

DEVELOPMENT PLAN MEADOW LAKE HANGAR

Approved
By: Kevin Mastin
Date: 06/13/2022
El Paso County Planning & Community Development



8140 CESSNA DRIVE
PEYTON, COLORADO 80831

ARCHITECT

JOHN F. NELSON ASSOCIATES
1626 EAST PIKES PEAK
COLORADO SPRINGS, CO. 80909
PHONE: 719-632-3384
john@jfnarch.com

LANDSCAPE

HIGHER GROUND DESIGNS, INC.
3610 REBECCA LANE, STE. III
COLORADO SPRINGS, CO. 80917
PHONE: 719-471-1646

CIVIL ENGINEER

OLIVER E. WATTS CONSULTING ENGINEER, INC.
614 ELKTON DRIVE
COLORADO SPRINGS, CO. 80907
PHONE: 719-593-0113
OLLEWATTS@AOL.COM

PROPERTY OWNER

RYAN SCHNEIDER
2610 FAIRMOUNT ST
COLORADO SPRINGS, CO 80909

CONSTRUCTION ABBREVIATIONS

AB	ANCHOR BOLT	FF	FINISH FLOOR	FL	PLATE
A/C	AIR CONDITIONING	FIN	FINISH FLOOR	FLAM	PLASTIC LAMINATE
AC	ALTERNATING CURRENT	FL	FLOOR	FLAS	PLASTER
AF	ABOVE FINISH FLOOR	FLASH	FLASHING	PLYWD	PLYWOOD
ALUM	ALUMINUM	FS	FULL SIZE	FR	FAIR
ALT	ALTERNATE	FT	FOOT OR FEET	FRFAB	PREFABRICATED
APPROX	APPROXIMATE	FTG	FOOTING	PT	POINT
ARCH	ARCHITECTURAL	FURN	FURNISH	PTN	PARTITION
ASPH	ASPHALT	FURR	FURRING	QT	QUARRY TILE
BD	BOARD	GA	GAUGE	R	RISER
BLDG	BUILDING	GI	GALVANIZED	RAD	RADIUS
BLK	BLOCK	GB	GRAB BAR	RD	ROOF DRAIN
BLKG	BLOCKING	GC	GENERAL CONTRACTOR	REF	REFERENCE
BOT	BOTTOM	GL	GLASS	REFR	REFRIGERATOR
BW	BOTH WAYS	GM	GAS METER	REINF	REINFORCED
CAB	CABINET	GND	GROUND	REQD	REQUIRED
C.B.	CATCH BASIN	GYP	GYPSONUM	REV	REVISION
CEM	CEMENT	HDW	HARDWARE	RH	ROOM
CER	CERAMIC	HM	HOLLOW METAL	RO	ROUGH OPENING
CL	CAST IRON	HORIZ	HORIZONTAL	RTU	ROOF TOP UNIT
CLG	CEILING	HT	HEIGHT	SC	SOLID CORE
CL	CENTER LINE	HTG	HEATING	SCHED	SCHEDULE
C.O.	CLEAN OUT	HYAC	HEATING VENTILATION AND AIR CONDITIONING	SF	SQUARE FOOT
COL	COLUMN	HVAC	HEATING VENTILATION AND AIR CONDITIONING	SECT	SECTION
CONC	CONCRETE	HW	HOT WATER	SHT	SHEET
CONN	CONNECTION	HWH	HOT WATER HEATER	SIM	SIMILAR
CONSTR	CONSTRUCTION	ID	INSIDE DIMENSION	SPEC	SPECIFICATION
CONT	CONTINUOUS	INSUL	INSULATION	SQ	SQUARE
CONTR	CONTRACTOR	INST	INSTALL	SS	STAINLESS STEEL
CTD	COATED	INT	INTERIOR	STA	STATION
CTSK	COUNTERSUNK	INV	INVERT	STD	STANDARD
CC	CENTER TO CENTER	JAN	JANITOR	STL	STEEL
CW	COLD WATER	JT	JOINT	STOR	STORAGE
CJ	CONTROL JOINT	LAM	LAMINATE	STRUCT	STRUCTURAL
DIA	DIAMETER	LAV	LAVATORY	SUSP	SUSPENDED
DBDC	DOUBLE	LKR	LOCKER	SYM	SYMMETRICAL
DEPT	DEPARTMENT	LT	LIGHT	T	TREAD
DET	DETAIL	MAX	MAXIMUM	T 4 B	TOP 4 BOTTOM
DIA	DIAMETER	MECH	MECHANICAL	TER	TELEPHONE
DM	DIMENSION	MH	MANHOLE	T 4 G	TERRAZZO
DN	DOWN	MTL	METAL	THK	THICK
D.O.	DOOR OPENING	MFR	MANUFACTURER	TOP	TOP OF PARAPET
DR	DOOR	MIN	MINIMUM	TOB	TOP OF STEEL
DS	DOWN SPOUT	MISC	MISCELLANEOUS	TOC	TO OF CONCRETE
DWG	DRAWING	MTD	MOUNTED	TYP	TYPICAL
EA	EACH	NIC	NOT IN CONTRACT	UNO	UNLESS NOTED OTHERWISE
E.J.	EXPANSION JOINT	NO	NUMBER	UR	URINAL
EL	ELEVATION	NOM	NOMINAL	VIF	VERIFY IN FIELD
ELEC	ELECTRICAL	NOM	NOMINAL	VCT	VINYL COMPOSITION TILE
ELEV	ELEVATION	NTS	NOT TO SCALE	VERT	VERTICAL
ENCL	ENCLOSURE	OC	ON CENTER	VEST	VESTIBULE
EQ	EQUAL	OFF	OFFICE	VT	VINYL TILE
EW	EACH WAY	OH	OVERHEAD	VTR	VENT THROUGH ROOF
EWC	ELECT WATER COOLER	OPNG	OPENING	W	WITH
EXIST	EXISTING	OPP	OPPOSITE	WC	WATER CLOSET
EXP	EXPANSION	OA	OUTSIDE AIR	WD	WOOD
EXFO	EXPOSED	LB	LB PER CUBIC FOOT	WDU	WINDOW
EXT	EXTERIOR	RCF	LB PER SQUARE FOOT	W/O	WITHOUT
EF	EXHAUST FAN	RSF	LB PER SQUARE FOOT	W	WEIGHT
FA	FIRE ALARM	P81	LB PER SQUARE INCH	WUF	WELDED WIRE FABRIC
FD	FLOOR DRAIN			WO	WALL OPENING
FDN	FOUNDATION				
FE	FIRE EXTINGUISHER				

PLANNING INFO

SETBACKS:
25FT AT FRONT,
12FT AT SIDES,
50FT AT REAR - TAXIWAY EASEMENT

DRAWING INDEX

DP-1	TS-1	TITLE SHEET	DP-9	PH	PHOTOMETRIC PLAN
DP-2	A-2	SITE PLAN	DP-10	L11	LANDSCAPE PLAN
DP-3	A-3	ELEVATIONS			
DP-4	C-1	GRADING AND EROSION CONTROL PLAN			
DP-5	C-2	EROSION CONTROL DETAILS			
DP-6	C-3	EDB OUTLET DETAILS			
DP-7	C-4	EROSION CONTROL DETAILS			
DP-8	C-5	EROSION CONTROL DETAILS			

SITE DATA

LEGAL DESCRIPTION:

LOT 1 BLK 1 MEADOW LAKE AIRPORT FIL NO 2

LOT ACARAGE:

LOT 1: 3.26 ACRES

EXISTING ZONING:

R-4 GA-0

PARCEL I.D. NUMBER:

4304002086

FEMA FLOOD NOTE

THIS SITE IS NOT IN A FLOODPLAIN "AREA OF MINIMAL FLOOD HAZARD" FLOODPLAIN MAP INFO: FIPS NO. 080410501G COMMUNITY MAP NO. 080060 PANEL 0538F ZONE: X DATE: DEC. 7, 2018

GEOLOGICAL HAZARD

THIS SITE IS NOT LOCATED IN A GEOLOGICAL HAZARD AREA

AVIGATION EASEMENT NOTE

AN AVIGATION EASEMENT EFFECTING THE SUBJECT PROPERTY AND DEVELOPMENT IS THEREIN ESTABLISHED BY THE WOODMEN HEIGHTS COMMERCIAL FILING NO. 21 SUBDIVISION PLAT. THIS EASEMENT IS SUBJECT TO THE TERMS AND CONDITIONS AS SPECIFIED IN THE INSTRUMENT RECORDED UNDER RECEPTION NO. 211063667 OF THE RECORDS OF EL PASO COUNTY, COLORADO

PROJECT CONSTRUCTION SCHEDULE

COMPLETION: SUMMER 2022

PROPOSED EXTERIOR LIGHTING

BUILDING MOUNTED ARCHITECTURAL FULL CUT OFF RECESSED LUMINARIES AT MAIN ENTRANCE TO BE 81 WATT LED, MOUNTED AT 10'-0" AFF. WAL-PAC FULL CUT-OFF SECURITY TYPE FIXTURES. MOUNTING HEIGHT = VARIES - SEE DP-3 ELEVATIONS PARKING LOT LIGHTING SHALL BE LED 104 WATT FULL CUTOFF POLE MOUNTED FIXTURES AND I.E.S. TYPE-V DISTRIBUTION ON 20'-0" POLE. SEE DETAIL 5/DP-2.

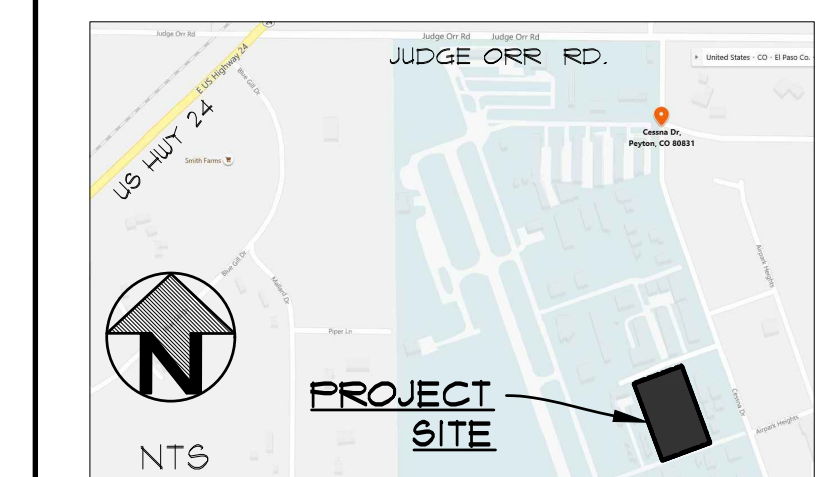
ADA DESIGN PROFESSIONAL STANDARDS

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 THE CITY OF EL PASO COUNTY DOES NOT ASSURE COMPLIANCE WITH THE ADA OR ANY OTHER FEDERAL OR STATE ACCESSIBILITY LAWS FOR ANY REGULATIONS OR GUIDELINES ENACTED OR PROMULGATED UNDER OR WITH RESPECT TO SUCH LAWS. SOLE RESPONSIBILITY FOR COMPLIANCE WITH FEDERAL AND STATE ACCESSIBILITY LAWS LIES WITH THE PROPERTY OWNER.

PROJECT DESCRIPTION:

THE PROJECT CONSISTS OF GROUND UP CONSTRUCTION, AND SITE IMPROVEMENTS. THE BUILDING IS LOCATED AT 8140 CESSNA DRIVE, PEYTON CO. 80831 EL PASO COUNTY REFER TO VICINITY MAP FOR PROPERTY LOCATION.

VICINITY MAP



John P. Nelson Associates
1626 E. Pikes Peak, Colorado Springs, CO 80909
Phone: (719) 632-3384
Fax: (719) 632-1181
john@jfnarch.com

MEADOW LAKE HANGAR

8140 CESSNA DRIVE
PEYTON, COLORADO 80831

TITLE SHEET

PROJECT NO.

DRN. BY: L. Ross

REVISIONS:

1st SUB. 4-16-2021
2nd SUB. 10-11-2021
3rd SUB. 5-18-2022

REVIEW SET NOT FOR CONSTRUCTION 5-18-2022

AMENDMENT HISTORY

FILE NUMBER	APPROVAL DATE	REVISION DESCRIPTION

REGULATORY/REVIEW AGENCIES

CITY LAND USE REVIEW

FILE NO: FPR-21-038

ISSUE DATE:

SHEET:

DP-1

1 OF 10

MEADOW LAKE HANGAR

8140 CESSNA DRIVE
 PEYTON, COLORADO 80831

PROJECT NO.

DRN. BY: L. Rose

REVISIONS:

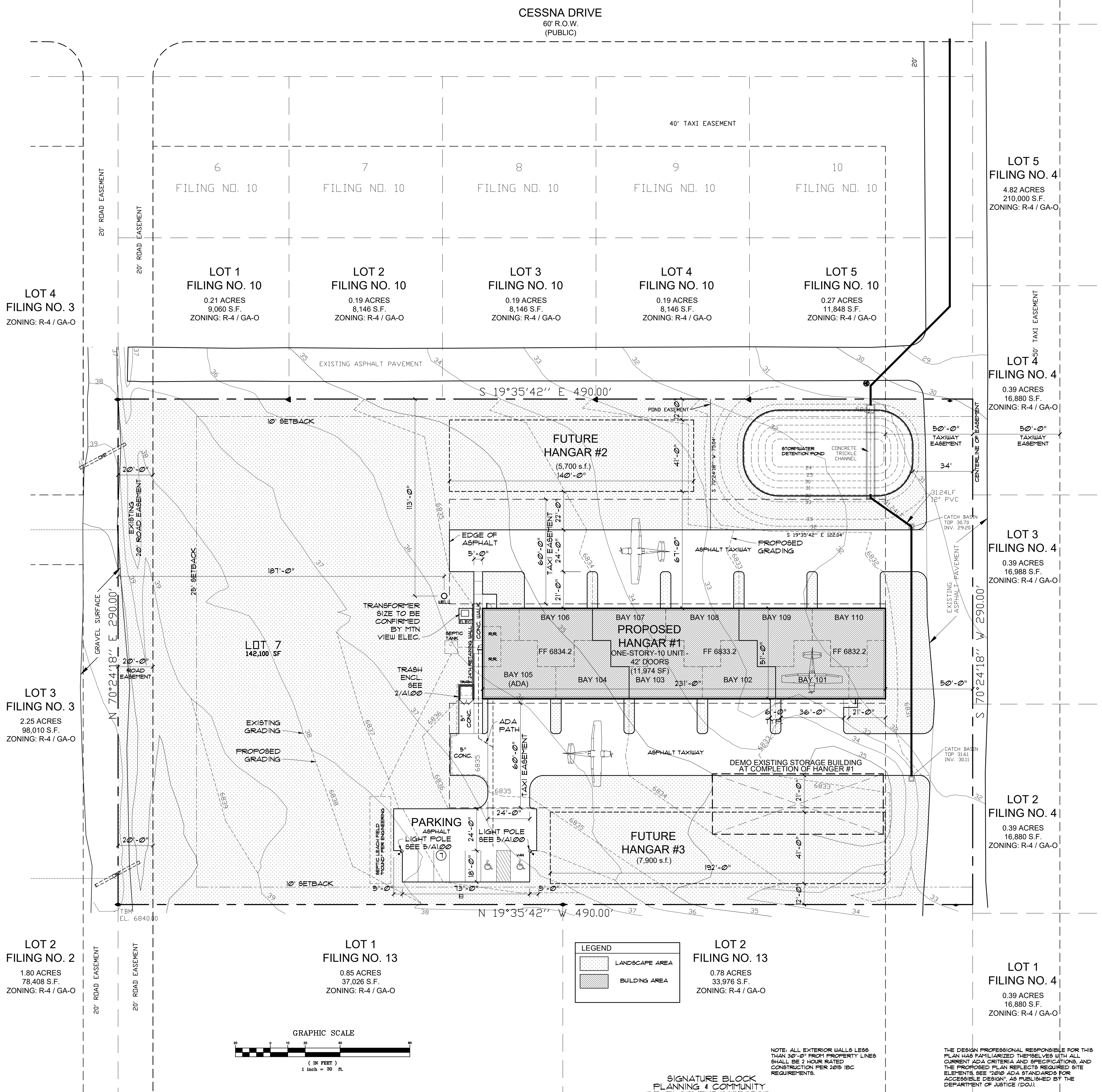
1st SUB.	4-16-2021
2nd SUB.	10-1-2021
3rd SUB.	5-18-2022

