DRIVEWAY GENERAL NOTES:

1. EARTHWORK OPERATIONS SHALL BE IN ACCORDANCE WITH GEOTECHNICAL REPORT

2. PAVING SHALL NOT START UNTIL SUBGRADE COMPACTING TESTS ARE TAKEN AND MEET THE REQUIREMENTS OF THE PLANS AND SPECS AND FINAL PAVEMENT DESIGN BY GEOTECHINICAL ENGINEER AND/OR SUMMIT COUNTY STANDARDS, WHICHEVER ARE MORE STRINGENT.
THE PAVEMENT SECTION SHALL BE IN ACCORDANCE WITH THE GEOTECHNICAL REPORT FOR THS PROJECT. THE MINIMUM DEPTH OF ASPHALT SHALL BE 4 INCHES

3. THE CONTRACTOR SHALL SAW-CUT ALL EXISTING PAVEMENT WHERE MATCH LINES WITH EXISTING EDGE OF PAVEMENT OCCUR.

4. PORTLAND CEMENT CONCRETE SHALL MEET THE FOLLOWING REQUIREMENTS:
   A. COMPRESSIVE STRENGTH OF 4000 PSI AFTER 28 DAYS OF CURE TIME;
   B. AIR CONTENT OF 6.5% ± 1.5%;
   C. MAXIMUM SLUMP OF 3";
   D. "FIBER MESH" FIBERS SHALL BE ADDED TO CONCRETE FOR STRENGTH, AT A RATE OF 1.5 POUNDS OF FIBER PER CUBIC YARD OF CONCRETE.

5. ROADWAY RETAINING WALL VERTICAL AND HORIZONTAL INFORMATION HAVE BEEN ESTABLISHED AS PART OF THESE ROADWAY PLANS. STRUCTURAL, GEOTECHNICAL, AND DRAINAGE ENGINEERING FOR THE WALLS IS BY OTHERS (SEE SEPARATE DESIGN DOCUMENTS).

6. COMPACTION TESTING FOR THE BASE COURSE IN THE ROADWAY SHALL MEET 95% OF MODIFIED PROCTOR (ASTM D-1557) THE MATERIAL BEING WITHIN 2.0 PERCENT OF OPTIMUM MOISTURE. EACH LIFT OF ASPHALT SHALL MEET THE MINIMUM DENSITY OF 92-96 PERCENT MAXIMUM THEORETICAL DENSITY AS DETERMINED BY THE RICE DENSITY METHOD (ASTM D-2041). TESTS SHALL BE MADE AT A FREQUENCY OF EVERY 200 LINEAR FEET AND AT EVERY 12" COMPACTED LIFT OF FILL PLACED, AND FOR EVERY LIFT OF ASPHALT PLACED OR ROLLED. ASPHALT DENSITY TESTING SHALL BE PERFORMED ON EACH LIFT AT INTERVALS OF ONE TEST PER EVERY 250 LINEAR FEET PER LANE. TEST LOCATIONS ON EACH LIFT AND EACH LANE SHALL BE STAGGERED.

7. DURING EARTHWORK OPERATION GEOTECHNICAL ENGINEER SHALL ASSESS ACTUAL SUB-SURFACE CONDITIONS AND REQUEST ADDITIONAL REQUIREMENTS IF NECESSARY. SUBJECT TO SUMMIT COUNTY CONSULTANT REVIEW AND CONCURRENCE.

STORM SEWER GENERAL NOTES

1. LOCATION AND ELEVATION OF EXISTING STORM SEWER AND CULVERTS SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO START OF CONSTRUCTION. ANY DIFFERENCES FROM DESIGN PLAN SHALL BE REPORTED TO DESIGN ENGINEER.

2. STORM SEWER SHALL BE HDPE (HIGH DENSITY POLYETHYLENE).

3. ALL CULVERTS SHALL HAVE END SECTIONS ON BOTH THE UPSTREAM AND DOWNSTREAM ENDS OF THE PIPE UNLESS OTHERWISE NOTED ON THE PLANS AND SHALL EXTEND 1 TO 3 FEET BEYOND EACH EDGE OF SHOULDERED PAVED DRIVE. OUTLET PROTECTION (RIP-RAP) SHALL BE INSTALLED AT THE OUTLET OF ALL CULVERTS.

4. STORM SEWER BEDDING AND PIPE ZONE BACKFILL SHALL BE 3/4 ROAD BASE OR APPROVED ALTERNATE.

5. PIPE LENGTHS FOR STORM SEWER ARE APPROXIMATE HORIZONTAL DISTANCES FROM END SECTION TO END SECTION. THEREFORE, DISTANCES SHOWN ON THE PLANS ARE APPROXIMATE ONLY AND COULD VARY. END SECTIONS ARE INCLUDED IN THE PIPE LENGTH SHOWN ON THE PLANS. FINAL LENGTH OF STORM SEWER SHALL BE SUFFICIENT TO PROVIDE THE ROAD SHOULDERS AND SIDE SLOPES TO NOT BE STEEPER THAN SHOWN ON THE TYPICAL ROAD SECTION.

6. REFER TO THE GEOTECHNICAL REPORT FOR PAVEMENT THICKNESS DESIGN RECOMMENDATIONS TRENCH STABILIZATION, BACKFILL PLACEMENT, COMPACTION, AND MOISTURE REQUIREMENTS.

7. INLETS SHALL BE TYPE C, CDOT M-604-10, TYPE D, CDOT M-604-11, OR TYPE R, CDOT M-604-12.

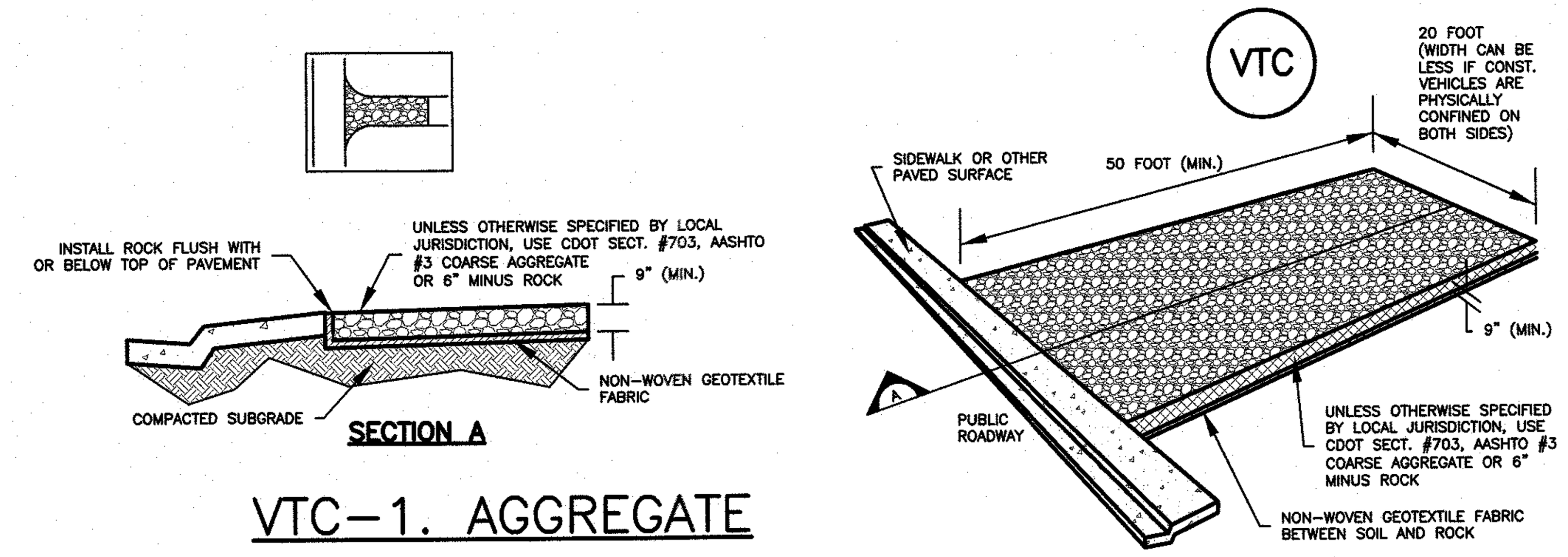
OVERALL GENERAL NOTES:

