

# CENTENNIAL RIDGE AMBLESIDE SCHOOL

**A PART OF NW 1/4 OF NW 1/4 OF SECTION 16, TOWNSHIP 6 SOUTH, RANGE 67 WEST, 6TH P.M.  
CITY OF LONE TREE, DOUGLAS COUNTY, COLORADO  
LINCOLN AVE & LONE TREE PKWY  
SITE IMPROVEMENT PLAN - SP24-0003**

**JANUARY 2024**

**CITY CONTACTS**

**PLANNING & ZONING**

CITY OF LONE TREE  
9220 KIMMER DRIVE, SUITE 100  
LONE TREE, CO 80124  
ATTN: ROSHANA FLOYD  
PHONE: (720) 509-1180

**TRAFFIC**

CDOT  
2829 W. HOWARD PLACE  
DENVER, CO 80204  
ATTN: JORDAN HERRMAN  
EMAIL: JORDAN.HERRMAN@STATE.CO.US  
PHONE: (303) 757-9881

**BUILDING DEPARTMENT**

CITY OF LONE TREE  
9220 KIMMER DRIVE, SUITE 100  
LONE TREE, CO 80124  
ATTN: LINDA SLOVER  
EMAIL: (720) 390-5211  
SOUTH METRO FIRE RESCUE - STATION 34  
8871 MAXIMUS DRIVE  
LONE TREE, CO 80124  
PHONE: (720) 989-2000

**ENGINEERING ADMINISTRATION**

CITY OF LONE TREE  
9220 KIMMER DRIVE, SUITE 100  
LONE TREE, CO 80124  
ATTN: RONNIE ROYBAL, P.E.  
EMAIL: (303) 662-8112

**WATER**

SOUTHWEST WATER DISTRICT  
3722 E ORCHARD ROAD  
CENTENNIAL, CO 80121  
PHONE: (303) 779-0261  
FAX: (303) 779-0220

**TELEPHONE**

XCEL ENERGY  
112 W 3RD AVE  
DENVER, CO 80223  
PHONE: (800) 895-4999

**PROJECT CONTACTS**

**PROPERTY OWNER/DEVELOPER**

AMBLESIDE COLORADO  
1510 E PHILLIPS AVE  
CENTENNIAL, CO 80122

**ARCHITECT**

GALLOWAY & COMPANY INC.  
5500 GREENWOOD PLAZA BLVD., STE 200  
GREENWOOD VILLAGE, CO 80111  
PHONE: (303) 779-8884  
ATTN: LISA METZGER, AIA, NCARB

**CIVIL ENGINEER**

GALLOWAY & COMPANY INC.  
5500 GREENWOOD PLAZA BLVD., STE 200  
GREENWOOD VILLAGE, CO 80111  
PHONE: (303) 779-8884  
ATTN: JOSEPH (SID) BIDDLE, P.E.

**SURVEYOR**

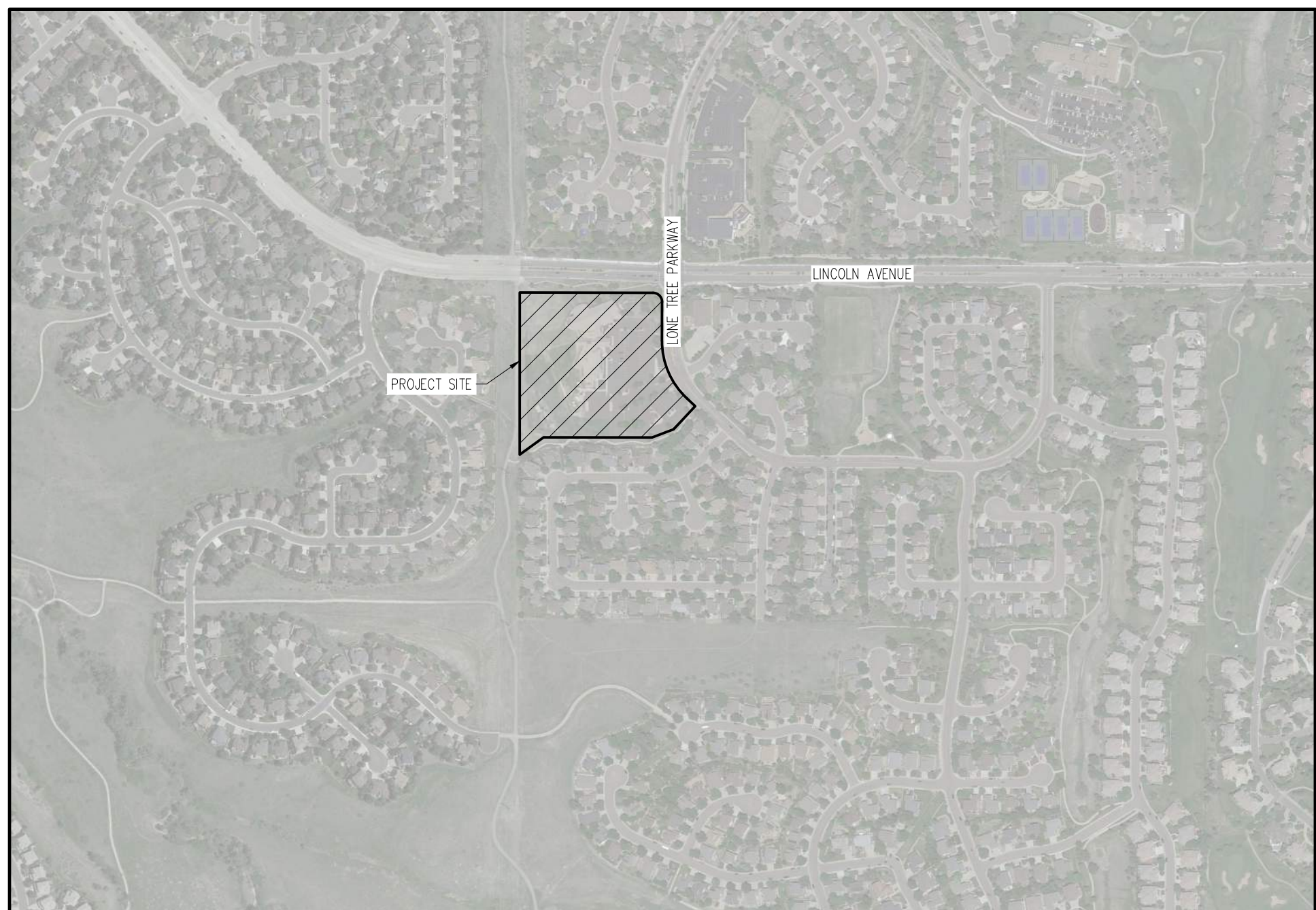
GALLOWAY & COMPANY INC.  
5500 GREENWOOD PLAZA BLVD., STE 200  
GREENWOOD VILLAGE, CO 80111  
PHONE: (303) 779-8884  
ATTN: KEVIN REYNOLDS, P.L.S.

**SITE IMPROVEMENT PLAN (SIP) NOTES**

- THE PROPERTY DESCRIBED HEREIN IS SUBJECT TO ALL APPLICABLE REQUIREMENTS OF THE LONE TREE ZONING CODE AND DESIGN STANDARDS, INCLUDING BUT NOT LIMITED TO, PROPERTY MAINTENANCE, LIGHTING, PARKING, SIGNAGE, LANDSCAPING AND OUTDOOR STORAGE, EXCEPT AS MAY OTHERWISE BE ADDRESSED IN AN APPROVED PLANNED DEVELOPMENT PLAN, SUB AREA PLAN, OR OTHER APPLICABLE PLAN OR AGREEMENT APPROVED BY THE CITY.
- THE APPLICANT ASSUMES RESPONSIBILITY TO ENSURE THE PROJECT IS COMPLETED IN ACCORDANCE WITH THE APPROVED SIP AND ANY ASSOCIATED MATERIALS SAMPLE BOARDS AND FURTHER ASSUMES THE RISK ASSOCIATED WITH ANY CHANGES OR OMISSIONS MADE WITHOUT PRIOR CITY APPROVAL. MODIFICATIONS TO STRUCTURES OR SITES MAY REQUIRE AN AMENDMENT TO THE SIP AS DETERMINED BY THE CITY'S COMMUNITY DEVELOPMENT DIRECTOR, PER SEC. 16-27-180. UNAUTHORIZED CHANGES OR OMISSIONS MADE WITHOUT PRIOR CITY APPROVAL CORRECTIVE ACTIONS, DELAY OF PERMITS OR CITATIONS FOR ZONING VIOLATIONS WITH ASSOCIATED FINES AND LEGAL MEASURES. BUILDING PLANS SHALL CONFORM TO THE APPROVED SIP.
- WITHIN SITE TRIANGLES, AS SHOWN, LIMITED LANDSCAPING SHALL BE ALLOWED WITH NO SOLID STRUCTURES PERMITTED AS STATED IN THE CITY OF LONE TREE'S LANDSCAPE DESIGN GUIDELINES AND STANDARDS FOR LANDSCAPING. LANDSCAPING WITHIN THE SIGHT TRIANGLE SHALL BE MAINTAINED BY THE PROPERTY OWNER OR APPROPRIATE ASSOCIATION OR DISTRICT, AS MAY BE IDENTIFIED IN MAINTENANCE AGREEMENTS RECORDED WITH THE DOUGLAS COUNTY CLERK AND RECORDER'S OFFICE.
- THE OWNER IS RESPONSIBLE FOR THE INSTALLATION OF ALL ROADWAY SIGNAGE, INCLUDING "NO PARKING/FIRE LANE" SIGNAGE, AS REQUIRED BY THE CITY PUBLIC WORKS DEPARTMENT AND/OR THE FIRE DISTRICT. SUCH SIGNAGE SHALL BE MAINTAINED BY THE PROPERTY OWNER OR APPROPRIATE ASSOCIATION OR DISTRICT, AS MAY BE IDENTIFIED IN MAINTENANCE AGREEMENTS RECORDED WITH THE DOUGLAS COUNTY CLERK AND RECORDER'S OFFICE.
- SITE LANDSCAPING, SITE AMENITIES AND FURNISHINGS, AND ALL SITE IMPROVEMENTS INCLUDING, BUT NOT LIMITED TO, SIDEWALKS AND PARKING AREAS SHALL BE MAINTAINED IN A STATE OF GOOD REPAIR CONSISTENT WITH THE APPROVED SIP AND THE LONE TREE MUNICIPAL CODE AND DESIGN GUIDELINES AND STANDARDS. SUCH MAINTENANCE SHALL INCLUDE THE REGULAR MAINTENANCE OF FEE WASTE STATIONS (WHEN PRESENT), TO INCLUDE WASTE COLLECTION AND WASTE BAG REPLACEMENT. LANDSCAPE PLANTINGS MUST BE ALIVE AND ALL IRRIGATION MUST BE FUNCTIONAL. ALL MAINTENANCE OBLIGATIONS SHALL BE COMPLETED BY THE PROPERTY OWNER OR APPROPRIATE ASSOCIATION OR DISTRICT, AS MAY BE IDENTIFIED IN MAINTENANCE AGREEMENTS RECORDED WITH THE DOUGLAS COUNTY CLERK AND RECORDER'S OFFICE.
- THE CITY OF LONE TREE REQUIRES THAT MAINTENANCE ACCESS BE PROVIDED TO ALL STORM DRAINAGE FACILITIES TO ASSURE CONTINUOUS OPERATIONAL CAPABILITY OF THE SYSTEM. THE PROPERTY OWNER 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 SITE IMPROVEMENT PLAN IMPROVEMENTS AGREEMENT. SHOULD THE OWNER FAIL TO ADEQUATELY MAINTAIN SAID FACILITIES, THE CITY OF LONE TREE SHALL HAVE THE RIGHT TO ENTER SAID LAND FOR THE PURPOSES OF OPERATIONS AND MAINTENANCE. ALL SUCH MAINTENANCE COSTS WILL BE ASSESSED TO THE PROPERTY OWNER OR THE RESPONSIBLE MAINTENANCE AUTHORITY.
- ALL PLANTS INSTALLED SHALL FOLLOW THE PLANT SCHEDULE, INSTALLATION INSTRUCTIONS AND THE LANDSCAPE DRAWINGS ON THE APPROVED LANDSCAPE PLAN INCLUDED IN THIS SITE IMPROVEMENT PLAN. ANY CHANGES TO THE APPROVED LANDSCAPE PLAN, TO INCLUDE PLANT SUBSTITUTIONS, MUST BE APPROVED BY THE CITY IN ADVANCE OF INSTALLATION.
- ALL MULCH AND/OR ROCK COBBLE SHALL BE INSTALLED AND MAINTAINED TO THE DEPTH(S) PROVIDED ON THE APPROVED LANDSCAPE PLAN INCLUDED IN THIS SITE IMPROVEMENT PLAN. ORGANIC MULCH SHALL NOT BE PLACED WITHIN SIX (6) FEET OF STORM INLETS.
- THE USE OF IMPERMEABLE SHEET PLASTIC AS A WEED BARRIER IS PROHIBITED.
- IRRIGATION SHALL OCCUR BETWEEN THE HOURS OF 8:00 P.M. AND 6:00 A.M.
- ANY IRRIGATION EQUIPMENT MOUNTED TO THE BUILDING SHALL BE PAINTED TO MATCH THE BUILDING.
- ACCORDING TO THE FEDERAL EMERGENCY MANAGEMENT AGENCY, NATIONAL FLOOD INSURANCE PROGRAM, FLOOD INSURANCE RATE MAP FOR THE CITY OF LONE TREE, DOUGLAS COUNTY, COLORADO COMMUNITY PANEL NUMBER 00426, DATED MARCH 16, 2016, THE SUBJECT PROPERTY LIES WITHIN ZONE X, AREAS DETERMINED TO BE INSIDE/OUTSIDE OF THE 0.2% ANNUAL CHANCE FLOOD.
- IT SHALL BE THE RESPONSIBILITY OF THE OWNER (OR RESPONSIBLE ASSOCIATION OR DISTRICT, AS MAY BE IDENTIFIED BY MAINTENANCE AGREEMENTS) TO MAINTAIN ALL PLAYGROUND EQUIPMENT AND PARK INFRASTRUCTURE ON THE PROPERTY IN A STATE OF GOOD REPAIR IN CONFORMANCE WITH ALL APPLICABLE BUILDING AND SAFETY REGULATIONS.

**NOTE:**

THE FOLLOWING SITE IMPROVEMENT PLAN IS BASED ON THE TRAFFIC IMPACT STUDY DATED: 05/31/2024 AND IS SUBJECT TO CHANGE IF THE RIGHT-OF-WAY IS IMPACTED OR ENROLLMENT INCREASES.



**SIP AMENDMENT WITH CITY COUNCIL APPROVAL**

THIS SITE IMPROVEMENT PLAN AMENDMENT WAS APPROVED FOR FILING BY THE CITY COUNCIL OF LONE TREE, CO, ON THE \_\_\_\_\_ DAY OF \_\_\_\_\_, 20\_\_\_\_, SUBJECT TO ANY CONDITIONS SPECIFIED HEREON.

ALL EXPENSES INCURRED WITH RESPECT TO IMPROVEMENTS FOR ALL UTILITY SERVICES, PAINTING, GRADING, LANDSCAPING, CURBS, CUTTERS, SIDEWALKS, ROAD LIGHTING, ROAD SIGNS, FLOOD PROTECTION DEVICES, DRAINAGE STRUCTURES, AND ALL OTHER IMPROVEMENTS THAT MAY BE REQUIRED SHALL BE THE RESPONSIBILITY OF THE DEVELOPER AND NOT THE CITY.

THIS ACCEPTANCE DOES NOT GUARANTEE THAT THE SOIL CONDITIONS, SUBSURFACE GEOLOGY, GROUNDWATER CONDITIONS OR FLOODING CONDITIONS OF ANY SITE SHOWN HEREON ARE SUCH THAT A BUILDING PERMIT, WELL PERMIT OR SEWAGE DISPOSAL PERMIT CAN OR WILL BE ISSUED.

\_\_\_\_\_  
(SIGNATURE)  
\_\_\_\_\_  
(PRINT NAME AND TITLE)  
STATE OF \_\_\_\_\_ )  
\_\_\_\_\_) JSS.  
COUNTY OF \_\_\_\_\_ )  
\_\_\_\_\_  
SUBSCRIBED AND SWORN TO BEFORE ME THIS \_\_\_\_\_ DAY OF \_\_\_\_\_, 20\_\_\_\_,  
BY \_\_\_\_\_

KELLY FIRST, COMMUNITY DEVELOPMENT DIRECTOR, CITY OF LONE TREE

\_\_\_\_\_  
(SIGNATURE)  
JUSTIN SCHMITZ, PUBLIC WORKS DIRECTOR, CITY OF LONE TREE

THE OWNER(S) OF THE LANDS DESCRIBED HEREIN, HEREBY AGREE(S) (1) TO DEVELOP AND MAINTAIN THE PROPERTY DESCRIBED HEREIN IN ACCORDANCE WITH THIS APPROVED SITE IMPROVEMENT PLAN AND IN COMPLIANCE WITH CHAPTER 16 OF THE LONE TREE MUNICIPAL CODE AND THAT (2) THE HEIRS, SUCCESSORS AND ASSIGNS OF THE OWNER(S) SHALL ALSO BE BOUND. THE SIGNATURES OF THE OWNER(S)'S REPRESENTATIVE(S) BELOW INDICATE THAT ANY REQUIRED AUTHORIZATIONS TO ENTER THIS AGREEMENT, INCLUDING ANY CORPORATE AUTHORIZATIONS, HAVE BEEN OBTAINED.

\_\_\_\_\_  
(NAME OF OWNER)  
\_\_\_\_\_  
(SIGNATURE OF OWNER)  
\_\_\_\_\_  
(PRINT NAME AND TITLE)  
STATE OF \_\_\_\_\_ )  
\_\_\_\_\_) JSS.  
COUNTY OF \_\_\_\_\_ )  
\_\_\_\_\_  
SUBSCRIBED AND SWORN TO BEFORE ME THIS \_\_\_\_\_ DAY OF \_\_\_\_\_, 20\_\_\_\_,  
BY \_\_\_\_\_

\_\_\_\_\_  
WITNESS MY HAND AND OFFICIAL SEAL.  
MY COMMISSION EXPIRES: \_\_\_\_\_  
\_\_\_\_\_  
NOTARY PUBLIC

**CITY OF LONE TREE STANDARD NOTES**

- THE CITY OF LONE TREE ENGINEERING DIRECTOR SIGNATURE AFFIXED TO THIS DOCUMENT INDICATES THE ENGINEERING DIVISION HAS REVIEWED THE DOCUMENT AND FOUND IT IN GENERAL CONFORMANCE WITH THE CITY OF LONE TREE ROADWAY DESIGN AND CONSTRUCTION STANDARDS AND THE CITY OF LONE TREE SUBDIVISION RESOLUTION OR ACCEPTED VARIANCES TO THOSE REGULATIONS. THE DOUGLAS COUNTY ENGINEERING DIRECTOR, THROUGH ACCEPTANCE OF THIS DOCUMENT, ASSUMES NO RESPONSIBILITY, OTHER THAN STATED ABOVE, FOR THE COMPLETENESS AND/OR ACCURACY OF THESE DOCUMENTS. THE OWNER AND ENGINEER UNDERSTAND THAT THE RESPONSIBILITY FOR THE ENGINEERING ADEQUACY OF THE FACILITIES DEPICTED IN THIS DOCUMENT LIES SOLELY WITH THE PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF COLORADO WHOSE STAMP AND SIGNATURE IS AFFIXED TO THIS DOCUMENT.
- ALL CONSTRUCTION SHALL CONFORM TO CITY OF LONE TREE STANDARDS. ANY CONSTRUCTION NOT SPECIFICALLY ADDRESSED BY THESE PLANS AND SPECIFICATIONS WILL BE BUILT IN COMPLIANCE WITH THE LATEST EDITION OF THE MOST STRINGENT OF THE FOLLOWING:
  - THE CITY OF LONE TREE ROADWAY DESIGN AND CONSTRUCTION STANDARDS
  - THE COLORADO DEPARTMENT OF HIGHWAYS STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION
  - THE COLORADO DEPARTMENT OF TRANSPORTATION M STANDARDS
- ALL MATERIALS AND WORKMANSHIP SHALL BE SUBJECT TO INSPECTION BY THE CITY OF LONE TREE ENGINEERING DIVISION AS APPLICABLE. THE COUNTY RESERVES THE RIGHT TO ACCEPT OR REJECT ANY SUCH MATERIALS AND WORKMANSHIP THAT DOES NOT CONFORM TO ITS STANDARDS AND SPECIFICATIONS.
- THE CONTRACTOR SHALL NOTIFY THE DOUGLAS COUNTY ENGINEERING INSPECTION DIVISION, 303-860-7487, A MINIMUM OF 24-HOURS AND A MAXIMUM OF 72-HOURS PRIOR TO STARTING CONSTRUCTION. CONTRACTOR SHALL NOTIFY DOUGLAS COUNTY ENGINEERING INSPECTION WHEN WORKING OUTSIDE OF THE PUBLIC RIGHT-OF-WAY ON ANY FACILITY THAT WILL BE CONVEYED TO THE COUNTY, URBAN DRAINAGE & FLOOD CONTROL DISTRICT, OR OTHER SPECIAL DISTRICT FOR MAINTENANCE (STORM SEWER, ENERGY DISSIPATORS, DETENTION OUTLET STRUCTURES, OR OTHER DRAINAGE INFRASTRUCTURES). FAILURE TO NOTIFY THE ENGINEERING INSPECTION DIVISION TO ALLOW THEM TO INSPECT THE CONSTRUCTION MAY RESULT IN NON-ACCEPTANCE OF THE FACILITY/INFRASTRUCTURE BY THE COUNTY AND/OR URBAN DRAINAGE.
- CONSTRUCTION WILL NOT BEGUN UNTIL ALL APPLICABLE PERMITS HAVE BEEN ISSUED. IF A CITY OF LONE TREE ENGINEERING INSPECTOR IS NOT AVAILABLE AFTER PROPER NOTICE OF CONSTRUCTION ACTIVITY HAS BEEN PROVIDED, THE PERMITEE MAY COMMENCE WORK IN THE INSPECTOR'S ABSENCE; HOWEVER, DOUGLAS COUNTY RESERVES THE RIGHT NOT TO ACCEPT THE IMPROVEMENT IF SUBSEQUENT TESTING REVEALS AN IMPROPER INSTALLATION.
- THE LOCATION OF EXISTING UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO ACTUAL CONSTRUCTION. FOR INFORMATION CONTACT: COLORADO 811, AT 1-800-922-1987 (WWW.COLORADO811.ORG).
- THE CONTRACTOR SHALL HAVE ONE (1) COPY OF THE PLANS SIGNED BY THE CITY OF LONE TREE ENGINEERING DIRECTOR, ONE (1) COPY OF THE ROADWAY DESIGN AND CONSTRUCTION STANDARDS, AS AMENDED, AND ALL APPLICABLE PERMITS AT ALL TIMES.
- ALL PROPOSED STREET CUTS TO EXISTING PAVEMENTS FOR UTILITIES, STORM SEWER OR FOR OTHER PURPOSES ARE LISTED AND REFERENCED BELOW:  
EXAMPLES: WATER TIE-IN SHEET 3  
STORM SEWER CONNECTION SHEET 6
- A TRAFFIC CONTROL PLAN, IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, SHALL BE SUBMITTED TO CITY OF LONE TREE FOR ACCEPTANCE WITH THE RIGHT-OF-WAY USE AND CONSTRUCTION PERMIT APPLICATION. A RIGHT-OF-WAY USE AND CONSTRUCTION PERMIT WILL NOT BE ISSUED WITHOUT AN ACCEPTED TRAFFIC CONTROL PLAN FOR TRAFFIC CONTROL DURING CONSTRUCTION.
- THE CONSTRUCTION PLANS SHALL BE CONSIDERED VALID FOR THREE (3) YEARS FROM THE DATE OF COUNTY ACCEPTANCE, AFTER WHICH TIME THESE PLANS SHALL BE VOID AND WILL BE SUBJECT TO RE-REVIEW AND RE-ACCEPTANCE BY CITY OF LONE TREE.
- CITY OF LONE TREE STANDARD DETAILS SHALL NOT BE MODIFIED. ANY NON-STANDARD DETAILS WILL BE CLEARLY IDENTIFIED AS SUCH.
- PAVING, INCLUDING CONSTRUCTION OF CURB AND GUTTER (WHEN USED), SHALL NOT START UNTIL A PAVEMENT DESIGN REPORT AND SUBGRADE COMPACTION TESTS ARE ACCEPTED BY THE ENGINEERING INSPECTION DIVISION FOR ALL PUBLIC AND PRIVATE ROADS.
- STANDARD CITY OF LONE TREE HANDICAP RAMPS ARE TO BE CONSTRUCTED AT ALL CURB RETURNS AND AT MID-BLOCK LOCATIONS OPPOSITE OF ONE OF THE CURB RETURNS OF ALL "T" INTERSECTIONS AS IDENTIFIED ON THESE PLANS.
- ALL STATIONING IS BASED ON CENTERLINE OF ROADWAYS UNLESS OTHERWISE NOTED.
- ALL ELEVATIONS ARE ON UNITED STATES COAST AND GEODETIC SURVEY (USCGS) (NAVD-88) DATUM WITH DATE. THE BENCHMARK POINT OR MONUMENTS SHALL BE SHOWN ON CONSTRUCTION DRAWINGS.
- ALL STORM SEWER IMPROVEMENTS (PUBLIC AND PRIVATE) INCLUDING, BUT NOT LIMITED TO, INLETS, PIPES, CULVERTS, CHANNELS, DITCHES, HYDRAULIC STRUCTURES, RIPRAP, DETENTION BASINS, FOREBAYS, MICROPOOLS, AND WATER QUALITY FACILITIES REQUIRE PERMITTING AND INSPECTIONS. PLEASE CONTACT THE DOUGLAS COUNTY ENGINEERING INSPECTIONS DIVISION AT 303-860-7487 FOR PERMITTING REQUIREMENTS AND INSPECTIONS SCHEDULING.
- TWO (2) MANHOLE ACCESS POINTS ARE REQUIRED ON ALL TYPE "R" CURB INLETS GREATER THAN OR EQUAL TO TEN (10) FEET IN LENGTH.
- EPOXY COATED REBAR IS REQUIRED ON ALL DRAINAGE STRUCTURES.
- CITY OF LONE TREE REQUIRES CLASS D CONCRETE FOR ALL DRAINAGE STRUCTURES.
- ALL RCP STORM SEWERS MUST USE ASTM C443 WATER TIGHT GASKETS PER THE CURRENT DOUGLAS COUNTY AND URBAN DRAINAGE DESIGN CRITERIA.
- ALL RCP SHALL BE CLASS III STORM SEWER PIPE UNLESS OTHERWISE SPECIFIED.
- JOINT RESTRAINTS ARE REQUIRED FOR A MINIMUM OF THE LAST TWO PIPE JOINTS AND FLARED END SECTION OF AN RCP OUTFALL.
- PRECAST INLETS AND MANHOLE BASES ARE NOT ALLOWED.
- TOE WALLS ARE REQUIRED ON FLARED END SECTIONS AT THE OUTLET END OF CULVERTS AND STORM SEWER OUTFALLS.
- FILTER FABRIC IS REQUIRED UNDER ALL RIPRAP PADS.
- THE PROFESSIONAL ENGINEER, REGISTERED IN THE STATE OF COLORADO, SHOWING THESE PLANS IS RESPONSIBLE FOR ENSURING THAT THE DETAILS INCLUDED ARE COMPATIBLE WITH THE STANDARD CITY OF LONE TREE DETAILS CONTAINED IN THE LATEST VERSIONS OF THE CRITERIA MANUALS. THIS INCLUDES, BUT IS NOT LIMITED TO:
  - CITY OF LONE TREE ROADWAY DESIGN AND CONSTRUCTION STANDARDS
  - CITY OF LONE TREE STORM DRAINAGE DESIGN AND TECHNICAL CRITERIA
  - CITY OF LONE TREE GRADING, EROSION AND SEDIMENT CONTROL CRITERIA
  - CDOT M & S STANDARDS
  - MUTCD
  - URBAN STORM DRAINAGE CRITERIA MANUAL, VOLUMES 1,2 & 3
- A TEMPORARY CONSTRUCTION ACCESS PERMIT FROM DOUGLAS COUNTY MAY BE REQUIRED FOR ANY PROJECT.

