



CU Anschutz – Breckenridge Parking Lot Improvements

Project Number: 22-116457

Friday June 10, 2022
ADDENDUM 1

DRAWING SCOPE AND CLARIFICATIONS:

1. The following four (4) electrical drawing sheets have been revised and reissued to reflect expanded lighting scope, including head replacement for the re-used light poles and replacement of heads for the existing light poles within the parking lot west of the project site. These drawing sheets are attached to this addendum:
 - a. E-001, Electrical Legends and Notes
 - b. ED-102, Electrical Demolition Site Plan
 - c. E-102, Electrical Site Plan
 - d. E-103, Photometric Site Plan
2. The following two (2) civil drawing sheets have been revised and reissued to clarify the construction-phase erosion control requirements and are attached to this addendum:
 - a. C-000, Cover Sheet
 - b. C-001, Civil Notes and Legend
3. The following three (3) civil drawing sheets have been added to the construction documents and are attached to this addendum:
 - a. C-251, Erosion Control Details
 - b. C-252, Erosion Control Details
 - c. C-253, Erosion Control Details

SPECIFICATIONS CLARIFICATIONS:

1. None

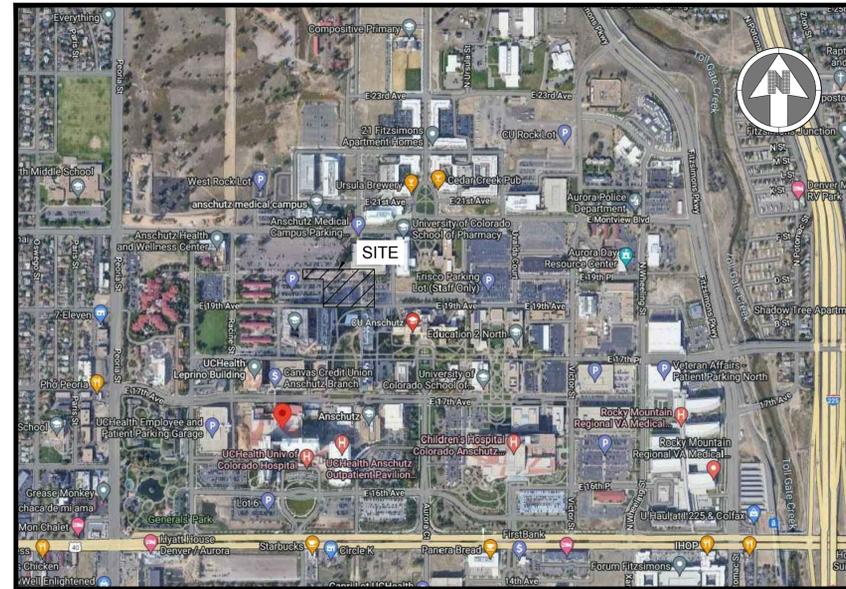
ADDITIONAL INFORMATION:

1. Not applicable

END OF ADDENDUM 1

CU ANSCHUTZ - BRECKENRIDGE PARKING LOT IMPROVEMENTS

UNIVERSITY OF COLORADO
ANSCHUTZ MEDICAL CAMPUS



VICINITY MAP
SCALE: NTS

OWNER:

ROBERT W. HOLZWARTH
PROJECT MANAGER
UNIVERSITY OF COLORADO
ANSCHUTZ MEDICAL CAMPUS
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CIVIL ENGINEER:

S.A. MIRO INC.
4582 SOUTH ULSTER STREET
SUITE 750
DENVER, CO 80237
PHONE: 303-741-3737

BASIS OF BEARING:

THE BASIS OF BEARING IS BASED ON THE FITZSIMONS SURVEY CONTROL SYSTEM. CONTROL IS BASED ON THE LINE BETWEEN JR CONTROL POINT 1320 AND JR CONTROL POINT 1312 BEING S89°44'28"E.

Drawing Number	Sheet Title
C-000	COVER SHEET
C-001	CIVIL NOTES AND LEGEND
C-101	DEMOLITION PLAN
C-121	HORIZONTAL CONTROL PLAN
C-122	HORIZONTAL CONTROL DATA
C-211	GRADING PLAN
C-221	GRADING PLAN ENLARGEMENTS
C-251	EROSION CONTROL DETAILS
C-252	EROSION CONTROL DETAILS
C-253	EROSION CONTROL DETAILS
C-411	PAVING PLAN
C-421	SIGNAGE AND STRIPING PLAN
C-451	SITE DETAILS
C-452	SITE DETAILS
C-511	UTILITY PLAN
C-651	UTILITY DETAILS
E-001	ELECTRICAL LEGENDS AND NOTES
ED-102	ELECTRICAL DEMOLITION SITE PLAN
E-102	ELECTRICAL SITE PLAN
E-103	PHOTOMETRIC SITE PLAN

FINAL CONSTRUCTION DOCUMENTS - PERMIT ISSUE

ISSUE DATE: MAY 31, 2022



S.A. MIRO INC.
CONSULTING ENGINEERS

4582 South Ulster Street
Suite 750, Denver, CO 80237
303-741-3737
www.samiro.com



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DATE	DESCRIPTION	NO.
04/08/22	DESIGN DEVELOPMENT	1
04/28/22	90% CONSTRUCTION DOCUMENTS	2
05/31/22	FINAL CONSTRUCTION DOCUMENTS - PERMIT ISSUE	3
06/09/22	ADDENDUM #1	A.1

PROJECT:
**CU ANSCHUTZ
BRECKENRIDGE PARKING LOT IMPROVEMENTS**

DRAWING TITLE:
COVER SHEET

FILE PATH: J:\Jobs\22017 CUA Breck Lot\05 CAD\Plans and Details\C000-COVR.dwg C000 - 6/9/2022

BENCHMARKS USED:

COA BENCHMARK 4S6701NW001:
3" BRASS CAP (STAMPED COA BM, G-020A, S-030A, 2003) SET IN SW COR OF C O INLET @ S PCR SE COR E COLFAX AVE & PEORIA ST.
ELEVATION = 5389.50 (NAVD88 COA)
ELEVATION = 5386.55 (NGVD 29 PROJECT)
(NAVD88 COA = NGVD 29 PROJECT + 2.95)

COA BENCHMARK 3S6735NE002:
3" DIAM. BRASS CAP (STAMPED C.O.A. BM, 5-025, F-20A) ATOP A 30" LONG STEEL PIPE IN CONC. AT THE N.W. COR. OF E. MONTVIEW BLVD. AND PEORIA ST. BEING 16.8 FT. +/- NORTH OF N. F.L. MONTVIEW BLVD. AND 21.3 FT. WEST OF W. F.L. PEORIA ST.
ELEVATION = 5371.90 (COA - NAVD88)
ELEVATION = 5368.96 (PROJECT - NGVD 29)
(NAVD88 COA = NGVD 29 PROJECT + 2.95)

SITE BENCHMARK:
THIS SURVEY IS BASED ON THE FITZSIMONS SURVEY CONTROL SYSTEM.
BASIS OF ELEVATIONS:
CONTROL POINT 70 ELEV: 5373.50
CONTROL POINT 72 ELEV: 5374.24