1. THE CONTRACTOR SHALL OBTAIN, AT HIS EXPENSE, ALL PERMITS WHICH ARE NECESSARY TO PERFORM THE PROPOSED WORK.

2. TRENCHES SHALL BE EXCAVATED AND THE PIPE EXPOSED FOR INSPECTION AT ANY LOCATION ON THE PROJECT IF SO ORDERED.

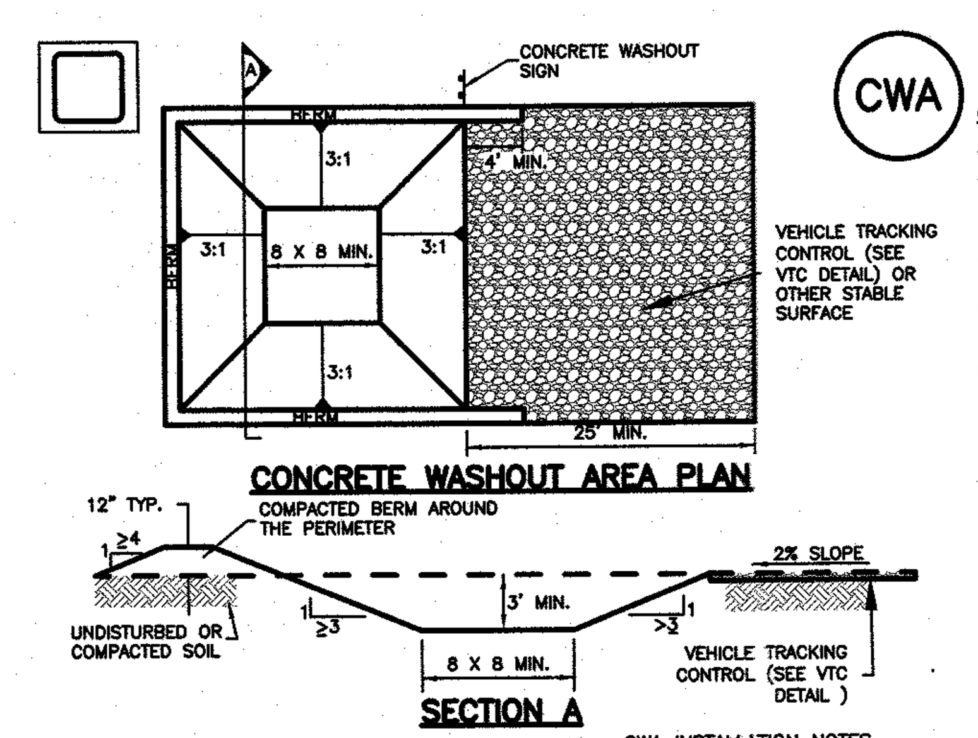
3. ALL STREET STATIONING IS ALONG THE CENTERLINE OF THE ROADWAY UNLESS OTHERWISE NOTED. FOR SEPARATE WATER & SANITARY SEWER PLANS THE STATIONING IS ALONG THE CENTERLINE OF THE PIPE.

4. THE PROFILE GRADE ON THE PLANS IS ALONG THE ROADWAY CENTERLINE UNLESS OTHERWISE NOTED.
5. THE CONTRACTOR SHALL HAVE ON HIS POSSESSION AT THE SITE A COPY OF THE APPROVED CONSTRUCTION PLANS AND SWMP, IF REQUIRED BY STATE, AT ALL TIMES.
6. LIMITS OF WORK: NO AREAS SHALL BE DISTURBED OUTSIDE OF THE TEMPORARY CONSTRUCTION EASEMENTS AND/OR THE ROADWAY DISTURBANCE LIMITS.
7. ALL CONSTRUCTION SHALL CONFORM TO THE SUMMIT COUNTY STANDARDS AND SPECIFICATIONS AS APPLICABLE. ALL WORKMANSHIP SHALL BE SUBJECT TO INSPECTION BY THE ENGINEER, SUMMIT COUNTY, OR THEIR REPRESENTATIVES. ONE OR ALL OF THE PARTIES HAS THE RIGHT TO REJECT MATERIALS AND WORKMANSHIP WHICH DO NOT CONFORM TO SPECIFICATIONS.
8. THE CONTRACTOR SHALL NOTIFY THE SUMMIT COUNTY AND THE PUBLIC UTILITY COMPANIES PRIOR TO PROCEEDING WITH ANY EXCAVATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ANY EXISTING UTILITY (INCLUDING DEPTHS) WHICH MAY CONFLICT WITH THE PROPOSED CONSTRUCTION. ALL EXISTING UTILITIES SHALL BE PROTECTED FROM DAMAGE BY THE CONTRACTOR. DAMAGED UTILITIES SHALL BE REPAIRED BY THE CONTRACTOR AT HIS OWN EXPENSE. ALL ITEMS SHOWN ON THE PLANS AS EXISTING ARE SHOWN IN APPROXIMATE LOCATIONS ONLY. THE ACTUAL LOCATIONS MAY VARY FROM THE PLANS, ESPECIALLY IN THE CASE OF UNDERGROUND UTILITIES. WHENEVER THE CONTRACTOR DISCOVERS A DISCREPANCY IN LOCATIONS, THE CONTRACTOR SHALL CONTACT THE ENGINEER IMMEDIATELY. ALL WORK PERFORMED IN THE AREA OF THE PUBLIC UTILITIES SHALL BE PERFORMED ACCORDING TO THE REQUIREMENTS OF THESE AGENCIES.
9. CONTRACTOR SHALL GIVE TWO BUSINESS DAY NOTICE TO COUNTY AND DISTRICT PERSONNEL TO PERFORM REQUIRED TESTING AND INSPECTIONS AND PRIOR TO ANY CONSTRUCTION ON THIS SITE NOTIFY SUMMIT COUNTY AND EMERGENCY SERVICES ANY ROAD OR LANE CLOSURES.
10. ALL EXCAVATION SHALL COMPLY WITH OSHA SAFETY REGULATIONS.
11. MATERIALS SHALL BE INSPECTED AND ACCEPTED BY THE INSPECTOR UPON DELIVERY AND WHERE POSSIBLE, PRIOR TO INSTALLATION.
12. A STAMPED FINAL FOR CONSTRUCTION PLAN SHALL BE GIVEN TO THE SUMMIT COUNTY AT LEAST 10 DAYS PRIOR TO START OF CONSTRUCTION.
13. ANY RETAINING WALL OVER 4' MUST BE ENGINEERED AT A LETTER STAMPED BY A CIVIL ENGINEER LICENSED IN THE STATE OF COLORADO STATING THE WALL WAS CONSTRUCTED PER THE ENGINEERED DESIGN IS REQUIRED.
14. ALL THE DEFENSIBLE SPACE (CLEARING AND GRUBBING) MUST HAVE APPROVAL BY THE FIRE MARSHALL PRIOR TO ANY CO'S ON ANY STRUCTURE.



