A		
Intersection Summary						
Cycle Length: 90						
Actuated Cycle Length: 90	to where O	.NDTI -	- 4 C.ODT	Ctant of	0	
Offset: 0 (0%), Referenced	to phase 2	::NB L ar	10 6:5BT	Start of	Green	
Natural Cycle: 50						
Control Type: Actuated-Coo	ordinated					
Maximum v/c Ratio: 0.40						
Intersection Signal Delay: 3		,			ntersection LOS: A	
Intersection Capacity Utiliza	ation 41.6%	o .		Į.	CU Level of Service A	
Analysis Period (min) 15						
Splits and Phases: 1: Pe	cos St & S	herrelwo	od Dr			
♦†						≠
Ø2 (R)						Ø4
						30 s
▼ Ø6 (R)]

	ၨ	•	4	†	ļ	4
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	W		ች	^	↑ ↑	
Traffic Volume (veh/h)	10	45	32	377	846	23
Future Volume (veh/h)	10	45	32	377	846	23
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No	1.00	1.00	No	No	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1870	1870	1870	1870
Adj Flow Rate, veh/h	16	56	48	410	881	36
Peak Hour Factor	0.63	0.80	0.67	0.92	0.96	0.64
Percent Heavy Veh, %	0.03	0.00	2	2	2	2
Cap, veh/h	20	71	525	2837	2778	114
Arrive On Green	0.06	0.06	0.80	0.80	0.80	0.80
	357	1249	609	3647	3573	142
Sat Flow, veh/h						
Grp Volume(v), veh/h	73	0	48	410	450	467
Grp Sat Flow(s), veh/h/ln	1628	0	609	1777	1777	1845
Q Serve(g_s), s	4.0	0.0	2.1	2.4	6.2	6.2
Cycle Q Clear(g_c), s	4.0	0.0	8.2	2.4	6.2	6.2
Prop In Lane	0.22	0.77	1.00			0.08
Lane Grp Cap(c), veh/h	93	0	525	2837	1419	1473
V/C Ratio(X)	0.78	0.00	0.09	0.14	0.32	0.32
Avail Cap(c_a), veh/h	425	0	525	2837	1419	1473
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.9	0.0	3.6	2.1	2.4	2.4
Incr Delay (d2), s/veh	13.4	0.0	0.3	0.1	0.6	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	0.0	0.2	0.5	1.4	1.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	55.2	0.0	3.9	2.2	3.0	3.0
LnGrp LOS	E	A	A	A	A	A
Approach Vol, veh/h	73	/\	/\	458	917	
Approach Delay, s/veh	55.2			2.4	3.0	
Approach LOS	55.Z F			2.4 A	3.0 A	
Approach LOS				A	А	
Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		78.4		11.6		78.4
Change Period (Y+Rc), s		6.5		6.5		6.5
Max Green Setting (Gmax), s		53.5		23.5		53.5
Max Q Clear Time (g_c+l1), s		10.2		6.0		8.2
Green Ext Time (p_c), s		3.5		0.2		6.8
(, =):		3.0		V.E		0.0
Intersection Summary						
HCM 6th Ctrl Delay			5.4			
HCM 6th LOS			Α			
Notes						

Timings 1: Pecos St & Sherrelwood Dr

	٠	•	†	↓	
Lane Group	EBL	NBL	NBT	SBT	
Lane Configurations	¥	ሻ	^	∱ Ъ	
Traffic Volume (vph)	22	37	1165	610	
Future Volume (vph)	22	37	1165	610	
Turn Type	Prot	Perm	NA	NA	
Protected Phases	4		2	6	
Permitted Phases	<u> </u>	2			
Detector Phase	4	2	2	6	
Switch Phase	<u> </u>	_			
Minimum Initial (s)	5.0	5.0	5.0	5.0	
Minimum Split (s)	24.5	24.5	24.5	24.5	
Total Split (s)	28.0	92.0	92.0	92.0	
Total Split (%)	23.3%	76.7%	76.7%	76.7%	
Yellow Time (s)	4.5	4.5	4.5	4.5	
All-Red Time (s)	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	
Total Lost Time (s)	6.5	6.5	6.5	6.5	
Lead/Lag	0.5	0.5	0.5	0.5	
Lead-Lag Optimize?					
Recall Mode	None	C-Max	C-Max	C-Max	
Act Effct Green (s)	None 7.7	103.0	103.0	103.0	
()					
Actuated g/C Ratio	0.06	0.86	0.86	0.86	
v/c Ratio	0.39	0.07	0.44	0.22	
Control Delay	41.7	2.5	3.2	2.2	
Queue Delay	0.0	0.0	0.0	0.0	
Total Delay	41.7	2.5	3.2	2.2	
LOS	D	Α	Α	Α	
Approach Delay	41.7		3.2	2.2	
Approach LOS	D		А	А	
Intersection Summary					
Cycle Length: 120					
Actuated Cycle Length: 120					
Offset: 0 (0%), Referenced	to phase 2	2:NBTL ar	nd 6:SBT	Start of	Green
Natural Cycle: 60					
Control Type: Actuated-Co	ordinated				
Maximum v/c Ratio: 0.44					
Intersection Signal Delay: 3	3.8			lı	ntersection LOS: A
Intersection Capacity Utiliz	ation 47.2%	6		[(CU Level of Service A
Analysis Period (min) 15					
Oulite and Discours 4. Di		ا مسمعا	- 4 D-		
Splits and Phases: 1: Pe	ecos St & S	rierreiwo	טמ טר		Γ Δ
√Tø2 (R)					<i>→</i> _{Ø4}
92 s					28 s
▼ Ø6 (R)					
92 s					

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Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	¥		ሻ	^	↑ ↑	
Traffic Volume (veh/h)	22	16	37	1165	610	11
Future Volume (veh/h)	22	16	37	1165	610	11
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No	1.00	1.00	No	No	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1870	1870	1870	1870
						24
Adj Flow Rate, veh/h	28	24	44	1339	635	
Peak Hour Factor	0.79	0.67	0.84	0.87	0.96	0.46
Percent Heavy Veh, %	0	0	2	2	2	2
Cap, veh/h	36	31	694	3026	2973	112
Arrive On Green	0.04	0.04	0.85	0.85	0.85	0.85
Sat Flow, veh/h	892	764	775	3647	3585	132
Grp Volume(v), veh/h	53	0	44	1339	323	336
Grp Sat Flow(s), veh/h/ln	1688	0	775	1777	1777	1847
Q Serve(g_s), s	3.7	0.0	1.3	10.8	4.0	4.0
Cycle Q Clear(g_c), s	3.7	0.0	5.3	10.8	4.0	4.0
Prop In Lane	0.53	0.45	1.00	10.0	7.0	0.07
Lane Grp Cap(c), veh/h	68	0.45	694	3026	1513	1572
V/C Ratio(X)	0.78	0.00	0.06	0.44	0.21	0.21
Avail Cap(c_a), veh/h	302	0	694	3026	1513	1572
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	57.1	0.0	2.1	2.1	1.6	1.6
Incr Delay (d2), s/veh	17.4	0.0	0.2	0.5	0.3	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	0.0	0.2	2.2	0.9	0.9
Unsig. Movement Delay, s/vel						
LnGrp Delay(d),s/veh	74.4	0.0	2.3	2.6	1.9	1.9
LnGrp LOS	E	A	Α	Α	A	A
Approach Vol, veh/h	53	, , , , , , , , , , , , , , , , , , ,	,,	1383	659	
• •	74.4				1.9	
Approach LOS	74.4 F			2.6		
Approach LOS	E			Α	Α	
Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		108.7		11.3		108.7
Change Period (Y+Rc), s		6.5		6.5		6.5
Max Green Setting (Gmax), s		85.5		21.5		85.5
Max Q Clear Time (g_c+l1), s		12.8		5.7		6.0
Green Ext Time (p_c), s		15.5		0.1		4.4
Intersection Summary						
HCM 6th Ctrl Delay			4.2			
HCM 6th LOS			Α			
Notes						

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Lane Group	EBT	WBT	NBL	NBT	SBL	SBT	Ø3	Ø7	
Lane Configurations	4	- ↔	ሻ	∱ î≽	7	∱ ∱			
Traffic Volume (vph)	0	0	32	382	3	847			
Future Volume (vph)	0	0	32	382	3	847			
Turn Type	NA	NA	Perm	NA	Perm	NA			
Protected Phases	4	8		2		6	3	7	
Permitted Phases			2		6				
Detector Phase	4	8	2	2	6	6			
Switch Phase									
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	24.5	22.5	24.5	24.5	24.5	24.5	9.5	24.5	
Total Split (s)	37.5	22.5	43.0	43.0	43.0	43.0	9.5	24.5	
Total Split (%)	41.7%	25.0%	47.8%	47.8%	47.8%	47.8%	11%	27%	
Yellow Time (s)	4.5	3.5	4.5	4.5	4.5	4.5	3.5	4.5	
All-Red Time (s)	2.0	1.0	2.0	2.0	2.0	2.0	1.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0			
Total Lost Time (s)	6.5	4.5	6.5	6.5	6.5	6.5			
Lead/Lag	Lag	Lag					Lead	Lead	
Lead-Lag Optimize?	Yes	Yes					Yes	Yes	
Recall Mode	None	None	C-Max	C-Max	C-Max	C-Max	None	None	
Act Effct Green (s)	0.0	0.0	68.2	68.2	68.2	68.2			
Actuated g/C Ratio	0.00	0.00	0.76	0.76	0.76	0.76			
v/c Ratio	0.60	0.11	0.11	0.16	0.00	0.34			
Control Delay	23.1	1.1	10.0	6.7	10.3	7.9			
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0			
Total Delay	23.1	1.1	10.0	6.7	10.3	7.9			
LOS	С	Α	Α	Α	В	Α			
Approach Delay	23.1	1.1		7.1		7.9			
Approach LOS	С	Α		Α		Α			

Intersection Summary

Cycle Length: 90 Actuated Cycle Length: 90

Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 75

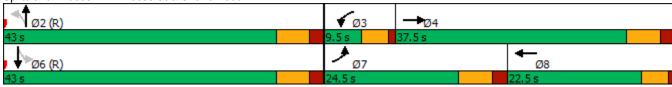
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.60

Intersection Signal Delay: 8.3 Intersection LOS: A ICU Level of Service A

Analysis Period (min) 15





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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			4		ሻ	∱ ኈ		ሻ	∱ ∱	
Traffic Volume (veh/h)	10	0	45	11	0	9	32	382	3	3	847	23
Future Volume (veh/h)	10	0	45	11	0	9	32	382	3	3	847	23
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	16	0	56	12	0	10	48	415	3	3	882	36
Peak Hour Factor	0.63	0.92	0.80	0.92	0.92	0.92	0.67	0.92	0.92	0.92	0.96	0.64
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	0	0	83	0	0	83	528	2905	21	833	2795	114
Arrive On Green	0.00	0.00	0.05	0.00	0.00	0.05	0.80	0.80	0.80	0.80	0.80	0.80
Sat Flow, veh/h	0	0	1585	0	0	1585	609	3616	26	969	3480	142
Grp Volume(v), veh/h	0	0	56	0	0	10	48	204	214	3	450	468
Grp Sat Flow(s), veh/h/ln	0	0	1585	0	0	1585	609	1777	1866	969	1777	1845
Q Serve(g_s), s	0.0	0.0	3.1	0.0	0.0	0.5	2.0	2.3	2.3	0.1	6.0	6.0
Cycle Q Clear(g_c), s	0.0	0.0	3.1	0.0	0.0	0.5	8.0	2.3	2.3	2.4	6.0	6.0
Prop In Lane	0.00		1.00	0.00		1.00	1.00		0.01	1.00		0.08
Lane Grp Cap(c), veh/h	0	0	83	0	0	83	528	1427	1499	833	1427	1482
V/C Ratio(X)	0.00	0.00	0.68	0.00	0.00	0.12	0.09	0.14	0.14	0.00	0.32	0.32
Avail Cap(c_a), veh/h	0	0	546	0	0	317	528	1427	1499	833	1427	1482
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	41.9	0.0	0.0	40.7	3.4	2.0	2.0	2.2	2.3	2.3
Incr Delay (d2), s/veh	0.0	0.0	9.3	0.0	0.0	0.6	0.3	0.2	0.2	0.0	0.6	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	1.4	0.0	0.0	0.2	0.2	0.5	0.5	0.0	1.3	1.4
Unsig. Movement Delay, s/veh		0.0		0.0	0.0	0.2	0.2	0.0	0.0	0.0	1.0	
LnGrp Delay(d),s/veh	0.0	0.0	51.2	0.0	0.0	41.3	3.7	2.2	2.2	2.2	2.9	2.9
LnGrp LOS	A	A	D	A	A	D	A	A	Α	Α	Α	Α
Approach Vol, veh/h		56			10			466		<u>,,, </u>	921	
Approach Delay, s/veh		51.2			41.3			2.3			2.9	
Approach LOS		D D			T 1.3			Α.			Α.3	
					D		_					
Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		78.8	0.0	11.2		78.8	0.0	11.2				
Change Period (Y+Rc), s		6.5	4.5	6.5		6.5	6.5	* 6.5				
Max Green Setting (Gmax), s		36.5	5.0	31.0		36.5	18.0	* 18				
Max Q Clear Time (g_c+I1), s		10.0	0.0	5.1		8.0	0.0	2.5				
Green Ext Time (p_c), s		2.9	0.0	0.3		6.4	0.0	0.0				
Intersection Summary												
HCM 6th Ctrl Delay			4.8									
HCM 6th LOS			Α									
Notes												

^{*} HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

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Lane Group	EBT	WBT	NBL	NBT	SBL	SBT	Ø3	Ø7	
Lane Configurations	4	4	ሻ	∱ ∱	7	∱ ∱			
Traffic Volume (vph)	0	0	37	1168	9	615			
Future Volume (vph)	0	0	37	1168	9	615			
Turn Type	NA	NA	Perm	NA	Perm	NA			
Protected Phases	4	8		2		6	3	7	
Permitted Phases			2		6				
Detector Phase	4	8	2	2	6	6			
Switch Phase									
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	24.5	22.5	24.5	24.5	24.5	24.5	9.5	9.5	
Total Split (s)	24.5	24.5	86.0	86.0	86.0	86.0	9.5	9.5	
Total Split (%)	20.4%	20.4%	71.7%	71.7%	71.7%	71.7%	8%	8%	
Yellow Time (s)	4.5	3.5	4.5	4.5	4.5	4.5	3.5	3.5	
All-Red Time (s)	2.0	1.0	2.0	2.0	2.0	2.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0			
Total Lost Time (s)	6.5	4.5	6.5	6.5	6.5	6.5			
Lead/Lag	Lag	Lag					Lead	Lead	
Lead-Lag Optimize?	Yes	Yes					Yes	Yes	
Recall Mode	None	None	C-Max	C-Max	C-Max	C-Max	None	None	
Act Effct Green (s)	0.0	0.0	100.8	100.8	100.8	100.8			
Actuated g/C Ratio	0.00	0.00	0.84	0.84	0.84	0.84			
v/c Ratio	0.60	0.14	0.09	0.43	0.03	0.22			
Control Delay	29.8	3.2	4.3	4.7	4.8	3.5			
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0			
Total Delay	29.8	3.2	4.3	4.7	4.8	3.5			
LOS	С	Α	Α	Α	Α	Α			
Approach Delay	29.8	3.3		4.7		3.5			
Approach LOS	С	Α		Α		Α			

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 65

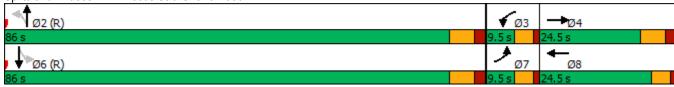
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.60

Intersection Signal Delay: 5.0 Intersection LOS: A Intersection Capacity Utilization 47.7% ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 1: Pecos St & Sherrelwood Dr



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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			4		7	ħβ		7	∱ ∱	
Traffic Volume (veh/h)	22	0	16	7	0	5	37	1168	12	9	615	11
Future Volume (veh/h)	22	0	16	7	0	5	37	1168	12	9	615	11
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	35	0	20	8	0	5	55	1270	13	10	641	17
Peak Hour Factor	0.63	0.92	0.80	0.92	0.92	0.92	0.67	0.92	0.92	0.92	0.96	0.64
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	0	0	57	0	0	57	699	3083	32	395	3026	80
Arrive On Green	0.00	0.00	0.04	0.00	0.00	0.04	0.86	0.86	0.86	0.86	0.86	0.86
Sat Flow, veh/h	0	0	1585	0	0	1585	776	3604	37	431	3537	94
Grp Volume(v), veh/h	0	0	20	0	0	5	55	626	657	10	322	336
Grp Sat Flow(s), veh/h/ln	0	0	1585	0	0	1585	776	1777	1864	431	1777	1853
Q Serve(g_s), s	0.0	0.0	1.5	0.0	0.0	0.4	1.6	9.4	9.4	0.6	3.8	3.8
Cycle Q Clear(g_c), s	0.0	0.0	1.5	0.0	0.0	0.4	5.5	9.4	9.4	10.1	3.8	3.8
Prop In Lane	0.00	0.0	1.00	0.00	0.0	1.00	1.00	0.1	0.02	1.00	0.0	0.05
Lane Grp Cap(c), veh/h	0.00	0	57	0.00	0	57	699	1520	1595	395	1520	1586
V/C Ratio(X)	0.00	0.00	0.35	0.00	0.00	0.09	0.08	0.41	0.41	0.03	0.21	0.21
Avail Cap(c_a), veh/h	0.00	0.00	238	0.00	0.00	264	699	1520	1595	395	1520	1586
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	56.5	0.0	0.0	55.9	2.0	1.9	1.9	3.1	1.5	1.5
Incr Delay (d2), s/veh	0.0	0.0	3.6	0.0	0.0	0.7	0.2	0.8	0.8	0.1	0.3	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.7	0.0	0.0	0.2	0.2	2.0	2.1	0.1	0.8	0.8
Unsig. Movement Delay, s/veh		0.0	0.1	0.0	0.0	0.2	0.2	2.0	۷.۱	0.1	0.0	0.0
LnGrp Delay(d),s/veh	0.0	0.0	60.1	0.0	0.0	56.6	2.2	2.8	2.7	3.2	1.8	1.8
LnGrp LOS	Α	Α	E	Α	Α	50.0 E	Α.Δ	Α.	Α	3.2 A	Α	Α
Approach Vol, veh/h		20			5	<u> </u>		1338			668	
Approach Delay, s/veh		60.1			56.6			2.7			1.9	
		60.1			30.0 E							
Approach LOS		E			E			Α			Α	
Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		109.2	0.0	10.8		109.2	0.0	10.8				
Change Period (Y+Rc), s		6.5	4.5	6.5		6.5	4.5	* 6.5				
Max Green Setting (Gmax), s		79.5	5.0	18.0		79.5	5.0	* 20				
Max Q Clear Time (g_c+l1), s		11.4	0.0	3.5		12.1	0.0	2.4				
Green Ext Time (p_c), s		12.8	0.0	0.0		4.6	0.0	0.0				
Intersection Summary												
HCM 6th Ctrl Delay			3.1									
HCM 6th LOS			Α									
Notes												

^{*} HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Timings 1: Pecos St & Sherrelwood Dr

	٠	•	†	↓			
Lane Group	EBL	NBL	NBT	SBT			
Lane Configurations	W	ሻ	^	∱ }			
Traffic Volume (vph)	11	35	412	926			
Future Volume (vph)	11	35	412	926			
Turn Type	Prot	Perm	NA	NA			
Protected Phases	4		2	6			
Permitted Phases		2					
Detector Phase	4	2	2	6			
Switch Phase	<u> </u>	_					
Minimum Initial (s)	5.0	5.0	5.0	5.0			
Minimum Split (s)	24.5	24.5	24.5	24.5			
Total Split (s)	29.0	61.0	61.0	61.0			
Total Split (%)	32.2%	67.8%	67.8%	67.8%			
Yellow Time (s)	4.5	4.5	4.5	4.5			
All-Red Time (s)	2.0	2.0	2.0	2.0			
Lost Time Adjust (s)	0.0	0.0	0.0	0.0			
Total Lost Time (s)	6.5	6.5	6.5	6.5			
Lead/Lag	0.5	0.5	0.5	0.5			
Lead-Lag Optimize?							
Recall Mode	None	C-Max	C-Max	C-Max			
	None 6.9	73.8	73.8	73.8			
Act Effct Green (s)			0.82	0.82			
Actuated g/C Ratio	0.08	0.82					
v/c Ratio	0.38	0.09	0.15	0.34			
Control Delay	20.9	3.3	2.5	3.2			
Queue Delay	0.0	0.0	0.0	0.0			
Total Delay	20.9	3.3	2.5	3.2			
LOS	C	Α	Α	Α			
Approach Delay	20.9		2.6	3.2			
Approach LOS	С		А	Α			
Intersection Summary							
Cycle Length: 90							
Actuated Cycle Length: 90							
Offset: 0 (0%), Referenced	I to phase 2	2:NBTL ar	nd 6:SBT	Start of	Green		
Natural Cycle: 50							
Control Type: Actuated-Co	ordinated						
Maximum v/c Ratio: 0.38							
Intersection Signal Delay:	3.8			lı	ntersection LOS: A		
Intersection Capacity Utiliz	ation 44.1%	6		Į(CU Level of Service A		
Analysis Period (min) 15							
Outto and Division 4. D	01 0 0	Na a weed	I D :				
Splits and Phases: 1: Pe	ecos St & S	nerrelwo	od Dr			T A	
√Tø2 (R)						→ _{Ø4}	
61s						29 s	
▼ Ø6 (R)							
61s						1	

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Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	W		*	^	† ‡	
Traffic Volume (veh/h)	11	50	35	412	926	25
Future Volume (veh/h)	11	50	35	412	926	25
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No	1.00	1.00	No	No	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1870	1870	1870	1870
Adj Flow Rate, veh/h	12	54	38	448	965	27
Peak Hour Factor	0.92	0.92	0.92	0.92	0.96	0.92
Percent Heavy Veh, %	0.92	0.92	0.92	0.92	2	0.92
Cap, veh/h	15	69	494	2854	2835	79
Arrive On Green	0.05	0.05	0.80	0.80	0.80	0.80
	290	1306	568	3647	3624	99
Sat Flow, veh/h						
Grp Volume(v), veh/h	67	0	38	448	486	506
Grp Sat Flow(s), veh/h/ln	1621	0	568	1777	1777	1853
Q Serve(g_s), s	3.7	0.0	1.7	2.6	6.7	6.7
Cycle Q Clear(g_c), s	3.7	0.0	8.4	2.6	6.7	6.7
Prop In Lane	0.18	0.81	1.00			0.05
Lane Grp Cap(c), veh/h	85	0	494	2854	1427	1488
V/C Ratio(X)	0.79	0.00	0.08	0.16	0.34	0.34
Avail Cap(c_a), veh/h	405	0	494	2854	1427	1488
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	42.1	0.0	3.5	2.0	2.4	2.4
Incr Delay (d2), s/veh	14.7	0.0	0.3	0.1	0.6	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	0.0	0.2	0.5	1.5	1.5
Unsig. Movement Delay, s/vel	h					
LnGrp Delay(d),s/veh	56.9	0.0	3.8	2.1	3.0	3.0
LnGrp LOS	Е	Α	A	Α	Α	Α
Approach Vol, veh/h	67			486	992	
Approach Delay, s/veh	56.9			2.2	3.0	
Approach LOS	F			A	A	
• •					, ,	
Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		78.8		11.2		78.8
Change Period (Y+Rc), s		6.5		6.5		6.5
Max Green Setting (Gmax), s		54.5		22.5		54.5
Max Q Clear Time (g_c+I1), s	•	10.4		5.7		8.7
Green Ext Time (p_c), s		3.7		0.1		7.6
Intersection Summary						
HCM 6th Ctrl Delay			5.1			
HCM 6th LOS			J. 1			
Notes						

Timings 1: Pecos St & Sherrelwood Dr

	٠	•	†	↓		
Lane Group	EBL	NBL	NBT	SBT		
Lane Configurations	W	ሻ	^	↑ ⊅		
Traffic Volume (vph)	24	41	1274	667		
Future Volume (vph)	24	41	1274	667		
Turn Type	Prot	Perm	NA	NA		
Protected Phases	4		2	6		
Permitted Phases		2				
Detector Phase	4	2	2	6		
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0		
Minimum Split (s)	24.5	24.5	24.5	24.5		
Total Split (s)	27.0	93.0	93.0	93.0		
Total Split (%)	22.5%	77.5%	77.5%	77.5%		
Yellow Time (s)	4.5	4.5	4.5	4.5		
All-Red Time (s)	2.0	2.0	2.0	2.0		
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		
Total Lost Time (s)	6.5	6.5	6.5	6.5		
Lead/Lag	0.5	0.5	0.5	0.5		
Lead-Lag Optimize?						
Recall Mode	None	C-Max	C-Max	C-Max		
	None 7.6	103.1	103.1	103.1		
Act Effct Green (s)						
Actuated g/C Ratio	0.06	0.86	0.86	0.86		
v/c Ratio	0.37	0.07	0.46	0.23		
Control Delay	42.5	2.5	3.2	2.3		
Queue Delay	0.0	0.0	0.0	0.0		
Total Delay	42.5	2.5	3.2	2.3		
LOS	D	Α	Α	Α		
Approach Delay	42.5		3.2	2.3		
Approach LOS	D		Α	Α		
Intersection Summary						
Cycle Length: 120						
Actuated Cycle Length: 120	0					
Offset: 0 (0%), Referenced	to phase 2	:NBTL ar	nd 6:SBT	Start of	Green	
Natural Cycle: 60	•					
Control Type: Actuated-Co	ordinated					
Maximum v/c Ratio: 0.46						
Intersection Signal Delay: 3	3.7			lı	ntersection LOS: A	
Intersection Capacity Utiliza		6			CU Level of Service A	
Analysis Period (min) 15		-				
Splits and Phases: 1: Pe	ecos St & S	herrelwo	od Dr			
1 Ø2 (R)					→ Ø4	
93 s					27 s	
1 (25 (2))						
● Ø6 (R)						

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Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	N/			^	1	
Traffic Volume (veh/h)	24	18	41	1274	667	12
Future Volume (veh/h)	24	18	41	1274	667	12
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00		J	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No	1.00	1.00	No	No	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1870	1870	1870	1870
Adj Flow Rate, veh/h	26	20	45	1385	695	13
Peak Hour Factor	0.92	0.92	0.92	0.92	0.96	0.92
	0.92	0.92	0.92	2	2	0.92
Percent Heavy Veh, % Cap, veh/h	33	26	668	3043	3055	57
Arrive On Green				0.86		
	0.04	0.04	0.86		0.86	0.86
Sat Flow, veh/h	937	721	741	3647	3662	67
Grp Volume(v), veh/h	47	0	45	1385	346	362
Grp Sat Flow(s), veh/h/ln	1694	0	741	1777	1777	1858
Q Serve(g_s), s	3.3	0.0	1.4	11.0	4.2	4.2
Cycle Q Clear(g_c), s	3.3	0.0	5.6	11.0	4.2	4.2
Prop In Lane	0.55	0.43	1.00			0.04
Lane Grp Cap(c), veh/h	60	0	668	3043	1521	1591
V/C Ratio(X)	0.78	0.00	0.07	0.46	0.23	0.23
Avail Cap(c_a), veh/h	289	0	668	3043	1521	1591
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	57.4	0.0	2.0	2.0	1.5	1.5
Incr Delay (d2), s/veh	19.5	0.0	0.2	0.5	0.3	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	0.0	0.0	2.1	0.9	0.0
Unsig. Movement Delay, s/veh		0.0	0.2	۷.۱	0.9	0.0
LnGrp Delay(d),s/veh	76.9	0.0	2.2	2.5	1.9	1.9
LnGrp LOS	70.9 E					
		A	A	A 420	700	A
Approach Vol, veh/h	47			1430	708	
Approach Delay, s/veh	76.9			2.5	1.9	
Approach LOS	Е			А	Α	
Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		109.2		10.8		109.2
Change Period (Y+Rc), s		6.5		6.5		6.5
Max Green Setting (Gmax), s		86.5		20.5		86.5
Max Q Clear Time (g_c+l1), s		13.0		5.3		6.2
Green Ext Time (p_c), s		16.6		0.1		4.9
u = /-		10.0		J. 1		т.0
Intersection Summary						
HCM 6th Ctrl Delay			3.9			
HCM 6th LOS			Α			
Notes						

	→	←	4	†	>	ļ			
Lane Group	EBT	WBT	NBL	NBT	SBL	SBT	Ø3	Ø7	
Lane Configurations	4	4	7	ħβ	Ţ	∱ }			
Traffic Volume (vph)	0	0	35	417	3	927			
Future Volume (vph)	0	0	35	417	3	927			
Turn Type	NA	NA	Perm	NA	Perm	NA			
Protected Phases	4	8		2		6	3	7	
Permitted Phases			2		6				
Detector Phase	4	8	2	2	6	6			
Switch Phase									
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	24.5	22.5	24.5	24.5	24.5	24.5	9.5	24.5	
Total Split (s)	37.5	22.5	43.0	43.0	43.0	43.0	9.5	24.5	
Total Split (%)	41.7%	25.0%	47.8%	47.8%	47.8%	47.8%	11%	27%	
Yellow Time (s)	4.5	3.5	4.5	4.5	4.5	4.5	3.5	4.5	
All-Red Time (s)	2.0	1.0	2.0	2.0	2.0	2.0	1.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0			
Total Lost Time (s)	6.5	4.5	6.5	6.5	6.5	6.5			
Lead/Lag	Lag	Lag					Lead	Lead	
Lead-Lag Optimize?	Yes	Yes					Yes	Yes	
Recall Mode	None	None	C-Max	C-Max	C-Max	C-Max	None	None	
Act Effct Green (s)	0.0	0.0	68.2	68.2	68.2	68.2			
Actuated g/C Ratio	0.00	0.00	0.76	0.76	0.76	0.76			
v/c Ratio	0.55	0.11	0.10	0.17	0.00	0.37			
Control Delay	18.5	1.1	10.1	6.8	10.3	8.1			
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0			
Total Delay	18.5	1.1	10.1	6.8	10.3	8.1			
LOS	В	Α	В	Α	В	Α			
Approach Delay	18.5	1.1		7.0		8.2			
Approach LOS	В	Α		Α		Α			
Intersection Cummany									

Intersection Summary

Cycle Length: 90 Actuated Cycle Length: 90

Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

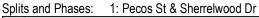
Natural Cycle: 75

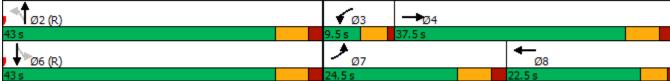
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.55

Intersection Signal Delay: 8.1 Intersection LOS: A Intersection Capacity Utilization 44.1% ICU Level of Service A

Analysis Period (min) 15





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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			4		ሻ	∱ ኈ		ሻ	∱ ∱	
Traffic Volume (veh/h)	11	0	50	11	0	9	35	417	3	3	927	25
Future Volume (veh/h)	11	0	50	11	0	9	35	417	3	3	927	25
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	12	0	54	12	0	10	38	453	3	3	966	27
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.96	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	0	0	79	0	0	79	495	2916	19	808	2845	80
Arrive On Green	0.00	0.00	0.05	0.00	0.00	0.05	0.81	0.81	0.81	0.81	0.81	0.81
Sat Flow, veh/h	0	0	1585	0	0	1585	567	3619	24	935	3531	99
Grp Volume(v), veh/h	0	0	54	0	0	10	38	222	234	3	486	507
Grp Sat Flow(s), veh/h/ln	0	0	1585	0	0	1585	567	1777	1866	935	1777	1853
Q Serve(g_s), s	0.0	0.0	3.0	0.0	0.0	0.5	1.7	2.5	2.5	0.1	6.6	6.6
Cycle Q Clear(g_c), s	0.0	0.0	3.0	0.0	0.0	0.5	8.3	2.5	2.5	2.6	6.6	6.6
Prop In Lane	0.00		1.00	0.00		1.00	1.00		0.01	1.00		0.05
Lane Grp Cap(c), veh/h	0	0	79	0	0	79	495	1432	1504	808	1432	1493
V/C Ratio(X)	0.00	0.00	0.68	0.00	0.00	0.13	0.08	0.16	0.16	0.00	0.34	0.34
Avail Cap(c_a), veh/h	0	0	546	0	0	317	495	1432	1504	808	1432	1493
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	42.1	0.0	0.0	40.9	3.4	1.9	1.9	2.2	2.3	2.3
Incr Delay (d2), s/veh	0.0	0.0	10.0	0.0	0.0	0.7	0.3	0.2	0.2	0.0	0.6	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	1.4	0.0	0.0	0.2	0.2	0.5	0.6	0.0	1.4	1.5
Unsig. Movement Delay, s/veh		0.0		0.0	0.0	V	V	0.0	0.0	0.0		
LnGrp Delay(d),s/veh	0.0	0.0	52.0	0.0	0.0	41.6	3.8	2.2	2.2	2.2	3.0	3.0
LnGrp LOS	A	A	D	A	A	D	A	A	A	A	A	A
Approach Vol, veh/h		54	_		10			494			996	
Approach Delay, s/veh		52.0			41.6			2.3			3.0	
Approach LOS		D			D			Α.			Α	
			•		D	•	-				А	
Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		79.0	0.0	11.0		79.0	0.0	11.0				
Change Period (Y+Rc), s		6.5	4.5	6.5		6.5	6.5	* 6.5				
Max Green Setting (Gmax), s		36.5	5.0	31.0		36.5	18.0	* 18				
Max Q Clear Time (g_c+I1), s		10.3	0.0	5.0		8.6	0.0	2.5				
Green Ext Time (p_c), s		3.1	0.0	0.3		7.0	0.0	0.0				
Intersection Summary												
HCM 6th Ctrl Delay			4.7									
HCM 6th LOS			Α									
Notes												

^{*} HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

	-	←	4	†	-	↓			
Lane Group	EBT	WBT	NBL	NBT	SBL	SBT	Ø3	Ø7	
Lane Configurations	4	4	ሻ	∱ ∱	7	∱ ∱			
Traffic Volume (vph)	0	0	41	1277	9	672			
Future Volume (vph)	0	0	41	1277	9	672			
Turn Type	NA	NA	Perm	NA	Perm	NA			
Protected Phases	4	8		2		6	3	7	
Permitted Phases			2		6				
Detector Phase	4	8	2	2	6	6			
Switch Phase									
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	24.5	22.5	24.5	24.5	24.5	24.5	9.5	9.5	
Total Split (s)	24.5	24.5	86.0	86.0	86.0	86.0	9.5	9.5	
Total Split (%)	20.4%	20.4%	71.7%	71.7%	71.7%	71.7%	8%	8%	
Yellow Time (s)	4.5	3.5	4.5	4.5	4.5	4.5	3.5	3.5	
All-Red Time (s)	2.0	1.0	2.0	2.0	2.0	2.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0			
Total Lost Time (s)	6.5	4.5	6.5	6.5	6.5	6.5			
Lead/Lag	Lag	Lag					Lead	Lead	
Lead-Lag Optimize?	Yes	Yes					Yes	Yes	
Recall Mode	None	None	C-Max	C-Max	C-Max	C-Max	None	None	
Act Effct Green (s)	0.0	0.0	100.8	100.8	100.8	100.8			
Actuated g/C Ratio	0.00	0.00	0.84	0.84	0.84	0.84			
v/c Ratio	0.51	0.14	0.08	0.47	0.04	0.24			
Control Delay	19.4	3.2	4.3	5.0	4.9	3.6			
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0			
Total Delay	19.4	3.2	4.3	5.0	4.9	3.6			
LOS	В	Α	Α	Α	Α	Α			
Approach Delay	19.4	3.3		5.0		3.6			
Approach LOS	В	Α		Α		Α			
latana asti an O									

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 70

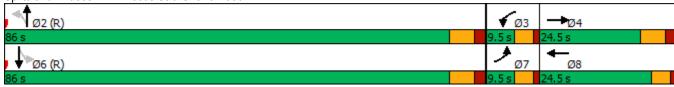
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.51

Intersection Signal Delay: 4.8 Intersection LOS: A ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 1: Pecos St & Sherrelwood Dr



	•	→	•	•	←	•	•	†	~	>	ļ	4
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			4		7	ħβ		7	∱ ∱	
Traffic Volume (veh/h)	24	0	18	7	0	5	41	1277	12	9	672	12
Future Volume (veh/h)	24	0	18	7	0	5	41	1277	12	9	672	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	26	0	20	8	0	5	45	1388	13	10	700	13
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.96	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	0	0	54	0	0	54	667	3094	29	356	3061	57
Arrive On Green	0.00	0.00	0.03	0.00	0.00	0.03	0.86	0.86	0.86	0.86	0.86	0.86
Sat Flow, veh/h	0	0	1585	0	0	1585	737	3607	34	385	3569	66
Grp Volume(v), veh/h	0	0	20	0	0	5	45	683	718	10	348	365
Grp Sat Flow(s), veh/h/ln	0	0	1585	0	0	1585	737	1777	1864	385	1777	1858
Q Serve(g_s), s	0.0	0.0	1.5	0.0	0.0	0.4	1.4	10.7	10.7	0.7	4.2	4.2
Cycle Q Clear(g_c), s	0.0	0.0	1.5	0.0	0.0	0.4	5.6	10.7	10.7	11.4	4.2	4.2
Prop In Lane	0.00	0.0	1.00	0.00	0.0	1.00	1.00	10.7	0.02	1.00	1.2	0.04
Lane Grp Cap(c), veh/h	0.00	0	54	0.00	0	54	667	1524	1599	356	1524	1594
V/C Ratio(X)	0.00	0.00	0.37	0.00	0.00	0.09	0.07	0.45	0.45	0.03	0.23	0.23
Avail Cap(c_a), veh/h	0.00	0.00	238	0.00	0.00	264	667	1524	1599	356	1524	1594
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	56.7	0.0	0.0	56.2	2.0	2.0	2.0	3.3	1.5	1.5
Incr Delay (d2), s/veh	0.0	0.0	4.2	0.0	0.0	0.7	0.2	1.0	0.9	0.1	0.3	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.7	0.0	0.0	0.2	0.2	2.2	2.3	0.1	0.9	0.9
Unsig. Movement Delay, s/ver		0.0	0.1	0.0	0.0	0.2	0.2	2.2	2.0	0.1	0.5	0.5
LnGrp Delay(d),s/veh	0.0	0.0	60.9	0.0	0.0	56.9	2.2	2.9	2.9	3.4	1.9	1.8
LnGrp LOS	Α	Α	60.5 E	Α	Α	50.5 E	Α.Α	Α.5	Α.3	Α	Α	Α
Approach Vol, veh/h		20	<u> </u>		5	<u> </u>		1446			723	
• •		60.9			56.9			2.9			1.9	
Approach LOS		60.9 E			50.9 E							
Approach LOS		E			E			Α			Α	
Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		109.4	0.0	10.6		109.4	0.0	10.6				
Change Period (Y+Rc), s		6.5	4.5	6.5		6.5	4.5	* 6.5				
Max Green Setting (Gmax), s		79.5	5.0	18.0		79.5	5.0	* 20				
Max Q Clear Time (g_c+I1), s		12.7	0.0	3.5		13.4	0.0	2.4				
Green Ext Time (p_c), s		15.0	0.0	0.0		5.1	0.0	0.0				
Intersection Summary												
HCM 6th Ctrl Delay			3.2									
HCM 6th LOS			Α									
Notes												

^{*} HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection								
Int Delay, s/veh	0.3							
Movement	EBL	EBR	NBL	NBT	SBT	SBR		
Lane Configurations	¥		ሻ	^	†			
Traffic Vol, veh/h	9	13	1	396	886	5		
Future Vol, veh/h	9	13	1	396	886	5		
Conflicting Peds, #/hr	0	0	0	0	0	0		
Sign Control	Stop	Stop	Free	Free	Free	Free		
RT Channelized	-	None	-	None	-	None		
Storage Length	0	-	0	-	_	-		
Veh in Median Storage		_	-	0	0	_		
Grade, %	0	_	_	0	0	_		
Peak Hour Factor	56	81	25	89	95	42		
Heavy Vehicles, %	2	2	23	2	2	2		
Mymt Flow	16	16	4	445	933	12		
IVIVIIIL I IUW	10	10	4	440	333	12		
Major/Minor N	Minor2		Major1	N	Major2			
Conflicting Flow All	1170	473	945	0	<u>viajuiz</u> -	0		
Stage 1	939	-	-	-	-	-		
Stage 2	231	-	-	-	-	-		
Critical Hdwy	6.84	6.94	4.14	-	-	-		
Critical Hdwy Stg 1	5.84	-	-	-	-	-		
Critical Hdwy Stg 2	5.84	-	-	-	-	-		
Follow-up Hdwy	3.52	3.32	2.22	-	-	-		
Pot Cap-1 Maneuver	*479		*1077	-	-	-		
Stage 1	*679	-	-	-	-	-		
Stage 2	*785	-	-	-	-	-		
Platoon blocked, %	1	1	1	-	-	-		
Mov Cap-1 Maneuver	*477	*720	*1077	-	-	-		
Mov Cap-2 Maneuver	*603	-	-	-	-	-		
Stage 1	*676	-	-	-	-	-		
Stage 2	*785	-	-	-	-	-		
Approach	EB		NB		SB			
HCM Control Delay, s	10.8		0.1		0			
HCM LOS	В							
Minor Lane/Major Mvm	ıt	NBL	NBT	EBLn1	SBT	SBR		
Capacity (veh/h)		* 1077		656	-			
HCM Lane V/C Ratio		0.004	_	0.049	-	_		
HCM Control Delay (s)		8.4	_	10.8	_	_		
HCM Lane LOS		A	_	В	_	_		
HCM 95th %tile Q(veh))	0	_	0.2	-	-		
ì				7.2				
Notes		ф. D	alas: -		00-	0-	mutation Nat Defined	* All maior values in plate
~: Volume exceeds cap	oacity	\$: D	elay ex	ceeds 3	UUS	+: Con	nputation Not Defined	*: All major volume in platoon

Intersection								
Int Delay, s/veh	0.3							
Movement	EBL	EBR	NBL	NBT	SBT	SBR		
Lane Configurations	W		ሻ	^	† 1>		<u> </u>	
Traffic Vol, veh/h	10	8	12	1182	607	16		
Future Vol, veh/h	10	8	12	1182	607	16		
Conflicting Peds, #/hr	0	0	0	0	0	0		
Sign Control	Stop	Stop	Free	Free	Free	Free		
RT Channelized	-	None	-		-			
Storage Length	0	-	0	-	_	-		
Veh in Median Storage		_	_	0	0	_		
Grade, %	0	_	_	0	0	_		
Peak Hour Factor	63	40	75	87	97	67		
Heavy Vehicles, %	2	2	2	2	2	2		
Mvmt Flow	16	20	16	1359	626	24		
MAINE I IOW	10	20	10	1000	020			
Major/Minor N	Minor2	ı	Major1	N	//ajor2			
Conflicting Flow All	1350	325	650	0	-	0		
Stage 1	638	-	-	-	-	-		
Stage 2	712	_	_	_	_	_		
Critical Hdwy	6.84	6.94	4.14	_	_	_		
Critical Hdwy Stg 1	5.84	-		_	_	_		
Critical Hdwy Stg 2	5.84	_	_	_	_	_		
Follow-up Hdwy	3.52	3.32	2.22	_	<u>-</u>	<u>-</u>		
Pot Cap-1 Maneuver	*221		*1265	_	_	_		
Stage 1	*798	-		_	_	_		
Stage 2	*447	_	_	-	-	-		
Platoon blocked, %	1	1	1	_	_	_		
Mov Cap-1 Maneuver	*218	•		_	-	_		
Mov Cap-2 Maneuver	*402	-		_	_	_		
Stage 1	*788	_	_	-	-	-		
Stage 2	*447	_	_	_	_	_		
Olago Z	171							
Approach	EB		NB		SB			
HCM Control Delay, s	11.8		0.1		0			
HCM LOS	В		0.1		U			
TIONI LOS	ь							
Minor Lane/Major Mvm	ıt	NBL	NRT	EBLn1	SBT	SBR		
Capacity (veh/h)		* 1265	וטוו	568	-	-		
HCM Lane V/C Ratio		0.013	-	0.063	-			
HCM Control Delay (s)		7.9		11.8		-		
HCM Lane LOS		7.9 A	-	11.0 B	-	-		
HCM 95th %tile Q(veh)	\	0	-	0.2	-	-		
`		U		0.2				
Notes		^ -			00		(() N () ()	+ All 1 1 1 1 1
~: Volume exceeds cap	pacity	\$: D	elay ex	ceeds 3	00s	+: Con	nputation Not Defined	*: All major volume in platoon

Intersection								
Int Delay, s/veh	0.3							
Movement	EBL	EBR	NBL	NBT	SBT	SBR		
Lane Configurations	¥		ች	^	† 1>			
Traffic Vol, veh/h	9	13	1	400	895	5		
Future Vol, veh/h	9	13	1	400	895	5		
Conflicting Peds, #/hr	0	0	0	0	0	0		
Sign Control	Stop	Stop	Free	Free	Free	Free		
RT Channelized	-		_	None	-			
Storage Length	0	-	0	-	-	-		
Veh in Median Storage		_	-	0	0	_		
Grade, %	0	_	_	0	0	_		
Peak Hour Factor	56	81	25	89	95	42		
Heavy Vehicles, %	2	2	2	2	2	2		
Mymt Flow	16	16	4	449	942	12		
HALL LOW	10	10	7	770	J72	12		
Major/Minor	Minor2		Major1	N	//ajor2			
Conflicting Flow All	1181	477	954	0	//aj012 -	0		
Stage 1	948	-	304	-	_	-		
Stage 2	233	_	_	<u>-</u>	_	_		
Critical Hdwy	6.84	6.94	4.14	_	_	_		
Critical Hdwy Stg 1	5.84	0.54	7.17	_	_	_		
Critical Hdwy Stg 2	5.84	_		_	_			
Follow-up Hdwy	3.52	3.32	2.22	_	_	_		
Pot Cap-1 Maneuver	*468		*1077	_	_	_		
Stage 1	*679	120	1077	_		_		
Stage 2	*784	_	_	_	_			
Platoon blocked, %	1	1	1	_		_		
Mov Cap-1 Maneuver	*466		*1077	_	-	-		
Mov Cap-1 Maneuver	*600	720	1011	<u>-</u>	_	-		
Stage 1	*676	-	_			-		
Stage 2	*784	_	-	-	_			
Staye Z	704	-	-	-	-	-		
Approach	EB		NB		SB			
HCM Control Delay, s	10.8		0.1		0			
HCM LOS	В							
Minor Lane/Major Mvn	nt_	NBL	NBT I	EBLn1	SBT	SBR		
Capacity (veh/h)		* 1077	-	655	-	-		
HCM Lane V/C Ratio		0.004	-	0.049	-	-		
HCM Control Delay (s))	8.4	-	10.8	-	-		
HCM Lane LOS		Α	_	В	-	_		
	٠,١	0	_	0.2	-	-		
HCM 95th %tile Q(veh	1)	U						
,	')							
Notes -: Volume exceeds ca			olav ov	ceeds 3	Me	±: Com	putation Not Defined	*: All major volume in platoon

Intersection								
Int Delay, s/veh	0.3							
Movement	EBL	EBR	NBL	NBT	SBT	SBR		
Lane Configurations	W		ř	^	ħβ			
Traffic Vol, veh/h	10	8	12	1194	613	16		
Future Vol, veh/h	10	8	12	1194	613	16		
Conflicting Peds, #/hr	0	0	0	0	0	0		
Sign Control	Stop	Stop	Free	Free	Free	Free		
RT Channelized	-	None	_	None	_	None		
Storage Length	0	-	0	-	_	-		
Veh in Median Storage		_	_	0	0	_		
Grade, %	0	_	_	0	0	_		
Peak Hour Factor	63	40	75	87	97	67		
Heavy Vehicles, %	2	2	2	2	2	2		
Mvmt Flow	16	20	16	1372	632	24		
IVIVIIIL FIUW	10	20	10	13/2	032	24		
Major/Minor	Minor2	ı	Major1	N	//ajor2			
Conflicting Flow All	1362	328	656	0	- najoiz	0		
Stage 1	644	J20 -	000	-	_	-		
Stage 2	718	_	-	-		_		
	6.84	6.94	4.14		-	_		
Critical Hdwy	5.84							
Critical Hdwy Stg 1		-	-	-	-	-		
Critical Hdwy Stg 2	5.84	-	- 0.00	-	-	-		
Follow-up Hdwy	3.52	3.32	2.22	-	-	-		
Pot Cap-1 Maneuver	*216		*1265	-	-	-		
Stage 1	*798	-	-	-	-	-		
Stage 2	*444	-	-	-	-	-		
Platoon blocked, %	1	1	1	-	-	-		
Mov Cap-1 Maneuver	*214	*846	*1265	-	-	-		
Mov Cap-2 Maneuver	*399	-	-	-	-	-		
Stage 1	*788	-	-	-	-	-		
Stage 2	*444	-	-	-	-	-		
Approach	EB		NB		SB			
HCM Control Delay, s	11.8		0.1		0			
HCM LOS	В							
Minor Lane/Major Mvn	nt	NBL	NBT	EBLn1	SBT	SBR		
Capacity (veh/h)		* 1265		566	_			
HCM Lane V/C Ratio		0.013		0.063	_	_		
HCM Control Delay (s	١	7.9	_	44.0	_	_		
HCM Lane LOS)							
	,1	A	-	0.2	-	-		
HCM 95th %tile Q(veh	1)	0	-	0.2		-		
Notes								
~: Volume exceeds ca	pacity	\$: D	elay ex	ceeds 3	00s	+: Con	nputation Not Defined	*: All major volume in platoon

Intersection									
Int Delay, s/veh	0.3								
Movement	EBL	EBR	NBL	NBT	SBT	SBR			
Lane Configurations	¥	LDIX	ሻ	^	†	ODIT			
Traffic Vol, veh/h	9	13	1	408	907	5			
Future Vol, veh/h	9	13	1	408	907	5			
Conflicting Peds, #/hr	0	0	0	0	0	0			
Sign Control	Stop	Stop	Free	Free	Free	Free			
RT Channelized	- -	None	-	None	-	None			
Storage Length	0	-	540	-	_	-			
Veh in Median Storage		_	-	0	0	_			
Grade, %	, # 2	_	_	0	0	<u> </u>			
Peak Hour Factor	56	81	25	89	95	42			
Heavy Vehicles, %	2	2	23	2	2	2			
Mvmt Flow	16	16	4	458	955	12			
IVIVIIIL FIOW	10	10	4	400	900	12			
	/linor2		Major1		Major2				
Conflicting Flow All	1198	484	967	0	-	0			
Stage 1	961	-	-	-	-	-			
Stage 2	237	-	-	-	-	-			
Critical Hdwy	6.84	6.94	4.14	-	-	-			
Critical Hdwy Stg 1	5.84	-	-	-	-	-			
Critical Hdwy Stg 2	5.84	-	-	-	-	-			
Follow-up Hdwy	3.52	3.32	2.22	-	-	-			
Pot Cap-1 Maneuver	*484	*703	*1051	-	-	-			
Stage 1	*663	-	-	-	-	-			
Stage 2	*780	-	-	-	-	-			
Platoon blocked, %	1	1	1	-	-	-			
Mov Cap-1 Maneuver	*482	*703	*1051	-	-	-			
Mov Cap-2 Maneuver	*596	-	-	-	-	-			
Stage 1	*660	-	-	-	-	-			
Stage 2	*780	-	-	-	-	-			
Approach	EB		NB		SB				
HCM Control Delay, s	10.9		0.1		0				
HCM LOS	В								
Minor Lane/Major Mvm	t	NBL	NRT	EBLn1	SBT	SBR			
Capacity (veh/h)		* 1051	NDI	645	501	יומט			
HCM Lane V/C Ratio		0.004	_	0.05	_	_			
HCM Control Delay (s)		8.4	-	10.9	-				
HCM Lane LOS			-	10.9 B					
HCM 95th %tile Q(veh)		A 0	-	0.2	-	_			
ì		U		0.2					
Notes		A -			.00			* AU	
~: Volume exceeds cap	pacity	\$: D	elay ex	ceeds 3	00s	+: Con	putation Not Defined	*: All major volume in platoon	

Intersection								
Int Delay, s/veh	0.3							
Movement	EBL	EBR	NBL	NBT	SBT	SBR		
Lane Configurations	¥		ች	^	† \$			
Traffic Vol, veh/h	10	8	12	1209	625	16		
Future Vol, veh/h	10	8	12	1209	625	16		
Conflicting Peds, #/hr	0	0	0	0	0	0		
Sign Control	Stop	Stop	Free	Free	Free	Free		
RT Channelized	-	None	-	None	-	None		
Storage Length	0	-	540	-	-	-		
Veh in Median Storage		-	-	0	0	-		
Grade, %	0	_	_	0	0	_		
Peak Hour Factor	63	40	75	87	97	67		
Heavy Vehicles, %	2	2	2	2	2	2		
Mymt Flow	16	20	16	1390	644	24		
IVIVIAL LIOW	10	20	10	1030	U44	Z '1		
Major/Minor N	Minor2	N	Major1	N	/lajor2			
Conflicting Flow All	1383	334	668	0	- -	0		
Stage 1	656	-	-	-	_	-		
Stage 2	727	_	_	_	_	_		
Critical Hdwy	6.84	6.94	4.14	_	_	_		
Critical Hdwy Stg 1	5.84	- 0.54		_	_	_		
Critical Hdwy Stg 2	5.84	_	_	_	_	_		
Follow-up Hdwy	3.52	3.32	2.22	_	_	_		
Pot Cap-1 Maneuver	*208	*846	1252	_		_		
Stage 1	*798	-	1202		_	_		
Stage 2	*439	_	_		_	_		
Platoon blocked, %	1	1	1	_	_	-		
Mov Cap-1 Maneuver	*205	*846	1252		_	<u>-</u> -		
Mov Cap-1 Maneuver	*394	040	1232	_	<u>-</u>	-		
Stage 1	*788	_	-	-	-	-		
	*439							
Stage 2	439	-	-	-	-	-		
Approach	EB		NB		SB			
HCM Control Delay, s	11.9		0.1		0			
HCM LOS	В							
Minor Lane/Major Mvm	ıt	NBL		EBLn1	SBT	SBR		
Capacity (veh/h)		1252	-	561	-	-		
HCM Lane V/C Ratio		0.013	-	0.064	-	-		
HCM Control Delay (s)		7.9	-	11.9	-	-		
HCM Lane LOS		Α	-	В	-	-		
HCM 95th %tile Q(veh)		0	-	0.2	-	-		
Notes								
~: Volume exceeds cap	pacity	\$: D	elay ex	ceeds 3	00s	+: Con	nputation Not Defined	*: All major volume in platoon
	. J. J. C.	.	- July On			. 5511		

Intersection								
Int Delay, s/veh	0.2							
Movement	EBL	EBR	NBL	NBT	SBT	SBR		
Lane Configurations	¥	LDI	NDL	† †	↑	אופט		
Traffic Vol, veh/h	10	14	1	438	979	6		
Future Vol, veh/h	10	14	1	438	979	6		
Conflicting Peds, #/hr	0		0	0	0	0		
Sign Control	Stop		Free	Free	Free	Free		
RT Channelized	-		-		-			
Storage Length	0	-	0	-	_	-		
Veh in Median Storage		_	-	0	0	_		
Grade, %	0	-	-	0	0	-		
Peak Hour Factor	92	92	92	92	95	92		
Heavy Vehicles, %	2	2	2	2	2	2		
Mvmt Flow	11	15	1	476	1031	7		
Major/Minor I	Minor2		Major1	N	Major2			
Conflicting Flow All	1275	519	1038	0	- viajoiz	0		
Stage 1	1035	-	-	-	_	-		
Stage 2	240	<u>-</u>	_	<u> </u>	<u>-</u>	<u>-</u>		
Critical Hdwy	6.84	6.94	4.14	_	_	_		
Critical Hdwy Stg 1	5.84	-	- 1.17	<u>-</u>	_	<u>-</u>		
Critical Hdwy Stg 2	5.84	-	_	_	_	_		
Follow-up Hdwy	3.52	3.32	2.22	_	_	<u>-</u>		
Pot Cap-1 Maneuver	*472	*668	*1000	_	-	_		
Stage 1	*631	-	-	_	_	_		
Stage 2	*777	-	_	_	-	-		
Platoon blocked, %	1	1	1	_	_	_		
Mov Cap-1 Maneuver	*471	*668		-	-	-		
Mov Cap-2 Maneuver	*575	-	-	_	_	-		
Stage 1	*630	-	-	_	-	-		
Stage 2	*777	-	-	-	-	-		
2 11 G =								
Approach	EB		NB		SB			
	11		0		0			
HCM LOS			U		U			
HCM LOS	В							
NA: 1 (0.0 1 0.0		ND	NET	EDL 4	007	000		
Minor Lane/Major Mvn	π	NBL		EBLn1	SBT	SBR		
Capacity (veh/h)		* 1000	-		-	-		
HCM Lane V/C Ratio		0.001		0.042	-	-		
HCM Control Delay (s)		8.6	-		-	-		
HCM Lane LOS	,	A	-	В	-	-		
HCM 95th %tile Q(veh)	0	-	0.1	-	-		
Notes								
~: Volume exceeds ca	pacity	\$: D	elay ex	ceeds 3	00s	+: Com	putation Not Defined	

Intersection									
Int Delay, s/veh	0.2								
Movement	EBL	EBR	NBL	NBT	SBT	SBR			
Lane Configurations	W		ች	^	† 1>				
Traffic Vol, veh/h	11	9	13	1306	671	18			
Future Vol, veh/h	11	9	13	1306	671	18			
Conflicting Peds, #/hr	0	0	0	0	0	0			
Sign Control	Stop	Stop	Free	Free	Free	Free			
RT Channelized	- -	None	-	None	-	None			
Storage Length	0	-	0	-		INOITE			
Veh in Median Storage		_	-	0	0				
	,		-		-				
Grade, %	0	-	-	0	0	-			
Peak Hour Factor	92	92	92	92	97	92			
Heavy Vehicles, %	2	2	2	2	2	2			
Mvmt Flow	12	10	14	1420	692	20			
Major/Minor	/line=0		Majer1		/oicr0				
	Minor2		Major1		Major2	^			
Conflicting Flow All	1440	356	712	0	-	0			
Stage 1	702	-	-	-	-	-			
Stage 2	738	-	-	-	-	-			
Critical Hdwy	6.84	6.94	4.14	-	-	-			
Critical Hdwy Stg 1	5.84	-	-	-	-	-			
Critical Hdwy Stg 2	5.84	-	-	-	-	-			
Follow-up Hdwy	3.52	3.32	2.22	-	-	-			
Pot Cap-1 Maneuver	*198	*820	*1227	-	-	-			
Stage 1	*774	-	-	-	-	-			
Stage 2	*434	_	_	_	-	-			
Platoon blocked, %	1	1	1	_	_	_			
Mov Cap-1 Maneuver	*196		*1227	_	_	_			
Mov Cap-1 Maneuver	*387	- 020	1221	_	_	_			
Stage 1	*765	_	_						
			-						
Stage 2	*434	-	-	-	-	-			
A l-			ND		0.5				
Approach	EB		NB		SB				
HCM Control Delay, s	12.4		0.1		0				
HCM LOS	В								
						0.5.5			
Minor Lane/Major Mvm		NBL	NBT	EBLn1	SBT	SBR			
Capacity (veh/h)		* 1227	-	508	-	-			
HCM Lane V/C Ratio		0.012	-	0.043	-	-			
HCM Control Delay (s)		8	-	12.4	-	-			
HCM Lane LOS		Α	-	В	-	-			
HCM 95th %tile Q(veh))	0	-	0.1	-	-			
Notes									
~: Volume exceeds cap	nacity	\$· D	elav ex	ceeds 3	00s	+: Con	nputation Not Defined	*: All major volume in platoon	
. Folding oxocous cal	Judity	ψ. υ	Jidy UN	00000	300	. 0011	ipatation Not Dolling	. 7 iii major volumo iii piatooti	

Intersection								
Int Delay, s/veh	0.2							
Movement	EBL	EBR	NBL	NBT	SBT	SBR		
Lane Configurations	W		ሻ	^	∱ }			
Traffic Vol, veh/h	10	14	1	446	991	6		
Future Vol, veh/h	10	14	1	446	991	6		
Conflicting Peds, #/hr	0	0	0	0	0	0		
Sign Control	Stop	Stop	Free	Free	Free	Free		
RT Channelized	-	None	_	None	-			
Storage Length	0	-	540	-	-	-		
Veh in Median Storage	, # 2	-	-	0	0	-		
Grade, %	0	-	-	0	0	-		
Peak Hour Factor	92	92	92	92	95	92		
Heavy Vehicles, %	2	2	2	2	2	2		
Mvmt Flow	11	15	1	485	1043	7		
Major/Minor N	/linor2	-	Major1	N	Major2			
Conflicting Flow All	1292	525	1050	0	-	0		
Stage 1	1047	-	-	-	-	-		
Stage 2	245	-	_	_	_	_		
Critical Hdwy	6.84	6.94	4.14	-	-	-		
Critical Hdwy Stg 1	5.84	-	-	_	_	-		
Critical Hdwy Stg 2	5.84	-	-	_	-	-		
Follow-up Hdwy	3.52	3.32	2.22	-	-	-		
Pot Cap-1 Maneuver	*454			_	-	-		
Stage 1	*631	-	-	-	-	-		
Stage 2	*773	-	-	-	-	-		
Platoon blocked, %	1	1	1	-	-	-		
Mov Cap-1 Maneuver	*453	*668	*1000	-	-	-		
Mov Cap-2 Maneuver	*570	-	-	-	-	-		
Stage 1	*630	-	-	-	-	-		
Stage 2	*773	-	-	-	-	-		
Ŭ								
Approach	EB		NB		SB			
HCM Control Delay, s	11		0		0			
HCM LOS	В				U			
TIOW LOO	U							
Minor Lane/Major Mvm	ıt	NBL	NRT	EBLn1	SBT	SBR		
		* 1000	NDI	623				
Capacity (veh/h) HCM Lane V/C Ratio			-		-	-		
		0.001	-	0.042	-	-		
HCM Control Delay (s) HCM Lane LOS		8.6	-	11	-	-		
	\	A 0	-	B	-	-		
HCM 95th %tile Q(veh))	U	_	0.1	-	-		
Notes								
~: Volume exceeds cap	pacity	\$: D	elay ex	ceeds 3	00s	+: Com	nputation Not Defined	*: All major volume in platoon

Intersection						
Int Delay, s/veh	0.2					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	¥		ሻ	^	∱ }	
Traffic Vol, veh/h	11	9	13	1321	683	18
Future Vol, veh/h	11	9	13	1321	683	18
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop		Free	Free	Free	Free
RT Channelized	-		-	None	-	None
Storage Length	0	-	540	-	-	-
Veh in Median Storage		-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	97	92
Heavy Vehicles, %	2		2	2	2	2
Mvmt Flow	12	10	14	1436	704	20
Major/Minor I	Minor2	ı	Major1	<u> </u>	Major2	
Conflicting Flow All	1460	362	724	0	-	0
Stage 1	714	-	-	-	-	-
Stage 2	746	_	_	_	-	_
Critical Hdwy	6.84	6.94	4.14	_	-	_
Critical Hdwy Stg 1	5.84	-	-	_	-	_
Critical Hdwy Stg 2	5.84	-	_	_	-	-
Follow-up Hdwy	3.52	3.32	2.22	_	-	_
Pot Cap-1 Maneuver	*191		*1227	-	-	-
Stage 1	*774	-	-	_	-	_
Stage 2	*430	-	_	_	-	-
Platoon blocked, %	1	1	1	_	-	_
Mov Cap-1 Maneuver	*189		*1227	_	-	-
Mov Cap-2 Maneuver	*383	-	-	-	-	-
Stage 1	*765	-	-	-	-	-
Stage 2	*430	-	-	-	-	_
Ŭ						
Approach	EB		NB		SB	
HCM Control Delay, s	12.5		0.1		0	
HCM LOS	В					
Minor Lane/Major Mvm	nt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)		* 1227		504	-	-
HCM Lane V/C Ratio		0.012	_	0.043	_	_
HCM Control Delay (s)		8	_	12.5	_	_
HCM Lane LOS		A	_	12.0 B	_	_
HCM 95th %tile Q(veh)	0	_	0.1	-	-
Notes	,					
~: Volume exceeds ca	nacity	¢. D	olov ov	ooodo 3	000	T: Co.
volume exceeds ca	pacity	φ. D	elay ex	ceeds 3	0008	+: Con

Intersection						
Int Delay, s/veh	0.2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	¥	VVDIX	↑ ↑	NUIN	<u> </u>	† †
Traffic Vol, veh/h	20	5	404	6	1	919
Future Vol, veh/h	20	5	404	6	1	919
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	Stop -	None			riee -	None
Storage Length	0	None -	-	None -	540	None -
Veh in Median Storage	,	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	22	5	439	7	1	999
Major/Minor I	Minor1	N	Major1	N	Major2	
Conflicting Flow All	945	223	0	0	446	0
Stage 1	443	-	-	U	440	-
Stage 2	502	-	-	-	_	-
	6.84	6.94		-	4.14	
Critical Hdwy			-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	*662	780	-	-	1111	-
Stage 1	*614	-	-	-	-	-
Stage 2	*663	-	-	-	-	-
Platoon blocked, %	1		-	-		-
Mov Cap-1 Maneuver	*662	780	-	-	1111	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	*614	-	-	-	-	-
Stage 2	*662	-	-	-	-	-
Approach	WB		NB		SB	
HCM Control Delay, s	9.8		0		0	
HCM LOS	Α					
Minor Lane/Major Mvm	nt	NBT	NBRV	VBLn1	SBL	SBT
Capacity (veh/h)		_	_	780	1111	_
HCM Lane V/C Ratio		_		0.035		_
HCM Control Delay (s)	1	_	_	9.8	8.2	_
HCM Lane LOS		_	_	Α	A	_
HCM 95th %tile Q(veh	1	_	_	0.1	0	_
•	1			0.1	U	
Notes						
~: Volume exceeds cap	pacity	\$: De	elay ex	ceeds 3	00s	+: Com
	_					

Intersection						
Int Delay, s/veh	0.2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	₩.	TIDIL	↑ \$	HDI	JDL Š	↑ ↑
Traffic Vol, veh/h	12	3	1218	21	5	628
Future Vol, veh/h	12	3	1218	21	5	628
Conflicting Peds, #/hr	0	0	0	0	0	020
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-		- 540	None
Storage Length	0	-	-	-		-
Veh in Median Storage		-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	13	3	1324	23	5	683
Major/Minor I	Minor1	N	Major1	N	//ajor2	
		674				0
Conflicting Flow All	1688		0	0	1347	0
Stage 1	1336	-	-	_	-	-
Stage 2	352	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	*116	397	-	-	507	-
Stage 1	*210	-	-	-	-	-
Stage 2	*798	-	-	-	-	-
Platoon blocked, %	1		-	-		-
Mov Cap-1 Maneuver	*114	397	-	-	507	-
Mov Cap-2 Maneuver	*198	-	-	-	-	-
Stage 1	*210	_	-	_	_	-
Stage 2	*790	-	-	-	-	-
J						
) A / D		ND		0.0	
Approach	WB		NB		SB	
HCM Control Delay, s			0		0.1	
HCM LOS	С					
Minor Lane/Major Mvm	nt	NBT	NRRV	VBLn1	SBL	SBT
	ıı	INDI	INDIN	220	507	
Capacity (veh/h) HCM Lane V/C Ratio		-	-			-
		-		0.074		-
HCM Control Delay (s)		-	-		12.2	-
HCM Lane LOS	\	-	-	С	В	-
HCM 95th %tile Q(veh)	-	-	0.2	0	-
Notes						
~: Volume exceeds cap	nacity	\$· D	elav ex	ceeds 3	00s	+: Com
. Volumo oxocous ca	paorty	ψ. υ	Jay CA	00000	000	JUII

Intersection						
Int Delay, s/veh	0.2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	¥	WDIX	†	NDIX	ሻ	^
Traffic Vol, veh/h	20	5	442	6	1	1004
Future Vol, veh/h	20	5	442	6	1	1004
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	Stop -	None		None		None
	0		-		- 540	
Storage Length		-	-	-		-
Veh in Median Storage		-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	22	5	480	7	1	1091
Major/Minor N	Minor1	ı	Major1	N	Major2	
						0
Conflicting Flow All	1032	244	0	0	487	0
Stage 1	484	-	-	-	-	-
Stage 2	548	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	*630	757	-	-	1072	-
Stage 1	*585	-	-	-	-	-
Stage 2	*631	_	_	-	_	_
Platoon blocked, %	1		_	_		_
Mov Cap-1 Maneuver	*630	757	_	_	1072	_
Mov Cap-1 Maneuver	-	-	_	_	1072	_
				-		
Stage 1	*585	-	-	-	-	-
Stage 2	*630	-	-	-	-	-
Approach	WB		NB		SB	
HCM Control Delay, s	9.9		0		0	
HCM LOS	9.9 A		U		U	
HCIVI LOS	А					
Minor Lane/Major Mvm	ıt	NBT	NBRV	VBLn1	SBL	SBT
Capacity (veh/h)		_	_	757	1072	_
HCM Lane V/C Ratio		_	_	0.036		_
HCM Control Delay (s)				9.9	8.4	_
HCM Lane LOS				9.9 A	Α	
	١	-	_	0.1		_
HCM 95th %tile Q(veh))	-	-	U. I	0	=
Notes						
~: Volume exceeds cap	pacity	\$: De	elav ex	ceeds 3	00s	+: Con
	2.0.0	ψ. Β	- July On			. 5011

Int Delay, s/veh	0.2
Movement	WBL
Lane Configurations	¥
Traffic Vol, veh/h	12
Future Vol, veh/h	12
· ·	
Conflicting Peds, #/hr	
Sign Control	Stop
RT Channelized	-
Storage Length	0
Veh in Median Storage	ge, # 2
Grade, %	0
Peak Hour Factor	92
Heavy Vehicles, %	2
Mvmt Flow	13
	Minor1
Conflicting Flow All	1843
Stage 1	1459
Stage 2	384
Critical Hdwy	6.84
Critical Hdwy Stg 1	5.84
Critical Hdwy Stg 2	5.84
Follow-up Hdwy	3.52
Pot Cap-1 Maneuver	
	*180
Stage 1	
Stage 2	*774
Platoon blocked, %	1
Mov Cap-1 Maneuver	
Mov Cap-2 Maneuver	
Stage 1	*180
010	*765
Stage 2	
Stage 2	
	W/D
Approach	WB
Approach HCM Control Delay, s	s 25.8
Approach	
Approach HCM Control Delay, s	s 25.8
Approach HCM Control Delay, s HCM LOS	s 25.8 D
Approach HCM Control Delay, s HCM LOS Minor Lane/Major Mvn	s 25.8 D
Approach HCM Control Delay, s HCM LOS Minor Lane/Major Mvn Capacity (veh/h)	s 25.8 D
Approach HCM Control Delay, s HCM LOS Minor Lane/Major Mvm Capacity (veh/h) HCM Lane V/C Ratio	s 25.8 D
Approach HCM Control Delay, s HCM LOS Minor Lane/Major Mvm Capacity (veh/h) HCM Lane V/C Ratio HCM Control Delay (s)	s 25.8 D
Approach HCM Control Delay, s HCM LOS Minor Lane/Major Mvm Capacity (veh/h) HCM Lane V/C Ratio HCM Control Delay (s) HCM Lane LOS	s 25.8 D
Approach HCM Control Delay, s HCM LOS Minor Lane/Major Mvm Capacity (veh/h) HCM Lane V/C Ratio HCM Control Delay (s)	s 25.8 D
Approach HCM Control Delay, s HCM LOS Minor Lane/Major Mvm Capacity (veh/h) HCM Lane V/C Ratio HCM Control Delay (s) HCM Lane LOS HCM 95th %tile Q(veh	s 25.8 D
Approach HCM Control Delay, s HCM LOS Minor Lane/Major Mvm Capacity (veh/h) HCM Lane V/C Ratio HCM Control Delay (s) HCM Lane LOS	s 25.8 D

	•	4	†	ļ
Lane Group	EBL	NBL	NBT	SBT
Lane Group Flow (vph)	72	48	405	909
v/c Ratio	0.40	0.10	0.14	0.32
Control Delay	21.8	3.4	2.6	3.1
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	21.8	3.4	2.6	3.1
Queue Length 50th (ft)	9	5	22	58
Queue Length 95th (ft)	24	11	41	99
Internal Link Dist (ft)	198		190	486
Turn Bay Length (ft)				
Base Capacity (vph)	471	475	2895	2880
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.15	0.10	0.14	0.32
Intersection Summary				

	•	•	†	↓
Lane Group	EBL	NBL	NBT	SBT
Lane Group Flow (vph)	52	44	1325	653
v/c Ratio	0.39	0.07	0.44	0.22
Control Delay	41.7	2.5	3.2	2.2
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	41.7	2.5	3.2	2.2
Queue Length 50th (ft)	21	5	111	41
Queue Length 95th (ft)	51	12	159	66
Internal Link Dist (ft)	198		190	486
Turn Bay Length (ft)				
Base Capacity (vph)	324	646	3036	3019
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.16	0.07	0.44	0.22
Intersection Summary				

	•	4	†	ļ
Lane Group	EBL	NBL	NBT	SBT
Lane Group Flow (vph)	72	48	410	917
v/c Ratio	0.40	0.10	0.14	0.32
Control Delay	21.8	3.4	2.6	3.1
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	21.8	3.4	2.6	3.1
Queue Length 50th (ft)	9	5	22	59
Queue Length 95th (ft)	24	11	41	100
Internal Link Dist (ft)	198		190	486
Turn Bay Length (ft)				
Base Capacity (vph)	471	471	2895	2880
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.15	0.10	0.14	0.32
Intersection Summary				

	•	•	†	↓
Lane Group	EBL	NBL	NBT	SBT
Lane Group Flow (vph)	52	44	1339	659
v/c Ratio	0.39	0.07	0.44	0.22
Control Delay	41.7	2.5	3.2	2.2
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	41.7	2.5	3.2	2.2
Queue Length 50th (ft)	21	5	113	42
Queue Length 95th (ft)	51	12	162	67
Internal Link Dist (ft)	198		190	486
Turn Bay Length (ft)				
Base Capacity (vph)	324	641	3036	3023
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.16	0.07	0.44	0.22
Intersection Summary				

	-	←	~	†	-	↓
Lane Group	EBT	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	72	22	48	418	3	918
v/c Ratio	0.60	0.11	0.11	0.16	0.00	0.34
Control Delay	23.1	1.1	10.0	6.7	10.3	7.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	23.1	1.1	10.0	6.7	10.3	7.9
Queue Length 50th (ft)	0	0	5	21	0	56
Queue Length 95th (ft)	#28	0	31	117	6	280
Internal Link Dist (ft)	198	98		190		486
Turn Bay Length (ft)						
Base Capacity (vph)	121	200	422	2679	715	2666
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.60	0.11	0.11	0.16	0.00	0.34
Intersection Summary						

⁹⁵th percentile volume exceeds capacity, queue may be longer. Queue shown is maximum after two cycles.

	-	←	1	†	-	↓
Lane Group	EBT	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	55	13	55	1283	10	658
v/c Ratio	0.60	0.14	0.09	0.43	0.03	0.22
Control Delay	29.8	3.2	4.3	4.7	4.8	3.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	29.8	3.2	4.3	4.7	4.8	3.5
Queue Length 50th (ft)	0	0	5	92	1	36
Queue Length 95th (ft)	#31	0	22	308	9	129
Internal Link Dist (ft)	198	98		190		486
Turn Bay Length (ft)						
Base Capacity (vph)	91	91	629	2967	314	2962
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.60	0.14	0.09	0.43	0.03	0.22
Intersection Summary						

⁹⁵th percentile volume exceeds capacity, queue may be longer. Queue shown is maximum after two cycles.

	•	4	†	↓
Lane Group	EBL	NBL	NBT	SBT
Lane Group Flow (vph)	66	38	448	992
v/c Ratio	0.38	0.09	0.15	0.34
Control Delay	20.9	3.3	2.5	3.2
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	20.9	3.3	2.5	3.2
Queue Length 50th (ft)	7	4	24	65
Queue Length 95th (ft)	44	13	44	109
Internal Link Dist (ft)	198		190	486
Turn Bay Length (ft)				
Base Capacity (vph)	451	433	2901	2891
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.15	0.09	0.15	0.34
Intersection Summary				

1: Pecos St & Sherrelwood Dr

	•	4	†	ļ
Lane Group	EBL	NBL	NBT	SBT
Lane Group Flow (vph)	46	45	1385	708
v/c Ratio	0.37	0.07	0.46	0.23
Control Delay	42.5	2.5	3.2	2.3
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	42.5	2.5	3.2	2.3
Queue Length 50th (ft)	20	5	119	45
Queue Length 95th (ft)	57	13	177	72
Internal Link Dist (ft)	198		190	486
Turn Bay Length (ft)				
Base Capacity (vph)	308	611	3040	3032
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.15	0.07	0.46	0.23
Intersection Summary				

	-	←	1	†	-	ļ
Lane Group	EBT	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	66	22	38	456	3	993
v/c Ratio	0.55	0.11	0.10	0.17	0.00	0.37
Control Delay	18.5	1.1	10.1	6.8	10.3	8.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	18.5	1.1	10.1	6.8	10.3	8.1
Queue Length 50th (ft)	0	0	4	23	0	63
Queue Length 95th (ft)	#18	0	37	127	6	310
Internal Link Dist (ft)	198	98		190		486
Turn Bay Length (ft)						
Base Capacity (vph)	121	200	385	2679	690	2672
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.55	0.11	0.10	0.17	0.00	0.37
Intersection Summary						

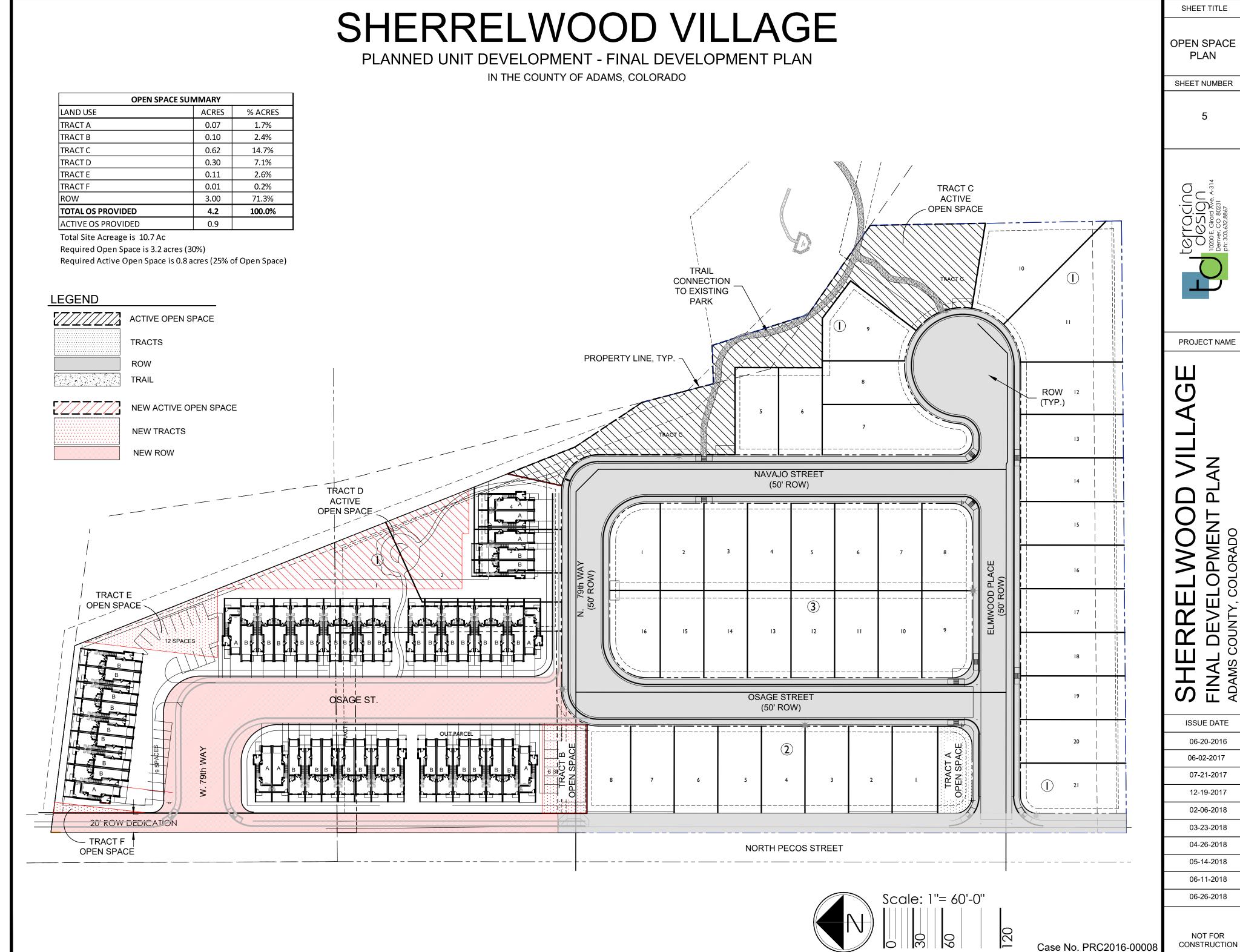
^{# 95}th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

	-	←	1	†	-	↓
Lane Group	EBT	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	46	13	45	1401	10	713
v/c Ratio	0.51	0.14	0.08	0.47	0.04	0.24
Control Delay	19.4	3.2	4.3	5.0	4.9	3.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	19.4	3.2	4.3	5.0	4.9	3.6
Queue Length 50th (ft)	0	0	4	106	1	40
Queue Length 95th (ft)	#8	0	26	353	9	142
Internal Link Dist (ft)	198	98		190		486
Turn Bay Length (ft)						
Base Capacity (vph)	91	91	596	2970	273	2964
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.51	0.14	0.08	0.47	0.04	0.24
Intersection Summary						

^{# 95}th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.



SHEET TITLE

ISSUE DATE 06-20-2016 06-02-2017

12-19-2017

03-23-2018

04-26-2018 05-14-2018

06-26-2018

NOT FOR

ELMWOOD ESTATES EROSION AND SEDIMENT CONTROL PLANS

PART OF THE NORTHEAST QUARTER SECTION 33, TOWNSHIP 2 SOUTH, RANGE 68 WEST OF THE SIXTH PRINCIPAL MERIDIAN, COUNTY OF ADAMS, STATE OF COLORADO

DELWEST CAPITAL DEVELOPMENT CORP. 155 S. MADISON ST. DENVER, COLORADO 80209 (720) 708-4065 CONTACT: DERRELL SCHREINER

LITTLETON, CO 80120 (303) 703-4444, EXT 113

1950 WEST LITTLETON BLVD., SUITE 109

CORE CONSULTANTS, INC.

CORE CONSULTANTS, INC.