REVIEW SET NOT FOR CONSTRUCTION
 5-18-2022

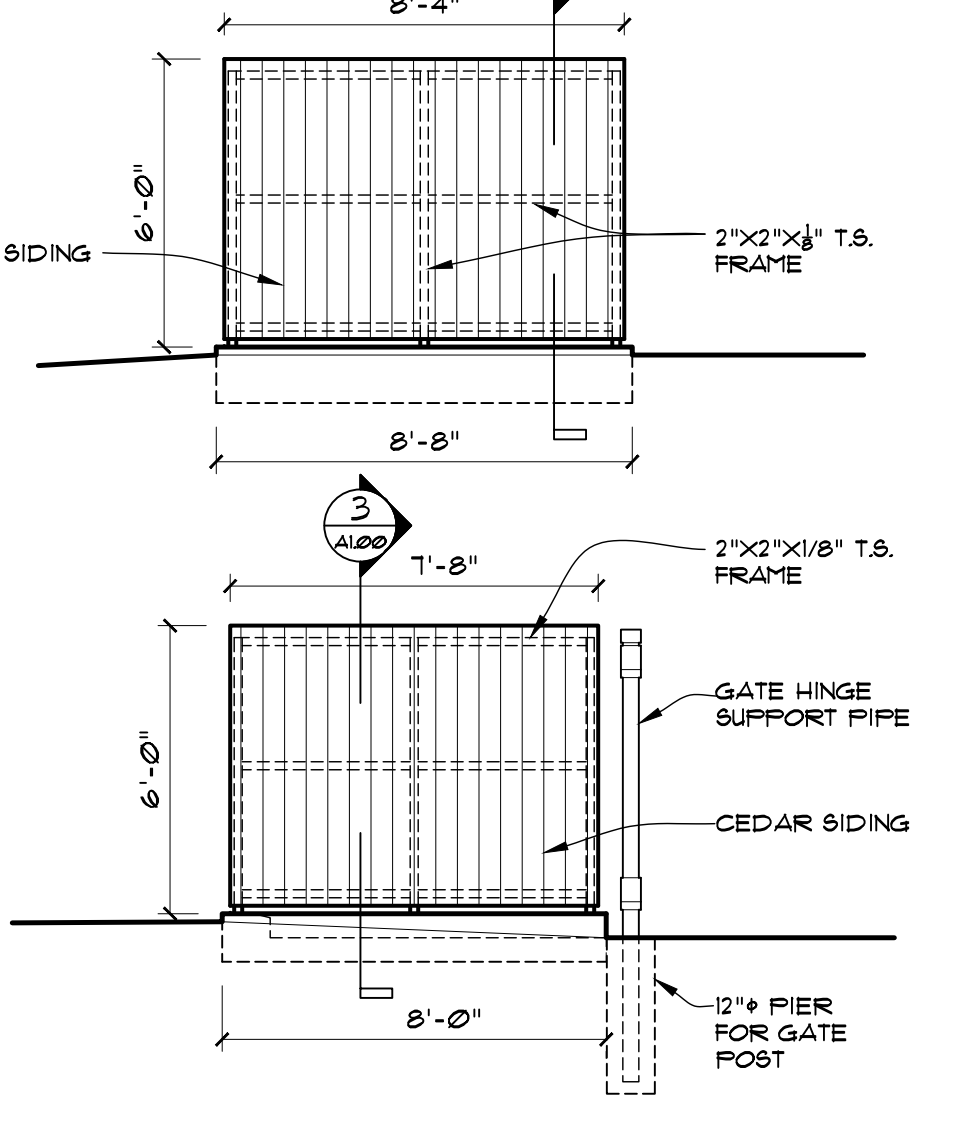
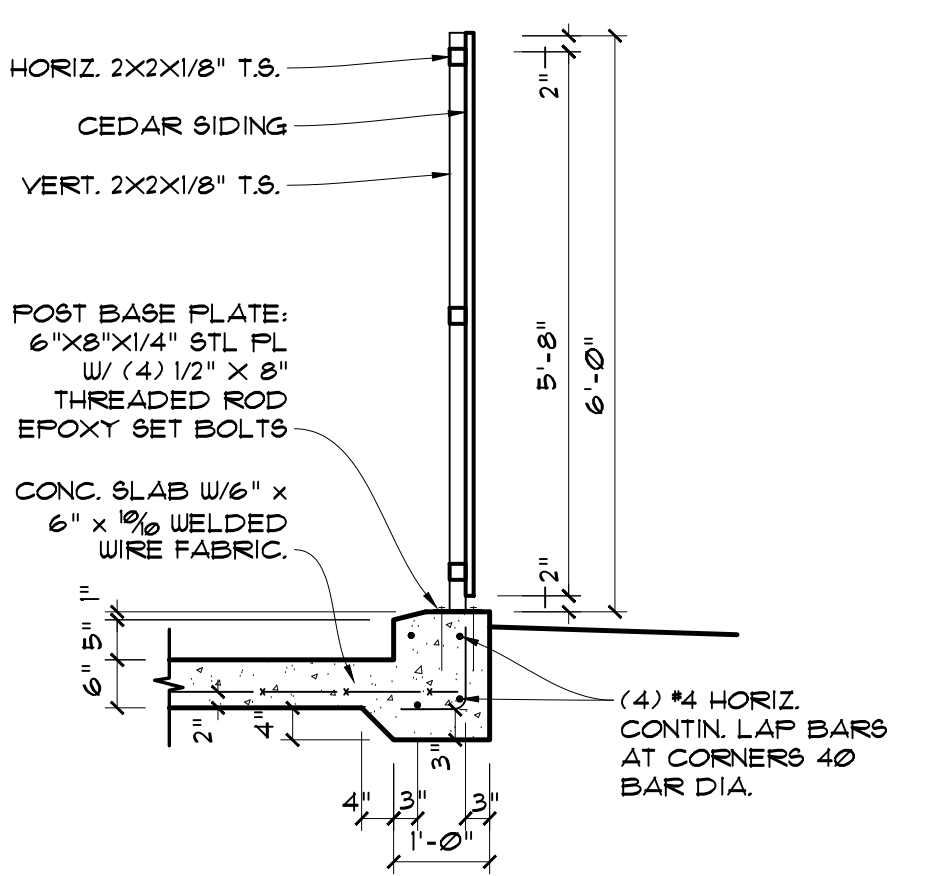
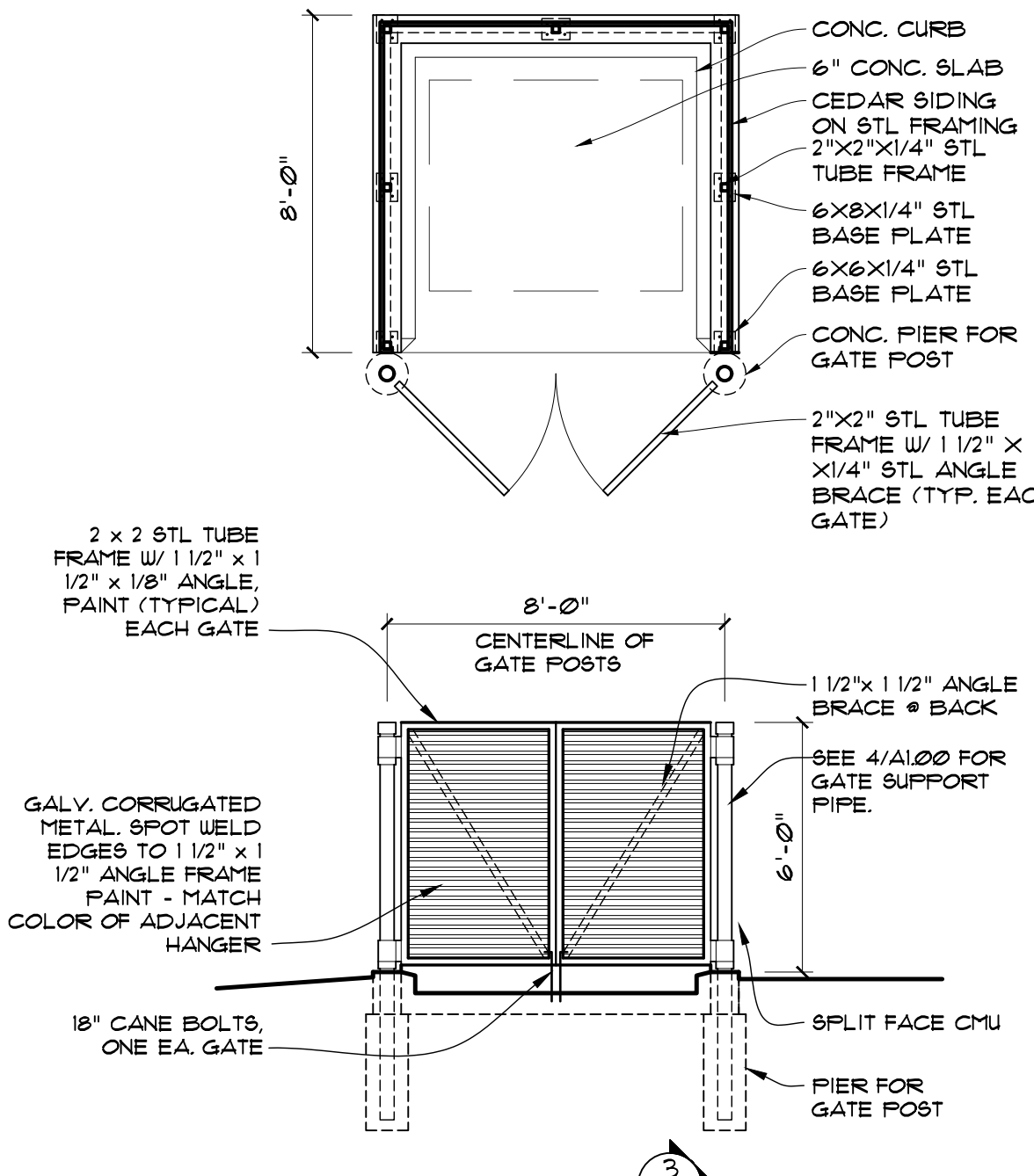
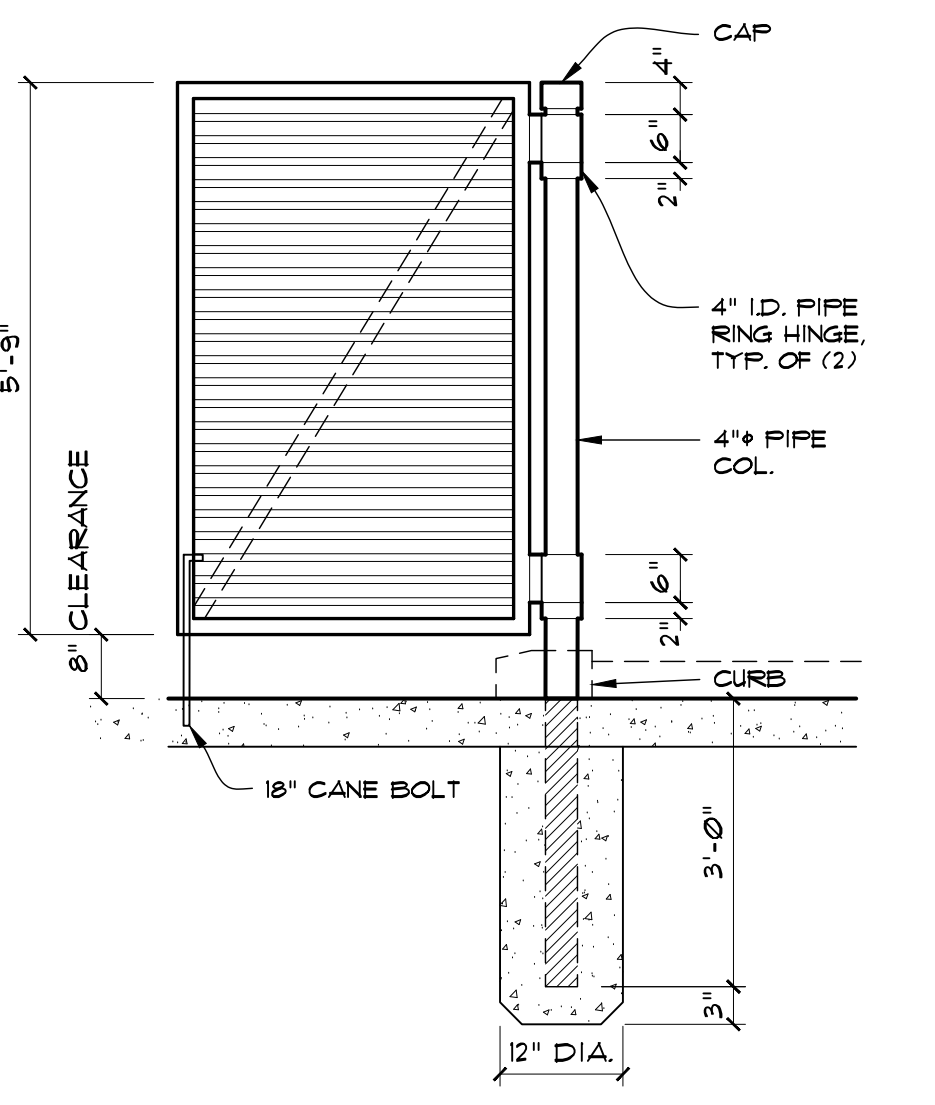
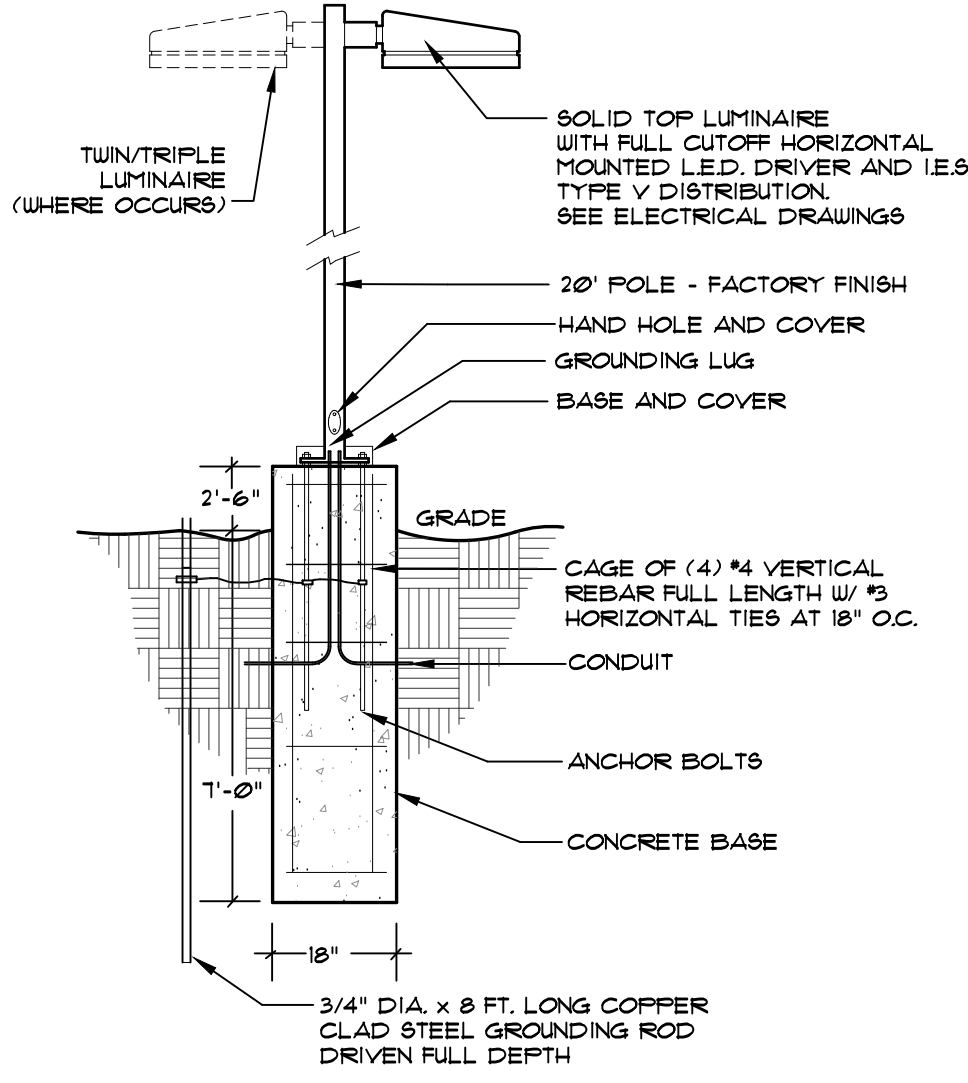
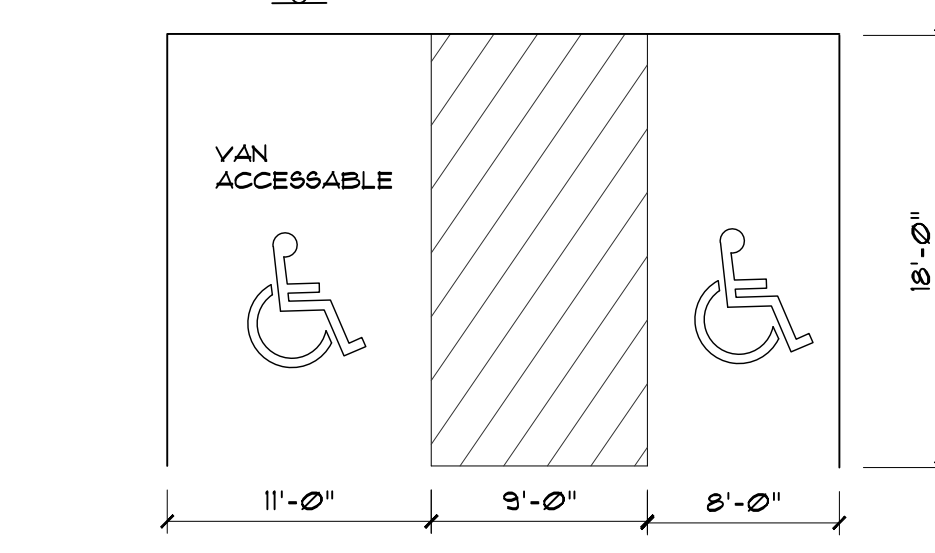
ISSUE DATE:

SHEET:

DP-2
 2 OF 10



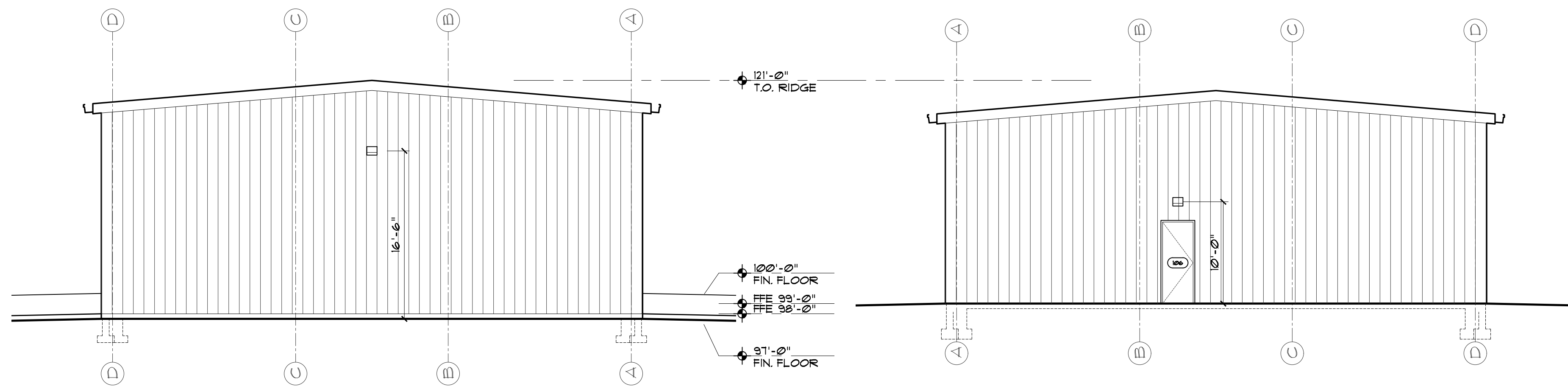
NOTE:
 GENERAL CONTRACTOR SHALL CONSTRUCT PER CITY STANDARDS



1 SITE PLAN
 DF-2 SCALE: 1:30

SIGNATURE BLOCK
 PLANNING & COMMUNITY DEVELOPMENT DIRECTOR

FILE NO: PPR-21-038



4 SOUTH ELEVATION - HANGAR #1
A3.00 SCALE: 1/8" = 1'-0"

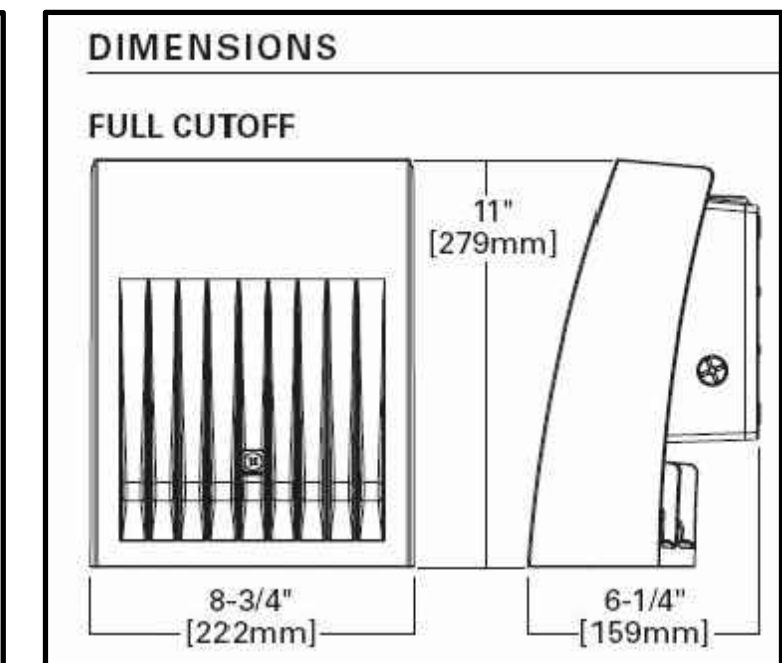
3 NORTH ELEVATION - HANGAR #1
A3.00 SCALE: 1/8" = 1'-0"



