Services to Planning and

1. CONSTRUCTION MAY NOT COMMENCE UNTIL A CONSTRUCTION PERMIT IS OBTAINED FROM DEVELOPMENT SERVICES ADN A PRECENCED TION CONFERENCE IS HELD WITH **DEVELOPMENT SERVICES** INSPECTIONS.

- 2. 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
- 3. 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
- 4. A SEPARATE STORMWATER MANAGEMENT PLAN (SMWP) 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 STORMWATER MANAGER, SHALL BE LOCATED ON SITE AT ALL TIMES AND SHALL BE KEPT UP TO DATE WITH WORK PROGRESS AND 🦯
- 5. ONCE THE ESQCP HAS BEEN ISSUED, THE CONTRACTOR MAY INSTALL THE INITIAL STAGE EROSION AND SEDIMENT CONTROL BMPS AS INDICATED ON THE 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 DSD INSPECTIONS STAFF.
- 6. SOIL EROSION CONTROL MEASURES FOR ALL SLOPES, CHANNELS, DITCHES, OR ANY DISTURBED LAND AREA SHALL BE COMPLETED WITHIN 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 SEEDED. ALL TEMPORARY SOIL EROSION CONTROL MEASURES AND BMPS SHALL BE MAINTAINED UNTIL PERMANENT SOIL EROSION CONTROL MEASURES ARE IMPLEMENTED AND ESTABLISHED.
- 7. TEMPORARY SOIL EROSION CONTROL FACILITIES SHALL BE REMOVED AND EARTH DISTURBANCE AREAS GRADED AND STABILIZED WITH PERMANENT SOIL EROSION CONTROL MEASURES PURSUANT TO STANDARDS AND SPECIFICATION PRESCRIBED IN THE DCM VOLUME II AND THE ENGINEERING
- 8. ALL PERSONS ENGAGED IN EARTH DISTURBANCE SHALL IMPLEMENT AND MAINTAIN ACCEPTABLE SOIL EROSION AND SEDIMENT CONTROL MEASURES INCLUDING BMPS IN CONFORMANCE WITH THE EROSION CONTROL TECHNICAL STANDARDS OF THE DRAINAGE CRITERIA MANUAL (DCM) VOLUME II AND IN ACCORDANCE WITH THE STORMWATER MANAGEMENT PLAN (SWMP).
- 9. ALL TEMPORARY EROSION CONTROL FACILITIES INCLUDING BMPS AND ALL PERMANENT FACILITIES INTENDED TO CONTROL EROSION OF ANY EARTH DISTURBANCE OPERATIONS, SHALL BE INSTALLED AS DEFINED IN THE APPROVED PLANS, THE SWMP AND THE DCM VOLUME II AND MAINTAINED THROUGHOUT THE DURATION OF THE EARTH DISTURBANCE OPERATION.
- 10. ANY EARTH DISTURBANCE SHALL BE CONDUCTED IN SUCH A MANNER SO AS TO EFFECTIVELY REDUCE 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.
- 11. ANY TEMPORARY OR PERMANENT FACILITY DESIGNED AND CONSTRUCTED FOR THE CONVEYANCE OF STORMWATER AROUND, THROUGH, OR FROM THE EARTH DISTURBANCE AREA SHALL BE DESIGNED TO LIMIT THE DISCHARGE TO A NON-EROSIVE VELOCITY.
- 12. 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.
- 13. EROSION CONTROL BLANKETING SHALL BE USED ON SLOPES STEEPER THAN 3:1.
- 14. BUILDING, CONSTRUCTION, EXCAVATION, OR OTHER 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. BMP'S MAY BE REQUIRED BY EL PASO COUNTY ENGINEERING IF DEEMED NECESSARY, BASED ON SPECIFIC CONDITIONS AND CIRCUMSTANCES.
- 15. VEHICLE TRACKING OF SOILS AND CONSTRUCTION DEBRIS OFF-SITE SHALL BE MINIMIZED. MATERIALS TRACKED OFFSITE SHALL BE CLEANED UP AND
- 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. THE OWNER, SITE DEVELOPER, CONTRACTOR, AND/OR THEIR AUTHORIZED AGENTS SHALL BE RESPONSIBLE FOR THE REMOVAL OF ALL CONSTRUCTION DEBRIS, DIRT, TRASH, ROCK, SEDIMENT, AND SAND THAT MAY ACCUMULATE IN THE STORM SEWER OR OTHER DRAINAGE CONVEYANCE SYSTEM AND STORMWATER APPURTENANCES AS A RESULT OF SITE DEVELOPMENT.
- 18. 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.
- 19. 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 ECM ADMINISTRATOR. IN GRANTING THE USE OF SUCH CHEMICALS, SPECIAL CONDITIONS AND MONITORING MAY BE REQUIRED.
- 20. BULK STORAGE STRUCTURES FOR PETROLEUM PRODUCTS AND OTHER CHEMICALS SHALL HAVE ADEQUATE PROTECTION SO AS TO CONTAIN ALL SPILLS AND PREVENT ANY SPILLED MATERIAL FROM ENTERING STATE WATERS, INCLUDING ANY SURFACE OR SUBSURFACE STORM DRAINAGE SYSTEM
- 21. NO PERSON SHALL CAUSE THE IMPEDIMENT OF STORMWATER FLOW IN THE FLOW LINE OF THE CURB AND GUTTER OR IN THE DITCHLINE
- 22. 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 DCM VOLUME II AND THE ECM 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
- 23, ALL CONSTRUCTION TRAFFIC MUST ENTER/EXIT THE SITE AT APPROVED CONSTRUCTION ACCESS POINTS.
- 24. PRIOR TO ACTUAL CONSTRUCTION THE PERMITTEE SHALL VERIFY THE LOCATION OF EXISTING UTILITIES.
- 25. A WATER SOURCE SHALL BE AVAILABLE ON SITE DURING EARTHWORK OPERATIONS AND UTILIZED AS REQUIRED TO MINIMIZE DUST FROM EARTHWORK EQUIPMENT AND WIND.
- 26. THE SOILS REPORT FOR THIS SITE HAS BEEN PREPARED BY ENTECH ENGINEERING, INC. AND SHALL BE CONSIDERED A PART OF THESE PLANS.
- 27. AT LEAST TEN 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

COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT WATER QUALITY CONTROL DIVISION, WQCD - PERMITS DENVER, CO 80246-1530

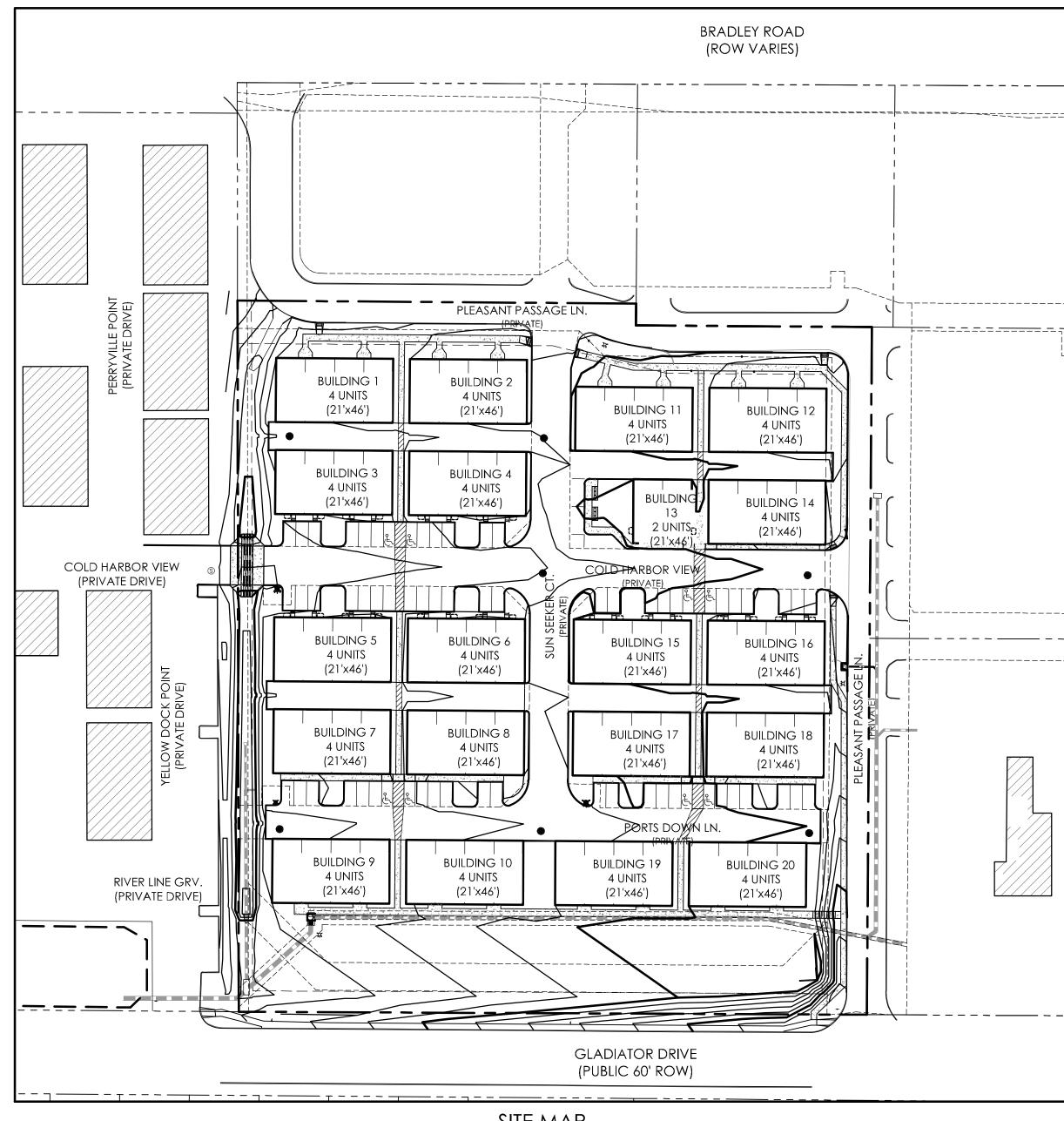
Submit a copy of the

GRADING NOTES:

- UNDERGROUND FACILITIES, STRUCTURES AND UTILITIES HAVE BEEN DRAWN FROM AVAILABLE RECORDS ANO/OR SURFACE EVIDENCE. THE LOCATION OF ALL UTILITIES MAY NOT BE SHOWN OR MAY NOT HAVE BEEN LOCATED. BELOW GROUND LOCATIONS HAVE NOT BEEN PERFORMED. THEREFORE, THE RELATIONSHIP BETWEEN PROPOSED WORK AND EXISTING FACILITIES, STRUCTURES AND UTILITIES MUST BE CONSIDERED APPROXIMATE. ALL UTILITIES SHALL BE LOCATED PRIOR TO ANY EARTH WORK OR DIGGING (1-800-922-1987). THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MAY BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY
- 2. CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING ALL SUBSURFACE UTILITY OWNERS PRIOR TO BEGINNING WORK TO DETERMINE LOCATION OF UTILITY FACILITIES.
- 3. EXISTING CONDITIONS SHALL BE VERIFIED BY THE GENERAL CONTRACTOR. DISCREPANCIES ARE TO BE REPORTED TO THE ENGINEER PRIOR TO
- 4. M.V.E., INC. OR THE ENGINEER ASSUMES NO RESPONSIBILITY OR LIABILITY FOR USE OF THIS GRADING PLAN FOR ANY OTHER PURPOSE THAN OVER
- 5. ALL WEEDS, TRASH, DEBRIS, RUBBLE, BROKEN ASPHALT, ORGANIC MATERIAL (EXCLUDING TOPSOIL) AND REFUSE, OR ANY OTHER MATERIAL WHICH WOULD NOT BE DELETERIOUS AS FILL MATERIAL OR INCAPABLE OF SUPPORTING THE BUILDING, VEHICULAR AND/OR OVERBURDEN LOADS TO BE IMPOSED SHALL BE CLEARED, GRUBBED OR EXCAVATED AS THE CASE MAY DICTATE PRIOR TO GRADING AND SHALL BE REMOVED FROM SITE AND
- 6. CONTOUR INTERVAL FOR EXISTING AND PROPOSED CONTOUR LINES IS 1.0'.
- 7. PROPOSED CONTOURS SHOWN ARE FINISH GRADES AND READ TO TOP OF PAVEMENT AND FINISH SOIL GRADE.
- 8. THE CONTRACTOR SHALL BE RESPONSIBLE TO PROTECT GRADED AREAS FROM, AND AS NECESSARY RESTORE TO GRADE, ANY RUTS, WASHES OR OTHER CHANGES FROM THE DESIGN ELEVATIONS SHOWN HEREON, UNTIL GRADING WORK IS ACCEPTED BY THE OWNER OR OWNER'S
- 9. THE CONTRACTOR SHALL ENDEAVOR NOT TO DISTURB ANY OFFSITE AREAS. THE CONTRACTOR SHALL RESTORE TO THE ORIGINAL CONDITION, ADJACENT (OFF-SITE) PROPERTY DISTURBED BY HIS OPERATIONS.
- 10. THE GENERAL CONTRACTOR SHALL STRIP TOPSOIL FROM CONSTRUCTION AREAS AND STOCKPILE TOPSOIL AT AREA SHOWN ON THIS PLAN. PLACE TOPSOIL WITH APPROPRIATE EROSION CONTROL AND IN A MANNER SO AS TO NOT CONFLICT WITH OTHER TRADES AND CONSTRUCTION PROCESS.
- 11. ALL GRADING SHALL BE DONE TO INSURE POSITIVE DRAINAGE AWAY FROM FOUNDATIONS AND STRUCTURES.
- 12. FINISHED GRADE OF ALL PERVIOUS EARTH SURFACES THAT CONTACT FOUNDATION WALLS SHALL BE A MINIMUM OF 6" BELOW ANY UNTREATED WOOD MATERIAL OR IN ACCORDANCE WITH APPLICABLE CODES AND THE RECOMMENDATIONS OF THE OWNER'S GEOTECHNICAL ENGINEERING
- 13. PERVIOUS EARTH SURFACES SHALL SLOPE AWAY FROM ALL FOUNDATION WALLS AT A MINIMUM RATE OF 6" IN 10 FEET (5%) FOR THE FIRST 10 FEET ADJACENT TO THE FOUNDATION OR IN ACCORDANCE WITH APPLICABLE CODES AND THE RECOMMENDATIONS OF THE OWNER'S GEOTECHNICAL ENGINEERING REPORT OR DESIGN.
- 14. CONCRETE OR OTHER IMPERVIOUS SURFACES THAT CONTACT FOUNDATION WALLS SHALL SLOPE AWAY FROM ALL FOUNDATION WALLS AT A MINIMUM RATE OF 1/4" PER FOOT (2.00%) OR IN ACCORDANCE WITH APPLICABLE CODES AND THE RECOMMENDATIONS OF THE OWNER'S GEOTECHNICAL ENGINEERING REPORT OR DESIGN.
- 15. ANY FILL MATERIAL REQUIRED TO BRING GRADES UP TO PROPOSED ELEVATIONS SHALL BE PROVIDED BY THE CONTRACTOR
- 16. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DISTRIBUTING TOPSOIL THROUGHOUT THE LAWN AND PLANTING AREAS ACCORDING TO APPROVED

GRADING AND EROSION CONTROL PLAN

THE TOWNHOMES AT BRADLEY CROSSROADS EL PASO COUNTY, COLORADO



- 17. THE NATURE OF WORK PROPOSED BY THIS PLAN IS GRADING AND THE EXTENT OF SAID PROPOSED GRADING IS SHOWN BY THE EXISTING AND PROPOSED CONTOURS HEREON.
- 18. CONTRACTOR SHALL USE MECHANICAL METHODS TO GO FROM THE EXISTING TO PROPOSED CONTOURS IN ACCORDANCE WITH THIS GRADING PLAN. QUALITY CONTROL OF SOILS AND GRADING OPERATION WILL BE AS DIRECTED BY OWNERS GEOTECHNICAL ENGINEER.
- 19. CONTRACTOR IN THE PERFORMANCE OF HIS GRADING WORK SHALL, AT ALL TIMES, WHETHER OR NOT SPECIFICALLY DIRECTED BY OWNER OR ENGINEER, STRICTLY OBSERVE SAFETY PROVISIONS OF ALL FEDERAL, STATE AND MUNICIPAL LAWS AND BUILDING AND CONSTRUCTION CODES RFI ATING TO PUBLIC SAFETY. CONTRACTOR SHALL CONTINUOUSLY CONDUCT HIS GRADING OPERATIONS WORK IN A MANNER THAT SUCH WORK WILL NOT BECOME A HAZARD TO LIFE AND LIMB, ENDANGER PROPERTY OR ADVERSELY AFFECT THE SAFETY, USE OR STABILITY OF THE PUBLIC WAY, DRAINAGE CHANNEL OR OTHER PROPERTY SHOWN ON THIS GRADING PLAN, GRADING OPERATIONS WORK COMPLETED IN ACCORDANCE WITH THIS GRADING PLAN WILL NOT BECOME A HAZARD TO LIFE AND LIMB, ENDANGER PROPERTY OR ADVERSELY AFFECT THE SAFETY, USE OR STABILITY OF THE PUBLIC WAY, DRAINAGE CHANNEL, OR OTHER PROPERTY SHOWN ON THIS GRADING PLAN.
- 20. Whenever Owner, engineer or city safety director or his designated representative becomes aware of contractors failure to COMPLY WITH APPLICABLE SAFETY REGULATIONS, THE OWNER, ENGINEER OR CITY SAFETY DIRECTOR OR HIS DESIGNATED REPRESENTATIVE WILL INFORM THE CONTRACTOR WHO SHALL TAKE IMMEDIATE STEPS TO REMEDY THE NONCOMPLIANCE.
- SEDIMENT TRANSFER TO ADJACENT PROPERTIES. EROSION CONTROL MEASURES ARE NOT LIMITED TO THOSE NOTED ON THE EROSION CONTROL A. ALL DISTURBED AREAS SHALL BE REVEGETATED OR OTHERWISE LANDSCAPED AFTER CONSTRUCTION IN ACCORDANCE WITH THE REVEGETATION

21. Contractor shall provide appropriate erosion control measures during earthwork operations to control erosion and

- GUIDELINES CONTAINED IN THE STANDARD EROSION CONTROL NOTES ON THIS PLAN AND IN ACCORDANCE WITH THE APPROVED LANDSCAPE PLAN FOR THIS PROJECT. THE APPROVED LANDSCAPE PLAN DEPICTS SOD AND SEEDING AREAS WITH SPECIFIED TYPES AND AMOUNTS.
- B. NETTING WILL BE PLACED ON CONSTRUCTED SLOPES GREATER THAN 3:1. SLOPE VALUES ARE ARE SHOWN ON THE PLAN. NETTING SHALL BE GREENFIX AMERICA WS072 OR EQUAL AGRICULTURAL STRAW BLANKET WITH PHOTODEGRADABLE NETTING ON BOTH SIDES. NETTING SHALL BE INSTALLED ACCORDING TO MANUFACTURER'S SPECIFICATIONS.
- C. STRAW BALES WILL BE PLACED AT TOP OF NEWLY CONSTRUCTED SLOPES OF 3:1 OR GREATER AT SELECTED LOCATIONS AS REQUIRED. D. PLACE SILT FENCE AS SHOWN ON THE EROSION CONTROL PLAN AND AS MAY BE REQUIRED TO PREVENT SEDIMENT MOVEMENT TO ADJACENT

PROPERTY, STRAW BALES OR EROSION CONTROL LOGS MAY BE SUBSTITUTED WITH APPROVAL OF THE ENGINEER.

22. ALL WORK IN THE PUBLIC RIGHT-OF-WAY SHALL BE PERFORMED ACCORDING TO THE CITY OF COLORADO SPRINGS STANDARD SPECIFICATIONS,

SHEET INDEX

SHEET TITLE

COVER SHEET

CIVIL DETAILS

GRADING PLAN (NORTH)

GRADING PLAN (SOUTH)

EROSION CONTROL PLAN

EROSION CONTROL DETAILS 61093-GEC-ED

SHEET NO.

C 1.1

C 1.2

C 1 3

C 1.4

C 1.5

DRAWING NO.

61093-GEC-CS

61093-GEC-GP

61093-GEC-GP2

61093-GEC-CD

61093-GEC-EC

OWNERS STATEMENT

MAP NOTES

FLOODPLAIN STATEMENT

----- EASEMENT LINE

_ _ _ _ _ _ _ _ _ _

· 00000000000 ·

ANTICIPATED STARTING AND COMPLETION TIME PERIOD OF SITE GRADING:

EXPECTED DATE ON WHICH THE FINAL STABILIZATION WILL BE COMPLETED:

ADJACENT PROPERTY LINE

INTERMEDIATE CONTOUR

BUILDING OVERHANG

RETAINING WALL - SOLID/

ROCK

CHAIN LINK FENCE

BARBED WIRE FENCE

CONCRETE AREA

CURB AND GUTTER

ASPHALT AREA

- DECK

BOLLARD

AREAS
TOTAL AREA OF THE SITE TO BE CLEARED, EXCAVATED OR GRADED:

I, THE OWNER/DEVELOPER HAVE READ AND WILL COMPLY WITH ALL OF THE REQUIREMENTS SPECIFIED IN THESE DETAILED PLANS AND SPECIFICATIONS.