LANDSCAPE TERRACINA DESIGN

10200 E. GIRARD AVENUE, SUITE A-314 DENVER, CO 80231 (303) 632-8867 CONTACT: LAYLA ROSALES

LITTLETON, CO 80120 (303) 703-4444, EXT 119

1950 WEST LITTLETON BLVD., SUITE 109

DISTRICT MANAGER CITY DEVELOPMENT 9500 CIVIC CENTER DRIVE THORNTON, CO 80229 (303) 538 - 7295CONTACT: TBD

ADAMS COUNTY 4430 S. ADAMS COUNTY PARKWAY, W2000B BRIGHTON, CO 80601 (720) 523-6826

ENGINEER

CONTACT: MATT EMMENS

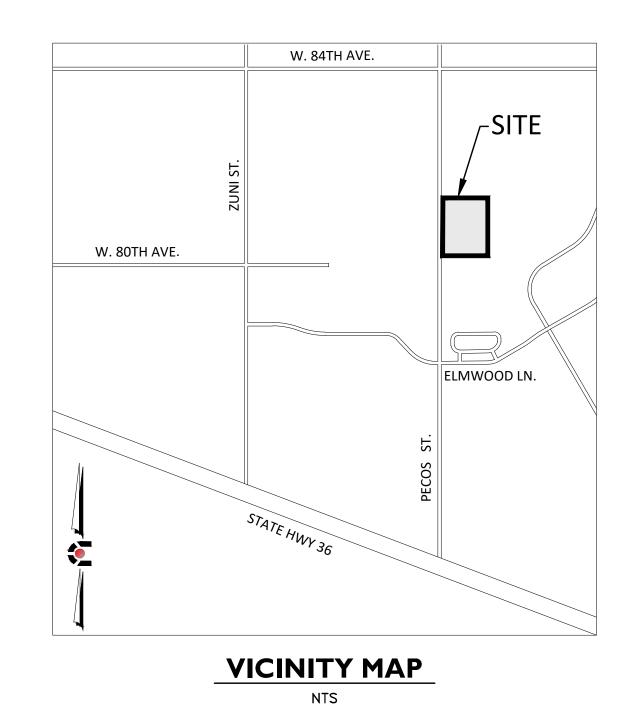
PUBLIC IMPROVEMENTS SHALL CONFORM TO ADAMS COUNTY STANDARDS AND SPECIFICATIONS AND LATEST EDITION OF COLORADO DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS.

NOTICE TO CONTRACTOR
THE EXISTENCE AND LOCATION OF ANY UNDERGROUND UTILITIES, CONDUITS OR OTHER STRUCTURES SHOWN ON THESE PLANS WAS OBTAINED BY THE SEARCH OF AVAILABLE RECORDS. THE ENGINEER ASSUMES NO LIABILITY WHATSOEVER FOR THE ACCURACY OR COMPLETENESS OF SUCH DATA. THE CONTRACTOR IS REQUIRED TO TAKE DUE PRECAUTIONARY MEASURES TO PROTECT ALL UTILITY LINES, CONDUITS OR STRUCTURES WHETHER OR NOT SHOWN ON THESE PLANS AND BY ACCEPTING AND UTILIZING THESE PLANS, ASSUMES ALL RESPONSIBILITY FOR THE PROTECTION OR AND ANY DAMAGE TO SAID FACILITIES.

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, CORE CONSULTANTS, INC. APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

BEARINGS FOR THIS DESCRIPTION ARE BASED ON THE NORTH LINE OF THE NORTHEAST QUARTER OF SECTION 33, TOWNSHIP 2 SOUTH, RANGE 68 WEST OF THE 6th P.M., BEING ASSUMED TO BEAR N 89°30'30" E, FROM THE NORTH QUARTER CORNER OF SAID SECTION 33, BEING A 3 1/4" ALUMINUM CAP IN RANGE BOX, PLS 23519 TO THE NORTHEAST CORNER OF SAID SECTION 33 BEING A 3 1/4" ALUMINUM CAP IN RANGE BOX, PLS 7276 WITH ALL BEARINGS CONTAINED HEREIN RELATIVE THERETO.

BENCHMARK DESCRIPTION NGS MONUMENT 547, P.I.D. "DJ8173, ADAMS COUNTY" HAVING A PUBLISHED ELEVATION OF 5286.29 FEET. (NAVD 88)



Sheet List Table Sheet Number Sheet Title

COVER SHEET GENERAL NOTES INITIAL EROSION CONTROL PLAN

INTERIM EROSION CONTROL PLAN FINAL EROSION CONTROL PLAN EROSION CONTROL DETAILS

DESIGNED BY: NW DRAWN BY: NW CHECKED BY: DF

JOB NO. 19-165 SHEET OF 6

ADAMS COUNTY EROSION CONTROL PLAN GENERAL NOTES:

1. ALL CONSTRUCTION PROJECTS, REGARDLESS OF THE SIZE, SHALL INSTALL, MAINTAIN AND REPAIR STORMWATER POLLUTION CONTROL MEASURES (CMS) TO EFFECTIVELY MINIMIZE EROSION, SEDIMENT TRANSPORT, AND THE RELEASE OF POLLUTANTS RELATED TO CONSTRUCTION ACTIVITY. CMS EXAMPLE INCLUDE: SEDIMENT CONTROL LOGS (SCL), SILT FENCE (SF), DIKES/SWALES, SEDIMENT TRAPS (ST), INLET PROTECTION (IP), OUTLET PROTECTION (IP), OUTLET PROTECTION (IP), OUTLET PROTECTION (IP), SEDIMENT BASINS (SB), TEMPORARY/PERMANENT SEEDING AND MULCHING (MU), SOIL ROUGHENING, MAINTAINING EXISTING VEGETATION AND PROTECTION OF TREES. CMS MUST BE SELECTED, DESIGNED, ADEQUATELY SIZED, INSTALLED AND MAINTAINED IN ACCORDANCE WITH GOOD ENGINEERING, HYDROLOGIC AND POLLUTION CONTROL PRACTICES. CMS/BMPS INSTALLATION AND MAINTENANCE DETAILS SHALL CONFORM TO URBAN DRAINAGE FLOOD CONTROL CRITERIA MANUAL VOLUME 3, OR THE COLORADO DEPARTMENT OF TRANSPORTATION (CDOT) ITEM CODE BOOK. CMS MUST FILTER, SETTLE, CONTAIN OR STRAIN POLLUTANTS FROM STORMWATER FLOWS WITHOUT TREATMENT. CMS MUST BE APPROPRIATE TO TREAT THE RUNOFF FROM THE AMOUNT OF DISTURBED AREA, THE EXPECTED FLOW RATE, DURATION, AND FLOW CONDITIONS (I.E., SHEET OR CONCENTRATED FLOW). CMS/BMPS SHALL BE SPECIFIED IN THE SWMP (IF APPLICABLE), AND THE LOCATIONS SHOWN ON THE EC PLAN.

1. 1) PRIOR TO CONSTRUCTION, PROJECTS DISTURBING 1 OR MORE ACRES OF LAND, OR ANY PROJECT BELONGING TO A COMMON PLAN OF DEVELOPMENT DISTURB 1 OR MORE ACRES, MUST OBTAIN:

DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT, AND

AND

- 2. PERMITTED PROJECTS SHALL DEVELOP A STORMWATER MANAGEMENT PLAN (SWMP), AKA EROSION AND SEDIMENT CONTROL PLAN (ESCP), IN COMPLIANCE WITH CDPHE MINIMUM REQUIREMENTS. THE APPROVED SWMP, INCLUDING EROSION CONTROL (EC) PLAN (SITE MAP), SHALL BE KEPT ON SITE AND UPDATED AT ALL TIMES. THE QUALIFIED STORMWATER MANAGER IS RESPONSIBLE FOR IMPLEMENTING THE SWMP AND CMS (AKA BMPS) DURING CONSTRUCTION.
- 4. TRACKING OF DIRT ONTO PAVED PUBLIC OR PRIVATE PAVED ROADS IS NOT ALLOWED. THE USE OF DIRT RAMPS TO ENTER/EXIT FROM AN UNPAVED INTO A PAVED AREA IS PROHIBITED. VEHICLE TRACKING CONTROLS SHALL BE IMPLEMENTED, OTHERWISE ENTRANCE AREA MUST DRAIN THRU A CM TOWARDS THE PRIVATE SITE.

 5. TRUCK LOADS OF FILL MATERIAL IMPORTED TO OR CUT MATERIAL EXPORTED FROM THE SITE SHALL BE PROPERLY COVERED TO PREVENT LOSS OF THE MATERIAL DURING TRANSPORTATION ON PUBLIC ROW. HAUL ROUTES MUST BE PERMITTED BY THE COUNTY. NO MATERIAL SHALL BE TRANSPORTED TO ANOTHER SITE
- WITHOUT APPLICABLE PERMITS.
- 6. CONTROL MEASURES DESIGNED FOR CONCRETE WASHOUT WASTE MUST BE IMPLEMENTED. THIS INCLUDES WASHOUT WASTE DISCHARGED TO THE GROUND AND WASHOUT WASTE FROM CONCRETE TRUCKS AND MASONRY OPERATIONS.
 7. TEMPORARY CMS/BMPS SHALL BE REMOVED AFTER THE SITE HAS REACHED FINAL STABILIZATION.
- 8. DEWATERING OPÉRATIONS DISCHARGING OFF SITE INTO ANY WATERS CONVEYANCE SYSTEMS INCLUDING WETLANDS, IRRIGATION DITCHES, CANALS, RIVERS, STREAMS OR STORM SEWER SYSTEMS, REQUIRE A STATE CONSTRUCTION DEWATERING PERMIT.
- 9. PERMITTED PROJECTS SHALL KEEP THE COPHE'S STORMWATER DISCHARGE PERMIT, STORMWATER MANAGEMENT PLAN (SWMP) AND INSPECTION LOGS AVAILABLE ON SITE THROUGHOUT THE DURATION OF THE PROJECT, AND FOR AN ADDITIONAL 3 YEARS AFTER PERMIT CLOSE OUT.
- 10. PERMITTED LANDOWNER AND/OR CONTRACTOR SHALL CLOSE THE STATE AND CITY/COUNTY PERMIT ONCE FINAL STABILIZATION IS REACHED. STORMWATER INSPECTIONS SHALL CONTINUE UNTIL INACTIVATION NOTICE IS FILED WITH CDPHE.

PERFORMANCE STANDARD NOTES:

- 1. STORMWATER RUNOFF FROM DISTURBED AREAS MUST FLOW TO AT LEAST ONE (1) CM TO MINIMIZE SEDIMENT TO LEAVE THE SITE. THE BEST WAY TO PREVENT SEDIMENT OR POLLUTANTS FROM ENTERING THE STORM SEWER SYSTEM IS TO STABILIZE THE SITE AS QUICKLY AS POSSIBLE, PREVENTING EROSION AND STOPPING SEDIMENT RUN-OFF AT ITS SOURCE.
- 2. PHASE CONSTRUCTION TO MINIMIZE DISTURBED AREAS, INCLUDING DISTURBANCE OF STEEP SLOPES. (I.E. THE ENTIRE PROJECT SITE SHOULD NOT BE DISTURBED IF CONSTRUCTION WILL ONLY BE OCCURRING IN ONE PARTICULAR SECTION OF THE SITE).LIMIT SOIL EXPOSURE TO THE SHORTEST POSSIBLE PERIOD OF TIME.
 PROTECT NATURAL FEATURES AND EXISTING VEGETATION WHENEVER POSSIBLE. REMOVAL OF EXISTING VEGETATION OPERATIONS. MAINTAIN PRE EXISTING VEGETATION (OR EQUIVALENT CMS) FOR AREAS WITHIN 50 HORIZONTAL FT OF RECEIVING WATERS.
- 3. SOIL COMPACTION MUST BE MINIMIZED FOR AREAS WHERE INFILTRATION CMS WILL OCCUR OR WHERE FINAL STABILIZATION WILL BE ACHIEVED THROUGH VEGETATIVE COVER.
- 4. ALL SOIL IMPORTED TO OR EXPORTED FROM THE SITE SHALL BE PROPERLY COVERED TO PREVENT THE LOSS OF MATERIAL DURING TRANSPORT.
- 5. DUST EMISSIONS RESULTING FROM GRADING ACTIVITIES OR WIND SHALL BE CONTROLLED.
- 6. INSTALL CONSTRUCTION FENCE (ORANGE) TO PROTECT WETLANDS AND OTHER SENSITIVE AREAS AND TO PREVENT ACCESS, AND TO DELINEATE THE LIMITS OF CONSTRUCTION. DO NOT USE SILT FENCE TO PROTECT WETLANDS SINCE TRENCHING MAY IMPACT THESE AREAS.
- 7. CMS INTENDED TO CAPTURE OVERLAND, LOW VELOCITY SHEET FLOW AT A FAIRLY LEVEL GRADE SHALL ONLY BE INSTALLED ALONG CONTOURS.
 8. INSTALL CMS, SUCH AS CHECK DAMS, PERPENDICULAR TO THE CONCENTRATED FLOWS TO REDUCE FLOW VELOCITY.
- 9. STORM DRAIN INLETS WITHIN AND ADJACENT TO THE CONSTRUCTION SITE MUST BE PROTECTED. ANY PONDING OF STORMWATER AROUND INLET PROTECTION MUST NOT CAUSE EXCESSIVE FLOODING OR DAMAGE ADJACENT AREAS OR STRUCTURES.
- 10. INSTALL VEHICLE TRACKING CONTROL (VTC) TO ENTER/EXIT UNPAVED AREA. DO NOT USE RECYCLED CRUSHED CONCRETE OR ASPHALT MILLINGS FOR VEHICLE TRACKING PADS.
- 11. STRAW BALES SHALL NOT BE USED FOR PRIMARY EROSION OR SEDIMENT CONTROL (I.E. STRAW BALES MAY BE USED FOR REINFORCEMENT BEHIND ANOTHER BMP SUCH AS SILT FENCE).
- 12. OUTLETS SYSTEMS (SUCH AS SKIMMER OR PERFORATED RISER PIPE) SHALL BE INSTALLED TO WITHDRAW WATER FROM OR NEAR THE SURFACE LEVEL WHEN DISCHARGING FROM BASINS. WATER CANNOT DRAIN FROM THE BOTTOM OF THE POND.
- 13. TEMPORARY STABILIZATION MUST BE IMPLEMENTED FOR EARTH DISTURBING ACTIVITIES ON ANY PORTION OF THE SITE WHERE LAND DISTURBING ACTIVITIES ON ANY PORTION OF THE SITE WHERE LAND DISTURBING ACTIVITIES HAVE PERMANENTLY OR TEMPORARY STABILIZATION METHODS EXAMPLES: TARPS, SOIL TACKIFIER, AND HYDROSEED. TEMPORARY STABILIZATION REQUIREMENT MAY EXCEED THE 14 DAY SCHEDULE WHEN EITHER THE FUNCTION OF THE SPECIFIC AREA REQUIRES IT TO REMAIN DISTURBED, OR, PHYSICAL CHARACTERISTICS OF THE TERRAIN AND CLIMATE PREVENT STABILIZATION AS LONG AS THE CONSTRAINTS AND ALTERNATIVE SCHEDULE IS DOCUMENTED ON THE SWMP, AND LOCATIONS ARE IDENTIFIED ON THE EC PLAN (SITE MAP).
- 14. RUNOFF FROM STOCKPILE AREA MUST BE CONTROLLED. SOILS THAT WILL BE STOCKPILE FOR MORE THAN 30 DAYS SHALL BE PROTECTED FROM WIND AND WATER EROSION WITHIN 14 DAYS OF STOCKPILE CONSTRUCTION. INSTALL CMS/BMPS 5 FT AWAY FROM THE TOE OF THE STOCKPILE'S SLOPE.
- 15. WATER USE TO CLEAN CONCRETE TRUCKS SHALL BE DISCHARGED INTO A CONCRETE WASHOUT AREA (CWA). THE PREDEFINED CONTAINMENT AREA MUST BE IDENTIFIED WITH A SIGN, AND SHALL ALLOW THE LIQUIDS TO EVAPORATE OR DRY OUT. CWA DISCHARGES THAT MAY REACH GROUNDWATER MUST FLOW THROUGH SOIL THAT HAS BUFFERING CAPACITY PRIOR TO REACHING GROUNDWATER. THE CONCRETE WASHOUT LOCATION SHALL BE NOT BE LOCATED IN AN AREA WHERE SHALLOW GROUNDWATER MAY BE PRESENT AND WOULD RESULT IN BUFFERING CAPACITY NOT BEING ADEQUATE, SUCH AS NEAR NATURAL DRAINAGES, SPRINGS, OR WETLANDS. IN THIS CASE, A LINER UNDERNEATH IS NEEDED FOR AREAS WITH HIGH GROUNDWATER LEVELS. CWA SHALL NOT BE PLACED IN LOW AREAS, DITCHES OR ADJACENT TO STATE WATERS.
- 16. WASTE, SUCH AS BUILDING MATERIALS, WORKERS TRASH AND CONSTRUCTION DEBRIS, MUST BE PROPERLY MANAGED TO PREVENT STORMWATER POLLUTION.
- 17. INSTALL STABILIZED STAGING AREA (SSA) TO STORE MATERIALS, CONSTRUCTION TRAILER, ETC.
 18. IF CONDITIONS IN THE FIELD WARRANT ADDITIONAL CMS/BMPS TO THE ONES ORIGINALLY APPROVED ON THE SWMP OR EC PLAN (CIVIL DRAWING), THE LANDOWNER OR CONTRACTOR SHALL IMPLEMENT MEASURES DETERMINED NECESSARY, AS DIRECTED BY THE COUNTY.
- 19. PERMANENT CMS/BMPS FOR SLOPES, CHANNELS, DITCHES, OR DISTURBED LAND AREA SHALL BE PERFORMED IMMEDIATELY AFTER FINAL GRADING. CONSIDER THE USE EROSION CONTROL BLANKETS ON SLOPES 3:1 OR STEEPER AND AREAS WITH CONCENTRATED FLOWS SUCH AS SWALES, LONG CHANNELS AND ROADSIDE DITCHES.
- 20. THE DISCHARGE OF SANITARY WASTE INTO THE STORM SEWER SYSTEM IS PROHIBITED. PORTABLE TOILETS MUST BE PROVIDED, SECURED AND PLACED ON PERMEABLE SURFACES, AWAY FROM THE CURBSIDE, STORM INLETS AND/OR DRAINAGE WAYS.
- 21. REMOVE TEMPORARY CMS/BMPS ONCE FINAL STABILIZATION IS REACHED, UNLESS OTHERWISE AUTHORIZED.
- 22.FINAL STABILIZATION MUST BE IMPLEMENTED. FINAL STABILIZATION IS REACHED WHEN ALL SOIL DISTURBING ACTIVITIES HAVE BEEN COMPLETED, AND EITHER A UNIFORM VEGETATIVE COVER HAS BEEN ESTABLISHED WITH AN INDIVIDUAL PLANT DENSITY OF AT LEAST 70% OF PRE DISTURBANCE LEVELS, OR EQUIVALENT PERMANENT ALTERNATIVE METHOD HAS BEEN IMPLEMENTED.
- 23. PROVIDE SPILL PREVENTION AND CONTAINMENT MEASURES FOR CONSTRUCTION MATERIALS, WASTE AND FUEL STORAGE (55 GALLONS OR GREATER) OF PETROLEUM PRODUCTS AND LIQUID CHEMICALS MUST HAVE SECONDARY CONTAINMENT, OR EQUIVALENT PROTECTION, IN ORDER TO CONTAIN SPILLS AND TO PREVENT SPILLED MATERIAL FROM ENTERING STATE WATERS.
- 24.REPORT SPILLS OR RELEASES OF CHEMICAL, OIL, PETROLEUM PRODUCT, SEWAGE, ETC., WHICH MAY REACH THE STORM SEWER OR ENTER STATE WATERS WITHIN 24 HOURS FROM TIME OF DISCOVERY. GUIDANCE AVAILABLE AT WWW.CDPHE.STATE.CO.US/EMP/SPILLSANDRELEASED.HTM. STATE OF COLORADO SPILL LINE: 1 877 518 5608. ADAMS COUNTY STORMWATER HOTLINE: 720 523 6400; PUBLIC WORKS 303 453 8787 AND THE TRI COUNTY HEALTH DEPARTMENT AT 303-220-9200.

MAINTENANCE STANDARD NOTES:

- 1 MAINTAIN AND REPAIR CMS ACCORDING TO APPROVED EROSION CONTROL PLAN (CIVIL DRAWING) TO ASSURE THEY CONTINUE PERFORMING AS ORIGINALLY INTENDED.
- 2 CMS/BMPS REQUIRING MAINTENANCE OR ADJUSTMENT SHALL BE REPAIRED IMMEDIATELY AFTER OBSERVATION OF THE FAILING BMP.
- 3 CMS SHALL BE CLEANED WHEN SEDIMENT LEVELS ACCUMULATE TO HALF THE DESIGN UNLESS OTHERWISE SPECIFIED. 4 SWMP AND EC PLAN SHALL BE CONTINUOUSLY UPDATED TO REFLECT NEW OR REVISED CMS/BMPS DUE TO CHANGES IN DESIGN, CONSTRUCTION, OPERATION, OR MAINTENANCE, TO ACCURATELY REFLECT THE ACTUAL FIELD CONDITIONS. A NOTATION SHALL BE MADE IN THE SWMP, INCLUDING DATE OF CHANGES IN THE FIELD, IDENTIFICATION OF THE CMS REMOVED, MODIFIED OR ADDED, AND THE LOCATIONS OF THOSE CMS. UPDATES MUST BE MADE WITHIN 72 HOURS FOLLOWING THE CHANGE.

 5 MAINTAIN VEHICLE TRACKING CONTROL (VTC), IF SEDIMENT TRACKING OCCURS. CLEAN UP IMMEDIATELY. SWEEP BY HAND OR THE USE STREET SWEEPERS (WITH VACUUM SYSTEM). FLUSHING OFF PAVED SURFACES WITH WATER IS PROHIBITED.
- 6 CWA MUST BE CLEANED ONCE WASTE ACCUMULATION REACHES % OF THE WET STORAGE CAPACITY OF THE STRUCTURE. LEGALLY DISPOSED OF CONCRETE WASTE. DO NOT BURY ON-SITE.
- 7 CLEAN-UP SPILLS IMMEDIATELY AFTER DISCOVERY, OR CONTAIN UNTIL APPROPRIATE CLEANUP METHODS CAN BE EMPLOYED. FOLLOW MANUFACTURER'S RECOMMENDED METHODS FOR SPILL CLEANUP, ALONG WITH PROPER DISPOSAL METHODS. RECORDS OF SPILLS, LEAKS, OR OVERFLOWS THAT RESULT IN DISCHARGE OF POLLUTANTS MUST BE DOCUMENTED AND MAINTAINED.
- 8 REMOVE SEDIMENT FROM STORM SEWER INFRASTRUCTURE (PONDS, STORM PIPES, OUTLETS, INLETS, ROADSIDE DITCHES, ETC.), AND RESTORE VOLUME CAPACITY UPON COMPLETION OF PROJECT OR PRIOR TO INITIAL ACCEPTANCE OF PUBLIC IMPROVEMENTS (IF APPLICABLE). DO NOT FLUSH SEDIMENT OFFSITE, CAPTURE ON SITE AND DISPOSED OF AT AN APPROVED LOCATION. THESE NOTES ARE NOT INTENDED TO BE ALL-INCLUSIVE, BUT TO HIGHLIGHT THE BASIC STORMWATER POLLUTION PREVENTION REQUIREMENTS FOR CONSTRUCTION ACTIVITIES TO COMPLY WITH CDPS STORMWATER CONSTRUCTION PERMIT AND BE IN CONFORMANCE WITH COUNTY STANDARDS.

303.703.4444 1950 W. Littleton Blvd., Ste.





UNDERGROUND MEMBER UTILITIES.

CORE ASSUMES NO RESPONSIBILITY FOR EXISTING LOCATIONS (HORIZONTAL AND VERTICAL). THE EUTILITIES SHOWN ON THIS DRAWING HAVE BEEN FROM THE BEST AVAILABLE INFORMATION. IT IS, HE RESPONSIBILITY OF THE CONTRACTOR TO FIEL THE LOCATION OF ALL UTILITIES PRIOR TO TO COMMENCEMENT OF ANY CONSTRUCTION ACT



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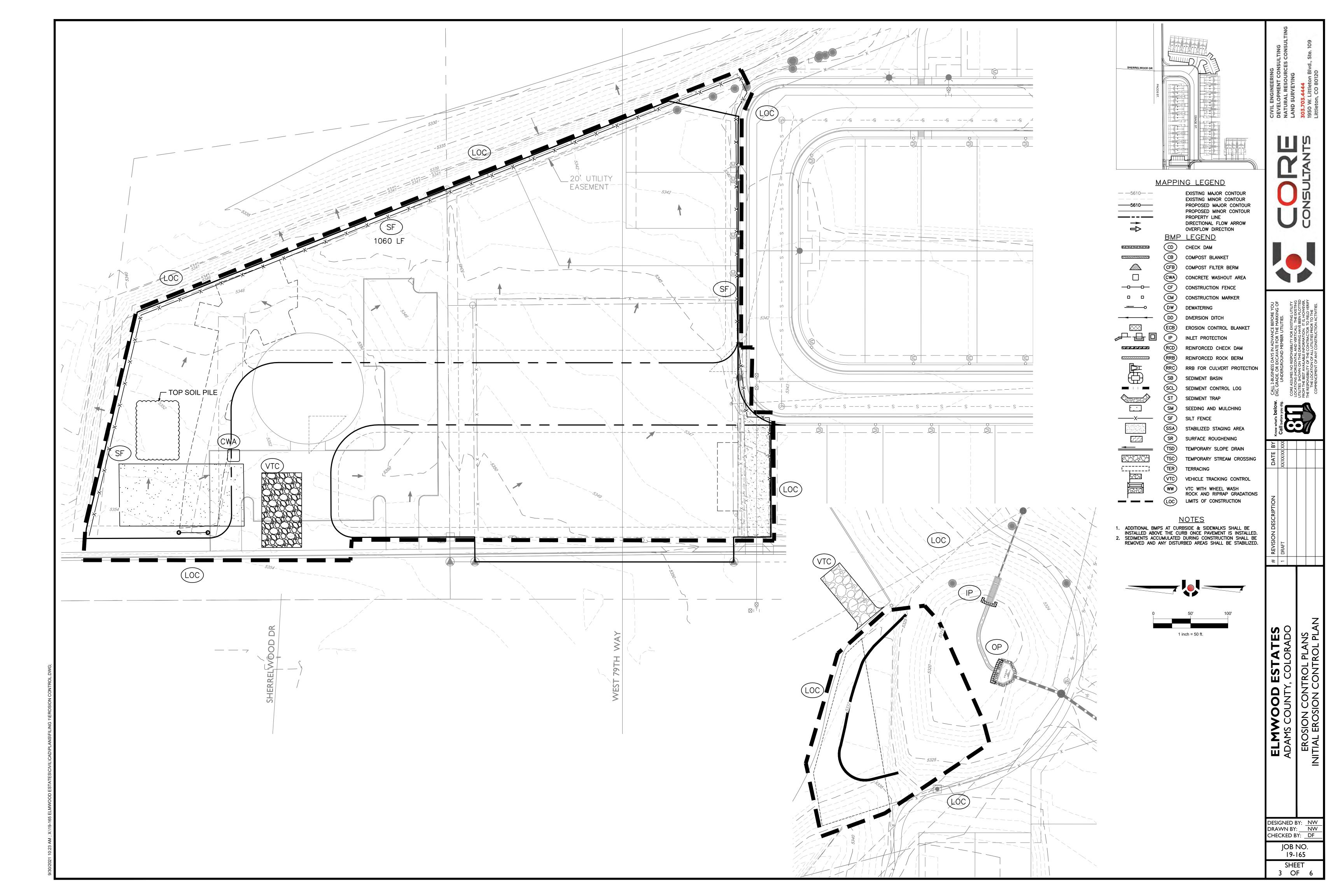
ONTROL PLANS

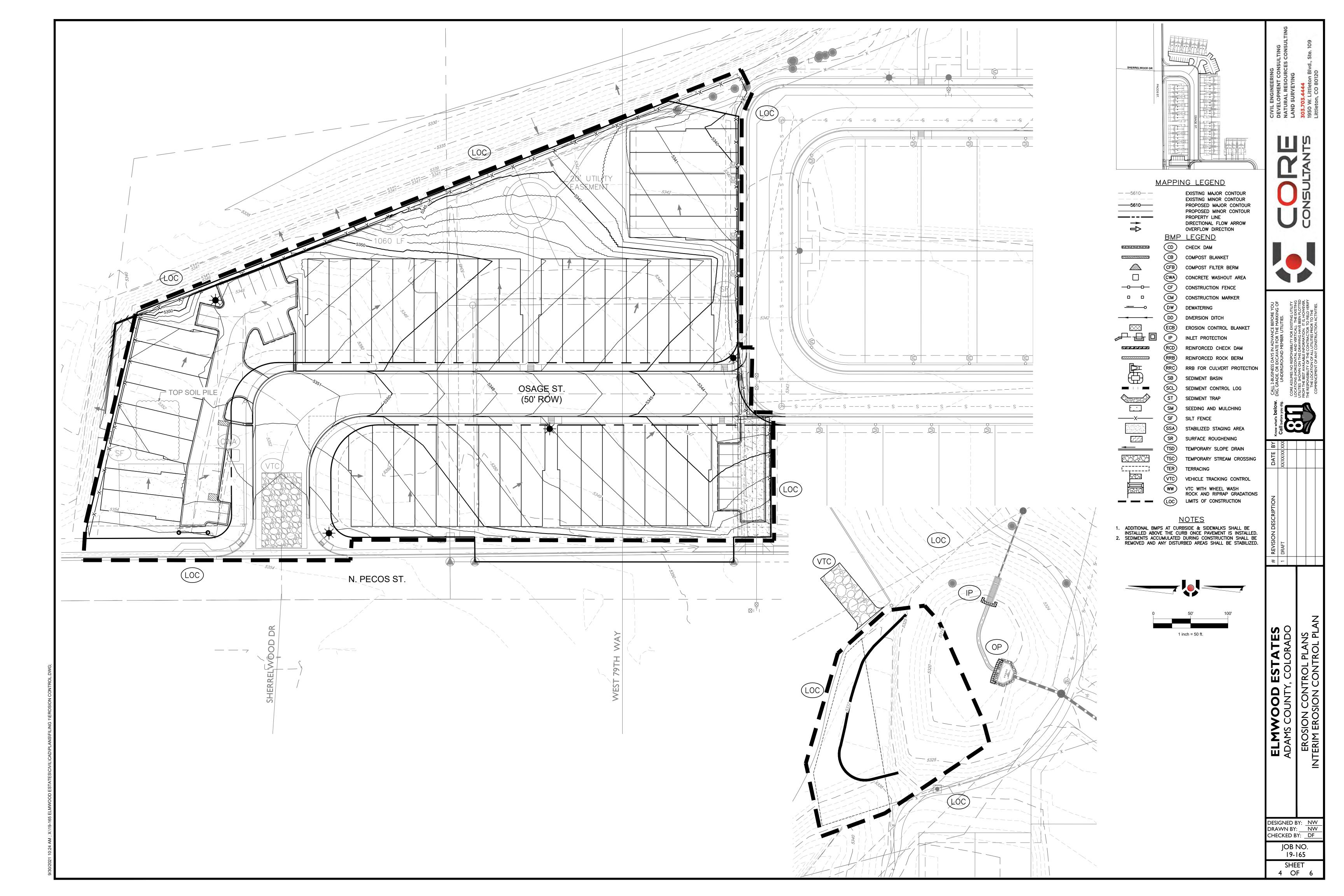
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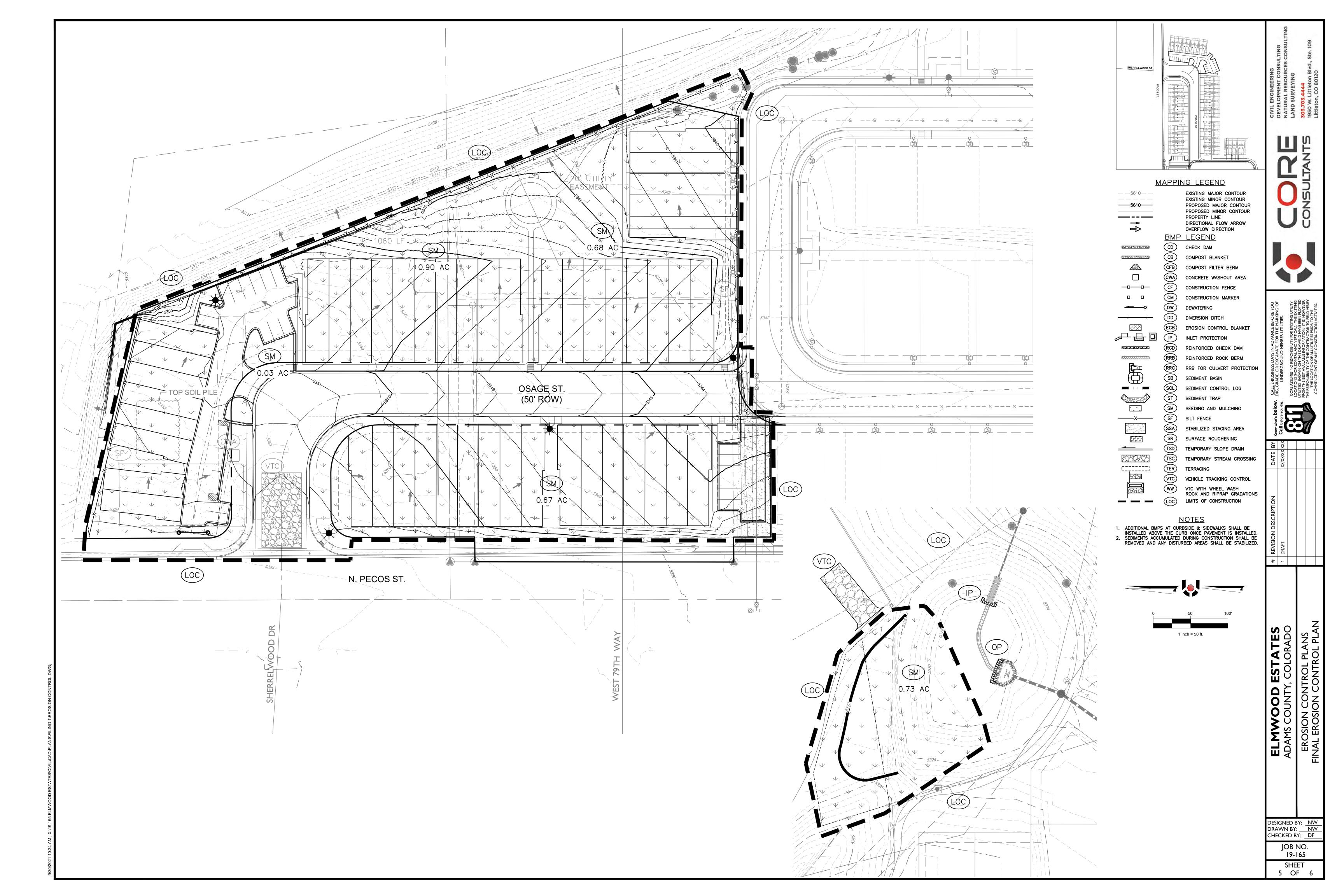
19-165 SHEET 2 OF 6

JOB NO.

9/30/2021 10:23 AM ; X:\19-165 ELMWOOD ESTATES\CIVIL\CAD\PLANS\F







SC-7

VEHICLE TRACKING

CONTROL (SEE

VEHICLE TRACKING

CONTROL (SEE VTC -

DETAIL)

VTC DETAIL) OR OTHER STABLE SURFACE

CONCRETE WASHOUT

CONCRETE WASHOUT AREA PLAN

8 X 8 MIN.

CWA-1. CONCRETE WASHOUT AREA

2. DO NOT LOCATE AN UNLINED CWA WITHIN 400' OF ANY NATURAL DRAINAGE PATHWAY OR

SITE CONSTRAINTS MAKE THIS INFEASIBLE, OR IF HIGHLY PERMEABLE SOILS EXIST ON SITE,

THE CWA MUST BE INSTALLED WITH AN IMPERMEABLE LINER (16 MIL MIN. THICKNESS) OR

4. CWA SHALL INCLUDE A FLAT SUBSURFACE PIT THAT IS AT LEAST 8' BY 8' SLOPES

7. SIGNS SHALL BE PLACED AT THE CONSTRUCTION ENTRANCE, AT THE CWA, AND

Urban Drainage and Flood Control District

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LEADING OUT OF THE SUBSURFACE PIT SHALL BE 3:1 OR FLATTER. THE PIT SHALL BE AT

5. BERM SURROUNDING SIDES AND BACK OF THE CWA SHALL HAVE MINIMUM HEIGHT OF 1'.

ELSEWHERE AS NECESSARY TO CLEARLY INDICATE THE LOCATION OF THE CWA TO OPERATORS

3. THE CWA SHALL BE INSTALLED PRIOR TO CONCRETE PLACEMENT ON SITE.

6. VEHICLE TRACKING PAD SHALL BE SLOPED 2% TOWARDS THE CWA.

8. USE EXCAVATED MATERIAL FOR PERIMETER BERM CONSTRUCTION.

SURFACE STORAGE ALTERNATIVES USING PREFABRICATED CONCRETE WASHOUT DEVICES OR A

WATERBODY, DO NOT LOCATE WITHIN 1,000' OF ANY WELLS OR DRINKING WATER SOURCES, IF

3 X 8 MIN.

COMPACTED BERM AROUND

THE PERIMETER

UNDISTURBED OR 1

CWA INSTALLATION NOTES

-CWA INSTALLATION LOCATION.

OF CONCRETE TRUCKS AND PUMP RIGS.

Vehicle Tracking Control (VTC)

SIDEWALK OR OTHER

ROADWAY

PAVED SURFACE

LINED ABOVE GROUND STORAGE ARE SHOULD BE USED.

1. SEE PLAN VIEW FOR:

COMPACTED SOIL

SM-4

(WIDTH CAN BE

LESS IF CONST.

VEHICLES ARE

No recycled concrete.

UNLESS OTHERWISE SPECIFIED

NON-WOVEN GEOTEXTILE

BY LOCAL JURISDICTION, USE - CDOT SECT. #703, AASHTO #3

COARSE AGGREGATE OR 6"

MINUS ROCK

BETWEEN SOIL AND ROCK

UNLESS OTHERWISE SPECIFIED BY LOCAL JURISDICTION, USE CDOT SECT. #703, AASHTO

#3 COARSE AGGREGATE

OR 6" MINUS ROCK

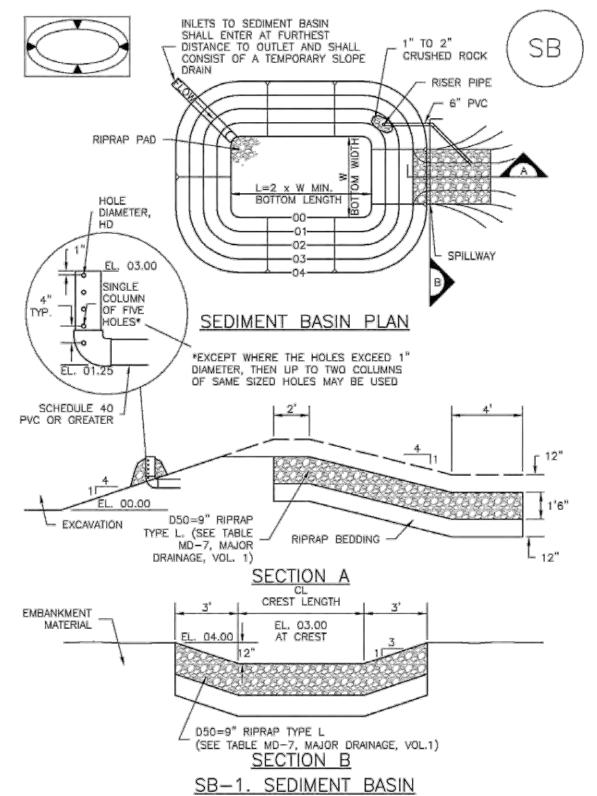
NON-WOVEN GEOTEXTILE FABRIC

PHYSICALLY CONFINED ON BOTH SIDES)

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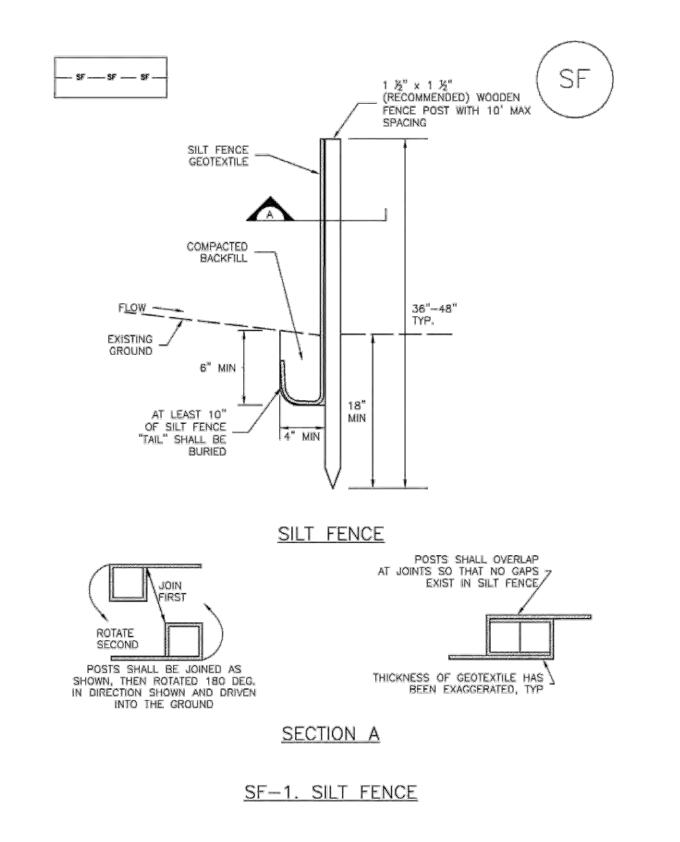
19-165





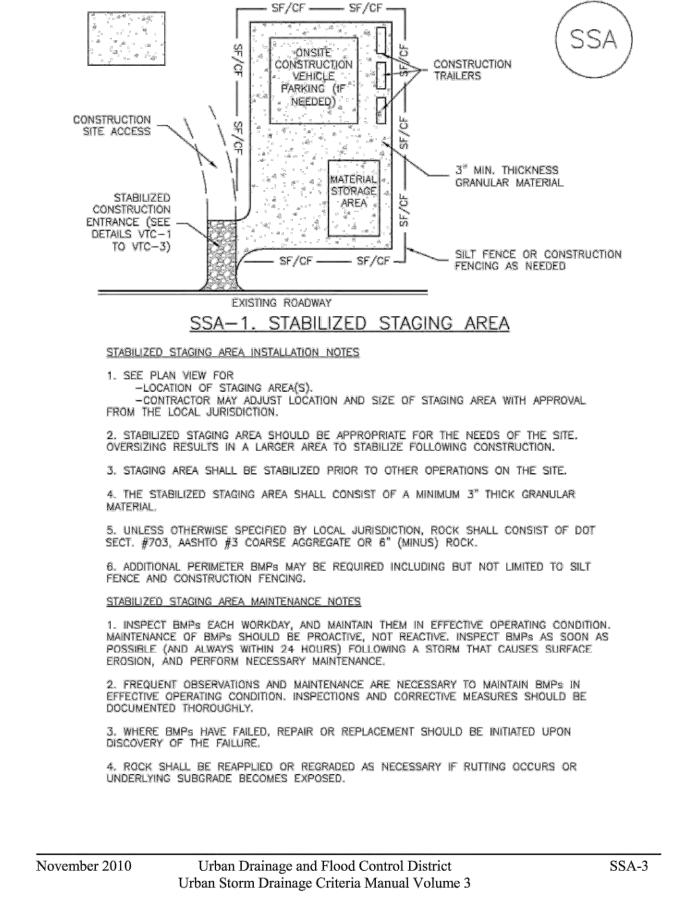
WIRE TIE ENDS -

- GROUND SURFACE

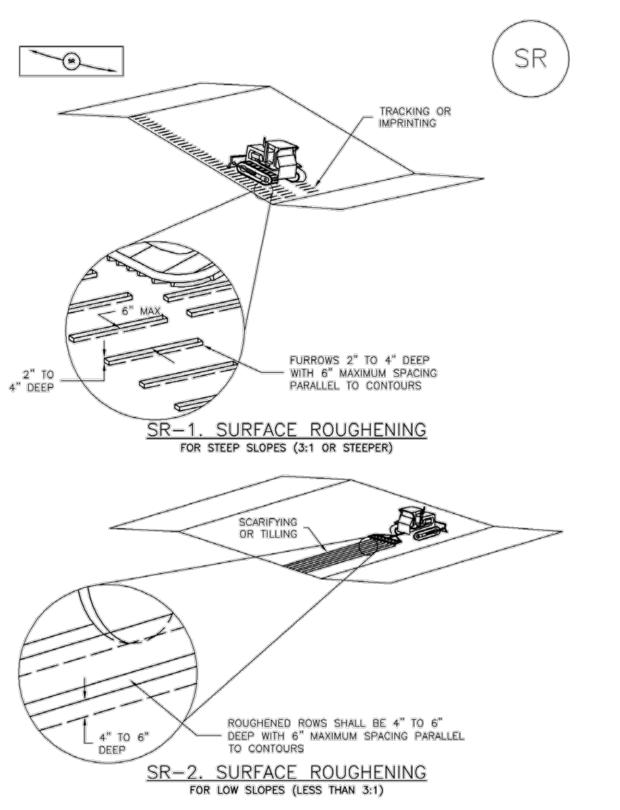


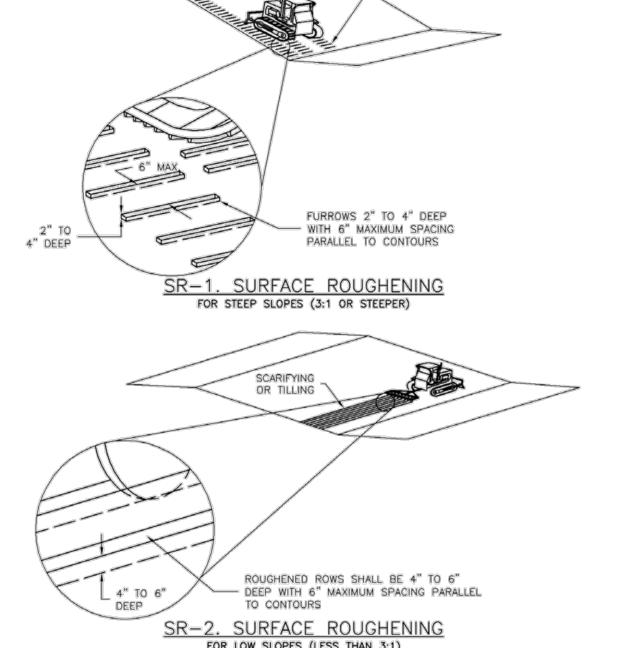
November 2010 Urban Drainage and Flood Control District Urban Storm Drainage Criteria Manual Volume 3

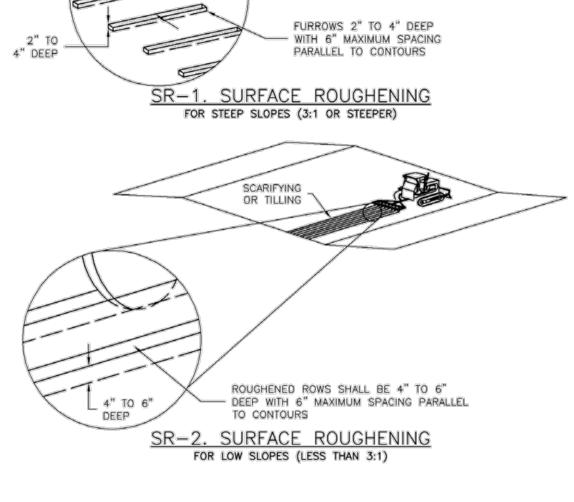
Inlet Protection (IP)











November 2010	Urban Drainage and Flood Control Distri Urban Storm Drainage Criteria Manual Volu

November 2010

2. PLACEMENT OF THE SOCK SHALL BE APPROXIMATELY 30 DEGREES FROM PERPENDICULAR

SEE ROCK SOCK DESIGN DETAIL FOR JOINTING SOCKS 16" CINDER BLOCKS 2"x4" WOOD STUD __ __ 2"x4" WOOD SECTION A -IP-1. BLOCK AND ROCK SOCK SUMP OR ON GRADE INLET PROTECTION BLOCK AND CURB SOCK INLET PROTECTION INSTALLATION NOTES 1. SEE ROCK SOCK DESIGN DETAIL FOR INSTALLATION REQUIREMENTS.

2. 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. 3. GRAVEL BAGS SHALL BE PLACED AROUND CONCRETE BLOCKS, CLOSELY ABUTTING ONE ANOTHER AND JOINTED TOGETHER IN ACCORDANCE WITH ROCK SOCK DESIGN DETAIL.

TWO CURB BLOCK AND ROCK SOCK INLET SOCKS APPROX 30 DEG. PROTECTION(SEE DETAIL IP-1) CURB SOCK -FLOW --

IP-2. CURB ROCK SOCKS UPSTREAM OF INLET PROTECTION

CURB ROCK SOCK INLET PROTECTION INSTALLATION NOTES 1. SEE ROCK SOCK DESIGN DETAIL INSTALLATION REQUIREMENTS.

IN THE OPPOSITE DIRECTION OF FLOW. 3. SOCKS ARE TO BE FLUSH WITH THE CURB AND SPACED A MINIMUM OF 5 FEET APART.

4. AT LEAST TWO CURB SOCKS IN SERIES ARE REQUIRED UPSTREAM OF ON-GRADE INLETS.

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

COMPACTED SUBGRADE -VTC-1. AGGREGATE VEHICLE TRACKING CONTROL

INSTALL ROCK FLUSH WITH

OR BELOW TOP OF PAVEMENT

Urban Drainage and Flood Control District

Rev. 3/12/12 Urban Storm Drainage Criteria Manual Volume 3

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

Rock Sock (RS)

(MINUS) CRUSHED ROCK

4" TO 6" MAX AT

- 6"-10" DEPENDING

SEDIMENT LOADS

ON EXPECTED

ROCK SOCK PLAN

GRADATION TABLE

SIEVE SIZE MASS PERCENT PASSING SQUARE MESH SIEVES

MATCHES SPECIFICATIONS FOR NO. 4 COARSE AGGREGATE FOR CONCRETE PER AASHTO M43. ALL ROCK SHALL BE FRACTURED FACE, ALL SIDES.

NO. 4

ENCLOSED IN WIRE MESH

SC-6

SR-3

EC-1

SHEET

SC-5

ANY GAP AT JOINT SHALL BE FILLED WITH AN ADEQUATE AMOUNT OF 1½" (MINUS) CRUSHED ROCK AND WRAPPED WITH ADDITIONAL WIRE MESH SECURED TO ENDS OF ROCK REINFORCED SOCK, AS AN ALTERNATIVE TO FILLING JOINTS BETWEEN ADJOINING ROCK SOCKS WITH CRUSHED ROCK AND ADDITIONAL WIRE WRAPPING, ROCK SOCKS CAN BE

IN SOIL

OVERLAPPED (TYPICALLY 12-INCH OVERLAP) TO AVOID GAPS. ROCK SOCK JOINTING

O" ON BEDROCK OR

L HARD SURFACE, 2"

ROCK SOCK SECTION

ROCK SOCK INSTALLATION NOTES

-LOCATION(S) OF ROCK SOCKS.

1. SEE PLAN VIEW FOR:

2. CRUSHED ROCK SHALL BE 11/2" (MINUS) IN SIZE WITH A FRACTURED FACE (ALL SIDES)

AND SHALL COMPLY WITH GRADATION SHOWN ON THIS SHEET (1½" MINUS). 3. WIRE MESH SHALL BE FABRICATED OF 10 GAGE POULTRY MESH, OR EQUIVALENT, WITH A

MAXIMUM OPENING OF 1/2", RECOMMENDED MINIMUM ROLL WIDTH OF 48"

4. WIRE MESH SHALL BE SECURED USING "HOG RINGS" OR WIRE TIES AT 6" CENTERS ALONG ALL JOINTS AND AT 2" CENTERS ON ENDS OF SOCKS.

5. SOME MUNICIPALITIES MAY ALLOW THE USE OF FILTER FABRIC AS AN ALTERNATIVE TO WIRE MESH FOR THE ROCK ENCLOSURE. RS-1. ROCK SOCK PERIMETER CONTROL

6 OF 6

ELMWOOD ESTATES CIVIL CONSTRUCTION PLANS

PART OF THE NORTHEAST QUARTER SECTION 33, TOWNSHIP 2 SOUTH, RANGE 68 WEST OF THE SIXTH PRINCIPAL MERIDIAN, COUNTY OF ADAMS, STATE OF COLORADO

> W. 84TH AVE. W. 80TH AVE. ELMWOOD LN **VICINITY MAP**

S	heet List Table
Sheet Number	Sheet Title
1	COVER
2	NOTES
3	DEMO PLAN
4	OVERALL SITE & UTILITY PLAN
5	GRADING PLAN
6	SIGNAGE PLAN
7	INITIAL EROSION CONTROL PLAN
8	INTERIM EROSION CONTROL PLAN
9	FINAL EROSION CONTROL PLAN
10	EROSION CONTROL DETAILS
11	OSAGE STREET PLAN & PROFILE
12	POND DETAIL
13	SITE DETAILS-1
14	SITE DETAILS-2

DELWEST DEVELOPMENT CORP

155 S. MADISON ST. DENVER, COLORADO 80209 CONTACT: DERRELL SCHREINER

LANDSCAPE TERRACINA DESIGN

10200 E. GIRARD AVENUE, SUITE A-314 DENVER, CO 80231 (303) 632-8867 CONTACT: LAYLA ROSALES

DISTRICT MANAGER
CITY DEVELOPMENT
9500 CIVIC CENTER DRIVE THORNTON, CO 80229 (303) 538-7295 CONTACT: TBD

CORE CONSULTANTS, INC.

(303) 703-4444, EXT 113

CORE CONSULTANTS, INC.

(303) 703-4444, EXT 119

1950 WEST LITTLETON BLVD., SUITE 109

1950 WEST LITTLETON BLVD., SUITE 109

CITY ENGINEER ADAMS COUNTY 4430 S. ADAMS COUNTY PARKWAY, W2000B BRIGHTON, CO 80601 (720) 523-6826 CONTACT: MATT EMMENS

PUBLIC IMPROVEMENTS SHALL CONFORM TO ADAMS COUNTY STANDARDS AND SPECIFICATIONS AND LATEST EDITION OF COLORADO DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS.

NOTICE TO CONTRACTOR
THE EXISTENCE AND LOCATION OF ANY UNDERGROUND UTILITIES, CONDUITS OR OTHER STRUCTURES SHOWN ON THESE PLANS WAS OBTAINED BY THE SEARCH OF AVAILABLE RECORDS. THE ENGINEER ASSUMES NO LIABILITY WHATSOEVER FOR THE ACCURACY OR COMPLETENESS OF SUCH DATA. THE CONTRACTOR IS REQUIRED TO TAKE DUE PRECAUTIONARY MEASURES TO PROTECT ALL UTILITY LINES, CONDUITS OR STRUCTURES WHETHER OR NOT SHOWN ON THESE PLANS AND BY ACCEPTING AND UTILIZING THESE PLANS, ASSUMES ALL RESPONSIBILITY FOR THE PROTECTION OR AND ANY

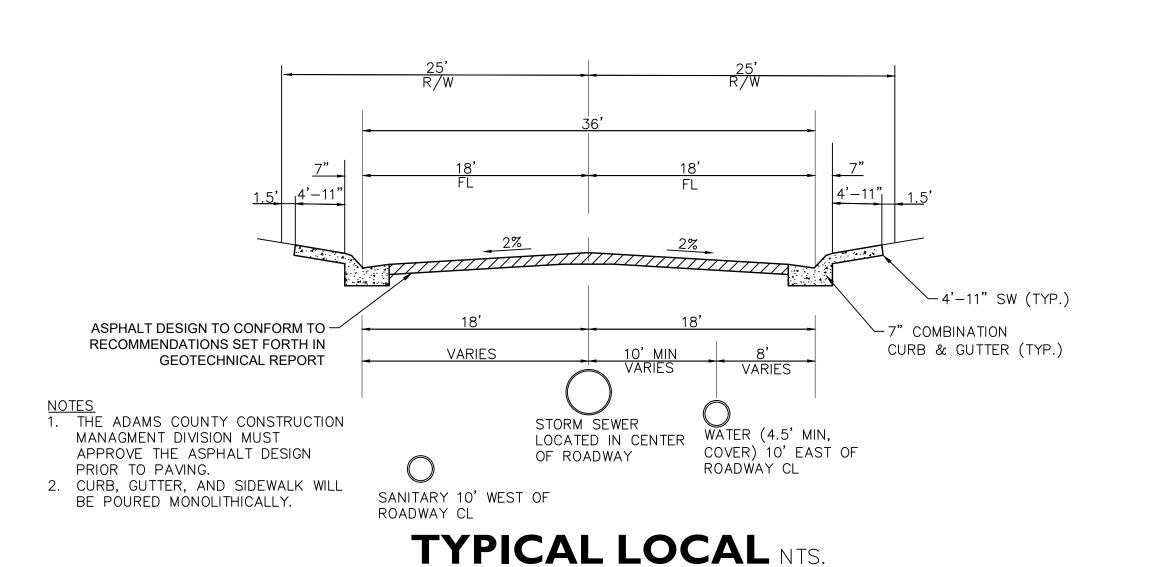
UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, CORE CONSULTANTS, INC. APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

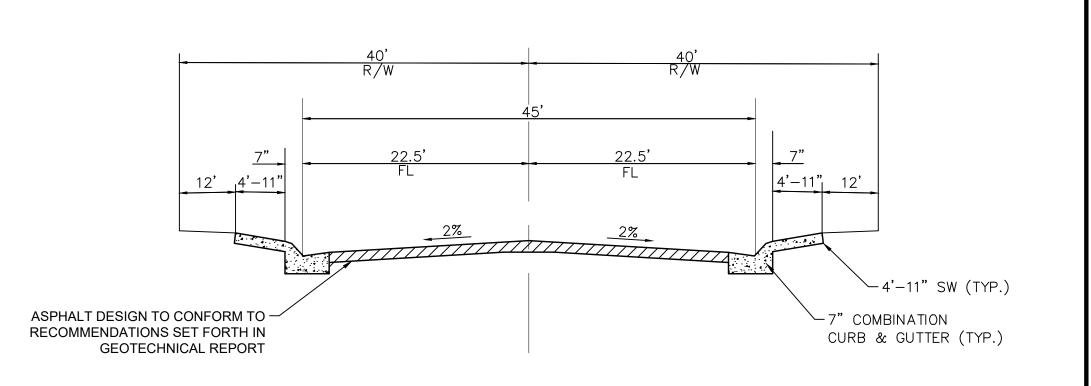
DAMAGE TO SAID FACILITIES.

BEARINGS FOR THIS DESCRIPTION ARE BASED ON THE NORTH LINE OF THE NORTHEAST QUARTER OF SECTION 33, TOWNSHIP 2 SOUTH, RANGE 68 WEST OF THE 6th P.M., BEING ASSUMED TO BEAR N 89°30'30" E, FROM THE NORTH QUARTER CORNER OF SAID SECTION 33, BEING A 3 ¼" ALUMINUM CAP IN RANGE BOX, PLS 23519 TO THE NORTHEAST CORNER OF SAID SECTION 33 BEING A 3 1/4" ALUMINUM CAP IN RANGE BOX, PLS 7276 WITH ALL BEARINGS CONTAINED HEREIN RELATIVE THERETO.

BENCHMARK DESCRIPTION

NGS MONUMENT 547, P.I.D. "DJ8173, ADAMS COUNTY" HAVING A PUBLISHED ELEVATION OF 5286.29 FEET. (NAVD 88)





ENTRY ROAD NTS.

DESIGNED BY: NW DRAWN BY: NW CHECKED BY: DF

> 19-165 SHEET I OF 14







#	REVISION DESCRIPTION	DATE	
~	1 DRAFT	x xx/xx/xx	_ ~

ELMWOOD ESTATES
ADAMS COUNTY, COLORADO
CONSTRUCTION DRAWINGS
COVER

JOB NO.

- 1. OWNER/CONTRACTOR IS RESPONSIBLE FOR OBTAINING A STATE OF COLORADO, COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT (CDPHE) GENERAL PERMIT FOR STORMWATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITY COR—030000 PRIOR TO CONSTRUCTION (CDPS STORMWATER CONSTRUCTION PERMIT).
- 2. THE OWNER/CONTRACTOR SHALL PROVIDE ADAMS COUNTY WITH A COPY OF THIS CDPS STORMWATER CONSTRUCTION PERMIT LETTER OF APPROVAL AND CERTIFICATION FROM THE STATE PRIOR TO RECEIVING A COUNTY CONSTRUCTION/BUILDING PERMIT. THE OWNER/CONTRACTOR IS RESPONSIBLE FOR ALL FEES ASSOCIATED WITH THIS CDPS STORMWATER CONSTRUCTION PERMIT.
- 3. A COPY OF THE CDPS STORMWATER CONSTRUCTION PERMIT FROM CDPHE AND THE APPROVED STORMWATER MANAGEMENT PLAN (SWMP) WITH AN EROSION AND SEDIMENT PLAN SHALL BE KEPT ON SITE AND UPDATED AT ALL TIMES IN COMPLIANCE WITH THE CDPS STORMWATER CONSTRUCTION PERMIT.
- 4. OWNER/CONTRACTOR IS RESPONSIBLE FOR FILING A CDPHE INACTIVATION NOTICE CONSTRUCTION STORMWATER DISCHARGE GENERAL PERMIT CERTIFICATION; ONCE THE CONSTRUCTION SITE HAS BEEN FINALLY STABILIZED IN COMPLIANCE WITH THE CDPS STORMWATER CONSTRUCTION PERMIT.
- 5. THE OWNER/CONTRACTOR SHALL PROVIDE ADAMS COUNTY WITH A COPY OF THIS INACTIVATION NOTICE. THERE WILL BE NO FEE CHARGED TO ADAMS COUNTY FOR THE INACTIVATION NOTICE OR IF THE CONTRACTOR NEGLECTS TO FILE THIS NOTICE.
- 6. THE SWMP ADMINISTRATOR IS RESPONSIBLE FOR IMPLEMENTING AND MAINTAINING EROSION AND SEDIMENT CONTROL MEASURES AT ALL TIMES DURING CONSTRUCTION. THE SWMP SHALL BE MODIFIED IN COMPLIANCE TO THE CDPS STORMWATER CONSTRUCTION PERMIT.
- 7. STANDARD INSPECTIONS A THOROUGH INSPECTION OF THE BEST MANAGEMENT PRACTICES (BMPS) SHALL BE PERFORMED EVERY FOURTEEN (14) CALENDAR DAYS AND WITHIN TWENTY—FOUR (24) HOURS AFTER ANY PRECIPITATION OR SNOWMELT EVENT THAT CAUSES SURFACE EROSION.
- 8. USE BIODEGRADABLE EROSION CONTROL BLANKETS ON SLOPES 3:1 OR STEEPER AND IN SWALES OR LONG CHANNELS.
- 9. ALL SOIL IMPORTED TO OR EXPORTED FROM THE SITE SHALL BE PROPERLY COVERED TO PREVENT THE LOSS OF MATERIAL DURING TRANSPORT. HAUL ROUTES MUST BE PERMITTED BY THE COUNTY. NO MATERIAL SHALL BE TRANSPORTED TO ANOTHER SITE WITHOUT FIRST OBTAINING A HAULING PERMIT FROM ADAMS COUNTY PLANNING.
- 10. 1THE CONCRETE WASHOUT CONTAINMENT STRUCTURE SHALL CONTAIN ALL CONCRETE WASHOUT WATER. STORMWATER SHALL NOT CARRY WASTES FROM THE DESIGNATED CONCRETE WASHOUT LOCATION AND SHALL BE LOCATED A MINIMUM OF FIFTY (50) FEET HORIZONTAL FROM WATERS OF THE STATE.
- 11. THE ACTUAL SCHEDULE FOR IMPLEMENTING EROSION AND SEDIMENT CONTROL MEASURES WILL BE DETERMINED BY PROJECT CONSTRUCTION PROGRESS. DOWN SLOPE PROTECTIVE MEASURES (I.E. SEDIMENT CONTROL BARRIERS) MUST ALWAYS BE IN PLACE BEFORE SOIL IS DISTURBED.
- 12. INSTALL SEDIMENT CONTROL BARRIERS DOWN SLOPE FROM CONSTRUCTION THAT DISTURB SITE SOIL. SEDIMENT CONTROL BARRIERS SHOULD BE INSTALLED IN THE LOCATIONS SHOWN ON THE EROSION AND SEDIMENT CONTROL DRAWINGS, AS WELL AS OTHER LOCATIONS AS DEEMED NECESSARY BY THE CONTRACTOR, INSPECTOR OR OWNER."

BMP MAINTENANCE NOTES:

- 1. IT IS ANTICIPATED THAT THE BMPS IMPLEMENTED AT THE SITE WILL HAVE TO BE MODIFIED TO ADAPT TO CHANGING CONDITIONS OR TO ENSURE THAT POTENTIAL POLLUTANTS ARE BEING PROPERLY MANAGED AT THE SITE. WHEN BMPS ARE MODIFIED, THE SWMP MUST BE MODIFIED TO ACCURATELY REFLECT THE ACTUAL FIELD CONDITIONS.
- 2. THE OWNER/CONTRACTOR SHALL CONTINUOUSLY MAINTAIN ALL SILT FENCING SO THAT IT FUNCTIONS PROPERLY DURING CONSTRUCTION AND WORK SUSPENSIONS. ALL SILT FENCING SHALL BE REMOVED BY THE CONTRACTOR UPON SUBSTANTIAL PERMANENT STABILIZATION UNLESS OTHERWISE DIRECTED BY AUTHORIZED ADAMS COUNTY PERSONNEL.
- 3. SILT FENCE SHALL BE INSTALLED ALONG CONTOURS AND PRIOR TO ANY GRUBBING OR GRADING ACTIVITY. IT SHALL BE LOCATED TO CAPTURE OVERLAND, LOW-VELOCITY SHEET FLOWS IN WHICH IT SHALL BE INSTALLED AT A FAIRLY LEVEL GRADE.
- 4. IT IS RECOMMENDED THAT SILT FENCE SHALL BE INSTALLED FIVE (5) FEET AWAY FROM THE TOE OF THE SLOPE OR STOCKPILE, AND EVERY SEVENTY FIVE (75) TO ONE HUNDRED TWENTY FIVE (125) FEET APART ON LONG SLOPES.
- 5. DO NOT PLACE SILT FENCE IN OR ADJACENT TO EXISTING WETLANDS
- WHERE TRENCHING IMPACTS WETLANDS.

 6. ALL INLET/OUTLET PROTECTION WILL BE CHECKED FOR MAINTENANCE AND FAILURE DAILY. SEDIMENT SHALL BE REMOVED AND PROPERLY DISPOSED OF ONCE IT HAS ACCUMULATED TO HALF THE DESIGN OF THE TRAP OR DAILY DURING PERIODS OF CONSISTENT PRECIPITATION.
- 7. THE OWNER/CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE VEHICLE TRACKING CONTROL DURING CONSTRUCTION. THE VEHICLE TRACKING CONTROL SHALL BE REMOVED AT THE COMPLETION OF THIS PROJECT UNLESS OTHERWISE DIRECTED BY AUTHORIZED ADAMS COUNTY PERSONNEL.
- 8. TEMPORARY SEDIMENT TRAPS AND BASINS SHALL BE INSTALLED BEFORE ANY LAND DISTURBANCE TAKES PLACE IN THE DRAINAGE AREA. THE AREA UNDER THE EMBANKMENT SHALL BE CLEARED, GRUBBED, AND STRIPPED OF ALL VEGETATION AND ROOT MAT. SEDIMENT SHALL BE REMOVED WHEN NO LONGER FUNCTIONAL AND DISPOSED OF AT AN APPROVED LOCATION.
- 9. ALL SEDIMENT FROM STORMWATER INFRASTRUCTURE (I.E. DETENTION PONDS, STORM SEWER PIPES, OUTLETS, INLETS, ROADSIDE DITCHES, ETC.) SHALL BE REMOVED PRIOR TO INITIAL ACCEPTANCE. THIS SEDIMENT SHALL NOT BE FLUSHED OFF—SITE, BUT SHALL BE CAPTURED ON—SITE AND DISPOSED OF AT AN APPROVED LOCATION.
- 10. TEMPORARY ROCK CHECK DAM THE MAXIMUM HEIGHT OF THE CHECK DAM AT THE CENTER SHOULD NOT EXCEED ONE HALF THE DEPTH OF THE DITCH OR SWALE. THE MAXIMUM SPACING BETWEEN DAMS SHOULD BE SUCH THAT THE TOE OF THE UPSTREAM DAM IS AT THE SAME ELEVATION AS THE TOP OF THE DOWNSTREAM DAM.
- 11. CONSTRUCTION SAFETY BARRIER FENCING (ORANGE CONSTRUCTION FENCE) MUST BE USED TO PROTECT WETLANDS AND OTHER SENSITIVE AREAS AND TO PREVENT ACCESS.
- 12. WATER FROM DEWATERING OPERATIONS SHALL NOT BE DIRECTLY
 DISCHARGED INTO ANY WATERS CONVEYANCE SYSTEMS INCLUDING
 WETLANDS, IRRIGATION DITCHES, CANALS, RIVERS, STREAMS OR STORM
 SEWER SYSTEMS, UNLESS ALLOWED BY A STATE CONSTRUCTION
 DEWATERING PERMIT.

PERFORMANCE NOTES:

- 1. TEMPORARY AND/OR PERMANENT BMPS INTENDED TO CONTROL EROSION OF AN EARTH DISTURBANCE OPERATION SHALL BE INSTALLED BEFORE ANY EARTH DISTURBANCE OPERATIONS TAKE PLACE IN SEQUENCE WITH PROPER PHASING.
- 2. EARTH DISTURBANCES SHALL BE CONDUCTED IN SUCH A MANNER SO AS TO MINIMIZE DISTURBED AREA AND PROTECT NATURAL FEATURES, SOIL AND VEGETATION.
- 3. PERSONS ENGAGED IN EARTH DISTURBANCES SHALL IMPLEMENT AND MAINTAIN ACCEPTABLE SOIL EROSION AND SEDIMENTATION CONTROL MEASURES, IN CONFORMANCE WITH THE EROSION CONTROL TECHNICAL STANDARDS ADOPTED BY ADAMS COUNTY AND IN COMPLIANCE WITH THE CDPS STORMWATER CONSTRUCTION PERMIT.
- 4. EARTH DISTURBANCES SHALL BE DESIGNED, CONSTRUCTED AND COMPLETED IN SUCH A MANNER SO THAT THE EXPOSED AREA OF ANY DISTURBED LAND SHALL BE LIMITED TO THE SHORTEST POSSIBLE PERIOD OF TIME.
- 5. SEDIMENT CAUSED BY ACCELERATED SOIL EROSION SHALL BE REMOVED FROM RUNOFF WATER BEFORE IT LEAVES THE SITE OF THE EARTH DISTURBANCE.
- 6. EXCAVATED MATERIAL AND OTHER CONSTRUCTION DEBRIS SHALL NOT BE STOCKPILED WITHIN THE ROADWAY SECTION. BACKFILL MATERIALS UP TO A MAXIMUM OF 130 CY MAY BE STOCKPILED, WITH APPROPRIATE EROSION CONTROL MEASURE, BUT MUST BE REMOVED OR PLACED BY THE END OF EACH WORK WEEK.
- 7. ANY CONSTRUCTION AREAS, NOT GRADED TO FINAL GRADE, REQUIRE TEMPORARY BMPS FOR SITE STABILIZATION.
- 8. AS NECESSARY, CONSTRUCT A TEMPORARY FACILITY DESIGNATED FOR CONVEYANCE OF STORMWATER AROUND, THROUGH, OR FROM THE CONSTRUCTION SITE.
- 9. PERMANENT EROSION AND SEDIMENT CONTROL MEASURES FOR ALL SLOPES, CHANNELS, DITCHES, OR ANY DISTURBED LAND AREA SHALL BE STABILIZED IMMEDIATELY AFTER FINAL GRADING.
- 10. ALL SPILLS SHALL BE CLEANED UP IMMEDIATELY AFTER DISCOVERY, OR CONTAINED UNTIL APPROPRIATE CLEANUP METHODS CAN BE EMPLOYED. MANUFACTURE'S RECOMMENDED METHODS FOR SPILL CLEANUP SHALL BE FOLLOWED, ALONG WITH PROPER DISPOSAL METHODS.
- 11. CONCRETE WASHOUTS SHALL NOT BE PLACED IN LOW AREAS, DITCHES OR ADJACENT TO STATE WATERS.
- 12. THE OWNER/CONTRACTOR SHALL CHECK THE CAPACITY FOR ALL CONCRETE WASHOUT AREAS. WASTE MATERIALS MUST BE REMOVED BY THE CONTRACTOR AND LEGALLY DISPOSED OF WHEN ACCUMULATIONS AMOUNT TO TWO—THIRDS (%) OF THE WET STORAGE CAPACITY OF THE STRUCTURE.
- 13. ALL CONCRETE WASHOUT AREAS SHALL BE CLEARLY MARKED. THE CONCRETE WASHOUT CONTAINMENT STRUCTURE WILL INCLUDE A 2'X3'SIGN POSTED WITH THE WORDS "CONCRETE WASHOUT". THE CONCRETE WASHOUT AREA SHALL BE REPAIRED AND/OR ENLARGED
- AS NECESSARY TO MAINTAIN CAPACITY FOR WASTED CONCRETE.

 14. AT THE END OF CONSTRUCTION, ALL CONCRETE SHALL BE REMOVED FROM THE SITE AND LEGALLY DISPOSED OF. CONCRETE WASHOUT WASTE MUST NOT BE BURIED.
- 15. DISTURBED AREAS AND STOCKPILES WHICH ARE NOT AT FINAL GRADE SHALL BE TEMPORARILY STABILIZED IMMEDIATELY AFTER INTERIM GRADING.
- 16. FINAL STABILIZATION IS REACHED WHEN ALL SOIL DISTURBING ACTIVITIES AT THE SITE HAVE BEEN COMPLETED, AND UNIFORM VEGETATIVE COVER HAS BEEN ESTABLISHED WITH A DENSITY OF AT LEAST SEVENTY PERCENT (70%) OF PRE-DISTURBANCE LEVELS OR EQUIVALENT PERMANENT, PHYSICAL EROSION REDUCTION METHODS HAS BEEN EMPLOYED.
- 17. RECORDS OF SPILLS, LEAKS, OR OVERFLOWS THAT RESULT IN THE DISCHARGE OF POLLUTANTS MUST BE DOCUMENTED AND MAINTAINED. SOME SPILLS MAY NEED TO BE REPORTED TO THE DIVISION IMMEDIATELY: SPECIFICALLY, A RELEASE OF ANY CHEMICAL, OIL, PETROLEUM PRODUCT, SEWAGE, ETC., WHICH MAY ENTER WATERS OF THE STATE, MUST BE REPORTED. MORE GUIDANCE IS AVAILABLE ON THE WEB AT WWW.CDPHE.STATE.CO.US/EMP/SPILLSANDRELEASED.HTM THE

DIVISION'S TOLL FREE 24-HOUR ENVIRONMENTAL EMERGENCY SPILL

ADAMS COUNTY AT 303-.453-8787 AND THE TRI-COUNTY HEALTH

REPORTING LINE IS 1-877-518-5608. ALSO IMMEDIATELY CALL

DEPARTMENT AT 303-220-9200"

CONSTRUCTION NOTES

GENERAL CONSTRUCTION NOTES:

1. A PRE-CONSTRUCTION MEETING IS REQUIRED PRIOR TO THE

- COMMENCEMENT OF CONSTRUCTION. TO SCHEDULE A PRE-CONSTRUCTION MEETING CONTACT THE ADAMS COUNTY CONSTRUCTION INSPECTOR SUPERVISOR AT 720-523-6965.

 2. ALL CONCRETE CURB, GUTTER AND WALK MUST BE POURED
- MONOLITHICALLY USING 4,500 PSI CONCRETE WITH FIBER MESH.

 3. ALL MATERIAL SUBMITTALS MUST BE APPROVED, STAMPED AND SIGNED, BY THE ENGINEER OF RECORD AND, SUBMITTED TO THE ADAMS COUNTY CONSTRUCTION INSPECTOR FOR APPROVAL PRIOR
- TO CONSTRUCTION/INSTALLATION.

 4. THE CONTRACTOR IS REQUIRED TO SUBMIT COPIES OF ALL CONCRETE AND ASPHALT TICKETS TO THE ADAMS COUNTY
- CONSTRUCTION INSPECTOR.

 5. THE CONTRACTOR IS RESPONSIBLE FOR ALL QUALITY CONTROL TESTING AND, IS REQUIRED TO SUBMIT ALL TEST RESULTS TO THE ADAMS COUNTY CONSTRUCTION INSPECTOR.
- 6. THE CONTRACTOR IS REQUIRED TO REMOVE A MINIMUM OF TWO (2) FEET OF EXISTING ASPHALT FOR ALL CURB AND GUTTER REPLACEMENT.
- 7. ALL UTILITY CUTS IN EXISTING STREETS ARE REQUIRED TO BE BACKFILLED WITH FLOWFILL AND, PATCHED WITH A MINIMUM OF
- 9-INCH ASPHALT PATCH.

 8. A COPY OF THE GEOTECHNICAL REPORT SPECIFYING THE PAVEMENT THICKNESS DESIGN MUST BE SUBMITTED FOR REVIEW.
- 9. PERMITS WILL BE REQUIRED FOR THE INSTALLATION OF ALL UTILITIES. THE DEVELOPER/CONTRACTOR/ENGINEER, MUST SUPPLY THE LINEAL FOOTAGES AND THE NUMBER OF SERVICE CUTS REQUIRED FOR ALL UTILITIES.
- 10. PERMITS WILL BE REQUIRED FOR THE INSTALLATION OF ALL CONCRETE AND ASPHALT FACILITIES. PRIOR TO THE ISSUANCE OF THESE PERMITS, THE DEVELOPER/CONTRACTOR/ENGINEER, MUST SUPPLY THE SQUARE YARDAGE/SQUARE FOOTAGES OF ALL
- CONCRETE AND ASPAHLT BEING INSTALLED.

 11. THE SIA MUST BE COMPLETED WITH APPROPRIATE COLLATERAL, ALONG WITH THE PROPOSED PLAT, PRIOR TO THE ISSUANCE OF ANY
- ROW ACCESS/CONSTRUCTION PERMIT.

 12. NO C.O.'S WILL BE ISSUED FOR ANY BUILDING CONSTRUCTION UNTIL ALL ROW IMPROVMENTS HAVE BEEN COMPLETED AND HAVE BEEN
- GRANTED PRELIMINARY ACCEPTANCE.

 13. UPON COMPLETION OF ALL CONSTRUCTION, A DRAINAGE
 CERTIFICATION LETTER, AND APPROPRIATE AS—BUILT CONSTRUCTION
 DRAWINGS AND INFORMATION WILL BE REQUIRED. THIS LETTER WILL
 BE STAMPED AND SIGNED BY THE ORIGINAL DESIGN ENGINEER.

STORMWATER GENERAL NOTE:

1. PER COLORADO REVISED STATUTE 37-92-602(8), ALL STORMWATER FACILITIES THAT RETAIN OR DETAIN STORMWATER MUST BE REGISTERED WITH THE STATEWIDE NOTIFICATION COMPLIANCE PORTAL (SNCP). IT IS THE RESPONSIBILITY OF THE DESIGN ENGINEER TO REGISTER THE STORMWATER FACILITY ON THE SNCP. THE FACILITY MUST BE REGISTERED WITH THE SNCP WITHIN TEN (10) DAYS OF THE COUNTY RECEIVING THE FINAL POND CERTIFICATION FROM THE ENGINEER OF RECORD. THE COUNTY IS REQUIRED TO VERIFY THE REGISTRATION OF THE STORMWATER FACILITY WITHIN 30 DAYS OF POSTING. THE STATEWIDE NOTIFICATION COMPLIANCE PORTAL CAN BE FOUND AT THE FOLLOWING WEB ADDRESS:

HTTPS: //MAPERTURE.DIGITALDATASERVICES.COM/GVH/?VIEWER=CSWDIF

SULTANTS SEE





COMMENCEMENT OF THE MARKING OF UNDERGROUND MEMBER UTILITIES.

CORE ASSUMES NO RESPONSIBILITY FOR EXISTING UTILITY OCATIONS (HORIZONTAL AND VERTICAL). THE EXISTING TILITES SHOWN ON THIS DRAWING HAVE BEEN PLOTTED FROM THE BEST AVAILABLE INFORMATION. IT IS, HOWEVER, HE RESPONSIBILITY OF THE CONTRACTOR TO FIELD VERIFY THE LOCATION OF ALL UTILITIES PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION ACTIVITIES.



