

PROJECT CONTACTS

OWNER/DEVELOPER
CHALLENGER COMMUNITIES, LLC
13570 NORTHFACIE ESTATES DR.
COLORADO SPRINGS, CO 80921
TEL: (719) 598-5190
ATTN: JIM BYERS
EMAIL: JIMBY@CHALLENGERHOMES.COM

APPLICANT
NES, INC.
619 NORTH CASCADE AVENUE, SUITE 200
COLORADO SPRINGS, CO 80903
TEL: (719) 471-0073
ATTN: BROOKS SWENSON
EMAIL: BSWENSON@NESCOLORADO.COM

CIVIL ENGINEER
GALLOWAY & CO., INC.
1155 KELLY JOHNSON BLVD., SUITE 305
COLORADO SPRINGS, CO 80920
TEL: (719) 900-7220
ATTN: GRANT DENNIS, P.E.
EMAIL: GRANTDENNIS@GALLOWAYUS.COM

GEOTECHNICAL ENGINEER
ROCKY MOUNTAIN GROUP
2910 AUSTIN BLUFFS PARKY
COLORADO SPRINGS, CO 80918
TEL: (719) 394-3072
ATTN: TONY MUNDER, P.E.
EMAIL: TMUNDER@RMG-ENGINEERS.COM

TRAFFIC ENGINEER
LSC TRANSPORTATION CONSULTANTS, INC.
545 EAST PICES PEAK AVENUE, SUITE 210
COLORADO SPRINGS, CO 80903
TEL: (719) 633-2868
ATTN: JEFFREY C. HODSON, P.E.
EMAIL: JEFF@LSCTRANS.COM

SURVEYOR
GALLOWAY & CO., INC.
1155 KELLY JOHNSON BLVD., SUITE 305
COLORADO SPRINGS, CO 80920
TEL: (719) 337-1262
ATTN: BRIAN DENNIS
EMAIL: BRIANDENNIS@GALLOWAYUS.COM

WATER & WASTEWATER

WOODMEN HILLS METRO DISTRICT
8046 EASTONVILLE ROAD
FALCON, CO 80831
TELE: (719) 495-2500
ATTN: CODY RITTER
EMAIL: CODY@WHMD.ORG

ELECTRIC

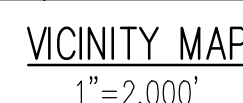
MOUNTAIN VIEW ELECTRIC
11140 E WOODMEN RD
FALCON, CO 80831
TELE: (719) 495-2283
CATHY HANSEN-LEE
EMAIL: CATHY.H@MVEA.COOP

NATURAL GAS

COLORADO SPRINGS UTILITIES (CSU)
7710 DURANT DRIVE, P.O. BOX 1103, MAIL CODE 2150
COLORADO SPRINGS, CO 80947-2150
TELE: (719) 668-5573
AARON CASSIO
EMAIL: ACASSIO@CSU.ORG

FIRE

FALCON FIRE PROTECTION DISTRICT
7030 OLD MERIDIAN ROAD
PEYTON, CO 80831
TELE: (719) 495-4050
EMAIL: FALCONFIRE@FALCONFIREPD.ORG



THIS GRADING AND EROSION CONTROL PLAN WAS PREPARED UNDER MY DIRECTION AND SUPERVISION AND IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. SAID PLAN HAS BEEN PREPARED ACCORDING TO THE CRITERIA ESTABLISHED BY THE COUNTY FOR GRADING AND EROSION CONTROL PLANS. I ACCEPT RESPONSIBILITY FOR ANY LIABILITY CAUSED BY AN NEGLIGENT ACTS, ERRORS OR OMISSIONS ON MY PART IN PREPARING THIS PLAN.

RONALD G. DENNIS, COLORADO P.E. NO. 0051622 _____ DATE _____

I, THE OWNER/DEVELOPER HAVE READ AND WILL COMPLY WITH THE REQUIREMENTS OF THE GRADING AND EROSION CONTROL PLAN.

JIM BYERS
CHALLENGER COMMUNITIES, LLC

COUNTY PLAN REVIEW IS PROVIDED ONLY FOR GENERAL CONFORMANCE WITH COUNTY DESIGN CRITERIA. THE COUNTY IS NOT RESPONSIBLE FOR THE ACCURACY AND ADEQUACY OF THE DESIGN DIMENSIONS, AND/OR ELEVATIONS WHICH SHALL BE CONFIRMED AT THE JOB SITE. THE COUNTY THROUGH THE APPROVAL OF THIS DOCUMENT ASSUMES NO RESPONSIBILITY FOR COMPLETENESS AND/OR ACCURACY OF THIS DOCUMENT, FILED IN ACCORDANCE WITH THE REQUIREMENTS OF THE EL PASO COUNTY LAND DEVELOPMENT CODE, DRAINAGE CRITERIA MANUAL, VOLUMES 1 AND 2, AND ENGINEERING CRITERIA MANUAL AS AMENDED.

IN ACCORDANCE WITH EGM SECTION 1.12, THESE CONSTRUCTION DOCUMENTS WILL BE VALID FOR CONSTRUCTION FOR A PERIOD OF 2 YEARS FROM THE DATE SIGNED BY THE EL PASO COUNTY ENGINEER. IF CONSTRUCTION HAS NOT STARTED WITHIN THOSE 2 YEARS, THE PLANS WILL NEED TO BE RESUBMITTED FOR APPROVAL, INCLUDING PAYMENT OF REVIEW FEES AT THE PLANNING AND COMMUNITY DEVELOPMENT DIRECTOR'S DISCRETION.

JENNIFER IRVINE, P.E. _____ DATE _____
COUNTY ENGINEER / EGM ADMINISTRATOR

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*SEE FALCON MEADOWS AT BENT GRASS FILING NO. 3 ROADWAY AND STORM SEWER CONSTRUCTION PLANS FOR ROADWAY AND STORM SEWER IMPROVEMENTS.

*SEE FALCON MEADOWS AT BENT GRASS FILING NO. 3 UTILITY CONSTRUCTION PLANS
FOR WATER AND SANITARY IMPROVEMENTS*

ALL BEARINGS ARE GRID BEARINGS OF THE COLORADO STATE PLANE COORDINATE SYSTEM, CENTRAL ZONE, NORTH AMERICAN DATUM 1983. THE BEARING OF THE LINE BETWEEN THE SOUTHWEST CORNER OF SECTION 1, T13S, R65W AND THE WEST QUARTER CORNER SECTION 1, T13S, R65W IS $N00^{\circ}13'46''W$ AND MONUMENTED AS SHOWN:

THE SOUTHWESTERLY CORNER OF LOT 1 WOODMEN HILLS FILING NO. 4, MONUMENTED BY A YELLOW PLASTIC SURVEYOR'S CAP ON A NO. 4 REBAR LS# 24954 ELEVATION = 6947.67

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 FIELD 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.

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 POTHOLING OR ALTERNATIVE METHOD. REPORT INFORMATION TO THE ENGINEER PRIOR TO CONSTRUCTION.

IT Know what's **below.**
Call before you dig.

1155 Kelly Johnson Blvd., Suite 305
Colorado Springs, CO 80920
719.900.7220
GallowayUS.com

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CONSTRUCTION DOCUMENTS
FALCON MEADOWS AT BENT GRA
FOR
CHALLENGER COMMUNITIES, LLC

BENT GRASS MEADOWS DRIVE & MERDIAN ROAD
FALCON, CO 80831 - EL PASO COUNTY

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Project No:	CLH000020
Drawn By:	CMWJ
Checked By:	RGD
Date:	01/20/2022

GRADING & EROSION CONTROL COVER SHEET

G0.0

Sheet 1 of 15

STANDARD NOTES FOR GEC PLANS

1. STORMWATER DISCHARGES FROM CONSTRUCTION SITES SHALL NOT CAUSE OR THREATEN TO CAUSE POLLUTION, CONTAMINATION, OR DEGRADATION OF STATE WATERS. ALL WORK AND EARTH DISTURBANCE SHALL BE DONE IN A MANNER THAT MINIMIZES POLLUTION OF ANY ON-SITE OR OFFSITE WATERS, INCLUDING WETLANDS.
2. NOTWITHSTANDING ANYTHING DEPICTED IN THESE PLANS IN WORDS OR GRAPHIC REPRESENTATION, ALL DESIGN AND CONSTRUCTION RELATED TO ROADS, STORM DRAINAGE AND EROSION CONTROL SHALL CONFORM TO THE STANDARDS AND REQUIREMENTS OF THE MOST RECENT VERSION OF THE RELEVANT ADOPTED EL PASO COUNTY STANDARDS, INCLUDING THE LAND DEVELOPMENT CODE, THE ENGINEERING CRITERIA MANUAL, THE DRAINAGE CRITERIA MANUAL, AND THE DRAINAGE CRITERIA MANUAL VOLUME 2. ANY DEVIATIONS TO REGULATIONS AND STANDARDS MUST BE REQUESTED, AND APPROVED, IN WRITING.
3. A SEPARATE STORMWATER MANAGEMENT PLAN (SWMP) FOR THIS PROJECT SHALL BE COMPLETED AND AN EROSION AND STORMWATER QUALITY CONTROL PERMIT (ESQCP) ISSUED PRIOR TO COMMENCING CONSTRUCTION. DURING CONSTRUCTION THE SWMP IS THE RESPONSIBILITY OF THE DESIGNATED QUALIFIED STORMWATER MANAGER OR CERTIFIED EROSION CONTROL INSPECTOR AND SHALL BE LOCATED ON SITE AT ALL TIMES DURING CONSTRUCTION AND SHALL BE KEPT UP TO DATE WITH WORK PROGRESS AND CHANGES IN THE FIELD.
4. ONCE THE ESQCP IS APPROVED AND A NOTICE TO PROCEED HAS BEEN ISSUED, THE CONTRACTOR MAY INSTALL THE INITIAL STAGE EROSION AND SEDIMENT CONTROL MEASURES AS INDICATED ON THE APPROVED GEC. A PRECONSTRUCTION MEETING BETWEEN THE CONTRACTOR, ENGINEER, AND EL PASO COUNTY WILL BE HELD PRIOR TO ANY CONSTRUCTION. IT IS THE RESPONSIBILITY OF THE APPLICANT TO COORDINATE THE MEETING TIME AND PLACE WITH COUNTY STAFF.
5. CONTROL MEASURES MUST BE INSTALLED PRIOR TO COMMENCEMENT OF ACTIVITIES THAT MAY CONTRIBUTE POLLUTANTS TO STORMWATER. TEMPORARY SEDIMENT AND EROSION CONTROL MEASURES FOR ALL SLOPES, CHANNELS, DITCHES, OR ANY DISTURBED LAND AREA SHALL BE COMPLETED IMMEDIATELY UPON COMPLETION OF THE DISTURBANCE.
6. ALL TEMPORARY SEDIMENT AND EROSION CONTROL MEASURES SHALL BE MAINTAINED AND REMAIN IN EFFECTIVE OPERATING CONDITION UNTIL PERMANENT SOIL EROSION CONTROL MEASURES ARE IMPLEMENTED AND FINAL STABILIZATION IS ESTABLISHED. ALL PERSONS ENGAGED IN LAND DISTURBANCE ACTIVITIES SHALL ASSESS THE ADEQUACY OF CONTROL MEASURES AT THE SITE AND IDENTIFY IF CHANGES TO THOSE CONTROL MEASURES IS NEEDED TO ENSURE THE CONTINUED EFFECTIVE PERFORMANCE OF THE CONTROL MEASURES. ALL CHANGES TO TEMPORARY SEDIMENT AND EROSION CONTROL MEASURES MUST BE INCORPORATED INTO THE STORMWATER MANAGEMENT PLAN PRIOR TO IMPLEMENTATION.
7. TEMPORARY STABILIZATION SHALL BE IMPLEMENTED ON DISTURBED AREAS AND STOCKPILES WHERE GROUND DISTURBING CONSTRUCTION ACTIVITY HAS PERMANENTLY CEASED OR TEMPORARILY CEASED FOR LONGER THAN 14 DAYS. AN AREA THAT IS GOING TO REMAIN IN AN INTERIM STATE FOR MORE THAN 60 DAYS SHALL ALSO BE STABILIZED.
8. FINAL STABILIZATION MUST BE IMPLEMENTED AT ALL APPLICABLE CONSTRUCTION SITES. FINAL STABILIZATION IS ACHIEVED WHEN ALL GROUND DISTURBING ACTIVITIES ARE COMPLETE AND ALL DISTURBED AREAS EITHER HAVE A UNIFORM VEGETATIVE COVER WITH INDIVIDUAL PLANT DENSITY OF 70 PERCENT OF PRE-DISTURBANCE LEVELS ESTABLISHED OR EQUIVALENT PERMANENT ALTERNATIVE STABILIZATION METHOD IS IMPLEMENTED. ALL TEMPORARY SEDIMENT AND EROSION CONTROL MEASURES SHALL BE REMOVED UPON FINAL STABILIZATION AND BEFORE PERMIT CLOSURE.
9. ALL PERMANENT STORMWATER MANAGEMENT FACILITIES SHALL BE INSTALLED AS DEFINED IN THE APPROVED PLANS. ANY PROPOSED CHANGES THAT EFFECT THE HYDROLOGY OR HYDRAULICS OF A PERMANENT STORMWATER MANAGEMENT STRUCTURES MUST BE APPROVED BY THE ECOM ADMINISTRATOR PRIOR TO IMPLEMENTATION.
10. EARTH DISTURBANCES SHALL BE CONDUCTED IN SUCH A MANNER SO AS TO EFFECTIVELY MINIMIZE ACCELERATED SOIL EROSION AND RESULTING SEDIMENTATION. ALL DISTURBANCES SHALL BE DESIGNED, CONSTRUCTED, AND COMPLETED SO THAT THE EXPOSED AREA OF ANY DISTURBED LAND SHALL BE LIMITED TO THE SHORTEST PRACTICAL PERIOD OF TIME. PRE-EXISTING VEGETATION SHALL BE PROTECTED AND MAINTAINED WITHIN 50 HORIZONTAL FEET OF A WATERS OF THE STATE UNLESS SHOWN TO BE INFEASIBLE AND SPECIFICALLY REQUESTED AND APPROVED.
11. COMPACTION OF SOIL MUST BE PREVENTED IN AREAS DESIGNATED FOR INFILTRATION CONTROL MEASURES OR WHERE FINAL STABILIZATION WILL BE ACHIEVED BY VEGETATIVE COVER. AREAS DESIGNATED FOR INFILTRATION CONTROL SHALL ALSO BE PROTECTED FROM SEDIMENTATION DURING CONSTRUCTION UNTIL FINAL STABILIZATION IS ACHIEVED.
12. ANY TEMPORARY OR PERMANENT FACILITY DESIGNED AND CONSTRUCTED FOR THE CONVEYANCE OF STORMWATER AROUND, THROUGH, OR FROM THE EARTH DISTURBANCE AREA SHALL BE A STABILIZED CONVEYANCE DESIGNED TO MINIMIZE EROSION AND THE DISCHARGE OF SEDIMENT OFF SITE.
13. CONCRETE WASH WATER SHALL BE CONTAINED AND DISPOSED OF IN ACCORDANCE WITH THE SWMP. NO WASH WATER SHALL BE DISCHARGED TO OR ALLOWED TO RUNOFF TO STATE WATERS, INCLUDING ANY SURFACE OR SUBSURFACE STORM DRAINAGE SYSTEM OR FACILITIES. CONCRETE WASHOUT SHALL NOT BE LOCATED IN AN AREA WHERE SHALLOW GROUNDWATER MAY BE PRESENT, OR WITHIN 50 FEET OF A SURFACE WATER BODY.
14. DURING DEWATERING OPERATIONS OF UNCONTAMINATED GROUND WATER MAY BE DISCHARGED ON SITE, BUT SHALL NOT LEAVE THE SITE IN THE FORM OF SURFACE RUNOFF UNLESS AN APPROVED STATE DEWATERING PERMIT IS IN PLACE.
15. EROSION CONTROL, BLANKETING OR OTHER PROTECTIVE COVERING SHALL BE USED ON SLOPES STEEPER THAN 3:1.
16. CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL OF ALL WASTES FROM THE CONSTRUCTION SITE FOR DISPOSAL IN ACCORDANCE WITH LOCAL AND STATE REGULATORY REQUIREMENTS. NO CONSTRUCTION DEBRIS, TREE SLASH, BUILDING MATERIAL, WASTES OR UNUSED BUILDING MATERIALS SHALL BE BURIED, DUMPED, OR DISCHARGED AT THE SITE.
17. WASTE MATERIALS SHALL NOT BE TEMPORARILY PLACED OR STORED IN THE STREET, ALLEY, OR OTHER PUBLIC WAY, UNLESS IN ACCORDANCE WITH AN APPROVED TRAFFIC CONTROL PLAN. CONTROL MEASURES MAY BE REQUIRED BY EL PASO COUNTY ENGINEERING IF DEEMED NECESSARY, BASED ON SPECIFIC CONDITIONS AND CIRCUMSTANCES.
18. TRACKING OF SOILS AND CONSTRUCTION DEBRIS OFF-SITE SHALL BE MINIMIZED. MATERIALS TRACKED OFF-SITE SHALL BE CLEANED UP AND PROPERLY DISPOSED OF IMMEDIATELY.
19. THE OWNER/DEVELOPER SHALL BE RESPONSIBLE FOR THE REMOVAL OF ALL CONSTRUCTION DEBRIS, DIRT, TRASH, ROCK, SEDIMENT, AND SAND THAT MAY ACCUMULATE IN ROADS, STORM DRAINS AND OTHER DRAINAGE CONVEYANCE SYSTEM AND STORMWATER APPURTENANCES AS A RESULT OF SITE DEVELOPMENT.
20. THE QUANTITY OF MATERIALS STORED ON THE PROJECT SITE SHALL BE LIMITED, AS MUCH AS PRACTICAL, TO THAT QUANTITY REQUIRED TO PERFORM THE WORK IN AN ORDERLY SEQUENCE. ALL MATERIALS STORED ON-SITE SHALL BE STORED IN A NEAT, ORDERLY MANNER, IN THEIR ORIGINAL CONTAINERS, WITH ORIGINAL MANUFACTURER'S LABELS.
21. NO CHEMICALS ARE TO BE USED BY THE CONTRACTOR, WHICH HAVE THE POTENTIAL TO BE RELEASED IN STORMWATER UNLESS PERMISSION FOR THE USE OF A SPECIFIC CHEMICAL IS GRANTED IN WRITING BY THE ECOM ADMINISTRATOR. IN GRANTING THE USE OF SUCH CHEMICALS, SPECIAL CONDITIONS AND MONITORING MAY BE REQUIRED.
22. BULK STORAGE OF PETROLEUM PRODUCTS OR OTHER LIQUID CHEMICALS IN EXCESS OF 55 GALLONS SHALL HAVE ADEQUATE SECONDARY CONTAINMENT PROTECTION TO CONTAIN ALL SPILLS AND PREVENT ANY SPILLED MATERIAL FROM ENTERING STATE WATERS, INCLUDING ANY SURFACE OR SUBSURFACE STORM DRAINAGE SYSTEM OR FACILITIES.
23. NO PERSON SHALL CAUSE THE IMPEDIMENT OF STORMWATER FLOW IN THE FLOW LINE OF THE CURB AND GUTTER OR DITCH EXCEPT WITH APPROVED SEDIMENT CONTROL MEASURES.
24. INDIVIDUALS SHALL COMPLY WITH THE "COLORADO WATER QUALITY CONTROL ACT" (TITLE 25, ARTICLE 8, CRS), AND THE "CLEAN WATER ACT" (33 USC 1344), IN ADDITION TO THE REQUIREMENTS INCLUDED IN THE ECOM VOLUME II AND THE ECOM APPENDIX I. ALL APPROPRIATE PERMITS MUST BE OBTAINED BY THE CONTRACTOR PRIOR TO CONSTRUCTION (NPDES, FLOODPLAIN, 404, FUGITIVE DUST, ETC.). IN THE EVENT OF CONFLICTS BETWEEN THESE REQUIREMENTS AND LAWS, RULES, OR REGULATIONS OF OTHER FEDERAL, STATE, OR COUNTY AGENCIES, THE MORE RESTRICTIVE LAWS, RULES, OR REGULATIONS SHALL APPLY.
25. ALL CONSTRUCTION TRAFFIC MUST ENTER/EXIT THE SITE AT APPROVED CONSTRUCTION ACCESS POINTS.
26. PRIOR TO ACTUAL CONSTRUCTION THE PERMITTEE SHALL VERIFY THE LOCATION OF EXISTING UTILITIES.
27. A WATER SOURCE SHALL BE AVAILABLE ON SITE DURING EARTHWORK OPERATIONS AND UTILIZED AS REQUIRED TO MINIMIZE DUST FROM EARTHWORK EQUIPMENT AND WIND.
28. THE SOILS REPORT, TITLED "FALCON MEADOWS AT BENT GRASS, EL PASO COUNTY, COLORADO" FOR THIS SITE HAS BEEN PREPARED BY ROCKY MOUNTAIN GROUP, JOB NO. 176147, DATED JUNE 22, 2020, LAST REVISED DECEMBER 3, 2021 AND SHALL BE CONSIDERED A PART OF THESE PLANS.
29. AT LEAST TEN (10) DAYS PRIOR TO THE ANTICIPATED START OF CONSTRUCTION, FOR PROJECTS THAT WILL DISTURB 1 ACRE OR MORE, THE OWNER OR OPERATOR OF CONSTRUCTION ACTIVITY SHALL SUBMIT A PERMIT APPLICATION FOR STORMWATER DISCHARGE TO THE COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT, WATER QUALITY DIVISION. THE APPLICATION CONTAINS CERTIFICATION OF COMPLETION OF A STORMWATER MANAGEMENT PLAN (SWMP), OF WHICH THIS GRADING AND EROSION CONTROL PLAN MAY BE A PART. FOR INFORMATION OR APPLICATION MATERIALS CONTACT:

COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT
WATER QUALITY CONTROL DIVISION
WOOD - PERMITS
4300 CHERRY CREEK DRIVE SOUTH
DENVER, CO 80246-1530
ATTN: PERMITS UNIT

STANDARD NOTES FOR CONSTRUCTION PLANS

1. ALL DRAINAGE AND ROADWAY CONSTRUCTION SHALL MEET THE STANDARDS AND SPECIFICATIONS OF THE CITY OF COLORADO SPRINGS/EL PASO COUNTY DRAINAGE CRITERIA MANUAL, VOLUMES 1 AND 2, AND THE EL PASO COUNTY ENGINEERING CRITERIA MANUAL.
2. CONTRACTOR SHALL BE RESPONSIBLE FOR THE NOTIFICATION AND FIELD NOTIFICATION OF ALL EXISTING UTILITIES, WHETHER SHOWN ON THE PLANS OR NOT, BEFORE BEGINNING CONSTRUCTION. LOCATION OF EXISTING UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. CALL 811 TO CONTACT THE UTILITY NOTIFICATION CENTER OF COLORADO (UNCC).
3. CONTRACTOR SHALL KEEP A COPY OF THESE APPROVED PLANS, THE GRADING AND EROSION CONTROL PLAN, THE STORMWATER MANAGEMENT PLAN (SWMP), THE SOILS AND GEOTECHNICAL REPORT, AND THE APPROPRIATE DESIGN AND CONSTRUCTION STANDARDS AND SPECIFICATIONS AT THE JOB SITE AT ALL TIMES, INCLUDING THE FOLLOWING:
 - A. EL PASO COUNTY ENGINEERING CRITERIA MANUAL (ECM)
 - B. CITY OF COLORADO SPRINGS/EL PASO COUNTY DRAINAGE CRITERIA MANUAL, VOLUMES 1 AND 2
 - C. COLORADO DEPARTMENT OF TRANSPORTATION (CDOT) STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION
 - D. CDOT M & S STANDARDS
4. NOTWITHSTANDING ANYTHING DEPICTED IN THESE PLANS IN WORDS OR GRAPHIC REPRESENTATION, ALL DESIGN AND CONSTRUCTION RELATED TO ROADS, STORM DRAINAGE AND EROSION CONTROL SHALL CONFORM TO THE STANDARDS AND REQUIREMENTS OF THE MOST RECENT VERSION OF THE RELEVANT ADOPTED EL PASO COUNTY STANDARDS, INCLUDING THE LAND DEVELOPMENT CODE, THE ENGINEERING CRITERIA MANUAL, THE DRAINAGE CRITERIA MANUAL, AND THE DRAINAGE CRITERIA MANUAL VOLUME 2. ANY DEVIATIONS FROM REGULATIONS AND STANDARDS MUST BE REQUESTED, AND APPROVED, IN WRITING. ANY MODIFICATIONS NECESSARY TO MEET CRITERIA AFTER-THE-FACT WILL BE ENTIRELY THE DEVELOPER'S RESPONSIBILITY TO RECTIFY.
5. IT IS THE DESIGN ENGINEER'S RESPONSIBILITY TO ACCURATELY SHOW EXISTING CONDITIONS, BOTH ON-SITE AND OFF-SITE, ON THE CONSTRUCTION PLANS. ANY MODIFICATIONS NECESSARY DUE TO CONFLICTS, OMISSIONS, OR CHANGED CONDITIONS WILL BE ENTIRELY THE DEVELOPER'S RESPONSIBILITY TO RECTIFY.
6. CONTRACTOR SHALL SCHEDULE A PRE-CONSTRUCTION MEETING WITH EL PASO COUNTY PLANNING AND COMMUNITY DEVELOPMENT (PCD) - INSPECTIONS, PRIOR TO STARTING CONSTRUCTION.
7. IT IS THE CONTRACTOR'S RESPONSIBILITY TO UNDERSTAND THE REQUIREMENTS OF ALL JURISDICTIONAL AGENCIES AND TO OBTAIN ALL REQUIRED PERMITS, INCLUDING BUT NOT LIMITED TO EL PASO COUNTY EROSION AND STORMWATER QUALITY CONTROL PERMIT (ESQCP), REGIONAL BUILDING FLOODPLAIN DEVELOPMENT PERMIT, U.S. ARMY CORPS OF ENGINEERS-ISSUED 401 AND/OR 404 PERMITS, AND COUNTY AND STATE FUGITIVE DUST PERMITS.
8. CONTRACTOR SHALL NOT DEVIATE FROM THE PLANS WITHOUT FIRST OBTAINING WRITTEN APPROVAL FROM THE DESIGN ENGINEER AND PCD. CONTRACTOR SHALL NOTIFY THE DESIGN ENGINEER IMMEDIATELY UPON DISCOVERY OF ANY ERRORS OR INCONSISTENCIES.
9. ALL STORM DRAIN PIPE SHALL BE CLASS III RCP UNLESS OTHERWISE NOTED AND APPROVED BY PCD.
10. CONTRACTOR SHALL COORDINATE GEOTECHNICAL TESTING PER ECOM STANDARDS. PAVEMENT DESIGN SHALL BE APPROVED BY EL PASO COUNTY PCD PRIOR TO PLACEMENT OF CURB AND GUTTER AND PAVEMENT.
11. ALL CONSTRUCTION TRAFFIC MUST ENTER/EXIT THE SITE AT APPROVED CONSTRUCTION ACCESS POINTS.
12. SIGHT VISIBILITY TRIANGLES AS IDENTIFIED IN THE PLANS SHALL BE PROVIDED AT ALL INTERSECTIONS. OBSTRUCTIONS GREATER THAN 18 INCHES ABOVE FLOWLINE ARE NOT ALLOWED WITHIN SIGHT TRIANGLES.
13. SLOWING AND STRIPING SHALL COMPLY WITH EL PASO COUNTY DOT AND MUTCD CRITERIA. [IF APPLICABLE, ADDITIONAL SLOWING AND STRIPING NOTES WILL BE PROVIDED.]
14. CONTRACTOR SHALL OBTAIN ANY PERMITS REQUIRED BY EL PASO COUNTY DOT, INCLUDING WORK WITHIN THE RIGHT-OF-WAY AND SPECIAL TRANSPORT PERMITS.
15. THE LIMITS OF CONSTRUCTION SHALL REMAIN WITHIN THE PROPERTY LINE UNLESS OTHERWISE NOTED. THE OWNER/DEVELOPER SHALL OBTAIN WRITTEN PERMISSION AND EASEMENTS, WHERE REQUIRED, FROM ADJOINING PROPERTY OWNER(S) PRIOR TO ANY OFF-SITE DISTURBANCE, GRADING, OR CONSTRUCTION.

EROSION CONTROL NOTES

1. SOIL EROSION CONTROL MEASURES FOR ALL SLOPES, CHANNELS, DITCHES, OR ANY DISTURBED LAND AREA SHALL BE COMPLETED WITHIN TWENTY-ONE (21) CALENDAR DAYS AFTER FINAL GRADING, OR FINAL EARTH DISTURBANCE HAS BEEN COMPLETED. DISTURBED AREAS AND STOCKPILES WHICH ARE NOT AT FINAL GRADE BUT WILL REMAIN DORMANT FOR LONGER THAN 30 DAYS SHALL ALSO BE MULCHED WITHIN 21 DAYS AFTER INTERIM GRADING. AN AREA THAT IS GOING TO REMAIN IN AN INTERIM STATE FOR MORE THAN 60 DAYS SHALL ALSO BE SEEDDED. ALL TEMPORARY SOIL EROSION CONTROL MEASURES AND BMPs SHALL BE MAINTAINED UNTIL PERMANENT SOIL EROSION CONTROL MEASURES ARE IMPLEMENTED.
2. CONSTRUCTION FENCE AND SILT FENCE OFFSET FOR CLARITY. CONTRACTOR TO ENSURE BMPs ARE PLACED DOWNSTREAM OF DISTURBED AREAS TO PREVENT SEDIMENT FROM LEAVING THE SITE.
3. BENT GRASS MEADOWS DRIVE SHALL BE STREET SWEEPED AND INSPECTED ON A REGULAR BASIS DURING CONSTRUCTION.
4. NO NOTABLE EXISTING VEGETATION EXISTS ON THE SITE, APART FROM NATIVE GRASSES AND WEEDS. THE EXISTING SOIL TYPES WITHIN THE PROPERTY CONSISTS OF COLUMBIANE GRAVELLY SANDY LOAM, BLAKELAND-FEUDALQUENTIC HAPLADOLLS, AND BLAKELAND LOAMY SAND. ALL SOILS ARE DEFINED AS HAVING A HYDROLOGIC SOIL GROUP OF A, AS DETERMINED BY THE NRCS WEB SOIL SURVEY FOR EL PASO COUNTY AREA.

GENERAL CONSTRUCTION NOTES

1. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE EXISTENCE AND LOCATION OF ALL UNDERGROUND UTILITIES ALONG THE ROUTE OF THE WORK. THE OMISSION FROM OR THE INCLUSION OF UTILITY LOCATIONS ON THE PLANS IS NOT TO BE CONSIDERED AS THE NONEXISTENCE OF OR A DEFINITE LOCATION OF EXISTING UNDERGROUND UTILITIES.
2. THE CONTRACTOR SHALL TAKE THE NECESSARY PRECAUTIONS TO PROTECT EXISTING UTILITIES FROM DAMAGE DUE TO THIS OPERATION. ANY DAMAGE TO THE UTILITIES WILL BE REPLACED AT THE CONTRACTORS EXPENSE AND ANY SERVICE DISRUPTION WILL BE SETTLED BY THE CONTRACTOR.
3. ADDITIONAL EROSION CONTROL STRUCTURES MAY BE REQUIRED AT THE TIME OF CONSTRUCTION.
4. ALL BACKFILL, SUB-BASE AND / OR BASE COURSE (CLASS 6) MATERIAL SHALL BE COMPACTED TO THE SOILS ENGINEERS RECOMMENDATIONS, AND APPROVED BY EL PASO COUNTY DEVELOPMENT SERVICES ENGINEERING DIVISION.
5. ALL STATIONING IS CENTERLINE UNLESS OTHERWISE INDICATED. ALL ELEVATIONS ARE FLOW LINE UNLESS OTHERWISE INDICATED.
6. ALL DISTURBED PAVEMENT EDGES SHALL BE CUT TO NEAT LINES. REPAIR SHALL CONFORM TO THE EPC ECOM APPENDIX K - 1.2C.
7. ALL INTERSECTION ACCESSES TO BE CONSTRUCTED WITH A 25 FOOT SIGHT VISIBILITY TRIANGLES AND THERE SHALL BE NO OBSTRUCTIONS GREATER THAN 18" IN THIS AREA.
8. ALL CULVERT AND STORM PIPES SHALL BE SMOOTH INTERIOR CORRUGATED POLYETHYLENE PIPE (HDE), OR REINFORCED CONCRETE PIPE (RCP). ALL CULVERTS SHALL BE PLACED COMPLETE WITH FLARED END SECTIONS. ADEQUACY OF MATERIAL THICKNESS FOR ANY CSP INSTALLED SHALL BE VERIFIED BY OWNERS GEOTECHNICAL ENGINEER TO SUPPORT MINIMUM 50 YEAR DESIGN LIFE. CULVERTS MUST CONFORM TO EPC ECOM SECTION 3.32 - CULVERTS.
9. ASPHALT THICKNESS AND BASE COURSE THICKNESS (COMPACTED FOR ROADS SHALL BE PER DESIGN REPORT BY OWNERS GEOTECHNICAL ENGINEER. OWNERS GEOTECHNICAL ENGINEER TO BE ON SITE AT TIME OF ROAD CONSTRUCTION TO EVALUATE SOIL CONDITIONS AND DETERMINE IF ADDITIONAL MEASURES ARE NECESSARY TO ASSURE STABILITY OF THE NEW ROADS. PAVEMENT DESIGN SHALL BE APPROVED BY EL PASO COUNTY DEVELOPMENT SERVICES ENGINEERING DIVISION PRIOR TO CONSTRUCTION.
10. TYPE M RIP-RAP WITH 4" OF TYPE II GRANULAR BEDDING AND MIRAFI 180N OR EQUAL MAY BE SUBSTITUTED WHERE TYPE L RIP-RAP WITH MIRAFI FW 700 OR EQUAL IS SPECIFIED.
11. ALL MATERIALS AND INSTALLATION PROCEDURES SHALL BE IN COMPLIANCE WITH ANY AND ALL APPLICABLE EL PASO COUNTY STANDARDS AND WITH WOODMAN HILLS METRO DISTRICT CONSULTING ENGINEER APPROVAL.
12. ALL POTABLE WATER MAINS SHALL BE AWWA C900-SDR18 PVC WITH PUSH-ON SINGLE GASKET TYPE JOINTS AND SHALL MEET THE REQUIREMENTS OF ANSI / NSF 61.
13. ALL WATER MAIN FITTINGS SHALL BE MADE FROM GRAY-IRON OR DUCTILE IRON AND FURNISHED WITH MECHANICAL JOINT ENDS. ALL FITTINGS SHALL HAVE A PRESSURE RATING OF 250 PSI AND SHALL MEET THE REQUIREMENTS OF ANSI / NSF 61.
14. ALL WATER LINE BENDS, TEES, BLOW-OFFS AND PLUGS AT DEAD-END MAINS SHALL BE PROTECTED FROM THRUST BY USING CONCRETE THRUST BLOCKS AND / OR RODDING AND RESTRAINED PIPE PER THE WOODMAN HILLS METRO DISTRICT CONSULTING ENGINEER APPROVAL.
15. MAXIMUM DEFLECTION OF 8" OR 12" PVC WATER MAIN JOINTS IS 4 DEGREES. CORRESPONDING MINIMUM CURVE RADIUS IS 286' ADDITIONAL 11.25' OR 22.5' BENDS MAY BE REQUIRED FOR PROPER ALIGNMENT.
16. CONTRACTOR IS RESPONSIBLE FOR PROVIDING DETAILED AS-BUILTS OF ALL WATER MAIN, STORM SEWER AND SANITARY SEWER MAIN INSTALLATIONS, INCLUDING ACCURATE DISTANCES OF MAIN LINES, VALVES, FITTINGS, MANHOLES AND LOCATIONS OF WATER AND SEWER SERVICES.
17. SANITARY SEWER PIPE AND FITTINGS: PVC 4" - 8" ASTM D3034, TYPE PSW, SDR 35; PUSH-ON JOINTS AND MOLDED RUBBER GASKETS MAXIMUM HORIZONTAL DEFLECTIONS AFTER INSTALLATION AND BACK FILLING SHALL NOT EXCEED 3% OF THE PIPE DIAMETER. (MINIMUM CURVE RADIUS IS 100' FOR 8" PVC SANITARY SEWER MAIN)



1155 Kelly Johnson Blvd., Suite 305
Colorado Springs, CO 80920
719.900.7220
GallowayUS.com

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CONSTRUCTION DOCUMENTS
FALCON MEADOWS AT BENT GRASS FILING NO. 3
FOR
CHALLENGER COMMUNITIES, LLC

