SITE DEVELOPMENT PLAN
FOR
THE TOWNHOMES AT BRADLEY CROSSROADS

LOT 1A, BRADLEY CROSSROADS FILING NO. 1B
LOCATED IN THE SOUTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 2, TOWNSHIP 15 SOUTH, RANGE 66 WEST OF THE 6TH P.M.,
EL PASO COUNTY, COLORADO

LEGEND

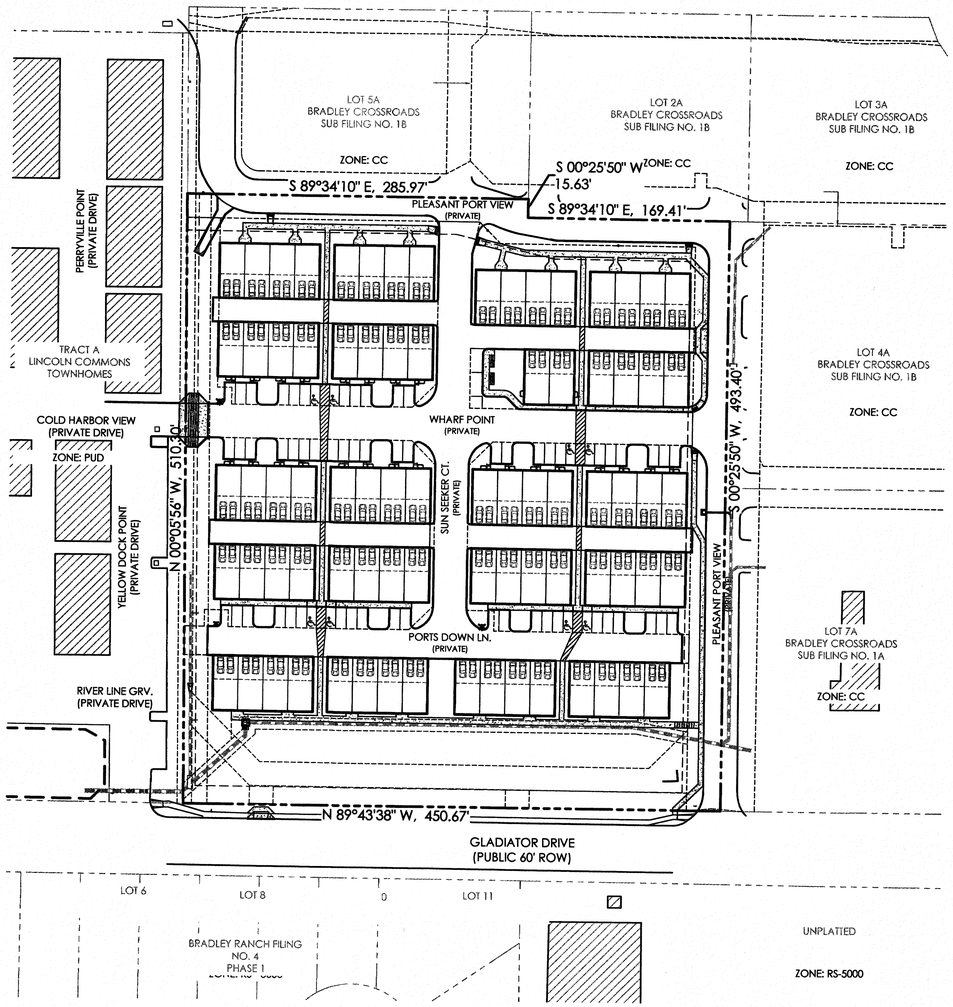
- PROPERTY LINE
- EASEMENT LINE
- LOT LINE
- BUILDING SETBACK LINE
- ADJACENT PROPERTY LINE

EXISTING

- 5985 INDEX CONTOUR
- 84 INTERMEDIATE CONTOUR
- CONCRETE AREA
- ASPHALT AREA
- CURB AND GUTTER
- BUILDING/ BUILDING OVERHANG
- DECK
- RETAINING WALL - SOLID/ ROCK
- SIGN
- BOLLARD
- WOOD FENCE
- CHAIN LINK FENCE
- BARBED WIRE FENCE
- TREE (EVERGREEN/DECIDUOUS)
- SHRUB
- ROCK

PROPOSED

- 5985 INDEX CONTOUR
- 84 INTERMEDIATE CONTOUR
- CONCRETE AREA
- ASPHALT AREA
- CURB AND GUTTER
- BUILDING/ BUILDING OVERHANG
- DECK
- RETAINING WALL - SOLID ROCK
- SIGN
- BOLLARD
- 2515 LARAMIE DRIVE BUILDING ADDRESS
- (100) UNIT ADDRESS
- FIRE LANE



SHEET INDEX:

FLOODPLAIN STATEMENT

NO PORTION OF THE SUBJECT PROPERTY IS NOT 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 08041C0763 F, EFFECTIVE MARCH 17, 1997.

MAP NOTES

1. BOUNDARY BEARINGS AND DISTANCES SHOWN ON THIS MAP ARE RELATIVE TO THE SOUTH LINE OF LOT 1A, BRADLEY CROSSROADS FILING NO. 1B, ASSUMED TO BEAR N89°43'38"W.
2. THE EXISTING TOPOGRAPHY SHOWN ON THIS PLAN WAS PREPARED AND PROVIDED BY POLARIS SURVEYING INC. ELEVATIONS SHOWN ARE RELATIVE TO THE CITY OF COLORADO SPRINGS CONTROL NETWORK (FIMS DATAM)
3. ALL EXISTING UNDERGROUND UTILITIES SHOWN ON THIS MAP ARE FROM UTILITY MAIN RECORD MAPS AND UTILITY SERVICE LOCATION MAPS. THE LOCATION OF UTILITIES AS SHOWN ARE APPROXIMATE. ALL UTILITIES MAY NOT BE SHOWN OR MAY NOT HAVE BEEN LOCATED. BELOW GROUND UTILITY LOCATIONS WERE NOT PERFORMED.

SITE DATA

OWNER
J. ELLIOT HOMES, INC.
12218 CRYSTAL DOWNS ROAD
PEYTON, CO 80831

DEVELOPER
J. ELLIOTT CONSTRUCTION
4310 YELLOW DOCK POINT
SECURITY, CO 80825

CONSULTANT/ENGINEER
M.V.E., INC.
1903 LELARAY STREET, SUITE 200
COLORADO SPRINGS, CO 80909
(719) 635-5736

SURVEYOR
POLARIS SURVEYING, INC.
1903 LELARAY STREET, SUITE 102
COLORADO SPRINGS, CO 80909
(719) 448-0844

ZONING
RESIDENTIAL MULTI-DWELLING (RM-30)

BUILDING USE
TOWN HOMES

CONSTRUCTION SCHEDULE
START: FALL, 2018
FINISH: WINTER, 2019

TAX SCHEDULE NO.
6502407102

PROPERTY ADDRESS
4735 BRADLEY ROAD
COLORADO SPRINGS, CO 80911

COVERAGE DATA

20 TOWNHOME BUILDINGS (78 - 3 BEDROOM UNITS)	38,640 SF	16.9%	
PAVEMENT (PARKING/WALK)	124,281 SF	54.5%	
LANDSCAPING	65,320 SF	28.6%	
TOTAL AREA	228,241 SF	100.0%	= 5.240± ACRES

PARKING DATA

20 MULTIFAMILY BUILDINGS w/ 78 - 3 BEDROOM UNITS	
MULTI FAMILY REQUIRED: 2.0 SPACES / 1 UNIT = 2.0 X 78	= 156
GUEST REQUIRED: 1 SPACE / 3 UNITS = 78 / 3	= 26
HANDICAP REQUIRED:	= 6
TOTAL SPACES REQUIRED:	= 188
PROVIDED:	
GARAGES:	= 156
OUTSIDE PARKING (GUEST):	= 65
VAN ACCESSIBLE HANDICAP:	= 8
TOTAL SPACES PROVIDED:	= 221 SPACES

BUILDING TYPE
BUILDING AREA - 3,864 SF
TWO STORY - TYPE II-B
NOT FIRE SPRINKLED / NO FIRE WALLS

BUILDING HEIGHT
40 FT MAX. (TWO STORY)

SET BACKS
25' FRONT (PLEASANT PORT VIEW (NORTH) & GLADIATOR DRIVE)
15' SIDE

LEGAL DESCRIPTION

LOT 1A, BRADLEY CROSSROADS FILING NO. 1B AS RECORDED AT RECEPTION NO. 218714143 OF THE RECORDS OF EL PASO COUNTY, COLORADO, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

THE FOLLOWING COURSES AND DISTANCES ARE ALONG THE WEST, NORTH, EAST AND SOUTH LINES OF SAID LOT 1A;

BEGINNING AT THE SOUTHWEST CORNER OF BRADLEY CROSSROADS FILING NO. 2B, THENCE N00°05'56"W, 510.30 FEET;
THENCE S89°34'10"E, 285.97 FEET;
THENCE S00°25'50"W, 15.63 FEET;
THENCE S89°34'10"E, 169.41 FEET;
THENCE S00°25'50"W, 493.40 FEET;
THENCE N89°43'38"W, 450.67 FEET TO THE POINT OF BEGINNING;

CONTAINING A CALCULATED AREA OF 5.240 ACRES, MORE OR LESS.

DEVELOPMENT NOTES:

1. WATER SERVICE PROVIDED BY SECURITY WATER DISTRICT.
2. SEWER SERVICE PROVIDED BY SECURITY SANITATION DISTRICT.
3. OWNERSHIP AND MAINTENANCE OF THE GENERAL COMMON ELEMENT (GCE), TRACT A SHALL BE VESTED TO THE TOWNHOMES AT BRADLEY CROSSROADS HOME OWNERS ASSOCIATION. THIS INCLUDES THE MAINTENANCE OF THE PRIVATE ROADS, COMMON AREAS, ETC.
4. "S" TYPE UNITS ARE SLAB ON GRADE AND ADA ACCESSIBLE. "B" TYPE UNITS INCLUDE PARTIAL BASEMENT UNDER THE MAIN LIVING AREA AND ARE NON-ADA.

ADA NOTE

THE PARTIES RESPONSIBLE FOR THIS PLAN HAVE FAMILIARIZED THEMSELVES WITH ALL CURRENT ACCESSIBILITY CRITERIA AND SPECIFICATIONS AND THE PROPOSED PLAN REFLECTS ALL SITE ELEMENTS REQUIRED BY THE APPLICABLE ADA DESIGN STANDARDS AND GUIDELINES AS PUBLISHED BY THE UNITED STATES DEPARTMENT OF JUSTICE. APPROVAL OF THIS PLAN BY EL PASO COUNTY DOES NOT ASSURE COMPLIANCE WITH THE ADA OR ANY REGULATIONS OR GUIDELINES ENACTED OR PROMULGATED UNDER OR WITH RESPECT TO SUCH LAWS.

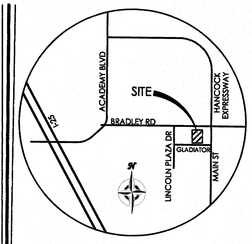
OWNERS STATEMENT

I, THE OWNER/DEVELOPER HAVE READ AND WILL COMPLY WITH ALL OF THE REQUIREMENTS SPECIFIED ON THIS SITE DEVELOPMENT PLAN.

J. ELLIOT HOMES, INC.
12218 CRYSTAL DOWNS ROAD
PEYTON, CO 80831

3/24/19
DATE

EPC PROJ NO. PPR1846



VICINITY MAP
N.T.S.

BENCHMARK

N

10 0 20 60 120
1" = 60' 1:720

MVE, INC.
ENGINEERS / SURVEYORS
1903 lelaray street, suite 200 colorado springs co 80909 719.635.5736

REVISIONS

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

THE TOWNHOMES AT BRADLEY CROSSROADS

SITE DEVELOPMENT PLAN COVER SHEET

DP-1

MVE PROJECT 61093
MVE DRAWING DEV-CS

FEBRUARY 11, 2019

SHEET 1 OF 4

LOT 5A
BRADLEY CROSSROADS
SUB FILING NO. 1B

BRADLEY INVESTMENT
GROUP LLC

ZONE: CC

LOT 2A
BRADLEY CROSSROADS
SUB FILING NO. 1B

BRADLEY INVESTMENT
GROUP LLC

ZONE: CC

LOT 3A
BRADLEY CROSSROADS
SUB FILING NO. 1B

BRADLEY INVESTMENT
GROUP LLC

ZONE: CC

S 00°25'50" W
15.63'

S 89°34'10" E, 285.97'

S 89°34'10" E, 169.41'

EX 20' UTIL ESMT (REC
NO 210713083)

40.00'
EX UTIL, DRNG &
ACCESS ESMT
(REC NO
210713083)

PLEASANT PORT VIEW
(PRIVATE)

EXISTING C & G

NEW 5' SIDEWALK

15' LNDSCP STBK

25' SETBACK

UNIT 1 "S" TYPE
UNIT 2 "S" TYPE
UNIT 3 "S" TYPE
UNIT 4 "S" TYPE
UNIT 5 "S" TYPE
UNIT 6 "S" TYPE
UNIT 7 "S" TYPE
UNIT 8 "S" TYPE

NEW C & G (TYP)

28.0'
DRNG, UTIL
& ACCESS
ESMT

35.0'

PRIVATE ACCESS

NEW ASPHALT PAVEMENT

TRACT A
(GCE)

UNIT 9 "B" TYPE
UNIT 10 "B" TYPE
UNIT 11 "B" TYPE
UNIT 12 "B" TYPE
UNIT 13 "B" TYPE
UNIT 14 "B" TYPE
UNIT 15 "B" TYPE
UNIT 16 "B" TYPE

4' WALK (TYP)

UNIT 41 "S" TYPE
UNIT 42 "S" TYPE
UNIT 43 "S" TYPE
UNIT 44 "S" TYPE
UNIT 45 "S" TYPE
UNIT 46 "S" TYPE
UNIT 47 "S" TYPE
UNIT 48 "S" TYPE

4' WALK (TYP)

15.0'

NEW C & G (TYP)

PROPOSED EPC STD
DRIVEWAY CUT

UNIT 49 "B" TYPE
UNIT 50 "B" TYPE
UNIT 51 "S" TYPE
UNIT 52 "S" TYPE
UNIT 53 "S" TYPE
UNIT 54 "S" TYPE

MAIL
KIOSKS

12.0'

4.0'

RAMP AT SIDEWALK

NEW 4' SIDEWALKS

LOCKED SWING GATE
(UTIL DEPT ACCESS ONLY)

10' LNDSCP STBK

PERRYVILLE POINT
(PRIVATE DRIVE)

TRACT A
LINCOLN COMMONS
TOWNHOMES

(6502407100)
LINCOLN COMMONS LLC

COLD HARBOR VIEW
(PRIVATE DRIVE)

ZONE: PUD

N 00°05'56" W, 510.30'

15' SETBACK

TRACT A
(GCE)

FIRE TRUCK
TURN-AROUND

WHARF POINT
(PRIVATE)

SUN SEEKER CT.
(PRIVATE)

UNIT 17 "B" TYPE
UNIT 18 "B" TYPE
UNIT 19 "B" TYPE
UNIT 20 "B" TYPE
UNIT 21 "B" TYPE
UNIT 22 "B" TYPE
UNIT 23 "B" TYPE
UNIT 24 "B" TYPE
UNIT 55 "B" TYPE
UNIT 56 "B" TYPE
UNIT 57 "B" TYPE
UNIT 58 "B" TYPE
UNIT 59 "B" TYPE
UNIT 60 "B" TYPE
UNIT 61 "B" TYPE
UNIT 62 "B" TYPE

4' WALK (TYP)

NEW C & G (TYP)

TRACT A
(GCE)

PRIVATE ACCESS

NEW ASPHALT PAVEMENT

20.0'

28.0'
DRNG, UTIL
& ACCESS
ESMT

UNIT 25 "S" TYPE
UNIT 26 "S" TYPE
UNIT 27 "S" TYPE
UNIT 28 "S" TYPE
UNIT 29 "S" TYPE
UNIT 30 "S" TYPE
UNIT 31 "S" TYPE
UNIT 32 "S" TYPE
UNIT 63 "S" TYPE
UNIT 64 "S" TYPE
UNIT 65 "S" TYPE
UNIT 66 "S" TYPE
UNIT 67 "S" TYPE
UNIT 68 "S" TYPE
UNIT 69 "S" TYPE
UNIT 70 "S" TYPE

4' WALK (TYP)

NEW 4' SIDEWALK

15' LNDSCP STBK
15' SETBACK

NEW 4' SIDEWALK

PLEASANT PORT VIEW
(PRIVATE)

EXISTING C & G

5.00' DRAINAGE
ESMT (#219026316)

YELLOW DOCK POINT
(PRIVATE DRIVE)

NEW C&G
(TYP)

24.0'
DRNG, UTIL
& ACCESS
ESMT

FIRE TRUCK
TURN-AROUND

NEW ASPHALT PAVEMENT

PORTS DOWN LN.
(PRIVATE)

TRACT A
(GCE)

EX 7' UTIL &
DRNG ESMT
(PLAT BK 2-2, PG 77)

UNIT 33 "S" TYPE
UNIT 34 "S" TYPE
UNIT 35 "S" TYPE
UNIT 36 "S" TYPE
UNIT 37 "S" TYPE
UNIT 38 "S" TYPE
UNIT 39 "S" TYPE
UNIT 40 "S" TYPE
UNIT 71 "S" TYPE
UNIT 72 "S" TYPE
UNIT 73 "S" TYPE
UNIT 74 "S" TYPE
UNIT 75 "S" TYPE
UNIT 76 "S" TYPE
UNIT 77 "S" TYPE
UNIT 78 "S" TYPE

23.0'

57.00'
EX UTIL, DRNG &
ACCESS ESMT
(REC NO
210713083)

NEW 5' SIDEWALK

EX 10' DRNG ESMT (REC NO 210713083)

TRACT A
(GCE)

TRACT A
(GCE)

EX 20' UTIL ESMT (REC NO 210713083)

25' SETBACK

15' LNDSCP STBK

LOCKED SWING GATE
(UTIL DEPT ACCESS ONLY)

N 89°43'38" W, 450.67'

NEW 4' SIDEWALK

EXISTING SIDEWALK

PROPOSED EPC STD
DRIVEWAY CUT

RIVER LINE GRV.
(PRIVATE DRIVE)

GLADIATOR DRIVE
(PUBLIC 60' ROW)

S 00°25'50" W, 493.40'

EX 34' UTIL, DRNG & ACCESS
ESMT (REC NO 210713083)

LOT 4A
BRADLEY CROSSROADS
SUB FILING NO. 1B

BRADLEY INVESTMENT
GROUP LLC

ZONE: CC

LOT 7A
BRADLEY CROSSROADS
SUB FILING NO. 1A

(6502407012)
KEEP-M-CLEAN LLC

ZONE: CC

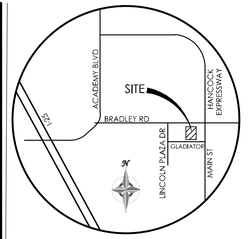
LOT 6A
BRADLEY CROSSROADS
SUB FILING NO. 1A

(6502407011)
1810 MAIN LLC

ZONE: CC

LOT 6 LOT 7 LOT 8 LOT 9 LOT 10 LOT 11

EPC PROJ NO. PPR1846



VICINITY MAP
N.T.S.