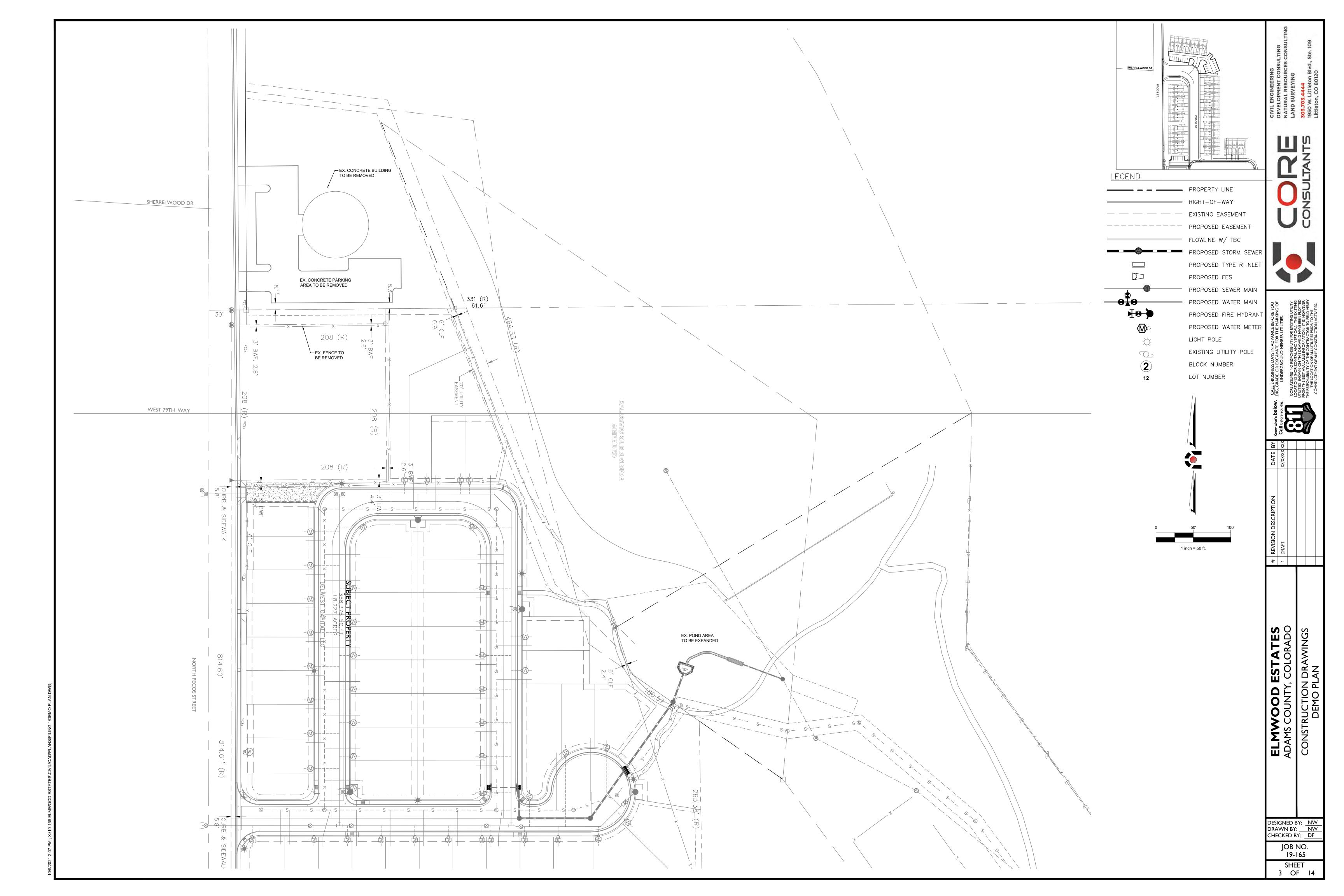
REVISION DESCRIPTION DATE BY XXXXXXXXXXXXX

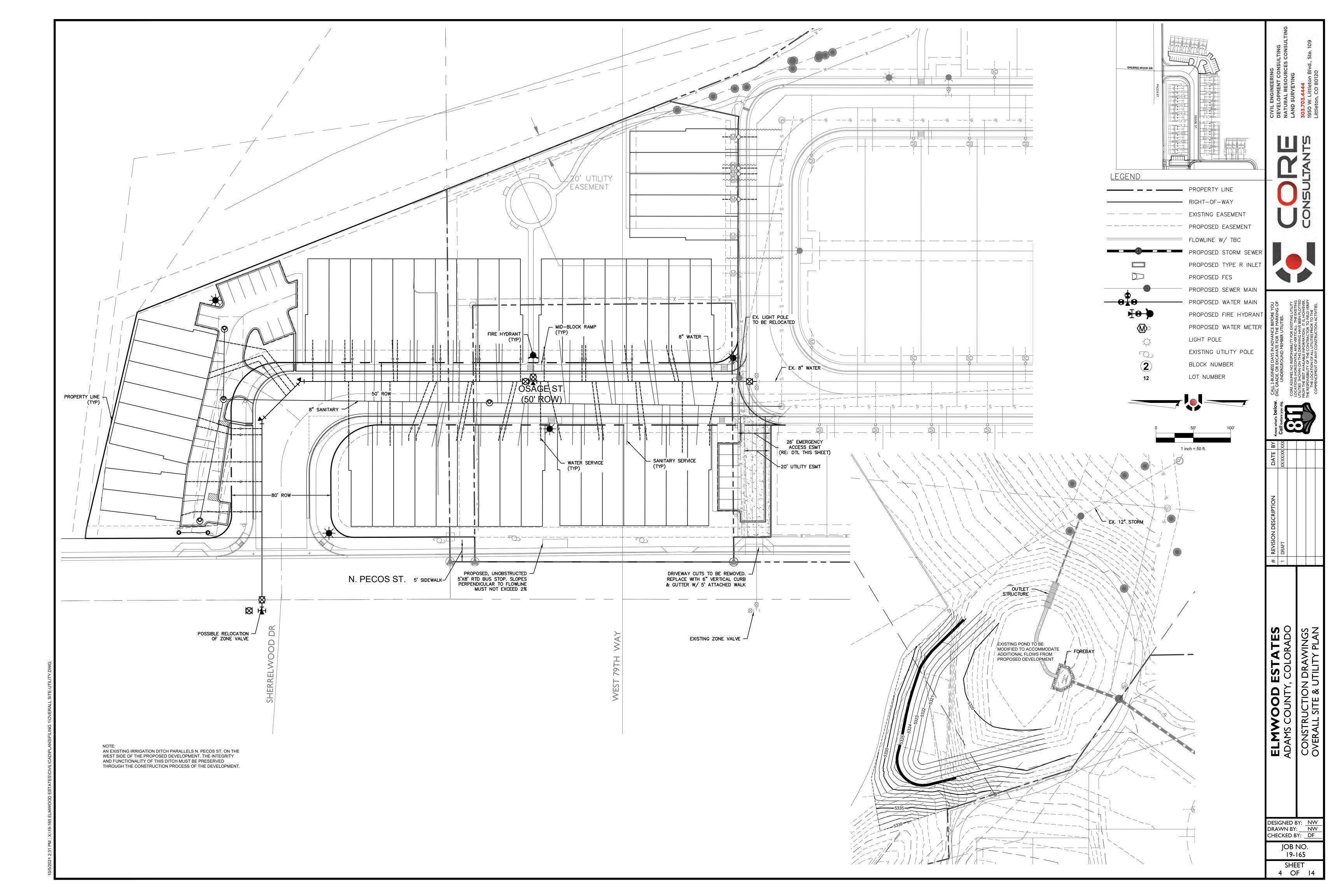
OD ESTATES
JNTY, COLORADO
CTION DRAWINGS

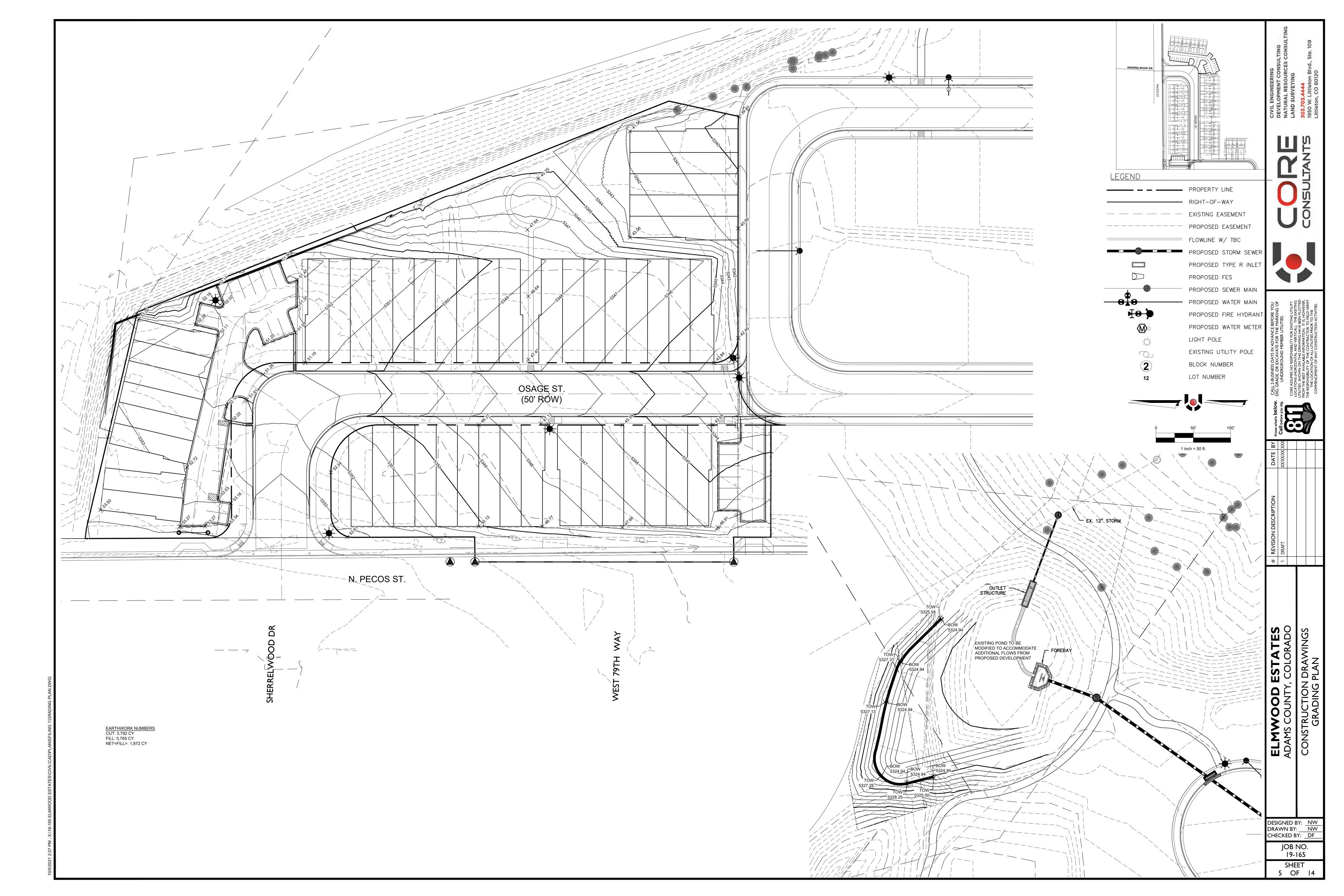
DESIGNED BY: NW
DRAWN BY: NW
CHECKED BY: DF

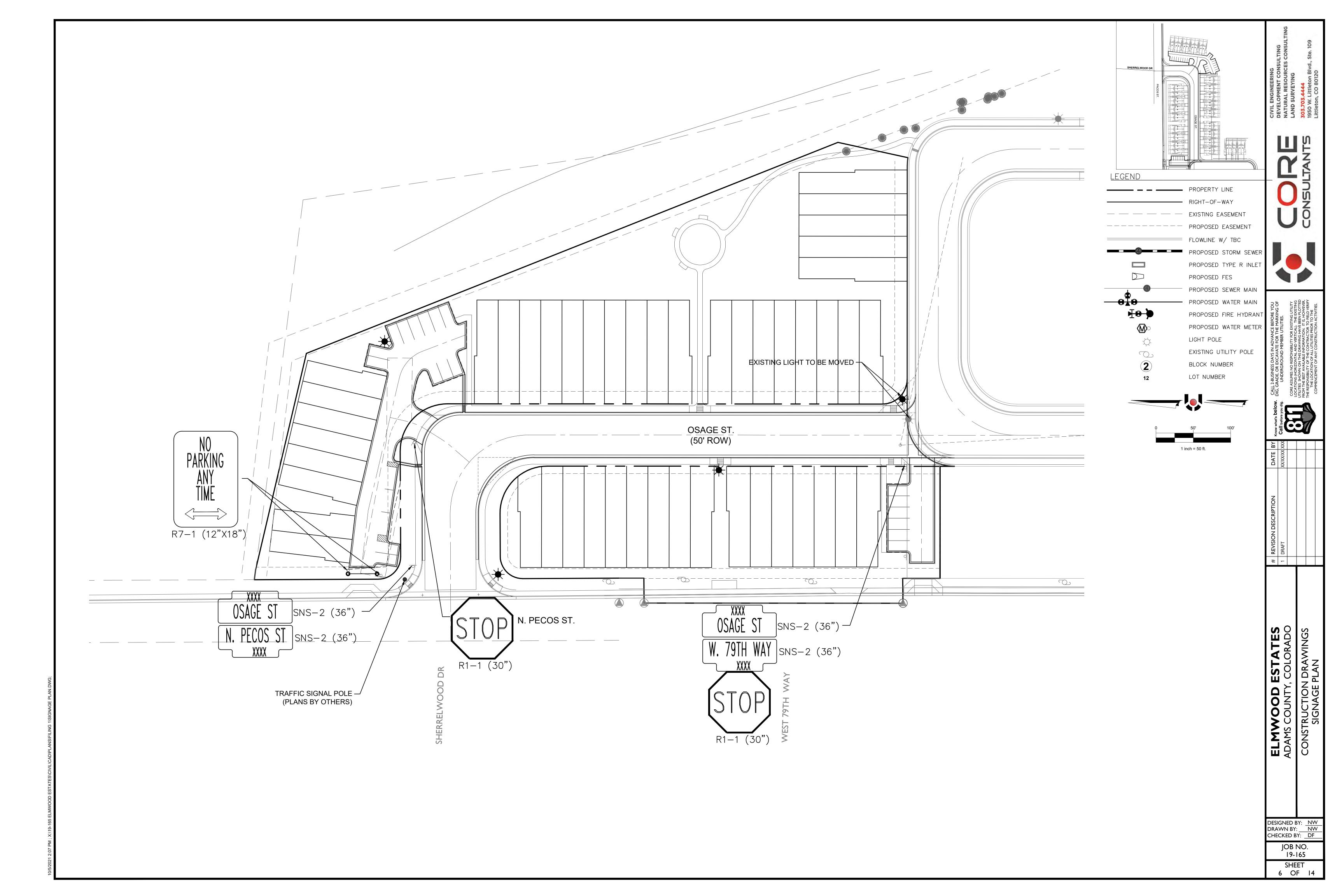
JOB NO. 19-165

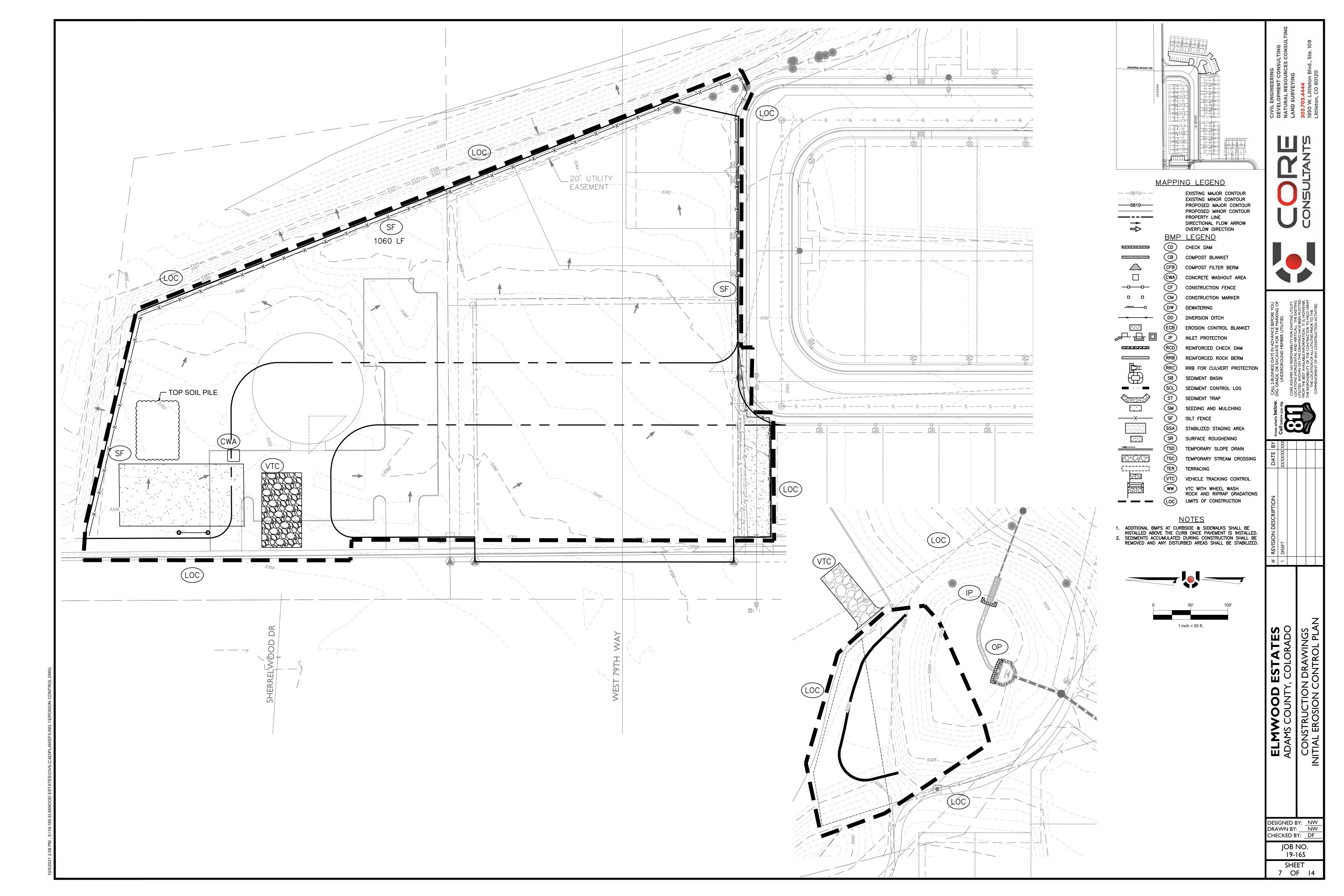
SHEET 2 OF 14

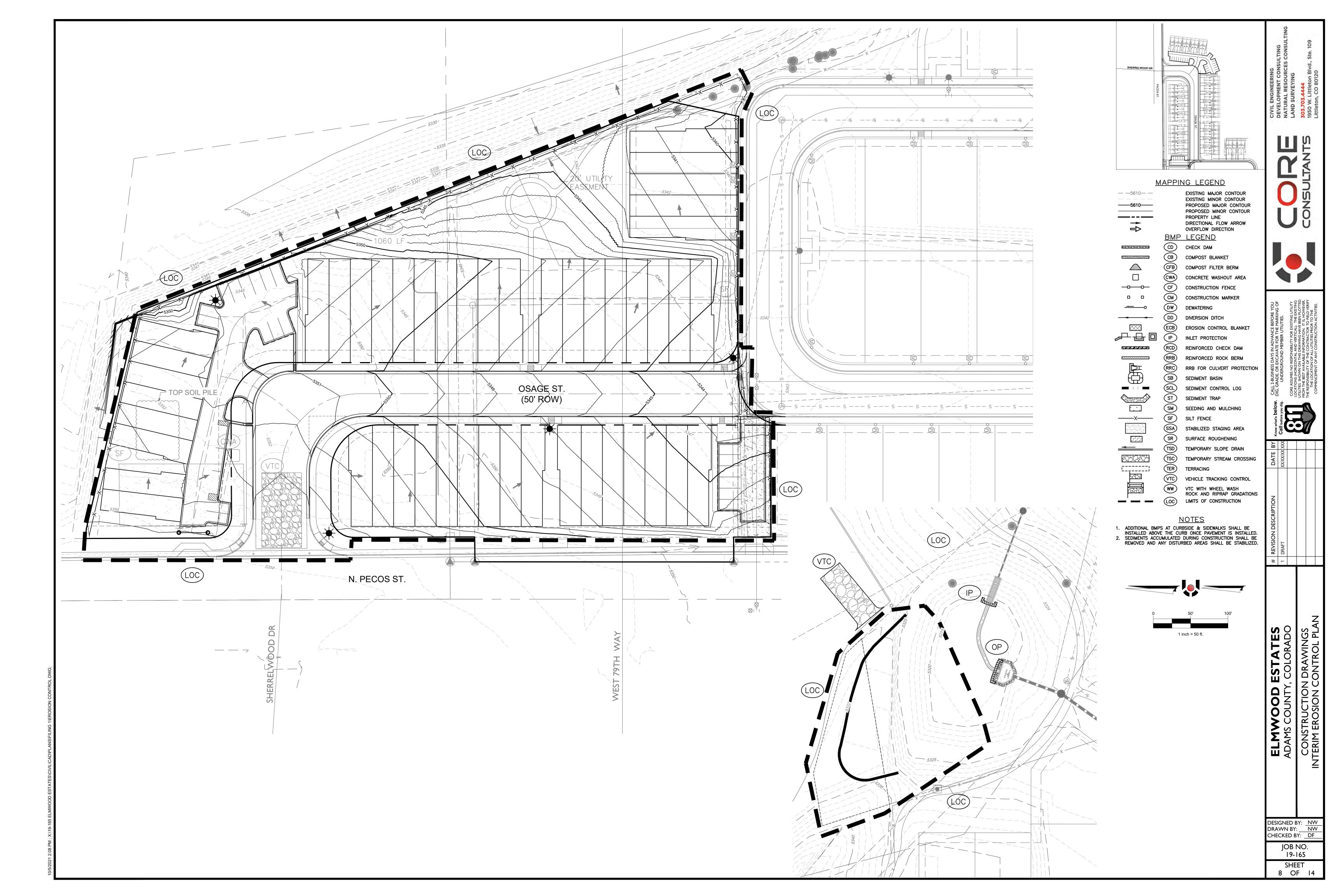


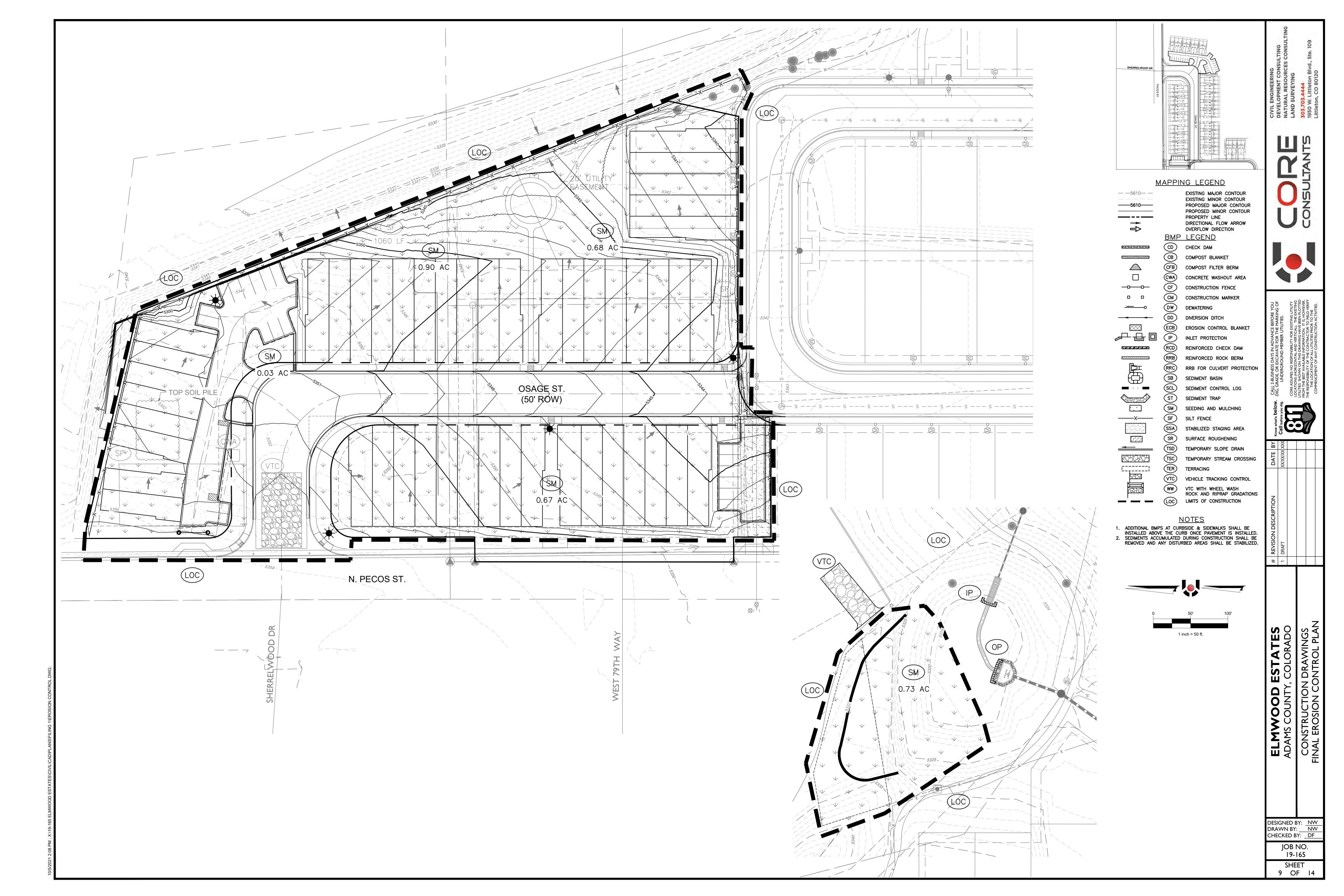












November 2010

SC-5

SC-7

UNDISTURBED OR 1

CWA INSTALLATION NOTES

-CWA INSTALLATION LOCATION.

OF CONCRETE TRUCKS AND PUMP RIGS.

LINED ABOVE GROUND STORAGE ARE SHOULD BE USED.

1. SEE PLAN VIEW FOR:

COMPACTED SOIL

3 X 8 MIN.

COMPACTED BERM AROUND

THE PERIMETER

VEHICLE TRACKING

CONTROL (SEE

VEHICLE TRACKING

CONTROL (SEE VTC -

DETAIL)

VTC DETAIL) OR OTHER STABLE SURFACE

CONCRETE WASHOUT

CONCRETE WASHOUT AREA PLAN

8 X 8 MIN.

CWA-1. CONCRETE WASHOUT AREA

2. DO NOT LOCATE AN UNLINED CWA WITHIN 400' OF ANY NATURAL DRAINAGE PATHWAY OR

SITE CONSTRAINTS MAKE THIS INFEASIBLE, OR IF HIGHLY PERMEABLE SOILS EXIST ON SITE,

THE CWA MUST BE INSTALLED WITH AN IMPERMEABLE LINER (16 MIL MIN. THICKNESS) OR

4. CWA SHALL INCLUDE A FLAT SUBSURFACE PIT THAT IS AT LEAST 8' BY 8' SLOPES

7. SIGNS SHALL BE PLACED AT THE CONSTRUCTION ENTRANCE, AT THE CWA, AND

Urban Drainage and Flood Control District

Urban Storm Drainage Criteria Manual Volume 3

LEADING OUT OF THE SUBSURFACE PIT SHALL BE 3:1 OR FLATTER. THE PIT SHALL BE AT

5. BERM SURROUNDING SIDES AND BACK OF THE CWA SHALL HAVE MINIMUM HEIGHT OF 1'.

ELSEWHERE AS NECESSARY TO CLEARLY INDICATE THE LOCATION OF THE CWA TO OPERATORS

3. THE GWA SHALL BE INSTALLED PRIOR TO CONCRETE PLACEMENT ON SITE.

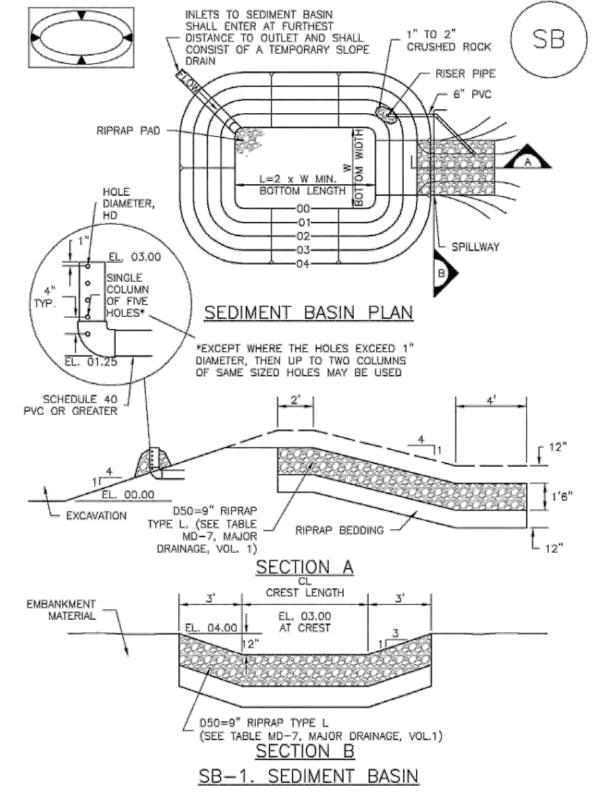
6. VEHICLE TRACKING PAD SHALL BE SLOPED 2% TOWARDS THE CWA.

8. USE EXCAVATED MATERIAL FOR PERIMETER BERM CONSTRUCTION.

SURFACE STORAGE ALTERNATIVES USING PREFABRICATED CONCRETE WASHOUT DEVICES OR A

WATERBODY, DO NOT LOCATE WITHIN 1,000' OF ANY WELLS OR DRINKING WATER SOURCES, IF

DESIGNED BY: NW DRAWN BY: NW CHECKED BY: DF JOB NO. 19-165



Urban Drainage and Flood Control District

Urban Storm Drainage Criteria Manual Volume 3

WIRE TIE ENDS -

- GROUND SURFACE

2. CRUSHED ROCK SHALL BE 11/2" (MINUS) IN SIZE WITH A FRACTURED FACE (ALL SIDES)

3. WIRE MESH SHALL BE FABRICATED OF 10 GAGE POULTRY MESH, OR EQUIVALENT, WITH A

5. SOME MUNICIPALITIES MAY ALLOW THE USE OF FILTER FABRIC AS AN ALTERNATIVE TO WIRE MESH FOR THE ROCK ENCLOSURE.

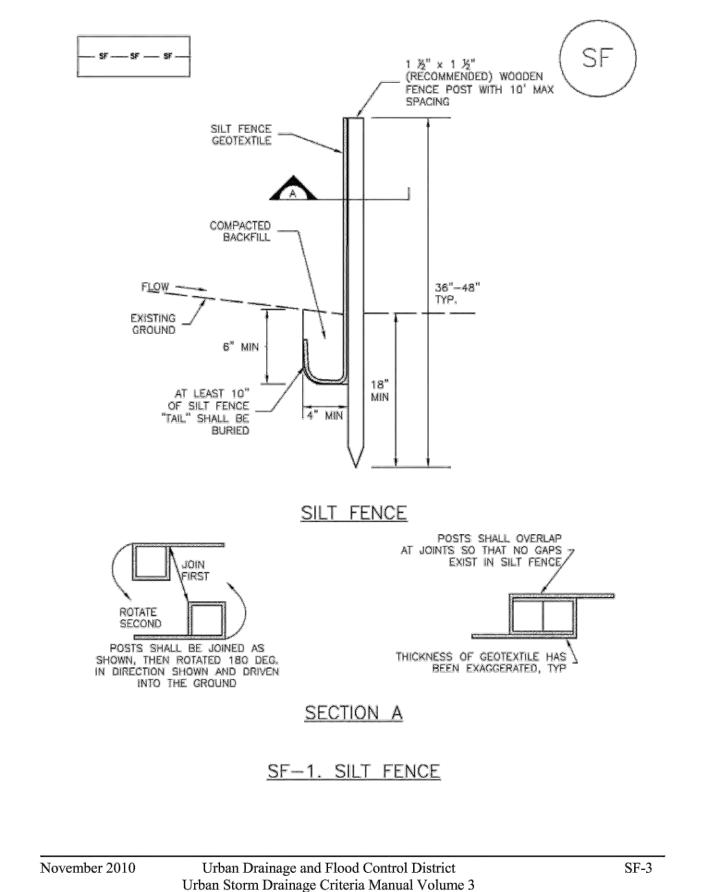
4. WIRE MESH SHALL BE SECURED USING "HOG RINGS" OR WIRE TIES AT 6" CENTERS

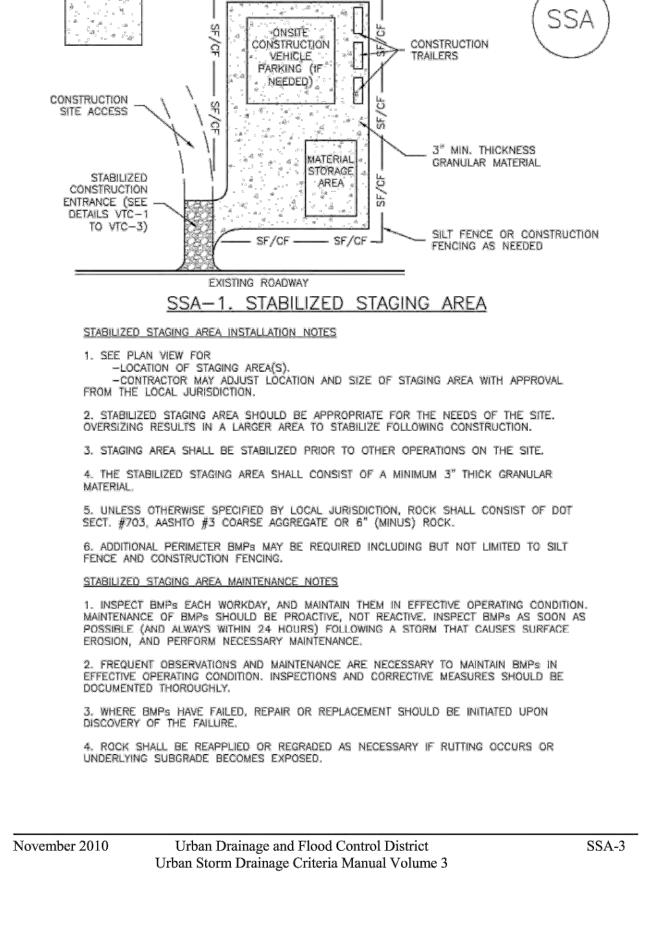
RS-1. ROCK SOCK PERIMETER CONTROL

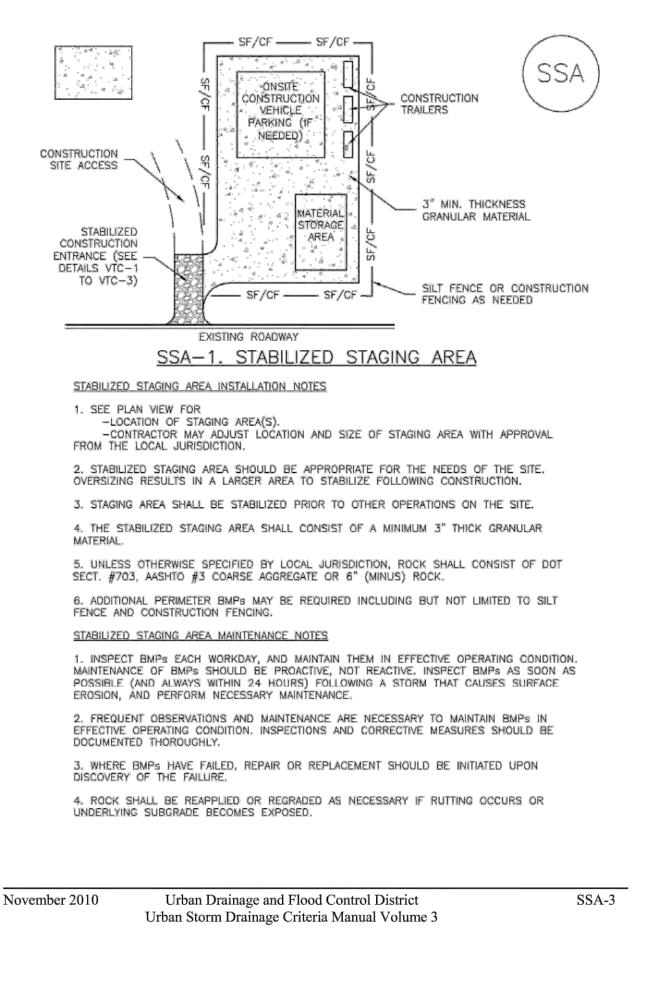
AND SHALL COMPLY WITH GRADATION SHOWN ON THIS SHEET (1½" MINUS).

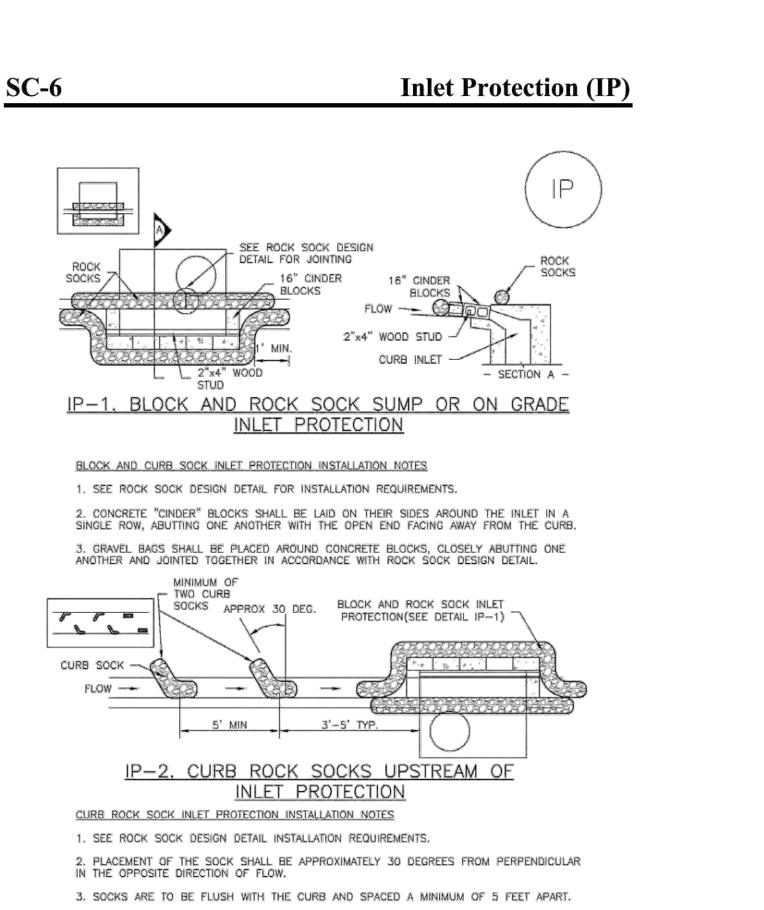
MAXIMUM OPENING OF 1/2", RECOMMENDED MINIMUM ROLL WIDTH OF 48"

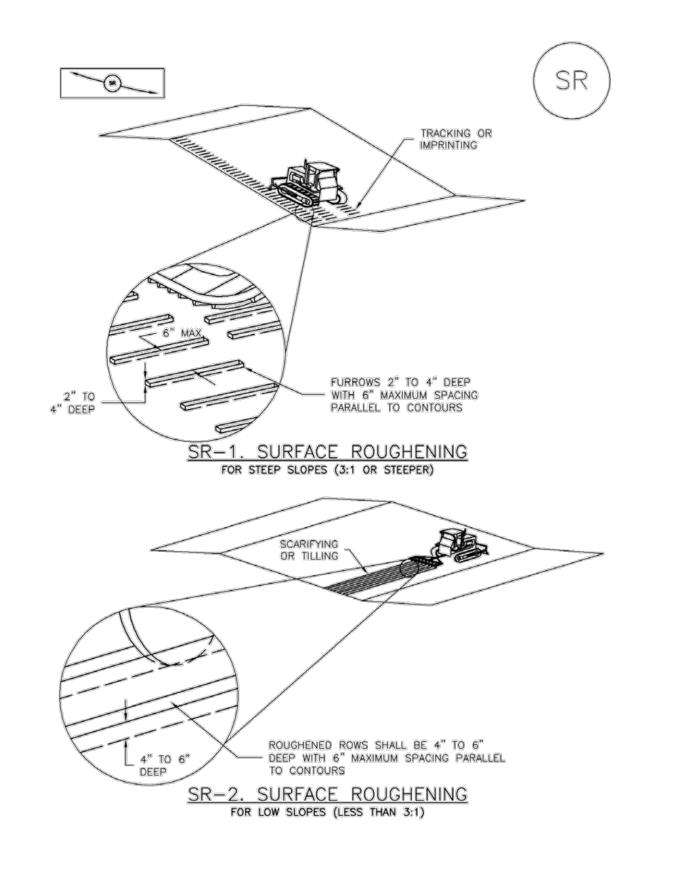
ALONG ALL JOINTS AND AT 2" CENTERS ON ENDS OF SOCKS.

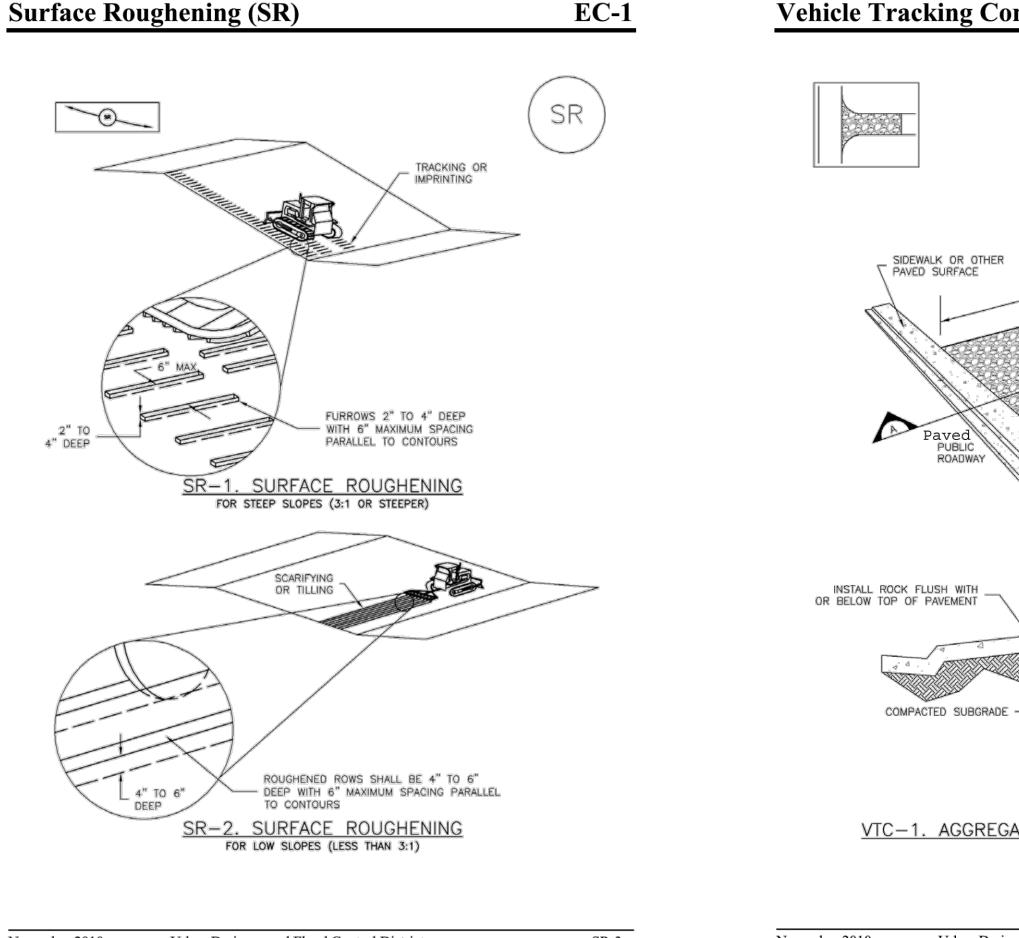


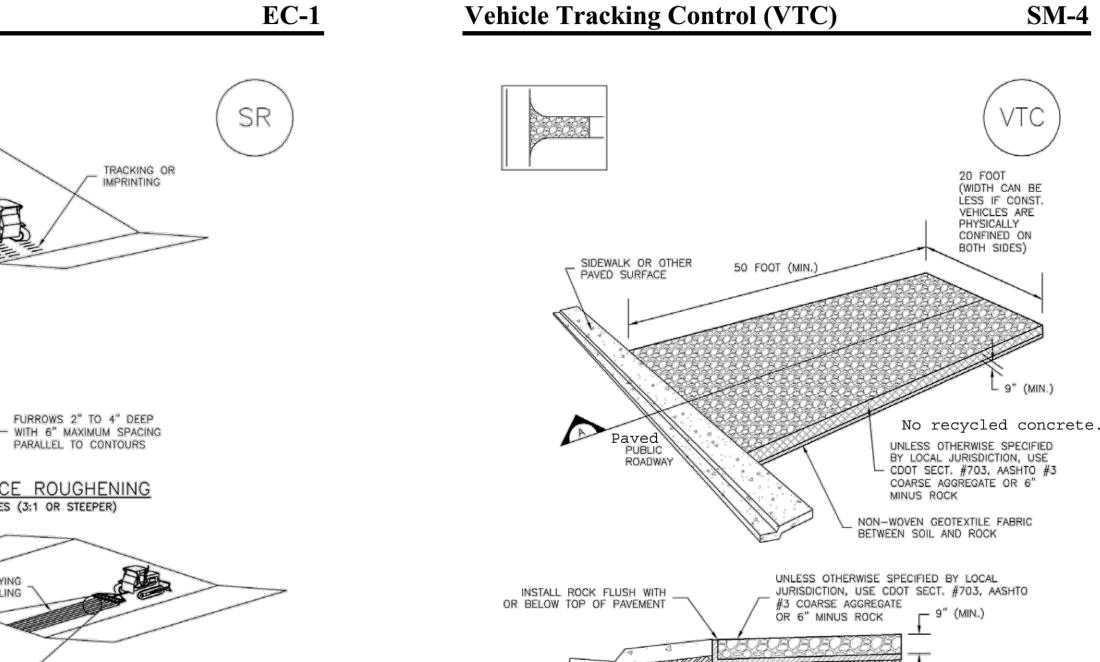












VTC-1. AGGREGATE VEHICLE TRACKING CONTROL

Urban Drainage and Flood Control District

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

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

Urban Drainage and Flood Control District

Urban Storm Drainage Criteria Manual Volume 3

November 2010

November 2010

SR-3

Rev. 3/12/12 Urban Storm Drainage Criteria Manual Volume 3

NON-WOVEN GEOTEXTILE

SHEET 10 OF 14

O" ON BEDROCK OR

L HARD SURFACE, 2"

ROCK SOCK SECTION

ROCK SOCK JOINTING

ROCK SOCK INSTALLATION NOTES

-LOCATION(S) OF ROCK SOCKS.

1. SEE PLAN VIEW FOR:

IN SOIL

November 2010

Rock Sock (RS)

(MINUS) CRUSHED ROCK

4" TO 6" MAX AT

- 6"-10" DEPENDING

SEDIMENT LOADS

ON EXPECTED

ROCK SOCK PLAN

GRADATION TABLE

SIEVE SIZE MASS PERCENT PASSING SQUARE MESH SIEVES

MATCHES SPECIFICATIONS FOR NO. 4 COARSE AGGREGATE FOR CONCRETE PER AASHTO M43. ALL ROCK SHALL BE FRACTURED FACE, ALL SIDES.

NO. 4

ANY GAP AT JOINT SHALL BE FILLED WITH AN ADEQUATE

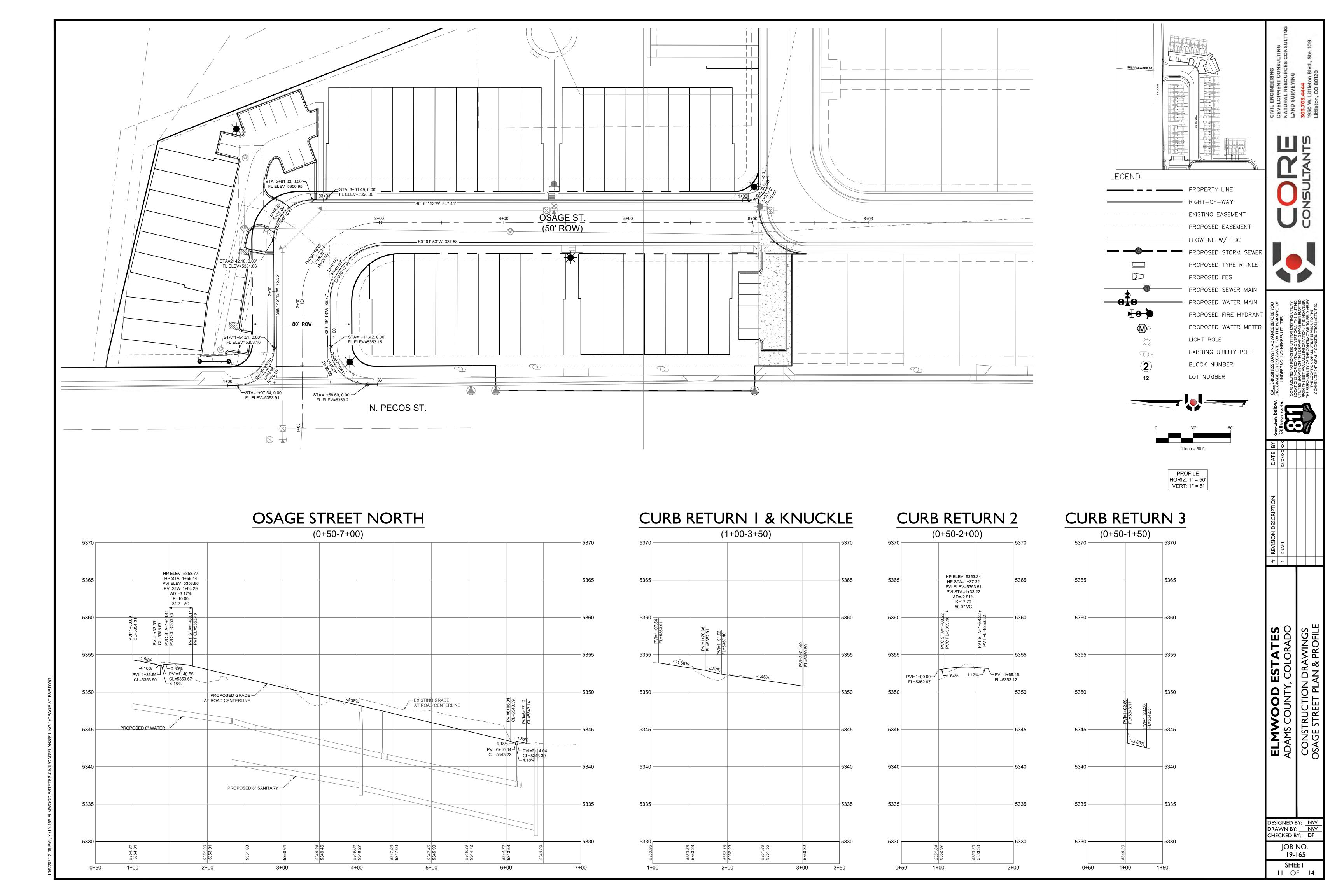
ADDITIONAL WIRE WRAPPING, ROCK SOCKS CAN BE

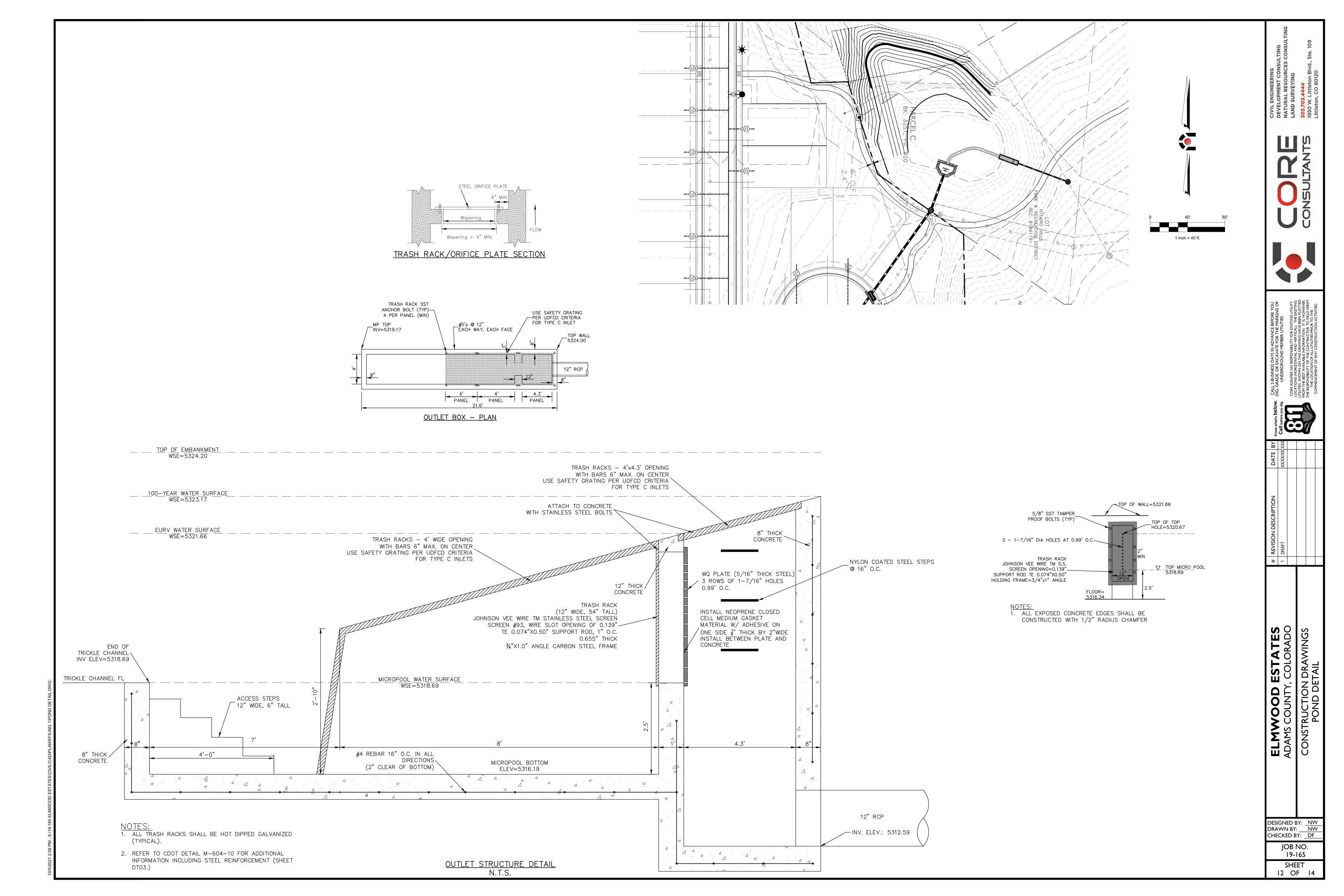
AMOUNT OF 1½" (MINUS) CRUSHED ROCK AND WRAPPED WITH ADDITIONAL WIRE MESH SECURED TO ENDS OF ROCK REINFORCED SOCK, AS AN ALTERNATIVE TO FILLING JOINTS BETWEEN ADJOINING ROCK SOCKS WITH CRUSHED ROCK AND

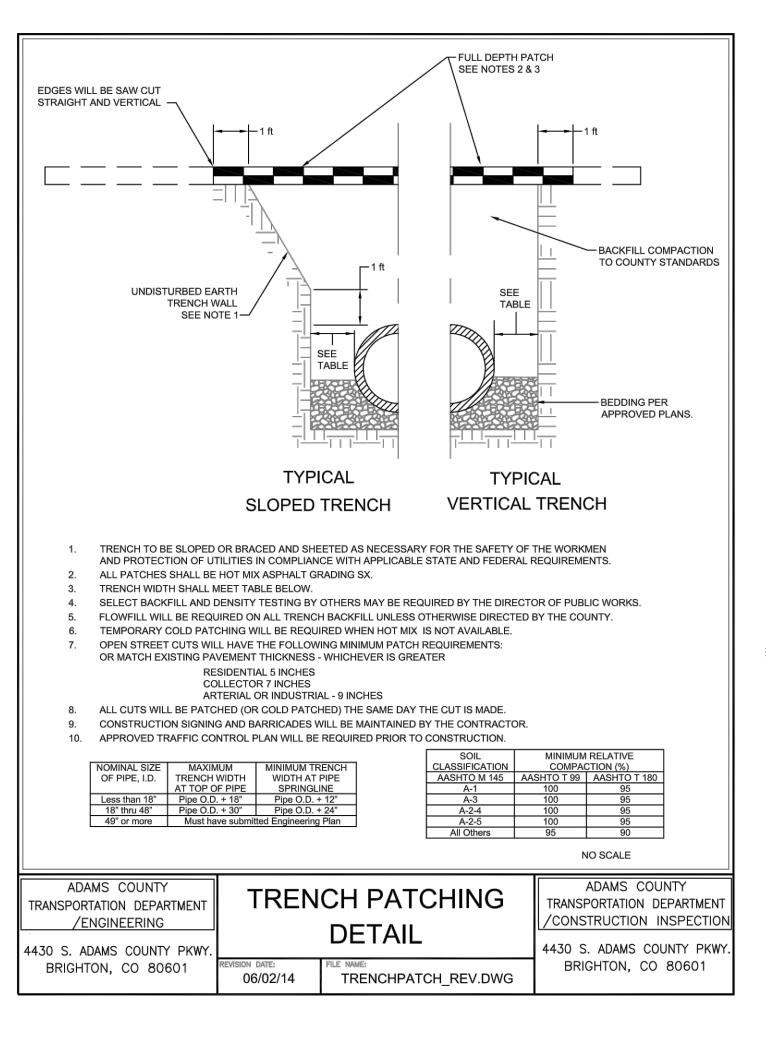
OVERLAPPED (TYPICALLY 12-INCH OVERLAP) TO AVOID GAPS.

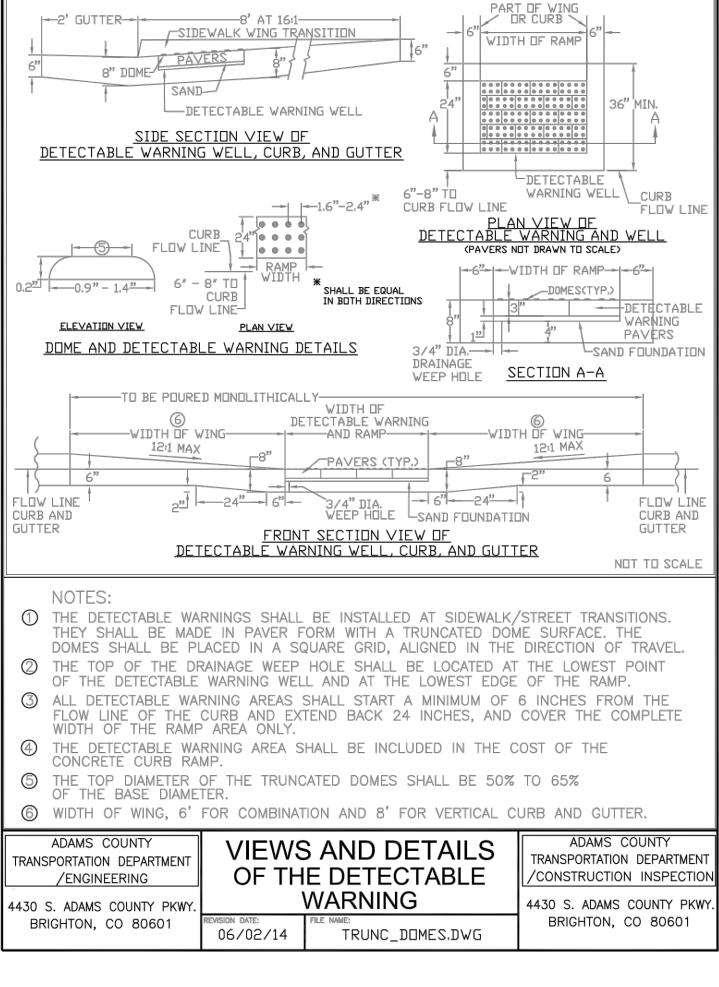
ENCLOSED IN WIRE MESH

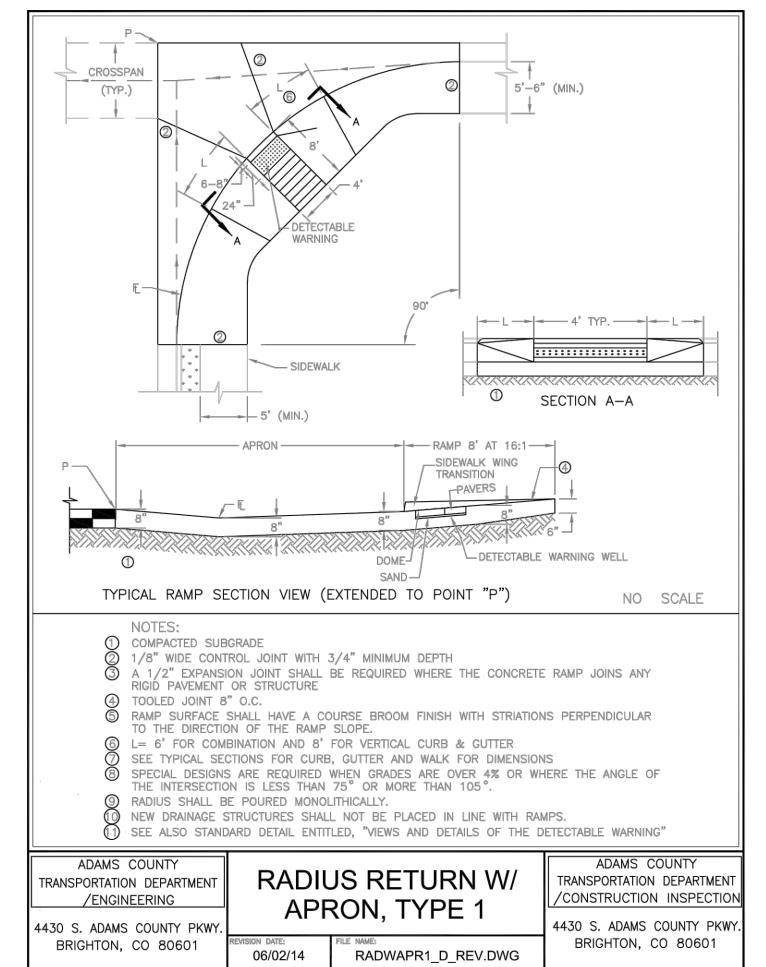
4. AT LEAST TWO CURB SOCKS IN SERIES ARE REQUIRED UPSTREAM OF ON-GRADE INLETS.

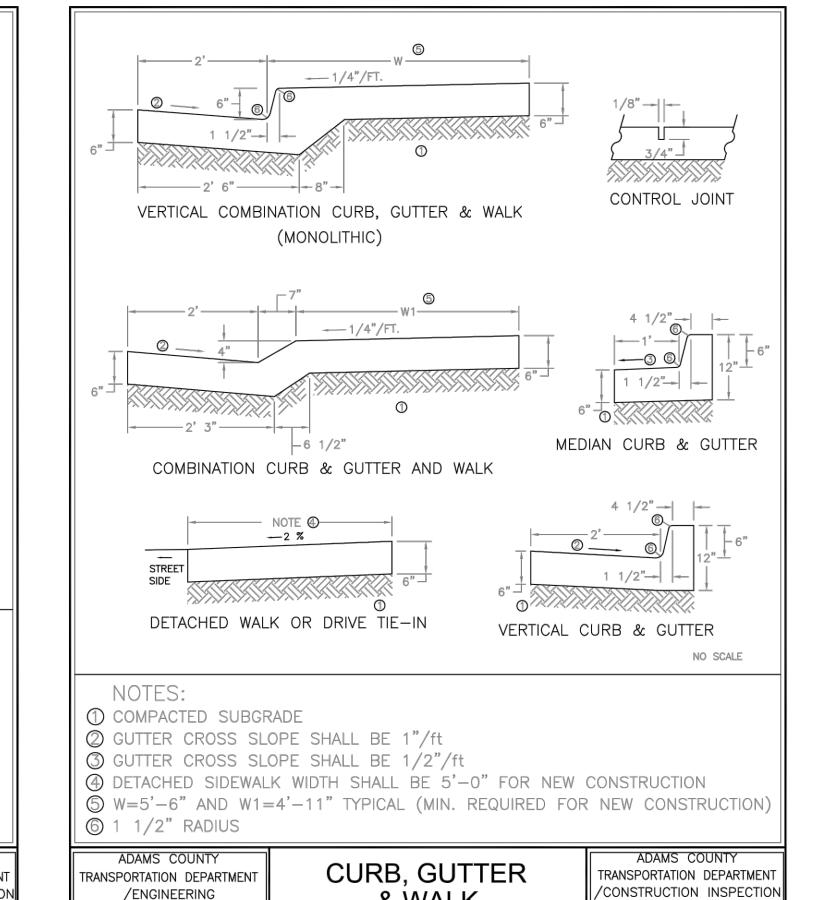










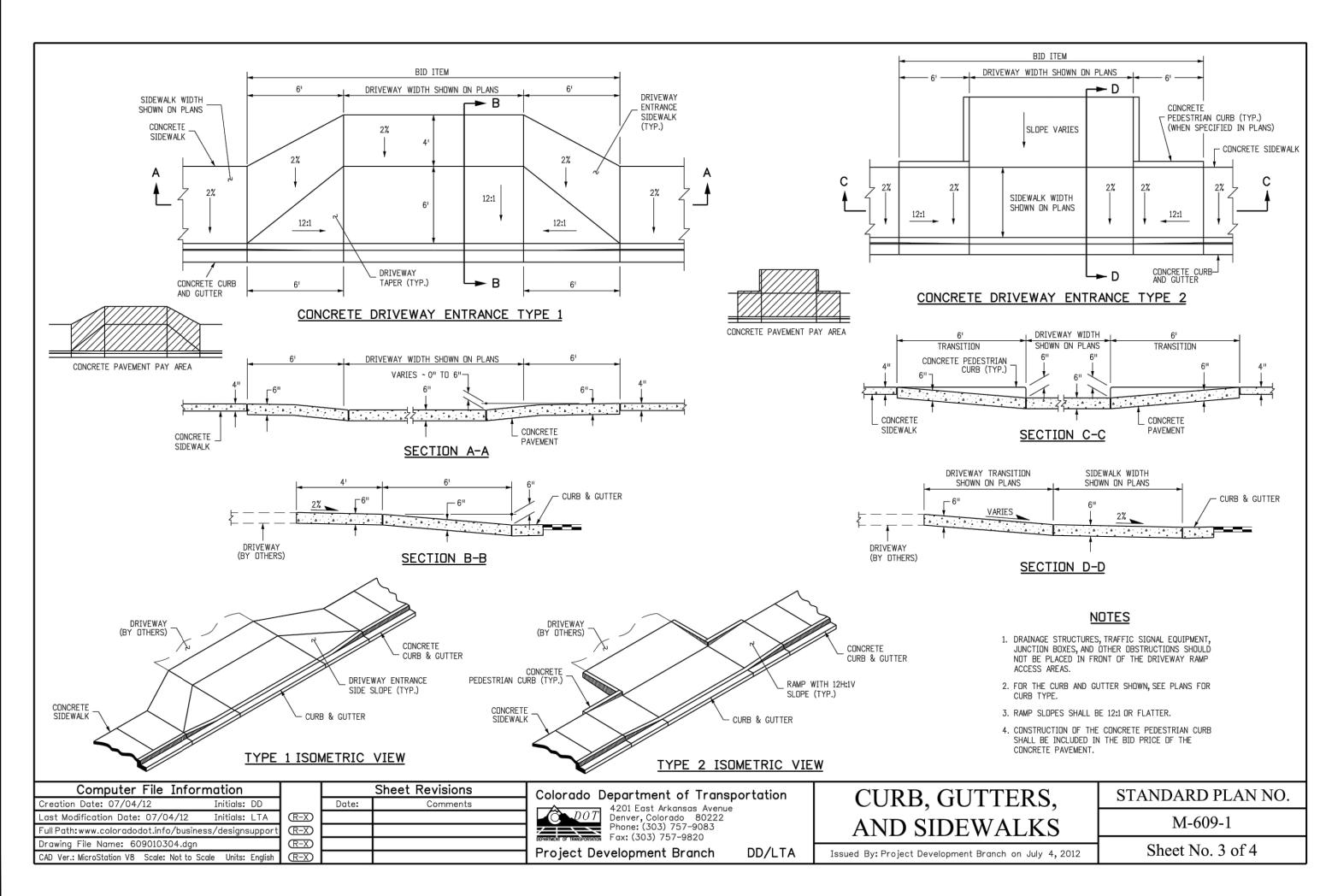


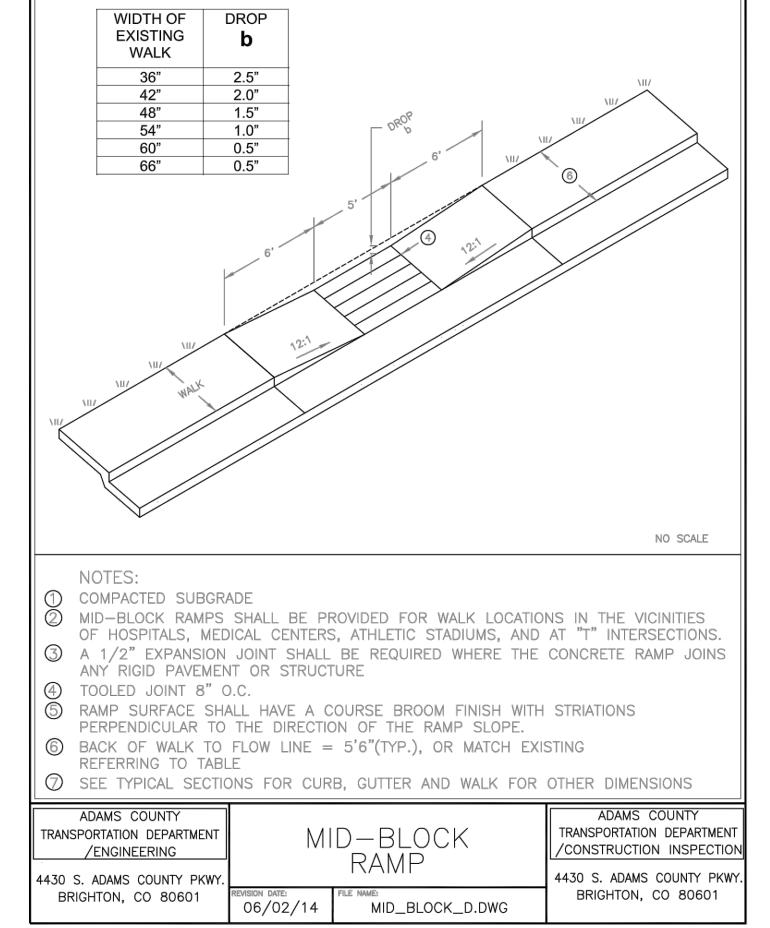
430 S. ADAMS COUNTY PKWY.

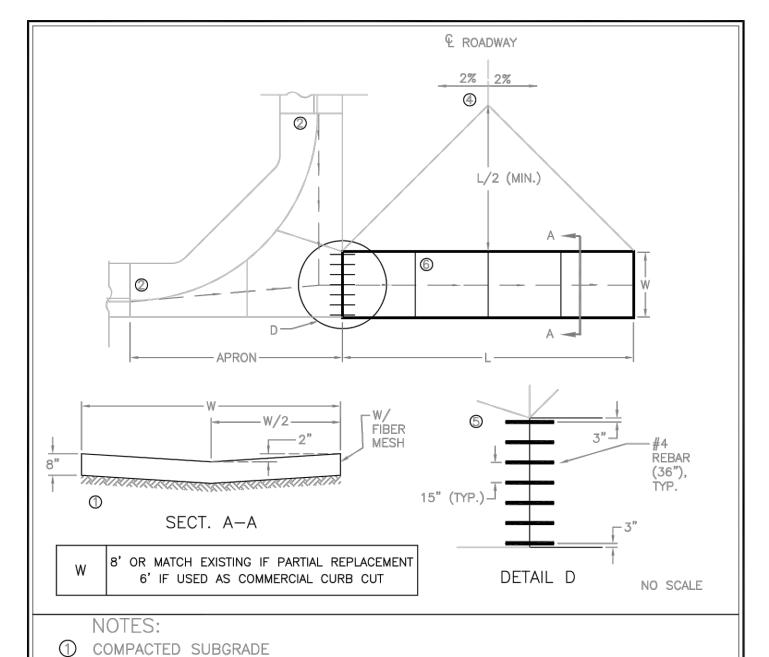
06/02/14

BRIGHTON, CO 80601

BRIGHTON, CO 80601







CG&W_D.DWG

2 1/8" WIDE CONTROL JOINT WITH 3/4" MINIMUM DEPTH 3 ADAMS COUNTY TO DETERMINE REINFORCEMENT REQUIREMENTS IF REINFORCEMENT IS NEEDED 4) WHERE PAVEMENT IS TO BE RECONSTRUCTED CROWN SHALL BE TRANSITIONED OVER L/2' (MIN). NO CROWN SHALL EXIST AT THE CROSSPAN (5) COLD JOINTS SHALL BE DOWELED AS PER "D" (MINIMUM, 2 BARS). JOINT TO BE FILLED WITH JOINT FILLER

6 CONTRACTION JOINTS SHALL BE SPACED @ MAXIMUM 10' INTERVALS O CROSSPANS SHALL BE CONSTRUCTED IN HALVES TO ALLOW TRAFFIC MOVEMENT

ADAMS COUNTY ADAMS COUNTY **TYPICAL** RANSPORTATION DEPARTMENT /ENGINEERING **CROSSPAN** 430 S. ADAMS COUNTY PKWY

TRANSPORTATION DEPARTMENT CONSTRUCTION INSPECTION 4430 S. ADAMS COUNTY PKWY BRIGHTON, CO 80601 TYP_XPAN_D.DWG

CHECKED BY: DF JOB NO. 19-165

DESIGNED BY: NW

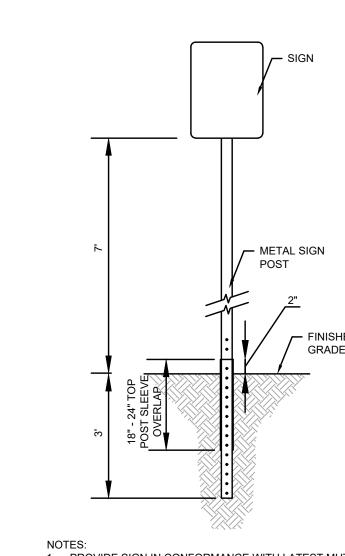
DRAWN BY: NW

2-BUSINESS DAYS IN ADVANCE BEFORE Y-GRADE, OR EXCAVATE FOR THE MARKING UNDERGROUND MEMBER UTILITIES.

1430 S. ADAMS COUNTY PKWY

BRIGHTON, CO 80601

SHEET 13 OF 14

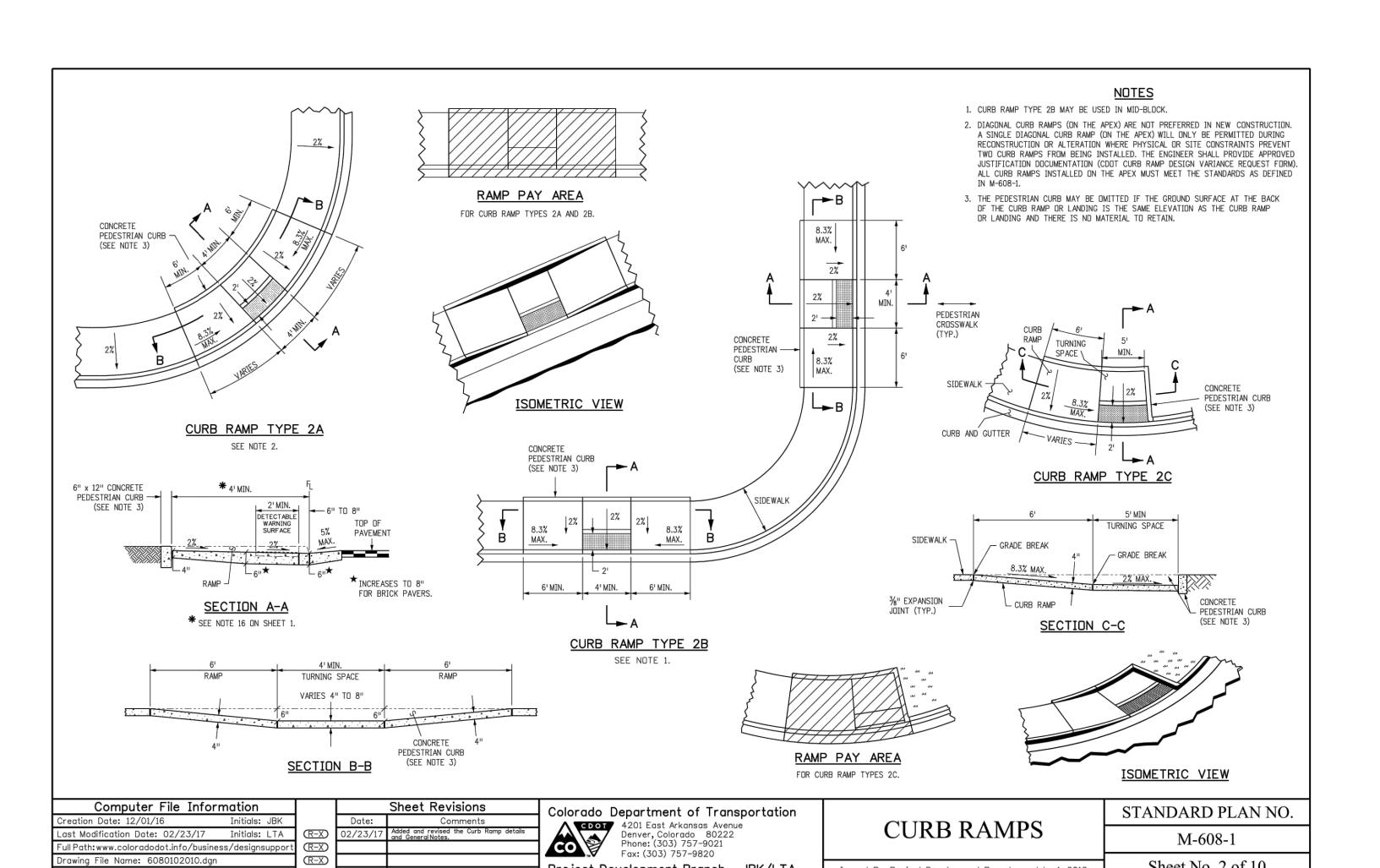


 PROVIDE SIGN IN CONFORMANCE WITH LATEST MUTCD SPECIFICATIONS. 2. WHEN A SIGN BASE FALLS WITHIN A HARDSCAPED AREA, A 3" PVC SLEVE SHALL BE INSTALLED AT THE SIGN LOCATION PRIOR TO PLACEMENT OF THE CONCRETE.

3. SIGN POSTS SHALL BE 1.75" X 1.75", SIGN BASES SHALL BE 2" X 2" WHEN SIGNS ARE SMALLER THAN 36" X 36".

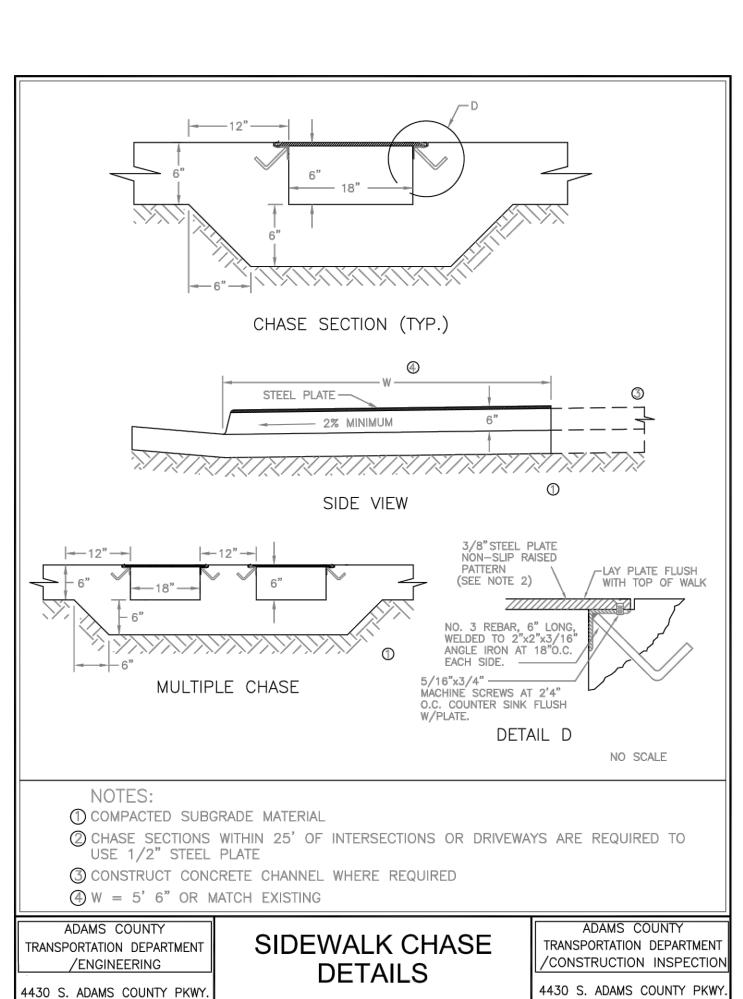
4. SIGN POSTS SHALL BE 2" X 2", SIGN BASES SHALL BE 2.25" X 2.25" WHEN SIGNS ARE 36" X 36" OR BIGGER. 5. SIGN POSTS AND BASES SHALL BE STEEL PERFORATED SQUARE TUBING AS SUPPLIED BY UNISTRUT, OR APPROVED EQUAL.

SIGN POST DETAIL NTS



Project Development Branch JBK/LTA

CAD Ver.: MicroStation V8 Scale: Not to Scale Units: English



SWLK_CHASE_D.DWG

BRIGHTON, CO 80601

06/02/14

Sheet No. 2 of 10

Issued By: Project Development Branch on July 4, 2012





Knov	Ca	_	
ВҮ	XXX		
DATE BY	xxx xx/xx/		
REVISION DESCRIPTION	DRAFT		
#	1		

XOOD COUNTY,

DESIGNED BY: NW DRAWN BY: NW CHECKED BY: DF

JOB NO. 19-165

SHEET 14 OF 14

BRIGHTON, CO 80601





PHASE III DRAINAGE REPORT

ELMWOOD ESTATES ADAMS COUNTY, COLORADO

Prepared for:

Delwest Development Corporation 155 South Madison Street Denver, CO 80209 Phone: 303.632.6755 Contact: Derrell Schreiner

Prepared by:

CORE Consultants, Inc.
1950 W. Littleton Blvd., Suite 109
Littleton, CO 80120
Phone: 303-703-4444
Contact: David Forbes

CORE Project Number: 19-165





CERTIFICATIONS

l.	Engineer's Statement:
	I hereby certify that this report and plan for the Preliminary Drainage Design of Elmwood Estates was prepared by me or under my direct supervision in accordance with the provisions of Adams County Storm Drainage Design and Technical Criteria for the owners thereof. I understand that Adams County does not and will not assume liability for drainage facilities designed by others.

David Forbes, PE.
Colorado Professional Engineer No. 36130

II. Owner / Developer's Statement:

Delwest Development Corporation hereby certifies that the drainage facilities for Elmwood Estates shall be constructed according to the design presented in this report. I understand that Adams County does not and will not assume liability for the drainage facilities designed and/ or certified by my engineer. I understand that Adams County reviews drainage plans pursuant to Colorado Revised Statues Title 30, Article 28; but cannot, on behalf of Elmwood Estates, guarantee that final drainage design review will absolve Delwest Development Corporation and/ or their successors and/ or assigns the future liability for improper design. I further understand that approval of the Final Plat and/ or Final Development Plan does not imply approval of my engineer's drainage design.

Derrell Schreiner	Date
Owner Representative	



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Appendices

Appendix A - Hydrologic Calculations

- Vicinity Map
- Firm Map
- SCS Soils Map
- SF-2 and SF-3 Forms

Appendix B - Hydraulic Calculations

- Detention Storage Calculations
- Street Capacity

Appendix C – Reference Information

Excerpts from Previous Drainage Reports

Appendix D – Proposed Maps

Overall Drainage plan



I INTRODUCTION

I.I Purpose

This report was prepared as a Phase III analysis of Elmwood Estates (Elmwood) to meet the regulatory requirements as outlined in the Adams County Storm Drainage Design and Technical Criteria for Final Drainage analysis purposes and volumes I-3 of the Mile High Flood District Criteria Manuals. This report provides drainage analysis that encompasses both Elmwood Estates and an existing single-family development to the south called Sherrelwood Village.