SHEET INDEX	
SHEET	DESCRIPTION
1	COVER SHEET
2	SITE PLAN
3	SITE DETAILS
4	GRADING PLAN
5	EROSION CONTROL PLAN
6	EROSION CONTROL DETAILS
7	EROSION CONTROL DETAILS
8	EROSION CONTROL DETAILS
9	CONCEPTUAL LANDSCAPE PLAN

SURVEYOR TO OBTAIN AUTOCAD FILE FROM ENGINEER AND VERIFY ALL HORIZONTAL CONTROL DIMENSIONS PRIOR TO CONSTRUCTION STAKING. SURVEYOR MUST VERIFY ALL BENCHMARK, BASIS OF BEARING AND DATUM INFORMATION TO ENSURE IMPROVEMENTS WILL BE AT THE SAME HORIZONTAL AND VERTICAL LOCATIONS SHOWN ON THE DESIGN CONSTRUCTION DRAWINGS. PRIOR TO CONSTRUCTION STAKING ANY DISCREPANCY MUST BE REPORTED TO OWNER AND ENGINEER PRIOR TO CONTINUATION OF ANY FURTHER STAKING OR CONSTRUCTION WORK.

CONTRACTOR IS RESPONSIBLE FOR AS-BUILT DRAWINGS, TESTS, REPORTS AND/OR ANY OTHER CERTIFICATES OR INFORMATION AS REQUIRED FOR ACCEPTANCE OF WORK FROM CITY, UTILITY DISTRICTS OR ANY OTHER GOVERNING AGENCY.

CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL INFORMATION FOR FINAL ACCEPTANCE OF WORK FOR ANY LOCAL, STATE OR FEDERAL AGENCY, UTILITY DISTRICT OR ANY OTHER AGENCY OR DISTRICT HAVING APPROVAL AUTHORITY OVER WORK. THIS INFORMATION MAY INCLUDE, BUT IS NOT LIMITED TO, AS-BUILT PLANS, CERTIFICATIONS, INSPECTIONS AND REPORTS.

NOTE: CONTRACTOR MUST COORDINATE WORK WITH UTILITY COMPANY AND CITY PRIOR TO BEGINNING WORK AND IS RESPONSIBLE FOR ALL MATERIALS, LABOR, REPAIRS, ETC. TO COMPLETE WORK AND RESTORE AREA TO SAME STATE PRIOR TO STARTING WORK.

NOTE: CONTRACTOR SHALL PROTECT ALL EXISTING SURVEY MONUMENTATION. CONTRACTOR SHALL HAVE LICENSED SURVEYOR REPLACE ANY DAMAGED OR DISTURBED MONUMENTATION AT THEIR COST.

**FLOODPLAIN STATEMENT**

PARCEL IS LOCATED WITHIN FLOODPLAIN ZONE "X" DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE OF RAIN AS PER FLOOD INSURANCE RATE MAP (FIRM) NUMBER 080350042G, REVISED MARCH 16, 2016.

**LEGAL DESCRIPTION**

A PARCEL OF LAND LOCATED IN THE NORTHWEST ¼ OF THE NORTHWEST ¼ OF THE SECTION 16, TOWNSHIP 6 SOUTH, RANGE 67 WEST OF THE 6TH PRINCIPAL MERIDIAN, DOUGLAS COUNTY, COLORADO, MORE PARTICULARLY DESCRIBED AS FOLLOWS:  
COMMENCING AT THE NORTHWEST CORNER OF SAID SECTION 16 AND CONSIDERING THE WEST LINE OF SAID SECTION 16 TO BEAR N01°14'50"E WITH ALL BEARINGS CONTAINED HEREIN RELATIVE THERETO:  
THENCE S01°14'50"W ALONG SAID SECTION 16, 75.00 FEET TO THE SOUTH LINE OF LINCOLN AVENUE AND THE POINT OF BEGINNING;  
THENCE CONTINUING S01°14'50"W ALONG SAID WEST LINE, 657.80 FEET TO A POINT ON THE NORTH LINE OF CENTENNIAL RIDGE SUBDIVISION FILING NO. 1;  
THENCE ALONG SAID NORTH LINE THE FOLLOWING FOUR (4) COURSES:  
1. N55°24'20"E, 124.62 FEET;  
2. S88°45'10"E, 411.36 FEET;  
3. N70°25'30"E, 100.94 FEET;  
4. N44°11'51"E, 128.00 FEET TO A POINT ON THE WEST LINE OF LONE TREE PARKWAY;  
THENCE ALONG SAID WEST LINE THE FOLLOWING FOUR (4) COURSES:  
1. THENCE N45°48'09"W, 73.59 FEET TO A POINT OF CURVE;  
2. THENCE ALONG SAID CURVE TO THE RIGHT HAVING A RADIUS OF 300.00 FEET, A CENTRAL ANGLE OF N01°21'36", 246.94 FEET TO A POINT OF TANGENT;  
3. THENCE ALONG SAID CURVE TO THE LEFT HAVING A RADIUS OF 35.00 FEET, A CENTRAL ANGLE OF 90°00'00", 54.98 FEET TO A LINE OF 75.00 FEET SOUTH OF AND PARALLEL TO THE NORTH LINE OF SAID NORTHWEST ¼ OF THE NORTHWEST ¼;  
THENCE N88°58'24"W ALONG SAID LINE 509.85 FEET TO THE POINT OF BEGINNING, EXCEPT THE REAL PROPERTY DESCRIBED IN THAT CERTAIN PARTIAL RELEASE OF DEED OF TRUST RECORDED AUGUST 14, 1985 IN BOOK 590, AT PAGE 392X, COUNTY OF DOUGLAS, STATE OF COLORADO.

#	Date	Issue / Description	Init.
1	01/19/24	1ST SUBMITTAL	JSB
2	03/13/24	2ND SUBMITTAL	JSB
3	05/08/24	3RD SUBMITTAL	JSB
4	05/31/24	4TH SUBMITTAL	JSB

Project No: AMC000002  
Drawn By: DMH  
Checked By: JSB  
Date: JANUARY 2024

**CAUTION - NOTICE TO CONTRACTOR**

- ALL UTILITY LOCATIONS SHOWN ARE BASED ON MAPS PROVIDED BY THE APPROPRIATE UTILITY COMPANY AND FIELD SURFACE EVIDENCE AT THE TIME OF SURVEY AND IS TO BE CONSIDERED AN APPROXIMATE LOCATION ONLY. IT IS THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY THE LOCATION OF ALL UTILITIES, PUBLIC OR PRIVATE, WHETHER SHOWN ON THE PLANS OR NOT, PRIOR TO CONSTRUCTION. REPORT ANY DISCREPANCIES TO THE ENGINEER PRIOR TO CONSTRUCTION.
- WHERE A PROPOSED UTILITY CROSSES AN EXISTING UTILITY, IT IS THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY THE HORIZONTAL AND VERTICAL LOCATION OF SUCH EXISTING UTILITY, EITHER THROUGH POTHOLING OR ALTERNATIVE METHOD. REPORT INFORMATION TO THE ENGINEER PRIOR TO CONSTRUCTION.



**COPYRIGHT**  
THESE PLANS ARE AN INSTRUMENT OF SERVICE AND ARE THE PROPERTY OF GALLOWAY, AND MAY NOT BE DUPLICATED, DISCLOSED, OR REPRODUCED WITHOUT THE WRITTEN CONSENT OF GALLOWAY. COPYRIGHTS AND INFRINGEMENTS WILL BE ENFORCED AND PROSECUTED.



**AMBLESIDE SCHOOL  
LINCOLN AVE & LONE TREE PKWY  
SITE IMPROVEMENT PLAN - SP24-0003**

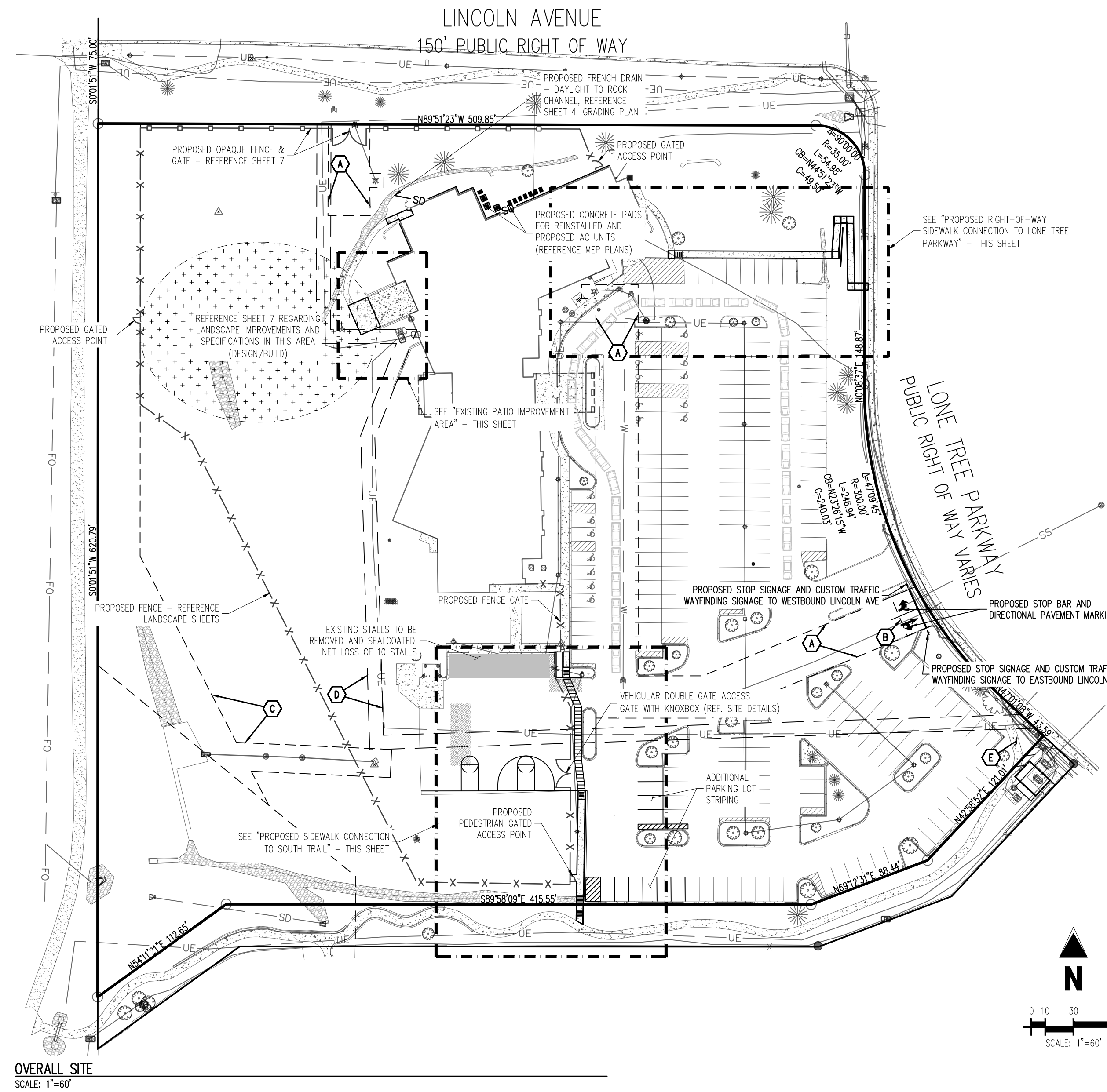
**9941 LONE TREE PARKWAY  
LONE TREE, CO 80124**

Project No: AMC000002  
Drawn By: DMH  
Checked By: JSB  
Date: JANUARY 2024

COVER SHEET



CENTENNIAL RIDGE  
**AMBLESIDE SCHOOL**  
 SITE IMPROVEMENT PLAN - SP24-0003  
 JANUARY 2024



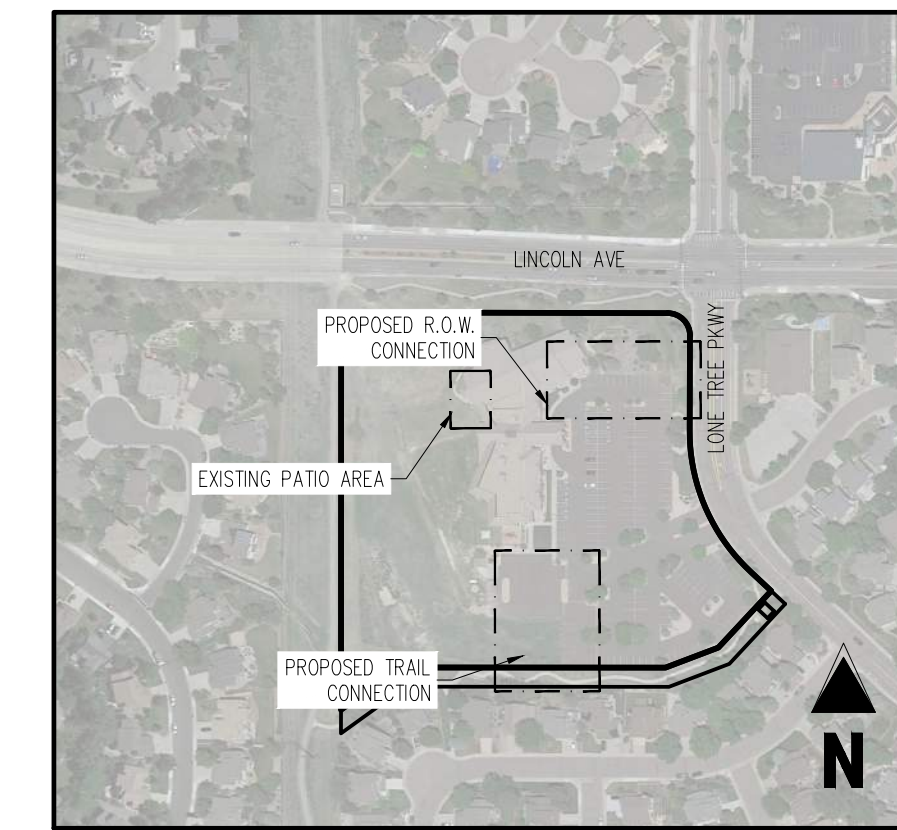
SITE DATA TABLE		
	SQUARE FOOTAGE	% OF GROSS SITE
GROSS SITE AREA	322,138 (7.39 AC)	100%
PERVIOUS AREA	179,388 (4.12 AC)	55%
IMPERVIOUS AREA	142,800 (3.27 AC)	45%

PARKING TABLE		
	EXISTING	PROPOSED
BUILDING AREA (S.F.)	27,358	27,358
REQUIRED STALLS	-	60
STANDARD STALLS	178	175
ADA STALLS	17	17
TOTAL PARKING STALLS	195	188
BICYCLE SPACES	4	4

CITY PARKING CODE REQUIRES PARKING PER THE FOLLOWING:  
 PER CODE, BICYCLE PARKING IS 2% OF TOTAL SITE PARKING  
 2 SPACES PER STUDENT (ELEMENTARY SCHOOL)  
 16 SPACES PER STUDENT (MIDDLE SCHOOL)  
 46 SPACES PER STUDENT (HIGH SCHOOL)

PROPOSED PARKING CONDITIONS ARE AS FOLLOWS:  
 ELEMENTARY SCHOOL (K-5): 102 STUDENTS - 20.4 PARKING SPACES  
 MIDDLE SCHOOL (6-8): 51 STUDENTS - 8.16 PARKING SPACES  
 HIGH SCHOOL (9-12): 68 STUDENTS - 31.28 PARKING SPACES  
 PER CITY REQUIREMENTS, 60 TOTAL STALLS NEEDED



KEY MAP  
 SCALE: 1"=200'

SITE LEGEND

—	PROPERTY BOUNDARY LINE
- - -	ADJACENT PROPERTY BOUNDARY LINE
- - - -	RIGHT OF WAY BOUNDARY LINE
- - - - -	SECTION LINE
- - - - -	EXISTING EASEMENT LINE
- - - - -	EXISTING TO REMAIN
- - - - -	EXISTING WATER LINE TO REMAIN
- - - - -	EXISTING FIBER OPTIC LINE TO REMAIN
- - - - -	EXISTING UNDERGROUND ELECTRIC TO REMAIN
- - - - -	EXISTING FENCE TO REMAIN
- - - - -	PROPOSED NEW
- - - - -	PROPOSED CURB AND GUTTER
- - - - -	EXISTING CURB AND GUTTER
- - - - -	PROPOSED SIDEWALK
- - - - -	PROPOSED ASPHALT PATCHBACK
- - - - -	PROPOSED SEALCOAT
- - - - -	ADA PATH OF TRAVEL
- - - - -	EXISTING SIGN
- - - - -	PROPOSED SIGNAGE

**EASEMENT SCHEDULE**

- (A) 30' WATER LINE EASEMENT, BOOK 1373, PAGE 1334
- (B) SEWER LINE EASEMENT, BOOK 1773, PAGE 1334
- (C) DRAINAGE EASEMENT, BOOK 330, PAGE 319
- (D) 10' PUBLIC SERVICE COMPANY OF COLORADO EASEMENT, REC. NO. 2004126614
- (E) PAVED TRAIL EASEMENT AT RECEPTION NO. 2007050248 UNDER SCHEDULE B, PART 2, ITEM 21 IN THE TITLE COMMITMENT, REFERENCED ON THIS SURVEY, APPEARS TO BE INTENDED FOR THE CONCRETE WALK AT THE SOUTHEAST CORNER OF THE PROPERTY. THE EASEMENT IN "EXHIBIT A" DOES NOT HAVE THE INFORMATION TO ACCURATELY PLOT SAID EASEMENT

**SITE SCHEDULE**

- (1) PROPOSED CONCRETE RAMP (REFERENCE SITE DETAILS)
- (2) PROPOSED RETAINING WALL (REFERENCE SITE DETAILS)
- (3) PROPOSED CONCRETE SIDEWALK (REFERENCE SITE DETAILS)
- (4) PROPOSED YELLOW PAINTED STRIPING AT 45° AT 2'-0" O.C.
- (5) PROPOSED 2' SIDEWALK CHASE (REFERENCE SITE DETAILS)
- (6) PROPOSED 6" CURB AND GUTTER (REFERENCE SITE DETAILS)
- (7) PROPOSED HANDRAIL
- (8) PROPOSED ASPHALT PATCHBACK (IN PLACE OF EXISTING LANDSCAPE ISLAND)
- (9) PROPOSED BASKETBALL COURT STRIPING
- (10) PROPOSED CONCRETE STAIRCASE (REFERENCE SITE DETAILS)
- (11) PROPOSED CONCRETE LANDING (REFERENCE SITE DETAILS)
- (12) PROPOSED BIKE RACK
- (13) PROPOSED CROSSWALK

SURVEYOR TO OBTAIN AUTOCAD FILE FROM ENGINEER AND VERIFY ALL HORIZONTAL CONTROL DIMENSIONING PRIOR TO CONSTRUCTION STAKING. SURVEYOR MUST VERIFY ALL BENCHMARK, BASIS OF BEARING AND DATUM INFORMATION TO ENSURE IMPROVEMENTS WILL BE AT THE SAME HORIZONTAL AND VERTICAL LOCATIONS SHOWN ON THE DESIGN CONSTRUCTION DRAWINGS. PRIOR TO CONSTRUCTION STAKING ANY DISCREPANCY MUST BE REPORTED TO OWNER AND ENGINEER PRIOR TO CONTINUATION OF ANY FURTHER STAKING OR CONSTRUCTION WORK.

CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL INFORMATION FOR FINAL ACCEPTANCE OF WORK FOR ANY LOCAL, STATE OR FEDERAL AGENCY, UTILITY DISTRICT OR ANY OTHER AGENCY OR DISTRICT HAVING APPROVAL AUTHORITY OVER WORK. THIS INFORMATION MAY INCLUDE, BUT IS NOT LIMITED TO, AS-BUILT PLANS, CERTIFICATIONS, INSPECTIONS AND REPORTS.

CONTRACTOR IS RESPONSIBLE FOR AS-BUILT DRAWINGS, TESTS, REPORTS AND/OR ANY OTHER CERTIFICATES OR INFORMATION AS REQUIRED FOR ACCEPTANCE OF WORK FROM CITY, UTILITY DISTRICTS OR ANY OTHER GOVERNING AGENCY.

NOTE: CONTRACTOR SHALL PROTECT ALL EXISTING SURVEY MONUMENTATION. CONTRACTOR SHALL HAVE LICENSED SURVEYOR REPLACE ANY DAMAGED OR DISTURBED MONUMENTATION AT THEIR COST.

NOTE: CONTRACTOR MUST COORDINATE WORK WITH UTILITY COMPANY AND CITY PRIOR TO BEGINNING WORK AND IS RESPONSIBLE FOR ALL MATERIALS, LABOR, REPAIRS, ETC. TO COMPLETE WORK AND RESTORE AREA TO SAME STATE PRIOR TO STARTING WORK.

NOTE: EXISTING SURFACE PIPE FOR ROOF DRAIN CONNECTION SHALL BE TRENCHED AND PLACED WITH A MINIMUM OF 1% SLOPE AT A MINIMUM BURIAL DEPTH OF 12" AND DAYLIGHTED TO NEAREST HILLSIDE TO PROMOTE POSITIVE DRAINAGE AND REDUCE SAFETY HAZARD.

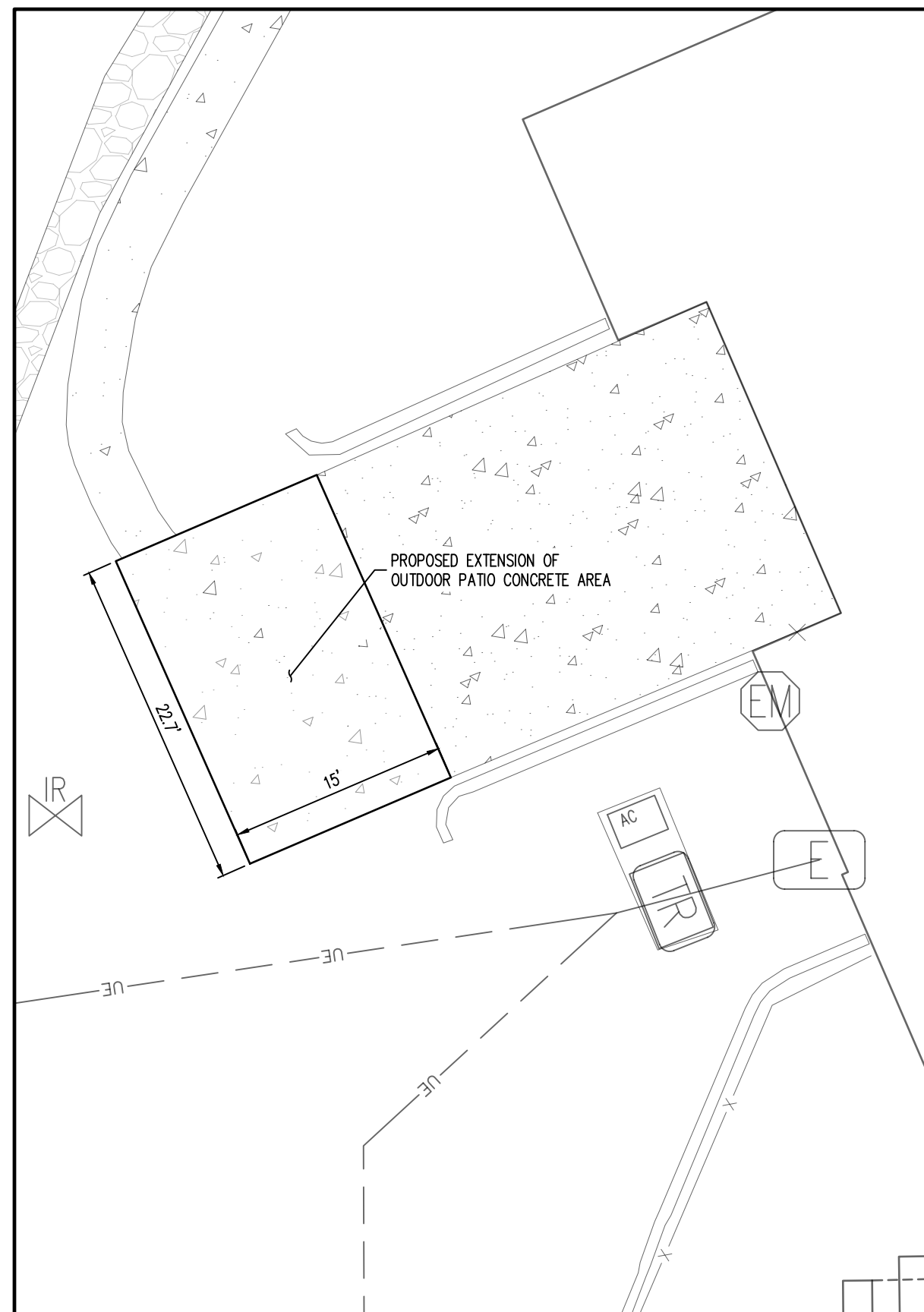
**LEGAL DESCRIPTION**

A PARCEL OF LAND LOCATED IN THE NORTHWEST ¼ OF THE NORTHWEST ¼ OF THE SECTION 16, TOWNSHIP 6 SOUTH, RANGE 67 WEST OF THE 6TH PRINCIPAL MERIDIAN, DOUGLAS COUNTY, COLORADO, MORE PARTICULARLY DESCRIBED AS FOLLOWS:  
 COMMENCING AT THE NORTHWEST CORNER OF SAID SECTION 16 AND CONSIDERING THE WEST LINE OF SAID SECTION 16 TO BEAR N01°14'50"E WITH ALL BEARINGS CONTAINED HEREIN RELATIVE THERETO:

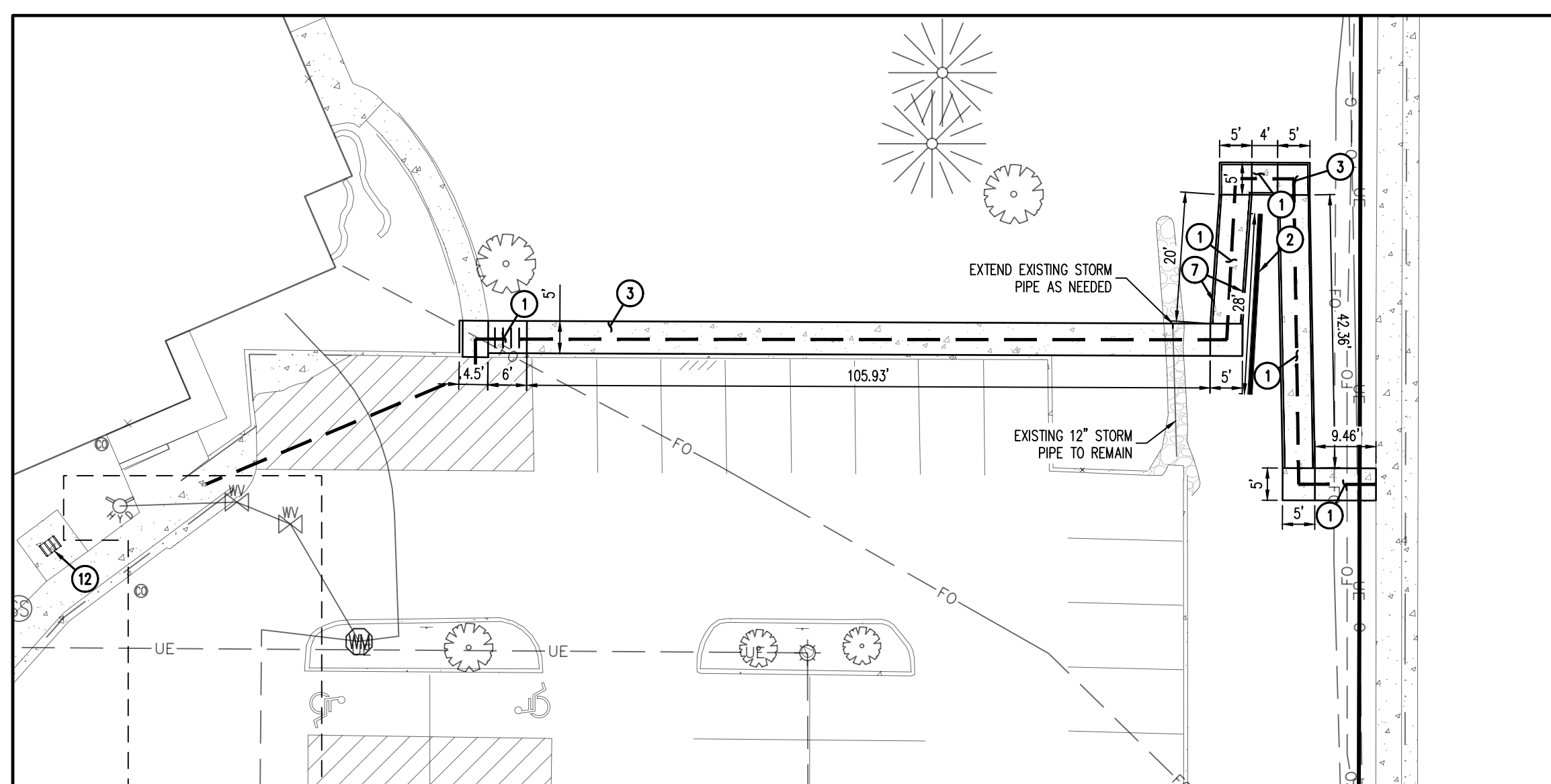
- THENCE S01°14'50"W ALONG SAID SECTION 16, 75.00 FEET TO THE SOUTH LINE OF LINCOLN AVENUE AND THE POINT OF BEGINNING;  
 THENCE CONTINUING S01°14'50"W ALONG THE SAID WEST LINE, 657.80 FEET TO A POINT ON THE NORTH LINE OF CENTENNIAL RIDGE SUBDIVISION FILING NO. 1;  
 THENCE ALONG SAID NORTH LINE THE FOLLOWING FOUR (4) COURSES:  
 1. N55°24'20"E, 124.62 FEET;  
 2. S88°45'10"E, 411.36 FEET;  
 3. N70°25'30"E, 100.94 FEET;  
 4. N44°11'51"E, 128.00 FEET TO A POINT ON THE WEST LINE OF LONE TREE PARKWAY;  
 THENCE ALONG SAID WEST LINE THE FOLLOWING FOUR (4) COURSES:  
 1. THENCE N45°48'09"W, 73.59 FEET TO A POINT OF CURVE;  
 2. THENCE ALONG SAID CURVE TO THE RIGHT HAVING A RADIUS OF 300.00 FEET, A CENTRAL ANGLE OF N01°21'36", 246.94 FEET TO A POINT OF TANGENT;  
 3. THENCE ALONG SAID CURVE TO THE LEFT HAVING A RADIUS OF 35.00 FEET, A CENTRAL ANGLE OF 90°00'00", 54.98 FEET TO A LINE OF 75.00 FEET SOUTH OF AND PARALLEL TO THE NORTH LINE OF SAID NORTHWEST 1/4 OF THE NORTHWEST ¼;  
 THENCE N88°38'24"W ALONG SAID LINE 509.85 FEET TO THE POINT OF BEGINNING, EXCEPT THE REAL PROPERTY DESCRIBED IN THAT CERTAIN PARTIAL RELEASE OF DEED OF TRUST RECORDED AUGUST 14, 1985 IN BOOK 590, AT PAGE 392X, COUNTY OF DOUGLAS, STATE OF COLORADO.