BENCHMARK

N

5 0 10 30 60

1" = 30' 1:360

MVE, INC.
ENGINEERS, SURVEYORS
1903 lelaray street, suite 200 colorado springs co 80909 719.635.5736

REVISIONS

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

THE TOWNHOMES AT BRADLEY CROSSROADS

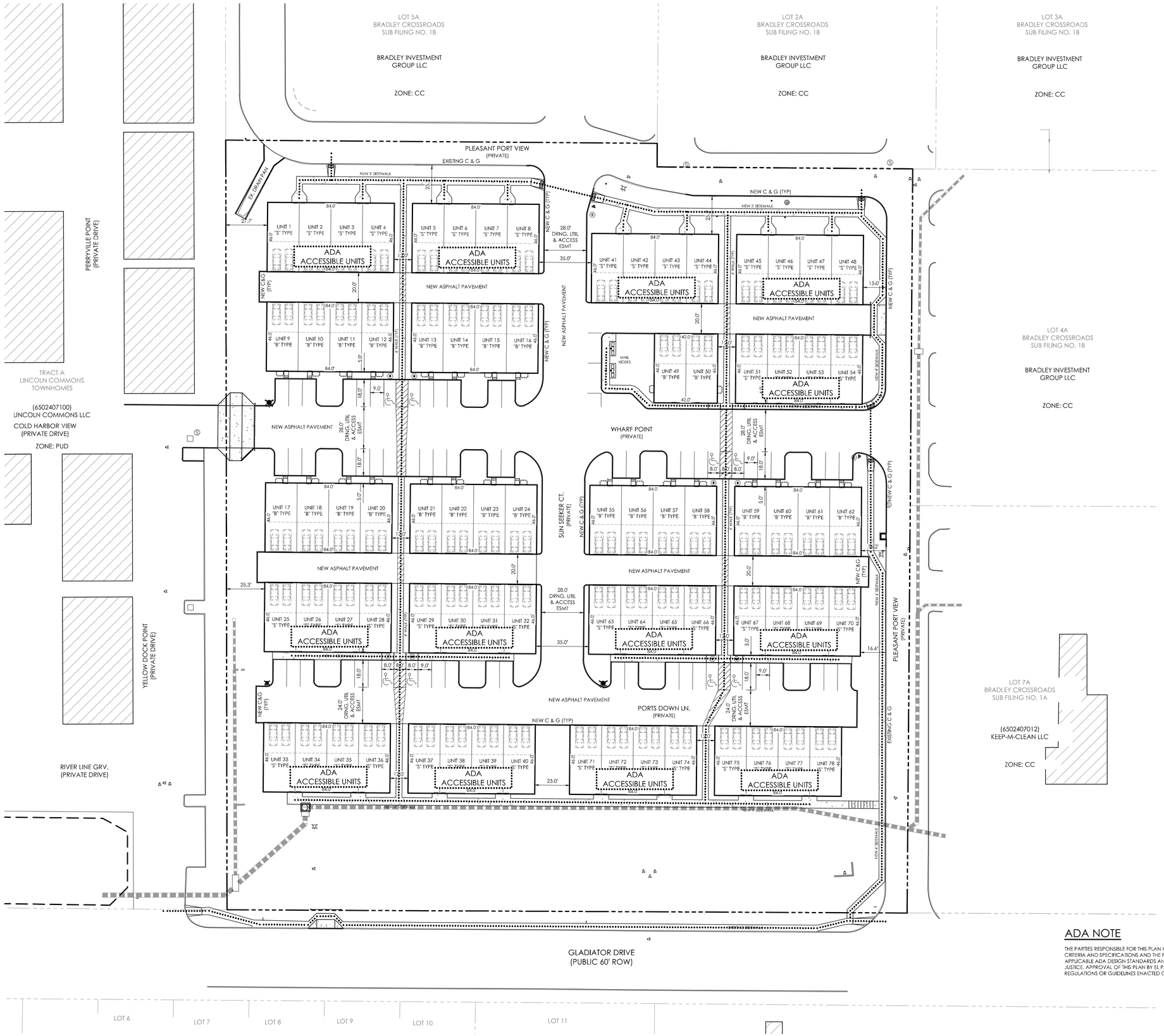
SITE DEVELOPMENT PLAN
SITE PLAN

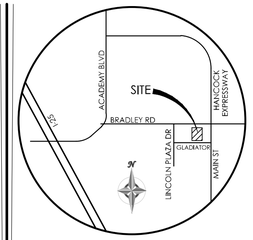
DP-2

MVE PROJECT 61093
MVE DRAWING DEV-SP

FEBRUARY 11, 2019

SHEET 2 **OF** 4





VICINITY MAP
N.T.S.

BENCHMARK

N

5 0 10 30 60

1" = 30' 1:360

MVE, INC.
ENGINEERS / SURVEYORS
1903 lelaray street, suite 200 colorado springs co 80909 719.635.5736

REVISIONS

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

THE TOWNHOMES AT BRADLEY CROSSROADS

SITE DEVELOPMENT PLAN
ADA ROUTE PLAN

DP-3

MVE PROJECT 61093

MVE DRAWING DEV-ADA

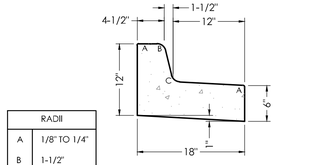
FEBRUARY 11, 2019

SHEET 3 **OF** 4

ADA NOTE

THE PARTIES RESPONSIBLE FOR THIS PLAN HAVE FAMILIARIZED THEMSELVES WITH ALL CURRENT ACCESSIBILITY CRITERIA AND SPECIFICATIONS AND THE PROPOSED PLAN REFLECTS ALL SITE ELEMENTS REQUIRED BY THE APPLICABLE ADA DESIGN STANDARDS AND GUIDELINES AS PUBLISHED BY THE UNITED STATES DEPARTMENT OF JUSTICE. APPROVAL OF THIS PLAN BY EL PASO COUNTY DOES NOT ASSURE COMPLIANCE WITH THE ADA OR ANY REGULATIONS OR GUIDELINES ENACTED OR PROMULGATED UNDER OR WITH RESPECT TO SUCH LAWS.

EPC PROJ NO. PPR1846



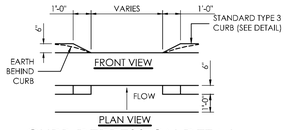
RADII	
A	1/8" TO 1/4"
B	1-1/2"
C	1-1/2" TO 2"

EPC TYPE B

EPC TYPE B STANDARD MEDIAN CURB & GUTTER

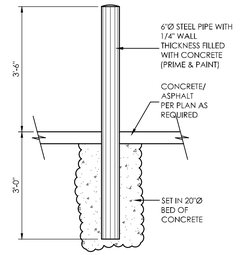
15/3

SCALE 1"=1'



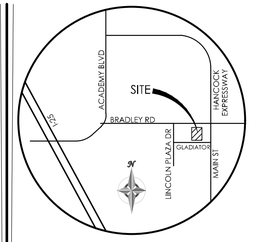
CURB DEPRESSION DETAIL

SCALE 1" = 4'



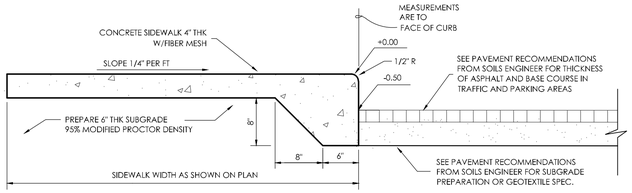
BOLLARD DETAIL

SCALE 1" = 2.0'



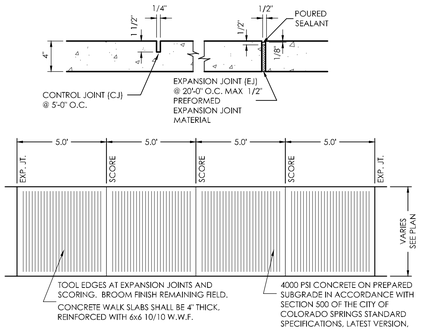
VICINITY MAP
N.T.S.

BENCHMARK



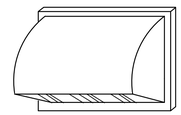
THICKENED EDGE SIDEWALK

SCALE: 1" = 1.0'



TYPICAL SIDEWALK DETAIL

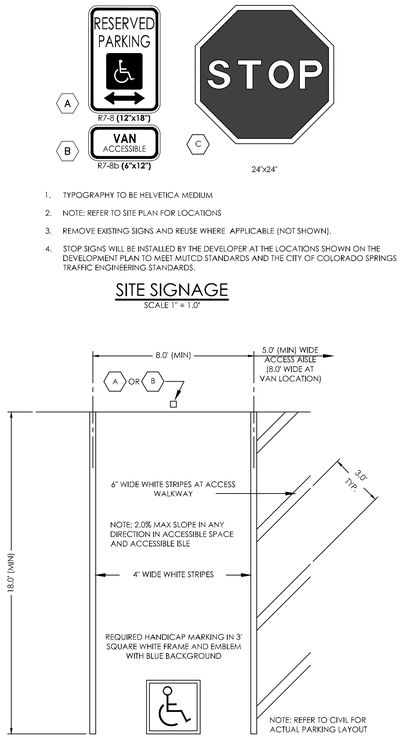
SCALE 1" = 4.0'



FULL CUT OFF LIGHT FIXTURE:
LITHONIA LIGHTING # TWAC5
32 TRT WATT, COMPACT FLUORESCENT

WALL PACK DETAIL

SCALE: NONE



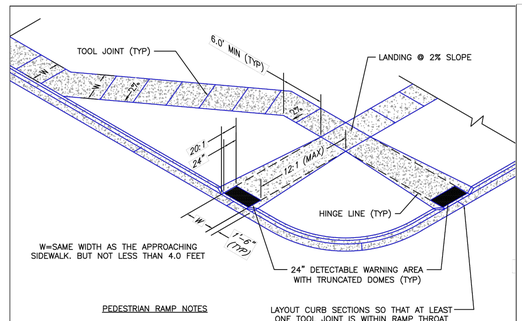
1. TYPOGRAPHY TO BE HELVETICA MEDIUM
2. NOTE: REFER TO SITE PLAN FOR LOCATIONS
3. REMOVE EXISTING SIGNS AND REUSE WHERE APPLICABLE (NOT SHOWN).
4. STOP SIGNS WILL BE INSTALLED BY THE DEVELOPER AT THE LOCATIONS SHOWN ON THE DEVELOPMENT PLAN TO MEET MUTCD STANDARDS AND THE CITY OF COLORADO SPRINGS TRAFFIC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

SITE SIGNAGE

SCALE 1" = 1.0'

TYPICAL HANDICAP PARKING SPACE

SCALE 1" = 4.0'



PEDESTRIAN RAMP NOTES

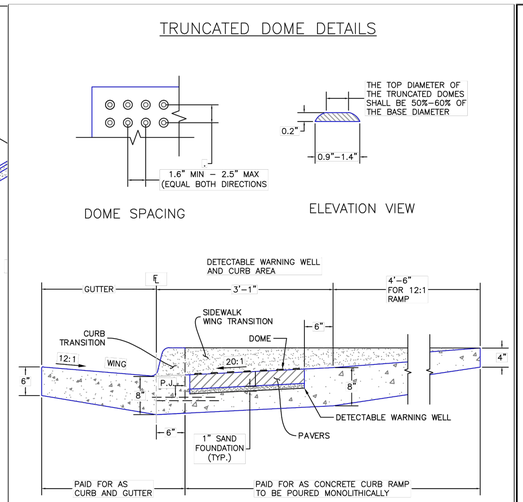
1. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE CURRENT ENGINEERING CRITERIA MANUAL AND ADA REQUIREMENTS.
2. CONTRACTOR TO NOTIFY ENGINEERING DIVISION INSPECTION STAFF 48 HOURS PRIOR TO CONCRETE PLACEMENT.
3. PEDESTRIAN RAMP CONSTRUCTION SHALL BE A MINIMUM 4,500 PSI CONCRETE, MINIMUM 4" THICK, NON-COLORED, NON-SCORED, COARSE BROOM FINISH.
4. RAMP LOCATION AND LENGTH MAY REQUIRE MODIFICATION TO MAINTAIN THE 12:1 MAXIMUM RUNNING RAMP SLOPE AND 20:1 DETECTABLE WARNING AREA DUE TO STREET INTERSECTION GRADES AND/OR ALIGNMENTS.
5. DETECTABLE WARNING AREA SHALL START A MINIMUM OF 6" BUT NOT MORE THAN 8" FROM THE FLOWLINE OF THE CURB AT ANY POINT.
6. DETECTABLE WARNING AREA SHALL BE PREFABRICATED, REDDISH INTEGRALLY COLORED, TRUNCATED-DOME, PAVERS. THERMOPLASTIC TRUNCATED DOMES WILL NOT BE ACCEPTED.
7. THE DETECTABLE WARNING AREA SHALL BE 24" IN LENGTH AND THE FULL WIDTH OF THE RAMP.
8. RAMP WIDTH REQUIRED IS SAME AS APPROACHING SIDEWALK; 4' MINIMUM.
9. ALL RAMPS WILL BE PERPENDICULAR TO TRAFFIC WITH THE EXCEPTION OF MID-BLOCK OR TERMINAL RAMPS WHICH MAY BE PARALLEL SUBJECT TO APPROVAL.
10. AVOID PLACING DRAINAGE STRUCTURES, TRAFFIC SIGNAL/SIGNAGE, UTILITIES/JUNCTION BOXES, OR OTHER OBSTRUCTIONS WITHIN PROPOSED RAMP AREAS.

GENERAL NOTES

1. WHERE THE 1'-6" FLARED SIDE(S) OF A PERPENDICULAR CURB RAMP IS (ARE) CONTIGUOUS WITH A PEDESTRIAN OR HARD SURFACE AREA, THE MAXIMUM FLARE SLOPE SHALL NOT EXCEED 10:1.
2. PEDESTRIAN WALKWAY AND/OR LOCATION OF EXISTING OR FUTURE PEDESTRIAN RAMPS ON OPPOSITE CORNERS SHALL BE REVIEWED BEFORE CONSTRUCTING NEW RAMPS.
3. AT MARKED PEDESTRIAN CROSSINGS, THE BOTTOM OF THE RAMPS, EXCLUSIVE OF THE FLARE SIDES, SHALL BE TOTALLY CONTAINED WITHIN THE MARKINGS.

7/9/09	Pedestrian Intersection Ramp	EL PASO COUNTY DEPARTMENT OF TRANSPORTATION
DATE APPROVED:	Standard Drawing	
André P. Brackin	REVISION DATE: 12/8/15	FILE NAME: SD_2-41
DEPARTMENT OF TRANSPORTATION		

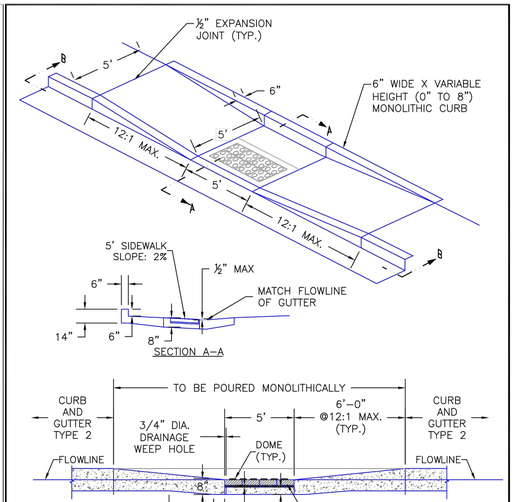
TRUNCATED DOME DETAILS



P.J.= PERMISSABLE JOINT WITH EPOXY-COATED DEFORMED NO. 4 BARS CONFORMING TO AASHTO M 284 AT 18 IN. SPACING

SIDE CROSS SECTION VIEW OF DETECTABLE WARNING, WELL, CURB AND GUTTER

1/1/08	Truncated Dome Details	EL PASO COUNTY DEPARTMENT OF TRANSPORTATION
DATE APPROVED:	Standard Drawing	
John A. McCarty	REVISION DATE: 11/25/15	FILE NAME: SD_2-42
DEPARTMENT OF TRANSPORTATION		



8/11/11	Parallel Pedestrian Ramp Detail	EL PASO COUNTY DEPARTMENT OF TRANSPORTATION
DATE APPROVED:	Standard Drawing	
André P. Brackin	REVISION DATE: 12/8/15	FILE NAME: SD_2-50
DEPARTMENT OF TRANSPORTATION		

MVE INC. ENGINEERS / SURVEYORS
1903 lelaray street, suite 200 colorado springs co 80909 719.635.5736

REVISIONS

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

THE TOWNHOMES AT BRADLEY CROSSROADS

SITE DEVELOPMENT PLAN SITE DETAILS

DP-4

MVE PROJECT 61093
MVE DRAWING DEV-SD

FEBRUARY 11, 2019

SHEET 4 OF 4

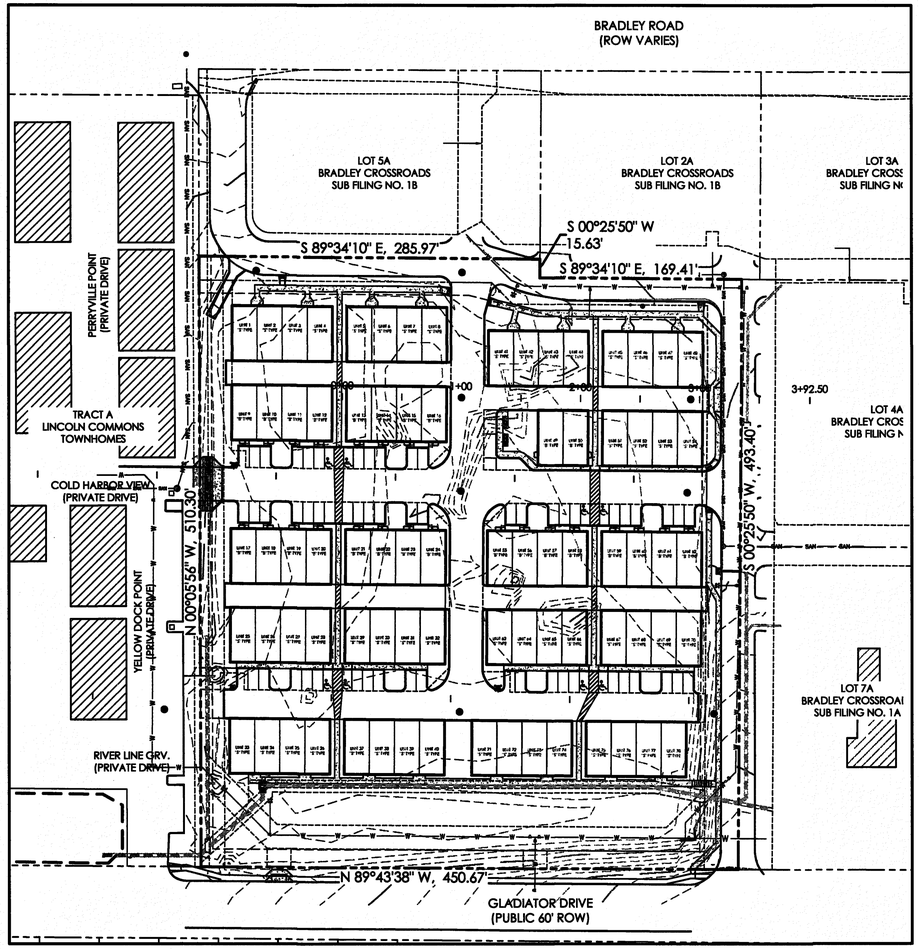
EPC PROJ NO. PPR1846

GRADING AND EROSION CONTROL PLAN
for
THE TOWNHOMES AT BRADLEY CROSSROADS
EL PASO COUNTY, COLORADO

STANDARD EL PASO COUNTY GRADING & EROSION CONTROL PLAN NOTES

1. CONSTRUCTION MAY NOT COMMENCE UNTIL A CONSTRUCTION PERMIT IS OBTAINED FROM PLANING AND COMMUNITY DEVELOPMENT (PCD) A PRECONSTRUCTION CONFERENCE IS HELD WITH PCD 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 OR OFF SITE WATERS. INCLUDING WETLANDS.
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 REQUESTED, AND APPROVED, IN WRITING.
4. 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 STORMWATER MANAGER, SHALL BE LOCATED ON SITE AT ALL TIMES AND SHALL BE KEPT UP TO DATE WITH WORK PROGRESS AND CHANGES IN THE FIELD.
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 PCD 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 CRITERIA MANUAL (ECM) APPENDIX I.
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 PROPERLY DISPOSED OF IMMEDIATELY.
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 OR FACILITIES.
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 MATERIALS CONTACT:

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



SITE MAP
1" = 60'

GRADING NOTES:

1. UNDERGROUND FACILITIES, STRUCTURES AND UTILITIES HAVE BEEN DRAWN FROM AVAILABLE RECORDS AND/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 AND ALL UTILITIES.
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 CONSTRUCTION.
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 LOT GRADING OPERATIONS.
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 DISPOSED OF LEGALLY.
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 REPRESENTATIVE.
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 REPORT OR DESIGN.
13. PERVIOUS EARTH SURFACES SHALL SLOPE AWAY FROM ALL FOUNDATION WALLS AT A MINIMUM RATE OF 12" IN 10 FEET (10%) 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 LANDSCAPE PLANS, BY OTHERS.
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 RELATING 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.
21. CONTRACTOR SHALL PROVIDE APPROPRIATE EROSION CONTROL MEASURES DURING EARTHWORK OPERATIONS TO CONTROL EROSION AND SEDIMENT TRANSFER TO ADJACENT PROPERTIES. EROSION CONTROL MEASURES ARE NOT LIMITED TO THOSE NOTED ON THE EROSION CONTROL PLAN.
    A. ALL DISTURBED AREAS SHALL BE REVEGETATED OR OTHERWISE LANDSCAPED AFTER CONSTRUCTION IN ACCORDANCE WITH THE REVEGETATION 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 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 EL PASO COUNTY STANDARD SPECIFICATIONS, LATEST REVISION.
23. OVER LOT GRADING TO BE COMPLETE PRIOR TO THE INSTALLATION OF ALL UTILITIES.

