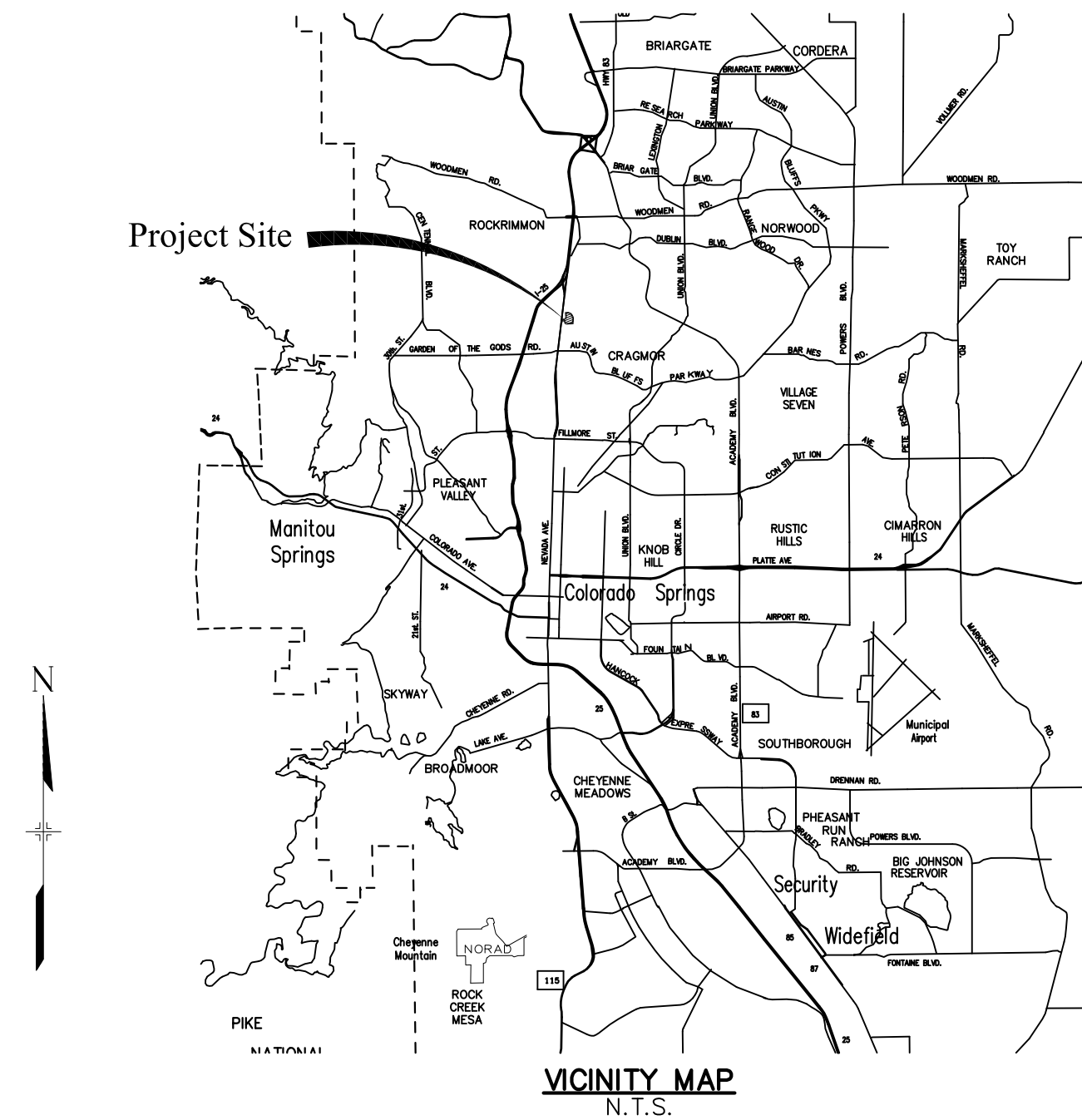


UCCS ARENA PARKING LOT
COLORADO SPRINGS, COLORADO
SITE DEVELOPMENT PLANS
FEBRUARY 2012

INDEX OF SHEETS

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OWNER:
UNIVERSITY OF COLORADO AT COLORADO SPRINGS (UCCS)
1420 AUSTIN BLUFFS PARKWAY
COLORADO SPRINGS, CO 80918
CONTACT: GARY REYNOLDS
(719) 255-3505

CIVIL ENGINEERS:
MATRIX DESIGN GROUP, INC.
2435 RESEARCH PARKWAY, SUITE 300
COLORADO SPRINGS, CO 80920

CALL UTILITY NOTIFICATION
CENTER OF COLORADO
1-800-922-1987
CALL 2-BUSINESS DAYS IN ADVANCE
BEFORE YOU DIG, GRADE, OR EXCAVATE
FOR THE MARKING OF UNDERGROUND
NEARBY UTILITIES.

MCBAUER
INVESTMENTS

RIDGELINE
INVESTMENTS

N. NEVADA AVENUE

NORTH CAMPUS
HEIGHTS

REGENTS OF THE
UNIVERSITY OF
COLORADO-COLORADO
SPRINGS

FOUR DIAMONDS
SPORTS COMPLEX

SITE MAP
N.T.S.

GENERAL NOTES:

- ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE "UCCS CAMPUS CONSTRUCTION STANDARDS".
- UTILITY LINES AS SHOWN ON THE PLAN SHEETS ARE PLOTTED FROM THE BEST AVAILABLE INFORMATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE VERIFICATION AND PROTECTION OF ALL UTILITIES IN PLACE.
- THE CONTRACTOR SHALL CONTACT THE UTILITY NOTIFICATION CENTER OF COLORADO AT 1-800-922-1987 TWO BUSINESS DAYS IN ADVANCE OF ANY EXCAVATING OR GRADING.
- THE CONTRACTOR SHALL PROTECT AND MAINTAIN ALL UTILITIES AND STRUCTURES AFFECTED BY THE WORK AND ANY DAMAGE SHALL BE REPAIRED AND RESTORED TO THE SATISFACTION OF THE UCCS FACILITIES DIRECTOR.
- THE PHYSICAL FEATURES WITHIN THE LIMITS OF THE PROJECT HAVE BEEN SHOWN BASED ON THE BEST AVAILABLE INFORMATION AT THE TIME OF DESIGN. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THE ACCURACY OF THE FEATURES SHOWN. THE CONTRACTOR SHALL REVIEW AND VERIFY EXISTING PHYSICAL FEATURES AND INFORM HIMSELF OF THE CONDITIONS TO BE ENCOUNTERED DURING CONSTRUCTION.
- ALL WORK SHALL BE DONE TO THE LINES, GRADES, SECTIONS, AND ELEVATIONS SHOWN ON THE PLANS UNLESS OTHERWISE NOTED OR APPROVED BY THE ENGINEER.
- THE CONTRACTOR SHALL LIMIT CONSTRUCTION ACTIVITIES TO THOSE AREAS WITHIN THE LIMITS OF DISTURBANCE AND/OR TOES OF SLOPE AS SHOWN ON THE PLANS AND CROSS SECTIONS. ANY DISTURBANCE BEYOND THESE LIMITS SHALL BE RESTORED TO ORIGINAL CONDITIONS BY THE CONTRACTOR AT HIS/HER CONSIDERATION. CONSTRUCTION ACTIVITIES, IN ADDITION TO NORMAL CONSTRUCTION PROCEDURES, SHALL INCLUDE THE PARKING OF VEHICLES OR EQUIPMENT, DISPOSAL OF LITTER AND ANY OTHER ACTION WHICH WOULD ALTER EXISTING CONDITIONS.
- THE PHYSICAL FEATURES REQUIRING REMOVAL OR OBLITERATION WITHIN THE PROJECT SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE DISPOSED OF OFF-SITE. THE EXCEPTION IS TRAFFIC CONTROL DEVICES, WHICH SHALL BE SALVAGED FOR CITY MAINTENANCE.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PRESERVING ANY MONUMENTATION, RANGE POINTS, TIES, BENCHMARKS AND/OR SURVEY CONTROL POINTS WHICH MAY BE DISTURBED OR DESTROYED BY CONSTRUCTION. SUCH POINTS SHALL BE REFERENCED AND REPLACED WITH APPROPRIATE MONUMENTATION BY A REGISTERED PROFESSIONAL LAND SURVEYOR AUTHORIZED TO PRACTICE LAND SURVEYING IN COLORADO.
- THE CONTRACTOR SHALL NOT STOCKPILE MATERIAL WITHIN 10 FT OF THE EDGE OF TRAVELED WAY.
- THE CONTRACTOR SHALL FURNISH, INSTALL, AND MAINTAIN TEMPORARY TRAFFIC CONTROL DEVICES NECESSARY THROUGHOUT THE DURATION OF CONSTRUCTION. THE CONTRACTOR SHALL CONTACT TRAFFIC ENGINEERING FORTY-EIGHT (48) HOURS IN ADVANCE FOR ANY REQUIRED MODIFICATION OF TRAFFIC SIGNALS WITHIN CONSTRUCTION AREA AS NECESSARY TO MAINTAIN SAFE OPERATIONS.
- ANY DISCREPANCY WITHIN THESE PLANS SHOULD BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ENGINEER.
- ACCESS TO HELLER PROPERTY MUST BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION.

TRAFFIC GENERAL NOTES:

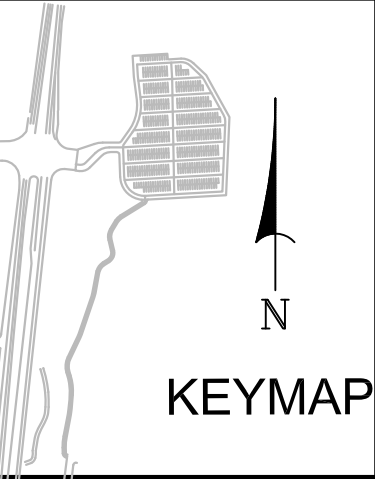
- BEFORE EXCAVATING, CONTRACTOR SHALL VERIFY LOCATION OF UNDERGROUND UTILITIES.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL NEW, TEMPORARY AND EXISTING TRAFFIC SIGNS FROM THE START OF THE CONSTRUCTION PROJECT UNTIL ACCEPTANCE BY CITY TRAFFIC ENGINEERING.
- ALL TRAFFIC SIGNS, PAVEMENT MARKINGS, AND TRAFFIC SIGNALS SHALL MEET OR EXCEED M.U.T.C.D. STANDARDS.
- THE CONTRACTOR SHALL NOT REMOVE ANY EXISTING SIGNS, PAVEMENTS MARKINGS OR TRAFFIC SIGNALS DURING THE PROJECT WITHOUT SIGNED AUTHORIZATION OF THE CITY ENGINEERING INSPECTOR ASSIGNED TO THE PROJECT.
- CONTRACTOR SHALL PREPARE A DETAILED TRAFFIC CONTROL PLAN, SUBMIT TO CITY TRAFFIC ENGINEERING FOR APPROVAL, AND OBTAIN APPROPRIATE PERMITS IN ACCORDANCE WITH THE "TRAFFIC CONTROLS FOR STREET CONSTRUCTION, UTILITY WORK, AND MAINTENANCE OPERATIONS", M.U.T.C.D. SUPPLEMENT FOR THE CITY OF COLORADO SPRINGS, AUGUST 1992.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL WORK ZONE TRAFFIC CONTROL. CONTRACTOR SHALL BE RESPONSIBLE FOR FURNISHING, INSTALLING AND MAINTAINING THE TEMPORARY TRAFFIC CONTROL DEVICES THROUGHOUT THE DURATION OF THE PROJECT.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL NEW, TEMPORARY AND EXISTING TRAFFIC SIGNAL MODIFICATIONS.
- CONTRACTOR IS TO CONTACT TRAFFIC ENGINEERING TO ARRANGE FOR REMOVAL AND REPLACEMENT OF ANY SIGNS CONFLICTING WITH CONSTRUCTION. CONTRACTORS ARE NOT AUTHORIZED TO MOVE EXISTING TRAFFIC CONTROL SIGNS. ANY SIGNS THAT CONFLICT WITH THE TRAFFIC CONTROL PLAN DURING CONSTRUCTION, SHALL BE COVERED, BEFORE COVERING THE SIGN, THE CONTRACTOR SHALL OBTAIN WRITTEN PERMISSION FROM THE TRAFFIC ENGINEER.

GRADING CONSTRUCTION NOTES:

- ALL MATERIALS AND WORKMANSHIP SHALL BE IN CONFORMANCE WITH THE "UCCS CAMPUS CONSTRUCTION STANDARDS".
- THE CONTRACTOR ASSUMES RESPONSIBILITY FOR THE PROTECTION OF ALL UTILITIES DURING THE WORK. ANY DAMAGE TO THE EXISTING UTILITIES WILL BE REPAIRED AT THE CONTRACTOR'S EXPENSE AND ANY SERVICE DISRUPTION WILL BE SETTLED BY THE CONTRACTOR. PRIOR TO ANY EXCAVATION, CONTACT THE UTILITY NOTIFICATION CENTER OF COLORADO AT 1-800-922-1987 AT LEAST TWO WORKING DAYS PRIOR TO DIGGING.
- CLEARING AND GRUBBING FOR THIS PROJECT WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE COST OF THE WORK. INCLUDED IN THIS WORK IS THE REMOVAL OF ALL VEGETATION AND PLANT MATERIAL. ITEMS DESIGNATED IN THE PLANS TO BE REMOVED UNDER A SPECIFIC ITEM WILL BE MEASURED AND PAID FOR IN ACCORDANCE WITH THE SPECIFICATION FOR THAT ITEM.
- THE CONTRACTOR IS RESPONSIBLE FOR THE RE-ESTABLISHMENT OF ALL SURVEY MONUMENTS DISTURBED WITHIN THE PROJECT LIMITS.
- THE CONTRACTOR SHALL PROTECT ALL WORK AREAS AND FACILITIES FROM FLOODING AT ALL TIMES. AREAS AND FACILITIES SUBJECTED TO FLOODING, REGARDLESS OF THE SOURCE OF WATER, SHALL BE PROMPTLY DEWATERED AND RESTORED.
- THE CONTRACTOR IS RESPONSIBLE FOR PREVENTING AND CONTROLLING EROSION DURING CONSTRUCTION ACTIVITIES AT ALL TIMES DURING GRADING AND CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE THE FOLLOWING EROSION AND SEDIMENT CONTROL MEASURES:
 - STRAW BALE BARRIERS WHERE NEEDED.
 - SILT FENCE WHERE NEEDED.
 - TEMPORARY DETENTION BASINS WHERE NEEDED.
 - MULCHING AND SEEDING OF EXCESSIVE SLOPED AREAS AS NEEDED.
 - TEMPORARY VEHICLE TRACKING CONTROL AS NEEDED.
- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE EXISTENCE AND LOCATION OF ALL UNDERGROUND AND ABOVE GROUND UTILITIES ALONG THE SITE. THE OMISSION FROM OR THE INCLUSION OF UTILITY LOCATIONS ON THE PLANS IS NOT TO BE CONSIDERED AS THE NONEXISTENCE OF OR A DEFINITE LOCATION OF EXISTING UNDERGROUND UTILITIES.
- CONTRACTOR WILL OBTAIN COPIES OF THE SOILS REPORT FROM THE GEOTECHNICAL ENGINEER AND A COPY WILL BE KEPT ONSITE DURING ALL EARTHWORK OPERATIONS.
- THE SITE SHALL BE STRIPPED A MINIMUM OF 0.5' BELOW EXISTING GRADE.
- MAXIMUM CUT/FILL SLOPES SHALL NOT EXCEED 3:1, UNLESS OTHERWISE NOTED. ALL SLOPES MUST BE PROTECTED FROM EROSION.
- CONTOURS SHOWN ARE FOR FINAL PAVING OR GROUND. ADJUSTMENT TO THE SUBGRADE IS THE CONTRACTORS RESPONSIBILITY.
- ALL DISTURBED AREAS THAT ARE UNSURFACED OR ARE NOT DESIGNATED AS LANDSCAPE AREAS ARE TO BE SEEDED, FERTILIZED, AND WATERED UNTIL A HEALTHY STAND OF GRASS IS OBTAINED.
- IF DURING THE OVERLOT GRADING PROCESS, CONDITIONS ARE ENCOUNTERED WHICH COULD INDICATE AN UNIDENTIFIED SITUATION IS PRESENT, THE SOILS ENGINEER SHALL BE CONTACTED FOR RECOMMENDATIONS.
- ON-SITE MATERIALS SUITABLE FOR FILL BENEATH DRIVES AND PARKING AREAS SHALL BE COMPACTED IN ACCORDANCE WITH GUIDELINES PRESENTED IN THE SOILS REPORT.
- SPOT ELEVATIONS SHALL TAKE PRECEDENCE OVER CONTOURS AND SLOPES SHOWN. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF THE SPOT ELEVATIONS THAT DO NOT APPEAR TO BE CONSISTENT WITH THE CONTOURS AND SLOPES. SPOT ELEVATIONS AND SPECIFIC PROFILE DESIGN SHALL BE USED FOR SETTING ELEVATIONS OF CURB, GUTTER, AND UTILITIES.
- BENCHMARK VERIFICATION: CONTRACTOR SHALL USE BENCHMARKS AND DATUMS SHOWN HEREON TO SET PROJECT BENCHMARK(S), BY RUNNING A LEVEL LOOP BETWEEN AT LEAST TWO BENCHMARK, AND SHALL PROVIDE SURVEY NOTES OF SUCH TO PROJECT ENGINEER PRIOR TO COMMENCING CONSTRUCTION.
- ALL UTILITIES (MANHOLES, VALVE COVERS, CLEANOUTS, VAULTS, BOXES, ETC.) SHALL BE ADJUSTED TO FINAL GRADE PRIOR TO THE FINAL LIFT OF ASPHALT.
- ALL EARTH MOVING AND PLACEMENT OPERATIONS SHALL BE IN CONFORMANCE WITH THE RECOMMENDATIONS IDENTIFIED IN THE SOILS REPORT.
- SPOT ELEVATIONS REPRESENT FINISH GRADE UNLESS OTHERWISE NOTED.
- EXISTING DRAINAGE STRUCTURES TO BE INSPECTED AND REPAIRED AS NEEDED, AND EXISTING PIPES TO BE CLEANED OUT TO REMOVE ALL SILT AND DEBRIS.
- EXISTING GRADE CONTOUR INTERVALS SHOWN AT 1 FOOT INTERVALS.
- PROPOSED GRADE CONTOUR INTERVALS SHOWN AT 1 FOOT INTERVALS.
- IF ANY EXISTING STRUCTURES TO REMAIN ARE DAMAGED DURING CONSTRUCTION IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO REPAIR AND/OR REPLACE THE EXISTING STRUCTURE AS NECESSARY TO RETURN IT TO EXISTING CONDITIONS OR BETTER.
- CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL UTILITIES AND NOTIFYING THE APPROPRIATE UTILITY COMPANY PRIOR TO BEGINNING OF CONSTRUCTION.
- THE CONTRACTOR WILL OBTAIN STATE APPROVAL OF THEIR EPA STORM WATER PERMIT APPLICATION TO INCLUDE A STORM WATER POLLUTION PREVENTION PLAN, PRIOR TO START OF CONSTRUCTION.

