ERO

Consultants in Natural Resources and the Environment

Source Area Excavation Plan
Thornton Shopping Center
East 88th Avenue and Washington Street
Thornton, Colorado

EPA ID COR000212639
Compliance Order on Consent Number: 24-02-01-01

Prepared for—

Thornton Development Authority
9500 Civic Center Drive
Thornton, Colorado 80229

Prepared by—

ERO Resources Corporation
1626 Cole Boulevard, Suite 100
Lakewood, Colorado 80401
(303) 830-1188
ERO Project #24-285

March 3, 2026

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1.0 Introduction

This Excavation Plan is submitted on behalf of the Thornton Development Authority (TDA), consistent with ERO's May 2024 Remedial Investigation and Corrective Measures Work Plan (Work Plan) (ERO 2024), approved by the Colorado Department of Public Health and Environment (CDPHE) through the Hazardous Materials and Waste Management Division (Division) on July 3, 2024 (CDPHE 2024) and supplements the June 20, 2025 Source Area Remedial Action Work Plan (SA-RAWP) (ERO 2025a) approved by the Division on July 22, 2025 (CDPHE 2025a). The submittal of this Excavation Plan is consistent with Paragraph 23 of the Compliance Order on Consent (Consent Order) Number 24-02-01-01 between the TDA and the Division. The Consent Order outlines the compliance and schedule requirements for the remediation of the 15.86-acre Thornton Shopping Center, located at the northeast corner of East 88th Avenue and Washington Street in Thornton, Colorado. Within this Excavation Plan, "TSC Property" refers to the Thornton Shopping Center real property as shown on the attached figures, whereas "Site" refers to the extent of known impacts to the TSC Property as well as off-site areas associated with the historical release of tetrachloroethene (PCE) on the TSC Property.

The purpose of this Excavation Plan is to supplement the SA-RAWP with greater detail, as of the date of this plan, of the proposed source area excavation outlined in the SA-RAWP. The excavation design, proposed implementation, and processes detailed herein have not substantively changed from those presented within the SA-RAWP. For brevity, site history, characterization data, and interpretations are not presented within this document, but are described in detail within the SA-RAWP and associated project documents.

2.0 Source Area Excavation Plan

As presented in the SA-RAWP, primary source removal via excavation was the chosen remedial action. The anticipated excavation plan is outlined below and is not substantively different from that presented within the SA-RAWP.

2.1 Dewatering Design and Permitting

Groundwater dewatering will be managed in accordance with the January 12, 2026 Source Area Dewatering Plan (ERO 2026a) prepared by ERO and approved by the Division on January 28, 2026 (CDPHE

2026) and subsequent permits and approvals issued by the Division and the CDPHE Water Quality Control Division (WQCD).

2.2 Buried Utility Management

Previously disconnected potable water service lines are the only remaining subsurface utilities within the area of the proposed excavation and will be abandoned prior to excavation activities.

2.3 Foundation Removal

The proposed excavations will require the removal of portions of the remaining building foundations. The asphalt, concrete and foundations within the work area will be removed prior to or at the appropriate times during excavation activities. Foundation and hardscape removal will be minimized to facilitate stormwater control.

2.4 Well Abandonments

Groundwater monitoring wells within the proposed excavation area will be abandoned in accordance with Colorado Division of Water Resources Water Well Construction Rules prior to excavation activities. Wells to be abandoned include MW-6, MW-9, MW-11, MW-12R, and the MW-22D cluster.

2.5 Soil Stockpiling Areas

Temporary facilities will include soil stockpile areas in the west and/or north portions of the TSC property for staging of soils as part of the September 22, 2025 Source Area Remediation Waste Characterization Plan (SA-RWCP) prepared by ERO (ERO 2025b) and approved by the Division on November 10, 2025 (CDPHE 2025). In general, soil stockpile areas are identified within the SA-RWCP, shown on the attached excavation plans, and will be constructed outside of the excavation of 20-mil liners surrounded by a 1-foot berm and covering an area sufficient to stage the soils excavated.

Once characterized and disposition concurrence is obtained from CDPHE, soils may be moved to an appropriate loading area for loadout and off-site disposal.

2.6 Stormwater Controls

The excavation contractor will develop and implement an appropriate Stormwater Management Plan (SWMP) and obtain appropriate permitting under a CDPHE Construction Stormwater Discharge Permit (COR400000) and the City of Thornton stormwater programs. Stormwater controls measures will be placed in accordance with the SWMP, maintained, and inspected by the contractor, TDA, and TDA representatives.

2.7 Decontamination Areas

Appropriate equipment and personnel decontamination areas will be constructed and maintained for the duration of the excavation activity.

2.8 Excavation Plan

The following section details the excavation plan for the Primary Excavation, the 8946 North Washington Excavation, and the Sanitary Sewer Line Excavation. Design plans for the excavations are included in Appendix A.

2.8.1 Excavation Plan – Primary Excavation

The Primary Excavation includes the two sources areas (Source Areas 1 and 2) and the areas outside these two targeted source areas referred to as the Main Soils Excavation in the north and the South Soils Excavation in the south. The plan is presented below with references to the process order and design drawings included in Appendix A. As noted previously, the plan is substantively similar to that presented within the SA-RAWP. Sequencing may be adjusted based on field conditions and contractor coordination.

1. Concrete foundation and asphalt will be removed from the all excavation areas and recycled or disposed at a permitted facility.
2. Soils from Source Area 1 (Sheet C2, Appendix A) between the surface and 10 feet bgs will be spot-excavated and transported to the potentially hazardous soil stockpile for characterization and management according to the SA-RWCP *(Step 6, Sheet G2, Appendix A).*
3. Soil excavated from the ground surface to 10 feet bgs in the Main Soils Excavation area (outside of Source Area 1) will be considered clean and transported to the clean overburden soil stockpile for potential on-site reuse, pending confirmation according to the SA-RWCP *(Step 7, Sheet G2, Appendix A).*
4. Soils along the sanitary sewer corridor within the Main Soils Excavation area will be spot excavated with the soils above the utility considered clean and transported to the clean soil stockpile for on-site reuse, pending confirmation and in accordance with the SA-RWCP. Soils within the sanitary line elevation and beneath will be considered potentially contaminated, removed and transported to the appropriate stockpile for characterization and management per the SA-RWCP *(Step 8, Sheet G2, Appendix A).*
5. Once the Main Soils Excavation reaches 10 feet bgs, soils within Source Area 1 and those within the sewer-line source area (Source Area 2, Sheet C2, Appendix A) will be spot-excavated between 10 and 20 feet. These soils will be considered potentially hazardous and transported to the potentially hazardous soil stockpile for characterization and management according to the SA-RWCP *(Step 8, Sheet G2, Appendix A).*
6. Soils within the remainder of the Main Soils Excavation will then be excavated from 10 to 20 feet bgs and considered potentially contaminated, removed and transported to the appropriate stockpile for characterization and management according to the SA-RWCP *(Step 9, Sheet G2, Appendix A).*
7. Soil excavated within the South Soils Excavation (Sheet C2, Appendix B) from the ground surface to 15 feet bgs will be considered clean and transported to the clean overburden soil stockpile for on-site reuse, pending confirmation according to the SA-RWCP *(Step 5, Sheet G2, Appendix A).*
8. Soil excavated from 15 to 20 feet bgs within the South Soils Excavation will be considered potentially contaminated, removed and transported to the appropriate stockpile for characterization and disposal per the SA-RWCP *(Step 11, Sheet G2, Appendix A).*

9. Soil excavated from 20 to 22 feet bgs (or as deep as efficiently and mechanically accessible) throughout the footprint of the Main Soils Excavation will be considered potentially hazardous, removed and transported to the appropriate stockpile for characterization and disposal per the SA-RWCP *(Step 10, Sheet G2, Appendix A).*
10. Soil excavated from 20 to 22 feet bgs (or as deep as efficiently and mechanically accessible) within the South Soils Excavation will be considered potentially hazardous, removed and transported to the appropriate stockpile for characterization and disposal per the SA-RWCP *(Step 12, Sheet G2, Appendix A).*

2.8.2 Excavation Plan – 8946 North Washington

The extent of the proposed excavation for the 8946 North Washington source area is shown on Sheet C5, Appendix A and is delineated by the existing soil borings described in the Supplemental Source Area Characterization Implementation Report (SSACP-IR) (ERO 2025c). The excavation will extend at least to the top of groundwater at a depth of 13 feet bgs, but will target a depth of 20 feet bgs. All soils will be considered potentially contaminated and transported to the appropriate stockpile for characterization and management according to the SA-RWCP *(Step 1, Sheet G2, Appendix A).*

2.8.3 Excavation Plan – Sanitary Sewer Removal

The sanitary sewer line between manholes G06009 and G06018 and the extension to 8946 North Washington Street will be excavated, removed, the sewer line trench inspected and evaluated for releases and backfilled with documented clean fill.

The sanitary sewer line excavation will consist of the following:

1. Surface asphalt and concrete within the path of the sanitary line will be removed for recycling/disposal.
2. An excavator will remove the overburden soils to the top of the sanitary line and manage the soils in one of two methods:
    a. Soils north of the former north wall of the TSC building will be considered clean and transported to the clean soil stockpile for on-site reuse or placed back in the trench upon completion.
    b. Soils south of the former north wall of the TSC building will be managed similar to the overall excavation described in Section 2.8.1 and subject to the SA-RWCP.
3. The length of the existing sanitary line and a minimum of 6-inches of soils beneath the line will be excavated. Soils beneath the line will be considered potentially contaminated, transported to the appropriate soil stockpile for characterization and management in accordance with the SA-RWCP *(Step 3, Sheet G2, Appendix A).*
4. Soils within the utility trench will be screened with a PID at approximately 10-foot intervals using soils collected from the excavator as personnel will not be permitted within the utility trench. Should elevated PID readings be encountered, additional soil may be removed based on field conditions.
5. Because an open trench of this depth presents a significant safety hazard on the site, the trench will be backfilled daily or a trench plate placed to cover it upon collection of trench-base samples. The

sewer line excavation will be backfilled with overburden soils that fit unrestricted use categories based on screening protocols or documented clean fill material – either imported or from the clean overburden stockpile *(Step 4, Sheet G2, Appendix A).*

2.8.3.1 Air Emission Control

Perimeter air monitoring stations will be established to monitor air quality during the excavation. Should excavation activities be identified as a source of increased VOCs with the potential to migrate off-Site in accordance with the 50 parts per million (ppm) action levels established in the health and safety plan, the appropriate action will be followed including, but not limited to stopping work or application of water or surfactants.