BENT GRASS MEADOWS DRIVE & MERIDIAN ROAD
FALCON, CO 80831 - EL PASO COUNTY

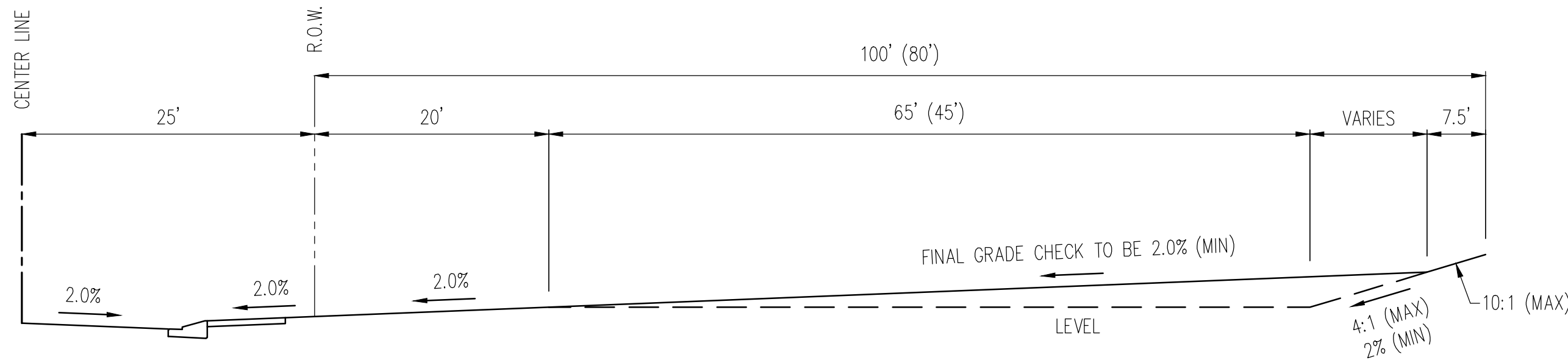
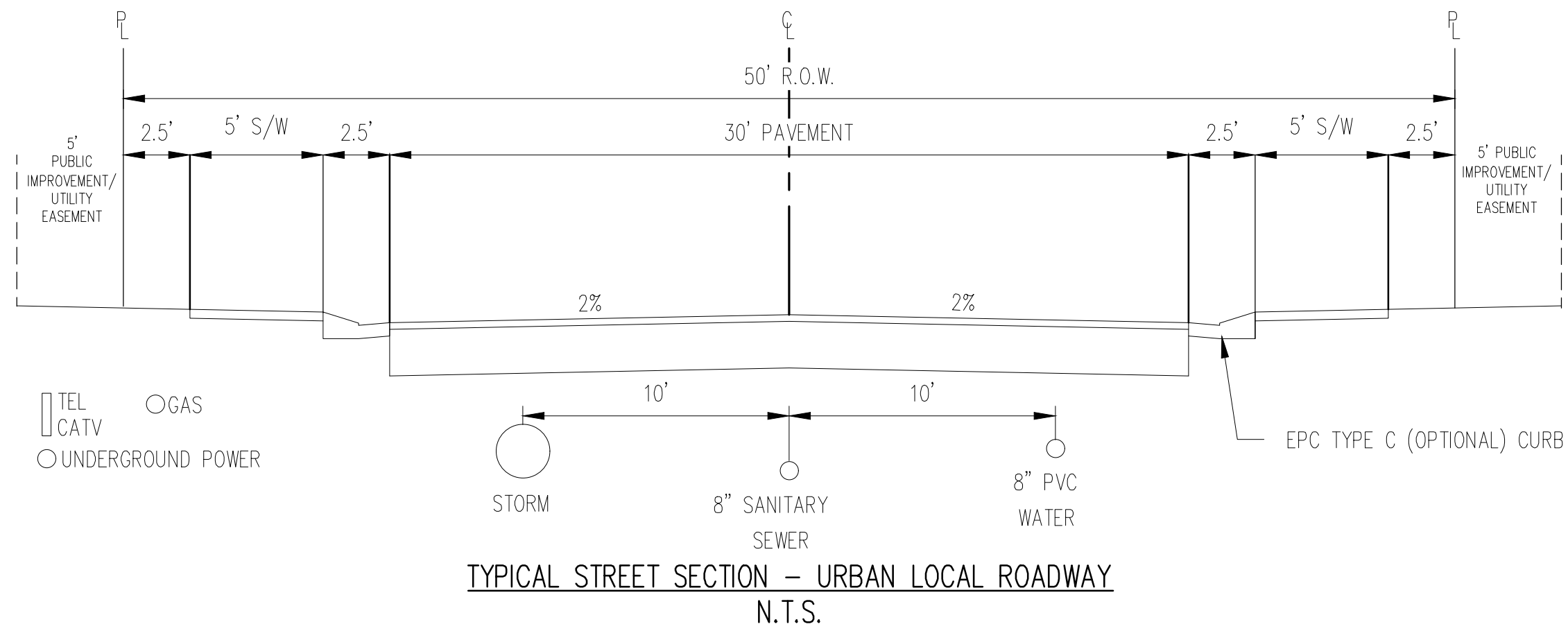
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Project No:	CLH000020
Drawn By:	CMWJ
Checked By:	RGD
Date:	01/29/2022

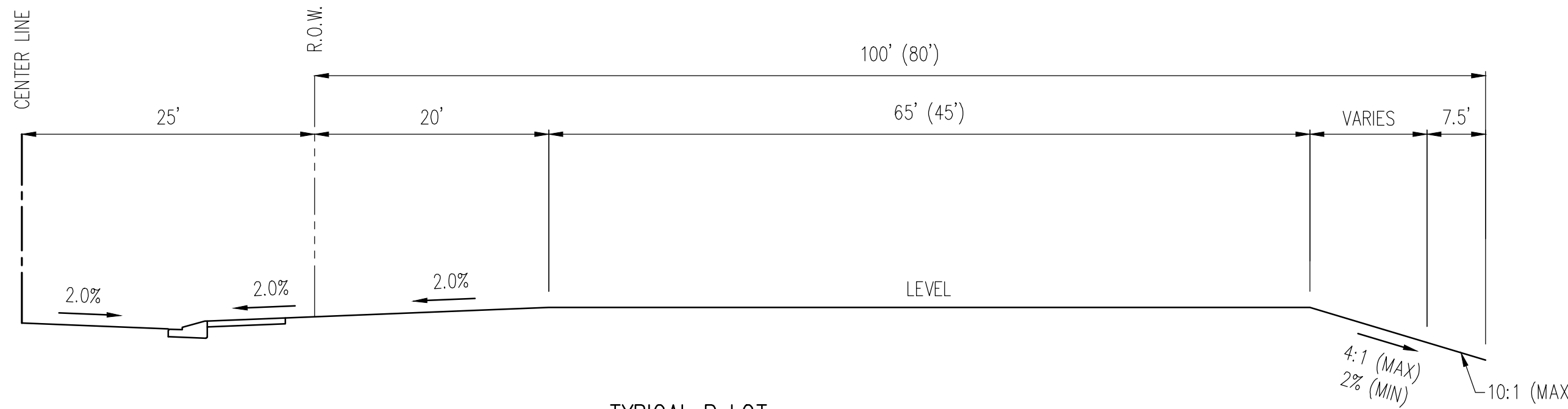
GRADING & EROSION
CONTROL NOTES

G0.1

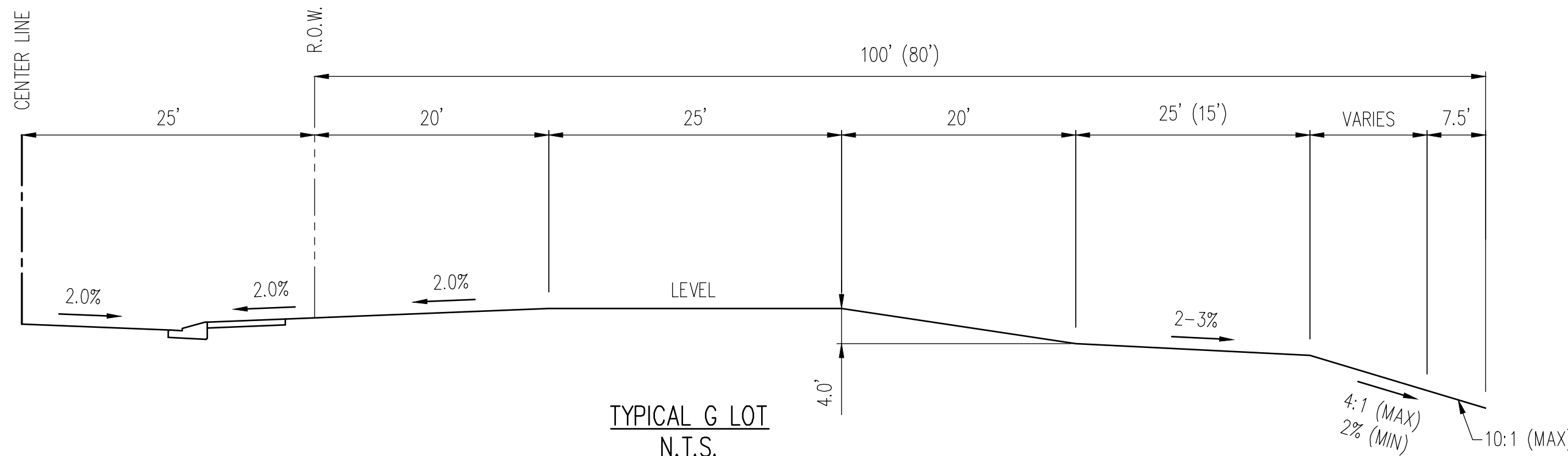
Sheet 2 of 15



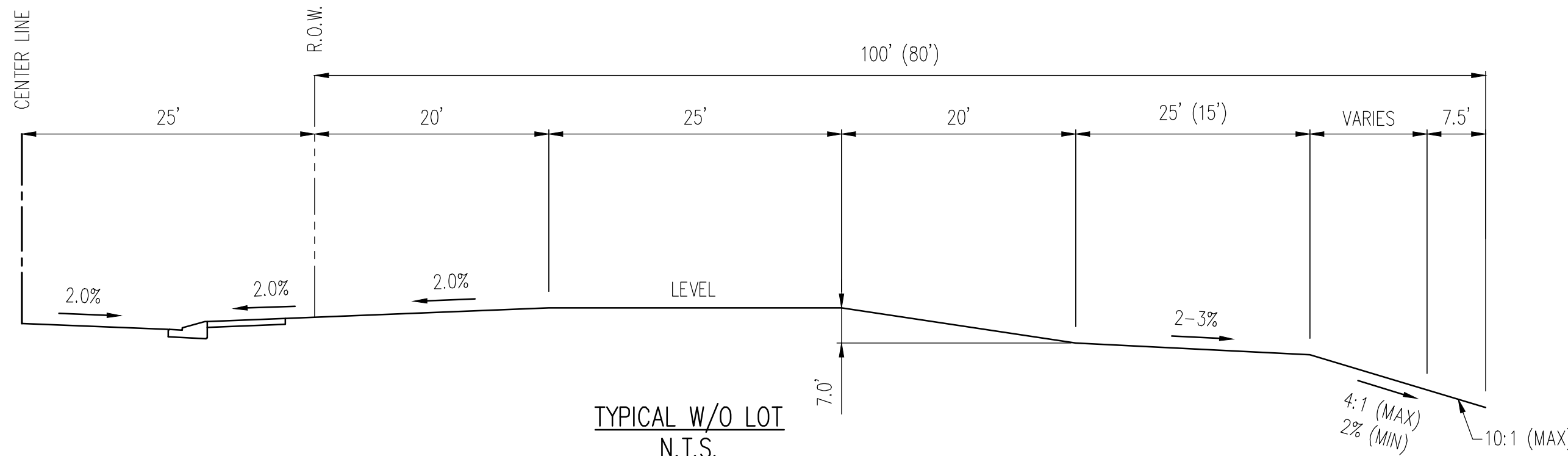
TYPICAL A LOT
N.T.S.



TYPICAL B LOT
N.T.S.

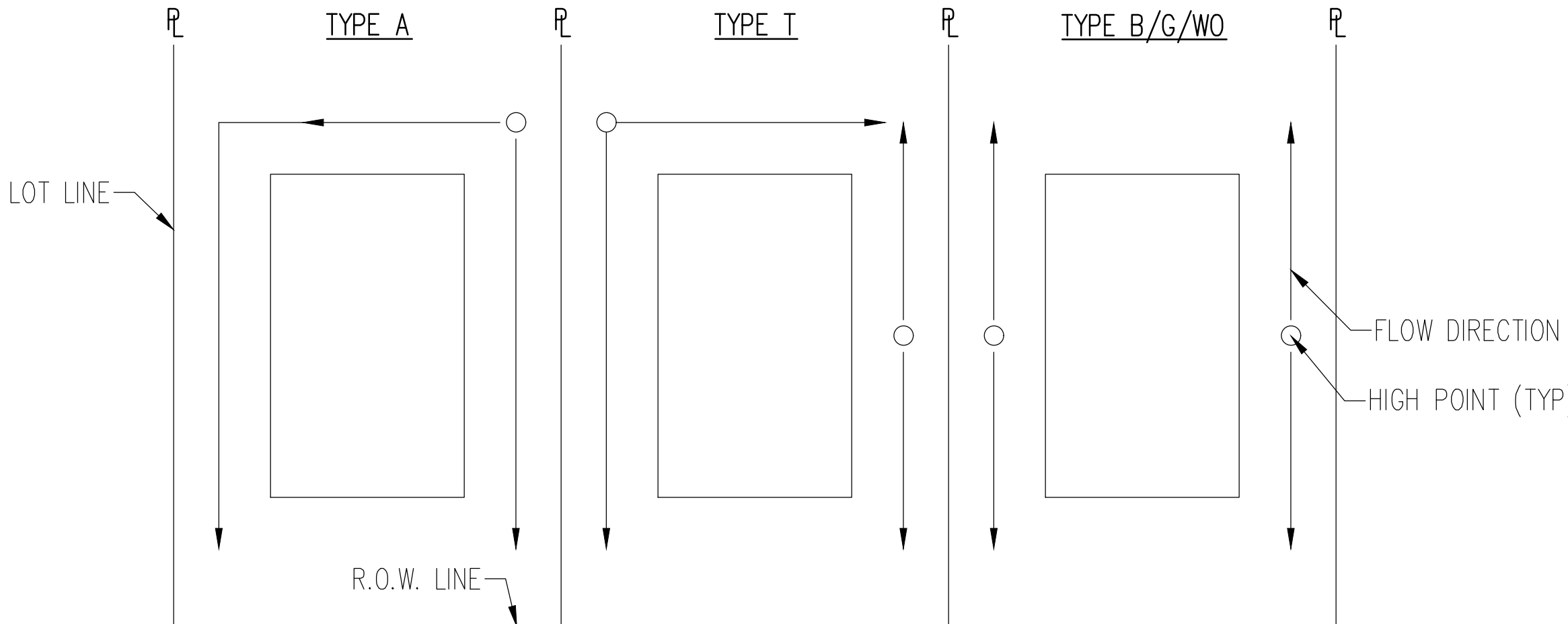


TYPICAL G LOT
N.T.S.



TYPICAL W/O LOT
N.T.S.

- NOTES:
1. TRANSITION LOTS IDENTIFIED BY A "T" ARE INCLUDED TO INDICATE LOTS THAT WILL REQUIRE HOME BUILDERS TO PREPARE A SITE SPECIFIC GRADING PLAN TO DETAIL THE GRADING TRANSITION FROM TYPE A/B LOTS TO GARDEN/WALKOUT LOTS
 2. THE DEVELOPER/HOME BUILDER SHALL INSTALL SIDE LOT SWALES TO MINIMIZE THE LOT TO LOT DRAINAGE.



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Project No:	CLH000020
Drawn By:	CMWJ
Checked By:	RGD
Date:	01/29/2022

GRADING & EROSION CONTROL TYPICAL SECTIONS

[illegible]

Project No:	CLH000020
Drawn By:	CMWJ
Checked By:	RGD
Date:	01/20/2022



- | | |
|--|--------------------------------------|
| | EXISTING PROPERTY LINE |
| | EXISTING PROPERTY LINE TO BE REMOVED |
| | PROPOSED RIGHT OF WAY LINE |
| | EXISTING LOT LINE |
| | PROPOSED LOT LINE |
| | EXISTING EASEMENT |
| | PROPOSED EASEMENT |
| | EXISTING SUBDIVISION BUFFER |
| | EXISTING MAJOR CONTOUR |
| | EXISTING MINOR CONTOUR |
| | PROPOSED MAJOR CONTOUR |
| | PROPOSED MINOR CONTOUR |
| | EXISTING STORM DRAIN PIPE |
| | PROPOSED STORM DRAIN PIPE |
| | EXISTING WATER LINE |
| | PROPOSED WATER LINE |
| | EXISTING SANITARY SEWER LINE |
| | PROPOSED SANITARY SEWER LINE |
| | EXISTING DRAINAGE FEATURE OUTLINE |
| | PROPOSED DRAINAGE FEATURE OUTLINE |
| | EXISTING SWALE WITH FLOW DIRECTION |
| | PROPOSED SWALE WITH FLOW DIRECTION |
| | 100-YEAR FEMA FLOODPLAIN |
- CUT / FILL

-
- Figure 1: Standard Symbols for Roadway Construction. The figure is divided into two columns. The left column contains six cross-sectional diagrams of road layers, each with a number (113, 161, 100, 100, 100, 100) and a corresponding symbol. The right column contains a list of construction items with their corresponding symbols.
- | Symbol | Description |
|----------|--|
| 113 | PROPOSED 1" TO 2" CRUSHED ROCK |
| 161 | PROPOSED RIP RAP |
| 100 | EXISTING CONCRETE PAVING |
| 100 | EXISTING CDOT CLASS 6 GRAVEL |
| 100 | EXISTING 1" TO 2" CRUSHED ROCK |
| 100 | EXISTING RIP RAP |
| 100 | EXISTING GROUTED BOULDERS |
| 100 | PROPOSED LOT # |
| 100 | EXISTING LOT # (BENT GRASS FILING NO. 2) |
| 100 | PROPOSED ADA RAMP |
| 100 | LIMITS OF DISURBANCE |
| 55.00 HP | SPOT ELEVATION - HIGH POINT |
| 55.00 LP | SPOT ELEVATION - LOW POINT |
| 55.00 FG | SPOT ELEVATION - FINISH GRADE |
| 2.00% | EXISTING SLOPE (PERCENT) |
| 4:1 | EXISTING SLOPE (RISE:RUN) |
| 2.00% | PROPOSED SLOPE (PERCENT) |
| 4:1 | PROPOSED SLOPE (RISE:RUN) |
| → | FLOW ARROW |

NOTES

1. ADD 6900 TO ALL SPOT ELEVATIONS
2. THE PLAN SHALL NOT SUBSTANTIALLY CHANGE THE DEPTH OF COVER, OR ACCESS TO UTILITY FACILITIES. ADDITIONALLY, THE PLAN SHALL NOT INCREASE OR DIVERT WATER TOWARDS UTILITY FACILITIES. ANY CHANGES TO UTILITY FACILITIES TO ACCOMMODATE THE PLAN, MUST BE DISCUSSED AND AGREED TO BY THE AFFECTED UTILITY PRIOR TO IMPLEMENTING THE PLAN. THE RESULTING COST TO RELOCATE OR PROTECT UTILITIES, OR PROVIDE INTERIM ACCESS IS AT THE EXPENSE OF THE PLAN APPLICANT.

EROSION CONTROL PHASING SCHEDULE	
PHASE	DESCRIPTION
INITIAL	INSTALL SILT FENCE, ALL WLEET PROTECTION MEASURES ON EXISTING INLETS, AND CURB CLOSING ALONG BAY GRASS MEADOWS DRIVE.
INTERIM	CONVERT EXISTING SEDIMENT BASIN FROM "EARLY GRADING & EROSION CONTROL PLANS" TO THE PROPOSED WATER QUALITY CAPTURE VOLUME DETENTION BASIN #/ ALL PERMANENT CONTROL MEASURES; THEN, INSTALL STABILIZED STAGING AREA, VEHICLE TRACKING CONTROL AT ENTRANCES, AND CONSTRUCT WASHOUT AREA, THEN OVERLAY GRASS THE ENTIRE PROJECT SITE AS SHOWN ON PLAN NOW. INSTALL STRAIN BALE BARRIERS ALONG INTERALS, ROADWAYS, AND INSTALL CHECK DAMS ALONG PROPOSED SLOPES. FINALLY, INSTALL PROPOSED STORM SEWER. CONTRACTOR TO USE EXTREME CAUTION TO NOT RAISE THE WATER AND WASTEWATER IMPROVEMENTS COMPLETED IN THE EARLY METRO DISTRICT IMPROVEMENTS PLAN SET.
FINAL	CONSTRUCT CURB/GUTTER AND PAVEMENT, CONSTRUCT GPS/ELECTRIC CABLE/PHONE CONDUIT, FINISH CONSTRUCTION BMP'S ONCE VERTICAL CONSTRUCTION OF ROADS AND APPLICABLE LANDSCAPING IS COMPLETE.