XTOR
CROSSTOUR
MAXX LED



XTOR
CROSSTOUR LED



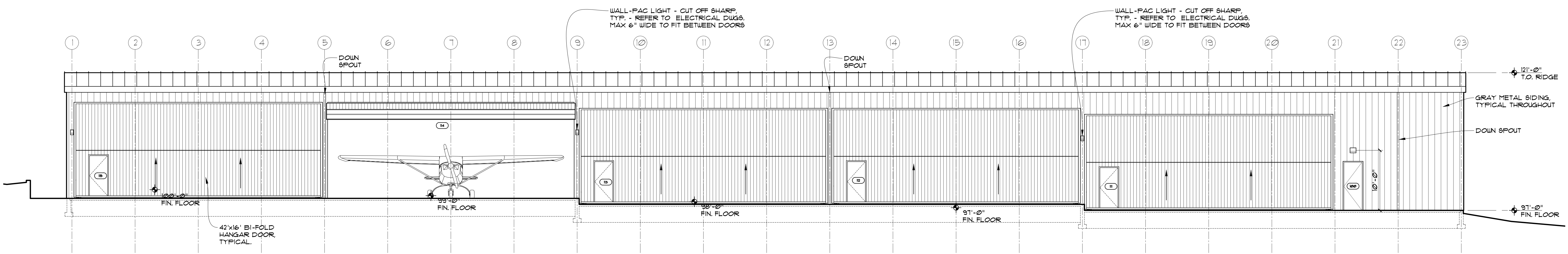
WALL-PAC VIEWS AND DIMENSIONS, FULL CUTOFF LENS SEE BUILDING ELEVATIONS FOR LOCATIONS

John P. Nelson
ASSOCIATES
1636 E. Platte Peak, Colorado Springs, CO 80909 Phone: (719) 632-3384
John@jpnarch.com (719) 632-1781 Fax

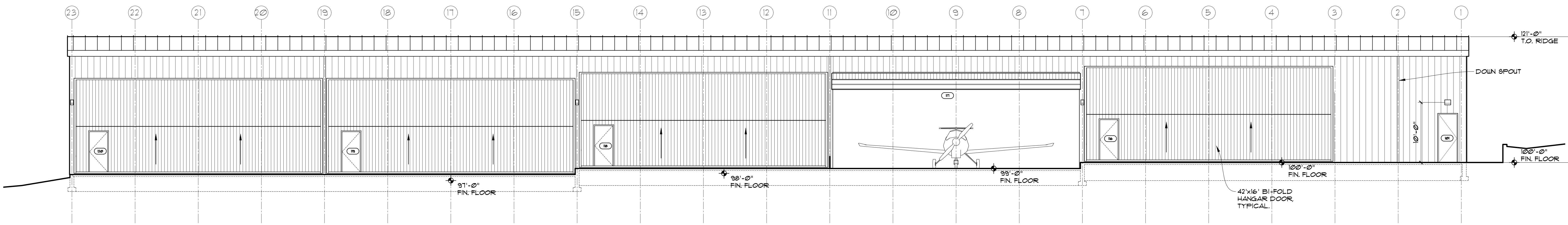
EXTERIOR ELEVATIONS

MEADOW LAKE HANGAR

8140 CESSNA DRIVE
PEYTON, COLORADO 80831



2 EAST ELEVATION - HANGAR #3
A3.00 SCALE: 1/8" = 1'-0"



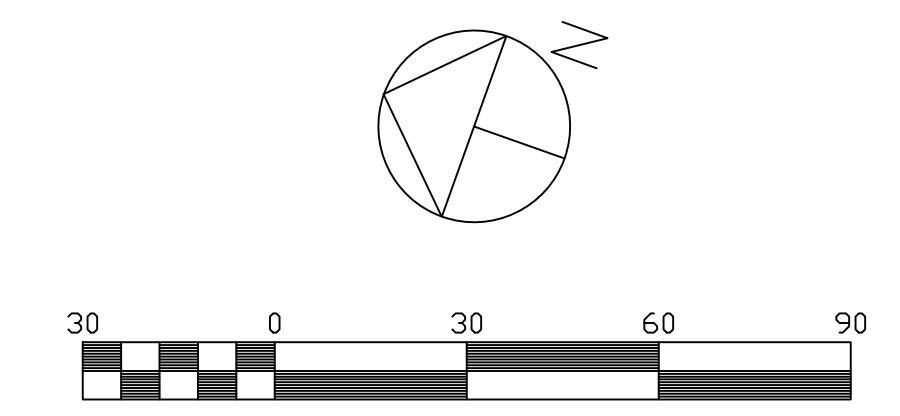
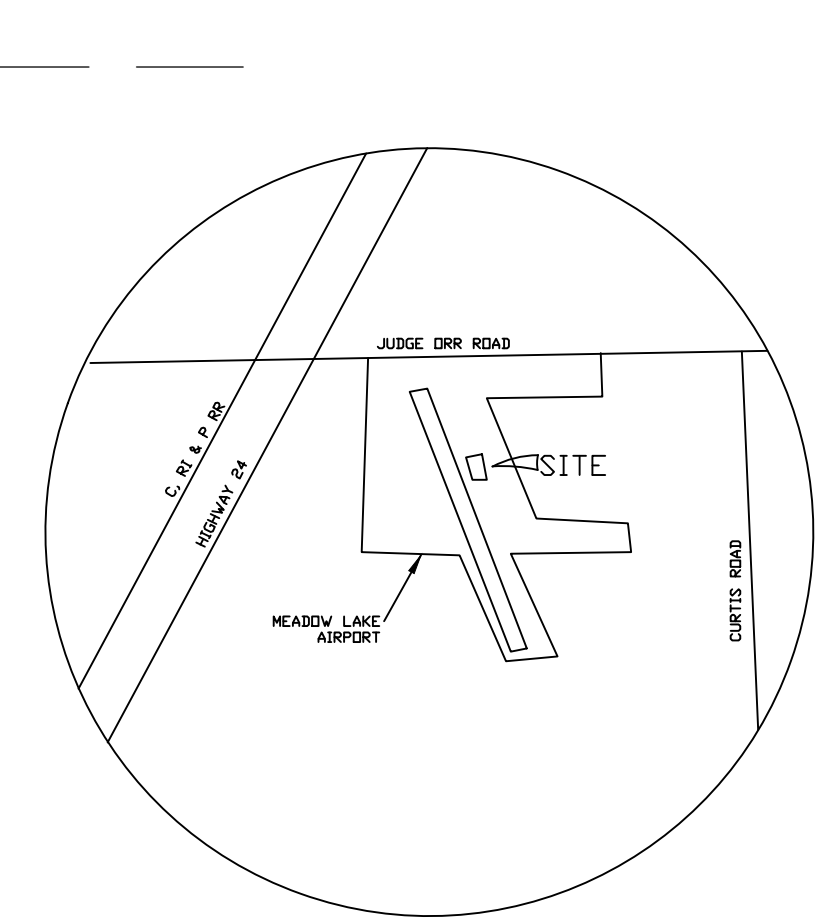
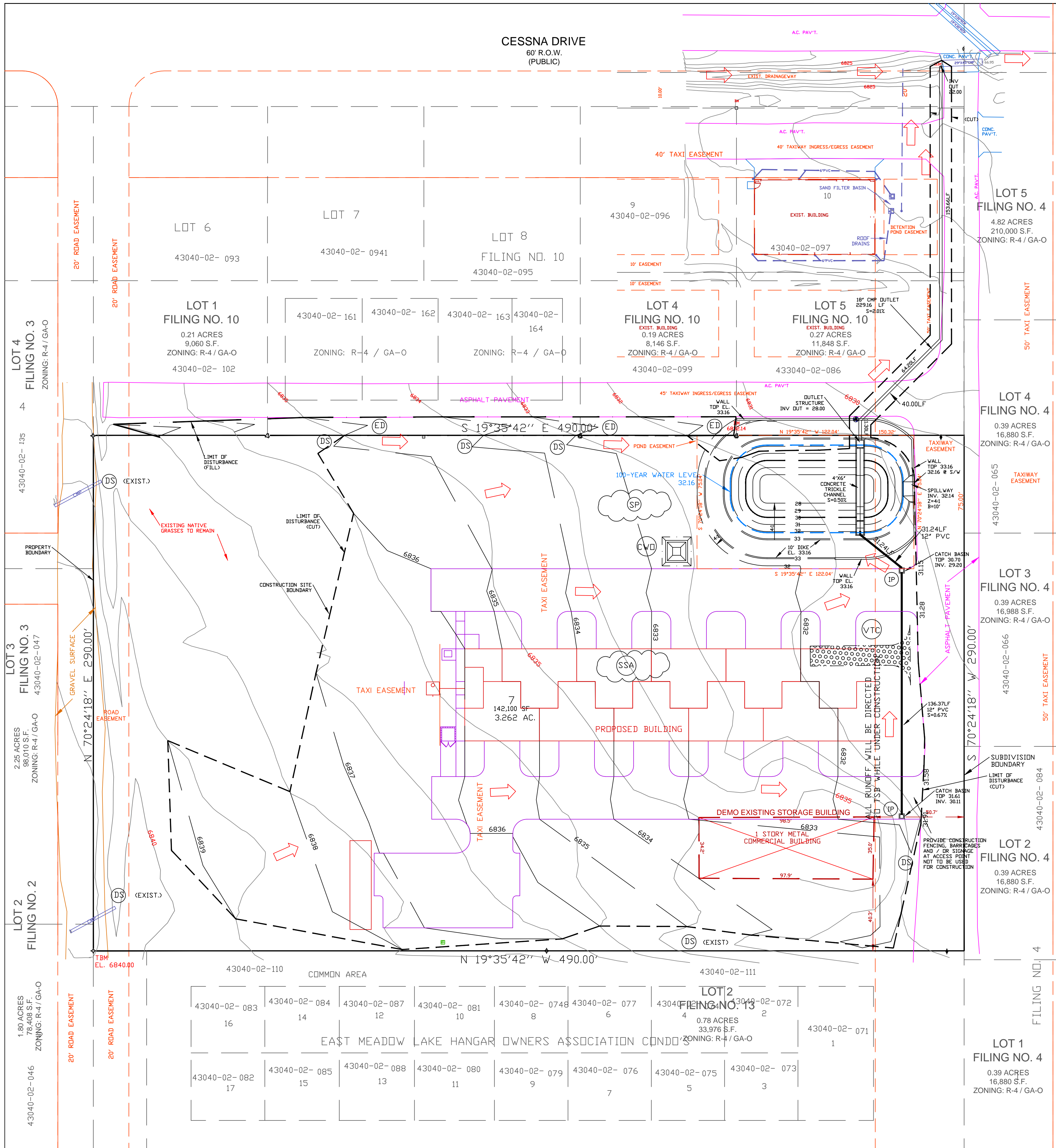
1 WEST ELEVATION - HANGAR #1
A3.00 SCALE: 1/8" = 1'-0"

FILE NO: PFR-21-038

PROJECT NO.
DRN. BY: L. Ross
REVISIONS:
1st SUB. 4-16-2021
2nd SUB. 10-1-2021
3rd SUB. 5-18-2022

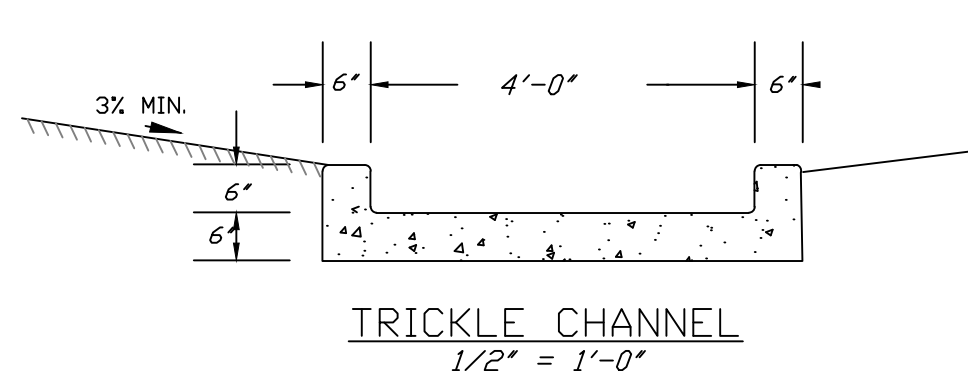
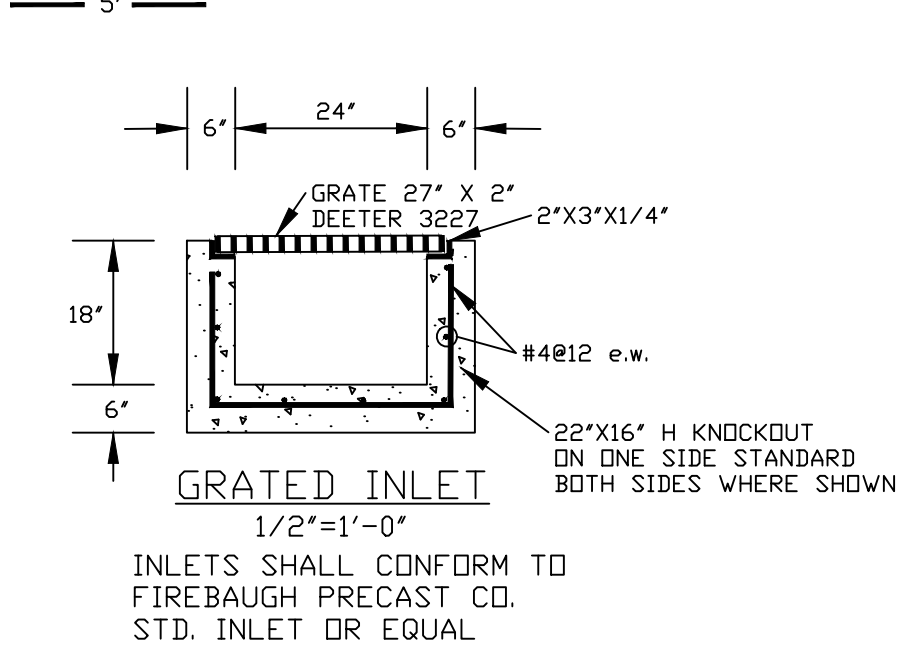
REVIEW SET
NOT FOR
CONSTRUCTION
5-18-2022

ISSUE
DATE:
SHEET:
DP-3
3 OF 10

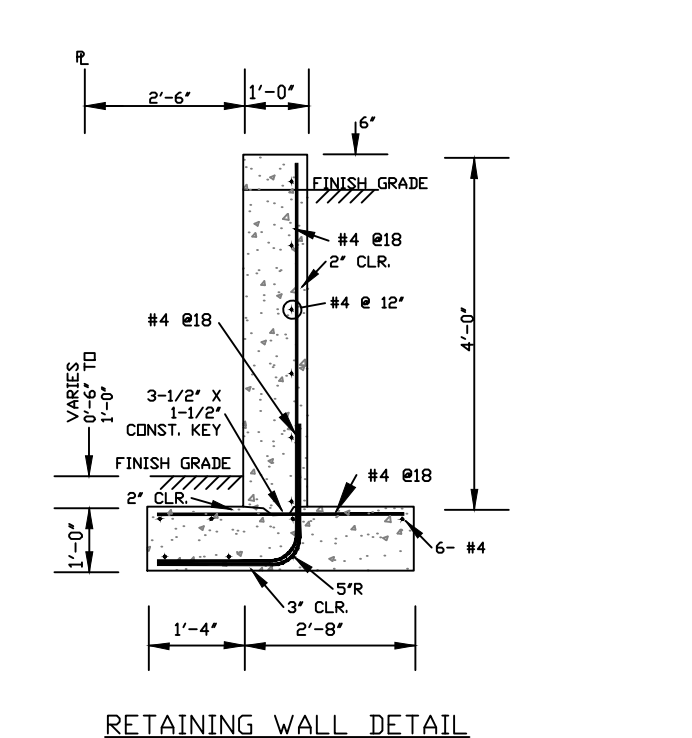


- LEGEND:**
- ◁ FOUND YELLOW #17655 CAP ON #4 REBAR
 - ◊ FOUND #4 REBAR
 - FOUND TELEPHONE PEDESTAL
 - FOUND WELL
 - LIMITS OF CONSTRUCTION / CONSTRUCTION BOUNDARY
 - LOT BOUNDARY
 - EXISTING STORM SEWER AS LABELED
 - PROPOSED STORM SEWER AS LABELED

- CONTOUR LEGEND:**
- ORIGINAL CONTOURS:
 - FINISH CONTOURS:



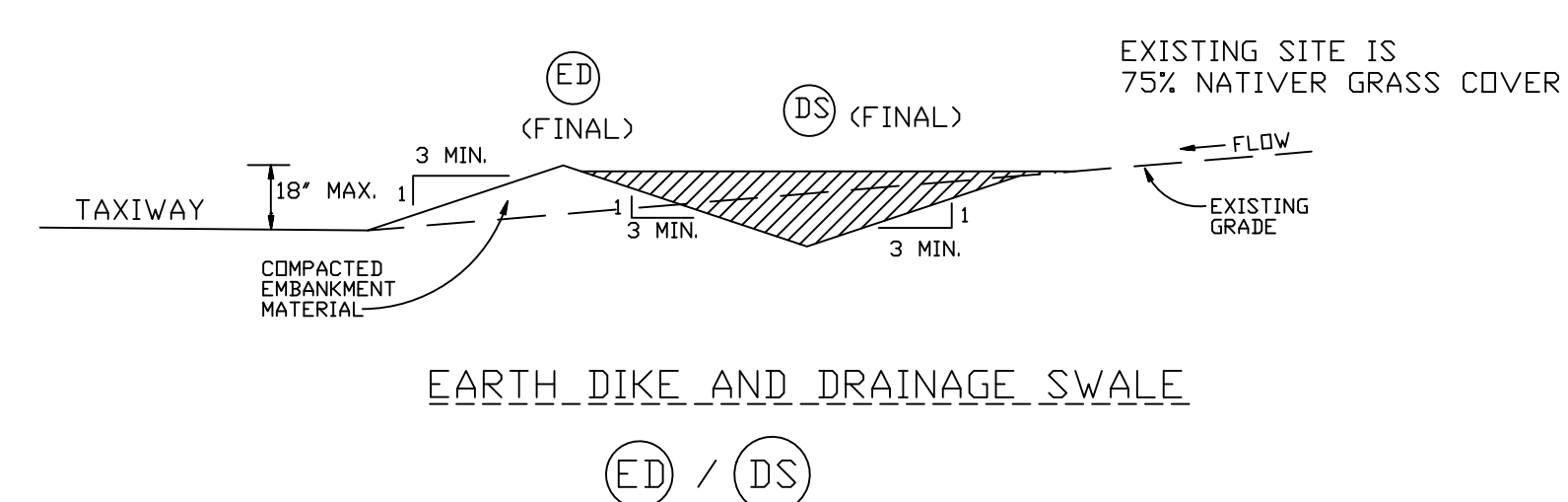
- EROSION CONTROL LEGEND:**
- IP INLET PROTECTION (INTERIM)
 - VTC VEHICLE TRACKING CONTROL (INTERIM)
 - SP STOCK PILE PROTECTION (INTERIM)
 - SSA STABILIZED STAGING AREA (INITIAL)
 - CWD CONCRETE WASHOUT (INTERIM)
 - DS DIRECTION OF RUNOFF (FINAL)



CONSTRUCTION BMP'S TO BE PROVIDED AROUND CATCH BASINS IF NEEDED (IP)

FOR RESEEDING SEE LANDSCAPE PLAN

No springs, streams or wetlands are within this project



COUNTY FILE NO. PPR 2138

DRAWN BY: D.E. WATTS DATE: 7-13-21 DWG. NO.: 20-5498-06 SURVEYED BY: DEW, ESV, 8-14-20	APPROVED BY: PROJ. NO.: DWG.:	REVISIONS 4-14-22 REVISED PER CITY COMMENTS DEW	OLIVER E. WATTS CONSULTING ENGINEER COLORADO SPRINGS	PROJECT 8140 CESSNA DRIVE LOT 7, BLOCK 1, MEADOW LAKE AIRPORT FIL. NO. 2 EL PASO COUNTY	SHIT. NAME GRADING AND EROSION CONTROL PLAN	SHIT. NO. 1 OF 5	SHEET 4 OF 10
---	-------------------------------------	---	--	---	---	---------------------	------------------

Prepared by the office of:
 Oliver E. Watts Consulting Engineer, Inc.
 614 Elkton Drive Colorado Springs, CO 80907
 719-593-0173
 olliewatts@aol.com
 Celebrating over 42 years in business

El Paso County (standalone GEC Plan):
 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 112, these construction documents will be valid for construction for a period of 2 years from the date signed by the El Paso County Engineer. If construction has not started within those 2 years, the plans will need to be resubmitted for approval, including payment of review fees at the Planning and Community Development Director's discretion.