VTC-1. AGGREGATE VEHICLE TRACKING CONTROL

NO SCALE



CWA 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. THE CWA SHALL BE REPAIRED, CLEANED, OR ENLARGED AS NECESSARY TO MAINTAIN CAPACITY FOR CONCRETE WASTE. CONCRETE MATERIALS, ACCUMULATED IN PIT, SHALL BE REMOVED ONCE THE MATERIALS HAVE REACHED A DEPTH OF 2'.

5. CONCRETE WASHOUT WATER, WASTED PIECES OF CONCRETE AND ALL OTHER DEBRIS IN THE SUBSURFACE PIT SHALL BE TRANSPORTED FROM THE JOB SITE IN A WATER-TIGHT CONTAINER AND DISPOSED OF PROPERLY.

6. THE CWA SHALL REMAIN IN PLACE UNTIL ALL CONCRETE FOR THE PROJECT IS PLACED.

7. WHEN THE CWA IS REMOVED, COVER THE DISTURBED AREA WITH TOP SOIL, SEED AND MULCH OR OTHERWISE STABILIZED IN A MANNER APPROVED BY THE LOCAL JURISDICTION.

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.

CWA INSTALLATION NOTES

1. SEE PLAN VIEW FOR:
   -CWA INSTALLATION LOCATION.

2. DO NOT LOCATE AN UNLINED CWA WITHIN 400' OF ANY NATURAL DRAINAGE PATHWAY OR WATERBODY. DO NOT LOCATE WITHIN 1,000' OF ANY WELLS OR DRINKING WATER SOURCES. IF 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 SURFACE STORAGE ALTERNATIVES USING PREFABRICATED CONCRETE WASHOUT DEVICES OR A LINED ABOVE GROUND STORAGE ARE SHOULD BE USED.

3. THE CWA SHALL BE INSTALLED PRIOR TO CONCRETE PLACEMENT ON SITE.

4. CWA SHALL INCLUDE A FLAT SUBSURFACE PIT THAT IS AT LEAST 8' BY 8' SLOPES LEADING OUT OF THE SUBSURFACE PIT SHALL BE 3:1 OR FLATTER. THE PIT SHALL BE AT LEAST 3' DEEP.

5. BERM SURROUNDING SIDES AND BACK OF THE CWA SHALL HAVE MINIMUM HEIGHT OF 1'.

6. VEHICLE TRACKING PAD SHALL BE SLOPED 2% TOWARDS THE CWA.

7. SIGNS SHALL BE PLACED AT THE CONSTRUCTION ENTRANCE, AT THE CWA, AND ELSEWHERE AS NECESSARY TO CLEARLY INDICATE THE LOCATION OF THE CWA TO OPERATORS OF CONCRETE TRUCKS AND PUMP RIGS.

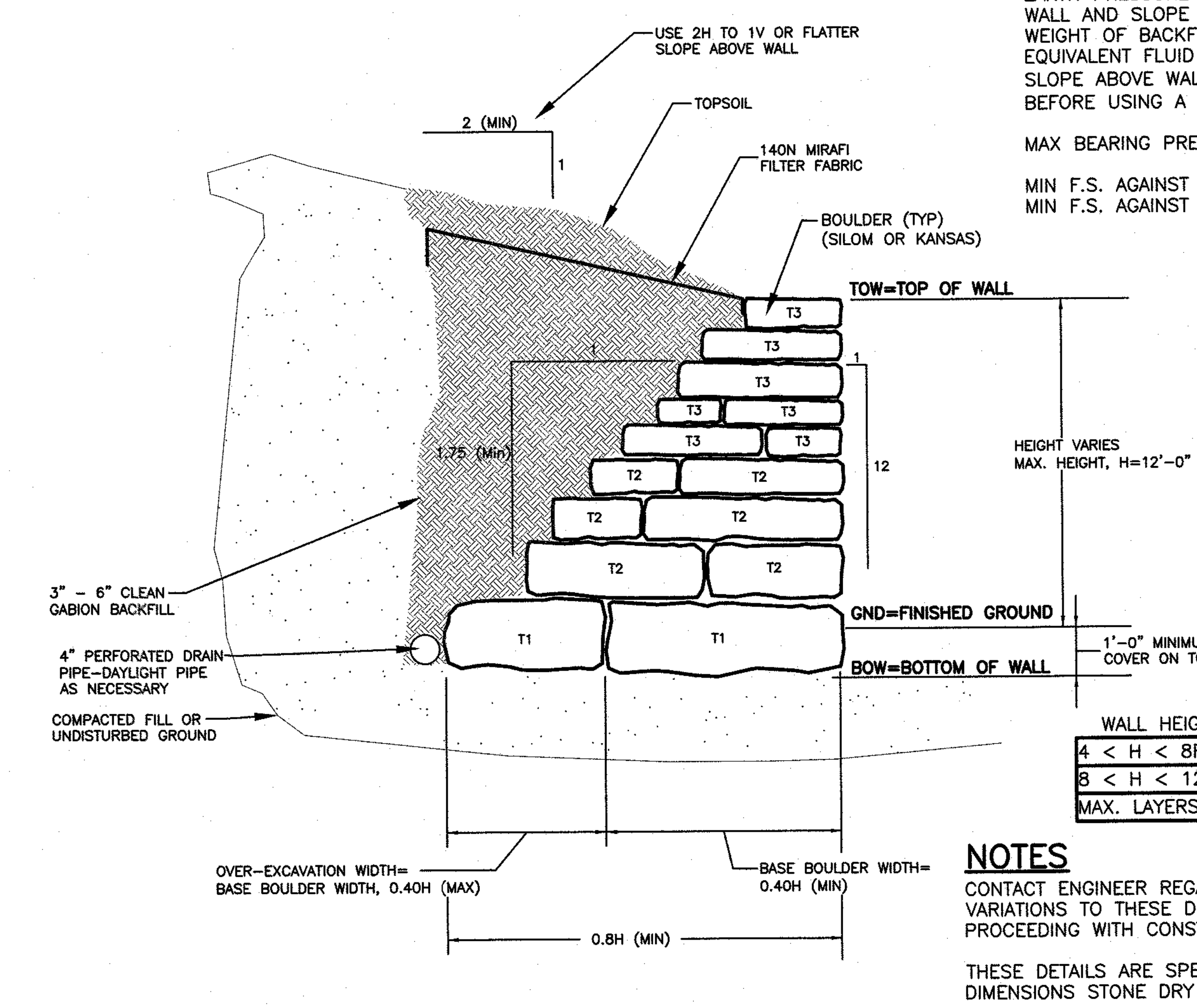
8. USE EXCAVATED MATERIAL FOR PERIMETER BERM CONSTRUCTION.