**CAUTION - NOTICE TO CONTRACTOR**

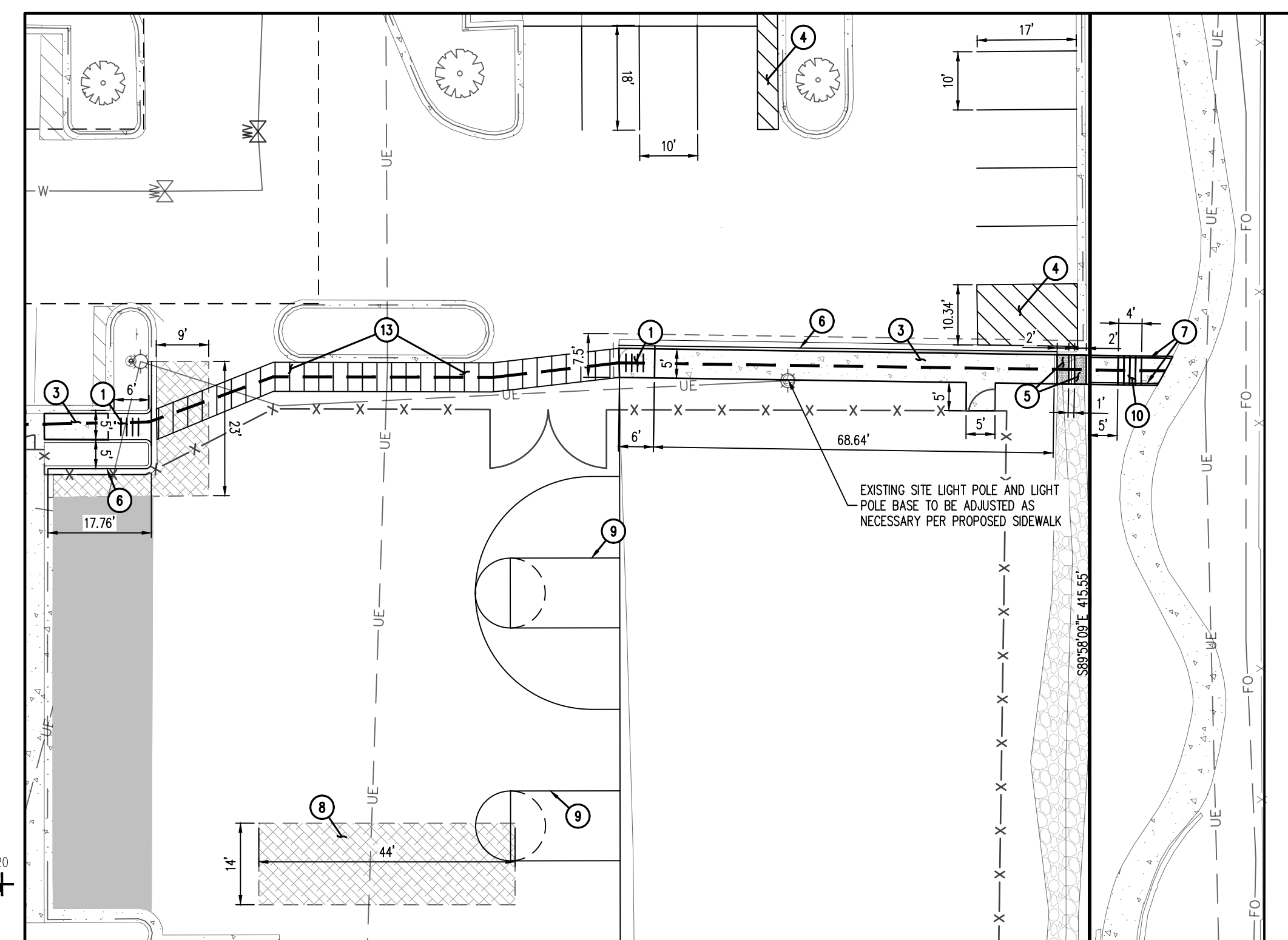
- 1. ALL UTILITY LOCATIONS SHOWN ARE BASED ON MAPS PROVIDED BY THE APPROPRIATE UTILITY COMPANY AND FIELD SURFACE EVIDENCE AT THE TIME OF SURVEY AND IS TO BE CONSIDERED AN APPROXIMATE LOCATION ONLY. IT IS THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY THE LOCATION OF ALL UTILITIES, PUBLIC OR PRIVATE, WHETHER SHOWN ON THE PLANS OR NOT, PRIOR TO CONSTRUCTION. REPORT ANY DISCREPANCIES TO THE ENGINEER PRIOR TO CONSTRUCTION. Call before you dig.
- 2. WHERE A PROPOSED UTILITY CROSSES AN EXISTING UTILITY, IT IS THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY THE HORIZONTAL AND VERTICAL LOCATION OF SUCH EXISTING UTILITY, EITHER THROUGH POT-HOLES OR ALTERNATIVE METHOD. REPORT INFORMATION TO THE ENGINEER PRIOR TO CONSTRUCTION.



EXISTING PATIO IMPROVEMENT AREA  
 SCALE: 1"=10'



PROPOSED RIGHT-OF-WAY SIDEWALK CONNECTION TO LONE TREE PARKWAY  
 SCALE: 1"=10'



PROPOSED SIDEWALK CONNECTION TO SOUTH TRAIL  
 SCALE: 1"=20'

**COPYRIGHT**  
 THESE PLANS ARE AN INSTRUMENT OF SERVICE AND ARE THE PROPERTY OF GALLOWAY, AND MAY NOT BE DUPLICATED, DISCLOSED, OR REPRODUCED WITHOUT THE WRITTEN CONSENT OF GALLOWAY. COPYRIGHTS AND INFRINGEMENTS WILL BE ENFORCED AND PROSECUTED.



AMBLESIDE SCHOOL  
 LINCOLN AVE & LONE TREE PKWY  
 SITE IMPROVEMENT PLAN - SP24-0003  
 9941 LONE TREE PARKWAY  
 LONE TREE, CO 80124

#	Date	Issue / Description	Init.
1	01/19/24	1ST SUBMITTAL	JSB
2	03/13/24	2ND SUBMITTAL	JSB
3	05/08/24	3RD SUBMITTAL	JSB

Project No: AMC000002  
 Drawn By: DMH  
 Checked By: JSB  
 Date: JANUARY 2024

SITE PLAN















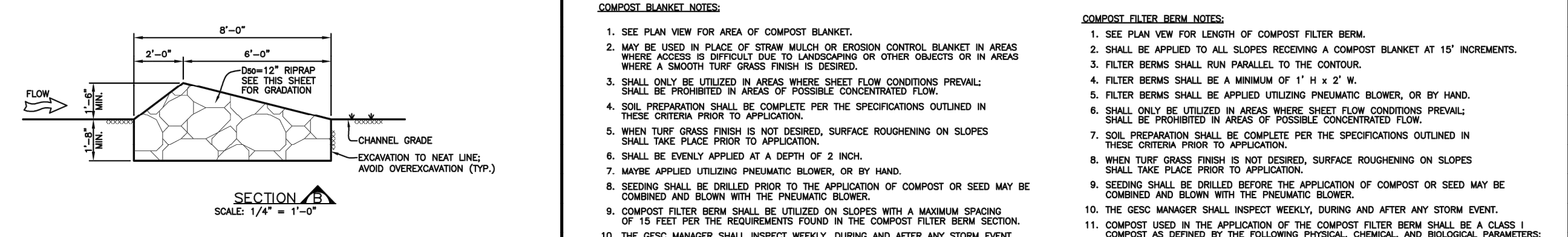
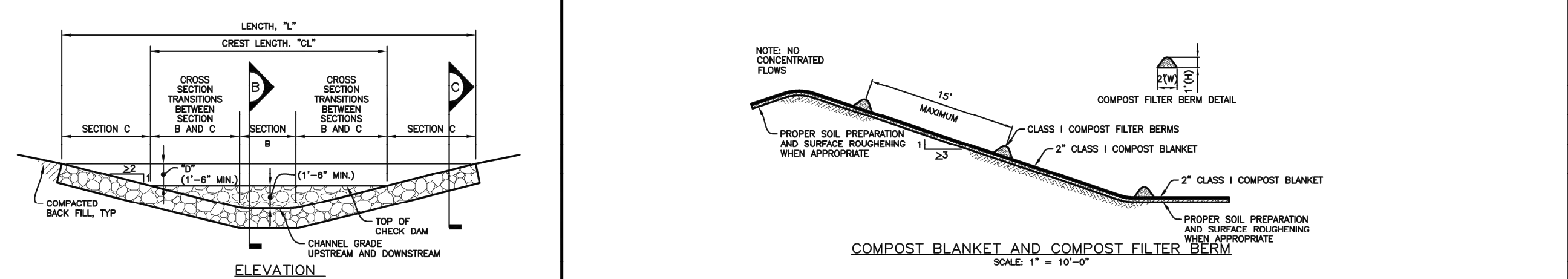
CENTENNIAL RIDGE  
**AMBLESIDE SCHOOL**  
 SITE IMPROVEMENT PLAN - SP24-0003  
 JANUARY 2024

**GRADING, EROSION, AND SEDIMENT CONTROL (GESC) GENERAL NOTES**

- THE CITY OF LONE TREE ENGINEER'S SIGNATURE AFFIXED TO THIS DOCUMENT INDICATES THE CITY OF LONE TREE PUBLIC WORKS DEPARTMENT, ENGINEERING DIVISION, HAS REVIEWED THE DOCUMENT AND FOUND IT IN GENERAL COMPLIANT WITH THE CITY OF LONE TREE SUBDIVISION REGULATIONS AND/OR THE GRADING, EROSION AND SEDIMENT CONTROL (GESC) CRITERIA MANUAL. THE CITY OF LONE TREE ENGINEER, THROUGH ACCEPTANCE OF THIS DOCUMENT, ASSUMES NO RESPONSIBILITY (OTHER THAN AS STATED ABOVE) FOR THE COMPLETENESS AND/OR ACCURACY OF THESE DOCUMENTS.
- THE ADEQUACY OF THIS GESC PLAN LIES WITH THE ORIGINAL DESIGN ENGINEER.
- THE GESC PLAN SHALL BE CONSIDERED VALID FOR TWO (2) YEARS FROM THE DATE OF ACCEPTANCE BY THE CITY OF LONE TREE. AFTER THAT TIME, THE PLAN SHALL BE VOID AND WILL BE SUBJECT TO RE-REVIEW AND RE-ACCEPTANCE BY THE CITY OF LONE TREE.
- ALL MATERIALS AND WORKMANSHIP SHALL BE SUBJECT TO INSPECTION BY THE CITY OF LONE TREE ENGINEERING DIVISION. THE CITY OF LONE TREE RESERVES THE RIGHT TO ACCEPT OR REJECT ANY SUCH MATERIALS AND WORKMANSHIP THAT DOES NOT CONFORM TO THE GESC MANUAL, GESC PLAN OR GESC PERMIT.
- THE PLACEMENT OF EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES (BMPs) SHALL BE IN ACCORDANCE WITH THE CITY OF LONE TREE - ACCEPTED GESC PLAN AND THE CITY OF LONE TREE GESC MANUAL.
- ANY VARIATION IN MATERIAL, TYPE OR LOCATION OF EROSION AND SEDIMENT CONTROL BMPs FROM THE CITY OF LONE TREE - ACCEPTED GESC PLAN WILL REQUIRE APPROVAL FROM AN ACCOUNTABLE REPRESENTATIVE OF THE CITY OF LONE TREE ENGINEERING DIVISION.
- AFTER THE GESC PLAN HAS BEEN ACCEPTED, THE GESC PERMIT APPLICANT, FEES AND FISCAL SECURITY SUBMITTED TO THE CITY AND THE GESC FIELD MANUAL OBTAINED AND REVIEWED, THE CONTRACTOR MAY INSTALL THE INITIAL-STAGE EROSION AND SEDIMENT CONTROL BMPs INDICATED ON THE ACCEPTED GESC PLAN.
- THE FIRST BMP TO BE INSTALLED ON THE SITE SHALL BE CONSTRUCTION FENCE, MARKERS, OR OTHER APPROVED MEANS OF DEFINING THE LIMITS OF CONSTRUCTION, INCLUDING CONSTRUCTION LIMITS ADJACENT TO STREAM CORRIDORS AND OTHER AREAS TO BE PRESERVED.
- AFTER INSTALLATION OF THE INITIAL-STAGE EROSION AND SEDIMENT CONTROL BMPs, THE PERMITTEE SHALL CALL THE CITY OF LONE TREE CONSTRUCTION INSPECTOR AT (303) 682-8112 TO SCHEDULE A PRECONSTRUCTION MEETING AT THE PROJECT SITE. THE REQUEST SHALL BE MADE A MINIMUM OF THREE BUSINESS DAYS PRIOR TO THE PRECONSTRUCTION MEETING. NO CONSTRUCTION ACTIVITIES SHALL BE PLANNED WITHIN 24 HOURS AFTER THE PRECONSTRUCTION MEETING.
- THE OWNER OR OWNER'S REPRESENTATIVE, THE GESC MANAGER, THE GENERAL CONTRACTOR, AND THE GRADING SUBCONTRACTOR, IF APPLICABLE, MUST ATTEND THE PRECONSTRUCTION MEETING. IF ANY OF THE REQUIRED PARTICIPANTS FAIL TO ATTEND THE PRECONSTRUCTION MEETING, OR IF THE GESC FIELD MANUAL IS NOT ON SITE OR IF THE INSTALLATION OF THE INITIAL BMPs ARE NOT APPROVED BY THE CITY OF LONE TREE GESC INSPECTOR, THE APPLICANT WILL HAVE TO PAY A RESCHEDULING FEE. ADDRESS ANY PROBLEMS WITH BMP INSTALLATION, AND CALL TO THE MEETING WITH A CORRESPONDING DELAY IN THE START OF CONSTRUCTION. THE CITY OF LONE TREE STRONGLY ENCOURAGES THE APPLICANT TO HAVE THE ENGINEER OF RECORD AT THE PRECONSTRUCTION MEETING. FAILURE OF THE ENGINEER OF RECORD TO ATTEND MAY RESULT IN A DELAY OF THE START OF CONSTRUCTION.
- CONSTRUCTION SHALL NOT BEGUN UNTIL THE CITY OF LONE TREE GESC INSPECTOR APPROVES THE INSTALLATION OF THE INITIAL BMPs. THE APPROVED GESC PERMIT IS PICKED UP FROM THE CITY AND IS IN-HAND ON THE SITE. THE COMPLETED PERMIT SHALL BE AVAILABLE WITHIN 24-HOURS AFTER THE INSTALLATION OF THE INITIAL BMPs ARE APPROVED.
- THE GESC MANUAL SHALL STRICTLY ADHERE TO THE CITY OF LONE TREE APPROVED LIMITS OF CONSTRUCTION AT ALL TIMES. THE CITY OF LONE TREE ENGINEERING DIVISION MUST APPROVE ANY CHANGES TO THE LIMITS OF CONSTRUCTION AND, AT THE DISCRETION OF THE ENGINEERING DIVISION, ADDITIONAL EROSION/SEDIMENT CONTROLS MAY BE REQUIRED IN ANY ADDITIONAL AREAS OF CONSTRUCTION.
- THE MAXIMUM AREA OF CONSTRUCTION SHALL BE LIMITED TO 40 ACRES (70 ACRES IF APPROVED FOR SOIL MITIGATION OPERATIONS) TO REDUCE THE AMOUNT OF LAND DISTURBED AT ANY ONE TIME. LARGER SITES SHALL BE DIVIDED INTO PHASES THAT ARE EACH 40 (OR 70) ACRES OR LESS IN SIZE. THESE PROJECTS SHALL CONDUCT GRADING ACTIVITIES IN ACCORDANCE WITH THE ACCEPTED GESC PLAN. BMP INSTALLATION AND APPROVAL BY THE CITY OF LONE TREE ARE AT THE START AND COMPLETION OF EACH PHASE SHALL BE CONDUCTED IN ACCORDANCE WITH THE PROCEDURES OUTLINED IN THE GESC MANUAL AND/OR GESC FIELD MANUAL.
- PRIOR TO ACTUAL CONSTRUCTION, THE PERMITTEE SHALL VERIFY THE LOCATION OF EXISTING UTILITIES. FOR INFORMATION, CONTACT THE DENVER INTER-UTILITY GROUP AT 1-800-922-1987 OR FAX AT (303) 534-6700.
- NATURAL VEGETATION SHALL BE RETAINED AND PROTECTED WHEREVER POSSIBLE. EXPOSURE OF SOIL TO EROSION BY THE PROCESSES OF VEGETATION SHALL BE LIMITED TO THE AREA REQUIRED FOR IMMEDIATE CONSTRUCTION OPERATIONS.
- THE GESC PERMIT SHALL BE VALID FOR A PERIOD OF ONE (1) YEAR, UNLESS EXTENDED.
- A COPY OF THE GESC PERMIT, ACCEPTED GESC PLANS AND THE GESC FIELD MANUAL SHALL BE ON SITE AT ALL TIMES.
- THE GESC MANAGER SHALL BE RESPONSIBLE FOR ENSURING THAT THE SITE REMAINS IN COMPLIANCE WITH THE GESC PERMIT AND SHALL BE RESPONSIBLE FOR CONTACTING PERSON WITH THE CITY FOR ALL MATTERS PERTAINING TO THE GESC PERMIT. THE GESC MANAGER SHALL BE PRESENT AT THE SITE THE MAJORITY OF THE TIME AND SHALL BE AVAILABLE THROUGHOUT THE PROJECT. IN THE EVENT THAT THE CONTRACTOR'S GESC MANAGER IS NOT ON SITE AND CANNOT BE REACHED DURING A VIOLATION, THE ALTERNATE GESC MANAGER SHALL BE CONTACTED. IF NEITHER THE GESC MANAGER NOR ALTERNATE GESC MANAGER CAN BE CONTACTED DURING ANY VIOLATION, A STOP WORK ORDER SHALL BE ISSUED.
- ALL CONSTRUCTION TRAFFIC MUST ENTER/EXIT THE SITE THROUGH THE CITY OF LONE TREE APPROVED ACCESS POINT. A VEHICLE TRACKING CONTROL PAD IS REQUIRED AT ALL ACCESS POINTS ON THE SITE. ADDITIONAL STABILIZED CONSTRUCTION ENTRANCES MAY BE ADDED WITH AUTHORIZATION FROM THE CITY OF LONE TREE ENGINEERING DIVISION.
- THE GESC MANAGER IS RESPONSIBLE FOR CLEANUP OF SEDIMENT OR CONSTRUCTION DEBRIS TRACKED ONTO ADJACENT PAVED AREAS INCLUDING STREETS ARE TO BE KEPT CLEAN THROUGHOUT BUILD-OUT AND SHALL BE CLEANED WITH A STREET SWEEPER OR SIMILAR DEVICE. AT FIRST NOTICE OF ACCIDENTAL TRACKING OR AT THE DISCRETION OF THE CITY OF LONE TREE GESC INSPECTOR, STREET WASHING IS NOT ALLOWED. THE CITY OF LONE TREE RESERVES THE RIGHT TO REQUIRE ADDITIONAL MEASURES TO ENSURE AREA STREETS ARE KEPT FREE OF SEDIMENT AND/OR CONSTRUCTION DEBRIS.

**DETAIL SHEET**

NO.	NO.	BMP LEGEND
1	(1)	CD CHECK DAM
2	(2)	CB COMPOST BLANKET
3	(3)	CFB COMPOST FILTER BERM
4	(4)	CWA CONCRETE WASHOUT AREA
5	(5)	CF CONSTRUCTION FENCE
6	(6)	CM CONSTRUCTION MARKERS
7	(7)	DW DEWATERING
8	(8)	DD DIVERSION DITCH
9	(9)	ECB EROSION CONTROL BLANKET
10	(10)	IF INLET PROTECTION
11	(11)	RCB REINFORCED CHECK DAM
12	(12)	RRB REINFORCED ROCK BERM
13	(13)	RRR RRB FOR CURB/ PROTECTION
14	(14)	SB SEDIMENT BASIN
15	(15)	SOL SEDIMENT CONTROL LOG
16	(16)	ST STABILIZED TRAP
17	(17)	SM SEEDING AND MULCHING
18	(18)	SF SILT FENCE
19	(19)	SSA STABILIZED STAGING AREA
20	(20)	SR SURFACE ROUGHENING
21	(21)	TSO TEMPORARY SLOPE DRAIN
22	(22)	TSC TEMPORARY STREAM CROSSING
23	(23)	TER TERRACING
24	(24)	VTC VEHICLE TRACKING CONTROL
25	(25)	WW WITH WHEEL WASH
26	(26)	CS CURB SOCK
	(LOC)	LIMITS OF CONSTRUCTION



**COMPOST BLANKET NOTES:**

- SEE PLAN VIEW FOR AREA OF COMPOST BLANKET.
- MAY BE USED IN PLACE OF STRIP MULCH OR EROSION CONTROL BLANKET IN AREAS WHERE ACCESS IS DIFFICULT DUE TO LANDSCAPE OR OTHER OBJECTS OR IN AREAS WHERE A SMOOTH TOP SURFACE FINISH IS DESIRED.
- SHALL ONLY BE UTILIZED IN AREAS WHERE SHEET FLOW CONDITIONS PREVAIL.
- SHALL BE PROHIBITED IN AREAS OF POSSIBLE CONCENTRATED FLOW.
- SOIL PREPARATION SHALL BE COMPLETE FOR THE SPECIFICATIONS OUTLINED IN THESE CRITERIA PRIOR TO APPLICATION.
- WHEN TURF GRASS FINISH IS NOT DESIRED, SURFACE ROUGHENING ON SLOPES SHALL TAKE PLACE PRIOR TO APPLICATION.
- SHALL BE EVENLY APPLIED AT A DEPTH OF 2 INCH.
- MAY BE APPLIED UTILIZING PNEUMATIC BLOWER, OR BY HAND.
- SEEDING SHALL BE ORILLED PRIOR TO THE APPLICATION OF COMPOST OR SEED MAY BE COMBINED AND BLOWN WITH THE PNEUMATIC BLOWER.
- COMPOST FILTER BERM SHALL BE UTILIZED ON SLOPES WITH A MINIMUM SPACING OF 15 FEET FOR THE REQUIREMENTS FOUND IN THE COMPOST FILTER BERM SECTION.
- THE GESC MANAGER SHALL INSPECT WEEKLY, DURING AND AFTER ANY STORM EVENT.
- COMPOST USED IN THE APPLICATION OF THE COMPOST BLANKET SHALL BE A CLASS 1 COMPOST AS DEFINED BY THE FOLLOWING PHYSICAL, CHEMICAL, AND BIOLOGICAL PARAMETERS:

PARAMETERS	CLASS 1 COMPOST FOR COMPOST BLANKET	CLASS 1 COMPOST FOR COMPOST FILTER BERM
MINIMUM STABILITY INDICATOR	STABLE TO VERY STABLE	STABLE TO VERY STABLE
PH	5.0 - 8.0	5.0 - 8.0
AS INDEX	2 - 10	2 - 10
MATURITY INDICATOR EXPRESSED AS PERCENTAGE OF ORGANIZATION MATTER	80+/80+	80+/80+
MATURITY INDICATOR EXPRESSED AS MATURITY BY NITROGEN RATIO	< 4	< 4
MATURITY INDICATOR EXPRESSED AS CARBON TO NITROGEN RATIO	20:1	20:1
TESTED FOR CLOSTRIDIA	YES/NEGATIVE RESULT	YES/NEGATIVE RESULT
TESTED FOR COLIFORMS	YES/NEGATIVE RESULT	YES/NEGATIVE RESULT
ORGANIC MATTER CONTENT	25-45 % OF DRY WEIGHT	25-45 % OF DRY WEIGHT
PARTICLE SIZE DISTRIBUTION	1/2" (12mm) SOE TO 100% PASSING 3/8" (9.5mm) SOE TO 80% PASSING 20# (0.85mm) SOE TO 80% PASSING	1/2" (12mm) SOE TO 100% PASSING 3/8" (9.5mm) SOE TO 80% PASSING 20# (0.85mm) SOE TO 80% PASSING
PRIMARY NUTRIENT CONTENT	MUST BE REPORTED	MUST BE REPORTED
TESTING AND TEST REPORT SUBMITTAL REQUIREMENTS	STA = GLOP/RALPH	MUST EXCEED US EPA CLASS A STANDARD.
CHEMICAL CONTAMINANTS	MUST REPORT	MUST EXCEED US EPA CLASS A STANDARD.
MINIMUM MANUFACTURING/PRODUCTION REQUIREMENT	MUST EXCEED US EPA CLASS A STANDARD, 40 CFR 503.1 TABLE 1 & 3.1 (LUG)	FULLY PERMITTED UNDER COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT, HAZARDOUS MATERIALS AND WASTE MANAGEMENT DIVISION
RISK FACTOR RELATING TO PLANT DAMAGE AND WEED MANIPULATION	LOW	LOW

