

MONUMENT ACADEMY Grading & Erosion Control Plans

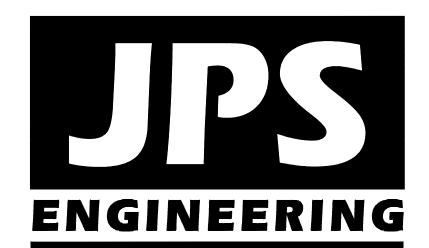
El Paso County, Colorado

PREPARED FOR:

Monument Academy

1150 Village Ridge Point Monument, CO 80132

PREPARED BY:



PREPARED BY:

19 East Willamette Avenue Colorado Springs, Colorado 80903 **APRIL**, 2019

GEC SHEET INDEX

CIVIL DETAILS

CIVIL ENGINEER: JPS ENGINEERING, INC.

GEC PLAN TITLE SHEET

SITE GRADING & EROSION CONTROL PLAN

DETENTION POND M3 PLAN & DETAILS

WATER QUALITY POND DETAILS

DETENTION POND C14 PLAN & DETAILS

ENLARGED GRADING PLAN - NORTH FIELD

ENLARGED GRADING PLAN - BUILDING AREA

NORTH SITE GRADING & EROSION CONTROL PLAN

SOUTH WATER LINE GRADING & EROSION CONTROL PLAN

SITE GRADING & EROSION CONTROL NOTES & DETAILS

SOUTH SITE GRADING & EROSION CONTROL PLAN

ENLARGED GRADING PLAN - NORTH PARKING LOT

ENLARGED GRADING PLAN - SOUTH PARKING LOT

COUNTY GENERAL CONSTRUCTION NOTES:

1. ALL DRAINAGE AND ROADWAY CONSTRUCTION SHALL MEET THE STANDARDS AND SPECIFICATIONS OF THE CITY OF COLORADO SPRINGS/EL PASO COUNTY DRAINAGE CRITERIA

2. CONTRACTOR SHALL BE RESPONSIBLE FOR THE NOTIFICATION AND FIELD LOCATION OF ALL EXISTING UTILITIES. WHETHER SHOWN ON THE PLANS OF NOT. BEFORE BEGINNING OF COLORADO (UNCC).

GEOTECHNICAL REPORT, AND THE APPROPRIATE DESIGN AND CONSTRUCTION STANDARDS AND SPECIFICATIONS AT THE JOB SITE AT ALL TIMES. INCLUDING THE FOLLOWING:

A. EL PASO COUNTY ENGINEERING CRITERIA MANUAL (ECM) B. CITY OF COLORADO SPRINGS/EL PASO COUNTY DRAINAGE CRITERIA MANUAL, VOLUMES 1 AND 2

C. COLORADO DEPARTMENT OF TRANSPORTATION (CDOT) STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION

4. 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 DRAINAGE CRITERIA MANUAL, AND THE DRAINAGE CRITERIA MANUAL VOLUME 2. ANY DEVIATIONS FROM REGULATIONS AND STANDARDS MUST BE REQUESTED, AND APPROVED, IN WRITING. ANY MODIFICATIONS NECESSARY TO MEET CRITERIA AFTER-THE-FACT WILL/BE ENTIRELY THE DEVELOPER'S

5. IT IS THE DESIGN ENGINEER'S RESPONSIBILITY TO ACCURATELY SHOW EXISTING CONDITIONS, BOTH ONSITE AND OFFSITE, ON THE CONSTAUCTION PLANS. ANY MODIFICATIONS NECESSARY DUE TO CONFLICTS, OMISSIONS, OR CHANGED CONDITIONS WILL BE ENTIRELY THE DEVELOPER'S RESPONSIBILITY TO RECTIFY.

6. CONTRACTOR SHALL SCHEDULE A PRE-CONSTRUCTION MEETING WITH EL PASO COUNTY (DEVELOPMENT SERVICES DEPARTMENT (DSD) - INSPECTIONS, PRIOR TO STARTING

CONSTRUCTION. 7. IT IS THE CONTRACTOR'S RESPONSIBILITY TO UNDERSTAND THE REQUIREMENTS OF ALL JURISDICTIONAL AGENCIES AND TO OBTAIN ALL REQUIRED PERMITS, INCLUDING BUT NOT LIMITED TO EL PASO COUNTY EROSION AND STORMWATER QUALITY CONTROL PERMIT (ESQCP), REGIONAL BUILDING FLOODPLAIN DEVELOPMENT PERMIT, U.S. ARMY CORPS OF

ENGINEERS-ISSUED 401 AND/OR 404 PERMITS, AND COUNTY AND STATE FUGITIVE DUST PERMITS.

8. CONTRACTOR SHALL NOT DEVIATE FROM THE PLANS WITHOUT FIRST OBTAINING WRITTEN APPROVAL FROM THE DESIGN ENGINEER AND DSD. CONTRACTOR SHALL NOTIFY THE DESIGN ENGINEER IMMEDIATELY UPON DISCOVERY OF ANY ERRORS OR INCONSISTENCIES.

9. ALL STORM DRAIN PIPE SHALL BE CLASS III RCP WITH CLASS B BEDDING UNLESS OTHERWISE NOTED AND APPROVED BY <mark>DSD</mark>

10. CONTRACTOR SHALL COORDINATE GEOTECHNICAL TESTING PER ECM STANDARDS. PAVEMENT DESIGN SHALL BE APPROVED BY EL PASO COUNTY DSD PRIOR TO PLACEMENT OF CURB AND GUTTER AND PAVEMENT.

11. ALL CONSTRUCTION TRAFFIC MUST ENTER/EXIT THE SITE AT APPROVED CONSTRUCTION ACCESS POINTS.

12. SIGHT VISIBILITY TRIANGLES AS IDENTIFIED IN THE PLANS SHALL BE PROVIDED AT ALL INTERSECTIONS. OBSTRUCTIONS GREATER THAN 18 INCHES ABOVE FLOWLINE ARE NOT ALLOWED WITHIN SIGHT TRIANGLES.

13. SIGNING AND STRIPING SHALL COMPLY WITH EL PASO COUNTY DOT AND MUTCD CRITERIA.

14. CONTRACTOR SHALL OBTAIN ANY PERMITS REQUIRED BY EL PASO COUNTY DOT, NCLUDING WORK WITHIN THE RIGHT—OF—WAY AND SPECIAL TRANSPORT PERMITS.

15. THE LIMITS OF CONSTRUCTION SHALL REMAIN WITHIN THE PROPERTY LINE UNLESS OTHERWISE NOTED. THE OWNER/DEVELOPER SHALL OBTAIN WRITTEN PERMISSION AND EASEMENTS, WHERE REQUIRED, FROM ADJOINING PROPERTY OWNER(S) PRIOR TO ANY OFF-SITE DISTURBANCE, GRADING, OR CONSTRUCTION.

PROJECT GENERAL NOTES:

RESPONSIBILITY TO RECTIFY.

1. STATIONING IS AT CENTERLINE UNLESS OTHERWISE NOTED. ALL ELEVATIONS ARE AT EDGE OF ASPHALT (EOA) UNLESS OTHERWISE NOTED. ALL DIMENSIONS ARE FROM EDGE OF ASPHALT TO EDGE OF ASPHALT UNLESS OTHERWISE NOTED.

- 2. PROPOSED CONTOURS SHOWN ARE TO FINISHED GRADE.
- 3. LENGTHS SHOWN FOR STORM SEWER PIPES ARE TO CENTER OF MANHOLE.
- 4. CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL EXISTING STRUCTURES, DEBRIS, WASTE AND OTHER UNSUITABLE FILL MATERIAL FOUND WITHIN THE LIMITS OF
- 5. MATCH INTO EXISTING GRADES AT 3:1 MAX CUT AND FILL SLOPES.
- 6. REVEGETATION OF ALL DISTURBED AREAS SHALL BE DONE WITH SPECIFIED SEED MIX WITHIN 60 DAYS AFTER FINE GRADING IS COMPLETE.

7. EROSION CONTROL SHALL CONSIST OF SILT FENCE AND OTHER BMP'S AS SHOWN ON THE DRAWING, AND TOPSOIL WITH GRASS SEED, WHICH WILL BE WATERED UNTIL VEGETATION HAS BEEN REESTABLISHED.

8. THE EROSION CONTROL MEASURES OUTLINED ON THIS PLAN ARE THE RESPONSIBILITY OF THE DEVELOPER TO MONITOR AND REPLACE, REGRADE, AND REBUILD AS

NECESSARY UNTIL VEGETATION IS REESTABLISHED.

- 9. EROSION CONTROL MEASURES SHALL BE IMPLEMENTED IN A MANNER THAT WILL PROTECT ADJACENT PROPERTIES AND PUBLIC FACILITIES FROM THE ADVERSE EFFECTS OF EROSION AND SEDIMENTATION AS A RESULT OF CONSTRUCTION AND EARTHWORK ACTIVITIES WITHIN THE PROJECT SITE.
- 10. ADDITIONAL EROSION CONTROL MEASURES MAY BE REQUIRED AS DETERMINED BY SITE CONDITIONS.
- 11. THE CONTRACTOR WILL TAKE THE NECESSARY PRECAUTIONS TO PROTECT EXISTING UTILITIES FROM DAMAGE DUE TO THIS OPERATION. ANY DAMAGE TO THE UTILITIES WILL BE REPAIRED AT THE CONTRACTOR'S EXPENSE, AND ANY SERVICE DISRUPTION WILL BE SETTLED BY THE CONTRACTOR.
- 12. ALL BACKFILL, SUB-BASE, AND/OR BASE COURSE MATERIAL SHALL BE COMPACTED PER EL PASO COUNTY SPECIFICATIONS AND PROJECT GEOTECHNICAL REPORT.
- 13. ALL FINISHED GRADES SHALL HAVE A MINIMUM 1.0% SLOPE TO PROVIDE POSITIVE DRAINAGE.
- 14. IN CASE OF CONFLICT BETWEEN PROPOSED SLOPES AND PROPOSED SPOT ELEVATIONS, SPOT ELEVATIONS SHALL GOVERN. 15. CONTRACTOR SHALL OBTAIN ALL REQUIRED PERMITS PRIOR TO BEGINNING WORK.