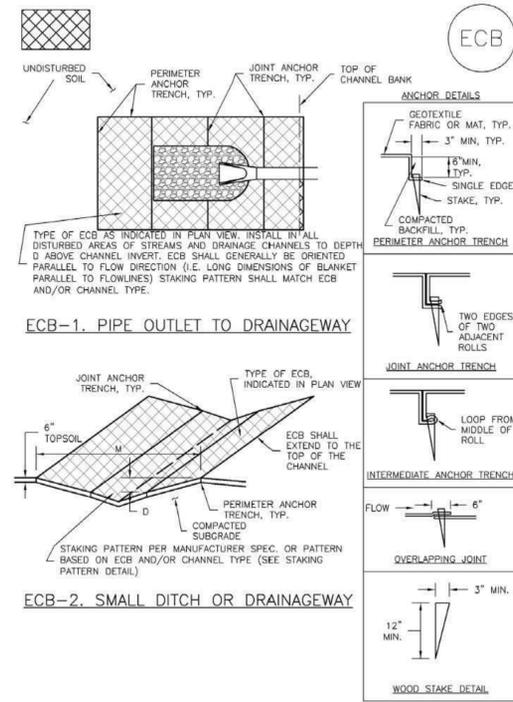
DESIGNED BY: RLH
DRAWN BY: SSM
CHECKED BY: MHV
MIRO JOB NO. 22017

DRAWING NUMBER:

C-000

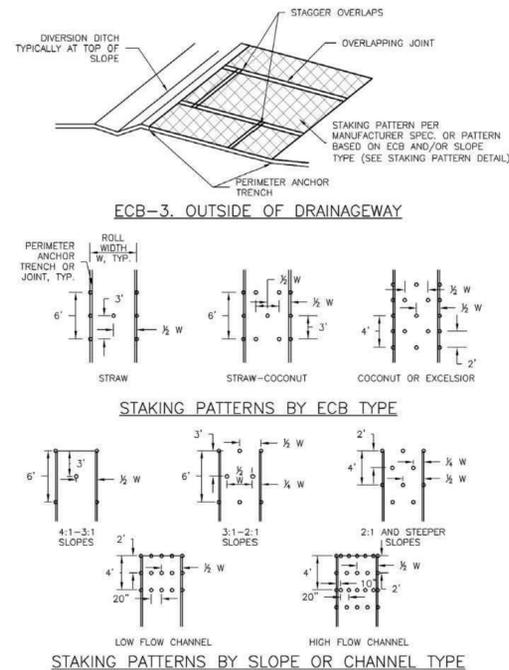
CU PROJECT NO. 22-116457

EC-6 Rolled Erosion Control Products (RECP)



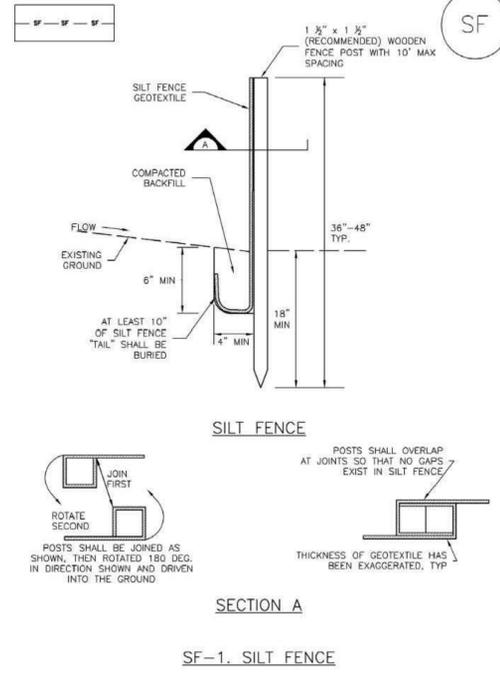
RECP-6 Urban Drainage and Flood Control District
Urban Storm Drainage Criteria Manual Volume 3 November 2010

EC-6 Rolled Erosion Control Products (RECP)



RECP-7 November 2010 Urban Drainage and Flood Control District
Urban Storm Drainage Criteria Manual Volume 3

Silt Fence (SF)



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

SC-1 Silt Fence (SF)

SILT FENCE INSTALLATION NOTES

- 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.
- 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.
- 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.
- 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.
- 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.
- 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').
- SILT FENCE SHALL BE INSTALLED PRIOR TO ANY LAND DISTURBING ACTIVITIES.

SILT FENCE MAINTENANCE NOTES

- INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.
- FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.
- WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.
- SEDIMENT ACCUMULATED UPSTREAM OF THE SILT FENCE SHALL BE REMOVED AS NEEDED TO MAINTAIN THE FUNCTIONALITY OF THE BMP, TYPICALLY WHEN DEPTH OF ACCUMULATED SEDIMENTS IS APPROXIMATELY 6".
- REPAIR OR REPLACE SILT FENCE WHEN THERE ARE SIGNS OF WEAR, SUCH AS SAGGING, TEARING, OR COLLAPSE.
- 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.
- WHEN SILT FENCE IS REMOVED, ALL DISTURBED AREAS SHALL BE COVERED WITH TOPSOIL, SEEDED AND MULCHED OR OTHERWISE STABILIZED AS APPROVED BY LOCAL JURISDICTION.

(DETAIL ADAPTED FROM TOWN OF PARKER, COLORADO AND CITY OF AURORA, COLORADO, NOT AVAILABLE IN AUTOCAD)

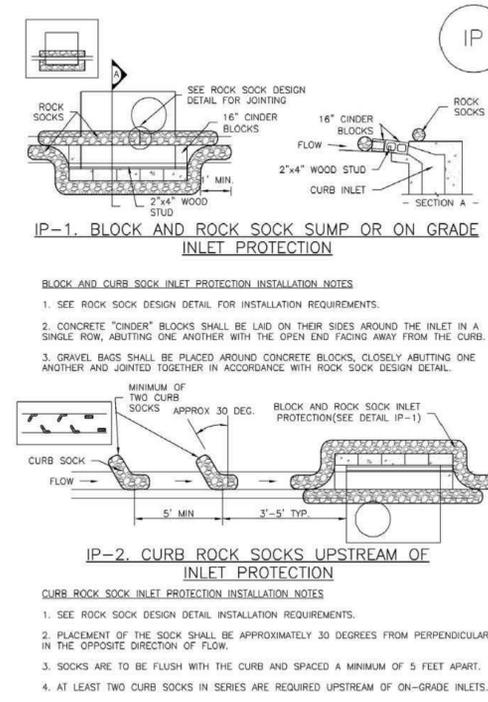
NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.

SF-4 November 2010 Urban Drainage and Flood Control District
Urban Storm Drainage Criteria Manual Volume 3

SC-1

SC-6

Inlet Protection (IP)



IP-4 Urban Drainage and Flood Control District
Urban Storm Drainage Criteria Manual Volume 3 August 2013

SC-6 Inlet Protection (IP)

GENERAL INLET PROTECTION INSTALLATION NOTES

- SEE PLAN VIEW FOR:
-LOCATION OF INLET PROTECTION
-TYPE OF INLET PROTECTION (IP-1, IP-2, IP-3, IP-4, IP-5, IP-6)
- INLET PROTECTION SHALL BE INSTALLED PROMPTLY AFTER INLET CONSTRUCTION OR PAVING IS COMPLETE (TYPICALLY WITHIN 48 HOURS). IF A RAINFALL/RUNOFF EVENT IS FORECAST, INSTALL INLET PROTECTION PRIOR TO ONSET OF EVENT.
- MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.