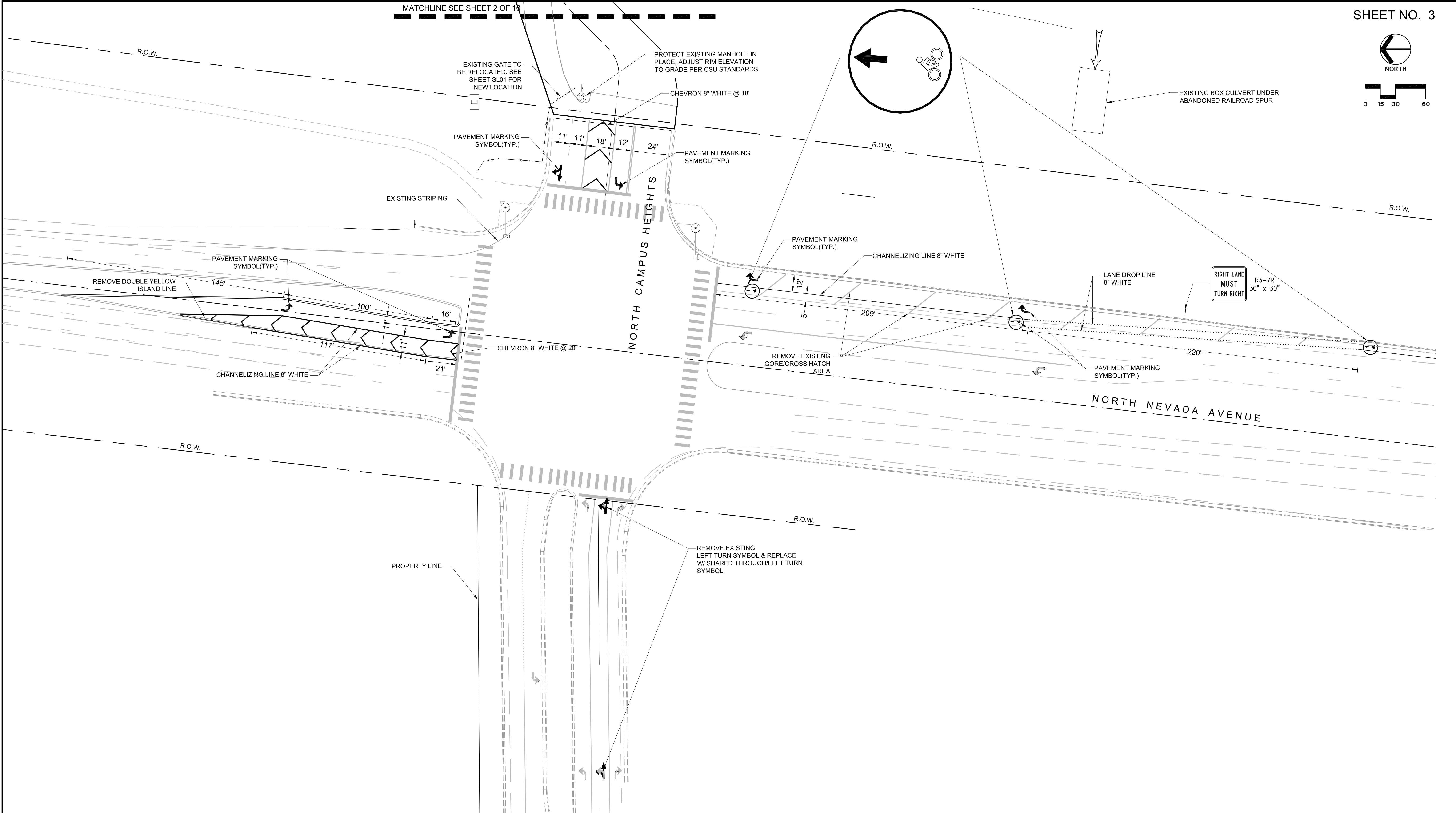
REVISIONS					
NO.	DATE	BY	DESCRIPTION	APPROVED BY:	DATE

BENCHMARK:
A #5 REBAR SET AT TOP OF BANK 80 FEET WEST OF THE REAR ACCESS TO UCCS AT THE NORTHEAST CORNER OF THE PROJECT (392.492,31 NORTH 196.341,34 EAST). ELEVATION IS 6276.74. NAVD83 (GEOID 9). A CROSS REFERENCE OF 6247.99 WAS ALSO MADE TO THE FIMS VERTICAL CONTROL MONUMENT "ABV2" BEING A 2 INCH DIAMETER ALUMINUM CAP STAMPED "CSU FIMS CONTROL ABV2" ON THE SOUTH END OF THE HEADWALL ON THE EAST SIDE OF A DRAINAGE TUNNEL UNDER THE OLD RAILROAD. NOTE: THE VERTCON ADJUSTMENT OF NAVD 88 TO NGVD 29 (FIMS) IS 1.108 METERS.

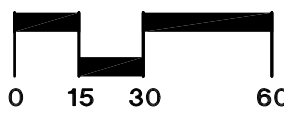


FOR AND ON BEHALF OF
MATRIX DESIGN GROUP, INC.

UCCS ARENA PARKING LOT			
SITE DEVELOPMENT PLANS			
TITLE SHEET			
DESIGNED BY: REP	SCALE	DATE ISSUED: FEBRUARY 17, 2012	TS1
DRAWN BY: BAS	HORIZ: N/A	SHEET NO. 1 OF 16	
CHECKED BY: REP	VERT: N/A		

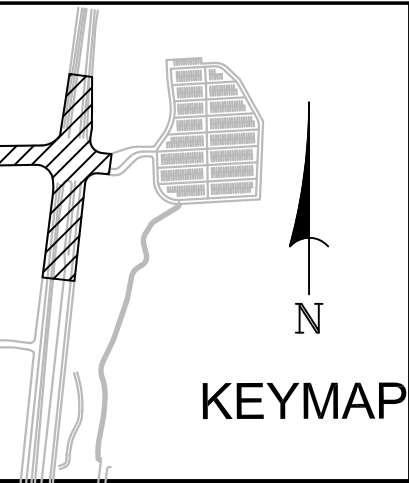


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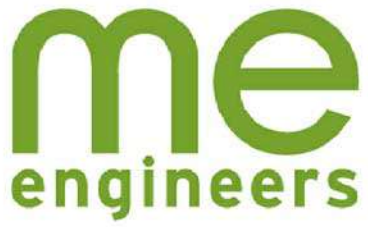


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NO.	DATE	BY	DESCRIPTION	APPROVED BY:	DATE

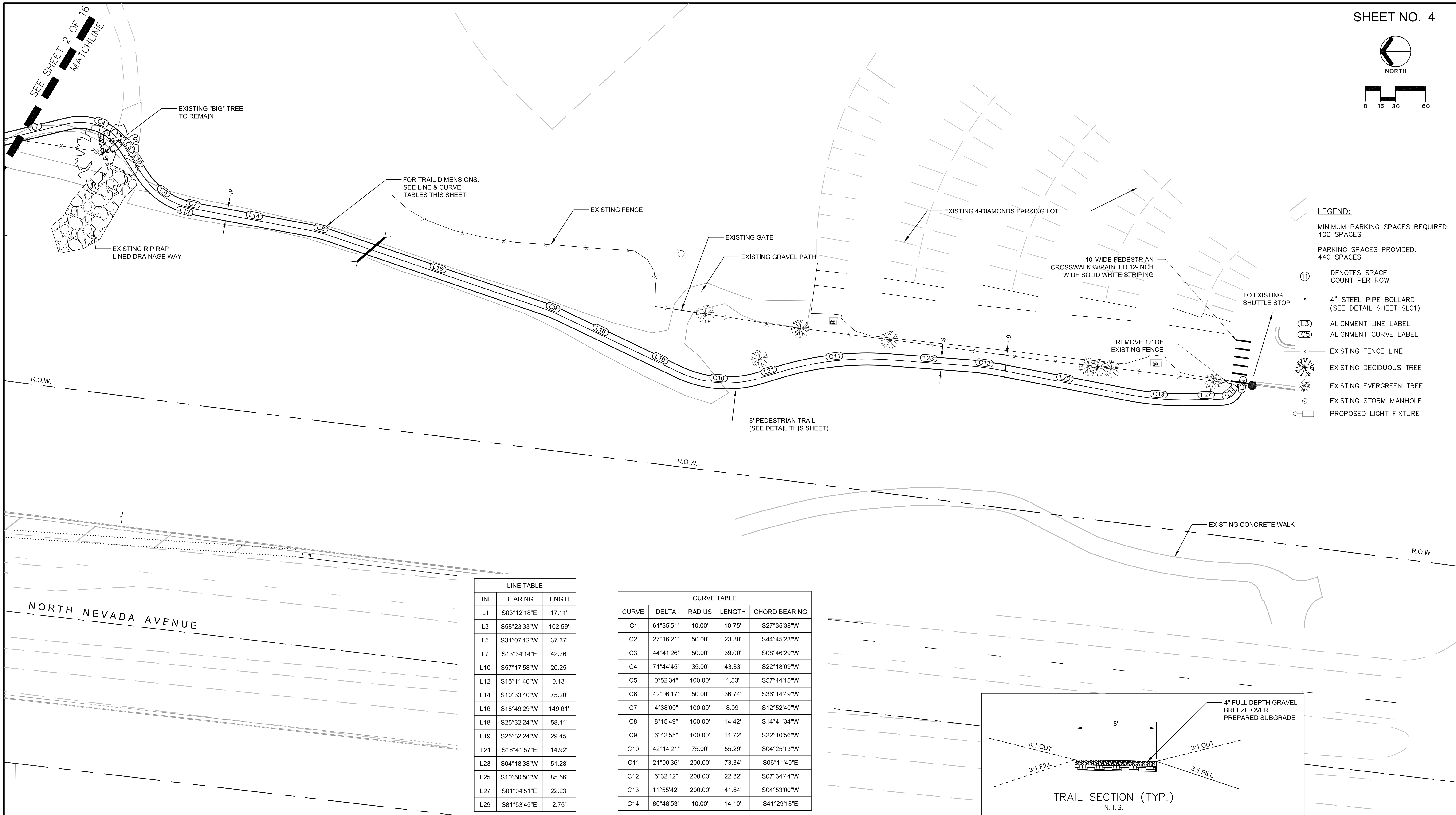
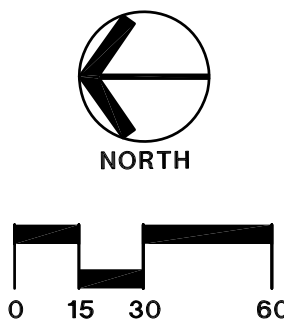
BENCHMARK:
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FOR AND ON BEHALF OF
MATRIX DESIGN GROUP, INC.



UCCS ARENA PARKING LOT			
SITE DEVELOPMENT PLANS			
INTERSECTION IMPROVEMENTS			
DESIGNED BY: REP	SCALE	DATE ISSUED: FEBRUARY 17, 2012	SL02
DRAWN BY: BAS	HORIZ: 1" = 30'	SHEET NO. 3 OF 16	
CHECKED BY: REP	VERT: N/A		

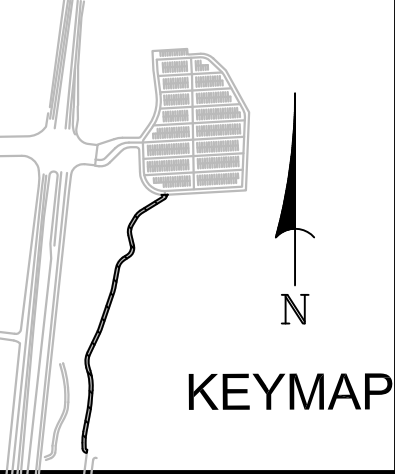


LINE TABLE		
LINE	BEARING	LENGTH
L1	S03°12'18"E	17.11'
L3	S58°23'33"W	102.59'
L5	S31°07'12"W	37.37'
L7	S13°34'14"E	42.76'
L10	S57°17'58"W	20.25'
L12	S15°11'40"W	0.13'
L14	S10°33'40"W	75.20'
L16	S18°49'29"W	149.61'
L18	S25°32'24"W	58.11'
L19	S25°32'24"W	29.45'
L21	S16°41'57"E	14.92'
L23	S04°18'38"W	51.28'
L25	S10°50'50"W	85.56'
L27	S01°04'51"E	22.23'
L29	S81°53'45"E	2.75'

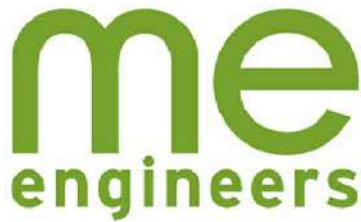
CURVE TABLE				
CURVE	DELTA	RADIUS	LENGTH	CHORD BEARING
C1	61°35'51"	10.00'	10.75'	S27°35'38"W
C2	27°16'21"	50.00'	23.80'	S44°45'23"W
C3	44°41'26"	50.00'	39.00'	S08°46'29"W
C4	71°44'45"	35.00'	43.83'	S22°18'09"W
C5	0°52'34"	100.00'	1.53'	S57°44'15"W
C6	42°06'17"	50.00'	36.74'	S36°14'49"W
C7	4°38'00"	100.00'	8.09'	S12°52'40"W
C8	8°15'49"	100.00'	14.42'	S14°41'34"W
C9	6°42'55"	100.00'	11.72'	S22°10'56"W
C10	42°14'21"	75.00'	55.29'	S04°25'13"W
C11	21°00'36"	200.00'	73.34'	S06°11'40"E
C12	6°32'12"	200.00'	22.82'	S07°34'44"W
C13	11°55'42"	200.00'	41.64'	S04°53'00"W
C14	80°48'53"	10.00'	14.10'	S41°29'18"E

REVISIONS				
NO.	DATE	BY	DESCRIPTION	APPROVED BY:

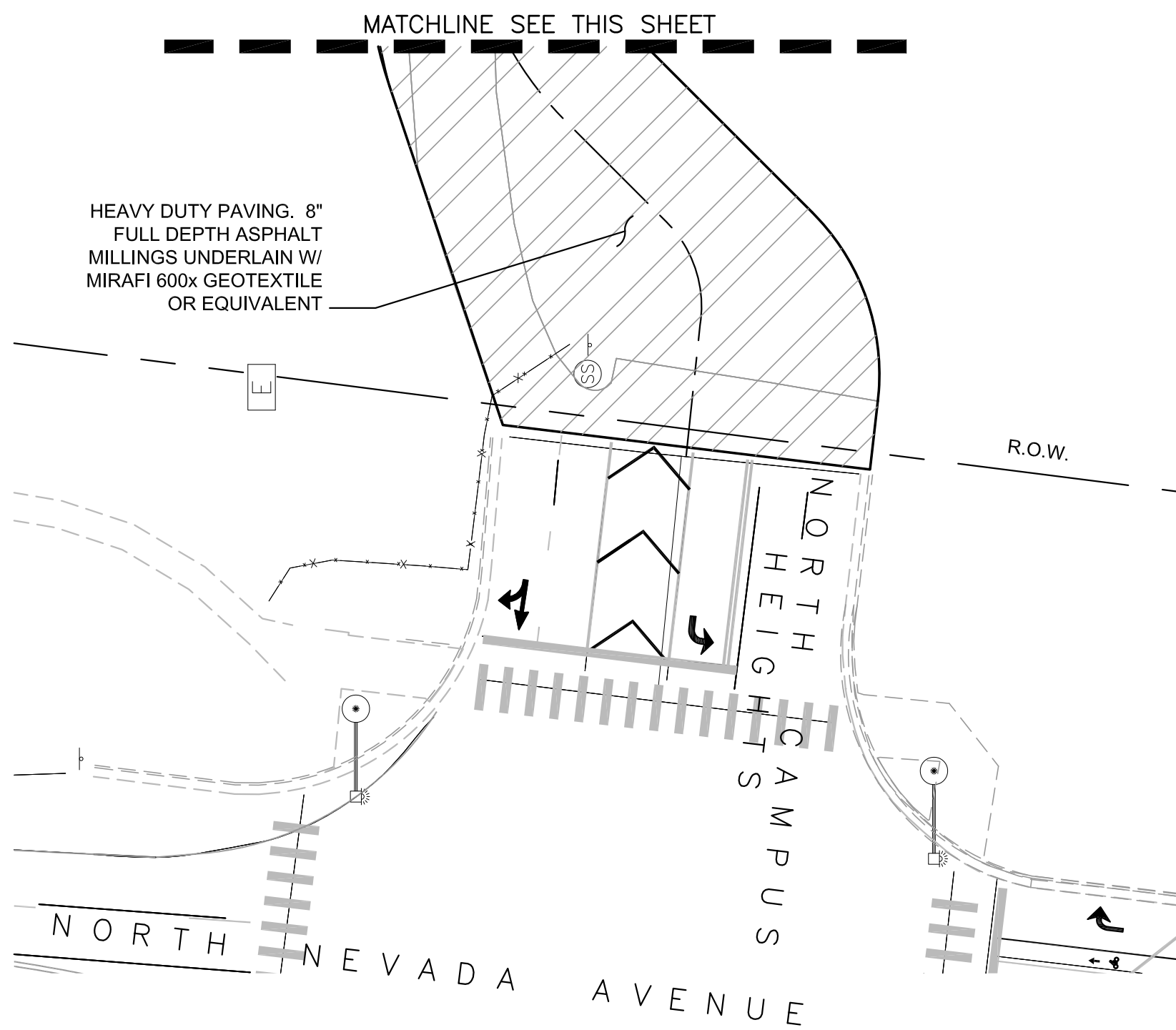
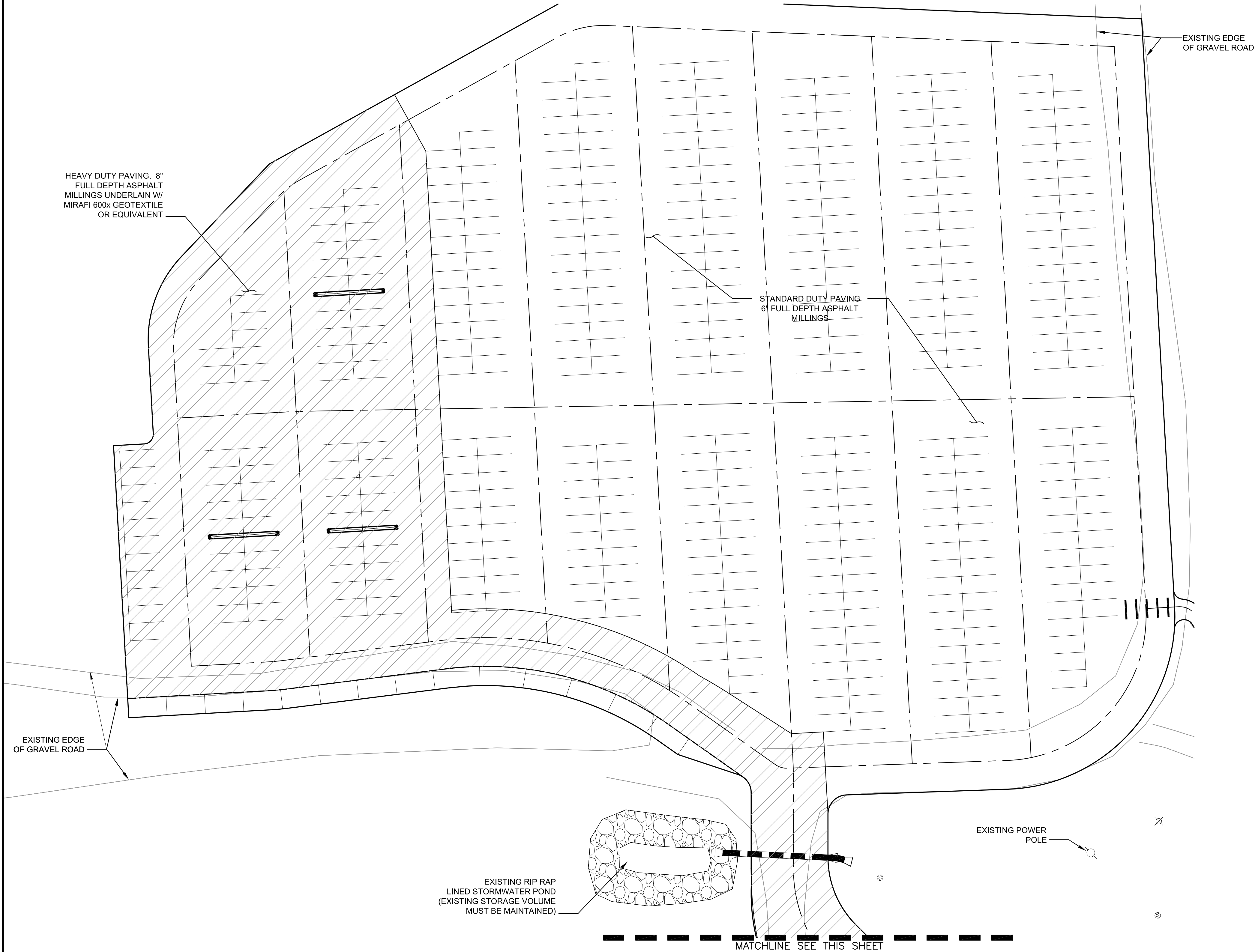
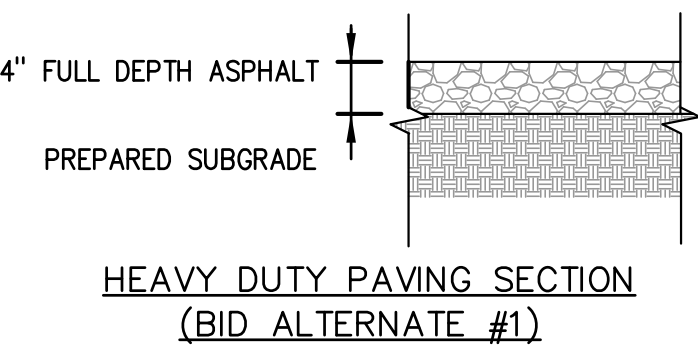
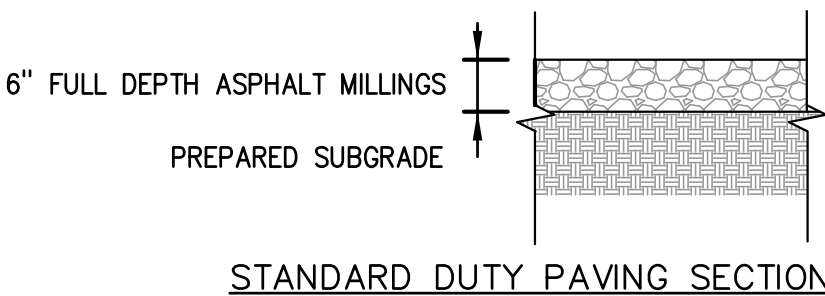
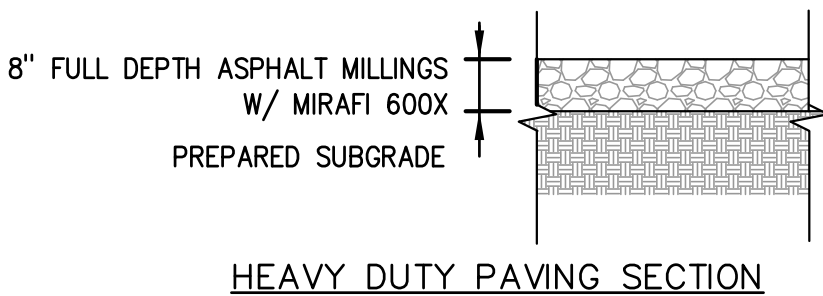
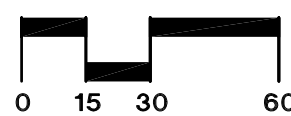
BENCHMARK:
A #5 REBAR SET AT TOP OF BANK 80 FEET WEST OF THE REAR ACCESS TO UCCS AT THE NORTHEAST CORNER OF THE PROJECT (392.492.31 NORTH 196.341.34 EAST). ELEVATION IS 6276.74. NAVD86 (GEOID 9), A CROSS REFERENCE OF 6247.58 WAS ALSO MADE TO THE FIMS VERTICAL CONTROL MONUMENT "ABV2" BEING A 2 INCH DIAMETER ALUMINUM CAP STAMPED "CSU FIMS CONTROL ABV2" ON THE SOUTH END OF THE HEADWALL ON THE EAST SIDE OF A DRAINAGE TUNNEL UNDER THE OLD RAILROAD. NOTE: THE VERTCON ADJUSTMENT OF NAVD 88 TO NGVD 29 (FIMS) IS 1.108 METERS.



FOR AND ON BEHALF OF
MATRIX DESIGN GROUP, INC.

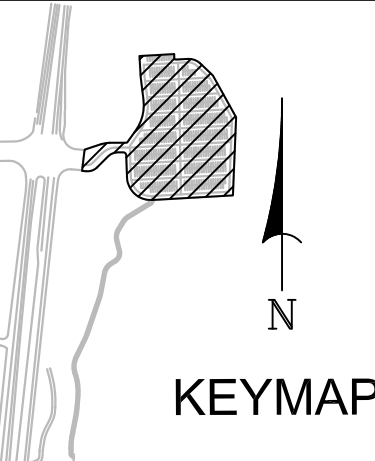


UCCS ARENA PARKING LOT			
SITE DEVELOPMENT PLANS			
SITE LAYOUT- PEDESTRIAN TRAIL			
DESIGNED BY: REP	SCALE	DATE ISSUED: FEBRUARY 17, 2012	
DRAWN BY: BAS	HORIZ: 1" = 30'	SHEET NO. 4 OF 16	SL03
CHECKED BY: REP	VERT: N/A		

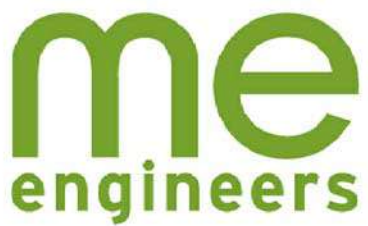


REVISIONS					
NO.	DATE	BY	DESCRIPTION	APPROVED BY:	DATE

BENCHMARK:
A #5 REBAR SET AT TOP OF BANK 80 FEET WEST OF THE REAR ACCESS TO UCCS AT THE NORTHEAST CORNER OF THE PROJECT (392.492.31 NORTH 196.341.34 EAST). ELEVATION IS 6276.74. NAVD86 (GEOID 9). A CROSS REFERENCE OF 6247.59 WAS ALSO MADE TO THE FIMS VERTICAL CONTROL MONUMENT "ABV2" BEING A 2 INCH DIAMETER ALUMINUM CAP STAMPED "CSU FIMS CONTROL ABV2" ON THE SOUTH END OF THE HEADWALL ON THE EAST SIDE OF A DRAINAGE TUNNEL UNDER THE OLD RAILROAD. NOTE: THE VERTCON ADJUSTMENT OF NAVD 88 TO NGVD 29 (FIMS) IS 1.108 METERS.



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MATRIX DESIGN GROUP, INC.

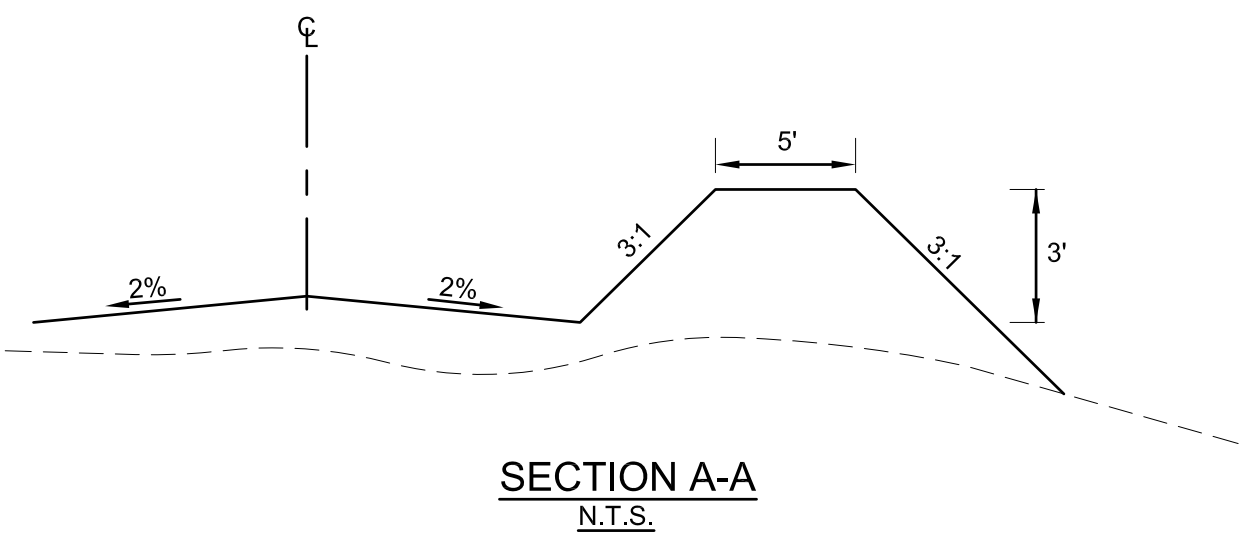


UCCS ARENA PARKING LOT			
SITE DEVELOPMENT PLANS			
PAVING PLAN			
DESIGNED BY: REP	SCALE	DATE ISSUED: FEBRUARY 17, 2012	
DRAWN BY: BAS	HORIZ: 1" = 30'	SHEET NO. 5 OF 16	
CHECKED BY: REP	VERT: N/A		
			PP1

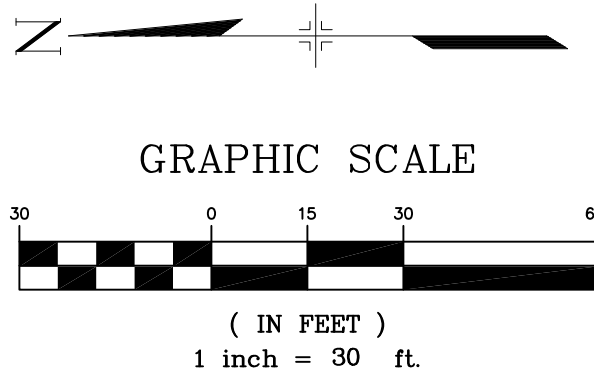


LEGEND:

- LIMITS OF GRADING
- - - EXISTING CONTOURS
- - - 6250 - - - PROPOSED CONTOURS
- 6250.00 SPOT ELEVATION
- 1.65% PROPOSED DIRECTION OF FLOW & SLOPE
- DIRECTION OF FLOW (EXISTING)
- RIP RAP (EXISTING)
- BVCS BEGINNING OF VERTICAL CURVE STATION
- EVCS END OF VERTICAL CURVE STATION
- BVCE BEGINNING OF VERTICAL CURVE ELEVATION
- EVCE END OF VERTICAL CURVE ELEVATION



- NOTES:
- SEE TITLE SHEET FOR GRADING PLAN GENERAL NOTES



NO.	DATE	BY	REVISIONS DESCRIPTION	APPROVED BY:	DATE

BENCHMARK:
A #5 REBAR SET AT TOP OF BANK 80 FEET WEST OF THE REAR ACCESS TO UCCS AT THE NORTHEAST CORNER OF THE PROJECT (392.492.31 NORTH 198.341.34 EAST). ELEVATION IS 6276.74. NAVD86 (GEOID 9). A CROSS REFERENCE OF 6247.88 WAS ALSO MADE TO THE FIMS VERTICAL CONTROL MONUMENT "ABV2" BEING A 2 INCH DIAMETER ALUMINUM CAP STAMPED "CSU FIMS CONTROL ABV2" ON THE SOUTH END OF THE HEADWALL ON THE EAST SIDE OF A DRAINAGE TUNNEL UNDER THE OLD RAILROAD. NOTE: THE VERTCON ADJUSTMENT OF NAVD 88 TO NGVD 29 (FIMS) IS 1.108 METERS.

Matrix DESIGN GROUP

me engineers

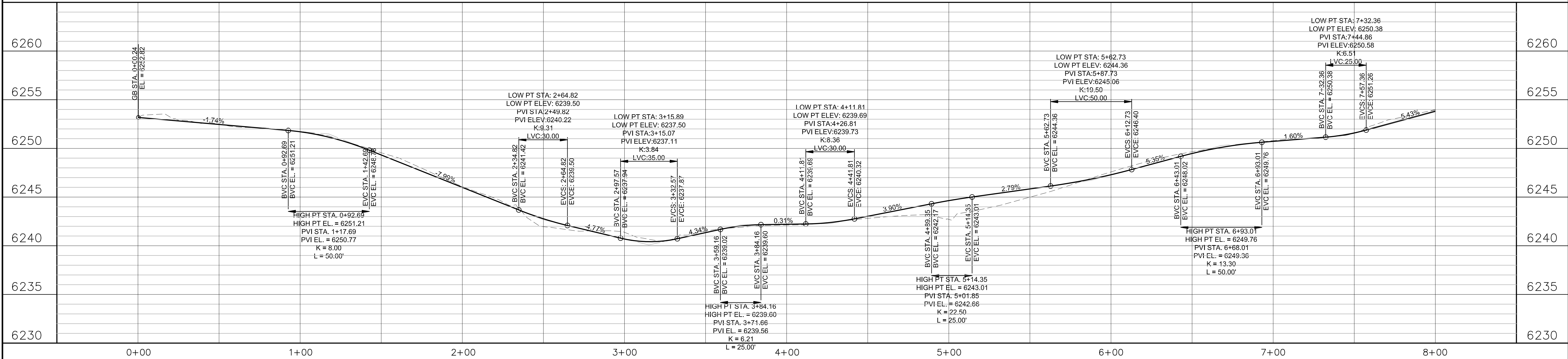
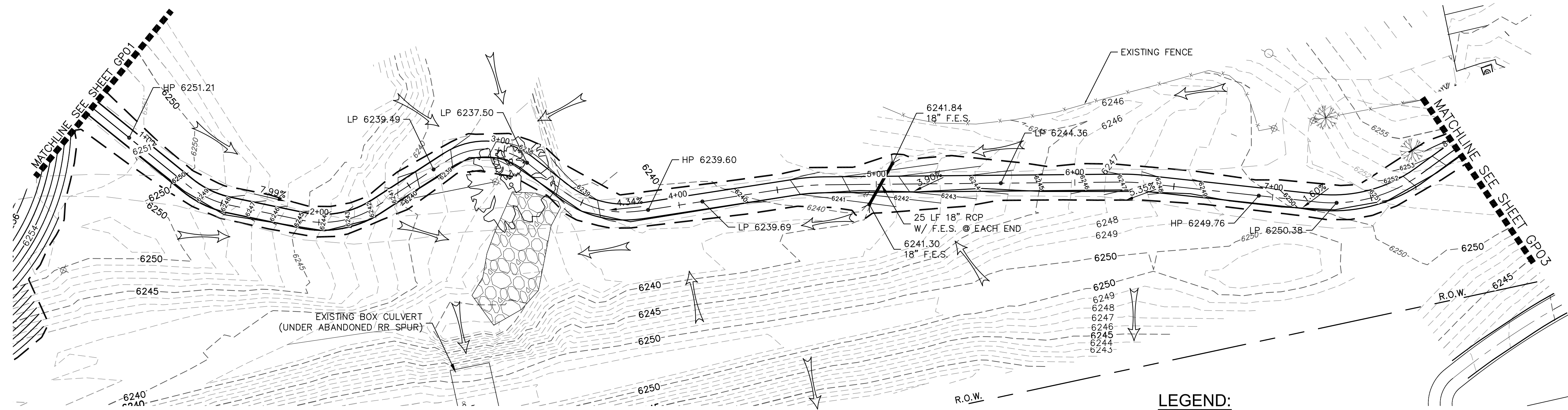
FOR AND ON BEHALF OF MATRIX DESIGN GROUP, INC.