(EVERGREEN/DECIDUOUS) FF = 5986.00

1. BOUNDARY BEARINGS AND DISTANCES SHOWN ON THIS MAP ARE RELATIVE TO THE SOUTH LINE OF LOT 1A, BRADLEY CROSSROADS

2. THE EXISTING TOPOGRAPHY SHOWN ON THIS PLAN WAS PREPARED BY MVE, INC. USING DATA PROVIDED BY POLARIS SURVEYING INC.

NO PORTION OF THE SUBJECT PROPERTY IS LOCATED WITHIN FEMA DESIGNATED SPECIAL FLOOD HAZARD AREA (SFHA'S) AS INDICATED ON

THE FLOOD INSURANCE RATE MAP (FIRM) FOR EL PASO COUNTY, COLORADO AND INCORPORATED AREAS - MAP NUMBER 08041 C0763F,

natch the property line shown on the

LEGEND

NOVEMBER 2018 - NOVEMBER, 2019

INDEX CONTOUR

— INTERMEDIATE CONTOUR

CONCRETE AREA

ASPHALT AREA

CURB AND GUTTER

RETAINING WALL - SOLID

TOP OF CURB/FLOWLINE

FL = FLOWLINE

FINISHED FLOOR ELEVATION

BOLLARD

BUILDING OVERHANG

TOP OF WALL/GRADE AT BOTTOM

TSW = TOP OF SIDEWALK

 ∞

NOVEMBER, 2019

ELEVATIONS SHOWN ARE RELATIVE TO THE CITY OF COLORADO SPRINGS CONTROL NETWORK (FIMS DATUM).

RECEIVING WATERS:

NAME OF RECEIVING WATERS:

Property line shown on legend does not unitally Creek

ENGINEER'S STATEMENT

THESE DETAILED PLANS AND SPECIFICATIONS WERE PREPARED UNDER MY DIRECTION AND SUPERVISION. SAID DETAILED PLANS AND SPECIFICATIONS HAVE BEEN PREPARED ACCORDING TO THE CRITERIA ESTABLISHED BY THE COUNTY FOR DETAILED PLANS AND SPECIFICATIONS, AND SAID DETAILED PLANS AND SPECIFICATIONS ARE IN CONFORMITY WITH THE MASTER PLAN OF THE DRAINAGE BASIN. SAID DETAILED DRAINAGE PLANS AND SPECIFICATIONS MEET THE PURPOSES FOR WHICH THE PARTICULAR DRAINAGE FACILITY IS DESIGNED. I ACCEPT responsibility for any liability caused by any negligent acts, errors or omissions on my part in PREPARATION OF THE DETAILED DRAINAGE PLANS AND SPECIFICATIONS.

DAVID R. GORMAN, P.E. COLORADO NO. 31672 DATE FOR AND ON BEHALF OF M.V.E., INC.

EL PASO COUNTY

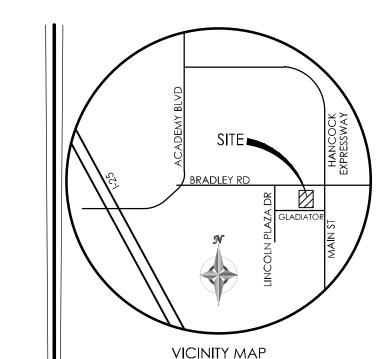
COUNTY PLAN REVIEW IS PROVIDED ONLY FOR GENERAL CONFORMANCE WITH COUNTY DESIGN CRITERIA. THE COUNTY IS NOT RESPONSIBLE FOR THE ACCURACY AND ADEQUACY OF THE DESIGN, DIMENSIONS, AND/OR ELEVATIONS WHICH SHALL BE CONFIRMED AT THE JOB SITE. THE COUNTY THROUGH THE APPROVAL OF THIS DOCUMENT ASSUMES NO RESPONSIBILITY 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.

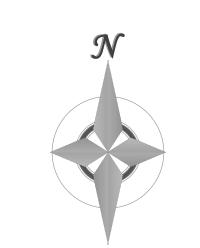
IN ACCORDANCE WITH ECM SECTION 1.12, THESE CONSTRUCTION DOCUMENTS WILL BE VALID FOR CONSTRUCTION FOR A PERIOD OF 2 YEARS FROM THE DATE SIGNED BY THE EL PASO COUNTY ENGINEER. IF CONSTRUCTION HAS NOT STARTED WITHIN THOSE 2 YEARS, THE PLANS WILL NEED TO BE RESUBMITTED FOR APPROVAL, INCLUDING PAYMENT OF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

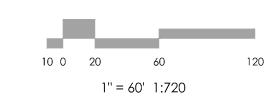
JENNIFER IRVINE, P.E. COUNTY ENGINEER / ECM ADMINISTRATOR

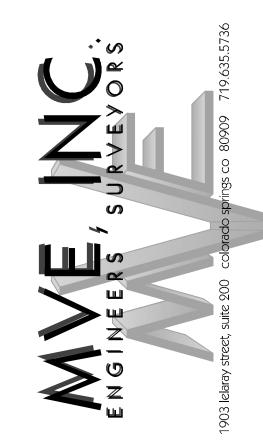
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BENCHMARK