BASIS OF BEARINGS

ALL BEARINGS ARE GRID BEARINGS OF THE COLORADO STATE PLANE COORDINATE SYSTEM, CENTRAL ZONE, NORTH AMERICAN DATUM 1983. THE BEARING OF THE LINE BETWEEN THE SOUTHWEST CORNER OF SECTION 1, T13S, R65W AND THE WEST QUARTER CORNER SECTION 1, T13S, R65W IS N00°13'46"W AND MONUMENTED AS SHOWN:

BENCHMARK

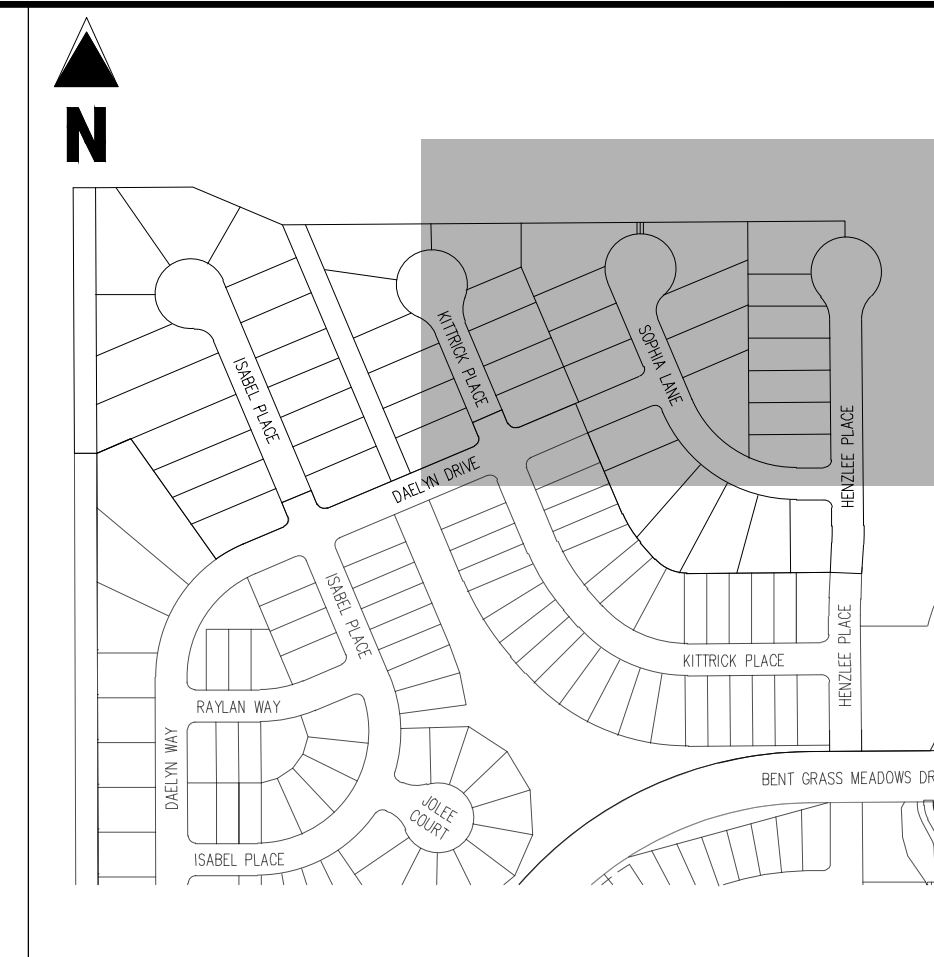
THE SOUTHWESTERLY CORNER OF LOT 1 WOODMEN HILLS FILING NO. 4, MONUMENTED BY A
YELLOW PLASTIC SURVEYORS CAP ON A NO. 4 REBAR LS# 24954 ELEVATION = 6947.67

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 FIELD 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.
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-HOLING OR ALTERNATIVE METHOD. REPORT INFORMATION TO THE ENGINEER PRIOR TO CONSTRUCTION.

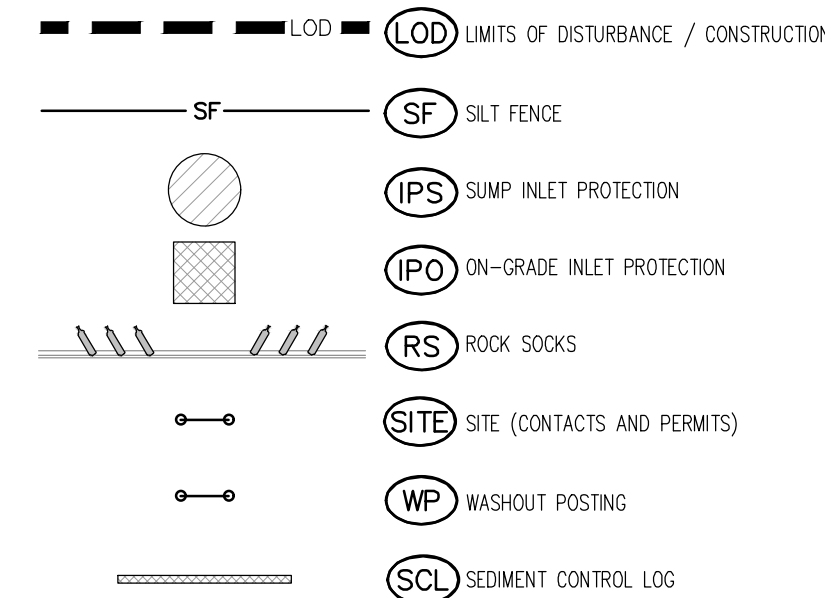


Know what's **below**.
Call before you dig.



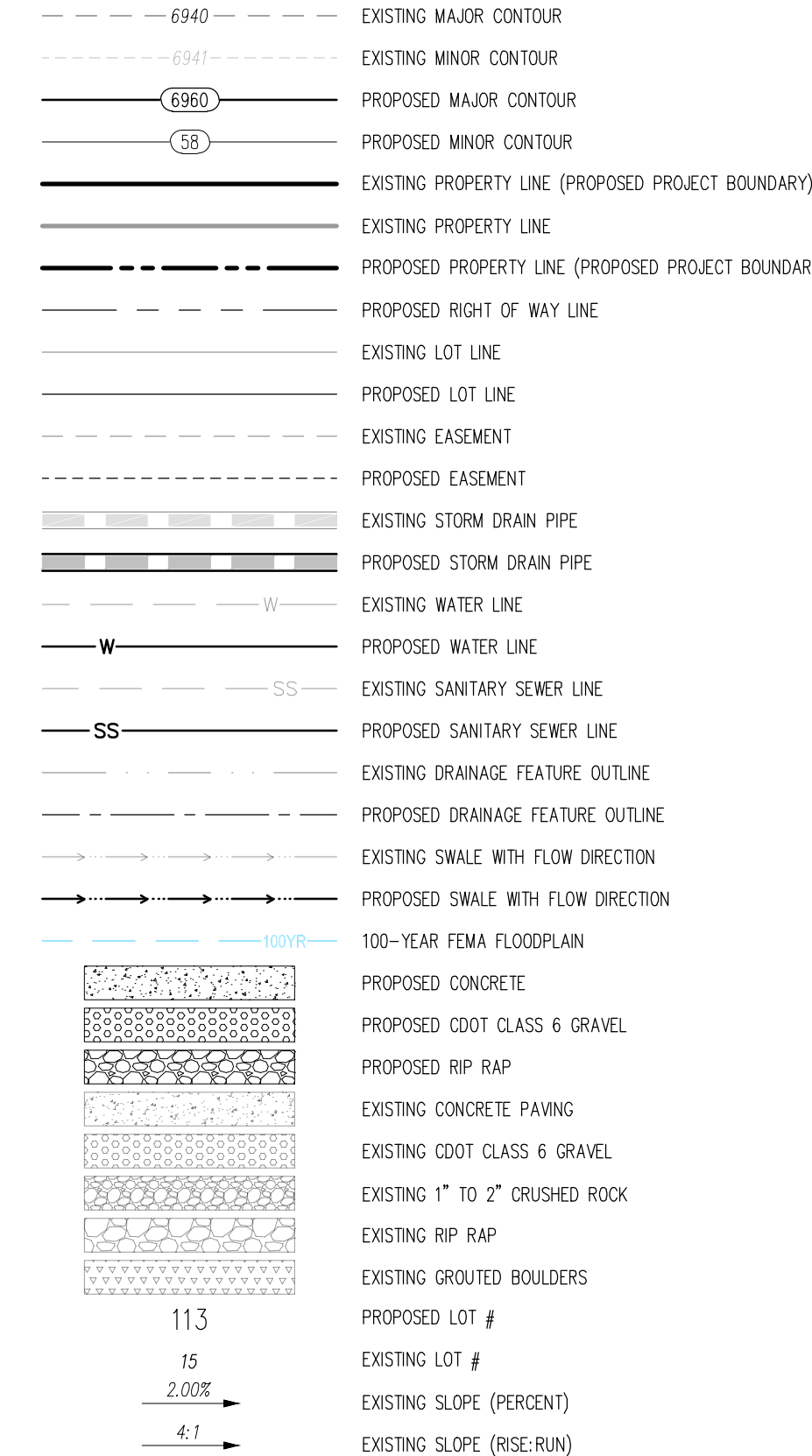
KEY MAP
SCALE: 1"=300'

EROSION CONTROL LEGEND



EROSION CONTROL PHASING SCHEDULE	
PHASE	DESCRIPTION
INITIAL	INSTALL SITE POSTING, SILT FENCE, INLET PROTECTION MEASURES ON EXISTING INLETS, AND CURB/CURBS ALONG BENT GRASS MEADOWS DRIVE
INTERIM	CONVERT EXISTING SEDIMENT BASIN FROM "EARLY GRADING & EROSION CONTROL PLANS" TO THE PROPOSED WATER QUALITY CAPTURE VOLUME DETENTION BASIN W/ ALL PERMANENT CONTROL MEASURES, THEN, INSTALL STABILIZED STAGING AREA, VEHICLE TRACKING CONTROL AT ENTRANCES, AND CONCRETE WASHOUT AREA, THEN OVERLID GRADE, THE ENTIRE PROJECT SITE AS SHOWN ON PLAN VIEW, INSTALL EROSION BARRIERS ALONG INTERNAL ROADWAYS, AND INSTALL CHECK DAMS ALONG PROPOSED SLOPES. FINALLY, INSTALL PROPOSED STORM SEWER. CONTRACTOR TO USE EXTREME CAUTION TO NOT DAMAGE THE WATER AND WASTEWATER IMPROVEMENTS COMPLETED IN THE EARLY METRO DISTRICT IMPROVEMENTS PLAN SET.
FINAL	CONSTRUCT CURB/GUTTER AND PAVEMENT. CONSTRUCT GAS/ELECTRIC/CABLE/FIBER IN ROW AREAS. REMOVE CONSTRUCTION BMP'S ONCE FINAL CONSTRUCTION OF HOUSES AND APPLICABLE LANDSCAPING IS COMPLETE.

LEGEND



NOTES

1. ADD 6900 TO ALL SPOT ELEVATIONS
2. EXISTING VEGETATION ON THE PROJECT SITE CONSISTS OF NATIVE GRASSES AND SHRUBS.
3. NO WETLANDS ARE TO BE PERMANENTLY DISTURBED BY THIS PLAN.
4. NO GRADING IS TO OCCUR WITHIN THE 100-YEAR FLOODPLAIN.
5. THE EROSION CONTROL DELINEATED ON THIS PLAN SHALL BE REGULARLY UPDATED BY THE CONTRACTORS.
6. CONTRACTOR SHALL PROTECT ALL AREAS OUTSIDE OF THE CONSTRUCTION LIMITS WITH SILT FENCE OR OTHER METHOD TO PROTECT UNDISTURBED AREAS FROM EROSION.
7. ALL TEMPORARY OR PERMANENT GRADING DISTURBANCES SHALL BE RE-SEEDDED AND MULCHED PER EL PASO COUNTY CRITERIA AND SPECIFICATIONS.

BASIS OF BEARINGS

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BENCHMARK

THE SOUTHWESTERLY CORNER OF LOT 1 WOODMEN HILLS FILING NO. 4, MONUMENTED BY A
YELLOW PLASTIC SURVEYOR'S CAP ON A NO. 4 REBAR LS# 24954 ELEVATION = 6947.67

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Know what's **below**.
Call before you dig.

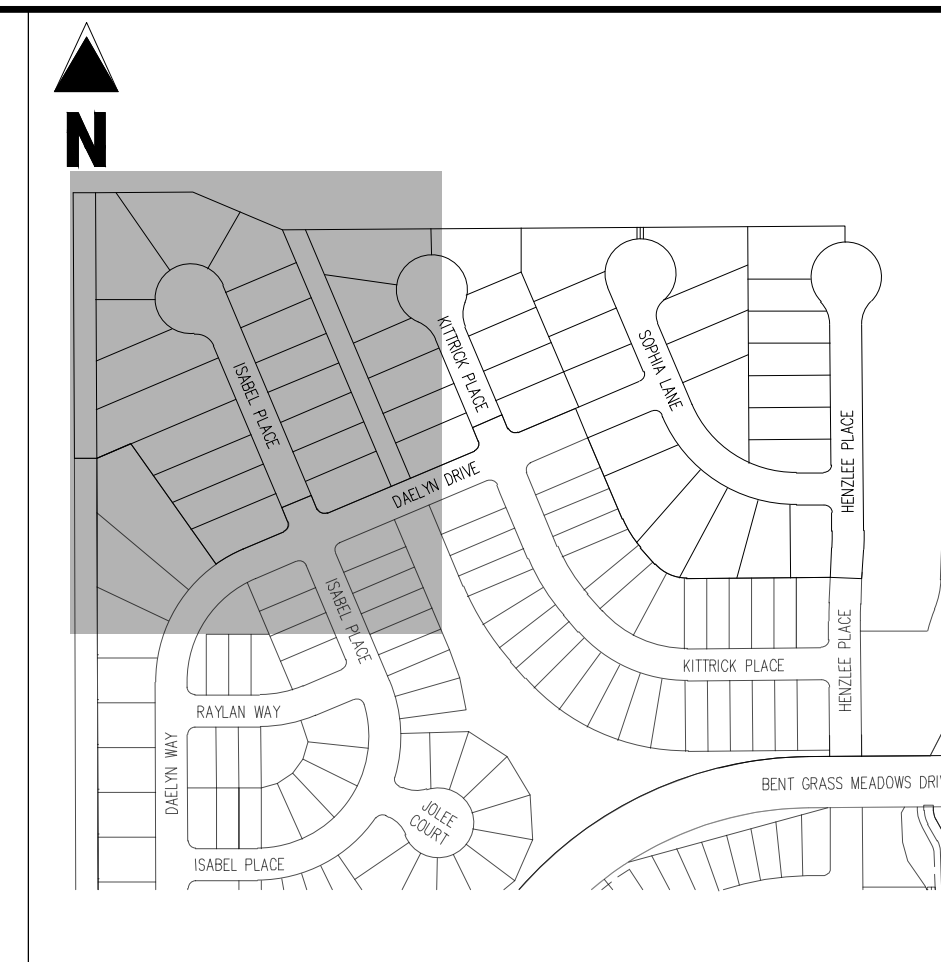
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Project No:	CLH000020
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Checked By:	RGD
Date:	01/20/2022

GRADING & EROSION
CONTROL INITIAL PLAN

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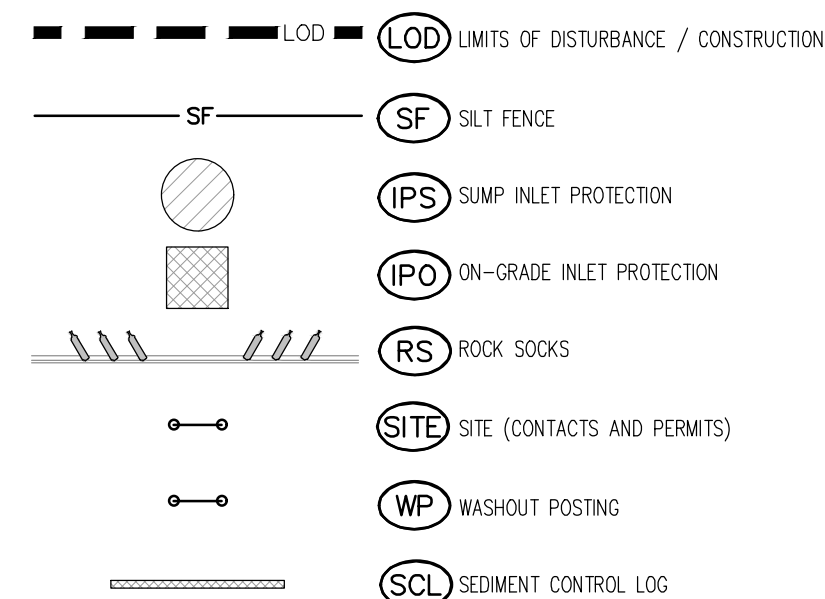
Sheet 6 of 15



KEY MAP

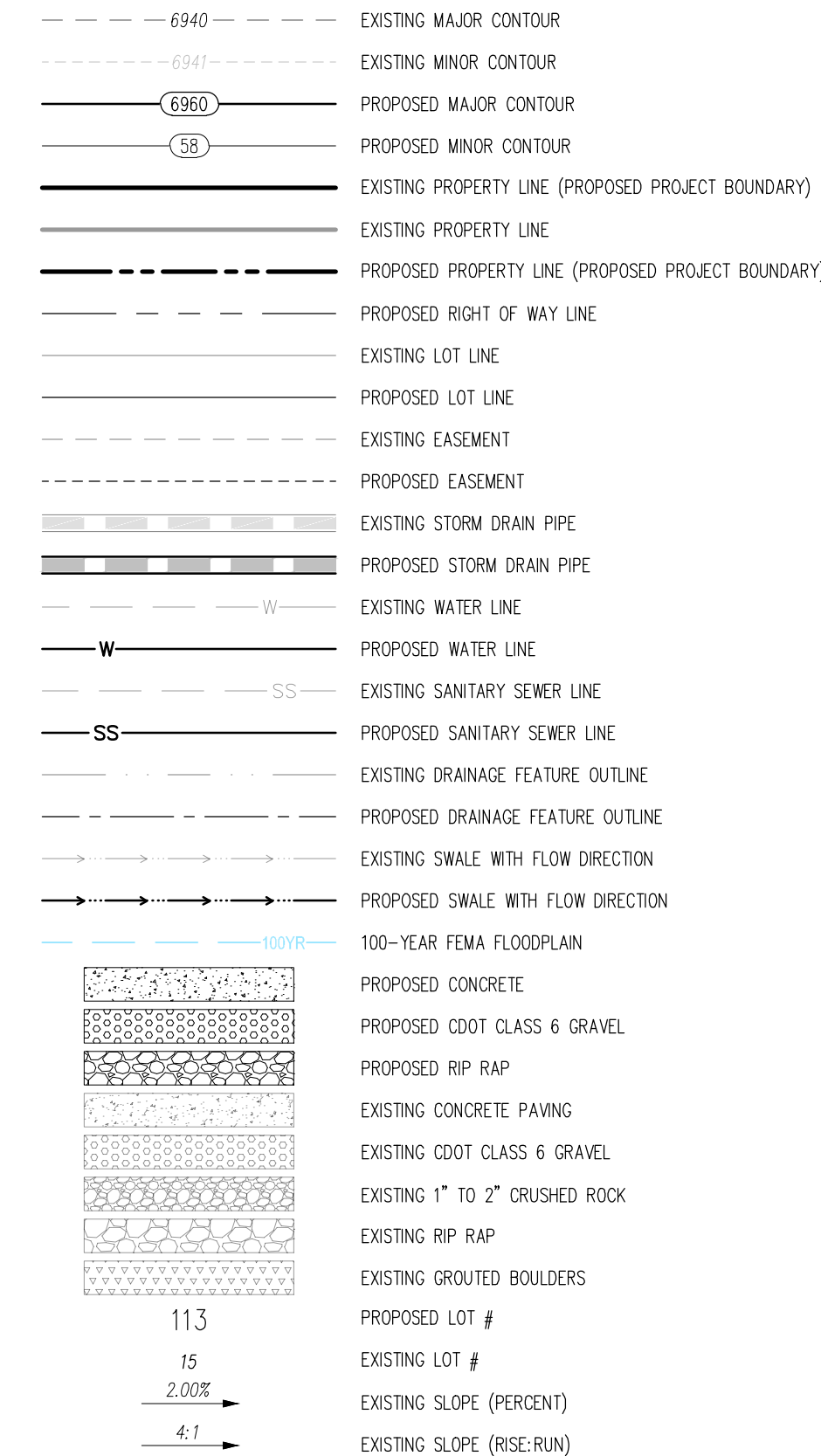
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EROSION CONTROL LEGEND



EROSION CONTROL PHASING SCHEDULE	
PHASE	DESCRIPTION
INITIAL	INSTALL SITE POSTING, SILENT, FELT, INLET PROTECTION MEASURES ON EXISTING INLETS, AND CURE ROCKS ALONG BENT GRASS MEADOWS DRIVE
INTERIM	CONVERT EXISTING SEDIMENT BASIN FROM "EARLY GRADING & EROSION CONTROL PLANS" TO THE PROPOSED WATER CAPTURE VOLUME DETENTION BASIN "W/ ALL PERMANENT CONTROL MEASURES". THEN, INSTALL STABILIZED STAGING AREA, VEHICLE TRACKING CONTROL AT ENTRANCES, AND CONCRETE WASHOUT AREA. THEN, OVERLIFT GROUND, THE ENTIRE PROJECT SITE AS SHOWN ON PLAN VIEW, INSTALL EROSION BARRIERS ALONG INTERNAL ROADWAYS, AND INSTALL CHECK DAMS ALONG PROPOSED SLOPES. FINALLY, INSTALL PROPOSED STORM SEWER. CONTRACTOR TO USE EXTREME CAUTION TO NOT DAMAGE THE WATER AND WASTEWATER IMPROVEMENTS COMPLETED IN THE EARLY METRO DISTRICT IMPROVEMENTS PLAN SET.
FINAL	CONSTRUCT CURB/GUTTER AND PAVEMENT. CONSTRUCT GAS/ELECTRIC/CABLE/PHONE IN ROW AREAS. REMOVE CONSTRUCTION BMP'S AND VERTICAL CURBING OF ROADS AND APPLICABLE LANDSCAPING IS COMPLETE.