UCCS ARENA PARKING LOT

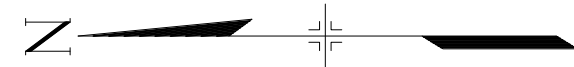
SITE DEVELOPMENT PLANS

GRADING PLAN

DESIGNED BY: REP	SCALE	DATE ISSUED: FEBRUARY 17, 2012	GP01
DRAWN BY: BAS	HORIZ: 1"=30'	SHEET NO. 6 OF 16	
CHECKED BY: REP	VERT: N/A		



REVISIONS				APPROVED BY:		BENCHMARK: A #5 REBAR SET AT TOP OF BANK 80 FEET WEST OF THE REAR ACCESS TO UCCS AT THE NORTHEAST CORNER OF THE PROJECT (392.492.31 NORTH 196.341.34 EAST). ELEVATION IS 6276.74 NAVD83 (GEOD 9). A CROSS REFERENCE OF 6247.58 WAS ALSO MADE TO THE FIMS VERTICAL CONTROL MONUMENT "ABV2" BEING A 2 INCH DIAMETER ALUMINUM CAP STAMPED "CSU FIMS CONTROL ABV2" ON THE SOUTH END OF THE HEADWALL ON THE EAST SIDE OF A DRAINAGE TUNNEL UNDER THE OLD RAILROAD. NOTE: THE VERTCON ADJUSTMENT OF NAVD 88 TO NGVD 29 (FIMS) IS 1.108 METERS.		FOR AND ON BEHALF OF MATRIX DESIGN GROUP, INC.			UCCS ARENA PARKING LOT			
NO.	DATE	BY	DESCRIPTION	DATE	SITE DEVELOPMENT PLANS									
											GRADING PLAN			
											DESIGNED BY: REP	SCALE	DATE ISSUED: FEBRUARY 17, 2012	GP02
											DRAWN BY: BAS	HORIZ: 1"=30'	SHEET NO. 7 OF 16	
											CHECKED BY: REP	VERT: N/A		



A diagram of a road cross-section. At the top, a dashed line represents the ground surface. Below it, a solid line represents the road grade, which slopes downwards from left to right. The slope is labeled "1.65%" with a downward-pointing arrow. The road width is indicated by a double-headed arrow. Below the road, there is a cross-hatched area representing the subgrade or foundation.

LIMITS OF GRADING
EXISTING CONTOURS
PROPOSED CONTOURS
SPOT ELEVATION

PROPOSED DIRECTION OF FLOW & SLOPE
DIRECTION OF FLOW (EXISTING)

RIP RAP (EXISTING)

BEGINNING OF VERTICAL CURVE STATION
END OF VERTICAL CURVE STATION
BEGINNING OF VERTICAL CURVE ELEVATION
END OF VERTICAL CURVE ELEVATION
MECHANICALLY STABILIZED EARTH



REVISIONS	DESCRIPTION
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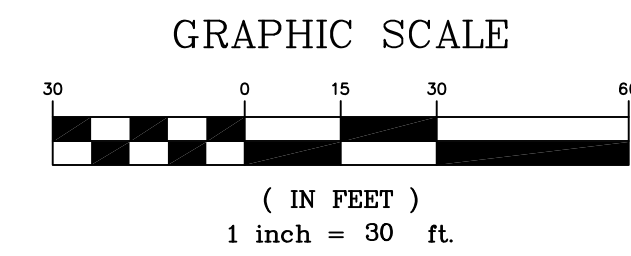
KEYMAP

Matrix
DESIGN GROUP

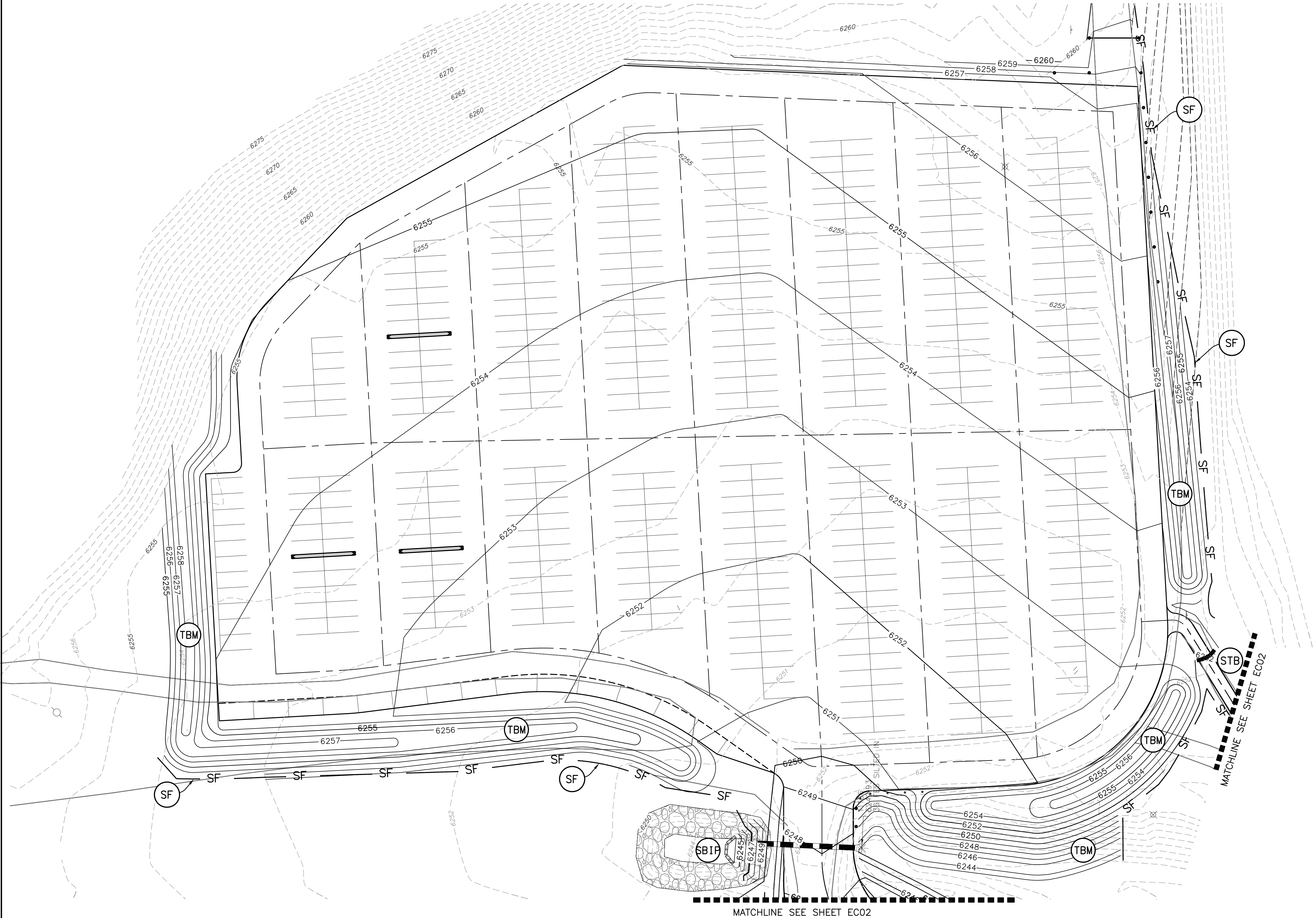


GRADING PLAN

GP03

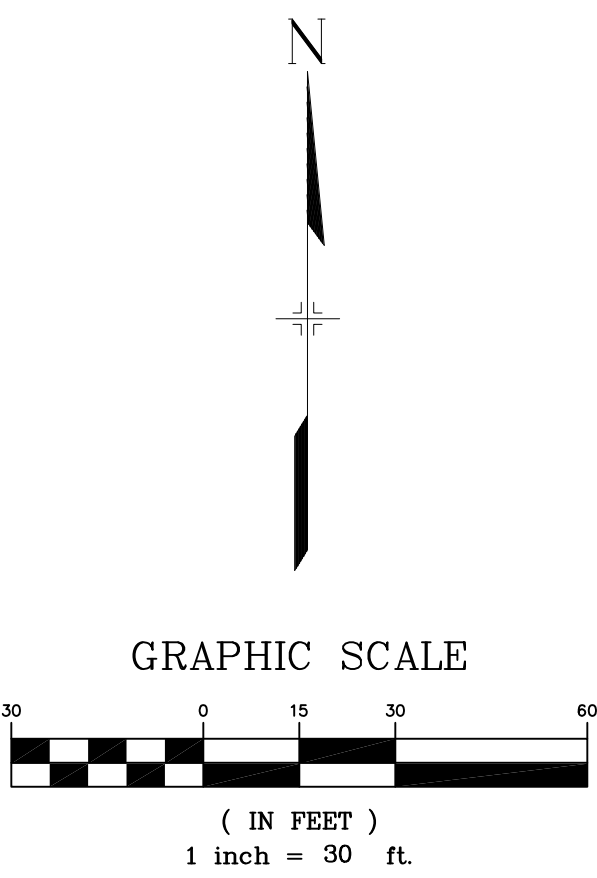


SHEET NO. 8



EROSION CONTROL LEGEND

— SF —	(SF)	SILT FENCE
	(VTC)	VEHICLE TRACKING PAD
	(SBIP)	STRAW BALE INLET PROTECTION
	(STB)	STRAW BALE BARRIER
	(TBM)	TEMPORARY EROSION CONTROL BLANKET ON DISTURBED SLOPES

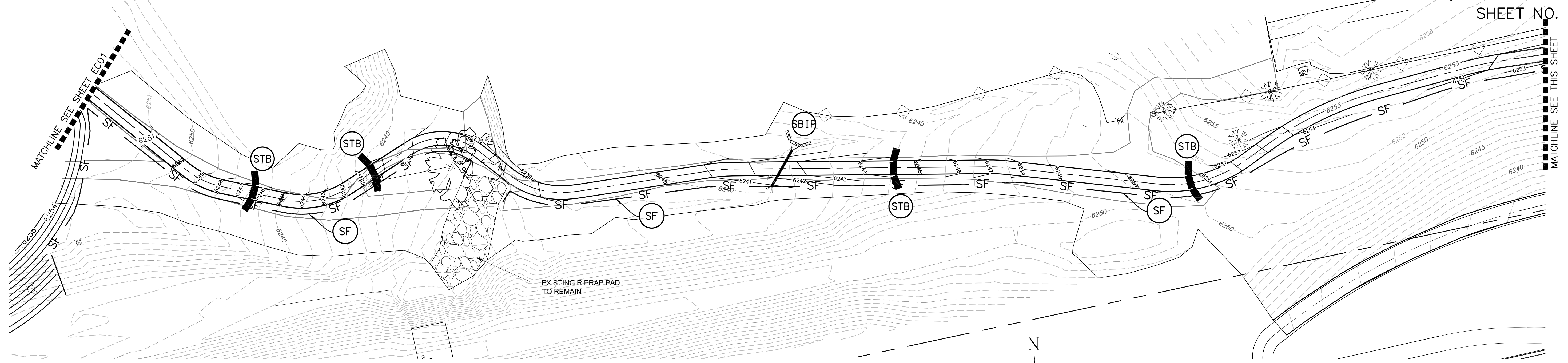


REFERENCE DRAWINGS				
X=BASE x=CStitle(Grading) UCCS Topo X=EX-ROW X=Road-Nevada	NO.	DATE	DESCRIPTION	BY
			REVISIONS	
			BENCHMARK DATA(ELEV.)	
			(DATUM)	
			(DESCRIPTION/LOCATION)	

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PCP: Matrix.ctb
PLOT DATE: Fri Feb 17, 2012 4:47pm

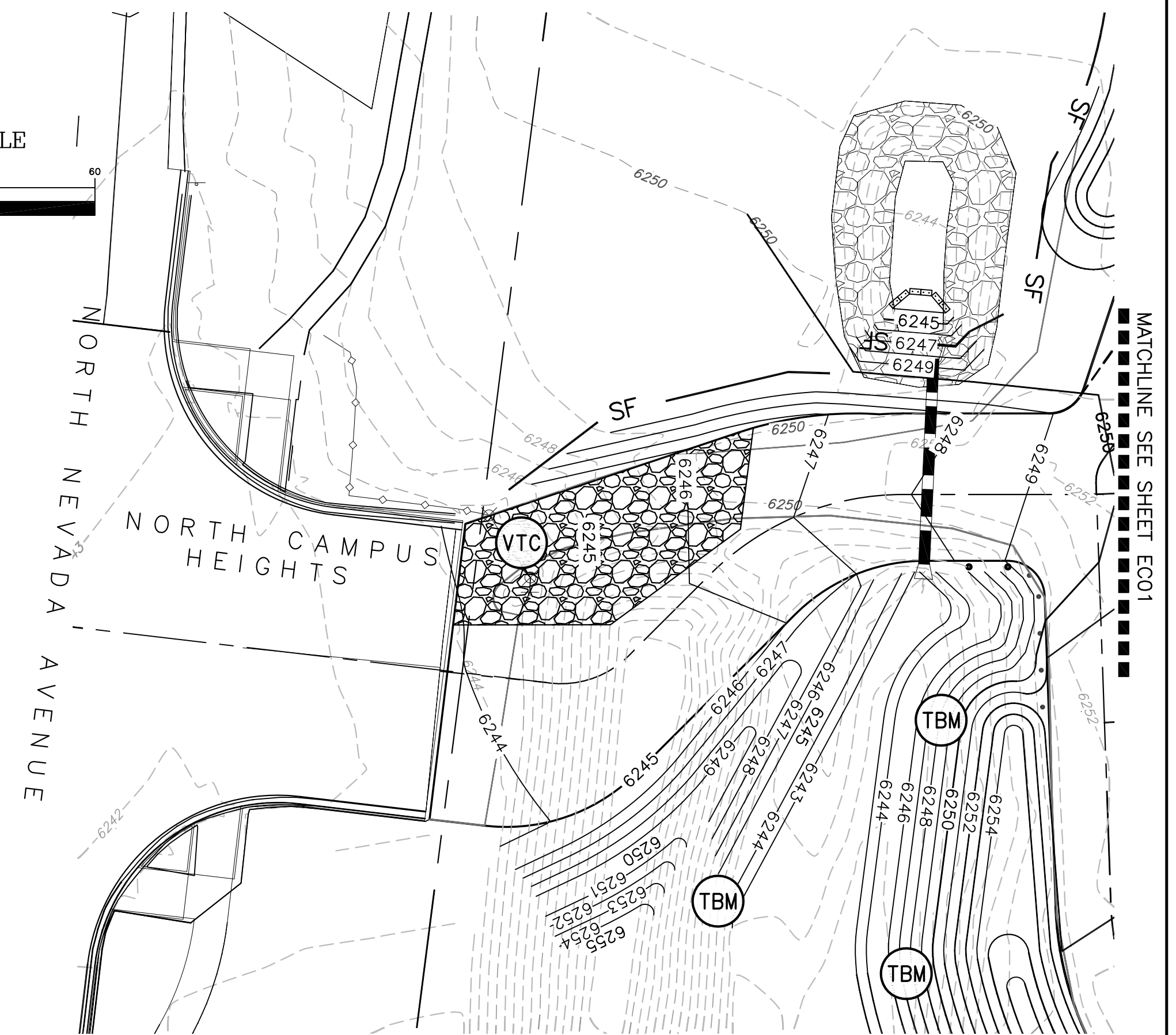
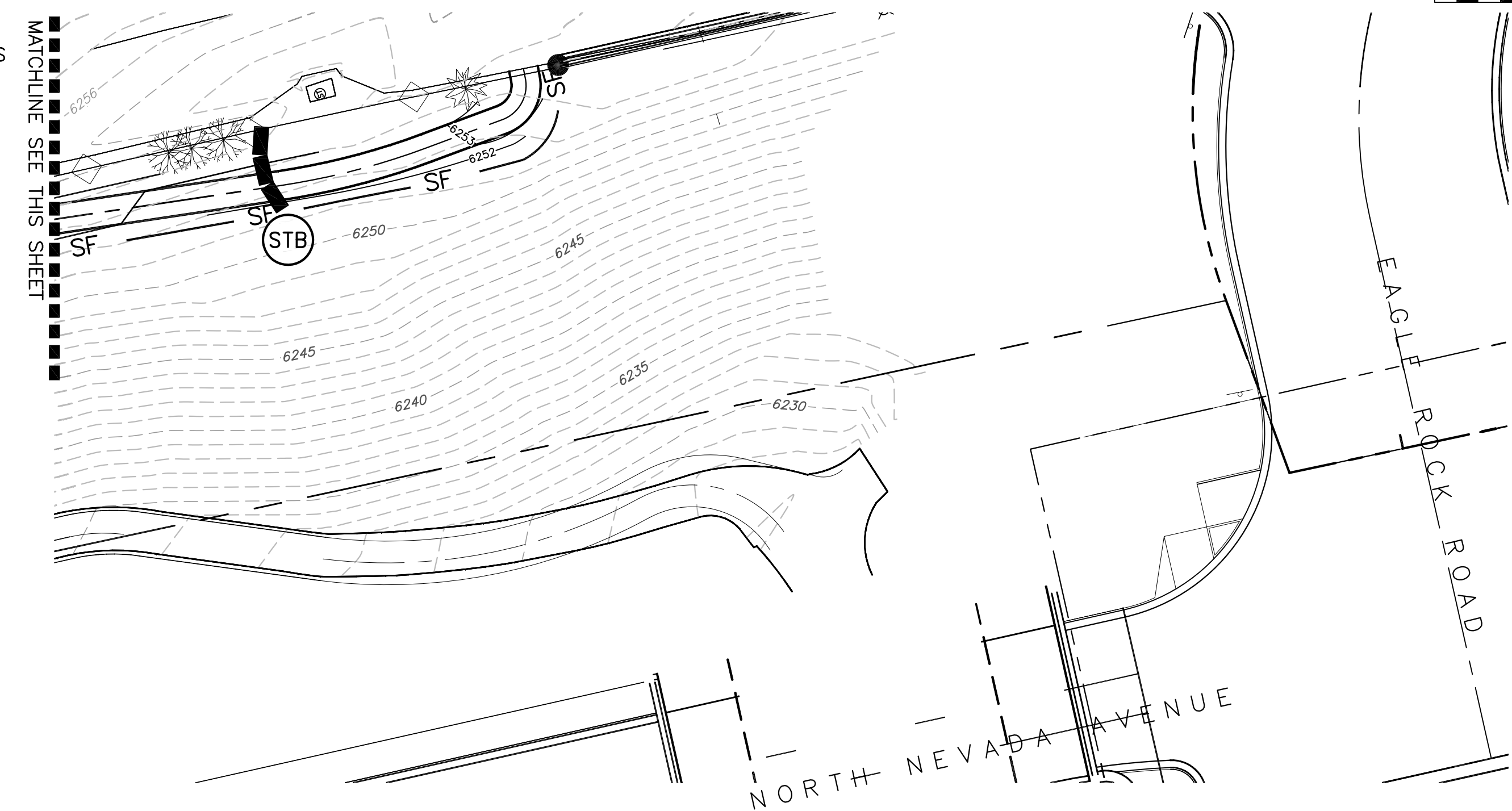
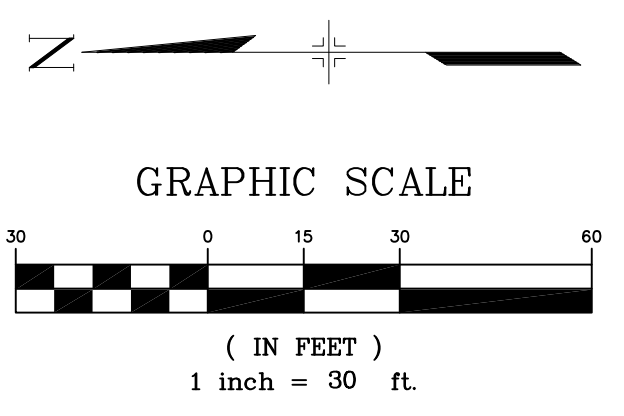
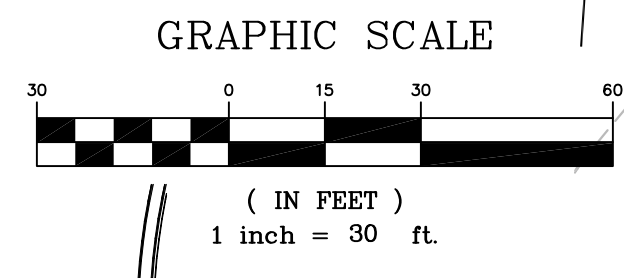
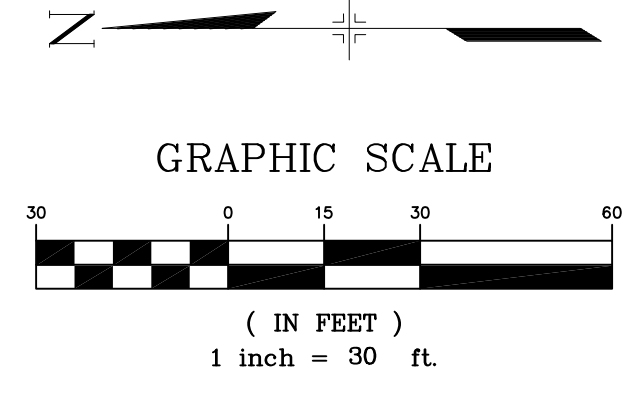
FOR AND ON BEHALF OF
MATRIX DESIGN GROUP, INC.