SHEET INDEX

SOILS & GEOLOGIC HAZARD STUDY NOTE:

A STUDY ENTITLED "SOIL, GEOLOGY AND GEOLOGIC HAZARD STUDY, LINCOLN PLAZA DRIVE AND BRADLEY ROAD, SOUTHEAST CORNER, EL PASO COUNTY, COLORADO" WAS PREPARED BY ENTECH ENGINEERING INC. WHICH IS DATED APRIL 12, 2005. THE IDENTIFICATION OF GEOLOGIC HAZARDS INCLUDED ARTIFICIAL FILL, HYDROCOMPACTION, AND EXPANSIVE SOILS. MITIGATION OF THESE HAZARDS ARE TO BE CONDUCTED IN ACCORDANCE WITH THE RECOMMENDATIONS OF SAID STUDY. ARTIFICIAL FILL ENCOUNTERED DURING EARTHWORK OPERATIONS ON THE SITE SHALL BE REMOVED AND RECOMPACTED IN ACCORDANCE WITH THE STUDY RECOMMENDATIONS. GRADING ADJACENT TO STRUCTURES SHALL BE ACCORDING TO THE GRADING NOTES ON THIS PLAN AND THE RECOMMENDATIONS OF THE SAID STUDY TO MITIGATE THE POTENTIAL FOR HYDROCOMPACTION AND LOOSE SOILS. ENGINEERED FOUNDATION DESIGNS SHALL BE REQUIRED IN ORDER TO MITIGATE THE POTENTIAL OF EXPANSIVE SOILS ON THE SITE.

MAP NOTES

1. BOUNDARY BEARINGS AND DISTANCES SHOWN ON THIS MAP ARE RELATIVE TO THE SOUTH LINE OF LOT 1A, BRADLEY CROSSROADS SUBDIVISION FILING NO. 1B, ASSUMED TO BEAR N89°43'38"W.
2. THE EXISTING TOPOGRAPHY SHOWN ON THIS PLAN WAS PREPARED BY MVE, INC. USING DATA PROVIDED BY POLARIS SURVEYING INC. ELEVATIONS SHOWN ARE RELATIVE TO THE CITY OF COLORADO SPRINGS CONTROL NETWORK (FIMS DATUM).

FLOODPLAIN STATEMENT

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 08041C0763G, EFFECTIVE DECEMBER 7, 2018.

TIMING
ANTICIPATED STARTING AND COMPLETION TIME PERIOD OF SITE GRADING: APRIL 2019 - NOVEMBER, 2019
EXPECTED DATE ON WHICH THE FINAL STABILIZATION WILL BE COMPLETED: NOVEMBER, 2019
AREAS
TOTAL AREA OF THE SITE TO BE CLEARED, EXCAVATED OR GRADED: 5.28 ACRES
RECEIVING WATERS
NAME OF RECEIVING WATERS: FOUNTAIN CREEK

LEGEND

	EXISTING	PROPOSED
PROPERTY LINE		
EASEMENT LINE		
LOT LINE		
BUILDING SETBACK LINE		
ADJACENT PROPERTY LINE		
INDEX CONTOUR	5985	5985
INTERMEDIATE CONTOUR	84	84
CONCRETE AREA		
ASPHALT AREA		
CURB AND GUTTER		
BUILDING/ BUILDING OVERHANG		
DECK		
RETAINING WALL - SOLID/ ROCK		RETAINING WALL - SOLID ROCK
SIGN		
BOLLARD		
WOOD FENCE		TOP OF WALL/GRADE AT BOTTOM OF WALL (84.0 TW / 83.0 FG)
CHAIN LINK FENCE		TOP OF CURB/FLOWLINE (84.85 / 83.35)
BARBED WIRE FENCE		SPOT ELEVATION FL = FLOWLINE TSW = TOP OF SIDEWALK (84.96 TSW)
TREE (EVERGREEN/DECIDUOUS)		FF = 5986.00 FINISHED FLOOR ELEVATION
SHRUB		
ROCK		

OWNERS STATEMENT

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

JORDAN E. GUIRANE, PRESIDENT
J. ELIOT HOMES, INC.
DATE 3/18/19

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.
FOR AND ON BEHALF OF M.V.E., INC.
DATE 3/18/19

EL PASO COUNTY

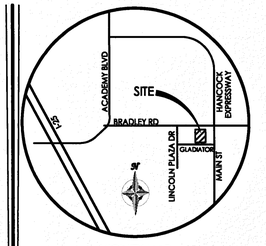
COUNTY PLAN REVIEW IS PROVIDED ONLY FOR GENERAL CONFORMANCE WITH COUNTY DESIGN CRITERIA. THE COUNTY IS NOT RESPONSIBLE FOR THE ACCURACY AND ADEQUACY OF THE DESIGN, DIMENSIONS, AND/OR ELEVATIONS WHICH SHALL BE CONFIRMED AT THE JOB SITE. THE COUNTY THROUGH THE APPROVAL OF THIS DOCUMENT ASSUMES NO RESPONSIBILITY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

EPC PROJ NO. PPR1846



VICINITY MAP
N.T.S.

BENCHMARK

1" = 60' 1:720

MVE, INC.
ENGINEERS, SURVEYORS
1903 lelaray street, suite 200 colorado springs co 80909 719.635.5736

REVISIONS

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

THE TOWNHOMES AT BRADLEY CROSSROADS

GRADING & EROSION CONTROL PLAN COVER SHEET

C1.1 MVE PROJECT 61093
MVE DRAWING -GEC-CS

FEBRUARY 11, 2019
SHEET 1 OF 7

Z:\61093_Shared Drive\61093-GEC-CS.dwg, 3/18/19 11:05:57 AM, DWG

BRADLEY INVESTMENT GROUP LLC

ZONE: CC

BRADLEY INVESTMENT GROUP LLC

ZONE: CC

S 89°34'10" E, 285.97'

PLEASANT PORT VIEW (PRIVATE)

S 00°25'50" W 15.63'

S 89°34'10" E, 169.41'

EX 20' UTIL ESMT (REC NO 21071308)

40.00' EX UTIL DING & ACCESS ESMT (REC NO 21071308)

PROPOSED 20' PUBLIC DRAINAGE EASEMENT

5.00' DRAINAGE ESMT (#219026316)

S 00°05'56" W, 510.30'

S 00°25'50" W, 493.40'

COLD HARBOR VIEW (PRIVATE)

SUN SEEKER CT. (PRIVATE)

UNIT 1 "S" TYPE
UNIT 2 "S" TYPE
UNIT 3 "S" TYPE
UNIT 4 "S" TYPE
UNIT 5 "S" TYPE
UNIT 6 "S" TYPE
UNIT 7 "S" TYPE
UNIT 8 "S" TYPE
UNIT 9 "B" TYPE
UNIT 10 "B" TYPE
UNIT 11 "B" TYPE
UNIT 12 "B" TYPE
UNIT 13 "B" TYPE
UNIT 14 "S" TYPE
UNIT 15 "B" TYPE
UNIT 16 "B" TYPE
UNIT 17 "B" TYPE
UNIT 18 "B" TYPE
UNIT 19 "B" TYPE
UNIT 20 "B" TYPE
UNIT 21 "B" TYPE
UNIT 22 "B" TYPE
UNIT 23 "B" TYPE
UNIT 24 "B" TYPE
UNIT 41 "S" TYPE
UNIT 42 "S" TYPE
UNIT 43 "S" TYPE
UNIT 44 "S" TYPE
UNIT 45 "S" TYPE
UNIT 46 "S" TYPE
UNIT 47 "S" TYPE
UNIT 48 "S" TYPE
UNIT 49 "B" TYPE
UNIT 50 "B" TYPE
UNIT 51 "S" TYPE
UNIT 52 "S" TYPE
UNIT 53 "S" TYPE
UNIT 54 "S" TYPE
UNIT 55 "B" TYPE
UNIT 56 "B" TYPE
UNIT 57 "B" TYPE
UNIT 58 "B" TYPE
UNIT 59 "B" TYPE
UNIT 60 "B" TYPE
UNIT 61 "B" TYPE
UNIT 62 "B" TYPE

MAE KIOSKS

12" RCP 45° BEND INV=41.90'

3 - 12" RCP @ 80%

12" RCP INV=42.00' @ 0.0%

INSTALL 24"X12" WYE ON EXISTING 24" RCP INV EX. 24" = 37.66' INV 12" RCP = 38.16'

NOTE LEGEND:

1. INSTALL COUNTY STD TYPE B CURB & GUTTER
2. INSTALL ASPHALT PAVING w/ PARKING LOT MARKINGS
3. INSTALL CONCRETE SIDEWALK (5' WIDE)
4. INSTALL CONCRETE SIDEWALK (4' WIDE)
5. INSTALL PEDESTRIAN RAMP (SEE DETAILS)
6. INSTALL CONCRETE CHANNEL "TEXAS CROSSING" (SEE DETAIL)
7. INSTALL THICKENED EDGE SIDE WALK (SEE DETAIL)
8. INSTALL 4' WIDE ROCK SWALE (SEE DETAIL "A")
9. EXISTING CURB & GUTTER
10. INSTALL CDOT TYPE C INLET, H=2.5' W/ CLOSED MESH GRATE
11. INSTALL 5' WIDE ROCK SWALE (SEE DETAIL "B")
12. INSTALL 2' WIDE CURB DEPRESSION
13. INSTALL COUNTY STANDARD DRIVEWAY, DETAIL SD_2-24.
14. REMOVE EXISTING CONCRETE DRAIN PAN AND REPLACE W/ NEW 8' WIDE x 40' LONG CONCRETE PAN (SEE DETAIL)

EPC PROJ NO. PPR1846

VICINITY MAP
N.T.S.

SITE
ACADEMY BLVD
BRADLEY RD
LINCOLN PLAZA DR
GLADIATOR
MAIN ST
HANCOCK EXPRESSWAY
25

BENCHMARK
-

1" = 20' 1:240

MVE, INC.
ENGINEERS / SURVEYORS
1903 lelaray street, suite 200 colorado springs co 80909 719.635.5736

REVISIONS

DESIGNED BY
DRAWN BY
CHECKED BY
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CHECKED BY

COLORADO LICENSED
DAVID J. RAYMOND
31672
3/18/19
PROFESSIONAL ENGINEER

THE TOWNHOMES AT BRADLEY CROSSROADS

GRADING & EROSION CONTROL PLAN
GRADING PLAN (NORTH)

C1.2 MVE PROJECT 61093
MVE DRAWING -GEC-GP1

FEBRUARY 11, 2019
SHEET 2 OF 7

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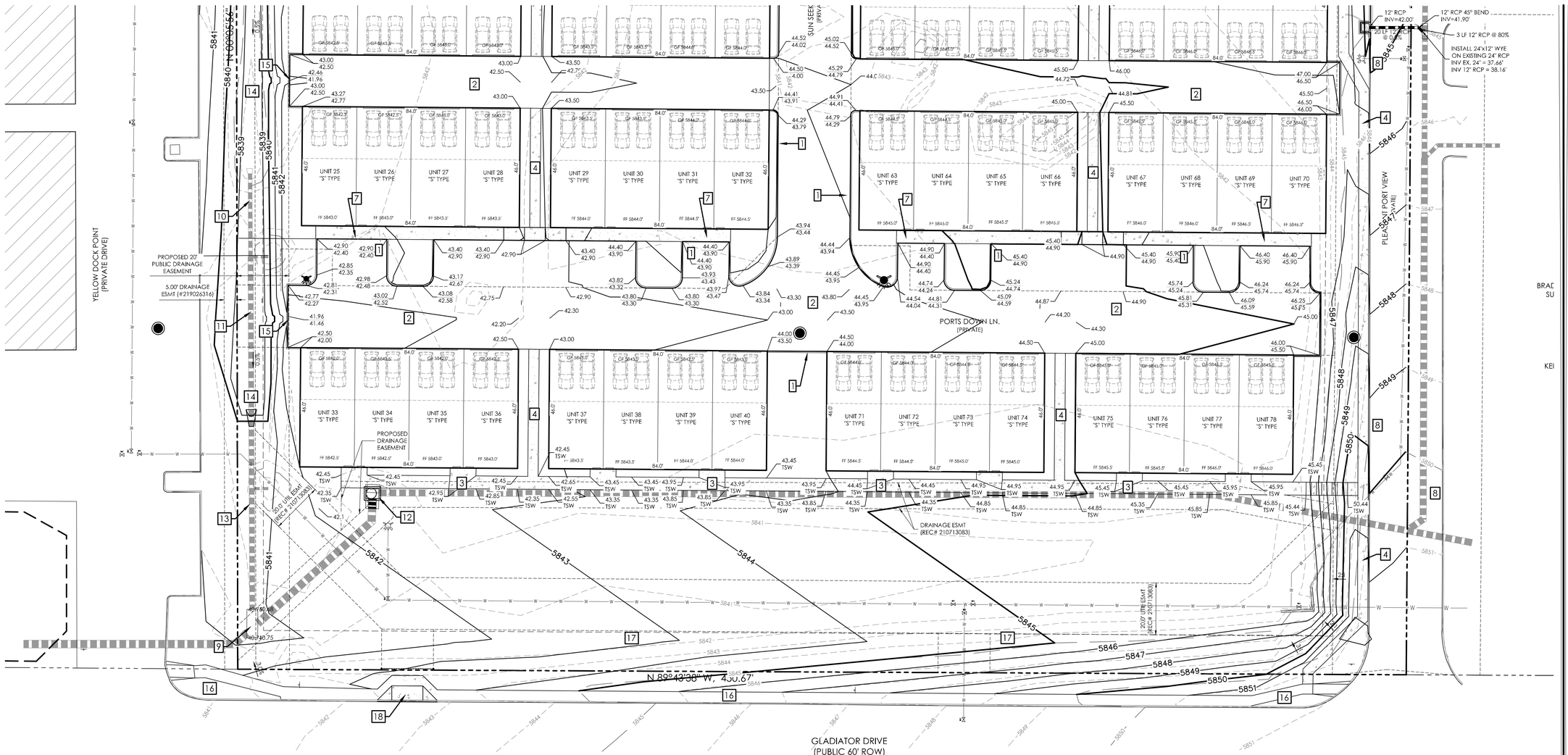

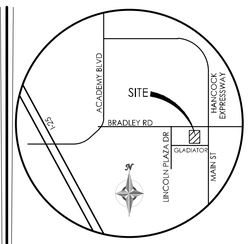

BENCHMARK

.

5 0 10 20 40

1" = 20' 1:240

NOTE LEGEND:

1. INSTALL COUNTY STD TYPE B CURB & GUTTER
2. INSTALL ASPHALT PAVING w/ PARKING LOT MARKINGS
3. INSTALL CONCRETE SIDEWALK (5' WIDE)
4. INSTALL CONCRETE SIDEWALK (4' WIDE)
5. INSTALL EPC STD PED RAMP D-8
6. INSTALL CONCRETE CHANNEL "TEXAS CROSSING" (SEE DETAIL)
7. INSTALL THICKENED EDGE SIDE WALK (SEE DETAIL)
8. EXISTING CURB & GUTTER
9. EXISTING INLET
10. REMOVE EXISTING 18" RCP
11. REMOVE EXISTING 24" RCP
12. REMOVE EXISTING INLET, INSTALL EPC TYPE 1 MANHOLE AND EXTEND EXISTING RCP AS REQUIRED. INSTALL MANHOLE RISERS AS NECESSARY TO MATCH FINISHED GRADE. CONTRACTOR TO VERIFY EXISTING PIPE INVERTS.
13. INSTALL 24" RCP FLARED END SECTION ON EXISTING 24" RCP LINE
14. INSTALL 5' WIDE ROCK SWALE (SEE DETAIL "B")
15. INSTALL 2' WIDE CURB DEPRESSION
16. EXISTING SIDEWALK (PROTECT IN PLACE)
17. CONTRACTOR TO ENSURE THAT GRADING IS ACCOMPLISHED PER THIS PLAN AND SHALL VERIFY THAT THE LOW POINT IS NOT WITHIN THE EXTENTS OF THE UTILITY EASEMENT.
18. INSTALL COUNTY STANDARD DRIVEWAY, DETAIL SD_2-24.