GENERAL DRAINAGE NOTES:

1. INDIVIDUAL BUILDERS SHALL PROVIDE POSITIVE DRAINAGE AWAY FROM STRUCTURES AND ACCOUNT FOR POTENTIAL CROSS-LOT DRAINAGE IMPACTS

- 2. BUILDERS AND PROPERTY OWNERS SHALL IMPLEMENT & MAINTAIN EROSION CONTROL BEST MANAGEMENT PRACTICES FOR PROTECTION OF DOWNSTREAM PROPERTIES AND FACILITIES INCLUDING PROTECTION OF EXISTING GRASS BUFFER STRIPS ALONG THE DOWNSTREAM PROPERTY BOUNDARIES.
- 3. GRADING AND DRAINAGE WITHIN LOTS IS THE RESPONSIBILITY OF THE INDIVIDUAL BUILDERS AND PROPERTY OWNERS.

NO.	REVISION	BY	DATE
A	FOR PERMIT	JPS	4/01/19
A	COUNTY COMMENTS	JPS	4/29/19

AGENCIES/CONTACTS

MONUMENT ACADEMY 1150 VILLAGE RIDGE PT MONUMENT, CO 80132 MR. DON GRIFFIN (719) 339-2410

OWNER'S REP: 1703 SAND LILY DRIVE

BLDG. H

GOLDEN, CO 80401

MR. KURT CONNOLLY

JHL CONSTRUCTORS, INC.

7076 SOUTH ALTON WAY,

CENTENNIAL, CO 80112

(303) 526-7928

MR. WILL VALKNER

(303) 741-6116

ARCHITECT:

GENERAL

CONTRACTOR:

CRP ARCHITECTS 100 E. ST. VRAIN ST., STE. 300 COLORADO SPRINGS, CO 80903 MR. BRIAN RISLEY (719) 633–5901

C2.0

C2.1

C3.1

C3.2

C3.3

C4.2

C5.2

C5.3

COLORADO SPRINGS, CO 80903 MR. JOHN P. SCHWAB, P.E. (719) 477-9429 LOCAL ROADS EL PASO COUNTY PCD & DRAINAGE: 2880 INTERNATIONAL CIRCLE

COLORADO SPRINGS, CO 80910 (719) 520-6300 STATE HIGHWAY COLORADO DEPARTMENT OF TRANSPORTATION REGION 2 5615 WILLS BLVD. **PUEBLO, CO 81008**

MS. VALERIE SWORD (719) 546-5407 FIRE DISTRICT TRI-LAKES MONUMENT FIRE PROTECTION DISTRICT

MR. JAMEY BUMGARNER, FIRE MARSHAL

MONUMENT, CO 8032

(719) 484-0911

19 E. WILLAMETTE AVENUE

TELEPHONE COMPANY: (LOCATORS) (719) 635-3674 16055 OLD FOREST POINT, STE. 1003

ELECTRIC DEPARTMENT:

WATER/WASTEWATER:

GAS DEPARTMENT:

ASSOCIATION 11140 E. WOODMEN ROAD COLORADO SPRINGS, CO 80908 MR. DAVE WALDNER (719) 495-2283CENTURY LINK COMMUNICATIONS (LOCATORS) (800) 922-1987 A.T. & T.

WALDEN CORPORATION

MR. MATT DUNSTON

BLACK HILLS ENERGY

MR. SEBASTIAN SCHWENDER

MOUNTAIN VIEW ELECTRIC

(719) 339-2410

(719) 399-3176

MONUMENT, CO 80132

PO BOX 1870

When is the

property transfer

occurring? Add

property owners.

blocks for all

Engineering Review EPC Planning & Community

Comments are cursory due to

volume and extent of

revisions required

CALL UTILITY NOTIFICATION

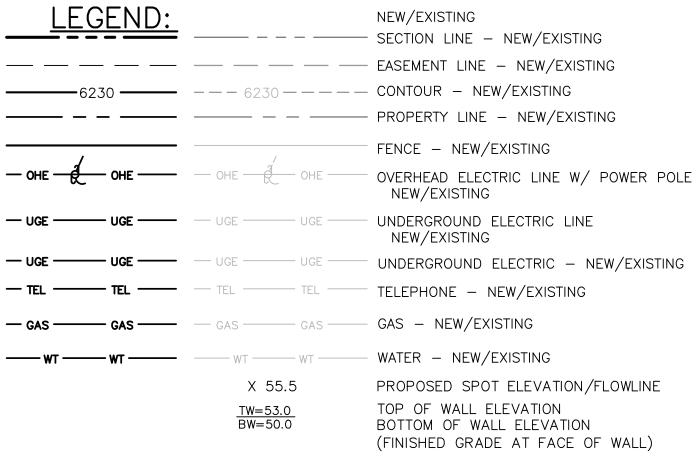
CENTER OF COLORADO

<u>CALL</u> 2—BUSINESS DAYS IN ADVANCE BEFORE YOU DIG, GRADE, OR EXCAVATE

FOR THE MARKING OF UNDERGROUND

MONUMENT ACADEMY HIGH SCHOOL

FOR CONSTRUCTION



DETAIL IS SHOWN SECTION IS SHOWN

BENCHMARK 4 BB RESET 1984 NAVD 88 DATUM ELEV.=7570.80 FOUND BRASS CAP IN CONCRETE INT HWY 83 & HODGEN RD.

BASIS OF BEARING: COMMENCING AT THE SOUTHEAST CORNER OF SAID E1/2 NW1/4, SAID POINT ALSO BEING THE SOUTHWEST CORNER OF THE NORTHEAST ONE-QUARTER (NE1/4) OF SAID SECTION 15, AS MONUMENTED BY A 1/2" REBAR (NO CAP), FROM WHICH THE SOUTHWEST CORNER OF THE NORTHWEST ONE-QUARTER (NW1/4) OF SAID SECTION 15, AS MONUMENTED BY A REBAR AND 3-1/4" ALUMINUM CAP STAMPED "BERGE-BREWER LS 9646" BEARS N88'08'01"W, A DISTANCE OF

2636.22 FEET AND IS THE BASIS OF BEARINGS USED HEREIN.

ENGINEER:

DESIGN ENGINEER'S STATEMENT:

THESE DETAILED PLANS AND SPECIFICATIONS WERE PREPARED UNDER MY DIRECTION AND SUPERVISION. SAID PLANS AND SPECIFICATIONS HAVE BEEN PREPARED ACCORDING TO THE CRITERIA ESTABLISHED BY THE COUNTY FOR DETAILED ROADWAY, DRAINAGE, GRADING AND EROSION CONTROL PLANS AND SPECIFICATIONS, AND SAID PLANS AND SPECIFICATIONS ARE IN CONFORMITY WITH APPLICABLE MASTER DRAINAGE PLANS AND MASTER TRANSPORTATION PLANS. SAID PLANS AND SPECIFICATIONS MEET THE PURPOSES FOR WHICH THE PARTICULAR ROADWAY AND DRAINAGE FACILITIES ARE DESIGNED AND ARE CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. I ACCEPT RESPONSIBILITY FOR LIABILITY CAUSED BY NEGLIGENT ACTS. ERRORS OR OMISSIONS ON MY PART IN PREPARATION OF THESE DETAILED PLANS AND SPECIFICATIONS.

JOHN P. SCHWAB, P.E. #29891 OWNER/DEVELOPER'S STATEMENT:

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

MONUMENT ACADEMY 1150 VILLAGE RIDGE POINT MONUMENT, CO 80132

EL PASO COUNTY:

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

FILED IN ACCORDANCE WITH THE REQUIREMENTS OF THE EL PASO COUNTY LAND DEVELOPMENT CODE, DRAINAGE CRITERIA MANUAL, AND ENGINEERING CRITERIA MANUAL AS AMENDED.

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

DATE

DATE

CRP ARCHITECTS AIA 100 E. St. Vrain, Suite 300 Colorado Springs, Colorado 80903

ENGINEERIN

19 E. Willamette Ave.

Colorado Springs, CO

PH: 719-477-9429

FAX: 719-471-0766

www.jpsengr.com

OWNERSHIP OF INSTRUMENTS OF SERVICE:

ALL REPORTS, PLANS, SPECIFICATIONS, COMPUTER FILES, FIELD

DATA, NOTES AND OTHER DOCUMENTS AND INSTRUMENTS

PREPARED BY DESIGN PROFESSIONAL AS INSTRUMENTS OF

SERVICE SHALL REMAIN THE PROPERTY OF THE DESIGN PROFESSIONAL. THE DESIGN PROFESSIONAL SHALL RETAIN ALL

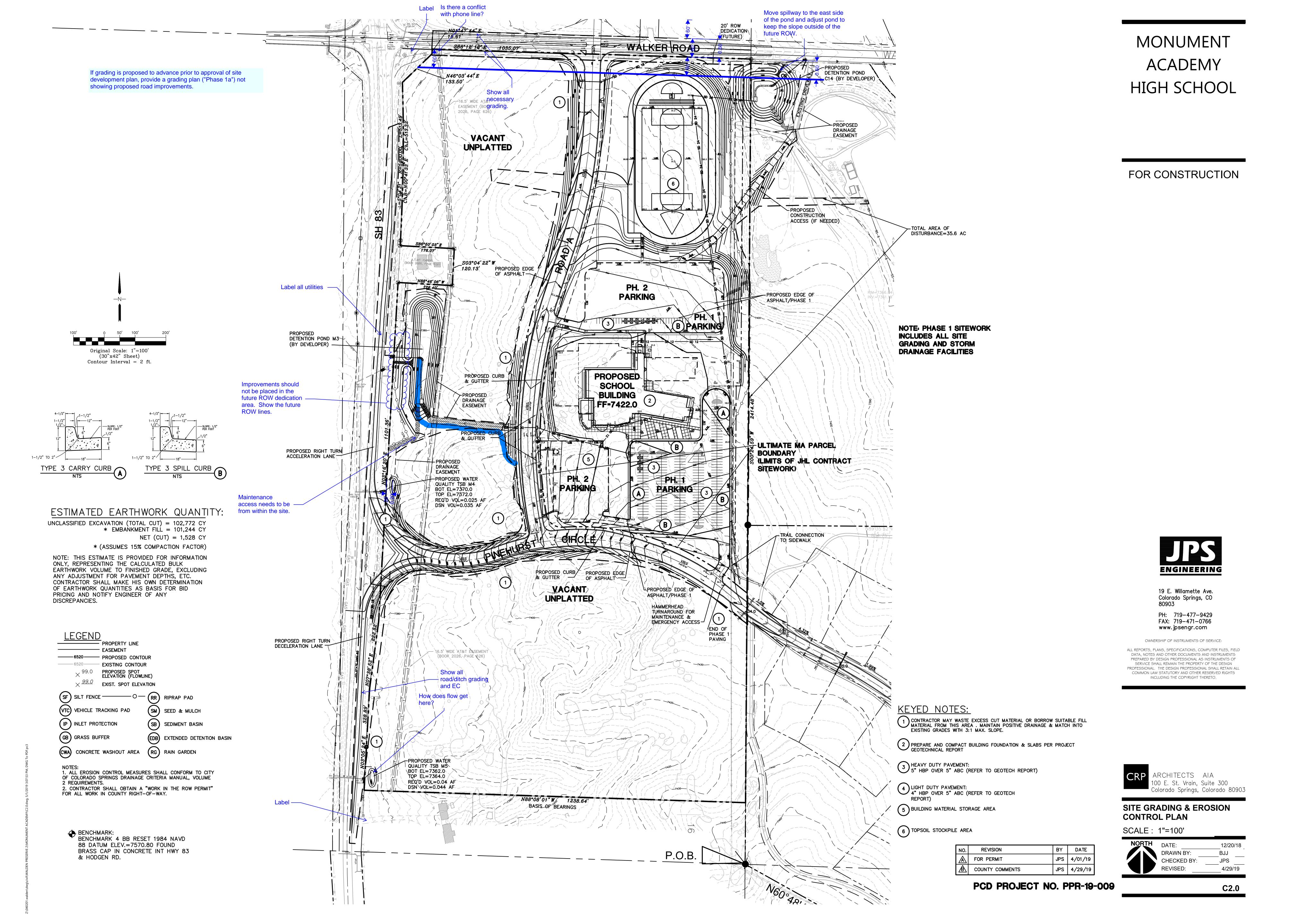
COMMON LAW STATUTORY AND OTHER RESERVED RIGHTS

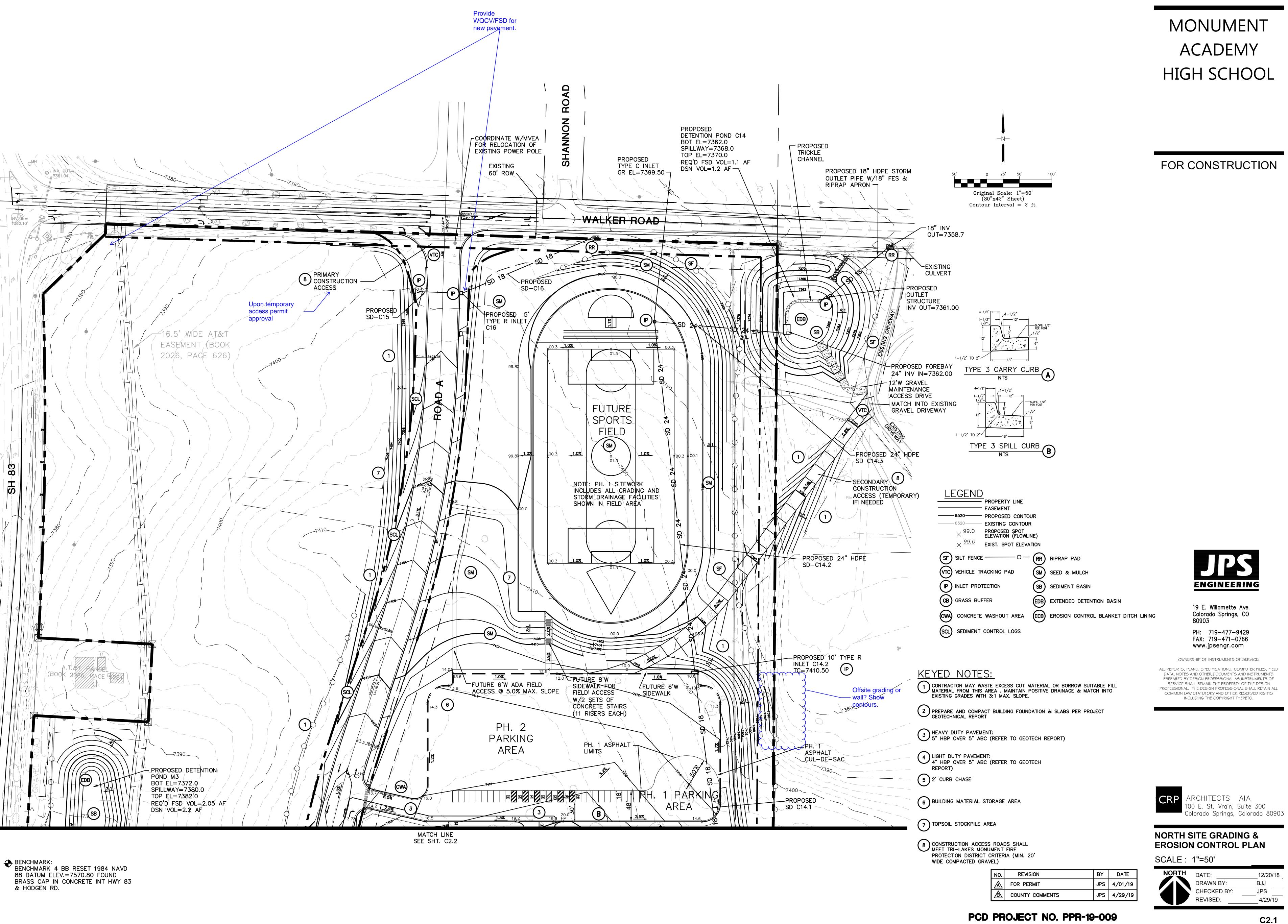
INCLUDING THE COPYRIGHT THERETO.