LEGEND



NOTES

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2. EXISTING VEGETATION ON THE PROJECT SITE CONSISTS OF NATIVE GRASSES AND SHRUBS.
3. NO WETLANDS ARE TO BE PERMANENTLY DISTURBED BY THIS PLAN.
4. NO GRADING IS TO OCCUR WITHIN THE 100-YEAR FLOODPLAIN.
5. THE EROSION CONTROL DELINEATED ON THIS PLAN SHALL BE REGULARLY UPDATED BY THE CONTRACTORS.
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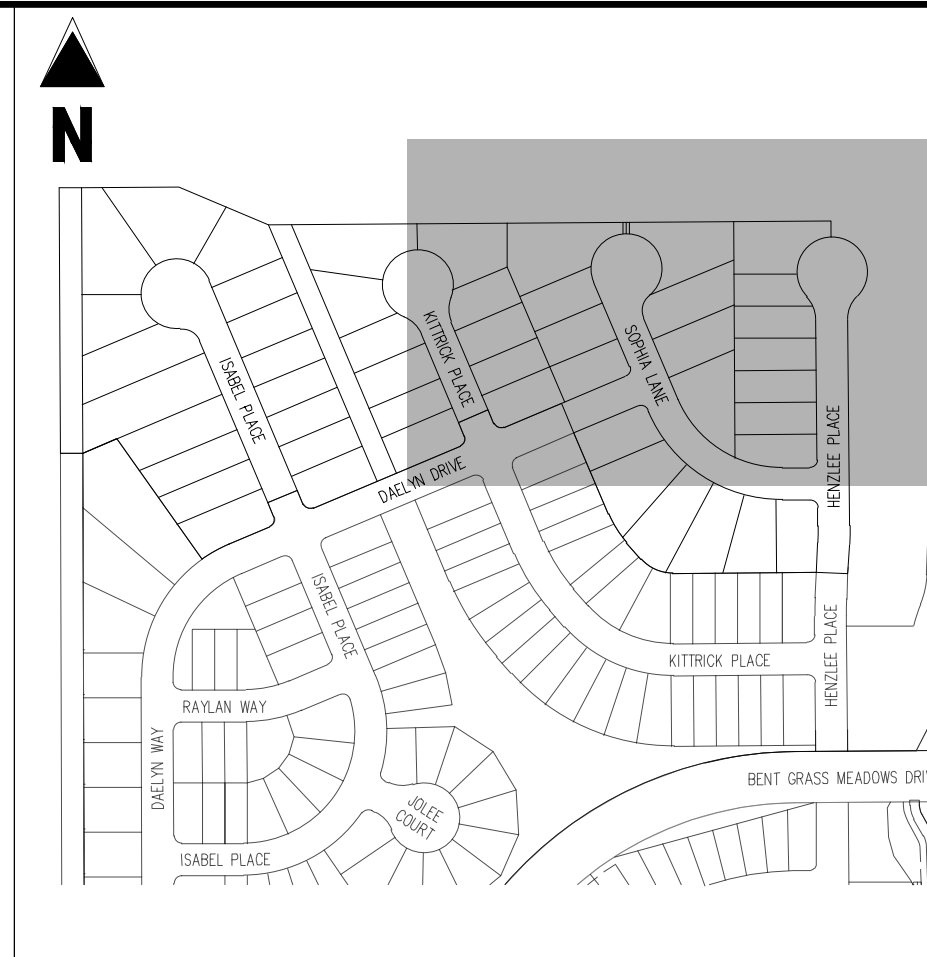
THE SOUTHWESTERLY CORNER OF LOT 1 WOODMEN HILLS FILING NO. 4, MONUMENTED BY A YELLOW PLASTIC SURVEYOR'S CAP ON A NO. 4 REBAR LS# 24954 ELEVATION = 6947.67

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Know what's **below**.
Call before you dig.



KEY MAP
SCALE: 1"=300'

LEGEND

	EXISTING MAJOR CONTOUR
	EXISTING MINOR CONTOUR
	PROPOSED MAJOR CONTOUR
	PROPOSED MINOR CONTOUR
	EXISTING PROPERTY LINE (PROPOSED PROJECT BOUNDARY)
	EXISTING PROPERTY LINE
	PROPOSED PROPERTY LINE (PROPOSED PROJECT BOUNDARY)
	PROPOSED RIGHT OF WAY LINE
	EXISTING LOT LINE
	PROPOSED LOT LINE
	EXISTING EASEMENT
	PROPOSED EASEMENT
	EXISTING STORM DRAIN PIPE
	PROPOSED STORM DRAIN PIPE
	EXISTING WATER LINE
	PROPOSED WATER LINE
	EXISTING SANITARY SEWER LINE
	PROPOSED SANITARY SEWER LINE
	EXISTING DRAINAGE FEATURE OUTLINE
	PROPOSED DRAINAGE FEATURE OUTLINE
	EXISTING SWALE WITH FLOW DIRECTION
	PROPOSED SWALE WITH FLOW DIRECTION
	100-YEAR FEMA FLOODPLAIN
	PROPOSED RIP RAP
	EXISTING CONCRETE PAVING
	EXISTING CDOT CLASS 6 GRAVEL
	EXISTING 1" TO 2" CRUSHED ROCK
	EXISTING RIP RAP
	EXISTING GROUTED BOULDERS
	PROPOSED LOT #
	EXISTING LOT #
	EXISTING SLOPE (PERCENT)
	EXISTING SLOPE (RISE:RUN)
	PROPOSED SLOPE (PERCENT)
	PROPOSED SLOPE (RISE:RUN)

NOTES

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BASIS OF BEARINGS

ALL BEARINGS ARE GRID BEARINGS OF THE COLORADO STATE PLANE COORDINATE SYSTEM, CENTRAL ZONE, NORTH AMERICAN DATUM 1983. THE BEARING OF THE LINE BETWEEN THE SOUTHWEST CORNER OF SECTION 1, T13S, R65W AND THE WEST QUARTER CORNER SECTION 1, T13S, R65W IS N00°13'46"W AND MONUMENTED AS SHOWN:

BENCHMARK

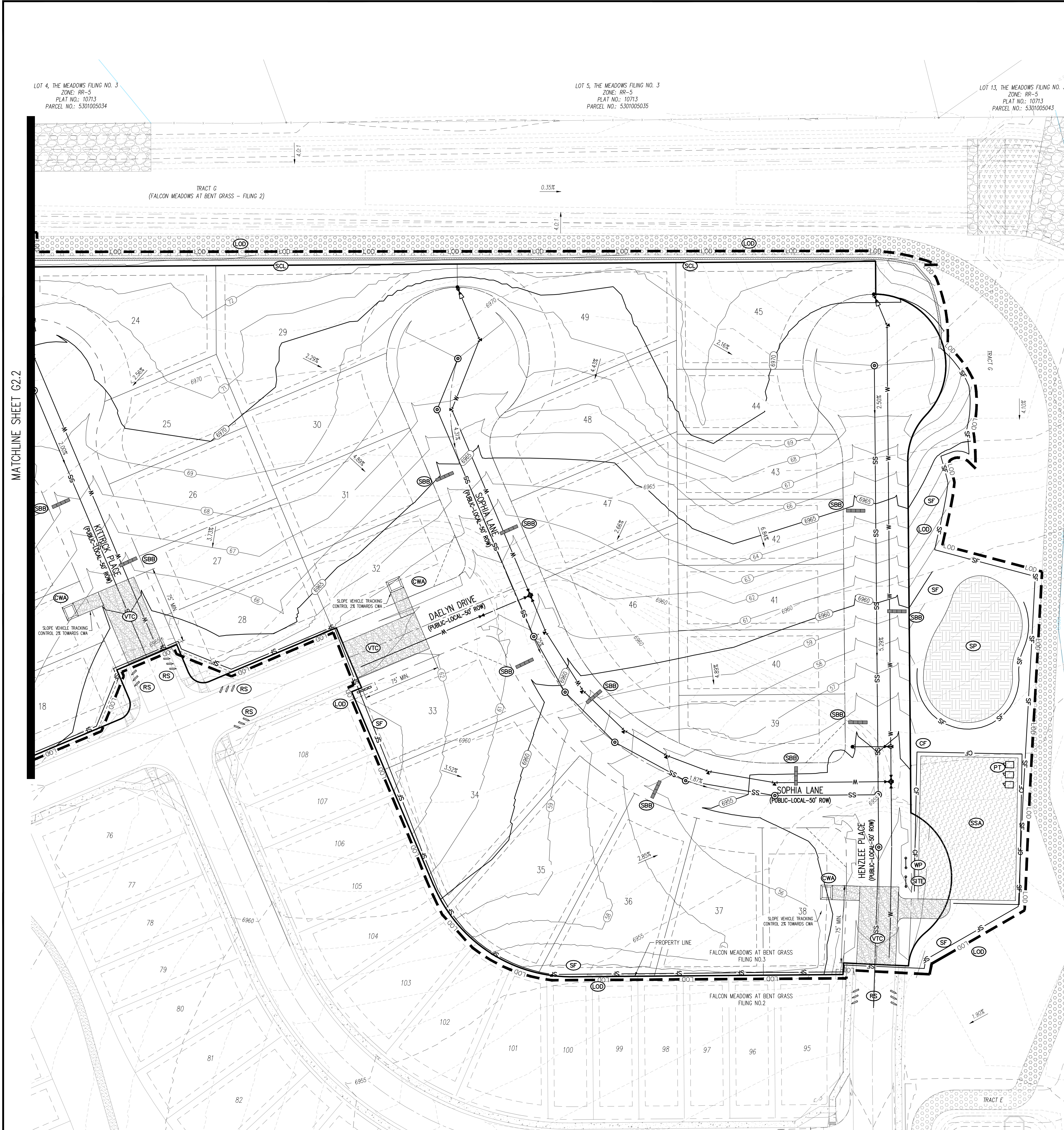
THE SOUTHWESTERLY CORNER OF LOT 1 WOODMEN HILLS FILING NO. 4. MONUMENTED BY A YELLOW PLASTIC SURVEYORS CAP ON A NO. 4 REBAR LS# 24954 ELEVATION = 6947.67

CAUTION - NOTICE TO CONTRACTOR





































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2. WHERE A PROPOSED UTILITY CROSSES AN EXISTING UTILITY, 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.



Know what's **below**.
Call before you c



EROSION CONTROL LEGEND

	LOD		LOD LIMITS OF DISTURBANCE / CONSTRUCTION
	SF		SF SILT FENCE
	CF		CF CONSTRUCTION FENCE
			IPS SUMP INLET PROTECTION
			IPO ON-GRADE INLET PROTECTION
			RS ROCK SOCKS
			VTC VEHICLE TRACKING CONTROL
			CWA CONCRETE WASHOUT AREA
			SSA STABILIZED STAGING AREA
			PT PORTABLE TOILET
			SP STOCKPILE
			CD CHECK DAM
			RR RIPRAP OUTFALL PADS
			SITE SITE POSTING (CONTACTS AND PERMITS)
			WP WASHOUT POSTING
			SBB STRAW BALE BARRIER
			SCL SEDIMENT CONTROL LOG
			ECB EROSION CONTROL BLANKET

EROSION CONTROL PHASING SCHEDULE

PHASE	DESCRIPTION
INITIAL	INSTALL SITE POSTING, SILT FENCE, INLET PROTECTION MEASURES ON EXISTING INLETS, AND CURE SODS ALONG BENT GRASS MEADOWS DRIVE
INTERIM	CONVERT EXISTING SEDIMENT BASIN FROM "EARLY GRADING & EROSION CONTROL PLANS" TO THE PROPOSED WATER QUALITY CAPTURE VOLUME DETENTION BASIN W/ ALL PERMANENT CONTROL MEASURES. THEN, INSTALL STABILIZED STAGING AREA, VEHICLE TRACKING CONTROL AT ENTRANCES, AND CONCRETE WASHOUT AREA, THEN OVERLIFT GARD. THE ENTIRE PROJECT SITE AS SHOWN ON PLAN VIEW, INCLUDING ALL BARRIERS ALONG INTERIOR ROADSWAYS, AND INSTALL CHECK DAMS ALONG PROPOSED SLOPES. FINALLY, INSTALL PROPOSED STORM SEWER CONTRACTOR TO USE EXTREME CAUTION TO NOT DAMAGE THE WATER AND WASTEWATER IMPROVEMENTS COMPLETED IN THE EARLY METRO DISTRICT IMPROVEMENTS PLAN SET.
FINAL	CONSTRUCT CURB/GUTTER AND PAVEMENT, CONSTRUCT GAS/ELECTRIC/CABLE/PHONE IN ROW AREAS, REMOVE CONSTRUCTION BMP'S AND VERTICAL CONSTRUCTION OF HOUSES AND APPLICABLE LANDSCAPING IS COMPLETE.

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CONSTRUCTION DOCUMENTS
FALCON MEADOWS AT BENT GRASS FILING NO. 3
FOR
CHALLENGER COMMUNITIES, LLC

BENT GRASS MEADOWS DRIVE & MERDIAN ROAD
FALCON, CO 80831 - EL PASO COUNTY

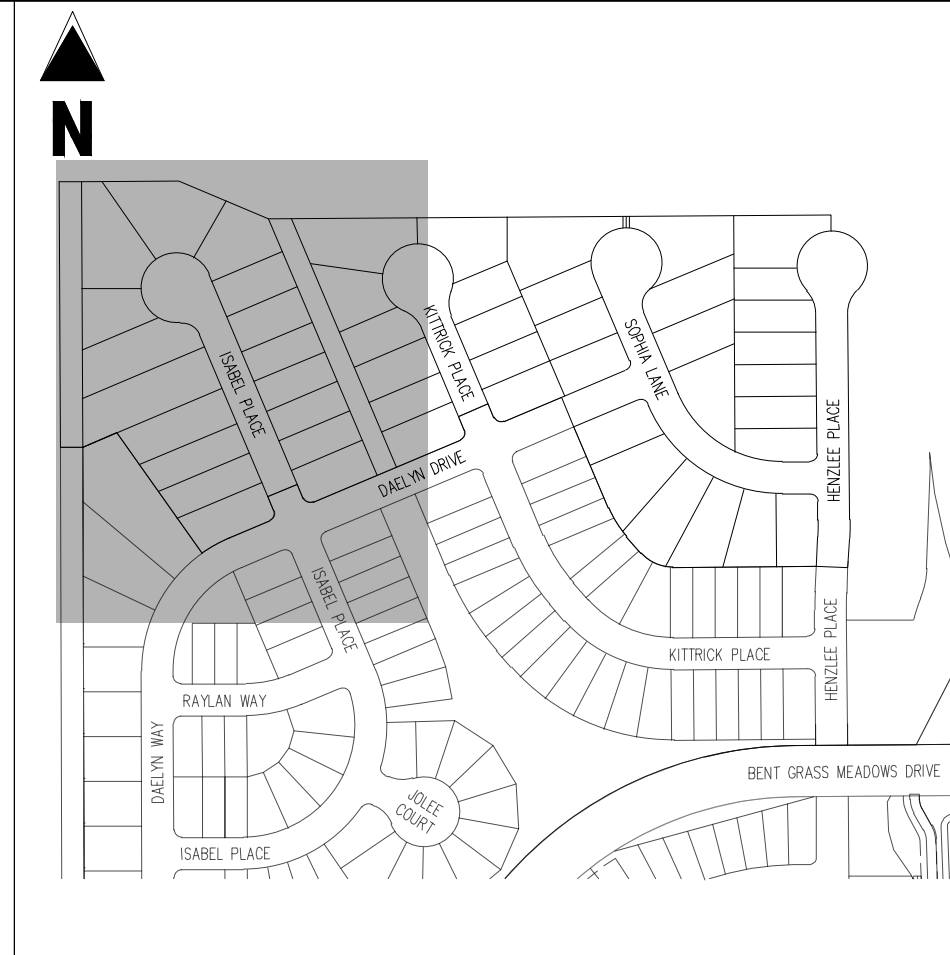
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Project No:	CLH000020
Drawn By:	CMWJ
Checked By:	RGD
Date:	01/20/2022

GRADING & EROSION
CONTROL INTERIM PLAN

G2.2

Sheet 8 of 15



KEY MAP
SCALE: 1"=300'

LEGEND

- | | |
|--|--|
| | EXISTING MAJOR CONTOUR |
| | EXISTING MINOR CONTOUR |
| | PROPOSED MAJOR CONTOUR |
| | PROPOSED MINOR CONTOUR |
| | EXISTING PROPERTY LINE (PROPOSED PROJECT BOUNDARY) |
| | EXISTING PROPERTY LINE |
| | PROPOSED PROPERTY LINE (PROPOSED PROJECT BOUNDARY) |
| | PROPOSED RIGHT OF WAY LINE |
| | EXISTING LOT LINE |
| | PROPOSED LOT LINE |
| | EXISTING EASEMENT |
| | PROPOSED EASEMENT |
| | EXISTING STORM DRAIN PIPE |
| | PROPOSED STORM DRAIN PIPE |
| | EXISTING WATER LINE |
| | PROPOSED WATER LINE |
| | EXISTING SANITARY SEWER LINE |
| | PROPOSED SANITARY SEWER LINE |
| | EXISTING DRAINAGE FEATURE OUTLINE |
| | PROPOSED DRAINAGE FEATURE OUTLINE |
| | EXISTING SWALE WITH FLOW DIRECTION |
| | PROPOSED SWALE WITH FLOW DIRECTION |
| | 100-YEAR FEMA FLOODPLAIN |
| | PROPOSED RIP RAP |
| | EXISTING CONCRETE PAVING |
| | EXISTING CDOT CLASS 6 GRAVEL |
| | EXISTING 1" TO 2" CRUSHED ROCK |
| | EXISTING RIP RAP |
| | EXISTING GROUTED BOULDERS |
| | PROPOSED LOT # |
| | EXISTING LOT # |
| | EXISTING SLOPE (PERCENT) |
| | EXISTING SLOPE (RISE:RUN) |
| | PROPOSED SLOPE (PERCENT) |
| | PROPOSED SLOPE (RISE:RUN) |

NOTES

1. ADD 6900 TO ALL SPOT ELEVATIONS
2. EXISTING VEGETATION ON THE PROJECT SITE CONSISTS OF NATIVE GRASSES AND SHRUBS.
3. NO WETLANDS ARE TO BE PERMANENTLY DISTURBED BY THIS PLAN.
4. NO GRADING IS TO OCCUR WITHIN THE 100-YEAR FLOODPLAIN.
5. THE EROSION CONTROL DELINEATED ON THIS PLAN SHALL BE REGULARLY UPDATED BY THE CONTRACTORS.
6. CONTRACTOR SHALL PROTECT ALL AREAS OUTSIDE OF THE CONSTRUCTION LIMITS WITH SILT FENCE OR OTHER METHOD TO PROTECT UNDISTURBED AREAS FROM EROSION.
7. ALL TEMPORARY OR PERMANENT GRADING DISTURBANCES SHALL BE RE-SEEDDED AND MULCHED PER EL PASO COUNTY CRITERIA AND SPECIFICATIONS.