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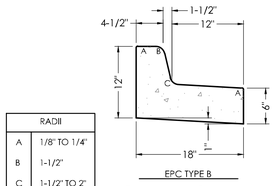
CHECKED BY ____ _____

THE TOWNHOMES AT BRADLEY CROSSROADS

GRADING & EROSION CONTROL PLAN
GRADING PLAN (SOUTH)

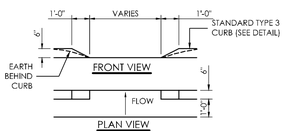
C1.2 MVE PROJECT 61093
MVE DRAWING -GEC-GP1

FEBRUARY 11, 2019
SHEET 3 **OF** 7



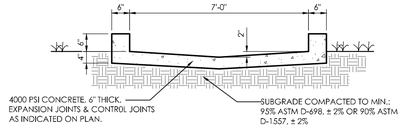
EPC TYPE B STANDARD MEDIAN CURB & GUTTER

SCALE 1"=1'



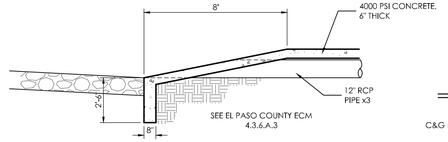
CURB DEPRESSION DETAIL

SCALE 1" = 4'



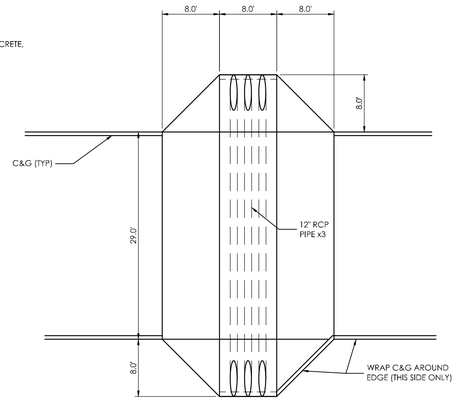
CONCRETE DRAIN PAN SECTION

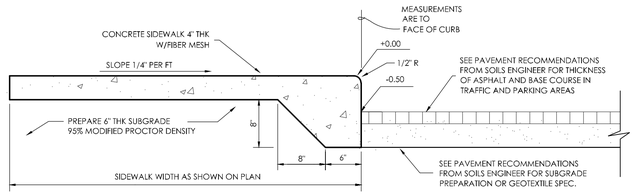
SCALE: NOT TO SCALE



"TEXAS CROSSING" END DETAIL

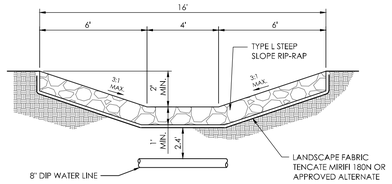
SCALE 1" = 4.0'





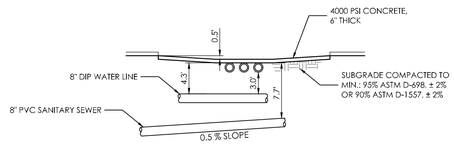
THICKENED EDGE SIDEWALK

SCALE: 1" = 1.0'



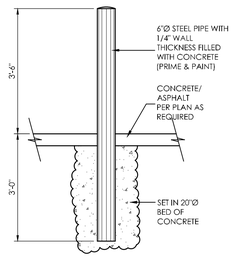
TYPICAL SWALE "A"

SCALE 1" = 4.0'



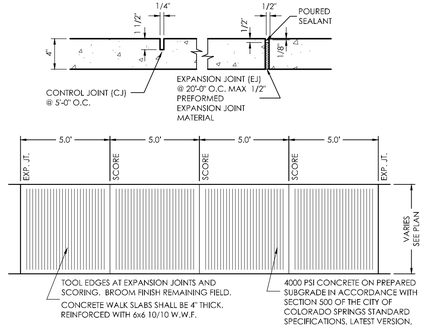
"TEXAS CROSSING" DETAIL

SCALE 1" = 10.0'



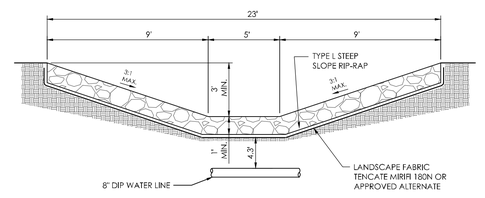
BOLLARD DETAIL

SCALE 1" = 2.0'



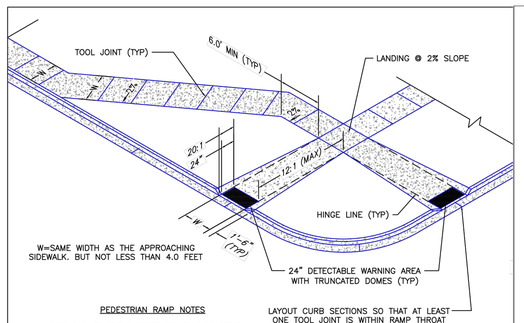
TYPICAL SIDEWALK DETAIL

SCALE 1" = 4.0'



TYPICAL SWALE "B"

SCALE 1" = 4.0'



PEDESTRIAN RAMP NOTES

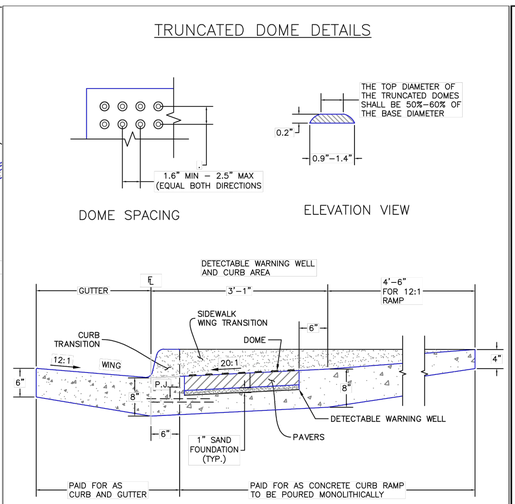
1. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE CURRENT ENGINEERING CRITERIA MANUAL AND ADA REQUIREMENTS.
2. CONTRACTOR TO NOTIFY ENGINEERING DIVISION INSPECTION STAFF 48 HOURS PRIOR TO CONCRETE PLACEMENT.
3. PEDESTRIAN RAMP CONSTRUCTION SHALL BE A MINIMUM 4,500 PSI CONCRETE, MINIMUM 4" THICK, NON-COLORED, NON-SCORED, COARSE BROOM FINISH.
4. RAMP LOCATION AND LENGTH MAY REQUIRE MODIFICATION TO MAINTAIN THE 12:1 MAXIMUM RUNNING RAMP SLOPE AND 20:1 DETECTABLE WARNING AREA DUE TO STREET INTERSECTION GRADES AND/OR ALIGNMENTS.
5. DETECTABLE WARNING AREA SHALL START A MINIMUM OF 6" BUT NOT MORE THAN 8" FROM THE FLOWLINE OF THE CURB AT ANY POINT.
6. DETECTABLE WARNING AREA SHALL BE PREFABRICATED, REDDISH INTEGRALLY COLORED, TRUNCATED-DOME, PAVERS. THERMOPLASTIC TRUNCATED DOMES WILL NOT BE ACCEPTED.
7. THE DETECTABLE WARNING AREA SHALL BE 24" IN LENGTH AND THE FULL WIDTH OF THE RAMP.
8. RAMP WIDTH REQUIRED IS SAME AS APPROACHING SIDEWALK; 4' MINIMUM.
9. ALL RAMPS WILL BE PERPENDICULAR TO TRAFFIC WITH THE EXCEPTION OF MID-BLOCK OR TERMINAL RAMPS WHICH MAY BE PARALLEL SUBJECT TO APPROVAL.
10. AVOID PLACING DRAINAGE STRUCTURES, TRAFFIC SIGNAL/SIGNAGE, UTILITIES/JUNCTION BOXES, OR OTHER OBSTRUCTIONS WITHIN PROPOSED RAMP AREAS.

GENERAL NOTES

1. WHERE THE 1'-6" FLARED SIDE(S) OF A PERPENDICULAR CURB RAMP IS (ARE) CONTIGUOUS WITH A PEDESTRIAN OR HARD SURFACE AREA, THE MAXIMUM FLARE SLOPE SHALL NOT EXCEED 10:1.
2. PEDESTRIAN WALKWAY AND/OR LOCATION OF EXISTING OR FUTURE PEDESTRIAN RAMPS ON OPPOSITE CORNERS SHALL BE REVIEWED BEFORE CONSTRUCTING NEW RAMPS.
3. AT MARKED PEDESTRIAN CROSSINGS, THE BOTTOM OF THE RAMPS, EXCLUSIVE OF THE FLARE SIDES, SHALL BE TOTALLY CONTAINED WITHIN THE MARKINGS.

7/9/09	Pedestrian Intersection Ramp	
DATE APPROVED:	Standard Drawing	
André P. Brackin	REVISION DATE: 12/8/15	FILE NAME: SD_2-41
DEPARTMENT OF TRANSPORTATION		EL PASO COUNTY DEPARTMENT OF TRANSPORTATION

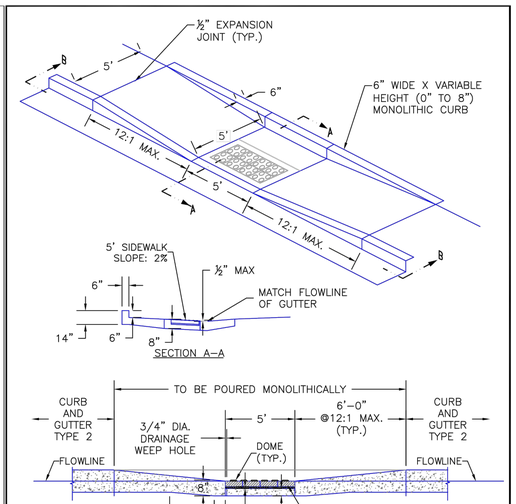
TRUNCATED DOME DETAILS



P.J.= PERMISSABLE JOINT WITH EPOXY-COATED DEFORMED NO. 4 BARS CONFORMING TO AASHTO M 284 AT 18 IN. SPACING

SIDE CROSS SECTION VIEW OF DETECTABLE WARNING, WELL, CURB AND GUTTER

1/1/08	Truncated Dome Details	
DATE APPROVED:	Standard Drawing	
John A. McCarty	REVISION DATE: 11/25/15	FILE NAME: SD_2-42
DEPARTMENT OF TRANSPORTATION		EL PASO COUNTY DEPARTMENT OF TRANSPORTATION

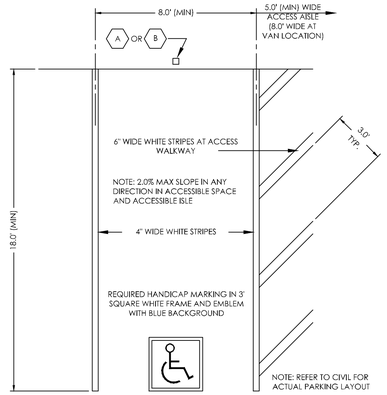


8/11/11	Parallel Pedestrian Ramp Detail	
DATE APPROVED:	Standard Drawing	
André P. Brackin	REVISION DATE: 12/8/15	FILE NAME: SD_2-50
DEPARTMENT OF TRANSPORTATION		EL PASO COUNTY DEPARTMENT OF TRANSPORTATION

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

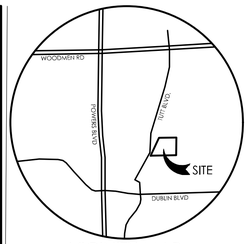
SCALE 1" = 1.0'



TYPICAL HANDICAP PARKING SPACE

SCALE 1" = 4.0'

EPC PROJ NO. PPR1846



VICINITY MAP

NOT TO SCALE

BENCHMARK

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ENGINEERS SURVEYORS
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REVISIONS

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AS-BUILTS BY
CHECKED BY

THE TOWNHOMES AT BRADLEY CROSSROADS

GRADING & EROSION CONTROL PLAN
CIVIL DETAILS

C1.4 MVE PROJECT 61093
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FEBRUARY 11, 2019
SHEET 4 OF 7

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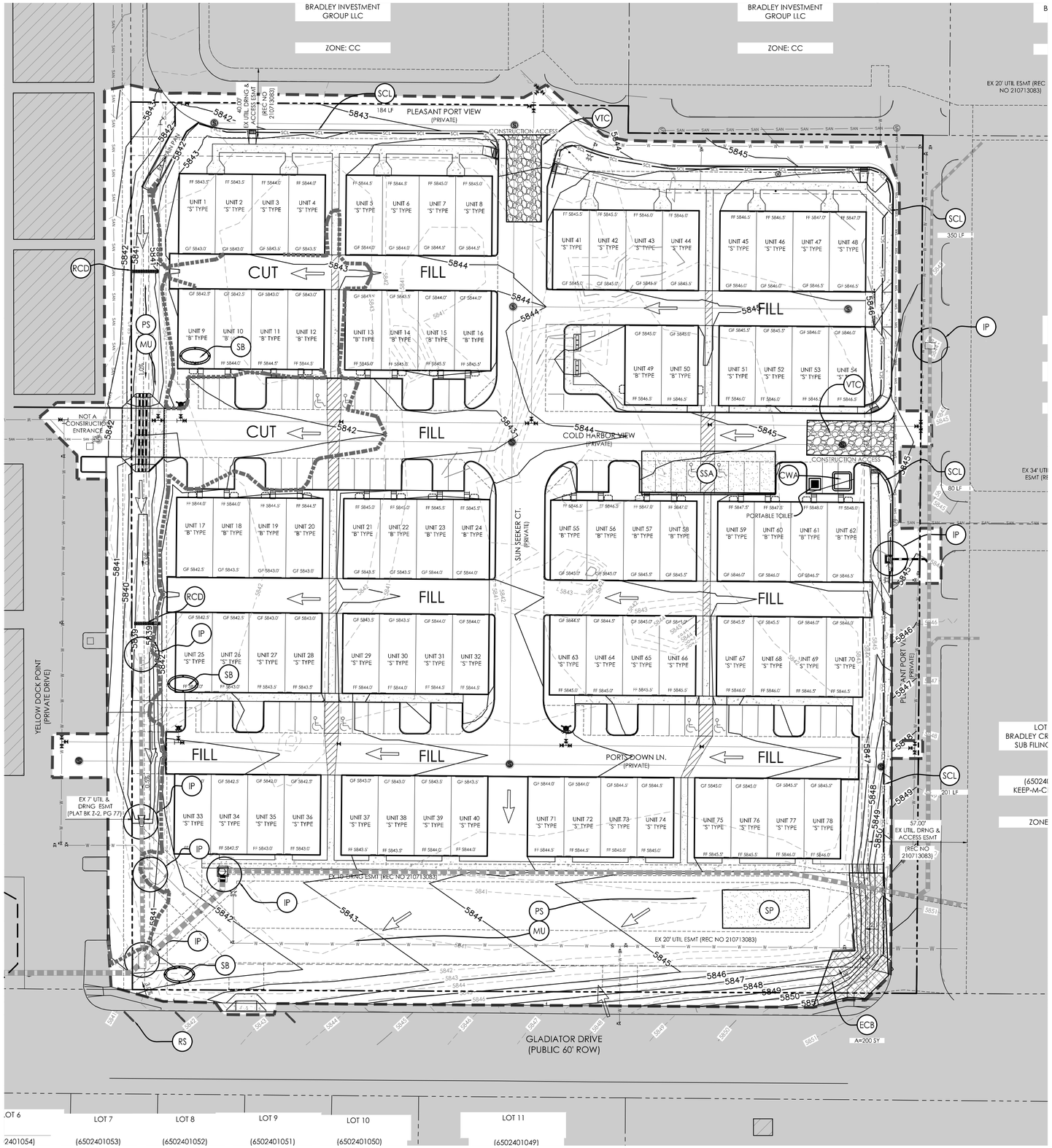

BMP LEGEND

MAP SYMBOL	KEY	DESCRIPTION
	CWA	CONCRETE WASHOUT AREA
	SB	TEMPORARY SEDIMENT BASIN
SF SF	SF	SILT FENCE
SCL	SCL	SEDIMENT CONTROL LOG
	RCD	ROCK CHECK DAM
	ST	**SEDIMENT TRAP
	SBB	STRAW BALE BARRIER
	RS	ROCK SOCK
	ECB	EROSION CONTROL BLANKET
	VTC	VEHICLE TRACKING CONTROL
SW	SW	STREET SWEEPING
IP	IP	INLET PROTECTION
OP	OP	PERMENANT OUTLET PROTECTION (SEE CONSTRUCTION PLANS)
	SSA	STABILIZED STAGING AREA
	SP	STOCKPILE PROTECTION
MU	MU	MULCHING
SR	SR	SURFACE ROUGHENING
PS	PS	PERMANENT SEEDING
UNDISTURBED AREA / LIMITS OF DISTURBANCE / DISTURBED AREA		LIMITS OF CONSTRUCTION SITE BOUNDARIES
CUT / FILL / NGC		LIMITS OF CUT/FILL/NO GRADE CHANGE
9		LIMITS OF SOIL TYPE
		FLOW DIRECTION ARROW

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

HYDROLOGIC SOIL GROUP	
MAP UNIT NUMBER	DESCRIPTION
8	BLAKELAND LOAMY SAND

EROSION CONTROL DATA

TIMING

ANTICIPATED START & COMPLETION TIME PERIOD OF SITE GRADING	NOVEMBER, 2018 TO NOVEMBER, 2019
EXPTECTED DATE ON WHICH FINAL STABILIZATION WILL BE COMPLETED	SEPTEMBER, 2019 TO JUNE, 2020

AREAS

TOTAL AREA OF THE SITE TO BE CLEARED, EXCAVATED OR GRADED	5.28 ACRES

RECEIVING WATERS

NAME OF RECEIVING WATERS	LITTLE JOHNSON

SOIL DATA

PRIMARY SOIL DESCRIPTION	BLAKELAND LOAMY SAND
PERMEABILITY	RAPID
SURFACE RUNOFF	LOW
HAZARD OF EROSION	MODERATE
HYDROLOGIC SOIL GROUP	A
EXISTING PERCENT IMPERVIOUS	0%
DEVELOPED PERCENT IMPERVIOUS	85.0%

COLORADO LICENSED DAVID RAYMOND PARMAN 31672 3/18/19 PROFESSIONAL ENGINEER

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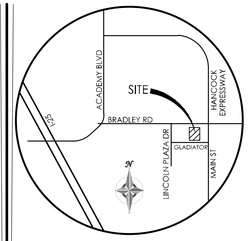

VICINITY MAP
N.T.S.

BENCHMARK
.

1" = 30' 1:360

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1903 Lelaray Street, Suite 200 colorado springs co 80909 719.635.5736

REVISIONS

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CHECKED BY

THE TOWNHOMES AT BRADLEY CROSSROADS

GRADING & EROSION CONTROL PLAN
EROSION CONTROL PLAN

C1.5
MVE PROJECT 61093
MVE DRAWING GEC-EC

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SHEET 5 **OF** 7

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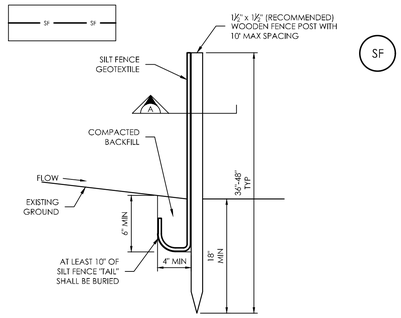


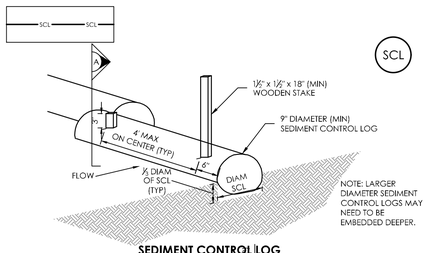
SILT FENCE

SECTION A

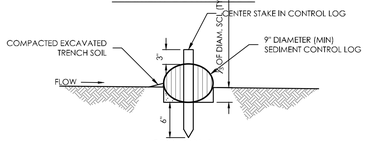
SF-1. SILT FENCE

SILT FENCE INSTALLATION NOTES:
1. 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.
3. COMPACT ANCHOR TRENCH BY HAND WITH A "JUMPING JACK" OR BY WHEEL ROLLING. COMPACTION SHALL BE SUCH THAT SILT FENCE RESISTS BEING PULLED OUT OF ANCHOR TRENCH BY HAND.
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 1" HEAVY DUTY STAPLES OR NAILS WITH 1" 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.