1.2 General Location & Description of Property

Elmwood is located within the SE $\frac{1}{4}$, Section of 28 and NE $\frac{1}{4}$, Section 33, T2S, R68W of the 6th Principal meridian. The 10 +/- acre site is bordered on the north by Kalcevic Reservoir, on the east by Sherrelwood Park, on the south by Sherrelwood Village and the west by North Pecos Street.

Ultimately the property will follow natural drainage patterns to the southeast at an approximate 3.00% slope. An existing pond designed, approved and as-built with the Sherrelwood Village Final Plat will be modified and utilized as the primary drainage infrastructure for Elmwood.

The site receives no offsite runoff.

Soils within the site are identified by the National Cooperative Soil Survey as Platner Loam (PIB), Samsil-Shingle complex (ShF) and Ulm Loam (UIC). These soil types are a part of Type C and D hydrologic soil group. A soils map has been provided and can be found in Appendix A.

2 MAJOR DRAINAGE BASINS

2.1 Drainage Basins

The existing drainage patters for the Elmwood site will remain historic with runoff from the northwest flowing to the southeast. An existing 100-yr detention pond in the southeast corner of the Sherrelwood Village site will be increased in size to accommodate the addition developed flow from the Elmwood site. Along with a volume increase of the existing pond the existing WQ Plate will be replaced to ensure the WQ and EURV events drain in the required time.

2.2 FIRM

The site falls within Zone X, as shown on the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) panel 08001C0584H. A copy of the FIRM map can be found in Appendix A.

3 DRAINAGE DESIGN CRITERIA

The subsurface storm infrastructure for the Sherrelwood Village project was designed to carry the 5-yr storm event (minor) within the pipe and to keep the 100-yr (major) hydraulic grade line below the finish grade surface. The existing storm sewer infrastructure is adequately designed to carry the maximum flow each inlet can capture at any given time and no modifications are needed. Additional flow from the minor



and major events from Elmwood will be captured by an existing 5' inlet at DP-2 and an existing 10' inlet at DP-5. By-pass flow during the minor event will not spread past the back of the sidewalk and during the major event the street crown will not have more than 6" of water. If any of the 3 existing inlets are clogged water will overflow through Tract C and reach the existing detention pond.

4 DRAINAGE FACILITY DESIGN

Elmwood will consist of 48 townhomes broken into pods of 5-9 units.

4.1 North Sub-Basins

There are 2 sub-basins that ultimately drain to the existing pond on the southwest corner of Sherrelwood Village. For this analysis impervious values were determined based on the proposed layout.

4.2 Finish Floor Analysis

No structures will be inundated at the ground line during either the minor or major storm events.

5 WATER QUALITY BEST MANAGEMENT PRACTICES

5.1 Non-Structural BMP's

Non-structural best management practices BMP's will include grass buffers and permanent seeding. The landscaping around the impervious areas will create buffers for water quality benefit.

5.2 Structural BMP's

The existing Sherrelwood Village detention pond will be expanded to capture the increased developed runoff from Elmwood. The as-built pond currently has 0.779 acre-ft of volume. During the Final Phase of the Elmwood project the pond will be expanded to a total volume of 1.042 acre-ft per MHFD-Detention, Version 4.03 spreadsheet developed by UDFCD. Along with a volume increase the WQ plate will be replaced within the existing outlet structure.

5.3 Source Controls

Existing Sherrelwood Village pond requires regular maintenance and cleaning to function properly and provide adequate water quality.

6 CONCLUSION

6.1 Compliance with Standards

The design of drainage facilities for Elmwood Estates follows the Urban Drainage and Flood Control District's Drainage Criteria Manual and the Adams County Storm Drainage Design and Technical Criteria.

6.2 Variance

No variances will need to be granted.



6.3 Drainage Concept

The Rational Method was used to determine the developed runoff values for the minor drainage basins throughout the site. These basins were delineated based on the natural site topography and the developed site plan. Once the runoff values were identified, storm sewer pipes and other drainage conveyances were designed to capture and transport runoff towards the existing detention pond. The storm sewer system has been designed to capture the minor (5-year) storm event. The drainage design included herein will control damage to proposed structures. The proposed improvements do not negatively affect any upstream or downstream drainage facilities or other structures.



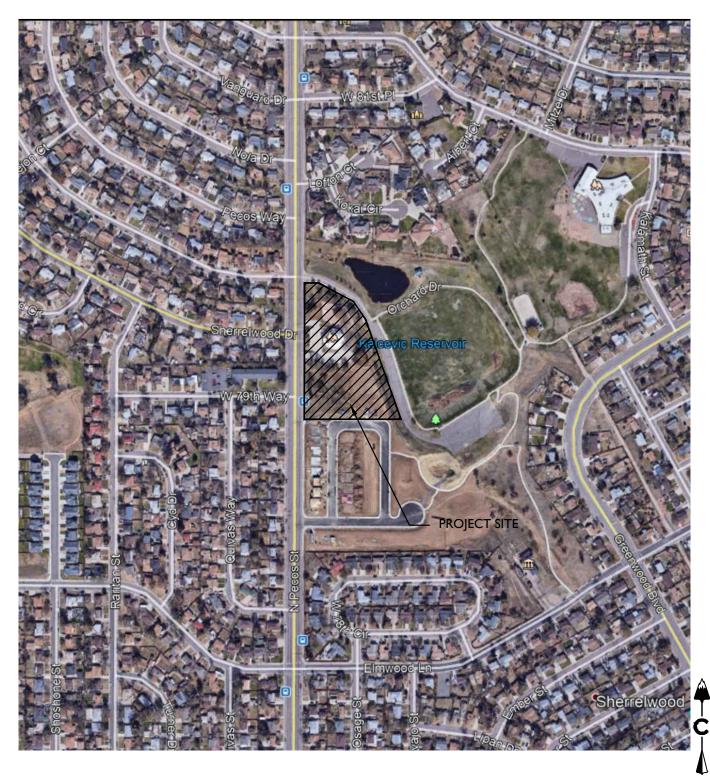
7 REFERENCES

- 1. Chapter 9 Storm Drainage Design and Stormwater Quality Regulations, Adams County Development Standards and Regulations, August 15, 2017.
- 2. Urban Storm Drainage Criteria Manuals, Urban Drainage and Flood Control District.
 - a. Volume I, Revised August 2018
 - b. Volume 2, Revised September 2017.
 - c. Volume 3 Revised April 2018



APPENDIX A HYDROLOGIC CALCULATIONS

VICINITY MAP ELMWOOD ESTATES (NOT TO SCALE)





ELMWOOD ESTATES VICINITY MAP

OF

OF 1 SHEETS

JOB NUMBER 19-165

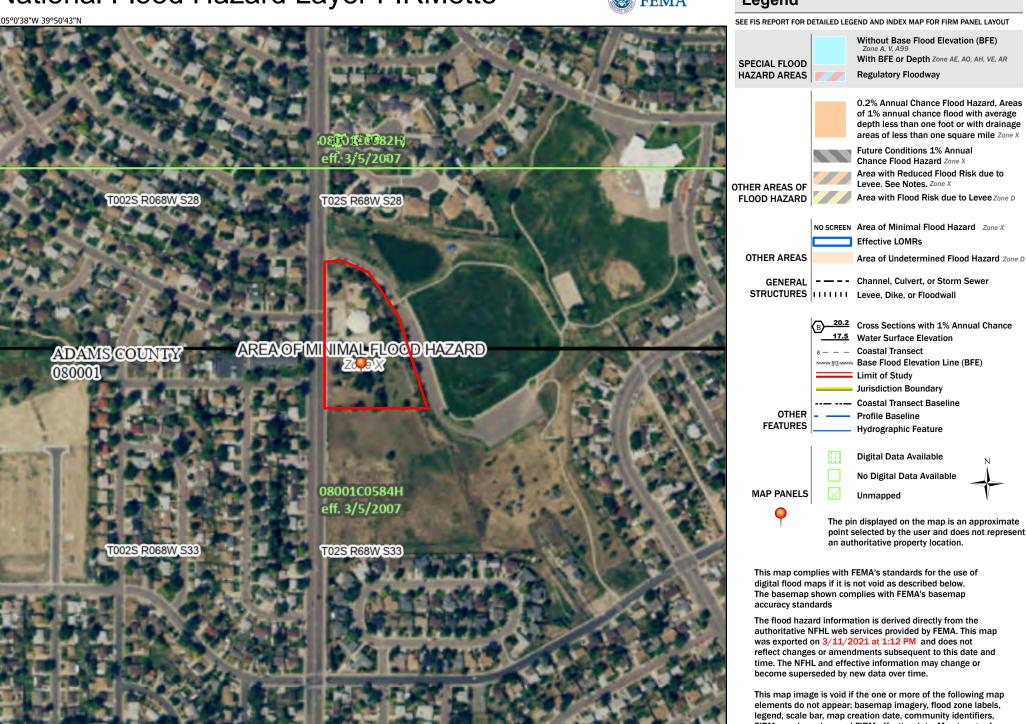
SHEET NUMBER

CREATED BY: NDW

DATE: 3/11/21

National Flood Hazard Layer FIRMette





Feet

2.000

250

500

1,000

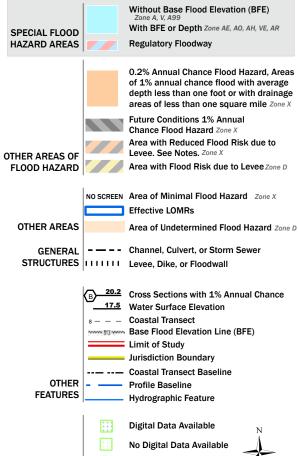
1,500

1:6,000

Basemap: USGS National Map: Orthoimagery: Data refreshed October, 2020

Legend

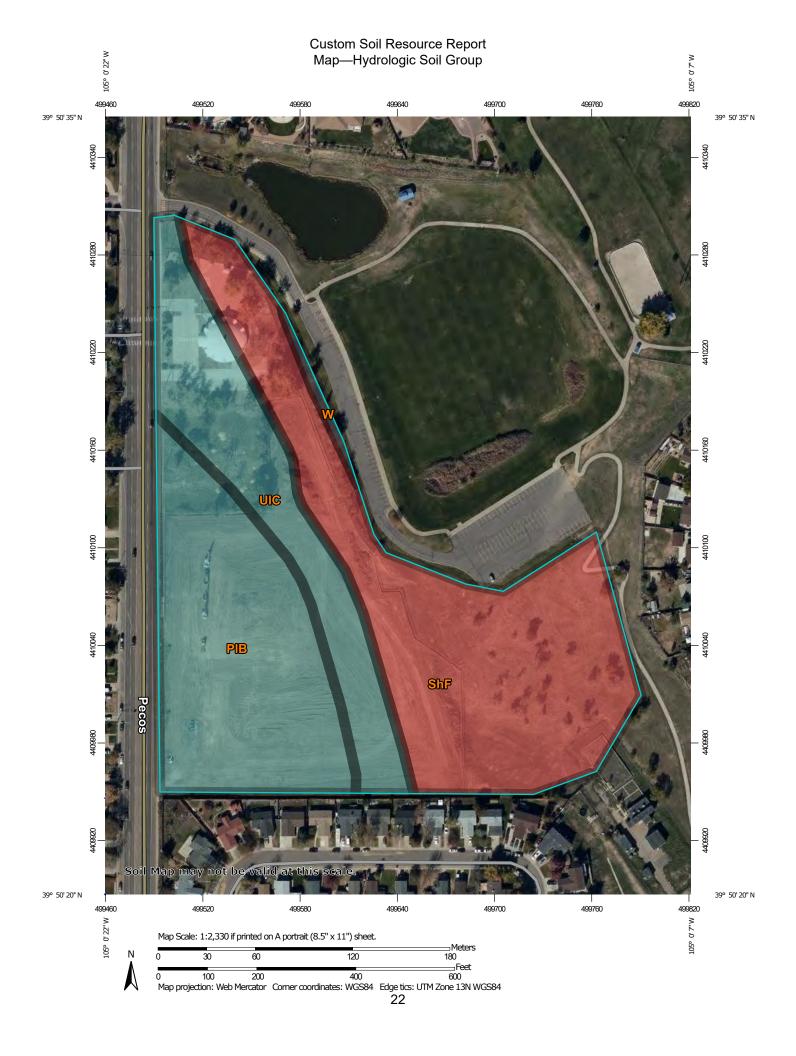
SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT



This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 3/11/2021 at 1:12 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.



MAP LEGEND Area of Interest (AOI) С Area of Interest (AOI) C/D Soils D Soil Rating Polygons Not rated or not available Α **Water Features** A/D Streams and Canals В Transportation B/D Rails ---Interstate Highways C/D **US Routes** Major Roads Not rated or not available Local Roads -Soil Rating Lines Background Aerial Photography Not rated or not available **Soil Rating Points** Α A/D B/D

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20.000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service

Web Soil Survey URL:

Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Adams County Area, Parts of Adams and

Denver Counties, Colorado

Survey Area Data: Version 16, Sep 12, 2019

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Oct 20, 2018—Oct 26, 2018

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background

Table—Hydrologic Soil Group

			_	
Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
PIB	Platner loam, 0 to 3 percent slopes	С	4.7	31.5%
ShF	Samsil-Shingle complex, 3 to 35 percent slopes	D	6.8	45.7%
UIC	Ulm loam, 3 to 5 percent slopes	С	3.3	22.3%
W	Water		0.1	0.6%
Totals for Area of Intere	st	15.0	100.0%	

Rating Options—Hydrologic Soil Group

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Higher

Adams County Area, Parts of Adams and Denver Counties, Colorado

PIB—Platner loam, 0 to 3 percent slopes

Map Unit Setting

National map unit symbol: 2tln0 Elevation: 4,000 to 4,930 feet

Mean annual precipitation: 14 to 17 inches Mean annual air temperature: 46 to 50 degrees F

Frost-free period: 135 to 160 days

Farmland classification: Prime farmland if irrigated

Map Unit Composition

Platner and similar soils: 85 percent Minor components: 15 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Platner

Setting

Landform: Interfluves

Landform position (two-dimensional): Summit Landform position (three-dimensional): Interfluve

Down-slope shape: Linear Across-slope shape: Linear

Parent material: Mixed eolian deposits over tertiary aged alluvium derived from

igneous, metamorphic and sedimentary rock

Typical profile

Ap - 0 to 6 inches: loam Bt1 - 6 to 11 inches: clay Bt2 - 11 to 20 inches: clay Bk1 - 20 to 27 inches: loam

Bk2 - 27 to 37 inches: sandy clay loam C - 37 to 80 inches: sandy clay loam

Properties and qualities

Slope: 0 to 3 percent

Depth to restrictive feature: More than 80 inches

Natural drainage class: Well drained

Runoff class: Medium

Capacity of the most limiting layer to transmit water (Ksat): Moderately low to

moderately high (0.06 to 0.20 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None Frequency of ponding: None

Calcium carbonate, maximum in profile: 15 percent

Salinity, maximum in profile: Nonsaline (0.0 to 1.0 mmhos/cm) Available water storage in profile: Moderate (about 8.1 inches)

Interpretive groups

Land capability classification (irrigated): 3s Land capability classification (nonirrigated): 4s

Hydrologic Soil Group: C

Ecological site: Loamy Plains (R067BY002CO)

Custom Soil Resource Report

Hydric soil rating: No

Minor Components

Ascalon

Percent of map unit: 10 percent

Landform: Interfluves

Landform position (two-dimensional): Summit, shoulder

Landform position (three-dimensional): Interfluve

Down-slope shape: Linear Across-slope shape: Linear

Ecological site: Loamy Plains (R067BY002CO)

Hydric soil rating: No

Rago, rarely flooded

Percent of map unit: 4 percent Landform: Drainageways

Landform position (two-dimensional): Toeslope

Landform position (three-dimensional): Base slope, head slope

Down-slope shape: Linear Across-slope shape: Concave

Ecological site: Overflow (R067BY036CO)

Hydric soil rating: No

Rago, ponded

Percent of map unit: 1 percent

Landform: Playas

Landform position (two-dimensional): Summit Landform position (three-dimensional): Interfluve

Down-slope shape: Concave Across-slope shape: Concave

Ecological site: Closed Upland Depression (R067BY010CO)

Hydric soil rating: No

ShF—Samsil-Shingle complex, 3 to 35 percent slopes

Map Unit Setting

National map unit symbol: 34wk Elevation: 3,500 to 5,600 feet

Mean annual precipitation: 12 to 14 inches Mean annual air temperature: 48 to 52 degrees F

Frost-free period: 125 to 160 days

Farmland classification: Not prime farmland

Map Unit Composition

Samsil and similar soils: 40 percent Shingle and similar soils: 35 percent Minor components: 25 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Samsil

Setting

Landform: Hills

Landform position (three-dimensional): Base slope, side slope, nose slope, head

slope

Down-slope shape: Linear Across-slope shape: Linear

Parent material: Residuum weathered from shale

Typical profile

H1 - 0 to 4 inches: clay H2 - 4 to 14 inches: silty clay

H3 - 14 to 18 inches: weathered bedrock

Properties and qualities

Slope: 3 to 35 percent

Depth to restrictive feature: 4 to 20 inches to paralithic bedrock

Natural drainage class: Well drained

Runoff class: High

Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately

low (0.00 to 0.06 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None Frequency of ponding: None

Calcium carbonate, maximum in profile: 10 percent

Gypsum, maximum in profile: 2 percent

Salinity, maximum in profile: Nonsaline to very slightly saline (0.0 to 2.0

mmhos/cm)

Sodium adsorption ratio, maximum in profile: 1.0

Available water storage in profile: Very low (about 2.0 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 7s

Hydrologic Soil Group: D

Ecological site: Shaly Plains (R067BY045CO)

Hydric soil rating: No

Description of Shingle

Settina

Landform: Hills

Landform position (three-dimensional): Head slope, nose slope, side slope, base

slope

Down-slope shape: Linear Across-slope shape: Linear

Parent material: Residuum weathered from shale

Typical profile

H1 - 0 to 3 inches: loam H2 - 3 to 12 inches: loam

H3 - 12 to 16 inches: unweathered bedrock

Properties and qualities

Slope: 3 to 35 percent

Depth to restrictive feature: 10 to 20 inches to paralithic bedrock

Custom Soil Resource Report

Natural drainage class: Well drained

Runoff class: Medium

Capacity of the most limiting layer to transmit water (Ksat): Moderately low to

moderately high (0.06 to 0.20 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None Frequency of ponding: None

Calcium carbonate, maximum in profile: 15 percent

Salinity, maximum in profile: Nonsaline to very slightly saline (0.0 to 2.0

mmhos/cm)

Available water storage in profile: Very low (about 1.8 inches)

Interpretive groups

Land capability classification (irrigated): 6s Land capability classification (nonirrigated): 6s

Hydrologic Soil Group: D

Ecological site: Shaly Plains (R067BY045CO)

Hydric soil rating: No

Minor Components

Renohill

Percent of map unit: 10 percent

Hydric soil rating: No

Ulm

Percent of map unit: 10 percent

Hydric soil rating: No

Loamy alluvial land

Percent of map unit: 3 percent

Hydric soil rating: No

Satanta

Percent of map unit: 2 percent Landform: Paleoterraces Hydric soil rating: No

UIC—UIm loam, 3 to 5 percent slopes

Map Unit Setting

National map unit symbol: 34x4 Elevation: 4,000 to 5,600 feet

Mean annual precipitation: 12 to 14 inches Mean annual air temperature: 48 to 52 degrees F

Frost-free period: 125 to 155 days

Farmland classification: Prime farmland if irrigated

Map Unit Composition

Ulm and similar soils: 80 percent

Custom Soil Resource Report

Minor components: 20 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Ulm

Setting

Landform: Plains

Landform position (three-dimensional): Talf

Down-slope shape: Linear Across-slope shape: Linear

Parent material: Residuum weathered from sandstone and shale

Typical profile

H1 - 0 to 7 inches: loam
H2 - 7 to 13 inches: silty clay
H3 - 13 to 30 inches: clay
H4 - 30 to 48 inches: clay loam

H5 - 48 to 52 inches: unweathered bedrock

Properties and qualities

Slope: 3 to 5 percent

Depth to restrictive feature: 40 to 60 inches to paralithic bedrock

Natural drainage class: Well drained

Runoff class: Low

Capacity of the most limiting layer to transmit water (Ksat): Moderately low to

moderately high (0.06 to 0.20 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None Frequency of ponding: None

Calcium carbonate, maximum in profile: 15 percent

Salinity, maximum in profile: Nonsaline to very slightly saline (0.0 to 2.0

mmhos/cm)

Available water storage in profile: Moderate (about 8.2 inches)

Interpretive groups

Land capability classification (irrigated): 3e Land capability classification (nonirrigated): 4e

Hydrologic Soil Group: C

Ecological site: Loamy Plains (R067BY002CO)

Hydric soil rating: No

Minor Components

Renohill

Percent of map unit: 13 percent

Hydric soil rating: No

Shingle

Percent of map unit: 5 percent

Hydric soil rating: No

Apishapa

Percent of map unit: 2 percent

Landform: Swales
Hydric soil rating: Yes

W-Water

Map Unit Setting

National map unit symbol: wdnx

Mean annual precipitation: 12 to 14 inches Farmland classification: Not prime farmland

Map Unit Composition

Water: 80 percent

Minor components: 20 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Minor Components

Aquolls

Percent of map unit: 10 percent

Landform: Marshes Hydric soil rating: Yes

Other soils

Percent of map unit: 10 percent

Hydric soil rating: No

CORE Project #: 19-165
Prepared By: NDW

PERCENT IMPERVIOUS CALCULATIONS

-REFERENCE UDFCD Vol.1 RUNOFF Table 6-3

			Resid	ential					Lav	vns			
			Single Family	,	Multi-Unit				Clay	' Soil			
		0.25 acres	3 DU's/Ac 3,000 sf 2 story	5 DU's/Ac 3,000 sf 2 story	(attached)	Roof	Streets: Paved	Gravel	2-7% Slope	>7% Slope	Historic		
% Imperv.		45.00%	48.00%	63.00%	85.00%	90.00%	100.00%	40.00%	2.00%	2.00%	2.00%		
	Design											Total	Percent
BASIN	Point	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Area	Imperviou
EA-1	EA	-	-	-	0.17	-	0.02	-	0.21	-	-	0.40	41.4%
EB-2	EB	-	-	-	1.72	-	1.01	-	-	-	-	2.73	90.5%
OF-1	01	-	-	-	-	-	-	-	-	-	0.02	0.02	2.0%
OF-2	O2	-	-	-	-	-	0.03	-	0.22	-	-	0.25	14.5%
В	2	-	0.86	-	-	-	-	-	-	-	-	0.86	48.0%
С	3	-	1.43	-	-	-	-	-	-	-	-	1.43	48.0%
D	4	-	2.17	-	-	-	-	-	-	-	-	2.17	48.0%
Е	5	-	1.51	-	-	-	-	-	-	-	-	1.51	48.0%
Н	8	-	0.32	-	-	-	-	-	-	-	-	0.32	48.0%
		-	-	-	-	-	-	-	-	-	-	-	
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TOTAL		0.00	6.30	0.00	1.89	0.00	1.05	0.00	0.43	0.00	0.02	9.69	58.7%

CORE Project #: 19-165
Prepared By: NDW

COMPOSITE DEVELOPED BASIN -WEIGHTED "C" CALCULATIONS

-REFERENCE UDFCD Vol.1 RUNOFF Table 6-4

i = % imperviousness/100 expressed as a decimal

C_A = Runoff coefficient for NRCS HSG A soils

C_B = Runoff coefficient for NRCS HSG B soils

 $\ensuremath{\text{C}_{\text{CD}}}$ = Runoff coefficient for NRCS HSG C and D soils.

Natural Resource Conservation Service (NRCS)

Table 6-4. Runoff coefficient equations based on NRCS soil group and storm return period

NRCS			Storm Return Period									
Soil Group	2-Year	5-Year	10-Year	25-Year	50-Year	100-Year	500-Year					
A	C _A =	C _A =	C _A =	C _A =	C _A =	C _A =	C _A =					
	$0.84i^{1.302}$	0.86i ^{1.276}	$0.87i^{1.232}$	$0.84i^{1.124}$	0.85i+0.025	0.78 <i>i</i> +0.110	0.65 <i>i</i> +0.254					
В	C _B =	C _B =	C _B =	C _B =	C _B =	C _B =	C _B =					
	0.84i ^{1.169}	$0.86i^{1.088}$	0.81 <i>i</i> +0.057	0.63 <i>i</i> +0.249	0.56i+0.328	0.47i+0.426	0.37i+0.536					
C/D	C _{C/D} =	C _{C/D} =	$C_{C/D} =$	C _{C/D} =	$C_{C/D} =$	$C_{C/D} =$	$C_{C/D} =$					
	$0.83i^{1.122}$	0.82 <i>i</i> +0.035	0.74i+0.132	0.56i+0.319	0.49i+0.393	0.41 <i>i</i> +0.484	0.32i+0.588					

Davin ID	% Imperv.	i	Sail Turns	ı	Runoff Co	efficients,	С	Basin	Total	W	eighted Runo	ff Coefficients,	С
Basin ID			Soil Type	2-Year	5-Year	10-Year	100-Year	Area	Area	2-Year	5-Year	10-Year	100-Year
			Α	0.27	0.28	0.29	0.43						
EA-1	41.4%	0.41	В	0.30	0.33	0.39	0.62		0.40	0.31	0.37	0.44	0.65
			C or D	0.31	0.37	0.44	0.65	0.40					
			Α	0.74	0.76	0.77	0.82						
EB-2	90.5%	0.91	В	0.75	0.77	0.79	0.85		2.73	0.74	0.78	0.80	0.86
			C or D	0.74	0.78	0.80	0.86	2.73					
			Α	0.01	0.01	0.01	0.13						
OF-1	2.0%	0.02	В	0.01	0.01	0.07	0.44		0.02	0.01	0.05	0.15	0.49
			C or D	0.01	0.05	0.15	0.49	0.02					
			Α	0.07	0.07	0.08	0.22						
OF-2	14.5%	0.15	В	0.09	0.11	0.17	0.49		0.25	0.10	0.15	0.24	0.54
			C or D	0.10	0.15	0.24	0.54	0.25					
			Α	0.32	0.34	0.35	0.48						
В	48.0%	0.48	В	0.36	0.39	0.45	0.65		0.86	0.36	0.43	0.49	0.68
			C or D	0.36	0.43	0.49	0.68	0.86					
			Α	0.32	0.34	0.35	0.48						
С	48.0%	0.48	В	0.36	0.39	0.45	0.65		1.43	0.36	0.43	0.49	0.68
			C or D	0.36	0.43	0.49	0.68	1.43					
			Α	0.32	0.34	0.35	0.48						
D	48.0%	0.48	В	0.36	0.39	0.45	0.65		2.17	0.36	0.43	0.49	0.68
			C or D	0.36	0.43	0.49	0.68	2.17					
			Α	0.32	0.34	0.35	0.48						
E	48.0%	0.48	В	0.36	0.39	0.45	0.65		1.51	0.36	0.43	0.49	0.68
			C or D	0.36	0.43	0.49	0.68	1.51					
			Α	0.32	0.34	0.35	0.48						
Н	48.0%	0.48	В	0.36	0.39	0.45	0.65		0.32	0.36	0.43	0.49	0.68
			C or D	0.36	0.43	0.49	0.68	0.32					

 CORE Project #:
 19-165

 Prepared By:
 NDW

TIME OF CONCENTRATION CALCULATIONS

-REFERENCE UDFCD Vol.1 Section 2.4 NRCS Conveyance factors, K -REFERENCE UDFCD Vol.1 RUNOFF Table 6-2

SF-2 Heavy Meadow 2.50 Short Grass Pasture & Lawns 7.00 Grassed Waterway 15.00

Tillage/field 5.00 10.00 Paved Area & Shallow Gutter 20.00 Nearly Bare Ground SUB-BASIN INITIAL / OVERLAND CHANNEL / TRAVEL TIME T(c) CHECK FINAL DATA TIME (URBANIZED BASINS) T(c) T(†) DRAIN AREA C(5) Length Elev Slope T(i) Length Elev Slope Coeff. Velocity T(†) COMP. % IMPER-USDCM **VIOUS BASIN** Change % Change Eq. 6-5 min fps min. T(c) ac. min. 0.40 0.37 115 100 3.5 3.5 20.0 3.7 0.4 8.8 19.6 8.8 EA-1 5.5 4.8 8.4 41.4% 2.73 0.78 10.2 2.9 2.8 8.7 90.5% EB-2 132 2.0 1.5 5.8 490 2.1 20.0 13.2 8.7 2.0% OF-1 0.02 0.05 23 5.5 23.9 3.2 0 0.0 20.0 3.2 5.0 9.2 OF-2 0.25 0.15 84 4.3 5.1 9.2 0 0.0 20.0 9.2 14.5% В 0.86 0.43 30 0.6 2.0 5.3 650 13.0 2.0 20.0 2.8 3.8 9.1 48.0% 22.7 9.1 С 1.43 0.43 65 1.3 2.0 7.8 530 10.4 2.0 20.0 2.8 3.2 10.9 48.0% 21.9 10.9 2.17 13.0 2.8 3.9 14.0 48.0% 22.8 D 0.43 110 2.2 2.0 10.1 660 2.0 20.0 14.0 1.51 0.43 50 1.0 2.0 410 12.4 3.0 20.0 3.5 2.0 8.8 48.0% 20.3 8.8 6.8 7.5 Н 0.32 0.43 100 2.0 2.0 9.6 150 5.0 20.0 4.5 0.6 10.2 48.0% 18.6 10.2

 CORE Project #:
 19-165

 Prepared By:
 NDW

RATIONAL METHOD PEAK RUNOFF

5-Year STORM Rainfall Depth-Duration-Frequency (1-hr) = 1.42

SF-3

-REFERENCE UDFCD Vol.1 EQ 5-1 & EQ 6-1

BASI	N INFORMA	TON		DIRECT RUNOFF				
DESIGN	DRAIN	AREA	5yr Runoff	T(c)	СхА		Q	
POINT	BASIN	ac.	COEFF	min		in/hr	cfs	
EA	EA-1	0.40	0.37	8.8	0.15	4.03	0.6	
EB	EB-2	2.73	0.78	8.7	2.12	4.06	8.6	
01	OF-1	0.02	0.05	5.0	0.00	4.82	0.0	
O2	OF-2	0.25	0.15	9.2	0.04	3.97	0.2	
2	В	0.86	0.43	9.1	0.37	3.98	1.5	
3	С	1.43	0.43	10.9	0.61	3.71	2.3	
4	D	2.17	0.43	14.0	0.93	3.33	3.1	
5	Е	1.51	0.43	8.8	0.65	4.04	2.6	
8	Н	0.32	0.43	10.2	0.14	3.81	0.5	

 CORE Project #:
 19-165

 Prepared By:
 NDW

RATIONAL METHOD PEAK RUNOFF

100-YR STORM

SF-3 Rainfall Depth-Duration-Frequency (1-hr) = 2.71

-REFERENCE UDFCD Vol.1 EQ 5-1 & EQ 6-1

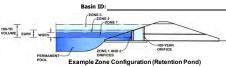
ВА	SIN INFORMATO	NC		DIRECT RUNOFF				
DESIGN POINT	DRAIN BASIN	AREA	100yr RUNOFF COEFF	T(c)		ı	Q	
		ac.	С	min	СхА	in/hr	cfs	
EA	EA-1	0.40	0.65	8.83	0.26	7.69	1.99	
EB	EB-2	2.73	0.86	8.67	2.33	7.74	18.06	
01	OF-1	0.02	0.49	5.00	0.01	9.19	0.10	
O2	OF-2	0.25	0.54	9.17	0.13	7.58	1.02	
2	В	0.86	0.68	9.11	0.59	7.60	4.45	
3	С	1.43	0.68	10.93	0.98	7.07	6.90	
4	D	2.17	0.68	14.03	1.48	6.35	9.38	
5	Е	1.51	0.68	8.78	1.03	7.70	7.92	
8	Н	0.32	0.68	10.20	0.22	7.27	1.59	



APPENDIX B HYDRAULIC CALCULATIONS

DETENTION BASIN STAGE-STORAGE TABLE BUILDER

MHFD-Detention, Version 4.03 (May 2020)



Watershed Information

Selected BMP Type =	EDB	
Watershed Area =	9.42	acres
Watershed Length =	1,500	ft
Watershed Length to Centroid =	800	ft
Watershed Slope =	0.025	ft/ft
Watershed Imperviousness =	60.00%	percent
Percentage Hydrologic Soil Group A =	0.0%	percent
Percentage Hydrologic Soil Group B =	0.0%	percent
Percentage Hydrologic Soil Groups C/D =	100.0%	percent
Target WQCV Drain Time =	40.0	hours
Location for 1-br Painfall Denths -	Thornton - Civ	ic Contar

After providing required inputs above including 1-hour rainfall depths, click 'Run CUHP' to generate runoff hydrographs using

the embedded Colorado Urban Hydrograph Procedure.									
Water Quality Capture Volume (WQCV) =	0.185	acre-feet							
Excess Urban Runoff Volume (EURV) =	0.543	acre-feet							
2-yr Runoff Volume (P1 = 1 in.) =	0.463	acre-feet							
5-yr Runoff Volume (P1 = 1.42 in.) =	0.772	acre-feet							
10-yr Runoff Volume (P1 = 1.68 in.) =	0.977	acre-feet							
25-yr Runoff Volume (P1 = 2 in.) =	1.257	acre-feet							
50-yr Runoff Volume (P1 = 2.35 in.) =	1.545	acre-feet							
100-yr Runoff Volume (P1 = 2.71 in.) =	1.865	acre-feet							
500-yr Runoff Volume (P1 = 3 in.) =	2.106	acre-feet							
Approximate 2-yr Detention Volume =	0.406	acre-feet							
Approximate 5-yr Detention Volume =	0.658	acre-feet							
Approximate 10-yr Detention Volume =	0.761	acre-feet							
Approximate 25-yr Detention Volume =	0.849	acre-feet							
Approximate 50-yr Detention Volume =	0.915	acre-feet							
Approximate 100-yr Detention Volume =	1.042	acre-feet							

Define	7ones	and	Rasin	Geometry

Jerine Zones and Basin Geometry		
Zone 1 Volume (WQCV) =	0.185	acre-feet
Zone 2 Volume (EURV - Zone 1) =	0.357	acre-feet
Zone 3 Volume (100-year - Zones 1 & 2) =	0.500	acre-feet
Total Detention Basin Volume =	1.042	acre-feet
Initial Surcharge Volume (ISV) =	user	ft ³
Initial Surcharge Depth (ISD) =	user	ft
Total Available Detention Depth (H _{total}) =	user	ft
Depth of Trickle Channel (H _{TC}) =	user	ft
Slope of Trickle Channel $(S_{TC}) =$	user	ft/ft
Slopes of Main Basin Sides (Smain) =	user	H:V
Basin Length-to-Width Ratio $(R_{L/W}) =$	user	

Initial Surcharge Area $(A_{ISV}) =$	user	ft ²
Surcharge Volume Length $(L_{ISV}) =$	user	ft
Surcharge Volume Width $(W_{ISV}) =$	user	ft
Depth of Basin Floor (H_{FLOOR}) =	user	ft
Length of Basin Floor (L_{FLOOR}) =	user	ft
Width of Basin Floor $(W_{FLOOR}) =$	user	ft
Area of Basin Floor $(A_{FLOOR}) =$	user	ft ²
Volume of Basin Floor (V _{FLOOR}) =	user	ft ³
Depth of Main Basin (H _{MAIN}) =	user	ft
Length of Main Basin $(L_{MAIN}) =$	user	ft
Width of Main Basin (W_{MAIN}) =	user	ft
Area of Main Basin $(A_{MAIN}) =$	user	ft ²
Volume of Main Basin $(V_{MAIN}) =$	user	ft ³
Calculated Total Basin Volume (V_{total}) =	user	acre-fee

-								
_	Depth Increment =		l _{ft}					
	Stage - Storage Description	Stage (ft)	Optional Override Stage (ft)	Length (ft)	Width (ft)	Area (ft²)	Optional Override Area (ft ²)	Area (acre
5318.69			0.00				50	0.001
	5319		0.31	-			4,290	0.098
	5320		1.31	-		-	7,140	0.164
	5321	+	2.31	1	1	-	11,510	0.264
	5322		3.31	-		-	13,460	0.309
	5323		4.31	-		-	15,630	0.359
	5324		5.31	-		-	18,030	0.414
	5324.5		5.81	-			19,000	0.436
				-		-		
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Volume (ft 3)

672

6,387

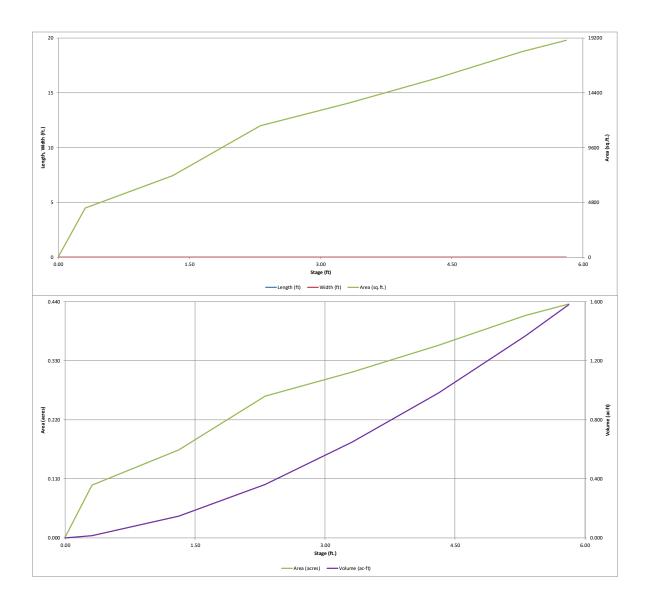
Volume (ac-ft)

0.015

0.147

		5320	-	1.31	-	-	-	7,140	0.164	6,387	0.147
		5321		2.31	-	-	-	11,510	0.264	15,712	0.361
		5322		3.31	-		-	13,460	0.309	28,197	0.647
		5323		4.31	-		-	15,630	0.359	42,742	0.981
		5324		5.31	-		-	18,030	0.414	59,572	1.368
		5324.5		5.81			-	19,000	0.436	68,830	1.580
					-		-				
					-		-				
					-	1	-				
			-		-		-				
					-		-				
					-		-				
Optional Use	r Overrides						-				
	acre-feet				-		-				
					-		-				
	acre-feet										
1.00	inches				-	1	-				
1.42	inches						-				
1.68	inches						-				
2.00	inches				-		-				
2.35	inches				-		-				
2.71	inches				-		-				
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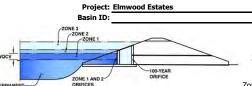
MHFD-Detention_v4 03 -EE, Basin 3/11/2021, 10:12 AM



M#FD-Detention_v4 03 -EE, Basin 3/11/2021, 10:12 AM

DETENTION BASIN OUTLET STRUCTURE DESIGN

MHFD-Detention, Version 4.03 (May 2020)



	Estimated	Estimated	
	Stage (ft)	Volume (ac-ft)	Outlet Type
Zone 1 (WQCV)	1.54	0.185	Orifice Plate
Zone 2 (EURV)	2.97	0.357	Orifice Plate
one 3 (100-year)	4.48	0.500	Weir&Pipe (Restrict
	Total (all zones)	1.042	

User Input: Orifice at Underdrain Outlet (typically used to drain WQCV in a Filtration BMP)

Underdrain Orifice Invert Depth = ft (distance below the filtration media surface) N/A Underdrain Orifice Diameter = N/A inches

	Calculated Parame	ters for Underdrain
Underdrain Orifice Area =	N/A	ft ²
Underdrain Orifice Centroid =	N/A	feet

User Input: Orifice Plate with one or more orifices or Elliptical Slot Weir (typically used to drain WQCV and/or EURV in a sedimentation BMP)

Invert of Lowest Orifice = 0.00 ft (relative to basin bottom at Stage = 0 ft) Depth at top of Zone using Orifice Plate = 2.97 ft (relative to basin bottom at Stage = 0 ft) Orifice Plate: Orifice Vertical Spacing = 11.90 inches Orifice Plate: Orifice Area per Row = 1.70 sq. inches (diameter = 1-7/16 inches)

Example Zone Configuration (Retention Pond)

n BMP)	Calculated Parame	ters for Plate
WQ Orifice Area per Row =	1.181E-02	ft ²
Elliptical Half-Width =	N/A	feet
Elliptical Slot Centroid =	N/A	feet
Elliptical Slot Area =	N/A	ft ²

<u>User Input: Stage and Total Area of Each Orifice Row (numbered from lowest to highest)</u>

	Row 1 (required)	Row 2 (optional)	Row 3 (optional)	Row 4 (optional)	Row 5 (optional)	Row 6 (optional)	Row 7 (optional)	Row 8 (optional)
Stage of Orifice Centroid (ft)	0.00	0.99	1.98					
Orifice Area (sq. inches)	1.70	1.70	1.70					

	Row 9 (optional)	Row 10 (optional)	Row 11 (optional)	Row 12 (optional)	Row 13 (optional)	Row 14 (optional)	Row 15 (optional)	Row 16 (optional)
Stage of Orifice Centroid (ft)								
Orifice Area (sq. inches)								

User Input: Vertical Orifice (Circular or Rectangular)

	Not Selected	Not Selected	
Invert of Vertical Orifice =	N/A	N/A	ft (relat
Depth at top of Zone using Vertical Orifice =	N/A	N/A	ft (relat
Vertical Orifice Diameter =	N/A	N/A	inches

ft (relative to basin bottom at Stage = 0 ft) ft (relative to basin bottom at Stage = 0 ft)

	Calculated Parameters for Vertical Orifice				
	Not Selected	Not Selected			
Vertical Orifice Area =	N/A	N/A	ft ²		
Vertical Orifice Centroid =	N/A	N/A	feet		

Input: Overflow Weir (Dropbox with Flat or Sloped Grate and Outlet Pipe OR Rectangular/Trapezoidal Weir (and No Outlet Pipe) Calculated Parameters for Overflow Weir									
	Zone 3 Weir	Not Selected			Zone 3 Weir	Not Selected			
Overflow Weir Front Edge Height, Ho =	2.97	N/A	ft (relative to basin bottom at Stage :	= 0 ft) Height of Grate Upper Edge, H_t =	3.97	N/A	feet		
Overflow Weir Front Edge Length =	2.00	N/A	feet	Overflow Weir Slope Length =	4.12	N/A	feet		
Overflow Weir Grate Slope =	4.00	N/A	H:V	Grate Open Area / 100-yr Orifice Area =	12.14	N/A			
Horiz. Length of Weir Sides =	4.00	N/A	feet	Overflow Grate Open Area w/o Debris =	5.77	N/A	ft ²		
Overflow Grate Open Area % =	70%	N/A	%, grate open area/total area	Overflow Grate Open Area w/ Debris =	2.89	N/A	ft ²		
Debris Clogging % =	50%	N/A	%						

<u>User Input: Outlet Pipe w/ Flow Restriction Plate (Circular Orifice</u>, Restrictor Plate. or Rectangular Orifice)

ser input: Outlet Pipe w/ Flow Restriction Plate	e (Circular Office, F	restrictor Plate, or	Rectangular Office)	Calculated Parameters	s for Outlet Pipe w/	Flow Restriction Pl	<u>ale</u>
	Zone 3 Restrictor	Not Selected			Zone 3 Restrictor	Not Selected	
Depth to Invert of Outlet Pipe =	5.00	N/A	ft (distance below basin bottom at Stage = 0 ft)	Outlet Orifice Area =	0.48	N/A	ft ²
Outlet Pipe Diameter =	12.00	N/A	inches	Outlet Orifice Centroid =	0.33	N/A	feet
Restrictor Plate Height Above Pipe Invert =	7.00		inches Half-Central Angle o	of Restrictor Plate on Pipe =	1.74	N/A	radians

User Input: Emergency Spillway (Rectangular or Trapezoidal)

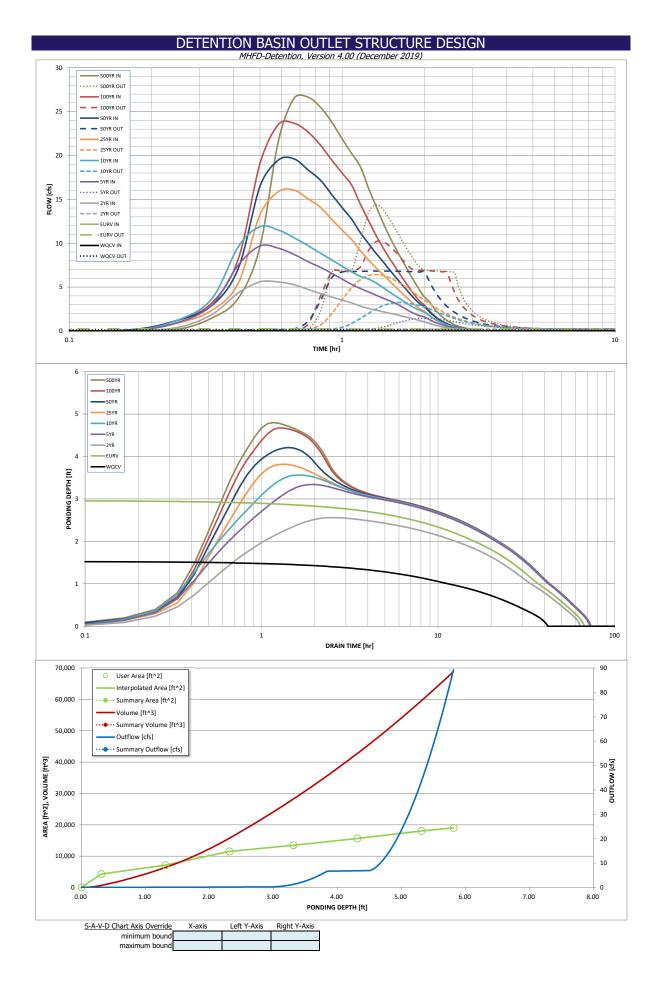
ipaci Emergency opinival (necessingular of	rrupczoladij	
Spillway Invert Stage=	4.50	ft (relative to basin bottom at Stage = 0 ft)
Spillway Crest Length =	14.00	feet
Spillway End Slopes =	4.00	H:V
Freeboard above Max Water Surface =	1.00	feet

Calculated Parameters for Spillway

Spillway Design Flow Depth=	0.62	feet
Stage at Top of Freeboard =	6.12	feet
Basin Area at Top of Freeboard =	0.44	acres
Basin Volume at Top of Freeboard =	1.58	acre-ft

Routed Hydrograph Results	The user can ove	rride the default CUI	HP hydrographs an	nd runoff volumes b	y entering new valu	ies in the Inflow Hy	vdrographs table (C	Columns W through	AF).
Design Storm Return Period =	WQCV	EURV	2 Year	5 Year	10 Year	25 Year	50 Year	100 Year	500 Year
One-Hour Rainfall Depth (in) =	N/A	N/A	1.00	1.42	1.68	2.00	2.35	2.71	3.00
CUHP Runoff Volume (acre-ft) =	0.185	0.543	0.463	0.772	0.977	1.257	1.545	1.865	2.106
Inflow Hydrograph Volume (acre-ft) =	N/A	N/A	0.463	0.772	0.977	1.257	1.545	1.865	2.106
CUHP Predevelopment Peak Q (cfs) =	N/A	N/A	0.3	2.3	3.5	6.2	8.2	10.7	12.4
OPTIONAL Override Predevelopment Peak Q (cfs) =	N/A	N/A							
Predevelopment Unit Peak Flow, q (cfs/acre) =	N/A	N/A	0.04	0.25	0.37	0.66	0.87	1.14	1.32
Peak Inflow Q (cfs) =	N/A	N/A	5.6	9.7	11.9	16.1	19.6	23.7	26.6
Peak Outflow Q (cfs) =	0.1	0.2	0.2	1.4	3.2	6.4	6.8	10.2	14.4
Ratio Peak Outflow to Predevelopment Q =	N/A	N/A	N/A	0.6	0.9	1.0	8.0	0.9	1.2
Structure Controlling Flow =	Plate	Overflow Weir 1	Plate	Overflow Weir 1	Overflow Weir 1	Overflow Weir 1	Outlet Plate 1	Spillway	Spillway
Max Velocity through Grate 1 (fps) =	N/A	N/A	N/A	0.2	0.5	1.1	1.1	1.2	1.2
Max Velocity through Grate 2 (fps) =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Time to Drain 97% of Inflow Volume (hours) =	38	59	57	62	60	58	55	53	51
Time to Drain 99% of Inflow Volume (hours) =	40	64	61	68	67	66	65	64	63
Maximum Ponding Depth (ft) =	1.53	2.97	2.56	3.34	3.56	3.82	4.21	4.67	4.80
Area at Maximum Ponding Depth (acres) =	0.19	0.29	0.28	0.31	0.32	0.33	0.35	0.38	0.39
Maximum Volume Stored (acre-ft) =	0.185	0.545	0.428	0.657	0.726	0.811	0.946	1.114	1.160

MHFD-Detention_v4 03 -EE, Outlet Structure 3/11/2021, 10:14 AM



MHFD-Detention_v4 03 -EE, Outlet Structure 3/11/2021, 10:14 AM

DETENTION BASIN OUTLET STRUCTURE DESIGN

Outflow Hydrograph Workbook Filename:

Inflow Hydrographs

The user can override the calculated inflow hydrographs from this workbook with inflow hydrographs developed in a separate program.

ĺ	SOURCE	CUHP	CUHP	CUHP	CUHP	CUHP	CUHP	CUHP	CUHP	CUHP
Time Interval									100 Year [cfs]	
	TIME	WQCV [cfs]	EURV [cfs]	2 Year [cfs]		10 Year [cfs]				
5.00 min	0:00:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0:05:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0:10:00	0.00	0.00	0.00	0.00	0.00	0.00	0.12	0.08	0.19
	0:15:00 0:20:00	0.00	0.00	0.41	0.97	1.25	0.90	1.22	1.25	1.48
	0:25:00	0.00	0.00	1.87 4.35	2.95 7.52	3.68 9.62	2.35 5.46	2.90 7.15	3.21 8.22	3.74 9.62
	0:30:00	0.00	0.00	5.59	9.68	11.89	13.27	16.49	19.07	21.64
	0:35:00	0.00	0.00	5.58	9.43	11.50	15.86	19.47	23.53	26.52
	0:40:00	0.00	0.00	5.26	8.71	10.62	16.05	19.61	23.68	26.64
	0:45:00	0.00	0.00	4.72	7.90	9.72	15.04	18.36	22.67	25.49
	0:50:00	0.00	0.00	4.25	7.24	8.84	14.07	17.16	21.16	23.79
	0:55:00	0.00	0.00	3.87	6.56	8.09	12.72	15.53	19.46	21.89
	1:00:00	0.00	0.00	3.52	5.90	7.38	11.50	14.05	17.99	20.23
	1:05:00	0.00	0.00	3.19	5.31	6.73	10.41	12.73	16.63	18.70
	1:10:00	0.00	0.00	2.83	4.84	6.22	9.13	11.19	14.42	16.24
	1:15:00	0.00	0.00	2.56	4.44	5.91	8.09	9.95	12.55	14.16
	1:20:00	0.00	0.00	2.36	4.06	5.46	7.16	8.81	10.84	12.24
	1:25:00 1:30:00	0.00	0.00	2.17	3.72	4.90	6.38	7.85	9.40	10.60
	1:35:00	0.00	0.00	2.00	3.40	4.38	5.61	6.88	8.16	9.20
	1:40:00	0.00	0.00	1.84 1.67	3.10 2.70	3.90 3.45	4.89 4.23	6.00 5.18	7.04 6.00	7.94 6.77
	1:45:00	0.00	0.00	1.51	2.70	3.03	3.61	4.42	5.04	5.68
	1:50:00	0.00	0.00	1.37	1.98	2.66	3.05	3.73	4.18	4.71
	1:55:00	0.00	0.00	1.18	1.75	2.38	2.56	3.14	3.45	3.89
	2:00:00	0.00	0.00	1.05	1.59	2.14	2.24	2.76	2.96	3.34
	2:05:00	0.00	0.00	0.85	1.30	1.75	1.78	2.19	2.32	2.63
	2:10:00	0.00	0.00	0.69	1.05	1.41	1.40	1.73	1.80	2.04
	2:15:00	0.00	0.00	0.56	0.84	1.14	1.10	1.36	1.39	1.58
	2:20:00	0.00	0.00	0.45	0.67	0.91	0.87	1.07	1.07	1.21
	2:25:00	0.00	0.00	0.36	0.54	0.72	0.68	0.84	0.82	0.92
	2:30:00	0.00	0.00	0.28	0.42	0.56	0.53	0.65	0.62	0.70
	2:35:00	0.00	0.00	0.22	0.33	0.43	0.41	0.50	0.47	0.54
	2:40:00 2:45:00	0.00	0.00	0.18 0.14	0.25 0.19	0.33 0.25	0.31 0.24	0.38	0.36 0.28	0.41
	2:50:00	0.00	0.00	0.14	0.15	0.20	0.19	0.23	0.22	0.25
	2:55:00	0.00	0.00	0.08	0.11	0.15	0.14	0.17	0.17	0.19
	3:00:00	0.00	0.00	0.05	0.08	0.11	0.10	0.13	0.12	0.14
	3:05:00	0.00	0.00	0.04	0.05	0.07	0.07	0.09	0.08	0.09
	3:10:00	0.00	0.00	0.02	0.03	0.04	0.04	0.05	0.05	0.06
	3:15:00	0.00	0.00	0.01	0.02	0.02	0.02	0.03	0.03	0.03
	3:20:00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01
	3:25:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	3:30:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	3:35:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	3:40:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	3:45:00 3:50:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	3:55:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	4:00:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	4:05:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	4:10:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	4:15:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	4:20:00 4:25:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	4:25:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	4:35:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	4:40:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	4:45:00 4:50:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	4:55:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	5:00:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	5:05:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	5:10:00 5:15:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	5:20:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	5:25:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	5:30:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	5:35:00 5:40:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	5:40:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	5:50:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	5:55:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	6:00:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

MHFD-Detention_v4 03 -EE, Outlet Structure 3/11/2021, 10:14 AM



APPENDIX C REFERENCE INFORMATION



DRAINAGE REPORT FOR SHERRELWOOD VILLAGE ADAMS COUNTY, CO

PREPARED FOR:

DELWEST DEVELOPMENT CORPORATION 155 SOUTH MADISON STREET DENVER, CO 80209 PHONE: 303-632-6755

CONTACT: DERRELL SCHREINER

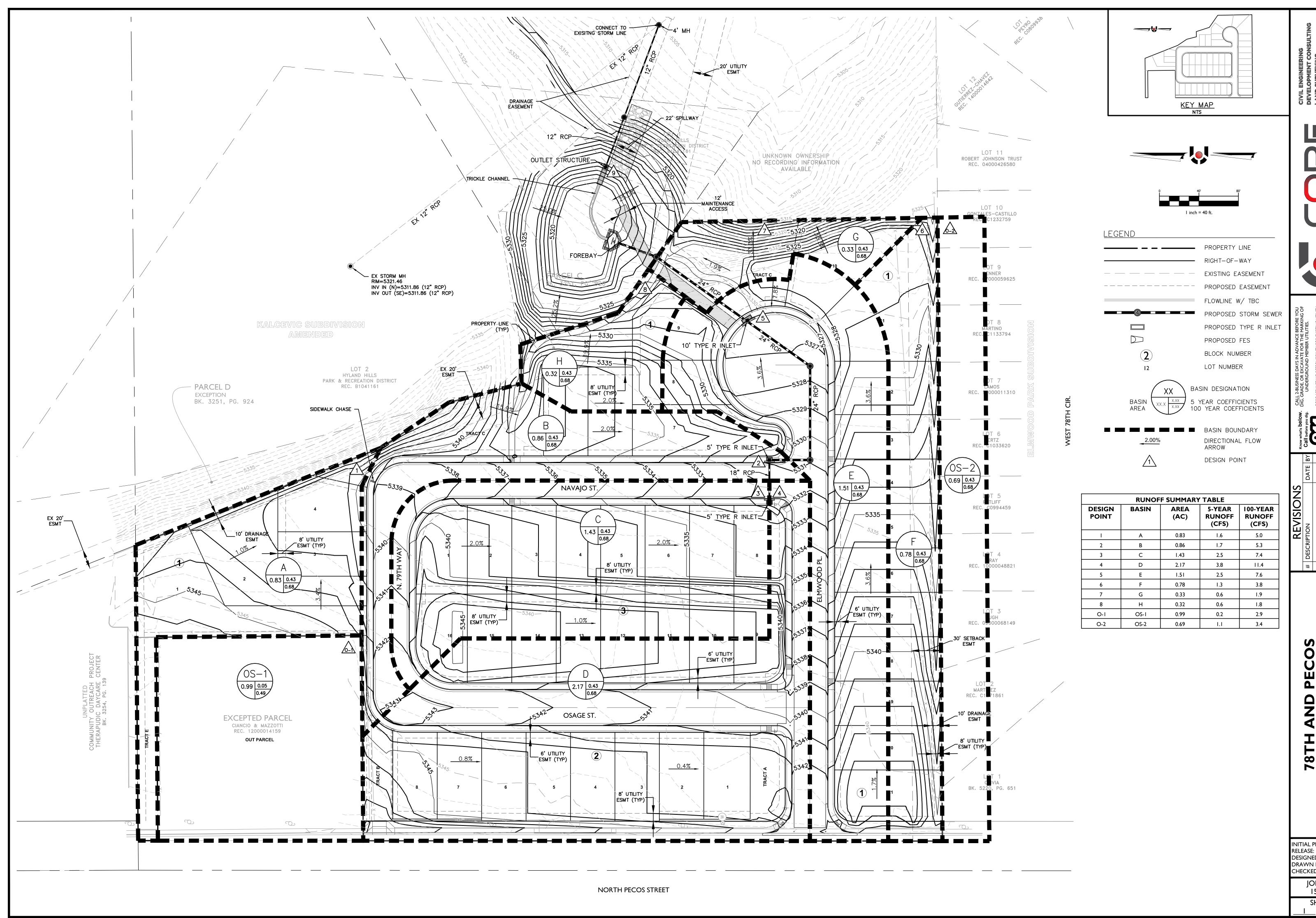
PREPARED BY:

CORE CONSULTANTS, INC.

1950 W. LITTLETON BOULEVARD, SUITE 109
LITTLETON, CO 80120
PHONE: 303-703-4444

CONTACT: DAVID FORBES
CORE PROJECT NUMBER: 15-018

JULY 21, 2017



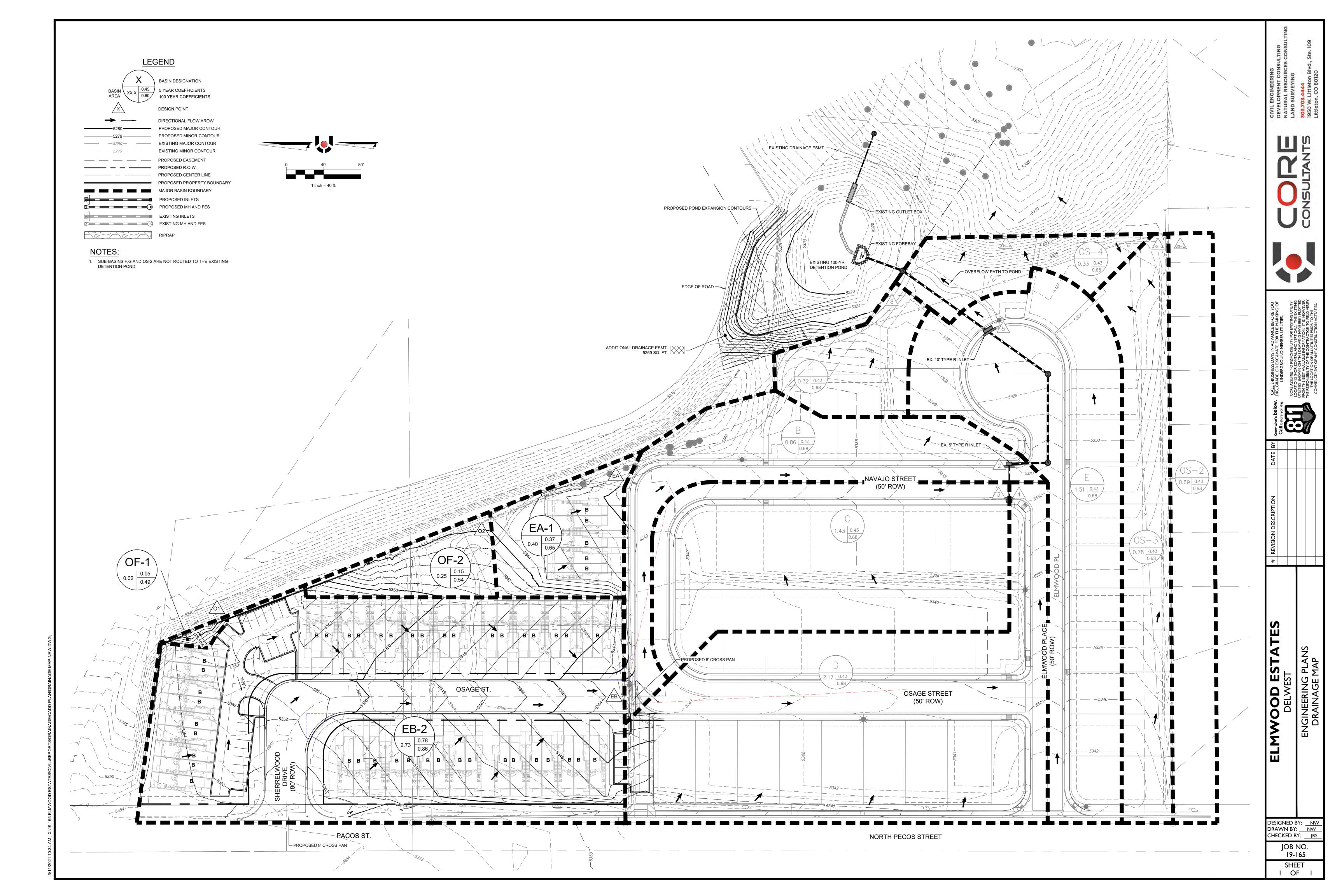
DOCUMENTS
PLAN
COLORADO 78TH AND I
CONSTRUCTION D
DRAINAGE F
ADAMS COUNTY, C

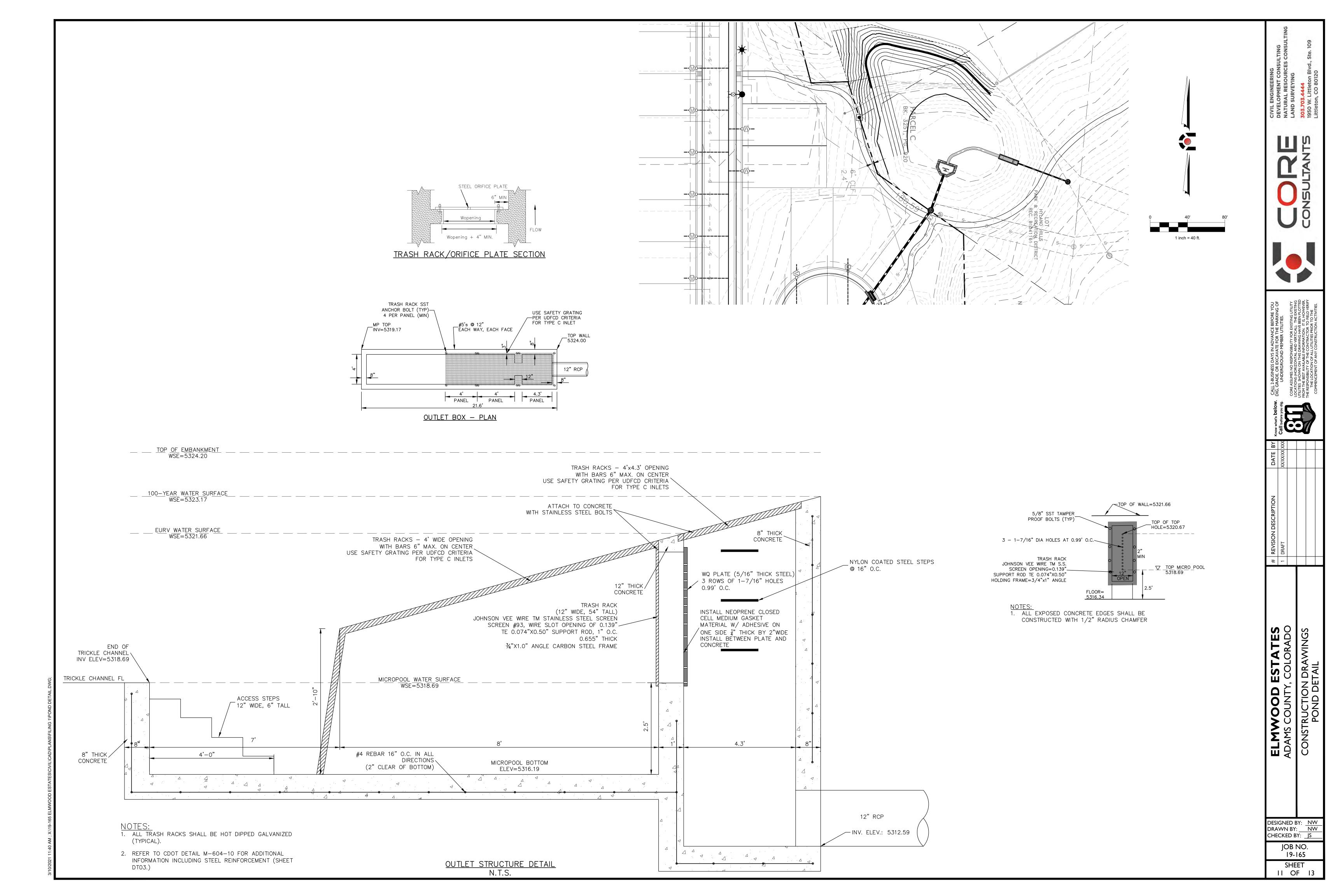
INITIAL PLAN
RELEASE: 5/16/2016
DESIGNED BY: JAF
DRAWN BY: JAF
CHECKED BY: DCF

JOB NO. 15-018 SHEET



APPENDIX D PROPOSED MAPS







OPERATION AND MAINTENANCE MANUAL FOR ELMWOOD ESTATES ADAMS COUNTY, CO

PREPARED FOR:

Delwest Development Corporation 155 South Madison Street Denver, CO 80209 Phone: 303-632-6755

CONTACT: DERRELL SCHREINER

PREPARED BY:

CORE CONSULTANTS, INC. 3473 S. BROADWAY
ENGLEWOOD, CO 80113
PHONE: 303-730-5964
CONTACT: NICK WADE

CORE PROJECT NUMBER: 19-165

OCTOBER 2021



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LIST OF APPENDICES

APPENDIX A - HYDROLOGIC CALCULATIONS

VICINITY MAP
INSPECTION REPORT FORM



I. GENERAL LOCATION AND DESCRIPTION

A. DESCRIPTION OF PROPERTY

Elmwood Estates is located at 8000 Pecos Street is currently undeveloped. The proposed improvements to the site include 47 single family townhomes, roadways, open space, and associated infrastructure. The site has naturally occurring slopes ranging from 1 to 35 percent and is covered with short grass and natural vegetation. The soils vary throughout the site and include Platner Loam (PIB), Samsil-Shingle complex (ShF) and Ulm Loam (UIC). These soil types are a part of Type C and D hydrologic soil group. The purpose of this manual is to ensure all stormwater facilities on the property are properly maintained and functioning as designed.

II. DRAINAGE BASINS

A. MAJOR DRAINAGE BASINS

The existing drainage patterns for the major basin will follow the historic patterns. Elmwood Estates will drain south towards an existing offsite detention pond within Hyland Hills Park and Recreation District property. The pond will outfall into an existing subsurface drainage system within Hyland Hills Park to a drainage system within Greenwood Blvd. and eventually discharge into Clear Creek.

The site falls within Zone X, as shown on the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) panel 08001C0584H.

III. STORMWATER MANAGEMENT FACILITY DESIGN

A. STORMWATER CONVEYANCE FACILITIES

The general concept for the drainage design is to maintain the historic drainage patterns and release rates for the site. By doing this, it reduces the impact to the existing channels and ultimately Clear Creek.

Runoff from the majority of the site will drain south and be collected by the existing stormwater inlets in Sherrelwood Village. Runoff will then be conveyed to the existing detention pond located adjacent to the site via the existing storm sewer system. An emergency overflow path through Tract C has been provided in the event an inlet clogs or is inundated. The existing detention pond will release at historic rates to an existing subsurface drainage system within Hyland Hills Park to a drainage system within Greenwood Blvd. and will ultimately discharge into Clear Creek. The existing detention pond will be expanded to accommodate the additional flows from the Elmwood Estates development.



B. WATER QUALITY ENHANCEMENT BEST MANAGEMENT PRACTICES

Water quality measures have been included in the design of the detention pond. The pond is designed as an extended detention basin which will incorporate structures which will release flows for the excess urban runoff volume (EURV), and the 100-year storm event. Water quality storage volume has been provided for the detention pond.

IV. FACILITY FEATURES

A. ULTIMATE CONDITION (EURV DETENTION POND)

- Sidewalk Chase
- Forebay
- Trickle Channel
- Type R Inlets
- Outlet Structure
 - 1. Trash Rack
 - 2. Water Quality Plate
 - 3. Orifice Plate
- Catchment area = 9.69 acres
- Impervious Area = 58.7%
- Storage Volume = 1.05 acre-ft

V. FACILITY OPERATIONS

A. NORMAL OPERATIONS

Normal operations following a storm will primarily consist of checking to make sure the pond outlet structure trash rack surrounding the outside of the outlet structure is clear of any debris. Also, the street inlets and chases should be checked to ensure no large tree branches or trash is present that could cause clogging further downstream.

B. EMERGENCY ACTION PLAN

In case of an emergency immediately evacuate all adjacent property owners and call 7840 Pecos Investments, LLC representative (720-708-4065). The HOA will assume maintenance of the pond and storm sewer facilities when it is created. The Adams County Transportation Department Operations Division (303-853-7137) should only be contacted in the case of a life-safety emergency situation and/or if any permitting is required to work in County ROW or easements.

C. REGULARLY SCHEDULED MAINTENANCE

Regular maintenance will be performed during the last week of October and the first week of April, where the outlet structure will need to be opened and cleared of all sediment and debris. During regular maintenance check to



ensure the outlet structure is not cracking or deforming in any manner. Check the forebays and concrete trickle channel leading to the outlet structure for trash or debris. Check to make sure the micropool is free of sediment and excess debris. Also, check the street inlets and sidewalk chases for excessive amounts of sediment or trash that could cause issues in the future.

VI. MAINTENANCE PLAN

A. DETENTION POND

It is critical to keep the pond outlet structure working properly at all times to ensure the safety of the public and most importantly adjacent property owners.

- Always check to make sure no obstructions are blocking the concrete trickle channel or forebays leading to the outlet structure.
- Check to make sure the outside trach rack is clear of any obstructions and water can flow freely into the structure.
- Open the outside trash rack of the outlet structure and make sure the water quality plate is clear and all orifice openings are free.
- While inside the outlet structure make sure the outlet pipe is clear and nothing is blocking the orifice plate covering the outlet pipe.
- Remove sediment from the forebay and trickle channel annually. The
 required frequency of sediment removal in the forebay may be as often
 as after each storm event.
- Sediment removal from the micropool is required once every one to four years, and should occur when the depth of the pool has been reduced to approximately 18 inches.
- Remove sediment from the bottom of the basin every 15 to 25 years or more frequently if needed.
- Repair basin inlets, outlets, trickle channels, and all other structural components required for the basin to operate as intended. Repair and vegetate eroded areas as needed following inspection.
- Remove debris and litter from the detention area as required to minimize clogging of the outlet.
- Mowing and Plant Care When starting from seed, mow native/drought tolerant grasses only when required to deter weeds during the first three years. Following this period, mowing of native/drought tolerant grass may stop or be reduced to maintain a height of no less than 6 inches (higher mowing heights are associated with deeper roots and greater drought tolerance). In general, mowing should be done as needed to maintain appropriate height and control weeds. Mowing of manicured grasses may vary from as frequently as weekly during the summer, to no mowing during the winter.



B. STREET INLETS (CDOT TYPE R INLETS)

- Check to ensure the flowline near the inlets and inlet grate is clear of debris.
- Open the manhole covers to the inlets and check to see the level of sediment and if any trash is clogging the inlet or outlet pipes. Remove sediment if flow is being restricted.

C. SIDEWALK CHASE

• Check to make sure the side walk chases are free and clear of all debris. Remove any trash or sediment present in or around all sidewalk chases.

D. DRAINAGE SWALES

 Check to make sure the swales are free and clear of all debris and/or obstructions. Remove any trash or sediment present in or around all drainage swales.

VII. UNSCHEDULED MAINTENANCE

If any unscheduled maintenance is needed contact 7840 Pecos Investments, LLC representative (720-708-4065).



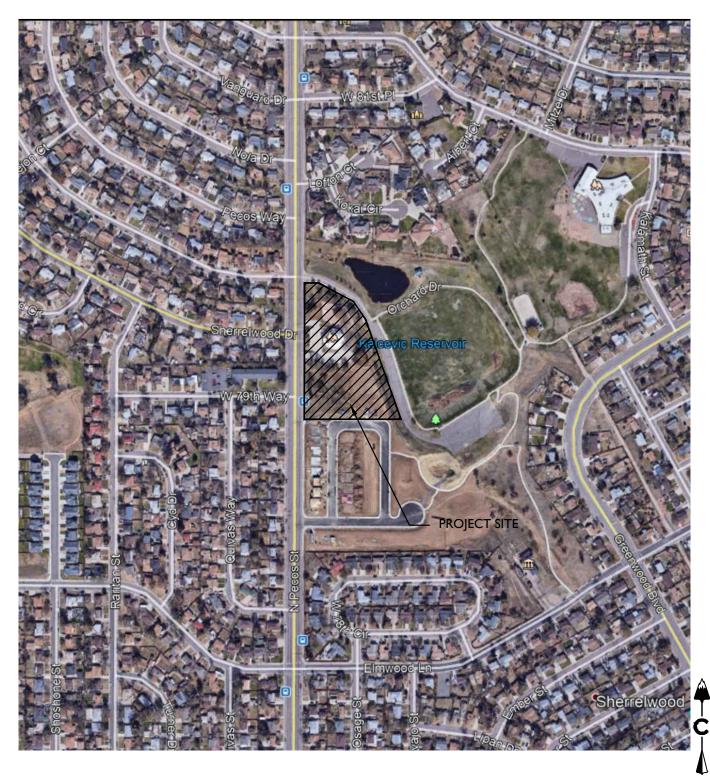
APPENDIX A

VICINITY MAP

MAINTENANCE MAP

INSPECTION REPORT FORM

VICINITY MAP ELMWOOD ESTATES (NOT TO SCALE)





ELMWOOD ESTATES VICINITY MAP

OF

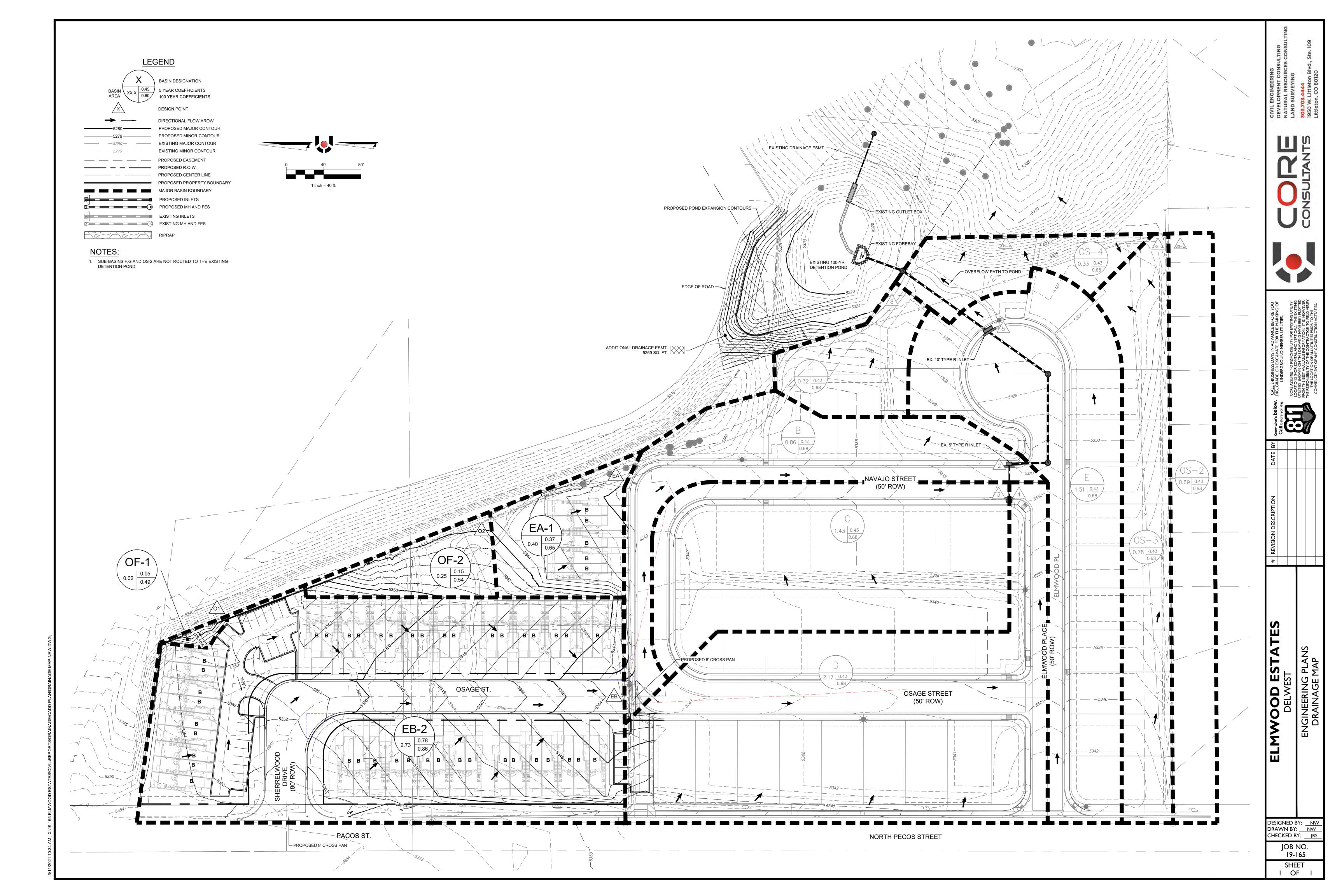
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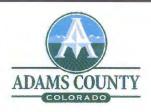
JOB NUMBER 19-165

SHEET NUMBER

CREATED BY: NDW

DATE: 3/11/21





EXTENDED DETENTION BASIN (EDB) MAINTENANCE FORM

bdivision/Business Name:	Completion Dat	Completion Date:					
bdivision/Business Address:		Contact Name:					
Maintenance Category: Circle All That Apply)	Routine	Restoration	Rehabilitation				
MAINTENANCE ACTIV	ITIES PERFORM	E D					
ROUTINE WORK MOWING TRASH/DEBRIS OUTLET WORKS WEED CONTRO MOSQUITO TRE ALGAE TREATM	S CLEANING (TRASH L (HERBICIDE APPLI ATMENT	RACK/WELL SCREEN) CATION)					
RESTORATION WORK		REHABILITATION	WORK				
EROSION REPA EROSION REPA INFLO TRICH VEGETATION RI TRICH TRICH UPPE BOTT REVEGETATION JET-VAC/CLEAR FORE	EBAY CLE CHANNEL DW IR DW POINT CLE CHANNEL EMOVAL/TREE THIN DW(S) KLE CHANNEL ER STAGE TOM STAGE II EING DRAINS EBAY ET WORKS	BO	UTLET WORKS PPER STAGE OTTOM STAGE PILLWAY . REPAIR				
ESTIMATED TOTAL MANHO	OURS:						
EQUIPMENT/MATERIAL US	ED:						
			The state of the s				
COMMENTS/ADDITIONAL I	NFO:						



Cost Opinion Worksheet

Probable Cost Spreadsheet for BMPs

Project Name: Elmwood Estates	Date: 9/30/21		

BMP					Installation		
No.	ВМР	Detail	ID	Unit	Unit Cost	Quantity	Cost
1	Check Dam	EC-12	CD	LF	\$24.00		\$0.00
2	Construction Fence	SM-3	AF	LF	\$2.00		\$0.00
3	Earth Dike/Diversion Swale	EC-10	DD	LF	\$1.60		\$0.00
4	Erosion Control Blanket	EC-6	ECB	SY	\$5.00		\$0.00
5	Inlet Protection	SC-6	IP	LF	\$20.00		\$0.00
6	Mulching	EC-4	MU	AC	\$500.00		\$0.00
7	Reinforced Check Dam	EC-12	RCD	LF	\$36.00		\$0.00
8	Rock Socks	SC-5	RS	LF	\$10.00		\$0.00
9	Sediment Control Log	SC-2	SCL	LF	\$2.00		\$0.00
10	Permanent Seeding	EC-2	PS	AC	\$1,250.00	2.67	\$3,337.50
11	Silt Fence	SC-1	SF	LF	\$2.00	1060	\$2,120.00
12	Surface Roughening	EC-1	SR	AC	\$600.00		\$0.00
13	Temporary Outlet Protection	EC-8	TOP	EA	\$250.00		\$0.00
14	Vehicle Tracking Control	SM-4	VTC	EA	\$1,000.00	2	\$2,000.00
15	Sediment Basin	SC-7	SB	EA	\$2,500.00		\$0.00
16	Stabilized Staging Area	SM-6	SSA	EA	\$1,000.00	1	\$1,000.00
17	Others:						\$0.00
18							\$0.00

Subtotal \$8,457.50
Contingency (10% of Subtotal) \$845.75

Total Cost of BMPs \$9,303.25

Official Use Only	
SWQ Permit Number: CSI-	
Approved by:	
Date:	

Stormwater Management Plan (SWMP)

for construction activities at:

Elmwood Estates 8000 N Pecos Denver, CO 80221

SWMP Preparation Date: 9/14/21
SWMP Revision Date: Insert Date

Docs. #3697430-v2

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Basic Acronyms:

SWMP: Stormwater Management Plan = **ESCP**: Erosion and Sediment Control Plan = **SWPPP**:

Stormwater Pollution Prevention Plan **EC Plan**: Erosion Control Plan (Site Map)

CM: Control Measures = **BMP**: Best Management Practices

MS4: Municipal Separate Storm Sewer System

Objectives:

The SWMP identifies potential pollutant sources that may contribute to stormwater pollution, and identifies CMs to reduce or eliminate water quality impacts during construction activities. The goal is to keep sediments on-site. The most efficient construction site control measures are those that prevent erosion from occurring.

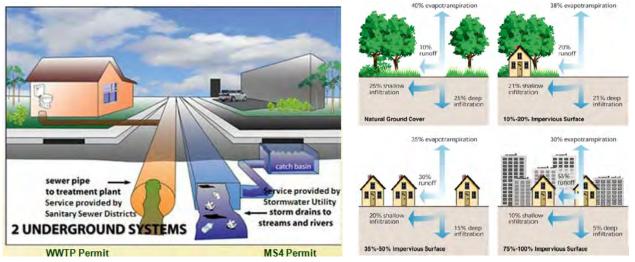
The SWMP must be completed and implemented prior to project breaking ground, and revised by the contractor's Qualified Stormwater Manager as construction proceeds, to accurately reflect the site conditions and practices until final stabilization is reached. The SWMP intends to meet the minimum requirements to comply with the State of Colorado CDPS General Permit for Stormwater Discharges Associated with Construction Activity, and local unincorporated Adams County regulations.