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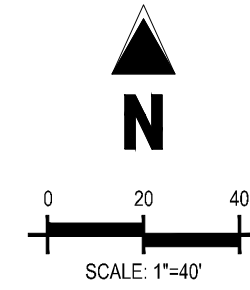
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Know what's **below**.
Call before you dig.



EROSION CONTROL LEGEND

- | | | | |
|--|-------------|--|---|
| | SF | | SF SILT FENCE |
| | CF | | CF CONSTRUCTION FENCE |
| | IPS | | IPS SUMP INLET PROTECTION |
| | IPO | | IPO ON-GRADE INLET PROTECTION |
| | RS | | RS ROCK SOCKS |
| | VTC | | VTC VEHICLE TRACKING CONTROL |
| | CWA | | CWA CONCRETE WASHOUT AREA |
| | SSA | | SSA STABILIZED STAGING AREA |
| | PT | | PT PORTABLE TOILET |
| | SP | | SP STOCKPILE |
| | CD | | CD CHECK DAM |
| | RR | | RR RIPRAP OUTFALL PADS |
| | SITE | | SITE SITE POSTING (CONTACTS AND PERMITS) |
| | WP | | WP WASHOUT POSTING |
| | SBB | | SBB STRAW BALE BARRIER |
| | SCL | | SCL SEDIMENT CONTROL LOG |
| | ECB | | ECB EROSION CONTROL BLANKET |

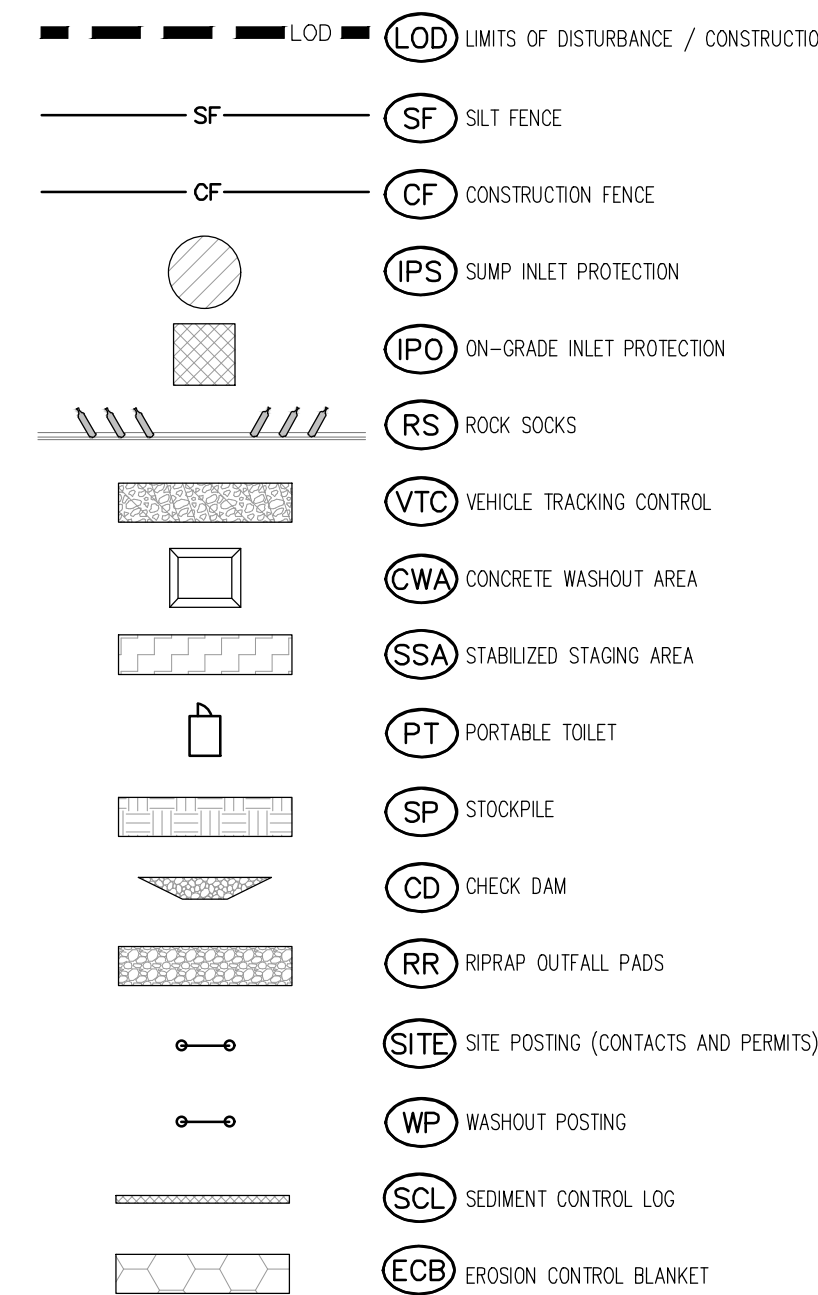
EROSION CONTROL PHASING SCHEDULE

PHASE	DESCRIPTION
INITIAL	INSTALL SITE POSTING, SILENT, FLINE, INLET PROTECTION MEASURES ON EXISTING INLETS, AND CURB CLOSERS ALONG BENT GRASS MEADOWS DRIVE
INTERIM	CONVERT EXISTING SEDIMENT BASIN FROM "EARLY GRADING & EROSION CONTROL PLANS" TO THE PROPOSED WATER QUALITY CAPTURE VOLUME DETENTION BASIN W/ ALL PERMANENT CONTROL MEASURES, THEN, INSTALL STABILIZED STAGING AREA, VEHICLE TRACKING CONTROL AT ENTRANCES, AND CONCRETE WASHOUT AREA, THEN OVERLIFT GROUND THE ENTIRE PROJECT SITE AS SHOWN ON PLAN VIEW, INSTALL EROSION BARRIERS ALONG INTERNAL ROADWAYS, AND INSTALL CHECK DAMS ALONG PROPOSED SLOPES. FINALLY, INSTALL PROPOSED STORM SEWER. CONTRACTOR TO USE EXTREME CAUTION TO NOT DAMAGE THE WATER AND WASTEWATER IMPROVEMENTS COMPLETED IN THE EARLY METRO DISTURBANCEMENTS PLAN SET.
FINAL	CONSTRUCT CURB/GUTTER AND PAVEMENT. CONSTRUCT GAS/ELECTRIC/CABLE/PHONE IN ROW AREAS. REMOVE CONSTRUCTION BMP'S AND VERTICAL CURBMENT OF HOUSES AND APPLICABLE LANDSCAPING IS COMPLETE.



KEY MAP
SCALE: 1"=300'

EROSION CONTROL LEGEND



EROSION CONTROL PHASING SCHEDULE

PHASE	DESCRIPTION
INITIAL	INSTALL SITE POSTING, SILT FENCE, INLET PROTECTION MEASURES ON EXISTING INLETS, AND CURB SOAKING ALONG BEST GRASS MEADOWS DRIVE.
INTERIM	CONVERT EXISTING SEDIMENT BASIN FROM "EARLY GRADING & EROSION CONTROL PLANS" TO THE PROPOSED WATER QUALITY CAPTURE VOLUME DETENTION BASIN BY ALL PERMANENT CONTROL MEASURES. THEN, INSTALL STABILIZED STAGING AREA, VEHICLE TRACKING CONTROL AT ENTRANCES, AND CONCRETE WASHOUT AREA. THEN OVERLOUT GRADE THE ENTIRE PROJECT SITE AS SHOWN ON PLAN VIEW. INSTALL STABILIZED DRIVE ALONG INTERNAL ROADWAYS, AND INSTALL CHECK DAMS ALONG PROPOSED SIDEWAYS. FINALLY, INSTALL PROPOSED STORM SEWER. CONTRACTOR TO USE EXTREME CAUTION NOT DAMAGE THE WATER AND WASTEWATER IMPROVEMENTS COMPLETED IN THE EARLY METRO DISTRICT IMPROVEMENTS PLAN SET.
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LEGEND

	EXISTING MAJOR CONTOUR
	EXISTING MINOR CONTOUR
	EXISTING MAJOR CONTOUR
	PROPOSED MINOR CONTOUR
	EXISTING PROPERTY LINE (PROPOSED PROJECT BOUNDARY)
	EXISTING PROPERTY LINE
	PROPOSED PROPERTY LINE (PROPOSED PROJECT BOUNDARY)
	PROPOSED RIGHT OF WAY LINE
	EXISTING LOT LINE
	PROPOSED LOT LINE
	EXISTING EASEMENT
	PROPOSED EASEMENT
	EXISTING STORM DRAIN PIPE
	PROPOSED STORM DRAIN PIPE
	EXISTING WATER LINE
	PROPOSED WATER LINE
	EXISTING SANITARY SEWER LINE
	PROPOSED SANITARY SEWER LINE
	EXISTING DRAINAGE FEATURE OUTLINE
	PROPOSED DRAINAGE FEATURE OUTLINE
	EXISTING SWALE WITH FLOW DIRECTION
	PROPOSED SWALE WITH FLOW DIRECTION
	100-YEAR FEMA FLOODPLAIN
	BASE FLOOD ELEVATION
	PROPOSED CONCRETE
	PROPOSED CDOT CLASS 6 GRAVEL
	PROPOSED RIP RAP
	EXISTING CONCRETE PAVING
	EXISTING CDOT CLASS 6 GRAVEL
	EXISTING 1" TO 2" CRUSHED ROCK
	EXISTING RIP RAP
	EXISTING GROUTED BOULDERS
	PROPOSED LOT #
	EXISTING LOT #
	EXISTING SLOPE (PERCENT)
	EXISTING SLOPE (RISE:RUN)
	PROPOSED SLOPE (PERCENT)
	PROPOSED SLOPE (RISE:RUN)
	SPOT ELEVATION - FLOW LINE
	SPOT ELEVATION - FINISH GRADE

NOTES

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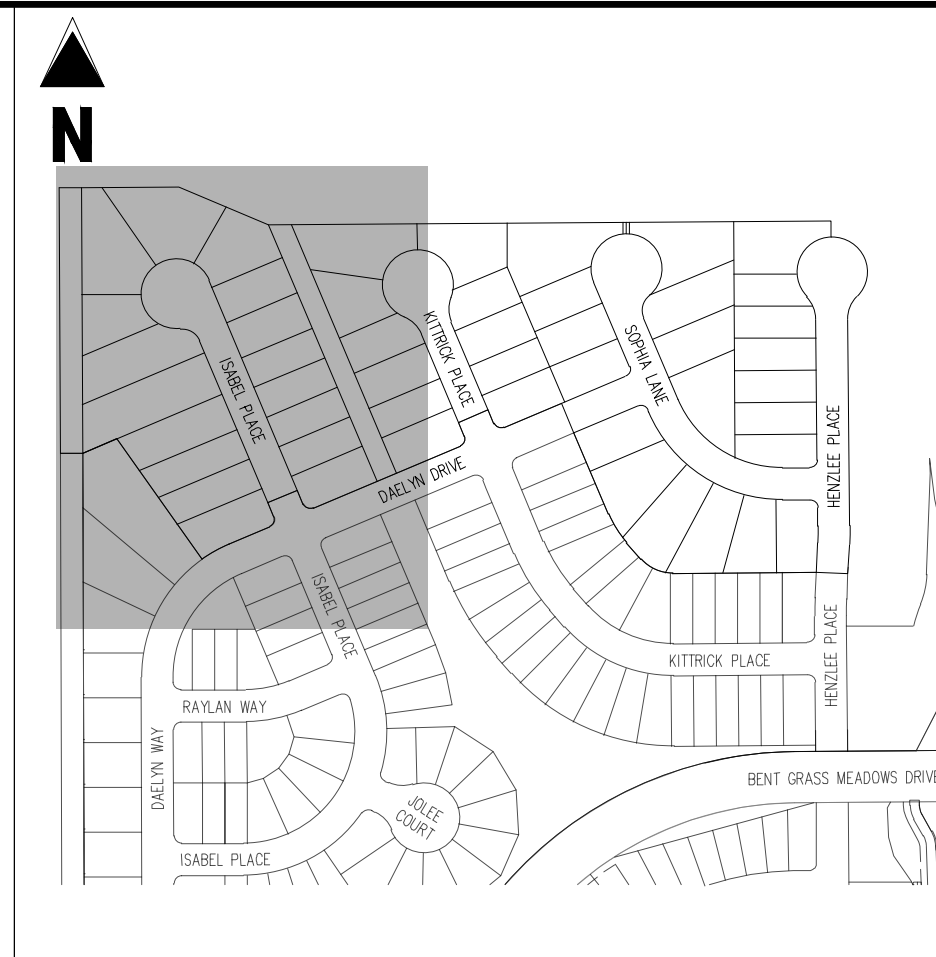
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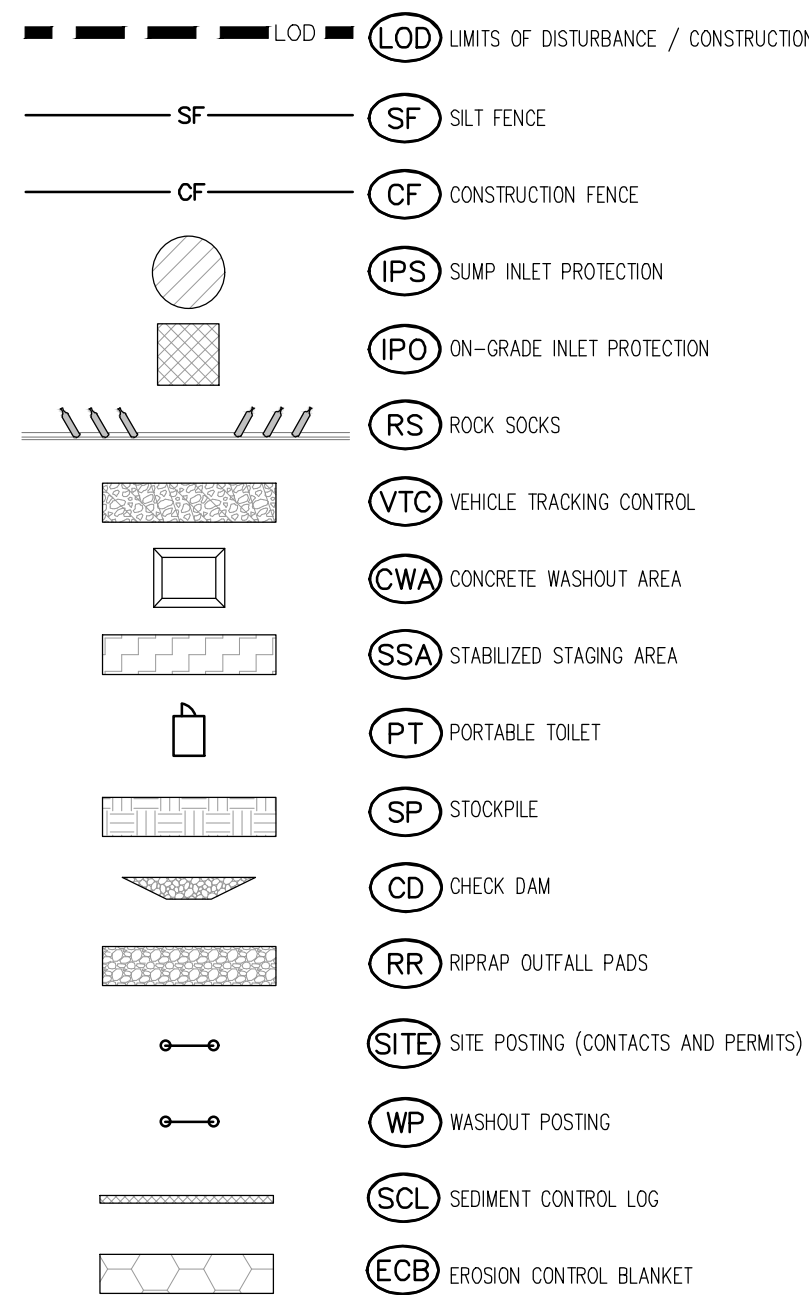
Know what's **below**.
Call before you dig.



KEY MAP

SCALE: 1"=300'

EROSION CONTROL LEGEND



EROSION CONTROL PHASING SCHEDULE

PHASE	DESCRIPTION
INITIAL	INSTALL SITE POSTING, SILT FENCE, INLET PROTECTION MEASURES ON EXISTING INLETS, AND CURBS SUCKS ALONG BENT GRASS MEADOWS DRIVE.
INTERIM	CONVERT EXISTING SEDIMENT BASIN FROM "EARLY GRADING & EROSION CONTROL PLANS" TO THE PROPOSED WATER QUALITY CAPTURE VOLUME DETENTION BASIN #10 ALL PERMANENT CONTROL MEASURES. THEN, INSTALL STABILIZED STAGING AREA, VEHICLE TRACKING CONTROL AT ENTRANCES, AND CONCRETE WASHOUT AREA. THEN OVERLAY GRADE THE ENTIRE PROJECT SITE AS SHOWN ON PLAN VIEW. INSTALL 12" POLYETHYLENE BARBERS ALONG INTERSECTIONS, ROADWAYS, AND CHECK DAMS ALONG PROPOSED SLOPES. FINALLY, INSTALL PROPOSED STORM SEWER CONTRACTOR TO USE EXTREME CAUTION TO NOT DAMAGE THE WATER AND WASTEWATER IMPROVEMENTS COMPLETED IN THE EARLY METRO DISTRICT IMPROVEMENTS PLAN SET.
FINAL	CONSTRUCT CURB/GUTTER AND PAVEMENT, CONSTRUCT GAS/ELECTRIC/CABLE/PHONE IN ROW AREAS, REMOVE CONSTRUCTION BMP'S ONCE VERTICAL CONSTRUCTION OF HOUSES AND APPLICABLE LANDSCAPING IS COMPLETE.