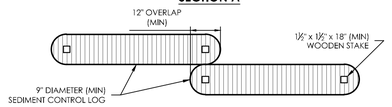
SILT FENCE MAINTENANCE NOTES
1. INSPECT BMPS EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPS SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPS AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.
2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPS IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.
3. WHERE BMPS HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.
4. SEDIMENT ACCUMULATED UPSTREAM OF THE SILT FENCE SHALL BE REMOVED AS NEEDED TO MAINTAIN THE FUNCTIONALITY OF THE BMP, TYPICALLY WHEN DEPTH OF ACCUMULATED SEDIMENTS IS APPROXIMATELY 6".
5. REPAIR OR REPLACE SILT FENCE WHEN THERE ARE SIGNS OF WEAR, SUCH AS SAGGING, TEARING, OR COLLAPSE.
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.



SEDIMENT CONTROL LOG



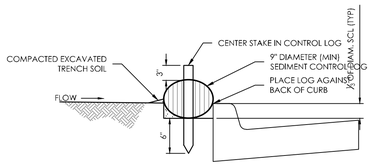
SECTION A



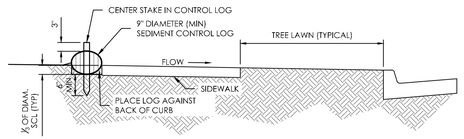
SEDIMENT CONTROL LOG JOINTS

SCL-1. SEDIMENT CONTROL LOG

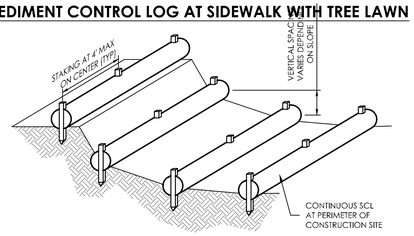
SEDIMENT CONTROL LOG INSTALLATION NOTES:
1. SEE PLAN VIEW FOR LOCATION AND LENGTH OF SEDIMENT CONTROL LOGS.
2. SEDIMENT CONTROL LOGS THAT ACT AS A PERIMETER CONTROL SHALL BE INSTALLED PRIOR TO ANY UPGRADIENT LAND—DISTURBING ACTIVITIES.
3. SEDIMENT CONTROL LOGS SHALL CONSIST OF STRAW, COMPOST, EXCELSIOR 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 GROUND. 3" OF THE STAKE SHALL PROTRUDE FROM THE TOP OF THE LOG. STAKES THAT ARE BROKEN PRIOR TO INSTALLATION SHALL BE REPLACED.



SCL-2. SEDIMENT CONTROL LOG AT BACK OF CURB

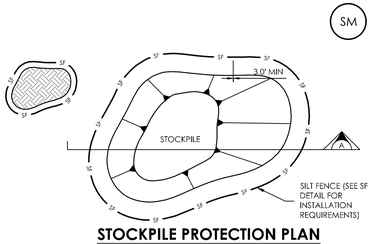


SCL-3. SEDIMENT CONTROL LOG AT SIDEWALK WITH TREE LAWN

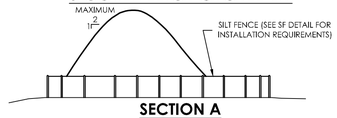


SCL-4. SEDIMENT CONTROL LOGS TO CONTROL SLOPE LENGTH

SEDIMENT CONTROL LOG MAINTENANCE NOTES
1. INSPECT BMPS EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPS SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPS AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.
2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPS IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.
3. WHERE BMPS HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.
4. SEDIMENT ACCUMULATED UPSTREAM OF SEDIMENT CONTROL LOG SHALL BE REMOVED AS NEEDED TO MAINTAIN FUNCTIONALITY OF THE BMP, TYPICALLY WHEN DEPTH OF ACCUMULATED SEDIMENTS IS APPROXIMATELY ½ OF THE HEIGHT OF THE SEDIMENT CONTROL LOG.
5. SEDIMENT CONTROL LOG SHALL BE REMOVED AT THE END OF CONSTRUCTION. IF DISTURBED AREAS EXIST AFTER REMOVAL, THEY SHALL BE COVERED WITH TOP SOIL, SEEDED AND MULCHED OR OTHERWISE STABILIZED IN A MANNER APPROVED BY THE LOCAL JURISDICTION.



STOCKPILE PROTECTION PLAN

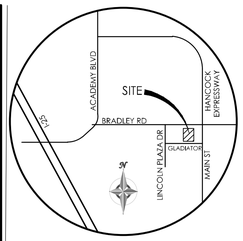


SECTION A

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 FROM THE STOCKPILE HAS BEEN USED.



VICINITY MAP
N.T.S.

BENCHMARK
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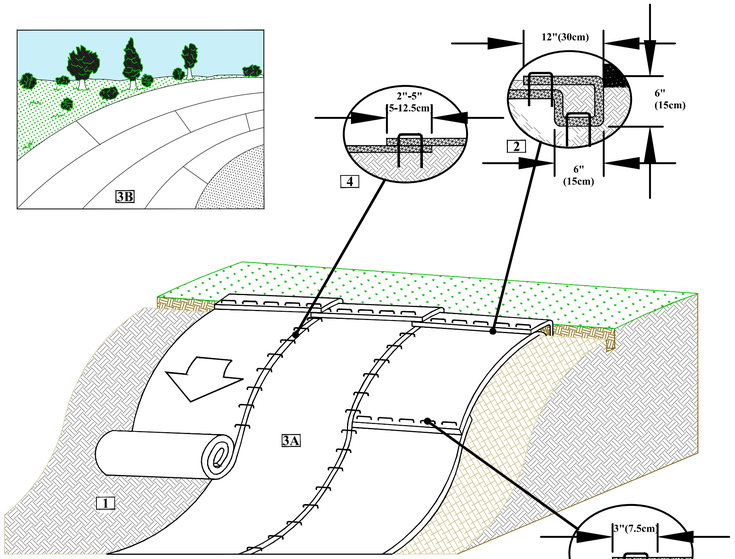
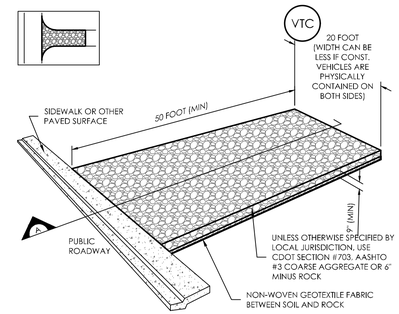
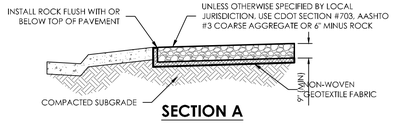


EROSION CONTROL BLANKET

DRAWING NOT TO SCALE

1. PREPARE SOIL BEFORE INSTALLING ROLLED EROSION CONTROL PRODUCTS (RECPS), INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED.
2. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE RECPS IN A 6"(15CM) DEEP X 6"(15CM) WIDE TRENCH WITH APPROXIMATELY 12" (30CM) OF RECPS EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE RECPS WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" (30CM) APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO THE COMPACTED SOIL AND FOLD THE REMAINING 12"(30CM) PORTION OF RECPS BACK OVER THE SEED AND COMPACTED SOIL. SECURE RECPS OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12"(30CM) APART ACROSS THE WIDTH OF THE RECPS.
3. ROLL THE RECPS (A) DOWN OR (B) HORIZONTALLY ACROSS THE SLOPE. RECPS WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL RECPS MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE.
4. THE EDGES OF PARALLEL RECPS MUST BE STAPLED WITH APPROXIMATELY 2' - 5' (5-12.5CM) OVERLAP DEPENDING ON THE RECPS TYPE.
5. CONSECUTIVE RECPS SPLICED DOWN THE SLOPE MUST BE END OVER END (SHINGLE STYLE) WITH AN APPROXIMATE 3"(7.5CM) OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12"(30CM) APART ACROSS ENTIRE RECPS WIDTH.

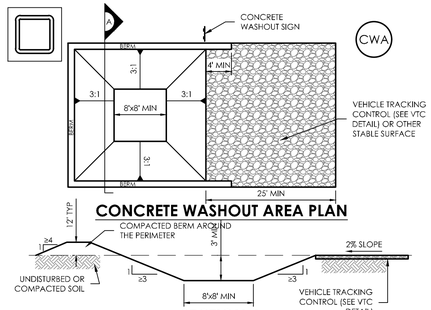




SECTION A

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.



SECTION A

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'.
6. VEHICLE TRACKING PAD SHALL BE SLOPED 2% TOWARDS THE CWA.
7. SIGNS SHALL BE PLACED AT THE CONSTRUCTION ENTRANCE, AT THE CWA, AND ELSEWHERE AS NECESSARY TO CLEARLY INDICATE THE LOCATION OF THE CWA TO OPERATORS OF CONCRETE TRUCKS AND PUMP RIGS.
8. USE EXCAVATED MATERIAL FOR PERIMETER BERM CONSTRUCTION.

CWA 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.
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3. WHERE BMPS HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.
4. THE CWA SHALL BE REPAIRED, CLEANED, OR ENLARGED AS NECESSARY TO MAINTAIN CAPACITY FOR CONCRETE WASTE. CONCRETE MATERIALS, ACCUMULATED IN PIT, SHALL BE REMOVED ONCE THE MATERIALS HAVE REACHED A DEPTH OF 2'.
5. CONCRETE WASHOUT WATER, WASTED PIECES OF CONCRETE AND ALL OTHER DEBRIS IN THE SUBSURFACE PIT SHALL BE TRANSPORTED FROM THE JOB SITE IN A WATER—TIGHT CONTAINER AND DISPOSED OF PROPERLY.
6. THE CWA SHALL REMAIN IN PLACE UNTIL ALL CONCRETE FOR THE PROJECT IS PLACED.
7. WHEN THE CWA IS REMOVED, COVER THE DISTURBED AREA WITH TOP SOIL, SEED AND MULCH OR OTHERWISE STABILIZED IN A MANNER APPROVED BY THE LOCAL JURISDICTION.

EPC PROJ NO. PPR1846

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REVISIONS

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

THE TOWNHOMES AT BRADLEY CROSSROADS

GRADING & EROSION CONTROL PLAN
EROISION DETAILS

C1.6
MVE PROJECT 61093
MVE DRAWING GEC-EC

FEBRUARY 11, 2019
SHEET 6 OF 7

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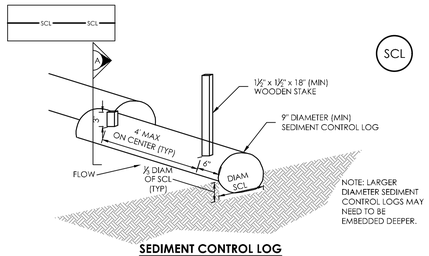
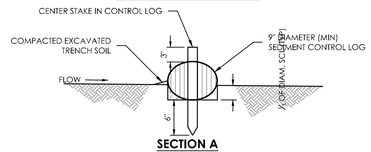
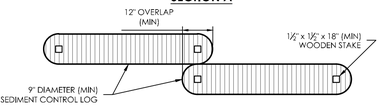


SCL

SEDIMENT CONTROL LOG



SECTION A



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.
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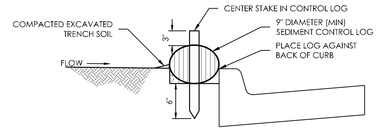
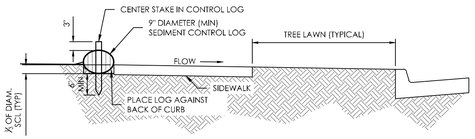
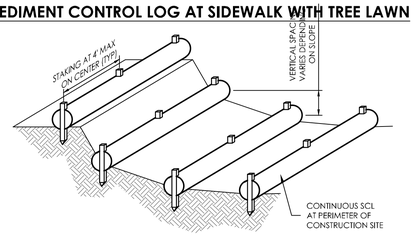


SCL-2. SEDIMENT CONTROL LOG AT BACK OF CURB



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



SCL-4. SEDIMENT CONTROL LOGS TO CONTROL SLOPE LENGTH

SEDIMENT CONTROL LOG MAINTENANCE NOTES

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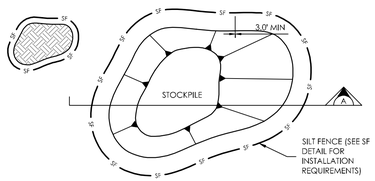
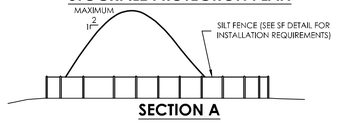


STOCKPILE PROTECTION PLAN



SECTION A

SP-1. STOCKPILE PROTECTION

STOCKPILE PROTECTION INSTALLATION NOTES

1. SEE PLAN VIEW FOR:
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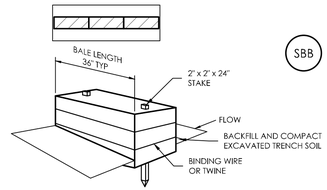
3. STABILIZE THE STOCKPILE SURFACE WITH SURFACE ROUGHENING, TEMPORARY SEEDING AND MULCHING, EROSION CONTROL BLANKETS, OR SOIL BINDERS. SOILS STOCKPILED FOR AN EXTENDED PERIOD (TYPICALLY FOR MORE THAN 60 DAYS) SHOULD BE SEEDED AND MULCHED WITH A TEMPORARY GRASS COVER ONCE THE STOCKPILE IS PLACED (TYPICALLY 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.

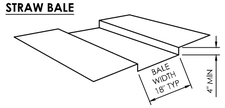
STOCKPILE PROTECTION MAINTENANCE NOTES

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 FROM THE STOCKPILE HAS BEEN USED.

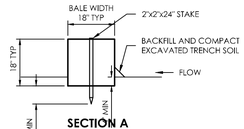
SBB



STRAW BALE



TRENCH FOR STRAW BALE



SECTION A

SBB-1. STRAW BALE BARRIER

STRAW BALE INSTALLATION NOTES:

1. SEE PLAN VIEW FOR:
   —LOCATION(S) OF STRAW BALES.
2. STRAW BALES SHALL CONSIST OF CERTIFIED WEED FREE STRAW OR HAY. LOCAL JURISDICTIONS MAY REQUIRE PROOF THAT BALES ARE WEED FREE.
3. STRAW BALES SHALL CONSIST OF APPROXIMATELY 5 CUBIC FEET OF STRAW OR HAY AND WEIGH NOT LESS THAN 35 POUNDS.
4. WHEN STRAW BALES ARE USED IN SERIES AS A BARRIER, THE END OF EACH BALE SHALL BE TIGHTLY ABUTTING ONE ANOTHER.
5. STRAW BALE DIMENSIONS SHALL BE APPROXIMATELY 36"x18"x18".
6. A UNIFORM ANCHOR TRENCH SHALL BE EXCAVATED TO A DEPTH OF 4". STRAW BALES SHALL BE PLACED SO THAT BINDING TWINE IS ENCOMPASSING THE VERTICAL SIDES OF THE BALE(S). ALL EXCAVATED SOIL SHALL BE PLACED ON THE UPHILL SIDE OF THE STRAW BALE(S) AND COMPACTED.
7. TWO (2) WOODEN STAKES SHALL BE USED TO HOLD EACH BALE IN PLACE. WOODEN STAKES SHALL BE 2"x2"x24", WOODEN STAKES SHALL BE DRIVEN 6" INTO THE GROUND.

STRAW BALE 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. STRAW BALES SHALL BE REPLACED IF THEY BECOME HEAVILY SOILED, ROTTEN, OR DAMAGED BEYOND REPAIR.
5. SEDIMENT ACCUMULATED UPSTREAM OF STRAW BALE BARRIER SHALL BE REMOVED AS NEEDED TO MAINTAIN FUNCTIONALITY OF THE BMP. TYPICALLY WHEN DEPTH OF ACCUMULATED SEDIMENTS IS APPROXIMATELY ½ OF THE HEIGHT OF THE STRAW BALE BARRIER.
6. STRAW BALES ARE TO REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS STABILIZED AND APPROVED BY THE LOCAL JURISDICTION.
7. WHEN STRAW BALES ARE REMOVED, ALL DISTURBED AREAS SHALL BE COVERED WITH TOPSOIL, SEEDED AND MULCHED OR OTHERWISE STABILIZED AS APPROVED BY LOCAL JURISDICTION.

MULCHING SPECIFICATIONS

INSTALLATION REQUIREMENTS:

1. ALL DISTURBED AREAS MUST BE MULCHED WITHIN 21 DAYS AFTER FINAL GRADE AND SEEDED AREAS ARE TO BE MULCHED WITHIN 24 HOURS AFTER SEEDING.
2. MATERIALS USED FOR MULCH CAN BE CERTIFIED CLEAN, WEED- AND SEED- FREE LONG STEMMED FIELD OR MARSH HAY, OR STRAW OF OATS, BARLEY, WHEAT, RYE, OR TRITICALE CERTIFIED BY THE COLORADO DEPARTMENT OF AGRICULTURE WEED FREE FORAGE CERTIFICATION PROGRAM.
3. HYDRAULIC MULCHING MATERIAL SHALL CONSIST OF VIRGIN WOOD FIBER MANUFACTURED FROM CLEAN WHOLE WOOD CHIPS. WOOD CHIPS CANNOT CONTAIN ANY GROWTH OR GERMINATION INHIBITORS OR BE PRODUCED FROM RECYCLED MATERIAL. GRAVEL CAN ALSO BE USED.
4. MULCH IS TO BE APPLIED EVENLY AT A RATE OF 2 TONS PER ACRE.
5. MULCH IS TO BE ANCHORED EITHER BY CRIMPING (TUCKING MULCH FIBERS 4 INCHES INTO THE SOIL), USING NETTING (USED ON SMALL AREAS WITH STEEP SLOPES), OR WITH A TACKIFIER.
6. HYDRAULIC MULCHING AND TACKIFIERS ARE NOT TO BE USED IN THE PRESENCE OF FREE SURFACE WATER.

MAINTENANCE REQUIREMENTS:

1. REGULAR INSPECTIONS ARE TO BE MADE OF ALL MULCHED AREAS.
2. MULCH IS TO BE REPLACED IMMEDIATELY IN THOSE AREAS IT HAS BEEN REMOVED, AND IF NECESSARY THE AREA SHOULD BE RESEEDED.