General Instructions:

To fill out the Stormwater Management Plan (SWMP) Template, <u>select</u> (double right click) the <u>blue</u> <u>text</u> and enter applicable information. If there is a blue box ____, check when applicable. **Doo not leave blank sections.** If a section is "Not Applicable", <u>select</u> the <u>blue text</u> and enter "N/A".

Disclaimer: This document has been modified from EPA SWPPP Template (September 17, 2007) by Adams County in an effort to cover permit requirements. It is ultimately the Permittee's responsibility to complete, insert, update, modify, delete or add site specific information to ensure compliance with federal, state and local regulations. The information contained in this template is for general information purposes only. The information is provided by the County and while the County endeavors to keep the information up to date and correct, the County makes no representations or warranties of any kind, express or implied, about the completeness, accuracy, reliability, suitability or any other aspect of this template or the information contained in the template for any purpose. The user is responsible for compliance with all applicable laws and regulations. Any reliance placed on such information is therefore strictly at your own risk. In making this template available, no client, advisory, fiduciary or professional relationship is implicated or established and neither the County nor any other person is, in connection with this template, engaged in rendering legal, advisory, consulting or other professional services or advice. The County reserves the right at any time and without notice to change, amend, or cease publication of this template.

Stormwater is runoff water from rain or snowmelt that does not infiltrate into the ground, and instead flows across the land discharging directly into the environment without treatment.

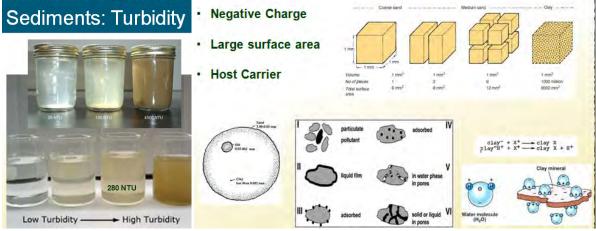


Runoff from construction sites can contain pollutants when runoff moves over and across disturbed areas discharging them into lakes, rivers, wetlands, and into MS4 systems.



Unmanaged construction soils erodes about 6 times more than farming activities

Typically, **sediment** from disturbed areas is the main pollutant source at construction sites.



Sediments easily attach to other pollutants and acts as a carrier, as well as impacting clarity of water which is critical for aquatic life and fish species spawning areas preservation.

SECTION 1: SITE EVALUATION, ASSESSMENT, AND PLANNING

1.1 Project/Site Information

Instructions:

- Include basic site information identifying general project information, permit numbers.
- Include a project vicinity map in **Appendix 1**.
- Attach the State of Colorado CDPS Stormwater Construction Permit Certification Page in Appendix 2.

- Attach a copy of the City/County Stormwater Permit in Appendix 2.

Project/Site Name: Elmwood Estates

Project Location: 8000 N Pecos

City: Denver State: CO ZIP Code: 80221

Subdivision: Sherrelwood

State of Colorado - CDPS Stormwater Discharge Permit associated with Construction Activities

Permit Number: COR-04 Insert Permit Number

Adams County Stormwater Quality (SWQ) Permit: Insert CSI Number

1.2 Contact Information/Responsible Parties

Instructions:

List the owner, operator, stormwater contact, and organization that prepared the SWMP. Complete by selecting the blue text, double right click, then type in the applicable information.

Owner:

Delwest Development Corp

Joe DelZotto

155 S. Madison St., Suite 326 Denver, CO 80209

Office #: 720-708-7065 Cell #: 720-708-7065 Email: jad@delwest.com

Site Superintendent:

Delwest Development Corp

TK Lightfoot

155 S. Madison St., Suite 326 Denver, CO 80209

Qualified Stormwater Manager: Individual responsible for implementing, maintaining, and revising the SWMP, knowledgeable in the principles and practices of ESC and pollution prevention, with the skills to:

- Assess conditions at construction sites that could impact stormwater quality, and
- Assess the effectiveness of stormwater controls measures (CMs).

Delwest Development Corp

Joe DelZotto

President

155 S. Madison St., Suite 326 Denver, CO 80209

Office #: 720-708-7065 Cell #: 720-708-7065 Email: jad@delwest.com

Qualified Stormwater Manager's area of control (if more than 1 operator at site):

Entire site

SWMP prepared by:

CORE Consultants

Nick Wade

3473 S Broadway, Englewood, CO 80113

1.3 Nature and Sequence of Construction Activity

Instructions:

- Describe the scope of the construction activity at the project site.
- Identify the purpose of the construction activity, include estimated dates to begin and conclude.
- Describe the sequence for major construction activities at each phase of the construction project.

Project scope of work:

The proposed improvements to the site include 47 town homes, roadways, open space and associated infrastructure on approximately 3.29 acres. The existing water quality pond south of the site will be expanded to accommodate this development.

Type of construction activity:	
Residential Commercial Industrial Road Construction	Linear Utility
Other (please specify): INSERT TEXT HERE	
Estimated Project Start Date: Nov. 2021	
Estimated Project Completion Date: Dec. 2021	
Estimated Project Final Stabilization: Dec. 2021	
Major phases of construction:	
Initial Control Measures (CM)	
Demolition	
Grading	
☐ Utility Installation	
Interim CM	
Road Construction	
Vertical Construction	
Final Stabilization CM	
Other (please specify such as Over-Excavation, etc.): INSERT TEXT HERE	
Earth Work Summary:	
Cut: 3785 (CY)	
Fill: 5460 (CY)	
If excess dirt: n/a	
If importing dirt: TBD	
Is the off-site borrow/fill area within ¼ mile of the project? No	
s the on-site borrow/iii area within ¼ thile of the project? No	

If yes: either incorporate off-site area to the project's SWMP/EC plan, or submit a separate SWMP/EC Plan for the off-site area.

1.4 Soils, Drainage Patterns, and Vegetation

Instructions:

- Describe the existing soil conditions at the construction site including soil type(s), drainage patterns, and other topographic features that might affect erosion and sediment control.
- Describe the pre-disturbance vegetation and include color pre-disturbance photos in **Appendix 3**.

Soil type:

Platner loam, Samsil-Shingle complex, Ulm loam

Source if this data:

NRCS Soils

Soil's erosion potential:

moderate

Top Soil:

Describe quality of site's existing topsoil?

Type C & D hydrologic group

Depth of top soil that will be preserved?

6"

Where will the top-soil be stored during construction?

Near the stabilized staging area

Where will the top soil be ultimately re-utilized?

Open space

Drainage pattern - Describe existing drainage patterns, slopes and changes due to the proposed grading:

Site will follow historical drainage patterns and sheet flow east and south.

Vegetation:

Describe type of pre-disturbance vegetation:

Short grass and natural vegetation

Estimate the percentage of pre-existing vegetation cover of the entire site (%):

70%

Describe method for determining the percentage:

Aerial photos and CAD

1.5 Construction Site Estimates

Instructions:

- Estimate total project area.
- Estimate the area to be disturbed by excavation, grading, or other construction activities, including <u>off-site</u> improvements, pavement cuts, dedicated <u>off-site</u> borrow or fill areas within ¼ mile from the site, equipment and material storage areas, and staging areas.

Total site area: 3.3 acres

Construction area to be disturbed: 3.0 acres

Are there any control measures (CMs) located <u>outside</u> the permitted area (or limits of construction), that are utilized for compliance, but not under the direct control of the Permittee?: No

If Yes: attach "Use Agreement" signed by the off-site owner/operator under **Appendix 11** and describe CMs location, specifications, etc.

1.6 Receiving Waters

Instructions:

- List the jurisdictional storm sewer system or drainage system that stormwater from your site discharges to, such as storm system within unincorporated Adams County MS4, CDOT MS4, City of Thornton MS4, etc.
- Indicate inside which watershed the project is located.
- List the waterbody(s) that would receive stormwater from your site, including streams, rivers, lakes and wetlands. Describe each as clearly as possible, such as: Clear Creek, a tributary to the South Platte River. Including water courses even if they are usually dry, such as borrow ditches, arroyos, and other unnamed waterways.
- Indicate if the stream segment of the waterbody(s) is impaired and if a Total Maximum Daily Load (TMDL) has been adopted for any pollutant.

Location of the site's storm discharge: existing pond to the south

If the site discharges to a public **Municipal Separate Storm Sewer System (MS4)**, insert the name of the MS4 owner: unincorporated Adams County

Name and description of the project's watershed: Clear Creek

Name and description of ultimately **receiving water**(s), including stream segment designation: Clear Creek

- Distance from the project to the closest receiving water: 1.5 miles
- Is the receiving water stream segment impaired? ☐ Yes / ☒ No
- If yes, list TMDL's adopted for each pollutant: n/a
- Are these pollutants expected to be present at the construction site? Yes / No
- Which pollutant?: n/a
- Describe specific control measures (CMs) selected for the pollutant-specific Wasteload Allocation (WLA): n/a

Are **stream crossings** within the construction site boundary? Tes / No

- Location within the site: n/a
- Stream name: n/a
- Description of any disturbed upland areas that may contribute to the stream at the stream crossing locations: n/a
- Description of the CMs to be implemented for those contributing disturbed upland areas: silt fence

Other: n/a

1.7 Protected Site Features and Sensitive Areas

Instructions:

- Describe unique site features or sensitive area including historic structures, floodplain/floodway of streams, stream buffers, wetlands, specimen trees, natural vegetation, steep slopes, or highly erodible soils that are to be preserved. Describe the measures that will be used to protect these features. Include unique features and sensitive areas on the EC Plan drawings.
- Describe any known soil or groundwater contamination. Note that additional permitting is required from the State of Colorado, Water Quality Control Division.
 - Refer to http://www.cdphe.state.co.us/hm/HMSiteCover.htm and access the Hazardous Materials and Waste Management Division Site Locator Mapping Application.

Describe unique site feature or sensitive area to be preserved during construction: n/a
Describe measures to preserve unique site feature or sensitive area during construction:
n/a
Describe any known soil or groundwater contamination:
n/a
Describe management plan for contaminated soils and/or groundwater:
n/a
Attach applicable Permits (check if applicable):
404 Permit
401 Permit
Dewatering Permit (off-site)
Remediation Permit
Other

1.8 Potential Sources of Pollution

Instructions:

- List and describe measures to control potential sources of pollution, which may reasonably be expected to affect stormwater quality discharges from the construction site.
- Below is a comprehensive list. Add rows if additional potential sources of pollution are identified.
- If a potential pollutant source is applicable to the site, then select the blue Yes/No, then type "Yes" or "No".

Potential Pollution Source	Potential on this site?	Control Measures (CM)	CM Implementation (as needed)
Disturbed & Stored Soils - grading - spoils - stockpiles	Yes	ESC CMs (IP, SF, SSA, TRM, RECP, TOP, SCL, SBB, RS, SB, ST) Preservation of existing vegetation (PV, VB, CF, CP) Materials management Solid waste management (SP, GH) Stockpile management (SP) Vehicle tracking control (VTC)	 Delineate protected areas prior to construction. Install CMs prior construction. Manage materials effectively once they arrive on site. Place trash receptacles prior to construction. Implement spill response. Implement stockpile mgnt controls. Delineate vehicle travel areas prior to construction, adjust as needed.
Vehicle Tracking - all permitted vehicle traffic	Yes	ESC CMs (IP, SF, SSA, TRM, RECP, TOP, SCL, SBB, RS, SB, ST) Vehicle traffic controls Vehicle tracking controls (VTC) Street sweeping (SS)	 Install CMs prior construction. Delineate vehicle travel areas prior to construction, adjust as needed. Install VTC prior to construction. Implement SS as needed, in conjunction with start of construction.
Contaminated Soils	Yes	Hazardous materials management (GH, CT) Spill response & notification (GH) Stockpile management (SP)	1.Implement hazardous materials management. 2.Implement spill response procedures. 3.Implement stockpile mgnt controls.
Loading & Unloading - construction materials	Yes	Material management (GH) Vehicle traffic controls (VTC)	 Manage materials effectively once they arrive on site. Delineate vehicle travel areas prior to construction, adjust as needed.
Vehicle/equip ment maint. & fueling - gas, oil, - diesel - lubricants - hydraulic fluids	Yes	Spill prevention controls (GH) Designated fuel storage area (GH) Spill response & notification (GH)	1. Designate fuel storage area. 2. Implement spill prevention controls. 3. Implement spill response and notification procedures.

^{*} Refer to Section 2, for acronyms used to identify CM details.

Potential Pollution Source	Potential on this site?	Control Measures (CM)	CM Implementation
Outdoor storage - building materials - fertilizers - chemicals	Yes	Material storage procedures (GH)	1. Designate material storage areas prior to delivery. 2. Materials left outdoors must be covered if they can pollute stormwater. 3. Secondary containment must be used for hazardous materials.
Dust - wind transport - saw cutting	Yes	Dust control (DC) Temporary soil stabilization (SF, SD, GB, SSA, TRM, RECP, TOP) Street sweeping (SS) Preservation of existing vegetation (PV, VB, CF)	 Delineate protected areas prior to construction. Implement dust control in conjunction with soil disturbing activities. Implement temporary soil stabilization measures as soon as practical. Implement street sweeping at the start of major construction and maintain as needed.
Routine Maintenance Activities - fertilizers - pesticides - detergents - solvents - fuels, oils, etc.	Yes	Material storage (GH) Hazardous waste management (GH, Chemical Treatment) ESC CMs (IP, SF, SSA, RECP, TOP, SCL, SBB, RS, SB, ST)	 Designate materials storage areas prior to site arrival. Practice hazardous waste management procedures during the storage of such materials. Install ESC measures prior to landscape work.
Non-industrial Waste - worker trash - portable toilets	Yes	Sanitary waste (GH) Solid waste management (GH)	 Place temporary sanitary facilities on site and prevent off-site discharges. Place trash receptacles on site.
On-site Industrial Waste - construction debris, etc	Yes	Waste management (GH) Liquid waste management (GH) Hazardous waste management (GH, CT)	 Place trash receptacles on site. Place designated watertight receptacles or washout area(s) prior to activities that produce liquid waste. Implement hazardous waste management procedures.
Concrete Truck Chute/Tool Washing	Yes	Concrete washout area (CWA)	Install designated concrete washout(s) prior to concrete work.
Drywall Mud and Paint	Yes	Liquid waste management (GH)	Place designated watertight receptacles or washout area(s) prior to activities that produce liquid waste.
Fly Ash - concrete - flow fill	Yes	Concrete washout area (CWA) Hazardous waste management (GH)	1.Install designated CWA prior to concrete activities. 2.Implement hazardous waste management procedures.

^{*} Refer to Section 2, for acronyms used to identify CM details.

Potential Pollution Source	Potential on this site?	Control Measures (CM)	CM Implementation
Dedicated: - Asphalt Plants - Concrete Batch Plants - Mortar/Masonry Mixing Stations	No	Secondary containment Concrete washout area (CWA) Solid waste management (GH) materials management (GH)	 Install secondary containment CMs prior to using dedicated batch plants. Establish dedicated washout area before construction begins. Place trash receptacles on site. Manage materials effectively once they arrive on site.
Waste from: - Geo-tech Test - Potholing - Saw Cutting - Utility borings for locates	Yes	Dust control (DC) Material storage (GH) Solid waste management (GH)	 Implement dust control in conjunction with soil disturbing activities. Designate materials storage areas prior to their arrival on site. Place trash receptacles on site.
Demolition of infrastructure: - concrete curb - asphalt road - steel/rebar	Yes	Dust control (DC) Solid waste management (GH)	 Implement dust control in conjunction with soil disturbing activities. Place trash receptacles.
Electric Generator - pump	Yes	Secondary containment Spill response & notification (GH) Hazardous waste management (GH, CT)	 Install secondary containment CMs prior to using generators. Implement hazardous waste management procedures.
Areas where potential spills can occur	Yes	Hazardous waste management (GH) Spill response & notification (GH)	 Implement hazardous waste management. Implement spill response and notification procedures.
Flushing Waterlines	No	ESC CMs Low Risk Guidance for Potable Water **See Appendix 12	 Install ESC measures prior to discharge. Follow CMs required by the Low Risk Guidance**See Appendix 12
Uncontaminat ed springs	No	n/a	n/a
Construction dewatering	No	sediment control measures	Install control measures prior to discharge discharge does not leave site as surface runoff
n/a	No	n/a	n/a

^{*} Refer to Section 2, for acronyms used to identify CM details.

Potential hazardous material & chemical pollutants to stormwater:

Potentially on Site?	Material/ Chemical	Physical Description	Stormwater Pollutants	Location
Yes	Fertilizer	Liquid or solid grains	Nitrogen, phosphorous	Newly seeded areas
Yes	Cleaning solvents	Colorless, blue, or yellow-green liquid	Perchloroethylene, methylene chloride, trichloroethylene, petroleum distillates	Staging areas
Yes	Asphalt	Black solid	Oil, petroleum distillates	Streets
Yes	Concrete and Grout	White solid/grey liquid	Limestone, sand, pH, chromium	Curb and gutter, sidewalk, building construction
Yes	Curing compounds	Creamy white liquid	Naphtha	Curb and gutter, sidewalk, driveways, concrete slabs
Yes	Hydraulic oil/ fluids	Brown, oily petroleum hydrocarbon	Mineral oil	Leaks or broken hoses from equipment
Yes	Gasoline	Colorless, pale brown or pink petroleum hydrocarbon	Benzene, ethyl benzene, toluene, xylene, MTBE	Secondary containment/staging area
Yes	Antifreeze/ coolant	Clear green/yellow liquid	Ethylene glycol, propylene glycol, heavy metals (copper, lead, zinc)	Leaks or broken hoses from equipment or vehicles
Yes	Sanitary toilets	Various colored liquid	Bacteria, parasites, and viruses	Staging areas
Yes/No	Other	Insert Text Here	Insert Text Here	Insert Text Here
Yes/No	Other	Insert Text Here	Insert Text Here	Insert Text Here
Yes/No	Other	Insert Text Here	Insert Text Here	Insert Text Here

1.9 Anticipated Allowable Sources of Non-stormwater Discharge

Instructions:

- Check box for presence of any anticipated allowable sources of non-stormwater discharge at the site such as: uncontaminated springs, landscape irrigation return flows, construction dewatering, concrete washout, superchlorinated water for pipeline testing, etc.
- Include location (if applicable).

Description and location of any anticipated <u>allowable</u> sources of non-stormwater discharge at the site. Check if applicable:
 Natural springs, only if: Uncontaminated, and Spring flows are not exposed to land disturbance Location: n/a
Landscape irrigation return flow Location: n/a
 Construction dewatering, only if: Groundwater or groundwater combined with stormwater is uncontaminated, and Dewatering CMs are identified in the SWMP (filtration measures at pump intake and outlet), and The discharge does not leave the site as surface runoff or to surface waters. Note: For off-site discharges a separate State of Colorado Dewatering Permit is required. Location: n/a
 Concrete washout (CWA), only if: Liquids from washing concrete tools and concrete mixer chutes are properly contained, and No concrete washout water leaves the site as surface runoff or reach receiving waters Liner under CWA is required if: The groundwater table level is high. CWA is within 400 feet of any natural drainage pathway or waterbody, or CWA is within 1,000 feet of any wells or drinking water sources. Check if the CWA liner is needed for this site. Location: n/a
Super-chlorinated water for line testing (**Refer to Appendix 12 for State Low Risk Guidance).

- Discharge only after dechlorination CMs, such as industry standard dechlorination techniques or chemical treatment to "no measurable chlorine" content, and
- Control flow during discharge to allow infiltration and reduce erosion of land

Location: n/a

Description and location of any <u>other</u> anticipated allowable sources of non-stormwater discharge at the site: n/a

1.10 Demolition

Instructions:

- Before demolition of a structure begins, a copy of the Asbestos Certification from the State of Colorado certifying the structure is free of asbestos and other pollutants must be obtained. Attach a copy of the Demolition Permit, including the State of Colorado Asbestos Abatement Permit in Appendix 4.

Are there any	building structures to be demolished at this site?
Yes	No

If yes:

- 1) Place a copy of Demolition Permit in Appendix 4.
- 2) Place a copy of the State of Colorado Asbestos Certification in Appendix 4.
- 3) Initial CMs must be installed prior beginning demolition work.
- 4) Describe additional steps taken to address demolition: n/a

SECTION 2: EROSION & SEDIMENT CONTROL MEASURES

Instructions:

Multiple permanent (structural) and temporary (non-structural) Control Measures (CM) are used for each phase of construction to minimize stormwater pollution. Select and categorize each CM according to their purpose:

- 1. Minimize disturbed area, and protect natural features and soil
- 2. Control stormwater flowing onto and through the project
- 3. Soil stabilization and slope protection
- 4. Storm drain inlet protection
- 5. Perimeter control and sediment barriers
- 6. Retention of sediment on-site
- 7. Construction entrance/exit stabilization
- 8. Additional CMs

Describe the CMs that will be implemented to control pollutants in stormwater discharges. A list of standard and commonly use CM is provided. The information also includes the expected level of information for each CM. The expected level of information must address the following:

- o What CMs will be installed? Select and describe CMs.
- o **When** will the CMs be implemented and removed? Timing, temporary or permanent. All CMs shall be installed as a phased operation as construction progresses.
- o Where will the CMs be implemented? Location.
- How will the CMs be maintained? Describe the maintenance and inspection procedures. Include protocols, thresholds, and schedules for cleaning, repairing or replacing damaged or failing CMs.

If a construction project uses a CM that is not included below, add the CMs and ensure that the *expected level of information* is included.

Place CM detail drawings in **Appendix 5**. Use Urban Drainage Flood Control District's Detail Drawings:

https://udfcd.org/wp-

content/uploads/vol3%20criteria%20manual/Chapter%207%20Construction%20BMPs.pdf

Indicate on the sections below which permanent (structural) or temporary (non-structural) control measure will be implemented to prevent stormwater pollution according to the following priorities:

1. Minimize Disturbed Area and Protect Natural Features and Soil

•	Limits of Construction	(LOC)	
•	Construction Phasing	(CP)	
•	Protection of Existing Vegetation	(PV)	SM-2

2. Control Stormwater Flowing onto and through the Project

•	Temporary Slope Drains	(TSD)	EC-7
•	Earth Dikes/Drainage Swales	(ED/DS)	EC-10
•	Sediment Trap	(ST)	SC-8
•	Temporary Diversion Channel	(TDC)	SM-8
•	Dewatering Operations	(DW)	SM-9
•	Temporary Stream Crossing	(TSC)	SM-10

3. Soil Stabilization and Slope Protection

•	Surface Roughening	(SR)	EC-1
•	Temporary and Permanent Seeding	(TS/PS)	EC-2

		Soil Binders	(SB)	EC-3
		Mulching	(MU)	EC-4
		Rolled Erosion Control Product	(RECP)	EC-6
		Temporary Slope Drain	(TSD)	EC-7
		Temporary Outlet Protection	(TOP)	EC-8
		Earth Dikes/Drainage Swales	(ED/DS)	EC-10
		Terracing	(TER)	EC-11
		Check Dams	(CD)	EC-12
		Streambank Stabilization	(SS)	EC-13
	•	Wind Erosion/Dust Control	(DC)	EC-14
4.	Storm Drain I	nlet Protection		
	_	Rock Sock	(RS)	SC-5
	_	Inlet Protection	(N3) (IP)	SC-6
	-	met Protection	(IP)	30-0
5.	Perimeter Co	ntrols and Sediment Barri	ers	
		Construction Fence	(CF)	SM-3
		Vehicle Tracking Control	(VTC)	SM-4
	•	Vegetated Buffer	(VB)	SC-9
6.	Retention of S	Sediment On-Site		
	•	Silt Fence	(SF)	SC-1
		Sediment Control Log	(SCL)	SC-2
		Straw Bale Barrier	(SBB)	SC-3
		Sediment Basin	(SB)	SC-7
	•	Sediment Trap	(ST)	SC-8
7.	Construction	Entrance/Exit Stabilization	1	
	•	Vehicle Tracking Control	(VTC)	SM-4
	•	Stabilized Construction Roadway	(SCR)	SM-5
	•	Stabilized Staging Area	(SSA)	SM-6
	•	Street Sweeping	(SS)	SM-7
8.	Additional CN	1 s		
		Concrete Washout Areas	(CWA)	MM-1
		Stockpile Management	(SP)	MM-2
		Paving and Grinding Operations	(3F) (PGO)	SM-12
	-	Temporary Cement Mixing Station	(1 00)	MM-3
	_	remporary content winning station		IVIIVI J

2.1 Minimize Disturbed Area & Protect Natural Features and Soil

Instructions:

- Select methods (signs, construction fence) to protect unique site feature or sensitive area that shall not be disturbed. Describe how each unique site feature or sensitive area identified earlier will be protected during construction activity. Include these areas and associated measures on the EC Plan (site map).
- Indicate applicable measure by selecting the blue Yes/No then type "Yes" or "No". Identify the phase of construction during which the CM will be implemented: 1, 2, or 3, and check whether the CM is Permanent (structural) or Temporary (non-structural). Add any additional CMs as needed.

Limits of Constru	uction (LOC)	Used: Yes	Phase(s): n/a
Permane	nt 🗵 Temp	orary	
What: Description	Loc is use to designate the area of land that will be disturbed by construction		
When: Installation The permitted LOC shall be designated prior to land disturbing activities. If I is disturbed outside of the limits, then the State and Local stormwood construction discharge permits and SWMP/EC Plan must be amended.			tate and Local stormwater
Where: Location	The permitted LOC shall be identified on the EC Plan.		
How: Maintenance & Inspection	continuously and maintain the permitted Loc in an enort to not disturb land		
Construction Phasing (CP) Used: n/a Phase(s): n/a			
Permane	nt 🔀 Temp	orary	
What: CP is scheduling and sequer dormant parts of the site.		cing of land disturbing	activities to limit erosion on
When: Installation	At planning		
Where: Location	The permitted CP shall be identified on the SWMP/EC Plan.		
How: Maintenance & Inspection At least establish CMs for initial, interim and final phase.			phase.

Protection of Ex	Protection of Existing Vegetation (PV) SM-2 Used: Yes Phase(s): n/a					
Permane	nt	<u> </u>	Гетро	orary		
What: Description	protec	A construction fence shall be installed around native areas that require protection. It may also be necessary to install perimeter controls to prevent sediment loading to those sensitive areas.				
When: Installation		CMs installed for protection of existing vegetation shall be installed prior to land disturbing activities or as part of the phasing of the construction project.				
Where: Location	PV shall be installed at locations identified on the SWMP as a preservation area.					
How: Maintenance & Inspection	Install and maintain PV per detail SM-2 (Appendix 5). Clearly mark the area on the EC plan to be preserved. No stockpiles, equipment, trailers or parking shall be allowed within the area. Repair or replace damaged or displaced protective barriers around the vegetated area. Inspect and maintain all areas that are designated to be protected. If damage to the vegetation occurs in a protected area, reseed the area with the same or similar species. Construction equipment must not enter a wetland area, except as permitted by the U.S. Army Corps of Engineers (USACE). In advertent placement of fill in a wetland is a 404 permit violation and requires notification to the USACE.					
Insert Additional	Contro	l Measure (CM)		Used: no	Phase(s): n/a	
Permane		Гетро	orary			
What – Description		INSERT TEXT HE	RE			
When – Installation		INSERT TEXT HE	RE			
Where – Location		INSERT TEXT HE	RE			
How – Maintenance and Inspection		INSERT TEXT HE	RE			

For additional CMs, repeat as needed here.

2.2 Control Stormwater Flowing onto and through the Project

Instructions:

- Select practices to divert flows from exposed soils, retain or detain flows, or otherwise limit runoff and the discharge of pollutants from exposed areas of the site.
- Indicate applicable measure by selecting the blue Yes/No then type "Yes" or "No". Identify the phase of construction during which the CM will be implemented: 1, 2, or 3, and check whether the CM is Permanent (structural) or Temporary (non-structural). Add any additional CMs as needed.

Temporary Slope	e Drains (TSD) EC-7	Used: no	Phase(s): n/a	
Permane	nt Tempo	orary		
What: Description	TSD is a pipe or culvert use to convey water down a slope where there is high potential for erosion. A collection system at the top of the slope directs runoff to the conveyance. The pipe outlet must be equipped with outlet protection.			
When: Installation	Install TSD prior to up-gradient land disturbing activities and maintain in place until no longer needed, but remove prior to the end of construction.			
Where: Location	TSD shall be installed at the long, steep slopes where the		ed on the SWMP. They are for all for flow concentration.	
How: Maintenance & Inspection	maintain all TSD throughout accumulation. Inspect the do	construction. Insp wnstream outlet fo lated sediment at	EC-7 (Appendix 5). Inspect and ect the entrance for sediment or signs of erosion and stabilize, the entrance and outfall, and	
	inage Swales (ED/DS) EC-10	Used: no	Phase(s): n/a	
Permane	nt Tempo	orary		
What: Description	slands or to convoy runoff to additional codiment control CMs prior to			
When: Installation	Install ED/DS immediately upon completion of channel grading and maintain in place until the end of construction.			
Where: Location	ED/DS shall be installed at the locations identified on the SWMP. Typically installed around steep slopes or as temporary conveyance feature leading to a sediment basin or trap.			
How: Maintenance & Inspection	maintain all ED/DS for stabil Inspect side slopes for erosic	ity, compaction and named to excessary. Accumulate	dix 5). Continuously inspect and ad signs of erosion and repair. erosion control fabric. Stabilize ted sediment shall be removed e depth of the ED/DS.	

Sediment Trap (ST) SC-8	Used: no	Phase(s): n/a		
Permane	nt 🗌 Ter	mporary			
What: Description	ST is an excavated or bermed area designed to capture drainage, allowing settling of sediment from a disturbed area upstream smaller than 1 acre.				
When: Installation	•	ST shall be installed prior to land disturbing activities. The ST shall not be removed until the upstream area is stabilized.			
Where: Location	ST shall be installed at the locations identified on the SWMP. It shall be installed across a low area or drainage swale.				
How: Maintenance & Inspection	and damage. Repair damage to the outlet, and remove an obstructions.				
Temporary Dive	rsion Channel (TDC) SM-8	Used: no	Phase(s): n/a		
Permane	nt 🔀 Ter	mporary			
What: Description	TDC diverts water from a place underneath or in the		construction activities to take		
When: Installation	TDC shall be installed prior to the start of any construction activities within a stream. The TDC shall be removed when the work at the down gradient or natural channel is no longer required. The TDC shall be backfilled and stabilized.				
Where: Location	TDC shall be installed at the location identified on the SWMP. TDC can be used in the following locations: construction of detention ponds, dams, in-stream grade control structures, utility installations or any activity that requires work in a waterway.				
How: Maintenance & Inspection TDC shall be installed per detail SM-8 (Appendix 5). Inspect frequence maintain all TDC throughout construction. Inspect flow barriers at the end of each workday. Inspect TDC for signs of erosion. Repair or relining if necessary.			t flow barriers at the start and		
Dewatering Operations (DW) SM-9 Used: no Phase(s): n/a					
Permane	nt Ter	mporary			
What: Description	to a receiving waterway	y,sediment basin or the permitted boundar	rea to a CM, then downstream well-vegetated area. When by a separate State of Colorado		

-						
When: Installation	a resul	DW is needed when an area of the construction site is inundated with water as a result of a large storm event, groundwater or existing ponding conditions. Remove DW once the work is no longer required.				
Where: Location		Install DW at the locations identified on the SWMP. DW may occur in any area of the site where accumulated water needs to be removed.				
How: Maintenance & Inspection	must b	DW shall be conducted per detail SM-9 (Appendix 5). All dewatering discharges must be treated to remove sediment (and other pollutants) before discharging from the construction site. Inspect DW regularly and maintain operations throughout construction.				
Temporary Stree	am Cross	sing (TSC) SM-10	Used: no	Phase(s): n/a		
Permane	nt	∑ Tempe	orary			
What: Description	method require	TSC is needed where an actively flowing watercourse must be crossed. Crossing methods: culvert crossing, stream ford and temporary bridge. A 404 permit is required for placement of fill in a waterway from the U.S. Army Corps of Engineers per Section 404 of the Clean Water Act.				
When: Installation	Install a TSC only when it is necessary to cross a stream; and remove it when the crossing is no longer needed for construction.					
Where: Location	TSC shall be installed at the locations identified on the SWMP.			on the SWMP.		
How: Maintenance & Inspection	TSC shall be installed per detail SM-10 (Appendix 5). Inspect and maintain T throughout construction. Inspect for bank erosion and in-stream degradation			•		
Insert Additional Control Measure (CM)		Measure (CM)	Used: no	Phase(s):n/a		
Permane	Permanent Temporary					
What –Descrip	tion	INSERT TEXT HERE				
When – Installation		INSERT TEXT HERE				
Where – Locat	ion	INSERT TEXT HERE				
How –Maintenance and Inspection		INSERT TEXT HERE				

For additional CMs, repeat as needed here.

2.3 Soil Stabilization and Slope Protection

Instructions:

- <u>Soil Stabilization:</u> Select controls to stabilize exposed soils where construction activities have temporarily or permanently ceased and measures to control dust generation.
- <u>Slope Protection:</u> Select controls that will be implemented to protect slopes from eroding.
- Indicate applicable measure by selecting the blue Yes/No then type "Yes" or "No". Identify the phase of construction during which the CM will be implemented: 1, 2, or 3, and check whether the CM is Permanent (structural) or Temporary (non-structural). Add any additional CMs as needed.

Surface Rougher	ning (SR) EC-1	Used: yes	Phase(s): n/a	
Permane	nt	☐ Temporary		
What: Description	tamparan, stabilization Variations in the sail are greated to belo minimize u			
When: Installation	· ·	SR shall be performed either after final grading or to temporarily stabilize an area during active construction.		
Where: Location	SR shall be used in the locations identified on the SWMP. It can be used on mild and steep slopes.			
How: Maintenance & Inspection	Maintenance are roughened throughout construction. SR shall be inspected for erosion as			
	Permanent Seeding		d: yes Phase(s): n/a	
Permane	nt			
What: Description Seed is applied to disturbed areas in an effort to establish vegetation. TS is used to stabilize disturbed areas that will be inactive for an extended period. Plused to stabilize areas at final grade that will not be otherwise stabiling Effective seeding includes preparation of a seedbed, selection of appropriate seed mixture, proper planting techniques, and protection of seeded area with mulch, geotextile, or other appropriate measures. Mulch helps to protect the bare soil and must be secured by crimping, tackiff netting or other measures. Site specific soil amendment and seed specifications must be included in the SWMP.			e inactive for an extended period. PM is that will not be otherwise stabilized. tion of a seedbed, selection of an nting techniques, and protection of the rother appropriate measures. Mulching nust be secured by crimping, tackifiers, ecific soil amendment and seed mix	
When: Installation	TS/PS shall be per completion of final	•	ary inactive surfaces and following the	
Where: Location	TS/PS shall be com areas at final grade		ons identified on the SWMP to stabilize wise be stabilized.	

How: Maintenance & Inspection	TS/PS and secured mulching shall be installed per seed mix specifications and detail EC-2 (Appendix 5). Continuously inspect and maintain TS/PS and secured mulch throughout construction. Prepare the seedbed, select an appropriate seed mixture, use proper planting techniques and protect the seeded area with secured mulch.			
Soil Binders (SB)	EC-3 Used: no Phase(s): n/a			
Permane	nt 🔀 Temporary			
What: Description	SB involves a broad range of treatments that can be applied to exposed soils for temporary stabilization to reduce wind and water erosion.			
When: Installation	Use SB for short term temporary stabilization. Soil binders can break down fast due to natural weathering.			
Where: Location	SB can be used on mild and steep slopes including stockpiles. They are often used in areas where work has temporarily stopped, but is expected to resume before revegetation can be established.			
How: Maintenance & Inspection	SB shall be used per detail EC-3 (Appendix 5). Continuously inspect and maintain all areas where SB have been applied throughout construction. SB can fail after heavy rainfall events and may require re-application. In particular, SB will generally experience spot failures during heavy rainfall events.			
Mulching (MU)	Used: yes Phase(s): n/a			
Permane	nt Temporary			
What: Description	MU consists of evenly applying straw, hay, shredded wood mulch, bark or compost to disturbed soils and securing the mulch by crimping, tackifiers or netting.			
When: Installation	MU is used in conjunction with TS/PS to help protect the seed bed and stabilize the soil. Mulch can also be used as a temporary cover on low to mild slopes to help temporarily stabilize disturbed area where there are growing season constraints. After MU application, there shall not be bare ground surface exposed. Reapply mulch, as needed, to cover bare areas.			
Where: Location	Temporary and/or permanent MU shall be completed in the locations identified on the SWMP.			
How: Maintenance & Inspection	MU shall be installed per detail EC-4 (Appendix 5). After MU, the bare ground surface shall not be more than 10% exposed. Re-apply mulch, as needed, to cover bare areas.			

Rolled Erosion C	ontrol Product (RECP) EC-6	Used: no	Phase(s): n/a		
Permane	Permanent Temporary				
What: Description	RECP consist of a variety of temporary or permanently installed manufactured products designed to control erosion and enhance vegetation establishment and survivability, especially on slopes and in channels. Categories of RECP: mulch control netting, open weave textile, erosion control blanket, and turf reinforcement mat.				
When: Installation	RECP shall be installed upon completion of slope grading and when revegetation measures are completed. RECP are biodegradable typically and do not need to be removed after construction.				
Where: Location	RECP shall be installed at the according to manufacturer's s		ed on the SWMP. Install RECP		
How: Maintenance & Inspection	voids under the mat. Also shock for damaged or loose stakes and secure loose				
Temporary Slope	Temporary Slope Drain (TSD) EC-7 Used: no Phase(s): n/a				
Permane	nt Tempo	rary			
What: Description	Refer to Section 2.2				
When: Installation	Refer to Section 2.2				
Where: Location	Refer to Section 2.2				
How: Maintenance & Inspection	Refer to Section 2.2				
Temporary Outl	et Protection (TOP) EC-8	Used: yes	Phase(s): n/a		
Permane	nt Tempo	rary			
What: Description	immediately downstream of a nine sulvert slene drain rundown or other				
When: Installation	TOP shall be installed immediately upon the completion of grading and removed once the pipe is no longer draining upstream area or once the downstream area has been sufficiently stabilized.				
Where: Location	TOP shall be installed at the locations identified on the SWMP, where there is a potential for accelerated erosion due to concentrated flow.				

How: Maintenance & Inspection	TOP shall be installed and maintain per EC-8 detail (Appendix 5). The Inspect regularly and maintain TOP as the rocks may be displaced. Accumulated sediment shall be removed before the TOP becomes buried and ineffective.			
Earth Dikes/Dra	inage Swales (ED/DS) EC-10	Used: no	Phase(s): n/a	
Permane	nt Tempo	rary		
What: Description	Refer to Section 2.2			
When: Installation	Refer to Section 2.2			
Where: Location	Refer to Section 2.2			
How: Maintenance & Inspection	Refer to Section 2.2			
Terracing (TER) EC-11 Used: no Phase(s): n/a				
Permane	nt Tempo	rary		
What: Description	TER consists of grading steep slopes into a series of relatively flat sections separated at intervals by steep slope segments. They shorten the uninterrupted flow lengths on steep slopes, reducing the development of rills and gullies.			
When: Installation	TER shall be completed during grading activities; when slope is at final grade, and vegetation shall be established as soon as possible.			
Where: Location	TER shall be installed at the locations identified on the SWMP. It is usually used to control erosion on slopes that are steeper than 4:1.			
How: Maintenance & Inspection	TER shall be installed per detail EC-11 (Appendix 5). TER shall be used in combination with other stabilization measures that provide cover for exposed soils. Inspect regularly and maintain all TER throughout construction. Remove accumulated sediment and repair rill erosion as necessary.			
Check Dams (CD) FC-12	Used: no	Phase(s): n/a	
Permane			1 11435(3): 11/4	
What: Description	CDs are temporary or perma channels to reduce the veloci- constructed from rock, gravel	ty of runoff and con	centrated flows. They can be	

CD shall be installed prior to earth disturbing activities or immediately upon completion of channel grading. Temporary CDs shall be removed and area shall be stabilized. Permanent CDs shall be cleaned and remain in place.			
CD shall be installed at the locations identified on the SWMP. Typically they are placed in drainage channels, swales or on mild to moderate steep slopes.			
CDs shall be installed per detail EC-12 (Appendix 5). They shall be placed at regularly spaced intervals along the drainage swale or ditch. The height of the CD shall allow for pooling of the runoff. Inspect regularly and maintain CD as rocks can be displaced and gravel bags or sandbags can be torn. Accumulated sediment shall be removed before it reaches ½ the height of the CD.			
bilization (SS) EC-13 Used: no Phase(s): n/a			
nt Temporary			
SS is a combination of erosion and sediment control measures to protect streams, banks, and in-stream habitat from accelerated erosion. Some of the measures include PV, CD, TS/PS and RECP.			
SS shall be installed prior to earth disturbing activities to protect existing vegetation, preserve exposed streambank, or mitigate erosion rates from disturbed area. SS measures that will not remain in place as a part of final stabilization, such as silt fence, shall be removed when all land disturbing activities have ceased and the area has been permanently stabilized.			
SS shall be installed at the locations identified on the SWMP. They shall be installed along the banks of streams or waterways.			
SS shall be installed per detail EC-13 (Appendix 5). Inspect regularly and maintain SS throughout construction.			
ust Control (DC) EC-14 Used: no Phase(s): n/a			
nt Temporary			
DC helps keep sediments (from soils and stockpiles) from entering the air as a result of land disturbing construction activities. A variety of practices that focus on grading disturbed areas may be used.			
Implement DC during conditions which result in dust from either construction activities or from naturally occurring winds. Do not overwater.			
Dust abatement shall be completed throughout the project area where any material exists that has the potential to become airborne.			
DC measures shall be performed per detail EC-14 (Appendix 5). Apply water or magnesium chloride, seed and mulch or use spray-on soil binders on disturbed			

areas. Water and magnesium chloride shall be applied such that concentrated flows do not form.			
Insert Additional Control	nsert Additional Control Measure (CM)		Phase(s): 1, 2, 3
Permanent	Temporary		
What – Description	INSERT TEXT HERE		
When – Installation	INSERT TEXT HERE		
Where – Location	INSERT TEXT HERE		
How – Maintenance and Inspection	INSERT TEXT HERE		

For additional CMs, repeat as needed here.

2.4 Storm Drain Inlet Protection

Instructions:

- Select controls, including design specifications and details, that will be implemented to protect storm drain inlets receiving stormwater from the project.
- Indicate applicable measure by selecting the blue Yes/No then type "Yes" or "No". Identify the phase of construction during which the CM will be implemented: 1, 2, or 3, and check whether the CM is Permanent (structural) or Temporary (non-structural). Add any additional CMs as needed.

Rock Sock (RS) S	C-5	Used: no	Phase(s): n/a
Permanent Temporary			
What: Description	no is an elongated cylinarical filter constructed of graver wrapped by whe mesh		
When: Installation	Install RS prior to land disturbing activities; once upstream stabilization is complete. Accumulated sediment shall be removed and properly disposed of.		
Where: Location	RS shall be installed at the locations identified on the EC Plan. They are use for perimeter control of a disturbed area, or as part of IP.		
How: Maintenance & Inspection	Install RS per detail SC-5 (Appendix 5). Inspect regularly and maintain RS as they are susceptible to displacement and breakage due to vehicle traffic. Accumulated sediment shall be removed to maintain functionality.		
Inlet Protection	(IP) SC-6	Used: yes	Phase(s): n/a
Permane	nt Tempo	rary	
What: Description	IP is a permeable barrier that and remove sediment before of: RS, SCL, SF, blocks and RS,	entering the storm sy	
When: Installation	Install IP for existing catch basins prior to land disturbing activities upslope from the inlet. IP for proposed catch basins shall be installed immediately after the drain is constructed. IP and associated sediment must be removed and properly disposed of when the drainage area upstream is stabilized.		
Where: Location	Install IP at the locations ide measure. It shall be used in co		
How: Maintenance & Inspection Install IP per detail SC-6 (Appendix 5). IP shall enable the drain to function without completely blocking the flow. Inspect regularly and maintain IP throughout construction as it is the final measure before runoff enters the storm drain. Accumulated sediment shall be removed when it has reached ½ of the height of the IP or looses functionality, whichever comes first. IP is not standalone measure and shall be part of redundant system.			
Insert Additional	Control Measures (CM)	Used: Yes/No	Phase(s): 1, 2, 3

Permanent	Temporary
What – Description	INSERT TEXT HERE
When – Installation	INSERT TEXT HERE
Where – Location	INSERT TEXT HERE
How – Maintenance and Inspection	INSERT TEXT HERE

For additional CMs, repeat as needed here.

2.5 Perimeter Control & Sediment Barriers

Instructions:

- Select measures, including design specifications and details, to filter and trap sediment before it leaves the construction site.
- Indicate applicable measure by selecting the blue Yes/No then type "Yes" or "No". Identify the phase of construction during which the CM will be implemented: 1, 2, or 3, and check whether the CM is Permanent (structural) or Temporary (non-structural). Add any additional CMs as needed.

Construction Fence (CF) SM-3		Used: no	Phase(s): n/a	
Permanent Temporary				
What: Description	construction site bo	oundaries, and keeps con	entrances and exits, delineates struction out of sensitive locations pen space, wetlands and riparian	
When: Installation	CF shall be installe construction is com	•	oing activities; and removed once	
Where: Location	Install CF along the be restricted.	site perimeter or any are	a within the site where access shall	
How: Maintenance & Inspection	Inspect CF for dama	·	ved per detail SM-3 (Appendix 5). F shall be tight and any areas with or replaced.	
Vehicle Tracking Control (VTC) SM-4 Used: Yes Phase(s): n/a				
What: Description	The is a stabilized site decess point that helps remove seament from vehicle			
When: Installation	Install VTC prior to any land disturbing activities; and removed when there is no longer the potential for vehicle tracking to occur.			
Where: Location	VTC shall be installed at the location identified on the SWMP. Locate VTC where frequent vehicle traffic will exit the construction site onto a paved roadway.			
How: Maintenance & Inspection	woven geotextile for aggregate is not all inspect regularly a becomes clogged with replace material with adjacent roadways.	Tabric between the soil lowed because concrete and maintain VTCs throwith sediment, remove a fith a fresh layer of rock.	pendix 5). All VTC must have non- and rock pad. Recycled concrete e dust elevates pH in stormwater. ughout construction. If the area nd dispose of excess sediment or Any sediment that is tracked onto coms, shovels (no water washing), m sweeper.	

Vegetated Buffer (VB) SC-9			Used: no	Phase(s): n/a
Permanent Tempo		Tempore	ary	
What: Description	VB is the preservation of natural vegetation to protect waterways and wetlands. A VB may be required as a type of setback from a natural waterway. It shall be used in conjunction with other perimeter measures.			
When: Installation	VB shall be pre-existing of land disturbing activities.			
Where: Location	VB shall be installed at the locations identified on the SWMP. VB shall be use with additional measures to separating land disturbing activities.			
How: Maintenance & Inspection	VB shall be installed per detail SC-9 (Appendix 5). Inspect regularly and maintain VB throughout construction. Inspect for signs of erosion. VB shall not be used as standalone measure and shall be part of redundant system.			
Insert Additional Control Measure (CM) Used: Yes/No Phase(s): 1, 2, 3				Phase(s): 1, 2, 3
Permanent Temporary				
What – Description		INSERT TEXT HERE		
When – Installation		INSERT TEXT HERE		
Where – Location INSERT TEXT HE		INSERT TEXT HERE		
How – Maintenance and Inspection		INSERT TEXT HERE		

For additional CMs, repeat as needed here.

2.6 Retention of Sediment On-Site

Instructions:

- Select sediment control practices, including design specifications and details (volume, dimensions, outlet structure) that will be implemented at the construction site to retain sediments on-site.
- Indicate applicable measure by selecting the blue Yes/No then type "Yes" or "No". Identify the phase of construction during which the CM will be implemented: 1, 2, or 3, and check whether the CM is Permanent (structural) or Temporary (non-structural). Add any additional CMs as needed.

Silt Fence (SF) SC-1		Used: yes	Phase(s): n/a
Permanent Temporary			
What: Description	SF is a woven geotextile fabric attached to wooden posts and trenched into the ground. It is use to intercept sheet flow runoff from disturbed areas.		
When: Installation	SF shall be installed prior to land disturbing activities. SF shall be removed when the upstream area is stabilized.		
Where: Location	SF shall be installed at the locations identified on the SWMP. SF is typically installed along the contour of slopes, which is down slope of a disturbed area to accept sheet flow, and placed along the perimeter of a construction site. SF is not designed to receive concentrated flow, or to be used a filter fabric.		
How: Maintenance & Inspection	SF throughout constructions undercutting or has be	ction. Any section of SF th	nspect regularly and maintain at has a tear, hole, slumping, aced. Accumulated sediment nches.
Sediment Control Log (SCL) SC-2 Used: no Phase(s): n/a			
Permane	nt :	Temporary	
What: Description	SCL, aka "Straw Wattle", is a linear roll made of natural materials (straw, coconut fiber or other fibrous material), trenched into the ground and held with wooden stakes, used to intercept sheet flows from disturbed areas.		
When: Installation	SCL shall be installed during land disturbing activities and it may also be installed after formation of a stockpile. Once the upstream area is stabilized, remove and properly dispose of the SCL. If disturbed areas exist after removal, the area shall be covered with top soil, seeded and mulched.		
Where: Location	used for stockpile cont slopes to shorten flow control along receiving in combination with ot	rol, IP, and CD in small divided in the control of	on the ECSP. SCL are typically rainage ditches, on disturbed to f multi-layered perimeter and or wetland. SCL work well sediment controls. Stockpiles I in a flowline and SCL shall be

	weighted. Stockpiles stored of SCL, SF or adequate vegetation	•	may be protected by pervious
How: Maintenance & Inspection	contour to avoid concentra	iting flows. Inspect s they will eventu	5), along (parallel) the slope regularly and maintain SCL ally degrade. Accumulated the height of the SCL.
Straw Bale Barri	ier (SBB) SC-3	Used: no	Phase(s): n/a
Permane	nt Tempo	orary	
What: Description			ercept and capture sheet flow ned area. Typically used as CD,
When: Installation	-	area has been sta	nove and properly dispose of bilized. Areas of disturbance nen bales are removed.
Where: Location	Straw bale barriers shall be in	nstalled at the location	ons identified on the ECSP.
How: Maintenance & Inspection	maintain SBB throughout con	struction as they ma ot. Accumulated sedi	dix 5). Inspect regularly and by be bypassed or undercut by iment shall be removed when
Sediment Basin	(SB) SC-7	Used: no	Phase(s): n/a
Permane	nt Temp	orary	
What: Description			ediment transported in runoff ling of the sediment prior to
When: Installation	permanent detention basins and re-configure the basin a	. For conversion, re and outlet to meet to orary, remove when	as are typically converted to move accumulated sediment the requirements of the final is no longer needed by filling cordingly.
Where: Location		the same location	n the SWMP. Where feasible, n where a permanent post-
How: Maintenance & Inspection	-	Accumulated sedime	ndix 5). Inspect regularly and ent shall be dredged from the ign storage volume.

Sediment Trap (ST) SC-8		Used: no	Phase(s): n/a	
Permane	nt		Temporary		
What: Description	ST is an excavated or bermed area designed to capture drainage, allow settling of sediment from upstream disturbed area smaller than 1 acre.			_	
When: Installation	Install ST prior to land disturbing activities. The ST shall not be removed until the upstream area is sufficiently stabilized.			ved until	
Where: Location	Install ST in the locations identified on the SWMP. It shall be installed across a low area or drainage swale.				
How: Maintenance & Inspection	Maintenance seepage, and the outlet for sediment, debris and damage. Repair damage to			oility and amage to	
Insert Additional Control Measure (CM)		Used: Y	es/No Phase(s): 1, 2	2, 3	
Permanent Temporary					
What – Description INSERT TEXT HERE		HERE			
When – Installation INSERT TEXT HERE		HERE			
Where – Locat	ion	INSERT TEXT	HERE		
How – Maintenance and Inspection INSERT TEXT HERE			HERE		

For additional CMs, repeat as needed here.

2.7 Construction Entrance/Exit Stabilization

Instructions:

- Select CM to stabilize vehicle entrance(s) and exit(s) to minimize off-site vehicle tracking of sediments and discharges to stormwater.
- Indicate applicable measure by selecting the blue Yes/No then type "Yes" or "No". Identify the phase of construction during which the CM will be implemented: 1, 2, or 3, and check whether the CM is Permanent (structural) or Temporary (non-structural). Add any additional CMs as needed.

Vehicle Tracking	Control (VTC) SM-4	Used: yes	Phase(s): n/a
Permane	nt Tempo	orary	
What: Description	Refer to Section 2.5		
When: Installation	Refer to Section 2.5		
Where: Location	Refer to Section 2.5		
How: Maintenance & Inspection	Refer to Section 2.5		
Stabilized Consti	ruction Roadway (SCR) SM-5	Used: no	Phase(s): n/a
Permane	nt Tempo	orary	
What: Description SCR is a temporary method to control sediment runoff, vehicle tracking, and dust from roads during construction activities consisting of aggregate base course of 3-inch diameter granular material (recycled concrete aggregate is not allowed because concrete dust elevates pH in stormwater).			
When: Installation SCR is installed on high traffic construction roads to minimize dust and erosion, and use in place of rough cut street controls on roadways with frequent construction and vehicle traffic. Gravel shall be removed once the road is ready to be paved. Prior to paving, the road should be inspected for grade changes and damage. Re-grade and repair as necessary.			
Where: Location	SCR shall be installed at the locations identified on the SWMP. Apply gravel to disturbed areas that are used as a route for vehicles.		
How: Maintenance & Inspection SCR shall be installed per detail SM-5 (Appendix 5). Inspect regularly and maintain SCR throughout construction. A stable surface cover of rigid gravel shall be maintained as well as repairing any perimeter controls. Inspect drainage ditches along the roadway for erosion and stabilize as needed.			
Stabilized Stagin	ng Area (SSA) SM-6	Used: yes	Phase(s): n/a

Permane	nt	Tempord	ıry	
What: Description	SSA is a clearly designated area where construction equipment and vehicles, stockpiles, waste bins and other construction-related materials are stored. If the construction site is big, more than one SSA may be necessary.			
When: Installation	SSA shall be installed prior to any land disturbing activities.			
Where: Location	SSA shall be installed at the location identified on the SWMP.			
How: Maintenance & Inspection	maintain SSA throughout construction. A stable surface cover of rigid gravel			
Street Sweeping	; (SS) SM-7	Used: no	Phase(s): n/a
Permanent Temporary				
What: Description	SS is used where vehicles track sediment onto paved roadways to reduce the transport of it into storm drain systems or surface waterways.			
When: Installation	noticeable seament accumulation on roadways adjacent to the construction			
Where: Location	SS shall be utilized throughout the site and also on adjacent areas to construction.			
How: Maintenance & Inspection SS shall be performed per detail SM-7 (Appendix 5). Use standard SS equipment to adequately remove sediment from roadways adjacent to the construction site.				
Insert Additional Control Measure (CM) Used: no Phase(s): n/a				
Permanent Temporary				
What – Descri	ption	INSERT TEXT HERE		
When – Install	ation	INSERT TEXT HERE		
Where – Locat	ion	INSERT TEXT HERE		
How – Mainte Inspection	nance and	INSERT TEXT HERE		

For additional CMs, repeat as needed here.

2.8 Additional Control Measures (CMs)

Instructions:

Indicate applicable CMs by selecting the blue Yes/No then type "Yes" or "No". Identify the phase of construction during which the CM will be implemented: 1, 2, or 3, and check whether the CM is Permanent (structural) or Temporary (non-structural). Add any additional CMs as needed.

Concrete Washo	out Areas (CWA) MM-1	Used: yes	Phase(s): n/a
Permane	nt 🔲 Temp	orary	
What: Description	<u>-</u>	_	ities. It can be an excavation a or prefabricated haul-away
When: Installation	CWA shall be installed prior to any concrete delivery to the construction site; and remove upon termination of use of the washout. Accumulated solid waste, including concrete waste and any contamination soils, must be removed from the site to a designated disposal location.		
Where: Location	the groundwater table is hig	gh; or if the CWA will	on the SWMP. Lined CWA if be placed within 400 ft of a 1,000 ft of a wells or drinking
How: Maintenance & Inspection	Maintenance maintain CWA throughout construction. Ensure adequate signage is in place		
	gement (SP) MM-2	Used: no	Phase(s): n/a
Permane	nt Temp	orary	
What: Description	SP includes measures to r stockpiles. SP shall be used v		d sediment transport from odible materials are stored.
When: Installation	a CM is necessary to access	s the SP, ensure CMs ger needed, properly	tion. If temporary removal of s area re-installed per detail dispose of excess materials here the SP was located.
Where: Location	-	rainageways, gutters	ere concentrated stormwater , and storm sewer inlets. SP
How: Maintenance & Inspection	maintain SP throughout copervious surface and protect	nstruction. It is reco ted from sediment tr	lix 5). Inspect regularly and mmended to place SP on a ransport with measures such pervious surfaces if no other

	practical alternative exists. Provide weighted sediment control measures around the perimeter of the SP, such as RS or sand bags.				
	1 0.00	ролиновог от инс	<u> ,</u>		
Paving and Grin	ding Ope	erations (PGO) SM-12	Used: no	Phase(s): n/a	
Permane	nt	Тетр	orary		
What: Description	manage materia	ement practices can	be used such as:	during all PGO. A variety of IP, perimeter controls, store drainages and waterways, and	
When: Installation	materia	PGO shall be scheduled during dry weather. Recycle asphalt and pavement material when feasible. Material that cannot be recycled must be disposed of properly.			
Where: Location		noff management pra	•	aving and grinding operations	
How: Maintenance & Inspection		nall be installed per c in PGO throughout co		ndix 5). Inspect regularly and	
Temporary Cement Mixing Area MM-3 Used: no Phase(s): n/a					
Permanent Temporary					
What: Description	Contained area for concrete, cement, mortar, drywall, mud and stucco mixing activities.				
When: Installation	Install prior to any material mixing activity; and remove upon termination of use of the area.				
Where: Location	Installed at the locations identified on the SWMP.				
How: Maintenance & Inspection	Install per detail (attach to Appendix 5). Inspect regularly and maintain capacity throughout construction. Clean-up if there are spills.				
a mspection	through	hout construction. Cle	an-up if there are s	pills.	
			·	•	
Insert Additional			Used: no	Phase(s): n/a	
	Control		Used: no	•	
Insert Additional	Control	Measure (CM)	Used: no	•	
Insert Additional	Control nt otion	Measure (CM)	Used: no	•	
Insert Additional Permane What – Descri	Control nt otion	Measure (CM) Tempo INSERT TEXT HERE	Used: no	•	

For additional CMs, repeat as needed here.

SECTION 3: CONSTRUCTION SITE PHASING & EC PLAN

3.1 Construction Site Phasing Summary

Instructions:

The SWMP and EC Plan (Site Map) shall clearly delineate the construction sequencing between the separate phases of construction, and the CM/BMP implementation of the permanent and temporary CMs.

Using the information under **Section 1.3 Nature and Sequence of Construction Activity**, describe the construction phase and the permanent or temporary CMs associated with each of the following 3 phases:

- Initial Construction = Phase I, Initial BMP/CMs
- Interim Construction = Phase II, Interim BMP/CMs
- Final Construction = Phase III, Final BMP/CMs

The EC Plan <u>must</u> identify location of the proposed CMs to be implemented during the 3 phases of construction. **Develop 3 separate phased detailed site maps** (one plan sheet representing one phase; do not combine). Place the EC Plan sheets in **Appendix 6**. Place CMs details in **Appendix 5**.

Initial Construction - Phase I
- Select applicable construction activities
Demolition
Clearing, Grubbing, Tree and Shrub Removal
☐ Top Soil Stripping and Stock Piling
☐ Grading
Over-excavation/Soil conditioning
Utility Installation
Dewatering
Other: Insert Here
☐ Initial Control Measures (CM)
Stabilized Staging Area (SSA) SM-6
VTC to enter/exit into public roads
Perimeter Control
Inlet Protection (IP) SC-6 on existing site or off-site storm drains
Check Dams (CD) EC-12
Rock Sock (RS) SC-5
Silt Fence (SF) SC-1
Sediment Control Log (SCL) SC-2
Sediment Basin (SB) SC-7
Sediment Trap (ST) SC-8
Earth Dikes/Drainage Swales (ED/DS) EC-10
Dewatering Operations (DW) SM-9
Stockpile Management (SP) MM-2
Surface Roughening (SR) EC-1
Temporary Seeding (TS) EC-2

Soil Binders (SB) EC-3
☐ Limits of Construction (LOC)
Protection of Existing Vegetation (PV) SM-2
Employee Training
Street Sweeping (SS) SM-7
Dust Control (DC) EC-14
Good Housekeeping Practices (required)
Spill Prevention, Containment and Control (required)
Covering Outdoor Storage and Handling Areas (required)
Other: Insert Here
 Interim Construction - Phase II Select applicable construction activities Road Construction Parkinglot Construction
Vertical Construction
Dewatering
Other: Insert Here
other. inservice
 ✓ Interim Control Measures (CM) - BMPs/CMs associated with this Phase ✓ Inlet Protection (IP) SC-6 as new storm drains are constructed ✓ Outlet Protection (OP)
Check Dams (CD) EC-12
Rock Sock (RS) SC-5
Installation of additional CMs at curbside, sidewalks, medians, and parking islands once
pavement is laid (until landscape begins)
▼ VTC to enter/exit dirt lots from internal roads or parkinglot
Concrete Washout Areas (CWA) MM-1
Temporary Cement Mixing Area
Stabilized Staging Area (SSA) SM-6
Silt Fence (SF) SC-1
Sediment Control Log (SCL) SC-2
Sediment Basin (SB) SC-7
Sediment Trap (ST) SC-8
Earth Dikes/Drainage Swales (ED/DS) EC-10
Surface Roughening (SR) EC-1
Temporary Seeding (TS) EC-2
Soil Binders (SB) EC-3
Dewatering Operations (DW) SM-9
Stockpile Management (SP) MM-2
Stockpile Indiagement (St.) Intin 2

☐ Limits of Construction (LOC)
Protection of Existing Vegetation (PV) SM-2
Employee Training
Street Sweeping (SS) SM-7
Dust Control (DC) EC-14
Good Housekeeping Practices (required)
Spill Prevention, Containment and Control (required)
Covering Outdoor Storage and Handling Areas (required)
Other: Insert Here
Final Construction - Phase III
- Select applicable construction activities
Final Grade
Top Soil Placement
Landscape (per approved plan)
Removal of applicable temporary BMPs/CMs
Permanent pond conversion + removal of sediments on the SB
Other: Insert Here
Final Stabilization - BMPs/CMs associated with this Phase
Sod
Permanent Seeding & Mulching (PS/MU)
Erosion Control blankets (RECP)
Limits of Construction (LOC)
Protection of Existing Vegetation (PV) SM-2
Employee Training
Street Sweeping (SS) SM-7
Dust Control
Good Housekeeping Practices (required)
Spill Prevention, Containment and Control (required)
Covering Outdoor Storage and Handling Areas (required)
Other: Insert Here

3.2 General Notes

Instructions:

Refer to Appendix 13 for the General EC Plan Notes from Unincorporated Adams County.

SECTION 4: WASTE MANAGEMENT PLAN

Instructions:

Complete the Waste Management Plan below by describing site-specific pollution prevention CMs that will be implemented to control pollutants in stormwater from construction sites. Indicate which of the following CM categories are applicable for your construction site:

Covering Outdoor Storage and Handling Areas
 Spill Prevention and Response Plan
 Good Housekeeping
 (required)
 (required)

Vehicle Maintenance, Fueling and Storage
 Street Sweeping and Cleaning
 Storm Sewer System Cleaning
 (required, if applicable)
 (required, if applicable)

4.1 Covering Outdoor Storage and Handling Areas

Instructions:

- Practices for outdoor storage and handling areas are required to be implemented in all 3 phases of construction (initial, interim and final).

Covering Outdoor Storage and Han	dling Areas	Used: Yes	Phase(s): n/a
Permanent		y Procedure	

Description: When raw materials, byproducts, finished products, storage tanks, and other materials are stored or handled outdoors, stormwater runoff that comes in contact with the materials can become contaminated. Proactively covering storage and handling areas can be an effective source control for such areas. Coverings can be permanent or temporary and consist of tarp, plastic sheeting, roofing, enclosed structures, or other approaches that reduce exposure of materials to precipitation and wind.

Uses: Covering is appropriate for areas where solids (e.g., gravel, compost, building materials) or liquids (e.g., oil, gas, tar) are stored, prepared, or transferred. Cover the following areas that are applicable to this construction site:

- Loading and Unloading: Loading and unloading operations usually take place at outside storage or staging area on the construction site. Materials may be spilled during transfer between storage facilities and trucks during pumping of liquids, pneumatic transfer of dry chemicals, and mechanical transfer of bags, boxes, drums, or other containers by material handling equipment.
- Aboveground Tanks/Liquid Storage: Accidental releases of chemicals from above-ground liquid storage can contaminate stormwater with a variety of pollutants. Several common causes of accidental releases from above-ground storage include: external corrosion and structural failure, problems due to improper installation, spills and overfills due to operator error, failure of piping systems, and leads or spills during pumping of liquids or gases between trucks to a storage facility.
- Outside Manufacturing: Common outside manufacturing activities may include parts assembly, rock grinding or crushing, metals painting or coating, grinding or sanding, degreasing, concrete manufacturing, parts cleaning or operations that use hazardous materials. These activities can result in dry deposition of dust, metal and wood shavings and liquid discharges of dripping or leaking fluids from equipment or process and other residuals being washed away in storm runoff. In addition, outside storage of materials and waste products may occur in conjunction with outside manufacturing.
- Waste Management: Wastes spilled, leached, or lost from outdoor waste management areas or outside manufacturing activities may accumulate in soils or on other surfaces and be carried away by storm runoff. There is also the potential for liquid wastes from surface impoundments to overflow to surface waters or soak the soil where they can be picked up by runoff. Possible stormwater contaminants include toxic compounds, oil and grease, oxygen-demanding organics, paints and solvents, heavy metals and high levels of

suspended solids. Lack of coverage of waste receptacles can result in precipitation seeping through the material and collecting contaminants or the material being blown around the site and into the storm sewer system. Containment sources include waste piles, wastewater and solid waste treatment and disposal, land application sites, dumpsters, or unlabeled drums.

Outside Storage of Materials: Raw materials, intermediate products, byproducts, process residuals, finished products, containers, and materials storage areas can be sources of pollutants such as metals, oils and grease, sediment and other contaminants. Pollutant transport can occur when solid materials wash off or dissolve into water, or when spills or leaks occur.

Practice Procedures:

- Where practical, conduct operations indoors. If outdoors, then select a temporary or permanent covering to reduce exposure of materials to precipitation and runoff.
- The type of covering selected depends on a variety of factors such as the type and size of activity being conducted and materials involved. Types of cover range from relatively inexpensive tarps and plastic sheeting to overhead structures or fully enclosed buildings equipped with ventilation, lighting, etc.
- Covering practices should be combined with Good Housekeeping to be most effective.
- Tarps and plastic sheets require more frequent inspection and maintenance.

Place site-specific information here:

INSERT TEXT HERE

4.2 Spill Prevention and Response Plan

Instructions: Implement spill prevention, containment and control practices during all 3 phases of construction.

Spill Prevention & Response Plan	Used: Yes	Phase(s): n/a
Permanent	Temporary Procedure	

Spills and leaks of solid and liquid materials processed, handled or stored outdoors can be a source of stormwater pollution. Spilled substances can reach receiving waters when runoff washes these materials from impervious surfaces or when spills directly enter the storm system during dry weather conditions. Effective controls depend on spill prevention and response measures, proper training, and may include structural spill containment or control devices. Spill containment measures include temporary or permanent curbs or berms that surround a potential spill site. Berms may be constructed of concrete, earthen material, metal, synthetic liners, or other material. Spill control devices include valves, slide gates, or other devices that can control and contain spilled material.

Spill Prevention Measures

- Train key employees in plan and provide clear, common-sense spill prevention practices and clean-up procedures to be strictly followed.
- Identify equipment that is exposed to precipitation, pollutants that may be generated and possible sources of leaks or discharges.
- Perform inspections and preventative maintenance of equipment for proper operation and to check for leaks or evidence of discharge (stains). Ensure repairs are completed or provide temporary leak containment until such repairs can be made.
- Drain used motor oil and other automotive fluids in a designated area away from storm inlets. Collect spent fluids and recycle or dispose of properly. Never dispose into storm or sanitary sewer.
- In fueling areas, clean up spills with dry methods (absorbents) and use damp cloths on gas pumps and damp mops on paved surfaces.
- Never hose down a spill or absorbent materials into the storm drain, or down into an interior floor drain which leads to the sanitary sewer system.
- Reduce stormwater contact with equipment and materials by implementing covered storage, reduce stormwater run-on and follow good housekeeping practices.
- Post signs at critical locations with Spill Prevention and Response Plan information.

Identification of Spill Areas: Spill prevention and response measures shall be implemented at construction sites in areas where materials may be spilled in quantities that can adversely impact receiving waters or the storm system. Identify potential spill areas, potential spill volumes, material types, frequency of material used, and drainage paths from spill areas with relation to storm sewer inlets, adjacent water bodies, structural CMs, and containment structures. Use this information to determine the types of spill prevention and control measures needed specific to the site conditions. Show the potential spill areas on the EC Plan:

- Loading and unloading areas
- Outdoor storage areas
- Outdoor manufacturing or processing activities
- Waste disposal
- Areas that generate significant dust or particulates that may later deposit on the ground
- Areas prone to spills based on past experience at the site
- Locations where other routine maintenance activities occur
- Areas where smaller leaks may occur (parkinglots)

Material Handling Procedures: From a water quality perspective, the primary principle behind effective material handling practices is to minimize exposure to precipitation. Store the material indoors, otherwise implement the following outdoor materials handling procedures:

- Divert stormwater around materials storage areas.
- Keep bulk solid materials (raw materials, sand, gravel, topsoil, compost, concrete, packing materials, metal products, etc) covered and protected from stormwater.
- When practical, store materials on impermeable surfaces.
- Store hazardous materials according to federal, state, and local requirements.
- Adopt procedures to reduce spills or leaks during filling or transfer of materials.
- Substitute less toxic or nontoxic materials for toxic materials.
- Store containers that are easily punctured or damaged away from high traffic areas.
- Add waste-capture containers such as collection pans for lubricating fluids.
- Store drums and containers with liquids on impermeable surfaces and provide 2dary containment. Place drums stored outdoors on pallets to minimize contact with runoff.

Spill Response Procedures: Tailor spill response procedures to site-specific conditions and industry-specific regulatory requirements. Follow procedures:

- Contain and cleanup spills promptly after the spill is discovered.
- Sweep up small quantities of pollutants to reduce exposure to runoff.
- Place absorbents at fueling areas or areas susceptible to spills.
- Wipe up small spills with a rag, store rags in appropriate containers, dispose of rags properly or use a professional industrial cleaning service.
- Contain medium-sized spills with absorbents and use berms or absorbent "snakes" as temporary booms for the spill. Store and dispose of absorbents properly. Wet/dry vacuums may be used, but not for volatile fluids.
- Install drip pans below minor equipment leaks until a repair can be made.
- For large spills, first contain the spill and plug storm inlet where the liquid may migrate off-site, then clean up the spill.

- Excavation of spill areas to removed contaminated material may be required where large liquid spills occur on unpaved surfaces.
- Maintain an inventory of cleanup materials onsite and strategically locate them based on the types and quantities of chemicals present.
- Records of spills, leaks, or overflows that result in the discharge of pollutants must be documented and maintained.

Two approaches are used when implementing spill containment measures: 1) Design system to contain the entire spill; or 2) Use curbing to route spilled material to a collection basin. Both containment berming and curbing should be sized to safely contain or convey to a collection basin a spill from the largest storage tank, tanker truck, or other containment device in the possible spill area. The spill containment area must have an impermeable surface (impermeable liner, asphalt or concrete) to prevent groundwater contamination. Design containment system to enable collection and removal of spilled material through a pump or vacuum trucks, sorbent or gelling material, etc. Material removed must be disposed of or recycled according to local, state, and federal standards. If the capacity of the spill containment is exceeded, supplemental measures should be available such as a portable containment device, sorbent materials, or gelling agents to solidify the material. Water that collects within containment areas due to rainfall or snowmelt must be appropriately treated before release from the spill area.

Emergency 24-Hour Site Contact (with spill response and clean-up authority):

Adams County Stormwater

Adams County

Office #: 720-523-6400 Cell #: n/a Email: n/a

Notification Procedures: Some spills may need to be reported to the State of Colorado, Water Quality Control Division and Adams County Stormwater Division <u>immediately</u> upon discovery. Releases of chemical, oil, petroleum product, sewage, etc., which may enter State Waters must be reported to: State of Colorado, 24-hour Emergency Spill Reporting Line: 1-877-518-5608. www.cdphe.state.co.us/emp/spillsandreleased.htm). Adams County Stormwater Hotline: 720-523-6400; Public Works: 303-453-8787. Tri-County Health Department: 303-220-9200.

Insert: Other Notification numbers in the event of a spill

Insert: List of spill clean-up materials on-site

Insert: Incorporate by reference any part of a Spill Prevention Control and Countermeasure (SPCC) plan under section 311 of the Clean Water Act (CWA)

The relevant sections of any referenced plans must be available on-site

Insert: Incorporate by reference any part of the Spill Prevention Plan required by a separate CDPS permit

The relevant sections of any referenced plans must be available on-site

INSERT ADDITIONAL INFORMATION HERE

4.3 Good Housekeeping

Instructions: Implement good housekeeping practices during all 3 phases of construction (initial, interim & final).

Good Housekeeping Practices	Used: Yes	Phase(s): 1, 2, 3
Permanent		

Description: Good housekeeping practices are designed to maintain a clean and orderly work environment. The most effective first steps towards preventing stormwater pollution at construction sites simply involve using common sense to improve the site's basic housekeeping methods. Poor housekeeping practices result in increased waste and potential for stormwater contamination. A clean and orderly work site reduces the possibility of accidental spills caused by mishandling of chemicals and equipment and should reduce safety hazards to personnel. A well-maintained material and chemical storage area will reduce the possibility of stormwater mixing with pollutants. Some simple procedures a site can use to promote good housekeeping include improved operation and maintenance of machinery and processes, material storage practices, material inventory controls, routine and regular clean-up schedules, maintaining well organized work areas, signage, and educational program for employees and the general public.

Practice Procedures for Operation and Maintenance:

- Maintain dry and clean floors and ground surfaces by using brooms, shovels, vacuums or cleaning machines, rather than wet clean-up methods.
- Regularly collect and dispose of garbage and waste material.
- Routinely inspect equipment to ensure that it is functioning properly without leaking and conduct preventative maintenance and needed repairs.
- Train employees on proper clean up and spill response procedures.
- Designate separate areas for auto parking, vehicle refueling and routine maintenance.
- Promptly clean up leaks, drips and other spills.
- Cover and maintain dumpsters and waste receptacles. Add additional dumpsters or increase frequency of waste collection if overflowing conditions reoccur.
- For outdoor painting and sanding: Conduct activities in designated areas that provide adequate protection to prevent overspray and uncontrolled emissions. All operations should be conducted on paved surfaces to facilitate cleanup. Use portable containment as necessary for outside operations. Clean up and properly dispose of excess paint, paint chips, protective coatings, grit waste, etc.
- Maintain vegetation on facility grounds in a manner that minimizes erosion. Follow the Landscape Maintenance and Pesticide, Herbicide and Fertilizer Usage CMs to ensure that minimum amounts of chemicals needed for healthy vegetation are applied to minimize transport of these materials in runoff.

Practice Procedures for Material Storage Practices:

Provide adequate aisle space to facilitate material transfer and access for inspection.

- Store containers, drums, and bags away from direct traffic routes to reduce container damage resulting in accidental spills.
- Stack containers according to manufacturer's instructions to avoid damaging the containers from improper weight distribution. Also store materials in accordance with directions in Material Safety Data Sheets (MSDSs).
- Store containers on pallets or similar devices to prevent corrosion of containers that results from containers coming in contact with moisture on the ground.
- Store toxic or hazardous liquids within curbed areas or secondary containers.

Practice Procedures for Material Inventory Practices: An up-to-date materials inventory can keep material costs down by preventing overstocking, track how materials are stored and handled onsite, and identify which materials and activities pose the most risk to the environment. Assign responsibility of hazardous material inventory to individuals trained to handle such materials. A material inventory should include these steps:

- Identify all chemical substances present at work site. Perform a walk-through of the site, review purchase orders, list all chemical substances used and obtain Material Safety Data Sheets (MSDS) for all chemicals.
- Label all containers with name and type of substance, stock number, expiration date, health hazards, handling suggestions, and first aid information. Find info on the MSDS.
- Clearly identify special handling, storage, use and disposal considerations for hazardous materials on the material inventory.
- Institute a shelf-life program to improve material tracking and inventory to reduce the amount of materials overstocked and ensure proper disposal of expired materials. Careful tracking of materials ordered can result in more efficient materials use. Decisions on the amounts of hazardous materials that are stored on site should include an evaluation-of any emergency control systems that are in place. All storage areas for hazardous materials should be designed to contain spills.

Practice Procedures for Training and Participation: Provide frequent and proper training in good housekeeping techniques to reduce mishandling of chemicals or equipment. Educate by:

- Discussing good housekeeping practices in training programs and meetings.
- Publicizing pollution prevention concepts through posters or signs.
- Posting bulletin boards with updated good housekeeping procedures and tips.

Ρ	lace	site-	specific	inform	nation	here:

INSERT TEXT HERE

4.4 Vehicle Maintenance, Fueling and Storage

Instructions:

- Identify procedures by selecting the blue Yes/NA then type "Yes" or "N/A".
- If applicable, CMs is required during all 3 phases of construction (initial, interim and final).

Vehicle Maintenance, Fueling and S	itorage	Used: yes	Phase(s): n/a	
Permanent	⊠ Temp	orary		

Description: Areas where vehicles are fueled, maintained, and stored/parked can be pollutant "hot spots" that can result in hydrocarbons, trace metals, and other pollutants being transported in precipitation runoff. Proper fueling operations, storage of automotive fluids and effective spill cleanup procedures can help reduce contamination of stormwater runoff from vehicle maintenance and fueling facilities. Fuel-related spills can occur due to lack of attention during fueling or "topping off" fuel tanks. Common activities at construction sites include vehicle fluid replacement and equipment replacement and repair. Some of the wastes generated maintaining automobiles include solvents (degreasers, paint thinners, etc.), antifreeze, brake fluid, brake pad dust, battery acid, motor oil, fuel, and lubricating grease.

Uses: procedures are applicable to vehicle maintenance and fueling. Vehicle wash water is considered process wastewater that <u>will not</u> be discharged to the storm sewer system.

Practice Procedures for Vehicle Maintenance: The most effective way to minimize wastes generated by automotive maintenance activities is to prevent their production in the first place. The following practices will be implemented:

- Perform maintenance activities inside or under cover. When repairs cannot be performed indoors, use drip pans or absorbents.
- Keep equipment clean and free of excessive oil and grease buildup.
- Promptly cleanup spills using dry methods and properly dispose of waste. When water is required, use as little as possible to clean spills, leaks, and drips.
- Use a solvent collection service to collect spent solvent used for parts cleaning.
- When using liquids for cleaning, use a centralized station to ensure that solvents and residues stay in one area. Locate drip pans and draining boards to direct solvents back into a solvent sink or holding tank for reuse.
- Store used oil for recycling in labeled tanks. Locate used oil tanks and drums away from storm sewer, flowing streams, and preferably indoors.
- Use non-hazardous or less hazardous alternatives when practical. For example, replace chlorinated organic solvents with non-chlorinated ones like kerosene or mineral spirits.
- Properly recycle or dispose of grease, oil, antifreeze, brake fluid, cleaning solutions, hydraulic fluid, batteries, transmission fluid, worn parts, filters, and rags.
- Drain and crush oil filters before recycling or disposal.
- Drain all fluids and remove batteries from salvage vehicles and equipment.

- Closely monitor parked vehicles for leaks and place pans under leaks to collect the fluids for proper disposal or recycling.
- Install berms or other measures to contain spills and prevent work surface runoff from entering storm sewer system.
- Develop a spill prevention plan with measures such as spill kits, and information about location of storm drains and how to protect them if a large spill occurs.
- Conduct periodic employee training to reinforce proper disposal practices.
- Promptly transfer used fluids to recycling drums or hazardous waste containers.
- Store cracked batteries in leak-proof secondary containers.
- Inspect outdoor storage areas regularly for drips, spills and improperly stored materials (for example: unlabeled containers, auto parts that might contain grease or fluids, etc).
 This is particularly important for parking areas for vehicles awaiting repair.
- Structural CMs, such as traps, installed in vehicle hotspot areas require routine cleanout of oil and grease. During heavy rainfall, cleanout is required more often to ensure that pollutants are not washed through the trap. Sediment removal is also required on a regular basis to keep the CM working efficiently.

Practice Procedures for Vehicle Fueling:

- Fueling areas should be designed to prevent stormwater runoff and spills. Fuel-dispensing areas should be paved with concrete or equivalent impervious surface, with an adequate slope to prevent ponding, and separated from the rest of the site by a grade break or berm to prevent run-on of precipitation.
- For sites using a mobile fuel truck, establish a designated fueling area. Place temporary "caps" over nearby catch basins or manhole covers so that if a spill occurs, it is prevented from entering the storm sewer. 2dary containment should be used when transferring fuel from the tank truck to the fuel tank. Cover storm drains in the vicinity. Install vapor recovery nozzles to help control drips, and reduce air pollution.
- Keep spill response information and spill cleanup materials onsite and readily available.
- Employ dry cleanup methods cleaning up fuel spills. Such methods include sweeping to remove litter and debris, and using rags and absorbents for leaks and spills.
- Water should not be used to wash fuel spill areas. During routine cleaning, use a damp cloth on the pumps and a damp mop on the pavement. Fuel dispensing nozzles should be fitted with automatic shutoff except where prohibited by fire department. Post signs at the fuel dispenser warning operators against "topping off' vehicle fuel tanks.
- Provide written procedures describing CMs to employees who will be fueling.

Place site-specific information here:

INSERT TEXT HERE

4.5 Street Sweeping and Cleaning

Instructions:

- Identify CMs for the construction site by selecting the blue Yes/NA then type "Yes" or "N/A".
- If applicable, street sweeping shall be implemented for all 3 phases of construction (initial, interim and final).

Street Sweeping (SS)	Used: n/a	Phase(s): n/a
Permanent		

Description: SS uses either manual or mechanical pavement cleaning practices to collect or vacuum sediment, litter and other debris from the streets before being washed into storm sewers by runoff. This practice can reduce pollutant loading to receiving waters, reduce clogging of storm sewer pipes, prolong the life of infiltration CMs and reduce clogging of outlet structures in detention ponds. Mechanical designs include: broom and conveyor belt sweeper, wet or dry vacuum-assisted sweepers, and regenerative-air sweepers. The effectiveness depends upon particle loadings being swept, street texture, moisture conditions, parked cars, equipment conditions and frequency of cleaning.