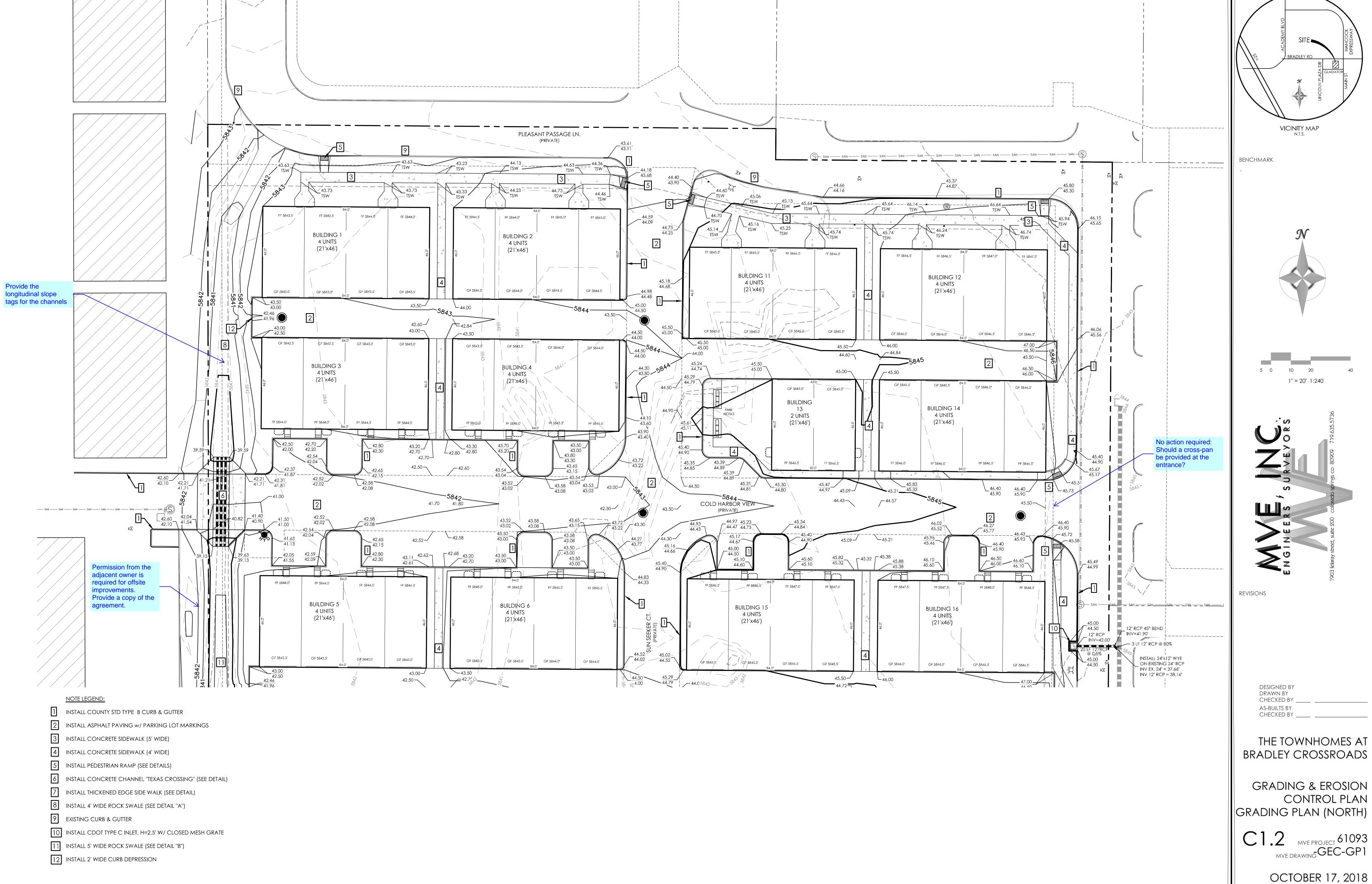


REVISIONS

DESIGNED BY DRAWN BY CHECKED BY AS-BUILTS BY CHECKED BY

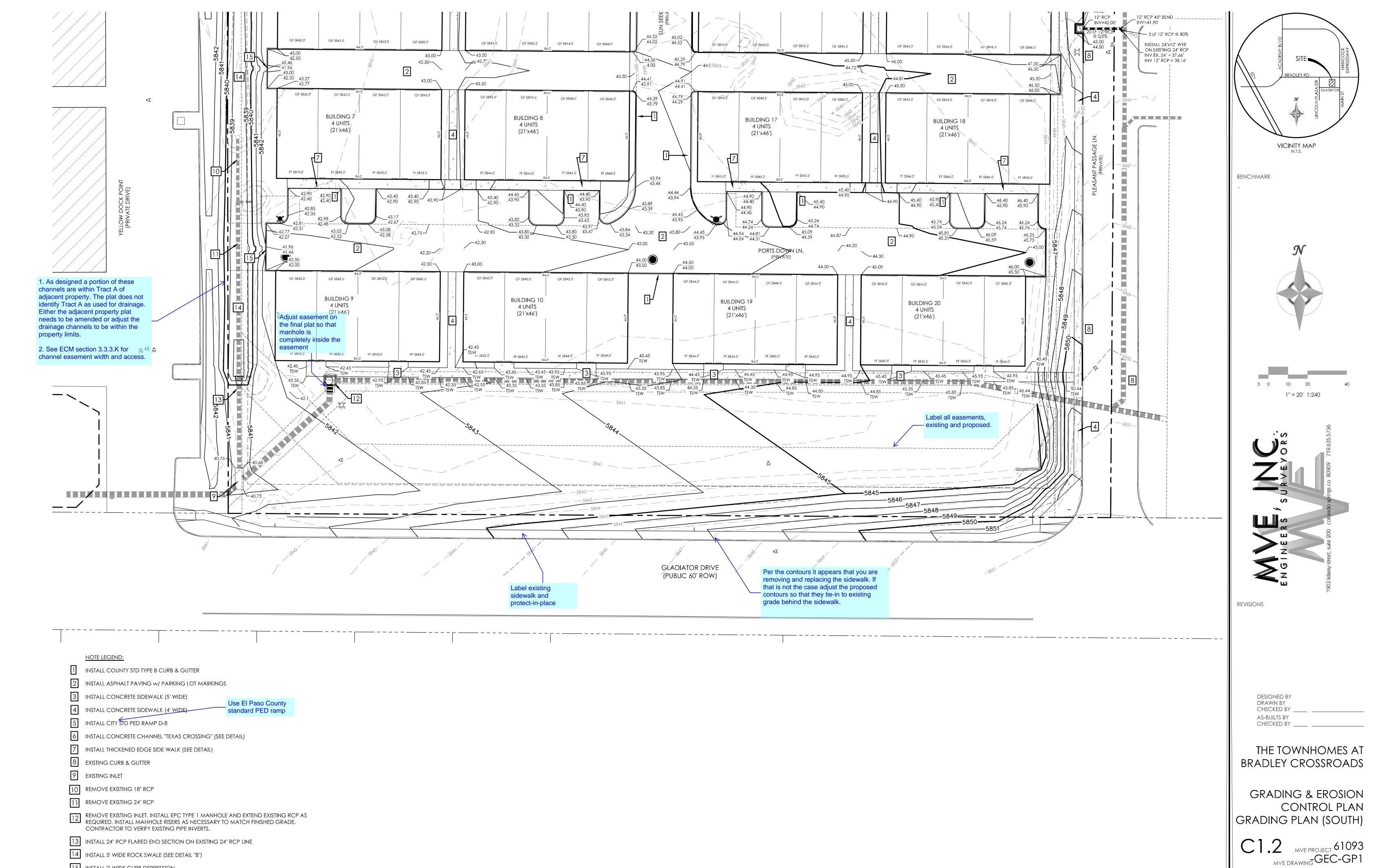
THE TOWNHOMES AT **BRADLEY CROSSROADS**

GRADING & EROSION



Z:\61093_Sheet Dwgs\61093-GEC-GP.cwg, 10/17/2018 10:25:29 AM, TJCAD

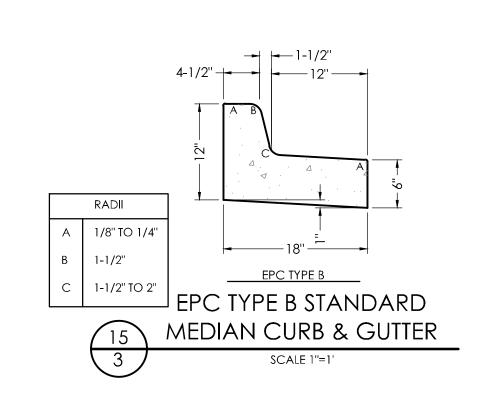
SHEET 2 OF 6

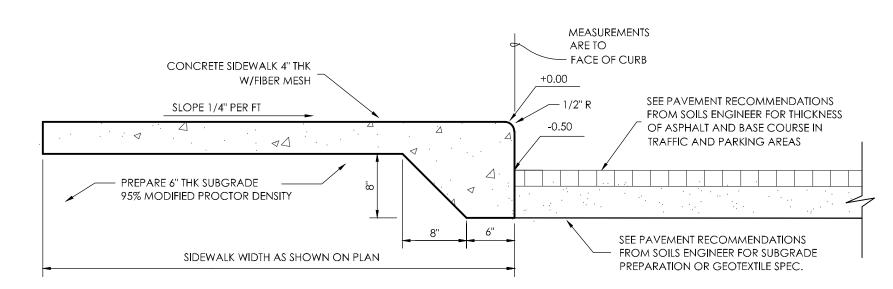


OCTOBER 17, 2018

SHEET 3 OF 6

15 INSTALL 2' WIDE CURB DEPRESSION

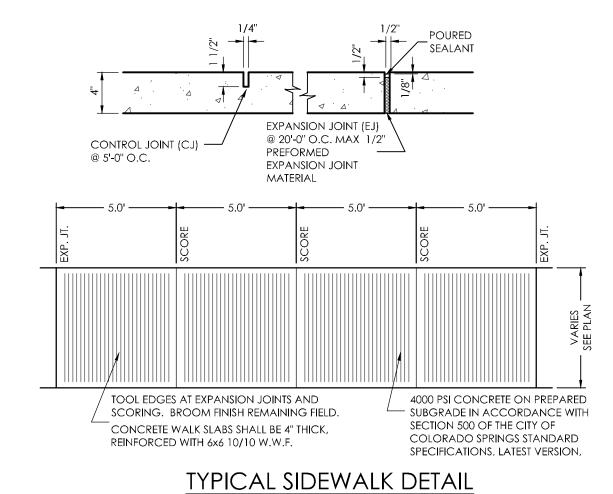




THICKENED EDGE SIDEWALK

SCALE: 1" = 1.0'

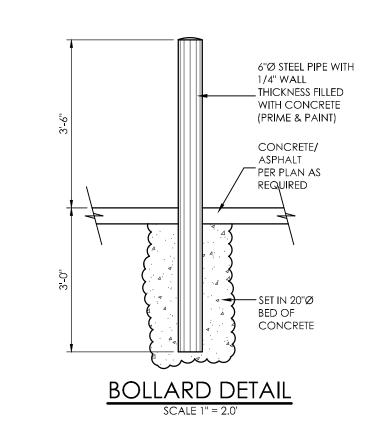
STANDARD TYPE 3 CURB (SEE DETAIL) EARTH †
BEHIND —
CURB FRONT VIEW † FLOW CURB DEPRESSION DETAIL

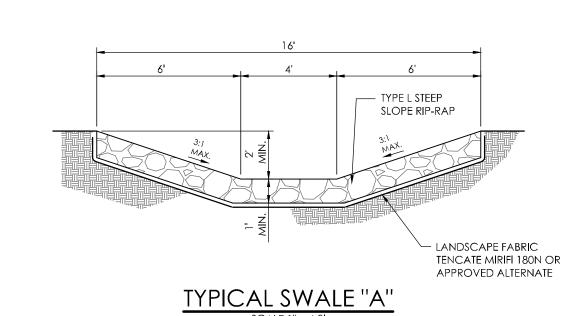


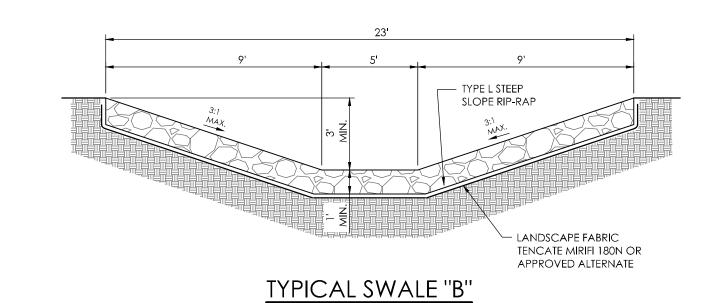
standard parallel

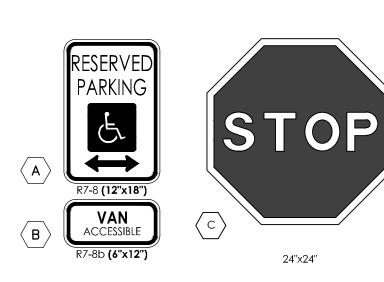
pedestrian ramp

detail SD_2-50



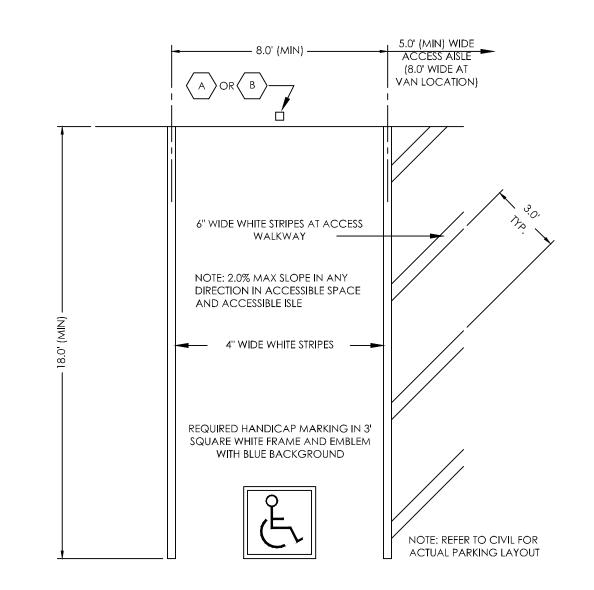




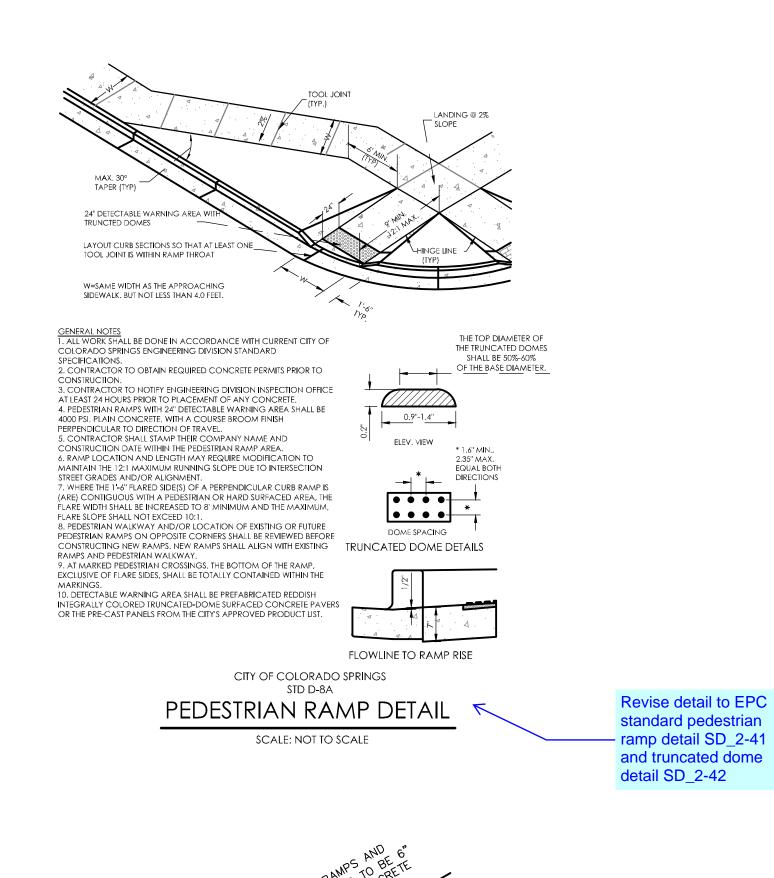


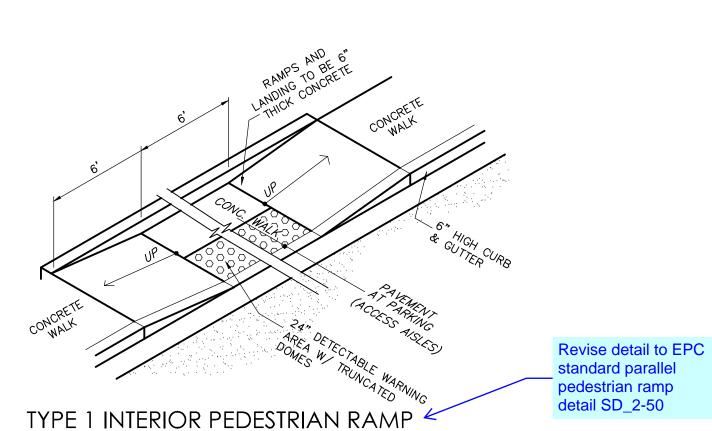
- 1. TYPOGRAPHY TO BE HELVETICA MEDIUM
- 2. NOTE: REFER TO SITE PLAN FOR LOCATIONS
- 3. REMOVE EXISTING SIGNS AND REUSE WHERE APPLICABLE (NOT SHOWN).
- 4. STOP SIGNS WILL BE INSTALLED BY THE DEVELOPER AT THE LOCATIONS SHOWN ON THE DEVELOPMENT PLAN TO MEET MUTCD STANDARDS AND THE CITY OF COLORADO SPRINGS TRAFFIC ENGINEERING STANDARDS.