INLET PROTECTION MAINTENANCE NOTES

- INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.
- FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.
- WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.
- SEDIMENT ACCUMULATED UPSTREAM OF INLET PROTECTION SHALL BE REMOVED AS NECESSARY TO MAINTAIN BMP EFFECTIVENESS, TYPICALLY WHEN STORAGE VOLUME REACHES 50% OF CAPACITY, A DEPTH OF 6" WHEN SILT FENCE IS USED, OR 1/4 OF THE HEIGHT FOR STRAW BALES.
- INLET PROTECTION IS TO REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS PERMANENTLY STABILIZED, UNLESS THE LOCAL JURISDICTION APPROVES EARLIER REMOVAL OF INLET PROTECTION IN STREETS.
- WHEN INLET PROTECTION AT AREA INLETS IS REMOVED, THE DISTURBED AREA SHALL BE COVERED WITH TOP SOIL, SEEDED AND MULCHED, OR OTHERWISE STABILIZED IN A MANNER APPROVED BY THE LOCAL JURISDICTION.

(DETAIL ADAPTED FROM TOWN OF PARKER, COLORADO AND CITY OF AURORA, COLORADO, NOT AVAILABLE IN AUTOCAD)

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

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

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

IP-8 August 2013 Urban Drainage and Flood Control District
Urban Storm Drainage Criteria Manual Volume 3

DATE	06/09/22
DESCRIPTION	
ADDENDUM #1	
NO.	A.1

PROJECT: **CU ANSCHUTZ BRECKENRIDGE PARKING LOT IMPROVEMENTS**

DRAWING TITLE: **EROSION CONTROL DETAILS**

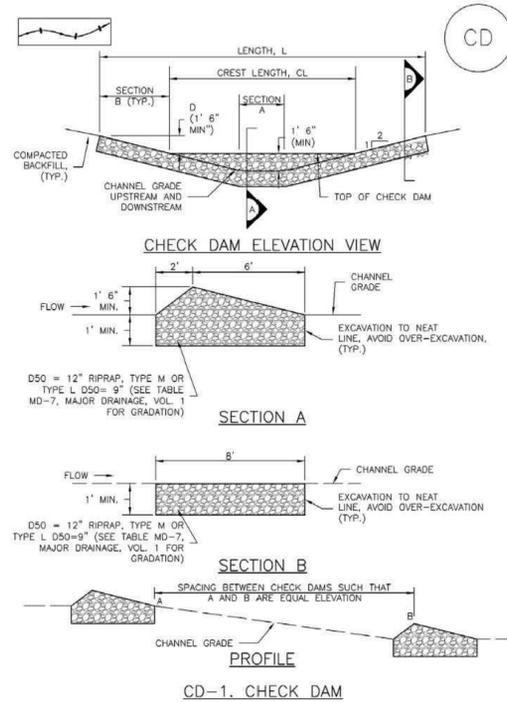
FILE PATH: J:\Jobs\22017 CUA Breck Lot\05 CAD\Plans and Details\C251-EROS-DTLS.dwg C251 - 6/9/2022



DESIGNED BY: RLH
DRAWN BY: SSM
CHECKED BY: MHV
MIRO JOB NO. 22017

DRAWING NUMBER: **C-251**
CU PROJECT NO. 22-116457

Check Dams (CD) EC-12



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

EC-12 Check Dams (CD)

CHECK DAM INSTALLATION NOTES

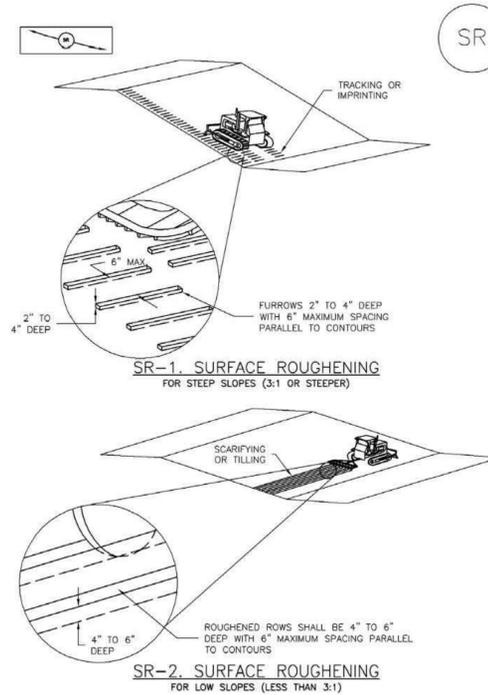
- SEE PLAN VIEW FOR:
 - LOCATION OF CHECK DAMS.
 - CHECK DAM TYPE (CHECK DAM OR REINFORCED CHECK DAM).
 - LENGTH (L), CREST LENGTH (CL), AND DEPTH (D).
- CHECK DAMS INDICATED ON INITIAL SWMP SHALL BE INSTALLED AFTER CONSTRUCTION FENCE, BUT PRIOR TO ANY UPSTREAM LAND DISTURBING ACTIVITIES.
- RIPRAP UTILIZED FOR CHECK DAMS SHOULD BE OF APPROPRIATE SIZE FOR THE APPLICATION. TYPICAL TYPES OF RIPRAP USED FOR CHECK DAMS ARE TYPE M (D50 12") OR TYPE L (D50 9").
- RIPRAP PAD SHALL BE TRENCHED INTO THE GROUND A MINIMUM OF 1'.
- THE ENDS OF THE CHECK DAM SHALL BE A MINIMUM OF 1' 6" HIGHER THAN THE CENTER OF THE CHECK DAM.

CHECK DAM MAINTENANCE NOTES

- INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.
 - FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.
 - WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.
 - SEDIMENT ACCUMULATED UPSTREAM OF THE CHECK DAMS SHALL BE REMOVED WHEN THE SEDIMENT DEPTH IS WITHIN 1/2 OF THE HEIGHT OF THE CREST.
 - CHECK DAMS ARE TO REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS STABILIZED AND APPROVED BY THE LOCAL JURISDICTION.
 - WHEN CHECK DAMS ARE REMOVED, EXCAVATIONS SHALL BE FILLED WITH SUITABLE COMPACTED BACKFILL. DISTURBED AREA SHALL BE SEEDED AND MULCHED AND COVERED WITH GEOTEXTILE OR OTHERWISE STABILIZED IN A MANNER APPROVED BY THE LOCAL JURISDICTION.
- (DETAILS ADAPTED FROM DOUGLAS COUNTY, COLORADO, NOT AVAILABLE IN AUTOCAD)
NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.