UCCS ARENA PARKING LOT			
SITE DEVELOPMENT PLANS			
EROSION CONTROL PLAN			
DESIGNED BY: REP	SCALE	DATE ISSUED: FEBRUARY 17, 2012	EC01
DRAWN BY: BAS	HORIZ: 1"=30'	SHEET NO. 9 OF 16 SHEETS	
CHECKED BY: REP	VERT: N/A		

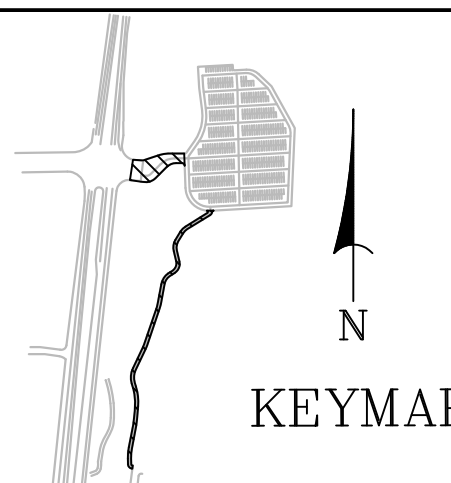


EROSION CONTROL LEGEND

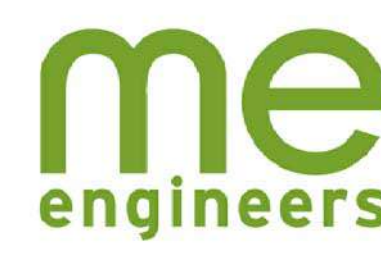
- SF SILT FENCE
- VTC VEHICLE TRACKING PAD
- SBIP STRAW BALE INLET PROTECTION
- STB STRAW BALE BARRIER
- TBM TEMPORARY EROSION CONTROL BLANKET ON DISTURBED SLOPES



REFERENCE DRAWINGS			
X=BASE			
x=CS:Title(Grading)			
UCCS Topo			
X=EX=ROW			
X=Road=Nevada			
NO.	DATE	DESCRIPTION	BY
REVISIONS			
		BENCHMARK DATA(ELEV.)	
		(DATUM)	
		(DESCRIPTION/LOCATION)	
NAME: S:\11,584.001.UCCS Arena Parking\Draw\Grading\EC01-02.dwg			
PCP: Matrix.ctb			
PLOT DATE: Fri Feb 17, 2012 4:48pm			



FOR AND ON BEHALF OF
MATRIX DESIGN GROUP, INC.



UCCS ARENA PARKING LOT			
SITE DEVELOPMENT PLANS			
EROSION CONTROL PLAN			
DESIGNED BY: REP	SCALE	DATE ISSUED: FEBRUARY 17, 2012	EC02
DRAWN BY: BAS	HORIZ: 1"=30'	SHEET NO. 10 OF 16 SHEETS	
CHECKED BY: REP	VERT: N/A		

-
- STRAW BALE
(SEE FIG. 508-2
FOR INSTALLATION
REQUIREMENTS)

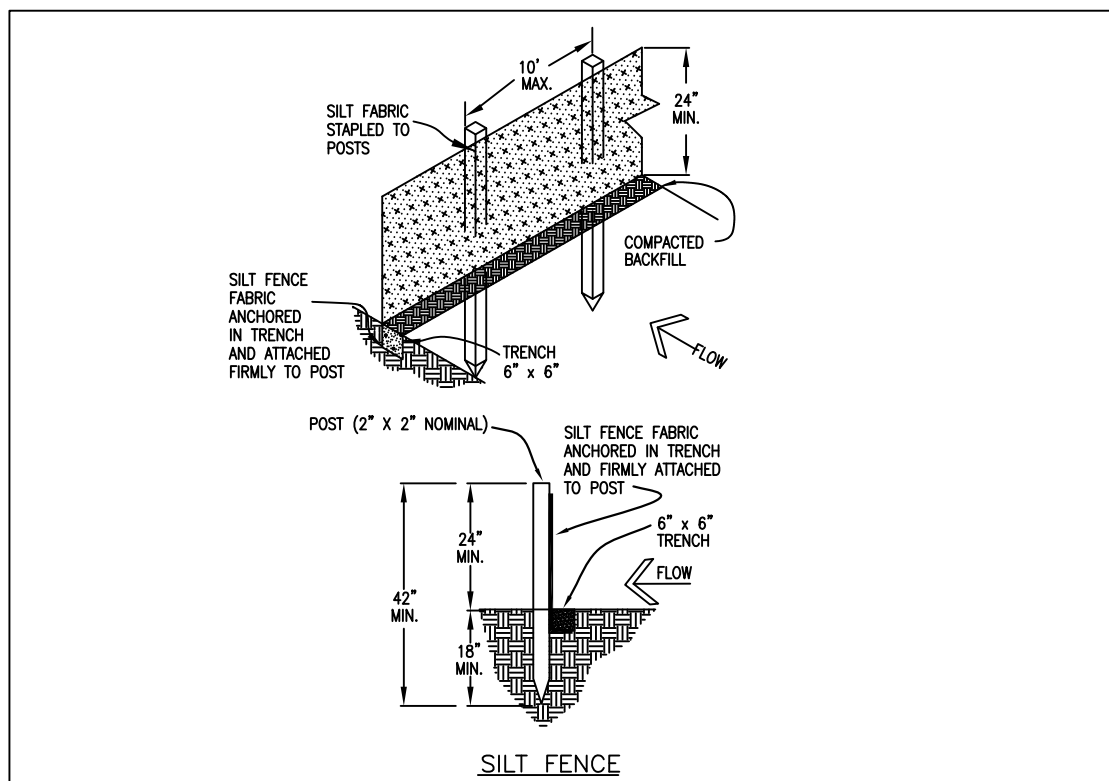
INSTALLATION REQUIREMENTS

MAINTENANCE REQUIREMENTS

1. INLET PROTECTION SHALL BE INSTALLED IMMEDIATELY AFTER CONSTRUCTION OF INLET.
2. BALES ARE TO BE PLACED IN A SINGLE ROW AROUND THE INLET WITH THE ENDS OF THE BALES TIGHTLY ABUTTING ONE ANOTHER.
3. SEE STRAW BALE BARRIER FIGURE SB8-2 FOR INSTALLATION REQUIREMENTS.
1. CONTRACTOR SHALL INSPECT STRAW BALE INLET PROTECTION IMMEDIATELY AFTER EACH RAINFALL AT LEAST DAILY DURING PROLONGED RAINFALL AND WEEKLY DURING PERIODS NO RAINFALL.
2. DAMAGED OR DEFECTIVE INLET PROTECTION SHALL PROMPTLY BE REPAIRED, REPLACING BALES IF NECESSARY, AND UNTENDRED BALES NEED TO BE REPAIRED WITH COMPACTED SUFFICIENT MATERIAL.
3. SEDIMENT SHALL BE REMOVED FROM BEHIND STRAW BALES WHEN IT ACCUMULATES TO EACH APPROXIMATELY 1/3 THE HEIGHT OF THE BARRIER.
4. INLET PROTECTION SHALL BE REMOVED WHEN ADEQUATE VEGETATIVE COVER IS ATTAINED WITHIN THE DRAINAGE AREA AS APPROVED BY THE CITY.

City of Colorado Springs
Stormwater Quality

Figure IP-2
Straw Bale Inlet Protection
Construction Detail and Maintenance Requirements



SILT FENCE NOTES

INSTALLATION REQUIREMENTS

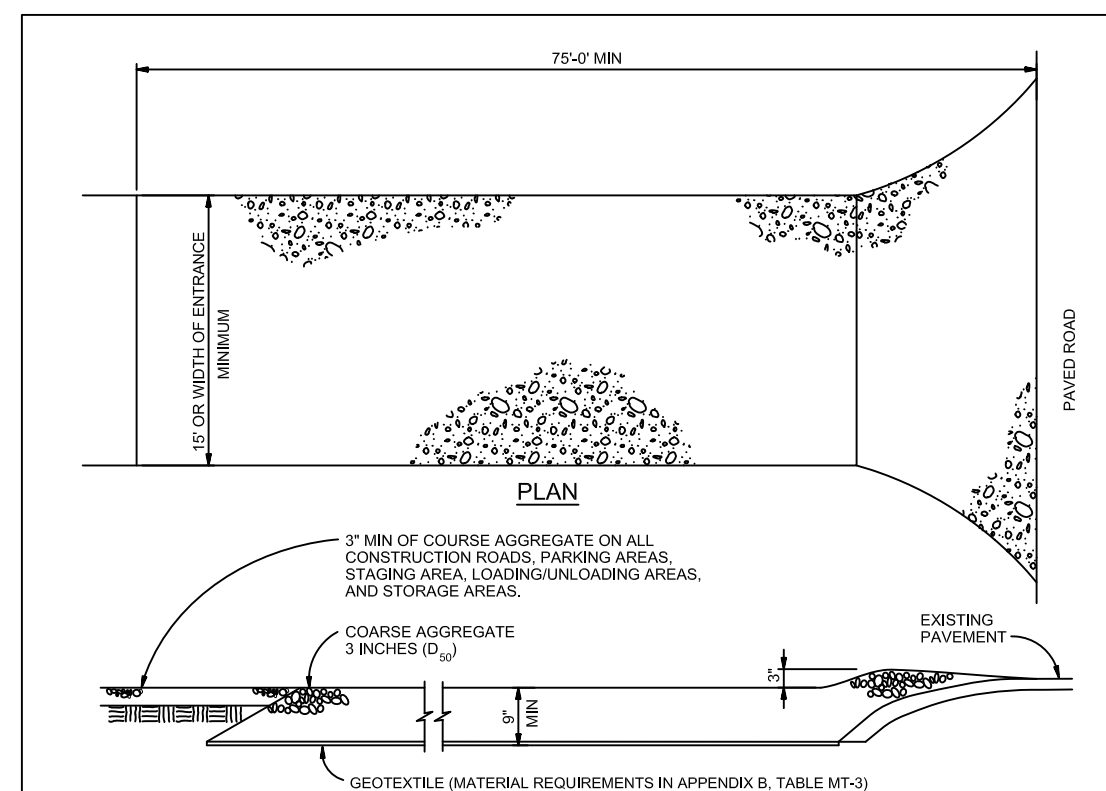
2. IF SENSE FENCES SHALL BE INSTALLED PRIOR TO ANY LAND CLEARING, THE FOLLOWING REQUIREMENTS SHALL BE OBSERVED:
- 2.1. WHEN JOINTS ARE NECESSARY, SENSE FENCE DETECTOR SHALL BE SECURED TOGETHER AT JOINT SUPPORT POST AND SPIGULED SEPARATELY.
- 2.2. METAL POSTS SHALL BE "STANDARD TIE OR T" TYPE WITH A MINIMUM OF 1.33 POUNDS PER LINEAR FOOT. WOOD POSTS SHALL HAVE A MINIMUM DIAMETER OR CROSS SECTION OF 1.5 INCHES.
- 2.3. THE FALTER MATERIAL SHALL BE FASTENED SECURELY TO METAL OR WOOD POSTS USING WIRE, NAILS, OR TO WOOD POSTS WITH "3/4" LONG 90-DEGREE STAPLES, THE WIRE SHALL BE STRETCHED TIGHT, NOT STAPLED TO EXISTING TREES.
- 2.4. IF WIRE IS NOT REQUIRED, WIRE SENSE FENCE MAY BE USED TO SUPPORT A 1/2" TO 3/4" POLYESTER OR POLYPROPYLENE FASTENED SECURELY TO THE UPSIDE SHELF OF THE POSTS. IF WIRE IS NOT REQUIRED, WIRE SENSE FENCE SHALL BE STRETCHED TIGHT, NOT STAPLED TO EXISTING TREES, LONG TIES OR HOG RINGS. THE WIRE SHALL EXTEND INTO THE TRENCH A MINIMUM OF 6" AND SHALL NOT EXTEND MORE THAN 3" ABOVE THE TRENCH.
- 2.5. IF SENSE FENCES SHALL BE REMOVED WHEN THE PROJECT IS COMPLETED, THE FOLLOWING REQUIREMENTS SHALL BE OBSERVED:
- 2.5.1. CONTRACTOR SHALL INSPECT SENSE FENCES AFTER EACH DAY OF REMOVAL TO DETERMINE IF ANY DURING PULPING, RANCHES AND FENCING DURING REMOVAL. IF ANY SENSE FENCES ARE DAMAGED, COLLAPSED, UNRECOVERED OR REMOVED, CONTRACTOR SHALL BE PROMPTLY REPAIRED OR REPLACED.
- 2.5.2. SEEDMENT SHALL BE REMOVED FROM BEHIND SENSE FENCES TO PREVENT ACCIDENTS TO HALF THE EXPOSED GEOTECHNICAL SHEET.
- 2.5.3. SENSE FENCES SHALL BE REMOVED WHEN THE PROJECT IS COMPLETED.

MAINTENANCE REQUIREMENTS

- TO METAL OR WOOD POSTS USING WIRE, TIES, OR TO WOOD
POSTS USING METAL BRACKETS. THE WIRE SHALL BE STAPLED
TO THE SILT FENCE GEOTEXTILE SHALL NOT BE STAPLED TO
EXISTING TREES.
5. WHERE NOT REQUIRED, WIRE MESH FENCE MAY BE USED
FOR THE ENTIRE PERIMETER. WIRE FENCE SHALL BE
FASTENED SECURELY TO THE UPSLOPE SIDE OF THE
POSTS USING HEAVY-DUTY WIRE STAPLES AT LEAST 3"
APART. UNLESS OTHERWISE SPECIFIED, THE SILT FENCE
SHALL BE STAPLED TO THE UPSLOPE SIDE OF THE POSTS
INTO THE TRENCH A MINIMUM OF 6" AND SHALL NOT EXTEND
MORE THAN 3' ABOVE THE ORIGINAL GROUND SURFACE.
1. CONTRACTOR SHALL INSPECT SILT FENCES
DAILY AFTER RAINFALL. IF THE SILT FENCE IS
DURING PROLONGED RAINFALL, AND
UNLESS OTHERWISE SPECIFIED, THE SILT FENCE SHALL BE
DAMAGED, COLLAPSED, UNINTENDED/NOT
REPAIRED OR REPLACED.
2. SEDIMENT SHALL BE REMOVED FROM BEHIND THE
SILT FENCE WHEN IT ACCUMULATES TO HALF
THE HEIGHT OF THE SILT FENCE.
3. SILT FENCES SHALL BE REMOVED WHEN
ADEQUATE VEGETATIVE COVER IS ATTAINED
AND APPROVED BY THE DISTRICT ENGINEER.

City of Colorado Springs

Figure SF-2
Silt Fence
Construction Detail and Maintenance Requirements



SECTION

VEHICLE TRACKING NOTES

INSTALLATION REQUIREMENTS

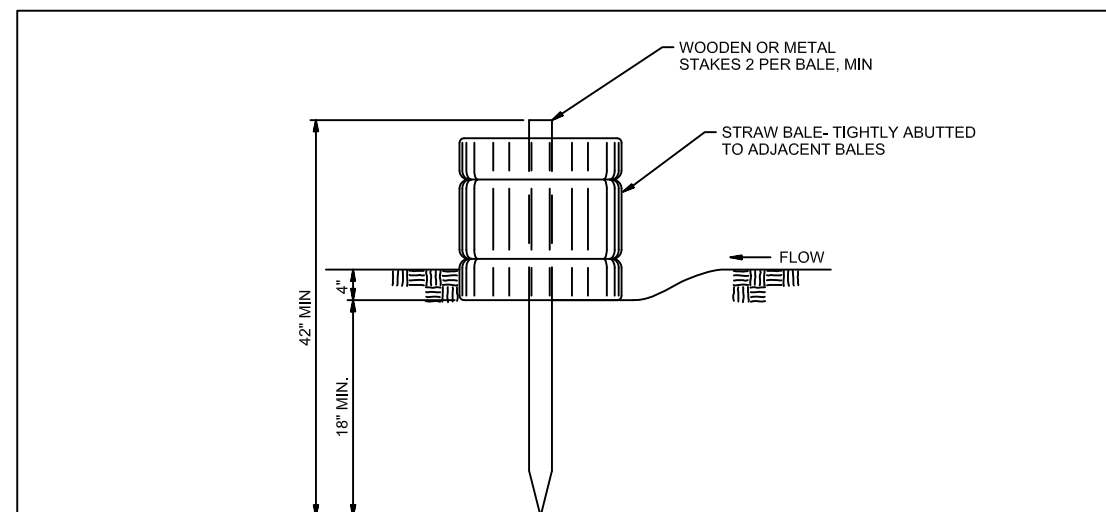
1. ALL ENTRANCES TO THE CONSTRUCTION SITE ARE TO BE STABILIZED PRIOR TO CONSTRUCTION BEGINNING.
2. CONSTRUCTION ENTRANCES ARE TO BE BUILT WITH AN APRON TO ALLOW FOR TURNING TRAFFIC, BUT SHOULD NOT BE BUILT OVER EXISTING PAVEMENT EXCEPT FOR A SLIGHT OVERLAP.
3. AREAS TO BE STABILIZED ARE TO BE PROPERLY GRADED AND COMPACTED PRIOR TO LAYING DOWN GEOTEXTILE AND STONE.
4. CONSTRUCTION ROADS, PARKING AREAS, LOADING/UNLOADING ZONES, STORAGE AREAS, AND STAGING AREAS ARE TO BE STABILIZED.
5. CONSTRUCTION ROADS ARE TO BE BUILT TO CONFORM TO STATE REQUIREMENTS, BUT SHOULD NOT HAVE SLOPES OR ROAD GRADES THAT ARE EXCESSIVELY STEEP.