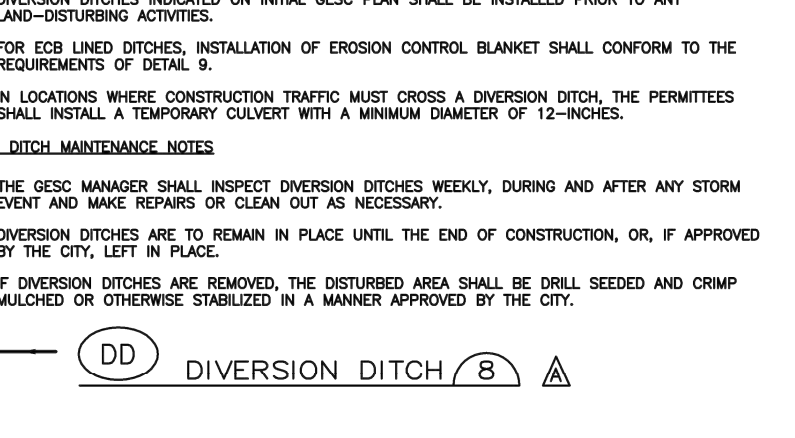
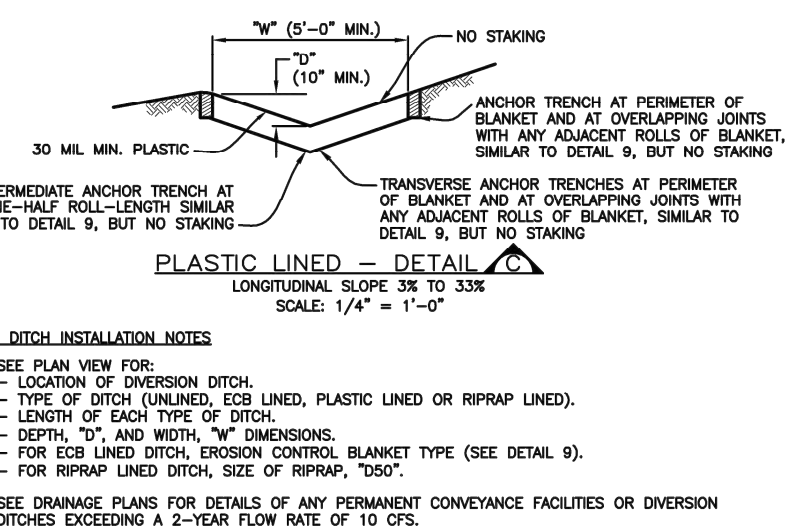
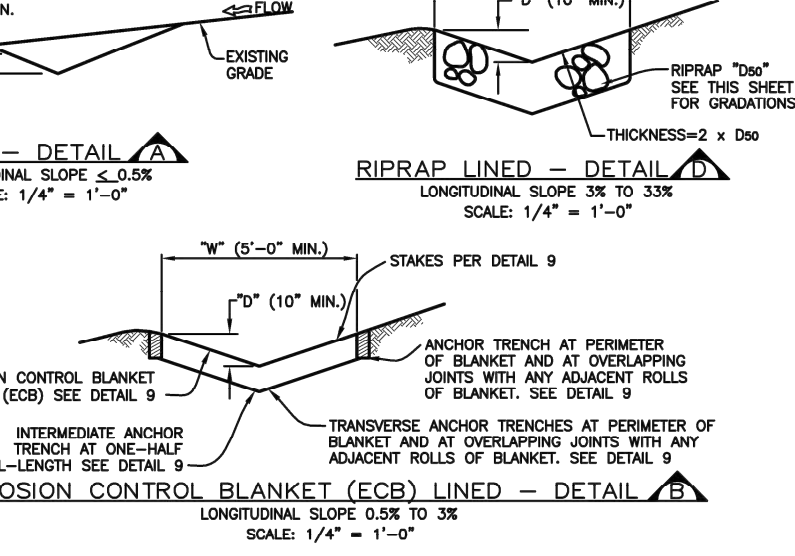
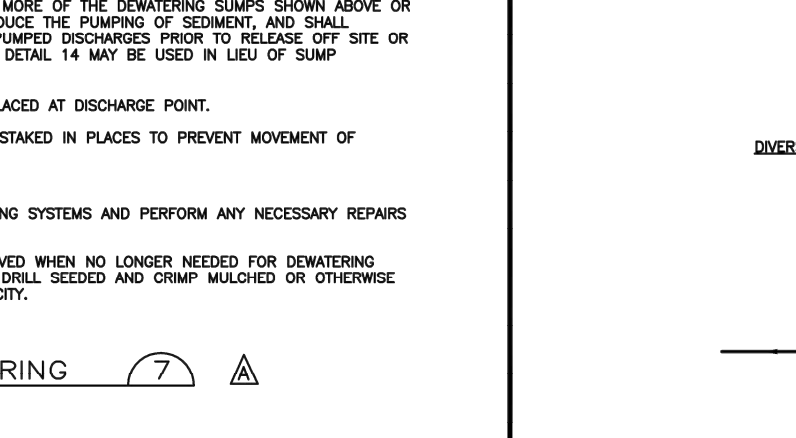
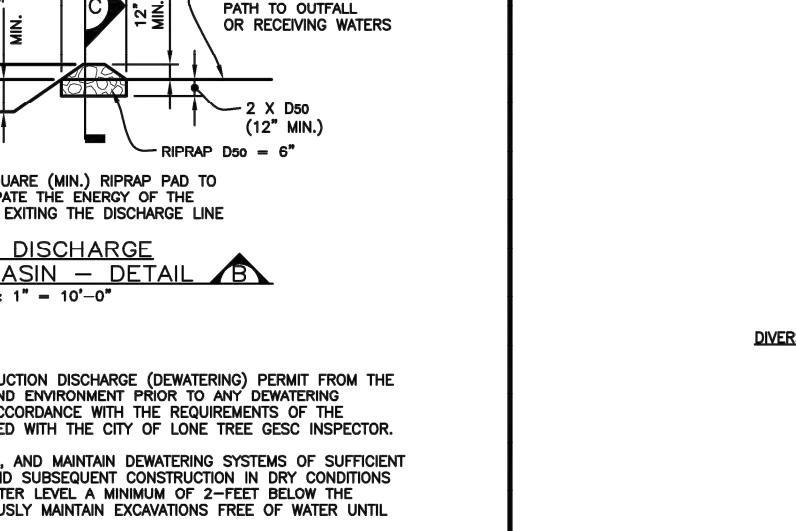
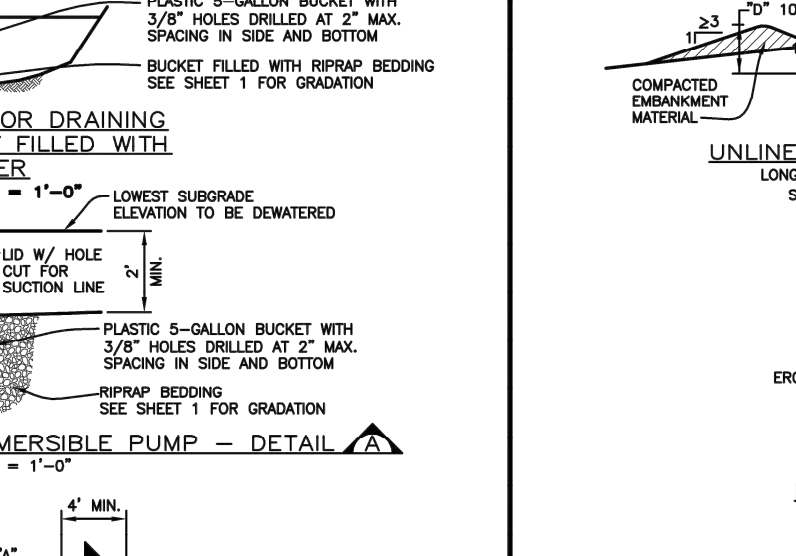
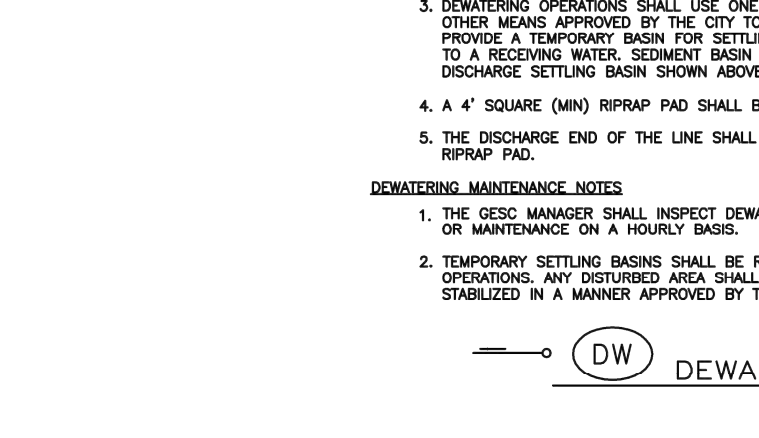
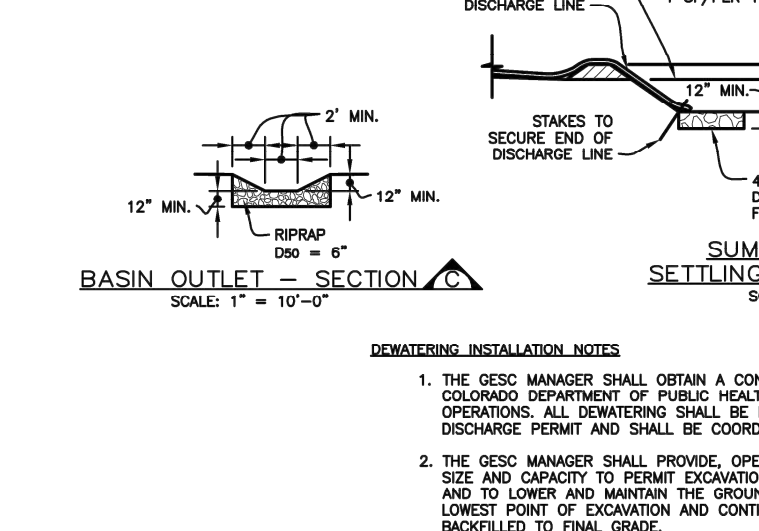
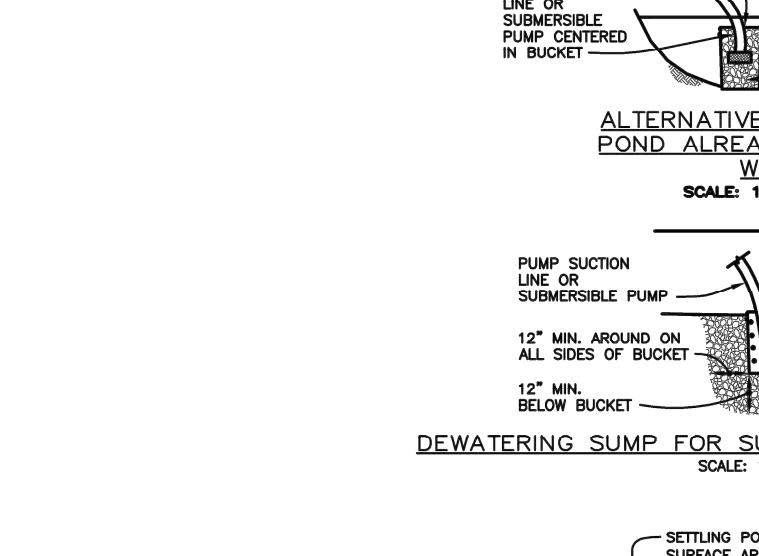
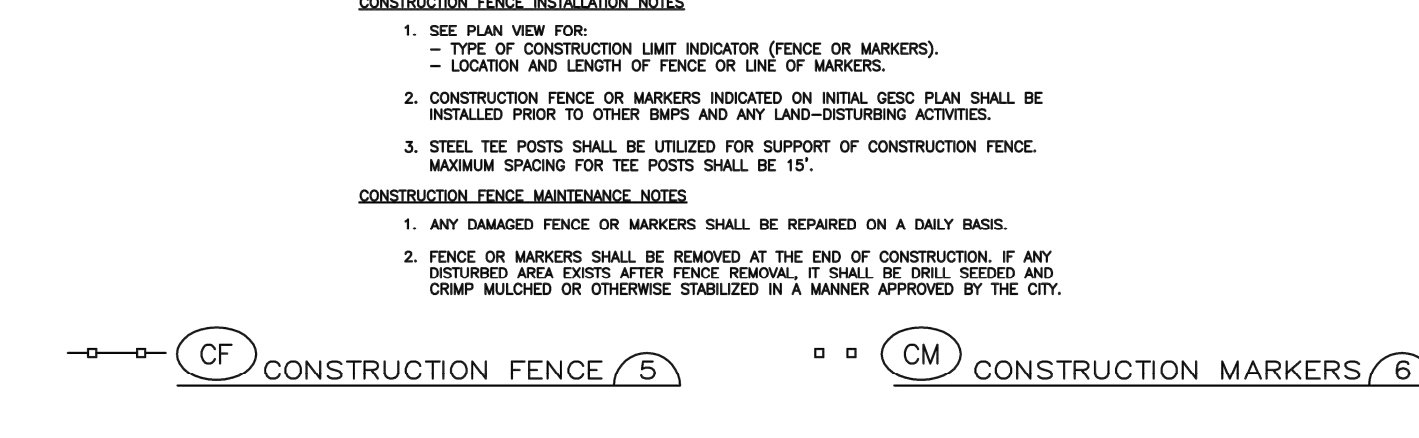
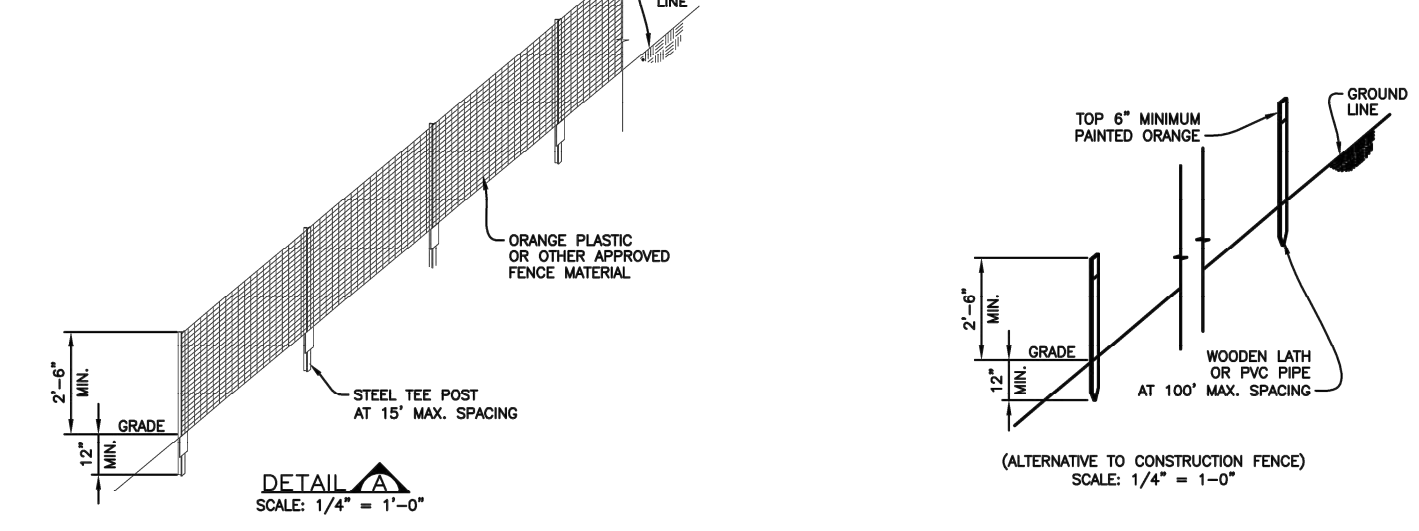
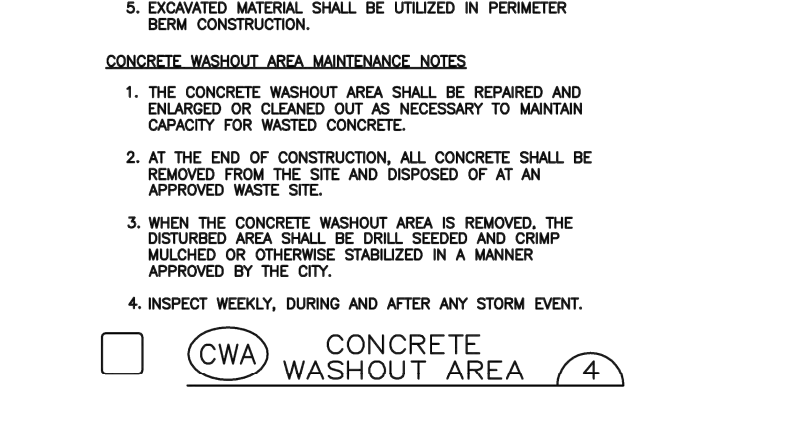
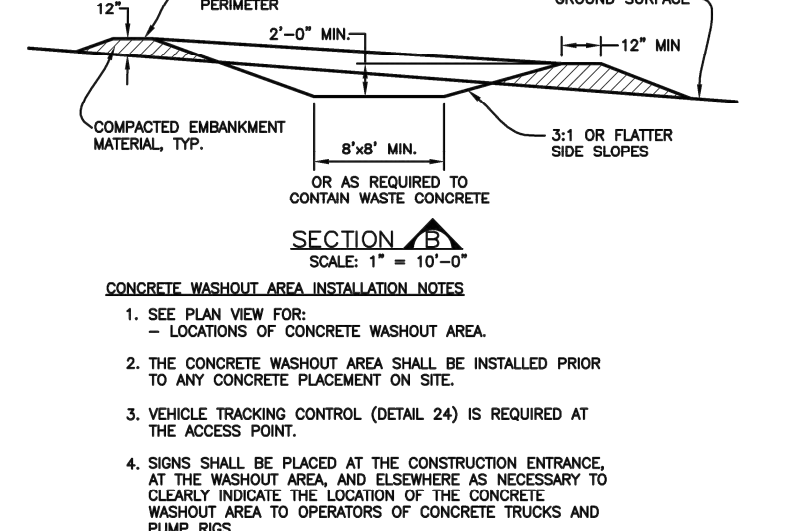
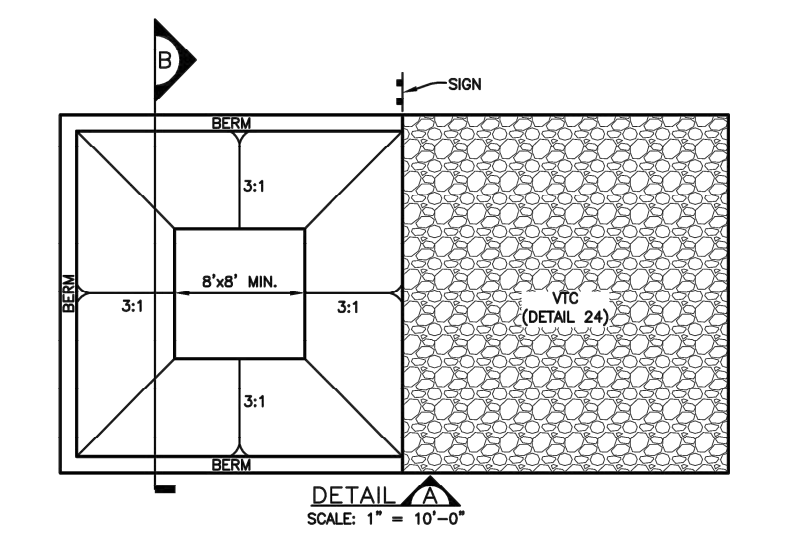
**COMPOST FILTER BERM NOTES:**

- SEE PLAN VIEW FOR LENGTH OF COMPOST FILTER BERM.
- SHALL BE APPLIED TO ALL SLOPES RECEIVING A COMPOST BLANKET AT 15' INTERVALS.
- FILTER BERMS SHALL RUN PARALLEL TO THE CONTOUR.
- FILTER BERMS SHALL BE A MINIMUM OF 1' H x 2' W.
- FILTER BERMS SHALL BE APPLIED UTILIZING PNEUMATIC BLOWER, OR BY HAND.
- SHALL ONLY BE UTILIZED IN AREAS WHERE SHEET FLOW CONDITIONS PREVAIL. SHALL BE PROHIBITED IN AREAS OF POSSIBLE CONCENTRATED FLOW.
- SOIL PREPARATION SHALL BE COMPLETE FOR THE SPECIFICATIONS OUTLINED IN THESE CRITERIA PRIOR TO APPLICATION.
- WHEN TURF GRASS FINISH IS NOT DESIRED, SURFACE ROUGHENING ON SLOPES SHALL TAKE PLACE PRIOR TO APPLICATION.
- SEEDING SHALL BE ORILLED PRIOR TO THE APPLICATION OF COMPOST OR SEED MAY BE COMBINED AND BLOWN WITH THE PNEUMATIC BLOWER.
- THE GESC MANAGER SHALL INSPECT WEEKLY, DURING AND AFTER ANY STORM EVENT.
- COMPOST USED IN THE APPLICATION OF THE COMPOST FILTER BERM SHALL BE A CLASS 1 COMPOST AS DEFINED BY THE FOLLOWING PHYSICAL, CHEMICAL, AND BIOLOGICAL PARAMETERS:

PARAMETERS	CLASS 1 COMPOST FOR COMPOST FILTER BERM
MINIMUM STABILITY INDICATOR	STABLE TO VERY STABLE
PH	5.0 - 8.0
AS INDEX	2 - 10
MATURITY INDICATOR EXPRESSED AS PERCENTAGE OF ORGANIZATION MATTER	80+/80+
MATURITY INDICATOR EXPRESSED AS MATURITY BY NITROGEN RATIO	< 4
MATURITY INDICATOR EXPRESSED AS CARBON TO NITROGEN RATIO	20:1
TESTED FOR CLOSTRIDIA	YES/NEGATIVE RESULT
TESTED FOR COLIFORMS	YES/NEGATIVE RESULT
ORGANIC MATTER CONTENT	25-45 % OF DRY WEIGHT
PARTICLE SIZE DISTRIBUTION	1/2" (12mm) SOE TO 100% PASSING 3/8" (9.5mm) SOE TO 80% PASSING 20# (0.85mm) SOE TO 80% PASSING
PRIMARY NUTRIENT CONTENT	MUST BE REPORTED
TESTING AND TEST REPORT SUBMITTAL REQUIREMENTS	STA = GLOP/RALPH
CHEMICAL CONTAMINANTS	MUST REPORT
MINIMUM MANUFACTURING/PRODUCTION REQUIREMENT	MUST EXCEED US EPA CLASS A STANDARD.
RISK FACTOR RELATING TO PLANT DAMAGE AND WEED MANIPULATION	LOW

**NOTE:** A BRANDED COMPOST IS TO BE UTILIZED IT SHALL BE PROVIDED BY A FACILITY IN POSSESSION OF A VALID NOTICE OF AUTHORIZATION (NOA) FOR THE UNRESTRICTED USE AND DISTRIBUTION OF COMPOST FOR LANDSCAPE, HEALTH AND ENVIRONMENT. THE NOA SHALL BE PROVIDED UPON REQUEST TO CITY OF LONE TREE.

**NOTE:** A LAB TEST DETERMINING THE CHEMICAL, PHYSICAL, AND BIOLOGICAL PARAMETERS SHALL BE PROVIDED UPON REQUEST BY THE CITY OF LONE TREE.



**TABLE 1. RIPRAP GRADATIONS**

SSD MEDIAN STONE SIZE (INCHES)	% OF MATERIAL SMALLER THAN TYPICAL STONE	TYPICAL STONE EQUIVALENT (TYPICAL WEIGHT (POUNDS))	TYPICAL STONE WEIGHT (POUNDS)
6	70 - 100	12	85
9	70 - 100	15	165
12	70 - 100	21	445
18	70 - 100	30	1270
24	70 - 100	45	3500

**TABLE 2. RIPRAP BEDDING**

SIEVE SIZE	MASS PERCENT PASSING (MINIMUM)
CLASS A	
3"	100
1 1/2"	20 - 90
NO. 4	0 - 20
NO. 100	0 - 3

**TABLE 3. 1 1/2" CRUSHED ROCK**

SIEVE SIZE	MASS PERCENT PASSING (MINIMUM)
NO. 4	100
1 1/2"	90 - 100
1"	20 - 55
3/4"	0 - 15
3/8"	0 - 5

**ROCK AND RIPRAP GRADATIONS**

SIEVE SIZE	MASS PERCENT PASSING (MINIMUM)
NO. 4	100
1 1/2"	90 - 100
1"	20 - 55
3/4"	0 - 15
3/8"	0 - 5

**Sheet Revisions**

DATE	DESCRIPTION	BY
6/30/05	ADOPTED FROM DOUGLAS COUNTY GESC PLANS	MLP
5/ /08	EDIT UPDATES	GAW
11/ /08	ADD CURB SOCK DETAIL (REF UDFCD, V3 FIGURE C5-23), MISC. NOTE EDITS	GAW

NOTE: SCALES SHOWN ARE FOR 24"x36" SHEETS. ADJUST ACCORDINGLY FOR 11"x17" SHEETS.



**CITY OF LONE TREE**  
 DEPARTMENT OF PUBLIC WORKS  
 Engineering Division

**GESC GRADING, EROSION, AND SEDIMENT CONTROL**

**GESC PLAN STANDARD NOTES AND DETAILS**

**SHEET 1 OF 3**

**COPYRIGHT**  
 THESE PLANS ARE AN INSTRUMENT OF SERVICE AND ARE THE PROPERTY OF GALLOWAY. COPYRIGHTS AND INFRINGEMENTS WILL BE ENFORCED AND PROSECUTED.