CWA-1. CONCRETE WASHOUT AREA

NO SCALE

STANDARD EROSION AND SEDIMENT CONTROL NOTES:

1. The contractor must notify Summit County at least 48 hours prior to starting construction.
2. All grading, erosion, and sediment control must conform with approved plans. Revisions to disturbance areas, slopes, and/or erosion and sediment control measures are not permitted without prior approval from the Town of Silverthorne.
3. The landowner is responsible for obtaining a permit for Storm Water Discharges Associated with Construction Activity from the Colorado Department of Public Health and Environment, at least 10 days prior to the start of construction activities for land disturbance areas of one acre or greater. The permit must be kept current throughout the construction duration.
4. Erosion control measures must be installed prior to grading activities.
5. All temporary and permanent soil erosion and sediment control practices must be maintained and repaired as needed to assure continued performance of their intended function. For example, erosion control blankets, straw bale dikes or silt fences may require periodic replacement. Sediment traps and basins will require periodic sediment removal.
6. All topsoil, where physically practicable, must be salvaged and not topsoil shall be removed from the site except as set forth in the approved plans. Topsoil and overburden must be segregated and stockpiled separately. Topsoil and overburden must be redistributed within the graded area after rough grading to provide a suitable base for seeding and planting. Runoff from the stockpiled area must be controlled to prevent erosion and resultant sedimentation of receiving water.
7. The landowner and/or contractor must immediately take all necessary steps to control increased sediment discharge.
8. The landowner and/or contractor is responsible for clean up and removal of all sediment and debris from all drainage infrastructure and other public facilities.
9. The landowner and/or contractor must take reasonable precautions to ensure that vehicles don not track or spill earth materials on to streets/roads and must immediately remove such material if this occurs.
10. The landowner and/or contractor is responsible for controlling waste such as discarded building materials, concrete truck washout, chemicals, litter, and sanitary waste, as applicable. In addition, spill prevention and containment BMP's for construction materials, waste and fuel must be provided, as applicable.
11. If it is necessary to move material in excess of 300 cubic yards and/or 10,000 square feet of land disturbance area to or from another unincorporated site a grading permit may be is necessary for the off-site property. If the material is moved to a property located within another jurisdiction, evidence is required that the local government has approved the grading operation.
12. The storm water volume capacity of detention ponds must be restored and storm sewer lines will be cleaned upon completion of the project.
13. Soil stabilization measures must be applied within 30 days to the disturbed areas that may not be at final grade, but will be left dormant for longer than 60 days.
14. Fugitive dust emissions resulting from grading activities and/or wind shall be controlled using the best available control technology, as defined by the Colorado Department of Public Health and Environment, at the time of grading.
15. The erosion and sediment control plan may be modified by Summit County, or its authorized representative, as field conditions warrant.



TYPICAL SECTION

NO SCALE

DRY STACK WALL DETAIL

NO SCALE

DESIGN DATA

AASHTO SPECIFICATIONS 17TH EDITION

SERVICE LOAD DESIGN

EARTH LOAD: COULOMB THEORY OF LATERAL EARTH PRESSURE MODIFIED FOR BATTER OF WALL AND SLOPE BACK FILL.
WEIGHT OF BACKFILL = 125 PCF
EQUIVALENT FLUID PRESSURE = 50PCF FOR 2:1 SLOPE ABOVE WALL (CONTACT ENGINEER BEFORE USING A STEEPER BACKFILL SLOPE)

MAX BEARING PRESSURE 3.0 KSF

MIN F.S. AGAINST OVERTURNING 2.0
MIN F.S. AGAINST SLIDING 1.5

ROCK THICKNESS

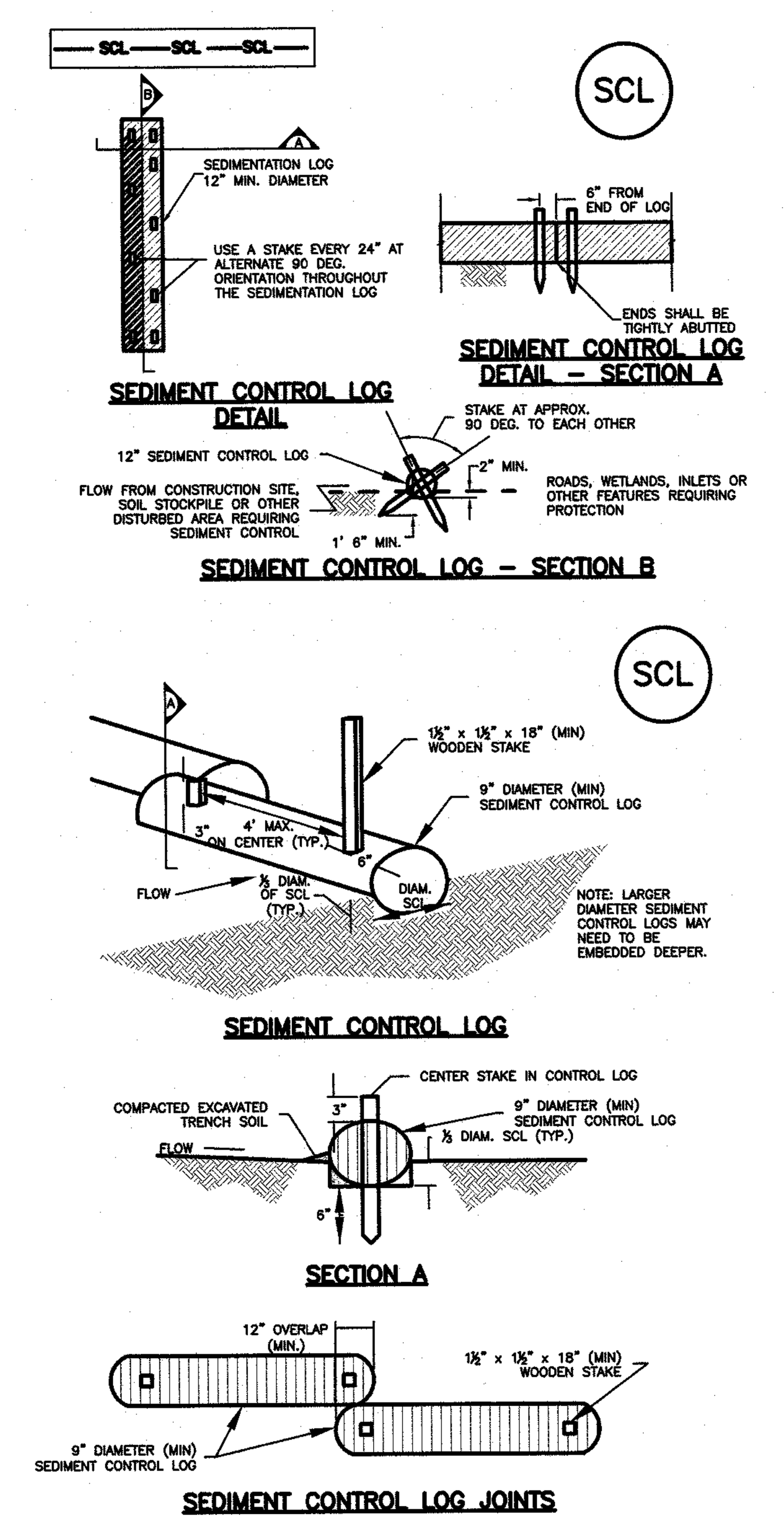
WALL HEIGHT	TI	T2	T3
4 < H < 8FT	18"-24"	12"-18"	6"-12"
8 < H < 12FT	24"-30"	18"-24"	12"-18"
MAX. LAYERS	1	3	5