Jennifer Irvine, PE County Engineer _____ date

Engineer's Statement (for standalone GEC Plan):
 This Grading and Erosion Control Plan was prepared under my direction and supervision and is correct to the best of my knowledge and belief. Said Plan has been prepared according to the criteria established by the County for Grading and Erosion Control Plans. I accept responsibility for any liability caused by any negligent acts, errors or omissions on my part in preparing this plan.

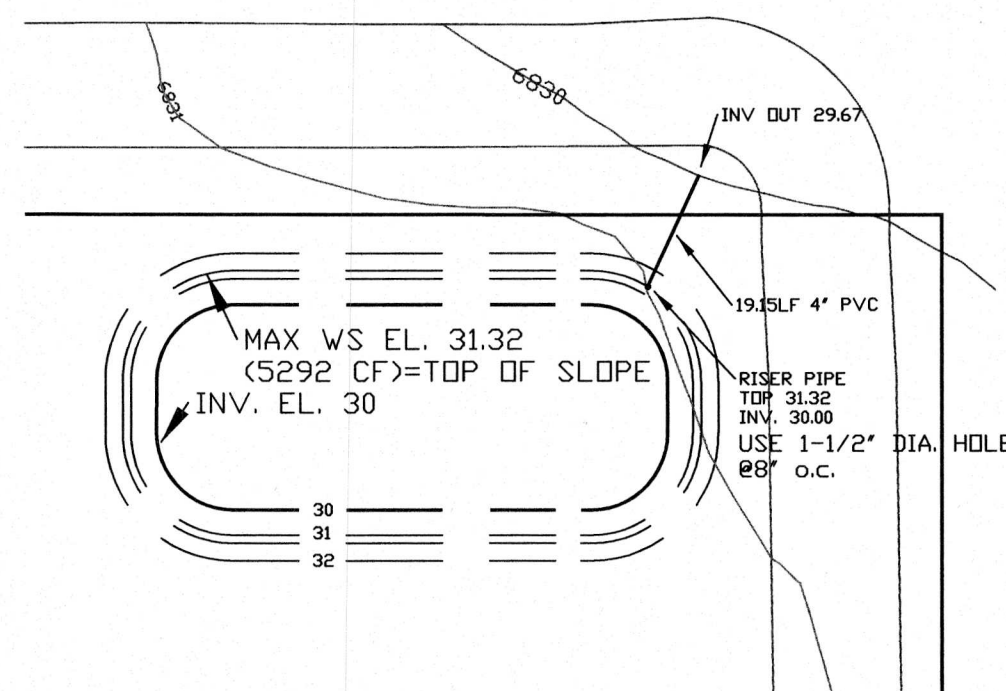
[Signature] _____ Date
 Engineer of Record Signature
 Oliver E. Watts, COLO PELS#9853
 Oliver E. Watts Consulting Engineer, Inc.
 614 Elkton Drive Colorado Springs, CO 80907
 719-593-0173
 olliewatts@aol.com

Owner's Statement (for standalone GEC Plan):
 I, the owner/developer have read and will comply with the requirements of the Grading and Erosion Control Plan.

[Signature] _____ Date
 Owner Signature
 RYAN SCHNEIDER
 5-11-2022

STANDARD NOTES FOR EL PASO COUNTY GRADING AND EROSION CONTROL PLANS

- 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.
- 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.
- A separate Stormwater Management Plan (SMWP) for this project shall be completed and an Erosion and Stormwater Quality Control Permit (ESQCP) issued prior to commencing construction. Management of the SWMP during construction is the responsibility of the designated Stormwater Manager or Certified Erosion Control Inspector. The SWMP shall be located on site at all times during construction and shall be kept up to date with work progress and changes in the field.
- Once the ESQCP is approved and a "Notice to Proceed" has been issued, the contractor may install the initial stage erosion and sediment control measures as indicated on the approved GEC. A Preconstruction Meeting between the contractor, engineer, and El Paso County will be held prior to any construction. It is the responsibility of the applicant to coordinate the meeting time and place with County staff.
- Control measures must be installed prior to commencement of activities that could contribute pollutants to stormwater. Control measures for all slopes, channels, ditches, and disturbed land areas shall be installed immediately upon completion of the disturbance.
- All temporary sediment and erosion control measures shall be maintained and remain in effective operating condition until permanent soil erosion control measures are implemented and final stabilization is established. All persons engaged in land disturbance activities shall assess the adequacy of control measures at the site and identify if changes to those control measures are needed to ensure the continued effective performance of the control measures. All changes to temporary sediment and erosion control measures must be incorporated into the Stormwater Management Plan.
- Temporary stabilization shall be implemented on disturbed areas and stockpiles where ground disturbing construction activity has permanently ceased or temporarily ceased for longer than 14 days.
- Final stabilization must be implemented at all applicable construction sites. Final stabilization is achieved when all ground disturbing activities are complete and all disturbed areas either have a uniform vegetative cover with individual plant density of 70 percent of pre-disturbance levels established or equivalent permanent alternative stabilization method is implemented. All temporary sediment and erosion control measures shall be removed upon final stabilization and before permit closure.
- All permanent stormwater management facilities shall be installed as designed in the approved plans. Any proposed changes that effect the design or function of permanent stormwater management structures must be approved by the ECM Administrator prior to implementation.
- Earth disturbances shall be conducted in such a manner so as to effectively minimize accelerated soil erosion and resulting sedimentation. All disturbances shall be designed, constructed, and completed so that the exposed area of any disturbed land shall be limited to the shortest practical period of time. Pre-existing vegetation shall be protected and maintained within 50 horizontal feet of waters of the state unless shown to be infeasible and specifically requested and approved.
- Compaction of soil must be prevented in areas designated for infiltration control measures or where final stabilization will be achieved by vegetative cover. Areas designated for infiltration control measures shall also be protected from sedimentation during construction until final stabilization is achieved. If compaction prevention is not feasible due to site constraints, all areas designated for infiltration and vegetation control measures must be loosened prior to installation of the control measure(s).
- Any temporary or permanent facility designed and constructed for the conveyance of stormwater around, through, or from the earth disturbance area shall be a stabilized conveyance designed to minimize erosion and the discharge of sediment off site.
- Concrete wash water shall be contained and disposed of in accordance with the SWMP. No wash water shall be discharged to or allowed to enter State Waters, including any surface or subsurface storm drainage system or facilities. Concrete washouts shall not be located in an area where shallow groundwater may be present, or within 50 feet of a surface water body, creek or stream.
- During dewatering operations of uncontaminated groundwater may be discharged on site, but shall not leave the site in the form of surface runoff unless an approved State dewatering permit is in place.
- Erosion control blanketing or other protective covering shall be used on slopes steeper than 3:1.
- 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.
- Waste materials shall not be temporarily placed or stored in the street, alley, or other public way, unless in accordance with an approved Traffic Control Plan. Control measures may be required by El Paso County Engineering if deemed necessary, based on specific conditions and circumstances.
- Tracking of soils and construction debris off-site shall be minimized. Materials tracked off-site shall be cleaned up and properly disposed of immediately.
- The owner/developer shall be responsible for the removal of all construction debris, dirt, trash, rock, sediment, soil, and sand that may accumulate in roads, storm drains and other drainage conveyance systems and stormwater appurtenances as a result of site development.
- 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.
- No chemical(s) having the potential to be released in stormwater are to be stored or used onsite unless permission for the use of such chemical(s) is granted in writing by the ECM Administrator. In granting approval for the use of such chemical(s), special conditions and monitoring may be required.
- Bulk storage of allowed petroleum products or other allowed liquid chemicals in excess of 55 gallons shall require adequate secondary containment protection to contain all spills onsite and to prevent any spilled materials from entering State Waters, any surface or subsurface storm drainage system or other facilities.
- No person shall cause the impediment of stormwater flow in the curb and gutter or ditch except with approved sediment control measures.
- Owner/developer and their agents 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 of the Land Development Code, DCM Volume II and the ECM Appendix I. All appropriate permits must be obtained by the contractor prior to construction (1041, NPDES, Floodplain, 404, Fugitive dust, etc.). In the event of conflicts between these requirements and other laws, rules, or regulations of other Federal, State, local, or County agencies, the most restrictive laws, rules, or regulations shall apply.
- All construction traffic must enter/exit the site only at approved construction access points.
- Prior to construction the Permittee shall verify the location of existing utilities.
- A water source shall be available on site during earthwork operations and shall be utilized as required to minimize dust from earthwork equipment and wind.
- The soils report for this site has been prepared by ENTECH ENGINEERING and shall be considered a part of these plans.
- At least ten (10) days prior to the anticipated start of construction, for projects that will disturb one (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
- No batch plants will be utilized on site.



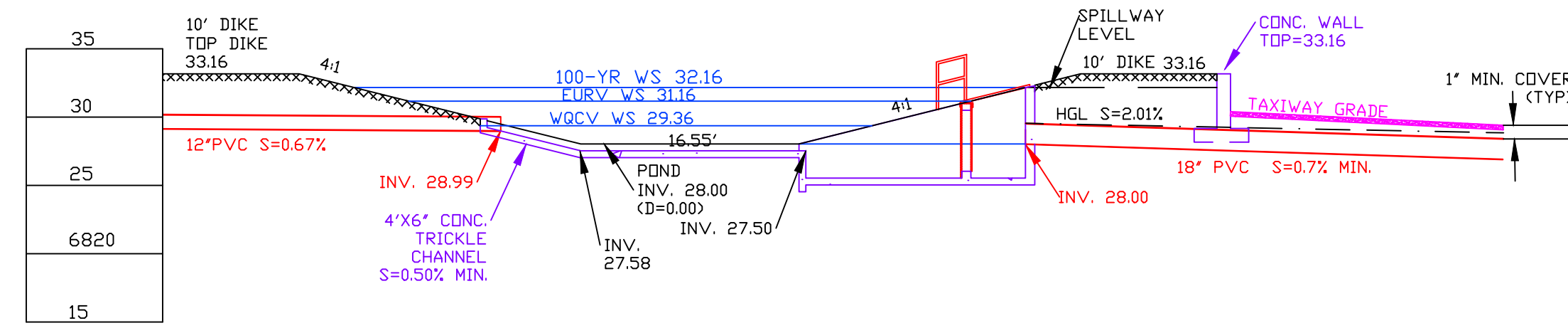
TEMPORARY SILTATION BASIN DETAILS

1"=30'

COUNTY FILE NO. PPR 2138

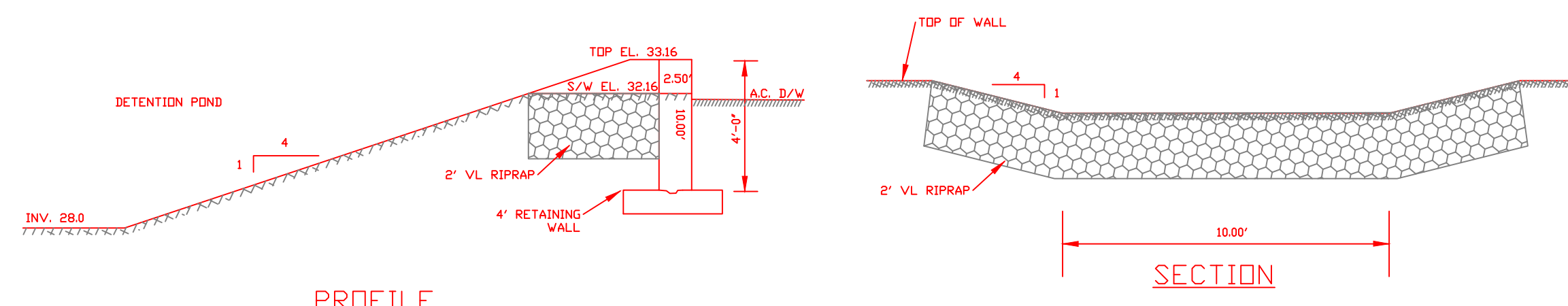
DRAWN BY: D.E. WATTS DATE: 7-13-21 DWG. NO.: 20-5498-07 SURVEYED BY: DEW, ESV, 8-14-20	APPROVED BY: PROJ. NO.: DWG.:	REVISIONS:	OLIVER E. WATTS CONSULTING ENGINEER COLORADO SPRINGS	PROJECT: 8140 CESSNA DRIVE LOT 7, BLOCK 1, MEADOW LAKE AIRPORT FIL. NO. 2 EL PASO COUNTY	SHT. NAME: EROSION CONTROL DETAILS	SHT. NO.: 2 OF 5	SHEET 5 OF 10
---	-------------------------------------	------------	--	---	--	---------------------	------------------

Prepared by the office of:
 Oliver E. Watts Consulting Engineer Inc.
 614 Elkton Drive Colorado Springs, CO 80907
 719-593-0173
 olliewatts@aol.com
 Celebrating over 42 years in business



OUTLET WORKS SECTION

1"=10'

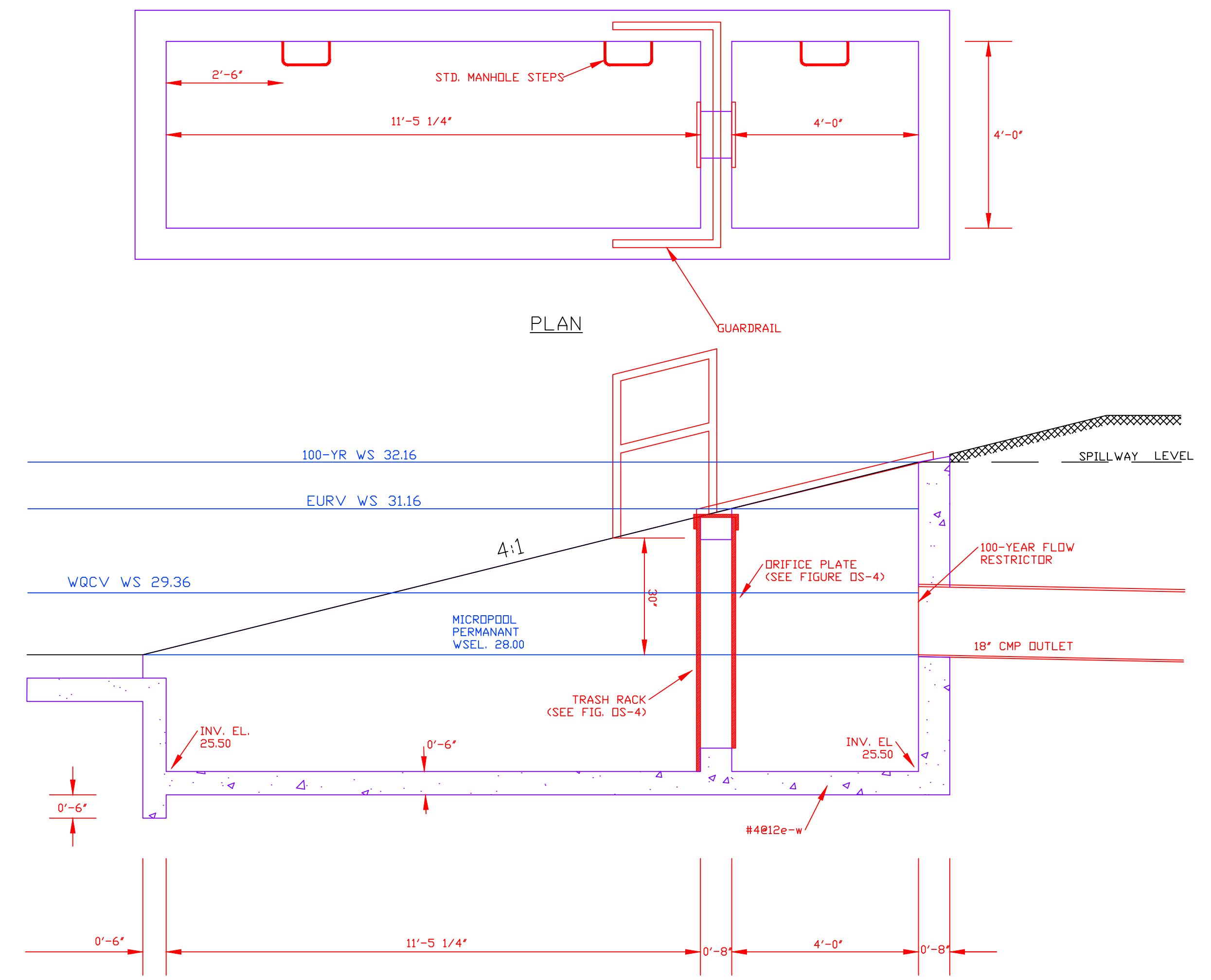


PROFILE

SECTION

SPILLWAY DETAILS

1/4"=1'-0"



PLAN

PROFILE

OUTLET WORKS

1/2"=1'-0"

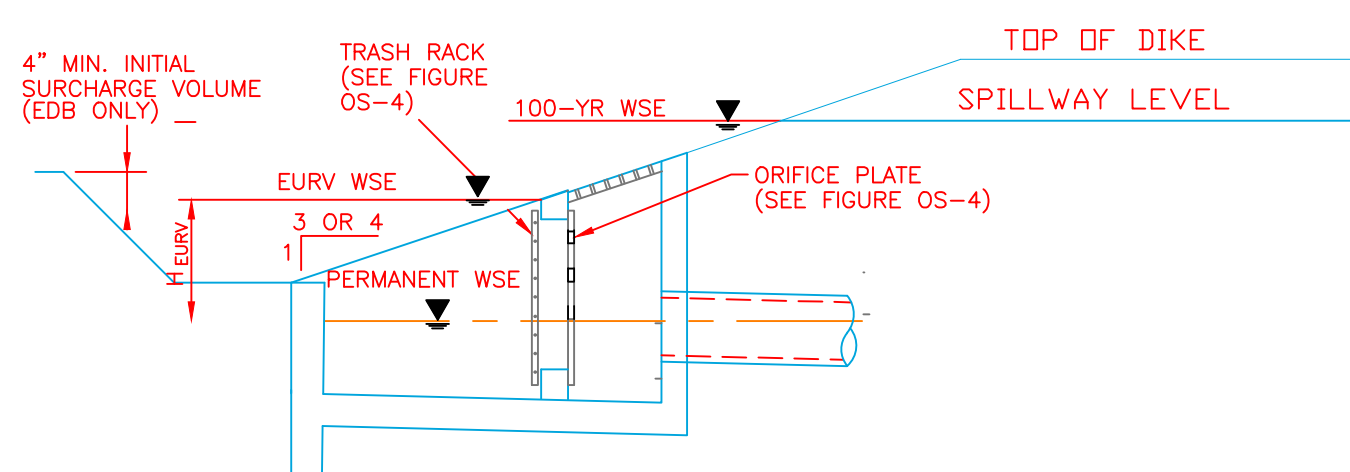
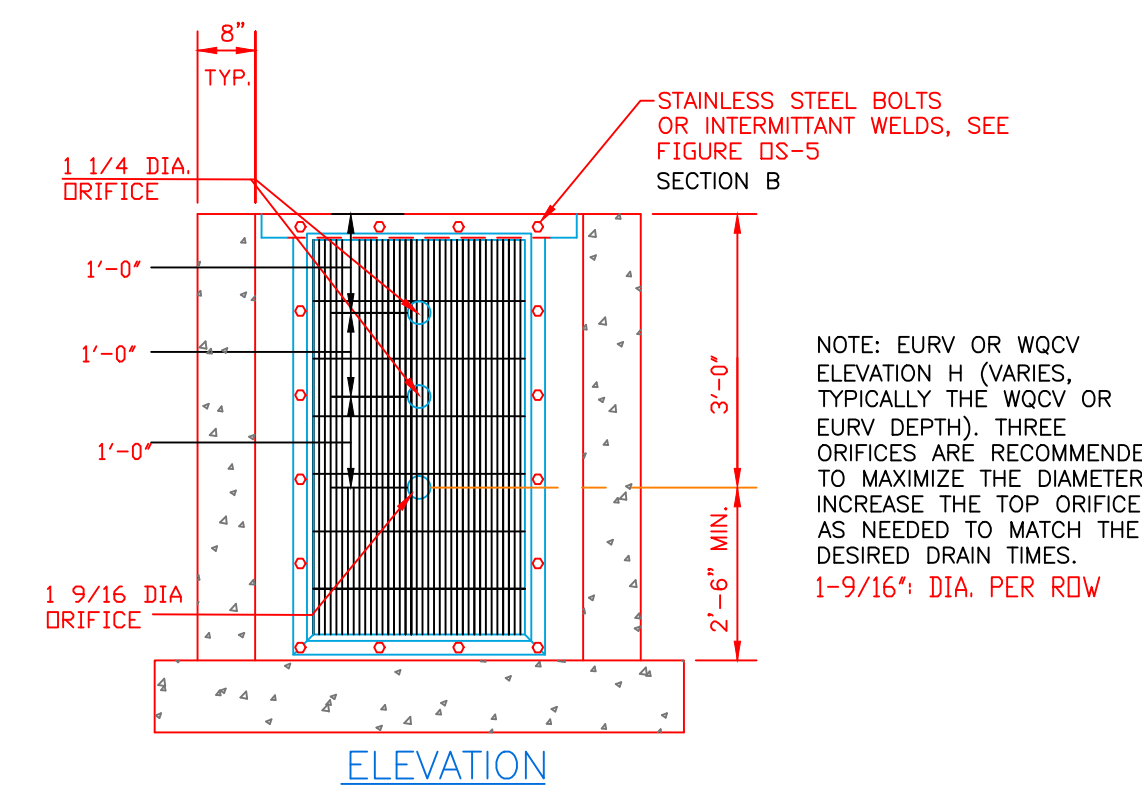


FIGURE OS-2 TYPICAL OUTLET STRUCTURE FOR FULL SPECTRUM DETENTION



ORIFICE PLATE NOTES:

1. PROVIDE CONTINUOUS NEOPRENE GASKET MATERIAL BETWEEN THE ORIFICE PLATE AND CONCRETE.
2. BOLT PLATE TO CONCRETE 12" ON CENTER MAX.