AMBLESIDE SCHOOL  
 LINCOLN AVE & LONE TREE PKWY  
 SITE IMPROVEMENT PLAN - SP24-0003  
 9941 LONE TREE PARKWAY  
 LONE TREE, CO 80124

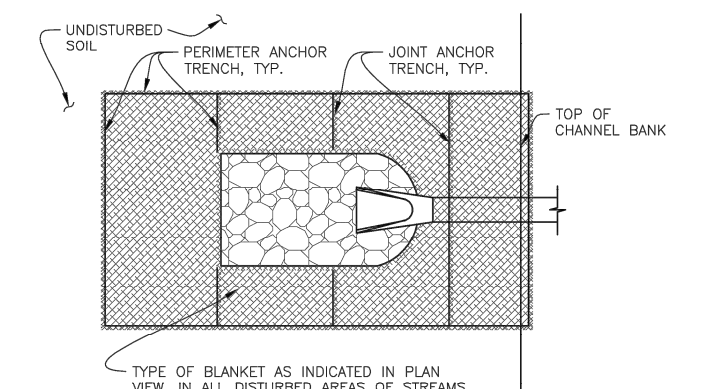
#	Date	Issue / Description	Init.
1	01/19/24	1ST SUBMITTAL	JSB
2	03/13/24	2ND SUBMITTAL	JSB
3	05/08/24	3RD SUBMITTAL	JSB
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			
21			
22			
23			
24			
25			
26			
27			
28			
29			
30			

Project No: AMCO00002  
 Drawn By: DMH  
 Checked By: JSB  
 Date: JANUARY 2024

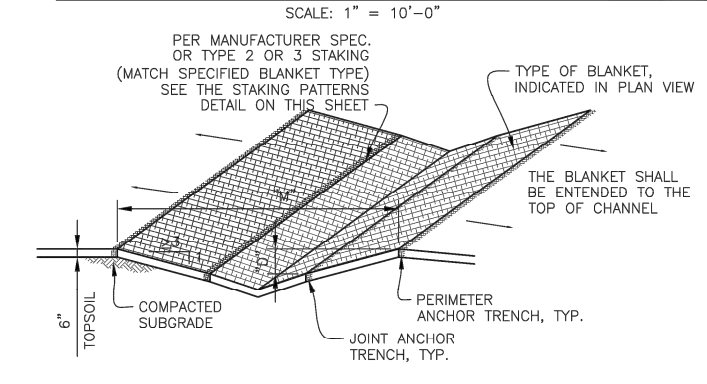
EROSION CONTROL DETAILS



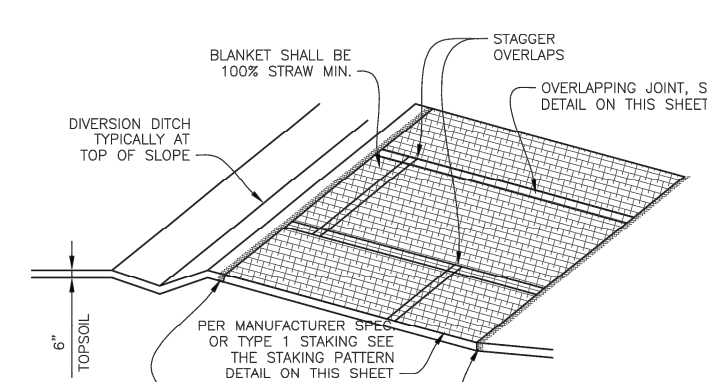
CENTENNIAL RIDGE  
 AMBLESIDE SCHOOL  
 SITE IMPROVEMENT PLAN - SP24-0003  
 JANUARY 2024



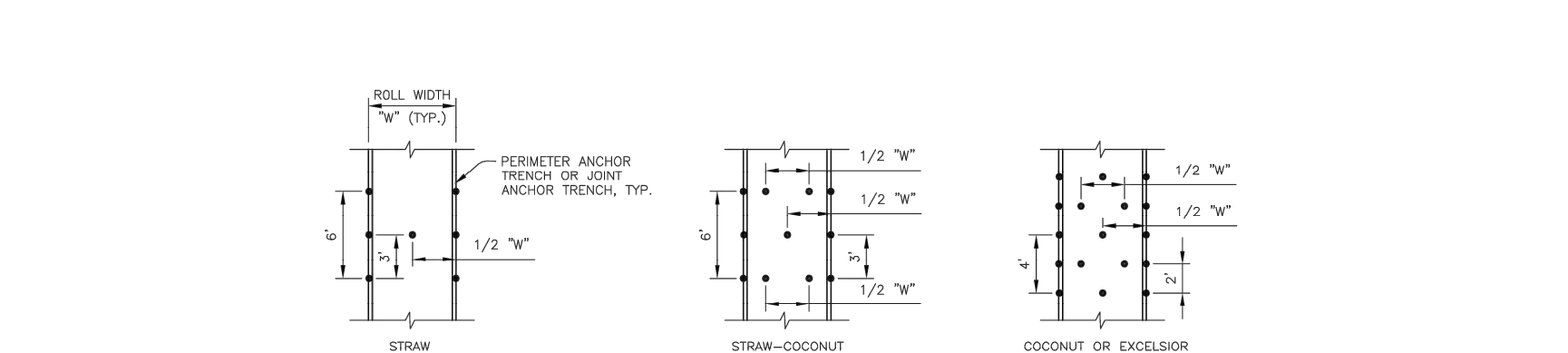
IN DISTURBED AREAS OF STREAMS AND DRAINAGE CHANNELS - DETAIL



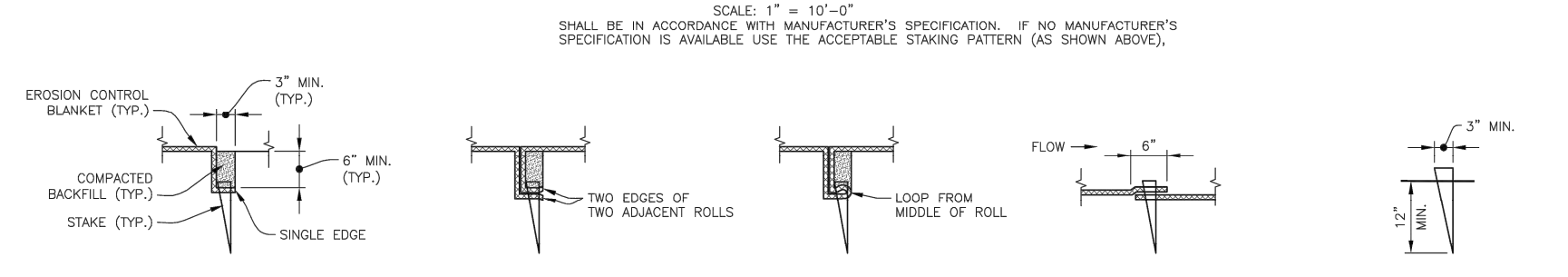
IN DIVERSION DITCH OR SMALL DITCH DRAINAGEWAY - DETAIL



OUTSIDE OF STREAMS AND DRAINAGE CHANNELS - DETAIL



STAKING PATTERNS



PERIMETER ANCHOR TRENCH JOINT ANCHOR TRENCH INTERMEDIATE ANCHOR TRENCH WOOD STAKE DETAIL

**EROSION CONTROL BLANKET INSTALLATION NOTES**

- SEE PLAN VIEW FOR:
  - LOCATION OF PERIMETER OF EROSION CONTROL BLANKET
  - TYPE OF BLANKET (STRAW, STRAW-COCONUT, COCONUT, OR EXCELSIOR)
  - AREA "A" IN SQUARE FEET OF EACH TYPE OF BLANKET
- ALL EROSION CONTROL BLANKETS AND NETTING SHALL BE MADE OF 100% NATURAL AND BIODEGRADABLE MATERIAL; NO PLASTIC OR OTHER SYNTHETIC MATERIAL, EVEN IF PHOTO DEGRADABLE, SHALL BE ALLOWED.
- IN AREAS WHERE EROSION CONTROL BLANKET IS SHOWN ON THE PLANS, THE PERMETER SHALL PLACE TOPSOIL AND PERFORM FINAL GRADING, SURFACE FORMATION, AND SEEDING BELOW THE BLANKET IN ACCORDANCE WITH THE REQUIREMENTS OF DETAIL 17. SEEDING AND MULCHING SHOULD BE IN FULL CONTACT WITH SUBGRADE; NO GAPS OR VOIDS SHALL EXIST UNDER THE BLANKET.
- PERIMETER ANCHOR TRENCH SHALL BE USED AT OUTSIDE PERIMETER OF ALL BLANKET AREAS.
- JOINT ANCHOR TRENCH SHALL BE USED TO JOIN ROLLS OF BLANKETS TOGETHER (LONGITUDINALLY AND TRANSVERSELY) FOR ALL BLANKETS EXCEPT STRAW, WHICH MAY USE AN OVERLAPPING JOINT.
- THE OVERLAPPING JOINT DETAIL SHALL BE USED TO JOIN ROLLS OF BLANKETS TOGETHER FOR BLANKETS ON SLOPES.
- MATERIAL SPECIFICATIONS OF EROSION CONTROL BLANKET SHALL CONFORM TO TABLE 7.1.

**EROSION CONTROL BLANKET MAINTENANCE NOTES - CONTINUED**

- ANY AREAS OF SEEDING AND MULCHING DISTURBED IN THE PROCESS OF INSTALLING EROSION CONTROL BLANKET SHALL BE RESEEDED AND MULCHED IN ACCORDANCE WITH DETAIL 17.
- SEE DRAINAGE DESIGN PLANS FOR MAJOR DRAINAGEWAY STABILIZATION MEASURES THAT MAY EXCEED THE DESIGN CONDITIONS ASSOCIATED WITH THE DETAILS ABOVE.

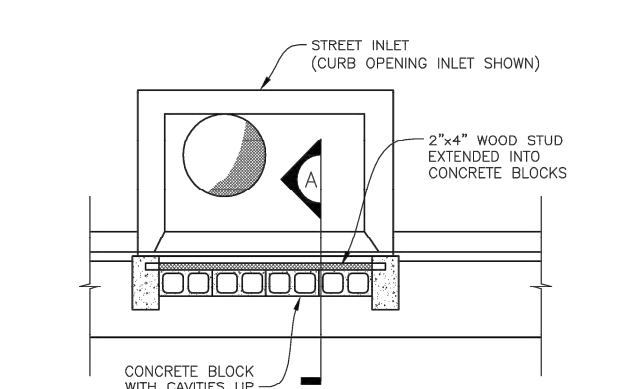
TABLE 7.1 - EROSION CONTROL BLANKET TYPE			
TYPE	COCONUT	STRAW	EXCELSIOR
CONTENT	CONTENT	CONTENT	CONTENT
NETTING MIN.	NETTING MIN.	NETTING MIN.	NETTING MIN.
STRAW	100%	100%	DOUBLE/PARTIAL
STRAW-COCONUT	50% MIN.	70% MAX.	DOUBLE/PARTIAL
COCONUT	100%	100%	DOUBLE/PARTIAL
EXCELSIOR	100%	100%	DOUBLE/PARTIAL

**FOR OUTSIDE OF STREAMS AND DRAINAGE CHANNELS**

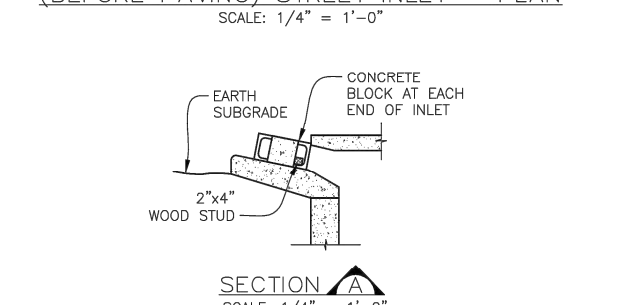
**EROSION CONTROL BLANKET MAINTENANCE NOTES**

- THE GESC MANAGER SHALL INSPECT EROSION CONTROL BLANKETS WEEKLY, DURING AND AFTER ANY STORM EVENT AND MAKE REPAIRS OR CLEAN OUT AS NECESSARY.
- EROSION CONTROL BLANKET IS TO BE LEFT IN PLACE UNLESS REQUESTED TO BE REMOVED BY THE CITY.
- ANY EROSION CONTROL BLANKET PULLED OUT, TORN, OR OTHERWISE DAMAGED SHALL BE RE-INSTALLED. ANY SUBGRADE AREAS BELOW THE BLANKET THAT HAVE EXPOSED TO CREATE A VOID UNDER THE BLANKET OR THAT REMAIN DEVOID OF GRASS SHALL BE REPAIRED, RESEEDED AND MULCHED AND THE EROSION CONTROL BLANKET REINSTALLED.

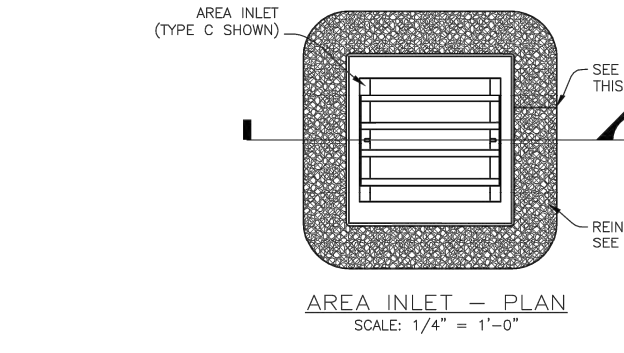
ECB EROSION CONTROL BLANKET 9



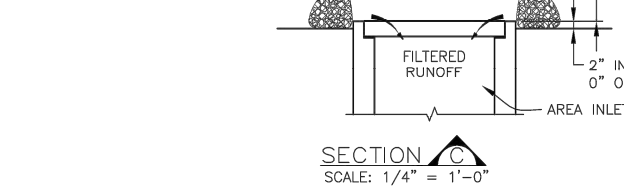
INTERIM CONFIGURATION (BEFORE PAVING) STREET INLET - PLAN



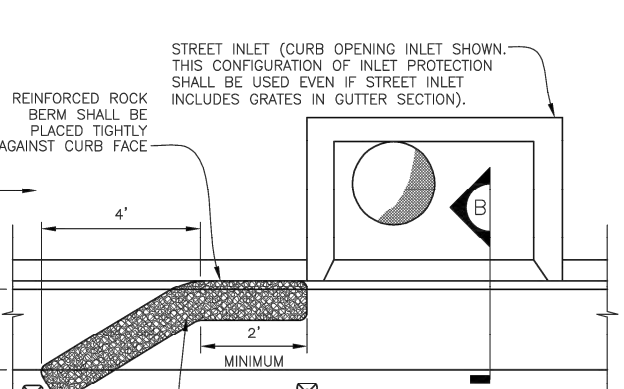
SECTION SCALE: 1/4" = 1'-0"



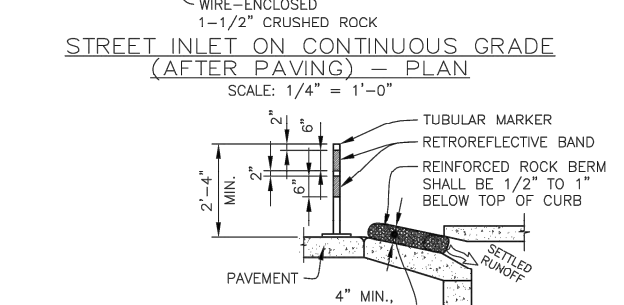
AREA INLET - PLAN SCALE: 1/4" = 1'-0"



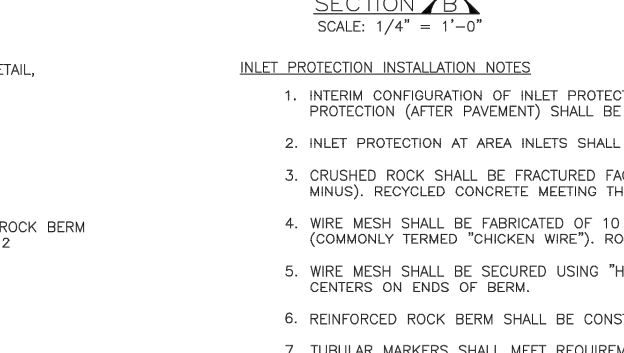
SECTION SCALE: 1/4" = 1'-0"



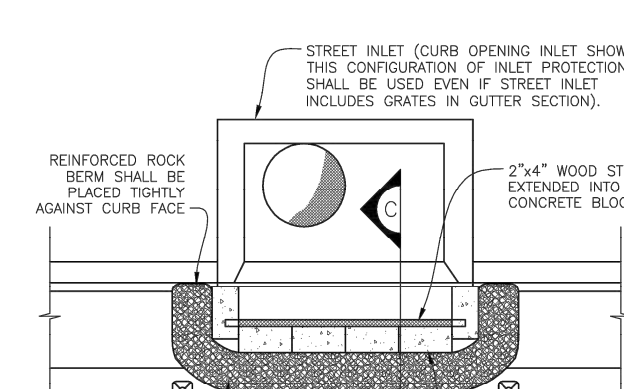
STREET INLET ON CONTINUOUS GRADE (AFTER PAVING) - PLAN



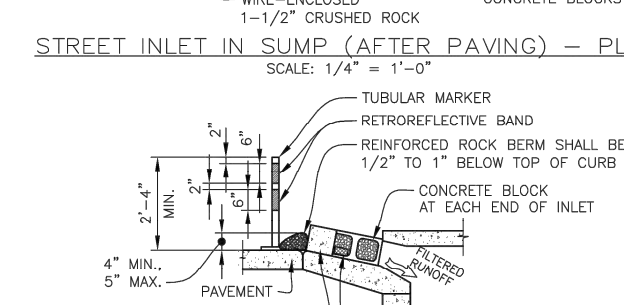
SECTION SCALE: 1/4" = 1'-0"



SECTION SCALE: 1/4" = 1'-0"

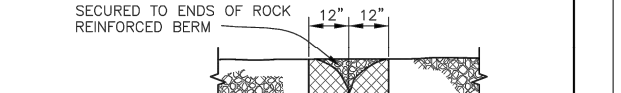


STREET INLET IN SUMP (AFTER PAVING) - PLAN



SECTION SCALE: 1/4" = 1'-0"

ANY GAP AT JOINT SHALL BE FILLED WITH 1-1/2" CRUSHED ROCK AND REPAIRED WITH ADDITIONAL WIRE MESH SECURED TO ENDS OF ROCK REINFORCED BERM



JOINT DETAIL SCALE: 1/4" = 1'-0"

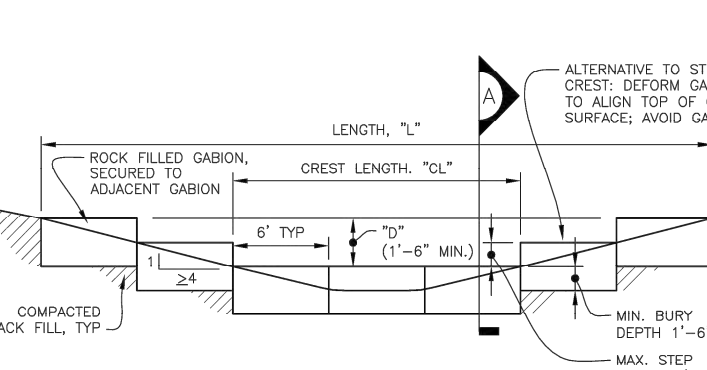
**INLET PROTECTION INSTALLATION NOTES**

- INTERIM CONFIGURATION OF INLET PROTECTION IN STREETS SHALL BE INSTALLED WITHIN 48-HOURS OF POURING INLET PROTECTION (AFTER PAVING) SHALL BE INSTALLED WITHIN 48 HOURS AFTER PAVING IS COMPLETE.
- INLET PROTECTION AT AREA INLETS SHALL BE INSTALLED WITHIN 48-HOURS OF POURING INLET.
- CRUSHED ROCK SHALL BE FRACTURED FACE (ALL SIDES) AND SHALL COMPLY WITH GRADATION SHOWN ON SHEET 1 (1-1/2" MINUS) INCLUDED CONCRETE METING THIS GRADATION MAY BE USED.
- WIRE MESH SHALL BE FABRICATED OF 10 GAUGE WIRE TWISTED INTO A MESH WITH A MAXIMUM OPENING OF 1.0 INCH (COMMONLY TERMED "CHICKEN WIRE"). ROLL WIDTH SHALL BE 48-INCHES.
- WIRE MESH SHALL BE SECURED USING "HOD RINGS" OR WIRE TIES AT 6-INCH CENTERS ALONG ALL JOINTS AND AT 2-INCH CENTERS ON ENDS OF BERM.
- REINFORCED ROCK BERM SHALL BE CONSTRUCTED IN ONE PIECE OR SHALL BE CONSTRUCTED USING JOINT DETAIL.
- TUBULAR MARKERS SHALL MEET REQUIREMENTS OF MANUAL ON LANEWAY TRAFFIC CONTROL DEVICES (MUTCD), AS AMENDED.
- THE TOP OF REINFORCED ROCK BERM SHALL BE 1/2"-1" BELOW TOP OF CURB.

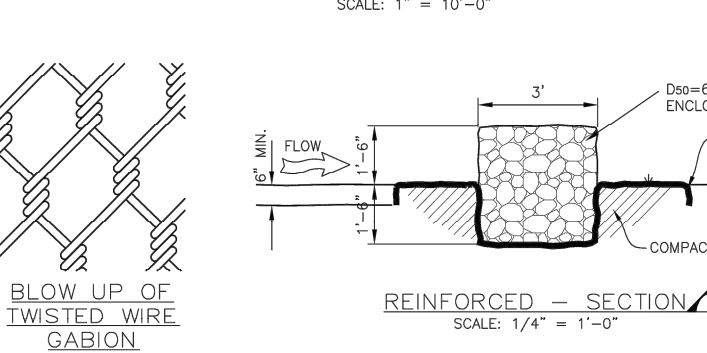
**INLET PROTECTION MAINTENANCE NOTES**

- THE GESC MANAGER SHALL INSPECT INLET PROTECTION WEEKLY, DURING AND AFTER ANY STORM EVENT AND MAKE REPAIRS OR CLEAN OUT AS NECESSARY. MORE FREQUENT INSPECTIONS AND REPAIRS SHALL BE REQUIRED DURING WINTER CONDITIONS DUE TO FREEZE/THAW PROBLEMS.
- SEDIMENT ACCUMULATED UPSTREAM OF INLET PROTECTION SHALL BE REMOVED WHEN THE SEDIMENT DEPTH UPSTREAM OF ROCK BERM IS WITHIN 2-1/2 INCHES OF THE CREST.
- INLET PROTECTION IS TO REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS STABILIZED AND GRASS COVER IS APPROVED, UNLESS THE CITY APPROVES EARLIER REMOVAL OF INLET PROTECTION IN STREETS.
- WHEN INLET PROTECTION AT AREA INLETS ARE REMOVED, THE DISTURBED AREA SHALL BE DRILL SEEDING AND CHMP MULCHED OR OTHERWISE STABILIZED IN A MANNER APPROVED BY THE CITY.

IP INLET PROTECTION 10



REINFORCED - ELEVATION SCALE: 1" = 10'-0"



BLOW UP OF TWISTED WIRE GAULON SCALE: N/A

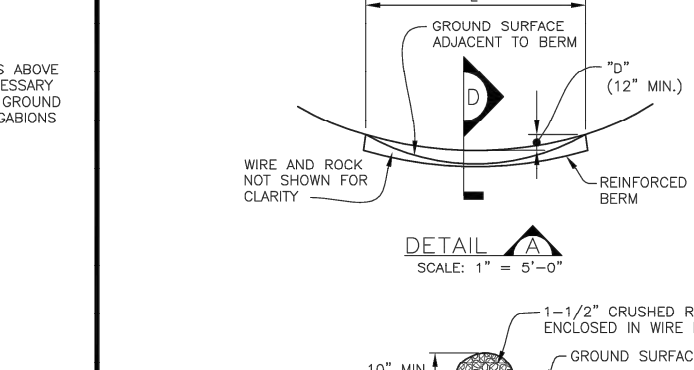
**REINFORCED CHECK DAM INSTALLATION NOTES**

- SEE PLAN VIEW FOR:
  - LOCATION OF CHECK DAMS
  - LENGTH, "L", AND DEPTH, "D"
- CHECK DAMS INDICATED ON INITIAL GESC PLAN SHALL BE INSTALLED AFTER CONSTRUCTION FENCE, BUT PRIOR TO ANY UPSTREAM LAND-RESTORING ACTIVITIES.
- REINFORCED CHECK DAMS, GABIONS SHALL HAVE GALVANIZED TWISTED WIRE NETTING WITH A MAXIMUM OPENING DIMENSION OF 4-1/2" AND A MINIMUM WIRE THICKNESS OF 1/16" WIRE "HOD RINGS" AT 4" SPACING OR OTHER APPROVED MEANS SHALL BE USED AT ALL GABION SEAMS AND TO SECURE THE GABION TO THE ADJACENT BERM.
- RIPRAP UTILIZED FOR CHECK DAMS SHALL HAVE A  $d_{50}$  MEDIAN STONE SIZE OF 6".
- THE CHECK DAM SHALL BE FRENCHED INTO THE GROUND A MINIMUM OF 1'-6".
- EROSION BLANKET SHALL BE PLACED IN THE REINFORCED CHECK DAM TRENCH EXTENDING A MINIMUM OF 1'-6" ON BOTH THE UPSTREAM AND DOWNSTREAM SIDES OF THE REINFORCED CHECK DAM.

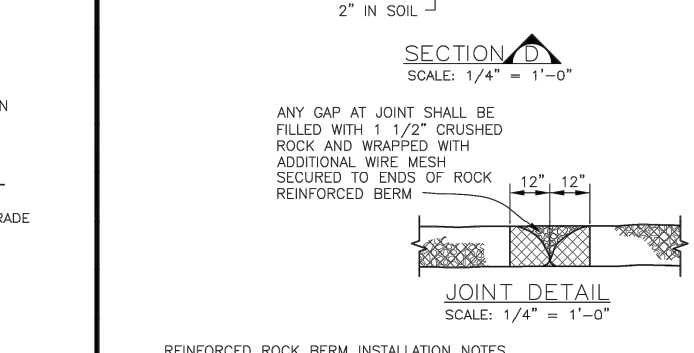
**REINFORCED CHECK DAM MAINTENANCE NOTES**

- THE GESC MANAGER SHALL INSPECT CHECK DAMS WEEKLY, DURING AND AFTER ANY STORM EVENT AND MAKE REPAIRS OR CLEAN OUT AS NECESSARY.
- SEDIMENT ACCUMULATED UPSTREAM OF CHECK DAMS SHALL BE REMOVED WHEN THE SEDIMENT DEPTH UPSTREAM OF CHECK DAM IS WITHIN 3/4 OF THE HEIGHT OF THE CREST.
- CHECK DAMS ARE TO REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS STABILIZED AND GRASS COVER IS APPROVED BY THE CITY.
- WHEN CHECK DAMS ARE REMOVED, EXCAVATIONS SHALL BE FILLED WITH SUITABLE COMPACTED BACK FILL. ANY DISTURBED AREA SHALL BE DRILL SEEDING AND CHMP MULCHED AND COVERED WITH EROSION CONTROL BLANKET OR OTHERWISE STABILIZED IN A MANNER APPROVED BY THE CITY.

RCD REINFORCED CHECK DAM 11



REINFORCED ROCK BERM DETAIL SCALE: 1" = 10'-0"



JOINT DETAIL SCALE: 1/4" = 1'-0"

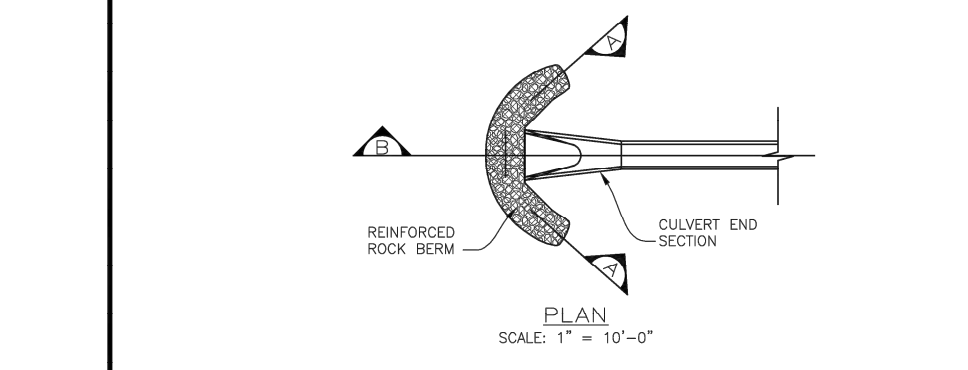
**REINFORCED ROCK BERM INSTALLATION NOTES**

- SEE PLAN VIEW FOR:
  - LOCATIONS OF REINFORCED ROCK BERMS
  - LENGTH, "L", AND DEPTH, "D", DIMENSIONS.
- REINFORCED ROCK BERM SECTION APPLIES TO CULVERT INLET FILTER AND INLET PROTECTION.
- CRUSHED ROCK SHALL BE FRACTURED FACE (ALL SIDES) AND SHALL COMPLY WITH GRADATION SHOWN ON SHEET 1 (1-1/2" MINUS). INCLUDED CONCRETE METING THIS GRADATION MAY BE USED.
- WIRE MESH SHALL BE FABRICATED OF 10 GAUGE WIRE TWISTED INTO A MESH WITH A MAXIMUM OPENING OF 1.0 INCH (COMMONLY TERMED "CHICKEN WIRE"). ROLL WIDTH SHALL BE 48-INCHES.
- WIRE MESH SHALL BE SECURED USING "HOD RINGS" OR WIRE TIES AT 6-INCH CENTERS ALONG ALL JOINTS AND AT 2-INCH CENTERS ON ENDS OF BERM.
- FOR CONCENTRATED FLOW AREAS THE ENDS OF THE REINFORCED ROCK BERM SHALL BE 12" HIGHER THAN THE CENTER OF THE BERM.

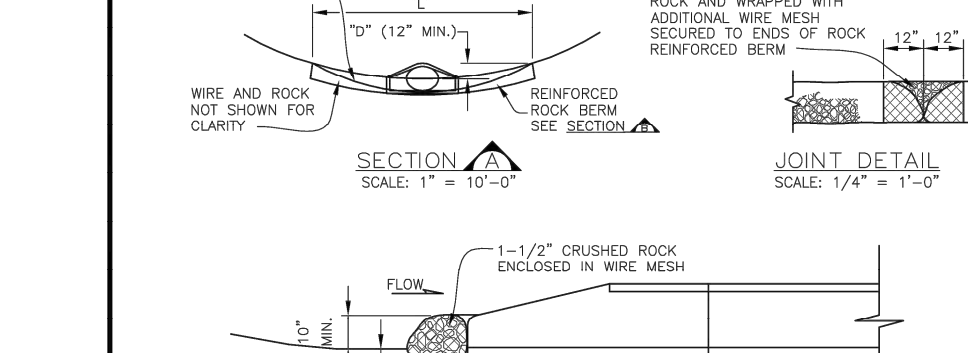
**REINFORCED ROCK BERM MAINTENANCE NOTES**

- THE GESC MANAGER SHALL INSPECT CULVERT INLET FILTER WEEKLY, DURING AND AFTER ANY STORM EVENT AND MAKE REPAIRS OR CLEAN OUT AS NECESSARY.
- SEDIMENT ACCUMULATED UPSTREAM OF CULVERT INLET FILTER SHALL BE REMOVED WHEN THE SEDIMENT DEPTH UPSTREAM OF FILTER IS 3/4 OF THE HEIGHT OF THE REINFORCED ROCK BERM.
- RIP FOR CULVERT PROTECTION IS TO REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS STABILIZED AND GRASS COVER IS APPROVED BY THE CITY.
- WHEN REINFORCED ROCK BERMS ARE REMOVED, ANY DISTURBED AREA SHALL BE DRILL SEEDING AND CHMP MULCHED OR OTHERWISE STABILIZED IN A MANNER APPROVED BY THE CITY.