NOTES

CONTACT ENGINEER REGARDING ANY VARIATIONS TO THESE DETAILS BEFORE PROCEEDING WITH CONSTRUCTION

THESE DETAILS ARE SPECIFIC TO LARGE DIMENSIONS STONE DRY STACK WALLS ONLY.

BACKFILL TOE AFTER PLACING LOWER ROCK COURSE AND PRIOR TO PLACING ADDITIONAL COURSES OF ROCK.



SEDIMENT CONTROL LOG INSTALLATION NOTES

1. SEE PLAN VIEW FOR LOCATION AND LENGTH OF SEDIMENT CONTROL LOGS.

2. SEDIMENT CONTROL LOGS THAT ACT AS A PERIMETER CONTROL SHALL BE INSTALLED PRIOR TO ANY UPGRADIENT LAND-DISTURBING ACTIVITIES.

3. SEDIMENT CONTROL LOGS SHALL CONSIST OF STRAW, COMPOST, EXCELSIOR OR COCONUT FIBER, AND SHALL BE FREE OF ANY NOXIOUS WEED SEEDS OR DEFECTS INCLUDING RIPS, HOLES AND OBVIOUS WEAR.

4. SEDIMENT CONTROL LOGS MAY BE USED AS SMALL CHECK DAMS IN DITCHES AND SWALES. HOWEVER, THEY SHOULD NOT BE USED IN PERENNIAL STREAMS OR HIGH VELOCITY DRAINAGE WAYS.

5. IT IS RECOMMENDED THAT SEDIMENT CONTROL LOGS BE TRENCHED INTO THE GROUND TO A DEPTH OF APPROXIMATELY ⅓ OF THE DIAMETER OF THE LOG. IF TRENCHING TO THIS DEPTH IS NOT FEASIBLE AND/OR DESIRABLE (SHORT TERM INSTALLATION WITH DESIRE NOT TO DAMAGE LANDSCAPE) A LESSER TRENCHING DEPTH MAY BE ACCEPTABLE WITH MORE ROBUST STAKING

6. THE UPHILL SIDE OF THE SEDIMENT CONTROL LOG SHALL BE BACKFILLED WITH SOIL THAT IS FREE OF ROCKS AND DEBRIS. THE SOIL SHALL BE TIGHTLY COMPACTED INTO THE SHAPE OF A RIGHT TRIANGLE USING A SHOVEL OR WEIGHTED LAWN ROLLER.

7. FOLLOW MANUFACTURERS' GUIDANCE FOR STAKING. IF MANUFACTURERS' INSTRUCTIONS DO NOT SPECIFY SPACING, STAKES SHALL BE PLACED ON 4' CENTERS AND EMBEDDED A MINIMUM OF 6" INTO THE GROUND. 3" OF THE STAKE SHALL PROTRUDE FROM THE TOP OF THE LOG. STAKES THAT ARE BROKEN PRIOR TO INSTALLATION SHALL BE REPLACED.

SEDIMENT CONTROL LOG MAINTENANCE NOTES

1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.

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

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

4. SEDIMENT ACCUMULATED UPSTREAM OF SEDIMENT CONTROL LOG SHALL BE REMOVED AS NEEDED TO MAINTAIN FUNCTIONALITY OF THE BMP, TYPICALLY WHEN DEPTH OF ACCUMULATED SEDIMENTS IS APPROXIMATELY ½ OF THE HEIGHT OF THE SEDIMENT CONTROL LOG.

5. SEDIMENT CONTROL LOG SHALL BE REMOVED AT THE END OF CONSTRUCTION. IF DISTURBED AREAS EXIST AFTER REMOVAL, THEY SHALL BE COVERED WITH TOP SOIL, SEEDED AND MULCHED OR OTHERWISE STABILIZED IN A MANNER APPROVED BY THE LOCAL JURISDICTION.

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.

SCL-1. SEDIMENT CONTROL LOG

NO SCALE

811

CALL 2 BUSINESS DAYS IN ADVANCE BEFORE YOU DIG, GRADE OR EXCAVATE FOR THE MARKING OF UNDERGROUND MEMBER UTILITIES.