2.8.3.2 Fugitive Dust

Fugitive dust will not be permitted and will be monitored during excavation activities. The excavation contractor will be required to minimize all fugitive dust during excavation activities. If dry conditions necessitate dust control or air quality or odor concerns are present, a water truck will be used to spray clean water within the excavation on an as needed basis.

2.9 Excavation Confirmation Soil Sampling

Confirmation soil sampling methods are described in the Sample and Analysis Plan (SAP). Locations of confirmation samples are discussed below.

2.9.1 Main Soils Excavation

Because the limits of the Main Soils Excavation were designed based on data detailed in the SSACP-IR, no additional soil confirmation sampling will occur along the walls of the Main Soils Excavation within the footprint of the activities reported in the SSACP-IR. Discrete soil confirmation samples from the floor of the excavation will be collected similar to the frequency detailed in the SSACP-IR, targeting samples on 25-foot centers as physically able to be collected using safe excavation practices.

2.9.2 South Soils Excavation

Floor and excavation wall samples from the area outside of the SSACP-IR activities (primarily the South Soils Excavation) will be collected provided conditions present safe conditions for collection. Best efforts will be employed to obtain samples at an interval of one sample every 50 linear feet of excavation wall and on 50-foot centers from the excavation floor. Discrete wall samples will be collected from about 1-foot above the base of the excavation and from the mid-depth of the excavation, as accessible. The purpose of the wall samples in this area is to document conditions of the soil left in place outside of the excavation perimeter prior to implementing the other remedial actions.

2.9.3 8946 North Washington Excavation

Because of the limited soil samples defining the limits of this excavation, discrete confirmation soil samples will be collected from the walls and floor of the excavation. Wall samples will be collected from the following depths, at lateral intervals of 25 linear feet along the walls of the excavation:

- One sample between the surface and the water table;
- One sample at the water table; and
- One sample at the base of the wall.

Floor samples will be collected at a rate of one per 400 square feet of excavation, or at least one from each quadrant, if safely accessible. If not safely accessible, an excavator will be used to collect soil from the base and a soil sample will be collected from the bucket as representative of that location.

2.9.4 Sewer Line Excavation

One soil sample will be collected from the base of the trench (effectively beneath the original sewer line elevation) using the excavator or hand auger to obtain a representative discrete sample at 20-foot intervals along the length of the sewer line corridor outside the proposed source area excavation area. Areas that the sewer line overlaps with proposed source area excavations will not be sampled.

2.10 Backfill Amendment

Prior to backfilling the main excavation, a carbon substrate treatment amendment will be placed at the base of the excavation and mixed, as feasible, into backfilled soils. The final product has yet to be determined and will be presented as an addendum to this plan.

2.11 In-Situ Treatment Gallery

An in-situ treatment gallery will be installed in the base of the Main Soils Excavation prior to backfilling to facilitate the treatment of deep groundwater and bedrock beneath the excavation, if warranted. A gravel drainage layer up to 3 feet thick will be constructed across as much of the floor as feasible. A geotextile fabric will be placed over the layer to minimize intrusion of fine material. Perforated horizontal PVC drain pipe will be installed within the base of the gravel layer, plumbed to a solid vertical standpipe at each end. The tops of the PVC riser will be housed within a flush-mounted, traffic-weighted well vault or similar surface completion once backfilling is complete. The remainder of the excavation will be backfilled as generally described below.

2.12 Backfilling

The Main Soils Excavation area will be completed with a combination of imported clean backfill as needed and clean soil from the clean overburden stockpile. The clean overburden soil used for backfilling will only be placed in the upper 13 feet of the excavation consistent with the depth from which it was removed. Backfilling is anticipated to consist of the following steps:

- Backfill from the top of the gravel treatment gallery layer to 13 feet bgs with imported fill material mixed on-site with the amendment;
- Backfill the area from 13 feet bgs to ground surface by placing the clean overburden soils directly in the excavation and compacted.

2.13 Survey Control

Site survey control has been established by a licensed Colorado Professional Land Surveyor. Prior to and during the excavation activities, survey control will document the extents of excavation, depths and topography within the excavation, and completion elevations of components. Because the proposed excavation will remove almost 10 feet or more of soils beneath the existing utilities, none of the existing utilities (e.g., sewer lines) within the excavation area are planned to be surveyed beyond what is currently known.

3.0 Schedule

The following presents the best assessment of a schedule at this time. As the timeline gets refined, updates will be provided to CDPHE in bi-weekly conferences and monthly reports.

Estimated Timeline	Anticipated Tasks
February 2026	Excavation design, permitting, pre-mobilization
March-May 2026	Excavation Plan implementation
June/July	Completion report submittal (90 days post excavation)

4.0 References

Colorado Department of Public Health and Environment (CDPHE). 2024. Approval – Remedial Investigation and Corrective Measures Work Plan; Thornton Shopping Center, NE Corner East 88th Avenue and Washington Street, Thornton, CO 80229; EPA ID# COR000212639. July 3.

Colorado Department of Public Health and Environment (CDPHE). 2025a. Approval: (Revised) - Source Area Remedial Action Work Plan; Thornton Shopping Center, NE Corner East 88th Avenue and Washington Street, Thornton, CO; Compliance Order On Consent: 24-02-01-01; EPA ID# COR000212639; CDPHERM HAZ COR – Corrective Action. July 22.

Colorado Department of Public Health and Environment (CDPHE). 2025b. Approval - Source Area Remediation Waste Characterization Plan; Thornton Shopping Center, NE Corner East 88th Avenue and Washington Street, Thornton, CO; Compliance Order On Consent: 24-02-01-01; EPA ID# COR000212639; CDPHERM HAZ COR – Corrective Action. November 10.

Colorado Department of Public Health and Environment (CDPHE). 2026. Approval – Source Area Dewatering Plan; Thornton Shopping Center, NE Corner East 88th Avenue and Washington Street, Thornton, CO; Compliance Order On Consent: 24-02-01-01; EPA ID# COR000212639; CDPHERM HAZ COR – IDW. January 28.

ERO Resources Corporation (ERO). 2024. Remedial Investigation and Corrective Measures Work Plan, Compliance Order on Consent Number: 24-02-01-01, Thornton Shopping Center, East 88th Avenue and Washington Street, Thornton, CO 80229. May.

ERO Resources Corporation (ERO). 2025a. Source Area Remedial Action Work Plan (SA-RAWP), Thornton Shopping Center, East 88th Avenue and Washington Street, Thornton, Colorado. June 20.

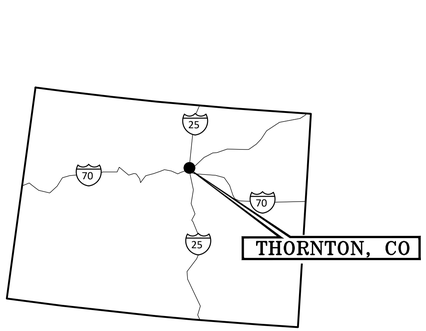
ERO Resources Corporation (ERO). 2025b. Source Area Remediation Waste Characterization Plan (SA-RWCP), Thornton Shopping Center, East 88th Avenue and Washington Street, Thornton, Colorado. September 22.

ERO Resources Corporation (ERO). 2025c. Supplemental Source Area Characterization Implementation Report (SSACP-IR), Thornton Shopping Center, East 88th Avenue and Washington Street, Thornton, CO 80229. February 14.

ERO Resources Corporation (ERO). 2026. Source Area Dewatering Plan, Thornton Shopping Center, East 88th Avenue and Washington Street, Thornton, Colorado. January 12.