Uses: SS is a technique in urban areas where sediment and litter accumulated on streets is of concern for aesthetic, sanitary, water and air quality reasons. SS is required at constructions sites per SWMP to reduce off-site tracking.

Procedures:

- 1. SS may be performed manually (broom and shovel) or with a vacuum sweeper (no kickbroom). Choose the most effective approach for site conditions.
- 2. SS shall be completed when there is sediment tracking from the construction site exits into the public road or right-of-way.
- 3. SS frequency depends on presence of sediment tracking. If tracking is occurring, either a VTC shall be installed, the VTC needs maintenance, or the VTC is inadequate; all require SWMP updates.
- 4. Off-site sediment tracking from the construction site shall be swept immediately.
- 5. Conduct SS prior to precipitation events.
- 6. Operate sweepers at manufacturer recommended optimal speed levels.
- 7. Regularly inspect vehicles and equipment for leaks and repair promptly.
- 8. Keep accurate logs of number of curb-miles swept and amount of waste collected.
- 9. Dispose of SS debris and dirt at a landfill.
- 10. Do not store swept material along the side of the street or near a storm drain inlet.

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INSERT TEXT HERE

4.6 Storm Sewer Cleaning

Instructions:

- Select CMs to remove accumulated sediment, trash, and other pollutants from the storm system for the
 applicable construction site wastes identified in Section 1.8 Potential Sources of Pollution to maintain a
 clean and orderly construction site.
- Identify CMs by selecting the blue Yes/NA then type "Yes" or "N/A". If applicable, the following practices shall be implemented for all 3 phases of construction (initial, interim and final).

Storm Sewer System Cleaning	Used: n/a	Phase(s): n/a
Permanent	☐ Temporary	

Description: Periodic storm sewer cleaning can help remove accumulated sediment, trash, and other pollutants from the storm system including inlets, pipes and also construction CMs. Routine cleaning reduces the amount of pollutants in the storm system and in receiving waters. Clogged drains can cause overflow, leading to increase erosion. Cleaning increases dissolved oxygen, reduces levels of bacteria, and supports in-stream habitat. Areas with flat grades or low flows should be given special attention because they rarely achieve high enough flows to flush themselves. Water used in storm drain cleaning must be collected and properly disposed of, typically at a sanitary wastewater treatment facility. Simpler methods in localized areas can also include manual trash collection and shoveling sediment and debris from inlets and outlets. Frequency and prioritization of storm sewer cleaning is affected by the activity and intensity of construction and the proper installation and maintenance for construction CMs.

Uses: Inspection of the existing storm system is recommended prior construction to document condition. The storm sewer shall be cleaned at minimum at completion of construction.

Practice Guidelines: Inspect the storm system as part of the required stormwater inspection.

- **Technology available**: manual cleaning (shovel), vacuum cleaning and vacuum combination jet cleaning. Choose the most effective approach for site conditions.
- Staff training: train about maintenance, waste collection and disposal methods.
- Waste disposal: Most catch basin waste is acceptable for landfills. If hazardous material is suspected, it should be tested and disposed of accordingly.

Place site specific information here:	
INSERT TEXT HERE	

SECTION 5: STORMWATER INSPECTIONS

5.1 Inspections

Instructions:

Identify the individual responsible for conducting inspections and describe qualifications. Certifications, such as "Certified Inspector of Sediment and Erosion Control" (CISEC), or equivalent, are recommended.

Select the frequency of inspections and procedures to inspect CMs that will occur at your site.

Identify procedures to document the repairs and maintenance of CMs as a result of the inspections.

Use the Stormwater Inspection Form in Appendix 7. Place completed stormwater inspections in Appendix 9.

1. Inspection Personnel:

Identify the person(s) who will be responsible for conducting stormwater inspections and describe their qualifications:

Chris Strickler, CBS Trucking

2. Inspection Frequency:

Inspections shall start within 7 calendar days of commencement of construction activities.

Minimum Stormwater Inspection Schedule: A thorough inspection of the site inspection shall be performed in accordance with <u>one</u> of the following <u>minimum frequencies:</u>

- At least one inspection every <u>7 calendar days</u>, or
- At least one inspection every <u>14 calendar days</u>, if post-storm event inspections are conducted within <u>24 hours after the end of any precipitation or snowmelt event</u> that causes surface erosion. Post-storm inspections may be used to fulfill the <u>14-day</u> routine inspection requirement.

Post-Storm Inspections at Temporarily Idle Sites - For permittees choosing to combine 14-day inspections and post-storm-event inspections, if no construction activities will occur following a storm event, post-storm event inspections must be conducted prior to re-commencing construction activities, but <u>no later than 72 hours following the storm event</u>. The delay of any post-storm event inspection must be documented in the inspection record. Routine inspections must still be conducted at least every 14 calendar days.

Inspections at Completed Sites/Areas - When the site, or portions of a site are awaiting establishment of a vegetative ground cover and final stabilization, the permittee must conduct a thorough inspection of the stormwater management system at least once <u>every 30 days</u>. Post-storm event inspections are not required under this schedule. This reduced inspection schedule is allowed if all of the following criteria are met:

- All construction activities resulting in ground disturbance are complete;
- ii. All activities required for final stabilization, in accordance with the SWMP, have been completed, with the exception of the application of seed that has not occurred due to seasonal conditions or the necessity for additional seed application to augment previous efforts; and

iii. The SWMP has been amended to locate those areas to be inspected in accordance with the reduced schedule allowed for in this paragraph.

The <u>minimum inspection frequency</u> required does not affect the permittee's responsibility to implement and maintain effective control measures as prescribed in the SWMP. Proper maintenance may require more frequent inspections.

3. Inspection Procedures:

- At minimum, inspect the construction site perimeter, all disturbed area, designated haul routes, material and/or waste storage areas that are exposed to precipitation, discharge location, and locations where vehicles exit the site shall be inspected for evidence of, or the potential for, pollutants leaving the Permitted boundaries, entering the storm sewer system, or discharging to the MS4.
- Refer to Section 5.3 Inspection Sequence.
- Visually verify whether all implemented CMs are in effective operational condition and are working as designed in their specifications to minimize pollutant discharges.
- Determine if there are new potential sources of pollutants.
- Assess the adequacy of CMs at the site to identify areas requiring new or modified CMs to minimize pollutant discharges.
- Identify all areas of non-compliance and implement corrective action.

4. Correcting Problems:

Take steps to minimize the discharge of pollutants until a CM is implemented and operational, or an inadequate CM is replaced or corrected, and returned to effective operating condition. If it is infeasible to install or repair the CM immediately after discovering the deficiency, the following must be documented:

- (a) Describe why it is infeasible to initiate the installation or repair immediately; and
- (b) Provide a schedule for installing or repairing the CM and returning it to an effective operating condition asap.

Remove and properly dispose of any unauthorized release or discharge. Clean up any contaminated surfaces to minimize discharges of the material in subsequent storm events. n/a

Responsible staff or company for making corrections: SWMP Administrator shall work with Adams County inspector to mitigate and determine the correct measures to mediate any problems identifies on site.

5. Inspection Form:

Use the form (or equivalent) in **Appendix 7**.Place completed inspections in **Appendix 9**. Document: Inspection date, name & title of inspector; weather conditions; phase of construction; estimated acreage of disturbance at the time of inspection; location(s) of discharges of sediment or other pollutants from the site; location(s) of CMs needing maintenance; location(s) and identification of inadequate CMs; location(s) and identification of additional CMs needed that were not in place at the time of inspection; description of the minimum inspection frequency; deviations from the minimum inspection schedule; certification statement for corrective action(s) or inspection (if no actions).

5.2 Delegation of Authority

Instructions:

- Delegation of Authority is **optional**. Attach a copy of the signed delegation of authority form in **Appendix 8**.
- Identify the individual(s) or specifically describe the position where the construction site operator has delegated authority for the purposes of signing inspection reports, certifications, or other information.

Duly Authorized Representative(s) or Position(s):

Delwest
Joe Delzotto
President
155 S. Madison St. Suite 326
Denver, CO 80209
720-708-4065
jad@delwest.com

5.3 Inspection Sequence

Instructions:

When conducting stormwater inspections of your construction site it is recommended that one always follows this recommended inspection sequence to ensure that all procedures and measures are being followed.

Place all completed inspections in Appendix 9.

1. Plan the stormwater inspection

- Use the inspection form (or equivalent) under Appendix 7.
- Obtain a copy of the EC Plan (Site Map) with CMs locations marked.
- Plan to walk the entire site, including discharge points from the site and any off-site support activities.
- Follow a consistent pattern each time to ensure you inspect all areas.

2. Determine Inspection frequency

- Site inspections must be conducted at least once every 7; or 14 calendar days.
- If 14-day inspections, then post-storm inspections must be conducted within 24 hours after the end of any precipitation or snowmelt event that causes surface erosion.
- 30-day inspections are conducted once construction is complete, temporary stabilizations has been installed and the site is waiting to reach final stabilization.

3. Inspect discharge points and downstream, off-site areas

- Inspect discharge locations to determine whether erosion and sediment control measures are effective.
- Inspect nearby downstream locations.
- Walk down the street to inspect off-site areas for signs of discharges.
- Inspect down slope existing catch basins to ensure they are free of sediment and other pollutants and to ensure that they are adequately protected.

4. Inspect perimeter controls and slopes

- Inspect perimeter controls to determine if sediment should be removed.
- Check the structural integrity of the CM. Determine if CM replacement is needed.
- Inspect slopes and temporary stockpiles to determine if erosion controls are effective.

5. Compare CMs in the EC Plan with the construction site conditions

- Determine whether CMs are in place as required by the EC plan.
- Evaluate whether CMs have been adequately installed and maintained.
- Look for areas where CMs are needed but are missing on the field, or are not documented on the SWMP.

6. Inspect construction site entrances

- Inspect the construction exits to determine if there is tracking of sediment from the site onto the street.
- Refresh or replace the rock in designated entrances and concrete washout areas.
- Look for evidence of additional construction exits being used that are not in the SWMP or are not stabilized.
- Sweep the street if there is evidence of sediment accumulation.

7. Inspect sediment controls

- Inspect any sediment basins for sediment accumulation.
- Remove sediment when it reduces the capacity of the basin by ¼ of the design storage volume.

8. Inspect pollution prevention and good housekeeping practices

- Inspect trash areas to ensure that waste is properly contained.
- Inspect material storage and staging areas to verify that potential pollutant sources are not exposed to stormwater runoff.
- Verify that concrete, paint, and stucco washouts are being used properly and are correctly sized for the volume of wash water.
- Inspect vehicle/equipment fueling and maintenance areas for signs of stormwater pollutant exposure.

9. Inspect for final stabilization

- Inspect all temporary and permanent CMs for correct application and installation with the CM details.
- Remove sediment from the private storm sewer system do not jet pollutants down into the public storm sewer system.

5.4 Common Compliance Problems

The following are problems commonly found at construction sites:

Problem #1 - Not using phased grading or providing temporary or permanent soil stabilization

Problem #2 - No sediment controls on-site

Problem #3 - No sediment control for temporary stockpiles

Problem #4 - No inlet protection

Problem #5 - No CMs or inadequate CMs to minimize vehicle tracking onto the road

Problem #6 - Inadequate or improper solid waste or hazardous waste management

Problem #7 - Unpermitted dewatering and other pollutant discharge at the construction site

Problem #8 - Poorly managed washouts (concrete, paint, stucco)

Problem #9 - Inadequate maintenance of CMs

Problem #10 - Inadequate documentation

Required Non-Compliance Notifications

Report non-compliance orally within twenty-four (24) hours from the time of awareness, and mail to the State a written report within five (5) working days after if:

- Any non-compliance issues which may endanger health or the environment regardless of the cause of the incident (these types of circumstances would primarily result from the discharge of pollutants in violation of the Construction Stormwater Permit);
- Any un-anticipated bypass which exceeds any effluent limitations in the Construction Stormwater Permit
- Any upset which causes an exceedance of any effluent limitation in the Construction Stormwater Permit
- Any daily maximum violations for any of the pollutants limited by Part I of the Construction Stormwater Permit. This includes any toxic pollutant or hazardous substance or any pollutant specifically identified as the method to control any toxic pollutant or hazardous substance (these types of circumstances would primarily result from an exceedance of a numeric effluent).

SECTION 6: RECORDKEEPING

6.1 Recordkeeping

Instructions:

The following section provides a list of records that shall be kept available at your construction site for review, including the length of time those records shall be preserved for.

The following records shall be kept available at the construction site, or be on-site when construction activities are occurring:

- ✓ An updated SWMP, reflecting current conditions and CMs.
- ✓ Keep record of SWMP/EC Plan changes made including the date and identification of the changes (*).
- ✓ Completed inspection reports, which shall be placed in **Appendix 9**.
- ✓ Any document or plan incorporated by reference to the SWMP.

Specify where will the SWMP be located on-site:

w/ contractor n/a

- (*) The SWMP must be amended when the following occurs:
 - 1) A change in design, construction, operation, or maintenance of the site requiring implementation of new or revised control measures;
 - 2) The SWMP proves ineffective in controlling pollutants in stormwater runoff in compliance with the permit conditions;
 - 3) Control measures identified in the SWMP are no longer necessary and are removed; and
 - 4) Corrective actions are taken onsite that result in a change to the SWMP.

A notation must be included in the SWMP to identify the date of the site change, the control measure removed, or modified, the location(s) of those control measures, and any changes to the control measure(s). The permittee must ensure the site changes are reflected in the SWMP. The permittee is non-compliant with the permit until the SWMP revisions have been made

SWMP documentation required under this permit are considered reports that must be available to the public under Section 308(b) of the CWA and Section 61.5(4) of the CDPS regulations. The permittee must make plans available to members of the public upon request. However, the permittee may claim any portion of a SWMP as confidential in accordance with 40 CFR Part 2.

Records will be retained for a minimum period of at least 3 years <u>after</u> the CDPHE permit is terminated.

SECTION 7: FINAL STABILIZATION

7.1 Final Stabilization Requirement

Instructions:

Final stabilization of the construction sites occurs when there is 70% <u>uniform</u> vegetated cover. The vegetation MUST be uniform so that there are no open patches of soil.

Final Stabilization means that all land disturbing activities are complete, and all disturbed areas have either been built on, paved over or a uniform vegetative cover has been established per SWMP. Prior to closing the State and County Stormwater Permit, all the items listed below must be completed in order for the construction site to be considered to have final stabilization.

- 1. The site has a uniform vegetative cover with a density of at least 70% compared to the original undisturbed site. Such cover must be capable of adequately controlling soil erosion.
- 2. If applicable, proper installation and maintenance of all approved, permanent, post-construction stormwater quality treatment drainage facilities.
- 3. Removal of all stockpiles of soil, construction material/debris, construction equipment, etc. from the construction site.
- 4. Streets, parking lots and other surrounding paved surfaces are clean and free of any sediment or debris.
- 5. Removal of sediment, debris or other pollutants within the private and adjacent public storm drainage system.
- 6. Restoration of any damaged public infrastructure caused by the construction activities.

7.2 Removal of Temporary CMs

Once the site has met the final stabilization conditions, the remaining temporary CMs such as perimeter controls, inlet protection, silt fence, etc. shall be removed and disposed of properly.

7.3 Stormwater Permits Close-out

Contact the County to close the local Stormwater Permit.

Submit the CDPS Stormwater Discharge Permit <u>Inactivation Form</u> to the State of Colorado, CDPHE.

7.4 Final Stabilization Measures

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Describe CMs for final stabilization of all disturbed areas at the site, such as: erosion control blankets, mulch and seeding, approved landscape plan, etc. Update the EC Plan (site map) to indicate areas that have achieved final stabilization.

Permanent Seeding (PS)	Used: n/a Phase(s): 3
	mporary
Per Adams county details	nporary
Broadcast seeding	
n/a	
n/a	
11/ 0	
Soil Stabilization Method	Used: Yes/NA Phase(s): 3
☐ Permanent ☐ Ten	mporary
INSERT CRIMPED STRAW	
INSERT HYDROMULCH	
INSERT ROLLED EROSION CONTROL PRODUC	CTS (RECP)
Others:	
	mporary
INSERT PAVEMENT Used: Yes/No	Phase(s): 3 Permanent - Temporary
Describe: INSERT TEXT HERE	
INSERT HARDSCAPE Used: Yes/No	Phase(s): 3 Permanent - Temporary
Describe: INSERT TEXT HERE	
INSERT XERISCAPE Used: Yes/No	Phase(s): 3 Permanent - Temporary
Describe: INSERT TEXT HERE	
INSERT LANDSCAPE PLAN Used: Yes/No	Phase(s): 3 Permanent - Temporary
Describe: INSERT TEXT HERE	
STABLE DRIVING SURFACES Used: Yes/No	Phase(s): 3 Permanent - Temporary
Describe: INSERT TEXT HERE	
INSERT OTHER Used: Yes/No	Phase(s): 3 Permanent - Temporary
Describe: INSERT TEXT HERE	<u>—</u>

For additional CMs, repeat as needed here

7.6 Long Term Stormwater Management

Instructions:

Describe planned water quality drainage facilities to control pollutants in stormwater discharges that will be installed and remain <u>after</u> construction operations are completed. Including, but not limited to, water quality detention basin, rain gardens, underground hydrodynamic separators, etc.

Describe type and location of the permanent water quality drainage facilities designed to control pollutants in stormwater discharges that will remain <u>after</u> construction operations are completed: n/a

Recorded Access and Drainage Easement over water quality facility: n/a n/a

Operation and Maintenance (O&M) Plan for the water quality facility: yes
If applicable: Submit copy to the O&M plan to the County for approval

SECTION 8: STORMWATER VIOLATIONS

8.1 Stormwater Violations

Federal, State and Local jurisdictions are able to enforce their respective Stormwater Pollution Prevention Regulations upon the Permittee or violator of these regulations. Administrative or judicial enforcement tools vary and may involve written warning, notice of violation, stop work order, permit revocation, surety withdrawal, civil or criminal penalties, which may require abatement of any violation, etc.

VIOLATIONS ARE SUBJECT TO ENFORCEMENT FROM THE TIME THE VIOLATION STARTS

8.2 Potential Stormwater Violations

The following items are considered a violation:

- 1. Conducting a permit covered activity without a local Stormwater Permit.
- 2. Conducting construction activities outside the permitted boundary of the local Stormwater Permit.
- 3. Failure to prepare a SWMP.
- 4. Failure to prepare an Erosion Control (EC) Plan, aka Site Map.
- 5. Conducting a permit covered activity without County/City's SWMP approval.
- 6. Conducting construction activity without a State CDPS Stormwater Discharge Permit.
- 7. Failure to renew Stormwater Permits.
- 8. Failure to renew financial surety.
- 9. Deficient SWMP.
- 10. Failure to update the SWMP adequately to reflect current site conditions.
- 11. Failure to install, maintain or properly select Control Measures (CM), aka Best Management Practices (BMP).
- 12. Failure to correct findings from previous City/County Regulatory Inspections
- 13. Failure to perform stormwater inspections of the permitted construction site.
- 14. Failure to submit requested documentation to the City/County.
- 15. Failure to adequately respond to the City/County's written directives.
- 16. Failure to install permanent post-construction BMPs (if applicable).
- 17. Lack of good housekeeping practices.
- 18. Pollution, contamination or degradation of stormwater quality.
- 19. An illicit discharge into the City/County's Municipal Separate Storm Sewer System (MS4).

SECTION 9: SWMP CERTIFICATION

9.1 SWMP Certification Statement

Instructions:

The <u>Permittee</u> shall certify the SWMP by signing the certification statement below. It is recommended that all subcontractors sign the Subcontractor Certifications/Agreements in **Appendix 10**.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name:	Title:
Signature:	Date:

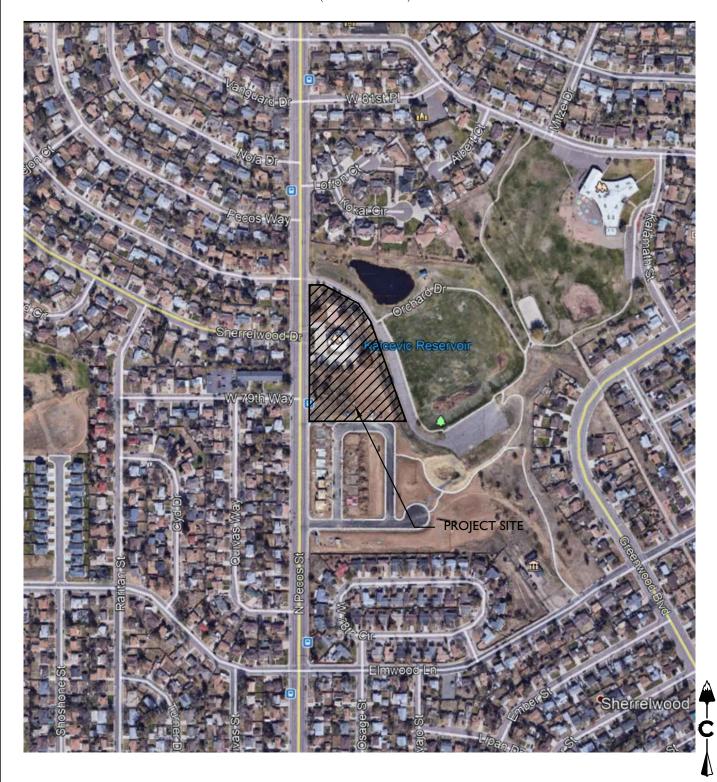
SWMP APPENDICES

Attach the following documentation:

Appendix 1 - Project Vicinity Map	(Section 1.1)
Appendix 2 - State CDPS Stormwater Construction Permit + Local Per	mit (Section 1.2)
Appendix 3 - Pre-disturbance Photos	(Section 1.4)
Appendix 4 -Demolition Permit and State Asbestos Permit	(Section 1.9)
Appendix 5 - Erosion and Sediment BMPs/CMs Details	(Section 1.10)
Appendix 6 - Erosion Control Plan (EC Plan) - Site Map	(Section 2.10)
Appendix 7 - Stormwater Inspection Form (Template)	(Section 5.1)
Appendix 8 - Delegation of Authority (optional)	(Section 5.2)
Appendix 9 - Completed Stormwater Inspection Logs	(Sections 5.3 & 5.5)
Appendix 10 - Subcontractor Certifications/Agreements (optional)	(Section 9.1)
Appendix 11 - Agreement for off-site Control Measures (if applicable)	(Section 1.5)
Appendix 12 - Low Risk Guidance for Discharges of Potable Water	(Section 1.8 & 1.9)
Appendix 13 – Erosion and Sediment Control General Notes	(Section 3.2)

APPENDIX 1: Project Vicinity Map

VICINITY MAP ELMWOOD ESTATES (NOT TO SCALE)





ELMWOOD ESTATES VICINITY MAP

CREATED BY: NDW

SHEET NUMBER

1

OF 1 SHEETS

DATE: 3/11/21

JOB NUMBER 19-165

APPENDIX 2: CDPHE Stormwater Construction Permit + Local Stormwater Permit

APPENDIX 3: Pre-Disturbance Photos

(ADD COLOR PICTURES)

APPENDIX 4: Local Demolition Permit + State Asbestos Permit

APPENDIX 5: Erosion & Sediment CMs/BMPs Details

Seeding dates for the highest success probability of perennial species along the Front Range are generally in the spring from April through early May and in the fall after the first of September until the ground freezes. If the area is irrigated, seeding may occur in summer months, as well. See Table TS/PS-3 for appropriate seeding dates.

Table TS/PS-1. Minimum Drill Seeding Rates for Various Temporary Annual Grasses

Species ^a (Common name)	Growth Season ^b	Pounds of Pure Live Seed (PLS)/acre ^c	Planting Depth (inches)
1. Oats	Cool	35 - 50	1 - 2
2. Spring wheat	Cool	25 - 35	1 - 2
3. Spring barley	Cool	25 - 35	1 - 2
4. Annual ryegrass	Cool	10 - 15	1/2
5. Millet	Warm	3 - 15	1/2 - 3/4
6. Sudangrass	Warm	5–10	1/2 - 3/4
7. Sorghum	Warm	5–10	1/2 - 3/4
8. Winter wheat	Cool	20–35	1 - 2
9. Winter barley	Cool	20–35	1 - 2
10. Winter rye	Cool	20–35	1 - 2
11. Triticale	Cool	25–40	1 - 2

^a Successful seeding of annual grass resulting in adequate plant growth will usually produce enough dead-plant residue to provide protection from wind and water erosion for an additional year. This assumes that the cover is not disturbed or mowed closer than 8 inches.

Hydraulic seeding may be substituted for drilling only where slopes are steeper than 3:1 or where access limitations exist. When hydraulic seeding is used, hydraulic mulching should be applied as a separate operation, when practical, to prevent the seeds from being encapsulated in the mulch.

^b See Table TS/PS-3 for seeding dates. Irrigation, if consistently applied, may extend the use of cool season species during the summer months.

^c Seeding rates should be doubled if seed is broadcast, or increased by 50 percent if done using a Brillion Drill or by hydraulic seeding.

EC-2 Temporary and Permanent Seeding (TS/PS)

Table TS/PS-2. Minimum Drill Seeding Rates for Perennial Grasses

Common ^a Name	Botanical Name	Growth Season ^b	Growth Form	Seeds/ Pound	Pounds of PLS/acre
Alakali Soil Seed Mix				-	
Alkali sacaton	Sporobolus airoides	Cool	Bunch	1,750,000	0.25
Basin wildrye	Elymus cinereus	Cool	Bunch	165,000	2.5
Sodar streambank wheatgrass	Agropyron riparium 'Sodar'	Cool	Sod	170,000	2.5
Jose tall wheatgrass	Agropyron elongatum 'Jose'	Cool	Bunch	79,000	7.0
Arriba western wheatgrass	Agropyron smithii 'Arriba'	Cool	Sod	110,000	5.5
Total					17.75
Fertile Loamy Soil Seed Mix			1	1	
Ephriam crested wheatgrass	Agropyron cristatum 'Ephriam'	Cool	Sod	175,000	2.0
Dural hard fescue	Festuca ovina 'duriuscula'	Cool	Bunch	565,000	1.0
Lincoln smooth brome	Bromus inermis leyss 'Lincoln'	Cool	Sod	130,000	3.0
Sodar streambank wheatgrass	Agropyron riparium 'Sodar'	Cool	Sod	170,000	2.5
Arriba western wheatgrass	Agropyron smithii 'Arriba'	Cool	Sod	110,000	7.0
Total					15.5
High Water Table Soil Seed Mix	K		•	1	
Meadow foxtail	Alopecurus pratensis	Cool	Sod	900,000	0.5
Redtop	Agrostis alba	Warm	Open sod	5,000,000	0.25
Reed canarygrass	Phalaris arundinacea	Cool	Sod	68,000	0.5
Lincoln smooth brome	Bromus inermis leyss 'Lincoln'	Cool	Sod	130,000	3.0
Pathfinder switchgrass	Panicum virgatum 'Pathfinder'	Warm	Sod	389,000	1.0
Alkar tall wheatgrass	Agropyron elongatum 'Alkar'	Cool	Bunch	79,000	5.5
Total					10.75
Transition Turf Seed Mix ^c			•	1	
Ruebens Canadian bluegrass	Poa compressa 'Ruebens'	Cool	Sod	2,500,000	0.5
Dural hard fescue	Festuca ovina 'duriuscula'	Cool	Bunch	565,000	1.0
Citation perennial ryegrass	Lolium perenne 'Citation'	Cool	Sod	247,000	3.0
Lincoln smooth brome	Bromus inermis leyss 'Lincoln'	Cool	Sod	130,000	3.0
Total					7.5

Table TS/PS-2. Minimum Drill Seeding Rates for Perennial Grasses (cont.)

Common Name	Botanical Name	Growth Season ^b	Growth Form	Seeds/ Pound	Pounds of PLS/acre
Sandy Soil Seed Mix		•			
Blue grama	Bouteloua gracilis	Warm	Sod-forming bunchgrass	825,000	0.5
Camper little bluestem	Schizachyrium scoparium 'Camper'	Warm	Bunch	240,000	1.0
Prairie sandreed	Calamovilfa longifolia	Warm	Open sod	274,000	1.0
Sand dropseed	Sporobolus cryptandrus	Cool	Bunch	5,298,000	0.25
Vaughn sideoats grama	Bouteloua curtipendula 'Vaughn'	Warm	Sod	191,000	2.0
Arriba western wheatgrass	Agropyron smithii 'Arriba'	Cool	Sod	110,000	5.5
Total					10.25
Heavy Clay, Rocky Foothill Seed	l Mix				
Ephriam crested wheatgrass ^d	Agropyron cristatum 'Ephriam'	Cool	Sod	175,000	1.5
Oahe Intermediate wheatgrass	Agropyron intermedium 'Oahe'	Cool	Sod	115,000	5.5
Vaughn sideoats grama ^e	Bouteloua curtipendula 'Vaughn'	Warm	Sod	191,000	2.0
Lincoln smooth brome	Bromus inermis leyss 'Lincoln'	Cool Sod 130,000		3.0	
Arriba western wheatgrass	Agropyron smithii 'Arriba'	Cool	Sod	110,000	5.5
Total					17.5

^a All of the above seeding mixes and rates are based on drill seeding followed by crimped straw mulch. These rates should be doubled if seed is broadcast and should be increased by 50 percent if the seeding is done using a Brillion Drill or is applied through hydraulic seeding. Hydraulic seeding may be substituted for drilling only where slopes are steeper than 3:1. If hydraulic seeding is used, hydraulic mulching should be done as a separate operation.

^b See Table TS/PS-3 for seeding dates.

^c If site is to be irrigated, the transition turf seed rates should be doubled.

^d Crested wheatgrass should not be used on slopes steeper than 6H to 1V.

^e Can substitute 0.5 lbs PLS of blue grama for the 2.0 lbs PLS of Vaughn sideoats grama.

EC-2 Temporary and Permanent Seeding (TS/PS)

Table TS/PS-3. Seeding Dates for Annual and Perennial Grasses

	Annual Grasses (Numbers in table reference species in Table TS/PS-1)		Perennia	Perennial Grasses		
Seeding Dates	Warm	Cool	Warm	Cool		
January 1–March 15			✓	✓		
March 16–April 30	4	1,2,3	✓	✓		
May 1–May 15	4		✓			
May 16–June 30	4,5,6,7					
July 1–July 15	5,6,7					
July 16–August 31						
September 1–September 30		8,9,10,11				
October 1-December 31			✓	✓		

Mulch

Cover seeded areas with mulch or an appropriate rolled erosion control product to promote establishment of vegetation. Anchor mulch by crimping, netting or use of a non-toxic tackifier. See the Mulching BMP Fact Sheet for additional guidance.

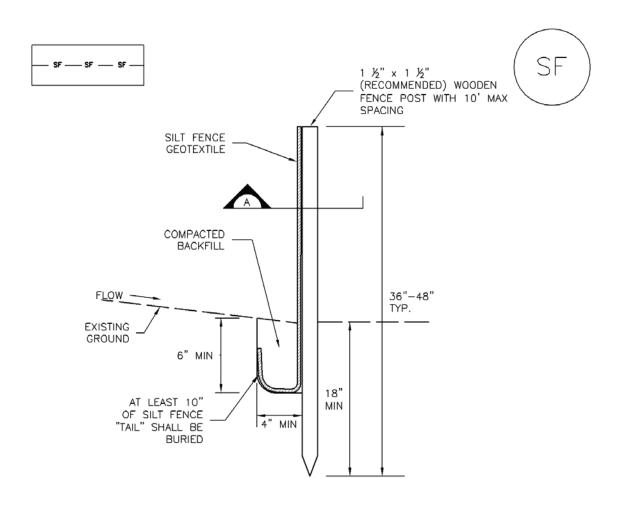
Maintenance and Removal

Monitor and observe seeded areas to identify areas of poor growth or areas that fail to germinate. Reseed and mulch these areas, as needed.

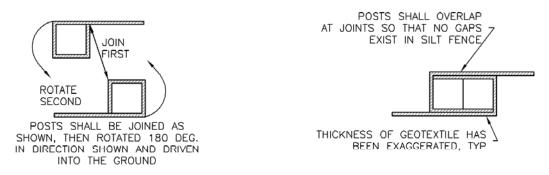
An area that has been permanently seeded should have a good stand of vegetation within one growing season if irrigated and within three growing seasons without irrigation in Colorado. Reseed portions of the site that fail to germinate or remain bare after the first growing season.

Seeded areas may require irrigation, particularly during extended dry periods. Targeted weed control may also be necessary.

Protect seeded areas from construction equipment and vehicle access.



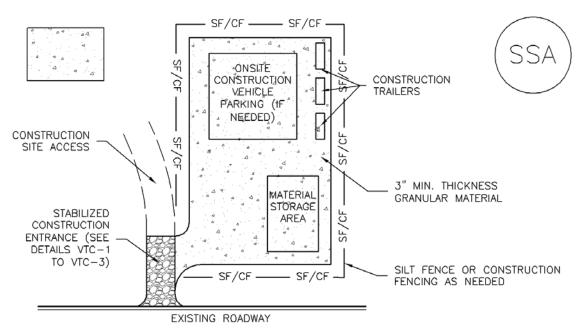
SILT FENCE



SECTION A

SF-1. SILT FENCE

SF-3



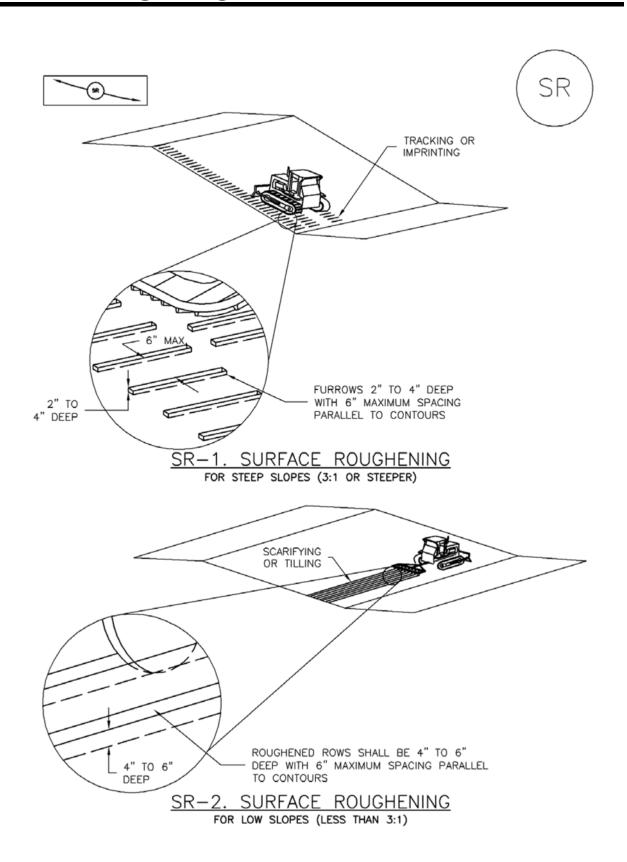
SSA-1. STABILIZED STAGING AREA

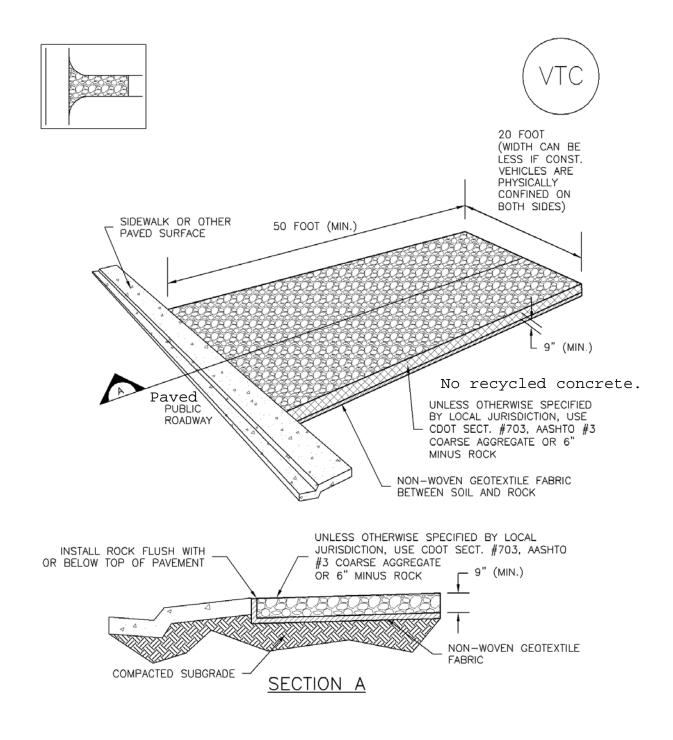
STABILIZED STAGING AREA INSTALLATION NOTES

- 1. SEE PLAN VIEW FOR
 - -LOCATION OF STAGING AREA(S).
- -CONTRACTOR MAY ADJUST LOCATION AND SIZE OF STAGING AREA WITH APPROVAL FROM THE LOCAL JURISDICTION.
- 2. STABILIZED STAGING AREA SHOULD BE APPROPRIATE FOR THE NEEDS OF THE SITE. OVERSIZING RESULTS IN A LARGER AREA TO STABILIZE FOLLOWING CONSTRUCTION.
- 3. STAGING AREA SHALL BE STABILIZED PRIOR TO OTHER OPERATIONS ON THE SITE.
- 4. THE STABILIZED STAGING AREA SHALL CONSIST OF A MINIMUM 3" THICK GRANULAR MATERIAL.
- 5. UNLESS OTHERWISE SPECIFIED BY LOCAL JURISDICTION, ROCK SHALL CONSIST OF DOT SECT. #703, AASHTO #3 COARSE AGGREGATE OR 6" (MINUS) ROCK.
- 6. ADDITIONAL PERIMETER BMPs MAY BE REQUIRED INCLUDING BUT NOT LIMITED TO SILT FENCE AND CONSTRUCTION FENCING.

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





VTC-1. AGGREGATE VEHICLE TRACKING CONTROL

Description

Wind erosion and dust control BMPs help to keep soil particles from entering the air as a result of land disturbing construction activities. These BMPs include a variety of practices generally focused on either graded disturbed areas or construction roadways. For graded areas, practices such as seeding and mulching, use of soil binders, site watering, or other practices that provide prompt surface cover should be used. For construction roadways, road watering and stabilized surfaces should be considered.



Photograph DC-1. Water truck used for dust suppression. Photo courtesy of Douglas County.

Appropriate Uses

Dust control measures should be used on any site where dust poses a problem to air quality. Dust control is important to control for the health of construction workers and surrounding waterbodies.

Design and Installation

The following construction BMPs can be used for dust control:

- An irrigation/sprinkler system can be used to wet the top layer of disturbed soil to help keep dry soil particles from becoming airborne.
- Seeding and mulching can be used to stabilize disturbed surfaces and reduce dust emissions.
- Protecting existing vegetation can help to slow wind velocities across the ground surface, thereby limiting the likelihood of soil particles to become airborne.
- Spray-on soil binders form a bond between soil particles keeping them grounded. Chemical treatments may require additional permitting requirements. Potential impacts to surrounding waterways and habitat must be considered prior to use.
- Placing rock on construction roadways and entrances will help keep dust to a minimum across the construction site.
- Wind fences can be installed on site to reduce wind speeds. Install fences perpendicular to the prevailing wind direction for maximum effectiveness.

Maintenance and Removal

When using an irrigation/sprinkler control system to aid in dust control, be careful not to overwater. Overwatering will cause construction vehicles to track mud off-site.

Wind Erosion Control/ Dust Control								
Functions								
Erosion Control Yes								
Sediment Control No								
Site/Material Management	Moderate							

Description

Implement construction site good housekeeping practices to prevent pollution associated with solid, liquid and hazardous construction-related materials and wastes. Stormwater Management Plans (SWMPs) should clearly specify BMPs including these good housekeeping practices:

- Provide for waste management.
- Establish proper building material staging areas.
- Designate paint and concrete washout areas.
- Establish proper equipment/vehicle fueling and maintenance practices.
- Control equipment/vehicle washing and allowable nonstormwater discharges.
- Develop a spill prevention and response plan.

Acknowledgement: This Fact Sheet is based directly on EPA guidance provided in *Developing Your Stormwater Pollution Prevent Plan* (EPA 2007).





Photographs GH-1 and GH-2. Proper materials storage and secondary containment for fuel tanks are important good housekeeping practices. Photos courtesy of CDOT and City of Aurora.

Appropriate Uses

Good housekeeping practices are necessary at all construction sites.

Design and Installation

The following principles and actions should be addressed in SWMPs:

Provide for Waste Management. Implement management procedures and practices to prevent or reduce the exposure and transport of pollutants in stormwater from solid, liquid and sanitary wastes that will be generated at the site. Practices such as trash disposal, recycling, proper material handling, and cleanup measures can reduce the potential for stormwater runoff to pick up construction site wastes and discharge them to surface waters. Implement a comprehensive set of waste-management practices for hazardous or toxic materials, such as paints, solvents, petroleum products, pesticides, wood preservatives, acids, roofing tar, and other materials. Practices should include storage, handling, inventory, and cleanup procedures, in case of spills. Specific practices that should be considered include:

Solid or Construction Waste

 Designate trash and bulk waste-collection areas onsite.

Good Housekeeping								
Functions								
Erosion Control	No							
Sediment Control	No							
Site/Material Management	Yes							

- o Recycle materials whenever possible (e.g., paper, wood, concrete, oil).
- o Segregate and provide proper disposal options for hazardous material wastes.
- Clean up litter and debris from the construction site daily.
- Locate waste-collection areas away from streets, gutters, watercourses, and storm drains. Waste-collection areas (dumpsters, and such) are often best located near construction site entrances to minimize traffic on disturbed soils. Consider secondary containment around waste collection areas to minimize the likelihood of contaminated discharges.
- o Empty waste containers before they are full and overflowing.

Sanitary and Septic Waste

- o Provide convenient, well-maintained, and properly located toilet facilities on-site.
- Locate toilet facilities away from storm drain inlets and waterways to prevent accidental spills and contamination of stormwater.
- o Maintain clean restroom facilities and empty portable toilets regularly.
- o Where possible, provide secondary containment pans under portable toilets.
- o Provide tie-downs or stake-downs for portable toilets.
- o Educate employees, subcontractors, and suppliers on locations of facilities.
- Treat or dispose of sanitary and septic waste in accordance with state or local regulations. Do not discharge or bury wastewater at the construction site.
- o Inspect facilities for leaks. If found, repair or replace immediately.
- Special care is necessary during maintenance (pump out) to ensure that waste and/or biocide are not spilled on the ground.

Hazardous Materials and Wastes

- Develop and implement employee and subcontractor education, as needed, on hazardous and toxic waste handling, storage, disposal, and cleanup.
- Designate hazardous waste-collection areas on-site.
- Place all hazardous and toxic material wastes in secondary containment.



Photograph GH-3. Locate portable toilet facilities on level surfaces away from waterways and storm drains. Photo courtesy of WWE.

- Hazardous waste containers should be inspected to ensure that all containers are labeled properly and that no leaks are present.
- Establish Proper Building Material Handling and Staging Areas. The SWMP should include comprehensive handling and management procedures for building materials, especially those that are hazardous or toxic. Paints, solvents, pesticides, fuels and oils, other hazardous materials or building materials that have the potential to contaminate stormwater should be stored indoors or under cover whenever possible or in areas with secondary containment. Secondary containment measures prevent a spill from spreading across the site and may include dikes, berms, curbing, or other containment methods. Secondary containment techniques should also ensure the protection of groundwater. Designate staging areas for activities such as fueling vehicles, mixing paints, plaster, mortar, and other potential pollutants. Designated staging areas enable easier monitoring of the use of materials and clean up of spills. Training employees and subcontractors is essential to the success of this pollution prevention principle. Consider the following specific materials handling and staging practices:
 - o Train employees and subcontractors in proper handling and storage practices.
 - Clearly designate site areas for staging and storage with signs and on construction drawings. Staging areas should be located in areas central to the construction site. Segment the staging area into sub-areas designated for vehicles, equipment, or stockpiles. Construction entrances and exits should be clearly marked so that delivery vehicles enter/exit through stabilized areas with vehicle tracking controls (See Vehicle Tracking Control Fact Sheet).
 - Provide storage in accordance with Spill Protection, Control and Countermeasures (SPCC)
 requirements and plans and provide cover and impermeable perimeter control, as necessary, for
 hazardous materials and contaminated soils that must be stored on site.
 - Ensure that storage containers are regularly inspected for leaks, corrosion, support or foundation failure, or other signs of deterioration and tested for soundness.
 - o Reuse and recycle construction materials when possible.
- Designate Concrete Washout Areas. Concrete contractors should be encouraged to use the washout facilities at their own plants or dispatch facilities when feasible; however, concrete washout commonly occurs on construction sites. If it is necessary to provide for concrete washout areas onsite, designate specific washout areas and design facilities to handle anticipated washout water. Washout areas should also be provided for paint and stucco operations. Because washout areas can be a source of pollutants from leaks or spills, care must be taken with regard to their placement and proper use. See the Concrete Washout Area Fact Sheet for detailed guidance.

Both self-constructed and prefabricated washout containers can fill up quickly when concrete, paint, and stucco work are occurring on large portions of the site. Be sure to check for evidence that contractors are using the washout areas and not dumping materials onto the ground or into drainage facilities. If the washout areas are not being used regularly, consider posting additional signage, relocating the facilities to more convenient locations, or providing training to workers and contractors.

When concrete, paint, or stucco is part of the construction process, consider these practices which will help prevent contamination of stormwater. Include the locations of these areas and the maintenance and inspection procedures in the SWMP.

- On one washout concrete trucks or equipment into storm drains, streets, gutters, uncontained areas, or streams. Only use designated washout areas.
- Establish washout areas and advertise their locations with signs. Ensure that signage remains in good repair.
- o Provide adequate containment for the amount of wash water that will be used.
- Inspect washout structures daily to detect leaks or tears and to identify when materials need to be removed.
- O Dispose of materials properly. The preferred method is to allow the water to evaporate and to recycle the hardened concrete. Full service companies may provide dewatering services and should dispose of wastewater properly. Concrete wash water can be highly polluted. It should not be discharged to any surface water, storm sewer system, or allowed to infiltrate into the ground in the vicinity of waterbodies. Washwater should not be discharged to a sanitary sewer system without first receiving written permission from the system operator.
- **Establish Proper Equipment/Vehicle Fueling and Maintenance Practices.** Create a clearly designated on-site fueling and maintenance area that is clean and dry. The on-site fueling area should have a spill kit, and staff should know how to use it. If possible, conduct vehicle fueling and maintenance activities in a covered area. Consider the following practices to help prevent the discharge of pollutants to stormwater from equipment/vehicle fueling and maintenance. Include the locations of designated fueling and maintenance areas and inspection and maintenance procedures in the SWMP.
 - Train employees and subcontractors in proper fueling procedures (stay with vehicles during fueling, proper use of pumps, emergency shutoff valves, etc.).
 - o Inspect on-site vehicles and equipment regularly for leaks, equipment damage, and other service problems.
 - O Clearly designate vehicle/equipment service areas away from drainage facilities and watercourses to prevent stormwater run-on and runoff.
 - Use drip pans, drip cloths, or absorbent pads when replacing spent fluids.
 - Collect all spent fluids, store in appropriate labeled containers in the proper storage areas, and recycle fluids whenever possible.
- Control Equipment/Vehicle Washing and Allowable Non-Stormwater Discharges. Implement
 practices to prevent contamination of surface and groundwater from equipment and vehicle wash
 water. Representative practices include:
 - o Educate employees and subcontractors on proper washing procedures.
 - Use off-site washing facilities, when available.
 - o Clearly mark the washing areas and inform workers that all washing must occur in this area.
 - Contain wash water and treat it using BMPs. Infiltrate washwater when possible, but maintain separation from drainage paths and waterbodies.

- Use high-pressure water spray at vehicle washing facilities without detergents. Water alone can remove most dirt adequately.
- o Do not conduct other activities, such as vehicle repairs, in the wash area.
- Include the location of the washing facilities and the inspection and maintenance procedures in the SWMP.
- **Develop a Spill Prevention and Response Plan.** Spill prevention and response procedures must be identified in the SWMP. Representative procedures include identifying ways to reduce the chance of spills, stop the source of spills, contain and clean up spills, dispose of materials contaminated by spills, and train personnel responsible for spill prevention and response. The plan should also specify material handling procedures and storage requirements and ensure that clear and concise spill cleanup procedures are provided and posted for areas in which spills may potentially occur. When developing a spill prevention plan, include the following:
 - O Note the locations of chemical storage areas, storm drains, tributary drainage areas, surface waterbodies on or near the site, and measures to stop spills from leaving the site.
 - o Provide proper handling and safety procedures for each type of waste. Keep Material Safety Data Sheets (MSDSs) for chemical used on site with the SWMP.
 - Establish an education program for employees and subcontractors on the potential hazards to humans and the environment from spills and leaks.
 - Specify how to notify appropriate authorities, such as police and fire departments, hospitals, or municipal sewage treatment facilities to request assistance. Emergency procedures and contact numbers should be provided in the SWMP and posted at storage locations.
 - Describe the procedures, equipment and materials for immediate cleanup of spills and proper disposal.
 - o Identify personnel responsible for implementing the plan in the event of a spill. Update the spill prevention plan and clean up materials as changes occur to the types of chemicals stored and used at the facility.

Spill Prevention, Control, and Countermeasure (SPCC) Plan

Construction sites may be subject to 40 CFR Part 112 regulations that require the preparation and implementation of a SPCC Plan to prevent oil spills from aboveground and underground storage tanks. The facility is subject to this rule if it is a non-transportation-related facility that:

- Has a total storage capacity greater than 1,320 gallons or a completely buried storage capacity greater than 42,000 gallons.
- Could reasonably be expected to discharge oil in quantities that may be harmful to navigable waters
 of the United States and adjoining shorelines.

Furthermore, if the facility is subject to 40 CFR Part 112, the SWMP should reference the SPCC Plan. To find out more about SPCC Plans, see EPA's website on SPPC at www.epa.gov/oilspill/spcc.htm.

Reporting Oil Spills

In the event of an oil spill, contact the National Response Center toll free at 1-800-424-8802 for assistance, or for more details, visit their website: www.nrc.uscg.mil.

Maintenance and Removal

Effective implementation of good housekeeping practices is dependent on clear designation of personnel responsible for supervising and implementing good housekeeping programs, such as site cleanup and disposal of trash and debris, hazardous material management and disposal, vehicle and equipment maintenance, and other practices. Emergency response "drills" may aid in emergency preparedness.

Checklists may be helpful in good housekeeping efforts.

Staging and storage areas require permanent stabilization when the areas are no longer being used for construction-related activities.

Construction-related materials, debris and waste must be removed from the construction site once construction is complete.

Design Details

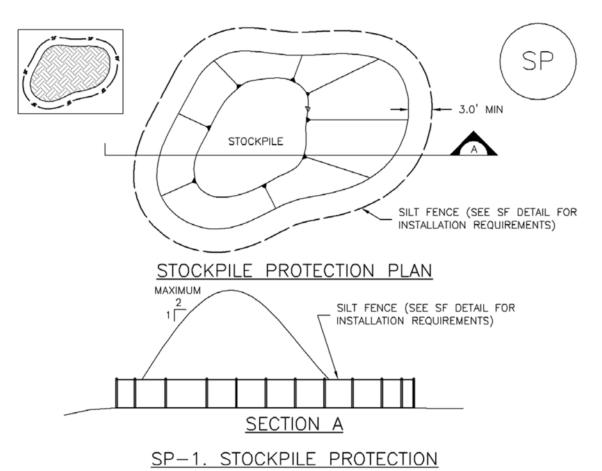
See the following Fact Sheets for related Design Details:

MM-1 Concrete Washout Area

MM-2 Stockpile Management

SM-4 Vehicle Tracking Control

Design details are not necessary for other good housekeeping practices; however, be sure to designate where specific practices will occur on the appropriate construction drawings.



STOCKPILE PROTECTION INSTALLATION NOTES

- SEE PLAN VIEW FOR:
 -LOCATION OF STOCKPILES.
 - -TYPE OF STOCKPILE PROTECTION.
- 2. INSTALL PERIMETER CONTROLS IN ACCORDANCE WITH THEIR RESPECTIVE DESIGN DETAILS. SILT FENCE IS SHOWN IN THE STOCKPILE PROTECTION DETAILS; HOWEVER, OTHER TYPES OF PERIMETER CONTROLS INCLUDING SEDIMENT CONTROL LOGS OR ROCK SOCKS MAY BE SUITABLE IN SOME CIRCUMSTANCES. CONSIDERATIONS FOR DETERMINING THE APPROPRIATE TYPE OF PERIMETER CONTROL FOR A STOCKPILE INCLUDE WHETHER THE STOCKPILE IS LOCATED ON A PERVIOUS OR IMPERVIOUS SURFACE, THE RELATIVE HEIGHTS OF THE PERIMETER CONTROL AND STOCKPILE, THE ABILITY OF THE PERIMETER CONTROL TO CONTAIN THE STOCKPILE WITHOUT FAILING IN THE EVENT THAT MATERIAL FROM THE STOCKPILE SHIFTS OR SLUMPS AGAINST THE PERIMETER, AND OTHER FACTORS.
- 3. STABILIZE THE STOCKPILE SURFACE WITH SURFACE ROUGHENING, TEMPORARY SEEDING AND MULCHING, EROSION CONTROL BLANKETS, OR SOIL BINDERS. SOILS STOCKPILED FOR AN EXTENDED PERIOD (TYPICALLY FOR MORE THAN 60 DAYS) SHOULD BE SEEDED AND MULCHED WITH A TEMPORARY GRASS COVER ONCE THE STOCKPILE IS PLACED (TYPICALLY WITHIN 14 DAYS). USE OF MULCH ONLY OR A SOIL BINDER IS ACCEPTABLE IF THE STOCKPILE WILL BE IN PLACE FOR A MORE LIMITED TIME PERIOD (TYPICALLY 30-60 DAYS).
- 4. FOR TEMPORARY STOCKPILES ON THE INTERIOR PORTION OF A CONSTRUCTION SITE, WHERE OTHER DOWNGRADIENT CONTROLS, INCLUDING PERIMETER CONTROL, ARE IN PLACE, STOCKPILE PERIMETER CONTROLS MAY NOT BE REQUIRED.

STOCKPILE PROTECTION MAINTENANCE NOTES

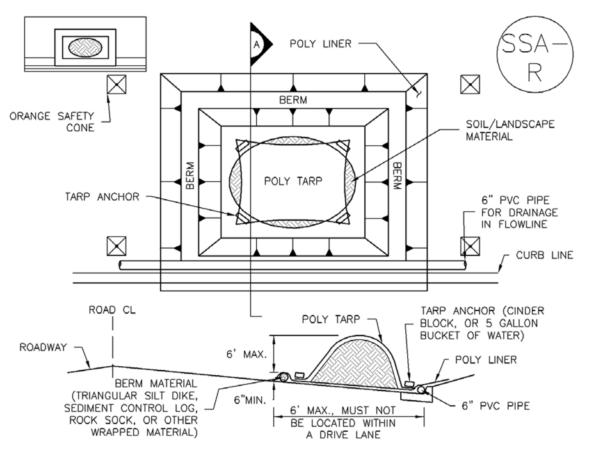
- 1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.
- 2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.
- 3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.

STOCKPILE PROTECTION MAINTENANCE NOTES

- 4. IF PERIMETER PROTECTION MUST BE MOVED TO ACCESS SOIL STOCKPILE, REPLACE PERIMETER CONTROLS BY THE END OF THE WORKDAY.
- 5. STOCKPILE PERIMETER CONTROLS CAN BE REMOVED ONCE ALL THE MATERIAL FROM THE STOCKPILE HAS BEEN USED.

(DETAILS ADAPTED FROM PARKER, 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.



<u>SP-2. MATERIALS STAGING IN ROADWAY</u>

MATERIALS STAGING IN ROADWAYS INSTALLATION NOTES

- 1. SEE PLAN VIEW FOR
 - -LOCATION OF MATERIAL STAGING AREA(S).
 - -CONTRACTOR MAY ADJUST LOCATION AND SIZE OF STAGING AREA WITH APPROVAL FROM THE LOCAL JURISDICTION.
- 2. FEATURE MUST BE INSTALLED PRIOR TO EXCAVATION, EARTHWORK OR DELIVERY OF MATERIALS.
- 3. MATERIALS MUST BE STATIONED ON THE POLY LINER. ANY INCIDENTAL MATERIALS DEPOSITED ON PAVED SECTION OR ALONG CURB LINE MUST BE CLEANED UP PROMPTLY.
- 4. POLY LINER AND TARP COVER SHOULD BE OF SIGNIFICANT THICKNESS TO PREVENT DAMAGE OR LOSS OF INTEGRITY.
- 5. SAND BAGS MAY BE SUBSTITUTED TO ANCHOR THE COVER TARP OR PROVIDE BERMING UNDER THE BASE LINER.
- 6. FEATURE IS NOT INTENDED FOR USE WITH WET MATERIAL THAT WILL BE DRAINING AND/OR SPREADING OUT ON THE POLY LINER OR FOR DEMOLITION MATERIALS.
- 7. THIS FEATURE CAN BE USED FOR:
 - -UTILITY REPAIRS.
 - -WHEN OTHER STAGING LOCATIONS AND OPTIONS ARE LIMITED.
 - -OTHER LIMITED APPLICATION AND SHORT DURATION STAGING.

MATERIALS STAGING IN ROADWAY 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. INSPECT PVC PIPE ALONG CURB LINE FOR CLOGGING AND DEBRIS. REMOVE OBSTRUCTIONS PROMPTLY.
- 5. CLEAN MATERIAL FROM PAVED SURFACES BY SWEEPING OR VACUUMING.

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.

(DETAILS ADAPTED FROM AURORA, COLORADO)

APPENDIX 6: Erosion Control Plan (EC Plan) – Site Map

EC Plan includes, at a minimum, the following:

- 1. Construction site boundaries;
- 2. Flow arrows that depict stormwater flow directions on-site and runoff direction;
- 3. Areas of ground disturbance including areas of borrow and fill;
- 4. Areas used for storage of soil;
- Location of all waste accumulation areas, including areas for liquid, concrete, masonry, and asphalt;
- 6. Location of dedicated asphalt, concrete batch plants and masonry mixing stations;
- 7. Location of all structural control measures;
- 8. Location of all non-structural control measures;
- 9. Location of springs, streams, wetlands and other state waters, including areas that require preexisting vegetation be maintained within 50 ft of a receiving water; and
- 10. Location of all stream crossings located within the construction site boundary.

Urban Poster:



Rural Poster: http://www.adcogov.org/sites/default/files/Stormwater%20Rural%20-%20Small%20Builder.pdf

ELMWOOD ESTATES EROSION AND SEDIMENT CONTROL PLANS

PART OF THE NORTHEAST QUARTER SECTION 33, TOWNSHIP 2 SOUTH, RANGE 68 WEST OF THE SIXTH PRINCIPAL MERIDIAN, COUNTY OF ADAMS, STATE OF COLORADO

W. 84TH AVE.

DELWEST CAPITAL DEVELOPMENT CORP.

155 S. MADISON ST. DENVER, COLORADO 80209 (720) 708-4065 CONTACT: DERRELL SCHREINER

LANDSCAPE TERRACINA DESIGN 10200 E. GIRARD AVENUE, SUITE A-314 DENVER, CO 80231 (303) 632-8867 CONTACT: LAYLA ROSALES

DISTRICT MANAGER CITY DEVELOPMENT 9500 CIVIC CENTER DRIVE THORNTON, CO 80229

(303) 538 - 7295

CONTACT: TBD

ENGINEER

CORE CONSULTANTS, INC. 1950 WEST LITTLETON BLVD., SUITE 109 LITTLETON, CO 80120 (303) 703-4444, EXT 113

CORE CONSULTANTS, INC. 1950 WEST LITTLETON BLVD., SUITE 109 LITTLETON, CO 80120 (303) 703-4444, EXT 119

ADAMS COUNTY 4430 S. ADAMS COUNTY PARKWAY, W2000B BRIGHTON, CO 80601 (720) 523-6826 CONTACT: MATT EMMENS

ELMWOOD LN **VICINITY MAP**

W. 80TH AVE.

Sheet List Table Sheet Number Sheet Title

COVER SHEET GENERAL NOTES

INITIAL EROSION CONTROL PLAN INTERIM EROSION CONTROL PLAN FINAL EROSION CONTROL PLAN EROSION CONTROL DETAILS

STANDARDS AND SPECIFICATIONS AND LATEST EDITION OF COLORADO

CONDUITS OR OTHER STRUCTURES SHOWN ON THESE PLANS WAS OBTAINED BY THE SEARCH OF AVAILABLE RECORDS. THE ENGINEER ASSUMES NO LIABILITY WHATSOEVER FOR THE ACCURACY OR COMPLETENESS OF SUCH DATA. THE CONTRACTOR IS REQUIRED TO TAKE DUE PRECAUTIONARY MEASURES TO PROTECT ALL UTILITY LINES, CONDUITS OR STRUCTURES WHETHER OR NOT SHOWN ON THESE PLANS AND BY ACCEPTING AND UTILIZING THESE PLANS, ASSUMES ALL RESPONSIBILITY FOR THE PROTECTION OR AND ANY

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, CORE CONSULTANTS, INC. APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

BEARINGS FOR THIS DESCRIPTION ARE BASED ON THE NORTH LINE RANGE 68 WEST OF THE 6th P.M., BEING ASSUMED TO BEAR N 33, BEING A 3 1/4" ALUMINUM CAP IN RANGE BOX, PLS 23519 TO THE NORTHEAST CORNER OF SAID SECTION 33 BEING A 3 1/4" ALUMINUM CAP IN RANGE BOX, PLS 7276 WITH ALL BEARINGS CONTAINED HEREIN RELATIVE THERETO.

BENCHMARK DESCRIPTION NGS MONUMENT 547, P.I.D. "DJ8173, ADAMS COUNTY" HAVING A PUBLISHED ELEVATION OF 5286.29 FEET. (NAVD 88)

DESIGNED BY: NW DRAWN BY: NW CHECKED BY: DF

> JOB NO. 19-165 SHEET OF 6

PUBLIC IMPROVEMENTS SHALL CONFORM TO ADAMS COUNTY DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS. NOTICE TO CONTRACTOR
THE EXISTENCE AND LOCATION OF ANY UNDERGROUND UTILITIES,

DAMAGE TO SAID FACILITIES.

OF THE NORTHEAST QUARTER OF SECTION 33, TOWNSHIP 2 SOUTH, 89°30'30" E, FROM THE NORTH QUARTER CORNER OF SAID SECTION

ADAMS COUNTY EROSION CONTROL PLAN GENERAL NOTES:

1. ALL CONSTRUCTION PROJECTS, REGARDLESS OF THE SIZE, SHALL INSTALL, MAINTAIN AND REPAIR STORMWATER POLLUTION CONTROL MEASURES (CMS) TO EFFECTIVELY MINIMIZE EROSION, SEDIMENT TRANSPORT, AND THE RELEASE OF POLLUTANTS RELATED TO CONSTRUCTION ACTIVITY. CMS EXAMPLE INCLUDE: SEDIMENT CONTROL LOGS (SCL), SILT FENCE (SF), DIKES/SWALES, SEDIMENT TRAPS (ST), INLET PROTECTION (IP), OUTLET PROTECTION (IP), OUTLET PROTECTION (IP), OUTLET PROTECTION (IP), SEDIMENT BASINS (SB), TEMPORARY/PERMANENT SEEDING AND MULCHING (MU), SOIL ROUGHENING, MAINTAINING EXISTING VEGETATION AND PROTECTION OF TREES. CMS MUST BE SELECTED, DESIGNED, ADEQUATELY SIZED, INSTALLED AND MAINTAINED IN ACCORDANCE WITH GOOD ENGINEERING, HYDROLOGIC AND POLLUTION CONTROL PRACTICES. CMS/BMPS INSTALLATION AND MAINTENANCE DETAILS SHALL CONFORM TO URBAN DRAINAGE FLOOD CONTROL CRITERIA MANUAL VOLUME 3, OR THE COLORADO DEPARTMENT OF TRANSPORTATION (CDOT) ITEM CODE BOOK. CMS MUST FILTER, SETTLE, CONTAIN OR STRAIN POLLUTANTS FROM STORMWATER FLOWS WITHOUT TREATMENT. CMS MUST BE APPROPRIATE TO TREAT THE RUNOFF FROM THE AMOUNT OF DISTURBED AREA, THE EXPECTED FLOW RATE, DURATION, AND FLOW CONDITIONS (I.E., SHEET OR CONCENTRATED FLOW). CMS/BMPS SHALL BE SPECIFIED IN THE SWMP (IF APPLICABLE), AND THE LOCATIONS SHOWN ON THE EC PLAN.

1. 1) PRIOR TO CONSTRUCTION, PROJECTS DISTURBING 1 OR MORE ACRES OF LAND, OR ANY PROJECT BELONGING TO A COMMON PLAN OF DEVELOPMENT DISTURB 1 OR MORE ACRES, MUST OBTAIN:

DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT, AND

AND

- 2. PERMITTED PROJECTS SHALL DEVELOP A STORMWATER MANAGEMENT PLAN (SWMP), AKA EROSION AND SEDIMENT CONTROL PLAN (ESCP), IN COMPLIANCE WITH CDPHE MINIMUM REQUIREMENTS. THE APPROVED SWMP, INCLUDING EROSION CONTROL (EC) PLAN (SITE MAP), SHALL BE KEPT ON SITE AND UPDATED AT ALL TIMES. THE QUALIFIED STORMWATER MANAGER IS RESPONSIBLE FOR IMPLEMENTING THE SWMP AND CMS (AKA BMPS) DURING CONSTRUCTION.
- 4. TRACKING OF DIRT ONTO PAVED PUBLIC OR PRIVATE PAVED ROADS IS NOT ALLOWED. THE USE OF DIRT RAMPS TO ENTER/EXIT FROM AN UNPAVED INTO A PAVED AREA IS PROHIBITED. VEHICLE TRACKING CONTROLS SHALL BE IMPLEMENTED, OTHERWISE ENTRANCE AREA MUST DRAIN THRU A CM TOWARDS THE PRIVATE SITE.

 5. TRUCK LOADS OF FILL MATERIAL IMPORTED TO OR CUT MATERIAL EXPORTED FROM THE SITE SHALL BE PROPERLY COVERED TO PREVENT LOSS OF THE MATERIAL DURING TRANSPORTATION ON PUBLIC ROW. HAUL ROUTES MUST BE PERMITTED BY THE COUNTY. NO MATERIAL SHALL BE TRANSPORTED TO ANOTHER SITE
- WITHOUT APPLICABLE PERMITS.
- 6. CONTROL MEASURES DESIGNED FOR CONCRETE WASHOUT WASTE MUST BE IMPLEMENTED. THIS INCLUDES WASHOUT WASTE DISCHARGED TO THE GROUND AND WASHOUT WASTE FROM CONCRETE TRUCKS AND MASONRY OPERATIONS.
 7. TEMPORARY CMS/BMPS SHALL BE REMOVED AFTER THE SITE HAS REACHED FINAL STABILIZATION.
- 8. DEWATERING OPÉRATIONS DISCHARGING OFF SITE INTO ANY WATERS CONVEYANCE SYSTEMS INCLUDING WETLANDS, IRRIGATION DITCHES, CANALS, RIVERS, STREAMS OR STORM SEWER SYSTEMS, REQUIRE A STATE CONSTRUCTION DEWATERING PERMIT.
- 9. PERMITTED PROJECTS SHALL KEEP THE COPHE'S STORMWATER DISCHARGE PERMIT, STORMWATER MANAGEMENT PLAN (SWMP) AND INSPECTION LOGS AVAILABLE ON SITE THROUGHOUT THE DURATION OF THE PROJECT, AND FOR AN ADDITIONAL 3 YEARS AFTER PERMIT CLOSE OUT.
- 10. PERMITTED LANDOWNER AND/OR CONTRACTOR SHALL CLOSE THE STATE AND CITY/COUNTY PERMIT ONCE FINAL STABILIZATION IS REACHED. STORMWATER INSPECTIONS SHALL CONTINUE UNTIL INACTIVATION NOTICE IS FILED WITH CDPHE.

PERFORMANCE STANDARD NOTES:

- 1. STORMWATER RUNOFF FROM DISTURBED AREAS MUST FLOW TO AT LEAST ONE (1) CM TO MINIMIZE SEDIMENT TO LEAVE THE SITE. THE BEST WAY TO PREVENT SEDIMENT OR POLLUTANTS FROM ENTERING THE STORM SEWER SYSTEM IS TO STABILIZE THE SITE AS QUICKLY AS POSSIBLE, PREVENTING EROSION AND STOPPING SEDIMENT RUN-OFF AT ITS SOURCE.
- 2. PHASE CONSTRUCTION TO MINIMIZE DISTURBED AREAS, INCLUDING DISTURBANCE OF STEEP SLOPES. (I.E. THE ENTIRE PROJECT SITE SHOULD NOT BE DISTURBED IF CONSTRUCTION WILL ONLY BE OCCURRING IN ONE PARTICULAR SECTION OF THE SITE).LIMIT SOIL EXPOSURE TO THE SHORTEST POSSIBLE PERIOD OF TIME.
 PROTECT NATURAL FEATURES AND EXISTING VEGETATION WHENEVER POSSIBLE. REMOVAL OF EXISTING VEGETATION OPERATIONS. MAINTAIN PRE EXISTING VEGETATION (OR EQUIVALENT CMS) FOR AREAS WITHIN 50 HORIZONTAL FT OF RECEIVING WATERS.
- 3. SOIL COMPACTION MUST BE MINIMIZED FOR AREAS WHERE INFILTRATION CMS WILL OCCUR OR WHERE FINAL STABILIZATION WILL BE ACHIEVED THROUGH VEGETATIVE COVER.
- 4. ALL SOIL IMPORTED TO OR EXPORTED FROM THE SITE SHALL BE PROPERLY COVERED TO PREVENT THE LOSS OF MATERIAL DURING TRANSPORT.
- 5. DUST EMISSIONS RESULTING FROM GRADING ACTIVITIES OR WIND SHALL BE CONTROLLED.
- 6. INSTALL CONSTRUCTION FENCE (ORANGE) TO PROTECT WETLANDS AND OTHER SENSITIVE AREAS AND TO PREVENT ACCESS, AND TO DELINEATE THE LIMITS OF CONSTRUCTION. DO NOT USE SILT FENCE TO PROTECT WETLANDS SINCE TRENCHING MAY IMPACT THESE AREAS.
- 7. CMS INTENDED TO CAPTURE OVERLAND, LOW VELOCITY SHEET FLOW AT A FAIRLY LEVEL GRADE SHALL ONLY BE INSTALLED ALONG CONTOURS.
 8. INSTALL CMS, SUCH AS CHECK DAMS, PERPENDICULAR TO THE CONCENTRATED FLOWS TO REDUCE FLOW VELOCITY.
- 9. STORM DRAIN INLETS WITHIN AND ADJACENT TO THE CONSTRUCTION SITE MUST BE PROTECTED. ANY PONDING OF STORMWATER AROUND INLET PROTECTION MUST NOT CAUSE EXCESSIVE FLOODING OR DAMAGE ADJACENT AREAS OR STRUCTURES.
- 10. INSTALL VEHICLE TRACKING CONTROL (VTC) TO ENTER/EXIT UNPAVED AREA. DO NOT USE RECYCLED CRUSHED CONCRETE OR ASPHALT MILLINGS FOR VEHICLE TRACKING PADS.
- 11. STRAW BALES SHALL NOT BE USED FOR PRIMARY EROSION OR SEDIMENT CONTROL (I.E. STRAW BALES MAY BE USED FOR REINFORCEMENT BEHIND ANOTHER BMP SUCH AS SILT FENCE).
- 12. OUTLETS SYSTEMS (SUCH AS SKIMMER OR PERFORATED RISER PIPE) SHALL BE INSTALLED TO WITHDRAW WATER FROM OR NEAR THE SURFACE LEVEL WHEN DISCHARGING FROM BASINS. WATER CANNOT DRAIN FROM THE BOTTOM OF THE POND.
- 13. TEMPORARY STABILIZATION MUST BE IMPLEMENTED FOR EARTH DISTURBING ACTIVITIES ON ANY PORTION OF THE SITE WHERE LAND DISTURBING ACTIVITIES ON ANY PORTION OF THE SITE WHERE LAND DISTURBING ACTIVITIES HAVE PERMANENTLY OR TEMPORARY STABILIZATION METHODS EXAMPLES: TARPS, SOIL TACKIFIER, AND HYDROSEED. TEMPORARY STABILIZATION REQUIREMENT MAY EXCEED THE 14 DAY SCHEDULE WHEN EITHER THE FUNCTION OF THE SPECIFIC AREA REQUIRES IT TO REMAIN DISTURBED, OR, PHYSICAL CHARACTERISTICS OF THE TERRAIN AND CLIMATE PREVENT STABILIZATION AS LONG AS THE CONSTRAINTS AND ALTERNATIVE SCHEDULE IS DOCUMENTED ON THE SWMP, AND LOCATIONS ARE IDENTIFIED ON THE EC PLAN (SITE MAP).
- 14. RUNOFF FROM STOCKPILE AREA MUST BE CONTROLLED. SOILS THAT WILL BE STOCKPILE FOR MORE THAN 30 DAYS SHALL BE PROTECTED FROM WIND AND WATER EROSION WITHIN 14 DAYS OF STOCKPILE CONSTRUCTION. INSTALL CMS/BMPS 5 FT AWAY FROM THE TOE OF THE STOCKPILE'S SLOPE.
- 15. WATER USE TO CLEAN CONCRETE TRUCKS SHALL BE DISCHARGED INTO A CONCRETE WASHOUT AREA (CWA). THE PREDEFINED CONTAINMENT AREA MUST BE IDENTIFIED WITH A SIGN, AND SHALL ALLOW THE LIQUIDS TO EVAPORATE OR DRY OUT. CWA DISCHARGES THAT MAY REACH GROUNDWATER MUST FLOW THROUGH SOIL THAT HAS BUFFERING CAPACITY PRIOR TO REACHING GROUNDWATER. THE CONCRETE WASHOUT LOCATION SHALL BE NOT BE LOCATED IN AN AREA WHERE SHALLOW GROUNDWATER MAY BE PRESENT AND WOULD RESULT IN BUFFERING CAPACITY NOT BEING ADEQUATE, SUCH AS NEAR NATURAL DRAINAGES, SPRINGS, OR WETLANDS. IN THIS CASE, A LINER UNDERNEATH IS NEEDED FOR AREAS WITH HIGH GROUNDWATER LEVELS. CWA SHALL NOT BE PLACED IN LOW AREAS, DITCHES OR ADJACENT TO STATE WATERS.
- 16. WASTE, SUCH AS BUILDING MATERIALS, WORKERS TRASH AND CONSTRUCTION DEBRIS, MUST BE PROPERLY MANAGED TO PREVENT STORMWATER POLLUTION.
- 17. INSTALL STABILIZED STAGING AREA (SSA) TO STORE MATERIALS, CONSTRUCTION TRAILER, ETC.
 18. IF CONDITIONS IN THE FIELD WARRANT ADDITIONAL CMS/BMPS TO THE ONES ORIGINALLY APPROVED ON THE SWMP OR EC PLAN (CIVIL DRAWING), THE LANDOWNER OR CONTRACTOR SHALL IMPLEMENT MEASURES DETERMINED NECESSARY, AS DIRECTED BY THE COUNTY.
- 19. PERMANENT CMS/BMPS FOR SLOPES, CHANNELS, DITCHES, OR DISTURBED LAND AREA SHALL BE PERFORMED IMMEDIATELY AFTER FINAL GRADING. CONSIDER THE USE EROSION CONTROL BLANKETS ON SLOPES 3:1 OR STEEPER AND AREAS WITH CONCENTRATED FLOWS SUCH AS SWALES, LONG CHANNELS AND ROADSIDE DITCHES.
- 20. THE DISCHARGE OF SANITARY WASTE INTO THE STORM SEWER SYSTEM IS PROHIBITED. PORTABLE TOILETS MUST BE PROVIDED, SECURED AND PLACED ON PERMEABLE SURFACES, AWAY FROM THE CURBSIDE, STORM INLETS AND/OR DRAINAGE WAYS.
- 21. REMOVE TEMPORARY CMS/BMPS ONCE FINAL STABILIZATION IS REACHED, UNLESS OTHERWISE AUTHORIZED.
- 22.FINAL STABILIZATION MUST BE IMPLEMENTED. FINAL STABILIZATION IS REACHED WHEN ALL SOIL DISTURBING ACTIVITIES HAVE BEEN COMPLETED, AND EITHER A UNIFORM VEGETATIVE COVER HAS BEEN ESTABLISHED WITH AN INDIVIDUAL PLANT DENSITY OF AT LEAST 70% OF PRE DISTURBANCE LEVELS, OR EQUIVALENT PERMANENT ALTERNATIVE METHOD HAS BEEN IMPLEMENTED.
- 23. PROVIDE SPILL PREVENTION AND CONTAINMENT MEASURES FOR CONSTRUCTION MATERIALS, WASTE AND FUEL STORAGE (55 GALLONS OR GREATER) OF PETROLEUM PRODUCTS AND LIQUID CHEMICALS MUST HAVE SECONDARY CONTAINMENT, OR EQUIVALENT PROTECTION, IN ORDER TO CONTAIN SPILLS AND TO PREVENT SPILLED MATERIAL FROM ENTERING STATE WATERS.
- 24.REPORT SPILLS OR RELEASES OF CHEMICAL, OIL, PETROLEUM PRODUCT, SEWAGE, ETC., WHICH MAY REACH THE STORM SEWER OR ENTER STATE WATERS WITHIN 24 HOURS FROM TIME OF DISCOVERY. GUIDANCE AVAILABLE AT WWW.CDPHE.STATE.CO.US/EMP/SPILLSANDRELEASED.HTM. STATE OF COLORADO SPILL LINE: 1 877 518 5608. ADAMS COUNTY STORMWATER HOTLINE: 720 523 6400; PUBLIC WORKS 303 453 8787 AND THE TRI COUNTY HEALTH DEPARTMENT AT 303-220-9200.

MAINTENANCE STANDARD NOTES:

- 1 MAINTAIN AND REPAIR CMS ACCORDING TO APPROVED EROSION CONTROL PLAN (CIVIL DRAWING) TO ASSURE THEY CONTINUE PERFORMING AS ORIGINALLY INTENDED.
- 2 CMS/BMPS REQUIRING MAINTENANCE OR ADJUSTMENT SHALL BE REPAIRED IMMEDIATELY AFTER OBSERVATION OF THE FAILING BMP.
- 3 CMS SHALL BE CLEANED WHEN SEDIMENT LEVELS ACCUMULATE TO HALF THE DESIGN UNLESS OTHERWISE SPECIFIED. 4 SWMP AND EC PLAN SHALL BE CONTINUOUSLY UPDATED TO REFLECT NEW OR REVISED CMS/BMPS DUE TO CHANGES IN DESIGN, CONSTRUCTION, OPERATION, OR MAINTENANCE, TO ACCURATELY REFLECT THE ACTUAL FIELD CONDITIONS. A NOTATION SHALL BE MADE IN THE SWMP, INCLUDING DATE OF CHANGES IN THE FIELD, IDENTIFICATION OF THE CMS REMOVED, MODIFIED OR ADDED, AND THE LOCATIONS OF THOSE CMS. UPDATES MUST BE MADE WITHIN 72 HOURS FOLLOWING THE CHANGE.

 5 MAINTAIN VEHICLE TRACKING CONTROL (VTC), IF SEDIMENT TRACKING OCCURS. CLEAN UP IMMEDIATELY. SWEEP BY HAND OR THE USE STREET SWEEPERS (WITH VACUUM SYSTEM). FLUSHING OFF PAVED SURFACES WITH WATER IS PROHIBITED.
- 6 CWA MUST BE CLEANED ONCE WASTE ACCUMULATION REACHES % OF THE WET STORAGE CAPACITY OF THE STRUCTURE. LEGALLY DISPOSED OF CONCRETE WASTE. DO NOT BURY ON-SITE.
- 7 CLEAN-UP SPILLS IMMEDIATELY AFTER DISCOVERY, OR CONTAIN UNTIL APPROPRIATE CLEANUP METHODS CAN BE EMPLOYED. FOLLOW MANUFACTURER'S RECOMMENDED METHODS FOR SPILL CLEANUP, ALONG WITH PROPER DISPOSAL METHODS. RECORDS OF SPILLS, LEAKS, OR OVERFLOWS THAT RESULT IN DISCHARGE OF POLLUTANTS MUST BE DOCUMENTED AND MAINTAINED.
- 8 REMOVE SEDIMENT FROM STORM SEWER INFRASTRUCTURE (PONDS, STORM PIPES, OUTLETS, INLETS, ROADSIDE DITCHES, ETC.), AND RESTORE VOLUME CAPACITY UPON COMPLETION OF PROJECT OR PRIOR TO INITIAL ACCEPTANCE OF PUBLIC IMPROVEMENTS (IF APPLICABLE). DO NOT FLUSH SEDIMENT OFFSITE, CAPTURE ON SITE AND DISPOSED OF AT AN APPROVED LOCATION. THESE NOTES ARE NOT INTENDED TO BE ALL-INCLUSIVE, BUT TO HIGHLIGHT THE BASIC STORMWATER POLLUTION PREVENTION REQUIREMENTS FOR CONSTRUCTION ACTIVITIES TO COMPLY WITH CDPS STORMWATER CONSTRUCTION PERMIT AND BE IN CONFORMANCE WITH COUNTY STANDARDS.

303.703.4444 1950 W. Littleton Blvd., Ste.





UNDERGROUND MEMBER UTILITIES.