MAINTENANCE REQUIREMENTS

1. REGULAR INSPECTIONS ARE TO BE MADE OF ALL STABILIZED AREAS, ESPECIALLY AFTER STORM EVENTS.
2. STONES ARE TO BE REPLAPPED PERIODICALLY AND WHEN REPAIR IS NECESSARY.
3. SEDIMENT TRACKED ONTO PAVED ROADS IS TO BE REMOVED DAILY BY SHOVELING OR SWEEPING. SEDIMENT IS NOT TO BE WASHED DOWN STORM SEWER DRAINS.
4. STORM SEWER INLET PROTECTION IS TO BE IN PLACE, INSPECTED, AND CLEANED IF NECESSARY.
5. OTHER ASSOCIATED SEDIMENT CONTROL MEASURES ARE TO BE INSPECTED TO ENSURE GOOD WORKING CONDITION.

City of Colorado Springs
Stormwater Quality

Figure VT-2
Vehicle Tracking
Application Examples



STRAW BALE BARRIER

STRAW BALE BARRIER NOTES

INSTALLATION REQUIREMENTS

2. STRAW BALE BARRIERS SHALL BE INSTALLED PRIOR TO ANY LAND DISTURBING ACTIVITIES.
3. BALES SHALL CONSIST OF APPROXIMATELY 5 CUBIC FEET OF CERTIFIED WEED FREE HAY OR STRAW AND WEIGH NOT LESS THAN 35 POUNDS.
4. BALES ARE TO BE PLACED IN A SINGLE ROW WITH THE END OF THE BALES TIGHTLY BUTTING ONE ANOTHER.
5. EACH BALE IS TO BE SECURELY ANCHORED WITH AT LEAST TWO STAKES AND THE FIRST STAKE IS TO BE DRIVEN TOWARD THE PREVIOUSLY LAID BALE TO TIE THE BALES TOGETHER.
6. STAKES ARE TO BE A MINIMUM OF 42 INCHES LONG. METAL STAKES SHALL BE STANDARD "T" OR "U" TYPE WITH MINIMUM WEIGHT OF 13 POUNDS PER LINEAR FOOT. WOOD STAKES SHALL HAVE A MINIMUM DIAMETER OR CROSS SECTION DIMENSION OF 2 INCHES.

MAINTENANCE REQUIREMENTS

1. CONTRACTOR SHALL INSPECT STRAW BALE BARRIERS IMMEDIATELY AFTER EACH RAINFALL, AT LEAST DAILY DURING PROLONGED RAINFALL, AND WEEKLY DURING PERIODS NO RAINFALL.
2. DAMAGED OR INEFFECTIVE BARRIERS SHALL PROMPTLY BE REPAIRED, REPLACING BALES IF NECESSARY, AND UNRENTERED BALES NEED TO BE REPAIRED WITH COMPACTED BACKFILL MATERIAL.
3. SEDIMENT SHALL BE REMOVED FROM BEHIND STRAW BALE BARRIERS WHEN IT ACCUMULATES TO APPROXIMATELY 1/2 THE HEIGHT OF THE BARRIER.
4. STRAW BALE BARRIERS SHALL BE REMOVED WHEN ADEQUATE VEGETATIVE COVER IS ATTAINED AS APPROVED BY THE CITY.

City of Colorado Springs
Stormwater Quality

Figure SBB-2 Straw Bale Barrier

BENCHMARK:

A #5 REBAR SET AT TOP OF BANK 80 FEET WEST OF THE REAR ACCESS TO UCAS AT THE NORTHEAST CORNER OF THE PROJECT (E32,492.31 NORTH 196.3414 EAST). ELEVATION IS 6276.74, NAVD88 (GEOID 9). A CROSS REFERENCE OF 6247.56 WAS ALSO MADE TO THE FIMS VERTICAL CONTROL MONUMENT "ABV2" BEING A 2 INCH DIAMETER ALUMINUM CAP STAMPED "CSU FIMS CONTROL ABV2" ON THE SOUTH END OF THE HEADWALL ON THE EAST SIDE OF A DRAINAGE TUNNEL UNDER THE OLD RAILROAD. NOTE: THE VERTCON ADJUSTMENT OF NAVD 88 TO NGVD 29 (FIMS) IS 1.108 METERS.

FOR AND ON BEHALF OF
MATRIX DESIGN GROUP, INC.



SITE DEVELOPMENT PLANS

EROSION CONTROL DETAILS AND NOTES

DESIGNED BY:	SCALE	DATE ISSUED: FEBRUARY 17, 2012
DRAWN BY: BAS	HORIZ: N/A	SHEET NO. 11 OF 16
CHECKED BY: REP	VERT: N/A	




ECD T1

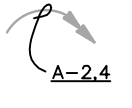





ABBREVIATIONS	
A,AMP	AMPERE
AC	ABOVE COUNTER
AF	AMPERE FUSE/FRAME
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AL	ALUMINUM
AM	AMMETER
ANN	ANNUNCIATOR
ANT	ANTENNA
ATS	AUTOMATIC TRANSFER SWITCH
AUTO	AUTOMATIC
AUX	AUXILIARY
AWG	AMERICAN WIRE GAUGE
BCST	BROADCAST
BFC	BELOW FINISHED CEILING
BFG	BELOW FINISHED GRADE
BKR	BREAKER
C	CONDUIT
CAB	CABINET
CAM	CAMERA
CB	CIRCUIT BREAKER
CCTV	CLOSED CIRCUIT TELEVISION
CKT	CIRCUIT
CO	CONDUIT ONLY
COMB	COMBINATION
COMP	COMPUTER
COND	CONDUCTOR
CT	CURRENT TRANSFORMER
CU	COPPER
dB	DECIBEL
DEMARC	DEMARICATION
DISC	DISCONNECT
DL	DAMP LABEL
DWG	DRAWING
DVR	DIGITAL VIDEO RECORDER
EA	EACH
EC	ELECTRICAL CONTRACTOR
EF	EXHAUST FAN
EG	EQUIPMENT GROUND
EHC	ELECTRIC HEATING COIL
ELEC	ELECTRIC OR ELECTRICAL
ELEV	ELEVATOR
EMERG	EMERGENCY
EMT	ELECTRIC METALLIC TUBING
ENG	ELECTRONIC NEWS GATHERING
EOL	F/A END OF LINE RESISTOR
EQUIP	EQUIPMENT
ER	EXISTING TO BE REMOVED/RELOCATED
EW	ELECTRIC WATER COOLER
EWI	ELECTRIC WATER HEATER
EXH	EXHAUST
EX	EXISTING
F	FUSE
F/A	FIRE ALARM
FACP	FIRE ALARM CONTROL PANEL
FBO	FURNISHED BY OTHERS
FC	FOOTCANDLES
FDR	FEEDER
FLEX	FLEXIBLE
FLR	FLOOR
FLUOR	FLUORESCENT
GALV	GALVANIZED
GEN	GENERATOR
GFCI	GROUND FAULT CIRCUIT INTERRUPTER
GND	GROUND
HC	HORIZONTAL CROSS CONNECT
HD	HEAVY DUTY
HH	HAND HOLE
HOA	HAND-OFF-AUTO
HP	HORSEPOWER
HPF	HIGH POWER FACTOR
HPS	HIGH PRESSURE SODIUM
HTR	HEATER
IC	INTERMEDIATE CROSS CONNECT
ID	INSIDE DIAMETER
IDF	INTERMEDIATE DISTRIBUTION FRAME
IMC	INTERMEDIATE GRADE METALLIC CONDUIT
INCAND	INCANDESCENT
J-BOX	JUNCTION BOX
KCMIL	THOUSAND OF CIRCULAR MILLS
KVA	KILOVOLT AMPERE
KW	KILOWATT
KWH	KILOWATT HOUR
LA	LIGHTNING ARRESTOR
LAN	LOCAL AREA NETWORK
LFC	LIQUID TIGHT FLEXIBLE CONDUIT
LTG	LIGHTING
LV	LOW VOLTAGE
MA	MILLIAMPERE
MAX	MAXIMUM
MB	MAIN BREAKERS
MC	MECHANICAL CONTRACTOR

ABBREVIATIONS	
MC	MAIN CROSS CONNECT
MCC	MOTOR CONTROL CENTER
MCP	MOTOR CIRCUIT PROTECTOR
MDF	MAIN DISTRIBUTION FRAME
MDP	MAIN DISTRIBUTION PANEL
MECH	MECHANICAL
MFR	MANUFACTURER
MG	MOTOR GENERATOR
MH	MANHOLE OR METAL HALIDE
MIN	MINIMUM
MLO	MAIN LUGS ONLY
MOV	MOTOR OPERATED VALVE
MPOE	MAIN POINT OF ENTRY
MTG	MOUNTING HEIGHT
MS	MOTOR STARTER
MSB	MAIN SWITCHBOARD
MTB	MAIN TERMINAL BOARD
MTD	MOUNTED
MTG	MOUNTING
MTGB	MAIN TELECOMMUNICATIONS GROUND BUS
MV	MEDIUM VOLTAGE
N	NEUTRAL
NEC	NATIONAL ELECTRICAL CODE
NF	NON FUSED
NIC	NOT IN CONTRACT
NC	NORMALLY CLOSED
NO	NORMALLY OPEN
NTS	NOT TO SCALE
OC	ON CENTER
OD	OUTSIDE DIAMETER
P	POLE
PA	PUBLIC ADDRESS
PB	PUSH BUTTON
PBX	PRIVATE BRANCH EXCHANGE
PE	PHOTOELECTRIC
PF	POWER FACTOR
PH	PHASE
PNL	PANEL
PR	PAIR
PRI	PRIMARY
PT	POTENTIAL TRANSFORMER
PVC	POLYVINYL CHLORIDE
PWR	POWER
QR	QUARTZ RESTRIKE
R	REMOVE
REC	RECEPTACLE
RGS	RIGID GALVANIZED STEEL
RM	ROOM
RPM	REVOLUTIONS PER MINUTE
SCP	SECURITY CONTROL PANEL
SEC	SECONDARY/SECOND
SECT	SECTION
SHT	SHEET
SMPOE	SECONDARY MAIN POINT OF ENTRY
SP	SERVICE PROVIDER
SPD	SURGE PROTECTIVE DEVICE
SPDT	SINGLE POLE, DOUBLE THROW
ST	SHUNT TRIP
STD	STANDARD
SW	SWITCH
SWBD	SWITCHBOARD
T	TWIST LOCK
TBB	TELECOMMUNICATIONS BONDING BACKBONE
TC	TIME CLOCK
TTC	TELEPHONE TERMINAL CABINET OR CLOSET
TTB	TELEPHONE TERMINAL BOARD
TEL	TELEPHONE
TELCO	TELEPHONE COMPANY
TELCOM	TELECOMMUNICATIONS
TEMP	TEMPERATURE
TGB	TELECOMMUNICATIONS GROUND BUS
TR	TAMPER RESISTANT
UC	UNDER COUNTER
U/G	UNDER GROUND
UH	UNIT HEATER
UL	UNDERWRITER LABORATORIES
UNO	UNLESS NOTED OTHERWISE
UPS	UNINTERRUPTIBLE POWER SUPPLY
UTP	UNSHIELDED TWISTED PAIR
V	VOLT
VFD	VARIABLE FREQUENCY DRIVE
VM	VOLTMETER
W	WATT
W/	WITH
WH	WATT HOUR
WHM	WATT HOUR METER
WLAN	WIRELESS-LOCAL AREA NETWORK
WP	WEATHERPROOF
WPL	WEATHER PROOF LOCKABLE ENCLOSURE
WT	WATERTIGHT
XFMR	TRANSFORMER
XP	EXPLOSION PROOF

NOTES:

- ALL EXPOSED RACEWAYS ARE TO BE INSTALLED PARALLEL OR PERPENDICULAR TO WALLS OR STRUCTURAL MEMBERS SUCH THAT THEY FOLLOW STRUCTURAL SURFACE CONTOURS AND SHALL BE INSTALLED SUCH THAT THEY DO NOT OBSTRUCT PASSAGeways OR ACCESS TO EQUIPMENT. MULTIPLE RACEWAYS SHOULD BE INSTALLED GROUPEd TOGETHER. THE LOCATION OF PUBLICLY VISIBLE RACEWAYS SHALL BE APPROVED BY THE ARCHITECT PRIOR TO INSTALLATION. (EXTRA TIME SHOULD BE ALLOWED FOR THIS REVIEW AND APPROVAL.)
- THE DISCONNECTING MEANS FOR ALL MECHANICAL EQUIPMENT SHALL BE ACCESSIBLE AND HAVE THE CLEARANCE IN FRONT AS REQUIRED BY NEC AMENDMENTS.
- ALL CEILING ATTACHED OBJECTS AND FLOOR ATTACHED EQUIPMENT INCLUDING BUT NOT LIMITED TO PENDANT LIGHTING FIXTURES, GENERAL LIGHTING, MULTIPLE RACEWAYS, GENERATOR, TRANSFORMER ELECTRICAL SWITCHGEAR, AND SWITCHBOARDS SHALL BE INSTALLED IN ACCORDANCE WITH SUPPORTING OBJECTS FOR SEISMIC ZONE AS REQUIRED BY STATE AND LOCAL CODES.
- ALL SWITCHGEAR, SWITCHBOARDS AND TRANSFORMERS SHALL HAVE A 4 INCH HOUSE KEEPING PAD. UNDER NO CONDITION SHALL THE HIGHEST SWITCH OR BREAKER EXCEED 6'-6" AFF.
- DATA GIVEN ON THE DRAWINGS IS AS EXACT AS COULD BE SECURED. ABSOLUTE ACCURACY IS NOT GUARANTEED AND THE CONTRACTOR SHALL OBTAIN AND VERIFY EXACT LOCATIONS, MEASUREMENTS, LEVELS, SPACE REQUIREMENTS, POTENTIAL CONFLICTS WITH OTHER TRADES, ETC. AT THE SITE AND SHALL SATISFACTORILY ADAPT HIS WORK TO ACTUAL CONDITIONS AT THE BUILDINGS. THE DRAWINGS ARE DIAGRAMATICAL IN NATURE AND SHALL NOT BE SCALED. HOWEVER THIS DOES NOT RELIEVE ANY SUB-CONTRACTOR FROM COORDINATING HIS WORK WITH ALL OTHER TRADES AND FROM ADJUSTING HIS WORK AS REQUIRED BY THE ACTUAL CONDITIONS OF THE PROJECT. THE CONTRACTOR SHALL VISIT THE SITE BEFORE SUBMITTING COSTS TO BECOME THOROUGHLY FAMILIAR WITH THE ACTUAL CONDITIONS OF THE PROJECT.
- COORDINATE AND ADJUST ALL WORK BETWEEN TRADES AND EXISTING CONDITIONS IN ORDER TO ACCOMPLISH A NEAT, INTEGRATED AND EFFICIENT INSTALLATION WHICH INCLUDE BUT ARE NOT LIMITED TO:
 - EXAMINE THE CONTRACT DOCUMENTS OF ALL TRADES (I.E. THE ARCHITECTURAL REFLECTED CEILING PLAN, MECHANICAL HVAC DRAWINGS, ELECTRICAL LIGHTING PLAN, FIRE PROTECTION PLAN, ETC.).
 - COORDINATE NECESSARY EQUIPMENT, FIXTURES, ETC. SO THAT THE FINAL INSTALLATION IS COMPATIBLE WITH THE MATERIALS AND EQUIPMENT OF THE OTHER TRADES.
 - THIS CONTRACTOR SHALL ASSIST THE DIVISION 15 CONTRACTOR IN PREPARING SHOP DRAWINGS FOR COORDINATING INSTALLATION OF ALL WORK (I.E. LOCATING ALL LIGHTING FIXTURES IN CEILING WITH CEILING CLEARANCES, RACEWAYS, PIPING, EQUIPMENT FOR CLEARANCE THROUGHOUT).
 - THE ELECTRICAL DRAWINGS INDICATE THE ELECTRICAL REQUIREMENTS FOR A SIGNIFICANT PORTION OF THE MECHANICAL AND PLUMBING SYSTEMS. ADDITIONAL MECHANICAL AND PLUMBING EQUIPMENT IS INDICATED ON THE DIVISION 15 DRAWINGS. REFER TO MECHANICAL DRAWINGS AND SPECIFICATIONS FOR ADDITIONAL INFORMATION. PROVIDE COMPLETE WIRING AND FUSIBLE DISCONNECTING MEANS FOR ALL MECHANICAL AND PLUMBING EQUIPMENT.
- DEFINITIONS:
 - "FURNISH" MEANS TO "SUPPLY" AND USUALLY REFERS TO AN ITEM OF EQUIPMENT.
 - "INSTALL" MEANS TO "SET IN PLACE, CONNECT AND PLACE IN FULL OPERATIONAL ORDER".
 - "PROVIDE" MEANS TO "FURNISH AND INSTALL".
 - "EQUIVALENT" MEANS "MEETS THE SPECIFICATIONS OF THE REFERENCE PRODUCT OR ITEM IN ALL SIGNIFICANT ASPECTS." SIGNIFICANT ASPECTS SHALL BE DETERMINED BY THE ENGINEER.
 - "RE-_____ DIVISION", AND SIMILAR EXPRESSIONS MEANS WORK TO BE PERFORMED UNDER THE CONTRACT DOCUMENTS, BUT NOT NECESSARILY UNDER THE DIVISION OR SECTION OF THE WORK ON WHICH THE NOTE APPEARS. IT IS THE CONTRACTORS SOLE RESPONSIBILITY TO COORDINATE THE WORK OF THE CONTRACT BETWEEN HIS/HER SUPPLIERS, SUBCONTRACTORS, AND EMPLOYEES. IF CLARIFICATION IS REQUIRED, CONSULT ARCHITECT.
- "FIRESHOOTING" REQUIREMENT: ALL PENETRATIONS THROUGH RATED WALLS AND FLOORS SHALL BE SEALED WITH MATERIAL CAPABLE OF PREVENTING THE PASSAGE OF FLAMES AND HOT GASSES WHEN SUBJECTED TO THE REQUIREMENTS OF THE TEST STANDARD SPECIFIC FOR FIRE STOPS ASTM-E-814. ALL PENETRATIONS SHALL MEET F AND T RATINGS AS REQUIRED BY THE BUILDING CODE.
- WHERE DISCONNECTS ARE INDICATED ON DRAWINGS CONTRACTOR SHALL PROVIDE FINAL CONNECTION TO EQUIPMENT BEING SERVED BY DISCONNECT.
- CONTRACTOR PROVIDE ALL MISCELLANEOUS SUPPORTS AS REQUIRED FOR A COMPLETE OPERABLE ELECTRICAL INSTALLATION INCLUDING MISCELLANEOUS STEEL, UNI-STRUT, ALL-THREAD, AIRCRAFT CABLE, ETC.