SITE SIGNAGE SCALE 1" = 1.0'

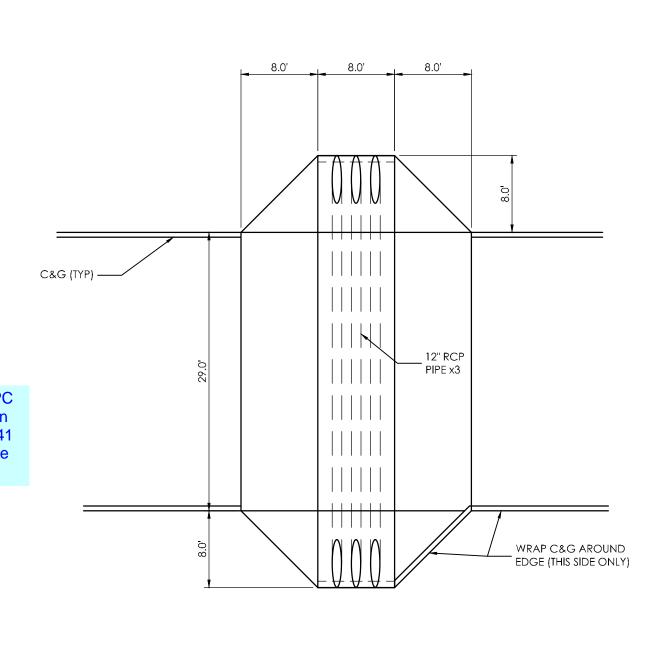


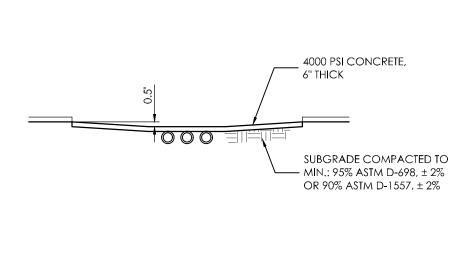
TYPICAL HANDICAP PARKING SPACE



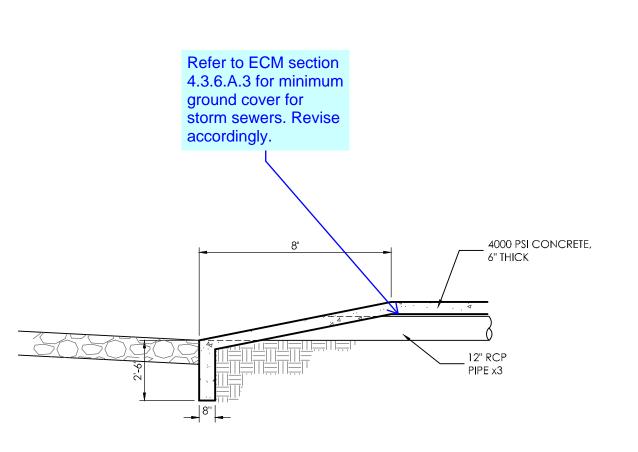


SCALE 1" = 4'

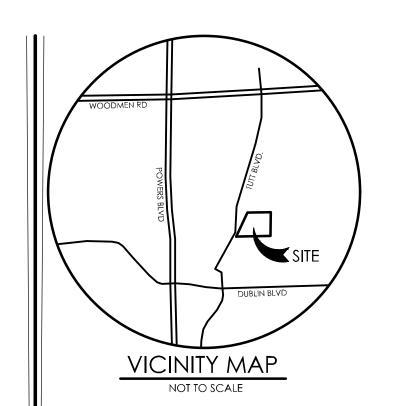




"TEXAS CROSSING" DETAIL



"TEXAS CROSSING" END DETAIL



BENCHMARK

revisions

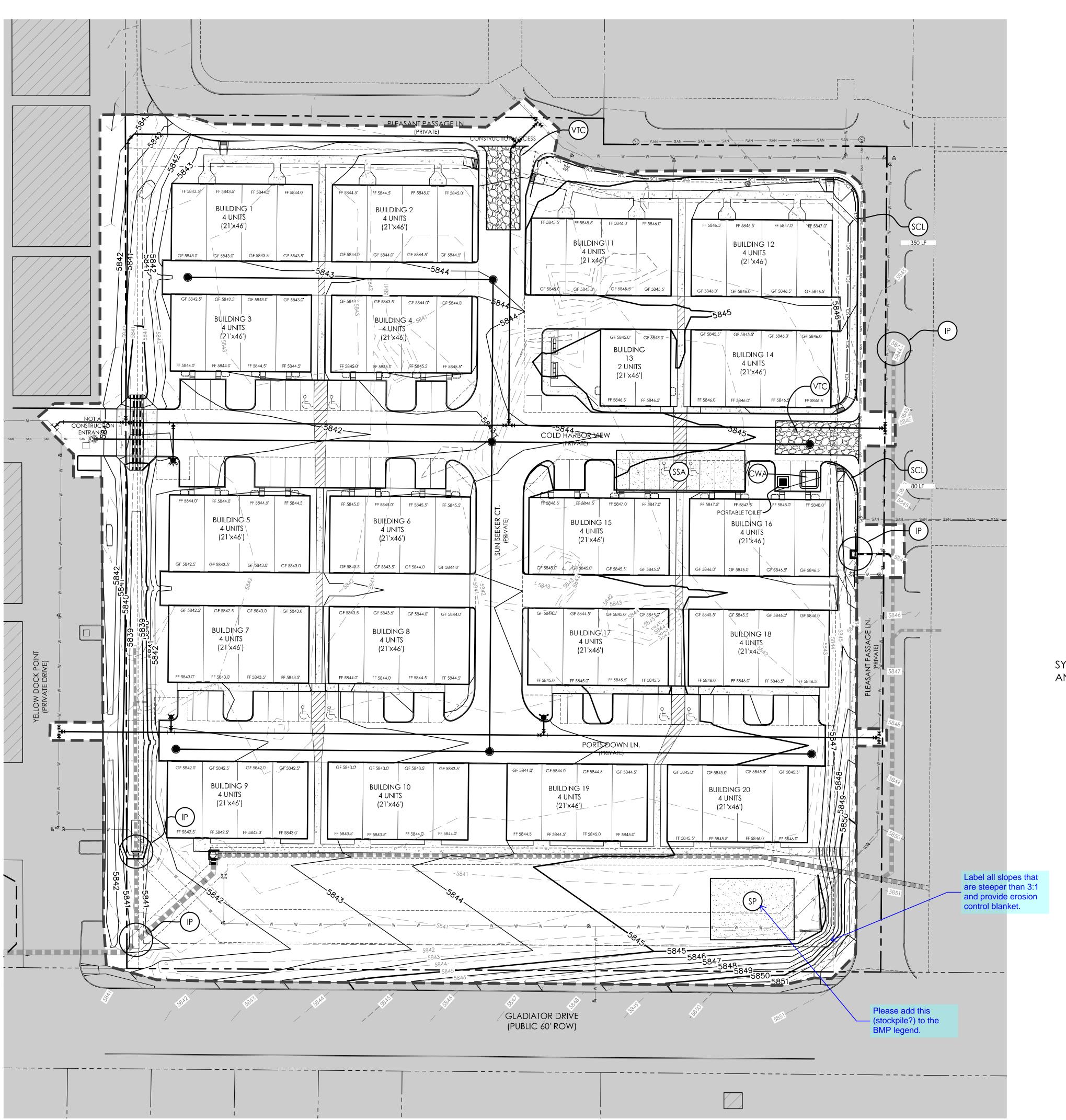
DESIGNED BY DRAWN BY CHECKED BY AS-BUILTS BY CHECKED BY

THE TOWNHOMES AT BRADLEY CROSSROADS

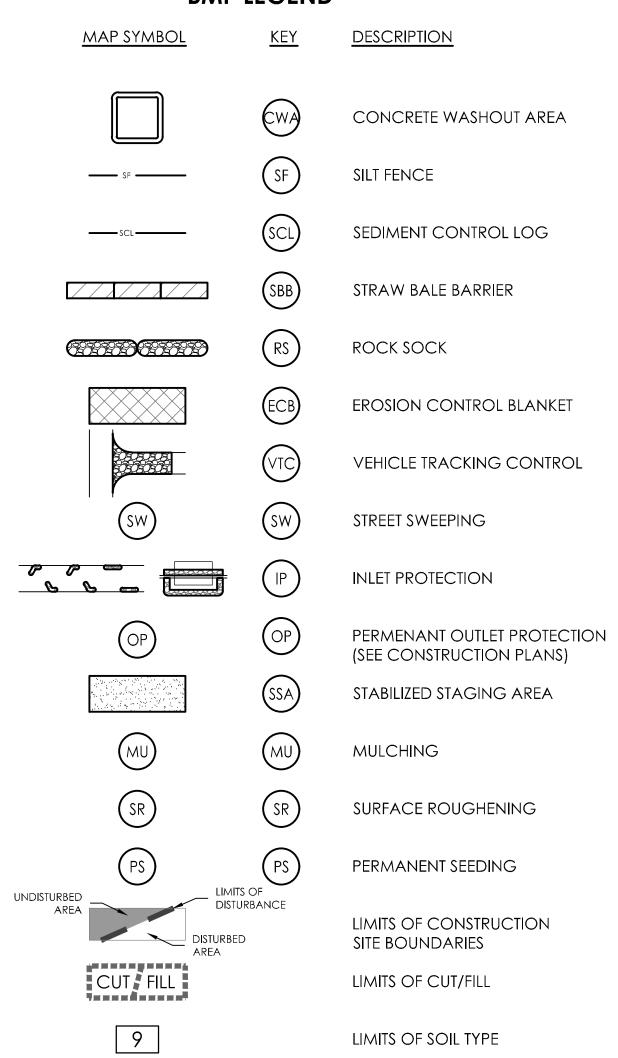
GRADING & EROSION CONTROL PLAN CIVIL DETAILS

.4 MVE PROJECT 61093 MVE DRAWING -GEC-CD

OCTOBER 17, 2018 SHEET 4 OF 6



BMP LEGEND



SYMBOLS SHOWN IN LEGEND SHALL BE USED BY SWMP ADMINISTRATOR TO ANNOTATE ANY CHANGES AND/OR ADDITIONS TO THIS PLAN.