EURV AND WQCV TRASH RACKS:

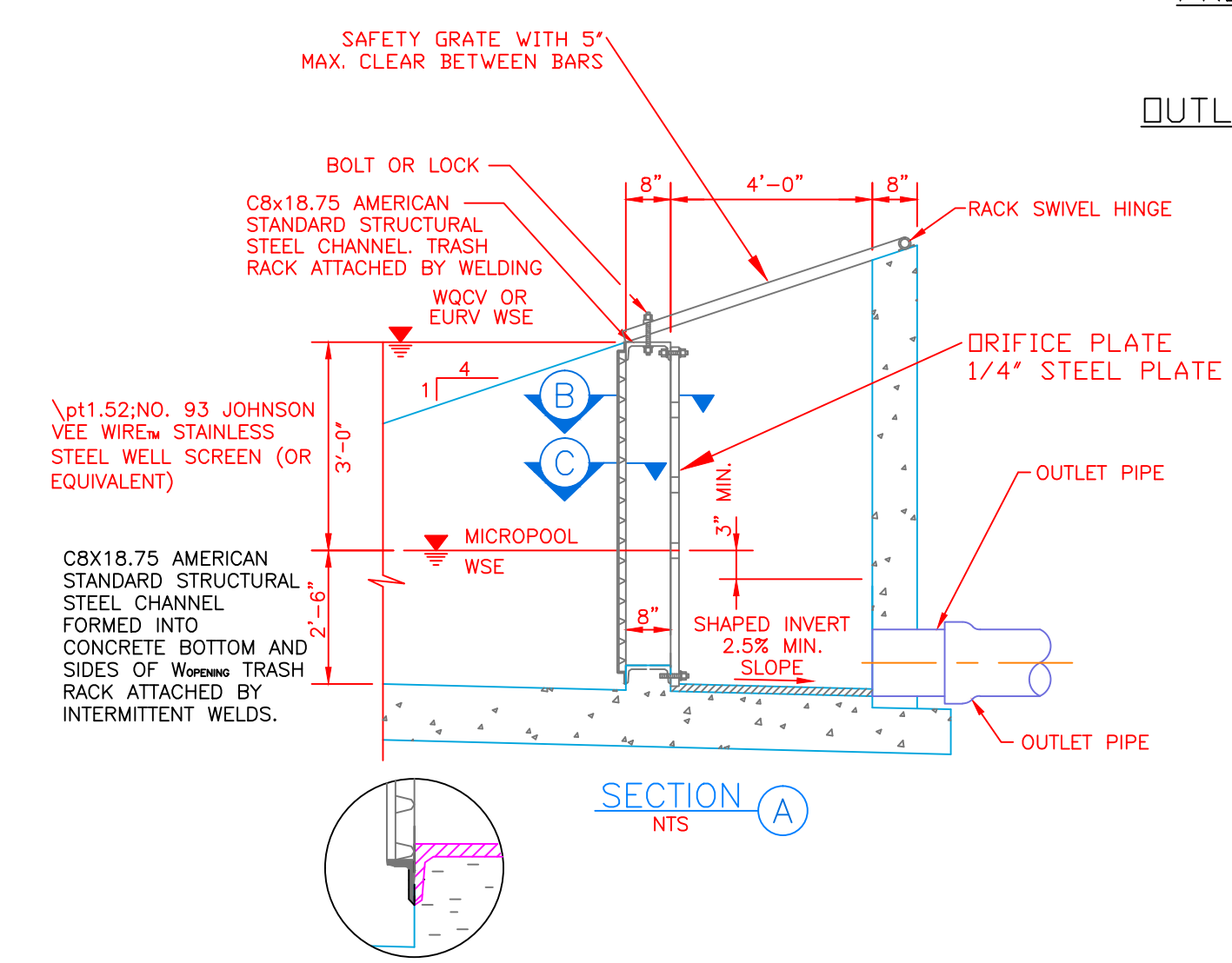
1. WELL-SCREEN TRASH RACKS SHALL BE STAINLESS STEEL AND SHALL BE ATTACHED BY INTERMITTENT WELDS ALONG THE EDGE OF THE MOUNTING FRAME.
2. BAR GATE TRASH RACKS SHALL BE ALUMINUM AND SHALL BE BOLTED USING STAINLESS STEEL HARDWARE.
3. TRASH RACK OPEN AREAS ARE FOR SPECIFIED TRASH RACK MATERIALS. TOTAL TRASH RACK SIZE MAY NEED TO BE ADJUSTED FOR MATERIALS HAVING DIFFERENT OPEN AREA/GROSS AREA RATIO (R VALUE).
4. STRUCTURAL DESIGN OF TRASH RACKS SHALL BE BASED ON FULL HYDROSTATIC HEAD WITH ZERO HEAD DOWNSTREAM OF THE RACK.

OVERFLOW SAFETY GRATES:

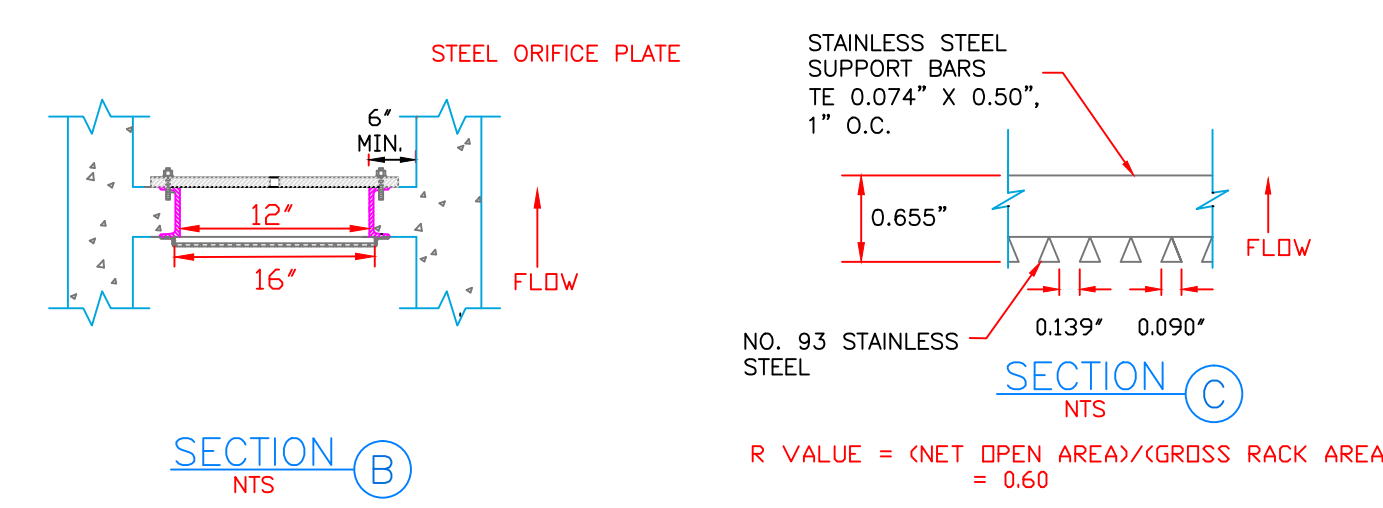
1. ALL SAFETY GRATES SHALL BE MOUNTED USING STAINLESS STEEL HARDWARE AND PROVIDED WITH HINGED AND LOCKABLE OR BOLTABLE ACCESS PANELS.
2. SAFETY GRATES SHALL BE STAINLESS STEEL, ALUMINUM, OR STEEL. STEEL GRATES SHALL BE HOT DIP GALVANIZED AND MAY BE HOT POWDER COATED AFTER GALVANIZING.
3. SAFETY GRATES SHALL BE DESIGNED SUCH THAT THE DIAGONAL DIMENSION OF EACH OPENING IS SMALLER THAN THE DIAMETER OF THE OUTLET PIPE.
4. STRUCTURAL DESIGN OF SAFETY GRATES SHALL BE BASED ON FULL HYDROSTATIC HEAD WITH ZERO HEAD DOWNSTREAM OF THE RACK.

FIGURE OS-4 ORIFICE PLATE AND TRASH RACK DETAILS AND NOTES

NTS



SECTION A



SECTION B

SECTION C

FIGURE OS-5 TYPICAL OUTLET STRUCTURE WITH WELL SCREEN TRASH RACK

DRAWN BY: O.E. WATTS
DATE: 11-8-21
DWG. NO.: 20-5498-08

APPROVED BY:
PROJ. NO.:
DWG.:

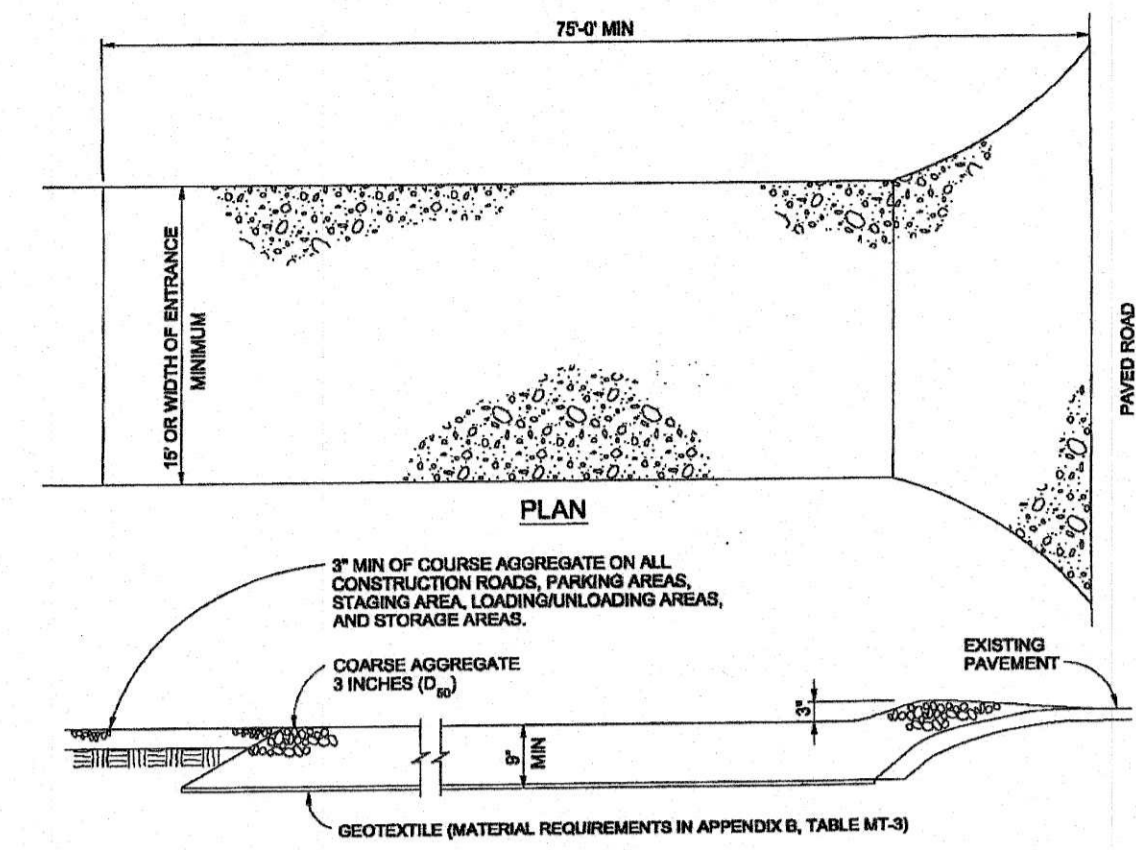
REVISIONS 4-14-22 REVISED PER CITY REVIEW COMMENTS OEW

OLIVER E. WATTS
CONSULTING ENGINEER
COLORADO SPRINGS

PROJECT 8140 CESSNA DRIVE
LOT 7, BLOCK 1, MEADOW LAKE
AIRPORT FILING NO. 2
EL PASO COUNTY

SHT. NO. 3 OF 5
EDB OUTLET DETAILS

SHEET 6 OF 10



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 AREAS ARE TO BE BUILT TO CONFORM TO SITE GRADES, BUT SHOULD NOT HAVE STEEP SLOPES OR ROAD GRADES THAT ARE EXCESSIVELY STEEP.

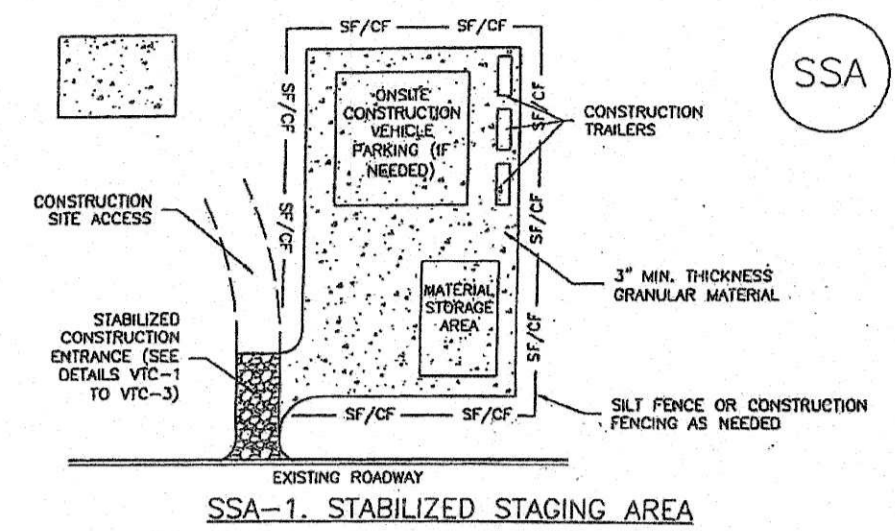
MAINTENANCE REQUIREMENTS

1. REGULAR INSPECTIONS ARE TO BE MADE OF ALL STABILIZED AREAS, ESPECIALLY AFTER STORM EVENTS.
2. STONES ARE TO BE REPLACED PERIODICALLY AND WHEN REPAIR IS NECESSARY.
3. SEDIMENT TRACKED ONTO PAVED ROADS IS TO BE REMOVED ONLY 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.
6. 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

Stabilized Staging Area (SSA) SM-6



SSA-1. STABILIZED STAGING AREA

STABILIZED STAGING AREA INSTALLATION NOTES

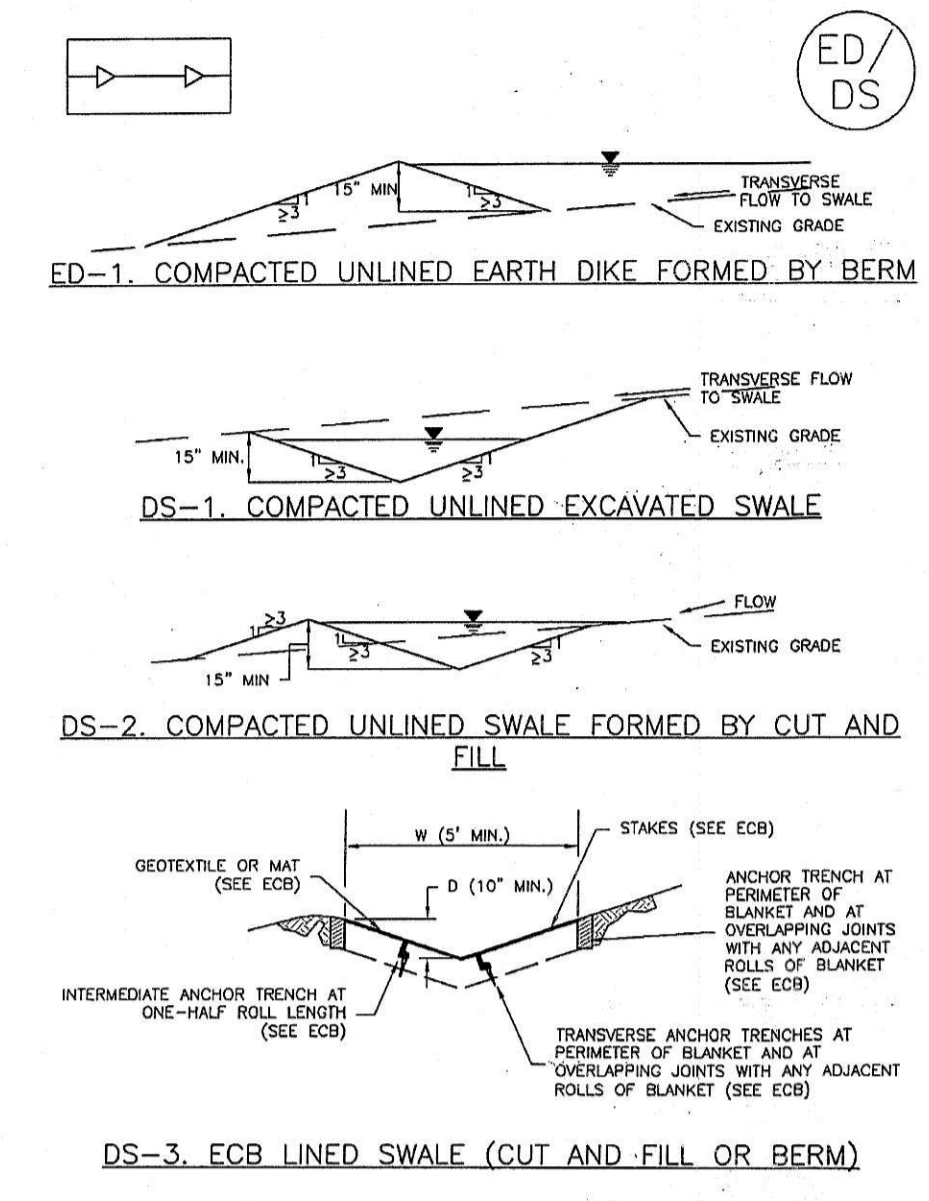
1. SEE PLAN VIEW FOR:
 - LOCATION OF STAGING AREAS.
 - CONSTRUCTION MAY ADJUST LOCATION AND SIZE OF STAGING AREA WITH APPROVAL FROM THE LOCAL JURISDICTION.
2. STABILIZED STAGING AREA SHOULD BE APPROPRIATE FOR THE NEEDS OF THE SITE. OVERSIZING RESULTS IN A LARGER AREA TO STABILIZE FOLLOWING CONSTRUCTION.
3. STAGING AREA SHALL BE STABILIZED PRIOR TO OTHER OPERATIONS ON THE SITE.
4. THE STABILIZED STAGING AREA SHALL CONSIST OF A MINIMUM 3" THICK GRANULAR MATERIAL.
5. UNLESS OTHERWISE SPECIFIED BY LOCAL JURISDICTION, ROCK SHALL CONSIST OF DOT SECT. #703, #40#10 #3 COARSE AGGREGATE OR 8" (MINUS) ROCK.
6. ADDITIONAL PERIMETER BMPs MAY BE REQUIRED INCLUDING BUT NOT LIMITED TO SILT FENCE AND CONSTRUCTION FENCING.