GEC PLAN TITLE SHEET

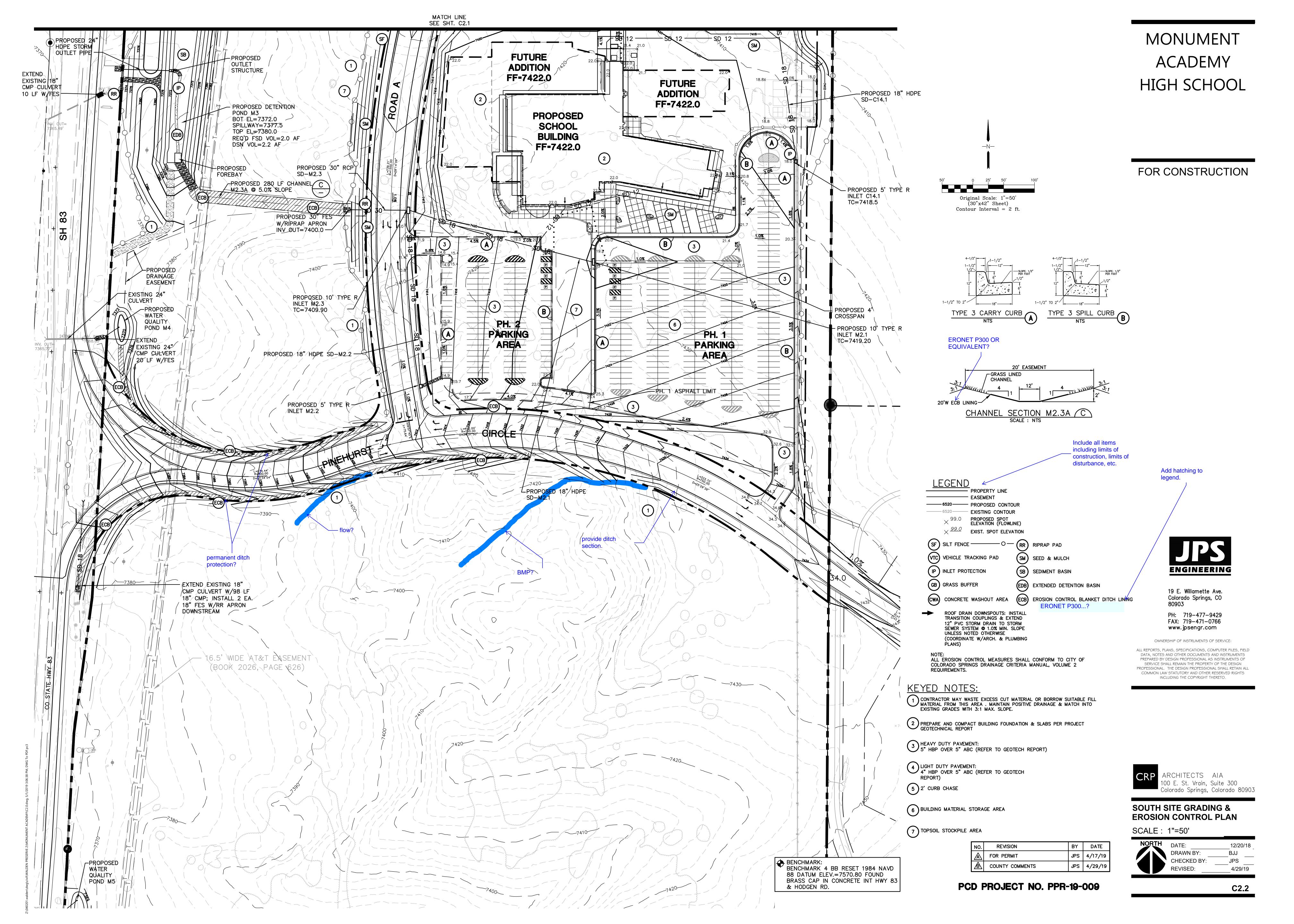


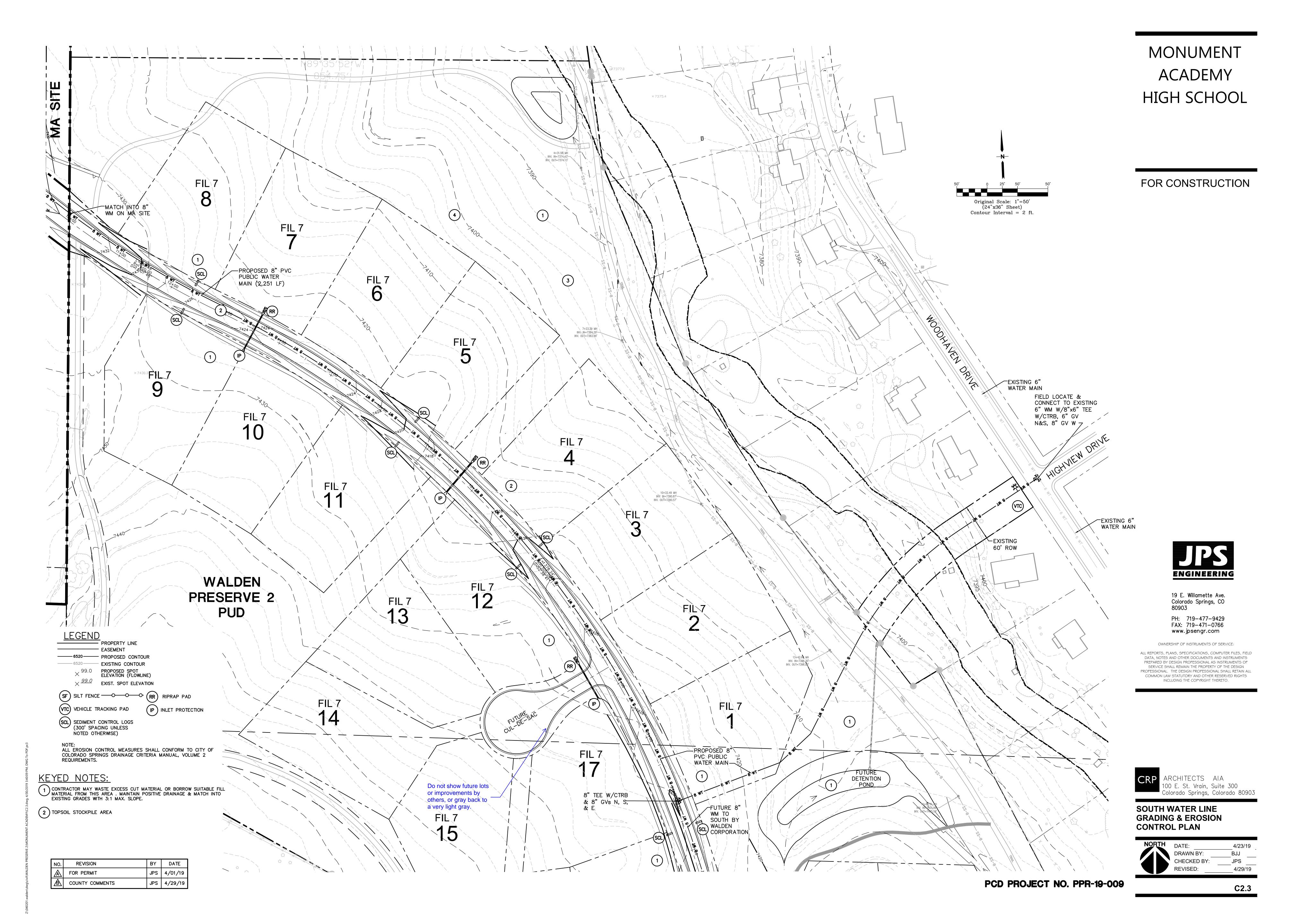
PCD PROJECT NO. PPR-19-009





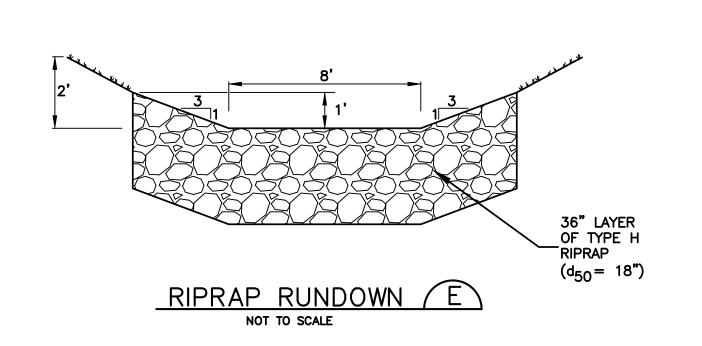
C2.1







FOR CONSTRUCTION



PLAN

SECTION A

TYPICAL CONCRETE

TRICKLE CHANNEL (B)

NOT TO SCALE

MICROPOOL

MAX WSL=7377.5

OPEN MESH GRATE-

MICROPOOL WSE=7371.0 -

INV IN=7371.5~

POND BOTTOM=7372.0

NO. 93 JOHNSON VEE WIRE STAINLESS STEEL WELL SCREEN

OS-2A AND OS-2B)

(OR EQUIVALENT PER TABLES

C8X18.75 AMERICAN STANDARD —
STRUCTURAL STEEL CHANNEL
FORMED INTO CONCRETE BOTTOM
AND SIDES OF WOPENING TRASH RACK

ATTACHED BY INTERMITTENT WELDS

GRATE EL.=7376.5

TUBULAR TRASH RACK ON 6"

(OR EQUAL) WITH 1-1/4" x

CENTERS, KLEMP CORPORATION

3/16" BEARING BARS SPACED

1-3/16" ON CENTER, CROSS

RODS SPACED 2" ON CENTER

WIDTH=12

OUTLET PIPE (24" RCP)

- EMERGENCY

EL.=7377.5

-BURIED RIPRAP OVERTOPPING PROTECTION (24" THICK LAYER

OF TYPE M RIPRAP; d50=12")

SPILLWAY

TOP OF BERM

EL.=7380.0

405050505050

_FINISHED GRADE

- 1/4" STEEL RESTRICTOR PLATE BOLTED TO INSIDE FACE OF BOX

BOT. PLATE EL=7372.33

PROPOSED 24" HDPE

- WQCV ORIFICE PLATE

BOTTOM EL=7368.5

OUTLET PIPE

INV=7371.5

CONCRETE CATCH BASIN

(DOUBLE CDOT TYPE

INTEGRAL MICROPOOL

<u>SECTION</u>

DETENTION POND OUTLET STRUCTURE (C)

SCALE: NTS

C-MODIFIED OR EQUAL)

INTEGRAL FOREBAY DETAIL (A)
NOT TO SCALE

BASE SLAB

RIPRAP BANK LINING (36" LAYER OF TYPE H RIPRAP)

SLOT DETAIL

PROPOSED DETENTION
POND M2
BOT EL=7372.0
TOP EL=7380.0
REQ'D FSD VOL=2.0 AF
DSN VOL=2.18 AF

See Sheet 2 comments. Move spillway and outlet structure to

the north or south end. Verify

acceptability with CDOT.

PROPOSED 15'Lx6'W RIPRAP INFILTRATION ZONE (2'

PROPOSED 140 LF TRICKLE
CHANNEL @ 0.5% SLOPE

DEPTH, d50=12"RR)

PROPOSED SPILLWAY

EL=7377.5 (8' WIDE)

INTEGRAL (FOREBAY

DRAINAGÉ

(30"x42" Sheet)

Contour Interval = 1 ft.

ÉASEMENT

FOREBAY EL=7372.2

PROPOSED 40
LF RIPRAP
RUNDOWN @
20% SLOPE

CONCRETE TRICKLE— CHANNEL

6" CURB

6" CONCRETE SLAB W/#4 BARS @ 12" O.C.E.W.