NOVEMBER, 2018 TO NOVEMBER,

2019

SEPTEMBER, 2019 TO

JUNE, 2020

5.28 ACRES

LITTLE

JOHNSON

BLAKELAND LOAMY SAND

RAPID

LOW

MODERATE

0%

85.0%

HYDROLOGIC SOIL GROUP		EROSION CONTROL DATA TIMING	
MAP UNIT NUMBER	DESCRIPTION	ANTICIPATED START & COMPLETION TIME PERIOD OF SITE GRADING	NOV 201 NOV 2
8	BLAKELAND LOAMY SAND	EXPTECTED DATE ON WHICH FINAL STABILIZATION WILL BE COMPLETED	SEPT 201 JUNE
		AREAS TOTAL AREA OF THE SITE TO BE CLEARED, EXCAVATED OR GRADED	5.28
		RECEIVING WATERS NAME OF RECEIVING WATERS	LI JOH
		SOIL DATA PRIMARY SOIL DESCRIPTION	BLAH LOAM

PERMEABILITY

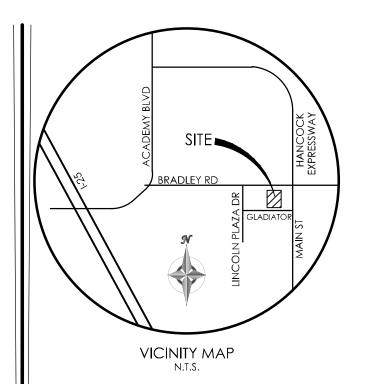
SURFACE RUNOFF

HYDROLOGIC SOIL

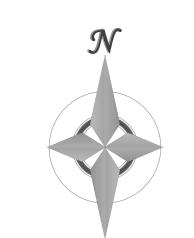
EXISTING PERCENT IMPERVIOUS

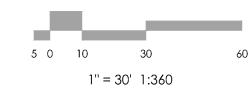
DEVELOPED PERCENT IMPERVIOUS

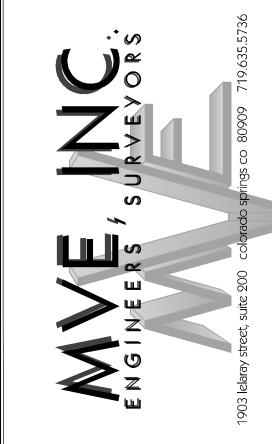
HAZARD OF EROSION



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REVISIONS

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THE TOWNHOMES AT BRADLEY CROSSROADS

GRADING & EROSION

CONTROL PLAN

EROSION CONTROL PLAN

C1.5 MVE PROJECT 61093
MVE DRAWING GEC-EC

OCTOBER 17, 2018 SHEET 5 OF 6

SECTION A SF-1. SILT FENCE

SILT FENCE INSTALLATION NOTES:

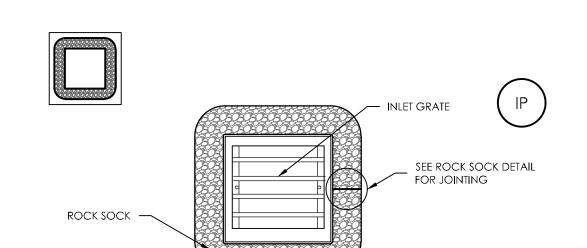
I. SILT FENCE MUST BE PLACED AWAY FROM THE TOE OF THE SLOPE TO ALLOW FOR WATER PONDING. SILT FENCE AT THE TOE OF A SLOPE SHOULD BE INSTALLED IN A FLAT LOCATION AT LEAST SEVERAL FEET

- (2-5 FT) FROM THE TOE OF THE SLOPE TO ALLOW ROOM FOR PONDING AND DEPOSITION. 2. A UNIFORM 6" X 4" ANCHOR TRENCH SHALL BE EXCAVATED USING TRENCHER OR SILT FENCE INSTALLATION DEVICE. NO ROAD GRADERS. BACKHOES. OR SIMILAR EQUIPMENT SHALL BE USED.
- COMPACTION SHALL BE SUCH THAT SILT FENCE RESISTS BEING PULLED OUT OF ANCHOR TRENCH BY 4. SILT FENCE SHALL BE PULLED TIGHT AS IT IS ANCHORED TO THE STAKES. THERE SHOULD BE NO
- NOTICEABLE SAG BETWEEN STAKES AFTER IT HAS BEEN ANCHORED TO THE STAKES. 5. SILT FENCE FABRIC SHALL BE ANCHORED TO THE STAKES USING I" HEAVY DUTY STAPLES OR NAILS WITH 1"

3. COMPACT ANCHOR TRENCH BY HAND WITH A "JUMPING JACK" OR BY WHEEL ROLLING.

- HEADS. STAPLES AND NAILS SHOULD BE PLACED 3" ALONG THE FABRIC DOWN THE STAKE. 6. AT THE END OF A RUN OF SILT FENCE ALONG A CONTOUR, THE SILT FENCE SHOULD BE TURNED PERPENDICULAR TO THE CONTOUR TO CREATE A "J—HOOK." THE "J—HOOK" EXTENDING
- PERPENDICULAR TO THE CONTOUR SHOULD BE OF SUFFICIENT LENGTH TO KEEP RUNOFF FROM FLOWING AROUND THE END OF THE SILT FENCE (TYPICALLY 10' - 20'). 7. SILT FENCE SHALL BE INSTALLED PRIOR TO ANY LAND DISTURBING ACTIVITIES.
- <u>SILT FENCE MAINTENANCE NOTES</u>

 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
- 3. WHERE BMPS HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE
- 4. SEDIMENT ACCUMULATED UPSTREAM OF THE SILT FENCE SHALL BE REMOVED AS NEEDED TO MAINTAIN THE FUNCTIONALITY OF THE BMP, TYPICALLY WHEN DEPTH OF ACCUMULATED SEDIMENTS IS
- 5. REPAIR OR REPLACE SILT FENCE WHEN THERE ARE SIGNS OF WEAR, SUCH AS SAGGING, TEARING, OR
- 6. SILT FENCE IS TO REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS STABILIZED AND APPROVED
- BY THE LOCAL JURISDICTION, OR IS REPLACED BY AN EQUIVALENT PERIMETER SEDIMENT CONTROL BMP 7. WHEN SILT FENCE IS REMOVED. ALL DISTURBED AREAS SHALL BE COVERED WITH TOPSOIL, SEEDED AND MULCHED OR OTHERWISE STABILIZED AS APPROVED BY LOCAL JURISDICTION.

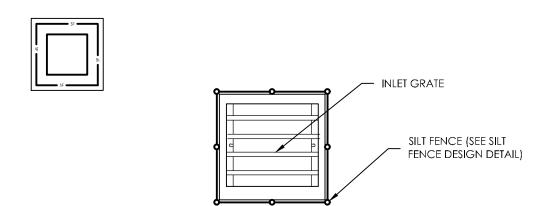


IP-3. ROCK SOCK SUMP/AREA INLET PROTECTION

ROCK SOCK SUMP/AREA INLET PROTECTION INSTALLATION NOTES

1. SEE ROCK SOCK DESIGN DETAIL FOR INSTALLATION REQUIREMENTS

2. STRAW WATTLES/SEDIMENT CONTROL LOGS MAY BE USED IN PLACE OF ROCK SOCKS FOR INLETS IN PERVIOUS AREAS. INSTALL PER SEDIMENT CONTROL LOG DETAIL.



IP-4. SILT FENCE FOR SUMP INLET PROTECTION

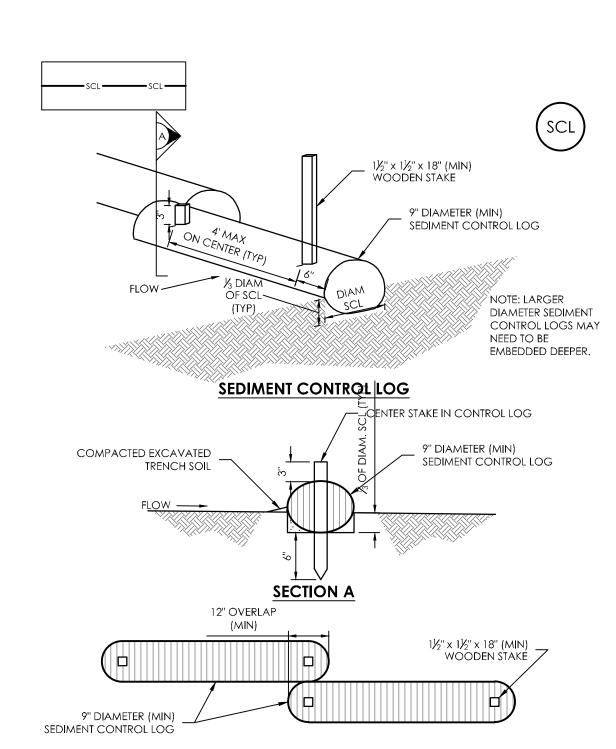
SILT FENCE INLET PROTECTION INSTALLATION NOTES

1. SEE SILT FENCE DESIGN DETAIL FOR INSTALLATION REQUIREMENTS.

AREAS. INSTALL PER SEDIMENT CONTROL LOG DETAIL.

2. POSTS SHALL BE PLACED AT EACH CORNER OF THE INLET AND AROUND THE EDGES AT A MAXIMUM

3. STRAW WATTLES/SEDIMENT CONTROL LOGS MAY BE USED IN PLACE OF SILT FENCE FOR INLETS IN PERVIOUS



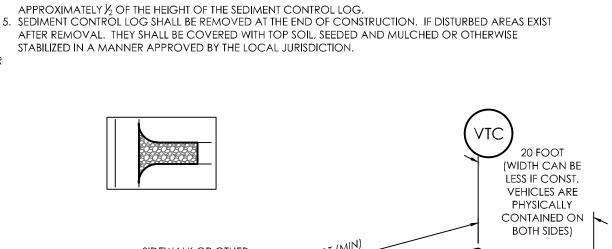
SEDIMENT CONTROL LOG JOINTS

SCL-1. SEDIMENT CONTROL LOG

SEDIMENT CONTROL LOG INSTALLATION NOTES:

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

- 2. SEDIMENT CONTROL LOGS THAT ACT AS A PERIMETER CONTROL SHALL BE INSTALLED PRIOR TO ANY UPGRADIENT LAND—DISTURBING ACTIVITIES.
- 3. SEDIMENT CONTROL LOGS SHALL CONSIST OF STRAW, COMPOST, EXCELSIOR OR COCONUT FIBER, AND SHALL BE FREE OF ANY NOXIOUS WEED SEEDS OR DEFECTS INCLUDING RIPS, HOLES AND OBVIOUS WEAR. 4. SEDIMENT CONTROL LOGS MAY BE USED AS SMALL CHECK DAMS IN DITCHES AND SWALES. HOWEVER, THEY SHOULD NOT BE USED IN PERENNIAL STREAMS OR HIGH VELOCITY DRAINAGE WAYS.
- 5. IT IS RECOMMENDED THAT SEDIMENT CONTROL LOGS BE TRENCHED INTO THE GROUND TO A DEPTH OF APPROXIMATELY 1/3 OF THE DIAMETER OF THE LOG. IF TRENCHING TO THIS DEPTH IS NOT FEASIBLE AND/OR DESIRABLE (SHORT TERM INSTALLATION WITH DESIRE NOT TO DAMAGE LANDSCAPE) A LESSER TRENCHING DEPTH MAY BE ACCEPTABLE WITH MORE ROBUST STAKING
- 6. THE UPHILL SIDE OF THE SEDIMENT CONTROL LOG SHALL BE BACKFILLED WITH SOIL THAT IS FREE OF ROCKS AND DEBRIS. THE SOIL SHALL BE TIGHTLY COMPACTED INTO THE SHAPE OF A RIGHT TRIANGLE USING A SHOVEL OR WEIGHTED LAWN ROLLER.
- 7. FOLLOW MANUFACTURERS' GUIDANCE FOR STAKING. IF MANUFACTURERS' INSTRUCTIONS DO NOT SPECIFY SPACING, STAKES SHALL BE PLACED ON 4' CENTERS AND EMBEDDED A MINIMUM OF 6" INTO THE STABILIZED IN A MANNER APPROVED BY THE LOCAL JURISDICTION. GROUND. 3" OF THE STAKE SHALL PROTRUDE FROM THE TOP OF THE LOG. STAKES THAT ARE BROKEN PRIOR TO INSTALLATION SHALL BE REPLACED.