Appendix A Excavation Design Drawings

CITY OF THORNTON
THORNTON SHOPPING CENTER REMEDIATION
THORNTON, COLORADO



VICINITY MAP
NTS

N

LOCATION MAP
NTS

SHEET INDEX

ERO Resources Corporation

TRC ENVIRONMENTAL CORP.
1526 COLE BLVD, SUITE 150, LAKEWOOD, CO. 80401
(303) 792-5555

TRC PROJECT NUMBER: 685281

COLORADO 811

COLORADO REGISTERED
MICHAEL V TODOSH RUSSELL
0061079
EXP 10/31/27
PROFESSIONAL ENGINEER
2/20/2026

FEBRUARY 2026

A. GENERAL NOTES

1. BLASTING IS NOT PERMITTED ON THIS PROJECT.
2. ALL CONSTRUCTION OPERATIONS SHALL BE ACCOMPLISHED IN ACCORDANCE WITH APPLICABLE REGULATIONS OF THE U.S. OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA).
3. TRENCH PROTECTION FOR ALL TRENCHES OVER 5 FEET IN DEPTH SHALL BE ACCOMPLISHED IN ACCORDANCE WITH ALL PROVISIONS OF PART 1926, SUBPART P - EXCAVATIONS, TRENCHING, AND SHORING AND INTERPRETATIONS (OSHA), OR ANY UPDATED AND SUBSEQUENT VERSION THEREOF.
4. THESE PLANS DO NOT EXTEND TO OR INCLUDE DESIGNS OR SYSTEMS PERTAINING TO THE SAFETY OF THE CONTRACTOR OR ITS EMPLOYEES, AGENTS OR REPRESENTATIVES DURING EXECUTION OF THE WORK. THE SEAL OF THE REGISTERED PROFESSIONAL ENGINEER(S) HEREON DOES NOT EXTEND TO ANY SUCH SAFETY SYSTEMS THAT MAY NOW OR HEREAFTER BE INCORPORATED IN THE WORK.
5. THE CONTRACTOR SHALL BE RESPONSIBLE TO CONFIRM ALL CONSTRUCTION, STORMWATER, UTILITY CROSSING, PERMITS HAVE BEEN OBTAINED PRIOR TO COMMENCEMENT OF WORK.
6. THE CONTRACTOR SHALL GIVE A MINIMUM OF 72 HOURS NOTICE TO ALL AUTHORIZED INSPECTORS, SUPERINTENDENTS, OR PERSONS IN CHARGE OF PRIVATE AND PUBLIC UTILITIES AFFECTED BY ITS OPERATIONS PRIOR TO COMMENCEMENT OF WORK.
7. THE CONTRACTOR SHALL TAKE ALL DUE PRECAUTIONS TO PROTECT EXISTING FACILITIES FROM DAMAGE. ANY DAMAGE TO EXISTING FACILITIES INCURRED AS A RESULT OF THESE CONSTRUCTION OPERATIONS ARE TO BE REPAIRED IMMEDIATELY BY THE CONTRACTOR TO AT LEAST THE PRE-EXISTING CONDITION. ADEQUACY OF REPAIR TO DAMAGED FACILITIES SHALL BE AT THE DISCRETION OF THE OWNER.
8. WHEN UNLOCATED OR INCORRECTLY LOCATED UNDERGROUND PIPING OR A BREAK IN A LINE OR OTHER UTILITIES AND SERVICES ARE ENCOUNTERED DURING SITE WORK OPERATIONS, THE CONTRACTOR SHALL NOTIFY THE APPLICABLE UTILITY COMPANY IMMEDIATELY TO OBTAIN PROCEDURE DIRECTIONS. THE CONTRACTOR SHALL COOPERATE WITH THE APPLICABLE UTILITY COMPANY IN MAINTAINING ACTIVE SERVICES IN OPERATION.
9. THE CONTRACTOR SHALL MAINTAIN ACCESS TO PUBLIC AND PRIVATE FACILITIES DURING CONSTRUCTION. CONSTRUCTION ACTIVITIES TO BE COORDINATED WITH THE OWNER.
10. THE CONTRACTOR SHALL COORDINATE INTERRUPTIONS OF ALL UTILITIES AND SERVICES WITH APPLICABLE UTILITY COMPANY OR COMPANIES AND OWNER. ALL WORK SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE APPLICABLE UTILITY COMPANY OR AGENCY INVOLVED.
11. THE CONTRACTOR SHALL LOCATE, PROTECT, AND MAINTAIN BENCHMARKS, MONUMENTS, AND CONTROL POINTS. RE-ESTABLISH DISTURBED OR DESTROYED ITEMS BY REGISTERED PUBLIC SURVEYOR IN THE STATE OF COLORADO.
12. EXISTING PAVING, BUILDING, AND OTHER ITEMS SHOWN ON PLANS NOT SPECIFICALLY RELATED TO THE WORK OF THE CONTRACTOR IS FOR INFORMATION ONLY.
13. DEMOLITION PERMITS (IF NEEDED) ARE TO BE OBTAINED BY THE CONTRACTOR.
14. EXISTING SURFACE AND SUBSURFACE STRUCTURES (GAS MAINS, WATER MAINS, STORM SEWERS, TELEPHONE CABLES, ETC.) ARE SHOWN ON THE PLANS IF THEIR LOCATION HAS BEEN DETERMINED, BUT IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO AVOID DAMAGING THESE EXISTING STRUCTURES WHETHER OR NOT THEY ARE SHOWN ON THE PLANS. THE OWNER AND ENGINEER ASSUME NO RESPONSIBILITY FOR FAILURE TO SHOW ANY OR ALL OF THESE STRUCTURES ON THE PLANS OR TO SHOW THEM IN THEIR EXACT LOCATION. IF ANY STRUCTURE IS DAMAGED BY THE CONTRACTOR, IT SHALL BE ITS RESPONSIBILITY TO REPAIR THE DAMAGE AND RESTORE THE STRUCTURE TO ITS ORIGINAL CONDITION.
15. THE ORIGINAL PLANS FOR THIS PROJECT WERE PREPARED ON FULL SIZE STANDARD SHEETS (24-INCHES X 36-INCHES). THE SPECIFIC SCALE FOR THE INDIVIDUAL UNITS WOULD BE TRUE ONLY ON THE ORIGINAL TRACING. REPRODUCED COPIES, REDUCTIONS OR OTHER METHODS OF PRINTING MAY CHANGE OR ALTER THE SCALE. THE ENGINEER IS NOT RESPONSIBLE FOR SCALE DIMENSIONS UTILIZED BY OTHERS ON THESE PLANS.
16. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY LOCATIONS, ELEVATIONS AND DIMENSIONS OF ADJACENT AND/OR CONFLICTING UTILITIES IN ADVANCE OF CONSTRUCTION IN ORDER THAT ADJUSTMENTS CAN BE MADE TO PROVIDE ADEQUATE CLEARANCES, IF REQUIRED. THE CONTRACTOR SHALL PRESERVE AND PROTECT PUBLIC UTILITIES AT ALL TIMES DURING CONSTRUCTION. ANY DAMAGE TO UTILITIES RESULTING FROM THE CONTRACTOR'S OPERATIONS SHALL BE RESTORED. THE ENGINEER SHALL BE NOTIFIED WHEN PROPOSED FACILITY GRADES CONFLICT WITH EXISTING UTILITY GRADES.
17. ALL CONCEPTS, IDEAS, DESIGNS, ARRANGEMENTS, AND PLANS INDICATED OR REPRESENTED BY THESE INSTRUMENTS, AS OUTLINED ON THE TITLE SHEET INDEX, AND BY ANY ADDENDUM ARE OWNED BY AND ARE THE PROPERTY OF TRC ENGINEERS, INC. AND WERE CREATED AND DEVELOPED FOR THE USE ON AND IN CONNECTION WITH THE SPECIFIED PROJECT. THESE CONCEPTS, IDEAS, DESIGNS ARRANGEMENTS OR PLANS SHALL NOT BE USED BY ANY PERSON, FIRM OR CORPORATION FOR ANY PURPOSE WHATSOEVER WITHOUT THE WRITTEN PERMISSION AND CONSENT OF TRC ENVIRONMENTAL CORP. OF DURANGO, COLORADO.
18. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING DIMENSIONS AND CONDITIONS AS THEY RELATE TO NEW CONSTRUCTION. CONTRACTOR SHALL REPORT ANY DISCREPANCIES TO THE OWNER AND ENGINEER.

B. STORMWATER NOTES

1. THROUGHOUT THE CONSTRUCTION, AND AT THE COMPLETION OF CONSTRUCTION, THE CONTRACTOR SHALL ASSURE THAT DRAINAGE OF STORMWATER RUNOFF IS NOT BLOCKED.
2. ALL SURFACE RUNOFF SHALL BE PROPERLY DIVERTED TO PREVENT WATER FROM ENTERING THE OPEN EXCAVATION AREA.

C. GENERAL SITE NOTES

1. THE CONTRACTOR SHALL CONTROL DUST CAUSED BY THE WORK AND COMPLY WITH POLLUTION CONTROL REGULATIONS OF GOVERNING AUTHORITIES.
2. EXCESS EXCAVATED MATERIAL SHALL BE STOCKPILED IN DESIGNATED AREA AS SHOWN ON PLANS OR AS DIRECTED BY THE OWNER. REINFORCED FILTER FABRIC FENCE TO BE INSTALLED AROUND STOCKPILE ON DOWNSTREAM SIDE AND BOTH SIDES ADJACENT TO THE DOWNSTREAM SIDE. STOCKPILES ARE NOT TO TRAP OR POND WATER. CONTRACTOR TO NOTIFY APPROPRIATE GOVERNING AUTHORITY AND THE OWNER'S REPRESENTATIVE OF LOCATION OF DISPOSAL BEFORE MATERIAL IS REMOVED.
3. CONTRACTOR SHALL STORE ANY SOIL THAT IS DEEMED POTENTIALLY CONTAMINATED ON TWO LAYERS OF A MINIMUM 20 MIL HDPE VISQUEEN PLASTIC AND COVER WITH A MINIMUM 6 MIL VISQUEEN PLASTIC OR STABILIZED WITH AMENDED WATER IN ACCORDANCE WITH SWMP UNTIL THE SOIL ANALYTICAL RESULTS ARE RECEIVED BY THE CONTRACTOR AND REVIEWED BY THE ENGINEER. THE PLASTIC COVER SHALL BE ANCHORED SUCH THAT THE SOIL WILL NOT BE EXPOSED TO THE WEATHER AND THE PILE SHALL BE BERMED TO DIVERT SURFACE WATER AWAY FROM PILE.
4. THE CONTRACTOR SHALL PROVIDE POSITIVE PROTECTION (MAT/SHEET COVERINGS) FOR ALL EXCAVATION SLOPES TO PROTECT SLOPES FROM INSTABILITY AND DETERIORATION DUE TO RAIN, WIND OR SNOW.
5. CONTRACTOR SHALL OBTAIN ALL REQUIRED WORK PERMITS SUCH AS, BUT NOT LIMITED TO STATE AND CITY.

D. GENERAL ENVIRONMENTAL NOTES

1. CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE LOCAL, STATE, AND FEDERAL REQUIREMENTS REGARDING EXCESS AND WASTE MATERIAL, INCLUDING METHODS OF HANDLING AND DISPOSAL.
2. CONTRACTOR SHALL LOCATE MATERIAL STORAGE AREAS AWAY FROM STORMWATER CONVEYANCE SYSTEMS. PROVIDE PROTECTED STORAGE AREAS FOR CHEMICALS, PAINTS, SOLVENTS, FERTILIZERS, AND OTHER POTENTIALLY TOXIC MATERIALS.