LEGEND

	6940	EXISTING MAJOR CONTOUR
	6941	EXISTING MINOR CONTOUR
	6960	EXISTING MAJOR CONTOUR
	58	PROPOSED MINOR CONTOUR
		EXISTING PROPERTY LINE (PROPOSED PROJECT BOUNDARY)
		EXISTING PROPERTY LINE
		PROPOSED PROPERTY LINE (PROPOSED PROJECT BOUNDARY)
		PROPOSED RIGHT OF WAY LINE
		EXISTING LOT LINE
		PROPOSED LOT LINE
		EXISTING EASEMENT
		PROPOSED EASEMENT
		EXISTING STORM DRAIN PIPE
		PROPOSED STORM DRAIN PIPE
	W	EXISTING WATER LINE
	W	PROPOSED WATER LINE
	SS	EXISTING SANITARY SEWER LINE
	SS	PROPOSED SANITARY SEWER LINE
		EXISTING DRAINAGE FEATURE OUTLINE
		PROPOSED DRAINAGE FEATURE OUTLINE
		EXISTING SWALE WITH FLOW DIRECTION
		PROPOSED SWALE WITH FLOW DIRECTION
	100YR	100-YEAR FEMA FLOODPLAIN
		BASE FLOOD ELEVATION
		PROPOSED CONCRETE
		PROPOSED CDOT CLASS 6 GRAVEL
		PROPOSED RIP RAP
		EXISTING CONCRETE PAVING
		EXISTING CDOT CLASS 6 GRAVEL
		EXISTING 1" TO 2" CRUSHED ROCK
		EXISTING RIP RAP
		EXISTING GRAVELLED BOULDERS
	113	PROPOSED LOT #
	15	EXISTING LOT #
	2.00%	EXISTING SLOPE (PERCENT)
	4:1	EXISTING SLOPE (RISE:RUN)
	2.00%	PROPOSED SLOPE (PERCENT)
	4:1	PROPOSED SLOPE (RISE:RUN)
	55.00 FL	SPOT ELEVATION - FLOW LINE
	55.00 FG	SPOT ELEVATION - FINISH GRADE

NOTES

1. ADD 8900 TO ALL SPOT ELEVATIONS
2. EXISTING VEGETATION ON THE PROJECT SITE CONSISTS OF NATIVE GRASSES AND SHRUBS.
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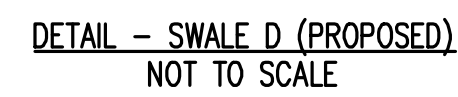
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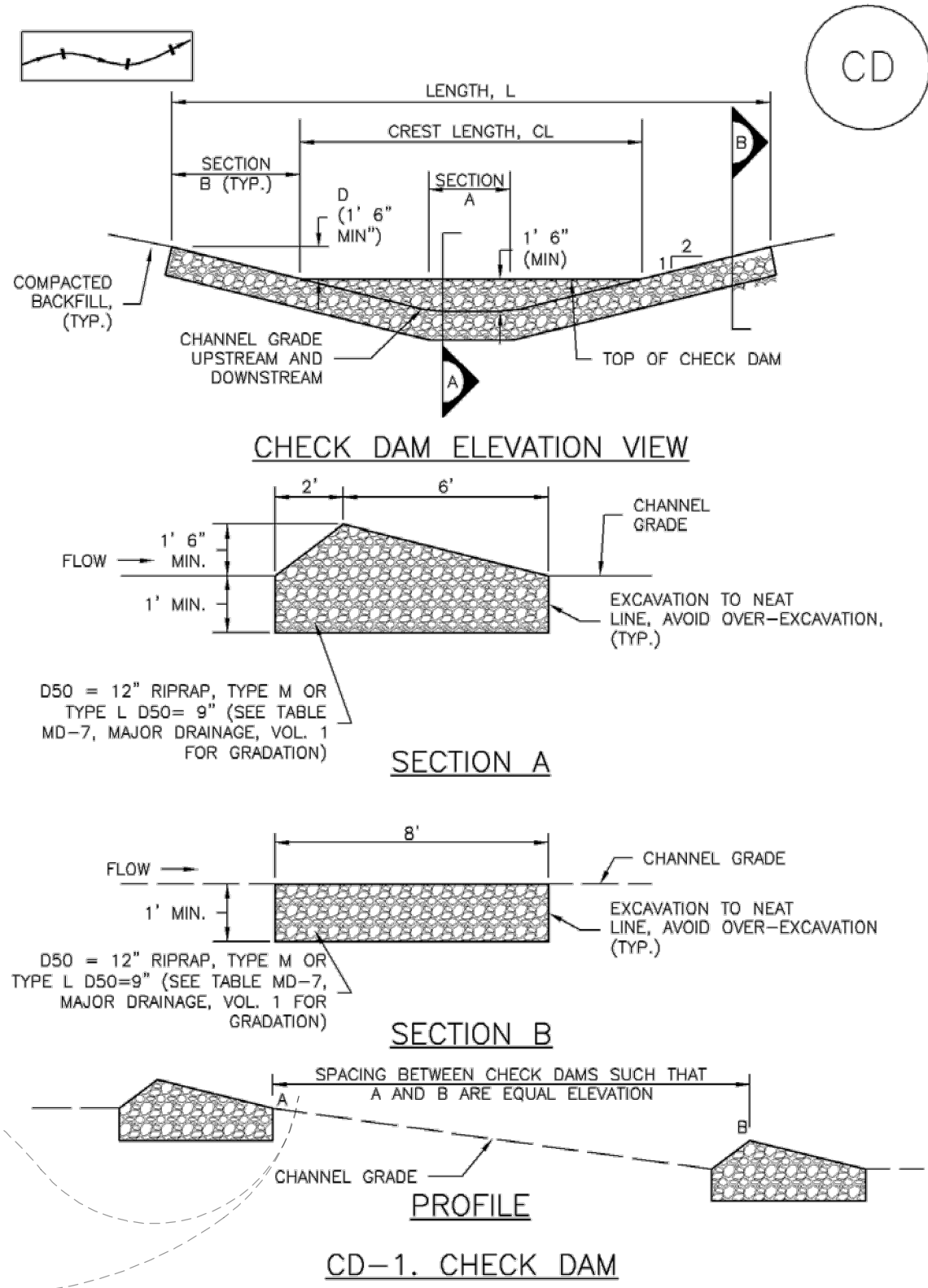
Know what's **below**.
Call before you dig.



Sheet 11 of 15

Check Dams (CD)

EC-12



REQUIRED SPACING FOR CHECK DAMS	
SLOPE OF DITCH FLOW LINE	SPACING (FT) (H = 1.5 FT)
1%	150.00
2%	75.00
3%	50.00
4%	37.50
5%	30.00
6%	25.00
7%	21.50
8%	18.75

November 2010 Urban Drainage and Flood Control District Urban Storm Drainage Criteria Manual Volume 3 CD-3

EC-12

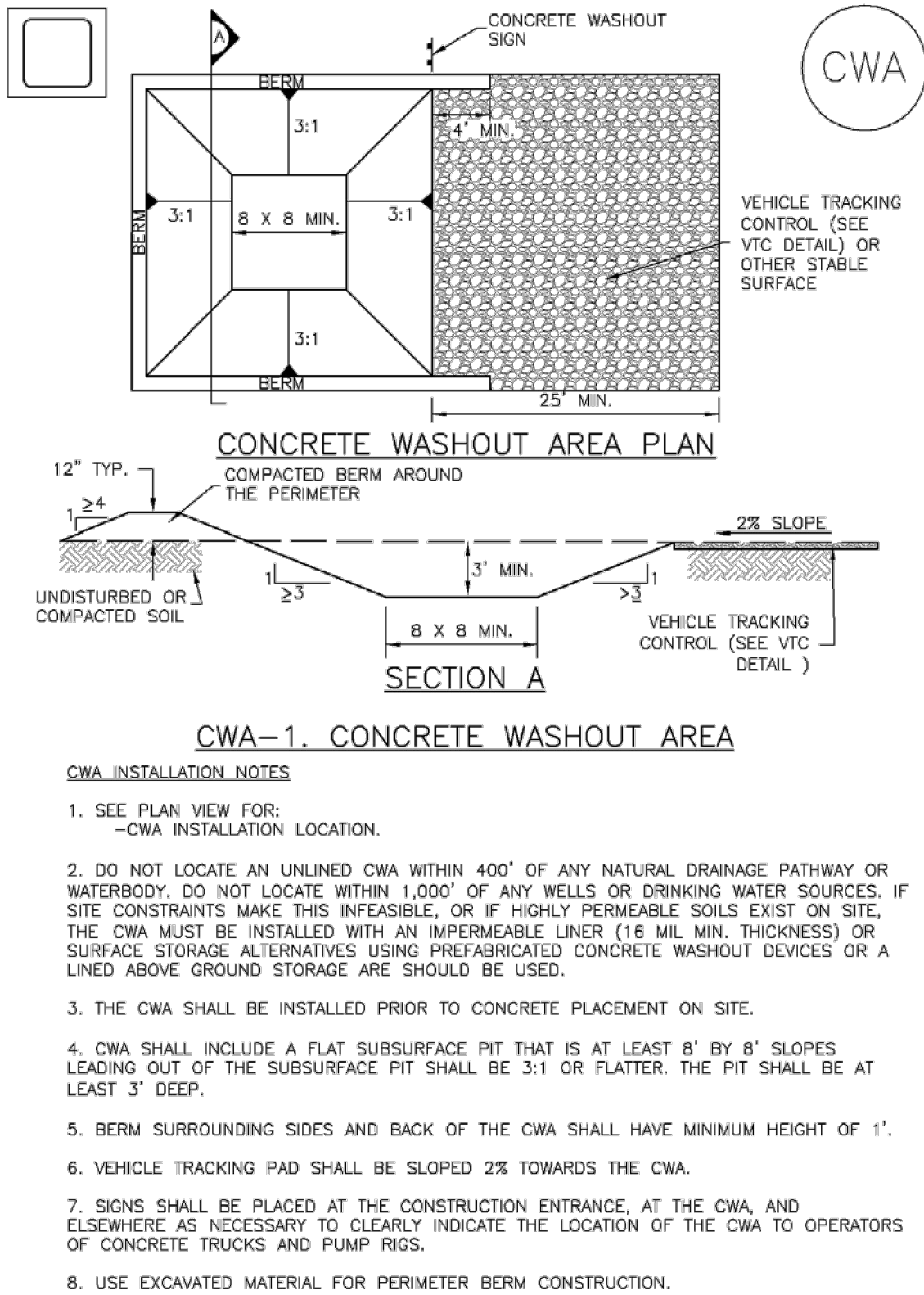
Check Dams (CD)

- CHECK DAM INSTALLATION NOTES**
- SEE PLAN VIEW FOR:
-LOCATION OF CHECK DAMS.
-CHECK DAM TYPE (CHECK DAM OR REINFORCED CHECK DAM).
-LENGTH (L), CREST LENGTH (CL), AND DEPTH (D).
 - CHECK DAMS INDICATED ON INITIAL SWMP SHALL BE INSTALLED AFTER CONSTRUCTION FENCE, BUT PRIOR TO ANY UPSTREAM LAND DISTURBING ACTIVITIES.
 - RIPRAP UTILIZED FOR CHECK DAMS SHOULD BE OF APPROPRIATE SIZE FOR THE APPLICATION. TYPICAL TYPES OF RIPRAP USED FOR CHECK DAMS ARE TYPE M (D50 12") OR TYPE L (D50 9").
 - RIPRAP PAD SHALL BE TRENCHED INTO THE GROUND A MINIMUM OF 1'.
 - THE ENDS OF THE CHECK DAM SHALL BE A MINIMUM OF 1' 6" HIGHER THAN THE CENTER OF THE CHECK DAM.
- CHECK DAM MAINTENANCE NOTES**
- INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.
 - FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.
 - WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.
 - SEDIMENT ACCUMULATED UPSTREAM OF THE CHECK DAMS SHALL BE REMOVED WHEN THE SEDIMENT DEPTH IS WITHIN $\frac{1}{2}$ OF THE HEIGHT OF THE CREST.
 - CHECK DAMS ARE TO REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS STABILIZED AND APPROVED BY THE LOCAL JURISDICTION.
 - WHEN CHECK DAMS ARE REMOVED, EXCAVATIONS SHALL BE FILLED WITH SUITABLE COMPACTED BACKFILL. DISTURBED AREA SHALL BE SEEDED AND MULCHED AND COVERED WITH GEOTEXTILE OR OTHERWISE STABILIZED IN A MANNER APPROVED BY THE LOCAL JURISDICTION.
- (DETAILS ADAPTED FROM DOUGLAS COUNTY, COLORADO, NOT AVAILABLE IN AUTOCAD)
- NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.

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Concrete Washout Area (CWA)

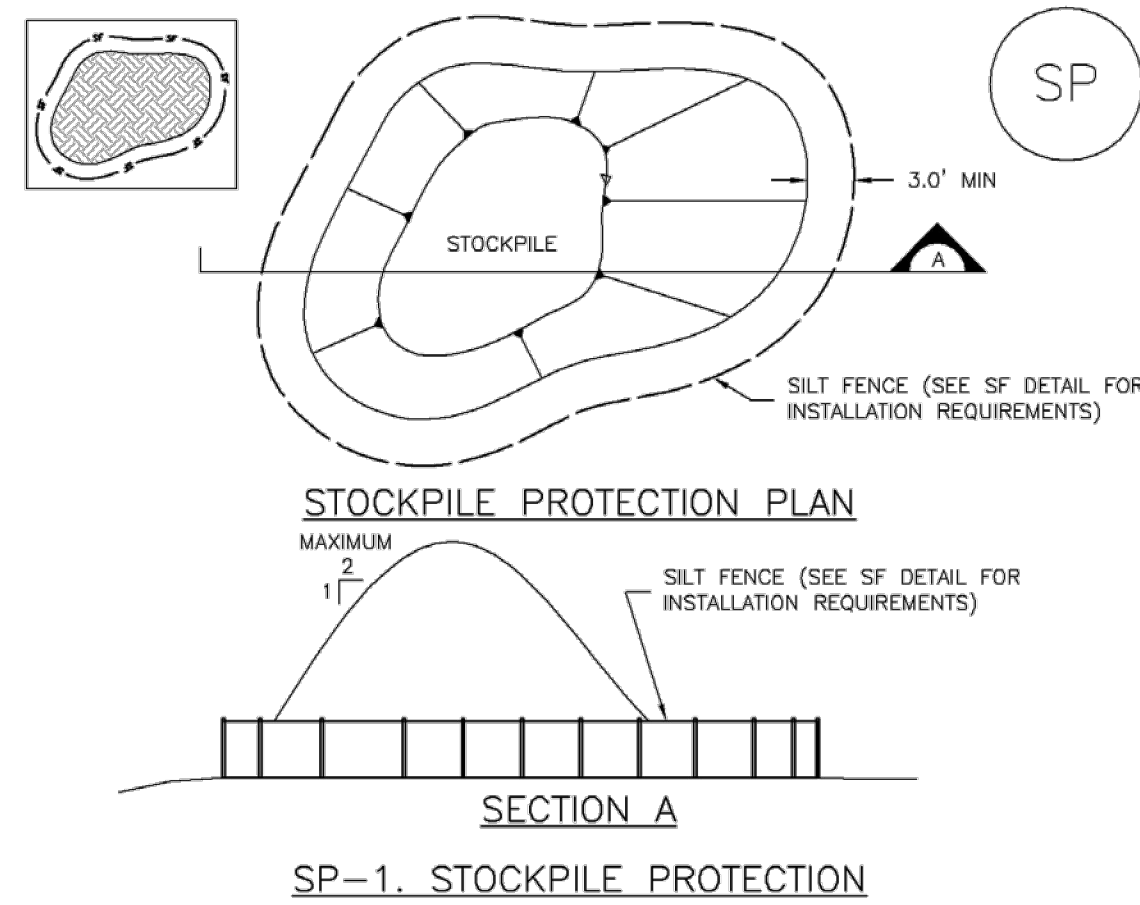
MM-1



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Stockpile Management (SP)

MM-2



- STOCKPILE PROTECTION INSTALLATION NOTES**
- SEE PLAN VIEW FOR:
-LOCATION OF STOCKPILES.
-TYPE OF STOCKPILE PROTECTION.
 - INSTALL PERIMETER CONTROLS IN ACCORDANCE WITH THEIR RESPECTIVE DESIGN DETAILS. SILT FENCE IS SHOWN IN THE STOCKPILE PROTECTION DETAILS; HOWEVER, OTHER TYPES OF PERIMETER CONTROLS INCLUDING SEDIMENT CONTROL LOGS OR ROCK SOCKS MAY BE SUITABLE IN SOME CIRCUMSTANCES. CONSIDERATIONS FOR DETERMINING THE APPROPRIATE TYPE OF PERIMETER CONTROL FOR A STOCKPILE INCLUDE WHETHER THE STOCKPILE IS LOCATED ON A PERVIOUS OR IMPERVIOUS SURFACE, THE RELATIVE HEIGHTS OF THE PERIMETER CONTROL AND STOCKPILE, THE ABILITY OF THE PERIMETER CONTROL TO CONTAIN THE STOCKPILE WITHOUT FAILING IN THE EVENT THAT MATERIAL FROM THE STOCKPILE SHIFTS OR SLUMPS AGAINST THE PERIMETER, AND OTHER FACTORS.
 - STABILIZE THE STOCKPILE SURFACE WITH SURFACE ROUGHENING, TEMPORARY SEEDING AND MULCHING, EROSION CONTROL BLANKETS, OR SOIL BINDERS. SOILS STOCKPILED FOR AN EXTENDED PERIOD (TYPICALLY FOR MORE THAN 60 DAYS) SHOULD BE SEEDED AND MULCHED WITH A TEMPORARY GRASS COVER ONCE THE STOCKPILE IS PLACED (TYPICALLY WITHIN 14 DAYS). USE OF MULCH ONLY OR A SOIL BINDER IS ACCEPTABLE IF THE STOCKPILE WILL BE IN PLACE FOR A MORE LIMITED TIME PERIOD (TYPICALLY 30-60 DAYS).
 - FOR TEMPORARY STOCKPILES ON THE INTERIOR PORTION OF A CONSTRUCTION SITE, WHERE OTHER DOWNGRADIENT CONTROLS, INCLUDING PERIMETER CONTROL, ARE IN PLACE, STOCKPILE PERIMETER CONTROLS MAY NOT BE REQUIRED.

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MM-2

Stockpile Management (SM)

- STOCKPILE PROTECTION MAINTENANCE NOTES**
- INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.
 - FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.
 - WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.
- STOCKPILE PROTECTION MAINTENANCE NOTES**
- IF PERIMETER PROTECTION MUST BE MOVED TO ACCESS SOIL STOCKPILE, REPLACE PERIMETER CONTROLS BY THE END OF THE WORKDAY.
 - STOCKPILE PERIMETER CONTROLS CAN BE REMOVED ONCE ALL THE MATERIAL FROM THE STOCKPILE HAS BEEN USED.
- (DETAILS ADAPTED FROM PARKER, COLORADO, NOT AVAILABLE IN AUTOCAD)
- NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.

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MM-1

Concrete Washout Area (CWA)

- CWA MAINTENANCE NOTES**
- INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.
 - FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.
 - WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.
 - THE CWA SHALL BE REPAIRED, CLEANED, OR ENLARGED AS NECESSARY TO MAINTAIN CAPACITY FOR CONCRETE WASTE. CONCRETE MATERIALS, ACCUMULATED IN PIT, SHALL BE REMOVED ONCE THE MATERIALS HAVE REACHED A DEPTH OF 2'.
 - CONCRETE WASHOUT WATER, WASTED PIECES OF CONCRETE AND ALL OTHER DEBRIS IN THE SUBSURFACE PIT SHALL BE TRANSPORTED FROM THE JOB SITE IN A WATER-TIGHT CONTAINER AND DISPOSED OF PROPERLY.
 - THE CWA SHALL REMAIN IN PLACE UNTIL ALL CONCRETE FOR THE PROJECT IS PLACED.
 - WHEN THE CWA IS REMOVED, COVER THE DISTURBED AREA WITH TOP SOIL, SEED AND MULCH OR OTHERWISE STABILIZED IN A MANNER APPROVED BY THE LOCAL JURISDICTION.
- (DETAIL ADAPTED FROM DOUGLAS COUNTY, COLORADO AND THE CITY OF PARKER, COLORADO, NOT AVAILABLE IN AUTOCAD)
- NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.