TEMPORARY SEEDING SPECIFICATIONS

INSTALLATION REQUIREMENTS

1. DISTURBED AREAS ARE TO BE SEEDED WITHIN 21 DAYS AFTER CONSTRUCTION ACTIVITY OR GRADING ENDS IF SEASON ALLOWS.
2. IF NECESSARY, SOIL IS TO BE CONDITIONED FOR PLANT GROWTH BY APPLYING TOPSOIL, FERTILIZER, OR LIME.
3. SOIL IS TO BE TILLED IMMEDIATELY PRIOR TO APPLYING SEEDS. COMPACT SOILS ESPECIALLY NEED TO BE LOOSENED.
4. SEEDBED DEPTH IS TO BE 4 INCHES FOR SLOPES FLATTER THAN 2:1, AND 1 INCH FOR SLOPES STEEPER THAN 2:1.
5. ANNUAL GRASSES LISTED IN TABLE TS-1 ARE TO BE USED FOR TEMPORARY SEEDING. SEED MIXES ARE NOT TO CONTAIN ANY NOXIOUS WEED SEEDS INCLUDING RUSSIAN OR CANADIAN THISTLE, KNAPWEED, PURPLE LOOSESTRIFE, EUROPEAN BINDWEED, JOHNSON GRASS, AND LEAFY SPURGE.
6. TABLE TS-1 ALSO PROVIDES REQUIREMENTS FOR SEEDING RATES, SEEDING DATES, AND PLANTING DEPTHS FOR THE APPROVED TYPES OF ANNUAL GRASSES.
7. SEEDING IS TO BE APPLIED USING MECHANICAL TYPE DRILLS EXCEPT WHERE SLOPES ARE STEEP OR ACCESS IS LIMITED THEN HYDRAULIC SEEDING MAY BE USED.
8. ALL SEEDED AREAS ARE TO BE MULCHED (SEE FACTSHEET ON MULCHING)
9. IF HYDRAULIC SEEDING IS USED THEN HYDRAULIC MULCHING SHALL BE DONE SEPARATELY TO AVOID SEEDS BECOMING ENCAPSULATED IN THE MULCH.

MAINTENANCE REQUIREMENTS:

1. REGULAR INSPECTIONS ARE TO BE MADE OF ALL SEEDED AREAS TO ENSURE GROWTH.
2. AREAS WHERE THE GROWTH IS NOT OCCURRING QUICKLY OR THE MULCH HAS BEEN REMOVED SHALL BE RE-SEEDED AS SOON AS A POSSIBLE AND RE-MULCHED IF NEEDED.
3. SEEDED AREAS ARE NOT TO BE DRIVEN OVER WITH CONSTRUCTION EQUIPMENT OR VEHICLES.

TABLE TS-1

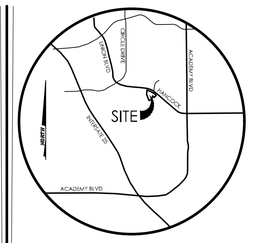
SPECIES* (COMMON NAME)	GROWTH SEASON**	POUNDS OF PURE LIVE SAND (PLS)/ACRE***	PLANTING DEPTH (INCHES)
1. OATS	COOL	35-50	1-2
2. SPRING WHEAT	COOL	25-35	1-2
3. SPRING BARLEY	COOL	25-35	1-2
4. ANNUAL RYEGRASS	COOL	10-15	½
5. MILLET	WARM	3-15	½ - ¾
6. SUDANGRASS	WARM	5-10	½ - ¾
7. SORGHUM	WARM	5-10	½ - ¾
8. WINTER WHEAT	COOL	20-35	1-2
9. WINTER BARLEY	COOL	20-35	1-2
10. WINTER RYE	COOL	20-35	1-2
11. TRITICALE	COOL	25-40	1-2

* SUCCESSFUL SEEDING OF ANNUAL GRASS RESULTING IN ADEQUATE PLANT GROWTH WILL USUALLY PRODUCE ENOUGH DEAD-PLANT RESIDUE TO PROVIDE PROTECTION FROM WIND AND WATER EROSION FOR AN ADDITIONAL YEAR. THIS ASSUMES THAT THE COVER IS NOT DISTURBED OR MOWED CLOSER THAN 8 INCHES.

HYDRAULIC SEEDING MAY BE SUBSTITUTED FOR DRILLING ONLY WHERE SLOPES ARE STEEPER THAN 3:1 OR WHERE ACCESS LIMITATIONS EXIST. WHEN HYDRAULIC SEEDING IS USED, HYDRAULIC MULCHING SHOULD BE APPLIED AS A SEPARATE OPERATION, WHEN PRACTICAL, TO PREVENT THE SEEDS FROM BEING ENCAPSULATED IN THE MULCH.

** SEE TABLE TS/PS-3 FOR SEEDING DATES. IRRIGATION, IF CONSISTENTLY APPLIED, MAY EXTEND THE USE OF COOL SEASON SPECIES DURING THE SUMMER MONTHS.

*** SEEDING RATES SHOULD BE DOUBLED IF SEED IS BROADCAST, OR INCREASED BY 50 PERCENT IF DONE USING A BRILLION DRILL OR BY HYDRAULIC SEEDING.



VICINITY MAP

NOT TO SCALE

BENCHMARK

COLORADO LICENSED
DAVID R. RAMOND
31672
3/18/19
PROFESSIONAL ENGINEER

MVE INC.
ENGINEERS / SURVEYORS
1903 lelaray street, suite 200 colorado springs co 80909 719.635.5736

REVISIONS

DESIGNED BY
DRAWN BY
CHECKED BY ____ _____
AS-BUILTS BY
CHECKED BY ____ _____

2515 LARAMIE DR

OFFICE/WAREHOUSE

C1.7
GRADING, EROSION, STORMWATER QUALITY CONTROL PLAN
EROSION DETAILS 2

MVE PROJECT **51367**

MVE DRAWING GESC-ED2

OCTOBER 22, 2018

SHEET 7 OF 7

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PROPOSED GROUND PLANE TREATMENT

PROPOSED IRRIGATED FESCUE BLEND SOD

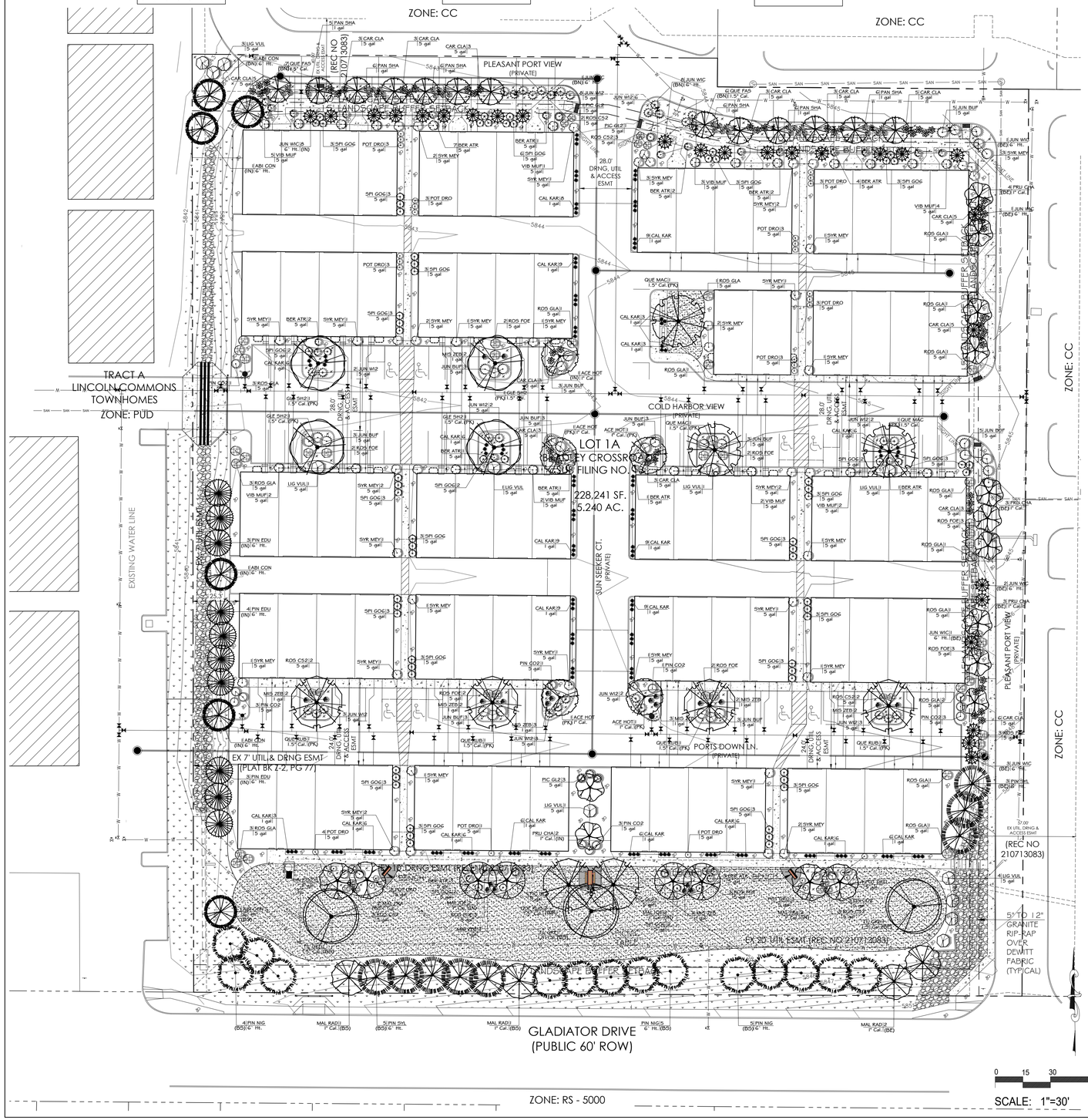
PROPOSED 5" TO 12" GRANITE RIP-RAP OVER DEWITT LANDSCAPE FABRIC

PROPOSED 1.5" BLUE GRAY RIVER ROCK COBBLE, 3" DEPTH, OVER DEWITT LANDSCAPE FABRIC

PROPOSED NON-IRRIGATED 'LOW GROW' NATIVE GRASS WITH EROSION CONTROL BLANKET

PROPOSED 1.5" ROYAL GRANITE CRUSHED ROCK, 3" DEPTH, OVER DEWITT LANDSCAPE FABRIC

PROPOSED COMPACTED RED BREEZE GRAVEL, 3" DEPTH, OVER DEWITT LANDSCAPE FABRIC



SITE CATEGORY CALCULATIONS:

Landscape Setbacks

Street Name or Boundary	Street Classification	Width (in Ft.) Req./Prov.	Linear Footage	Tree/Feet Required	No. of Trees Req./ Prov.	Setback Plant Abbr. Denoted on Plan
Pleasant Port View (north)	Private collector	10' / 15'	471'	1 / 30'	16 / 24	(see Buffer & Screens requirements)
Pleasant Port View (east)	Private collector	10' / 15'	493'	1 / 30'	16 / 25	(see Buffer & Screens requirements)
Gladiator Drive	Non arterial	10' / 15'	451'	1 / 30'	15 / 23	(see Buffer & Screens requirements)

Parking

No. of Vehicles Spaces Provided	Shade Trees Required/Provided	Abbr. on Plan
221	15 / 15	(PK)

Vehicle Lot Frontages	Length of Frontage (excluding driveways)	2/3 Length of Frontage (ft.)
Pleasant Port View	36'	24'

Min. 3' Screening Plants Req. /Prov.	Evergreen Plants Req. (50%) / Prov.	Length of Screening Wall or Berm Provided	Vehicle Lot Plant Abbr. on Plan	Percent Ground Plane Veg. Req. / Prov.
6 / 6	3 / 3	-	(PS)	75% / 75%

Internal Landscaping

Net Site Area (SF) (less public ROW)	Percent Minimum Internal Area (%)	Internal Area (SF) Required /Provided	Internal Trees (1/500 SF) Required /Provided
228,241 s.f.	15%	34,236 s.f. / 65,320 s.f.	68 /34

Shrub Substitutes Required /Provided	Internal Plant Abbr. Denoted on Plan
340 / 340	(IN)

Landscape Buffer & Screens

Street Name or Property Line	Width (in Ft.) Req. / Prov.	Linear Footage	Buffer Trees (1/20') Required / Provided	Evergreen Trees Req. (1/3) / Provided
North Boundary	15' / 15'	471'	24 / 24	8 / 11
East Boundary	15' / 15'	493'	25 / 25	9 / 10
South Boundary	15' / 15'	451'	23 / 23	8 / 15

Length of 6 Ft. Opaque Structure Req. Prov.	Buffer Tree Abbr. Denoted on Plan	Percent Ground Plane Veg. Req. / Prov.
0' / 0'	(BN)	75% / 75%
0' / 0'	(BE)	75% / 75%
0' / 0'	(BS)	75% / 75%

PLANT_SCHEDULE

PLANT SCHEDULE

TREES	CODE	QTY	BOTANICAL NAME	COMMON NAME	SIZE	NOTES
	ABI CON	6	Abies concolor	White Fir	6` Ht.	B & B
	ACE HOT	5	Acer tatancum `Hot Wings`	Hot Wings Tatarian Maple	1" Cal.	B & B
	GLE SH2	4	Gleditsia tricanthos inermis `Shademaster` TM	Shademaster Locust	1.5" Cal.	B & B
	JUN WIC	26	Juniperus scopulorum `Wichita Blue`	Wichita Blue Juniper	6` Ht.	
	MAL IOE	4	Malus ioensis `Plena`	Bechtel Crab Apple	1" Cal.	B & B
	MAL PRA	4	Malus x `Prairifire`	Prairifire Crab Apple	1" Cal.	B & B
	MAL RAD	4	Malus x `Radiant`	Radiant Crab Apple	1" Cal.	B & B
	PIN EDU	10	Pinus cembroides edulis	Pinyon Pine	6` Ht.	B & B
	PIN NIG	14	Pinus nigra	Austrian Black Pine	6` Ht.	B & B
	PIN SYL	8	Pinus sylvestris	Scotch Pine	6` Ht.	B & B
	PRU CHA	12	Pyrus calleryana `Chanticleer`	Chanticleer Pear	1" Cal.	B & B
	QUE MAC	3	Quercus macrocarpa	Burr Oak	1.5" Cal.	B & B
	QUE FAS	13	Quercus robur `Fastigiata`	Fastigiate English Oak	1.5" Cal.	B & B
	QUE RUB	6	Quercus rubra	Northern Red Oak	1.5" Cal.	B & B
	TIL GRE	3	Tilia cordata `Greenspire`	Greenspire Littleleaf Linden	1.5" Cal.	B & B

SHRUBS	CODE	QTY	BOTANICAL NAME	COMMON NAME	SIZE	NOTES
	BER ATR	28	Berberis thunbergii `Atropurpurea`	Red Leaf Japanese Barberry	5 gal	
	CAR CLA	53	Caryopteris x clandonensis `Blue Mist`	Blue Mist Spirea	5 gal	
	JUN WI2	31	Juniperus horizontalis `Wiltonii`	Wilton Carpet Juniper	5 gal	
	JUN BUF	34	Juniperus sabina `Buffalo`	Buffalo Juniper	5 gal	
	LIG VUL	13	Ligustrum vulgare `Cheyenne`	Cheyenne Privet	5 gal	
	PIC GL2	7	Picea pungens glauca `Globosa`	Globed Colorado Blue Spruce	5 gal	
	PIN CO2	18	Pinus mugo `Compacta`	Dwarf Mugo Pine	5 gal	
	POT DRO	37	Potentilla fruticosa `Gold Drop`	Gold Drop Potentilla	5 gal	
	ROS FOE	25	Rosa foetida bicolor	Austnan Copper Rose	5 gal	
	ROS GLA	22	Rosa glauca	Redleaf Rose	5 gal	
	ROS C52	15	Rosa x `Carefree Delight`	Carefree Delight Rose	5 gal	
	SPI GOG	73	Spiraea japonica `Goldflame`	Goldflame Spirea	5 gal	
	SYR MEY	41	Syringa meyeri `Palibin`	Dwarf Korean Lilac	5 gal	
	VIB MUF	21	Viburnum dentatum `Blue Muffin`	Blue Muffin Arrowwood Viburnum	5 gal	

GRASSES	CODE	QTY	BOTANICAL NAME	COMMON NAME	SIZE	NOTES
	CAL KAR	132	Calamagrostis x acutiflora `Karl Foerster`	Feather Reed Grass	1 gal	
	MIS ZEB	22	Miscanthus sinensis `Zebrinus`	Zebra Grass	1 gal	
	PAN SHA	35	Panicum virgatum `Shenendoah`	Burgundy Switch Grass	1 gal	

JWLA
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jwlandarch@gmail.com

PROJECT FILE: bradley townhomes flp 02-08-19.dwg

DEVELOPMENT PLAN FOR
TOWNHOMES AT BRADLEY CROSSROADS
4735 Bradley Road, Colorado Springs, CO
El Paso County, CO

PROJECT NAME:

FINAL LANDSCAPE PLAN

SHEET TITLE:

DATE: 11 February 2019

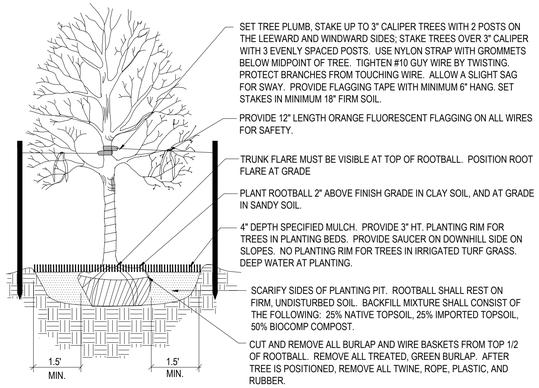
REVISION NO.

STAMP:

SHEET NO. L1

PLANTING DETAILS

NOTES:
1. DO NOT REMOVE OR CUT LEADER.
2. PRUNE ONLY DEAD OR BROKEN BRANCHES AND WEAK OR NARROW CROTCHES.
3. DO NOT REMOVE LOWER LIMBS AND SPROUTS FOR AT LEAST TWO GROWING SEASONS.
4. KEEP PLANTS MOIST AND SHADED UNTIL PLANTED.
5. DO NOT FERTILIZE FOR AT LEAST ONE GROWING SEASON.
6. WRAP TRUNK ON EXPOSED SITES OR SPECIES WITH THIN BARK. USE ELECTRICAL TAPE NOT TWINE. WRAP OCTOBER 15 AND REMOVE BY MARCH 31.