E. SITE SPECIFIC NOTES

1. THE CONTRACTOR WILL PROVIDE ALL CONSTRUCTION STAKING SERVICES FOR THE PROJECT.
2. THE CONTRACTOR SHALL KEEP ACCURATE RECORDS OF ALL CONSTRUCTION. THE CONTRACTOR SHALL FURNISH "AS-BUILT" DRAWINGS FOLLOWING COMPLETION OF ALL CONSTRUCTION. THESE "AS-BUILT" DRAWINGS SHALL BE SUBMITTED TO THE OWNER FOR REVIEW AND APPROVAL PRIOR TO FINAL ACCEPTANCE OF THE WORK.
3. ALL WORK SHALL BE CONDUCTED SUCH THAT IT DOES NOT INTERFERE WITH THE ON-GOING OPERATIONS OF THE SITE OR SCHEDULED A MINIMUM OF TWO-WEEKS IN ADVANCE WITH APPROVAL OF THE OWNER.
4. ALL CONTRACTOR'S STAFF PERFORMING WORK ON THE SITE SHALL COMPLETE ALL SITE SPECIFIC SAFETY AS REQUIRED BY THE OWNER.
5. LEVEL D SAFETY PROTECTION IS REQUIRED AT ALL TIME WHILE WORKING ON-SITE INCLUDING A HARD HAT; A HIGH VISIBILITY, TEAR-OFF REFLECTIVE VEST; ANKLE HIGH, LACE-UP LEATHER SAFETY BOOTS WITH STEEL SHANK AND STEEL TOES; AND SAFETY GLASSES WITH PERMANENT SIDE-SHIELDS.
6. ALL ELEVATIONS SHOWN ON PLAN AND PROFILE DRAWINGS ARE APPROXIMATE. CONTRACTOR TO FIELD VERIFY.
7. CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING ALL UTILITY PROVIDERS WITH LINES IN THE CONSTRUCTION AREA AND "CALL BEFORE YOU DIG" LINE FOR LOCATION OF ALL EXISTING LINES.
8. CONTRACTOR AGREES TO ASSUME ROLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE CONSTRUCTION OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY. THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS.
9. CONTRACTOR TO CONTACT THE ENGINEER-OF-RECORD (EOR) FOR ANY FIELD CHANGES. ANY REVISIONS OR CHANGES TO THE APPROVED CONSTRUCTION PLANS WILL REQUIRE ADDITIONAL APPROVAL BY THE ENGINEER AND OWNER IN WRITING.
10. OSHA REGULATIONS PROHIBIT OPERATIONS THAT WILL BRING PERSONS OR EQUIPMENT WITHIN 10 FEET OF AN ENERGIZED LINE. WHERE WORKMEN AND/OR EQUIPMENT HAVE TO WORK CLOSE TO AN ENERGIZED ELECTRICAL LINE, THE CONTRACTOR SHALL NOTIFY THE ELECTRICAL POWER COMPANY INVOLVED AND MAKE WHATEVER ADJUSTMENTS NECESSARY TO ENSURE THE SAFETY OF THOSE WORKMEN AND EQUIPMENT.
11. CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR SAFETY CONSULTANT, IF ANY, SHALL REVIEW THESE PLANS AND THE ANTICIPATED INSTALLATION SITE(S) WITHIN THE PROJECT WORK AREA IN ORDER TO IMPLEMENT CONTRACTOR'S TRENCH EXCAVATION SAFETY PROTECTION SYSTEMS, PROGRAMS AND/OR PROCEDURES. THE CONTRACTOR'S IMPLEMENTATION OF THE SYSTEMS, PROGRAMS AND/OR PROCEDURES SHALL PROVIDE FOR ADEQUATE TRENCH EXCAVATION SAFETY PROTECTION THAT COMPLIES WITH A MINIMUM, OSHA STANDARDS FOR TRENCH EXCAVATIONS. SPECIFICALLY, CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE, COMPETENT PERSON OR SAFETY CONSULTANT SHALL IMPLEMENT A TRENCH EXCAVATION SAFETY PROGRAM IN ACCORDANCE WITH OSHA STANDARDS GOVERNING THE PRESENCE AND ACTIVITIES OF INDIVIDUALS WORKING IN AND AROUND TRENCH EXCAVATION.

F. GEOTECHNICAL CONSIDERATIONS

1. SUBSURFACE INFORMATION WAS OBTAINED FROM THE LIMITED NUMBER OF BORINGS FROM THE SUPPLEMENTAL SOURCE AREA CHARACTERIZATION PLAN IMPLEMENTATION REPORT FOR THE THORNTON SHOPPING CENTER (EAST 88TH AVENUE AND WASHINGTON STREET) AND THE REQUEST FOR PROPOSALS: SOURCE AREA REMEDIATION EXCAVATION, 8800 WASHINGTON STREET, THORNTON, COLORADO, BOTH PREPARED BY ERO RESOURCES CORPORATION.
2. AVAILABLE SUBSURFACE INFORMATION REVEALED SOILS TO APPROXIMATELY 5 FEET BELOW GROUND SURFACE (BGS), WITH WEATHERED ROCK ENCOUNTERED BELOW THIS DEPTH WITHIN THE EXCAVATION LIMITS. SOIL PARAMETERS USED FOR ANALYSIS ARE SUMMARIZED IN TABLE 1.
3. TEMPORARY CUT SLOPES MAY BE EXCAVATED AT A MAXIMUM SLOPE OF 2H:1V IN THE UPPER SOILS AND 0.75H:1V IN WEATHERED ROCK/IGM. DEPTH TO BEDROCK COULD VARY DUE TO LIMITED NUMBER OF BORINGS, HOWEVER, THE RECOMMENDED CUT SLOPES ARE APPLICABLE BASED ON THE ENCOUNTERED FORMATIONS.
4. IF ALTERNATE SLOPE CONFIGURATIONS ARE UTILIZED OR EXCAVATION DEPTHS DIFFER FROM THOSE SHOWN, THE CONTRACTOR SHALL DEMONSTRATE A MINIMUM FACTOR OF SAFETY OF 1.3 FOR GLOBAL STABILITY.

TABLE 1: SOIL PARAMETERS USED IN ANALYSIS

SOIL STRATA	UNIT WEIGHT (PCF)	ANGLE OF INTERNAL FRICTION (DEGREES)	COHESION (PSF)
UPPER SOIL (0-5 FT BGS)	120	30	10
DEEPER SOIL (IGM) - SILTSTONE/CLAYSTONE (BELOW 5 FT BGS)	135	0	4,500

G. EXCAVATION SUPPORT GENERAL NOTES

1. BASED ON THE AVAILABLE INFORMATION AT THE TIME OF ANALYSIS IT IS RECOMMENDED THAT CONTRACTOR STARTED EXCAVATIONS FROM INSIDE EACH AREA AWAY FROM THE EXCAVATION LINE WHILE EXAMINING THE ENCOUNTERED FORMATIONS AND THICKNESS OF THE UPPER SOIL LAYER.
2. IF THE SUBSURFACE CONDITIONS ENCOUNTERED DURING EXCAVATION DIFFER FROM THOSE DESCRIBED ABOVE (E.G., DIFFERENT FORMATIONS OR THICKNESS OF THE SOIL VARIED BY MORE THAN 3 FT), CONTRACTOR SHALL NOTIFY THE ENGINEER ON RECORD TO EVALUATE THE CONDITIONS AND CONFIRM THE STABILITY OF THE PROPOSED EXCAVATION SLOPES.
3. SLOPE ACCOUNTS FOR SOIL TYPE USED FOR BACKFILL FOLLOWING SEWER LINE REMOVAL
4. EXCAVATION SHALL BE COMPLETED TO DEPTHS SHOWN ON THE EXCAVATION PLAN.
5. EXCAVATIONS SHALL INCLUDE THE REMOVAL OF ALL SOIL, BOULDERS, AND ANY MAN-MADE OBSTRUCTION WITHIN THE DEPTH AND LIMIT OF THE EXCAVATION.
6. CONTRACTOR IS TO PREPARE A SITE LOGISTICS PLAN PRIOR TO START OF THE WORK. THE SITE LOGISTICS PLAN SHALL CONTAIN , AMONG OTHER ITEMS SEQUENCING OF CONSTRUCTION ACTIVITIES, CONSTRUCTION SCHEDULE WITH CRITICAL PATH, FENCING OF THE EXCAVATION LIMITS, SITE SIGNAGE, SITE SAFETY AND SITE ACCESS MANAGEMENT PLAN.
7. NO SURCHARGE LOADS SHALL BE ALLOWED WITHIN 6 FEET FROM THE EXCAVATION CREST/LIMIT. EXCAVATED MATERIAL SHALL NOT BE STOCKPILED WITHIN 10 FEET FROM THE EXCAVATION LIMITS.
8. THE CONTRACTOR SHALL PROTECT EXCAVATION BOTTOMS FROM PROLONGED EXPOSURE AND SHOULD BE BACKFILLED OR OTHERWISE STABILIZED PROMPTLY FOLLOWING COMPLETION OF REMEDIAL ACTIVITIES.
9. THE CONTRACTOR SHALL DIVERT ALL SURFACE WATER AWAY FROM THE EXCAVATION.
10. THE CONTRACTOR SHALL MAINTAIN GROUNDWATER LEVEL BELOW THE BOTTOM OF EXCAVATION.
11. THE CONTRACTOR MUST SEND PICTURES TO ENGINEER ON RECORD WEEKLY FOR EVALUATIONS DURING EXCAVATION.
12. THE DESIGN ENGINEER RESPONSIBLE FOR THE SUPPORT OF EXCAVATION DESIGN IS NOT RESPONSIBLE FOR ANY WORK COMPLETED WITHOUT INSPECTION OR DEVIATIONS FROM THE DESIGN NOT PREVIOUSLY AUTHORIZED IN WRITING
13. CONTRACTORS SOLE RESPONSIBILITY FOR DEVELOPMENT PLAN NEEDED TO GET CONSTRUCTION EQUIPMENT INTO AND OUT OF THE EXCAVATION LIMITS .
14. THE CONTRACTOR SHALL PROVIDE ALL EGRESS TO MEET OSHA REQUIREMENT