STABILIZED STAGING AREA MAINTENANCE NOTES

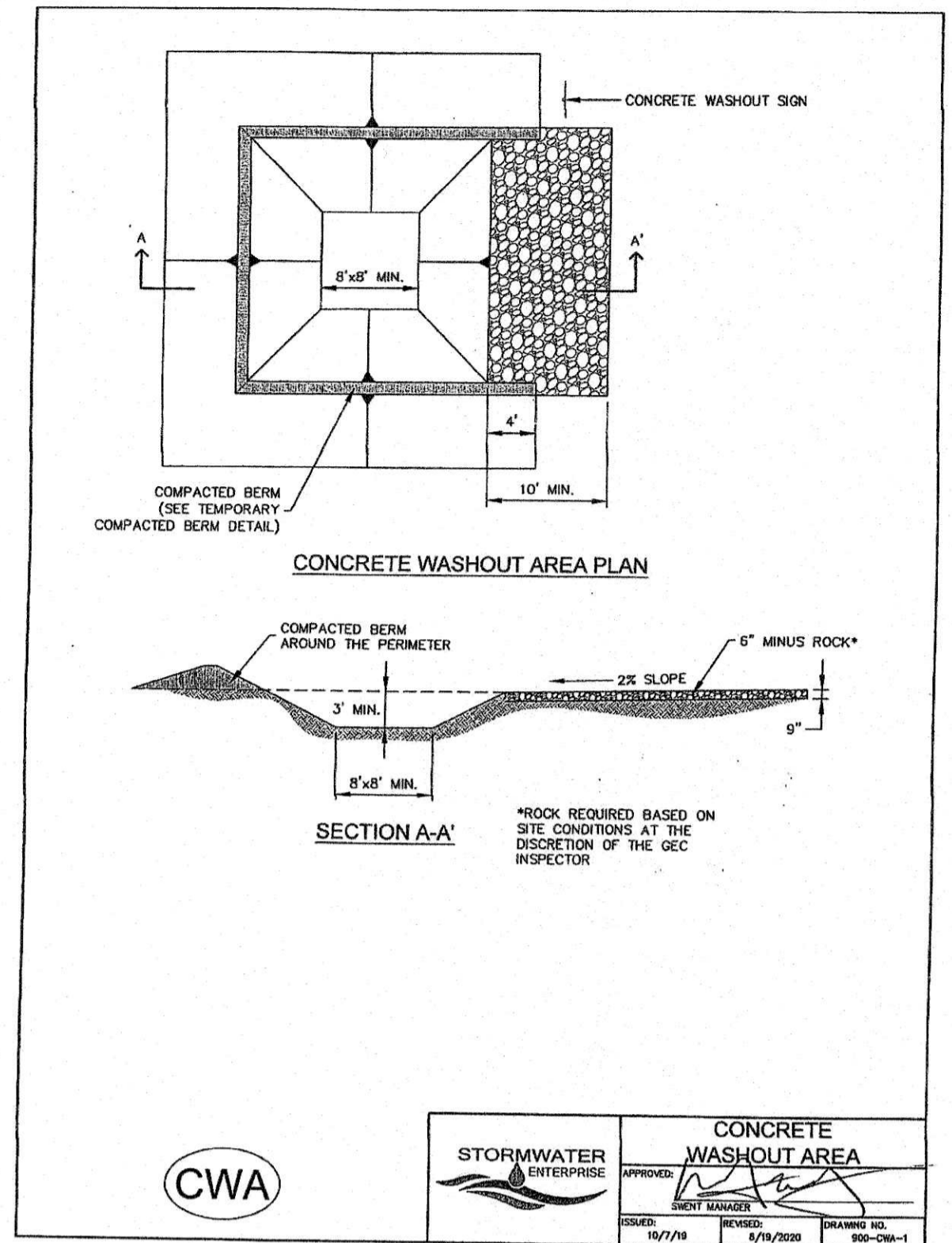
1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.
2. FREQUENT OBSERVATIONS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

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

Earth Dikes and Drainage Swales (ED/DS) EC-10



November 2010 Urban Drainage and Flood Control District
Urban Storm Drainage Criteria Manual Volume 3 ED/DS-3



CONCRETE WASHOUT AREA PLAN

SECTION A-A

*ROCK REQUIRED BASED ON SITE CONDITIONS AT THE DISCRETION OF THE GEC INSPECTOR

CWA

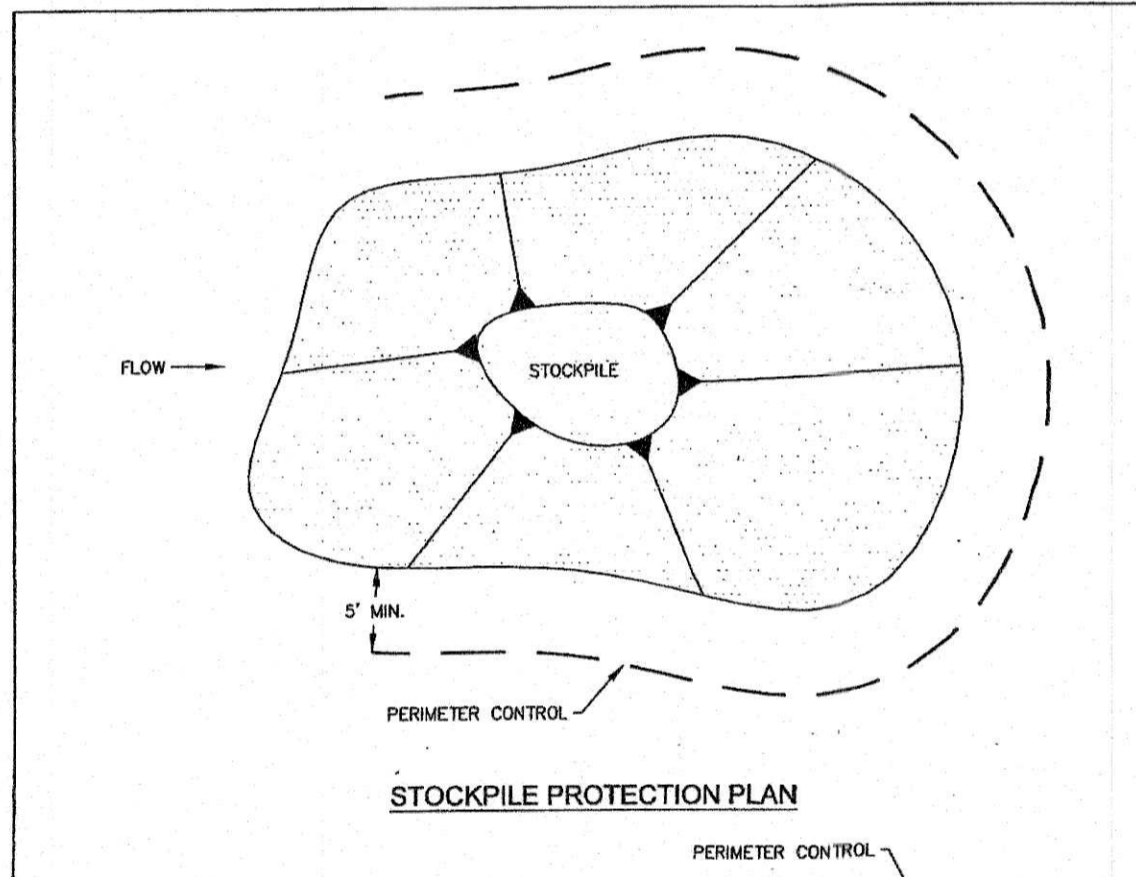
STORMWATER ENTERPRISE

CONCRETE WASHOUT AREA

APPROVED: [Signature] DATE: 10/17/10

DESIGNED: [Signature] DATE: 8/19/2009

DRAWING NO. 900-CW-1



STOCKPILE PROTECTION PLAN

STOCKPILE PROTECTION ELEVATION

INSTALLATION NOTES

1. INSTALL PERIMETER CONTROL AROUND STOCKPILE ON DOWNGRADIENT SIDE. PERIMETER CONTROL MUST BE SUITABLE TO SITE CONDITIONS AND INSTALLED ACCORDING TO THE RELEVANT DETAIL.
2. FOR 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.

MAINTENANCE NOTES

1. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN CONTROL MEASURES IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.
2. IF PERIMETER CONTROLS MUST BE MOVED TO ACCESS STOCKPILE, REPLACE PERIMETER CONTROLS BY THE END OF THE WORK DAY.
3. ACCUMULATED SEDIMENT MUST BE REMOVED ACCORDING TO PERIMETER CONTROL DETAIL.

SP

STORMWATER ENTERPRISE

STOCKPILE PROTECTION

APPROVED: [Signature] DATE: 10/17/10

DESIGNED: [Signature] DATE: 8/19/2009

DRAWING NO. 900-SP

Stabilized Staging Area (SSA) SM-6

STABILIZED STAGING AREA MAINTENANCE NOTES

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

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

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

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

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

Earth Dikes and Drainage Swales (ED/DS) EC-10

EARTH DIKE AND DRAINAGE SWALE 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. SWALES SHALL REMAIN IN PLACE UNTIL THE END OF CONSTRUCTION; IF APPROVED BY LOCAL JURISDICTION, SWALES MAY BE LEFT IN PLACE.
5. WHEN A SWALE IS REMOVED, THE DISTURBED AREA SHALL BE COVERED WITH TOPSOIL, SEEDS, AND MULCH OR OTHERWISE STABILIZED IN A MANNER APPROVED BY LOCAL JURISDICTION.

(DETAILS ADAPTED FROM DOUGLAS COUNTY, COLORADO AND THE CITY OF COLORADO SPRINGS, COLORADO, NOT AVAILABLE IN AUTOCAD)

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

ED/DS-4 Urban Drainage and Flood Control District
Urban Storm Drainage Criteria Manual Volume 3 November 2010

INSTALLATION NOTES

1. SEE PLAN VIEW FOR:
 - LOCATION OF CONCRETE WASHOUT AREA
 - LOCATE AT LEAST 50' AWAY FROM STATE WATERS MEASURED HORIZONTALLY.
 - AN IMPERMEABLE LINER (16 MIL MINIMUM THICKNESS) IS REQUIRED IF CONCRETE WASH AREA IS LOCATED WITHIN 400' OF STATE WATERS OR 1000' OF WELLS OR DRINKING WATER SOURCES.
 - DO NOT LOCATE IN AREAS WHERE SHALLOW GROUNDWATER MAY BE PRESENT.
 - THE CONCRETE WASH AREA SHALL BE INSTALLED PRIOR TO CONCRETE PLACEMENT ON SITE.
 - CONCRETE WASH AREA SHALL INCLUDE A FLAT SUBSURFACE PIT THAT IS AT LEAST 8' BY 8'.
 - BERM SURROUNDING SIDES AND BACK OF CONCRETE WASH AREA SHALL HAVE A MINIMUM HEIGHT OF 2 FEET.
 - CONCRETE WASH AREA ENTRANCE SHALL BE SLOPED 2% TOWARDS THE CONCRETE WASH AREA.
 - SIGNS SHALL BE PLACED AT THE CONCRETE WASH AREA.
 - USE EXCAVATED MATERIAL FOR PERIMETER BERM CONSTRUCTION.

MAINTENANCE NOTES

1. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN CONTROL MEASURES IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.
2. THE CONCRETE WASH AREA SHALL BE REPAIRED, CLEANED, OR ENLARGED AS NECESSARY TO MAINTAIN CAPACITY FOR CONCRETE WASTE. CONCRETE MATERIALS ACCUMULATED IN THE PIT SHALL BE REMOVED ONCE THE MATERIALS HAVE REACHED A DEPTH OF 2/3 THE HEIGHT OF THE CONCRETE WASH AREA.
3. 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.
4. THE CONCRETE WASH AREA SHALL REMAIN IN PLACE UNTIL ALL CONCRETE FOR THE PROJECT IS PLACED.
5. PERMANENTLY STABILIZE AREA AFTER CONCRETE WASH AREA IS REMOVED.

CWA

STORMWATER ENTERPRISE

CONCRETE WASHOUT AREA

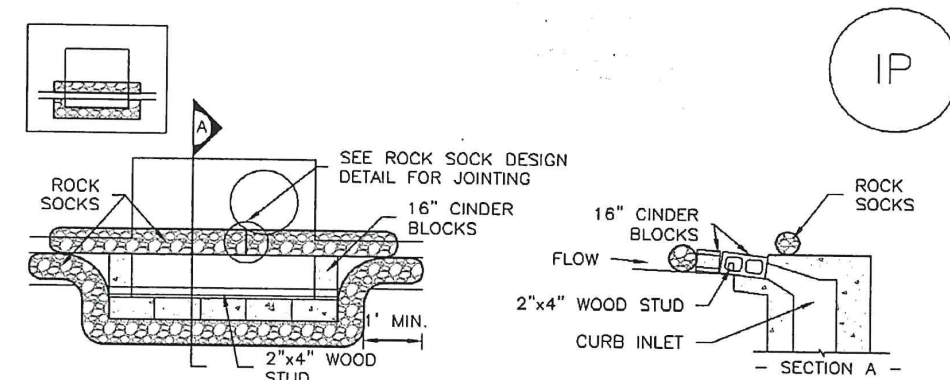
APPROVED: [Signature] DATE: 10/17/10

DESIGNED: [Signature] DATE: 8/19/2009

DRAWING NO. 900-CW-2

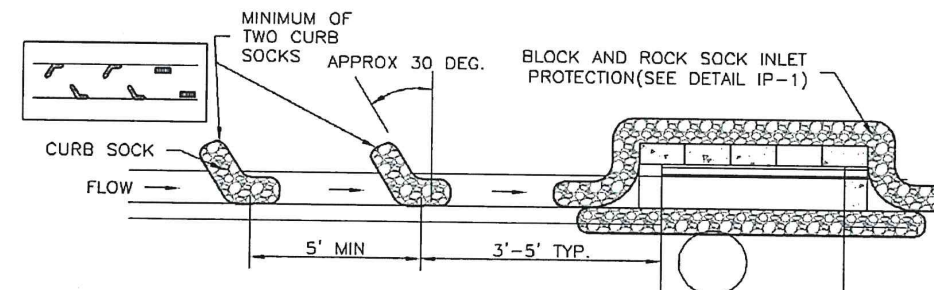
Prepared by the Office of:
Oliver E. Watts, Consulting Engineer, Inc.
614 Elkton Drive, Colorado Springs, CO 80907
719-593-0173
oliewatts@aol.com

DRAWN BY: DE. WATTS	APPROVED BY:	REVISIONS:	PROJECT:	SHT. NAME:	SHT. NO.:
DATE:	PRD. NO.:		OLIVER E. WATTS CONSULTING ENGINEER COLORADO SPRINGS	EROSION CONTROL DETAILS	4 OF 5
DWG. NO.:	DWG.:		COLORADO SPRINGS		SHEET 7 OF 10



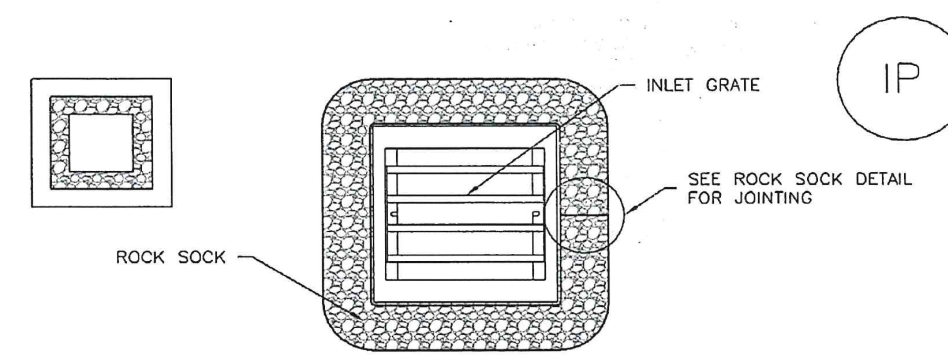
IP-1. BLOCK AND ROCK SOCK SUMP OR ON GRADE INLET PROTECTION

- BLOCK AND CURB SOCK INLET PROTECTION INSTALLATION NOTES**
- SEE ROCK SOCK DESIGN DETAIL FOR INSTALLATION REQUIREMENTS.
 - CONCRETE "CINDER" BLOCKS SHALL BE LAID ON THEIR SIDES AROUND THE INLET IN A SINGLE ROW, ABUTTING ONE ANOTHER WITH THE OPEN END FACING AWAY FROM THE CURB.
 - GRIVEL BAGS SHALL BE PLACED AROUND CONCRETE BLOCKS, CLOSELY ABUTTING ONE ANOTHER AND JOINTED TOGETHER IN ACCORDANCE WITH ROCK SOCK DESIGN DETAIL.



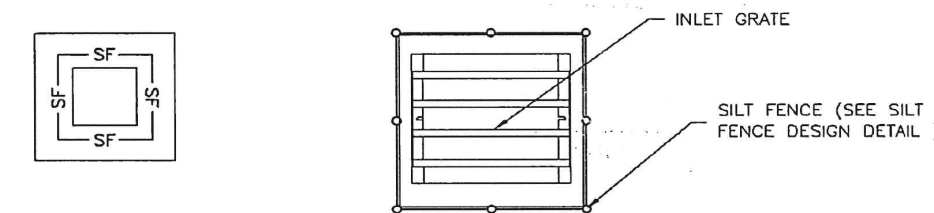
IP-2. CURB ROCK SOCKS UPSTREAM OF INLET PROTECTION

- CURB ROCK SOCK INLET PROTECTION INSTALLATION NOTES**
- SEE ROCK SOCK DESIGN DETAIL INSTALLATION REQUIREMENTS.
 - PLACEMENT OF THE SOCK SHALL BE APPROXIMATELY 30 DEGREES FROM PERPENDICULAR IN THE OPPOSITE DIRECTION OF FLOW.
 - SOCKS ARE TO BE FLUSH WITH THE CURB AND SPACED A MINIMUM OF 5 FEET APART.
 - AT LEAST TWO CURB SOCKS IN SERIES ARE REQUIRED UPSTREAM OF ON-GRADE INLETS.