CD-4 Urban Drainage and Flood Control District November 2010
Urban Storm Drainage Criteria Manual Volume 3

Surface Roughening (SR) EC-1



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

EC-1 Surface Roughening (SR)

SURFACE ROUGHENING INSTALLATION NOTES

- SEE PLAN VIEW FOR:
 - LOCATION(S) OF SURFACE ROUGHENING.
- SURFACE ROUGHENING SHALL BE PROVIDED PROMPTLY AFTER COMPLETION OF FINISHED GRADING (FOR AREAS NOT RECEIVING TOPSOIL) OR PRIOR TO TOPSOIL PLACEMENT OR ANY FORECASTED RAIN EVENT.
- AREAS WHERE BUILDING FOUNDATIONS, PAVEMENT, OR SOD WILL BE PLACED WITHOUT DELAY IN THE CONSTRUCTION SEQUENCE, SURFACE ROUGHENING IS NOT REQUIRED.
- DISTURBED SURFACES SHALL BE ROUGHENED USING RIPPER OR TILLING EQUIPMENT ON THE CONTOUR OR TRACKING UP AND DOWN A SLOPE USING EQUIPMENT TREADS.
- A FARMING DISK SHALL NOT BE USED FOR SURFACE ROUGHENING.

SURFACE ROUGHENING MAINTENANCE NOTES

- INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.
 - FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.
 - WHERE BMPs HAVE FAILED, REPAIR OR REPLACE UPON DISCOVERY OF THE FAILURE.
 - VEHICLES AND EQUIPMENT SHALL NOT BE DRIVEN OVER AREAS THAT HAVE BEEN SURFACE ROUGHENED.
 - IN NON-TURF GRASS FINISHED AREAS, SEEDING AND MULCHING SHALL TAKE PLACE DIRECTLY OVER SURFACE ROUGHENED AREAS WITHOUT FIRST SMOOTHING OUT THE SURFACE.
 - IN AREAS NOT SEEDED AND MULCHED AFTER SURFACE ROUGHENING, SURFACES SHALL BE RE-ROUGHENED AS NECESSARY TO MAINTAIN GROOVE DEPTH AND SMOOTH OVER RILL EROSION.
- (DETAILS ADAPTED FROM TOWN OF PARKER, COLORADO, NOT AVAILABLE IN AUTOCAD)
NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.

SR-4 Urban Drainage and Flood Control District November 2010
Urban Storm Drainage Criteria Manual Volume 3

EC-6 Rolled Erosion Control Products (RECP)

EROSION CONTROL BLANKET INSTALLATION NOTES

- SEE PLAN VIEW FOR:
 - LOCATION OF ECB.
 - TYPE OF ECB (STRAW-COCONUT, COCONUT, OR EXCELSIOR).
 - AREA, A, IN SQUARE YARDS OF EACH TYPE OF ECB.
- 100% NATURAL AND BIODEGRADABLE MATERIALS ARE PREFERRED FOR RECPs, ALTHOUGH SOME JURISDICTIONS MAY ALLOW OTHER MATERIALS IN SOME APPLICATIONS.
- IN AREAS WHERE ECBs ARE SHOWN ON THE PLANS, THE PERMITEE SHALL PLACE TOPSOIL AND PERFORM FINAL GRADING, SURFACE PREPARATION, AND SEEDING AND MULCHING. SUBGRADE SHALL BE SMOOTH AND MOIST PRIOR TO ECB INSTALLATION AND THE ECB SHALL BE IN FULL CONTACT WITH SUBGRADE. NO GAPS OR VOIDS SHALL EXIST UNDER THE BLANKET.
- PERIMETER ANCHOR TRENCH SHALL BE USED ALONG THE OUTSIDE PERIMETER OF ALL BLANKET AREAS.
- JOINT ANCHOR TRENCH SHALL BE USED TO JOIN ROLLS OF ECBs TOGETHER (LONGITUDINALLY AND TRANSVERSELY) FOR ALL ECBs EXCEPT STRAW WHICH MAY USE AN OVERLAPPING JOINT.
- INTERMEDIATE ANCHOR TRENCH SHALL BE USED AT SPACING OF ONE-HALF ROLL LENGTH FOR COCONUT AND EXCELSIOR ECBs.
- OVERLAPPING JOINT DETAIL SHALL BE USED TO JOIN ROLLS OF ECBs TOGETHER FOR ECBs ON SLOPES.
- MATERIAL SPECIFICATIONS OF ECBs SHALL CONFORM TO TABLE ECB-1.
- ANY AREAS OF SEEDING AND MULCHING DISTURBED IN THE PROCESS OF INSTALLING ECBs SHALL BE RESEEDED AND MULCHED.
- DETAILS ON DESIGN PLANS FOR MAJOR DRAINAGEWAY STABILIZATION WILL GOVERN IF DIFFERENT FROM THOSE SHOWN HERE.

TYPE	COCONUT CONTENT	STRAW CONTENT	EXCELSIOR CONTENT	RECOMMENDED NETTING**
STRAW*	-	100%	-	DOUBLE/NATURAL
STRAW-COCONUT	30% MIN	70% MAX	-	DOUBLE/NATURAL
COCONUT	100%	-	-	DOUBLE/NATURAL
EXCELSIOR	-	-	100%	DOUBLE/NATURAL

*STRAW ECBs MAY ONLY BE USED OUTSIDE OF STREAMS AND DRAINAGE CHANNELS.
**ALTERNATE NETTING MAY BE ACCEPTABLE IN SOME JURISDICTIONS.

RECP-8 Urban Drainage and Flood Control District November 2010
Urban Storm Drainage Criteria Manual Volume 3

EC-6 Rolled Erosion Control Products (RECP)

EROSION CONTROL BLANKET MAINTENANCE NOTES

- INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.
 - FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.
 - WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.
 - ECBs SHALL BE LEFT IN PLACE TO EVENTUALLY BIODEGRADE, UNLESS REQUESTED TO BE REMOVED BY THE LOCAL JURISDICTION.
 - ANY ECB PULLED OUT, TORN, OR OTHERWISE DAMAGED SHALL BE REPAIRED OR REINSTALLED. ANY SUBGRADE AREAS BELOW THE GEOTEXTILE THAT HAVE ERODED TO CREATED A VOID UNDER THE BLANKET, OR THAT REMAIN DEVOID OF GRASS SHALL BE REPAIRED, RESEEDED AND MULCHED AND THE ECB REINSTALLED.
- NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.
(DETAILS ADAPTED FROM DOUGLAS COUNTY, COLORADO AND TOWN OF PARKER COLORADO, NOT AVAILABLE IN AUTOCAD)

November 2010 Urban Drainage and Flood Control District RECP-9
Urban Storm Drainage Criteria Manual Volume 3

DATE	DESCRIPTION	ADDENDUM #1
06/09/22		

PROJECT: **CU ANSCHUTZ BRECKENRIDGE PARKING LOT IMPROVEMENTS**

DRAWING TITLE: **EROSION CONTROL DETAILS**

FILE PATH: J:\Jobs\22017 CUA Breck Lot\05 CAD\Plans and Details\2251-EROS-DTLS.dwg C252 - 6/9/2022



DESIGNED BY: RLH
DRAWN BY: SSM
CHECKED BY: MHV
MIRO JOB NO. 22017

DRAWING NUMBER: **C-252**
CU PROJECT NO. 22-116457

Wind Erosion/Dust Control (DC)

EC-14

Description

Wind erosion and dust control BMPs help to keep soil particles from entering the air as a result of land disturbing construction activities. These BMPs include a variety of practices generally focused on either graded disturbed areas or construction roadways. For graded areas, practices such as seeding and mulching, use of soil binders, site watering, or other practices that provide prompt surface cover should be used. For construction roadways, road watering and stabilized surfaces should be considered.