POWER DEVICES	
	DUPLEX RECEPTACLE W/ WP IN-USE COVER
	BRANCH CIRCUIT OR POWER PANEL
	POLE MOUNTED LUMINAIRE WITH ARM

RACEWAY LEGEND	
	BRANCH CIRCUIT HOMERUN TO PANELBOARD, NUMBER OF ARROWS INDICATES NUMBER OF CIRCUITS, NUMERAL INDICATES CIRCUIT NUMBER.
	UNDERGROUND FEEDER
	UNDERGROUND BRANCH CIRCUIT HOMERUN
	CONDUIT UP
	CONDUIT DOWN
	CONDUIT RUNS UNDERFLOOR OR BELOW GRADE

UCCS-Parking Lot			M-E Engineers Inc.			PANEL: PL1								
240/120			BUS: 150 Amps Copper			SECTION: 1 OF 1								
1Phase,3Wire + Gnd			MANS: 150 Amp Main Bkr			LOCATION:								
14K AIC						DATE: 02/17/12								
NOTES:			OPTIONS:			FED FROM:								
						MOUNTING: Pad on Floor								
						ISSUE: FINAL REVIEW								
N	ID	DESCRIPTION	V-A	P	BKR	CKT	PH	CKT	BKR	P	V-A	DESCRIPTION	ID	N
L		TRAIL LIGHTING	420	1	20	1	A	2	20	1	1240	PARKING LOT LIGHTING	L	
L		TRAIL LIGHTING	420	1	20	3	B	4	20	1	1240	PARKING LOT LIGHTING	L	
L		TRAIL LIGHTING	630	1	20	5	A	6	20	1	1240	PARKING LOT LIGHTING	L	
L		TRAIL LIGHTING	420	1	20	7	B	8	20	1	1240	PARKING LOT LIGHTING	L	
L		TRAIL LIGHTING	630	1	20	9	A	10	20	1	1550	PARKING LOT LIGHTING	L	
P		--SPARE--		1	20	11	B	12	20	1	1240	PARKING LOT LIGHTING	L	
P		--SPARE--		1	20	13	A	14	20	1	1240	PARKING LOT LIGHTING	L	
P		--SPARE--		1	20	15	B	16	20	1	930	PARKING LOT LIGHTING	L	
R		BUS HEATER	1500	1	20	17	A	18	20	1		--SPARE--	P	
R		BUS HEATER	1500	1	20	19	B	20	20	1		--SPARE--	P	
R		BUS HEATER	1500	1	20	21	A	22	20	1		--SPARE--	P	
R		BUS HEATER	1500	1	20	23	B	24	20	1		--SPARE--	P	
R		BUS HEATER	1500	1	20	25	A	26	20	1		--SPARE--	P	
R		BUS HEATER	1500	1	20	27	B	28	20	1		--SPARE--	P	
R		BUS HEATER	1500	1	20	29	A	30	20	1		--SPARE--	P	
R		BUS HEATER	1500	1	20	31	B	32	20	1		--SPARE--	P	
P		--SPARE--		1	20	33	A	34	20	1		--SPARE--	P	
P		--SPARE--		1	20	35	B	36	20	1		--SPARE--	P	
P		--SPARE--		1	20	37	A	38	20	1	500	CODE BLUE LIGHT	X	
P		--SPARE--		1	20	39	B	40	20	1	500	CODE BLUE LIGHT	X	
R		RECP PANEL PL1	180	1	20	41	A	42	20	1	500	CODE BLUE LIGHT	X	
BKR:150														
CONNECTED (Downstream Loads Included)			LOAD SUMMARY WITH DOWNSTREAM LOADS INCLUDED											
PHASE			A-B	TOTALS	CATEGORY	CONNECTED	FACTOR	CALCD V-A	AMPS @ 240/120 VOLTS					
VA			14130 - 11980	26,120	LIGHTING	12,440	129%	15,550	65					
AMPS			58 - 50	109	RECEPT	12,180	100%	10,000	42					
DOWNSTREAM LOADS					RECEPT		95%	1,080	5					
					MOTOR		100%							
					LGST MTR		25%							
					MISC	1,500	100%	1,500	6					
					KITCHEN		100%							
CONDUCTOR COLORS (EC TO LABEL IN PANEL)					ELEC HEAT		100%							
PH			A BLACK		HEAT									
			B RED											
			N WHITE											
			G GREEN											
					TOTAL	26,120		26,140	117					

PANEL SCHEDULE

PL1
SCALE: NONE

REVISIONS				
NO.	DATE	BY	DESCRIPTION	APPROVED BY:



NOT FOR
CONSTRUCTION

FOR AND ON BEHALF OF
MATRIX DESIGN GROUP, INC.

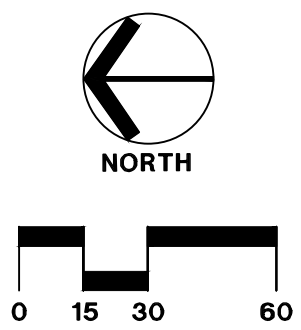


UCCS ARENA PARKING LOT

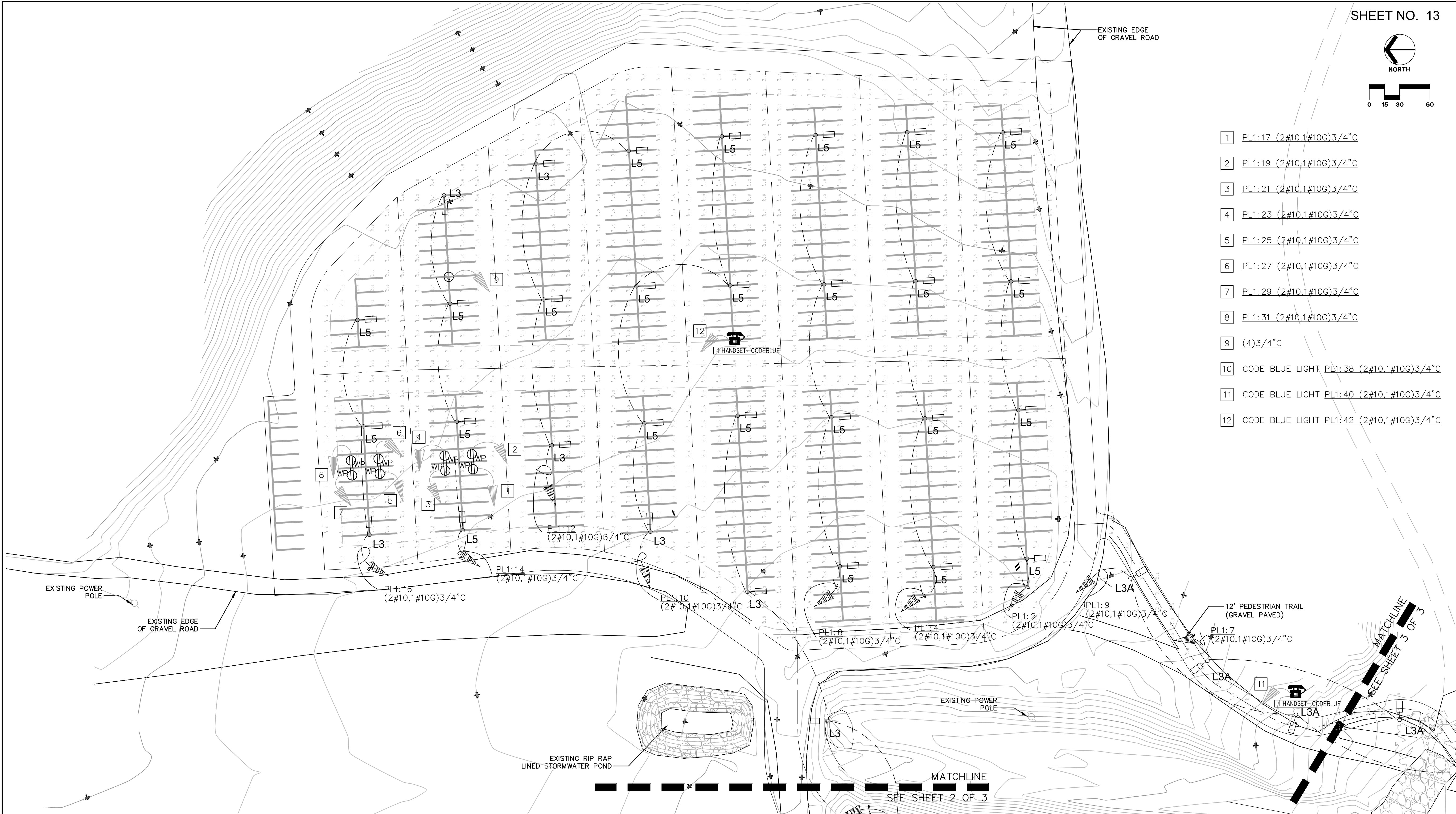
LIGHTING LEGEND/NOTES

DESIGNED BY: APS	SCALE	DATE ISSUED: JANUARY 27, 2012
DRAWN BY: APS	HORIZ: N/A	SHEET NO. 12 OF 16
CHECKED BY:	VERT: N/A	

L00



- 1 PL1:17 (2#10,1#10G)3/4"C
- 2 PL1:19 (2#10,1#10G)3/4"C
- 3 PL1:21 (2#10,1#10G)3/4"C
- 4 PL1:23 (2#10,1#10G)3/4"C
- 5 PL1:25 (2#10,1#10G)3/4"C
- 6 PL1:27 (2#10,1#10G)3/4"C
- 7 PL1:29 (2#10,1#10G)3/4"C
- 8 PL1:31 (2#10,1#10G)3/4"C
- 9 (4)3/4"C
- 10 CODE BLUE LIGHT PL1:38 (2#10,1#10G)3/4"C
- 11 CODE BLUE LIGHT PL1:40 (2#10,1#10G)3/4"C
- 12 CODE BLUE LIGHT PL1:42 (2#10,1#10G)3/4"C



REVISIONS				
NO.	DATE	BY	DESCRIPTION	APPROVED BY: DATE



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FOR AND ON BEHALF OF
MATRIX DESIGN GROUP, INC.

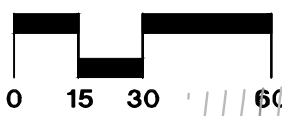
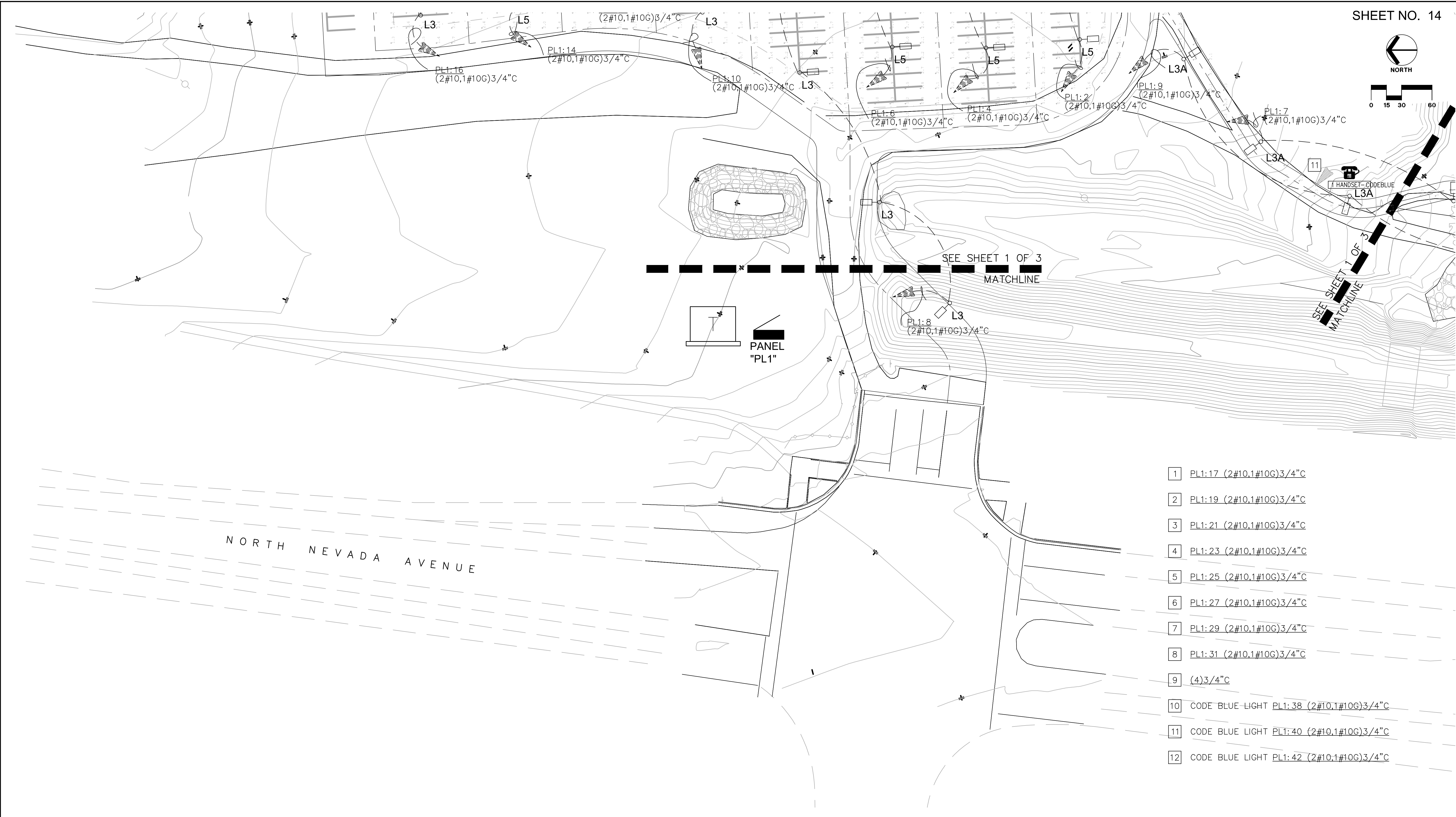


UCCS ARENA PARKING LOT

LIGHTING LAYOUT – PARKING LOT

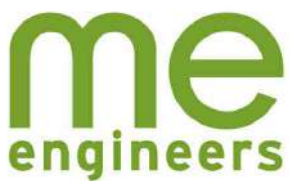
DESIGNED BY: APS	SCALE	DATE ISSUED: JANUARY 27, 2012
DRAWN BY: APS	HORIZ: 1" = 30'	SHEET NO. 13 OF 16
CHECKED BY:	VERT: N/A	

L01



- 1 PL1:17 (2#10,1#10G)3/4"C
- 2 PL1:19 (2#10,1#10G)3/4"C
- 3 PL1:21 (2#10,1#10G)3/4"C
- 4 PL1:23 (2#10,1#10G)3/4"C
- 5 PL1:25 (2#10,1#10G)3/4"C
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- 9 (4)3/4"C
- 10 CODE BLUE-LIGHT PL1:38 (2#10,1#10G)3/4"C
- 11 CODE BLUE LIGHT PL1:40 (2#10,1#10G)3/4"C
- 12 CODE BLUE LIGHT PL1:42 (2#10,1#10G)3/4"C

REVISIONS					
NO.	DATE	BY	DESCRIPTION	APPROVED BY:	DATE



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CONSTRUCTION

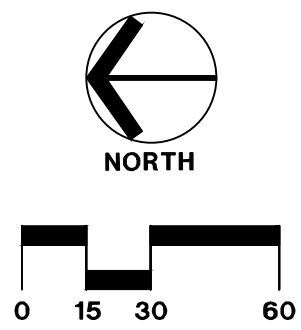
FOR AND ON BEHALF OF
MATRIX DESIGN GROUP, INC.