CORE ASSUMES NO RESPONSIBILITY FOR EXISTING LOCATIONS (HORIZONTAL AND VERTICAL). THE EUTILITIES SHOWN ON THIS DRAWING HAVE BEEN FROM THE BEST AVAILABLE INFORMATION. IT IS, HE RESPONSIBILITY OF THE CONTRACTOR TO FIEL THE LOCATION OF ALL UTILITIES PRIOR TO TO COMMENCEMENT OF ANY CONSTRUCTION ACT



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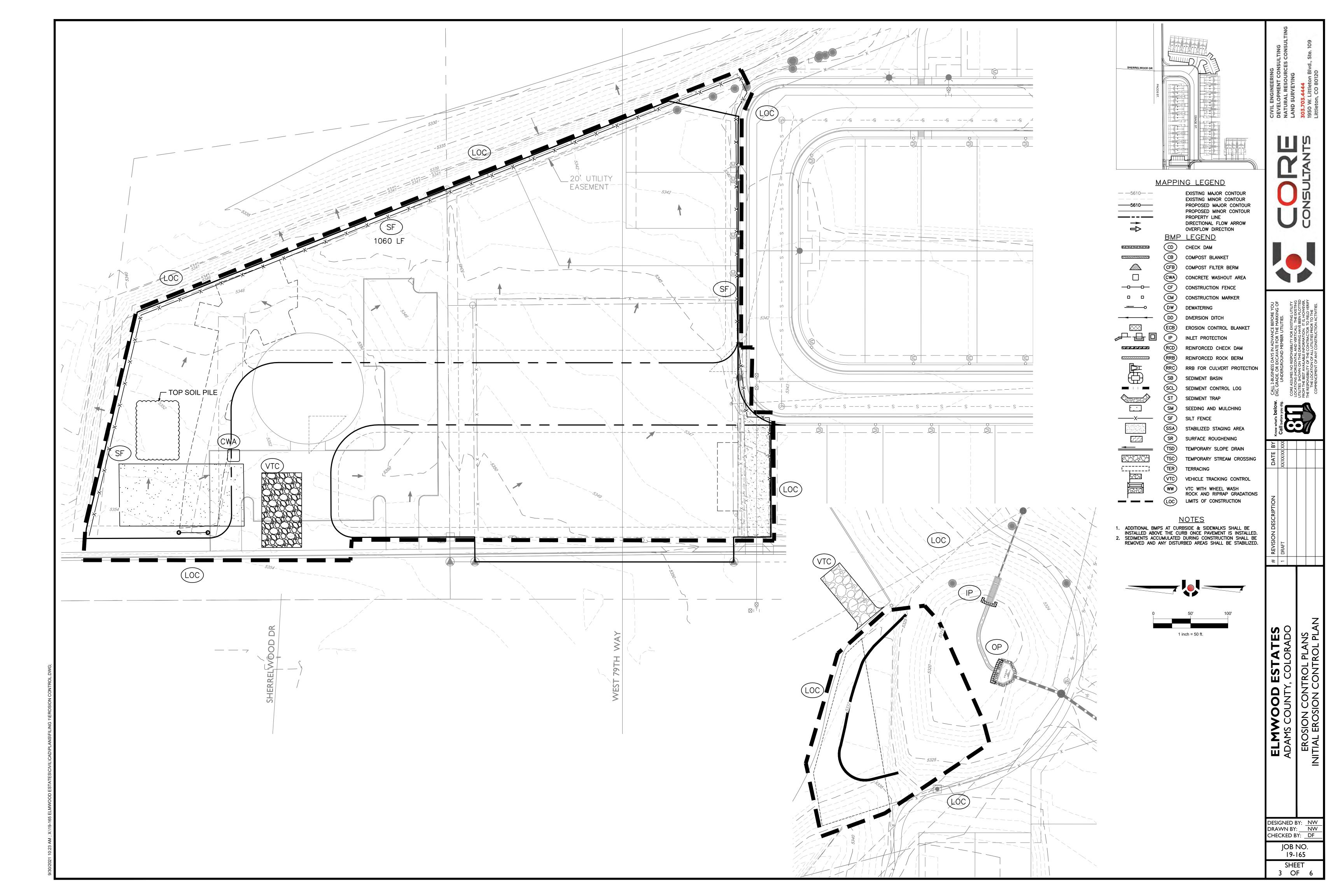
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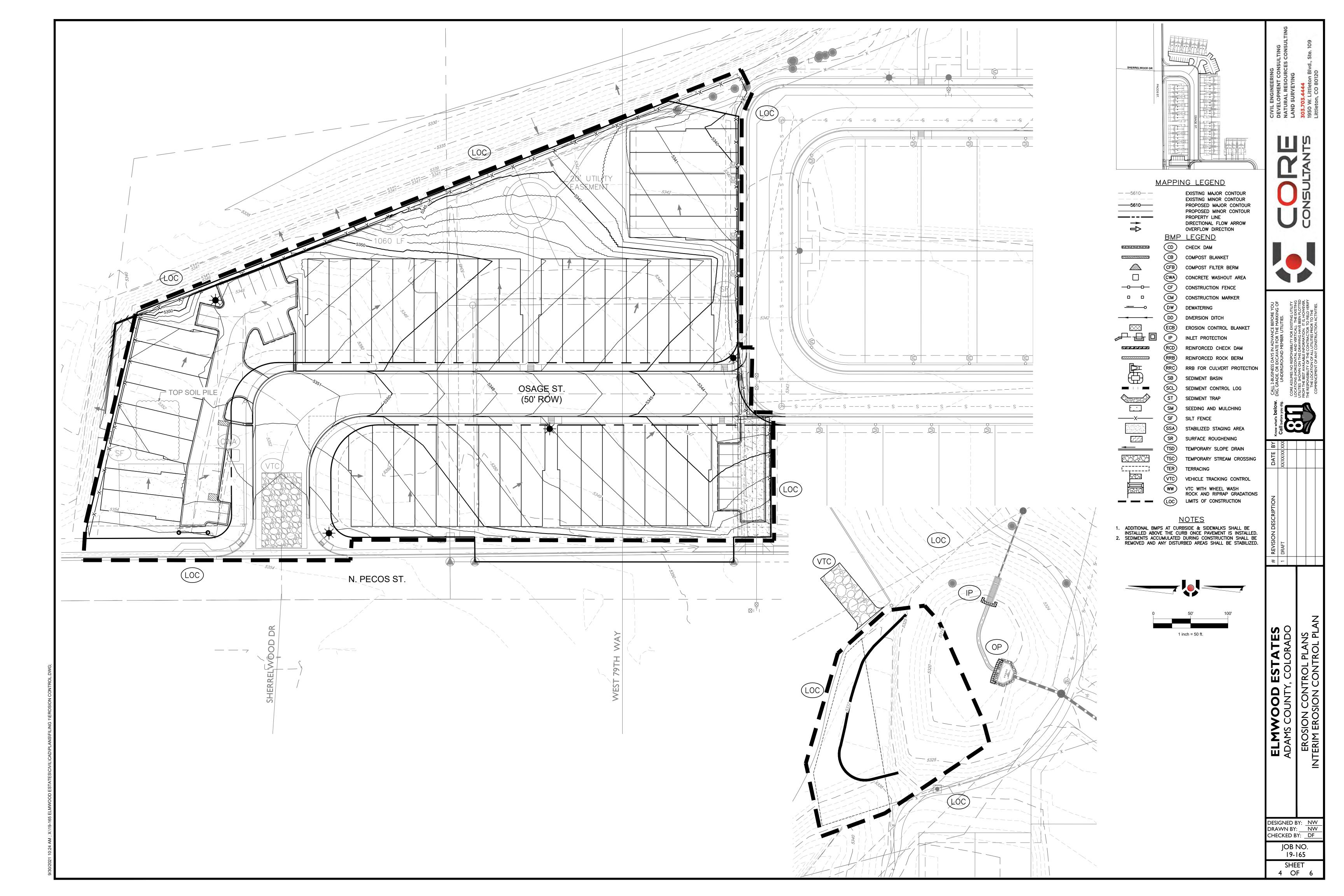
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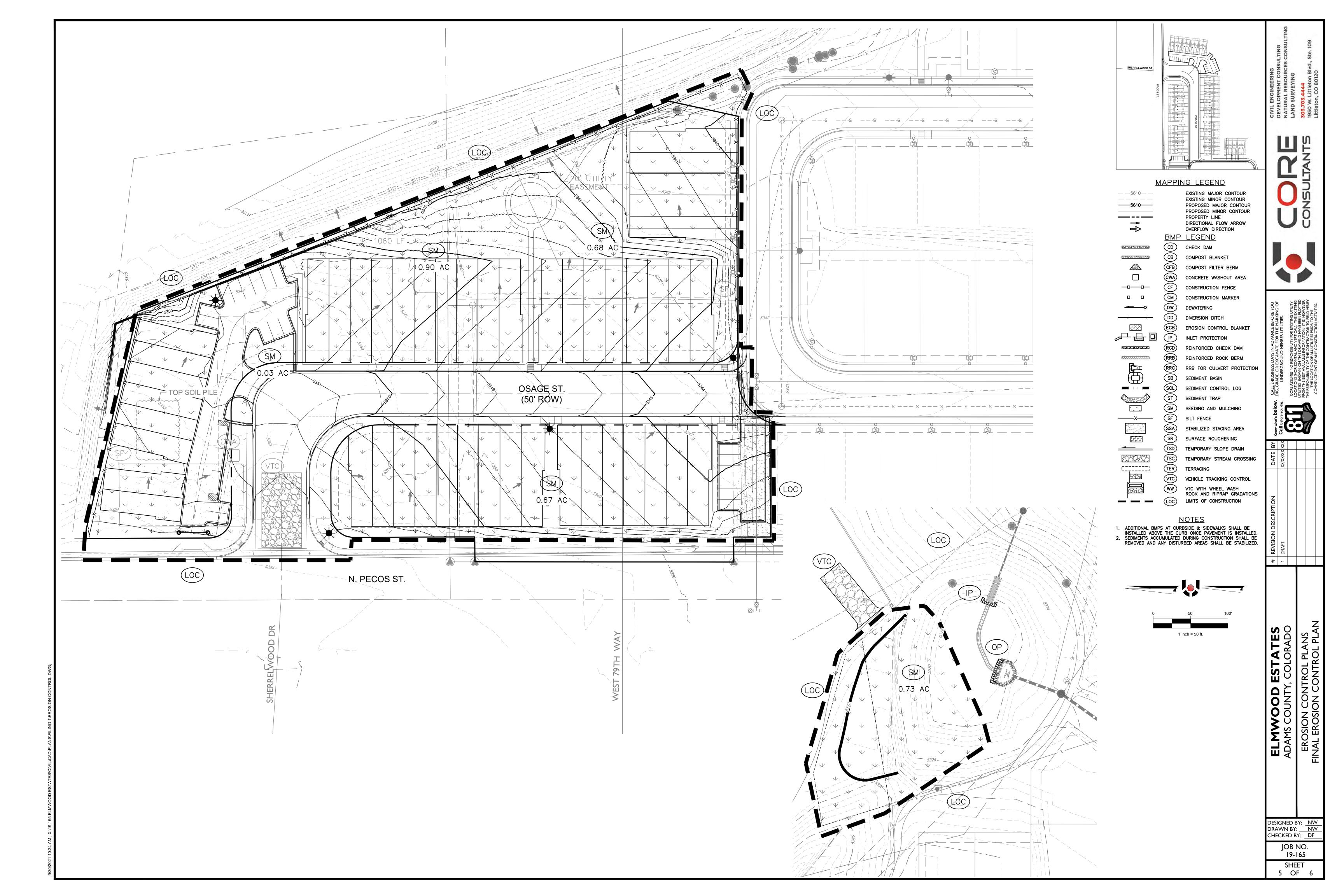
19-165 SHEET 2 OF 6

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9/30/2021 10:23 AM ; X:\19-165 ELMWOOD ESTATES\CIVIL\CAD\PLA







RIPRAP PAD

DIAMETER,

COLUMN

HOLES*

D50=9" RIPRAP

MD-7, MAJOR

04.00

CREST LENGTH

EL. 03.00

AT CREST

SECTION B

SB-1. SEDIMENT BASIN

WIRE TIE ENDS -

- GROUND SURFACE

Rock Sock (RS)

(MINUS) CRUSHED ROCK

4" TO 6" MAX AT

- 6"-10" DEPENDING

SEDIMENT LOADS

ON EXPECTED

ROCK SOCK PLAN

GRADATION TABLE

SIEVE SIZE MASS PERCENT PASSING SQUARE MESH SIEVES

NO. 4

November 2010

ANY GAP AT JOINT SHALL BE FILLED WITH AN ADEQUATE

ADDITIONAL WIRE WRAPPING, ROCK SOCKS CAN BE

AMOUNT OF 1½" (MINUS) CRUSHED ROCK AND WRAPPED WITH ADDITIONAL WIRE MESH SECURED TO ENDS OF ROCK REINFORCED SOCK, AS AN ALTERNATIVE TO FILLING JOINTS BETWEEN ADJOINING ROCK SOCKS WITH CRUSHED ROCK AND

OVERLAPPED (TYPICALLY 12-INCH OVERLAP) TO AVOID GAPS.

ENCLOSED IN WIRE MESH

D50=9" RIPRAP TYPE L

Urban Drainage and Flood Control District

Urban Storm Drainage Criteria Manual Volume 3

TYPE L. (SEE TABLE

DRAINAGE, VOL. 1)

SCHEDULE 40

EXCAVATION

PVC OR GREATER

EMBANKMENT

November 2010

SC-5

MATERIAL

SC-7

— SF/CF —— SF/CF —

VEHICLE TRACKING

CONTROL (SEE

VEHICLE TRACKING

CONTROL (SEE VTC -

DETAIL)

VTC DETAIL) OR OTHER STABLE SURFACE

CONCRETE WASHOUT

CONCRETE WASHOUT AREA PLAN

8 X 8 MIN.

CWA-1. CONCRETE WASHOUT AREA

2. DO NOT LOCATE AN UNLINED CWA WITHIN 400' OF ANY NATURAL DRAINAGE PATHWAY OR

SITE CONSTRAINTS MAKE THIS INFEASIBLE, OR IF HIGHLY PERMEABLE SOILS EXIST ON SITE,

THE CWA MUST BE INSTALLED WITH AN IMPERMEABLE LINER (16 MIL MIN. THICKNESS) OR

4. CWA SHALL INCLUDE A FLAT SUBSURFACE PIT THAT IS AT LEAST 8' BY 8' SLOPES

7. SIGNS SHALL BE PLACED AT THE CONSTRUCTION ENTRANCE, AT THE CWA, AND

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LEADING OUT OF THE SUBSURFACE PIT SHALL BE 3:1 OR FLATTER. THE PIT SHALL BE AT

5. BERM SURROUNDING SIDES AND BACK OF THE CWA SHALL HAVE MINIMUM HEIGHT OF 1'.

ELSEWHERE AS NECESSARY TO CLEARLY INDICATE THE LOCATION OF THE CWA TO OPERATORS

3. THE GWA SHALL BE INSTALLED PRIOR TO CONCRETE PLACEMENT ON SITE.

6. VEHICLE TRACKING PAD SHALL BE SLOPED 2% TOWARDS THE CWA.

8. USE EXCAVATED MATERIAL FOR PERIMETER BERM CONSTRUCTION.

SURFACE STORAGE ALTERNATIVES USING PREFABRICATED CONCRETE WASHOUT DEVICES OR A

WATERBODY, DO NOT LOCATE WITHIN 1,000' OF ANY WELLS OR DRINKING WATER SOURCES, IF

3 X 8 MIN.

COMPACTED BERM AROUND

THE PERIMETER

UNDISTURBED OR 1

CWA INSTALLATION NOTES

-CWA INSTALLATION LOCATION.

OF CONCRETE TRUCKS AND PUMP RIGS.

Vehicle Tracking Control (VTC)

SIDEWALK OR OTHER

ROADWAY

COMPACTED SUBGRADE -

INSTALL ROCK FLUSH WITH

OR BELOW TOP OF PAVEMENT

PAVED SURFACE

LINED ABOVE GROUND STORAGE ARE SHOULD BE USED.

1. SEE PLAN VIEW FOR:

COMPACTED SOIL

SM-4

(WIDTH CAN BE

LESS IF CONST.

VEHICLES ARE

No recycled concrete.

UNLESS OTHERWISE SPECIFIED

NON-WOVEN GEOTEXTILE

BY LOCAL JURISDICTION, USE - CDOT SECT. #703, AASHTO #3

COARSE AGGREGATE OR 6"

MINUS ROCK

BETWEEN SOIL AND ROCK

UNLESS OTHERWISE SPECIFIED BY LOCAL JURISDICTION, USE CDOT SECT. #703, AASHTO

#3 COARSE AGGREGATE

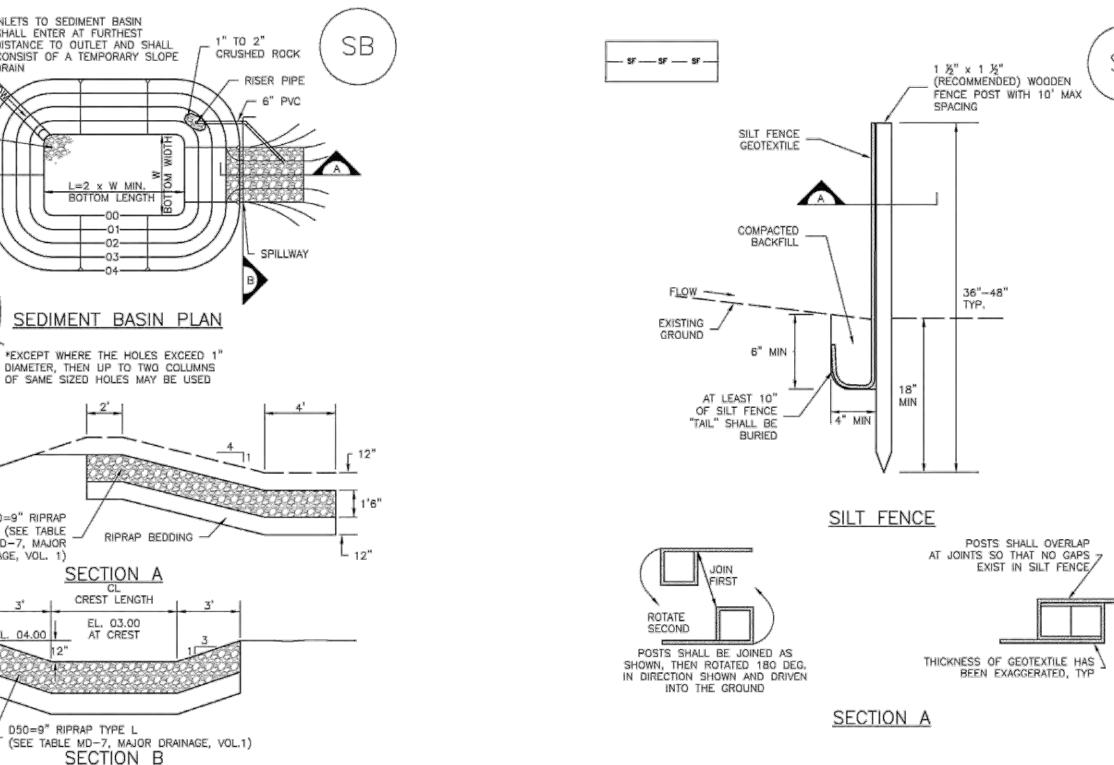
OR 6" MINUS ROCK

NON-WOVEN GEOTEXTILE FABRIC

PHYSICALLY CONFINED ON BOTH SIDES)

DESIGNED BY: NW DRAWN BY: NW CHECKED BY: DF JOB NO.

19-165



November 2010

ONSITE CONSTRUCTION CONSTRUCTION VEHICLE PARKING (IF NEEDED) CONSTRUCTION SITE ACCESS 3° MIN. THICKNESS GRANULAR MATERIAL CONSTRUCTION ENTRANCE (SEE -DETAILS VTC-1 TO VTC-3) SILT FENCE OR CONSTRUCTION FENCING AS NEEDED EXISTING ROADWAY SSA-1. STABILIZED STAGING AREA STABILIZED STAGING AREA INSTALLATION NOTES 1. SEE PLAN VIEW FOR -LOCATION OF STAGING AREA(S). -CONTRACTOR MAY ADJUST LOCATION AND SIZE OF STAGING AREA WITH APPROVAL FROM THE LOCAL JURISDICTION. 2. STABILIZED STAGING AREA SHOULD BE APPROPRIATE FOR THE NEEDS OF THE SITE. OVERSIZING RESULTS IN A LARGER AREA TO STABILIZE FOLLOWING CONSTRUCTION. 3. STAGING AREA SHALL BE STABILIZED PRIOR TO OTHER OPERATIONS ON THE SITE. 4. THE STABILIZED STAGING AREA SHALL CONSIST OF A MINIMUM 3" THICK GRANULAR 5. UNLESS OTHERWISE SPECIFIED BY LOCAL JURISDICTION, ROCK SHALL CONSIST OF DOT SECT. #703, AASHTO #3 COARSE AGGREGATE OR 6" (MINUS) ROCK. 6. ADDITIONAL PERIMETER BMPs MAY BE REQUIRED INCLUDING BUT NOT LIMITED TO SILT FENCE AND CONSTRUCTION FENCING. STABILIZED STAGING AREA 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. ROCK SHALL BE REAPPLIED OR REGRADED AS NECESSARY IF RUTTING OCCURS OR SF-1. SILT FENCE UNDERLYING SUBGRADE BECOMES EXPOSED. Urban Drainage and Flood Control District November 2010 Urban Drainage and Flood Control District SSA-3 Urban Storm Drainage Criteria Manual Volume 3 Urban Storm Drainage Criteria Manual Volume 3

Surface Roughening (SR)

IMPRINTING FURROWS 2" TO 4" DEEP WITH 6" MAXIMUM SPACING PARALLEL TO CONTOURS SURFACE ROUGHENING FOR STEEP SLOPES (3:1 OR STEEPER) OR TILLING ROUGHENED ROWS SHALL BE 4" TO 6"

4" DEEP DEEP WITH 6" MAXIMUM SPACING PARALLEL SURFACE ROUGHENING FOR LOW SLOPES (LESS THAN 3:1)

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SC-6 Inlet Protection (IP)

SEE ROCK SOCK DESIGN DETAIL FOR JOINTING 16" CINDER BLOCKS 2"x4" WOOD STUD __ __ 2"x4" WOOD IP-1. BLOCK AND ROCK SOCK SUMP OR ON GRADE INLET PROTECTION

> BLOCK AND CURB SOCK INLET PROTECTION INSTALLATION NOTES 1. SEE ROCK SOCK DESIGN DETAIL FOR INSTALLATION REQUIREMENTS.

2. 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. 3. GRAVEL BAGS SHALL BE PLACED AROUND CONCRETE BLOCKS, CLOSELY ABUTTING ONE ANOTHER AND JOINTED TOGETHER IN ACCORDANCE WITH ROCK SOCK DESIGN DETAIL.

TWO CURB BLOCK AND ROCK SOCK INLET SOCKS APPROX 30 DEG. PROTECTION(SEE DETAIL IP-1) CURB SOCK -FLOW --

IP-2. CURB ROCK SOCKS UPSTREAM OF INLET PROTECTION

CURB ROCK SOCK INLET PROTECTION INSTALLATION NOTES 1. SEE ROCK SOCK DESIGN DETAIL INSTALLATION REQUIREMENTS.

2. PLACEMENT OF THE SOCK SHALL BE APPROXIMATELY 30 DEGREES FROM PERPENDICULAR IN THE OPPOSITE DIRECTION OF FLOW.

3. SOCKS ARE TO BE FLUSH WITH THE CURB AND SPACED A MINIMUM OF 5 FEET APART.

4. AT LEAST TWO CURB SOCKS IN SERIES ARE REQUIRED UPSTREAM OF ON-GRADE INLETS.

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SOCKS

SECTION A -

SR-3

EC-1

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VTC-1. AGGREGATE VEHICLE TRACKING CONTROL

SHEET 6 OF 6

ROCK SOCK JOINTING ROCK SOCK INSTALLATION NOTES MATCHES SPECIFICATIONS FOR NO. 4 COARSE AGGREGATE FOR CONCRETE PER AASHTO M43. ALL ROCK SHALL BE FRACTURED FACE, ALL SIDES. 1. SEE PLAN VIEW FOR: -LOCATION(S) OF ROCK SOCKS. 2. CRUSHED ROCK SHALL BE 11/2" (MINUS) IN SIZE WITH A FRACTURED FACE (ALL SIDES) AND SHALL COMPLY WITH GRADATION SHOWN ON THIS SHEET (1½" MINUS). 3. WIRE MESH SHALL BE FABRICATED OF 10 GAGE POULTRY MESH, OR EQUIVALENT, WITH A MAXIMUM OPENING OF 1/2", RECOMMENDED MINIMUM ROLL WIDTH OF 48" 4. WIRE MESH SHALL BE SECURED USING "HOG RINGS" OR WIRE TIES AT 6" CENTERS ALONG ALL JOINTS AND AT 2" CENTERS ON ENDS OF SOCKS. 5. SOME MUNICIPALITIES MAY ALLOW THE USE OF FILTER FABRIC AS AN ALTERNATIVE TO WIRE MESH FOR THE ROCK ENCLOSURE. RS-1. ROCK SOCK PERIMETER CONTROL

O" ON BEDROCK OR

L HARD SURFACE, 2"

ROCK SOCK SECTION

IN SOIL

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APPENDIX 7: Stormwater Inspection Form (Template)

Instructions:

This inspection report has been developed to complete the 7 day (<u>or</u> 14 day and storm event site inspections) and 30-day inspections at completed sites.

Using the Inspection Report:

You can complete the items in the upper section that will remain constant, such as the date, project name, and inspector. You will either need to print out multiple copies of this inspection report or save an electronic version as a master form to use during your inspections.

Ensure that all items are completed by checking "Yes", "No", or "N/A" –Not Applicable. Document any "Corrective Action Needed". Under "BMP/CMs Description", document the CMs that are required per plan and/or installed, if maintenance is needed and document any "Corrective Action Needed" as necessary.

When issues are present at a construction site, ensure you enter the date when the issue has been addressed, on the same inspection form. Document when the issue was addressed by filling in the "Date Fixed".

Stormwater In	spection Form			
Project Name: Elmwood Estates	Inspection Date/Time:			
Project Location: 8000Pecos	Current Weather: temperature / rainy, sunny, etc			
Company Name:	Current Disturbed Acres: Estimate acreage			
Qualified SW Manager Name & Title:	Current Construction Phase: Initial (Demo, Grading,			
Insert Name & Title Here	Utilities, Road), Interim (Building Filing/Block/Lot),			
Phone Number: Insert Phone Number	Final (Landscape,etc)			
Type of Inspection 14 Day Inspection 20 Day Pedyood Fraguency Inspection				
☐ 14-Day Inspection ☐ 7-Day Inspection	30-Day Reduced Frequency Inspection (Construction and Final Stabilization completed + SWMP updated)			
Winter Conditions Inspections Exclusion:				
Dates when snow cover existed	Deviation from minimum inspection frequency: Y/N			
Dates when construction activities ceased	If Yes, Explain:			
Dates melting conditions began Off-Site Discha	arge Assessment			
	t Location, type of pollutant, date and corrective action.			
The position of the distinguished by the same of the s	2 200 and to the control of the cont			
Minimum R	equirements:			
Are there any new potential sources of pollutants?: Y/N				
Does stormwater runoff from all disturbed areas flow thru at least one				
Is VTC installed? Y/N (If NOT, area must run thru at least one control measure)				
Is pre-existing vegetation (or equivalent CM) maintained for areas within 50 ft of receiving waters? Y/N/NA Does all bulk storage (55+ gall) of petrology products and liquid chemicals have secondary containment (or equivalent). Y/N/NA				
Does all bulk storage (55+ gall) of petroleum products and liquid chemicals have secondary containment (or equivalent) Y/N/NA Is outlet installed to withdrawn water just below surface level at basin? Y/N/NA				
Are <u>inactive disturbed areas</u> stabilized within 14 days? Y/N				
(if NOT, then document constraints, alternative schedule and location in SWMP)				
Are natural areas (streams, wetlands, trees) protected? Y/N				
Has soil compaction been minimized? Y/N				
Has topsoil been preserved? Y/N				
Has the amount of soil exposed been minimized (including the disturb	bance of steep slopes)? Y/N			
Is construction perimeter contained? Y/N				
Are designated haul routes in compliance? Y/N Are washout facilities identified and maintained? Y/N				
(Add liner if shallow groundwater or close to stream/channels/wetland)				
Are potential stormwater pollutants stored properly? Y/N				
Are equipment maintenance areas free of spills/leaks? Y/N				
Are non-stormwater discharges properly controlled? (on-site dewater				
Has the SWMP/EC Plan (site map) been updated to reflect current fie				
Notes: If "YES" describe discharge or potential for discharge below. actions.	. Document related maintenance, inadequate CMs and corrective			

BMP/Control Measure (CM) Description	Code	In EC plan? Y/N	Installed?	Describe Corrective Action: Additional BMP Maintenance Removal	Location:	Date Fixed
			Se	ediment Control BMPs/CMs	•	
Silt Fence	SF					
Sediment Control Log	SCL					
Straw Bale Barrier	SBB					
Rock Sock	RS					
Inlet Protection	IP					
Sediment Basin	SB					
Sediment Trap	ST					
Vegetated Buffer	VB					
Other:						
			E	crosion Control BMPs/CMs		
Surface Roughening	SR					
Temp. & Permanent Seed	TS/PS					
Soil Binders	SB					
Mulching	MU					
Rolled Erosion Control Prod.	RECP					
Temp. Slope Drain	TSD					
Temp. Outlet Protection	TOP					
Earth Dikes/Drainage Swales	ED/DS					
Terracing	TER					
Check Dams	CD					
Streambank Stabilization	SS					
Dust Control	DC					
Other:						
Materials Management						
Concrete Washout Area	CWA					
Stockpile Management	SP					
Stabilize Staging Area	SSA					
Good Housekeeping	GH					
Portable Toilets	PT					
Blowing Trash	Waste					
Spills and Leaks	Spills					
Equip. Maint. & Fueling	Equip					
Other:						
			\$	Site Management Controls		
Protection of Vegetation	PV					
Construction Fence	CF					
Vehicle Tracking Control	VTC					
Stabilized Construction Rd	SCR					
Street Sweeping	SS					
Temp. Diversion Channel	TDC					
Dewatering Ops.	DW					
Temp. Stream Crossing	TSC					
Paving & Grinding Ops.	PGO					
Other:						
Certification Statement (if	all CMs	are in	Good	Condition, or After Corrective	Actions are Completed): I verify that,	to the

Certification Statement (if all CMs are in Good Condition, or After Corrective Actions are Completed): I verify that, to the best of my knowledge and belief, all corrective action and maintenance identified in the inspection are complete, and the site is in compliance w/ permit.

Signature: Insert Signature

Date: Insert Date

Reporting Requirements

Report the following circumstances orally within twenty-four (24) hours from the time the permittee becomes aware of the circumstances, and mail to the State a written report containing the information requested within five (5) working days after becoming aware of the following circumstances.

All Noncompliance Requiring 24-Hour Notification per Part II.L.6 of the Permit

a. Endangerment to Health or the Environment Circumstances leading to any non-compliance which may endanger health or the environment regardless of the cause of the incident (See Part II.L.6.a of the Permit)

This category would primarily result from the discharge of pollutants in violation of the permit

- b. Numeric Effluent Limit Violations
 - Circumstances leading to any unanticipated bypass which exceeds any effluent limitations (See Part II.L.6.b of the Permit)
 - Circumstances leading to any upset which causes an exceedance of any effluent limitation (See Part II.L.6.c of the Permit)
 - Daily maximum violations (See Part II.L.6.d of the Permit)

Numeric effluent limits are very uncommon in certifications under the COR400000 general permit. This category of noncompliance only applies if numeric effluent limits are included in a permit certification.

Has there been an incident of non-compliance requiring 24-hour notification? Y/N/NA

Date and Time of Incident	Location	Description of Noncompliance	Corrective Action	Date and Time of 24 Hour Oral Notification	Date of 5 Day Written Notification *

APPENDIX 8: Delegation of Authority Form

I, Insert Name Here, hereby designate the person or specifically described position below to be a duly authorized representative for the purpose of overseeing compliance with environmental requirements, including the Construction General Permit, at the Insert Name of Project construction site. The designee is authorized to sign any reports, stormwater pollution prevention plans and all other documents required by the permit.

Insert Name & Title
Insert Company Name
Insert Company Address
Insert Company City, State, Zip Code
Insert Company Phone

By signing this authorization, I confirm that I meet the requirements to make such a designation as set forth in Insert State Permit No + City/County Stormwater Permit No, and that the designee above meets the definition of a "duly authorized representative"

APPENDIX: 9 Completed Stormwater Inspection Logs

(File completed inspection forms here)

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APPENDIX 10: Subcontractor Certifications/Agreements

SUBCONTRACTOR CERTIFICATION STORMWATER MANAGEMENT PLAN (SWMP)

Project Number:
Project Title:
Operator(s):
As a subcontractor, you are required to comply with the SWMP, for any work that you perform on-site. Any person or company who violates any condition of the SWMP may be subject to substantial penalties or loss of contract. You are encouraged to advise each of your employees working on this project of the requirements of the SWMP. A copy of the SWMP is available for your review at: Insert Location of Documents.
Each subcontractor engaged in activities at the construction site that could impact stormwater must be identified and sign the following certification statement:
I certify under the penalty of law that I have read and understand the terms and conditions of the SWMP for the above designated project and agree to follow the CMs and practices described in the SWMP.
This certification is hereby signed in reference to the above named project:
Company:
Address:
Telephone Number:
Type of construction service to be provided:
Signature:
Title:
Date:

APPENDIX 11: Agreement for off-site Control Measures

(if applicable)

Attach use agreement between the Permittee and the owner/operator of any control measures located outside of the permitted area, that are utilized by the Permittee's construction site for compliance with this permit, but not under the direct control of the Permittee.

The Permittee is responsible for ensuring that all control measures located outside of their permitted area, that are being utilized by the Permittee's construction site, are properly maintained and in compliance with all terms and conditions of the permit.

Include all information to any such off-site control measures located outside the permitted area, including location, installation specifications, design specifications and maintenance requirements

APPENDIX 12: Low Risk Discharge Guidance for Discharges of Potable Water

**If Flushing New Waterlines including fire suppression lines, irrigation lines, etc , the State of Colorado Low Risk Discharge Guidance for Discharges of Potable Water must be followed.

Discharges of potable water are short term infrequent discharges that with proper management are not expected to contain pollutants in concentrations that are toxic or in concentrations that would cause or contribute to a violation of a water quality standard. The typical pollutant of concern is total residual chlorine, however, total suspended solids (TSS) and oil&grease may also become pollutants of concern. These pollutants can be handled using dechlorination techniques, filters, oil booms, and other control measures (CM).

The following conditions must be followed by anyone discharging potable water: The discharge of cleaning materials or chemicals, including dyes, is strictly prohibited, and shall be sent to the sanitary sewer, with permission of the local wastewater treatment facility, or otherwise collected and disposed of. Except for additional chlorine and dechlorination chemicals in accordance with manufacturer's label. The potable water shall **not** be used in any additional process. Processes include, but are not limited to, any type of washing, heat exchange, manufacturing, and hydrostatic testing of pipelines not associated with treated water distribution systems. The discharge shall be from a potable water distribution system, tank or storage that has been maintained for potable water distribution use. Discharges from a distribution system, tank or storage that is used for conveyance or storage of materials other than potable water is not authorized. The discharge shall not cause erosion of a land surface. Energy dissipation devices designed to protect downstream areas from erosion y reducing velocity of flow (such as hose attachments and erosion controls), may be necessary. The discharge shall not contain solid materials in concentrations that can settle to form bottom deposits detrimental to the beneficial uses of the state waters or form floating debris, scum, or other surface materials sufficient to harm existing beneficial uses. All discharges must comply with the lawful requirements of federal agencies, municipalities, counties, drainage districts, ditch owners, and other local agencies regarding any discharges to storm drain systems, conveyances, ditches or other water courses under their jurisdiction. This guidance in no way reduces the existing authority of the owner of a storm sewer, ditch owner, or other local agency, from prohibiting or placing additional conditions on the discharge.

If the discharge is directly to a State surface water (any stream, creek, gully, whether dry or flowing), it must not contain any residual chlorine in excess of 0.011 mg/l. The operator is responsible for determining what is necessary for removing chlorine from the discharge. If the discharge is to a ditch, chlorine content may be limited by the owner of the ditch. However, if the ditch returns flow to classified state waters, it must not contain any residual chlorine in excess of 0.011 mg/l at the point where it discharges to the classified state water. Removal of residual chlorine in excess of 0.011 ml/l, must be done for any direct discharge to state surface waters or for any discharge to a storm sewer or conveyance where the chlorine will not dissipate below 0.011 mg/l prior to reaching state surface water. Dechlorination, if necessary, may be achieved by allowing water to stand uncovered until no chlorine is detected, or by dechlorination using a portable dechlorinator. Pay particular attention when handling superchlorinated waters. A longer time is needed to dissipate chlorine from super-chlorinated waters.

When using chemicals in the dechlorination process, the operator must ensure that proper quantities and rates are used, based on the concentration of chlorine; that adequate mixing occurs; and that enough time is allowed prior to flow reaching a surface water for the dechlorination chemicals to react with the chlorine in the water. In cases where the discharge of water that had been super-chlorinated will occur, operators should allow additional time for the chlorine to dissipate. It is the operators' responsibility to ensure that adequate processes are followed to meet the 0.011 mg/L chlorine limitation prior to discharge to classified state surface water. It is not required that an EPA approved test method be used to make this determination. For many methods, it will be necessary to have a test result indicating no (0 mg/L) residual chlorine to ensure that this limitation is met. Discharging without Testing is possible without analysis. This may be based on a determination that the given hold time or travel time to classified state water, based on other discharge-specific variables, will adequately reduce chlorine levels to result in the chlorine limitation being met. It is the operator's responsibility to ensure they understand the variables associated with a specific discharge to ensure that the chlorine limitation has been met. CMs shall be implemented as necessary to meet the conditions above, by anyone discharging potable water.

<u>For discharge to the ground</u>: the water shall not cause any toxicity to vegetation. When discharging, allow the water to drain slowly so that it soaks into the ground as much as possible. Dechlorination is not required for discharges into the ground if the discharge does not reach state surface water. This option should be considered as an alternative to dechlorination.

<u>Pollutants Picked Up After Release:</u> The discharge should be conducted to minimize the potential to pick up additional pollutants following release from the potable water distribution systems and prior to discharge to a water of the state. The discharge should be conducted to minimize the potential to pick up additional suspended solids and to control erosion. It is understood that minimal suspension of sediment is inherent to any water running across soils. However potential water quality impacts should

be minimized through practices such as diffusing flows and avoiding flows across bare soils. The discharge should be conducted to minimize the potential that it will contact petroleum products/waste, and avoid picking up any oil and grease. When possible, an absorbent oil pad, boom or similar device should be used to eliminate oil from the discharge. A visible sheen must not be evident in the discharge. The discharge shall be conducted to minimize the potential that it will not pick up any oil and grease. When possible, an absorbent oil pad, boom or similar device shall be used to eliminate oil from the discharge.

Preparing and Installing Components: When installing new pipe, fittings and appurtenances into a potable water distribution system, the components should be prepared and maintained in a way to minimize the potential for contribution of pollutants to discharges covered under this guidance. All pipe, fittings, and other appurtenances associated with the discharge should meet industry standards for cleanliness for public water. Examples of standard operating procedures include, but are not limited to, those found in ANSI/AWWA Standard C600-10, (Installation of ductile-Iron mains and their appurtenances), or any other applicable standard operating procedures that reflect industry standards of cleanliness. When it is necessary to remove debris, foreign material or other gross contamination from components prior to installation, wastewater generated from such activities may not be covered under this guidance. Such activity should occur at a location that allows for generated wastewater to be sent to the sanitary sewer with permission of the local wastewater treatment facility. Such wastewater could also be otherwise collected and disposed of. Practices should be implemented during transport, storage, installation, and maintenance to minimize introduction of contaminants to pipe, fittings, and other appurtenances that could contribute pollutants to discharges.

<u>Removing Pollutants:</u> Control measures for filtering or settling suspended solids and other debris should be used to remove solids or other debris that have either been picked up after discharge or that originated from within the potable water system. Examples of suspended solid removal practices include check dams and filter bags. As a final measure downstream from additional control measures, inlet protection can be used to provide some additional removal and to allow for redundancy. Pollutant removal control measures should be used and maintained in accordance with manufacturers' specifications.

Alternative Disposal Options:

Water not meeting the criteria and conditions of this guidance may be sent to the sanitary sewer with permission of the local wastewater treatment facility or otherwise collected and disposed. If discharge is to the sanitary sewer, contact the local wastewater treatment facility prior to discharge. System owners may grant blanket authorization to discharge to their systems. This must be done to ensure that the facility is able to accept the discharge. Not all facilities are able to accept such discharges. Note that additional restrictions or local guidelines may apply. If the waste is collected for disposal, it may be hauled off site for disposal at a facility that is authorized to discharge the water through an existing CDPS permit or in accordance with disposal requirements administered through the Colorado Hazardous Materials and Waste Management Division. Alternatively the water may be land applied in a way that results in complete evapotranspiration. This will likely only be an option when the quantities of water are small.

Low Risk Guidance for Discharges of Uncontaminated Groundwater to Land

Applicable to:

- The source of the discharge must solely be uncontaminated groundwater or uncontaminated groundwater combined with stormwater. To be considered uncontaminated, the source must not contain pollutants in concentrations that exceed water quality standards for the applicable receiving groundwater.
- The discharge must be to land. Point source discharges to surface waters, storm sewers, or other drainage conveyance systems are not covered by this guidance.

Conditions:

Prohibition of pollutants in the discharge:

- No chemicals may be added.
- If the discharge is from vaults or similar structures, the discharge cannot be contaminated by process materials used, stored, or conveyed in the structures, or by introduced surface water runoff from outside environments that may contain oil, grease, and corrosives.
- A visible sheen must not be evident in the source water or discharge.

Exclusion of Process Discharges:

• The groundwater shall not be used in additional processes, such as any type of washing, heat exchange, or manufacturing.

Controlling the discharge:

• The groundwater discharge cannot leave the operational control of the entity administering the land application. The owner of the property where the discharge is occurring must have prior knowledge and grant permission for the land application.

- Land application must be conducted at a rate and location that does not allow for any runoff into state waters or other drainage conveyance systems, including but not limited to streets, curb and gutter, inlets, borrow ditches, open channels etc. If the land application is to agricultural land, it must not reach or have the potential to reach an agricultural ditch. Discharges to drainage conveyance systems as described above are a discharge to surface water that require a discharge permit and are not covered under this guidance document.
- Land application must be conducted at a rate that does not allow ponding of the groundwater on the surface, unless the ponding is a result of implementing control measures that are designed to reduce flow velocity. If the control measures used result in ponding, the land application must be done in an area with a constructed containment, such as an excavation or bermed area with no designed outfall. The containment shall prevent the discharge of the ponding water offsite as runoff.

Compliance with construction stormwater discharge permits: If the discharge is located at a facility covered by a CDPS General Permit for Stormwater Discharge Associated with Construction Activities, the requirements in that permit associated with the discharge of groundwater must be complied with, including identification in the Stormwater Management Plan.

<u>Controlling erosion:</u> The discharge shall not cause erosion of a land surface that could cause pollution of the receiving water. Signs of visible erosion that have the potential to cause pollution without downstream controls measures implemented include the formation of rills or gullies on the land surface. Energy dissipation devices designed to protect downstream areas from erosion by reducing velocity of flow (such as hose attachments and erosion controls) may be necessary to prevent erosion.

<u>Controlling pollutant potential of deposited sediment:</u> Control measures shall be implemented to prevent any sediment deposited during land application from being transported by stormwater runoff to surface waters or other conveyances.

Additional Requirements and Property Rights:

- All discharges must comply with federal agencies, municipalities, counties, drainage districts, ditch owners, and other local agencies regarding any discharges to storm drain systems, conveyances, ditches or other water courses under their jurisdiction.
- This guidance in no way reduces the existing authority of the owner of a storm sewer, ditch owner, or other local agency, from prohibiting or placing additional conditions on the discharge.
- The discharge shall not result in flooding of neighboring property, streets, gutters or storm sewers. The discharge must be diverted from building foundations or other areas that may be damaged from ground settling or swelling.

Implementation of Control Measures:

Identifying potentially contaminated groundwater: It the groundwater is located within 1 mile of a landfill, abandoned landfill, mine or mine tailing area, a Leaking Underground Storage Tank (LUST), Brownfield site, or other area of contamination, there is an increased likelihood that groundwater contamination exists. In those cases additional work is appropriate to determine if your dewatering area is in an area of contamination. The following is a list of contamination and plume resources and is helpful when determining if your dewatering area is in an area of contamination, however the list is not all inclusive and in some cases sitespecific characterization of groundwater may be necessary. All control measures used to meet the provisions of this guidance document must be selected, installed, implemented and maintained according to good engineering, hydrologic and pollution control practices. Control measures must be adequately designed to provide control for all potential pollutant sources associated with the discharge of uncontaminated groundwater to land. Route discharge in such a way that it will not contact petroleum products/waste, a visible sheen must not be evident in the discharge. To minimize potential for creating stormwater pollution sources, control measures (such as a filter bag or similar filtration device) should be used to remove sediment/solids prior to land application. Water that does not meet the criteria of this guidance or that cannot be discharged in a manner that meets the conditions of this guidance must be either authorized by a Colorado Discharge Permit System (CDPS) discharge permit issued by the division or disposed of through an alternative means. The Water Quality Control Division has general permits available for discharges to surface water and/or land associated with construction dewatering, subterranean structure/foundation dewatering, and the remediation of groundwater. Obtaining coverage one of these permits will likely be the most efficient solution for discharges that do not meet the criteria and conditions of this guidance. For discharges associated with construction projects, guidance on determining the appropriate permit and Application Guidance Document for these general permits, visit: https://www.colorado.gov/pacific/cdphe/wq-construction-general-permits. Discharges from subterranean (basement, foundation, footer drains, etc.) are covered by the Subterranean Dewatering or Well Development general permit. Visit: https://www.colorado.gov/pacific/cdphe/clean-water-commerce-and-industry-permitting

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APPENDIX 13: Erosion and Sediment Control Standard Notes

Adams County Erosion Control Plan - General Notes:

- 1 All construction projects, regardless of the size, shall install, maintain and repair stormwater pollution control measures (CMs) to effectively minimize erosion, sediment transport, and the release of pollutants related to construction activity. CMs example include: sediment control logs (SCL), silt fence (SF), dikes/swales, sediment traps (ST), inlet protection (IP), outlet protection (OP), check dams (CD), sediment basins (SB), temporary/permanent seeding and mulching (MU), soil roughening, maintaining existing vegetation and protection of trees. CMs must be selected, designed, adequately sized, installed and maintained in accordance with good engineering, hydrologic and pollution control practices. CMs/BMPs installation and maintenance details shall conform to Urban Drainage Flood Control Criteria Manual Volume 3, or the Colorado Department of Transportation (CDOT) Item Code Book. CMs must filter, settle, contain or strain pollutants from stormwater flows in order to prevent bypass of flows without treatment. CMs must be appropriate to treat the runoff from the amount of disturbed area, the expected flow rate, duration, and flow conditions (i.e., sheet or concentrated flow). CMs/BMPs shall be specified in the SWMP (if applicable), and the locations shown on the EC Plan.
- 1) <u>Prior</u> to construction, projects disturbing 1 or more acres of land, or any project belonging to a common plan of development disturb 1 or more acres, must obtain:
 - A General Permit for Stormwater Discharges associated with Construction Activities, from the Colorado Department of Public Health and Environment, and
 - An Adams County Stormwater Quality Permit within the unincorporated Adams County MS4 Area.
- 2) Permitted projects shall develop a Stormwater Management Plan (SWMP), aka Erosion and Sediment Control Plan (ESCP), in compliance with CDPHE minimum requirements. The approved SWMP, including Erosion Control (EC) Plan (Site Map), shall be kept on site and updated at all times. The Qualified Stormwater Manager is responsible for implementing the SWMP and CMs (aka BMPs) during construction.
- 3) Permitted projects shall perform regular Stormwater Inspections every 7 calendar days; or every 14 calendar days and within 24 hours after any precipitation or snowmelt event that causes surface erosion. Inspection frequency can be reduced for Post-Storm Event inspections at Temporarily Idle Sites and also for Stormwater Inspections at Completed Sites waiting for final stabilization. Inspection reports must identify any incidents of noncompliance.
- 4) **Tracking** of dirt onto paved public or private paved roads is not allowed. The use of dirt ramps to enter/exit from an unpaved into a paved area is prohibited. Vehicle tracking controls shall be implemented, otherwise entrance area must drain thru a CM towards the private site.
- 5) **Truck loads** of fill material imported to or cut material exported from the site shall be properly covered to prevent loss of the material during transportation on public ROW. Haul routes must be permitted by the County. No material shall be transported to another site without applicable permits.

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- 6) Control measures designed for **concrete washout waste** must be implemented. This includes washout waste discharged to the ground and washout waste from concrete trucks and masonry operations.
- 7) Temporary CMs/BMPs shall be removed after the site has reached final stabilization.
- 8) **Dewatering operations** discharging <u>off-site</u> into any waters conveyance systems including wetlands, irrigation ditches, canals, rivers, streams or storm sewer systems, require a State Construction Dewatering Permit.
- 9) Permitted projects shall **keep** the CDPHE's Stormwater Discharge Permit, Stormwater Management Plan (SWMP) and inspection logs available on-site throughout the duration of the project, and for an additional 3 years after permit close-out.
- 10) Permitted landowner and/or contractor shall close the State and City/County permit once final stabilization is reached. Stormwater inspections shall continue until Inactivation Notice is filed with CDPHE.

Performance Standard Notes:

- 1. Stormwater runoff from disturbed areas must flow to at least **one (1)** CM to minimize sediment in the discharge. Do not allow **sediment to leave** the site. The best way to prevent sediment or pollutants from entering the storm sewer system is to stabilize the site as quickly as possible, preventing erosion and stopping sediment run-off at its source.
- 2. Phase construction to minimize disturbed areas, including disturbance of steep slopes. (i.e. the entire project site should not be disturbed if construction will only be occurring in one particular section of the site). Limit soil exposure to the shortest possible period of time. Protect natural features and existing vegetation whenever possible. Removal of existing vegetation shall be limited to the area required for immediate construction operations. Maintain pre-existing vegetation (or equivalent CMs) for areas within 50 horizontal ft of receiving waters.
- 3. **Soil compaction** must be minimized for areas where infiltration CMs will occur or where final stabilization will be achieved through vegetative cover.
- 4. All **soil imported** to or **exported** from the site shall be properly covered to prevent the loss of material during transport.
- 5. **Dust** emissions resulting from grading activities or wind shall be controlled.
- 6. **Install construction fence** (orange) to protect wetlands and other sensitive areas and to prevent access, and to delineate the Limits of Construction. Do not use silt fence to protect wetlands since trenching may impact these areas.
- 7. CMs intended to capture overland, low velocity **sheet flow** at a fairly level grade shall only be installed along contours.
- 8. Install CMs, such as **check dams**, perpendicular to the **concentrated flows** to reduce flow velocity.
- 9. Storm drain **inlets** within and adjacent to the construction site must be protected. Any ponding of stormwater around inlet protection must not cause excessive flooding or damage adjacent areas or structures.
- 10. Install **Vehicle Tracking Control (VTC)** to enter/exit unpaved area. Do not use recycled crushed concrete or asphalt millings for vehicle tracking pads.

- 11. **Straw bales** shall not be used for primary erosion or sediment control (i.e. straw bales may be used for reinforcement behind another BMP such as silt fence).
- 12. **Outlets** systems (such as skimmer or perforated riser pipe) shall be installed to withdraw water from or near the surface level when discharging from basins. Water cannot drain from the bottom of the pond.
- 13. **Temporary stabilization** must be implemented for earth disturbing activities on any portion of the site where land disturbing activities have permanently or temporarily ceased (for more than 14 calendar days). Temporary stabilization methods examples: tarps, soil tackifier, and hydroseed. Temporary stabilization requirement may **exceed** the 14-day schedule when either the function of the specific area requires it to remain disturbed, or, physical characteristics of the terrain and climate prevent stabilization as long as the constraints and alternative schedule is documented on the SWMP, and locations are identified on the EC Plan (site map).
- 14. Runoff from **stockpile area** must be controlled. Soils that will be stockpiled for more than 30 days shall be protected from wind and water erosion within 14 days of stockpile construction. Install CMs/BMPs 5 ft away from the toe of the stockpile's slope.
- 15. Water use to clean concrete trucks shall be discharged into a **concrete washout area** (CWA). The predefined containment area must be identified with a sign, and shall allow the liquids to evaporate or dry out. CWA discharges that may reach groundwater must flow through soil that has buffering capacity prior to reaching groundwater. The concrete washout location shall be not be located in an area where shallow groundwater may be present and would result in buffering capacity not being adequate, such as near natural drainages, springs, or wetlands. In this case, a liner underneath is needed for areas with high groundwater levels. CWA shall not be placed in low areas, ditches or adjacent to state waters. Place CWA 50 ft away from state waters.
- 16. **Waste**, such as building materials, workers trash and construction debris, must be properly managed to prevent stormwater pollution.
- 17. Install **stabilized staging area (SSA)** to store materials, construction trailer, etc.
- 18. If conditions in the field warrant <u>additional</u> CMs/BMPs to the ones originally approved on the SWMP or EC Plan (civil drawing), the landowner or contractor shall implement measures determined necessary, as **directed by the County**.
- 19. Permanent CMs/BMPs for slopes, channels, ditches, or disturbed land area shall be performed immediately after final grading. Consider the use **erosion control blankets** on slopes 3:1 or steeper and areas with **concentrated flows** such as swales, long channels and roadside ditches.
- 20. The discharge of **sanitary waste** into the storm sewer system is prohibited. Portable toilets must be provided, secured and placed on permeable surfaces, away from the curbside, storm inlets and/or drainage ways.
- 21. **Remove temporary CMs/BMPs** once final stabilization is reached, unless otherwise authorized.
- 22. **Final stabilization** must be implemented. Final stabilization is reached when all soil disturbing activities have been completed, and either a uniform vegetative cover has been established with an individual plant density of at least 70% of pre-disturbance levels, or equivalent <u>permanent</u> alternative method has been implemented.

- 23. Provide **spill prevention** and containment measures for construction materials, waste and fuel storage areas. **Bulk storage** (55 gallons or greater) of petroleum products and liquid chemicals must have secondary containment, or equivalent protection, in order to contain spills and to prevent spilled material from entering state waters.
- 24. **Report** spills or releases of chemical, oil, petroleum product, sewage, etc., which may reach the storm sewer or enter state waters within **24-hours** from time of discovery. Guidance available at www.cdphe.state.co.us/emp/spillsandreleased.htm. State of Colorado Spill-line: 1-877-518-5608. Adams County Stormwater Hotline: 720-523-6400; Public Works 303-453-8787 and the Tri-County Health Department at 303-220-9200.

Maintenance Standard Notes:

- 1. Maintain and repair CMs according to approved Erosion Control Plan (civil drawing) to assure they continue performing as originally intended.
- 2 CMs/BMPs requiring maintenance or adjustment shall be **repaired immediately** after observation of the failing BMP.
- 3 CMs shall be cleaned when sediment levels accumulate to **half the design** unless otherwise specified.
- 4 SWMP and EC plan shall be continuously **updated** to reflect new or revised CMs/BMPs due to changes in design, construction, operation, or maintenance, to accurately reflect the actual field conditions. A notation shall be made in the SWMP, including date of changes in the field, identification of the CMs removed, modified or added, and the locations of those CMs. Updates must be made within 72-hours following the change.
- 5 Maintain **Vehicle Tracking Control (VTC)**, if sediment tracking occurs, clean-up immediately. Sweep by hand or the use street sweepers (with vacuum system). Flushing off paved surfaces with water is prohibited.
- 6 **CWA** must be cleaned once waste accumulation reaches ¾ of the wet storage capacity of the structure. Legally disposed of concrete waste. Do not bury on-site.
- 7 **Clean-up spills** immediately after discovery, or contain until appropriate cleanup methods can be employed. Follow Manufacturer's recommended methods for spill cleanup, along with proper disposal methods. **Records** of spills, leaks, or overflows that result in discharge of pollutants must be documented and maintained.
- 8 Remove sediment from storm sewer infrastructure (ponds, storm pipes, outlets, inlets, roadside ditches, etc.), and restore volume capacity upon completion of project or prior to initial acceptance of public improvements (if applicable). Do not flush sediment offsite, capture on-site and disposed of at an approved location.

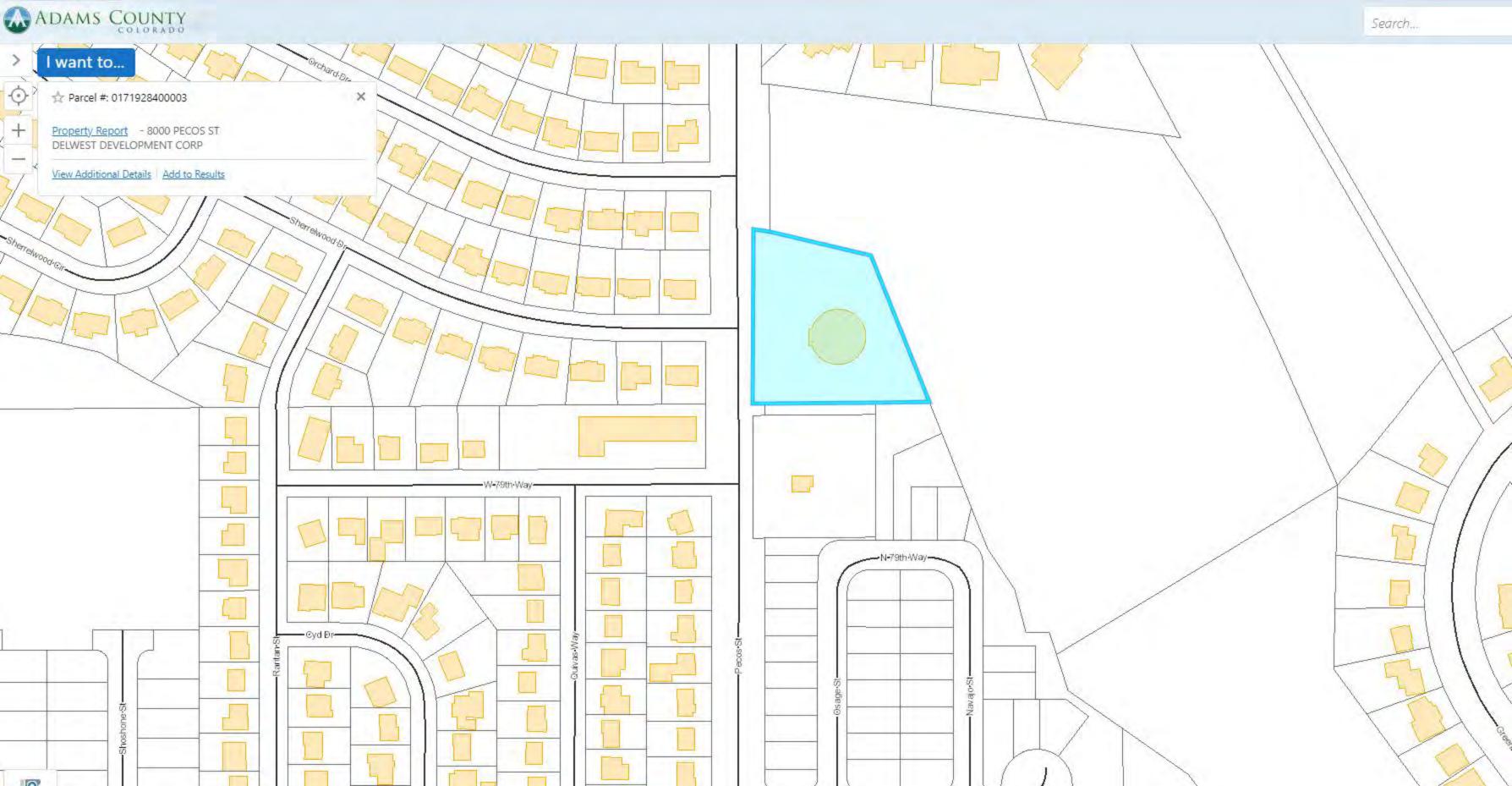
These notes are not intended to be all-inclusive, but to highlight the basic stormwater pollution prevention requirements for construction activities to **comply** with CDPS Stormwater Construction Permit and be in **conformance** with County standards.



Elmwood Estates Final Utlity Report Potable Water Demand Calcualtion

Water Demand

							DEMAND		i	
PARCEL NO.	USE	DWELLING	ACRES	EQUIVALENT	SFE	AVG DAY	AVG DAY	AVG DAY		
		UNITS		(SFE/DU)	(DU)	(GPD/DU)	(GPM/SFE)	(GPM)	ı	
<u>RESIDENTIAL</u>										
Domestic Water Demand	SFD	48		2.45	117.60	150	0.10	12.25		
Irrigation Water Demand	Irrigation		0		0.00	150	0.10	0.00		
				SUB-TOTAL	117.60		SUB-TOTAL	12.25		
				FILING TOTAL	117.60		FILING TOTAL	12.25		
				<u>PEA</u>	KING FAC	CTOR				
				MA	X DAY (N	IDD)	3.2	39.20	GPM	
				PEA	K HOUR (PHD)	5.76	70.56	GPM	
				TOTAL RESIL	DENTIAL &	IRRIGATION		GPM	GPD	Al
				AVER	AGE DAY	(ADD)		12.25	17,640	1
				MA	X DAY (N	IDD)		39.20	56,448	6
				PEA	K HOUR (PHD)		70.56	101,606	11



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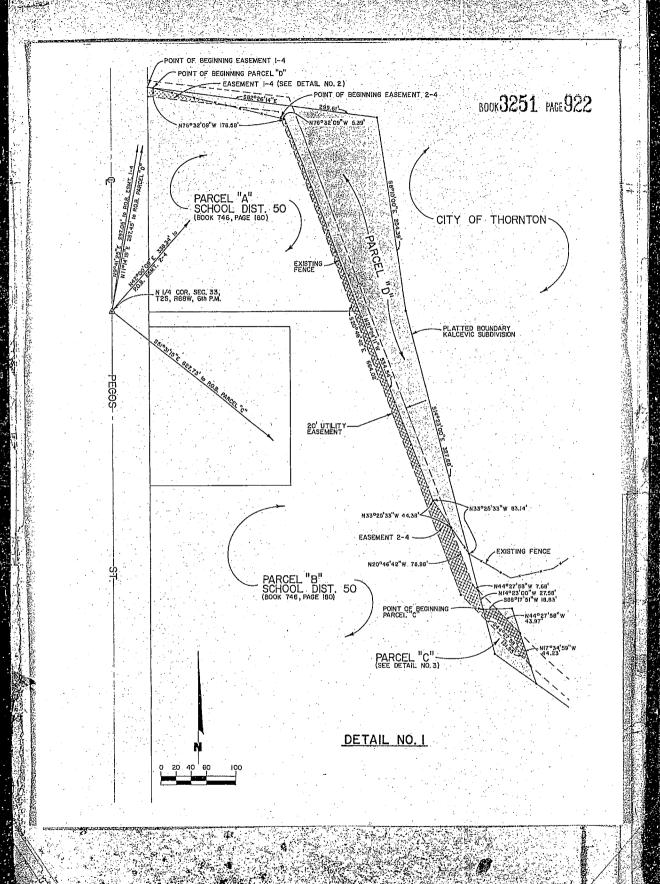
PARCEL C

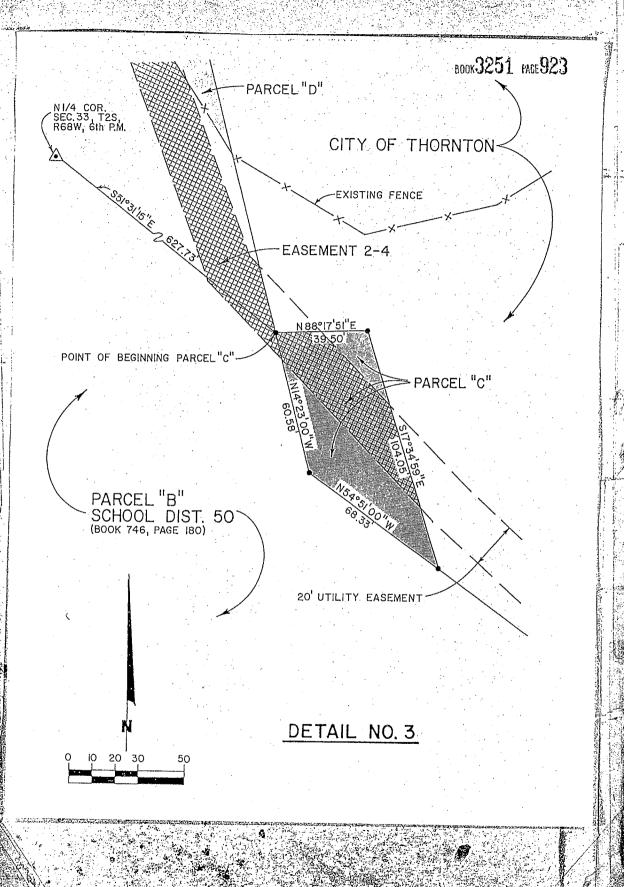
Beginning at the North one-quarter corner of Section 33, Township 2 South, Range 68 West, 6th Principal Meridan, Adams County, State of Colorado; thence South 51°31'15" East, a distance of 627.73 feet to a point, said point being the True Point of Beginning; thence the following courses and distances:

North 88°17'51" East, 39.50 feet; South 17°34'59" East, 104.05 feet; North 54°51'00" West, 68.33 feet; North 14°23'00" West, 60.58 feet to the True Point of Beginning.

The above parcel contains 0.076 acres more or less (3.319.97 square feet).

(The Bearings and Distances are derived from the Kalcevic Subdivision Plat as recorded August 23, 1984, County of Adams, State of Colorado, in File 16, Map Number 142, Reception Number B523787 and the attached Detail Maps Number 1 and 3).





777

PARCEL D

Beginning at the North one-quarter corner of Section 33, Township 2 South, Range 68 West, 6th Principal Meridian, Adams County, State of Colorado; thence North 11°14'19" East, a distance of 297.45 feet to a point, said point being the True Point of Beginning; thence the following courses and distances:

South 82°26'14" East, 299.61 feet; South 08°10'00" East, 254.39 feet; South 14°23'00" East, 327.68 feet; North 33°25'33" West, 83.14 feet; North 21°24'11" West, 534.54 feet; North 76°32'09" West, 178.58 feet to the True Point of Beginning.

The above parcel contains 0.875 acres more or less (38,093.28 square feet).

(The Bearings and Distances are derived from the Kalcevic Subdivision Plat as recorded August 23, 1984, County of Adams, State of Colorado, in File 16, Map Number 142, Reception Number B523787 and the attached Detail Map Number 1).

EASEMENT 1-4

Beginning at the North one-quarter corner of Section 33, Township 2 South, Range 68 West, 6th Principal Meridian, Adams County, State of Colorado; thence North 9°41'25" East, a distance of 297.05 feet to a point, said point being the True Point of Beginning; thence the following courses and distances:

South 82°26'14" East, 8.04 feet; South 76°32'09" East, 98.36 feet; North 83°17'55" West, 104.34 feet;

North 00°00'01" East, 11.78 feet to the True Point of Beginning.

The above easement contains 0.015 acres more or less $(651.27 \ \text{square feet})$.

(The Bearings and Distances are derived from the Kalcevic Subdivision Plat as recorded August 23, 1984, County of Adams, State of Colorado, in File 16, Map Number 142, Reception Number B523787 and the attached Detail Maps Number 1 and 2).

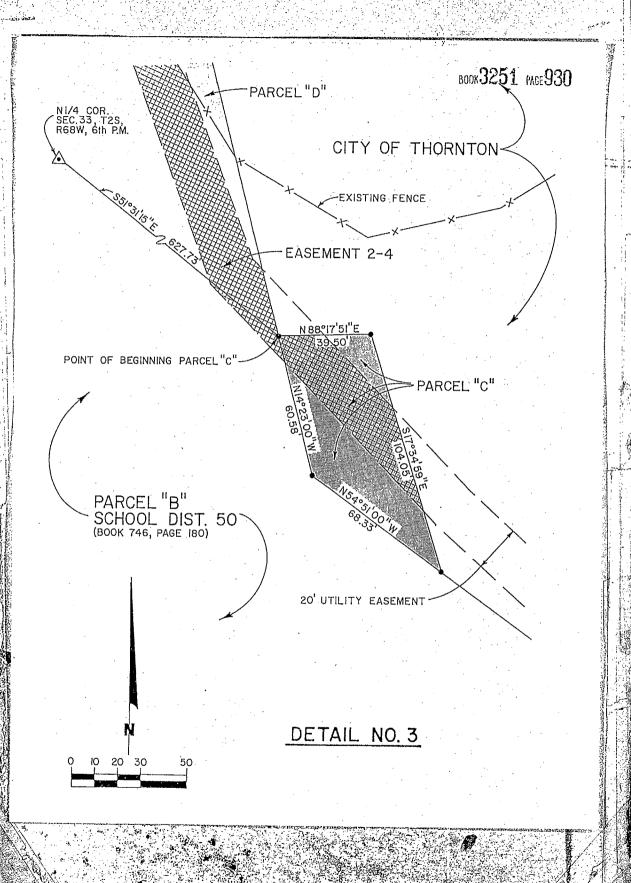
EASEMENT 2-4

Beginning at the North one-quarter corner of Section 33, Township 2 South, Range 68 West, 6th Principal Meridian, Adams County, State of Colorado; thence North 42°00'09" East, a distance of 338.34 feet to a point, said point being the True Point of Beginning; thence the following courses and distances:

```
South 20°46'42" East, 664.02 feet;
South 44°27'58" East, 131.95 feet;
North 17°34'59" West, 44.23 feet;
North 44°27'58" West,
                      43.97 feet;
South 88°17'51" West, 18.83 feet;
North 14°23'00" West, 27.58 feet;
North 44°27'58" West,
                       7.68 feet;
North 20°46'42" West,
                      78.98 feet;
North 33°25'33" West,
                      44.38 feet;
North 21°24'11" West, 534.54 feet;
                        5.39 feet to the True Point of Beginning.
North 76°32'09" West,
```

The above easement contains 0.188 acres more or less (8,171.00 square feet).

(The Bearings and Distances are derived from the Kalcevic Subdivision Plat as recorded August 23, 1984, County of Adams, State of Colorado, in File 16, Map Number 142, Reception Number B523787 and the attached Detail Map Number 1).



Project No.	为各类的发现的
产工具体技术等数据数	
Parcel No.	

EXCLUSIVE EASEMENT FOR PIPELINE

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(hereinafter referred to as "Grantor"), in consideration of the sum of \$5.00, receipt of which is hereby acknowledged, and of further agreements and considerations herein stated does hereby grant to the City of Thornton, acting by and through its Utilities Board, a Municipal corporation of the State of Colorado (hereinafter referred to as "Grantee"), its successors and assigns, the permanent right to enter, reenter, occupy and use the hereinafter described property to construct, maintain, repair, replace, remove, enlarge, and operate one or more pipelines and all underground and surface appurtenances thereto, together with a temporary construction easement during the period of construction of such pipelines in, over, under, through, and across the real property described on Exhibit "A", attached hereto and incorporated herein by reference. The easement hereby granted includes the right of necessary use of the surface and subsurface of such land for the construction, laying, maintenance, repair, removal, and replacement of such pipelines.

- 2. Grantee shall have and exercise the right of ingress and egress into, over, through, and across the above described property for any purpose needful for the full enjoyment of any other right of occupancy or use provided for herein.
- 3. Grantor shall not construct or place any structure or building, street light, power pole, yard light, or plant any shrub, trees, wooden plant or nursery stock in any part of the above described right of way. Any structure, building, street light, power pole, yard light, shrub, tree, wooden plant or nursery stock situated on the above-described right of way as of the date of this Agreement, except the existing baseball backstop, may be removed by the Grantee without liability for damages arising therefrom. If Grantee must remove or damage such baseball backstop Grantee agrees to replace it at Grantee's sole expense.
- 4. Existing fencing disturbed or destroyed by the Grantee in constructing the facilities contemplated hereby shall be replaced

by Grantee to its original condition as near as may be, however Grantor shall not construct new fencing across or within the right of way herein described without the prior written approval of the Grantee.

- 5. Grantee shall have and exercise the right of subjacent and lateral support to whatever extent is necessary or desirable for the full, complete and unmolested enjoyment of the rights hereinabove described. The Grantor shall take no action which would impair the earth cover over, or the lateral or subjacent support for any pipeline or lines and appurtenances within the right of way without obtaining the specific written permission of the Grantee. Any modification undertaken by the Grantor would be upon terms which would provide for reimbursement to the Grantee of the cost of any alterations to any pipeline facility made necessary by the change. In the event the terms of this paragraph are violated by the Grantor or by any person in privy with him or her, such violation shall be corrected and eliminated immediately upon receipt of notice from Grantee and in the alternative Grantee shall have right to correct and eliminate such violation, and the Grantor, his or her heirs, administrators, successors, and assigns, shall promptly pay the actual cost thereof.
- 6. Grantor retains the right to undisturbed use and occupancy of the subject property insofar as such use and occupancy is consistent with and does not impair any grant herein contained and except as otherwise herein provided.
- 7. In case the Grantee shall abandon its rights herein and cease to use the right of way herein described, all right, title and interest of the Grantee shall cease and terminate and all rights of the Grantee so abandoned shall cease and terminate and the Grantor shall hold the premises as the same may then be free from the rights so abandoned but nothing herein shall be construed as working a forfeiture or abandonment if any interest described hereunder is owned by Grantee at the time of abandonment of Grantee's rights.
- 8. After construction of any pipeline, the general surface of the ground, except as necessarily modified to accommodate appurtenances shall be restored as near as may reasonably be, to the graded condition it was in immediately prior to construction. Top soil shall be replaced in cultivated and agricultural areas and excess earth resulting from installations by the Grantee shall be removed from the right of way at the sole expense of Grantee.

9. Grantor warrants that he has full and lawful authority to make the grant herein above contained, and promises and agrees to defend that Grantee in the exercise of its rights hereunder against any defect and Grantor's title to the land involved or Grantor's right to make the grant hereinabove contained.

Each and every one of the benefits and burdens of this agreement shall inure to and be binding upon the respective legal representatives, heirs, executors, administrators, successors, and assigns of the parties hereto.

(SIGNATURES CONTINUED ON NEXT PAGE)

My Commission Expires:

CITY OF THORNTON, acting by and through its Utilities Board

ATTEST:

Kanın Wirft

APPROVED AS TO FORM:

STATE OF COLORADO COUNTY OF ADAMS

The within and foregoing instrument was acknowledged before me by Legensed Boulas, this 1/46 day of Lept. 1986.

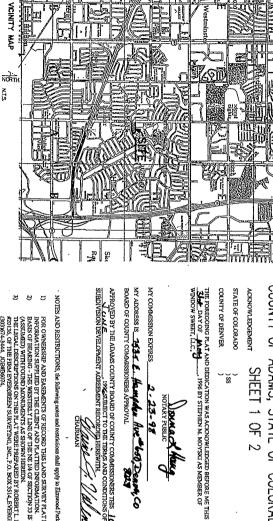
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Notary Public
commission expires: 9-20-89 9500 Civic Center Dr.
Lharnton, CO 80229

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OF THE NW 1/4, OF THE NE 1/4, COUNTY OF ADAMS, STATE OF COLORADO SECTION 33, TOWNSHIP 2 SOUTH, RANGE 68 WEST OF THE 6TH P.M., F17-537 1/2 STATE OF COLORADO ÄRK

SHEET 1 OF 2

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CERTIFICATION OF DEDICATION AND OWNERSHIP

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EVERGREEN SURVEYING AND ENGINEERING INC.

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EXECUTED THIS SIX DAY OF MAN NANCE, AND LIZED IN A RESPONSIBLE



COUNTY CLERK AND RECORDER

2.23-98 NOTARY PUBLIC

MY ADDRESS IS 1434 E. Hamphy hve 650 Deavy, Co BOARD OF COUNTY COMMISSIONERS APPROVAL

APPROVED BY THE ADMAS COUNTY BOARD OF COUNTY COMMISSIONERS THIS 10 DAY OF THE SUBDIVISION DEVELOPMENT AGREEMENT RESPONDED HERRITHM 1 MILE THAT WAS AND CONDITIONS OF THE SUBDIVISION DEVELOPMENT AGREEMENT RESPONDED HERRITHM 1 MILE THAT WAS AND CONDITIONS OF THE SUBDIVISION DEVELOPMENT AGREEMENT RESPONDED HERRITHM 1 MILE THAT WAS AND CONDITIONS OF THE SUBDIVISION DEVELOPMENT AGREEMENT RESPONDED HERRITHM 1 MILE THAT WAS AND CONDITIONS OF THE SUBDIVISION DEVELOPMENT AGREEMENT RESPONDED HERRITHM 1 MILE THAT WAS AND CONDITIONS OF THE SUBDIVISION DEVELOPMENT AGREEMENT RESPONDED HERRITHM 1 MILE THAT WAS AND CONDITIONS OF THE SUBDIVISION DEVELOPMENT AGREEMENT RESPONDED HERRITHM 1 MILE THAT WAS AND CONDITIONS OF THE SUBDIVISION DEVELOPMENT AGREEMENT RESPONDED HERRITHM 1 MILE THAT WAS AND CONDITIONS OF THE SUBDIVISION DEVELOPMENT AGREEMENT RESPONDED HERRITHM 1 MILE THAT WAS AND CONDITIONS OF THE SUBDIVISION DEVELOPMENT AGREEMENT RESPONDED HERRITHM 1 MILE THAT WAS AND CONDITIONS OF THE SUBDIVISION DEVELOPMENT AGREEMENT RESPONDED HERRITHM 1 MILE THAT WAS AND CONDITIONS OF THE SUBDIVISION DEVELOPMENT AGREEMENT.

NOTES AND RESTRICTIONS, the following notes and restrictions shall apply to Elmwood Park;

FOR OWNERSHE AND EASEMENTS OF RECORD THIS LAND SURVEY PLAT RELIED UPON INFORMATION SUPPLIED BY THE CLEEN AND PLATED INFORMATION, BASIN OF BEARING - THE WESTERLY LURIE OF THE RE 14 OF SECTION 31 IS NO "CORD'E (ASSUMED) WITH FOUND MONUMENTS AS SHOWN HEREON.

L DESCRIPTIONS ON THIS PLAT WERE PRIPARED BY ROBERT L. PEROLDI, PLS-THE FIRM EVERGREEN SURVEYING, INC., P.O. BOX 3514, EVERGREEN, CO., 80439,

ANY PERSON WHO KNOWINGLY REMOVES, ALTERS OR DEFACES ANY PUBLIC LAND SURVEY MONUMENT OR LAND BOUNDARY MONUMENT, OR ACCESSORY, COMMIS

CLASS TWO/DIMENDEMENSIOR PRESIDENT TO STATE STATUTE 184-498 CES.
NOTICE: ACCORDING TO COLURADO, LAW TOU MISST COMMENSE ANY LEGAL ACTION
BASED UPON ANY DEFECT IN THIS SURVEY WITHIN THESE TRANS AFERS YOUTEST.
DISCONES SUCI DEFECT, INNO EYENT MAY ANY ACTION BASED UPON ANY DEFECT IN
THIS SURVEY ER COMMENCED MORE THAN TENY TRANS FROM THE DATE OF THE
THIS SURVEYER.

WAN HEREON. WE AS PREVIOUSLY DEEDED OR SURVEYED. OR OFFSET COUNTES ALE TO BE SET BY A COLORADO PROFESSIONAL RIOR TO INDIVIDUAL LOT SALES.

AND DRAINAGE EASEMENT IS RESERVED ALONG ALL AR LOT LINES ADJOINING THE SUBDIVISION BOUNDARY. NAGE EASEMENT IS RESERVED ALONG ALL SIDE AND REAR LOT

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LIMES EXCEPT.AS NOTED.

A 6 GAS, UTILITY AND DEALINGGE EASEMENT IN RESERVED ALONG ALL FRONT LOT LINES.

NO FRINCES OR OTHER STRUCTURES ARE TO BE LOCACIED WITHIN THE VIEW

TRANSALES AT BOTH RITERSECTIONS OF ELAWOOD LANE.

DEVELOPMENT OF THE PROPERTY SMALL BE SENDED TO THE DESIGN REVIEW CRITERA

SET FORTH IN SECTION 1332 OF THE ZONING REGULATIONS.

ALL LOTS OF THIS SUBDIVISION WILL BE ACCESSED FROM THE PROPOSED WEST 78TH

CIRCLE AND NO DIRECT ACCESS WILL BE ALLOWED TO ELAWDOOD LANE.

SURVEYOR'S CERTIFICATE

THAT THAT THE STATE THE STATE THAT THE STATE AND STREET THE STATE THAT STATE AND STATE THAT STATE AND STAT



THIS PLAT AND DEDICATION WAS FILED FOR RECORD IN THE OFFICE OF THE ADAMS COUNTY CLERK AND RECORDER, IN THE STATE OF COLORADO, ATCLOS WALON THE THE DAY OF

CEKTIFICATE OF THE CLERK AND RECORDER

BY: Andy I raylises MAP NO. 531

PLANNING COMMISSION APPROVAL

te: 17 map: 53

62# DAY OF

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	LOT 23	10123	LOT 20	61 TOJ	FOT 18	LOT 17	10T 16	10T IS	10114	TOT 13	LOT 12	11 TOT	10T 10	LOT 9	FOT 8	LOT 7	FOT 6	LOTS	LOT4	1013	LOT 2	1.07
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	LOT 47 DETENTION	LOT 45	LOT44	LOT 43	LOT 42	LOT 41	LOT 40	10139	LOT 38	LOT37	LOT 36	LOT 35	10134	LOT 33	LOT 32	10131	1OT 30	LOT 29	10128	TOI 27	LOT 26	10125
RIZZIR	LOT 47 6079 SQFT DETENTION AREA = 33152 SQFT.	5500 SQFT	SSOO SQFT	5500 SQFT	5500 SQFT	SS00 SQFT	SSOS SQFT	6007 SQFT	6000 SQFT	SS00 SQFT	5500 SQFT	5500 SQFT	SS00 SQFT	5500 SQFT	5500 SQFT	6079 SQFT	6013 SQFT	7572 SQFT	SS46 SQFT	7720 SQFT	12834 SQFT	13047 SOFT
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F17-537 2/2

KALCEVIC SUBDIVISION

A PART OF THE SE 1/4 OF SECTION 28, T2S, R68W AND OF THE NE 1/4 OF SECTION 33, T2S, R68W OF THE 6th PM., ADAMS COUNTY, COLORADO.

LEGAL DESCRIPTION

A utility easement for the purpose of operating, maintaining, controlling, repairing, and replacing an eight inch water line with all fixtures, devices and appurterances used or useful in the operation of said water line being more particularly described as follows:

(Bearings being based on a line between the south one-quatter corner (4" rebar in asphair) and a point, on the north/south centerline of Section 28 (4" rebar in asphair) as lying NO OO OO" 2, 549.00 feet.)

Beginning at a point on the northerly right of way line of Elmood lane whence the north one-quarter corner of Section 33, Toomship 2 South, Range 68 West of the 6th Principal Meridian hears Me⁶ 57) 1974, 1541. 10 feet; thence along said northerly right of way line the following two courses: along a curve to the left having a central angle of 302141, a radius of 115.49 feet, an arc length 62.52 feet and of which the chord hears M5⁵ 16⁴ 4747, 542.51 feet; thence 835 6127277, 140.10 feet; thence (Learning said right of way line) 562 055 0574, 204.77 feet; thence S56 1810075, 28.00 feet to the point of beginning.

LEGAL DESCRIPTION

A twenty-foot wide utility easement for the purpose of operating, maintaining, controlling, repairing and replacing a sixeeen inch water line with all fixeum devices and appurenances used or useful in the operation of said water line being more particularly described as follows:

(Searing) being based on a line between the south one-quarter corner (the rebar in asphalt) and a point, on the north/south centerline of Section 28 (the tebar in asphalt) as lying NO 00 000 E, 549.00 feet.)

Beginning at a point on the northerly right of way line of Elemond Lane whence the north one-quarter corner of Seccion 33, Tomnship 2 South, Ennee 68 West of the oth Frincipal Boridian bears MNS 22150°W, 1605.12 feet; thence along said northerly right of way, along a curve to the right having a central angle of 0.550.43°, a radius of 123.00°, an arc length of 20.02 feet and of which the chord bears MNS 5610°FE, 20.02 feet; thence NNS 0000°WF, 119.16 feet; thence SNS 05157WF, 10.32 feet; thence NNS 02.27°WF, 116.25 feet; thence SNS 05157WF, 10.32 feet; thence NNS 03150°WF, 10.94 feet; thence SNS 05157WF, 10.52 feet; thence NNS 05157WF, 10.52 feet; thence NNS 05157WF, 10.52 feet; thence SNS 05157WF, 10.52 feet; thence NNS 05157WF, 10.52 feet; thence SNS 05157WF, 10.52 feet; thence SNS 0515WF, 92.11 feet; thence SNS 051000°WF, 99.66 feet to the point of beginning.