Photograph DC-1. Water truck used for dust suppression. Photo courtesy of Douglas County.

Appropriate Uses

Dust control measures should be used on any site where dust poses a problem to air quality. Dust control is important to control for the health of construction workers and surrounding waterbodies.

Design and Installation

The following construction BMPs can be used for dust control:

- An irrigation/sprinkler system can be used to wet the top layer of disturbed soil to help keep dry soil particles from becoming airborne.
- Seeding and mulching can be used to stabilize disturbed surfaces and reduce dust emissions.
- Protecting existing vegetation can help to slow wind velocities across the ground surface, thereby limiting the likelihood of soil particles to become airborne.
- Spray-on soil binders form a bond between soil particles keeping them grounded. Chemical treatments may require additional permitting requirements. Potential impacts to surrounding waterways and habitat must be considered prior to use.
- Placing rock on construction roadways and entrances will help keep dust to a minimum across the construction site.
- Wind fences can be installed on site to reduce wind speeds. Install fences perpendicular to the prevailing wind direction for maximum effectiveness.

Wind Erosion Control/ Dust Control	
Functions	
Erosion Control	Yes
Sediment Control	No
Site/Material Management	Moderate

Maintenance and Removal

When using an irrigation/sprinkler control system to aid in dust control, be careful not to overwater. Overwatering will cause construction vehicles to track mud off-site.

November 2010

Urban Drainage and Flood Control District
Urban Storm Drainage Criteria Manual Volume 3

DC-1



S.A. MIRO INC.
CONSULTING ENGINEERS

4582 South Ulster Street
Suite 750, Denver, CO 80237
303-741-3737
www.samiro.com



Know what's below.
Call before you dig.

DATE

06/09/22

DESCRIPTION
ADDENDUM #1

NO.

Δ 1

PROJECT: CU ANSCHUTZ BRECKENRIDGE PARKING LOT IMPROVEMENTS

DRAWING TITLE: EROSION CONTROL DETAILS

FILE PATH: J:\Jobs\22017 CUA Breck Lot\05 CAD\Plans and Details\C251-EROS-DTLS.dwg C253 - 6/9/2022



DESIGNED BY: RLH
DRAWN BY: SSM
CHECKED BY: MHV
MIRO JOB NO. 22017

DRAWING NUMBER:

C-253

CU PROJECT NO. 22-116457



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DATE	DESCRIPTION
05/27/22	FINAL CONSTRUCTION DOCUMENTS - PERMIT ISSUE
06/10/22	ADDENDUM #1

NO.	DESCRIPTION
1	NO. 1
2	NO. 2

PROJECT: UNIVERSITY OF COLORADO - ANSCHUTZ MEDICAL CAMPUS BRECKENRIDGE LOT IMPROVEMENTS
DRAWING TITLE: ELECTRICAL LEGENDS AND NOTES
FILE PATH:



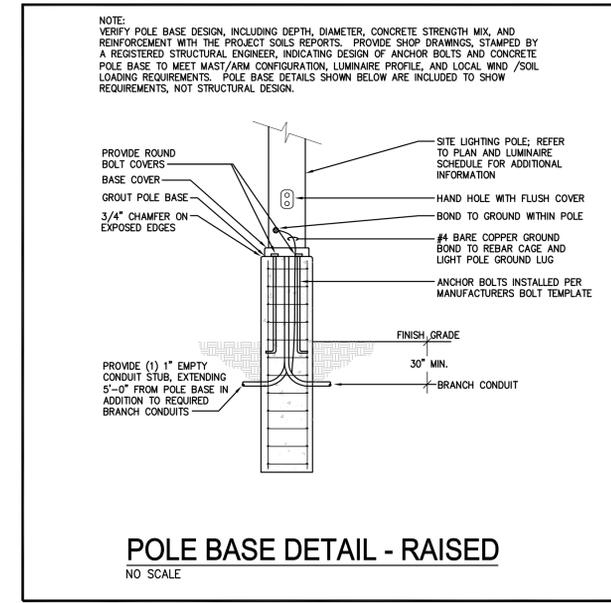
DESIGNED BY: CLM
DRAWN BY: CLM
CHECKED BY: NCW
MIRO JOB NO. 22017
DRAWING NUMBER:

E-001

LIGHTING LEGEND (Not all symbols listed below are used on these drawings)			
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
	POLE LUMINAIRE - ARM MOUNTED		

REFERENCE SYMBOLS LEGEND (Not all symbols listed below are used on these drawings)			
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
	KEY NOTE REFERENCE		KITCHEN/OWNER/MEDICAL EQUIPMENT REFERENCE
	TYPICAL CIRCUIT NUMBER		EXISTING TO REMAIN
	TYPICAL LUMINAIRE TYPE		EXISTING TO BE REMOVED
	TYPICAL ROOM REFERENCE (TOP=RM#, BOTTOM=FLR)		EXISTING TO BE RELOCATED
	MECHANICAL EQUIPMENT REFERENCE		EXISTING TO REMAIN - REPLACE DEVICE
	LIGHTING CONTROL/ EQUIPMENT REFERENCE		EXISTING TO BE REMOVED AND REPLACED

LUMINAIRE SCHEDULE										
TYPE	DESCRIPTION	LAMPS	VOLT-AMPS	VOLTAGE	MANUFACTURER	CATALOG SERIES	FINISH	MOUNTING	RECESS	NOTES
E1	22" DIAMETER POLE MOUNTED LED LUMINAIRE, SINGLE HEAD, TYPE 3 DISTRIBUTION, 48 LEDS, 900mA DRIVER, INTERNAL HOUSE SIDE SHIELD POLE - GARDCO RA5 SERIES, 5' STRAIGHT ROUND ALUMINUM CAST BASE, 30 FOOT TALL, RAL7038 FINISH	LED 3000K 12,000 LUMENS 70 CRI	135	277	GARDCO	CA22L	RAL7038	30' POLE		
E2	22" DIAMETER POLE MOUNTED LED LUMINAIRE, DUAL HEAD, TYPE 3 DISTRIBUTION, 48 LEDS, 900mA DRIVER, INTERNAL HOUSE SIDE SHIELD POLE - GARDCO RA5 SERIES, 5' STRAIGHT ROUND ALUMINUM CAST BASE, 30 FOOT TALL, RAL7038 FINISH	LED 3000K 24,000 LUMENS 70 CRI	270	277	GARDCO	CA22L	RAL7038	30' POLE		



GENERAL NOTES:

- FOR REMODELING, WORK INCLUDED IS DENOTED IN BOLD. EXISTING CONDITIONS TO REMAIN ARE DENOTED LIGHTLY.
- PROTECT STRUCTURE AND OWNER EQUIPMENT FROM DAMAGE. IMMEDIATELY REPLACE OR REPAIR TO ORIGINAL CONDITION. DAMAGE CAUSED BY THE CONTRACTOR WHETHER EQUIPMENT APPEARS TO BE CURRENTLY IN USE OR NOT, UNLESS WRITTEN AUTHORIZATION FROM THE OWNER INDICATED OTHERWISE. PREPARE LISTING OF ALL EXISTING DAMAGED ITEMS AND SUBMIT TO OWNER PRIOR TO BEGINNING WORK.
- A DETAILED WRITTEN METHOD OF PROCEDURE IS REQUIRED WHEN A CONSTRUCTION ACTIVITY OR AN OUTAGE AFFECTS THE SAFETY OF OCCUPANTS, TELEPHONE/DATA/FIRE ALARM EQUIPMENT OR COMPONENTS OF ANY SYSTEM WHICH SUPPORTS THIS EQUIPMENT OR ESSENTIALLY AFFECTS THE BUILDING MANAGEMENT, OPERATIONS OR SECURITY. SEE SPECIFICATIONS FOR ADDITIONAL INFORMATION.
- EXISTING INFORMATION SHOWN ON THE DRAWINGS HAS BEEN TAKEN FROM OWNER FURNISHED DRAWINGS AND/OR LIMITED FIELD OBSERVATIONS. CATOR, RUMA & ASSOCIATES IS NOT RESPONSIBLE FOR THE ACCURACY OF ANY INFORMATION OR THE ADEQUACY, SAFETY AND CONFORMANCE TO CURRENT PREVAILING CODES OF ANY WORK SHOWN AS EXISTING ON THESE DRAWINGS.
- FIELD LOCATE EXISTING UNDERGROUND PUBLIC AND OWNER UTILITIES OF ALL TRADES AND BUILDING GROUNDING/LIGHTNING PROTECTION SYSTEMS PRIOR TO ANY EXCAVATION. REPLACE OR REPAIR DAMAGED UTILITIES AND GROUNDING/LIGHTNING PROTECTION SYSTEMS TO ORIGINAL CONDITION.

DEMOLITION NOTES:

- UNLESS NOTED OTHERWISE, BOLD ITEMS INDICATE EQUIPMENT, DEVICES, ETC. TO BE REMOVED. SEE SPECIFICATION SECTION 260500 FOR REMODEL/DEMOLITION DETAILED REQUIREMENTS.
- DEMOLITION DRAWINGS MAY NOT SHOW EVERY ITEM TO BE DEMOLISHED. CONTRACTOR SHALL VISIT SITE TO DETERMINE AND COORDINATE THE EXACT EXTENT OF DEMOLITION TO FACILITATE ALL WORK INDICATED BY THE CONTRACT DOCUMENTS PRIOR TO QUOTATION. NO EXTRAS WILL BE ALLOWED FOR WORK REQUIRED TO ACHIEVE THE END RESULT AS INDICATED BY THE CONTRACT DOCUMENTS. REWORK EXISTING TERMINATIONS, CONNECTIONS, CONDUIT, WIRING, ETC. TO ACCEPT NEW WORK. MAINTAIN CIRCUIT CONTINUITY TO EXISTING CIRCUITS AND DEVICES TO REMAIN OR REMODEL/DEMOLITION DETAILED REQUIREMENTS TO BE RELOCATED. PRIOR TO COMMENCEMENT OF ANY DEMO WORK, CONFIRM EXISTING CONDITIONS AND NOTIFY ENGINEER OF ANY DISCREPANCIES FOR RESOLUTION.
- ALL ITEMS IDENTIFIED TO BE REMOVED SHALL BE REMOVED IN THEIR ENTIRETY INCLUDING ALL WIRING AND EXPOSED CONDUIT AND CONDUIT SUPPORTS BACK TO POINT OF ORIGIN OR NEXT DEVICE TO REMAIN. REMOVED ITEMS SHALL BE TURNED OVER TO THE OWNER, UNLESS NOTED OTHERWISE, AND STORED IN THE AREA DESIGNATED BY THE OWNER. REMOVE FROM SITE AND LEGALLY DISPOSE OF ALL ITEMS THE OWNER CHOOSES NOT TO ACCEPT.
- WHERE EXISTING CONDUITS ARE SHOWN TO BE REMOVED AND HAVE BEEN ROUTED IN CONCRETE FLOOR SLABS, CONCRETE WALLS OR CONCRETE CEILINGS, THEY SHALL BE CUT BACK FLUSH WITH CONCRETE. FILL WITH GROUT TO ACHIEVE A SMOOTH AND EVEN FINISH FLUSH WITH CONCRETE SURFACE AFTER CONDUCTORS HAVE BEEN REMOVED.
- REUSE EXISTING CONDUIT WHERE CURRENT NEC AND LOCAL CODE REQUIREMENTS ARE MAINTAINED. PROVIDE NEW CONDUIT AND WIRE FOR NEW INSTALLATIONS AND EXTENSION OF EXISTING INSTALLATIONS. REUSE EXISTING CONDUIT IN PLACE. DO NOT REINSTALL EXISTING CONDUIT. PROVIDE LABELING PER SPECIFICATIONS FOR REUSED CONDUIT.
- RELOCATED EQUIPMENT AND DEVICES ARE TO BE CLEANED OF ALL FOREIGN MATERIAL. REPLACE EQUIPMENT OR DEVICES WHICH ARE DEFECTIVE OR DAMAGED DURING RELOCATION.

SITE PLAN NOTES:

- EXTERIOR LIGHTING, POLE BASES, AND OTHER ELECTRICAL EQUIPMENT AND/OR DEVICES ARE SHOWN DIAGRAMMATICALLY AND ARE NOT NECESSARILY SHOWN TO SCALE. IF DIMENSIONS ARE NOT INDICATED ON PLAN DRAWING, SUBMIT PROPOSED SPACINGS AND LOCATIONS WITH DIMENSIONS FOR ACCEPTANCE PRIOR TO INSTALLATION.

DEMO NOTES:

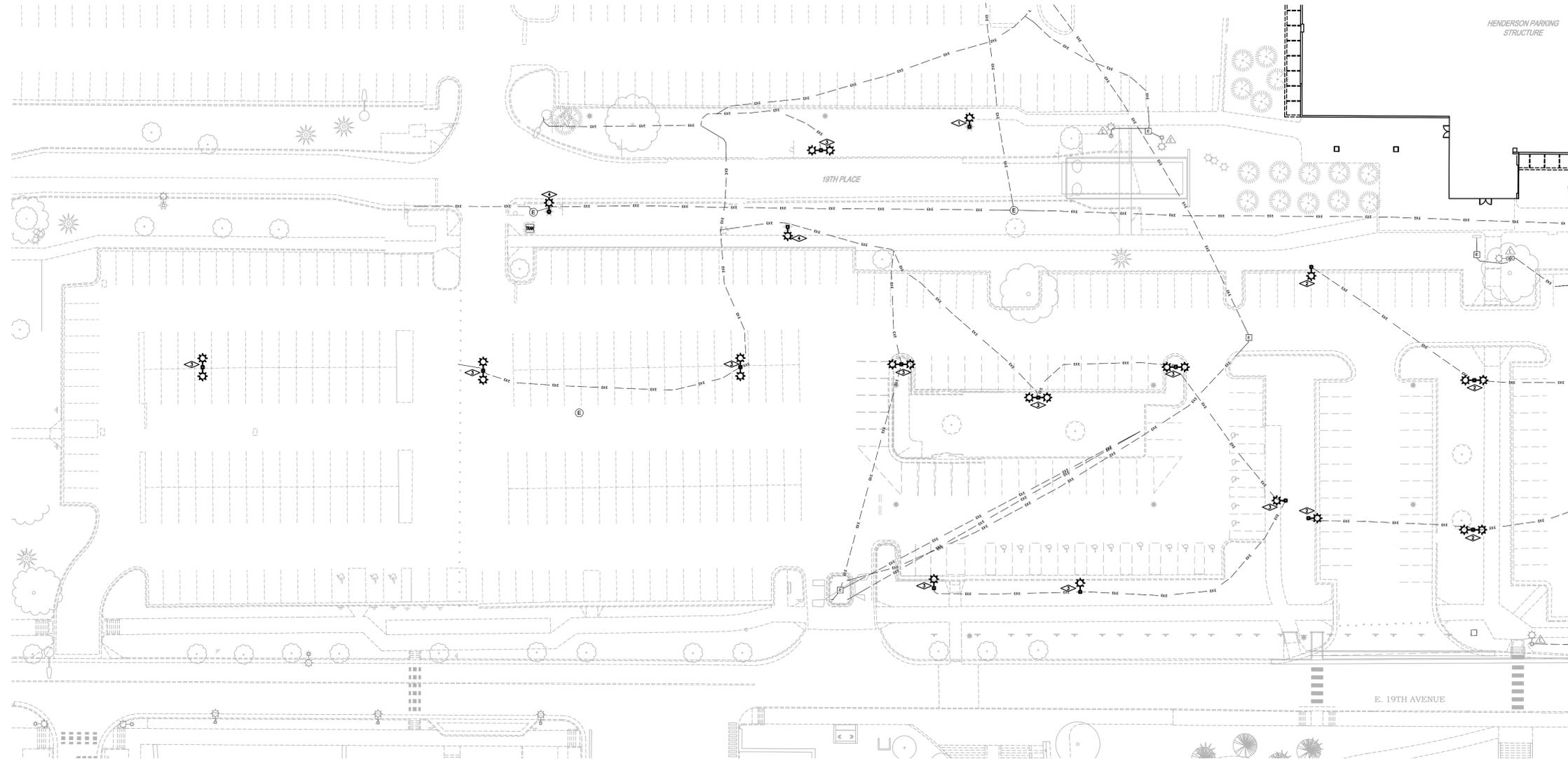
1. EXISTING POLE TO REMAIN. HEAD TO BE ROTATED. REFER TO NEW LIGHTING PLAN SHEET E-102 FOR ADDITIONAL INFORMATION.
2. POLE AND LED HEAD TO BE REUSED AND RELOCATED. REFER TO NEW LIGHTING PLAN SHEET E-102 FOR ADDITIONAL INFORMATION.
3. POLE TO BE RELOCATED. HEAD/HEADS ARE TO BE UPGRADED TO LED. REFER TO NEW LIGHTING PLAN SHEET E-102 FOR ADDITIONAL INFORMATION.
4. EXISTING COBRA HEAD LIGHT FIXTURE TO BE REMOVED.



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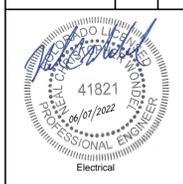
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 **ELECTRICAL DEMOLITION SITE PLAN**
SCALE: 1"=30'

NO.	DESCRIPTION	DATE
1	FINAL CONSTRUCTION DOCUMENTS - PERMIT ISSUE	05/27/22
2	ADDENDUM #1	06/10/22

PROJECT: UNIVERSITY OF COLORADO - ANSCHUTZ MEDICAL CAMPUS BRECKENRIDGE LOT IMPROVEMENTS
DRAWING TITLE: ELECTRICAL DEMOLITION SITE PLAN
FILE PATH:



DESIGNED BY: CLM
DRAWN BY: CLM
CHECKED BY: NCW
MIRO JOB NO. 22017

DRAWING NUMBER:
ED-102

KEY NOTES:

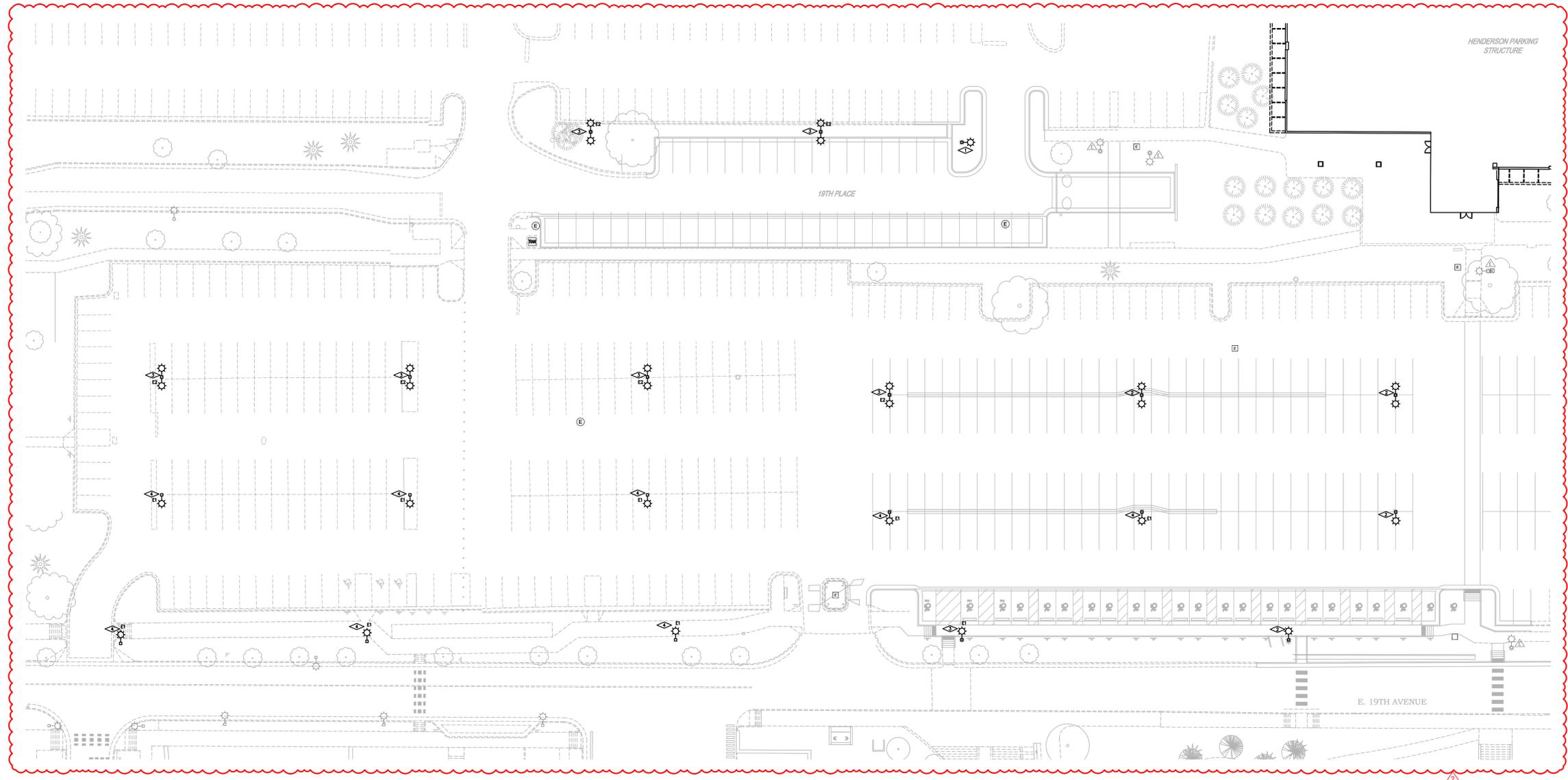
1. EXISTING POLE AND HEAD TO REMAIN. ROTATE EXISTING POLE/HEAD TO THE NEW DIRECTION SHOWN.
2. POLE AND LED HEAD TO BE REUSED AND RELOCATED. RECONNECT TO EXISTING CIRCUIT AND EXISTING LIGHTING CONTROL SYSTEM.
3. POLE TO BE RELOCATED. HEAD/HEADS ARE TO BE UPGRADED TO LED. REFER TO LUMINAIRE SCHEDULE FOR MORE INFORMATION. RECONNECT TO EXISTING CIRCUIT AND EXISTING LIGHTING CONTROL SYSTEM.
4. NEW POLE AND NEW LED HEAD TO BE PROVIDED. REFER TO LUMINAIRE SCHEDULE FOR MORE INFORMATION. CONNECT TO NEAREST EXISTING PARKING LOT LIGHTING CIRCUIT AND EXISTING LIGHTING CONTROL SYSTEM.