CONCRETE TRICKLE CHANNEL

AT&T PARCEL

EXISTING AT&T
ACCESS EASEMENT

PROTECT EXISTING ACCESS DRIVE

PROPOSED BERM-

PROPOSED 75.2 LF 24" HDPE DISCHARGE PIPE @ 0.5% SLOPE

INV=7371.1

N PROPOSED OUTLET

ノ**≾**4" INV OUT=7371.5-

SPILLWAY (L=8') EL=7377.5

EXISTING 18" CULVERT 18" INV OUT=7369.22 —

83

SH

4PROPOSED

EXTENSION

W/18" FES

10.0 LF 18" CMP CULVERT

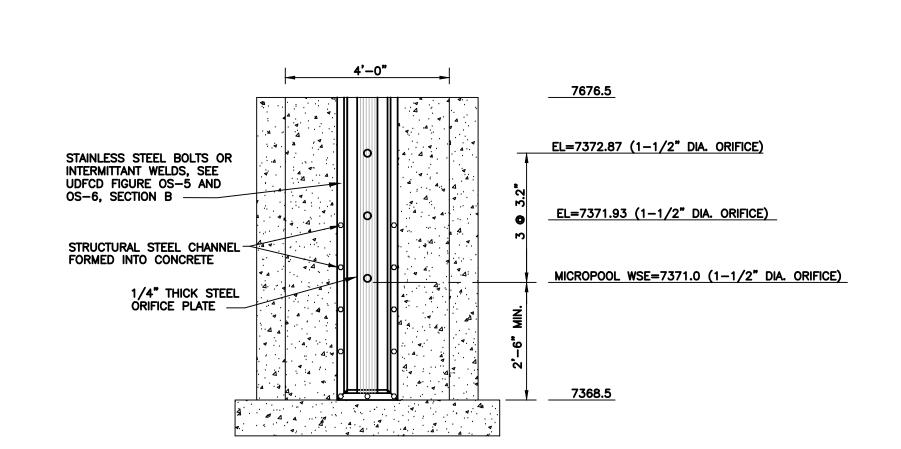
PROPOSED 12'W ACCESS RAMP 0 15% SLOPE

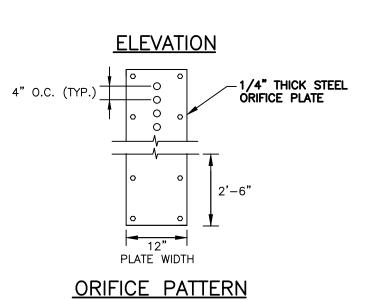
(6" GRAVEL)—

ENLARGED DETENTION POND M3 PLAN

PROPOSED BURIED RIPRAP

PROPOSED 24" FES W/RIPRAP APRON



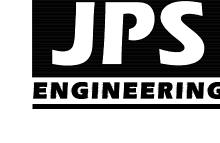


ORIFICE PLATE NOTES:

- 1. MINIMIZE THE NUMBER OF COLUMNS.
- 2. PROVIDE GASKET MATERIAL BETWEEN THE ORIFICE PLATE AND CONCRETE. 3. BOLT PLATE TO CONCRETE 12" MAX. ON CENTER.
- 1. WELL-SCREEN TRASH RACKS (FOR CIRCULAR ORIFICES) SHALL BE STAINLESS STEEL AND SHALL BE ATTACHED BY INTERMITTENT WELDS ALONG THE EDGE OF THE MOUNTING FRAME.
- 2. STRUCTURAL DESIGN OF TRASH RACKS SHALL BE BASED ON FULL HYDROSTATIC HEAD WITH ZERO HEAD DOWNSTREAM OF THE RACK.
- 1. ALL TRASH RACKS SHALL BE MOUNTED USING STAINLESS STEEL HARDWARE AND PROVIDED WITH HINGED AND LOCKABLE OR BOLTABLE ACCESS PANELS.
- 2. TRASH RACKS SHALL BE STAINLESS STEEL, ALUMINUM, OR STEEL. STEEL TRASH RACKS SHALL BE HOT DIP GALVANIZED AND MAY BE HOT POWDER COATED AFTER GALVANIZING.
- 3. TRASH RACKS SHALL BE DESIGNED SUCH THAT THE DIAGONAL DIMENSION OF EACH OPENING IS SMALLER THAN THE DIAMETER OF THE OUTLET PIPE.
- 4. STRUCTURAL DESIGN OF TRASH RACKS SHALL BE BASED ON FULL HYDROSTATIC HEAD WITH ZERO HEAD DOWNSTREAM OF THE RACK.
- TYPICAL WQCV ORIFICE PLATE DETAIL (D) SCALE: NTS

NO.	REVISION	BY	DATE
A	FOR PERMIT	JPS	4/17/19
A	COUNTY COMMENTS	JPS	4/29/19





19 E. Willamette Ave. Colorado Springs, CO

PH: 719-477-9429 FAX: 719-471-0766 www.jpsengr.com

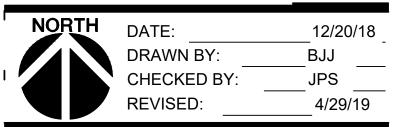
OWNERSHIP OF INSTRUMENTS OF SERVICE: ALL REPORTS, PLANS, SPECIFICATIONS, COMPUTER FILES, FIELD DATA, NOTES AND OTHER DOCUMENTS AND INSTRUMENTS PREPARED BY DESIGN PROFESSIONAL AS INSTRUMENTS OF SERVICE SHALL REMAIN THE PROPERTY OF THE DESIGN PROFESSIONAL. THE DESIGN PROFESSIONAL SHALL RETAIN ALL COMMON LAW STATUTORY AND OTHER RESERVED RIGHTS

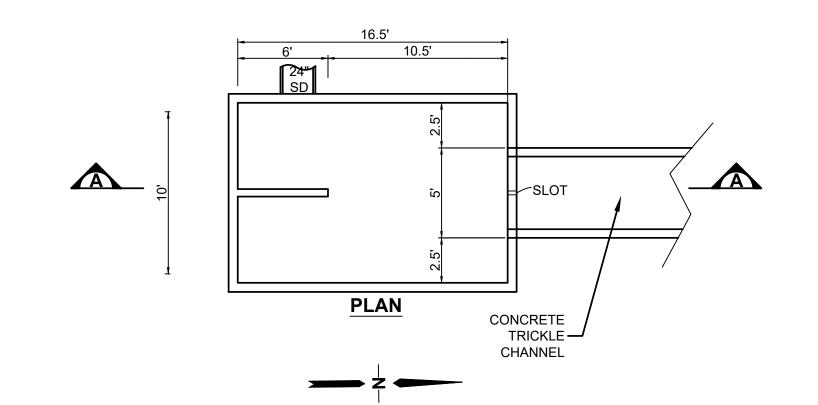
INCLUDING THE COPYRIGHT THERETO.



100 E. St. Vrain, Suite 300 Colorado Springs, Colorado 80903

DETENTION POND M3 PLAN & DETAILS SCALE: AS SHOWN







FOR CONSTRUCTION

TOP OF BASE SLAB **SLOT DETAIL**

- INTEGRAL

<u>−−|6"| 2.5' −|6"| 2.5' −|6"| −</u>

OPEN MESH GRATE-

GRATE EL.=7366.0

MAX WSL=7367.5

MICROPOOL

- CONCRETE

OPENING

WIDTH=12

OUTLET PIPE (18" HDPE)

PROPOSED SPILLWAY (L=2'; 4:1 END SLOPES) EL=7367.5

-WALKER ROAD

ENLARGED DETENTION POND C14 PLAN

Original Scale: 1"=30'

(30"x42" Sheet)

Contour Interval = 2 ft.

PROPOSED OUTLET STRUCTURE

18" INV OUT=7360.3 -

PROPOSED 77 LF TRICKLE CHANNEL @ 0.5% SLOPE _

PROPOSED INTEGRAL

FOREBAY

INV IN=7362.0 -

PROPOSED BURIED RIPRAP SPILLWAY

CHANNEL (6' WIDE x 2'D; d50=12" RR)

PROPOSED 18" FES

W/RIPRAP APRON

INV=7359.7

EXISTING DRIVEWAY CULVERT

PROPOSED

_ PROPOSED BERM

DRAINAGE

EASEMENT

⁻12**'**₩x15% ACCESS RAMP \

~PROPOSED

DRAINAGE

EASEMENT

EXISTING GRAVEL

ACCESS ROAD (MIN.

6" CLASS 6 ABC)

DRIVEWAY

PROPOSED 12'W MAINTENANCE

- PROPOSED 110.7 LF 18" HDPE DISCHARGE PIPE @ 0.5% SLOPE

- PROPOSED 15'L x 6'W RIPRAP INFILTRATION

TUBULAR TRASH RACK ON 6"

CENTERS, KLEMP CORPORATION

3/16" BEARING BARS SPACED

(OR EQUAL) WITH 1-1/4" x

1-3/16" ON CENTER, CROSS

RODS SPACED 2" ON CENTER

POND BOTTOM=7362.0

INV IN=7361.5~

NO. 93 JOHNSON VEE WIRE STAINLESS STEEL WELL

SCREEN (OR EQUIVALENT

PER TABLES OS-2A AND

MICROPOOL WSE=7361.0 —

C8X18.75 AMERICAN STANDARD -STRUCTURAL STEEL CHANNEL

FORMED INTO CONCRETE BOTTOM AND SIDES OF WOPENING TRASH RACK

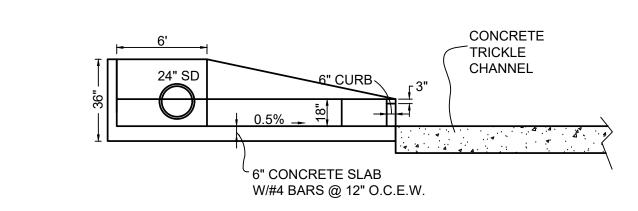
ATTACHED BY INTERMITTENT WELDS

OS-2B)

ZONE (2' DEPTH; d50=12" RR)

DETENTION POND C14 BOT EL=7362.0 SPILLWAY=7367.5 TOP EL=7370.0

REQ'D FSD VOL=1.1 AF DSN VOL=1.3 AF



SECTION A INTEGRAL FOREBAY DETAIL (A)
NOT TO SCALE

> - EMERGENCY SPILLWAY EL.=7367.5

> > -BURIED RIPRAP OVERTOPPING

PROTECTION (24" THICK LAYER

OF TYPE M RIPRAP; d50=12")

EL.=7370.0

40505050505050

1/4" STEEL RESTRICTOR PLATE BOLTED TO INSIDE FACE OF BOX

BOT. PLATE EL=7361.92

-wqcv orifice plate (D)