CENTER STAKE IN CONTROL LOG

TREE LAWN (TYPICAL)

SCL-2. SEDIMENT CONTROL LOG AT BACK OF CURB

SCL-3. SEDIMENT CONTROL LOG AT SIDEWALK WITH TREE LAWN

SCL-4. SEDIMENT CONTROL LOGS TO CONTROL SLOPE LENGTH

SEDIMENT CONTROL LOG MAINTENANCE NOTES

. INSPECT BMPS EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION.

NECESSARY MAINTENANCE.

THOROUGHLY.

FAILURE.

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

FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPS IN EFFECTIVE

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

4. SEDIMENT ACCUMULATED UPSTREAM OF SEDIMENT CONTROL LOG SHALL BE REMOVED AS NEEDED TO

MAINTAIN FUNCTIONALITY OF THE BMP, TYPICALLY WHEN DEPTH OF ACCUMULATED SEDIMENTS IS

OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED

COMPACTED EXCAVATED

TRENCH SOIL

- CENTER STAKE IN CONTROL LOG

PLACE LOG AGAINST BACK OF CURB

9" DIAMETER (MIN)

SEDIMENT CONTROL LOG

SIDEWALK

9" DIAMETER (MIN)

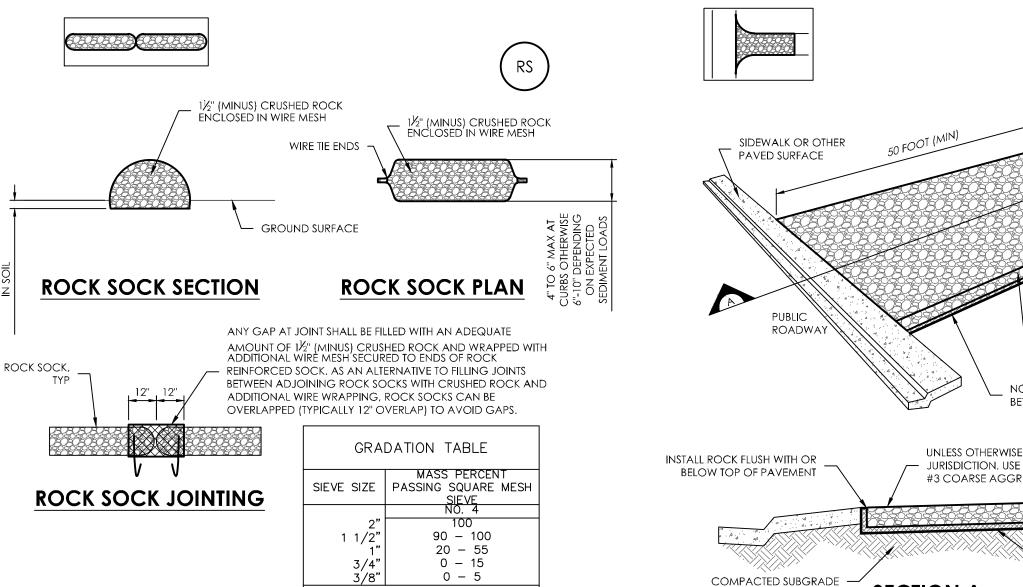
PLACE LOG AGAINS BACK OF CURB

SEDIMENT CONTROLPO

CONTINUOUS SCL

CONSTRUCTION SITE

AT PERIMETER OF



MATCHES SPECIFICATIONS FOR NO. 4

COARSE AGGREGATE FOR CONCRETE

PER AASHTO M43. ALL ROCK SHALL

BE FRACTURED FACE, ALL SIDES.

ROCK SOCK INSTALLATION NOTES: SEE PLAN VIEW FOR:

—LOCATION(S) OF ROCK SOCKS.

- 2. CRUSHED ROCK SHALL BE $1\frac{1}{2}$ " (MINUS) IN SIZE WITH A FRACTURED FACE (ALL SIDES) AND SHALL COMPLY WITH GRADATION SHOWN ON THIS SHEET ($1\frac{1}{2}$ " MINUS).

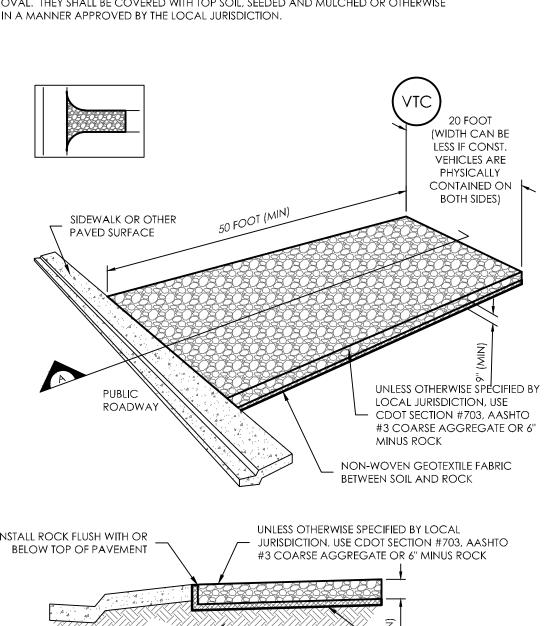
 3. WIRE MESH SHALL BE FABRICATED OF 10 GAGE POULTRY MESH. OR EQUIVALENT, WITH A MAXIMUM
- OPENING OF \mathcal{Y} ", RECOMMENDED MINIMUM ROLL WIDTH OF 48"

 4. WIRE MESH SHALL BE SECURED USING "HOG RINGS" OR WIRE TIES AT 6" CENTERS ALONG ALL JOINTS
- AND AT 2" CENTERS ON ENDS OF SOCKS. 5. SOME MUNICIPALITIES MAY ALLOW THE USE OF FILTER FABRIC AS AN ALTERNATIVE TO WIRE MESH

FOR THE ROCK ENCLOSURE.

- ROCK SOCK 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. FREOUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPS IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED
- 3. WHERE BMPS HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF
- THE FAILURE 4. ROCK SOCKS SHALL BE REPLACED IF THEY BECOME HEAVILY SOILED, OR DAMAGED BEYOND
- 5. SEDIMENT ACCUMULATED UPSTREAM OF ROCK SOCKS SHALL BE REMOVED AS NEEDED TO MAINTAIN FUNCTIONALITY OF THE BMP, TYPICALLY WHEN DEPTH OF ACCUMULATED SEDIMENTS IS
- APPROVED BY THE LOCAL JURISDICTION.
- 7. WHEN ROCK SOCKS ARE REMOVED, ALL DISTURBED AREAS SHALL BE COVERED WITH TOPSOIL, SEEDED AND MULCHED OR OTHERWISE STABILIZED AS APPROVED BY LOCAL JURISDICTION.



STABILIZED CONSTRUCTION ENTRANCE/EXIT INSTALLATION NOTES SEE PLAN VIEW FOR

—LOCATION OF CONSTRUCTION ENTRANCE(S)/EXIT(S) —TYPE OF CONSTRUCTION ENTRANCE(S)/EXITS(S) (WITH/WITHOUT WHEEL WASH, CONSTRUCTION MAT

- 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

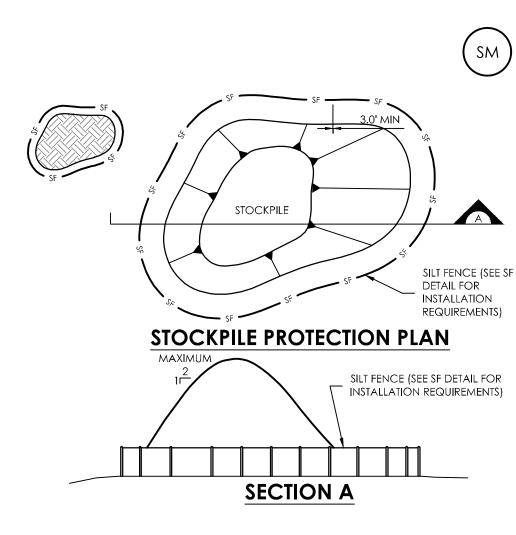
NON-WOVEN

GEOTEXTILE FABRIC

- ACCESS THE CONSTRUCTION SITE FROM PAVED RIGHT-OF-WAYS. 4. STABILIZED CONSTRUCTION ENTRANCE/EXIT SHALL BE INSTALLED PRIOR TO ANY LAND DISTURBING
- 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.

TABILIZED CONSTRUCTION ENTRANCE EXIT MAINTENANCE NOTE 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 3. WHERE BMPS HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE
- 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.



SP-1. STOCKPILE PROTECTION

STOCKPILE PROTECTION INSTALLATION NOTES

1. SEE PLAN VIEW FOR:

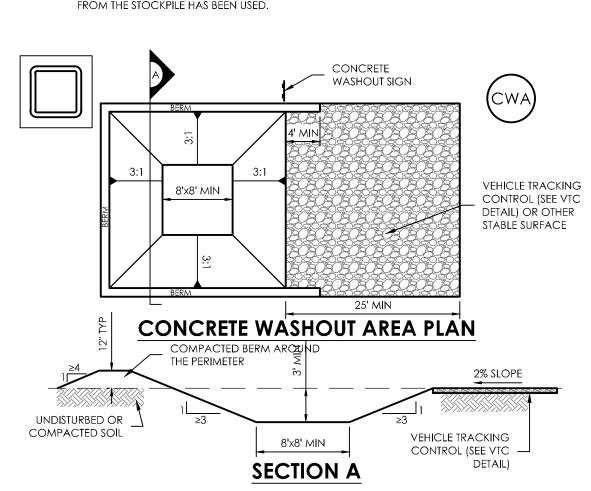
-LOCATION OF STOCKPILES.

—TYPE OF STOCKPILE PROTECTION. 2. INSTALL PERIMETER CONTROLS IN ACCORDANCE WITH THEIR RESPECTIVE DESIGN DETAILS. SILT FENCE IS SHOWN IN THE STOCKPILE PROTECTION DETAILS; HOWEVER, OTHER TYPES OF PERIMETER CONTROLS INCLUDING SEDIMENT CONTROL LOGS OR ROCK SOCKS MAY BE SUITABLE IN SOME CIRCUMSTANCES. CONSIDERATIONS FOR DETERMINING THE APPROPRIATE TYPE OF PERIMETER CONTROL FOR A STOCKPILE INCLUDE WHETHER THE STOCKPILE IS LOCATED ON A PERVIOUS OR IMPERVIOUS SURFACE, THE RELATIVE HEIGHTS OF THE PERIMETER CONTROL AND STOCKPILE, THE ABILITY OF THE PERIMETER CONTROL TO CONTAIN THE STOCKPILE WITHOUT FAILING IN THE EVENT THAT MATERIAL FROM THE STOCKPILE SHIFTS OR SLUMPS AGAINST THE PERIMETER, AND OTHER FACTORS.