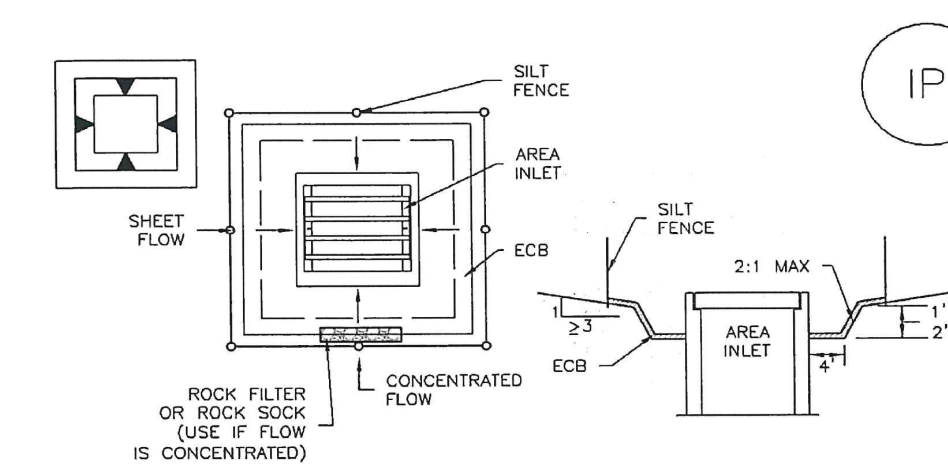
IP-3. ROCK SOCK SUMP/AREA INLET PROTECTION

- ROCK SOCK SUMP/AREA INLET PROTECTION INSTALLATION NOTES**
- SEE ROCK SOCK DESIGN DETAIL FOR INSTALLATION REQUIREMENTS.
 - STRAW WATTLES/SEDIMENT CONTROL LOGS MAY BE USED IN PLACE OF ROCK SOCKS FOR INLETS IN PERVIOUS AREAS. INSTALL PER SEDIMENT CONTROL LOG DETAIL.



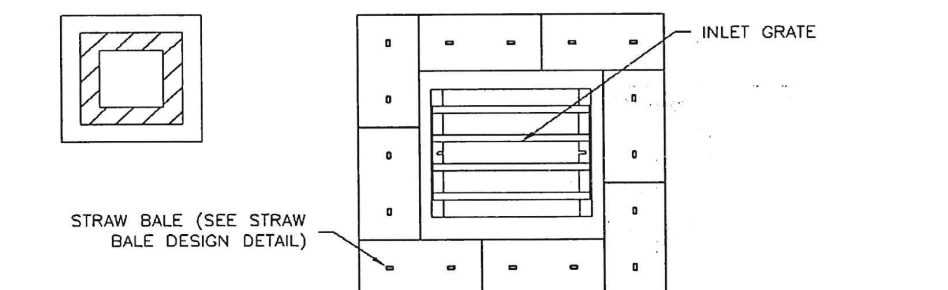
IP-4. SILT FENCE FOR SUMP INLET PROTECTION

- SILT FENCE INLET PROTECTION INSTALLATION NOTES**
- SEE SILT FENCE DESIGN DETAIL FOR INSTALLATION REQUIREMENTS.
 - POSTS SHALL BE PLACED AT EACH CORNER OF THE INLET AND AROUND THE EDGES AT A MAXIMUM SPACING OF 3 FEET.
 - STRAW WATTLES/SEDIMENT CONTROL LOGS MAY BE USED IN PLACE OF SILT FENCE FOR INLETS IN PERVIOUS AREAS. INSTALL PER SEDIMENT CONTROL LOG DETAIL.



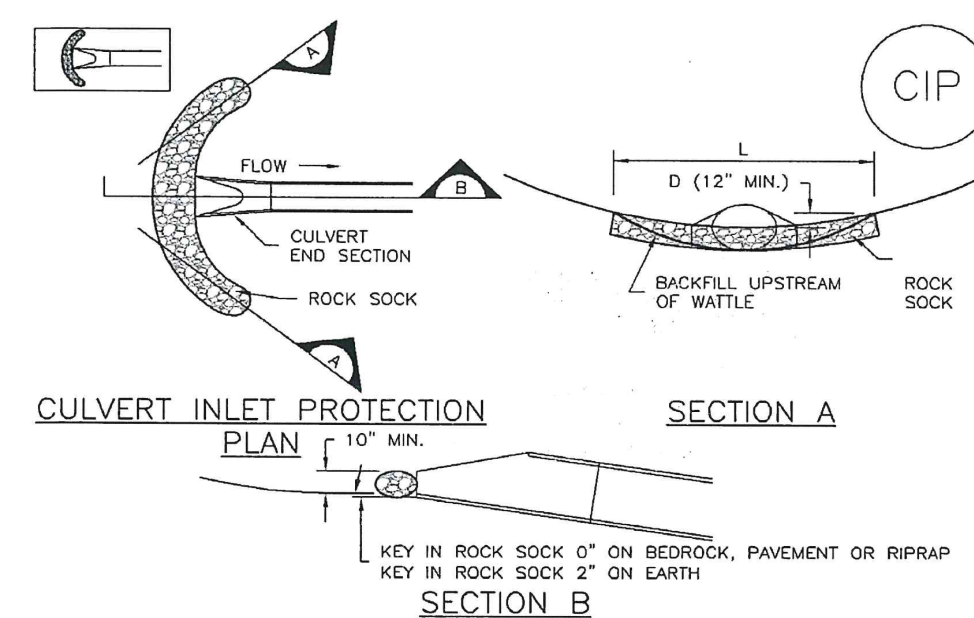
IP-5. OVEREXCAVATION INLET PROTECTION

- OVEREXCAVATION INLET PROTECTION INSTALLATION NOTES**
- THIS FORM OF INLET PROTECTION IS PRIMARILY APPLICABLE FOR SITES THAT HAVE NOT YET REACHED FINAL GRADE AND SHOULD BE USED ONLY FOR INLETS WITH A RELATIVELY SMALL CONTRIBUTING DRAINAGE AREA.
 - WHEN USING FOR CONCENTRATED FLOWS, SHAPE BASIN IN 2:1 RATIO WITH LENGTH ORIENTED TOWARDS DIRECTION OF FLOW.
 - SEDIMENT MUST BE PERIODICALLY REMOVED FROM THE OVEREXCAVATED AREA.



IP-6. STRAW BALE FOR SUMP INLET PROTECTION

- STRAW BALE BARRIER INLET PROTECTION INSTALLATION NOTES**
- SEE STRAW BALE DESIGN DETAIL FOR INSTALLATION REQUIREMENTS.
 - BALES SHALL BE PLACED IN A SINGLE ROW AROUND THE INLET WITH ENDS OF BALES TIGHTLY ABUTTING ONE ANOTHER.



CIP-1. CULVERT INLET PROTECTION

- CULVERT 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 THE CULVERT SHALL BE REMOVED WHEN THE SEDIMENT DEPTH IS $\frac{1}{2}$ THE HEIGHT OF THE ROCK SOCK.
 - CULVERT INLET PROTECTION SHALL REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS PERMANENTLY STABILIZED AND APPROVED BY THE LOCAL JURISDICTION.
- (DETAILS ADAPTED FROM 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.

- 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 $\frac{1}{2}$ 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, SEEDS 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.

Prepared by the Office of:
Oliver E. Watts, Consulting Engineer, Inc.
614 Elkton Drive, Colorado Springs, CO 80907
719-593-0173
oliewatts@aol.com

DRAWN BY: O.E. WATTS	APPROVED BY:
DATE:	PRJ. NO.:
DWG. NO.:	DWG.:

REVISIONS

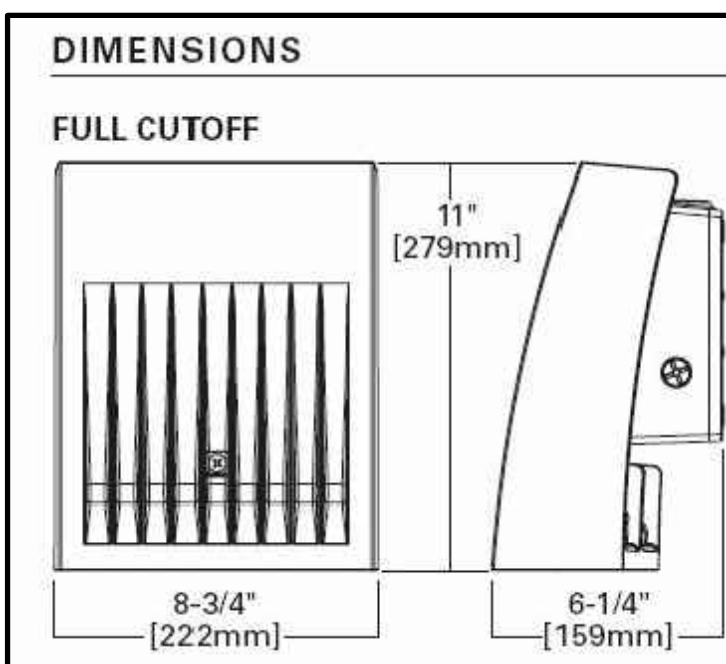
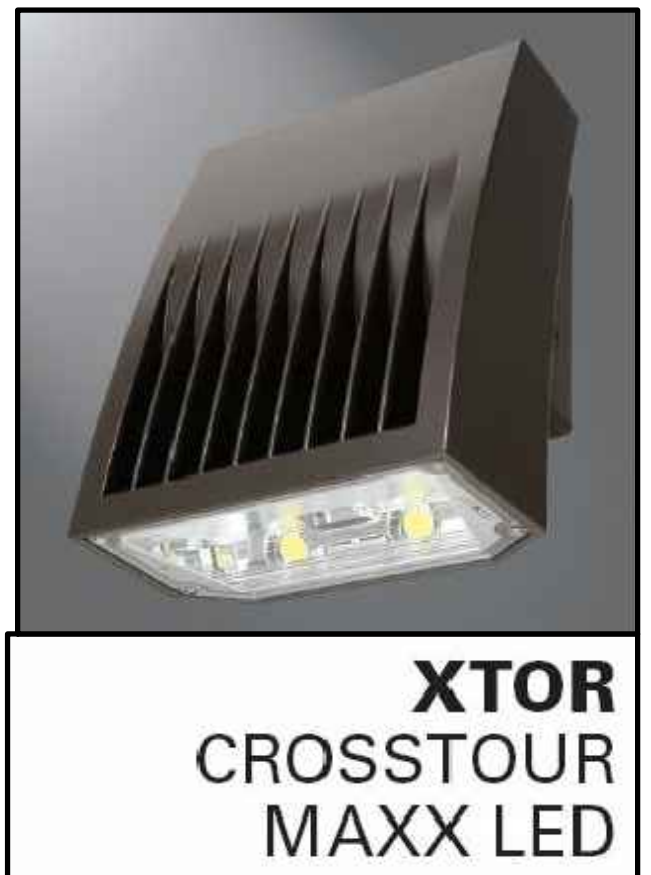
OLIVER E. WATTS
CONSULTING ENGINEER
COLORADO SPRINGS

PROJECT	COLORADO SPRINGS
SHT. NAME	EROSION CONTROL DETAILS

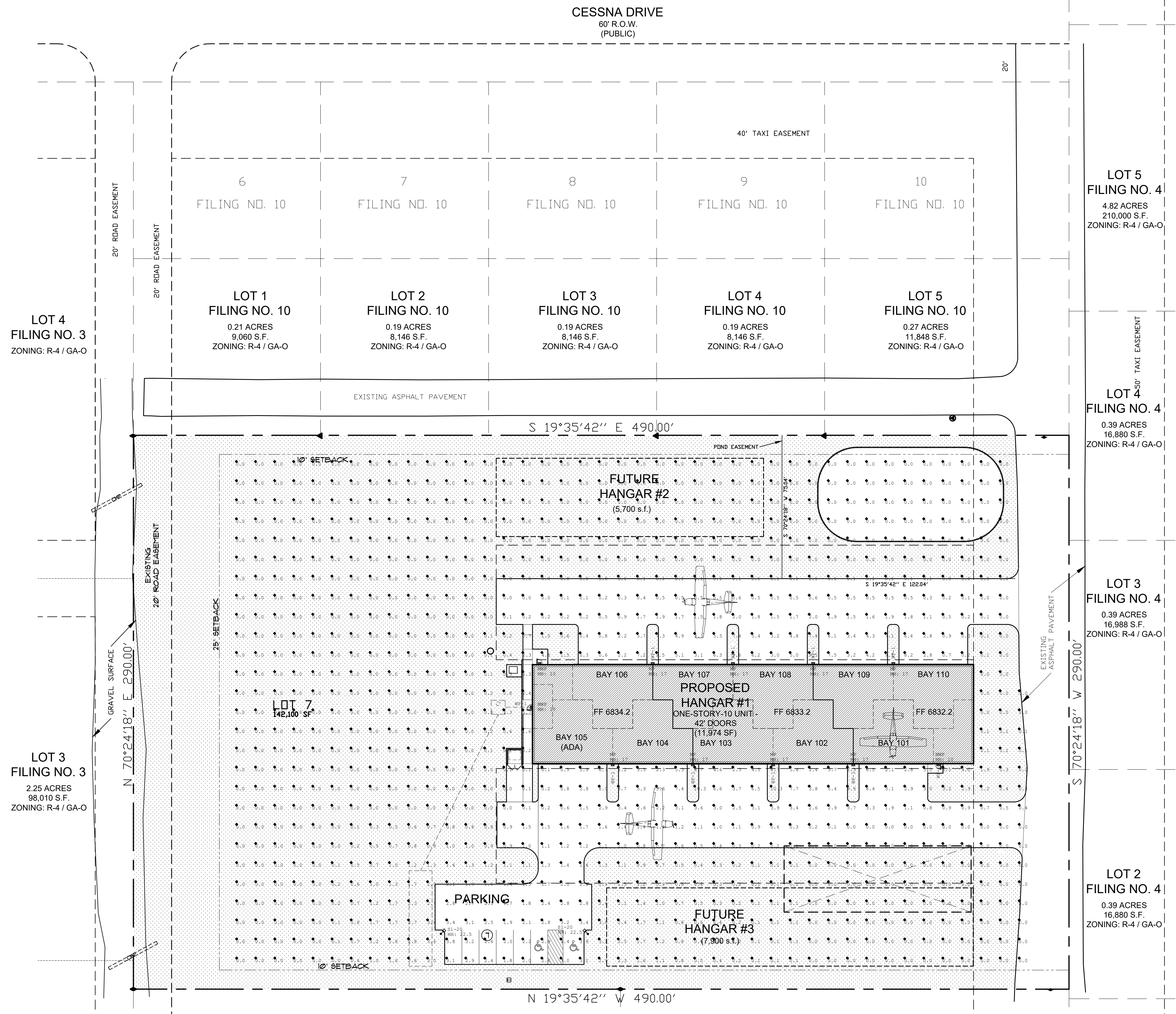
SHT. NO.	5	SHEET 8 OF 10
OF	5	



2 POLE LIGHT FIXTURE
DP-1 N.T.S.



WALL-PAK VIEWS AND DIMENSIONS, FULL CUTOFF LENS SEE BUILDING ELEVATIONS FOR LOCATIONS

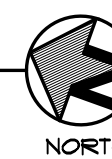


Luminaire Schedule

Qty	Label	Arrangement	LLF	Description	Tag
2	S1-20	SINGLE	0.855	VP-L-96L-220-4K7-5W	BEACON
3	MWP	SINGLE	0.855	SG1-20-4K7-FT	HUBBELL
8	WP	SINGLE	0.855	SG2-80-4K7-FT	HUBBELL

Calculation Summary

Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
0 INCHES AFF	Illuminance	Fc	0.81	10.3	0.0	N.A.	N.A.
Property Line	Illuminance	Fc	0.28	2.0	0.0	N.A.	N.A.



SEEDING NOTES

SEED MIX 'A': NATIVE SEED TO BE EL PASO COUNTY ALL PURPOSE LOW GROW MIX (OR APPROVED EQUAL). SEED TO BE APPLIED USING DRILL SEED PROCESS OR HYDRO-SEED PROCESS. HAND BROADCAST IN AREAS NOT ACCESSIBLE WITH EQUIPMENT. SOIL SHALL BE AMENDED BREW-GRO BIOCOMP CLASS 1 (OR CITY APPROVED EQUAL) AT 3 C.Y./1000 SF FILLED INTO TOP 4-6" OF SOIL PRIOR TO SEEDING. CONTACT PAVINEE BUTTES FOR CURRENT SEED MIX. SEEDING RATES ARE NOTED IN CHART.

DEPENDENT ON WEATHER, SEED SHALL BE INSTALLED WITHIN THE FOLLOWING TIME FRAMES: SEPTEMBER 1 UNTIL CONSISTENT GROUND FREEZE FOR SPRING ESTABLISHMENT (DORMANT SEEDING); SPRING THAW UNTIL JUNE 1 FOR SPRING AND SUMMER ESTABLISHMENT (ACTIVE SEEDING).

FOR HYDRO-SEEDING ALL SEEDED AREAS SHALL RECEIVE NOT LESS THAN 1 TON PER ACRE (2000 LBS) OF VIRGIN WOOD CELLULOSE HYDRO-MULCH AND 100 LBS PER ACRE OF ORGANIC TACKIFIER.

SEEDED LANDSCAPE AREAS SHALL HAVE NO BARE AREAS LARGER THAN SIX (6) SQUARE INCHES 15 DAYS AFTER GERMINATION.

DRILL SEEDING: SEEDING EQUIPMENT USED FOR APPLYING SEED MIXTURES SHALL BE DESIGNED, MODIFIED OR EQUIPPED TO REGULATE THE APPLICATION RATE AND PLANTING DEPTH OF THE SEED MIXTURE. SEED SHALL BE UNIFORMLY DISTRIBUTED IN THE DRILL HOPPER DURING THE DRILLING OPERATION. A RANGELAND DRILL CAPABLE OF MIXING DIFFERENT SIZES AND WEIGHTS OF SEEDS SHALL BE USED. THE DRILL SHALL BE EQUIPPED WITH DOUBLE DISK FURROW OPENERS, DEPTH BANDS, PRESS WHEELS OR DRAG CHAINS.

THE SEED SHALL BE DRILLED APPROXIMATELY 3/8" INCH BELOW THE SOIL SURFACE. HALF OF THE TOTAL RATE OF SEED APPLICATION SHALL BE DRILLED IN 1 DIRECTION, WITH THE REMAINDER OF THE SEED RATE DRILLED AT 90 DEGREES FROM THE FIRST DIRECTION. DO NOT DRILL OR SOW SEED DURING HIGH WINDS OR WHEN THE GROUND IS FROZEN OR OTHERWISE UNABLE TO BE WORKED.