18" HDPE OUTLET PIPE

BOTTOM EL=7358.5

INV=7361.0

- CONCRETE CATCH BASIN

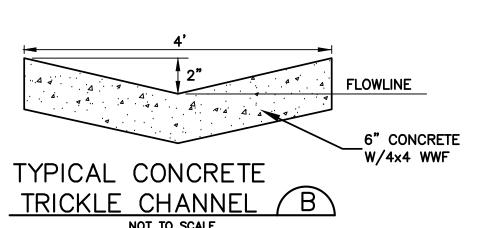
C-MODIFIED OR EQUAL)

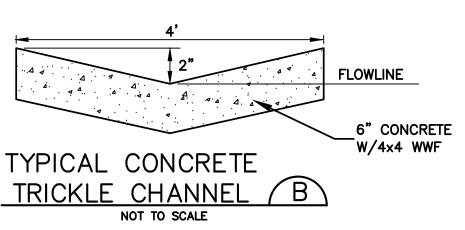
(DOUBLE CDOT TYPE

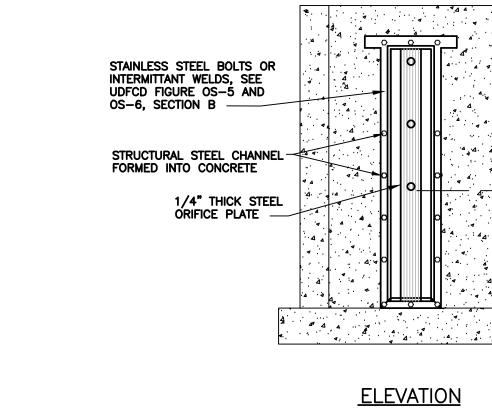
INTEGRAL MICROPOOL

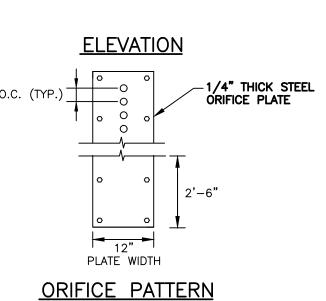
DETENTION POND OUTLET STRUCTURE C
SCALE: NTS

FINISHED GRADE









4'-0"

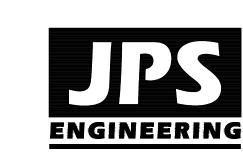
EL=7363.55 (1-7/16" DIA. ORIFICE)

EL=7362.27 (1-7/16" DIA. ORIFICE)

MICROPOOL WSE=7361.0 (1-7/16" DIA. ORIFICE)

- ORIFICE PLATE NOTES:
- 1. MINIMIZE THE NUMBER OF COLUMNS.
- 2. PROVIDE GASKET MATERIAL BETWEEN THE ORIFICE PLATE AND CONCRETE.
- 3. BOLT PLATE TO CONCRETE 12" MAX. ON CENTER.
- EURV AND WQCV TRASH RACKS:
- 1. WELL-SCREEN TRASH RACKS (FOR CIRCULAR ORIFICES) SHALL BE STAINLESS STEEL AND SHALL BE ATTACHED BY INTERMITTENT WELDS ALONG THE EDGE OF THE MOUNTING FRAME.
- 2. STRUCTURAL DESIGN OF TRASH RACKS SHALL BE BASED ON FULL HYDROSTATIC HEAD WITH ZERO HEAD DOWNSTREAM OF THE RACK. OVERFLOW TRASH RACKS:
- 1. ALL TRASH RACKS SHALL BE MOUNTED USING STAINLESS STEEL HARDWARE AND PROVIDED WITH HINGED AND LOCKABLE OR BOLTABLE ACCESS PANELS.
- 2. TRASH RACKS SHALL BE STAINLESS STEEL, ALUMINUM, OR STEEL. STEEL TRASH RACKS SHALL BE HOT DIP GALVANIZED AND MAY BE HOT POWDER COATED AFTER GALVANIZING.
- 3. TRASH RACKS SHALL BE DESIGNED SUCH THAT THE DIAGONAL DIMENSION OF EACH OPENING IS SMALLER THAN THE DIAMETER OF THE OUTLET PIPE.
- 4. STRUCTURAL DESIGN OF TRASH RACKS SHALL BE BASED ON FULL HYDROSTATIC HEAD WITH ZERO HEAD DOWNSTREAM OF THE RACK.

TYPICAL WQCV ORIFICE PLATE DETAIL (D) SCALE: NTS



19 E. Willamette Ave. Colorado Springs, CO

PH: 719-477-9429 FAX: 719-471-0766 www.jpsengr.com

OWNERSHIP OF INSTRUMENTS OF SERVICE: ALL REPORTS, PLANS, SPECIFICATIONS, COMPUTER FILES, FIELD DATA, NOTES AND OTHER DOCUMENTS AND INSTRUMENTS PREPARED BY DESIGN PROFESSIONAL AS INSTRUMENTS OF SERVICE SHALL REMAIN THE PROPERTY OF THE DESIGN PROFESSIONAL. THE DESIGN PROFESSIONAL SHALL RETAIN ALL COMMON LAW STATUTORY AND OTHER RESERVED RIGHTS

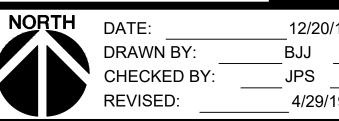
INCLUDING THE COPYRIGHT THERETO.



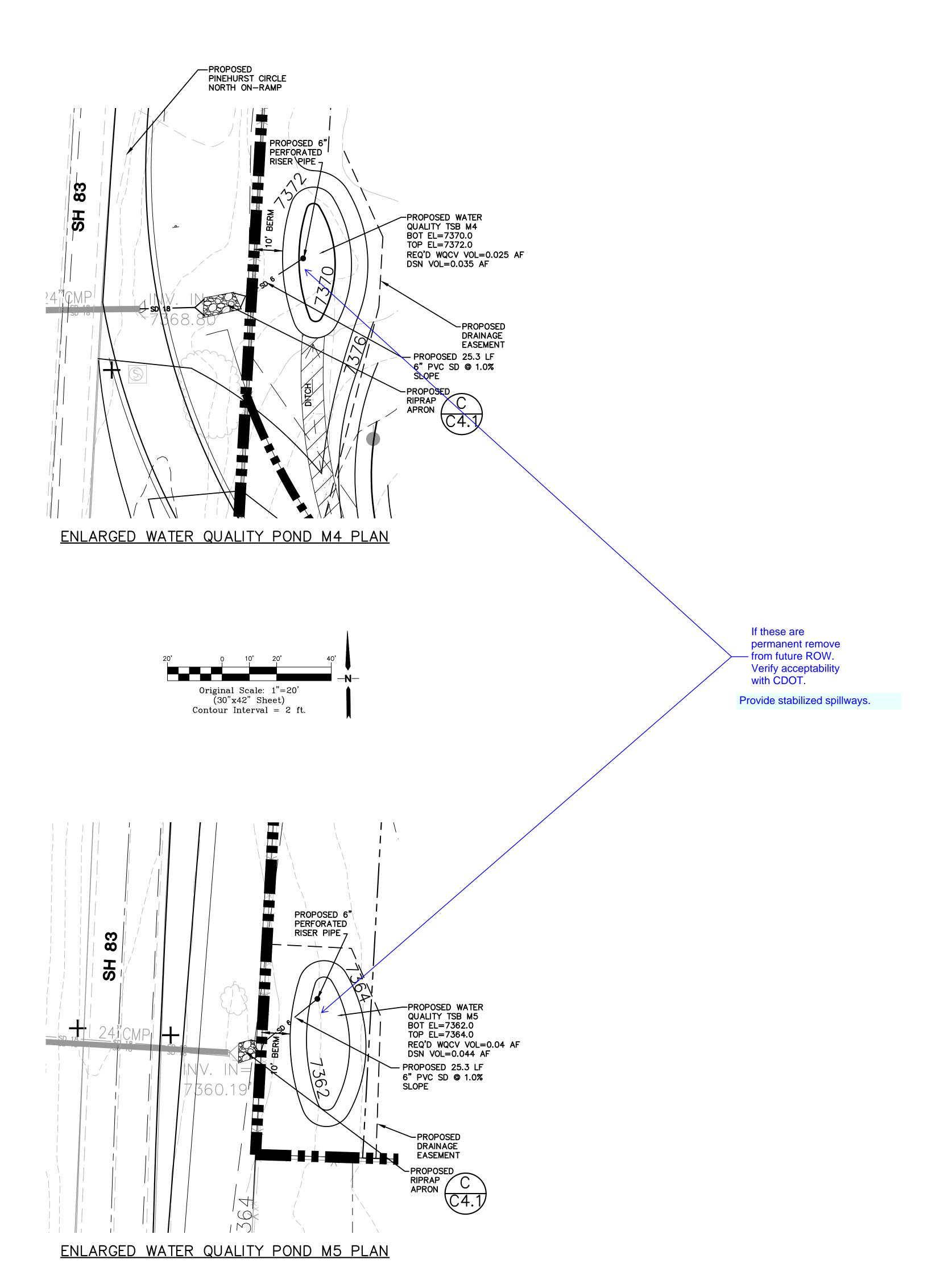
100 E. St. Vrain, Suite 300 Colorado Springs, Colorado 80903