COLORADO REGISTERED JOSEPH E. MAGLICIC 33789 PROFESSIONAL ENGINEER

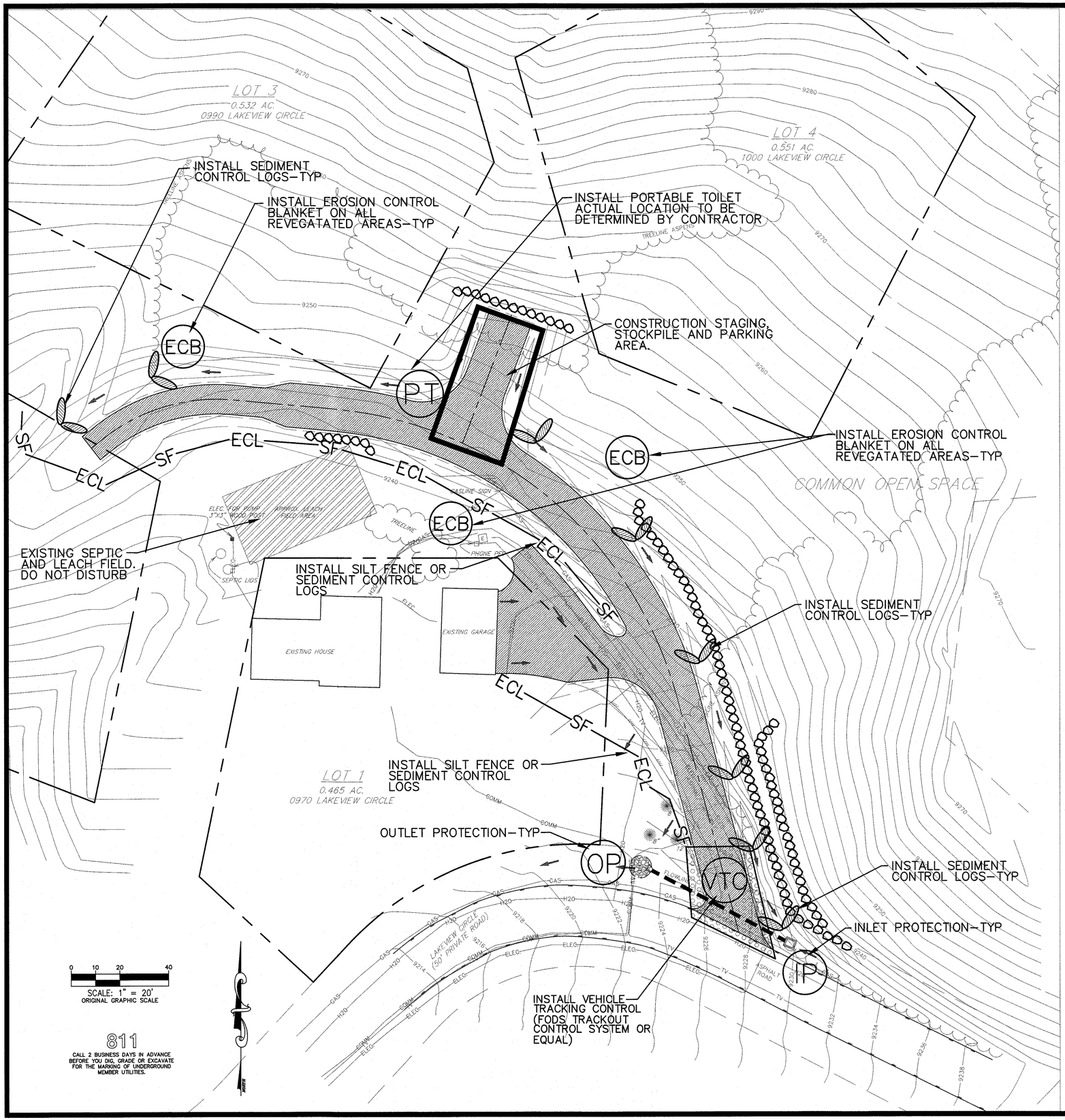
No.	Revision/Issue	Date	Description
1	G+E SUBMITTAL	7/31/24	GRADING AND EXCAVATION PERMIT SUBMITTAL

TEN MILE ENGINEERING, INC.
Professional Civil Engineers
Po Box 1785
Frisco, CO 80443
970.485.5773
tenmileengineer@aol.com

LOTS 2, 3 & 4
HAMILTON CREEK FILING 1
SUMMIT COUNTY, CO

GENERAL NOTES AND DETAILS PLAN

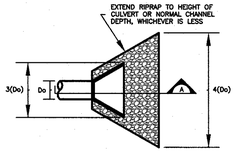
Project: LOTS 2 3 4 HAMILTON CR
Date: 7/31/24
Sheet: 1
Scale: NTS



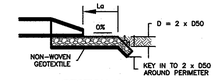
0 10 20 40

SCALE: 1" = 20'
ORIGINAL GRAPHIC SCALE

811
CALL 2 BUSINESS DAYS IN ADVANCE BEFORE YOU DIG, GRADE OR EXCAVATE FOR THE MARKING OF UNDERGROUND MEMBER UTILITIES.



TEMPORARY OUTLET PROTECTION PLAN



SECTION A

TABLE OP-1. TEMPORARY OUTLET PROTECTION SIZING TABLE

PIPE DIAMETER, Do (INCHES)	DISCHARGE, Q (CFS)	APRON LENGTH, Lo (FT)	RIPRAP D50 DIAMETER MIN. (INCHES)
8	2.5	5	4
	5	10	6
12	5	10	4
	10	13	6
18	10	10	6
	20	16	9
	30	23	12
	40	29	16
24	30	16	9
	40	26	9
	50	28	12
	60	30	16

TEMPORARY OUTLET PROTECTION INSTALLATION NOTES

1. SEE PLAN VIEW FOR
   -LOCATION OF OUTLET PROTECTION.
   -DIMENSIONS OF OUTLET PROTECTION.

2. DETAIL IS INTENDED FOR PIPES WITH SLOPE ≤ 10%. ADDITIONAL EVALUATION OF RIPRAP SIZING AND OUTLET PROTECTION DIMENSIONS REQUIRED FOR STEEPER SLOPES.

3. TEMPORARY OUTLET PROTECTION INFORMATION IS FOR OUTLETS INTENDED TO BE UTILIZED LESS THAN 2 YEARS.

TEMPORARY OUTLET PROTECTION INSPECTION AND 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.

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.

OP OUTLET PROTECTION (OP)

GENERAL INLET PROTECTION INSTALLATION NOTES

1. SEE PLAN VIEW FOR:
   -LOCATION OF INLET PROTECTION.
   -TYPE OF INLET PROTECTION (IP.1, IP.2, IP.3, IP.4, IP.5, IP.6)

2. INLET PROTECTION SHALL BE INSTALLED PROMPTLY AFTER INLET CONSTRUCTION OR PAVING IS COMPLETE (TYPICALLY WITHIN 48 HOURS). IF A RAINFALL/RUNOFF EVENT IS FORECAST, INSTALL INLET PROTECTION PRIOR TO ONSET OF EVENT.

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

INLET PROTECTION MAINTENANCE NOTES

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 48 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.

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

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

4. SEDIMENT ACCUMULATED UPSTREAM OF INLET PROTECTION SHALL BE REMOVED AS NECESSARY TO MAINTAIN BMP EFFECTIVENESS, TYPICALLY WHEN STORAGE VOLUME REACHES 50% OF CAPACITY, A DEPTH OF 6" WHEN SILT FENCE IS USED, OR ¼ OF THE HEIGHT FOR STRAW BALES.

5. INLET PROTECTION IS TO REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS PERMANENTLY STABILIZED, UNLESS THE LOCAL JURISDICTION APPROVES EARLIER REMOVAL OF INLET PROTECTION IN STREETS.

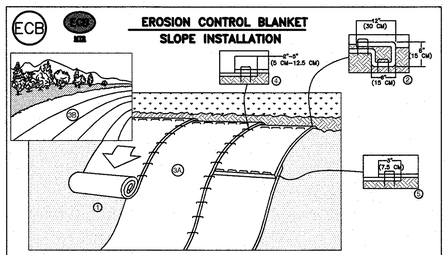
6. WHEN INLET PROTECTION AT AREA INLETS IS REMOVED, THE DISTURBED AREA SHALL BE COVERED WITH TOP SOIL, SEEDED AND MULCHED, OR OTHERWISE STABILIZED IN A MANNER APPROVED BY THE LOCAL JURISDICTION.

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

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

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

IP INLET PROTECTION (IP)



1. PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED. NOTE: WHEN USING CELL-O-SEED DO NOT SEED PREPARED AREA. CELL-O-SEED MUST BE INSTALLED WITH PAPER SIDE DOWN.

2. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE BLANKET IN A 6" (15 CM) DEEP X 6" (15 CM) WIDE TRENCH WITH APPROXIMATELY 12" (30cm) OF BLANKET EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE BLANKET WITH A ROW OF STAPLES/ STAKES APPROXIMATELY 12" (30 CM) APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" (30 CM) PORTION OF BLANKET BACK OVER SEED AND COMPACTED SOIL. SECURE BLANKET OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" (30 CM) APART ACROSS THE WIDTH OF THE BLANKET.