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ELECTRICAL SITE PLAN
SCALE: 1"=30'

NO.	DESCRIPTION	DATE
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PROJECT: UNIVERSITY OF COLORADO - ANSCHUTZ MEDICAL CAMPUS BRECKENRIDGE LOT IMPROVEMENTS
DRAWING TITLE: ELECTRICAL SITE PLAN
FILE PATH:



DESIGNED BY: CLM
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MIRO JOB NO. 22017

DRAWING NUMBER:
E-102

KEY NOTES:

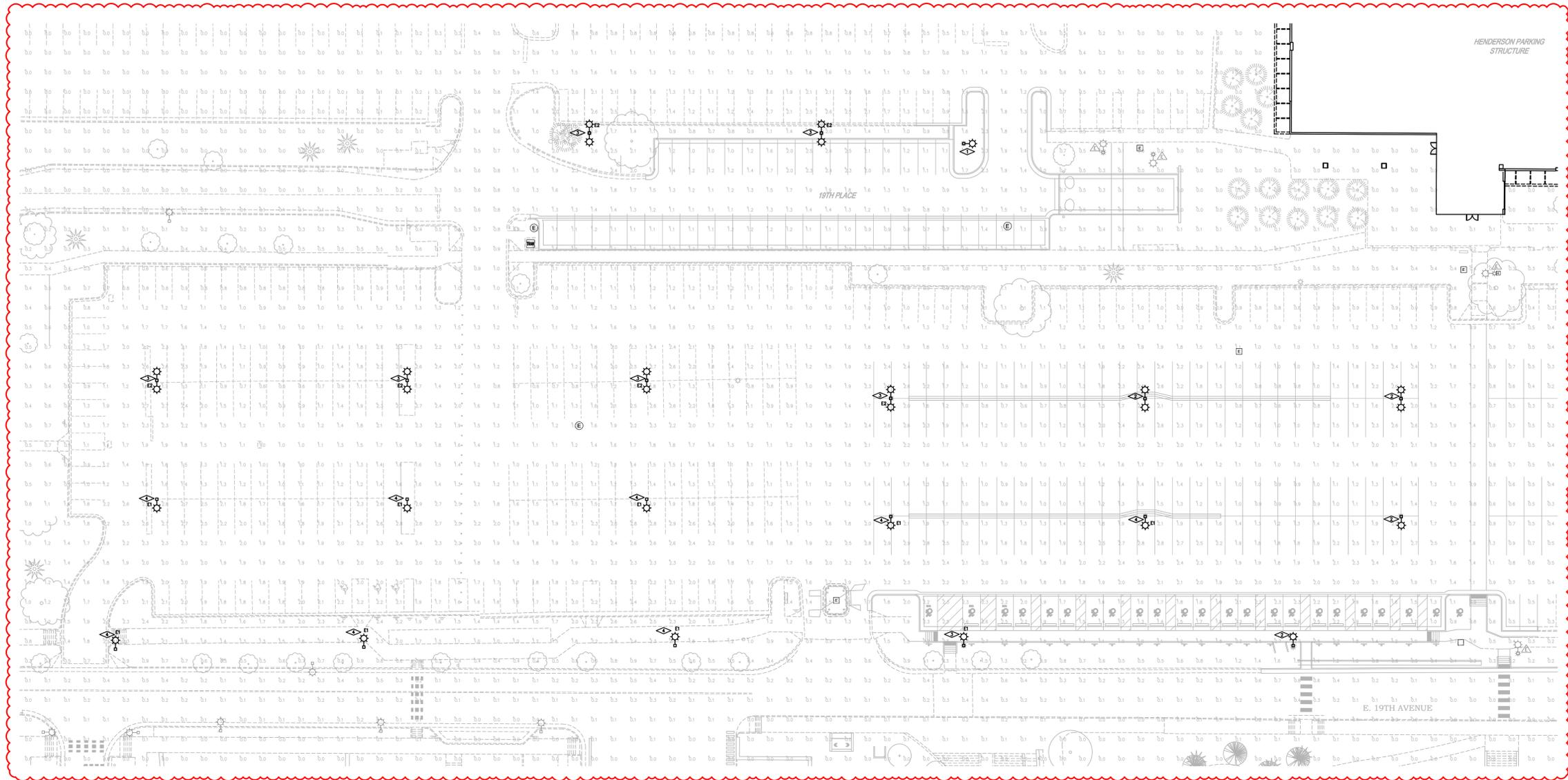
1. EXISTING POLE AND HEAD TO REMAIN. ROTATE EXISTING POLE/HEAD TO THE NEW DIRECTION SHOWN.
2. POLE AND LED HEAD TO BE REUSED AND RELOCATED. RECONNECT TO EXISTING CIRCUIT AND EXISTING LIGHTING CONTROL SYSTEM.
3. POLE TO BE RELOCATED. HEAD/HEADS ARE TO BE UPGRADED TO LED. REFER TO LUMINAIRE SCHEDULE FOR MORE INFORMATION. RECONNECT TO EXISTING CIRCUIT AND EXISTING LIGHTING CONTROL SYSTEM.
4. NEW POLE AND NEW LED HEAD TO BE PROVIDED. REFER TO LUMINAIRE SCHEDULE FOR MORE INFORMATION. CONNECT TO NEAREST EXISTING PARKING LOT LIGHTING CIRCUIT AND EXISTING LIGHTING CONTROL SYSTEM.



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PHOTOMETRIC SITE PLAN
SCALE: 1"=30'

NO.	DESCRIPTION	DATE
1	FINAL CONSTRUCTION DOCUMENTS - PERMIT ISSUE	05/27/22
2	ADDENDUM #1	06/10/22

PROJECT: UNIVERSITY OF COLORADO - ANSCHUTZ MEDICAL CAMPUS BRECKENRIDGE LOT IMPROVEMENTS
DRAWING TITLE: PHOTOMETRIC SITE PLAN
FILE PATH:



DESIGNED BY: CLM
DRAWN BY: CLM
CHECKED BY: NCW
MIRO JOB NO. 22017

DRAWING NUMBER:
E-103