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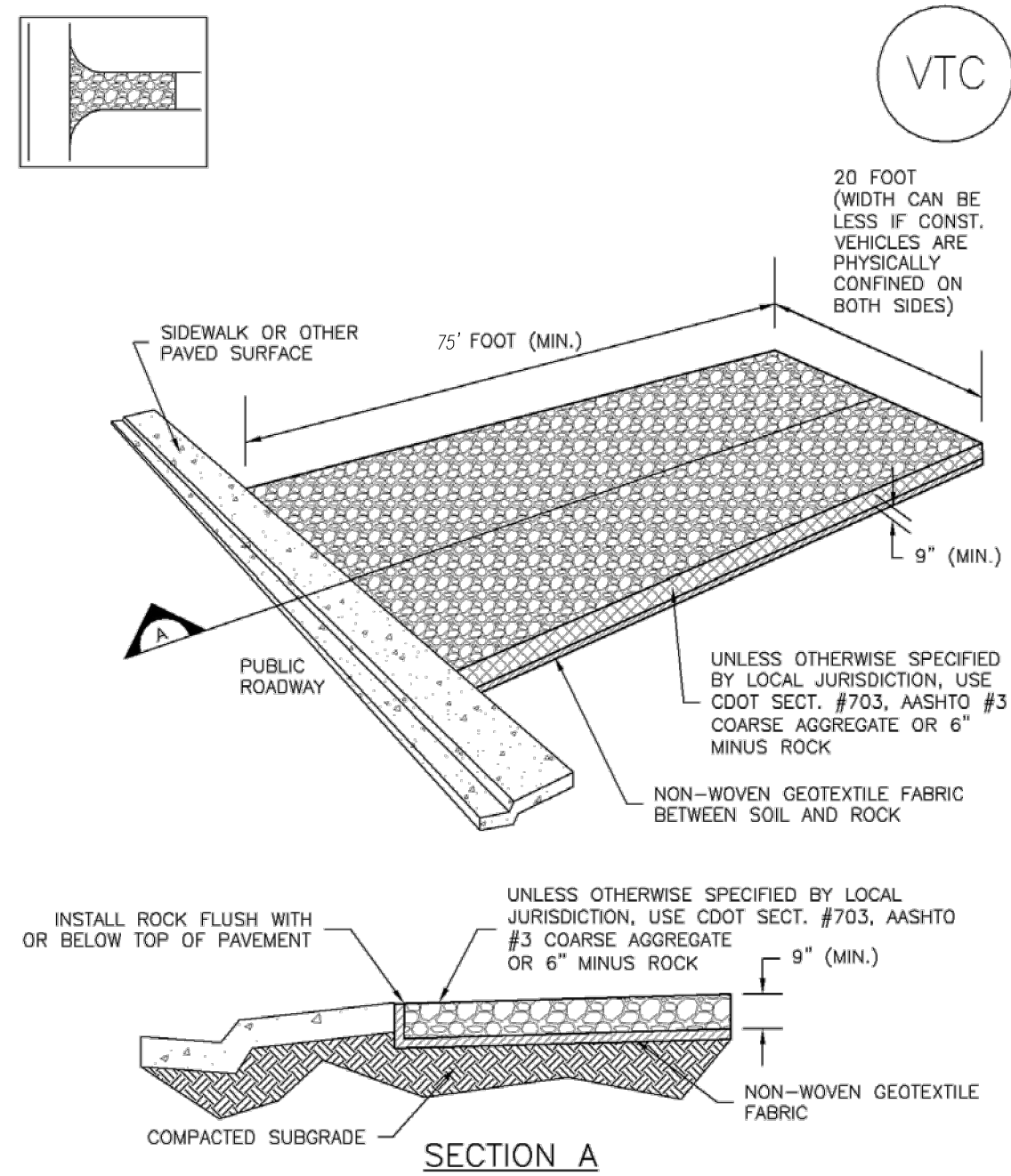
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Checked By:	RGD
Date:	01/29/2022

GEC DETAILS

Vehicle Tracking Control (VTC)

SM-4

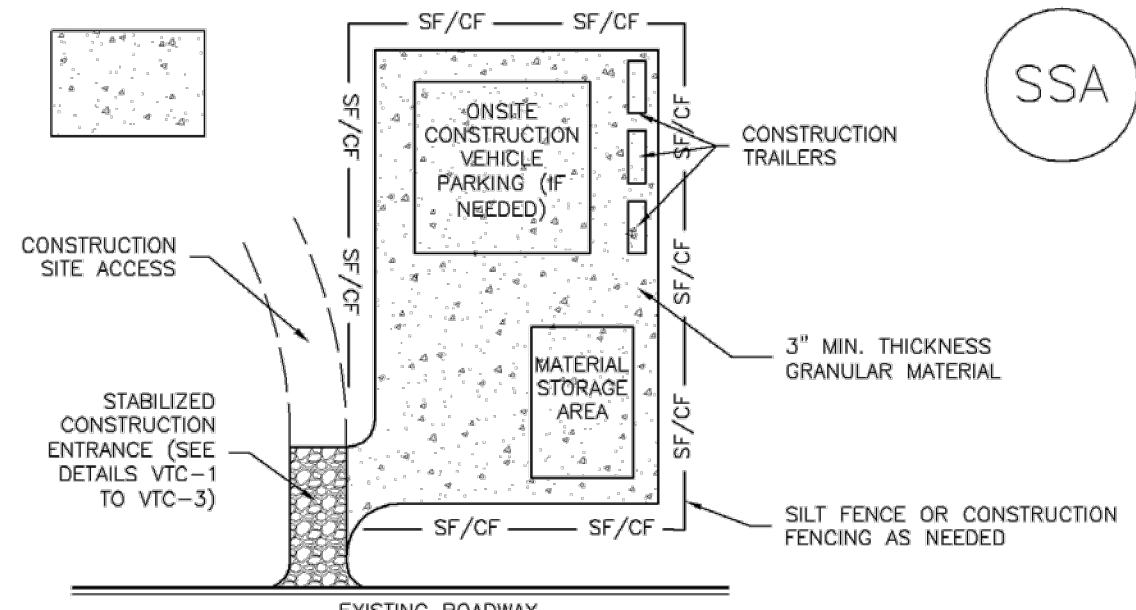


VTC-1. AGGREGATE VEHICLE TRACKING CONTROL

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Stabilized Staging Area (SSA)

SM-6



SSA-1. STABILIZED STAGING AREA

STABILIZED STAGING AREA INSTALLATION NOTES

1. SEE PLAN VIEW FOR
-LOCATION OF STAGING AREA(S).
-CONTRACTOR MAY ADJUST LOCATION AND SIZE OF STAGING AREA WITH APPROVAL FROM THE LOCAL JURISDICTION.
2. STABILIZED STAGING AREA SHOULD BE APPROPRIATE FOR THE NEEDS OF THE SITE. OVERSIZING RESULTS IN A LARGER AREA TO STABILIZE FOLLOWING CONSTRUCTION.
3. STAGING AREA SHALL BE STABILIZED PRIOR TO OTHER OPERATIONS ON THE SITE.
4. THE STABILIZED STAGING AREA SHALL CONSIST OF A MINIMUM 3" THICK GRANULAR MATERIAL.
5. UNLESS OTHERWISE SPECIFIED BY LOCAL JURISDICTION, ROCK SHALL CONSIST OF DOT SECT. #703, AASHTO #3 COARSE AGGREGATE OR 6" (MINUS) ROCK.
6. ADDITIONAL PERIMETER BMPs MAY BE REQUIRED INCLUDING BUT NOT LIMITED TO SILT FENCE AND CONSTRUCTION FENCING.

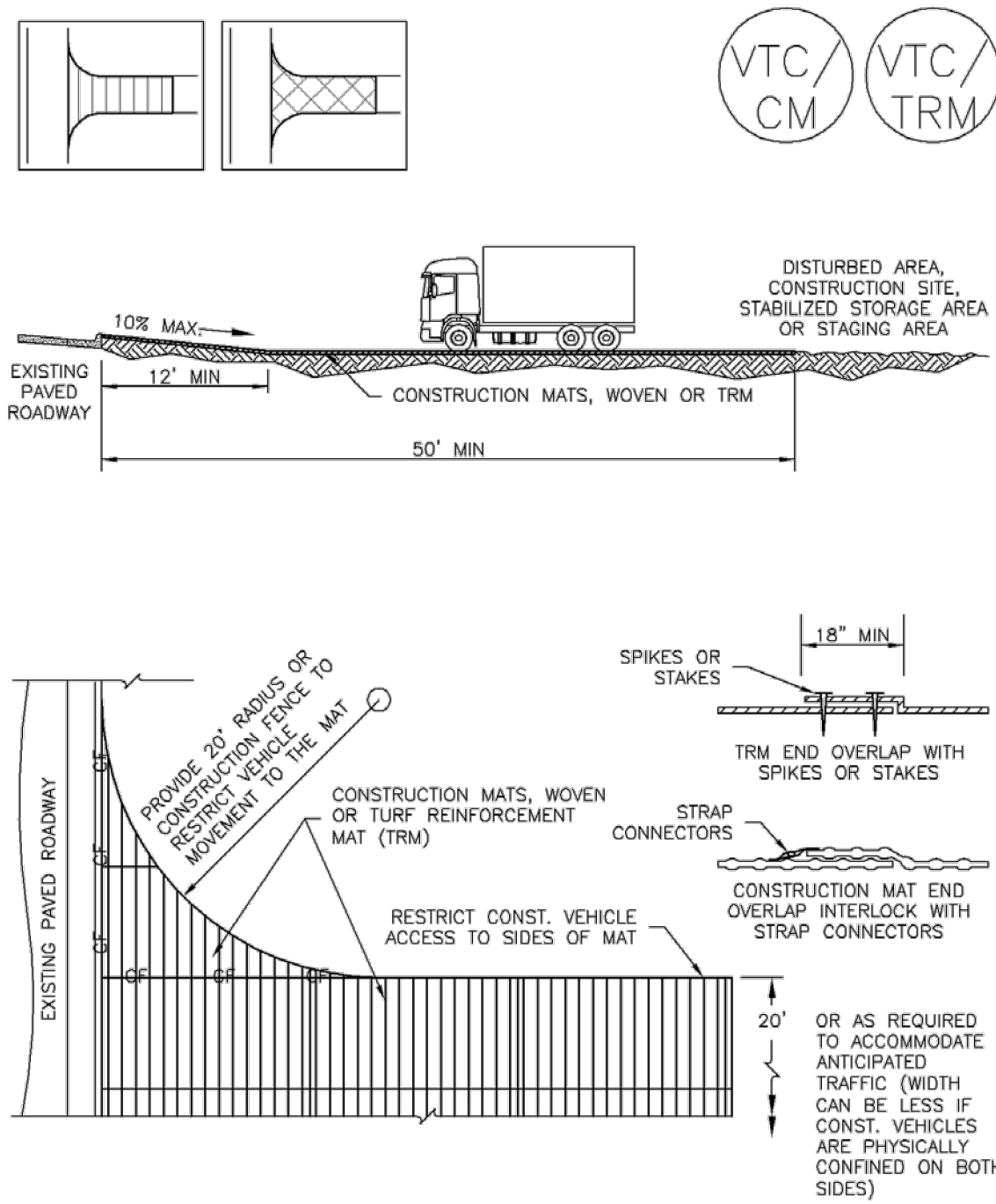
STABILIZED STAGING AREA MAINTENANCE NOTES

1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.
2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.
3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.
4. ROCK SHALL BE REAPPLIED OR REGRADED AS NECESSARY IF RUTTING OCCURS OR UNDERLYING SUBGRADE BECOMES EXPOSED.

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Vehicle Tracking Control (VTC)

SM-4



VTC-3. VEHICLE TRACKING CONTROL W/ CONSTRUCTION MAT OR TURF REINFORCEMENT MAT (TRM)

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SM-6

Stabilized Staging Area (SSA)

STABILIZED STAGING AREA MAINTENANCE NOTES

5. STABILIZED STAGING AREA SHALL BE ENLARGED IF NECESSARY TO CONTAIN PARKING, STORAGE, AND UNLOADING/LOADING OPERATIONS.
6. THE STABILIZED STAGING AREA SHALL BE REMOVED AT THE END OF CONSTRUCTION. THE GRANULAR MATERIAL SHALL BE REMOVED OR, IF APPROVED BY THE LOCAL JURISDICTION, USED ON SITE, AND THE AREA COVERED WITH TOPSOIL, SEEDED AND MULCHED OR OTHERWISE STABILIZED IN A MANNER APPROVED BY LOCAL JURISDICTION.

NOTE: MANY MUNICIPALITIES PROHIBIT THE USE OF RECYCLED CONCRETE AS GRANULAR MATERIAL FOR STABILIZED STAGING AREAS DUE TO DIFFICULTIES WITH RE-ESTABLISHMENT OF VEGETATION IN AREAS WHERE RECYCLED CONCRETE WAS PLACED.

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

(DETAILS ADAPTED FROM DOUGLAS COUNTY, COLORADO, NOT AVAILABLE IN AUTOCAD)

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SM-4

Vehicle Tracking Control (VTC)

STABILIZED CONSTRUCTION ENTRANCE/EXIT INSTALLATION NOTES

1. SEE PLAN VIEW FOR
-LOCATION OF CONSTRUCTION ENTRANCE(S)/EXIT(S).
-TYPE OF CONSTRUCTION ENTRANCE(S)/EXIT(S) (WITH/WITHOUT WHEEL WASH, CONSTRUCTION MAT OR TRM).
2. CONSTRUCTION MAT OR TRM STABILIZED CONSTRUCTION ENTRANCES ARE ONLY TO BE USED ON SHORT DURATION PROJECTS (TYPICALLY RANGING FROM A WEEK TO A MONTH) WHERE THERE WILL BE LIMITED VEHICULAR ACCESS.
3. A STABILIZED CONSTRUCTION ENTRANCE/EXIT SHALL BE LOCATED AT ALL ACCESS POINTS WHERE VEHICLES ACCESS THE CONSTRUCTION SITE FROM PAVED RIGHT-OF-WAYS.
4. STABILIZED CONSTRUCTION ENTRANCE/EXIT SHALL BE INSTALLED PRIOR TO ANY LAND DISTURBING ACTIVITIES.
5. A NON-WOVEN GEOTEXTILE FABRIC SHALL BE PLACED UNDER THE STABILIZED CONSTRUCTION ENTRANCE/EXIT PRIOR TO THE PLACEMENT OF ROCK.
6. UNLESS OTHERWISE SPECIFIED BY LOCAL JURISDICTION, ROCK SHALL CONSIST OF DOT SECT. #703, AASHTO #3 COARSE AGGREGATE OR 6" (MINUS) ROCK.

STABILIZED CONSTRUCTION ENTRANCE/EXIT MAINTENANCE NOTES

1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.
 2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.
 3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.
 4. ROCK SHALL BE REAPPLIED OR REGRADED AS NECESSARY TO THE STABILIZED ENTRANCE/EXIT TO MAINTAIN A CONSISTENT DEPTH.
 5. SEDIMENT TRACKED ONTO PAVED ROADS IS TO BE REMOVED THROUGHOUT THE DAY AND AT THE END OF THE DAY BY SHOVELING OR SWEEPING. SEDIMENT MAY NOT BE WASHED DOWN STORM SEWER DRAINS.
- NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.

(DETAILS ADAPTED FROM CITY OF BROOMFIELD, COLORADO, NOT AVAILABLE IN AUTOCAD)

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T-2

Grass Swale

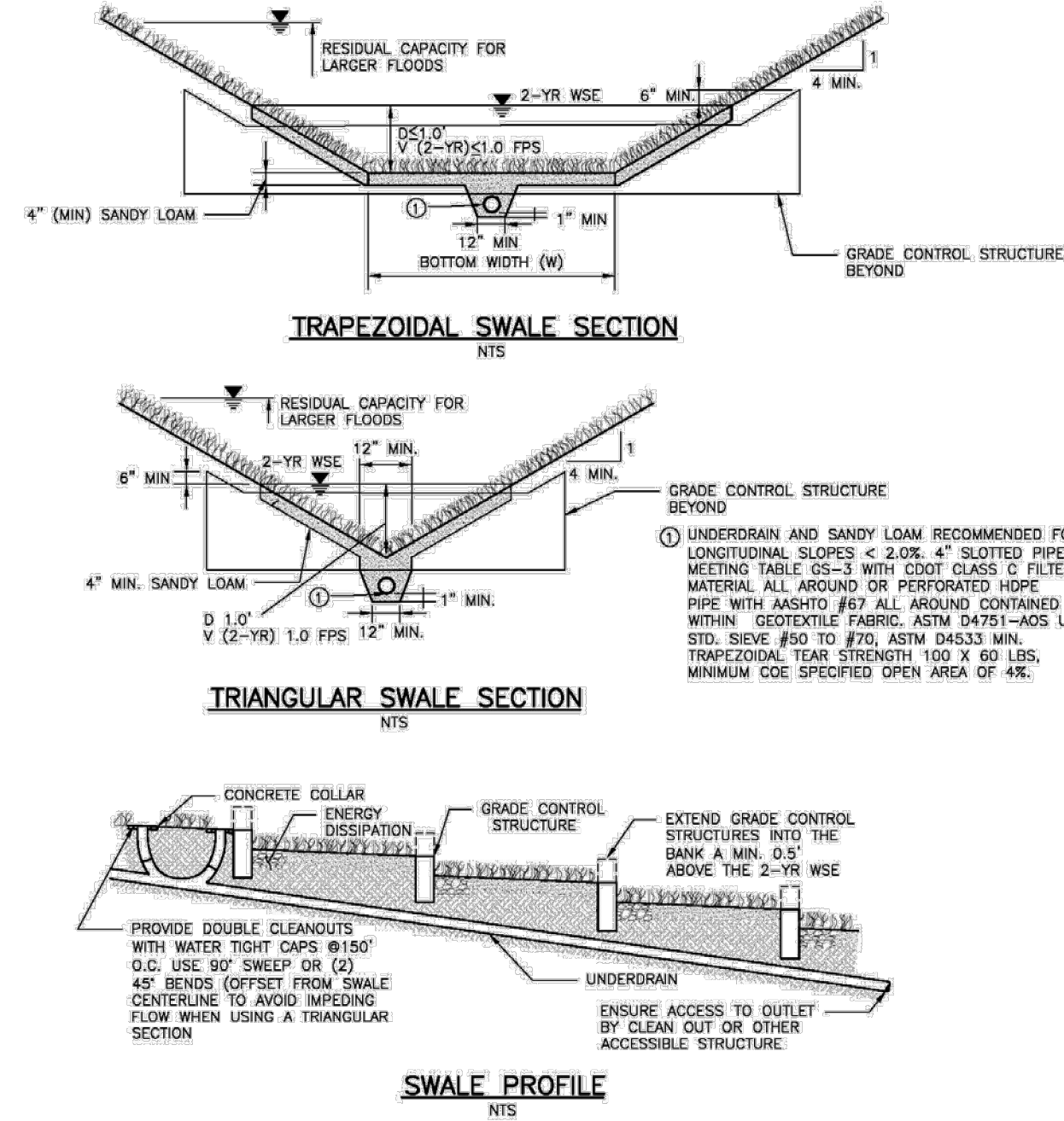


Figure GS-1. Grass Swale Profile and Sections

Design Example

The *UD-BMP* workbook, designed as a tool for both designer and reviewing agency is available at www.udfed.org. This section provides a completed design form from this workbook as an example.

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GEC DETAILS