UCCS ARENA PARKING LOT

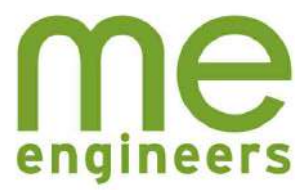
LIGHTING LAYOUT – ENTRANCE

DESIGNED BY: APS	SCALE	DATE ISSUED: JANUARY 27, 2012
DRAWN BY: APS	HORIZ: 1" = 30'	SHEET NO. 14 OF 16
CHECKED BY:	VERT: N/A	



- 1 PL1:17 (2#10,1#10G)3/4"C
- 2 PL1:19 (2#10,1#10G)3/4"C
- 3 PL1:21 (2#10,1#10G)3/4"C
- 4 PL1:23 (2#10,1#10G)3/4"C
- 5 PL1:25 (2#10,1#10G)3/4"C
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- 11 CODE BLUE LIGHT PL1:40 (2#10,1#10G)3/4"C
- 12 CODE BLUE LIGHT PL1:42 (2#10,1#10G)3/4"C

REVISIONS					
NO.	DATE	BY	DESCRIPTION	APPROVED BY:	DATE

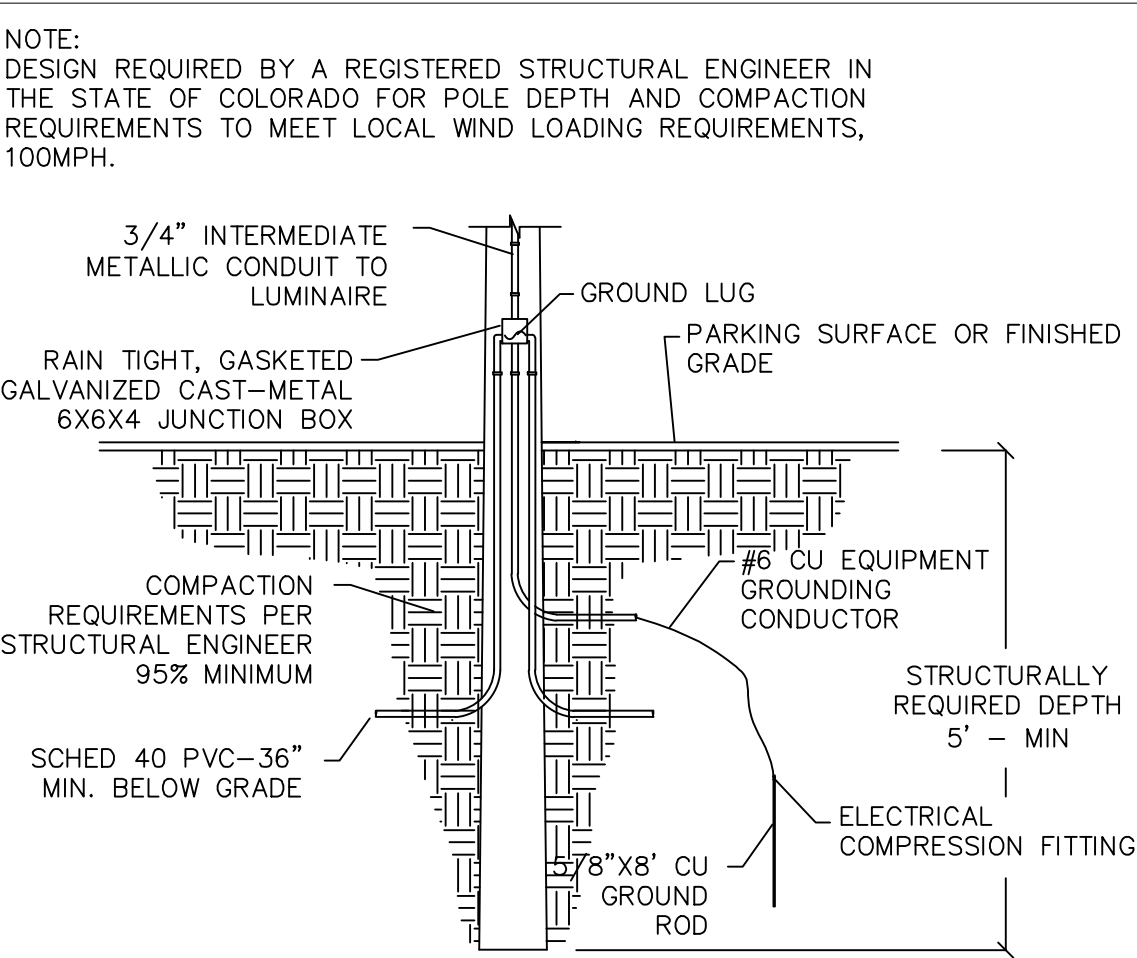
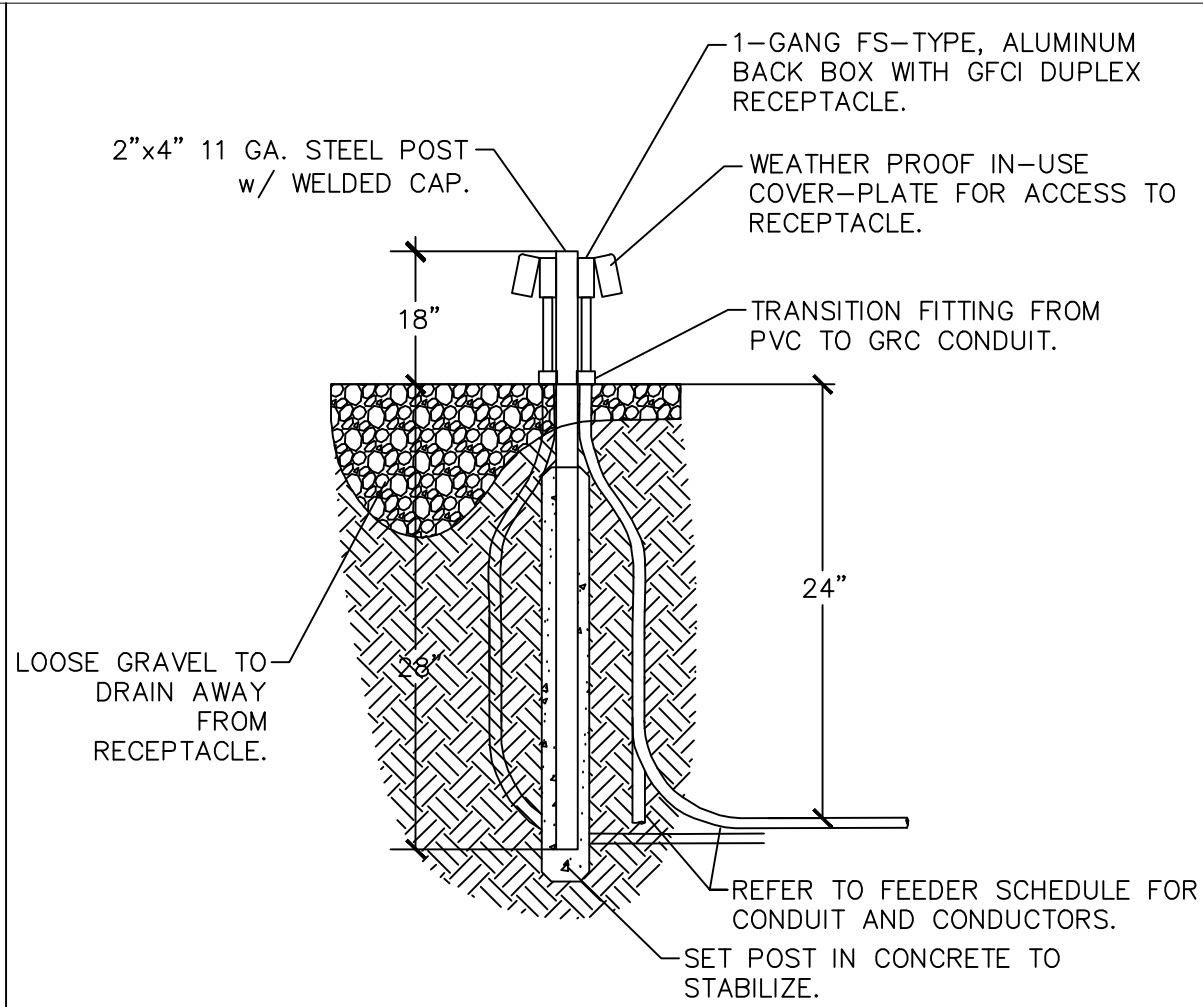
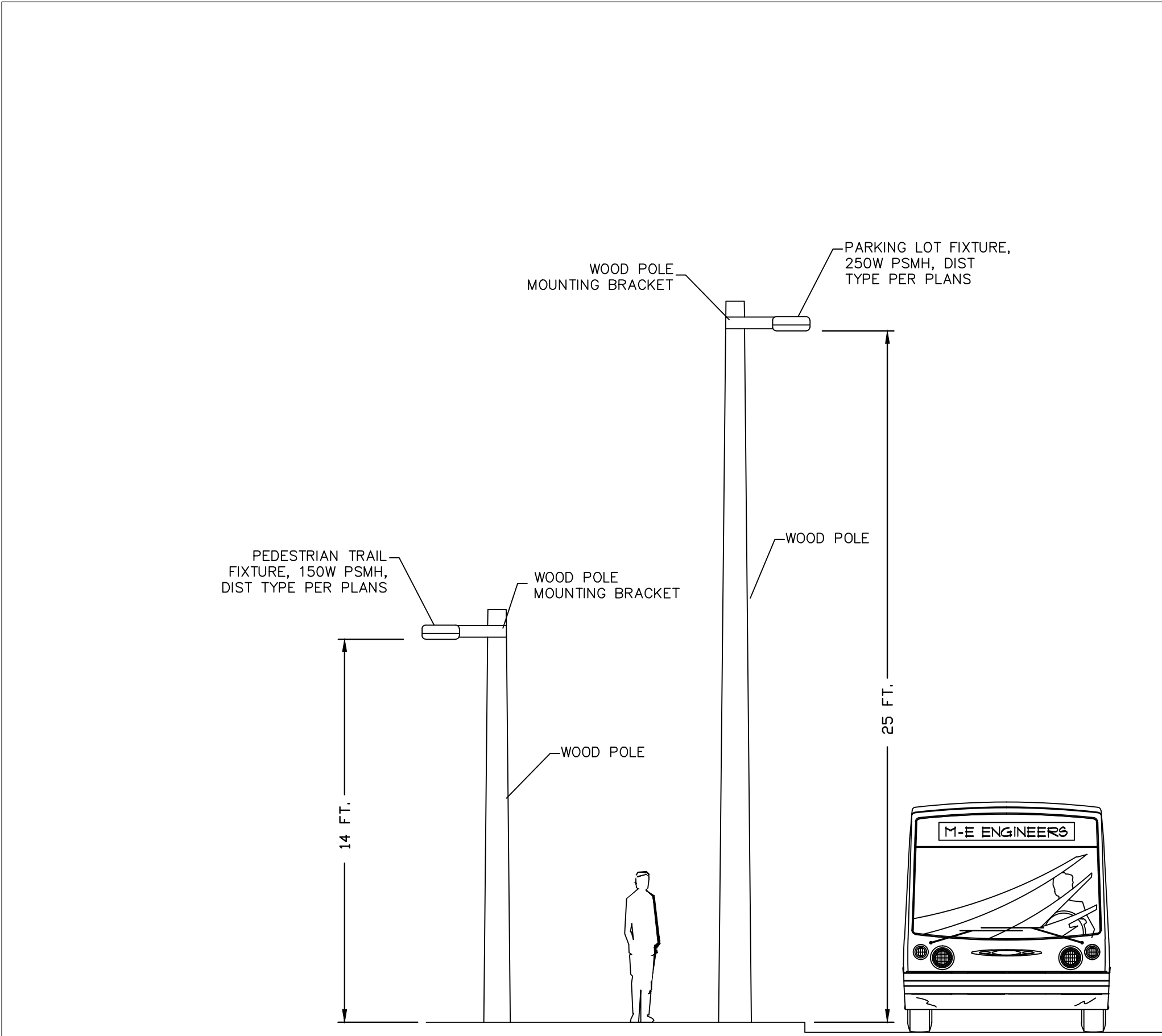


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UCCS ARENA PARKING LOT			
LIGHTING LAYOUT – PEDESTRIAN TRAIL			
DESIGNED BY: APS	SCALE: 1" = 30'	DATE ISSUED: JANUARY 27, 2012	L03
DRAWN BY: APS	HORIZ: N/A	SHEET NO. 15 OF 16	
CHECKED BY:	VERT:		

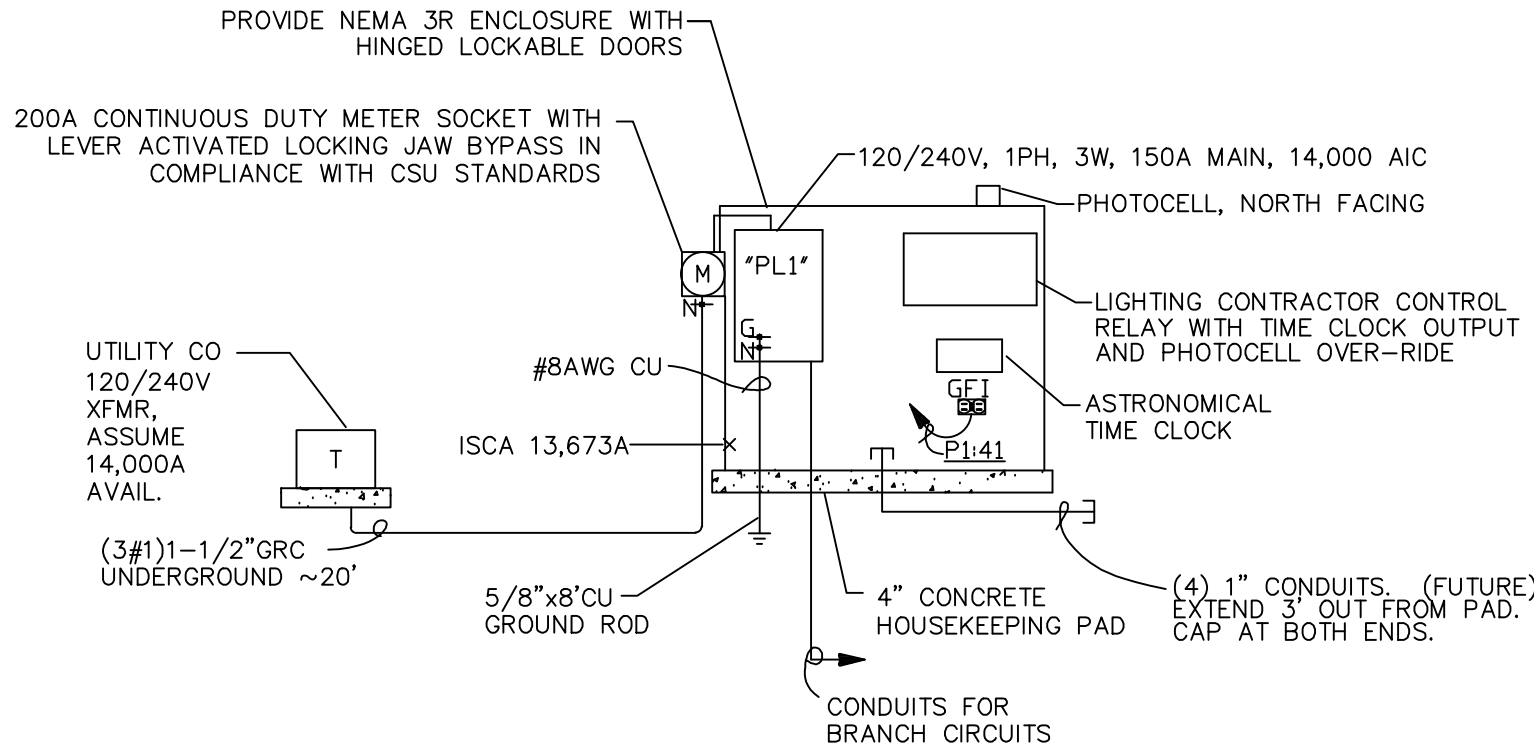


D BACK TO BACK RECEPTACLE DETAIL

NO SCALE

A PUBLIC ROW POLE BASE DETAIL

NO SCALE



NOTE:
1. CONTRACTOR TO CONFIRM WITH COLORADO SPRINGS UTILITIES (CSU) FOR EXACT SERVICE CONNECTION DETAILS.
2. CONTRACTOR TO SUBMIT FOR ENGINEERING REVIEW PANEL SCHEDULE, EQUIPMENT DETAILS AND PRODUCT INFORMATION.

F PEDESTRIAN TRAIL LIGHT DETAIL

NO SCALE

E PARKING LOT LIGHT DETAIL

NO SCALE

B 'PL1' ELECTRICAL ONE-LINE DIAGRAM, PANEL ELEVATION

NO SCALE

SITE		Description		Finish	Voltage	Mounting	Manufacturer	Catalog Number	Location	Comments
L3A	(1) 105 WATT PULSE START METAL HALIDE MH150/C/U/M, 13000 LUMENS, 70 CRI, 15,000 HRS	PEDESTRIAN SCALE HORIZONTAL POST TOP LUMINAIRE, ONE-PIECE, DIE CAST POWDER COATED ALUMINUM HOUSING, WITH OPTICALLY CLEAR TEMPERED FLAT GLASS LENS, 14" OVERALL HEIGHT, 16 INCH DIAMETER, PULSE START METAL HALIDE LAMPING, TYPE III DIST.		WOOD POLE	240V	WOOD POLE - 14'	EMCO	AVA-1-3-150PSMH-240V-BRP-PTF2-MOD WOOD BRACKET-14FT POLE	PEDESTRIAN TRAIL	
L3	(1) 250 WATT PULSE START METAL HALIDE PSMH250/C/U/M, 23000 LUMENS, 65 CRI, 15,000 HRS	25 FOOT WOOD POLE WITH HORIZONTAL POST TOP LUMINAIRE, ONE-PIECE, DIE CAST POWDER COATED ALUMINUM HOUSING, WITH OPTICALLY CLEAR TEMPERED FLAT GLASS LENS, 14" OVERALL HEIGHT, 16 INCH DIAMETER, PULSE START METAL HALIDE LAMPING, TYPE III DIST.		WOOD POLE	240V	WOOD POLE - 25'	EMCO	AVA-1-3-250PSMH-240V-BRP-PTF2-MOD WOOD BRACKET-25FT POLE	PARKING LOT	
L5	(1) 250 WATT PULSE START METAL HALIDE PSMH250/C/U/M, 23000 LUMENS, 65 CRI, 15,000 HRS	25 FOOT WOOD POLE WITH HORIZONTAL POST TOP LUMINAIRE, ONE-PIECE, DIE CAST POWDER COATED ALUMINUM HOUSING, WITH OPTICALLY CLEAR TEMPERED FLAT GLASS LENS, 14" OVERALL HEIGHT, 16 INCH DIAMETER, PULSE START METAL HALIDE LAMPING, TYPE V DIST.		WOOD POLE	240V	WOOD POLE - 25'	EMCO	AVA-1-5-250PSMH-240V-BRP-PTF2-MOD WOOD BRACKET-25FT POLE	PARKING LOT	

G FIXTURE SCHEDULE

NO SCALE

C BLUE PHONE

NO SCALE

REVISIONS				APPROVED BY:	DATE
NO.	DATE	BY	DESCRIPTION		



NOT FOR CONSTRUCTION

FOR AND ON BEHALF OF
MATRIX DESIGN GROUP, INC.



UCCS ARENA PARKING LOT

LIGHTING DETAILS

DESIGNED BY: APS	SCALE		DATE ISSUED: JANUARY 27, 2012
DRAWN BY: APS	HORIZ: N/A	SHEET NO. 16 OF 16	
CHECKED BY:	VERT: N/A		