1 Deciduous Tree Planting Detail

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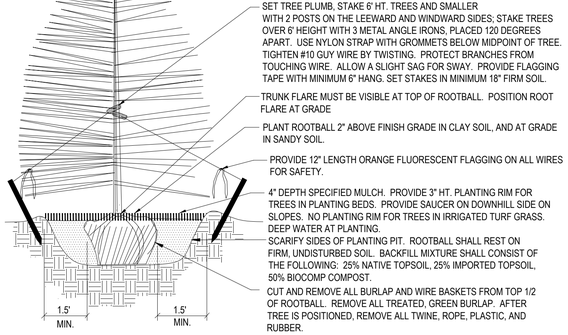

2 Coniferous Tree Planting Detail

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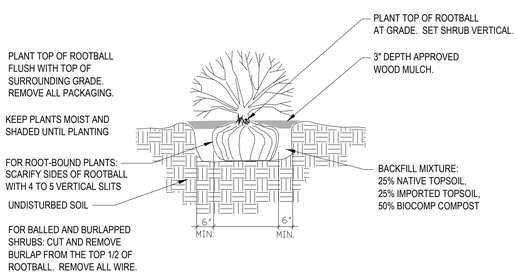

3 Shrub Planting Detail

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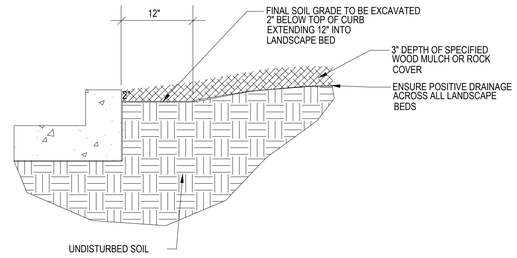

4 Rock Cover / Mulch Bed Excavation

SCALE: NOT TO SCALE

PROJECT DATA

PROPERTY SIZE:	228,241 s.f. total
BULDING AREA:	38,640 s.f.
PAVEMENT AREA:	124,281 s.f.
LANDSCAPE AREA:	65,320 s.f.
TOTAL PARKING SPACES:	221 spaces
RESIDENTIAL UNITS:	78 units total

NATIVE SEED ESTABLISHMENT

INITIAL PLANTING

STOCKPILED TOPSOIL SHOULD BE SPREAD EVENLY OVER ALL AREAS TO RECEIVE NATIVE SEED. SEED BED IS TO BE WEED-FREE. SPECIFIED SOIL AMENDMENTS SHOULD BE SPREAD AND INCORPORATED INTO TOP 6" OF SOIL. SEED BED IS TO BE RAKED SMOOTH AND FREE OF DEBRIS LARGER THAN 1" IN DIAMETER. ANY AREAS THAT THE CONTRACTOR BELIEVES TO BE SUSCEPTIBLE TO EROSION ARE TO BE BROUGHT TO THE ATTENTION OF THE OWNER AND/OR GENERAL CONTRACTOR PRIOR TO SEEDING. THE SPECIFIED SEED MIX IS TO BE APPLIED BY HYDRO-MULCH SEEDING AT THE RATE SPECIFIED. SEED IS TO BE APPLIED BETWEEN APRIL 15 AND SEPTEMBER 15. SEED SHALL NOT BE SOWN IF GROUND IS IN A FROZEN STATE. SPECIFIED EROSION CONTROL BLANKET IS TO BE INSTALLED IMMEDIATELY AFTER SEEDING. BLANKET SHALL BE LAID AND SECURED WITH 6" METAL STAPLES AS PER MANUFACTURER'S INSTRUCTIONS. CONTRACTOR IS TO PROVIDE INCIDENTAL WATERING OF ALL SEEDED AREAS THREE TIMES A WEEK DURING GROWING SEASON FOR A MINIMUM OF 8 WEEKS, OR UNTIL ESTABLISHED AND MEETING COVERAGE REQUIREMENTS. MOWING MAY BE NECESSARY DURING THE FIRST GROWING SEASON TO KEEP INVASIVE WEEDS FROM SETTING SEEDS. CONTRACTOR IS RESPONSIBLE FOR KEEPING BROADLEAF WEEDS UNDER CONTROL FOR 12 MONTHS AFTER INITIAL SEEDING AND IS ALSO RESPONSIBLE FOR OVER SEEDING BARE AREAS UNTIL SPECIFIED NATIVE GRASSES COVER ALL AREAS AND AREAS WITHOUT SPECIFIED NATIVE GRASS DO NOT EXCEED 6" X 6".

OVER SEEDING

SIX WEEKS AFTER THE INITIAL SEEDING DURING THE FIRST GROWING SEASON AND/OR DURING THE SPRING OF THE SECOND GROWING SEASON CONTRACTOR IS TO REPAIR ANY ERODED AREAS AND OVER SEED ALL BARE NATIVE GRASS AREAS. CONTRACTOR IS TO USE SPECIFIED SEED MIX BY BROADCAST AND RAKING INTO TOP ¼" TO ½" OF SOIL. INCIDENTAL WATERING IS TO BE PROVIDED TO ESTABLISH OVER-SEEDED AREAS. BROADLEAF WEEDS ARE TO BE KEPT UNDER CONTROL BY MANUALLY PULLING OR CUTTING WEEDS OR SPRAYING OF BROADLEAF WEED HERBICIDE. HERBICIDE AND APPLICATION SHALL CONFORM TO ALL APPLICABLE LAWS OF THE STATE OF COLORADO AND MANUFACTURERS INSTRUCTIONS.

GENERAL NOTES

1. ALL REFERENCES TO 'CONTRACTOR' REFER TO LANDSCAPE CONTRACTOR, UNLESS OTHERWISE NOTED.
2. CONTRACTOR IS RESPONSIBLE FOR GETTING ALL UTILITY LOCATES 1-800-922-1987 PRIOR TO STARTING ANY WORK ON SITE AND ALSO HAVING UTILITIES RELOCATED AS NECESSARY FOR THE DURATION OF CONSTRUCTION.
3. CONTRACTOR IS RESPONSIBLE FOR INSTALLING ALL LANDSCAPE SHOWN ON THIS PLAN. ANY DEFICIENCIES OR DEVIATIONS FROM THIS PLAN ARE TO BE APPROVED BY OWNER'S REPRESENTATIVE OR LANDSCAPE ARCHITECT. ANY CHANGES FROM THE APPROVED PLANS MAY REQUIRE APPROVAL FROM THE EL PASO COUNTY PLANNING DEPARTMENT AND MAY DELAY COMPLETION OF PROJECT.
4. CONTRACTOR IS RESPONSIBLE FOR VERIFYING QUANTITIES OF MATERIALS NEEDED TO COMPLETE THIS PLAN IN THE FIELD. NOTIFY OWNER'S REPRESENTATIVE OF DISCREPANCIES BETWEEN THE DRAWINGS AND CONDITIONS IN THE FIELD. SUBSTITUTIONS OF LANDSCAPE MATERIALS ARE NOT ALLOWED WITHOUT APPROVAL FROM LANDSCAPE ARCHITECT GIVEN PRIOR TO INSTALLATION. NOTIFY LANDSCAPE ARCHITECT PRIOR TO CONSTRUCTION IF LANDSCAPE MATERIAL LOCATIONS NEED TO BE ALTERED DUE TO ON-SITE CONDITIONS.
5. CONTRACTOR IS TO PROVIDE A ONE YEAR WARRANTY ON ALL PLANT MATERIALS, SOD, IRRIGATION COMPONENTS, NATIVE GRASS, AND WORKMANSHIP. CONTRACTOR IS TO PROVIDE OWNER WITH WARRANTY CONDITIONS AND COMMENCE WARRANTY PERIOD UPON FINAL ACCEPTANCE OF LANDSCAPE INSTALLATION.
6. CONTRACTOR SHALL REFER TO ASSOCIATED LANDSCAPE CONTRACTORS OF COLORADO SPECIFICATIONS HANDBOOK, 1996 (OR MORE RECENT) REVISED EDITION FOR SPECIFICATIONS RELATING TO LANDSCAPE AND IRRIGATION CONSTRUCTION ON THIS SITE. REFER TO SECTIONS 02810, 02930, 02940, AND 02950. CONTRACTOR SHOULD CONTACT OWNER'S REPRESENTATIVE OR LANDSCAPE ARCHITECT FOR CLARIFICATIONS OR QUESTIONS.
7. THE OWNER OF THIS PROPERTY AND ANY FUTURE OWNERS SHALL BE RESPONSIBLE FOR THE PROPER LANDSCAPE AND IRRIGATION MAINTENANCE OF THIS SITE . MAINTENANCE OF THIS SITE INCLUDES, BUT IS NOT LIMITED TO, IRRIGATION INSPECTIONS AND ADJUSTMENTS, IRRIGATION SYSTEM SHUT DOWN AND START UP, IRRIGATION LEAK REPAIR, LANDSCAPE WEEDING, MOWING, SEEDING, FERTILIZATION, WOOD MULCH AND ROCK COVER REPLACEMENT, PRUNING, AND PLANT MATERIAL REPLACEMENT. ALL MAINTENANCE SHOULD BE IN ACCORDANCE WITH STANDARDS SPECIFIED WITHIN THE "ALCC SPECIFICATIONS HANDBOOK" REVISED EDITION- 1996. OWNER SHOULD CONTACT LANDSCAPE CONTRACTOR OR LANDSCAPE ARCHITECT REGARDING ANY QUESTIONS RELATING TO THE LANDSCAPE OR IRRIGATION MAINTENANCE OF THIS SITE.

PROJECT NOTES

1. ALL EXISTING TREES, WHICH CONSIST OF VOLUNTEER SIBERIAN ELMS, ON THE PROJECT SITE ARE TO BE REMOVED.
2. FINE GRADING TO BE PERFORMED BY LANDSCAPE CONTRACTOR TO REFLECT FINISHED GRADES SHOWN ON THE PROJECT GRADING PLANS. ALL FINISHED GRADES ARE TO HAVE A MINIMUM 2% SLOPE. CONTRACTOR IS TO REPORT POOR DRAINAGE CONDITIONS OR ANY GRADES IN LANDSCAPE AREAS LESS THAN 2% TO GENERAL CONTRACTOR AND LANDSCAPE ARCHITECT PRIOR TO LANDSCAPE CONSTRUCTION WORK. FINISHED GRADES SHALL BE FREE OF WEEDS AND FREE OF DEBRIS AND ROCKS GREATER THAN ONE INCH.
3. CONTRACTOR IS TO PROVIDE FINAL GRADES ADJACENT TO HARDSCAPE SURFACES AT THE FOLLOWING SPECIFICATIONS:
   2" BELOW TOP OF CONCRETE OR RETAINING WALLS FOR ALL MULCH AND ROCK COVER BEDS.
   1" BELOW TOP OF CONCRETE OR RETAINING WALLS FOR IRRIGATED TURF AND NATIVE SEED AREAS.
   CONTRACTOR IS TO COORDINATE THESE GRADING SPECIFICATIONS WITH GENERAL CONTRACTOR AND/OR WHOEVER IS PROVIDING ROUGH GRADING. FINAL GRADES IN ALL LANDSCAPE AREAS ARE TO BE ESTABLISHED USING ON-SITE STOCKPILED TOPSOIL.
4. ALL AREAS SHOWN AS 'NON-IRRIGATED NATIVE SEED' TO BE SEEDED WITH 'LOW GROW NATIVE SEED MIX' (PAWNEE BUTTE SEED, INC.) BY DRILL SEEDING AND HYDRO-MULCH SEEDING AT A RATE OF 2 LBS. PER 1,000 SQ. FT. REFER TO NATIVE SEED ESTABLISHMENT SPECIFICATION FOR MORE DETAILED INSTRUCTIONS. ALL SEEDED AREAS TO RECEIVE EROSION CONTROL BLANKET- 'R1 EXCEL' WESTERN EXCELSIOR PHOTO-DEGRADABLE EROSION CONTROL BLANKET. INSTALL PER MANUFACTURER'S INSTRUCTIONS.
5. ROCK COVER AREAS TO CONSIST OF 1.5" DIAMETER 'ROYAL GRANITE' CRUSHED ROCK (C&C SAND), SPREAD 3" DEPTH OVER LANDSCAPE FABRIC AND 1.5" DIAMETER BLUE GRAY RIVER ROCK COBBLE, 3" DEPTH OVER LANDSCAPE FABRIC. RIP-RAP AREAS TO RECEIVE 5" TO 12" DIAMETER OF 'CIMARRON' (C&C SAND) ROCK OVER LANDSCAPE FABRIC. RED BREEZE GRAVEL IS TO BE PROVIDED AT BENCH AND PICNIC TABLE AREAS, 3" COMPACTED DEPTH OVER LANDSCAPE FABRIC. REFER TO PLAN FOR LOCATIONS OF EACH TYPE OF ROCK. LANDSCAPE FABRIC TO CONSIST OF 'DEWITT' WEED BARRIER PRO, 3 OZ BLACK WOVEN POLYPROPYLENE FABRIC. FABRIC TO OVERLAP 6" MINIMUM AT ALL SEAMS. 6" STEEL ANCHOR PINS TO BE INSTALLED 6' O.C. MAX.
6. PROPOSED SOD IS TO CONSIST OF A FESCUE BLEND. SOD IS TO HAVE LOW CLAY CONTENT. SOD BED IS TO BE RAKED SMOOTH AND FREE OF DEBRIS AND ROCKS GREATER THAN ONE HALF INCH. SOD IS TO BE LAID WITH TIGHT STAGGERED EDGES AND BE ROLLED AFTER INSTALLATION.
7. ALL PROPOSED PLANTING BEDS ARE TO BE ROTO-TILLED TO A 6" DEPTH. PLANTING BEDS ARE TO BE RAKED SMOOTH AND FINISHED GRADES ARE TO BE ESTABLISHED AND VERIFIED TO THE TOLERANCES LISTED ABOVE PRIOR TO PLANTING. PARKING LOT ISLANDS WHERE TREES ARE PROPOSED ARE TO BE EXCAVATED TO A 30" DEPTH, 8' DIAMETER AT PROPOSED TREE LOCATIONS AND HALF OF EXCAVATED SOIL IS TO BE MIXED WITH IMPORTED TOPSOIL AND REPLACED INTO ISLANDS.
8. AFTER PLANTING, BUT BEFORE LANDSCAPE FABRIC IS INSTALLED, ALL PLANTING BEDS ARE TO RECEIVE A GRANULAR PRE-EMERGENT HERBICIDE (PREEN OR SNAPSHOT). APPLY PER MANUFACTURER'S INSTRUCTIONS. CONTRACTOR IS TO SPRAY ALL PLANTING BEDS WITH WATER IMMEDIATELY AFTER MULCH IS INSTALLED TO REMOVE PRE-EMERGENT FROM FOLIAGE AND ACTIVATE HERBICIDE.
9. GORILLA HAIR WOOD MULCH IS TO BE PROVIDED AROUND ALL THE BASE OF ALL TREES, 4' DIAMETER, 3" DEPTH. NO LANDSCAPE FABRIC TO BE INSTALLED BENEATH MULCH.
10. STEEL EDGING IS TO CONSIST OF 16 GAUGE PERFORATED GALVANIZED ROLLED-TOP STEEL EDGING. EDGING IS TO BE USED TO SEPARATE TURF, NATIVE GRASS, AND ROCK COVER AREAS, UNLESS OTHERWISE NOTED ON PLAN. EDGING IS TO BE PARTIALLY BURIED SO THAT HALF OF EDGING HEIGHT IS BELOW FINISHED SOIL GRADE. 12" STEEL EDGING PINS TO BE INSTALLED EVERY 4' O.C. MAX.. ENDS OF STEEL EDGING TO OVERLAP 6" MINIMUM WITH AND HAVE TWO PINS SECURING OVERLAPPED ENDS.

SOIL PREPARATION NOTES

1. **PROPOSED BLUEGRASS SOD AREAS:** ALL SODDED AREAS TO RECEIVE 4 CU. YDS. PER 1,000 SQ. FT. OF 'BIOCOMP' SOIL AMENDMENTS (C&C SAND) INCORPORATED INTO EXISTING SOIL AND ROTO-TILLED TO A 6" DEPTH.
2. **PROPOSED NATIVE GRASS AREAS:** ALL SEEDED AREAS TO RECEIVE 2 CU. YDS. PER 1,000 SQ. FT. OF 'BIOCOMP' SOIL AMENDMENTS (C&C SAND) INCORPORATED INTO EXISTING SOIL AND ROTO-TILLED TO A 6" DEPTH.
3. **PROPOSED TREES AND SHRUBS:** ALL PROPOSED TREES ARE TO BE BACKFILLED WITH A MIXTURE OF 'BIOCOMP' SOIL AMENDMENT AND IMPORTED GRADE A TOPSOIL (C&C SAND). REFER TO PLANTING DETAILS.

IRRIGATION NOTES

1. ALL PROPOSED TREES AND SHRUBS ARE TO BE WATERED BY A PROPOSED DRIP IRRIGATION SYSTEM. IRRIGATION SYSTEM SHALL INCLUDE AUTOMATIC CONTROLLER, RAIN SENSOR, BACKFLOW PREVENTER (INSTALLED PER LOCAL CODES), AND TWO QUICK COUPLERS EVENLY SPACED ALONG MAINLINE. TREES TO HAVE (4) 1 GPH EMITTERS EACH EVENLY SPACED AT EDGE OF ROOT BALL, SHRUBS / ORNAMENTAL GRASSES TO HAVE (2) 1 GPH EMITTERS EACH EVENLY SPACED AT EDGE OF ROOT BALL. ALL DRIP PIPE SHALL BE SECURED WITH 6" METAL STAKES AND BURIED.
2. ALL FESCUE SOD AREAS TO BE IRRIGATED WITH POP-UP SPRAY HEADS AND/OR ROTARY HEADS. IRRIGATION HEADS TO BE SPACED FOR HEAD TO HEAD COVERAGE.
3. ALL DISTURBED NATIVE SEED AREAS TO RECEIVE TEMPORARY IRRIGATION UNTIL NATIVE GRASS IS ESTABLISHED. REFER TO NATIVE SEED ESTABLISHMENT NOTES. HOSES ARE TO BE CONNECTED TO BUILDING HOSE BIBS AND IRRIGATION QUICK COUPLERS TO MANUALLY WATER PROPOSED NATIVE SEED AREAS WITH PORTABLE SPRINKLERS UNTIL ESTABLISHED. TEMPORARY SPRAY IRRIGATION ZONES CAN BE CREATED TO IRRIGATE NATIVE SEED AREAS UNTIL ESTABLISHED.

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PROJECT FILE: bradley townhomes flp 02-08-19.dwg

DEVELOPMENT PLAN FOR
TOWNHOMES AT BRADLEY CROSSROADS
4735 Bradley Road, Colorado Springs, CO
El Paso County, CO

PROJECT NAME:

FINAL LANDSCAPE PLAN

SHEET TITLE:

DATE: 11 February 2019

REVISION NO.

STAMP:

SHEET NO. L2

FRONT VIEW

REAR VIEW

NO:	REVISIONS

JAC Drafting Services

719-499-8214
12216 Crystal Downs Rd.

ELEVATION VIEWS FOR MASTER PLAN

DATE: 3/19/18

SCALE: AS SHOWN

JOB NO.: 1000

SHEET:

A 1.0

LEFT VIEW

RIGHT VIEW

NO:	REVISIONS

JAC Drafting Services
719-499-8214
12218 Crystal Downs Rd.