3. ROLL THE BLANKETS (A.) DOWN OR (B.) HORIZONTALLY ACROSS THE SLOPE. BLANKETS WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL BLANKETS MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE. WHEN USING THE DOT SYSTEM , STAPLES/STAKES SHOULD BE PLACED THROUGH EACH OF THE COLORED DOTS CORRESPONDING TO THE APPROPRIATE STAPLE PATTERN.

4. THE EDGES OF PARALLEL BLANKETS MUST BE STAPLED WITH APPROXIMATELY 2" – 5" (5 CM – 12.5 CM) OVERLAP DEPENDING ON BLANKET TYPE.

5. CONSECUTIVE BLANKETS SPLICED DOWN THE SLOPE MUST BE PLACED END OVER END (SHINGLE STYLE) WITH AN APPROXIMATE 3" (7.5 CM) OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" (30 CM) APART ACROSS ENTIRE BLANKET WIDTH. NOTE: *IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" (15 CM) MAY BE NECESSARY TO PROPERLY SECURE THE BLANKETS.

REV. 1/2004

COLORADO REGISTERED JOSEPH E. MILLER, JR. 33789 PROFESSIONAL ENGINEER

No.	Revision/Issue	Date	Description
1	G+E SUBMITTAL	7/31/24	GRADING AND EXCAVATION PERMIT SUBMITTAL

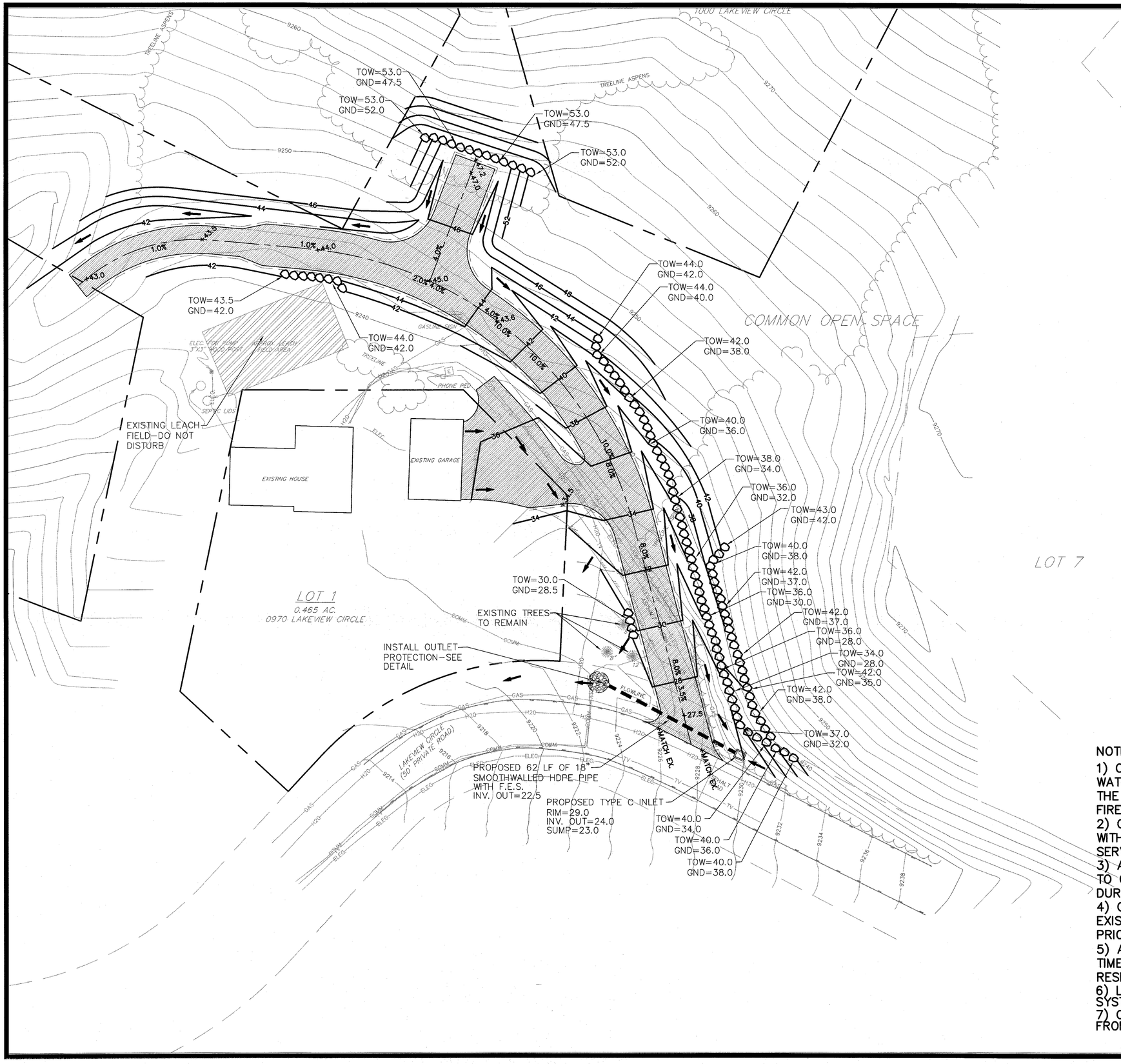
TEN MILE ENGINEERING, INC.
Professional Civil Engineers
Po Box 1785
Frisco, CO 80443
970.485.5773
tenmileengineer@aol.com

LOTS 2, 3 & 4 HAMILTON CREEK FILING 1

SUMMIT COUNTY, CO

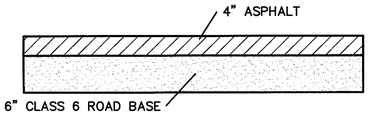
EROSION CONTROL AND CONSTRUCTION MANAGEMENT PLAN

Project: LOTS 2 3 4 HAMILTION CR
Date: 7/31/24
Scale: 1"=20'
Sheet: 2



811

CALL 2 BUSINESS DAYS IN ADVANCE BEFORE YOU DIG, GRADE OR EXCAVATE FOR THE MARKING OF UNDERGROUND MEMBER UTILITIES.



PAVEMENT SECTION SHALL BE
4" ASPHALT ON 6" OF ROAD BASE
SEE GEOTECHNICAL RECOMMENDATIONS
FOR COMPACTION REQUIREMENTS
SECTION TO BE FIELD VERIFIED BY
GEOTECHINICAL ENGINEER

NOTE:

1) CONTRACTOR RESPONSIBLE TO COORDINATE WATER SERVICES AND CONNECTION TO MAIN W/ THE HAMILTON CREEK METRO DISTRICT, ARCHITECT, FIRE PROTECTION AND MECHANICAL ENGINEER.
2) OWNER/CONTRACTOR RESPONSIBLE TO COORDINATE WITH ELECTRIC, GAS, CATV AND PHONE COMPANIES SERVICE LOCATIONS AND INSTALLATIONS.
3) A SUMP PUMP MAY BE NECESSARY. CONTRACTOR TO COORDINATE WITH GEOTECH, ARCH AND MECH DURING CONSTRUCTION FOR DESIGN.
4) CONTRACTOR RESPONSIBLE FOR LOCATING ALL EXISTING UTILITIES, HORIZONTAL AND VERTICAL PRIOR TO CONSTRUCTION
5) ACCESS TO LOT 1 SHALL BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION. CONTRACTOR RESPONSIBLE FOR COORDINATING WITH LOT 1 OWNER.
6) LOTS 2, 3 AND 4 MAY REQUIRE A FIRE PROTECTION SYSTEM BE INSTALLED WHEN HOMES IS BUILT.
7) CONTRACTOR RESPONSIBLE FOR OBTAINING A ROW PERMIT FROM SUMMIT COUNTY FOR ALL WORK WITHIN EXISTING ROW.