- 3. STABILIZE THE STOCKPILE SURFACE WITH SURFACE ROUGHENING, TEMPORARY SEEDING AND MULCHING, EROSION CONTROL BLANKETS, OR SOIL BINDERS. SOILS STOCKPILED FOR AN EXTENDED PERIOD (TYPICALLY FOR MORE THAN 60 DAYS) SHOULD BE SEEDED AND MULCHED WITH A TEMPORARY GRASS COVER ONCE THE STOCKPILE IS PLACED (TYPICALLY WITHIN 14 DAYS). USE OF MULCH ONLY OR A SOIL BINDER IS ACCEPTABLE IF THE STOCKPILE WILL BE IN PLACE FOR A MORE
- LIMITED TIME PERIOD (TYPICALLY 30-60 DAYS). 4. FOR TEMPORARY STOCKPILES ON THE INTERIOR PORTION OF A CONSTRUCTION SITE. WHERE OTHER DOWNGRADIENT CONTROLS, INCLUDING PERIMETER CONTROL. ARE IN PLACE. STOCKPILE PERIMETER CONTROLS MAY NOT BE REQUIRED.

- STOCKPILE PROTECTION MAINTENANCE NOTES

 1. INSPECT BMPS EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPS SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPS AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.
- 2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPS IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY. 3. WHERE BMPS HAVE FAILED. REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON
- DISCOVERY OF THE FAILURE. 4. IF PERIMETER PROTECTION MUST BE MOVED TO ACCESS SOIL STOCKPILE. REPLACE
- PERIMETER CONTROLS BY THE END OF THE WORKDAY. 5. STOCKPILE PERIMETER CONTROLS CAN BE REMOVED ONCE ALL THE MATERIAL



CWA-1. CONCRETE WASHOUT AREA

CWA INSTALLATION NOTES

1. SEE PLAN VIEW FOR:

—CWA INSTALLATION LOCATION.

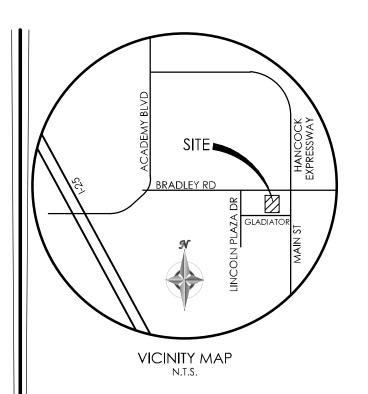
- 2. DO NOT LOCATE AN UNLINED CWA WITHIN 400' OF ANY NATURAL DRAINAGE PATHWAY OR WATERBODY. DO NOT LOCATE WITHIN 1,000' OF ANY WELLS OR DRINKING WATER SOURCES. IF SITE CONSTRAINTS MAKE THIS INFEASIBLE, OR IF HIGHLY PERMEABLE SOILS EXIST ON SITE, THE CWA MUST BE INSTALLED WITH AN IMPERMEABLE LINER (16 MIL MIN. THICKNESS) OR SURFACE STORAGE ALTERNATIVES USING PREFABRICATED CONCRETE WASHOUT DEVICES OR A LINED ABOVE GROUND STORAGE AREA SHOULD BE USED.
- 3. THE CWA SHALL BE INSTALLED PRIOR TO CONCRETE PLACEMENT ON SITE. 4. CWA SHALL INCLUDE A FLAT SUBSURFACE PIT THAT IS AT LEAST 8' BY 8' SLOPES LEADING OUT OF THE SUBSURFACE PIT SHALL BE 3:1 OR FLATTER. THE PIT SHALL BE AT LEAST 3' DEEP.
- 5. BERM SURROUNDING SIDES AND BACK OF THE CWA SHALL HAVE MINIMUM HEIGHT OF 1'. . VEHICLE TRACKING PAD SHALL BE SLOPED 2% TOWARDS THE CWA. 7. SIGNS SHALL BE PLACED AT THE CONSTRUCTION ENTRANCE, AT THE CWA, AND ELSEWHERE AS NECESSARY TO CLEARLY INDICATE THE LOCATION OF THE CWA TO OPERATORS OF CONCRETE
- TRUCKS AND PUMP RIGS. 8. USE EXCAVATED MATERIAL FOR PERIMETER BERM CONSTRUCTION.

- CWA 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 4. THE CWA SHALL BE REPAIRED, CLEANED, OR ENLARGED AS NECESSARY TO MAINTAIN CAPACITY
- ONCE THE MATERIALS HAVE REACHED A DEPTH OF 2'. 5. CONCRETE WASHOUT WATER, WASTED PIECES OF CONCRETE AND ALL OTHER DEBRIS IN THE SUBSURFACE PIT SHALL BE TRANSPORTED FROM THE JOB SITE IN A WATER—TIGHT CONTAINER

FOR CONCRETE WASTE. CONCRETE MATERIALS, ACCUMULATED IN PIT, SHALL BE REMOVED

AND DISPOSED OF PROPERLY. 6. 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.



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GRADING & EROSION CONTROL PLAN **EROISION DETAILS**

MVE DRAWING GEC-EC

OCTOBER 17, 2018

Markup Summary

Callout (18)

LI DESIGN AND CONSTRUCTION RELATED TO LIREMENTS OF THE MIGHT RECENT VERSION OF Subject: Callout

Page Label: [1] 61093-GEC-CS-C1.1

Author: Daniel Torres Date: 11/5/2018 1:58:32 PM

Color:

Revise Development Services to Planning and

Community Development (PCD)

THE T(Subject: Callout

Page Label: [1] 61093-GEC-CS-C1.1

Author: Daniel Torres Date: 11/5/2018 1:59:40 PM

Color:

Revise DSD to PCD



Subject: Callout

Page Label: [5] 61093-GEC-EC-C1.5

Author: Daniel Torres **Date:** 11/6/2018 10:04:12 AM

Color:

Please add this (stockpile?) to the BMP legend.



Subject: Callout

Page Label: [3] 61093-GEC-GP2-C1.3

Author: Daniel Torres **Date:** 11/6/2018 11:18:38 AM

Color:

Use El Paso County standard PED ramp



Subject: Callout

Page Label: [2] 61093-GEC-GP-C1.2

Author: Daniel Torres Date: 11/6/2018 5:16:05 PM

Color:

Permission from the adjacent owner is required for offsite improvements. Provide a copy of the

agreement.



Subject: Callout

Page Label: [3] 61093-GEC-GP2-C1.3

Author: Daniel Torres Date: 11/6/2018 5:20:34 PM

Color:

Per the contours it appears that you are removing and replacing the sidewalk. If that is not the case adjust the proposed contours so that they tie-in to

existing grade behind the sidewalk.



Subject: Callout

Page Label: [3] 61093-GEC-GP2-C1.3

Author: Daniel Torres Date: 11/6/2018 5:23:03 PM

Color:

Adjust easement on the final plat so that manhole is completely inside the easement



Subject: Callout

Page Label: [4] 61093-GEC-CD-C1.4

Author: Daniel Torres Date: 11/6/2018 8:21:09 AM

Color:

Revise detail to EPC standard parallel pedestrian

ramp detail SD_2-50



Subject: Callout

Page Label: [4] 61093-GEC-CD-C1.4

Author: Daniel Torres
Date: 11/6/2018 9:17:21 AM

Color:

Revise detail to EPC standard pedestrian ramp detail SD_2-41 and truncated dome detail

SD_2-42

Management of the control of the con

Subject: Callout

Page Label: [1] 61093-GEC-CS-C1.1

Author: Daniel Torres **Date:** 11/7/2018 11:16:51 AM

Color:

Property line shown on legend does not match the property line shown on the plans. Revise.

Label all examents, existing and proposed.

Subject: Callout

Page Label: [3] 61093-GEC-GP2-C1.3

Author: Daniel Torres **Date:** 11/7/2018 11:19:28 AM

Color:

Label all easements, existing and proposed.



Subject: Callout

Page Label: [5] 61093-GEC-EC-C1.5

Author: Daniel Torres **Date:** 11/7/2018 11:20:55 AM

Color:

Label all slopes that are steeper than 3:1 and provide erosion control blanket.

Rate to ECM section grant and the property of the property of

Subject: Callout

Page Label: [4] 61093-GEC-CD-C1.4

Author: Daniel Torres Date: 11/7/2018 4:24:38 PM

Color:

Refer to ECM section 4.3.6.A.3 for minimum ground cover for storm sewers. Revise

accordingly.



Subject: Callout

Page Label: [2] 61093-GEC-GP-C1.2

Author: Daniel Torres **Date:** 11/7/2018 4:30:01 PM

Color:

Provide the longitudinal slope tags for the channels



Subject: Callout

Page Label: [1] 61093-GEC-CS-C1.1

Author: Daniel Torres **Date:** 11/7/2018 4:44:23 PM

Color:

Submit a copy of the soil report



Subject: Callout

Page Label: [3] 61093-GEC-GP2-C1.3

Author: Daniel Torres **Date:** 11/7/2018 4:47:46 PM

Color:

Label existing sidewalk and protect-in-place



Subject: Callout

Page Label: [2] 61093-GEC-GP-C1.2

Author: Daniel Torres Date: 11/7/2018 4:55:54 PM

Color:

No action required: Should a cross-pan be provided at the entrance?



Subject: Callout

Page Label: [3] 61093-GEC-GP2-C1.3

Author: Daniel Torres Date: 11/7/2018 5:47:32 PM

Color:

1. As designed a portion of these channels are within Tract A of adjacent property. The plat does not identify Tract A as used for drainage. Either the adjacent property plat needs to be amended or adjust the drainage channels to be within the property limits.

2. See ECM section 3.3.3.K for channel easement width and access.

Highlight (3)

ROL PLAN NOTES

Subject: Highlight

Page Label: [1] 61093-GEC-CS-C1.1

Author: Daniel Torres **Date:** 11/5/2018 1:56:47 PM

Color:

SO COUNTY GRADING &

YEN TO CAUSE POLLUTION, CONTAMINATION ONE IN A MANNER THAT MINIMIZES POLLUTION

Subject: Highlight

Page Label: [1] 61093-GEC-CS-C1.1

NOT COMMENCE UNTIL A CONSTRUCT
) WITH DEVELOPMENT SERVICES INSPEC **Author:** Daniel Torres RGES FROM CONSTRUCTION SITES SHA ATE WATERS, ALL WORK AND EARTH D INCLUDING WETLANDS. Date: 11/5/2018 1:58:18 PM

Color:

'RIOR TO A

Subject: Highlight

Page Label: [1] 61093-GEC-CS-C1.1

ITY DSD INS Author: Daniel Torres Date: 11/5/2018 1:59:51 PM

Color:

DSD

Text Box (1)

Subject: Text Box

Page Label: [1] 61093-GEC-CS-C1.1

Author: Daniel Torres Date: 11/7/2018 11:20:21 AM

Color:

Add PCD File No. PPR1846

DEVELOPMENT SERVICES ADN

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