ELEVATION VIEWS FOR MASTER PLAN

DATE: 3/19/18

SCALE: AS SHOWN

JOB NO.: 1000

SHEET:

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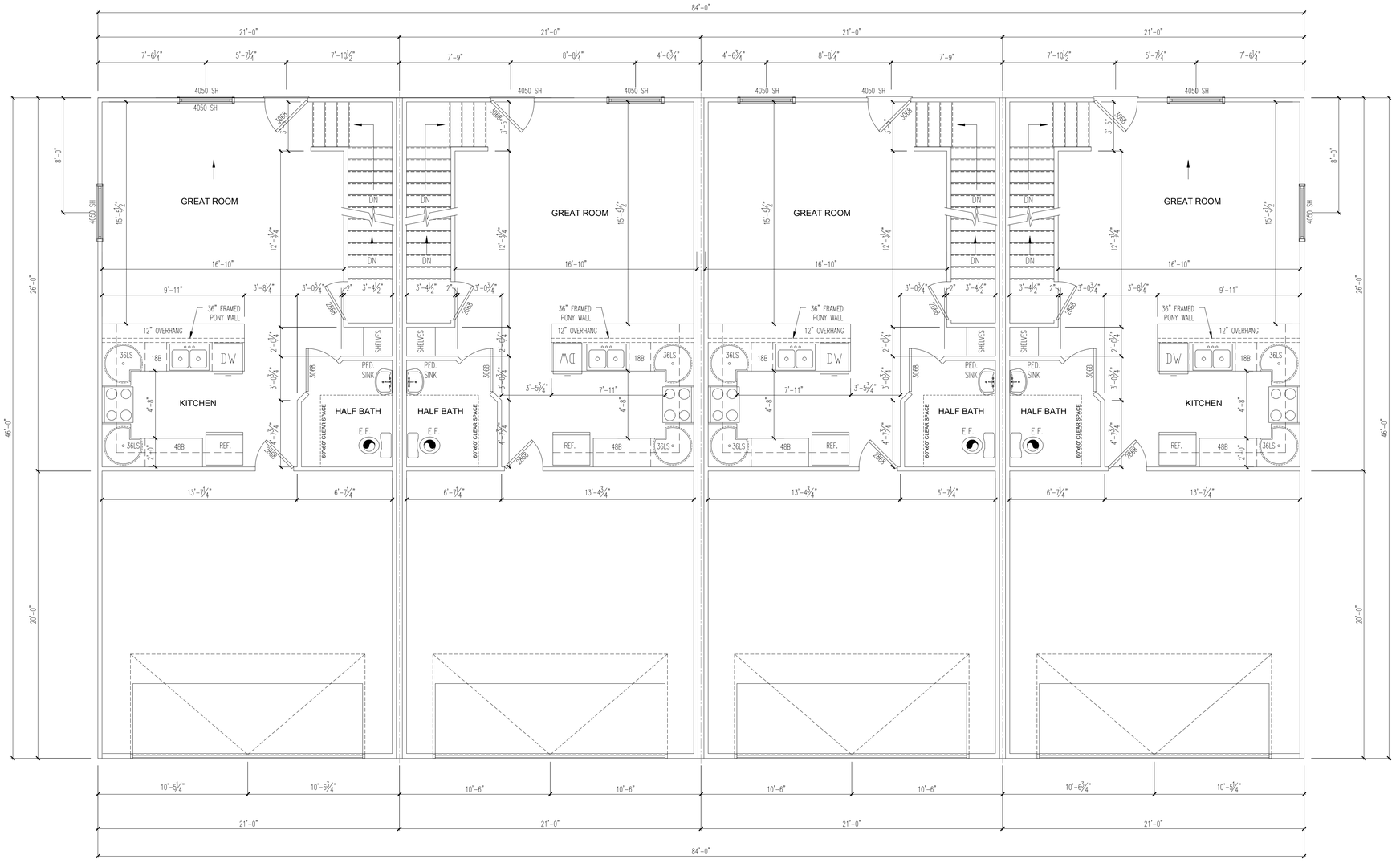

SQUARE FOOTAGE(BASEMENT MODEL)
MAIN FLOOR: 541
UPPER FLOOR: 960
TOTAL LIVING: 1990
U/F BSMT: 489
2 CAR GARAGE: 416

MAIN LEVEL

NO:	REVISIONS

JAC Drafting Services

12216 Crystal Downs Rd.
719-499-8214

MAIN LEVEL (BASEMENT) FOR MASTER PLAN

DATE: 3/19/18

SCALE: AS SHOWN

JOB NO.: 1000

SHEET:

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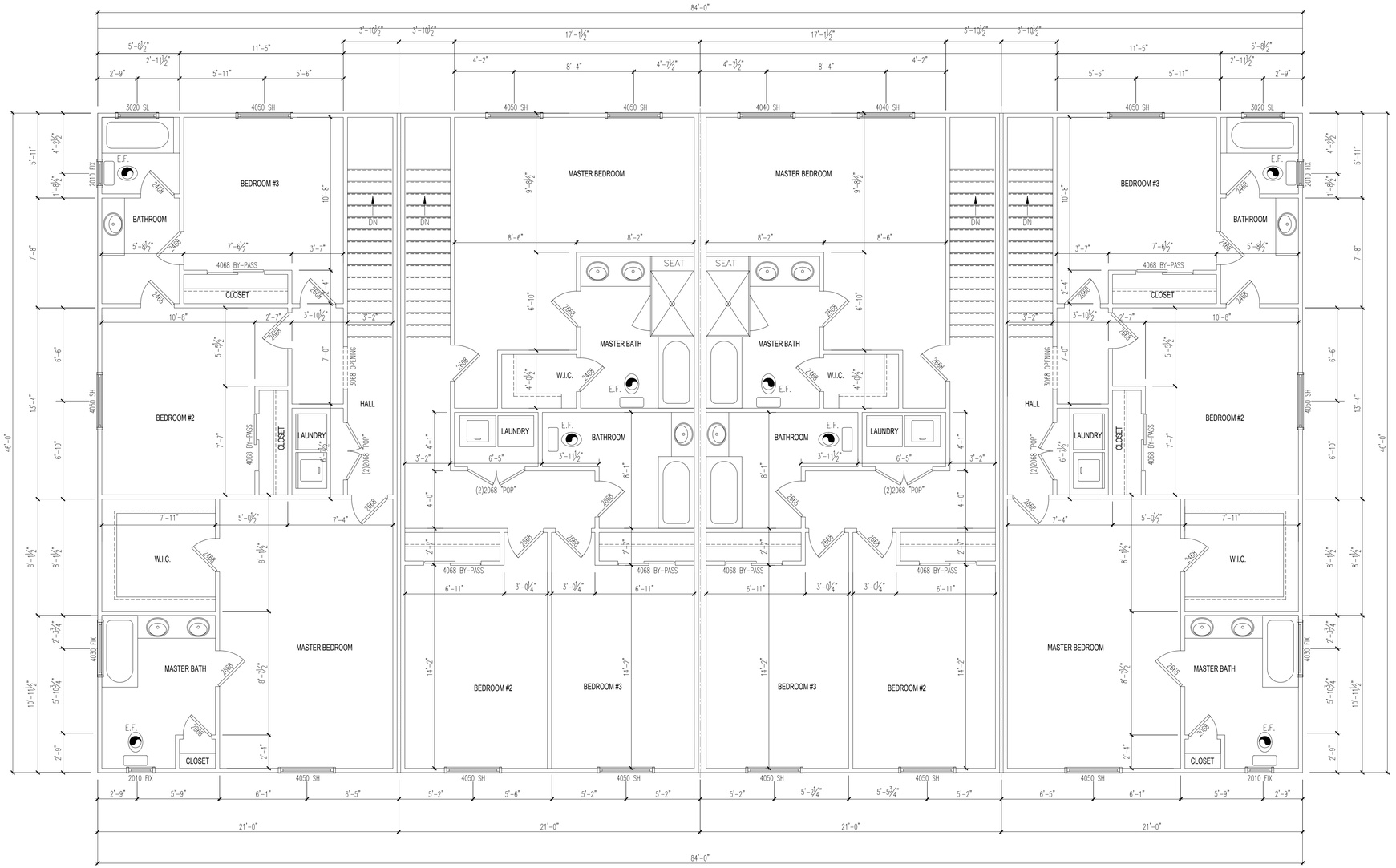

UPPER LEVEL

NO:	REVISIONS

JAC Drafting Services

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719-499-8214

UPPER LEVEL (BASEMENT) FOR MASTER PLAN

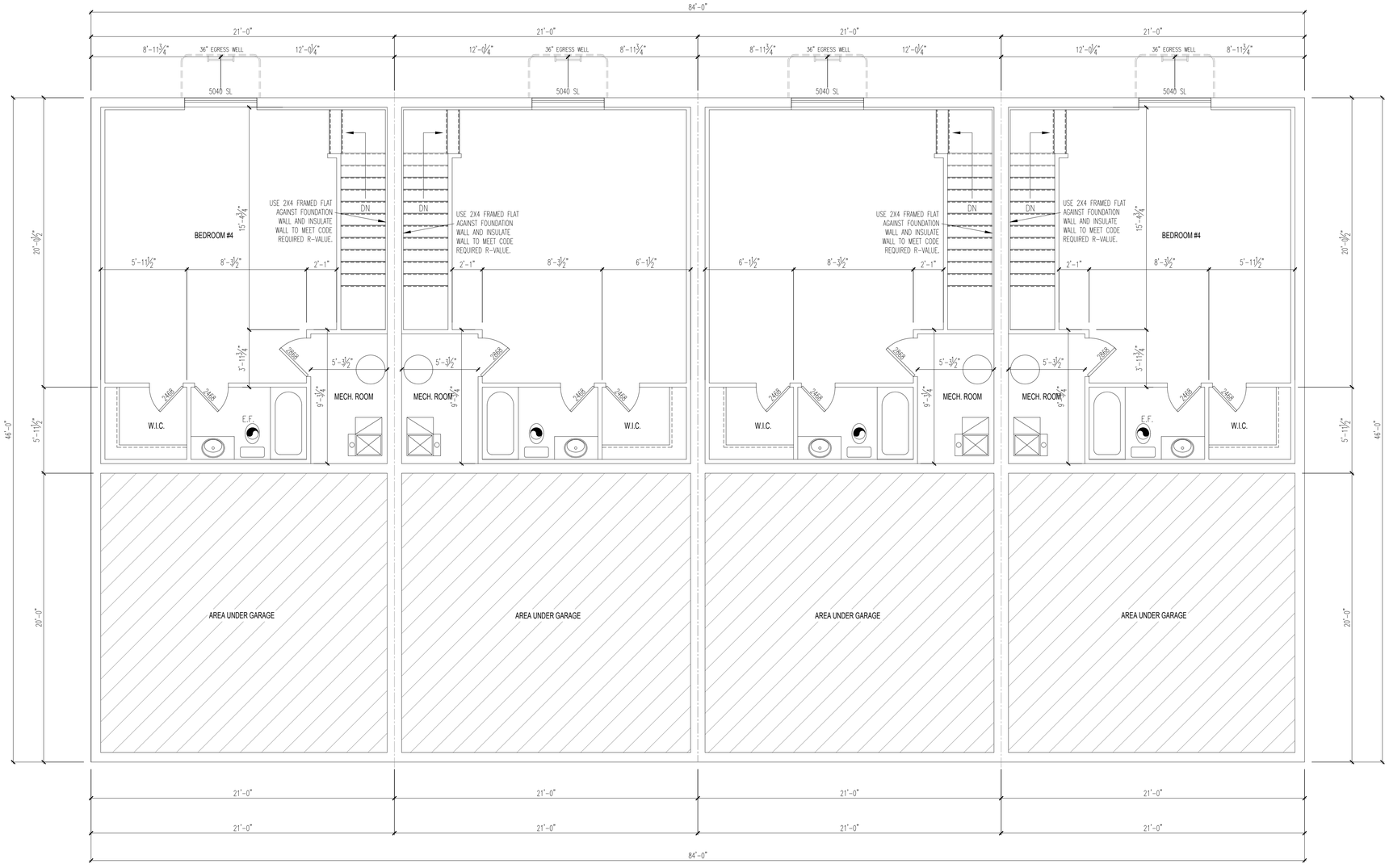
DATE: 3/19/18

SCALE: AS SHOWN

JOB NO.: 1000

SHEET:

A 4.0



BASEMENT LEVEL

NO:	REVISIONS

JAC Drafting Services

719-499-8214
12218 Crystal Downs Rd.

BASEMENT LEVEL FOR MASTER PLAN

DATE: 3/19/18

SCALE: AS SHOWN

JOB NO.: 1000

SHEET:

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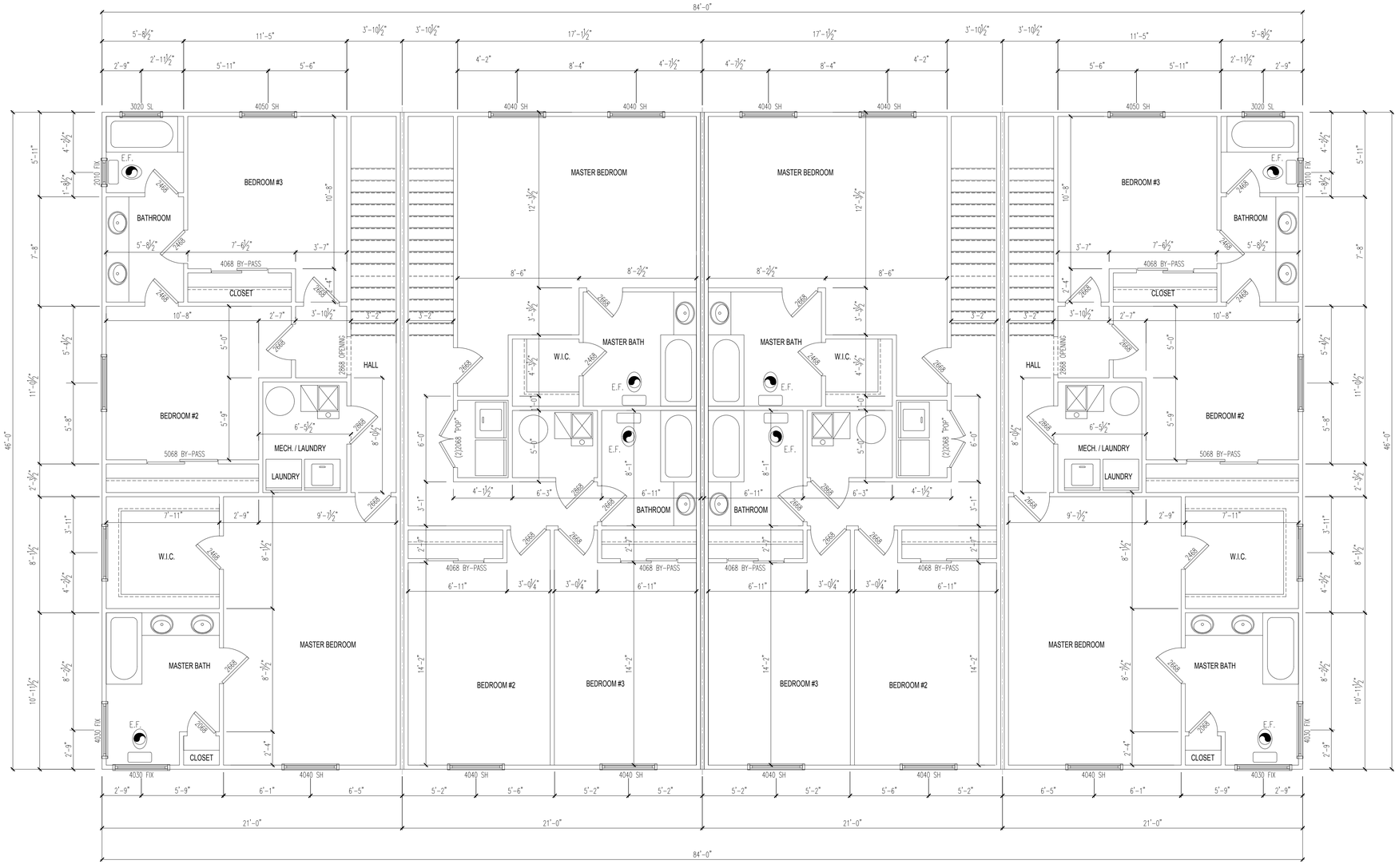

UPPER LEVEL (SLAB)

NO:	REVISIONS

JAC Drafting Services

719-499-8214
12216 Crystal Downs Rd.

UPPER LEVEL FOR MASTER PLAN

DATE: 3/19/18

SCALE: AS SHOWN

JOB NO.: 1000

SHEET:

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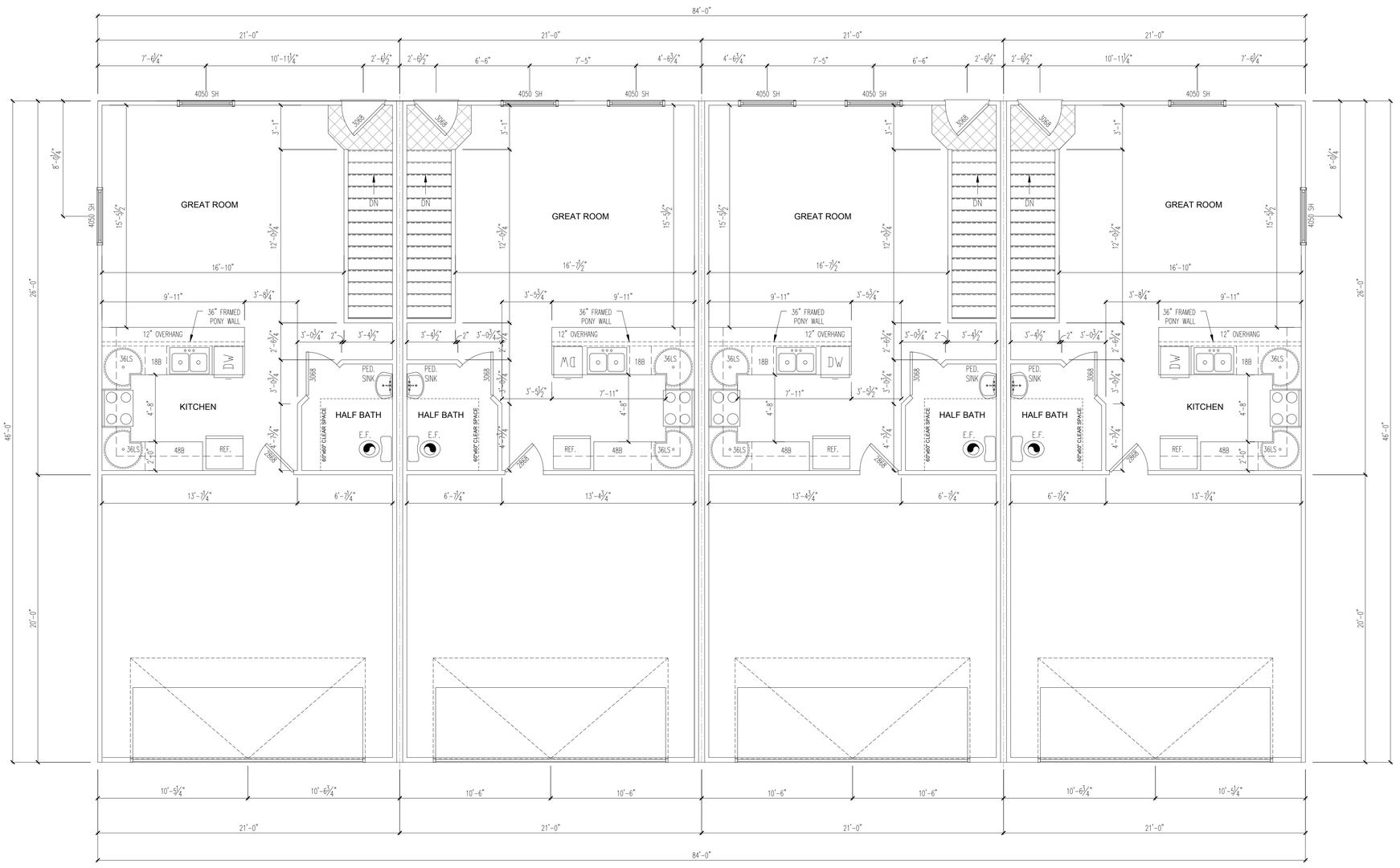

MAIN LEVEL (SLAB)

SQUARE FOOTAGE(SLAB MODEL)

MAIN FLOOR: 541
UPPER FLOOR: 960

TOTAL LIVING: 1501

2 CAR GARAGE: 416

NO:	REVISIONS

JAC Drafting Services

12218 Crystal Downs Rd. 719-499-8214

MAIN LEVEL FOR MASTER PLAN

DATE: 3/19/18

SCALE: AS SHOWN

JOB NO.: 1000

SHEET:

A 7.0