ALL SEEDED AREAS LESS THAN 3:1 SHALL RECEIVE NO LESS THAN 2 TONS PER ACRE (400 LBS) OF CERTIFIED WEED FREE STRAW MULCH. STRAW MULCH SHALL BE APPLIED IN A UNIFORM MANNER BY MULCH SPREADER OR BY HAND. STRAW MULCH SHALL BE CRIMPED OR ANCHORED INTO THE SEEDED IMMEDIATELY FOLLOWING SPREADING BY USING A MULCH TILER (CRIMPER). MULCH TILERS SHALL HAVE ROUND, NOTCHED-BLADES SPACED 8-INCHES APART (MIN.) AND SHALL HAVE SUFFICIENT WEIGHT TO FORCE THE VEGETATIVE MULCH A MINIMUM DEPTH OF 3-INCHES INTO THE SOIL. ALL MULCH TILLING SHALL BE DONE PERPENDICULAR TO THE FLOW-LINE OF THE SLOPE (ALONG CONTOURS). HAND CRIMPING SHALL BE PERFORMED ON AREAS WHERE MECHANICAL METHODS CANNOT BE USED.

MULCH SHALL BE APPLIED TO SEEDED AREAS (INCLUDING DAMP GROUND) WITHIN 24 HOURS FOLLOWING THE COMPLETION OF SEEDING OPERATIONS FOR THE AREA. MULCHING SHALL NOT BE PERFORMED DURING ADVERSE WEATHER CONDITIONS OR WHEN WIND PREVENTS UNIFORM DISTRIBUTION. APPLICATION SHALL BE IN A MANNER TO NOT SERIOUSLY DISTURB THE SEEDED SURFACE.

NATIVE GRASS MANAGEMENT NOTE

ON-GOING MAINTENANCE RECOMMENDATIONS FOR NATIVE GRASS

WELL ESTABLISHED SEEDED LAWN SHALL BE A HEALTHY, WELL-ROOTED, EVEN-COLORED, AND FREE OF WEEDS, BARE AREAS, AND SURFACE IRREGULARITIES.

THE MATURE HEIGHT OF NATIVE GRASS IS EXPECTED TO BE MAINTAINED AT APPROX. 4" HT. AND MOWED AT MINIMUM ANNUALLY IN THE LATE WINTER OR EARLY SPRING, AND IRRIGATED ON REDUCED WATER SCHEDULE.

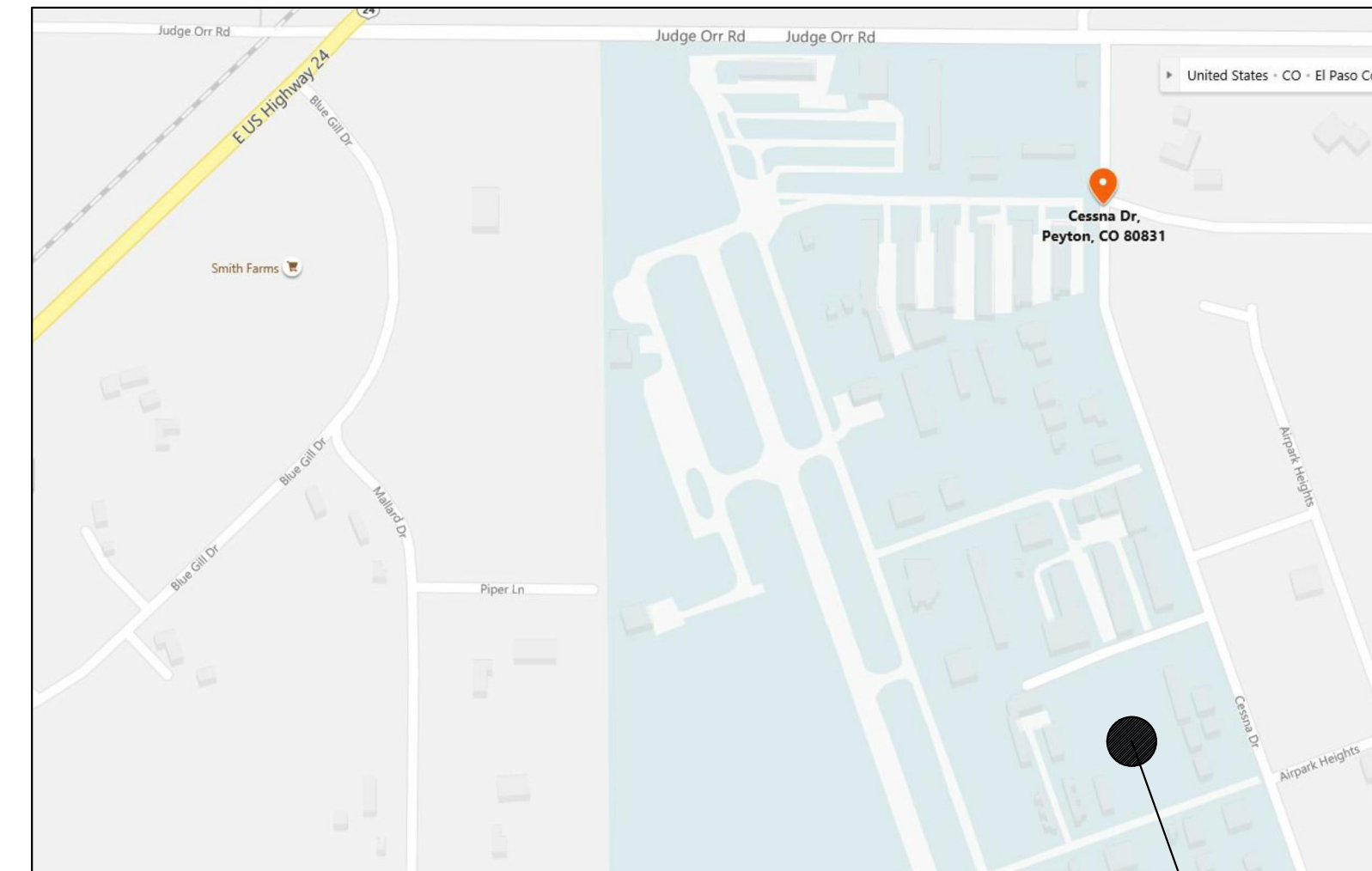
THE SUCCESS OF PERMANENT NATIVE GRASS SEEDING CAN RARELY BE EVALUATED ACCURATELY PRIOR TO THE END OF ITS SECOND FULL GROWING SEASON. SEEDING SUCCESS DEPENDS UPON CONTROL OF WEED COMPETITION DURING THE FIRST TWO GROWING SEASONS. IN ADDITION, THE SITE SHOULD BE MONITORED ANNUALLY FOR UNDESIRABLE PLANT SPECIES.

THE SITE SHOULD BE MONITORED FOR UNDESIRABLE PLANT SPECIES. IF WEED CONTROL NEEDS TO BE PERFORMED DURING THE FIRST YEAR OF PLANT GROWTH, UTILIZE ONE OF TWO METHODS. REGARDLESS OF WHICH METHOD OF WEED CONTROL IS USED, COMPLETE BEFORE FLOWERING OF WEED SEED HEADS. SINCE WEED SPECIES MAY DEVELOP MATURE SEED HEADS AT DIFFERENT TIME OF THE GROWING SEASON, WEED CONTROL EFFORTS WILL BE REQUIRED.

- HAND PULL NOXIOUS WEEDS, REMOVING AS MUCH OF THE ROOT SYSTEM AS POSSIBLE.
- USE WEED EATERS TO SELECTIVELY CUT OFF THE SEED HEADS OF NOXIOUS WEEDS. USE SELECTIVE BROADLEAF HERBICIDE SUCH AS 2-4-D WITH A BACKPACK SPRAYER OR WICK APPLICATOR. BE CAREFUL NOT TO APPLY HERBICIDE ON MORE THAN ONE SQUARE FOOT IN ANY GIVEN AREA. CONTRACTOR TO NOTIFY OWNER'S AUTHORIZED REPRESENTATIVE OF ANY SUSPECTED SOIL PROBLEMS AT THE END OF THE FIRST GROWING SEASON. BROADBAND APPLICATIONS OF HERBICIDE CAN BE COMPLETED AFTER NATIVE GRASS SPECIES REACH MATURE HEIGHT.

LAYOUT NOTE

CONTRACTOR IS RESPONSIBLE FOR INSTALLING ALL LANDSCAPE SHOWN ON THIS PLAN. ANY DEVIATIONS FROM THIS PLAN ARE TO BE APPROVED BY OWNER'S REPRESENTATIVE OR LANDSCAPE ARCHITECT. DEVIATIONS FROM THE APPROVED PLAN MAY REQUIRE APPROVAL BY EL PASO COUNTY AND OWNER REPRESENTATIVE.



VICINITY MAP

SITE LOCATION

INSTALLATION NOTES

REMOVE EXISTING TREES, DEBRIS AND WEEDS FROM SITE PRIOR TO CONSTRUCTION (AS SHOWN PER PLAN).

LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING THE SITE DURING CONSTRUCTION. WEEDS AND TRASH SHALL BE REMOVED DAILY AS REQUIRED.

EXISTING TOPSOIL TO BE STOCKPILED ON-SITE AND USED DURING CONSTRUCTION TO ESTABLISH GRADES WITHIN LANDSCAPE AREAS AS SHOWN PER PLAN.

CONTRACTOR SHALL REFER TO ASSOCIATED LANDSCAPE CONTRACTORS OF COLORADO HANDBOOK (ALCC), 2007 REVISED EDITION FOR ALL CONSTRUCTION FOR THIS SITE. CONTACT OWNER/LANDSCAPE ARCHITECT FOR QUESTIONS.

LANDSCAPE CONTRACTOR SHALL NOTIFY LANDSCAPE ARCHITECT IF STORM DRAINAGE FROM ADJACENT LANDSCAPE AREAS OR BUILDING DOWNSPOUTS WILL ADVERSELY AFFECT LANDSCAPED AREAS PER THE PLAN.

CODE REQUIREMENTS

LANDSCAPE SETBACKS (LS)					
STREET NAME OR ZONE BOUNDARY (ELEV.)	STREET CLASSIFICATION	WIDTH (FT.) REQ./PROV.	LINEAR FOOTAGE	TREE/FEET REQUIRED	NO. OF TREES REQ./PROVIDED
PRIVATE DRIVE	PRIVATE	0	0	0	0

MOTOR VEHICLE LOTS (MV)			
NO. OF VEHICLE SPACES PROVIDED	SHADE TREES (1/15 SPACES)	VEHICLE LOT FRONTAGE(S)	2/3 LENGTH OF FRONTAGE (FT)
5	1/10 (ALT. PLAN REQUEST)	NOT REQUIRED	0

MIN. 3' SCREENING PLANTS REQ./PROV.		EVERGREEN PLANTS REQ. 50%/PROV.	
0	0	0	0

INTERNAL LANDSCAPING (IL)			
INTERNAL LANDSCAPE AREA INCLUDES ALL LANDSCAPE AREAS NOT INCLUDING SETBACKS, BUFFERS OR MOTOR VEHICLE ISLANDS.			
NET SITE AREA (SF) (LESS PUBLIC R.O.W.)	PERCENT MINIMUM INTERNAL AREA (10%)	INTERNAL AREA (SF) REQ./PROV.	INTERNAL TREES (1/500 SF) (EXCLUDING DRIVEWAYS)
142,100 SF	NON-RESIDENTIAL	7,105 SF/ 9,917 SF	150 (ALTERNATE PLAN REQUEST)

LANDSCAPE BUFFERS AND SCREENS (LB)			
STREET NAME OR PROPERTY LINE (ELEV.)	LINEAR FOOTAGE	SETBACK BUFFER REQ. / PROV.	BUFFER TREES (1/25') REQ./PROV.
NOT REQUIRED	0	0	0

GROUND COVER LEGEND

SYMBOL	DESCRIPTION	APPROX. SF
	Protect Existing Grass	
	Non-irrigated Seed Grass, Seed Mix 'A'. Refer to notes.	69,977 SF

NOTE: ALL QUANTITIES SHALL BE PER PLAN. LEGEND SF ARE FOR REFERENCE ONLY.

GRADE NOTE

GRADE SHALL BE ESTABLISHED BASED ON GRADING PLAN BY OTHERS, AND FOR LANDSCAPE MATERIALS PER PLAN. FINAL SOIL GRADE FOR 6-12" DIAMETER ROCK AREAS SHALL BE 4" BELOW TOP OF SIDEWALK/CURB/PAVING. AT ALL OTHER ROCK AREAS GRADE SHALL BE 3" BELOW SIDEWALK/CURB. AT SOI SEED AREAS GRADE SHALL BE 1" BELOW TOP OF SIDEWALK/CURB.

DOCUMENT NOTE

IRRESPECTIVE OF ANY OTHER TERM IN THIS DOCUMENT, LANDSCAPE ARCHITECT SHALL NOT CONTROL, OR BE RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SCHEDULES, SEQUENCES OR PROCEDURES, OR FOR CONSTRUCTION SAFETY OR ANY OTHER RELATED PROGRAMS, OR FOR ANOTHER PARTIES' ERRORS OR OMISSIONS OR FOR ANOTHER PARTIES' FAILURE TO COMPLETE THEIR WORK OR SERVICES IN ACCORDANCE WITH LANDSCAPE ARCHITECT'S DOCUMENTS.

UTILITIES NOTE

VERIFY LOCATION AND DEPTH OF ALL UNDERGROUND UTILITIES PRIOR TO START OF WORK. CALL 811 FOR UTILITY LOCATES. TREE TRUNK PLACEMENT SHALL BE 6' MINIMUM DISTANCE FROM ANY UTILITY AND 10' FROM GAS MAINS. FOR SANITARY SEWER AND WATER MAIN LINES TREES SHALL BE PLACED A MINIMUM OF 15' FROM LINES. REFER TO LOCAL CODE. ALL ELECTRICAL VAULTS AND TRANSFORMERS SHALL BE KEPT CLEAR FROM PLANT MATERIAL. SEE LOCAL CODE REQUIREMENTS. ALL SHRUBS TO BE LOCATED 3' CLEAR OF ALL FIRE HYDRANTS AT MATURE SIZE.

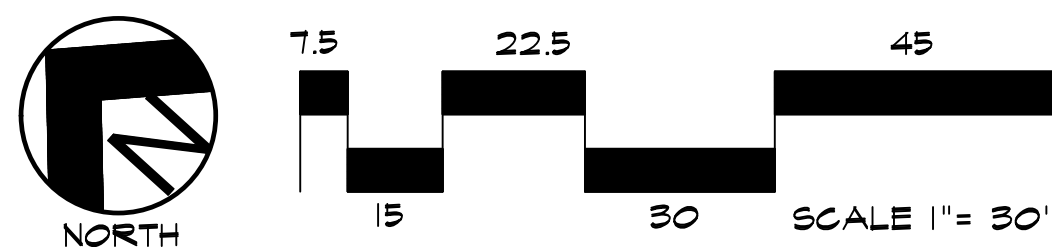


Know what's below.
Call before you dig.

ZONING NOTE

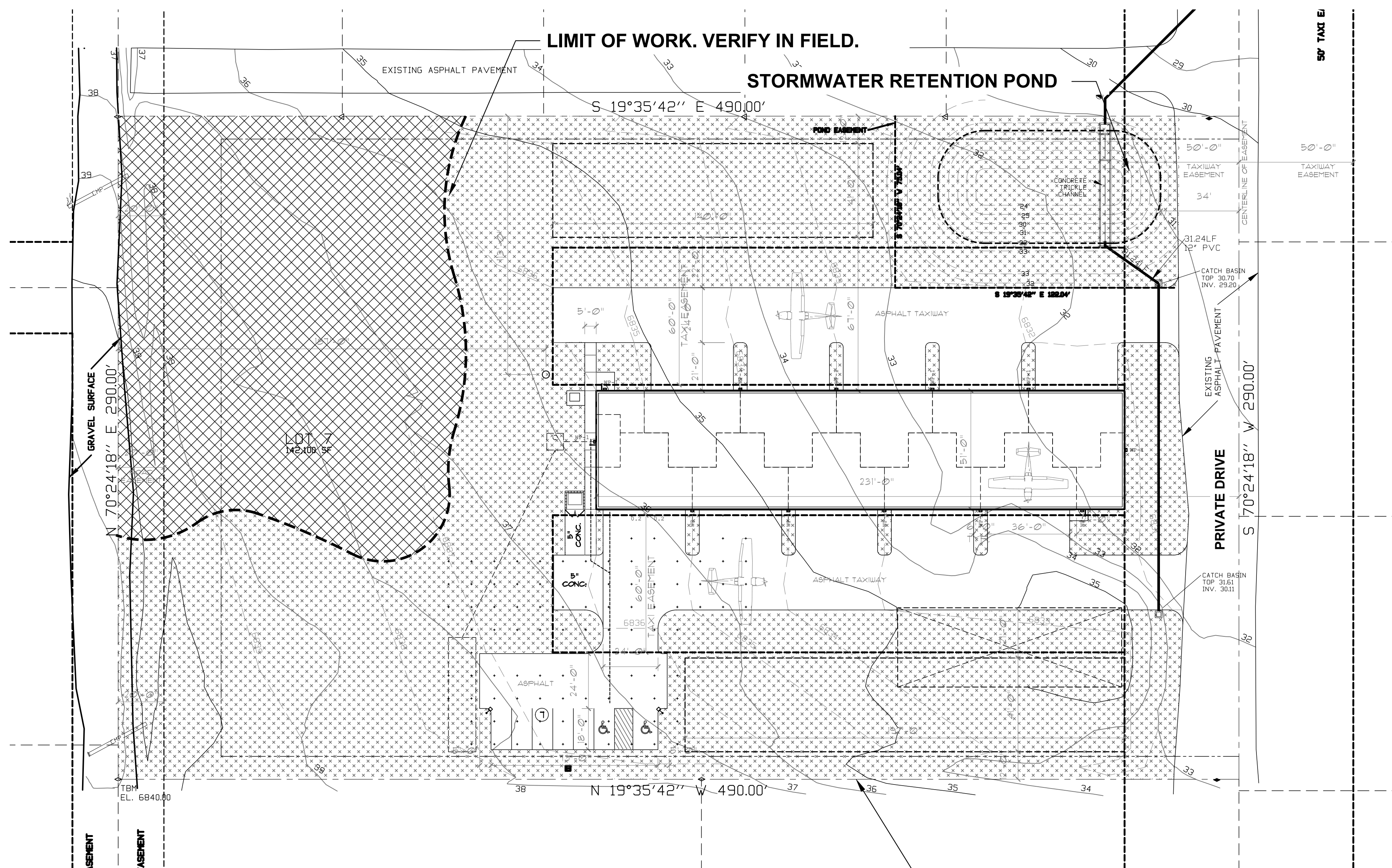
NOTE: SITE IS ZONED R-4(GA-O)

ALTERNATIVE LANDSCAPE PLAN



LIMIT OF WORK. VERIFY IN FIELD.

STORMWATER RETENTION POND



PROPERTY BOUNDARY

FOR APPROVAL ONLY

HIGHER GROUND DESIGNS, INC.
LANDSCAPE ARCHITECTURE, PLANNING & IRRIGATION DESIGN
3610 REBECCA LANE, STE. 111
COLORADO SPRINGS, CO 80917
Phone: 719-268-1122
Fax: 719-268-1122



MEADOW LAKE HANGAR
8140 CESSNA DRIVE
PEYTON, CO
EL PASO COUNTY
PREPARED FOR:
JOHN P NELSON ASSOCIATES

THIS DOCUMENT IS FOR APPROVAL ONLY. THESE PLANS AND SPECIFICATIONS ARE THE PROPERTY OF HIGHER GROUND DESIGNS, INC. AND SHALL NOT BE USED FOR ANY OTHER PURPOSE WITHOUT WRITTEN AUTHORIZATION BY HIGHER GROUND DESIGNS, INC.

JOB NUMBER	1002-21
REVISIONS	
06-08-21	PER COMMENTS
09-30-21	PER COMMENTS
ORIGINAL DATE	4-20-21
DRAWN BY	
DESCRIPTION	LANDSCAPE PLAN
SHEET NO.	L1.1

NOT FOR CONSTRUCTION