RRB REINFORCED ROCK BERM 12



RRB FOR CULVERT PROTECTION 13



JOINT DETAIL SCALE: 1/4" = 1'-0"

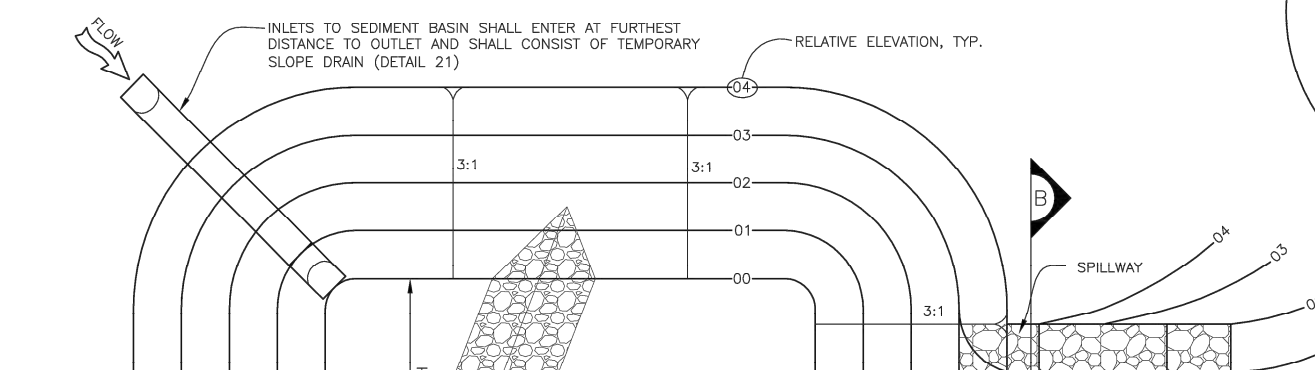
**INSTALLATION NOTES**

- SEE PLAN VIEW FOR:
  - LOCATIONS OF CULVERT INLET FILTERS
  - LENGTH, "L", AND DEPTH, "D"
- CRUSHED ROCK SHALL BE FRACTURED FACE (ALL SIDES) AND SHALL COMPLY WITH GRADATION SHOWN ON SHEET 1 (1-1/2" MINUS). INCLUDED CONCRETE METING THIS GRADATION MAY BE USED.
- WIRE MESH SHALL BE FABRICATED OF 10 GAUGE WIRE TWISTED INTO A MESH WITH A MAXIMUM OPENING OF 1.0 INCH (COMMONLY TERMED "CHICKEN WIRE"). ROLL WIDTH SHALL BE 48-INCHES.
- WIRE MESH SHALL BE SECURED USING "HOD RINGS" OR WIRE TIES AT 6-INCH CENTERS ALONG ALL JOINTS AND AT 2-INCH CENTERS ON ENDS OF BERM.
- THE ENDS OF THE REINFORCED ROCK BERM SHALL BE 12" HIGHER THAN THE CENTER OF THE BERM.

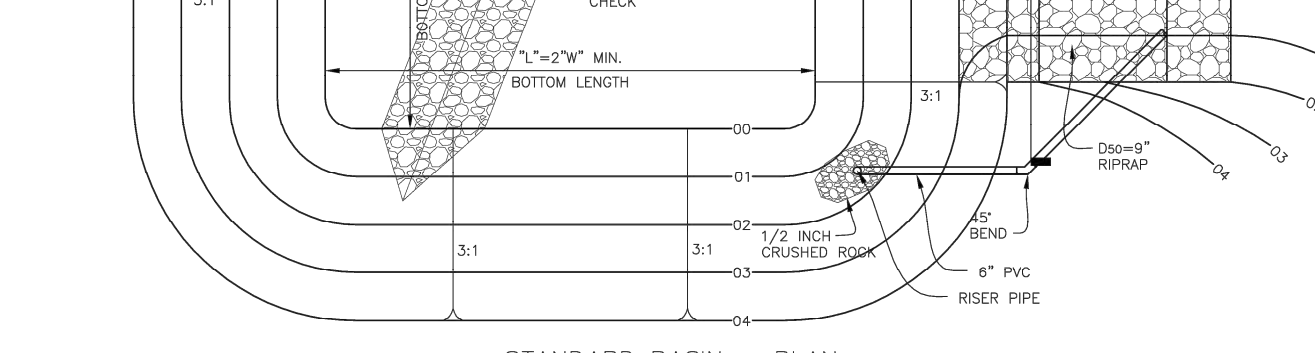
**MAINTENANCE NOTES**

- THE GESC MANAGER SHALL INSPECT CULVERT INLET FILTER WEEKLY, DURING AND AFTER ANY STORM EVENT AND MAKE REPAIRS OR CLEAN OUT AS NECESSARY.
- SEDIMENT ACCUMULATED UPSTREAM OF CULVERT INLET FILTER SHALL BE REMOVED WHEN THE SEDIMENT DEPTH UPSTREAM OF FILTER IS 3/4 OF THE HEIGHT OF THE REINFORCED ROCK BERM.
- RIP FOR CULVERT PROTECTION IS TO REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS STABILIZED AND GRASS COVER IS APPROVED BY THE CITY.
- WHEN CULVERT INLET FILTERS ARE REMOVED, ANY DISTURBED AREA SHALL BE DRILL SEEDING AND CHMP MULCHED OR OTHERWISE STABILIZED IN A MANNER APPROVED BY THE CITY.

RRB FOR CULVERT PROTECTION 13



STANDARD BASIN - PLAN SCALE: 1" = 10'-0"



STANDARD BASIN - SECTION SCALE: 1/4" = 1'-0"

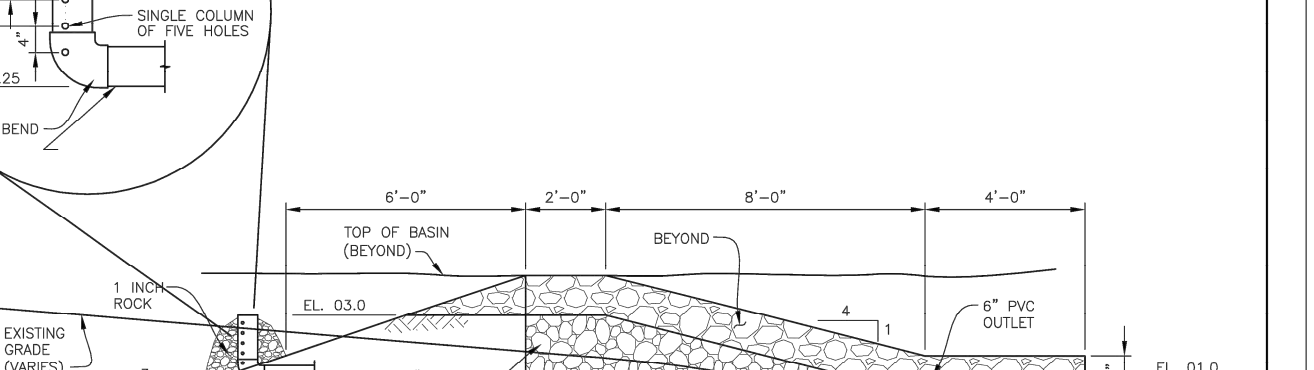
**SEDIMENT BASIN INSTALLATION NOTES**

- SEE PLAN VIEW FOR:
  - LOCATION OF SEDIMENT BASIN
  - TYPE OF BASIN (STANDARD BASIN OR NON-STANDARD BASIN)
  - FOR STANDARD BASIN, CREST LENGTH, "L", BOTTOM WIDTH, "W", AND HOLE DIAMETER, "H"
  - FOR NON-STANDARD BASIN, SEE CONSTRUCTION DRAWINGS FOR DESIGN OF BASIN INCLUDING RISES HEIGHT, "H", NUMBER OF COLUMNS, "N", HOLE DIAMETER, "H", AND PIPE DIAMETER "D"
- FOR STANDARD BASIN, BOTTOM DIMENSION MAY BE MODIFIED AS LONG AS BOTTOM AREA IS NOT REDUCED.
- SEDIMENT BASINS INDICATED ON INITIAL GESC PLAN SHALL BE INSTALLED PRIOR TO ANY OTHER LAND-RESTORING ACTIVITY.
- EMBANKMENT MATERIAL SHALL CONSIST OF SOIL FREE OF DEBRIS, ORGANIC MATERIAL, AND ROCKS OR CONCRETES GREATER THAN 2 INCHES AND SHALL HAVE A MINIMUM OF 15 PERCENT BY WEIGHT PASSING THE NO. 200 SIEVE.
- EMBANKMENT MATERIAL SHALL BE COMPACTED TO AT LEAST 85 PERCENT OF MAXIMUM DENSITY WITHIN 2 PERCENTAGE POINTS OF OPTIMUM DENSITY IN ACCORDANCE WITH ASTM D998.
- PIPE SCH 40 OR GREATER SHALL BE USED.
- THE DETAILS SHOWN ON THIS SHEET PERTAIN TO STANDARD SEDIMENT BASINS IDENTIFIED ON THE GESC PLAN VIEW (DRAWINGS USED FOR DRAINAGE AREAS LESS THAN 15 ACRES). SEE CONSTRUCTION DRAWINGS FOR EMBANKMENT, STORAGE VOLUME, SPILLWAY, OUTLET, AND OUTLET PROTECTION DETAILS FOR ANY SEDIMENT BASINS THAT HAVE BEEN INDIVIDUALLY DESIGNED FOR DRAINAGE AREAS LARGER THAN 15 ACRES.

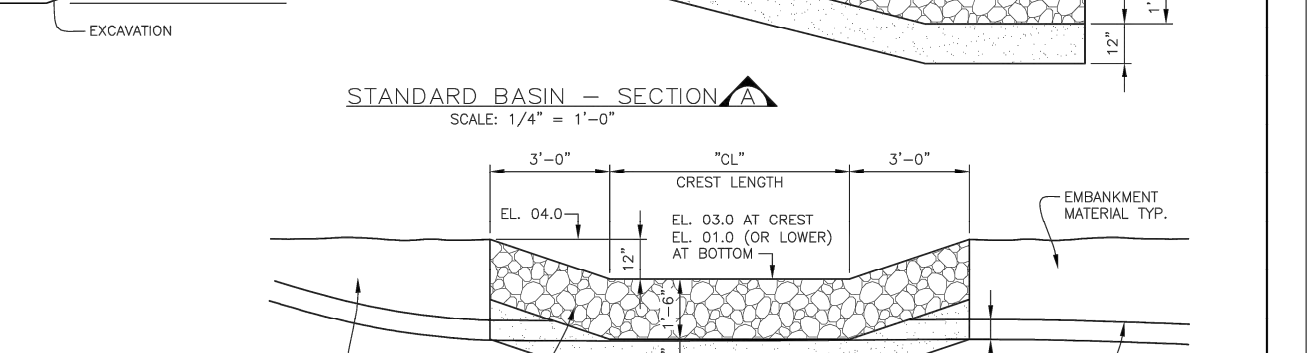
**SEDIMENT BASIN MAINTENANCE NOTES**

- THE GESC MANAGER SHALL INSPECT SEDIMENT BASIN WEEKLY, DURING AND AFTER ANY STORM EVENT AND MAKE REPAIRS OR CLEAN OUT AS NECESSARY.
- SEDIMENT ACCUMULATED IN SEDIMENT BASIN SHALL BE REMOVED WHEN THE SEDIMENT DEPTH IS WITHIN 2.0 FEET OF THE CREST OF THE SPILLWAY.
- SEDIMENT BASINS ARE TO REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS STABILIZED AND GRASS COVER IS APPROVED BY THE CITY.
- IF SEDIMENT BASINS ARE REMOVED, THE DISTURBED AREA SHALL BE SEEDING AND MULCHED OR OTHERWISE STABILIZED IN A MANNER APPROVED BY THE CITY.

SB SEDIMENT BASIN 14



STANDARD BASIN - SECTION SCALE: 1/4" = 1'-0"



STANDARD BASIN - SECTION SCALE: 1/4" = 1'-0"

**SEDIMENT BASIN MAINTENANCE NOTES**

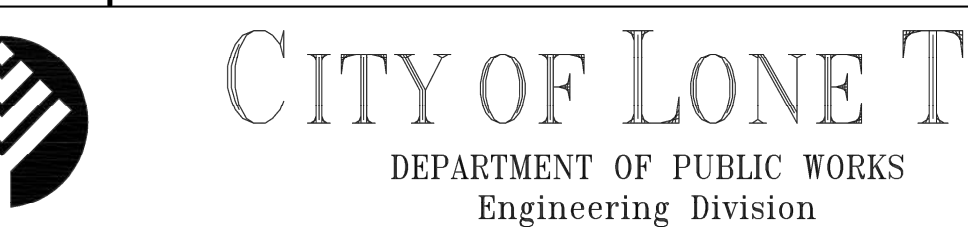
- THE GESC MANAGER SHALL INSPECT SEDIMENT BASIN WEEKLY, DURING AND AFTER ANY STORM EVENT AND MAKE REPAIRS OR CLEAN OUT AS NECESSARY.
- SEDIMENT ACCUMULATED IN SEDIMENT BASIN SHALL BE REMOVED WHEN THE SEDIMENT DEPTH IS WITHIN 2.0 FEET OF THE CREST OF THE SPILLWAY.
- SEDIMENT BASINS ARE TO REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS STABILIZED AND GRASS COVER IS APPROVED BY THE CITY.
- IF SEDIMENT BASINS ARE REMOVED, THE DISTURBED AREA SHALL BE SEEDING AND MULCHED OR OTHERWISE STABILIZED IN A MANNER APPROVED BY THE CITY.

SB SEDIMENT BASIN 14

Sheet Revisions

Date	Description	By	App'd
6/30/05	ADOPTED FROM DOUGLAS COUNTY GESC PLANS	MLP	
5/ /08	EDIT UPDATES	GAW	
11/ /08	ADD CURB SOCK DETAIL (REF UDFCD, V3 FIGURE CS-23), MISC. NOTE EDITS	GAW	

NOTE: SCALES SHOWN ARE FOR 24"x36" SHEETS. ADJUST ACCORDINGLY FOR 11"x17" SHEETS.



CITY OF LONE TREE  
 DEPARTMENT OF PUBLIC WORKS  
 Engineering Division

GESC PLAN  
 STANDARD NOTES  
 AND DETAILS

SHEET  
 2 OF 3

**COPYRIGHT**  
 THESE PLANS ARE AN INSTRUMENT OF SERVICE AND ARE THE PROPERTY OF GALLOWAY. NO PARTS MAY BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, WITHOUT THE WRITTEN CONSENT OF GALLOWAY. COPYRIGHTS AND INFRINGEMENTS WILL BE ENFORCED AND PROSECUTED.



AMBLESIDE SCHOOL  
 LINCOLN AVE & LONE TREE PKWY  
 SITE IMPROVEMENT PLAN - SP24-0003

9941 LONE TREE PARKWAY  
 LONE TREE, CO 80124

#	Date	Issue / Description	Init.
1	01/19/24	1ST SUBMITTAL	JSB
2	03/13/24	2ND SUBMITTAL	JSB
3	05/08/24	3RD SUBMITTAL	JSB
4			
5			
6			
7			
8			
9			
10			

Project No: AMC000002  
 Drawn By: DMH  
 Checked By: JSB  
 Date: JANUARY 2024

EROSION CONTROL DETAILS



**CENTENNIAL RIDGE  
AMBLESIDE SCHOOL  
SITE IMPROVEMENT PLAN - SP24-0003  
JANUARY 2024**

**COPYRIGHT**  
THESE PLANS ARE AN INSTRUMENT OF SERVICE AND ARE THE PROPERTY OF GALLOWAY. NO PART OF THESE PLANS MAY BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE WRITTEN CONSENT OF GALLOWAY. COPYRIGHTS AND INFRINGEMENTS WILL BE ENFORCED AND PROSECUTED.



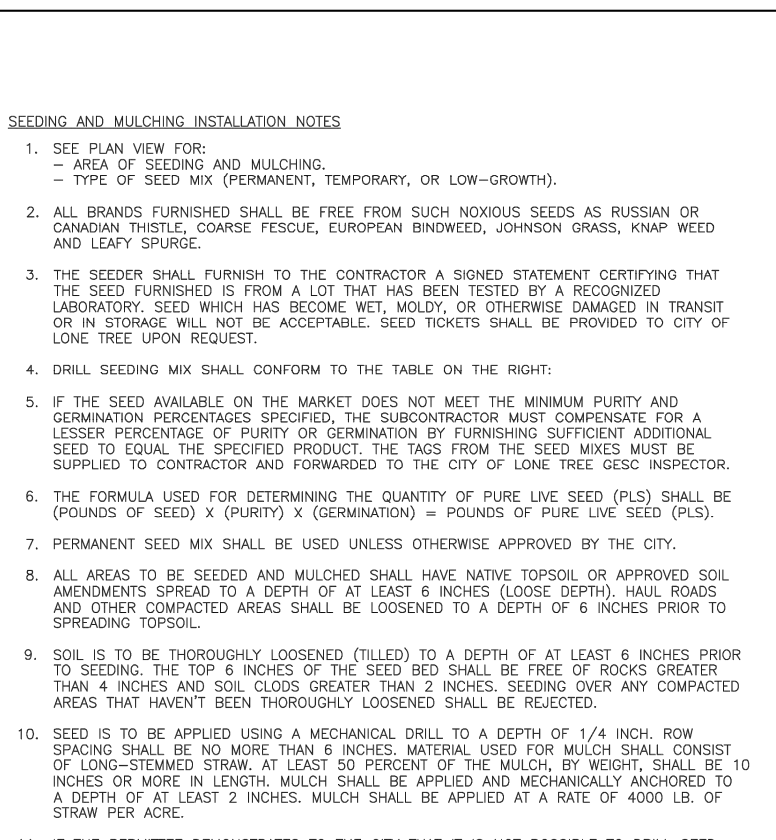
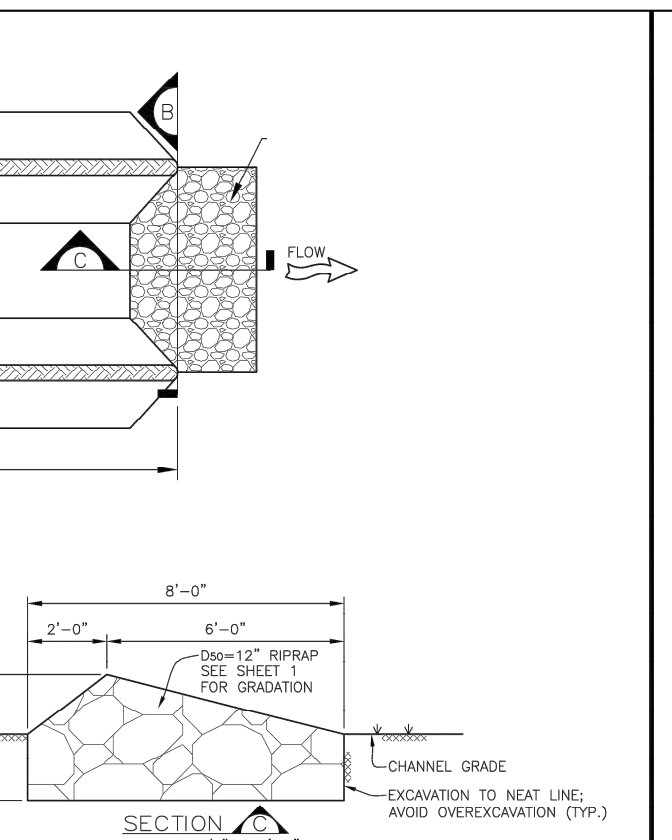
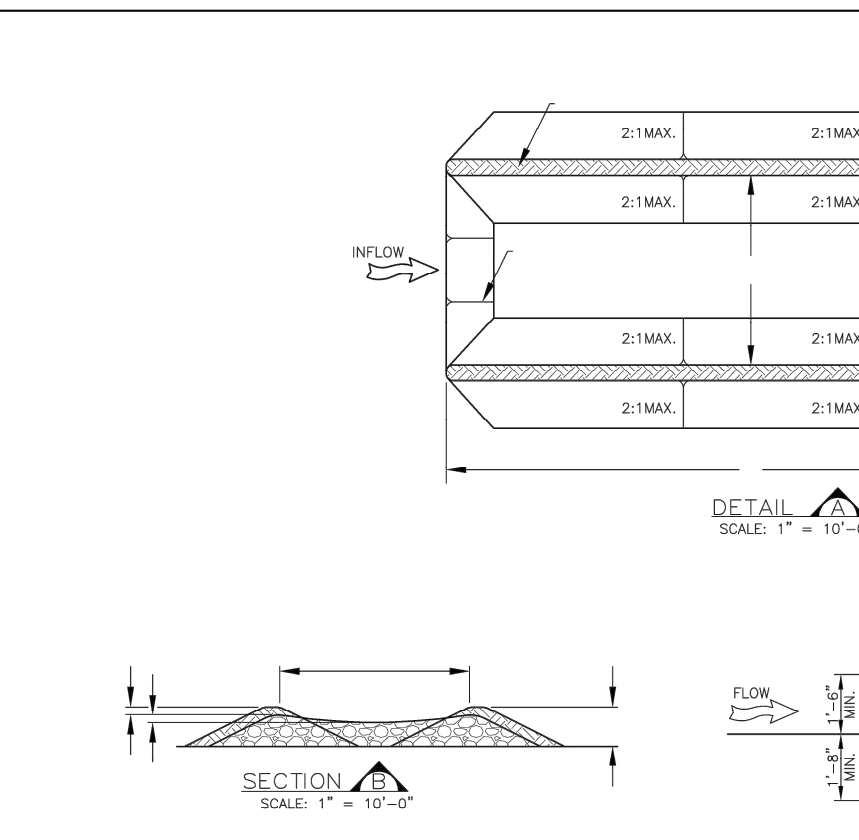
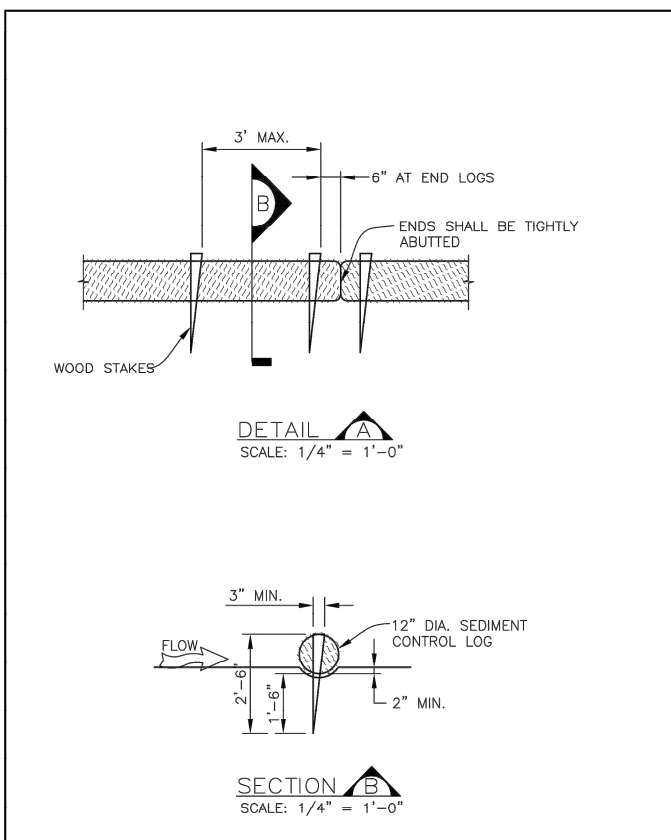
**AMBLESIDE SCHOOL  
LINCOLN AVE & LONE TREE PKWY  
SITE IMPROVEMENT PLAN - SP24-0003**

**9941 LONE TREE PARKWAY  
LONE TREE, CO 80124**

#	Date	Issue / Description	Init.
1	01/19/24	1ST SUBMITTAL	JSB
2	03/13/24	2ND SUBMITTAL	JSB
3	05/08/24	3RD SUBMITTAL	JSB
4			
5			
6			
7			
8			
9			
10			

Project No: AM0000002  
Drawn By: DMH  
Checked By: JSB  
Date: JANUARY 2024

EROSION CONTROL DETAILS



**SEDIMENT CONTROL LOG INSTALLATION NOTES**

- SEE PLAN VIEW FOR LOCATION AND LENGTH OF SEDIMENT CONTROL LOG.
- SEDIMENT CONTROL LOGS INDICATED ON INITIAL GESC PLAN SHALL BE INSTALLED PRIOR TO ANY LAND-USE/RESTORATION ACTIVITIES.
- SEDIMENT CONTROL LOGS SHALL CONSIST OF STRAW, COMPOST, EXCELLOID, OR COCONUT FIBER.
- NOT FOR USE IN CONCENTRATED FLOW AREAS.
- THE SEDIMENT CONTROL LOG SHALL BE TOUCHED INTO THE GROUND A MINIMUM OF 2'.

**SEDIMENT CONTROL LOG MAINTENANCE NOTES**

- THE GESC MANAGER SHALL INSPECT SEDIMENT CONTROL LOGS DAILY DURING AND AFTER ANY STORM EVENT AND MAKE REPAIRS OR CLEAN UP UPSTREAM SEDIMENT AS NECESSARY.
- SEDIMENT ACCUMULATED UPSTREAM OF SEDIMENT CONTROL LOGS SHALL BE REMOVED WHEN THE DEPTH OF SEDIMENT DEPTH IS WITHIN 1/2" OF THE CREST OF LOG.
- SEDIMENT CONTROL LOGS SHALL BE REMOVED AT THE END OF CONSTRUCTION IF ANY DISTURBED AREA EXISTS AFTER REMOVAL. IT SHALL BE RE-RESTORED TO ORIGINAL OR OTHERWISE STABILIZED IN A MANNER APPROVED BY THE CITY.

**SEDIMENT TRAP INSTALLATION NOTES**

- SEE PLAN VIEW FOR LOCATION AND LENGTH OF SEDIMENT TRAP.
- SEDIMENT TRAPS INDICATED ON INITIAL GESC PLAN SHALL BE INSTALLED PRIOR TO ANY LAND-USE/RESTORATION ACTIVITIES.
- SEDIMENT TRAP BERM SHALL BE CONSTRUCTED FROM MATERIAL FROM EXCAVATION. THE BERM SHALL BE COMPACTED TO 90% OF THE MAXIMUM DENSITY IN ACCORDANCE WITH ASTM D698.
- RRAP OUTLET SHALL BE CONSTRUCTED WITH D=12" RRAP WITH A MINIMUM COVER OF 4'.
- THE TOP OF THE EARTHEN BERM SHALL BE A MINIMUM OF 6" HIGHER THAN THE TOP OF THE RRAP OUTLET STRUCTURE.
- THE ENDS OF THE RRAP OUTLET STRUCTURE SHALL BE MINIMUM OF 6" HIGHER THAN THE CENTER OF THE OUTLET STRUCTURE.

**SEDIMENT TRAP MAINTENANCE NOTES**

- THE GESC MANAGER SHALL INSPECT SEDIMENT TRAPS WEEKLY, DURING AND AFTER ANY STORM EVENT AND MAKE REPAIRS OR CLEAN UP UPSTREAM SEDIMENT AS NECESSARY.
- SEDIMENT ACCUMULATED UPSTREAM OF SEDIMENT TRAP SHALL BE REMOVED WHEN THE SEDIMENT DEPTH IS WITHIN 1/2" OF THE HEIGHT OF THE RRAP OUTLET STRUCTURE.
- SEDIMENT TRAPS SHALL REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS STABILIZED AND GRASS COVERAGE IS APPROVED BY THE CITY.
- WHEN SEDIMENT TRAPS ARE REMOVED THE DISTURBED AREA SHALL BE DRILLED SEEDS AND CRIMP MULCHED OR STABILIZED IN A MANNER APPROVED BY THE CITY.