H. MONITORING/SURVEY NOTES

1. THE CONTRACTOR SHALL HAVE A COLORADO STATE LICENSED SURVEYOR ESTABLISH HORIZONTAL AND VERTICAL CONTROLS POINTS PRIOR TO EXCAVATION START. CONTRACTOR SHALL CONDUCT AN INITIAL TOPOGRAPHIC SURVEY OF THE SITE BEFORE EXCAVATION BEGINS. THIS SURVEY SHALL DOCUMENT EXISTING GROUND ELEVATIONS AND SITE FEATURES FOR COMPARISON DURING AND AFTER EXCAVATION.
2. THE CONTRACTOR SHALL OUTLINE THE SCOPE OF EXCAVATION WORK, INCLUDING THE INTENDED DEPTHS AND THE PURPOSE FOR WHICH EXCAVATION IS BEING PERFORMED.
3. THE CONTRACTOR SHALL INSPECT THE ICE MACHINE BUILDING, ADJACENT STRUCTURES, AND GROUND SURFACE ADJACENT TO THE EXCAVATION DAILY DURING CONSTRUCTION. IF MOVEMENT IS OBSERVED, EXCAVATION SHALL CEASE IMMEDIATELY, AND THE CONTRACTOR SHALL REVISE THE EXCAVATION APPROACH TO MITIGATE FURTHER MOVEMENT AND MAINTAIN SAFE EXCAVATION CONDITIONS.
4. THE CONTRACTOR SHALL DEVELOP A MONITORING PLAN WHICH SHALL INCLUDE:
   - 4.1. MONITORING FREQUENCY: DEFINE HOW OFTEN THE SURVEYOR WILL CHECK DEPTHS DURING EXCAVATION (E.G., DAILY, WEEKLY, OR AFTER SIGNIFICANT PROGRESS).
   - 4.2. MEASUREMENT METHODS: SPECIFY THE METHODS FOR MEASURING EXCAVATION DEPTHS, SUCH AS LASER SCANNING, TOTAL STATION, OR GPS EQUIPMENT FOR ACCURATE THREE-DIMENSIONAL POSITIONING.
5. THE CONTRACTOR SHALL HAVE THE LICENSED SURVEYOR WILL PERFORM REGULAR SURVEYS TO MONITOR THE DEPTH OF EXCAVATION AGAINST PROJECT SPECIFICATIONS TO ENSURE COMPLIANCE.
6. AS EXCAVATION PROGRESSES, THE SURVEYOR AND THE ENGINEER ON RECORD WILL COMPARE CURRENT DEPTHS WITH THE PLANNED DEPTHS OUTLINED IN THE ENGINEERING DRAWING.
7. DOCUMENTATION AND REPORTING:
   - 7.1. THE SURVEYOR SHOULD MAINTAIN DETAILED RECORDS OF ALL SURVEY DATA COLLECTED, INCLUDING:
     - 7.1.1. MEASURED DEPTHS COMPARED TO SPECIFIED CONSTRUCTION DEPTHS.
     - 7.1.2. DATES AND TIMES OF EACH MONITORING EFFORT.
     - 7.1.3. ANY DISCREPANCIES NOTED, ALONG WITH RECOMMENDATIONS FOR REMEDIATION.
     - 7.1.4. PREPARE PERIODIC REPORTS SUMMARIZING FINDINGS AND PROVIDING VISUAL REPRESENTATIONS OF DEPTH MEASUREMENTS, SUCH AS CROSS-SECTIONS OR PROFILES.
8. DEVIATION MANAGEMENT:
   - 8.1. ESTABLISH PROTOCOLS FOR ADDRESSING ANY DEVIATIONS FROM PLANNED EXCAVATION DEPTHS. THIS MAY INCLUDE:
   - 8.2. IMMEDIATE NOTIFICATION TO PROJECT MANAGEMENT AND CONTRACTORS.
   - 8.3. RECOMMENDATIONS FOR CORRECTIVE ACTION TO BRING DEPTHS BACK IN LINE WITH SPECIFICATIONS.
9. FINAL REVIEW AND CERTIFICATION:
   - 9.1. UPON COMPLETION OF EXCAVATION WORK, THE LICENSED SURVEYOR SHOULD CONDUCT A FINAL REVIEW TO VERIFY THAT ALL DEPTHS MEET DESIGN REQUIREMENTS.
   - 9.2. PROVIDE A CERTIFICATION OF DEPTH COMPLIANCE, DETAILING THE MONITORING PERFORMED AND CONFIRMING THAT THE SPECIFIED EXCAVATION DEPTHS HAVE BEEN ACHIEVED.
10. REGULATORY COMPLIANCE:
    - 10.1. ENSURE THAT ALL MONITORING ACTIVITIES COMPLY WITH COLORADO STATE REGULATIONS AND LOCAL ORDINANCES REGARDING EXCAVATION PRACTICES.
    - 10.2. SUBMIT NECESSARY REPORTS AND CERTIFICATIONS TO PERTINENT LOCAL AUTHORITIES IF REQUIRED.
11. THE CONTRACTOR SHALL PERFORM DAILY EXCAVATION INSPECTION AND DOCUMENTATION.

EXCAVATION PHASE PLAN	
STEP 1:	8946 WASHINGTON (SECONDARY) EXCAVATION (20 FT BGS TO POTENTIALLY CONTAMINATED SOILS AREA)
STEP 2:	8946 WASHINGTON (SECONDARY) EXCAVATION (BACKFILL W/ COMPACTION TESTING EVERY 10" FROM 4 FT TO SURFACE)
STEP 3:	SANITARY SEWER REMOVAL
STEP 4:	SANITARY SEWER BACKFILL (COMPACTION TESTING EVERY 10" FROM 4 FEET TO SURFACE)
STEP 5:	SOUTH SOILS AREA EXCAVATION (TO 15 FT BGS - 10,500 CY)
STEP 6:	AREA 1 EXCAVATION (TO 10 FT BGS TO POTENTIALLY HAZARDOUS SOILS STOCK PILE - 3,600 CY)
STEP 7:	MAIN EXCAVATION OVERBURDEN (TO 10 FT BGS CLEAN OVERBURDEN - 7,300 CY)
STEP 8:	AREAS 1 AND 2 (NEAR SEWER LINE) EXCAVATION FROM 10-20 FT (SPOT EXCAVATION - SEGREGATED HAZARDOUS VS POTENTIALLY CONTAMINATED - 550 CY)
STEP 9:	MAIN EXCAVATION (TO 20 FT BGS TO POTENTIALLY CONTAMINATED STOCKPILE AREA - 3,000 CY)
STEP 10:	MAIN EXCAVATION (20 TO 22 FT BGS TO POTENTIALLY HAZARDOUS STOCKPILE AREA - 1,500 CY)
STEP 11:	SOUTH SOILS EXCAVATION (0 TO 15 FT BGS CLEAN OVERBURDEN; 15 TO 20 FT TO POTENTIALLY CONTAMINATED SOILS. - 2,600 CY)
STEP 12	SOUTH SOILS EXCAVATION (20 TO 22 FT BGS TO POTENTIALLY HAZARDOUS STOCKPILE AREA - 1,000 CY)
STEP 13:	INSTALLATION OF TREATMENT GALLERY AND GRAVEL/SEDIMENT BARRIER (725 CY)
STEP 14:	BACKFILL WITH IMPORTED MATERIAL (FROM GRAVEL TO 13 FT BGS - 12,620 CY)
STEP 15:	BACKFILL WITH CLEAN OVERBURDEN FROM 13 FT BGS TO SURFACE WITH COMPACTION TESTING EVERY 10" FROM 4 FT SURFACE (17,800 CY)

LEGEND

- WW — EX SANITARY SEWER
- EX CONCRETE
- UE — EX UNDERGROUND ELECTRIC
- X — EX CHAIN LINK FENCE
- MINOR CONTOUR
- MAJOR CONTOUR
- EX HYDRANT
- W — EX WATER
- TEL — EX TELECOM
- GAS — EX GAS
- OE — EX OVERHEAD ELECTRIC
- Ⓦ — EX MONITORING WELL
- PROP DEMOLITION
- EX SIGN
- MH — EX MANHOLE
- EX TREE
- WATER FLOW DIRECTION

SECTION MARK — A / M-2 — SECTION SCALE
DRAWING FROM WHICH THE SECTION IS TAKEN

COLORADO 811

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SHEET G2

FEBRUARY 2026

ERO Resources Corporation

CITY OF THORNTON
THORNTON SHOPPING CENTER REMEDIATION
LEGEND & GENERAL NOTES

COLORADO REGISTERED PROFESSIONAL ENGINEER — 0061079 — EXP 10/31/27 — 2/20/2026

TRC ENVIRONMENTAL CORP.
1526 COLE BLVD., SUITE 150, LAKEWOOD, CO 80401
(303) 972 - 5555

DESIGN BY:	IKWOFIE	NO.	REVISION	DATE
DRAWN BY:	EPENATE			
CHECKED BY:	JTUBBS			
SCALE:	N\A			
JOB NUMBER:	685281			

WASHINGTON ST

CORONA ST

ASH CT

EAST 88TH AVE

OAK PL

STORMWATER INLET

RESTRICTED POTENTIALLY CONTAMINATED SOIL (PCS) STOCKPILE AREA

CLEAN OVERBURDEN STOCKPILE AREA

UNRESTRICTED POTENTIALLY CONTAMINATED SOIL (PCS) STOCKPILE AREA

MW-08 (TO REMAIN)

SECONDARY EXCAVATION FIELD DELINEATION (SEE NOTE 1)

RELOCATE EXISTING FENCE

MW-4 (TO REMAIN)

EXISTING FIRE HYDRANT

MW-28

MW-10

MW-45 48-53 (TO REMAIN)

MW-45 55-60 (TO REMAIN)

MW-45 40-45 (TO REMAIN)

MW-03 (TO REMAIN)

AREA 1 BOTTOM OF EXCAVATION DELINEATION

MAIN EXCAVATION FIELD DELINEATION (SEE NOTE 1)

AREA 2 BOTTOM OF EXCAVATION DELINEATION

HAZARDOUS WASTE (HW) SOIL STOCKPILE AREA

MW-11

MW-46 48-53

MW-46 55-60

MW-46 40-45

EXISTING CHAIN LINK FENCE

CONCRETE PAD

SOUTH SOILS EXCAVATION FIELD DELINEATION (SEE NOTE 1)

MW-6

MW-47 40-45 (TO REMAIN)

MW-47 48-53 (TO REMAIN)

MW-47 55-60 (TO REMAIN)

MW-17

ICE MACHINE (TO REMAIN)

MONITORING WELLS (TO REMAIN)

CONCRETE PAD (TO REMAIN)

MW-2

MW-13

N

50 25 0 50 100

SCALE : 1" = 50'

NOTE:

1. THE FIELD MARKOUT/DELINEATION SHOWN ON THIS SHEET IS FOR INFORMATIONAL PURPOSES ONLY AND IS NOT TO BE USED FOR CONSTRUCTION. FINAL EXCAVATION LIMITS HAVE BEEN REVISED DURING DESIGN. REFER TO THE OVERALL EXCAVATION PLAN (SHEET C2), SOUTH SOILS EXCAVATION PLAN (SHEET C4), AND MAIN AREA EXCAVATION PLAN (SHEET C5) FOR PROPOSED EXCAVATION EXTENTS.