LEGAL DESCRIPTION

A twenty for wide utility easement for the purpose of operating, maintaining, controlling, repairing and replacing an eighteen inch storm sewer line with all fixures, devices and appurementers used or useful in the operation of said water line the centerline of which is described as follows:

[Rearings being based on a line between the south one-quarter corner (4" rebar in asphalt) and a point on the north/couth centerline of Section 28 (4" rebar in asphalt) as lying NO 00 '00"E, 549.00 feed.

Regimning at a point on the portherly right of way line of Elmoood Lane whence the north one-quarter corner of Section 33, Township 2 South, Range 68 West of the 6th Frincipal Meridjan bears NSZ 580/m, 182.83 feet; theme N36 00 00 m, 182.83 feet; thence N36 01 27 m, 160.68 feet; thence N36 59 30 m, 13.70 feet to the point of termination, the exterior easement lines being either shortened or lengthened to adjoin the Elmoood Lane right of way line or the existing property

CERTIFICATE OF THE CLERK AND RECORDER

This plat was filed for record in the office of the Adams County Clerk and Recorder. In the State of Colorado as 3:30 Lt., on the 323 days of Ottagana's A. D. 13 84



Legal Description: Parcel A

[Bearings being based on a line between the south one-quarter corner (Avurbar in asphalt) and a point on the north/south centerline of Section 28 (Avurbar in asphalt) as lying NO OU OUTS 549.00 feet.)

Legal Description: Parcel B

(Parring) being based on a line between the south one-quarter corner (Ar rebar in asphalt) and a point on the north/south centerline of Section 28 (Ar rebar in asphalt) as 171m NO CO'COTE, 549.00 feet.)

Segimning at a point whence the north one-quarter corner of Secition 33, 725, 886W of the 6th P. M. bears 802/56/12W, 50,44 feet and 50 COVOUNG, 549.00 feet; thence 532/29/00W, 549.00 feet; thence 532/29/00W, 549.00 feet; thence 532/29/00W, 521.21 feet; thence 532/29/00W, 107.20 feet; thence 532/29/00W, 107.20 feet; thence 523/29/00W, 107.20 feet; thence 525/20/20W, 107.20 feet;

PLANNING COMMISSION APPROVAL

Approved by the Adams County Planning Commission this A. D. 19 \mathbb{Z}^{d} . day of June

Adams County Board of County Commissioners this Ambay of

Tile. 16-MAP-142

KNOW ALL MEM by these presents that the undersigned, being the sole owner of that property described as follows:

(Bearing being based on a line between the south one-quarter corner (A' robat in asphalt) and a point on the morth/south centerline of Section 28 (A' rebar in asphalt) as lying NO '00' 00'%, 549.00 feet).

A parcel of land lying in the southeast one-quarter of Section 28 and in the northeast one-quarter of Section 39, 723, R86W of the 66th P.M.; Adams County, Colorado, being more particularly described as follows: Beginning at a point on the existing easterly right of way line of Pecos Street whence the north one-quarter owner of said Section 33 bears 882-261/407, 50.44 feet gad 50 000 10074, 559.00 feet, thence 582 291/4078, 183.25 feet; thence 532 29 00076, 167.28 feet; thence 532 29 10078, 276.95 feet (as indicated in the figld by an existing ¼" rebar in place); thence 512 25/0076, 312.00 feet; thence 532 29 10078, 276.95 feet of way line of Elmodol Lane; thence 582 29 1474, 28.21.11 feet; thence 532 29 10078, 276.95 feet of way line of Elmodol Lane; thence along said mortherly right of way line of Elmodol Lane; thence along said mortherly right of way line of the right having a central angle of 50.95 feet and of which the chord bears store the right having a central angle of 50.75%, a radius classed the reach the right having a central angle of 50.75%, a radius classed the chord bears of the right having a central angle of 50.75%, a radius central reach of which the chord bears of 50.95%, a radius 537.04 feet; thence M22 56:1478, 307.65 feet to a point on the existing easterly right of way line of Recons Street; thence M20 54.9777, 559.05 feet, a long said right of way line of Recons Street; thence M20 54.9777, 559.55 feet, a long said right of way line of Recons Street; thence M20 54.9777, 559.55 feet, a long said right of way line of Recons Street; thence M20 54.97777, 559.55 feet, a long said right of way line of Recons Street; thence M20 54.97777, 559.55 feet, a long said right of way line of Recons Street; thence M20 54.97777, 559.55 feet, a long said right of way line of Recons Street; thence M20 54.97777, 559.55 feet, a long said right of way line of Recons Street; thence M20 54.97777, 559.55 feet, a long said right of way line of Recons Street; thence M20 54.97777, 559.55 feet, a long said right of wa

COUNTY OF ADAMS) SS

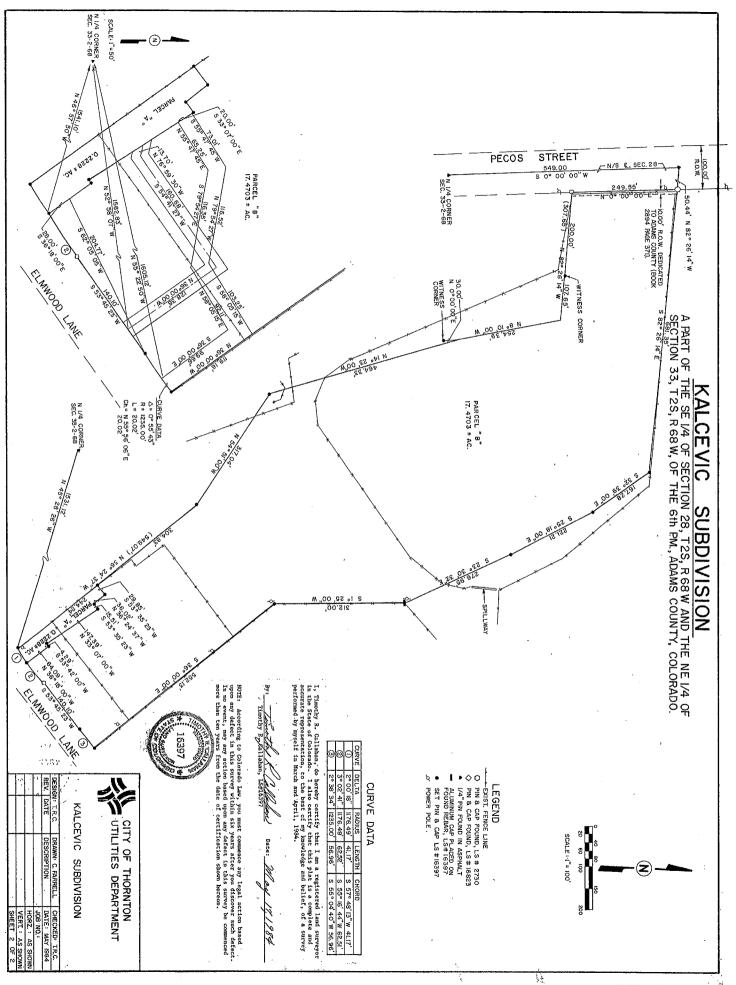
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UTILITIES DEPARTMENT CITY OF THORNTON

- KALCEVIC SUBDIVISION

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CASE NO. 103-91-AP

KALCEVIC SUBDIVISION AMENDED

A PART OF THE SE 1/4 OF SECTION 28, T2S, R68W, AND THE NE 1/4 OF SECTION 33, T2S, R68W, OF THE 6TH P.M., ADAMS COUNTY, STATE OF COLORADO SHEET 1 OF 3

Certification of Dedication and Ownership

Know all men by these presents that the City of Thornton, a municipality, being the owner of that part of the Kaleevic Subdivision, as it is recorded in File 16 May 142 at the Adams County Clerk and Recorder's Office, located in the southeast 1/4 of Section 28 and the northeast 1/4 of Section 33 Township 2 South, Range 68 West of the Sukth Principal Merdian, Adams County, State of Colorado, said parcel being more particularly described as follows:

Commencing at the south 1/4 corner of said Section 28; thence, coincident with the north/south center line of said Section 28, North 07 07 07 Cest a distance of 5430 feet to the cast right-or-way line of Pecos Street and the south line of a parcel recorded in Book 2278 at Page 338 at said office, said point being the Polit of Beginning: thence, coincident with said south line, South 82° 26' 14" East a distance of 517.26 feet to a point on the west line of the third a filting of Sherrelwood Estates as recorded in File 10 as Map 335 at

coincident with said west line, the following courses and

or rage szi at said orffice;
thence, coincident with said east line, North 17" 34" 59" West a distance of 104.05 feet to the north line of said porcei;
thence, coincident with said north line, South 88" 17" 51" West a distance of 33.50 feet to the east line of said parcel described in Book 746 at Page 180.

thence, coincident with said east line of a parcel recorded in the said parcel secreted in Book 3251 at Page 928 at said office;
thence, coincident with said east line of a parcel described in Book 3254 at Page 139 at said office, the line, coincident with said west line and the east line of a parcel described in Book 3254 at Page 139 at said office, the following sources and distances:
following sources of distances:
following sources of 33" West a distance of 534.54 feet;
North 75" 32" 09" West a distance of 175.49 feet to said east right-of-way line of paces Street;
thence, coincident with salf-east right-of-way line, North 00"
00" Cest a distance of 2243.77 feet to the south line of said parcel described in Book-2278 at Page 338, said point being the PCINT OF BEGINNING, containing 18.43 acres more or less;

countries:

South 32' 39' 00' East a distance of 157.28 feet;
South 25' 18' 00' East a distance of 251.21 feet;
South 25' 30' 32' East a distance of 251.55 feet;
South 01' 25' 00' West a distance of 251.55 feet;
South 01' 25' 00' West a distance of 351.20 feet;
South 01' 25' 00' West a distance of 351.20 feet;
The south of 25' 00' West a distance of 552.13 feet to the north right-of-way line, along a curve to the left horing a radius of 1255.00 feet, through a central angle of 02' 38' 34' on arc distance of 56.96 feet, whose chord bears South 55' 04' 40' West a chord distance of 58.96 feet to a point of tangency.

The south so of 34.01' feet, through a central condition of the right horing a radius of 1175.49 feet, through a central angle of 05' 25' and arc distance of 103.56 feet, whose chord bears South 55' 16' 53'' West a chord distance of 103.66 feet to the cent line of a parcel encores of 104.01' feet;
thence, coincident with said east line, North 36' 24' 37' West a distance of 48.01' feet;
the cent line of a parcel encored by the Archidocese of Delawer thence, coincident with the east line of a parcel recorded in Book 748 of Page 180 at said office, North 36' 5' 00' West a distance of 24.51' feet to the east line of a parcel recorded in Book 748 of Page 180 at said office, North 36' 26' 35' West a distance of 24.51' feet to the east line of a parcel recorded in Book 748 of Page 821' at said office. My address is: My commission expires State of Colorado)



KERRY A PERKINS PLS 24965 Acting City Surveyor For and on behalf of the City of Thornton Date / Warand 1/ Job No. 891000

C.R.S. SURVEYOR'S NOTICE
S. Section 13-80-105

NOTICE: According to Colorado law, any legal action based upon any defect in this survey must be commenced within three years offer discovering such defect. In no event may any action based upon any action this survey be commenced more than ten years from the actie of certification shown hereon.

of Thamton (Uwner) ; Ethredge (City Manager)

Acknowledgement

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City of Thornton)
The foregoing plot and dedication was acknowledged before me this 5 m day of Mulander 19.91 by Jack Ethieshee this 5 m day of Mulander 19.91 by Jack Ethieshee

Planning Commission Approval:
Approved by the Adams County Planning Commission this 1071 day of Coctast S. 1971.

The following notes and restrictions shall apply to Kolcevic Subdivision Amended:

Notes and Restrictions

VICINITY MAP SCALE: 1"= 2000"

Samely J. Mein

9500 Civio Ct. Dr. July 29 1995

SURVEYOR'S CERTIFICATE

Mess

I, Kerry A. Perkins, a licensed professional Land Surveyor in the State of Colorado, do hereby state that the survey of this plat was made under my direct supervision and that the accompanying plat accurately and properly shows said subdivision in conformance with ITIE 38, Article 51 of the Colorado Revised Statutes as amended.



Clerk and Recorder's Certificate

Suga Pakin

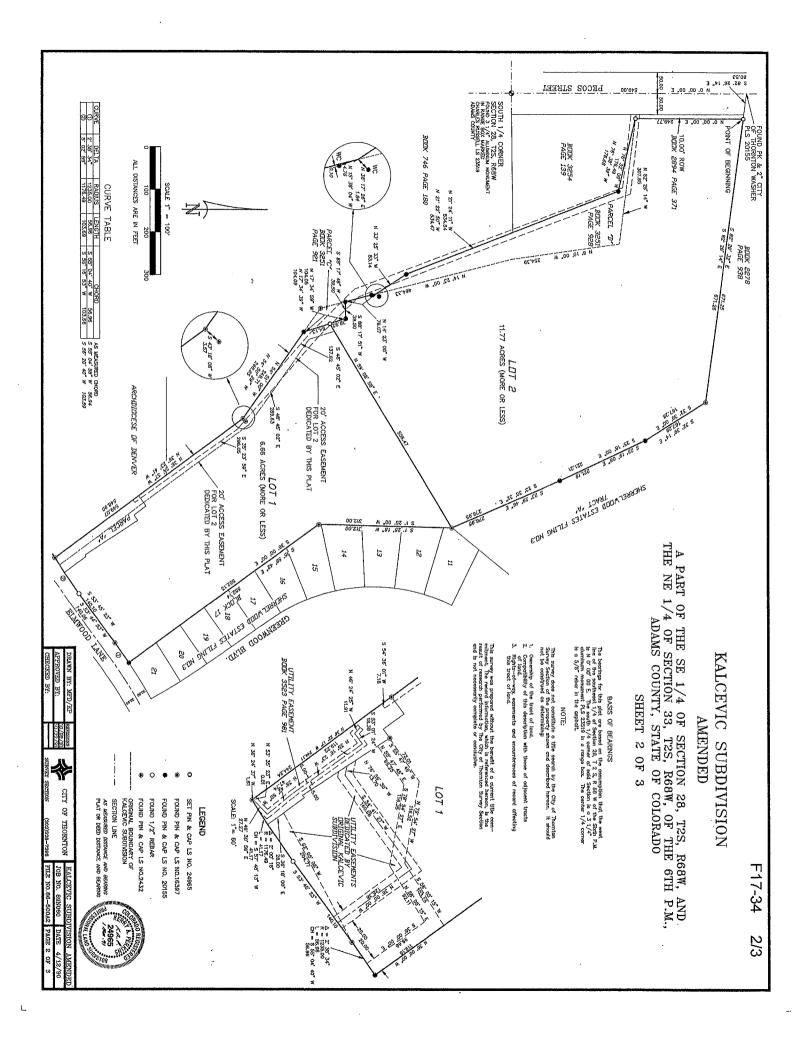
This plat and dedication was filed for record in the office of the Adams County Clerk and Recorder, in the State of Colorado, at 8:00 A.M. on the 6 day of 2000. County Clerk and Recorder

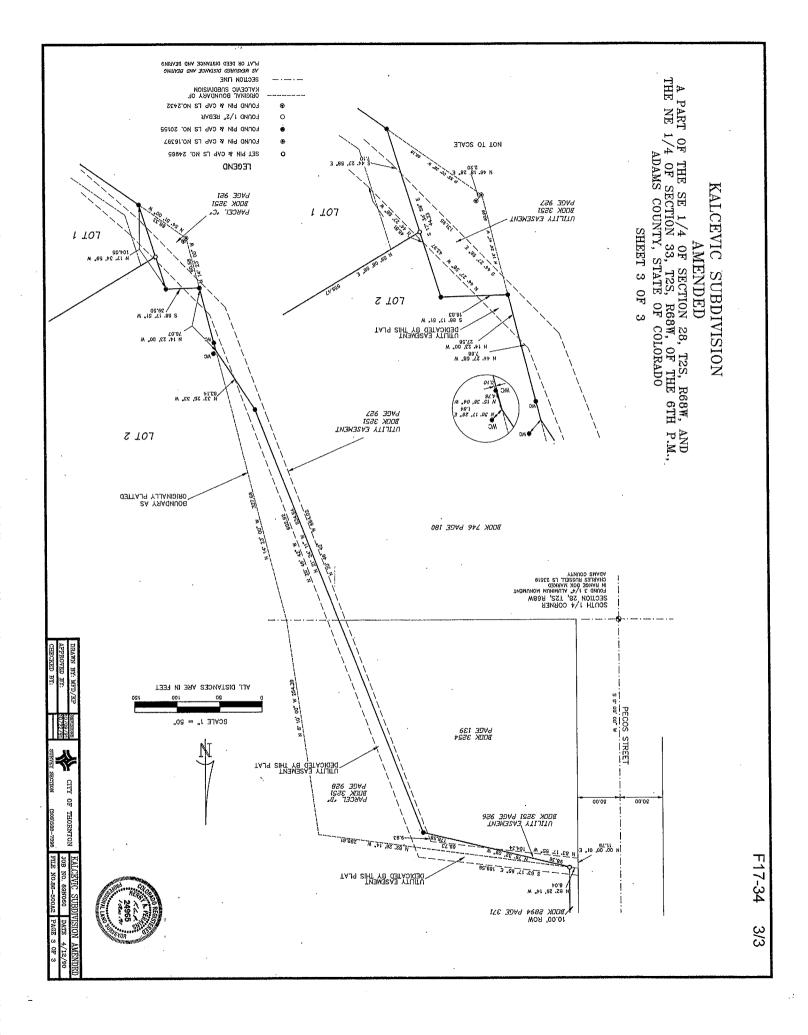
By Cenis & Ressers File No.

Reception No. B1041161 Map No.

34

CITY OF THORNTON





CASE NO. 103-91-AP

KALCEVIC SUBDIVISION AMENDED

A PART OF THE SE 1/4 OF SECTION 28, T2S, R68W, AND THE NE 1/4 OF SECTION 33, T2S, R68W, OF THE 6TH P.M., ADAMS COUNTY, STATE OF COLORADO

SHEET 1 OF 3

Certification of Dedication and Ownership

Know all men by these presents that the City of Thornton, a municipality, being the owner of that part of the Kalcevic Subdivision, as it is recorded in File 16 Map 142 at the Adams County Clerk and Recorder's Office, located in the southeast 1/4 of Section 28 and the northeast 1/4 of Section 33 Township 2 South, Range 68 West of the Sixth Principal Meridian, Adams County, State of Colorado, said parcel being more particularly described as follows:

Commencing at the south 1/4 corner of said Section 28; thence, coincident with the north/south center line of said Section 28, North 00° 00' 00" East a distance of 549.00 feet; thence South 82° 26' 14" East a distance of 60.53 feet to the east right—of—way line of Pecos Street and the south line of a parcel recorded in Book 2278 at Page 938 at said office, said point being the Point of Beginning;

thence, coincident with said south line, South 82° 26' 14" East a distance of 671.26 feet to a point on the west line of the third filing of Sherrelwood Estates as recorded in File 10 as Map 335 at said office;

thence, coincident with said west line, the following courses and distances:

South 32° 39' 00" East a distance of 167.28 feet; South 25° 18' 00" East a distance of 221.21 feet; South 23° 30' 32" East a distance of 276.95 feet; South 01° 25' 00" West a distance of 312.00 feet; South 36° 00' 00" East a distance of 552.13 feet to the

north right—of—way line of Elmwood Lane; thence, coincident with said north right—of—way line, along a curve to the left having a radius of 1235.00 feet, through a central angle of 02° 38′ 34″ an arc distance of 56.96 feet, whose chord bears South 55° 04′ 40″ West a chord distance of 56.96 feet to a point of tangency;

thence, coincident with said north right—of—way line, South 53° 45' 23" West a distance of 140.10 feet;

thence, coincident with said north right—of—way line, along a curve to the right having a radius of 1176.49 feet, through a central angle of 05° 02' 59" an arc distance of 103.69 feet, whose chord bears South 56° 16' 53" West a chord distance of 103.66 feet to the east line of a parcel owned by the Archdiocese of Denver; thence, coincident with said east line, North 36° 24' 37" West a distance of 549.07 feet;

thence, coincident with the east line of a parcel recorded in Book 746 at Page 180 at said office, North 54° 51′ 00″ West a distance of 248.71 feet to the east line of a parcel recorded in Book 3251 at Page 921 at said office:

thence, coincident with said east line, North 17° 34' 59" West a distance of 104.05 feet to the north line of said parcel; thence, coincident with said north line, South 88° 17' 51" West a distance of 39.50 feet to the east line of said parcel described in Book 746 at Page 180;

thence, coincident with said east line, North 14° 23' 00" West a distance of 76.07 feet to the west line of a parcel recorded in Book 3251 at Page 928 at said office;

thence, coincident with said west line and the east line of a parcel described in Book 3254 at Page 139 at said office, the following courses and distances:

North 33° 25′ 33′ West a distance of 83.14 feet; North 21° 24′ 11″ West a distance of 534.54 feet; North 76° 32′ 09″ West a distance of 176.49 feet to said

east right—of—way line of Pecos Street; thence, coincident with sald east right—of—way line, North 00° 00° 00" East a distance of 249.77 feet to the south line of said parcel described in Book 2278 at Page 938, said point being the POINT OF BEGINNING, containing 18.43 acres more or less;

y of Thornton (Owner)
ack Ethredge (City Manager)

Acknowledgement

State of Colorado)
) SS
City of Thornton)

The foregoing plat gnd dedication was acknowledged before me this 5 day of **November** 19 91 by **Tack** ETHRESSE

Janela S. Mein Notary Public

My commission expires July 29, 1995

My address is: 9500 Civic Ctr. Dr.

SURVEYOR'S CERTIFICATE

I, Kerry A. Perkins, a licensed professional Land Surveyor in the State of Colorado, do hereby state that the survey of this plat was made under my direct supervision and that the accompanying plat accurately and properly shows said subdivision in conformance with Title 38, Article 51 of the Colorado Revised Statutes as amended.



KERRY A. PERKINS PLS 24965
Acting City Surveyor
For and on behalf of the
City of Thornton
Date / March 91
Job No. 894060

SURVEYOR'S NOTICE C.R.S. Section 13-80-105

NOTICE: According to Colorado law, any legal action based upon any defect in this survey must be commenced within three years after discovering such defect. In no event may any action based upon any defect in this survey be commenced more than ten years from the date of certification shown hereon.



VICINITY MAP SCALE: 1"= 2000"

Notes and Restrictions

The following notes and restrictions shall apply to Kalcevic Subdivision Amended:

None

Planning Commission Approval:
Approved by the Adams County Planning Commission this 10th day of CTOBER, 19 91.

Chairman Chairman

Board of County Commissioners Approval:

Approved by the Adams County Board of County Commissioners this

2/2 day of OCTOBER, 19 91.

Chairman Chairman

Clerk and Recorder's Certificate

This plat and dedication was filed for record in the office of the Adams County Clerk and Recorder, in the State of Colorado, at 8:00 A.M. on the 6 day of 1992

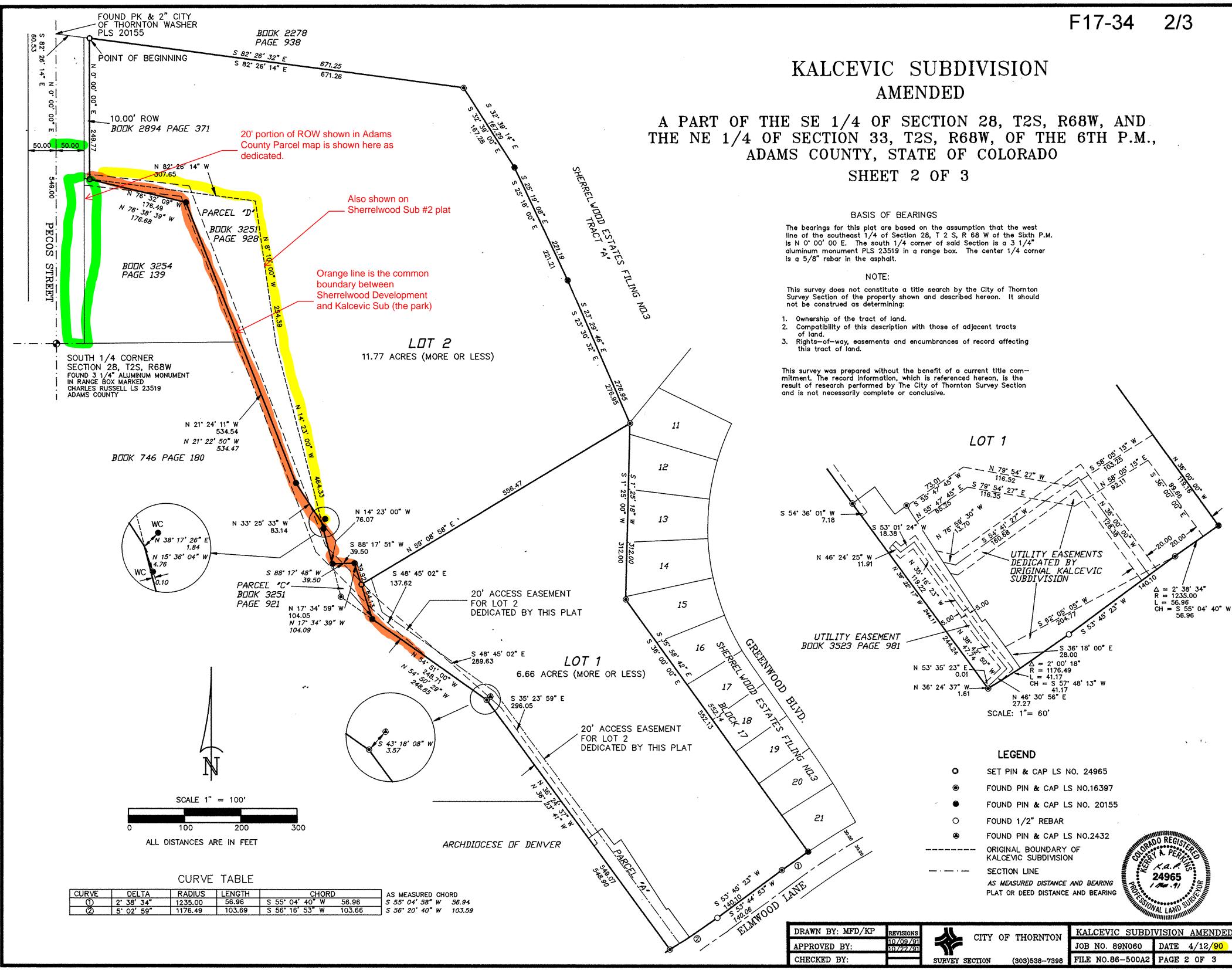
Robert Sack
County Clerk and Recorder

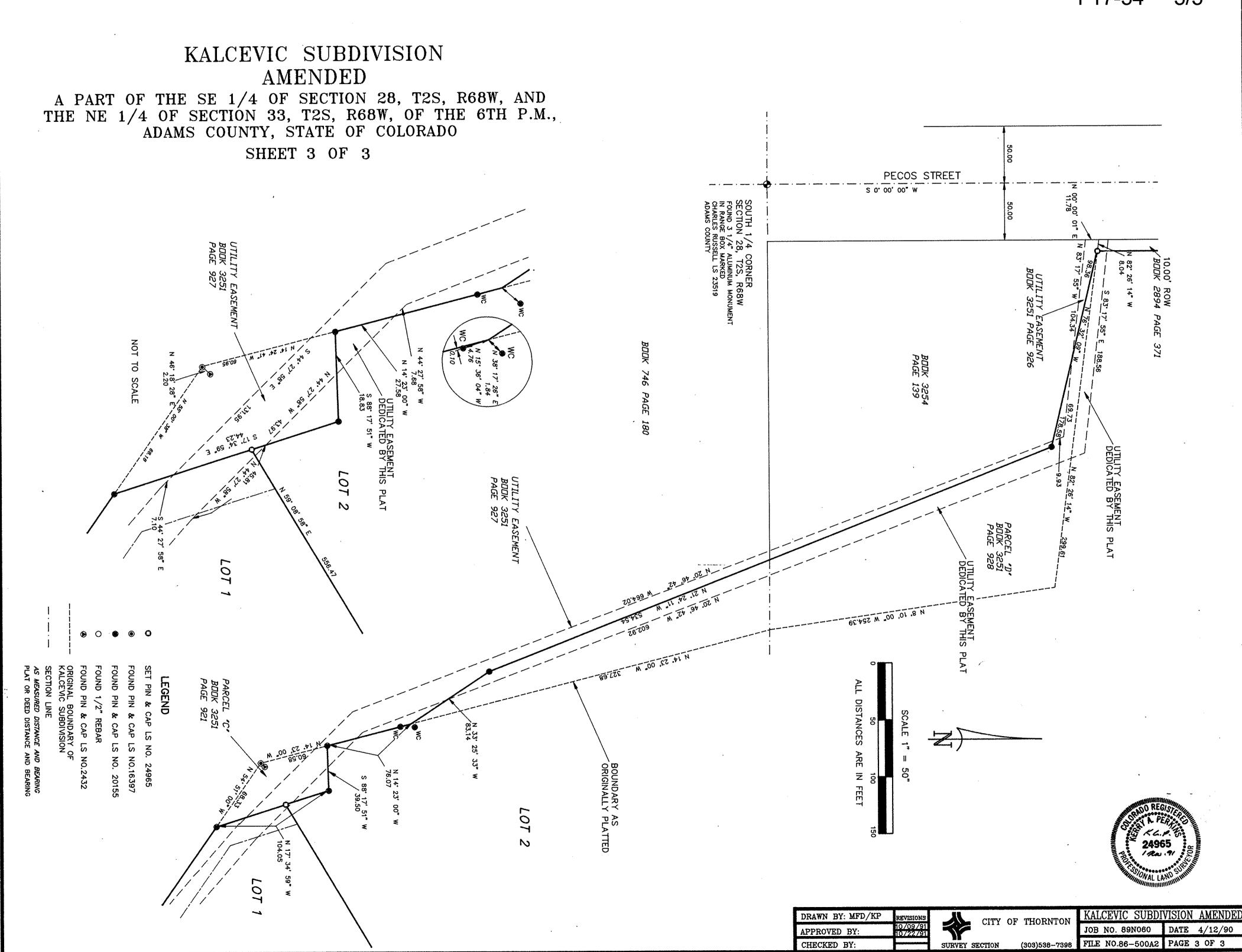
By. Lenis L. Ressones

Map No. 34

Reception No. B 104/16/

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DRAWN BY: MFD/KP	REVISIONS	CIT	 Y ог '	THORNTON	KALCEVI	C SUBDI	VISION	AMENDE
APPROVED BY:	10/09/91 10/22/91		1 Or	HIGHNION	JOB NO.	89N060	DATE	4/12/90
CHECKED BY: WOY		SURVEY SECTION	N (:	303)538-7398	FILE NO. 8	6-500A2	PAGE	1 OF 3





At aheld at the Admin	regular	_	f the Board of Cou Wednesday	nty Commissioners for A	dams County, 4th	Colorado
February	A.D. 19.	707	were present:	·		uay U
	Steven E.	Cramer		Commissioner Chairman Commissioner		-
	Harold E. Mike Kamin		······)	Commissioner County Attorney		
	Wilma That	cher, D	eputy	Clerk of the Board		

RESOLUTION ACCEPTING DEED FROM COMMUNITY OUTREACH PROJECT THERAPEUTIC DAYCARE CENTER

when the following proceedings, among others were held and done, to-wit:

WHEREAS, the Adams County Planning Commission has considered the advisability of accepting deed from Community Outreach Project Therapeutic Daycare Center to Adams County, a body politic, for the following described property:

Legal Description as set forth in Exhibit "A" attached hereto and incorporated by this reference.

WHEREAS, this property is being dedicated for street right-of-way and is approximately located east of Pecos Street between West 79th Way and Orchard Way; and,

WHEREAS, the Adams County Planning Commission has recommended by Resolution of January 22, 1987, that the Board of County Commissioners accept said Deed.

NOW, THEREFORE, BE IT RESOLVED, by the Board of County Commissioners of the County of Adams, State of Colorado, that the Deed from Community Outreach Project Therapeutic Daycare Center is hereby accepted.

E 7 1 5 2 0 0

WILLIAM SOKOL
COUNTY RECORDER
ADAMS COUNTY, COLO

***************************************	Younger	Aye	
***************************************		Aye	
***************************************	Kite	Aye	*
			Commissioners
STATE OF COLORADO	}		
County of Adams	SS.		
m and for the County an	a State aforesaid do nereby (rk and ex-officio Clerk of the Board certify that the annexed and forego County Commissioners for said A	oing Order is truly copied
IN WITNESS WHE	REOF, I have hereunto set my	hand and affixed the seal of said	County, at Brighton, this
4th	y of		
		erk and ex-officio Clerk of the Board	-
		William Sol	col

By Wilma Thatcher

Upon motion duly made and seconded the foregoing Resolution was adopted by the following vote:

Recorder's Stamp

THIS DEED, Made this day of COBAR 1986, between Community Outreach Project Therapeutic Daycare Center, a Colorado Corporation

a corporation duly organized and existing under and by virtue of the laws

of the State of Colorado of the first part, and Adams County, a body politic, 450 South 4th Avenue, Brighton, Colorado 80601

of the Colorado

Adams County of of the second part:

and State of

WITNESSETH, That the said party of the first part, for and in consideration of the sum of Good and Valuable Considerations-

and State of Colorado, to wit:

DOLLARS to the said party of the first part in hand paid by the said part y of the second part, the receipt whereof is hereby confessed and acknowledged, hath granted, bargained, sold and conveyed, and by these presents doth grant, bargain, sell, convey and confirm unto the said part y of the second part, its heirs, and assigns forever, all of the following described lot or parcel of land, situate, lying and being in the County of Adams

Legal description as set forth in Exhibit "A" attached hereto and incorporated by this reference.

Dedicated for Pecos Street

TOGETHER with all and singular the hereditaments and appurtenances thereunto belonging, or in anywise appertaining, and the reversion or reversions, remainders, rents, issues and profits thereof; and all the estate, right, title, interest, claim and demand whatsoever of the said party of the first part, either in law or equity, of, in and to the above bargained premises with the hereditaments and appurtenances.

TO HAVE AND TO HOLD the said premises above hargained and described, with the appurtenances unto the part y of the second part its Successors increased and assigns forever. And the said said part y Community Outreach Project Therapeutic Daycare Center, a Colorado Corporation

party of the first part, for itself, and its successors, doth covenant, grant, bargain, and agree to and with the said part y its successors heirs and assigns, that at the time of the ensealing and delivery of these presents it is well seized of the premises above conveyed, as of a good, sure, perfect, absolute and indefeasible estate of inheritance, in law, in fee simple, and hath good right, full power and lawful authority to grant, bargain, sell and convey the same in manner and form aforesaid, and that the same are free and clear from all former and other grants, bargains, sales, liens, taxes, assessments and incumbrances of whatever kind or nature soever; with no exceptions.

and the above bargained premises in the quiet and peaceable possession of the said part y its successors and assigns, against all and every person or persons lawfully claiming or to claim the whole or any part thereof, the said party of the first part shall and will WARRANT AND FOREVER DEFEND.

IN WITNESS WHEREOF, The said party of the first part hath caused its corporate name to be hereunto subscribed by its President, and its corporate seal to be hereunto affixed, attested by its Secretary, the day and year first above written.

Secretary

Timothy E.

Community Outreach Project Therapeutic <u>a Colorado Corporation</u>

President.

STATE OF COLORADO,

County of Adams

The foregoing instrument was acknowledged before me this

, by Gordon P. Schick Timothy E. Glasgow

day of October, President and

Community Outreach Project Therapeutic Daycare Center, a Colorado

Secretary of Excorporation.

My notarial commission expires Witness my hand and official seal.

My address is: 1010 Depot Hill

Community Outreach Project Therapeutic Daycare Center

Exhibit "A"

That part of the Southeast 1/4 of Section 28, Township 2 South, Range 68 West of the 6th P.M., County of Adams, State of Colorado, more particularly described as follows:

Beginning at the South 1/4 corner of said Section 28; thence N89°55'33"E a distance of 30.00 feet to the True Point of Beginning; thence N00°00'00"E parallel with the west line of said Southeast 1/4 a distance of 295.42 feet; thence S82°26'14"E a distance of 20.18 feet to a point 50.00 feet East of the west line of said Southeast 1/4; thence S00°00'00"E parallel with the west line of said Southeast 1/4 a distance of 292.74 feet; thence S89°55'33"W a distance of 20.00 feet to the True Point of Beginning.

Contains 5,881.58 square feet or 0.135 acres more or less.

(The Bearings and Distances are derived from the Kalcevic Subdivision Plat as recorded August 23, 1984, County of Adams, State of Colorado in File 16, Map Number 142, Reception Number B 523787.)

At a regular meeting of the Planning Commission for Adams County, Colorado, held at the Administration Building in Brighton on Thursday, the 22nd day of January , 1987 A.D., the following proceedings, among others, were had and done; to wit:

WHEREAS, The Adams County Planning Commission has considered the advisability of accepting a deed from Community Outreach Project Therapeutic Daycare Center to Adams County, a body politic, for the following described property:

Legal description as set forth in Exhibit "A" attached hereto and incorporated by this reference.

AND WHEREAS this property is being dedicated for street right-of-way and is approximately located east of Pecos Street between West 79th Way and Orchard Way,

NOW, THEREFORE, BE IT RESOLVED that the Adams County Planning Commission recommends to the Board of County Commissioners that said deed be accepted by the Board of County Commissioners.

Upon motion duly made and seconded the foregoing resolution was adopted.

I, Rosemary Pomponio , Chairman of the Adams County Planning Commission do hereby certify that the annexed and foregoing resolution is a true and correct record of the proceedings of the Adams County Planning Commission.

Rosemary Pomponio, Chairman Adams County Planning Commission

LEGAL DESCRIPTION:

A PARCEL OF LAND AS DESCRIBED IN THAT DEED RECORDED AT RECEPTION NO. 2019000075343, IN THE RECORDS OF THE ADAMS COUNTY CLERK AND RECORDER'S OFFICE, LYING WITHIN THE SOUTHEAST QUARTER OF SECTION 28, TOWNSHIP 2 SOUTH, RANGE 68 WEST OF THE SIXTH PRINCIPAL MERIDIAN, COUNTY OF ADAMS, STATE OF COLORADO, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

THE BEARINGS FOR THIS DESCRIPTION ARE BASED ON THE SOUTH LINE OF THE SOUTHEAST QUARTER OF SECTION 28, TOWNSHIP 2 SOUTH, RANGE 68 WEST OF THE SIXTH P.M., BEING ASSUMED TO BEAR N 89°30'30" E, FROM THE SOUTH QUARTER CORNER OF SAID SECTION 28, BEING MONUMENTED BY A REBAR WITH A 3-1/4 INCH ALUMINUM CAP, STAMPED "PLS 23519" TO THE SOUTHEAST CORNER OF SAID SECTION 28, BEING MONUMENTED BY A REBAR WITH A 3-1/4 INCH ALUMINUM CAP, STAMPED "PLS 7276", WITH ALL BEARINGS CONTAINED HEREIN RELATIVE THERETO.

COMMENCING AT THE SOUTH QUARTER CORNER OF SAID SECTION 28, THENCE N 89°30'30" E, ALONG THE SOUTH LINE OF THE SOUTHEAST QUARTER OF SAID SECTION 28, A DISTANCE OF 50.00 FEET TO THE NORTHWEST CORNER OF SHERRELWOOD VILLAGE, A SUBDIVISION PLAT RECORDED AT RECEPTION NO. 2018000075940, SAID ADAMS COUNTY RECORDS, ALSO BEING A POINT ON THE EAST LINE OF THE PECOS STREET RIGHT-OF-WAY, AS DEDICATED BY THAT RESOLUTION RECORDED IN BOOK 3270 AT PAGE 279, SAID ADAMS COUNTY RECORDS AND THE POINT OF BEGINNING;

THENCE N 00°14'47" W, ALONG THE EAST LINE OF SAID PECOS STREET RIGHT-OF-WAY, AND ALONG A LINE BEING 50.00 FEET EAST OF AND PARALLEL TO THE WEST LINE OF THE SOUTHEAST QUARTER OF SAID SECTION 28, A DISTANCE OF 293.01 FEET TO A POINT ON THE NORTH LINE OF SAID PARCEL OF LAND DESCRIBED IN RECEPTION NO. 2019000075343;

THENCE S 82°41'00" E, ALONG SAID NORTH LINE, A DISTANCE OF 8.12 FEET TO THE WEST CORNER OF PARCEL D, AS DESCRIBED IN THAT QUIT CLAIM DEED RECORDED IN BOOK 3251 AT PAGE 924; THENCE ALONG THE SOUTH AND WEST LINES OF SAID PARCEL D, THE FOLLOWING TWO (2) COURSES:

- 1. S 76°46'56" E, A DISTANCE OF 178.56 FEET;
- S 21°38'59" E, ALONG THE EAST LINE OF SAID PARCEL DESCRIBED IN BOOK RECEPTION NO. 2019000075343, A DISTANCE OF 267.62 FEET TO A POINT ON THE SOUTH LINE OF THE SOUTHEAST QUARTER OF SAID SECTION 28 ALSO BEING THE NORTHEAST CORNER OF SAID SHERRELWOOD VILLAGE PLAT;

THENCE S 89°30'30" W, ALONG THE NORTH LINE OF SAID SHERRELWOOD VILLAGE PLAT AND ALONG THE SOUTH LINE OF THE SOUTHEAST QUARTER OF SAID SECTION 28, A DISTANCE OF 279.36 FEET TO THE POINT OF BEGINNING.

CONTAINING AN AREA OF 61,556 SQUARE FEET OR 1.413 ACRES, MORE OR LESS.

LEGAL DESCRIPTION:

A PARCEL OF LAND AS DESCRIBED IN THAT DEED RECORDED AT RECEPTION NO. 2019000073502, IN THE RECORDS OF THE ADAMS COUNTY CLERK AND RECORDER'S OFFICE, LYING WITHIN THE NORTHEAST QUARTER OF SECTION 33, TOWNSHIP 2 SOUTH, RANGE 68 WEST OF THE SIXTH PRINCIPAL MERIDIAN, COUNTY OF ADAMS, STATE OF COLORADO, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

THE BEARINGS FOR THIS DESCRIPTION ARE BASED ON THE NORTH LINE OF THE NORTHEAST QUARTER OF SECTION 33, TOWNSHIP 2 SOUTH, RANGE 68 WEST OF THE SIXTH P.M., BEING ASSUMED TO BEAR N 89°30'30" E, FROM THE NORTH QUARTER CORNER OF SAID SECTION 33, BEING MONUMENTED BY A REBAR WITH A 3-1/4 INCH ALUMINUM CAP, STAMPED "PLS 23519" TO THE NORTHEAST CORNER OF SAID SECTION 33, BEING MONUMENTED BY A REBAR WITH A 3-1/4 INCH ALUMINUM CAP, STAMPED "PLS 7276", WITH ALL BEARINGS CONTAINED HEREIN RELATIVE THERETO.

COMMENCING AT THE NORTH QUARTER CORNER OF SAID SECTION 33, THENCE S 56°38'28" E, A DISTANCE OF 35.90 FEET TO THE NORTHWEST CORNER OF THAT PARCEL OF LAND DESCRIBED AT SAID RECEPTION NO. 2019000073502, BEING A POINT 30.00 FEET EAST OF THE WEST LINE OF THE NORTHEAST QUARTER OF SAID SECTION 33 AND 20.00 FEET SOUTH OF THE NORTH LINE OF THE NORTHEAST QUARTER OF SAID SECTION 33 AND THE POINT OF BEGINNING;

THENCE N 89°30'30" E, ALONG A LINE BEING 20.00 FEET SOUTH OF AND PARALLEL TO THE NORTH LINE OF THE NORTHEAST QUARTER OF SAID SECTION 33, AND ALONG THE SOUTH LINE OF TRACT D, SHERRELWOOD VILLAGE, A SUBDIVISION PLAT RECORDED AT RECEPTION NO. 2018000075940, SAID ADAMS COUNTY RECORDS, A DISTANCE OF 208.00 FEET TO THE SOUTHEAST CORNER OF SAID TRACT D; THENCE S 00°01'53" W, ALONG THE WEST LINE OF SAID SHERRELWOOD VILLAGE PLAT, A DISTANCE OF 208.00 FEET TO THE NORTHEAST CORNER OF TRACT B, SAID SHERRELWOOD VILLAGE PLAT; THENCE S 89°30'30" W, ALONG THE NORTH LINE OF SAID TRACT B, A DISTANCE OF 208.00 FEET TO A POINT BEING 30.00 FEET EAST OF THE WEST LINE OF THE NORTHEAST QUARTER OF SAID SECTION 33; THENCE N 00°01'53" E, ALONG A LINE BEING 30.00 FEET EAST OF AND PARALLEL TO THE WEST LINE OF THE NORTHEAST QUARTER OF SAID SECTION 33, A DISTANCE OF 208.00 FEET TO THE POINT OF BEGINNING.

CONTAINING AN AREA OF 43,262 SQUARE FEET OR 0.993 ACRES, MORE OR LESS.

SUBDIVISION IMPROVEMENTS AGREEMENT

THIS AGREEMENT is made and entered into this __day of _______, 20___, between <u>Delwest</u>, a <u>development</u> corporation qualified to do <u>business</u> in <u>Colorado</u> ("Developer"), whose address is <u>55 South Madison St</u>, <u>Ste 326 Denver CO 80209</u> and the Board of County Commissioners of the County of Adams, State of Colorado ("County"), whose address is 4430 S. Adams County Parkway, Brighton, CO 80601.

WITNESSETH:

WHEREAS, Developer is the owner of real property in the County of Adams, State of Colorado, as described in Exhibit "A" attached hereto, and by this reference made a part hereof.

WHEREAS, it is provided by resolution of the Board of County Commissioners, County of Adams, that where designated the Developer shall have entered into a written agreement with the County to install public and/or private improvements, and to deed land for public purposes or right-of-way.

NOW, THEREFORE, in consideration of the foregoing, the parties hereto promise, covenant, and agree as follows:

- 1. **Engineering Services**. Developer shall furnish, at its own expense, all engineering and other services in connection with the design and construction of the improvements described and detailed on Exhibit "B" attached hereto, and by this reference made a part hereof ("Improvements").
- 2. **Drawings and Estimates**. The Developer shall furnish drawings and cost estimates for all improvements described and detailed on Exhibit "B" for approval by the County. Upon request, the Developer shall furnish one set of reproducible "as built" drawings and a final statement of construction costs to the County.
- 3. **Construction**. Developer shall furnish and construct, at its own expense and in accordance with drawings and materials approved by the County, the improvements described and detailed on Exhibit "B".
- 4. **Time for Completion**. Improvements shall be completed according to the terms of this agreement within "construction completion date" appearing in Exhibit "B". The Director of Community and Economic Development Department may for good cause grant extension of time for completion of any part or all of improvements appearing on said Exhibit "B". Any extension greater than 180 days may be approved only by the Board of County Commissioners. All extensions of time shall be in written form only.
- 5. Warranties of Developer. Developer warrants that the Improvements shall be installed in good workmanlike manner and in substantial compliance with the Plans and requirements of this Agreement and shall be substantially free of defects in materials and workmanship. These warranties of Developer shall remain in effect until Preliminary Acceptance of the improvements by the County.
- 6. Guarantee of Compliance. Developer shall furnish to the County a cash escrow deposit or other acceptable collateral, releasable only by the County, to guarantee compliance with this agreement. Said collateral shall be in the amount of \$164,865.03, including twenty percent (20%) to cover administration and five percent (5%) per year for the term of the Agreement to cover inflation. Upon approval of the final plat, completion of said improvements constructed according to the terms of this agreement, and preliminary acceptance by the Director of Public Works in accordance with section 5-02-05-01 of the County's Development Standards and Regulations, the collateral shall be released. Completion of said improvements shall be determined solely by the County, and a reasonable part of said collateral, up to 20%, may be retained to guarantee maintenance of public improvements for a period of one year from the date of preliminary acceptance.

Collateral shall be furnished in the amount required and in a form acceptable to the Board of County Commissioners prior to final plat approval. No building permits shall be issued until the final plat has been approved and the improvements described in Exhibit "B" have been preliminarily accepted by the Department of Public Works.

- 7. Acceptance and Maintenance of Public Improvements. All improvements designated "public" on Exhibit "B" shall be public facilities and become the property of the County or other public agencies upon acceptance. During the period of one year from and after the acceptance of public improvements, the Developer shall, at its own expense, make all needed repairs or replacement due to defective materials or workmanship which, in the opinion of the County, becomes necessary. If, within ten days of written notice to the Developer from the County requesting such repairs or replacements, the Developer has not undertaken with due diligence to make the same, the County may make such repairs or replacements at the Developer's expense. In the case of an emergency such written notice may be waived.
- 8. **Successors and Assigns**. This agreement shall be binding upon the heirs, executors, personal representatives, successors, and assigns of the Developer, and shall be deemed a covenant running with the real property as described in Exhibit "A" attached hereto.
- 9. **Improvements and Dedication**. The undersigned Developer hereby agrees to provide the following improvements, and to dedicate described property.
 - A. **Improvements**. Designate separately each public and private improvement.

Public Improvements:

Construction of approximately 509 linear feet of public roads including sidewalk (395 linear feet of Osage Street and 114 linear feet of Sherrelwood Drive), 521 linear feet of improvements to Pecos Street, 415 linear feet of concrete trail.

See Exhibits "B and C" for description, estimated quantities, and estimated construction costs.

The improvements shall be constructed in accordance with all County requirements and specifications in accordance with the approved plans and time schedule as indicated in Exhibit "B".

B. **Public dedication of land for right-of-way purposes or other public purpose**. Upon approval of this agreement by the Board of County Commissioners, the Developer hereby agrees to convey by warranty deed to the County of Adams the following described land for right-of-way or other public purposes:

The rights-of-way shown on the Sherrelwood Village Filing No. 2 Final Plat, known as Osage Street, Sherrelwood Drive, and Twenty (20) feet for Pecos Street. See Exhibit "C" for legal description.

- 10. **Default by Developer.** A default by the Developer shall exist if (a) Developer fails to construct the Subdivision Improvements in substantial compliance with the Plans and the other requirements of this Agreement; (b) Developer fails to complete construction of the Improvements by the Completion Date provided herein as the same may be extended; (c) Developer fails to cure any noncompliance specified in any written notice of noncompliance within a reasonable time after receipt of the notice of noncompliance; (d) Developer otherwise breaches or fails to comply with any obligation of Developer under this Agreement.
 - A. **Remedies of County**. If the County, after notice, determines that a default by Developer exists, and if Developer fails to cure such default within the time specified by the County, the County shall be entitled to (a) make a draw on the collateral for the amount reasonably determined by the County to be necessary to cure the default in a manner consistent with the approved Plans up to the face amount of the Collateral; and (b) sue the

Developer for recovery of any amount necessary to cure the default over and above the amount available in the Collateral provided.

- B. County Right to Completion of Subdivision Improvements. The right of the County to complete or cause completion of the Improvements as herein provided shall include the following rights:
 - a. The County shall have the right to complete the Subdivision Improvements, in substantial accordance with the plans, the estimated costs, and other requirements of this Agreement, either itself or by contract with a third party or by assignment of its rights to a successor developer who has acquired the Property by purchase, foreclosure, or otherwise. The County, any contractor under the County, or any such successor developer, their agents, subcontractors and employees shall have the non-exclusive right to enter upon the streets and easements shown on the final plat of the Subdivision and upon any part of the Subdivision owned by Developer for the purpose of completing the Improvements.
- C. Use of Funds by County. Any funds obtained by the County through Collateral, or recovered by the County from Developer by suit or otherwise, shall be used by the County to pay the costs of completion of the Improvements substantially in accordance with the Plans and the other Requirements of this Agreement and to pay the reasonable costs and expenses of the County in connection with the default by Developer, including reasonable attorneys' fees.

DelWest Development Corporation	on
By: Name, Title	By: Name, Title
	lged before me this day of,
My commission expires:	
Address:	Mataux Dulalia
APPROVED BY resolution at the meeting	ng of
shall be required in the amount of	this agreement and construction of public improvement No building permits shall be issued unt ant required and in a form acceptable to the Board of
ATTEST:	BOARD OF COUNTY COMMISSIONERS ADAMS COUNTY, COLORADO
Clerk of the Board	Chair

EXHIBIT A

A PARCEL OF LAND BEING TRACTS B & D, LOTS 1 THROUGH 4, BLOCK 1, AND A PORTION OF LOT 8, BLOCK 2, SHERRELWOOD VILLAGE, A SUBDIVISION PLAT RECORDED AT RECEPTION NO. 2018000075940 TOGETHER WITH THAT PARCEL OF LAND DESCRIBED IN THAT WARRANTY DEED RECORDED AT RECEPTION NO. 2019000073502 AND THAT PARCEL OF LAND DESCRIBED IN THAT WARRANTY DEED RECORDED AT RECEPTION NO. 2019000075343, ALL IN THE RECORDS OF THE ADAMS COUNTY CLERK AND RECORDER'S OFFICE, LYING WITHIN THE SOUTHEAST QUARTER OF SECTION 28 AND THE NORTHEAST QUARTER OF SECTION 33, TOWNSHIP 2 SOUTH, RANGE 68 WEST OF THE SIXTH PRINCIPAL MERIDIAN, COUNTY OF ADAMS, STATE OF COLORADO, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

THE BEARINGS FOR THIS DESCRIPTION ARE BASED ON THE NORTH LINE OF THE NORTHEAST QUARTER OF SECTION 33, TOWNSHIP 2 SOUTH, RANGE 68 WEST OF THE SIXTH P.M., BEING ASSUMED TO BEAR N 89°30'30" E, FROM THE NORTH QUARTER CORNER OF SAID SECTION 33, BEING MONUMENTED BY A REBAR WITH A 3-1/4 INCH ALUMINUM CAP, STAMPED "PLS 23519" TO THE NORTHEAST CORNER OF SAID SECTION 33, BEING MONUMENTED BY A REBAR WITH A 3-1/4 INCH ALUMINUM CAP, STAMPED "PLS 7276", WITH ALL BEARINGS CONTAINED HEREIN RELATIVE THERETO

COMMENCING AT THE NORTH QUARTER CORNER OF SAID SECTION 33, THENCE N 89°30'30" E, ALONG THE NORTH LINE OF THE NORTHEAST QUARTER OF SAID SECTION 33, A DISTANCE OF 50.00 FEET TO A POINT ON THE EAST LINE OF THE PECOS STREET RIGHT-OF-WAY AS DEDICATED BY THAT RESOLUTION RECORDED IN BOOK 3270 AT PAGE 279, SAID ADAMS COUNTY RECORDS, ALSO BEING THE NORTHWEST CORNER OF SAID SHERRELWOOD VILLAGE PLAT AND THE SOUTHWEST CORNER OF THAT PARCEL OF LAND DESCRIBED IN SAID DEED, RECEPTION NO. 2019000075343 AND THE POINT OF BEGINNING; THENCE N 00°14'47" W, ALONG THE EAST LINE OF SAID PECOS STREET RIGHT-OF-WAY, AND THE WEST LINE OF SAID DEED, RECEPTION NO. 2019000075343, ALONG A LINE BEING 50.00 FEET EAST OF AND PARALLEL TO THE WEST LINE OF THE SOUTHEAST QUARTER OF SAID SECTION 28, A DISTANCE OF 293.01 FEET TO THE NORTHWEST CORNER OF SAID DEED, RECEPTION NO. 2019000075343; THENCE S 82°41'00" E, CONTINUING ALONG THE PECOS STREET ROW AND THE NORTH LINE OF SAID DEED, A DISTANCE OF 8.10 FEET TO A POINT ON THE EAST LINE OF SAID PECOS STREET RIGHT-OF-WAY AND THE WEST CORNER OF PARCEL D, AS DESCRIBED IN THAT QUIT CLAIM DEED RECORDED IN BOOK 3251 AT PAGE 924, SAID COUNTY RECORDS:

THENCE ALONG THE SOUTH AND WEST LINES OF SAID PARCEL D THE FOLLOWING THREE (3) COURSES:

- 1. S 76°46'55" E, A DISTANCE OF 178.58 FEET;
- 2. S 21°38'59" E, ALONG THE EAST LINES OF SAID DEED, RECEPTION NO. 2019000075343 AND THE EAST LINE OF SAID SHERRELWOOD VILLAGE PLAT, A DISTANCE OF 459.50 FEET TO THE EAST CORNER OF LOT 4, BLOCK 1;

THENCE S 12°19'21" W, ALONG THE SOUTHEAST LINE OF SAID LOT 4, BLOCK 1, A DISTANCE OF 57.53 FEET TO A POINT ON THE NORTH LINE OF WEST 79TH WAY RIGHT-OF-WAY, AS DEDICATED BY SAID SHERRELWOOD VILLAGE PLAT AND A POINT OF NON-TANGENT CURVATURE; THENCE ALONG THE NORTH LINE OF THE WEST 79TH WAY RIGHT-OF-WAY THE FOLLOWING THREE (3) COURSES:

- 1. ALONG THE ARC OF A NON-TANGENT CURVE TO THE LEFT HAVING A RADIUS OF 38.00 FEET, A CENTRAL ANGLE OF 09°04'20" AND AN ARC LENGTH OF 6.02 FEET, THE CHORD OF WHICH BEARS N 85°25'57" W, A DISTANCE OF 6.01 FEET
- 2. N 89°58'07" W, A DISTANCE OF 204.00 FEET TO A POINT OF CURVATURE;
- 3. ALONG THE ARC OF A CURVE TO THE LEFT HAVING A RADIUS OF 38.00 FEET, A CENTRAL ANGLE OF 90°00'00" AND AN ARC LENGTH OF 59.69 FEET;

THENCE N $00^{\circ}01'53''$ E, A DISTANCE OF 11.47 FEET TO A POINT ON THE SOUTH LINE OF SAID TRACT B, SHERRELWOOD VILLAGE; THENCE ALONG THE SOUTH AND WEST LINES OF SAID TRACT B THE FOLLOWING TWO (2) COURSES:

- 1. N 89°58'07" W, A DISTANCE OF 90.00 FEET TO A POINT ON THE WEST LINE OF SAID SHERRELWOOD VILLAGE PLAT, ALSO BEING THE EAST LINE OF SAID PECOS STREET RIGHT-OF-WAY;
- 2. N 00°01'53" E, ALONG SAID WEST LINE, A DISTANCE OF 30.01 FEET TO A POINT ON THE SOUTH LINE OF THAT PARCEL OF LAND DESCRIBED IN SAID DEED RECORDED AT RECEPTION NO. 2019000073502;

THENCE ALONG THE SOUTH, EAST AND NORTH LINES OF SAID DEED, ALSO BEING THE EAST LINE OF THE PECOS STREET RIGHT-OF-WAY THE FOLLOWING THREE (3) COURSES:

EXHIBIT A

LEGAL CONTINUED:

- 1. S 89°30'30" W, ALONG A LINE BEING PARALLEL TO THE NORTH LINE OF THE NORTHEAST QUARTER OF SAID SECTION 33, A DISTANCE OF 20.00 FEET TO A POINT BEING 30.00 FEET EAST OF THE WEST LINE OF THE NORTHEAST QUARTER OF SAID SECTION 33;
- 2. N 00°01'53" E, ALONG A LINE BEING 30.00 FEET EAST OF AND PARALLEL TO THE WEST LINE OF THE NORTHEAST QUARTER OF SAID SECTION 33, A DISTANCE OF 208.00 FEET TO A POINT BEING 20.00 FEET SOUTH OF THE NORTH LINE OF THE NORTHEAST QUARTER OF SAID SECTION 33;
- 3. N 89°30'30" E, ALONG A LINE BEING 20.00 FEET SOUTH OF AND PARALLEL TO THE NORTH LINE OF THE NORTHEAST QUARTER OF SAID SECTION 33, A DISTANCE OF 20.00 FEET TO A POINT ON THE WEST LINE OF SAID SHERRELWOOD VILLAGE PLAT, ALSO BEING THE EAST LINE OF THE PECOS STREET RIGHT-OF-WAY AS DEDICATED BY SAID SHERRELWOOD VILLAGE PLAT, BEING 50.00 FEET EAST OF THE WEST LINE OF THE NORTHEAST QUARTER OF SAID SECTION 33;

THENCE N 00°01'53" E, ALONG SAID EAST LINE OF THE PECOS STREET RIGHT-OF-WAY, BEING 50.00 FEET EAST OF AND PARALLEL TO THE WEST LINE OF THE NORTHEAST QUARTER OF SAID SECTION 33, A DISTANCE OF 20.00 FEET TO THE NORTHWEST CORNER OF SAID SHERRELWOOD VILLAGE PLAT, AND THE POINT OF BEGINNING.

CONTAINING AN AREA OF 143,370 SQUARE FEET OR 3.291 ACRES, MORE OR LESS.

EXHIBIT A

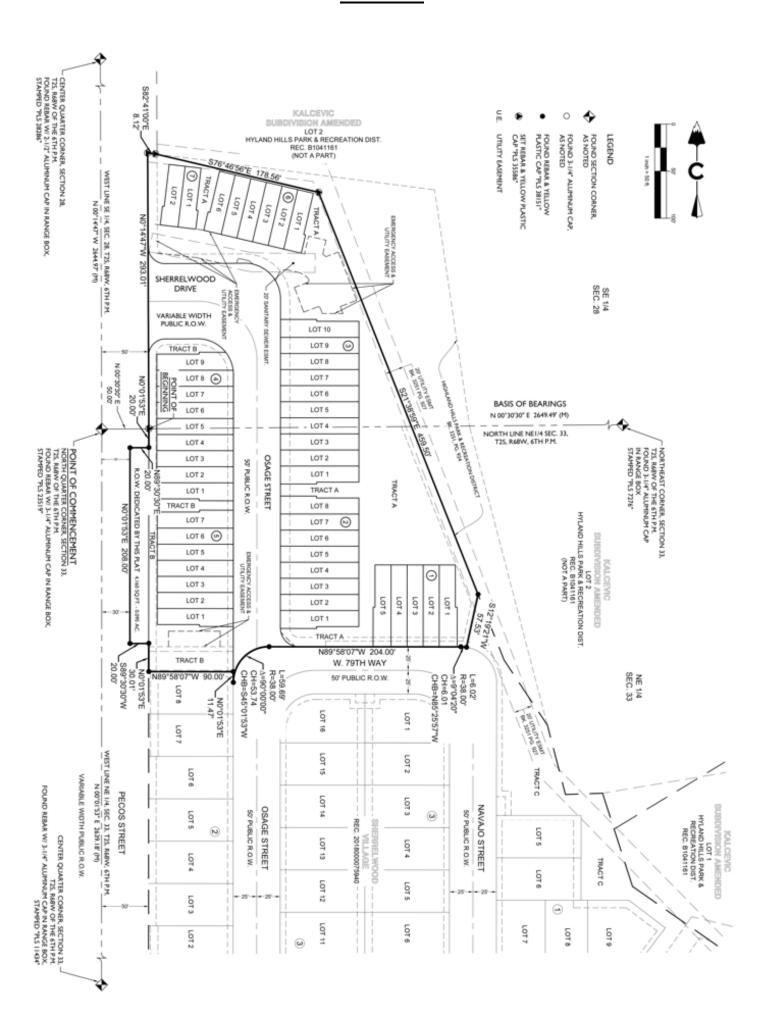


EXHIBIT B

Public Improvements:

	Quantity	Units	Unit Cost	Total
GRADING				
Cut to Fill	4,000	CY	\$2.35	\$9,400.00
Strippings (Topsoil)	2,700	CY	\$5.00	\$13,500.00
			Grading Subtotal	\$22,900.00
STREET IMPROVEMENTS				
Osage Street				
Asphalt Local Streets (Bottom Lift - 4" Thick)	208	TON	\$77.97	\$16,217.76
Asphalt Local Streets (Top Lift - 2" Thick)	104	TON	\$87.50	\$9,100.00
Subgrade Prep.	3,850	SY	\$2.11	\$8,123.50
Curb, Gutter & Attached Sidewalk	950	LF	\$33.00	\$31,350.00
ADA Ramps	6	SY	\$110.00	\$660.00
Street Signs and Barricades	5	EA	\$688.00	\$3,440.00
Sidewalk Chase	2	EA	\$1,500.00	\$3,000.00
			Street Subtotal	\$71,891.26
OPEN SPACE IMPROVEMENTS				
Concrete Path- 4' width	1,660	SF	\$1.50	\$2,490.00
Revegetation - Open Space	18,620	SF	\$0.60	\$11,172.00
Revegetation - Offsite	13,320	SF	\$0.60	\$7,992.00
Retaining Wall	180	LF	\$80.00	\$14,400.00
			Open Space Subtotal	\$36,054.00
			Subdivision Total	\$130,845.26
			20% Admin.	\$26,169.05
			5% Inflation	\$7,850.72
			2,2	
			TOTAL	\$164,865.03

Initials or signature of Developer:	

Construction Completion Date: Q2, 2023

EXHIBIT C

Legal Description

A drainage easement, of variable width, situated in the Northeast Quarter of Section 33, Township 2 South, Range 68 West of the 6th Principal Meridian, County of Adams, State of Colorado, being a part of Lots 1 and 2, KALCEVIC SUBDIVISION AMENDED, a Subdivision Plat recorded at Reception No. B1041161, in the records of the Adams County Clerk and Recorder's Office, being more particularly described as follows;

Bearings for this description are based upon the West line of the Northeast Quarter of Section 33, Township 2 South, Range 68 West of the Sixth Principal Meridian, being assumed to bear South 00°01′53″ West, from the North Quarter Corner of said Section 33, being monumented by a rebar with a 3-1/4″ aluminum cap stamped "PLS 23519", to the Center Quarter Corner of said Section 33, being monumented by a rebar with a 3-1/4″ aluminum cap stamped "PLS 11434", with all bearings contained herein relative thereto;

<u>Commencing</u> at the North Quarter Corner of said Section 33, thence South 54°01′03" East, a distance of 658.20 feet to the Northwest Corner of that drainage easement recorded at Reception No.

2018000072630, said Adams County records and the Point of Beginning;

Thence North 17°49'46" West, a distance of 56.74 feet;

Thence North 80°27'43" East, a distance of 42.90 feet;

Thence South 74°46'37" East, a distance of 99.74 feet;

Thence South 43°06'49" East, a distance of 17.25 feet to the Northeast Corner of said drainage easement;

Thence South 80°27′43″ West, along the North line of said drainage easement, a distance of 134.83 feet to the <u>Point of Beginning</u>.

Containing: 5,441 square feet or 0.125 acres, more or less. Legal Description prepared by: Thomas M. Girard

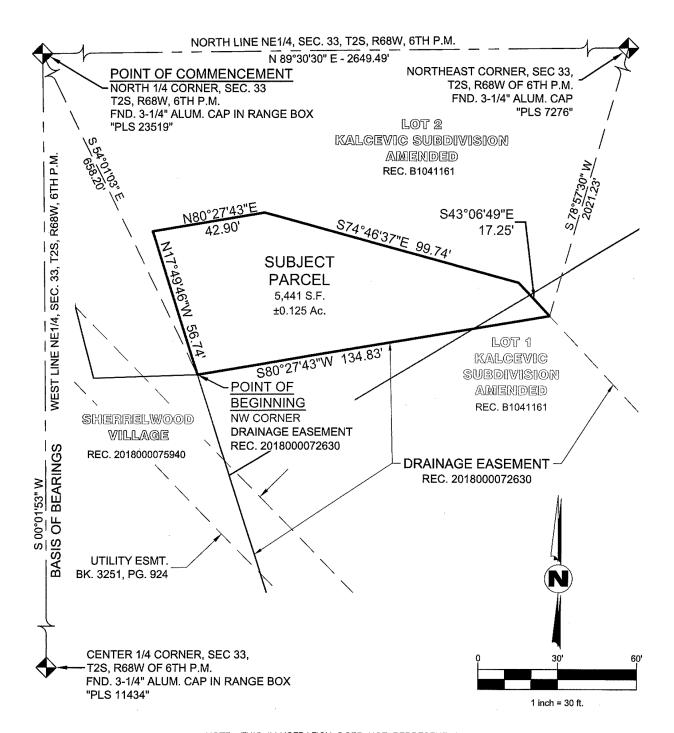
Thomas M. Girard Colorado PLS 38151

For and on behalf of CORE Consultants, INC.

Exhibit "B" attached and hereby made a part thereof.



EXHIBIT C



NOTE: THIS ILLUSTRATION DOES NOT REPRESENT A MONUMENTED SURVEY. IT IS INTENDED ONLY TO DEPICT THE ATTACHED LEGAL DESCRIPTION.

EXHIBIT C

EXHIBIT

NORTHEAST QUARTER, SECTION 33, SOUTHEAST QUARTER, SECTION 28, TOWNSHIP 2 SOUTH, RANGE 68 WEST OF THE 6TH P.M., ADAMS COUNTY, STATE OF COLORADO

A PARCEL OF LAND BEING A PORTION OF LOT 8, BLOCK 2 AND PORTIONS OF TRACTS B & D, SHERRELWOOD VILLAGE, A SUBDIVISION PLAT RECORDED AT RECEPTION NO. 2018000075940 AND PORTIONS OF THOSE PARCELS OF LAND DESCRIBED IN THOSE DEEDS RECORDED AT RECEPTION NOS. 2019000073502 AND 2019000075343 IN THE RECORDS OF THE ADAMS COUNTY CLERK AND RECORDER'S OFFICE, SITUATED IN THE NORTHEAST QUARTER OF SECTION 33 AND IN THE SOUTHEAST QUARTER OF SECTION 28, TOWNSHIP 2 SOUTH, RANGE 68 WEST OF THE SIXTH PRINCIPAL MERIDIAN, COUNTY OF ADAMS, STATE OF COLORADO, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE NORTH QUARTER CORNER OF SAID SECTION 33, THENCE N 32°33'42" E, A DISTANCE OF 92.28 FEET TO A POINT ON THE WEST LINE OF SAID PARCEL OF LAND DESCRIBED AT RECEPTION NO. 2019000075343, A POINT BEING 50.00 FEET EAST OF THE WEST LINE OF THE SOUTHEAST QUARTER OF SAID SECTION 28, ALSO BEING A POINT ON THE EAST LINE OF THE PECOS STREET RIGHT-OF-WAY AND THE POINT OF BEGINNING;

THENCE ALONG THE ARC OF A NON-TANGENT CURVE TO THE LEFT HAVING A RADIUS OF 18:00 FEET, A CENTRAL ANGLE OF 90°00'00" AND AN ARC LENGTH OF 28.27 FEET, THE CHORD OF WHICH BEARS S 45°14'47"

E, A DISTANCE OF 25.46 FEET; THENCE N 89"45"13" E. A DISTANCE OF 84.67 FEET TO A POINT OF CURVATURE:

THENCE ALONG THE ARC OF A CURVE TO THE RIGHT HAVING A RADIUS OF 38.00 FEET, A CENTRAL ANGLE OF 90 16'40" AND AN ARC LENGTH OF 59.87 FEET TO A POINT BEING 190.00 FEET EAST OF THE WEST LINE OF THE NORTHEAST QUARTER OF SAID SECTION 33;

THENCE S 00°01'53" W, ALONG A LINE BEING 190.00 FEET EAST OF AND PARALLEL WITH THE WEST LINE OF THE NORTHEAST QUARTER OF SAID SECTION 33, A DISTANCE OF 349.32 FEET TO A POINT OF CURVATURE; THENCE ALONG THE ARC OF A CURVE TO THE LEFT HAVING A RADIUS OF 20.00 FEET, A CENTRAL ANGLE OF 90°00'00" AND AN ARC LENGTH OF 31.42 FEET TO A POINT ON THE NORTH LINE OF THE WEST 79TH WAY RIGHT-OF-WAY.

THENCE ALONG THE NORTH LINE OF SAID WEST 79TH WAY RIGHT-OF-WAY AND ALONG THE WEST LINE OF THE OSAGE STREET RIGHT-OF-WAY, THE FOLLOWING TWO (2) COURSES:

1, N 89°58'07" W, A DISTANCE OF 32.00 FEET TO A POINT OF CURVATURE

2. ALONG AN ARC OF A CURVE TO THE LEFT HAVING A RADIUS OF 38 00 FEET, A CENTRAL ANGLE OF 90°00'00" AND AN ARC LENGTH OF 59.69 FEET TO A POINT BEING 140.00 FEET EAST OF THE WEST LINE OF THE NORTHEAST QUARTER OF SAID SECTION 33:

NOTE: THIS DOES NOT REPRESENT A MONUMENTED SURVEY.
IT IS INTENDED ONLY TO DEPICT THE ATTACHED DESCRIPTION

PROJECT: 19-165 DATE: 11/1/2021 SHEET 1 OF 4 DR: D. BUCHHOLZ DS: M. SMALL CORE

CORE CONSULTANTS, INC. 3473 SOUTH BROADWAY ENGLEWOOD, CO:80113 303.703.4444 UIVEYOURCORE COM

EXHIBIT C

EXHIBIT

NORTHEAST QUARTER, SECTION 33, SOUTHEAST QUARTER, SECTION 28, TOWNSHIP 2 SOUTH, RANGE 68 WEST OF THE 6TH P.M., ADAMS COUNTY, STATE OF COLORADO

THENCE N 00°01'53" E, ALONG A LINE BEING 140.00 FEET EAST OF AND PARALLEL TO THE NORTHEAST QUARTER OF SAID SECTION 33, A DISTANCE OF 327.08 FEET TO A POINT OF CURVATURE; THENCE ALONG THE ARC OF A CURVE TO THE LEFT HAVING A RADIUS OF 38.00 FEET, A CENTRAL ANGLE OF 90°17'34 AND AN ARC LENGTH OF 59.88 FEET;

THENCE S 89°45'13 W, A DISTANCE OF 20.00 FEET TO A POINT OF CURVATURE;
THENCE ALONG THE ARC OF A CURVE TO THE LEFT HAVING A RADIUS OF 18.00 FEET, A CENTRAL ANGLE OF 90°00'00" AND AN ARC LENGTH OF 28.27 FEET TO THE POINT OF BEGINNING.

CONTAINING AN AREA OF 28,157 SQUARE FEET, OR 0.646 ACRES, MORE OR LESS

BEARINGS FOR THIS DESCRIPTION ARE BASED ON THE NORTH LINE OF THE NORTHEAST QUARTER OF SECTION 33, TOWNSHIP 2 SOUTH, RANGE 68 WEST OF THE 6TH PRINCIPAL MERIDIAN, BEING ASSUMED TO BEAR N 89°30'30" E, FROM THE NORTH QUARTER CORNER OF SAID SECTION 33, BEING MONUMENTED BY A #6 REBAR WITH A 3-1/4" ALUMINUM CAP IN A RANGE BOX, STAMPED "PLS 23519", TO THE NORTHEAST CORNER OF SAID SECTION 33 BEING MONUMENTED BY A #6 REBAR WITH A 3-1/4" ALUMINUM CAP IN A RANGE BOX, STAMPED "PLS 7276", WITH ALL BEARINGS CONTAINED HEREIN RELATIVE THERETO;

MILES SMALL COLORADO PLS 38534 FOR AND ON BEHALF OF CORE CONSULTANTS, INC



NOTE: THIS DOES NOT REPRESENT A MONUMENTED SURVEY. IT IS INTENDED ONLY TO DEPICT THE ATTACHED DESCRIPTION

PROJECT: 19-165 DATE: 11/01/2021 SHEET 2 OF 4 DR: D. BUCHHOLZ DS: M. SMALL CORE

CORE CONSULTANTS, INC. 3473 SOUTH BROADWAY ENGLEWOOD, CO 80113 303.703.4444 LIVEYOURCORE,COM

EXHIBIT C

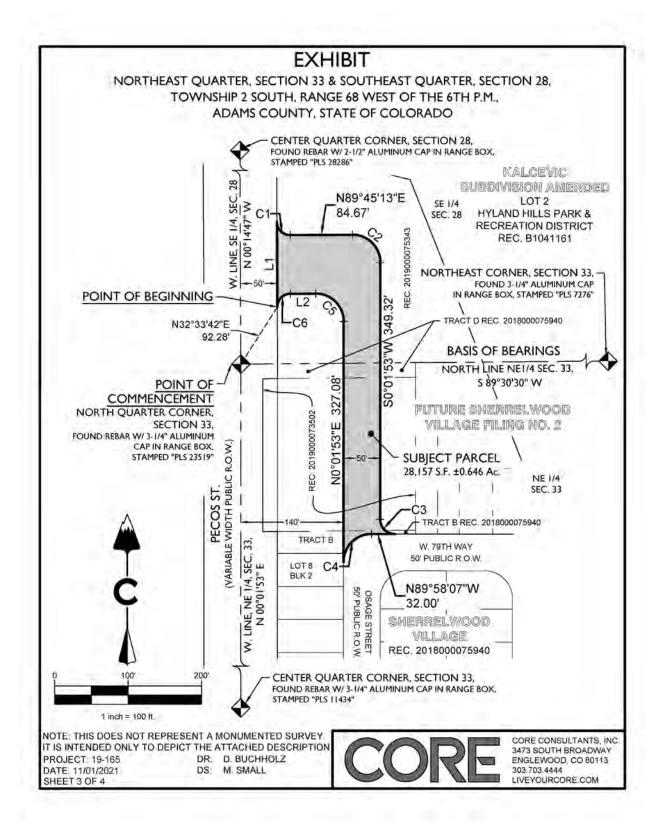


EXHIBIT C

EXHIBIT

NORTHEAST QUARTER, SECTION 33, SOUTHEAST QUARTER, SECTION 28, TOWNSHIP 2 SOUTH, RANGE 68 WEST OF THE 6TH P.M., ADAMS COUNTY, STATE OF COLORADO

LINE TABLE				
LINE #	LENGTH	DIRECTION		
L1	116.00'	N 0°14'47" W		
L2	34.28	S 89°45'13" W		

CURVE TABLE					
CURVE #	LENGTH	RADIUS	DELTA	CHORD BEARING	CHORD LENGTH
C1	28.27'	18.00'	90°00'00"	S45°14'47"E	25.46'
C2	59.87'	38.00'	90°16'40"	S45°06'27"E	53.87'
C3	31 42'	20.00	90°00'00"	S44°58'07"E	28.28
C4	59.69'	38.00	90 00 00"	S45°01'53'W	53.74'
C5	59,88'	38,00'	90°17'34"	N45°06'54'W	53.88'
C6	28.27	18.00	90°00'00"	S44°45'13'W	25.46

NOTE: THIS DOES NOT REPRESENT A MONUMENTED SURVEY.
IT IS INTENDED ONLY TO DEPICT THE ATTACHED DESCRIPTION
PROJECT: 19-165 DR: D. BUCHHOLZ
DATE: 11/01/2021 DS: M. SMALL

PROJECT: 19-165 DATE: 11/01/2021 SHEET 4 OF 4

CORE CONSULTANTS, INC 3473 SOUTH BROADWAY ENGLEWOOD, CO 80113 303.703.4444 LIVEYOURCORE,COM

EXHIBIT C

EXHIBIT

NORTHEAST QUARTER, SECTION 33, TOWNSHIP 2 SOUTH, RANGE 68 WEST OF THE 6TH P.M., ADAMS COUNTY, STATE OF COLORADO

A PARCEL OF LAND BEING THE WEST 20.00 FEET OF THAT PARCEL OF LAND DESCRIBED IN THAT DEED RECORDED AT RECEPTION NO. 2019000073502; IN THE RECORDS OF THE ADAMS COUNTY CLERK AND RECORDER'S OFFICE, SITUATED IN THE NORTHEAST QUARTER OF SECTION 33, TOWNSHIP 2 SOUTH, RANGE 68 WEST OF THE SIXTH PRINCIPAL MERIDIAN, COUNTY OF ADAMS, STATE OF COLORADO, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE NORTH QUARTER CORNER OF SAID SECTION 33, THENCE S 58°38'28" E, A DISTANCE OF 35.90 FEET TO THE NORTHWEST CORNER OF SAID DEED, BEING A POINT ON A LINE BEING 30.00 FEET EAST OF THE WEST LINE OF THE NORTHEAST QUARTER OF SAID SECTION 33, AND ALSO BEING A POINT ON THE EAST LINE OF THE PECOS STREET

RIGHT-OF-WAY AND THE <u>POINT OF BEGINNING;</u>
THENCE N 89°30'30" E, ALONG THE NORTH LINE OF SAID DEED, A DISTANCE OF 20.00 FEET TO A POINT BEING 50.00 FEET

EAST OF THE WEST LINE OF THE NORTHEAST QUARTER OF SAID SECTION 33;

THENCE S 00°01'53" W, ALONG A LINE BEING 50.00 FEET EAST OF AND PARALLEL WITH THE WEST LINE OF THE NORTHEAST QUARTER OF SAID SECTION 33, A DISTANCE OF 208.00 FEET TO A POINT ON THE SOUTH LINE OF SAID DEED; THENCE S 89°30'30" W, ALONG THE SOUTH LINE OF SAID DEED, A DISTANCE OF 20.00 FEET TO THE SOUTHWEST CORNER OF SAID DEED AND A POINT BEING 30.00 FEET EAST OF THE WEST LINE OF THE NORTHEAST QUARTER OF SAID SECTION

THENCE N 00°01'53" E, ALONG SAID EAST LINE OF SAID DEED AND ALONG A LINE BEING 30,00 FEET EAST OF AND PARALLEL WITH THE WEST LINE OF THE NORTHEAST QUARTER OF SAID SECTION 33, A DISTANCE OF 208.00 FEET TO THE POINT OF BEGINNING.

CONTAINING AN AREA OF 4,160 SQUARE FEET, OR 0.096 ACRES, MORE OR LESS

BEARINGS FOR THIS DESCRIPTION ARE BASED ON THE NORTH LINE OF THE NORTHEAST QUARTER OF SECTION 33, TOWNSHIP 2 SOUTH, RANGE 68 WEST OF THE 6TH PRINCIPAL MERIDIAN, BEING ASSUMED TO BEAR N. 89°30'30" E, FROM THE NORTH QUARTER CORNER OF SAID SECTION 33, BEING MONUMENTED BY A #6 REBAR WITH A 3-1/4" ALLUMINUM CAP IN A RANGE BOX, STAMPED "PLS 23519", TO THE NORTHEAST CORNER OF SAID SECTION 33 BEING MONUMENTED BY A #6 REBAR WITH A 3-1/4" ALUMINUM CAP IN A RANGE BOX, STAMPED "PLS 7276", WITH ALL BEARINGS CONTAINED HEREIN RELATIVE THERETO;

MILES SMALL COLORADO PLS 38534 FOR AND ON BEHALF OF CORE CONSULTANTS, INC.



NOTE: THIS DOES NOT REPRESENT A MONUMENTED SURVEY. IT IS INTENDED ONLY TO DEPICT THE ATTACHED DESCRIPTION

PROJECT: 19-165 DATE: 11/01/2021 SHEET 1 OF 2

D. BUCHHOLZ DR: DS: M. SMALL

CORE CONSULTANTS, INC 3473 SOUTH BROADWAY ENGLEWOOD, CO 80113 303 703 4444 LIVEYOURCORE.COM

EXHIBIT C