**SEEDING AND MULCHING INSTALLATION NOTES**

- SEE PLAN VIEW FOR TYPE OF SEEDING AND MULCHING.
- ALL BRANDS FURNISHED SHALL BE FREE FROM SUCH NOXIOUS SEEDS AS RUSSIAN OR GARDIAN YHETLE, COARSE FESCUE, EUROPEAN BROMEED, JOHNSON GRASS, KNAP WEED AND LEAFY SPURGE.
- THE SEEDER SHALL FURNISH TO THE CONTRACTOR A SIGNED STATEMENT CERTIFYING THAT THE SEED FURNISHED IS FROM A LOT THAT HAS BEEN TESTED BY A RECOGNIZED LABORATORY. SEED WHICH HAS BECOME WET, MOULDY, OR OTHERWISE DAMAGED IN TRANSIT OR IN STORAGE WILL NOT BE ACCEPTABLE. SEED TICKETS SHALL BE PROVIDED TO CITY OF LONE TREE UPON REQUEST.
- DRILL SEEDING MIX SHALL CONFORM TO THE TABLE ON THE RIGHT.
- IF THE SEED AMOUNTS ON THE BAGGAGE DOES NOT MEET THE MINIMUM PURITY AND GERMINATION PERCENTAGES SPECIFIED, THE SUBCONTRACTOR MUST COMPENSATE FOR A LESSEY PERCENTAGE OF PURITY OR GERMINATION BY FURNISHING SUFFICIENT ADDITIONAL SEED TO EQUAL THE SPECIFIED PRODUCT. THE TAGS FROM THE SEED MIXES MUST BE SUPPLIED TO CONTRACTOR AND FORWARDED TO THE CITY OF LONE TREE GESC INSPECTOR.
- THE FORMULA USED FOR DETERMINING THE QUANTITY OF PURE LIVE SEED (PLS) SHALL BE:  $(\text{PURITY} \times \text{GERMINATION}) \div 100 = \text{PERCENTAGE OF PURE LIVE SEED (PLS)}$ .
- PERMANENT SEED MIX SHALL BE USED UNLESS OTHERWISE APPROVED BY THE CITY.
- ALL AREAS TO BE SEEDS AND MULCHED SHALL HAVE NATIVE TOPSOIL OR APPROVED SOIL AMENDMENTS SPREAD TO A DEPTH OF AT LEAST 6 INCHES (LOOSE DEPTH). HAIL BOARDS AND OTHER COMPACTED AREAS SHALL BE LOOSESED TO A DEPTH OF 6 INCHES PRIOR TO SPREADING TOPSOIL.
- SOIL IS TO BE THOROUGHLY LOOSESED (TILLED) TO A DEPTH OF AT LEAST 6 INCHES PRIOR TO SEEDING. THE TOP 6 INCHES OF THE SEED BED SHALL BE FREE OF ROCKS GREATER THAN 4 INCHES AND SOIL CLOSURE GREATER THAN 2 INCHES. SEEDING OVER ANY COMPACTED AREAS THAT HAVEN'T BEEN THOROUGHLY LOOSESED SHALL BE REJECTED.
- SEED IS TO BE APPLIED USING A MECHANICAL DRILL TO A DEPTH OF 1/4" INCH. ROW SPACING SHALL BE NO MORE THAN 30 INCHES. MULCH SHALL BE APPLIED TO A DEPTH OF 1/4" INCHES OR MORE IN LENGTH. MULCH SHALL BE APPLIED AND MECHANICALLY ANCHORED TO DEPTH OF AT LEAST 2 INCHES. MULCH SHALL BE APPLIED AT A RATE OF 4000 LB. OF STRAW PER ACRE.
- IF THE PERMITTEE DEMONSTRATES TO THE CITY THAT IT IS NOT POSSIBLE TO DRILL SEED, SEED IS TO BE UNIFORM BROADCAST AT TWO TIMES THE DRILLED RATE. THIS METHOD IS HARROWED TO PROVIDE A SEED DEPTH OF APPROXIMATELY 1/4" INCH. THEN ROLLED TO COMPACT, THEN MULCHED AS SPECIFIED ABOVE.
- SEEDING AND MULCHING SHALL BE COMPLETED WITHIN 30 DAYS OF INITIAL EXPOSURE OR 7 DAYS AFTER GRASS IS SUBSTANTIALLY COMPLETE IN A GIVEN AREA (AS DEFINED BY THE CITY). THIS MAY REQUIRE MULTIPLE APPLICATIONS FOR SEEDING AND MULCHING.
- MULCH SHALL BE APPLIED WITHIN 24-HOURS OF SEEDING.

**SEEDING AND MULCHING MAINTENANCE NOTES**

- SEEDS AND MULCHED AREAS SHALL BE INSPECTED FOR REQUIRED COVERAGE MONTHLY FOR A PERIOD OF TWO YEARS FOLLOWING INITIAL SEEDING, REPAIRS AND RE-SEEDING AND MULCHING SHALL BE UNDERTAKEN AFTER THE FIRST GROWING SEASON FOR ANY AREAS FAILING TO MEET THE REQUIRED COVERAGE.
- REQUIRED COVERAGE FOR STRAWED, OPEN SPACE AND LOW GROWTH SEED MIXES SHALL BE DEFINED AS FOLLOWS:
  - THREE (3) PLANTS PER SQUARE FOOT WITH A MINIMUM HEIGHT 2 INCHES. PLS 3 PLANTS PER SQUARE FOOT SHALL BE 0% OF THE WEEDY AND SPICES.
  - NO BARE AREAS LARGER THAN 4 SQUARE FEET (TWO-FOOT BY TWO-FOOT OR EQUIVALENT).
  - FREE OF ERODED AREAS.
  - FREE FROM INFESTATION OF NOXIOUS WEEDS IN ACCORDANCE WITH SECTION 6.4 OF THE GESC CRITERIA MANUAL.
- REQUIRED COVERAGE FOR TURF GRASS AREAS SHALL BE DEFINED AS FOLLOWS:
  - AT LEAST 80% VEGETATIVE COVER OF GRASS SPECIES PLANTED.
  - NO BARE AREAS LARGER THAN 4 SQUARE FEET (TWO-FOOT BY TWO-FOOT OR EQUIVALENT).
  - FREE OF ERODED AREAS.
  - FREE FROM INFESTATION OF NOXIOUS WEEDS IN ACCORDANCE WITH SECTION 6.4 OF THE GESC CRITERIA MANUAL.
- ROLL AND GULLY EROSION SHALL BE FILLED WITH TOPSOIL PRIOR TO RESEEDING. THE RESEEDING METHOD SHALL BE APPROVED BY THE CITY.

**CITY OF LONE TREE PERMANENT DRILL SEEDING MIX**

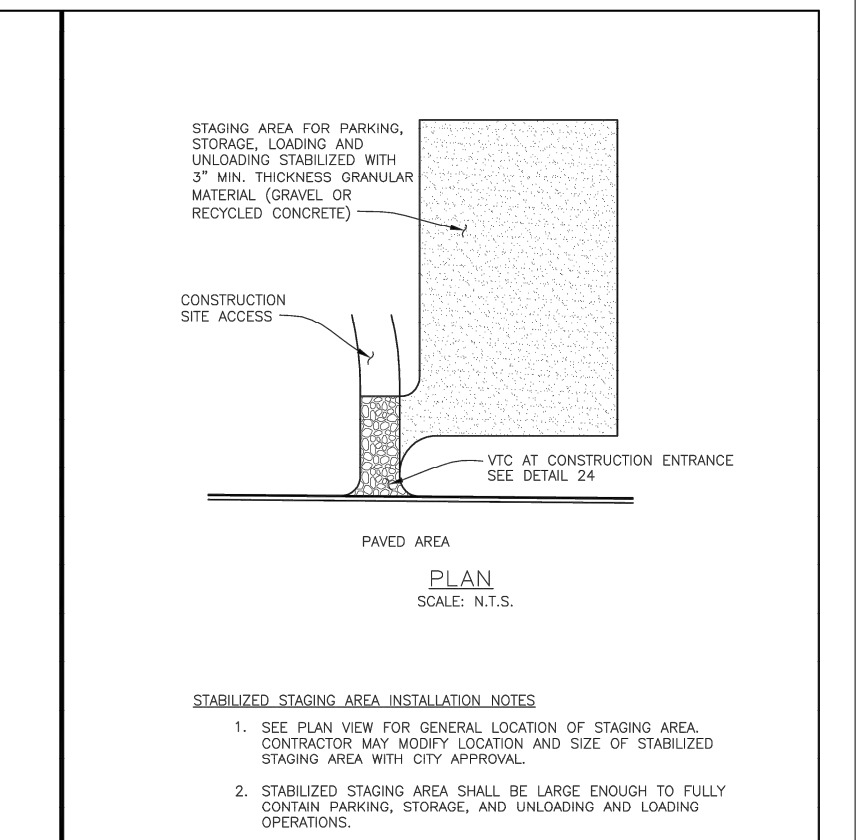
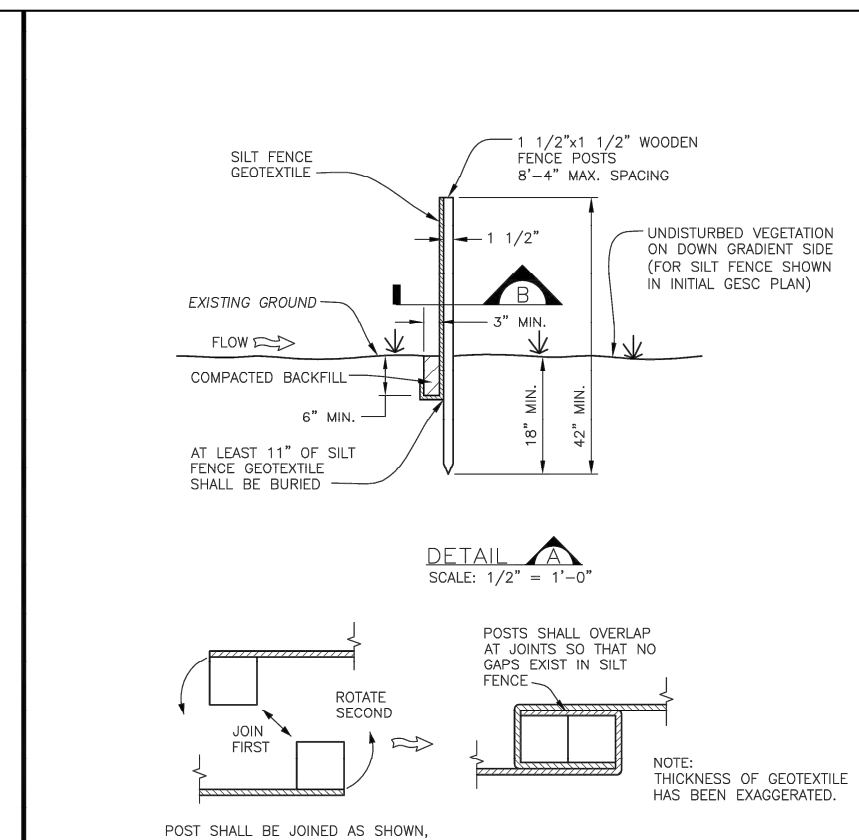
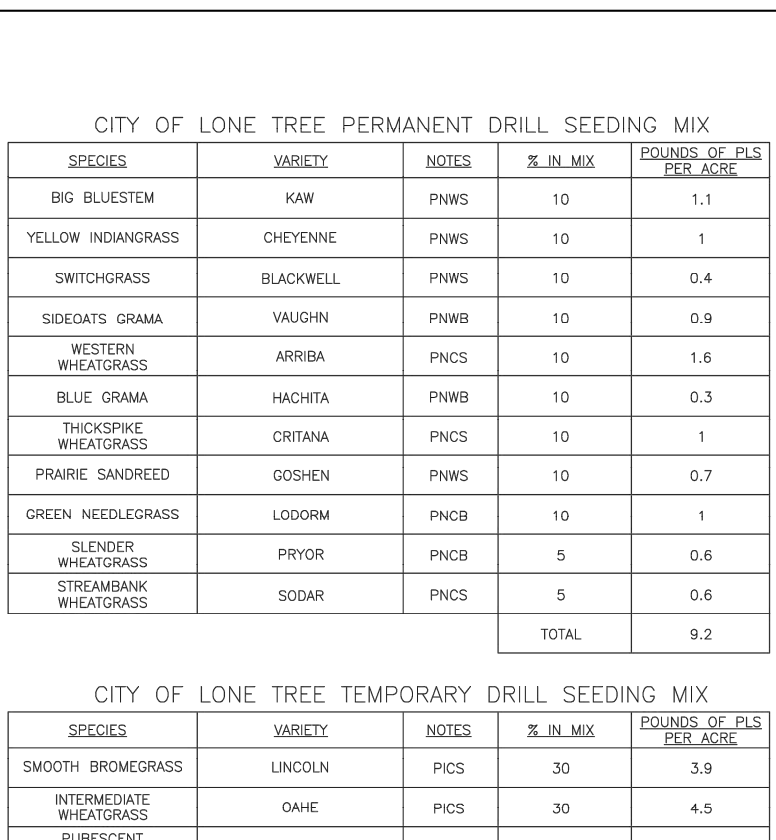
SPECIES	VARIETY	NOTES	% IN MIX	POUNDS OF PLS PER ACRE
BIG BLUESTEM	KAW	PNWS	10	1.1
YELLOW INDIANGRASS	CHEYANE	PNWS	10	1
SMITHGRASS	BLACKWELL	PNWS	10	0.4
SODASITS GRAMA	WAUGHN	PNWB	10	0.9
WESTERN WHEATGRASS	ARRIBA	PNCS	10	1.6
BLUE GRAMA	HACHTA	PNWB	10	0.3
THICKSPINE WHEATGRASS	CRITANA	PNCS	10	1
PANIKR SHAGREED	DOSEHN	PNWS	10	0.7
GREEN NEEDLEGRASS	LOOSRW	PNCS	10	1
SLENDER WHEATGRASS	PRYOR	PNCS	5	0.6
STREAMBANK WHEATGRASS	SODAR	PNCS	5	0.6
TOTAL			9.2	

**CITY OF LONE TREE TEMPORARY DRILL SEEDING MIX**

SPECIES	VARIETY	NOTES	% IN MIX	POUNDS OF PLS PER ACRE
SMOOTH BROMGRASS	LINDCOLN	PNCS	30	3.9
INTERMEDIATE WHEATGRASS	DAHE	PNCS	30	4.5
PURSCLOVE WHEATGRASS	LUNA	PNCS	30	4.2
ANNUAL Ryegrass	N/A	ACR	10	0.8
TOTAL			13.4	

**CITY OF LONE TREE LOW-GROWTH DRILL SEEDING MIX**

SPECIES	VARIETY	NOTES	% IN MIX	POUNDS OF PLS PER ACRE
BUFFALOGRASS	TODIKA	PNWS	20	3.2
BLUE GRAMA	HACHTA	PNWB	20	0.6
WESTERN WHEATGRASS	ARRIBA	PNCS	20	3.2
SODASITS GRAMA	WAUGHN	PNWB	20	1.8
THICKSPINE WHEATGRASS	CRITANA	PNCS	10	1
STREAMBANK WHEATGRASS	SODAR	PNCS	10	1.2
TOTAL			11.0	



**SEEDING AND MULCHING INSTALLATION NOTES**

- SEE PLAN VIEW FOR LOCATION AND LENGTH OF SEDIMENT CONTROL LOG.
- SEDIMENT CONTROL LOGS INDICATED ON INITIAL GESC PLAN SHALL BE INSTALLED PRIOR TO ANY LAND-USE/RESTORATION ACTIVITIES.
- SEDIMENT CONTROL LOGS SHALL CONSIST OF STRAW, COMPOST, EXCELLOID, OR COCONUT FIBER.
- NOT FOR USE IN CONCENTRATED FLOW AREAS.
- THE SEDIMENT CONTROL LOG SHALL BE TOUCHED INTO THE GROUND A MINIMUM OF 2'.

**SEDIMENT CONTROL LOG MAINTENANCE NOTES**

- THE GESC MANAGER SHALL INSPECT SEDIMENT CONTROL LOGS DAILY DURING AND AFTER ANY STORM EVENT AND MAKE REPAIRS OR CLEAN UP UPSTREAM SEDIMENT AS NECESSARY.
- SEDIMENT ACCUMULATED UPSTREAM OF SEDIMENT CONTROL LOGS SHALL BE REMOVED WHEN THE DEPTH OF SEDIMENT DEPTH IS WITHIN 1/2" OF THE CREST OF LOG.
- SEDIMENT CONTROL LOGS SHALL BE REMOVED AT THE END OF CONSTRUCTION IF ANY DISTURBED AREA EXISTS AFTER REMOVAL. IT SHALL BE RE-RESTORED TO ORIGINAL OR OTHERWISE STABILIZED IN A MANNER APPROVED BY THE CITY.

**SEDIMENT TRAP INSTALLATION NOTES**

- SEE PLAN VIEW FOR LOCATION AND LENGTH OF SEDIMENT TRAP.
- SEDIMENT TRAPS INDICATED ON INITIAL GESC PLAN SHALL BE INSTALLED PRIOR TO ANY LAND-USE/RESTORATION ACTIVITIES.
- SEDIMENT TRAP BERM SHALL BE CONSTRUCTED FROM MATERIAL FROM EXCAVATION. THE BERM SHALL BE COMPACTED TO 90% OF THE MAXIMUM DENSITY IN ACCORDANCE WITH ASTM D698.
- RRAP OUTLET SHALL BE CONSTRUCTED WITH D=12" RRAP WITH A MINIMUM COVER OF 4'.
- THE TOP OF THE EARTHEN BERM SHALL BE A MINIMUM OF 6" HIGHER THAN THE TOP OF THE RRAP OUTLET STRUCTURE.
- THE ENDS OF THE RRAP OUTLET STRUCTURE SHALL BE MINIMUM OF 6" HIGHER THAN THE CENTER OF THE OUTLET STRUCTURE.

**SEDIMENT TRAP MAINTENANCE NOTES**

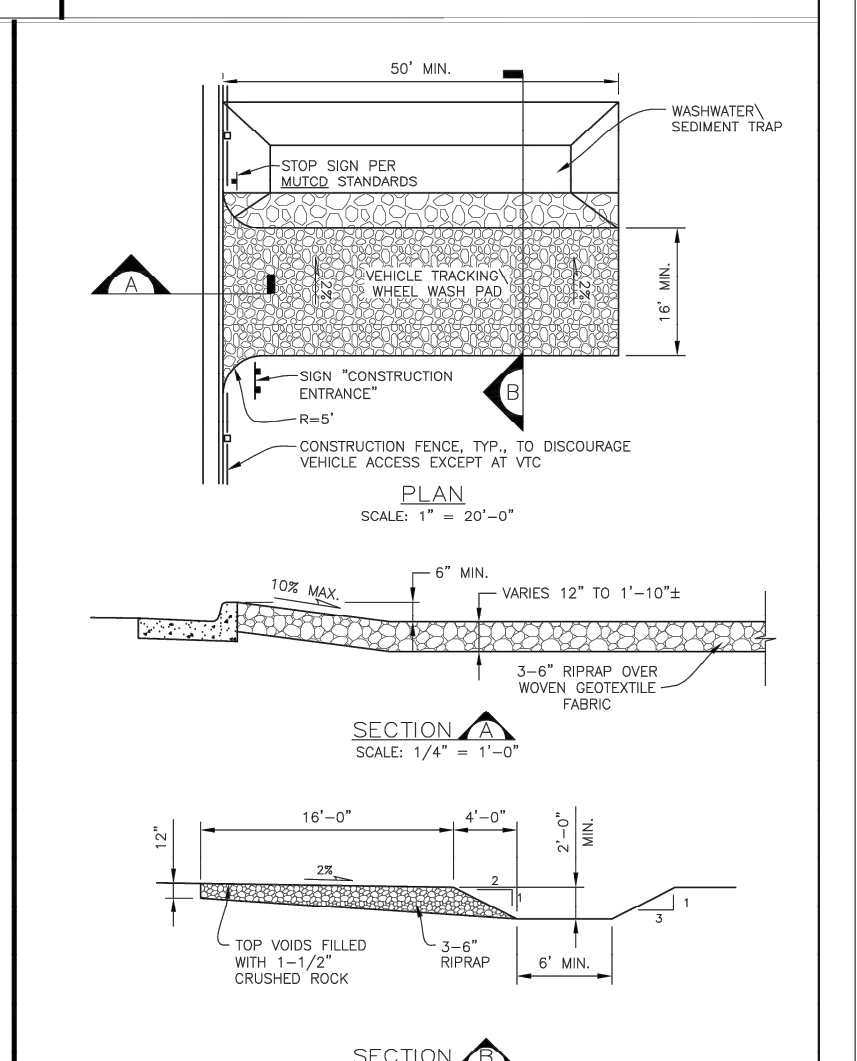
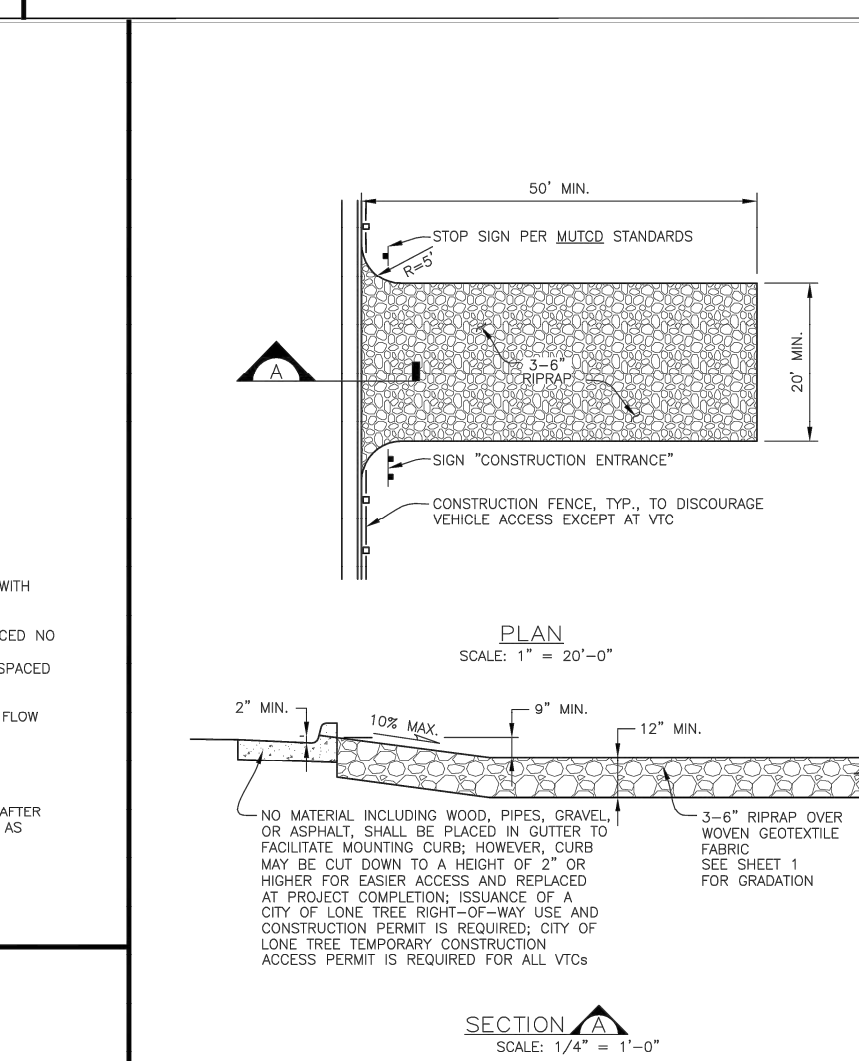
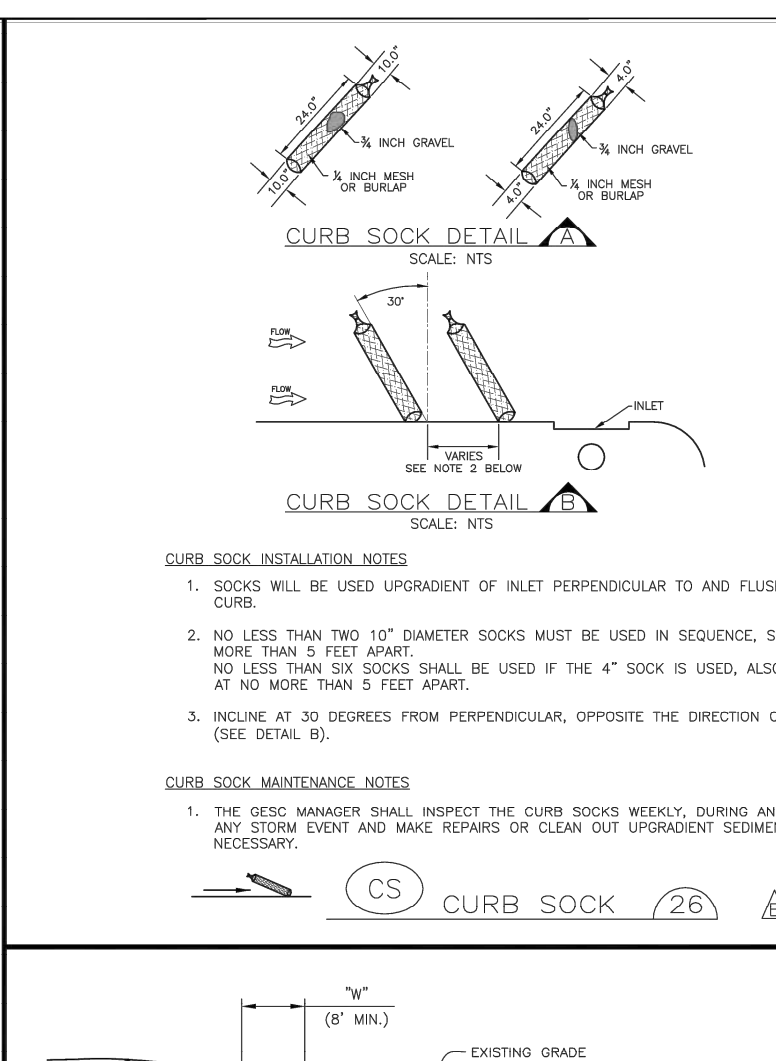
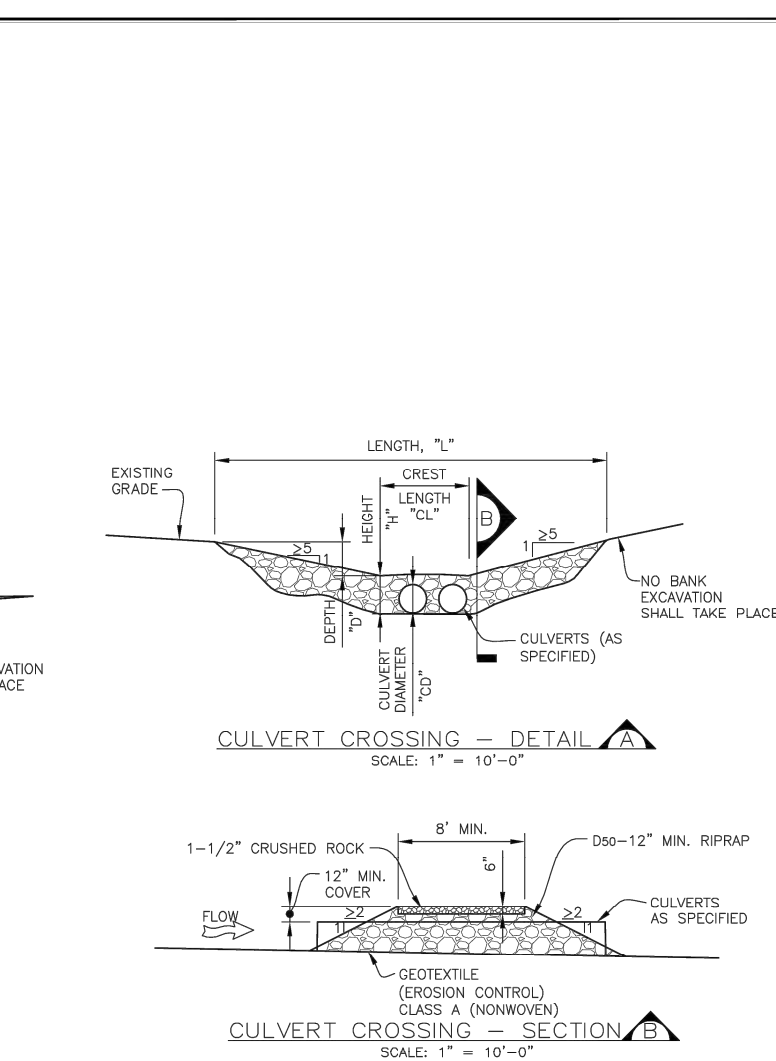
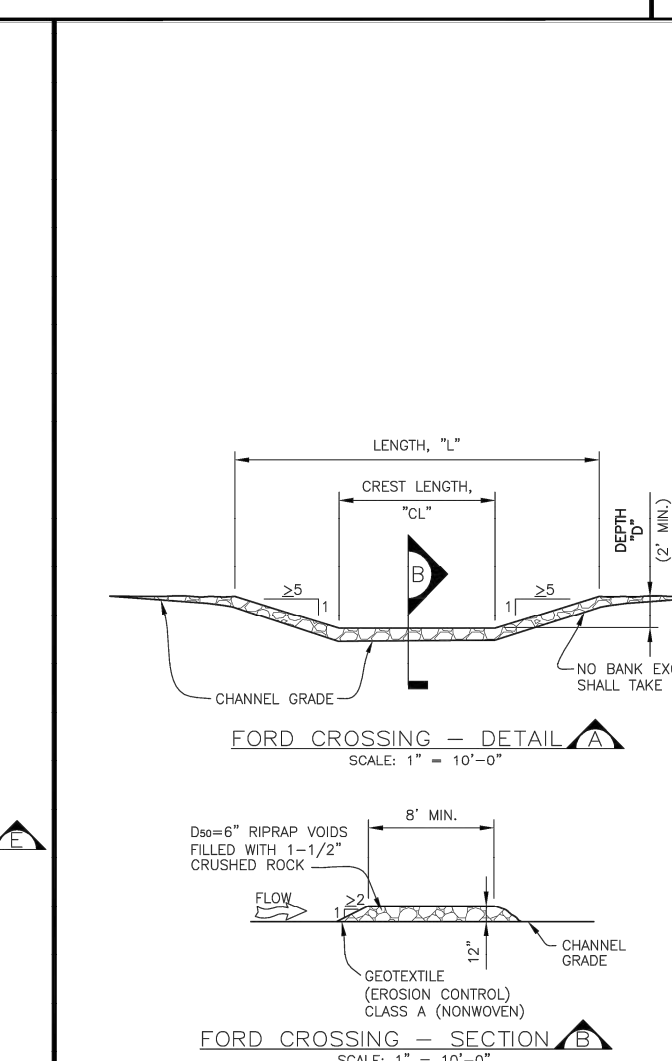
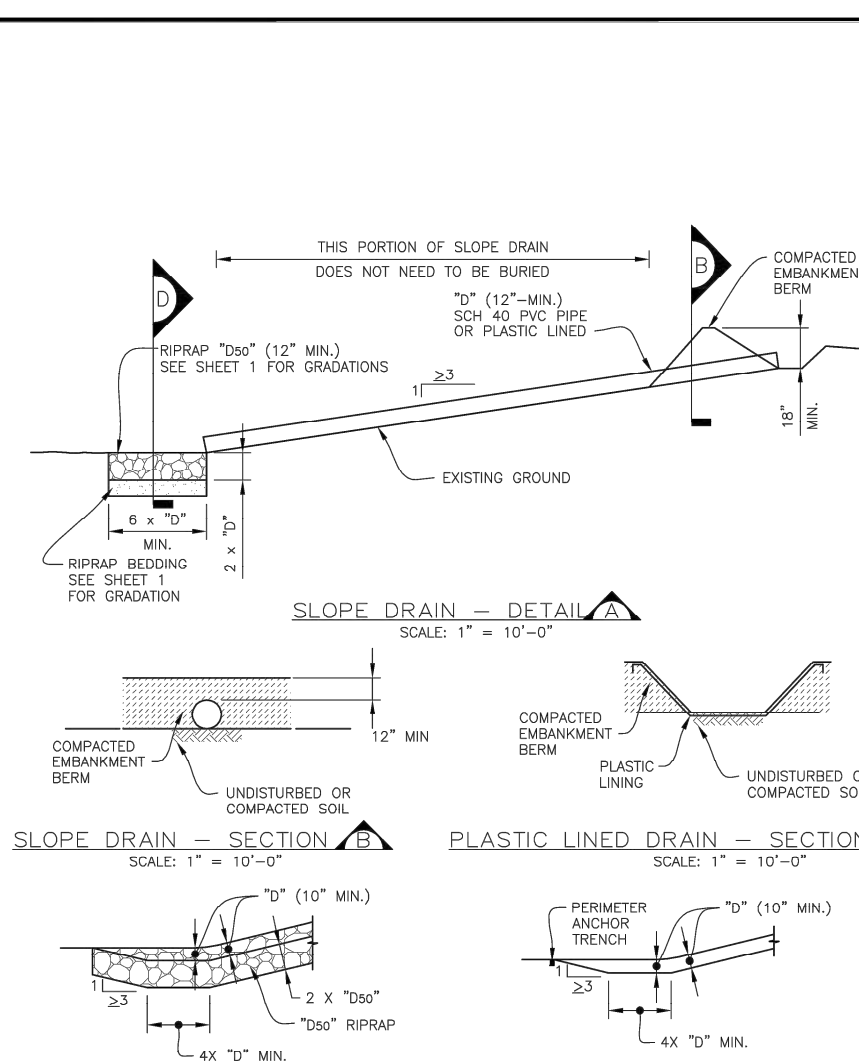
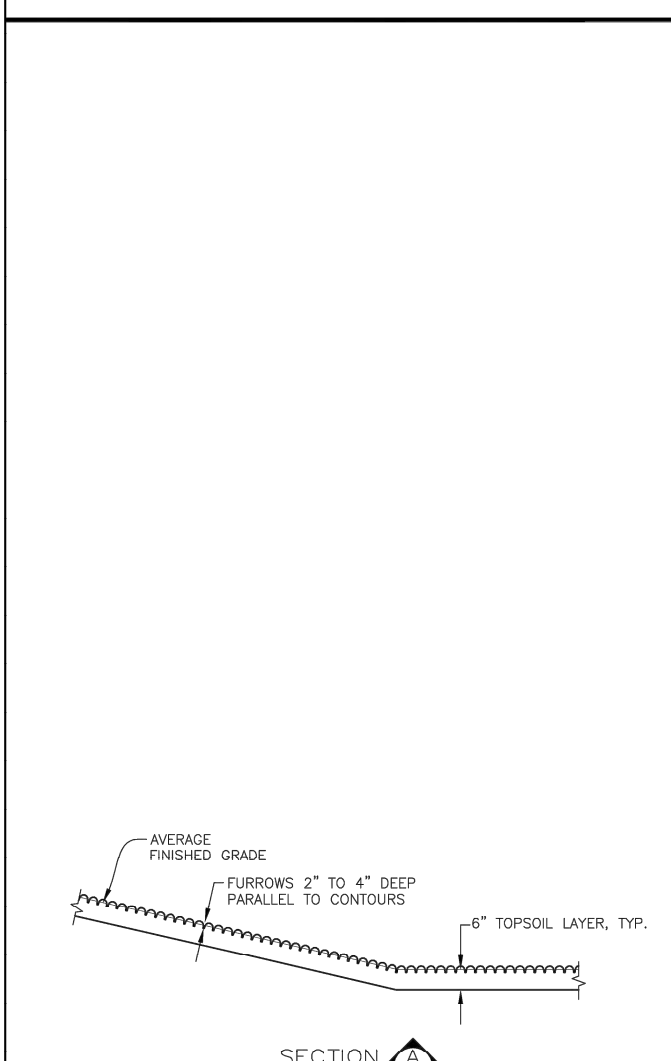
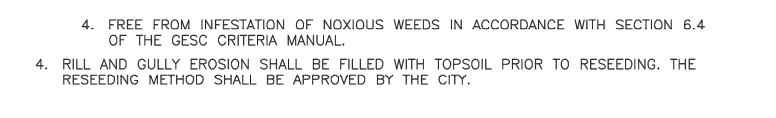
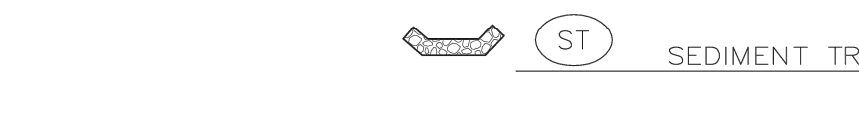
- THE GESC MANAGER SHALL INSPECT SEDIMENT TRAPS WEEKLY, DURING AND AFTER ANY STORM EVENT AND MAKE REPAIRS OR CLEAN UP UPSTREAM SEDIMENT AS NECESSARY.
- SEDIMENT ACCUMULATED UPSTREAM OF SEDIMENT TRAP SHALL BE REMOVED WHEN THE SEDIMENT DEPTH IS WITHIN 1/2" OF THE HEIGHT OF THE RRAP OUTLET STRUCTURE.
- SEDIMENT TRAPS SHALL REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS STABILIZED AND GRASS COVERAGE IS APPROVED BY THE CITY.
- WHEN SEDIMENT TRAPS ARE REMOVED THE DISTURBED AREA SHALL BE DRILLED SEEDS AND CRIMP MULCHED OR STABILIZED IN A MANNER APPROVED BY THE CITY.