SHEET C1

FEBRUARY 2026

ERO Resources Corporation

CITY OF THORNTON
THORNTON SHOPPING CENTER REMEDIATION
EXISTING CONDITIONS

COLORADO REGISTERED PROFESSIONAL ENGINEER
0061079
EXP 10/31/27
2/20/2026

TRC ENVIRONMENTAL CORP.
1526 COLE BLVD., SUITE 150, LAKEWOOD, CO 80401
(303) 972 - 5555

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DRAWN BY:	EPENATE			
CHECKED BY:	JTUBBS			
SCALE:	1" = 50'			
JOB NUMBER:	685281			

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WASHINGTON ST

CORONA ST

EAST 88TH AVE

RESTRICTED POTENTIALLY CONTAMINATED SOIL (PCS) STOCKPILE

UNRESTRICTED POTENTIALLY CONTAMINTED SOIL (PCS) STOCKPILE

HAZARDOUS WASTE (HW) SOIL STOCKPILE

MW-08 (TO REMAIN)

BOTTOM OF SECONDARY EXCAVATION

SECONDARY EXCAVATION (SEE SHEET C6)

GRADE BREAK

SECONDARY EXCAVATION LIMITS

MW-4 (TO REMAIN)

EXISTING MONITORING WELL TO BE PROTECTED IN PLACE

EXISTING FENCE TO BE RELOCATED OUTSIDE OF EXCAVATION LIMITS

MW-28

MW-10

MW-45 48-53

MW-45 55-60

MW-45 40-45

MW-03 (TO REMAIN)

EXISTING POWER POLE TO BE PROTECTED IN PLACE

MAIN EXCAVATION LIMITS

AREA 1 EXCAVATION (SEE SHEET C3)

EXISTING SANITARY SEWER LINE TO BE REMOVED

BOTTOM OF MAIN EXCAVATION

EXISTING WATER LINE TO BE REMOVED

MAIN & SOUTH SOILS EXCAVATION (SEE SHEETS C4 & C6)

MW-11

MW-46 48-53

MW-46 55-60

MW-46 40-45

MAIN EXCAVATION GRADE BREAK

AREA 2 EXCAVATION (SEE SHEET C3)

BOTTOM OF SOUTH SOILS EXCAVATION

MW-6

EXCAVATION BOTTOM EL: 5281.01

MW-47 40-45 (TO REMAIN)

MW-47 48-53 (TO REMAIN)

MW-47 55-60 (TO REMAIN)

NO SURCHARGE LOAD WITHIN THIS LIMIT

SOUTH SOILS EXCAVATION LIMITS

MONITORING WELLS

MW-17

ICE MACHINE (TO REMAIN)

SOUTH SOILS GRADE BREAK

CONCRETE PAD (TO REMAIN)

MW-2

MW-13

EXISTING WATER LINE TO BE PROTECTED IN PLACE

EXISTING UNDERGROUND ELECTRIC TO BE PROTECTED IN PLACE

N

30 15 0 30 60

SCALE : 1" = 30'

SHEET C2

FEBRUARY 2026

ERO Resources Corporation

CITY OF THORNTON
THORNTON SHOPPING CENTER REMEDIATION
OVERALL EXCAVATION PLAN

COLORADO REGISTERED PROFESSIONAL ENGINEER
IKWOFIE VITOSHA ROUTE
0061079
EXP 10/31/27
2/20/2026

TRC ENVIRONMENTAL CORP.
1526 COLE BLVD., SUITE 150, LAKEWOOD, CO 80401
(303) 972 - 5555

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CHECKED BY:	JTUBBS			
SCALE:	1" = 30'			
JOB NUMBER:	685281			

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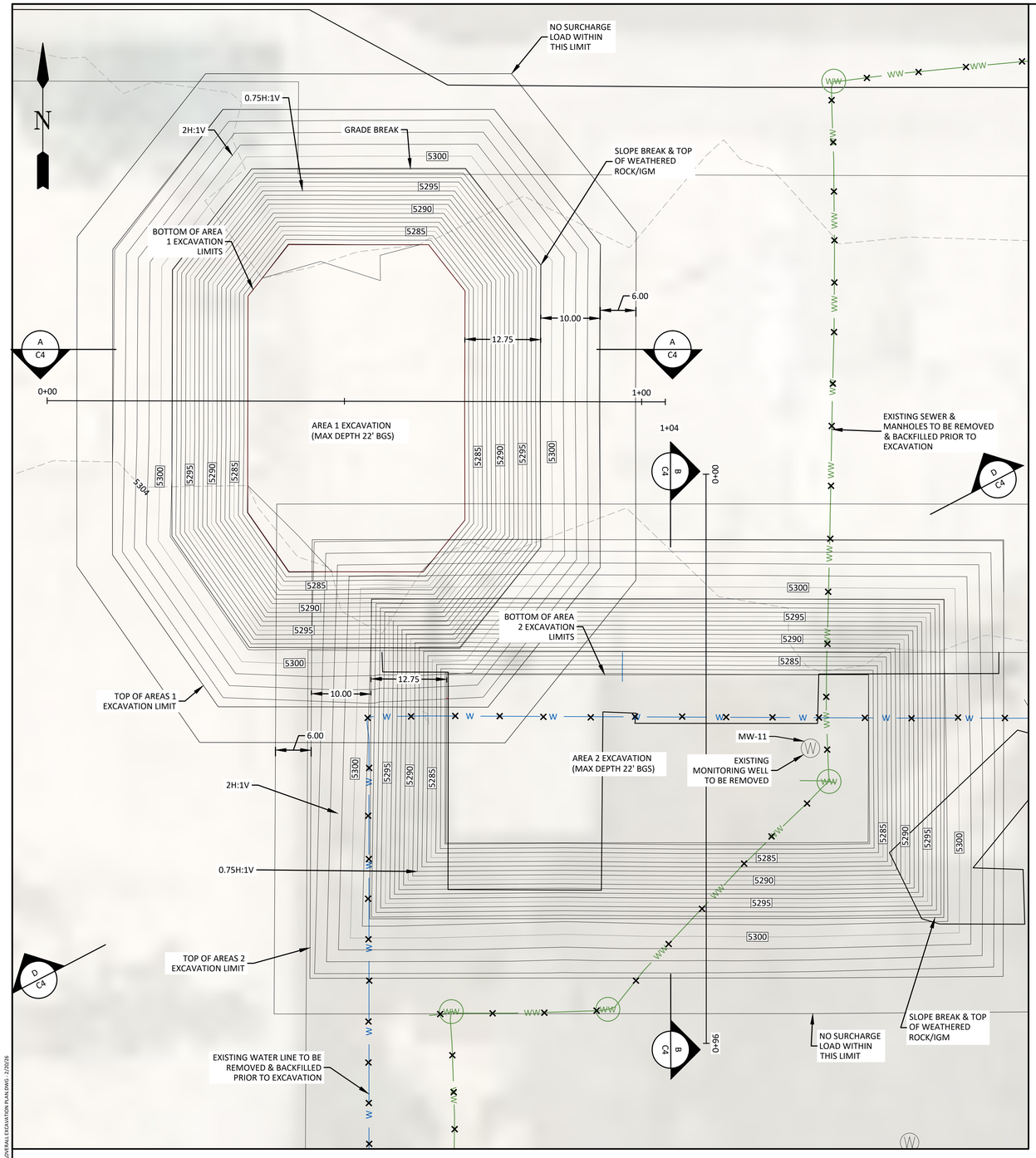
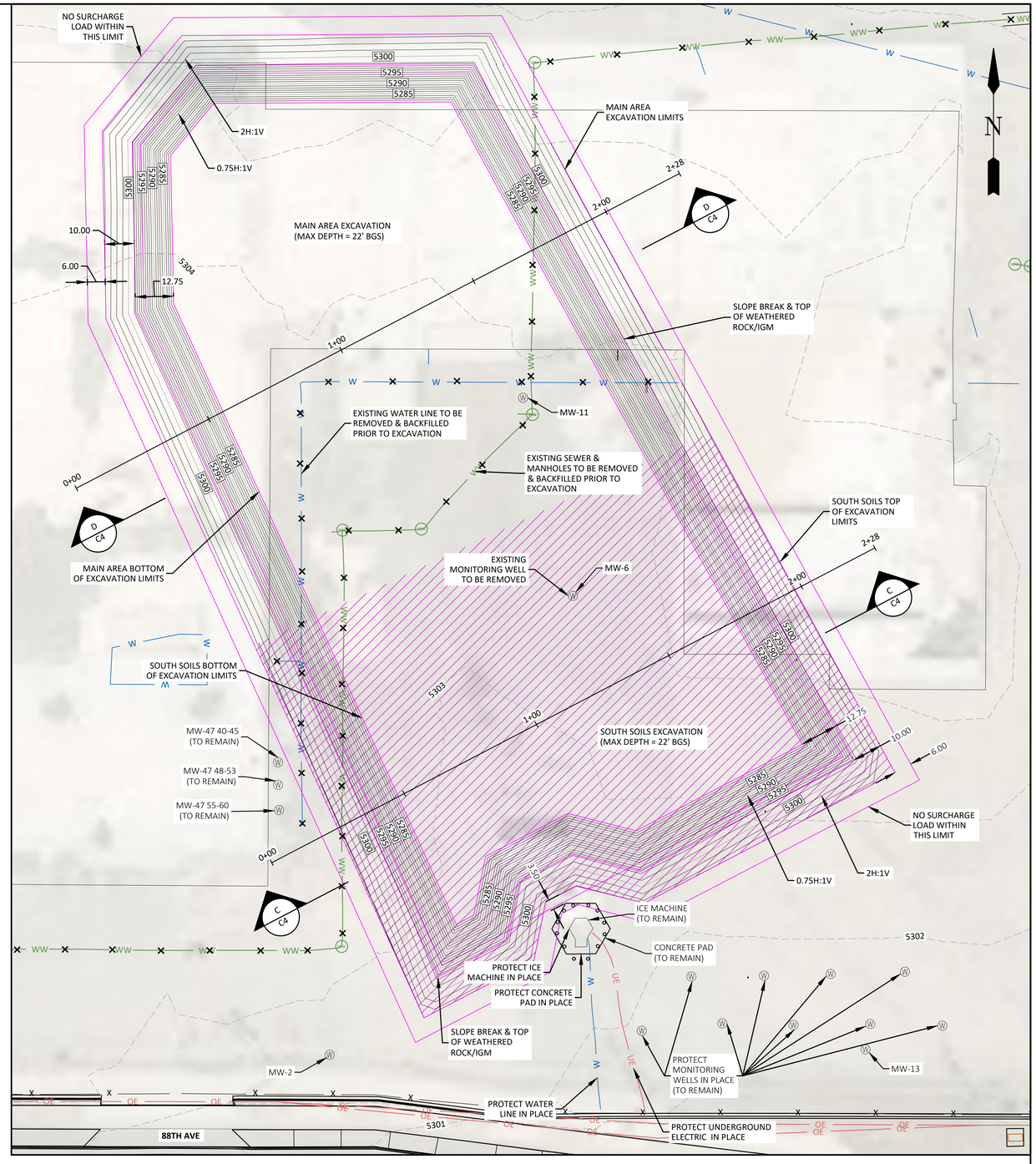