COLORADO REGISTERED
JOSEPH E. WILLIAMS
33789
PROFESSIONAL ENGINEER

No.	Revision/Issue	Date	Description
1	G+E SUBMITTAL	7/31/24	GRADING AND EXCAVATION PERMIT SUBMITTAL

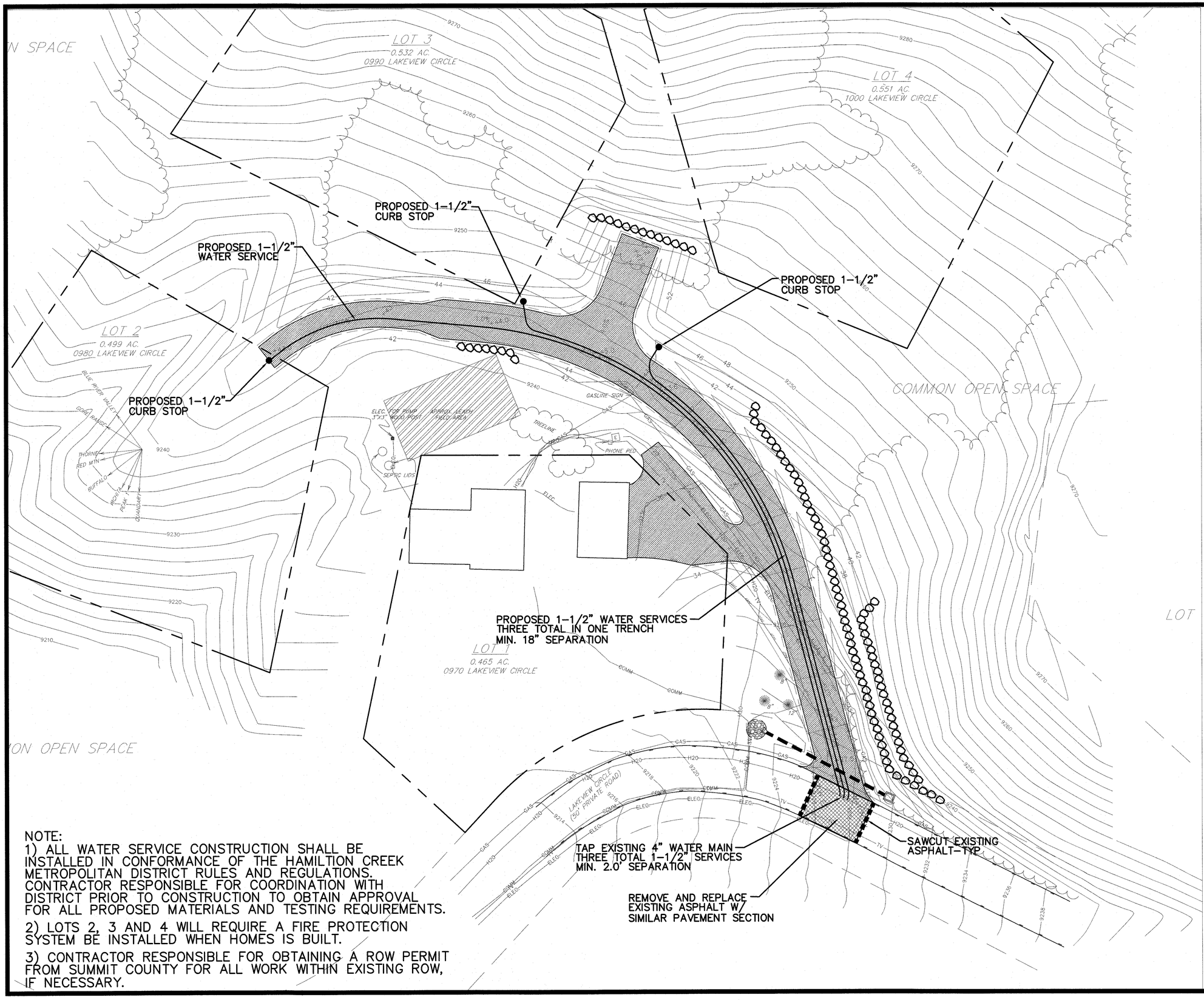
TEN MILE ENGINEERING, INC.
Professional Civil Engineers
Po Box 1785
Frisco, CO 80443
970.485.5773
tenmileengineer@aol.com

LOTS 2, 3 & 4 HAMILTON CREEK FILING 1

SUMMIT COUNTY, CO

GRADING AND DRAINAGE PLAN

Project: LOTS 2 3 4 HAMILTON CR
Date: 7/31/24
Scale: 1"=20'
Sheet: 3



NOTE:
1) ALL WATER SERVICE CONSTRUCTION SHALL BE INSTALLED IN CONFORMANCE OF THE HAMILTON CREEK METROPOLITAN DISTRICT RULES AND REGULATIONS. CONTRACTOR RESPONSIBLE FOR COORDINATION WITH DISTRICT PRIOR TO CONSTRUCTION TO OBTAIN APPROVAL FOR ALL PROPOSED MATERIALS AND TESTING REQUIREMENTS.

2) LOTS 2, 3 AND 4 WILL REQUIRE A FIRE PROTECTION SYSTEM BE INSTALLED WHEN HOMES IS BUILT.

3) CONTRACTOR RESPONSIBLE FOR OBTAINING A ROW PERMIT FROM SUMMIT COUNTY FOR ALL WORK WITHIN EXISTING ROW, IF NECESSARY.

SCALE: 1" = 20'
ORIGINAL GRAPHIC SCALE

811
CALL 2 BUSINESS DAYS IN ADVANCE BEFORE YOU DIG, GRADE OR EXCAVATE FOR THE MARKING OF UNDERGROUND MEMBER UTILITIES.

COLORADO REGISTERED
33789
PROFESSIONAL ENGINEER

No.	Revision/Issue	Date	Description
1	G+E SUBMITTAL	7/31/24	GRADING AND EXCAVATION PERMIT SUBMITTAL

TEN MILE ENGINEERING, INC.
Professional Civil Engineers
Po Box 1785
Frisco, CO 80443
970.485.5773
tenmileengineer@aol.com

LOTS 2, 3 & 4
HAMILTON CREEK FILING 1
SUMMIT COUNTY, CO

WATER SERVICE PLAN

Project: LOTS 2 3 4 HAMILTON CR
Date: 7/31/24
Scale: 1"=20'
Sheet: 4