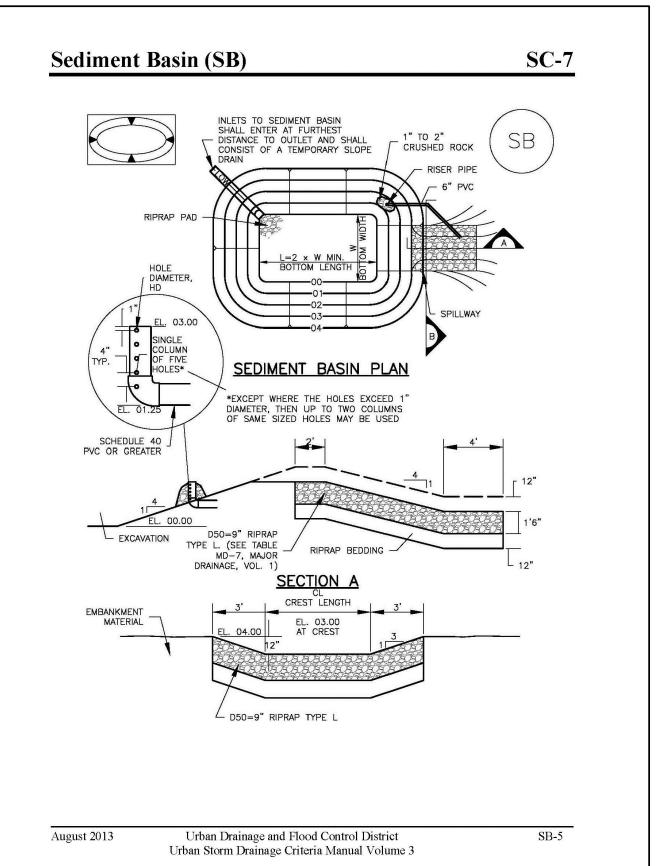
DETENTION POND C14 PLAN & DETAILS

SCALE: AS SHOWN DATE:



REVISION FOR PERMIT JPS 4/17/19 JPS 4/29/19 COUNTY COMMENTS





Sediment Basin (SB)

Upstream Drainage Area (rounded to nearest acre), (ac)	Basin Bottom Width (W), (ft)	Spillway Crest Length (CL), (ft)	Hole Diameter (HD), (in)
1	12 ½	2	952 1 H 6 H 96 2 H 52 2 H 52 2 H 52 2 H 6 1 H 6 3 H 52
2	21 28	2 3 5 6 8 9	716
3		5	9/2
4	33 ½ 38 ½	6	216
5 6	43	9	21/2
7		11	25/32
8	47 ¼ 51 55	12	27/32
8 9	55	13	7/8
10	58 ¼	15	15/16
11	61	16	31/32
12	64	18	1
13	67 1/2	19 21	1 X6
14 15	70 ½ 73 ¼	21	1 1/6 1 1/8 1 3/6

SEDIMENT BASIN INSTALLATION NOTES

1. SEE PLAN VIEW FOR:

-LOCATION OF SEDIMENT BASIN.

-TYPE OF BASIN (STANDARD BASIN OR NONSTANDARD BASIN).

-FOR STANDARD BASIN, BOTTOM WIDTH W, CREST LENGTH CL, AND HOLE DIAMETER, HD.

-FOR NONSTANDARD BASIN, SEE CONSTRUCTION DRAWINGS FOR DESIGN OF BASIN INCLUDING RISER HEIGHT H, NUMBER OF COLUMNS N, HOLE DIAMETER HD AND PIPE DIAMETER D.

- 2. FOR STANDARD BASIN, BOTTOM DIMENSION MAY BE MODIFIED AS LONG AS BOTTOM AREA IS NOT REDUCED.
- 3. SEDIMENT BASINS SHALL BE INSTALLED PRIOR TO ANY OTHER LAND-DISTURBING ACTIVITY THAT RELIES ON ON BASINS AS AS A STORMWATER CONTROL.
- 4. EMBANKMENT MATERIAL SHALL CONSIST OF SOIL FREE OF DEBRIS, ORGANIC MATERIAL, AND ROCKS OR CONCRETE GREATER THAN 3 INCHES AND SHALL HAVE A MINIMUM OF 15 PERCENT BY WEIGHT PASSING THE NO. 200 SIEVE. 5. EMBANKMENT MATERIAL SHALL BE COMPACTED TO AT LEAST 95 PERCENT OF MAXIMUM DENSITY IN ACCORDANCE WITH ASTM D698.
- 6. PIPE SCH 40 OR GREATER SHALL BE USED.
- 7. THE DETAILS SHOWN ON THESE SHEETS PERTAIN TO STANDARD SEDIMENT BASIN(S) FOR DRAINAGE AREAS LESS THAN 15 ACRES. SEE CONSTRUCTION DRAWINGS FOR EMBANKMENT, STORAGE VOLUME, SPILLWAY, OUTLET, AND OUTLET PROTECTION DETAILS FOR ANY SEDIMENT BASIN(S) THAT HAVE BEEN INDIVIDUALLY DESIGNED FOR DRAINAGE AREAS LARGER THAN 15 ACRES.

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

Sediment Basin (SB)

SEDIMENT BASIN 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. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY. 3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE. 4. SEDIMENT ACCUMULATED IN BASIN SHALL BE REMOVED AS NEEDED TO MAINTAIN BMP EFFECTIVENESS, TYPICALLY WHEN SEDIMENT DEPTH REACHES ONE FOOT (I.E., TWO FEET BELOW THE SPILLWAY CREST).

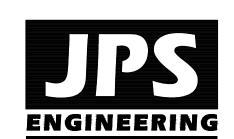
5. SEDIMENT BASINS ARE TO REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS STABILIZED AND GRASS COVER IS ACCEPTED BY THE LOCAL JURISDICTION. 6. WHEN SEDIMENT BASINS ARE REMOVED, ALL DISTURBED AREAS SHALL BE COVERED WITH TOPSOIL, SEEDED AND MULCHED OR OTHERWISE STABILIZED AS APPROVED BY LOCAL JURISDICTION.

(DETAILS ADAPTED FROM DOUGLAS COUNTY, COLORADO) 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.

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

MONUMENT **ACADEMY** HIGH SCHOOL

FOR CONSTRUCTION



19 E. Willamette Ave. Colorado Springs, CO

PH: 719-477-9429 FAX: 719-471-0766 www.jpsengr.com

OWNERSHIP OF INSTRUMENTS OF SERVICE:

ALL REPORTS, PLANS, SPECIFICATIONS, COMPUTER FILES, FIELD DATA, NOTES AND OTHER DOCUMENTS AND INSTRUMENTS PREPARED BY DESIGN PROFESSIONAL AS INSTRUMENTS OF SERVICE SHALL REMAIN THE PROPERTY OF THE DESIGN PROFESSIONAL. THE DESIGN PROFESSIONAL SHALL RETAIN ALL COMMON LAW STATUTORY AND OTHER RESERVED RIGHTS INCLUDING THE COPYRIGHT THERETO.