AREAS 1 & 2 PLAN VIEW

SCALE: 1" = 10'-0"

10 5 0 10 20

SCALE : 1" = 10'



MAIN AREA & SECONDARY SOILS PLAN VIEW

SCALE: 1" = 20'-0"

20 10 0 20 40

SCALE : 1" = 20'

NOTES:

1. EXCAVATION SLOPES TO BE CONSTRUCTED AT 2H:1V FROM EXISTING GRADE TO 5FT DEPTH.
2. EXCAVATION SLOPES TRANSITION TO 0.75H:1V FROM 5FT BGS TO 20FT BGS
3. SLOPES TO BE EVALUATED AND ADJUSTED IN THE FIELD IF UNSTABLE SOILS ARE ENCOUNTERED.
4. CONTRACTOR TO MAINTAIN OSHA-COMPLIANT EXCAVATION SAFETY AT ALL TIMES.
5. NO SURCHARGE LOADS PERMITTED WITHIN 6FT OF TOP OF EXCAVATION
6. CONTRACTOR TO FIELD ADJUST THE EXCAVATION LIMITS AROUND ICE MACHINE CONCRETE PAD TO PROTECT THE ICE MACHINE IN PLACE. MINIMUM 3FT SETBACK FROM EDGE OF CONCRETE PAD.
7. AREA 1 TO BE EXCAVATED PRIOR TO AREA 2. CONTRACTOR TO FIELD ADJUST EXCAVATION LIMITS FOR AREA 2 DUE TO PROXIMITY OF AREA 1.
8. ACCESS/EGRESS RAMPS SHALL BE DESIGNED AND MAINTAINED BY THE CONTRACTOR'S COMPETENT PERSON.

SHEET C3

FEBRUARY 2026

ERO Resources Corporation

CITY OF THORNTON
THORNTON SHOPPING CENTER REMEDIATION
PRIMARY AREA EXCAVATION PLANS

COLORADO REGISTERED PROFESSIONAL ENGINEER
ISSABEL YTUGAY KNAPP
0061079
EXP 10/31/27
2/20/2026

TRC ENVIRONMENTAL CORP.
1526 COLE BLVD., SUITE 150, LAKEWOOD, CO 80401
(303) 972 - 5555

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CHECKED BY:	JTUBBS			
SCALE:	1" = 10'			
JOB NUMBER:	685281			

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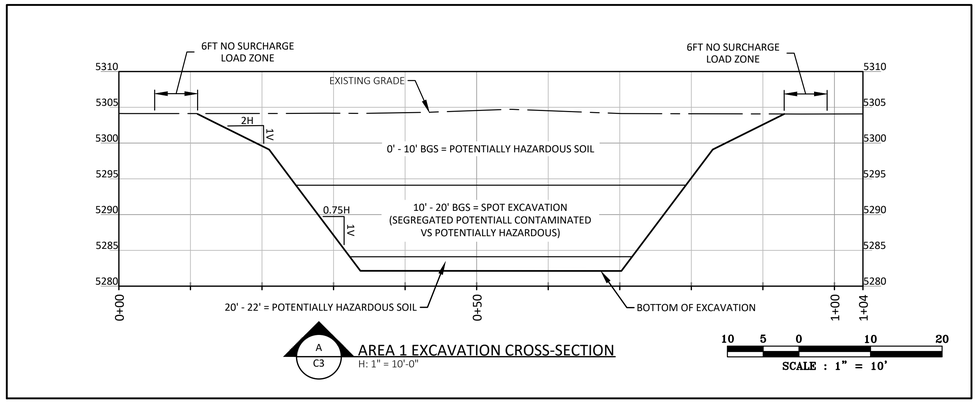
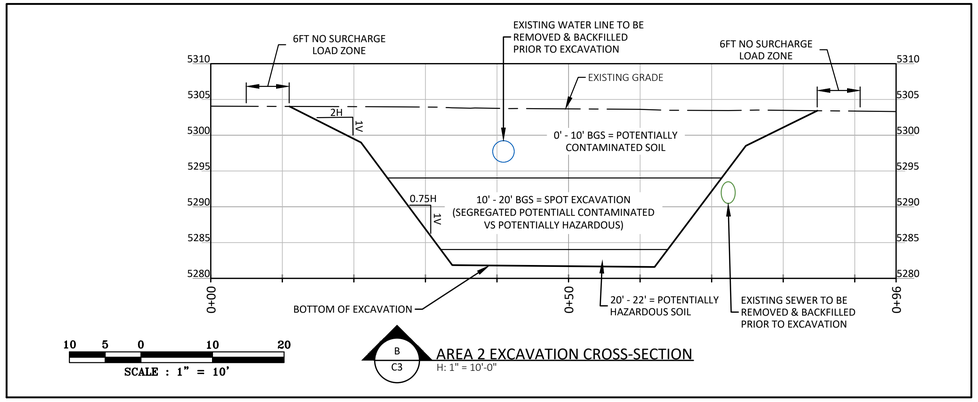
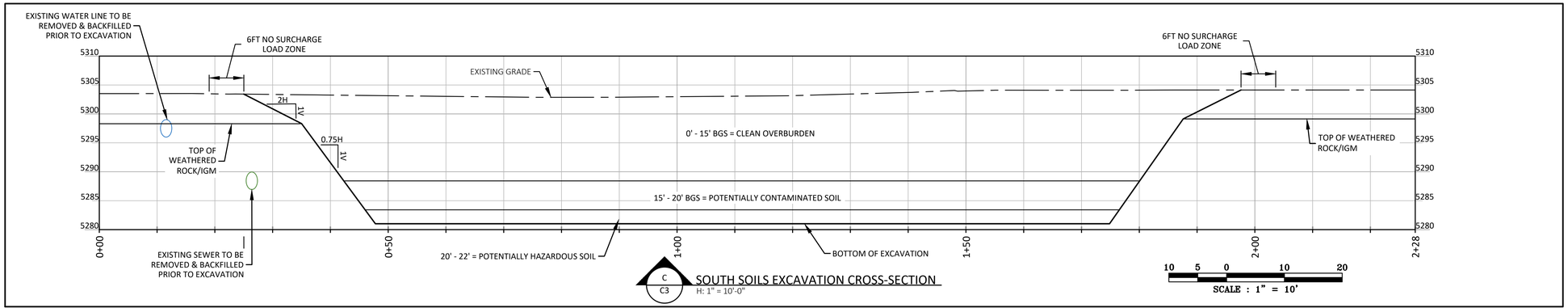


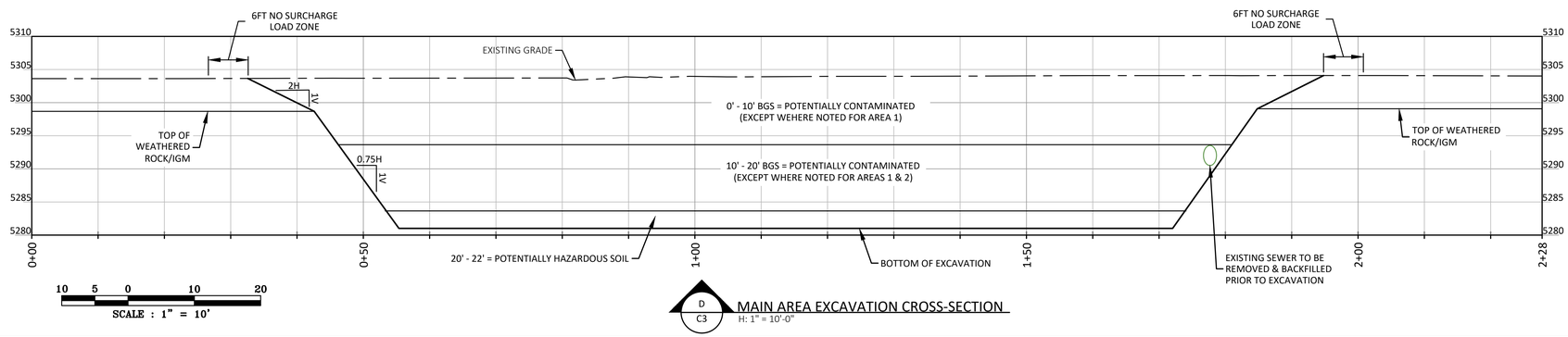
A C3 AREA 1 EXCAVATION CROSS-SECTION
H: 1" = 10'-0"