**SEEDING AND MULCHING INSTALLATION NOTES**

- SEE PLAN VIEW FOR TYPE OF SEEDING AND MULCHING.
- ALL BRANDS FURNISHED SHALL BE FREE FROM SUCH NOXIOUS SEEDS AS RUSSIAN OR GARDIAN YHETLE, COARSE FESCUE, EUROPEAN BROMEED, JOHNSON GRASS, KNAP WEED AND LEAFY SPURGE.
- THE SEEDER SHALL FURNISH TO THE CONTRACTOR A SIGNED STATEMENT CERTIFYING THAT THE SEED FURNISHED IS FROM A LOT THAT HAS BEEN TESTED BY A RECOGNIZED LABORATORY. SEED WHICH HAS BECOME WET, MOULDY, OR OTHERWISE DAMAGED IN TRANSIT OR IN STORAGE WILL NOT BE ACCEPTABLE. SEED TICKETS SHALL BE PROVIDED TO CITY OF LONE TREE UPON REQUEST.
- DRILL SEEDING MIX SHALL CONFORM TO THE TABLE ON THE RIGHT.
- IF THE SEED AMOUNTS ON THE BAGGAGE DOES NOT MEET THE MINIMUM PURITY AND GERMINATION PERCENTAGES SPECIFIED, THE SUBCONTRACTOR MUST COMPENSATE FOR A LESSEY PERCENTAGE OF PURITY OR GERMINATION BY FURNISHING SUFFICIENT ADDITIONAL SEED TO EQUAL THE SPECIFIED PRODUCT. THE TAGS FROM THE SEED MIXES MUST BE SUPPLIED TO CONTRACTOR AND FORWARDED TO THE CITY OF LONE TREE GESC INSPECTOR.
- THE FORMULA USED FOR DETERMINING THE QUANTITY OF PURE LIVE SEED (PLS) SHALL BE:  $(\text{PURITY} \times \text{GERMINATION}) \div 100 = \text{PERCENTAGE OF PURE LIVE SEED (PLS)}$ .
- PERMANENT SEED MIX SHALL BE USED UNLESS OTHERWISE APPROVED BY THE CITY.
- ALL AREAS TO BE SEEDS AND MULCHED SHALL HAVE NATIVE TOPSOIL OR APPROVED SOIL AMENDMENTS SPREAD TO A DEPTH OF AT LEAST 6 INCHES (LOOSE DEPTH). HAIL BOARDS AND OTHER COMPACTED AREAS SHALL BE LOOSESED TO A DEPTH OF 6 INCHES PRIOR TO SPREADING TOPSOIL.
- SOIL IS TO BE THOROUGHLY LOOSESED (TILLED) TO A DEPTH OF AT LEAST 6 INCHES PRIOR TO SEEDING. THE TOP 6 INCHES OF THE SEED BED SHALL BE FREE OF ROCKS GREATER THAN 4 INCHES AND SOIL CLOSURE GREATER THAN 2 INCHES. SEEDING OVER ANY COMPACTED AREAS THAT HAVEN'T BEEN THOROUGHLY LOOSESED SHALL BE REJECTED.
- SEED IS TO BE APPLIED USING A MECHANICAL DRILL TO A DEPTH OF 1/4" INCH. ROW SPACING SHALL BE NO MORE THAN 30 INCHES. MULCH SHALL BE APPLIED TO A DEPTH OF 1/4" INCHES OR MORE IN LENGTH. MULCH SHALL BE APPLIED AND MECHANICALLY ANCHORED TO DEPTH OF AT LEAST 2 INCHES. MULCH SHALL BE APPLIED AT A RATE OF 4000 LB. OF STRAW PER ACRE.
- IF THE PERMITTEE DEMONSTRATES TO THE CITY THAT IT IS NOT POSSIBLE TO DRILL SEED, SEED IS TO BE UNIFORM BROADCAST AT TWO TIMES THE DRILLED RATE. THIS METHOD IS HARROWED TO PROVIDE A SEED DEPTH OF APPROXIMATELY 1/4" INCH. THEN ROLLED TO COMPACT, THEN MULCHED AS SPECIFIED ABOVE.
- SEEDING AND MULCHING SHALL BE COMPLETED WITHIN 30 DAYS OF INITIAL EXPOSURE OR 7 DAYS AFTER GRASS IS SUBSTANTIALLY COMPLETE IN A GIVEN AREA (AS DEFINED BY THE CITY). THIS MAY REQUIRE MULTIPLE APPLICATIONS FOR SEEDING AND MULCHING.
- MULCH SHALL BE APPLIED WITHIN 24-HOURS OF SEEDING.

**SEEDING AND MULCHING MAINTENANCE NOTES**

- SEEDS AND MULCHED AREAS SHALL BE INSPECTED FOR REQUIRED COVERAGE MONTHLY FOR A PERIOD OF TWO YEARS FOLLOWING INITIAL SEEDING, REPAIRS AND RE-SEEDING AND MULCHING SHALL BE UNDERTAKEN AFTER THE FIRST GROWING SEASON FOR ANY AREAS FAILING TO MEET THE REQUIRED COVERAGE.
- REQUIRED COVERAGE FOR STRAWED, OPEN SPACE AND LOW GROWTH SEED MIXES SHALL BE DEFINED AS FOLLOWS:
  - THREE (3) PLANTS PER SQUARE FOOT WITH A MINIMUM HEIGHT 2 INCHES. PLS 3 PLANTS PER SQUARE FOOT SHALL BE 0% OF THE WEEDY AND SPICES.
  - NO BARE AREAS LARGER THAN 4 SQUARE FEET (TWO-FOOT BY TWO-FOOT OR EQUIVALENT).
  - FREE OF ERODED AREAS.
  - FREE FROM INFESTATION OF NOXIOUS WEEDS IN ACCORDANCE WITH SECTION 6.4 OF THE GESC CRITERIA MANUAL.
- REQUIRED COVERAGE FOR TURF GRASS AREAS SHALL BE DEFINED AS FOLLOWS:
  - AT LEAST 80% VEGETATIVE COVER OF GRASS SPECIES PLANTED.
  - NO BARE AREAS LARGER THAN 4 SQUARE FEET (TWO-FOOT BY TWO-FOOT OR EQUIVALENT).
  - FREE OF ERODED AREAS.
  - FREE FROM INFESTATION OF NOXIOUS WEEDS IN ACCORDANCE WITH SECTION 6.4 OF THE GESC CRITERIA MANUAL.
- ROLL AND GULLY EROSION SHALL BE FILLED WITH TOPSOIL PRIOR TO RESEEDING. THE RESEEDING METHOD SHALL BE APPROVED BY THE CITY.



**SURFACE ROUGHENING INSTALLATION NOTES**

- SURFACE ROUGHENING SHALL BE PROVIDED ON ALL FINISHED GRADES (SLOPES AND FLAT AREAS) WITHIN 3 DAYS OF COMPLETION OF FINISHED GRADE (FOR AREAS NOT RECEIVING TOPSOIL) OR WITHIN 2 DAYS OF TOPSOIL PLACEMENT.
- AREAS WHERE BUILDING FOUNDATIONS, PAVEMENT, OR SOO IS TO BE SURFACE ROUGHENED.
- DISTURBED SURFACES SHALL BE ROUGHENED USING RIPRAP OR TULING EQUIPMENT ON THE CONTOUR OR TRACKING UP AND DOWN A SLOPE USING EQUIPMENT TREADS.

**SURFACE ROUGHENING MAINTENANCE NOTES**

- THE GESC MANAGER SHALL INSPECT THE SURFACE ROUGHENING WEEKLY DURING AND AFTER ANY STORM EVENT AND MAKE REPAIRS OR CLEAN UP UPSTREAM SEDIMENT AS NECESSARY.
- VEHICLES AND EQUIPMENT SHALL GENERALLY BE CONFINED TO ACCESS DRIVES AND SHALL NOT BE DRIVEN OVER AREAS THAT HAVE BEEN SURFACE ROUGHENED.
- IN NON-TURF GRASS FINISHED AREAS SEEDING AND MULCHING SHALL TAKE PLACE DIRECTLY OVER SURFACE ROUGHENED AREAS WITHOUT FIRST STABILIZING THE SURFACE.
- IN AREAS NOT SEEDS AND MULCHED AFTER SURFACE ROUGHENING SURFACES SHALL BE RE-ROUGHENED AS NECESSARY TO MAINTAIN GRADE DEPTH AND SMOOTH OVER ANY HILL EROSION.

**SLOPE DRAIN INSTALLATION NOTES**

- SEE PLAN VIEW FOR LOCATION AND LENGTH OF SLOPE DRAIN.
- PIPE DIAMETERS 12" AND RRAP SIZE 120".
- SLOPE DRAIN DIMENSIONS SHALL BE CONSIDERED MINIMUM DIMENSIONS. CONTRACTOR MAY ELECT TO INSTALL LARGER FACILITIES ANY CHANGE TO SLOPE OR SLOPE DRAIN DURING RUNOFF EVENTS SHALL BE THE CONTRACTOR'S RESPONSIBILITY.
- SEE SHEET 1 FOR RRAP AND 1-1/2" CRUSHED ROCK GRADATIONS.
- FOR A TEMPORARY STREAM CROSSING THAT WILL CARRY LOADS, THE TEMPORARY STREAM CROSSING MUST BE DESIGNED BY THE DESIGN ENGINEER.

**SLOPE DRAIN MAINTENANCE NOTES**

- THE GESC MANAGER SHALL INSPECT SLOPE DRAIN WEEKLY, DURING AND AFTER ANY STORM EVENT AND MAKE REPAIRS AS NECESSARY.
- SEDIMENT ACCUMULATED UPSTREAM OF SLOPE DRAIN SHALL BE REMOVED WHEN THE SEDIMENT DEPTH IS WITHIN 6-INCHES OF THE CREST (FOR CULVERT) OR GREATER THAN AN AVERAGE DEPTH OF 12-INCHES (FOR CULVERT).
- STREAM CROSSINGS ARE TO REMAIN IN PLACE UNTIL NO LONGER NEEDED, BUT SHALL BE REMOVED PRIOR TO THE END OF CONSTRUCTION.
- WHEN STREAM CROSSINGS ARE REMOVED, THE DISTURBED AREA SHALL BE DRILLED SEEDS AND CRIMP MULCHED OR OTHERWISE STABILIZED IN A MANNER APPROVED BY THE CITY.

**FORD CROSSING INSTALLATION NOTES**

- SEE PLAN VIEW FOR LOCATION OF TEMPORARY STREAM CROSSING.
- STREAM CROSSING TYPE (FORD OR CULVERT).
- FOR FORD CROSSING: LENGTH, "L", CREST LENGTH, "LC", AND DEPTH, "D".
- FOR CULVERT CROSSING: LENGTH, "L", CREST LENGTH, "LC", DEPTH, "D", CULVERT DIAMETER, "CD", AND NUMBER, TYPE AND CLASS OR GRADE OF CULVERTS.
- SEE SHEET 1 FOR RRAP AND 1-1/2" CRUSHED ROCK GRADATIONS.

**FORD CROSSING MAINTENANCE NOTES**

- THE GESC MANAGER SHALL INSPECT STREAM CROSSINGS WEEKLY, DURING AND AFTER ANY STORM EVENT AND MAKE REPAIRS OR CLEAN UP UPSTREAM SEDIMENT AS NECESSARY.
- SEDIMENT ACCUMULATED UPSTREAM OF STREAM CROSSINGS SHALL BE REMOVED WHEN THE SEDIMENT DEPTH IS WITHIN 6-INCHES OF THE CREST (FOR CULVERT) OR GREATER THAN AN AVERAGE DEPTH OF 12-INCHES (FOR CULVERT).
- STREAM CROSSINGS ARE TO REMAIN IN PLACE UNTIL NO LONGER NEEDED, BUT SHALL BE REMOVED PRIOR TO THE END OF CONSTRUCTION.
- WHEN STREAM CROSSINGS ARE REMOVED, THE DISTURBED AREA SHALL BE DRILLED SEEDS AND CRIMP MULCHED OR OTHERWISE STABILIZED IN A MANNER APPROVED BY THE CITY.

**CULVERT CROSSING INSTALLATION NOTES**

- SEE PLAN VIEW FOR LOCATION OF TEMPORARY STREAM CROSSING.
- STREAM CROSSING TYPE (FORD OR CULVERT).
- FOR FORD CROSSING: LENGTH, "L", CREST LENGTH, "LC", AND DEPTH, "D".
- FOR CULVERT CROSSING: LENGTH, "L", CREST LENGTH, "LC", DEPTH, "D", CULVERT DIAMETER, "CD", AND NUMBER, TYPE AND CLASS OR GRADE OF CULVERTS.
- SEE SHEET 1 FOR RRAP AND 1-1/2" CRUSHED ROCK GRADATIONS.

**CULVERT CROSSING MAINTENANCE NOTES**

- THE GESC MANAGER SHALL INSPECT STREAM CROSSINGS WEEKLY, DURING AND AFTER ANY STORM EVENT AND MAKE REPAIRS OR CLEAN UP UPSTREAM SEDIMENT AS NECESSARY.
- SEDIMENT ACCUMULATED UPSTREAM OF STREAM CROSSINGS SHALL BE REMOVED WHEN THE SEDIMENT DEPTH IS WITHIN 6-INCHES OF THE CREST (FOR CULVERT) OR GREATER THAN AN AVERAGE DEPTH OF 12-INCHES (FOR CULVERT).
- STREAM CROSSINGS ARE TO REMAIN IN PLACE UNTIL NO LONGER NEEDED, BUT SHALL BE REMOVED PRIOR TO THE END OF CONSTRUCTION.
- WHEN STREAM CROSSINGS ARE REMOVED, THE DISTURBED AREA SHALL BE DRILLED SEEDS AND CRIMP MULCHED OR OTHERWISE STABILIZED IN A MANNER APPROVED BY THE CITY.

**CURB SOCK INSTALLATION NOTES**

- SOCKS WILL BE USED UPSTREAM OF INLET PERPENDICULAR TO AND FLUSH WITH CURB.
- NO LESS THAN TWO 10" DIAMETER SOCKS MUST BE USED IN SEQUENCE, SPACED NO MORE THAN 2 FEET APART.
- NO LESS THAN SIX SOCKS SHALL BE USED IF THE 4" SOCK IS USED, ALSO SPACED AT NO MORE THAN 3 FEET APART.
- INCLINE AT 30 DEGREES FROM PERPENDICULAR, OPPOSITE THE DIRECTION OF FLOW (SEE DETAIL B).

**CURB SOCK MAINTENANCE NOTES**

- THE GESC MANAGER SHALL INSPECT THE CURB SOCKS WEEKLY DURING AND AFTER ANY STORM EVENT AND MAKE REPAIRS OR CLEAN UP UPSTREAM SEDIMENT AS NECESSARY.

**VEHICLE TRACKING CONTROL INSTALLATION NOTES**

- VEHICLE TRACKING CONTROL PADS SHALL BE INSTALLED AT EVERY ACCESS POINT TO SITE.
- VEHICLE TRACKING CONTROL PADS SHALL CONSIST OF HARD, DENSE, DURABLE STONE, ANGULAR IN SHAPE AND RESISTANT TO WEATHERING. ROUNDED STONE OR BOLLERS WILL NOT BE ACCEPTABLE. THE STONES SHALL BE 3" WITH A MAXIMUM SIZE OF 6". THE STONE SHALL HAVE A SPECIFIC QUANTITY OF AT LEAST 2.6 CUMYD OF GRAVEL WILL BE BY VISUAL INSPECTION.
- WOVEN GEOTEXTILE FABRIC SHALL BE PLACED UNDER THE VTC STONE TO HELP MINIMIZE MIGRATION OF THE STONE INTO THE UNDERLYING MATERIAL.
- ANY CRACKED OR DAMAGED CURB AND GUTTER AND SIDEWALK SHALL BE REPLACED BY PERMITEE.
- A CITY OF LONE TREE TEMPORARY CONSTRUCTION ACCESS PERMIT IS REQUIRED FOR EACH ACCESS/EXIT POINT FROM THE SITE.
- A STOP SIGN INSTALLED IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), AS AMENDED, SHALL BE INSTALLED FOR EXITING TRAFFIC AT THE VTC.

**VEHICLE TRACKING CONTROL MAINTENANCE NOTES**

- THE GESC MANAGER SHALL INSPECT VEHICLE TRACKING CONTROL PADS DAILY. ACCUMULATED SEDIMENTS SHALL BE REMOVED FROM PAD SURFACE. STONE SURFACE SHALL BE CLEAN AND LOOSE ENOUGH TO RUT SLIGHTLY UNDER WHEEL LOADS SUFFICIENTLY TO CAUSE LOOSE GRAVEL TO DISLODGE.
- VEHICLE TRACKING CONTROL PADS SHALL BE MAINTAINED TO REMAIN CLEAN AND LOOSE ENOUGH TO RUT SUFFICIENTLY UNDER WHEEL LOADS SUFFICIENTLY TO CAUSE LOOSE GRAVEL TO DISLODGE.
- MOVEMENT FROM VEHICLE TRACKS, WHEN STONE BECOMES COMPACTED AND/OR FILLED WITH SEDIMENT SO THAT THE EFFECTIVENESS OF THE PAD IS DIMINISHED, CONSTRUCTION SHALL STOP. WHEN STONE BECOMES COMPACTED AND/OR FILLED WITH SEDIMENT SO THAT THE EFFECTIVENESS OF THE PAD IS DIMINISHED, CONSTRUCTION SHALL STOP. WHEN STONE BECOMES COMPACTED AND/OR FILLED WITH SEDIMENT SO THAT THE EFFECTIVENESS OF THE PAD IS DIMINISHED, CONSTRUCTION SHALL STOP. WHEN STONE BECOMES COMPACTED AND/OR FILLED WITH SEDIMENT SO THAT THE EFFECTIVENESS OF THE PAD IS DIMINISHED, CONSTRUCTION SHALL STOP.
- VEHICLE TRACKING CONTROL SHALL BE REMOVED AT THE END OF CONSTRUCTION. THE STONE MATERIAL AND GEOTEXTILE REMOVED OR IF APPROVED BY THE CITY, USED ON SITE, AND THE AREA TOPSOILED, DRILL SEEDS AND CRIMP MULCHED OR OTHERWISE STABILIZED IN CONFORMANCE WITH CITY APPROVED PLANS FOR SITE AND THE APPLICABLE GESC PERMIT.

**VEHICLE TRACKING CONTROL WITH WHEEL WASH INSTALLATION NOTES**

- ALTHOUGH NOT NORMALLY USED, THE CITY RESERVES THE RIGHT TO REQUIRE VEHICLE TRACKING CONTROL WITH WHEEL WASH FACILITIES AT SITES WHERE TRACKING INTO PAVED AREAS BECOMES A SIGNIFICANT PROBLEM.
- IF VEHICLE TRACKING CONTROL WITH WHEEL WASH FACILITIES ARE REQUIRED, ALL WHEELS ON EVERY VEHICLE LEAVING THE SITE SHALL BE CLEANED OF MUD USING A PRESSURE-WASHER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING A WATER SOURCE.
- VEHICLE TRACKING CONTROL PADS SHALL CONSIST OF HARD, DENSE, DURABLE STONE, ANGULAR IN SHAPE AND RESISTANT TO WEATHERING. ROUNDED STONE OR BOLLERS WILL NOT BE ACCEPTABLE. THE STONES SHALL BE 3" WITH A MAXIMUM SIZE OF 6". THE STONE SHALL HAVE A SPECIFIC QUANTITY OF AT LEAST 2.6 CUMYD OF GRAVEL WILL BE BY VISUAL INSPECTION.
- WOVEN GEOTEXTILE FABRIC SHALL BE PLACED UNDER THE VTC STONE TO HELP MINIMIZE MIGRATION OF THE STONE INTO THE UNDERLYING MATERIAL.
- ANY CRACKED OR DAMAGED CURB AND GUTTER AND SIDEWALK SHALL BE REPLACED BY PERMITEE.
- A CITY OF LONE TREE TEMPORARY CONSTRUCTION ACCESS PERMIT IS REQUIRED FOR EACH ACCESS/EXIT POINT FROM THE SITE.
- A STOP SIGN INSTALLED IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), AS AMENDED, SHALL BE INSTALLED FOR EXITING TRAFFIC AT THE VTC.

**VEHICLE TRACKING CONTROL WITH WHEEL WASH MAINTENANCE NOTES**

- THE GESC MANAGER SHALL INSPECT VEHICLE TRACKING CONTROL PADS DAILY. ACCUMULATED SEDIMENTS SHALL BE REMOVED FROM PAD SURFACE. STONE SURFACE SHALL BE CLEAN AND LOOSE ENOUGH TO RUT SUFFICIENTLY UNDER WHEEL LOADS SUFFICIENTLY TO CAUSE LOOSE GRAVEL TO DISLODGE.
- MOVEMENT FROM VEHICLE TRACKS, WHEN STONE BECOMES COMPACTED AND/OR FILLED WITH SEDIMENT SO THAT THE EFFECTIVENESS OF THE PAD IS DIMINISHED, CONSTRUCTION SHALL STOP. WHEN STONE BECOMES COMPACTED AND/OR FILLED WITH SEDIMENT SO THAT THE EFFECTIVENESS OF THE PAD IS DIMINISHED, CONSTRUCTION SHALL STOP.
- VEHICLE TRACKING CONTROL SHALL BE REMOVED AT THE END OF CONSTRUCTION. THE STONE MATERIAL AND GE