B C3 AREA 2 EXCAVATION CROSS-SECTION
H: 1" = 10'-0"



C C3 SOUTH SOILS EXCAVATION CROSS-SECTION
H: 1" = 10'-0"



D C3 MAIN AREA EXCAVATION CROSS-SECTION
H: 1" = 10'-0"

NOTES:
1. EXCAVATION SLOPES TO BE CONSTRUCTED AT 2H:1V FROM EXISTING GRADE TO 5FT DEPTH.
2. EXCAVATION SLOPES TRANSITION TO 0.75H:1V FROM 5FT BGS TO 20FT BGS
3. SLOPES TO BE EVALUATED AND ADJUSTED IN THE FIELD IF UNSTABLE SOILS ARE ENCOUNTERED.
4. CONTRACTOR TO MAINTAIN OSHA-COMPLIANT EXCAVATION SAFETY AT ALL TIMES.
5. NO SURCHARGE LOADS PERMITTED WITHIN 6FT OF TOP OF EXCAVATION
7. CONTRACTOR TO FIELD VERIFY SEWER LINE AND WATER LINE LOCATIONS AND DEPTHS. ELEVATIONS SHOWN ON PROFILE VIEW ARE APPROXIMATE.
8. ACCESS/EGRESS RAMPS SHALL BE DESIGNED AND MAINTAINED BY THE CONTRACTOR'S COMPETENT PERSON.

SHEET C4

FEBRUARY 2026

ERO Resources Corporation

CITY OF THORNTON
THORNTON SHOPPING CENTER REMEDIATION
PRIMARY AREA EXCAVATION PROFILES

COLORADO REGISTERED PROFESSIONAL ENGINEER — MICHAEL VIDDAL MOORE — 0061079 — EXP 10/31/27 — 2/20/2026

TRC ENVIRONMENTAL CORP.
1526 COLE BLVD., SUITE 150, LAKEWOOD, CO 80401
(303) 972 - 5555

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CHECKED BY:	JTUBBS			
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JOB NUMBER:	685281			

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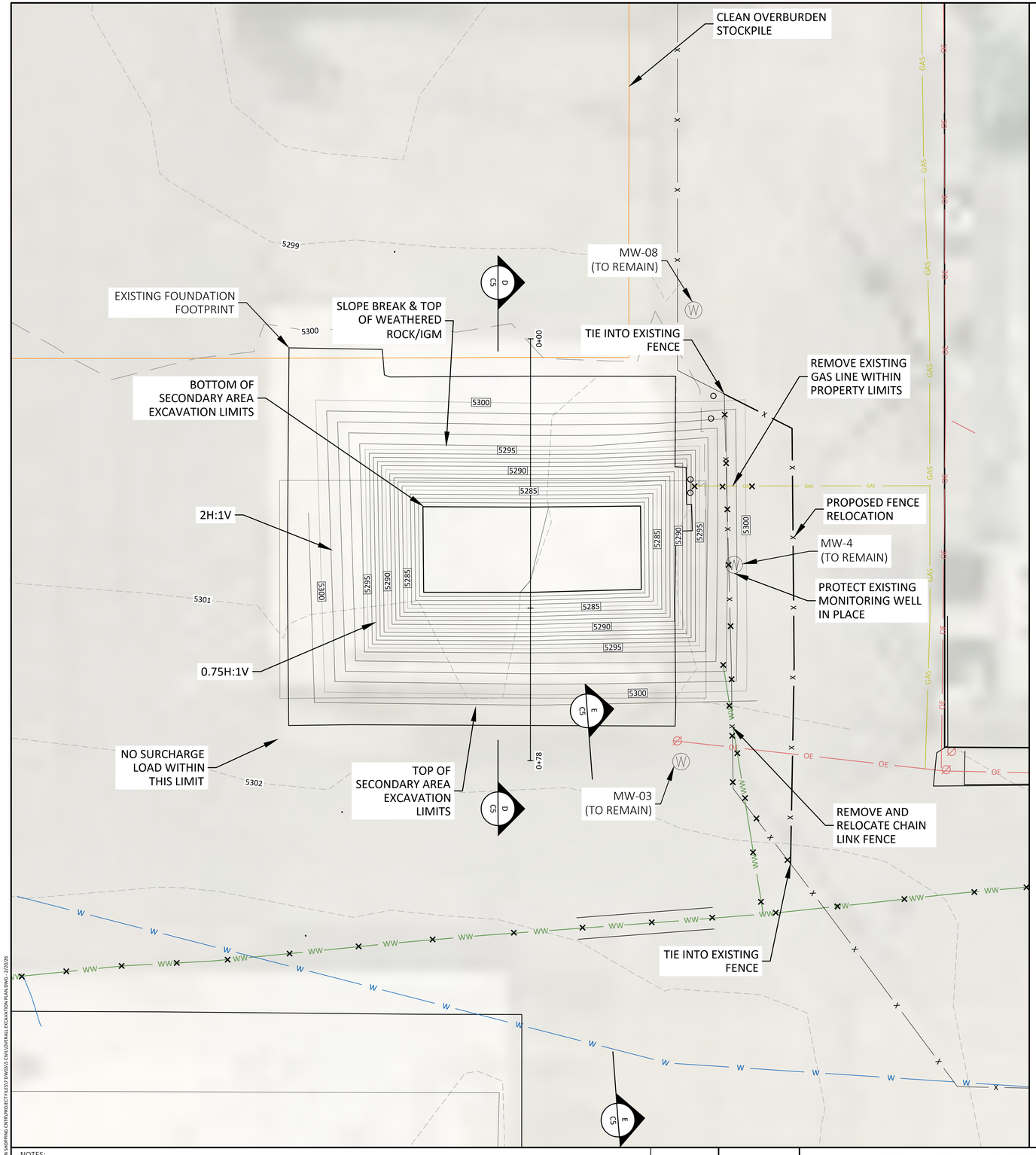
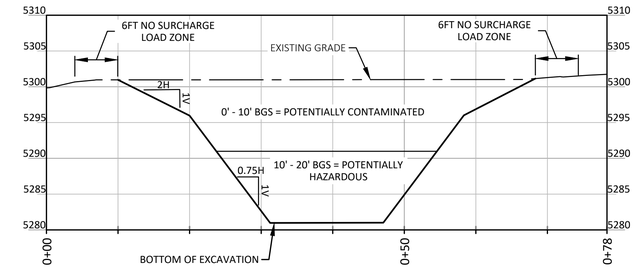
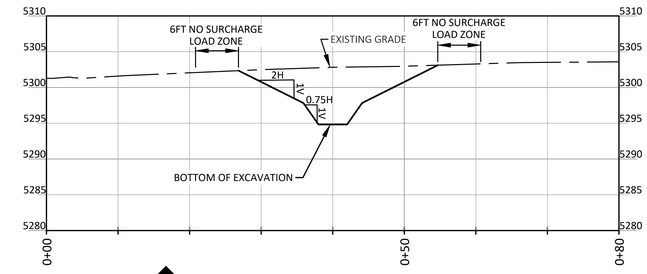




D C5 EXCAVATION CROSS-SECTION
H: 1" = 10'-0"



E C5 TYPICAL WW EXCAVATION CROSS-SECTION
H: 1" = 10'-0"

N

10 5 0 10 20
SCALE : 1" = 10'

NOTES:
1. EXCAVATION SLOPES TO BE CONSTRUCTED AT 2H:1V FROM EXISTING GRADE TO 5FT DEPTH.
2. EXCAVATION SLOPES TRANSITION TO 0.75H:1V FROM 5FT BGS TO 20FT BGS
3. SLOPES TO BE EVALUATED AND ADJUSTED IN THE FIELD IF UNSTABLE SOILS ARE ENCOUNTERED.
4. CONTRACTOR TO MAINTAIN OSHA-COMPLIANT EXCAVATION SAFETY AT ALL TIMES.
5. NO SURCHARGE LOADS PERMITTED WITHIN 6FT OF TOP OF EXCAVATION
6. CONTRACTOR TO RELOCATE EXISTING CHAIN LINK FENCE OUTSIDE OF "NO SURCHARGE LOAD" LIMITS.
7. CONTRACTOR TO FIELD VERIFY GAS LINE LOCATION & DEPTH PRIOR TO EXCAVATION.
8. ACCESS/EGRESS RAMPS SHALL BE DESIGNED AND MAINTAINED BY THE CONTRACTOR'S COMPETENT PERSON.

SHEET C5

FEBRUARY 2026

ERO Resources Corporation

CITY OF THORNTON
THORNTON SHOPPING CENTER REMEDIATION
SECONDDARY EXCAVATION PLAN & PROFILE

COLORADO REGISTERED DARNELL VIDDAH HOUSE 0061079 EXP 10/31/27 PROFESSIONAL ENGINEER 2/20/2026

TRC ENVIRONMENTAL CORP.
1526 COLE BLVD., SUITE 150, LAKEWOOD, CO 80401
(303) 972 - 5555

DESIGN BY:	IKWOFIE	NO.	REVISION	DATE
DRAWN BY:	EPENATE			
CHECKED BY:	JTUBBS			
SCALE:	1" = 5'			
JOB NUMBER:	685281			

C:\ACCADOCS\TRC\685281 - THORTON SHOPPING CNTR\PROJECT FILES\7 DWGS\5 CIVIL\CIVIL\FINAL EXCAVATION PLAN.DWG - 2/20/26