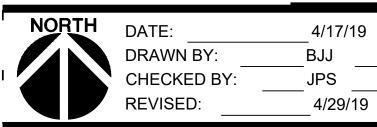
JPS 4/17/19

JPS 4/29/19

100 E. St. Vrain, Suite 300 Colorado Springs, Colorado 80903

WATER QUALITY POND **DETAILS**

SCALE: AS SHOWN



PCD PROJECT NO. PPR-19-009

REVISION

B | COUNTY COMMENTS

FOR PERMIT

REVISED 7/07/10

- 1. CONSTRUCTION MAY NOT COMMENCE UNTIL A CONSTRUCTION PERMIT IS OBTAINED FROM DEVELOPMENT SERVICES AND A PRECONSTRUCTION CONFERENCE IS HELD WITH DEVELOPMENT. SERVICES INSPECTORS.
- 2. STORMWATER DISCHARGES FROM CONSTRUCTION SITES SHALL NOT CAUSE OR THREATEN TO CAUSE POLLUTION, CONTAMINATION, OR DEGRADATION OF STATE WATERS. ALL WORK AND EARTH DISTURBANCE SHALL BE DONE IN A MANNER THAT MINIMIZES POLLUTION OF ANY ON-SITE OR OFF SITE WATERS, INCLUDING WETLANDS.
- 3. NOTWITHSTANDING ANYTHING DEPICTED IN THESE PLANS IN WORDS OR GRAPHIC REPRESENTATION, ALL DESIGN AND CONSTRUCTION RELATED TO ROADS, STORM DRAINAGE AND EROSION CONTROL SHALL CONFORM TO THE STANDARDS AND REQUIREMENTS OF THE MOST RECENT VERSION OF THE RELEVANT ADOPTED EL PASO COUNTY STANDARDS, INCLUDING THE LAND DEVELOPMENT CODE, THE ENGINEERING CRITERIA MANUAL, AND THE DRAINAGE CRITERIA MANUAL VOLUME 2. ANY DEVIATIONS TO REGULATIONS AND STANDARDS MUST BE REQUESTED, AND APPROVED, IN WRITING.
- 4. A SEPARATE STORMWATER MANAGEMENT PLAN (SMWP) FOR THIS PROJECT SHALL BE COMPLETED AND AN EROSION AND STORMWATER QUALITY CONTROL PERMIT (ESQCP) ISSUED PRIOR TO COMMENCING CONSTRUCTION. DURING CONSTRUCTION THE SWMP IS THE RESPONSIBILITY OF THE DESIGNATED STORMWATER MANAGER, SHALL BE LOCATED ON SITE AT ALL TIMES AND SHALL BE KEPT UP TO DATE WITH WORK PROGRESS AND CHANGES IN THE FIELD.
- 5. ONCE THE ESQCP HAS BEEN ISSUED, THE CONTRACTOR MAY INSTALL THE INITIAL STAGE EROSION AND SEDIMENT CONTROL BMPS AS INDICATED ON THE GEC. A PRECONSTRUCTION MEETING BETWEEN THE CONTRACTOR, ENGINEER, AND EL PASO COUNTY WILL BE HELD PRIOR TO ANY CONSTRUCTION. IT IS THE RESPONSIBILITY OF THE APPLICANT TO COORDINATE THE MEETING TIME AND PLACE WITH COUNTY DSD INSPECTIONS STAFF
- 6. SOIL EROSION CONTROL MEASURES FOR ALL SLOPES, CHANNELS, DITCHES, OR ANY DISTURBED LAND AREA SHALL BE COMPLETED WITHIN 21 CALENDAR DAYS AFTER FINAL EARTH DISTURBANCE, HAS BEEN COMPLETED. DISTURBED AREAS AND STOCKPILES WHICH ARE NOT AT FINAL GRADE BUT WILL REMAIN DORMANT FOR LONGER THAN 30 DAYS SHALL ALSO BE MULCHED WITHIN 21 DAYS AFTER INTERIM GRADING. AN AREA THAT IS GOING TO REMAIN IN AN INTERIM STATE FOR MORE THAN 60 DAYS SHALL ALSO BE SEEDED. ALL TEMPORARY SOIL EROSION CONTROL MEASURES AND BMPS SHALL BE MAINTAINED UNTIL PERMANENT SOIL EROSION CONTROL MEASURES ARE IMPLEMENTED AND ESTABLISHED
- 7. TEMPORARY SOIL EROSION CONTROL FACILITIES SHALL BE REMOVED AND EARTH DISTURBANCE AREAS GRADED AND STABILIZED WITH PERMANENT SOIL EROSION CONTROL MEASURES PURSUANT TO STANDARDS AND SPECIFICATION PRESCRIBED IN THE DCM VOLUME II AND THE ENGINEERING CRITERIA MANUAL (ECM) APPENDIX I.
- 8. ALL PERSONS ENGAGED IN EARTH DISTURBANCE SHALL IMPLEMENT AND MAINTAIN ACCEPTABLE SOIL EROSION AND SEDIMENT CONFORMANCE WITH THE EROSION CONTROL TECHNICAL STANDARDS OF THE DRAINAGE CRITERIA MANUAL (DCM) VOLUME I AND IN ACCORDANCE WITH THE STORMWATER MANAGEMENT PLAN (SWMP).
- 9. ALL TEMPORARY EROSION CONTROL FACILITIES INCLUDING BMPS AND ALL PERMANENT FACILITIES INTENDED TO CONTROL EROSION OF ANY EARTH DISTURBANCE OPERATIONS, SHALL BE INSTALLED AS DEFINED IN THE APPROVED PLANS, THE SWMP AND THE DCM VOLUME II AND MAINTAINED THROUGHOUT THE DURATION OF THE EARTH DISTURBANCE OPERATION.
- 10. ANY EARTH DISTURBANCE SHALL BE CONDUCTED IN SUCH A MANNER SO AS TO EFFECTIVELY REDUCE ACCELERATED SOIL EROSION AND RESULTING SEDIMENTATION. ALL DISTURBANCES SHALL BE DESIGNED, CONSTRUCTED, AND COMPLETED SO THAT THE EXPOSED AREA OF ANY DISTURBED LAND SHALL BE LIMITED TO THE SHORTEST PRACTICAL PERIOD OF TIME.
- 11. ANY TEMPORARY OR PERMANENT FACILITY DESIGNED AND CONSTRUCTED FOR THE CONVEYANCE OF STORMWATER AROUND. THROUGH, OR FROM THE EARTH DISTURBANCE AREA SHALL BE DESIGNED TO LIMIT THE DISCHARGE TO A NON-EROSIVE VELOCITY.
- 12. CONCRETE WASH WATER SHALL BE CONTAINED AND DISPOSED OF IN ACCORDANCE WITH THE SWMP. NO WASH WATER SHALL BE DISCHARGED TO OR ALLOWED TO RUNOFF TO STATE WATERS, INCLUDING ANY SURFACE OR SUBSURFACE STORM DRAINAGE SYSTEM OR FACILITIES.
- 13. EROSION CONTROL BLANKETING IS TO BE USED ON SLOPES STEEPER THAN 3:1.
- 14. BUILDING, CONSTRUCTION, EXCAVATION, OR OTHER WASTE MATERIALS SHALL NOT BE TEMPORARILY PLACED OR STORED IN THE STREET, ALLEY, OR OTHER PUBLIC WAY, UNLESS IN ACCORDANCE WITH AN APPROVED TRAFFIC CONTROL PLAN. BMP'S MAY BE REQUIRED BY EL PASO COUNTY ENGINEERING IF DEEMED NECESSARY, BASED ON SPECIFIC CONDITIONS AND CIRCUMSTANCES.
- 15. VEHICLE TRACKING OF SOILS AND CONSTRUCTION DEBRIS OFF-SITE SHALL BE MINIMIZED. MATERIALS TRACKED OFFSITE SHALL BE CLEANED UP AND PROPERLY DISPOSED OF IMMEDIATELY.
- 16. CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL OF ALL WASTES FROM THE CONSTRUCTION SITE FOR DISPOSAL IN ACCORDANCE WITH LOCAL AND STATE REGULATORY REQUIREMENTS. NO CONSTRUCTION DEBRIS, TREE SLASH, BUILDING MATERIAL WASTES OR UNUSED BUILDING MATERIALS SHALL BE BURIED, DUMPED, OR DISCHARGED AT THE SITE
- 17. THE OWNER, SITE DEVELOPER, CONTRACTOR, AND/OR THEIR AUTHORIZED AGENTS SHALL BE RESPONSIBLE FOR THE REMOVAL OF ALL CONSTRUCTION DEBRIS, DIRT, TRASH, ROCK, SEDIMENT, AND SAND THAT MAY ACCUMULATE IN THE STORM SEWER OR OTHER DRAINAGE CONVEYANCE SYSTEM AND STORMWATER APPURTENANCES AS A RESULT OF SITE DEVELOPMENT.
- 18. THE QUANTITY OF MATERIALS STORED ON THE PROJECT SITE SHALL BE LIMITED, AS MUCH AS PRACTICAL, TO THAT QUANTITY REQUIRED TO PERFORM THE WORK IN AN ORDERLY SEQUENCE. ALL MATERIALS STORED ON-SITE SHALL BE STORED IN A NEAT, ORDERLY MANNER, IN THEIR ORIGINAL CONTAINERS. WITH ORIGINAL MANUFACTURER'S LABELS.
- 19. NO CHEMICALS ARE TO BE USED BY THE CONTRACTOR, WHICH HAVE THE POTENTIAL TO BE RELEASED IN STORMWATER UNLESS PERMISSION FOR THE USE OF A SPECIFIC CHEMICAL IS GRANTED IN WRITING BY THE ECM ADMINISTRATOR. IN GRANTING THE USE OF SUCH CHEMICALS, SPECIAL
- CONDITIONS AND MONITORING MAY BE REQUIRED.
- 20. BULK STORAGE STRUCTURES FOR PETROLEUM PRODUCTS AND OTHER CHEMICALS SHALL HAVE ADEQUATE PROTECTION SO AS TO CONTAIN ALL SPILLS AND PREVENT ANY SPILLED MATERIAL FROM ENTERING STATE WATERS, INCLUDING ANY SURFACE OR SUBSURFACE STORM DRAINAGE SYSTEM OR FACILITIES.

21. NO PERSON SHALL CAUSE THE IMPEDIMENT OF STORMWATER FLOW IN THE FLOW LINE OF THE CURB AND GUTTER OR IN THE DITCHLINE

- 22. INDIVIDUALS SHALL COMPLY WITH THE "COLORADO WATER QUALITY CONTROL ACT" (TITLE 25, ARTICLE 8, CRS), AND THE "CLEAN WATER ACT" (33 USC 1344), IN ADDITION TO THE REQUIREMENTS INCLUDED IN THE DCM VOLUME II AND THE ECM APPENDIX I. ALL APPROPRIATE PERMITS MUST BE OBTAINED BY THE CONTRACTOR PRIOR TO CONSTRUCTION (NPDES, FLOODPLAIN, 404, FUGITIVE DUST, ETC.). IN THE EVENT OF CONFLICTS BETWEEN THESE REQUIREMENTS AND LAWS, RULES, OR REGULATIONS OF OTHER FEDERAL, STATE, OR COUNTY AGENCIES, THE MORE RESTRICTIVE LAWS, RULES, OR REGULATIONS SHALL APPLY.
- 23. ALL CONSTRUCTION TRAFFIC MUST ENTER/EXIT THE SITE AT APPROVED CONSTRUCTION ACCESS POINTS
- 24. PRIOR TO ACTUAL CONSTRUCTION THE PERMITEE SHALL VERIFY THE LOCATION OF EXISTING UTILITIES.
- 25. A WATER SOURCE SHALL BE AVAILABLE ON SITE DURING EARTHWORK OPERATIONS AND UTILIZED AS REQUIRED TO MINIMIZE DUST FROM EARTHWORK EQUIPMENT AND WIND.

and/or Kumar &

dated 2/25/201

PERIODIC SITE INSPECTIONS

REMOVAL OF BMP'S

INSTALL BMP'S

STABILIZATION

SEEDING & MULCHING

TOTAL DISTURBED AREA: 27.8 ACRES

WHERE LOT LINES, WALLS, SLOPES OR OTHER PHYSICAL

MAINTAIN POSITIVE SLOPE AWAY FROM BLDG. ON ALL

SIDES. MIN. SLOPE 6" IN FIRST 10' IN UNPAVED AREAS, MIN. SLOPE OF 3" IN THE FIRST 10' IN PAVED AREAS.

AFTER INITIAL 10' SLOPE AWAY FROM BLDG. MIN 1%, MAX.

FROM THE STRUCTURE.

5% SLOPE.

BARRIERS PROHIBIT 6" OF FALL WITHIN 10', DRAINS OR

SWALES SHALL BE PROVIDED TO ENSURE DRAINAGE AWAY

RECEIVING WATERS: <u>WEST CHERRY CREEK</u>

SITE GRADING

RE-VEGETATION OF EXPOSED SOILS

SEDIMENT REMOVAL FROM BMP'S

- 26. THE PRELIMINARY SOILS REPORT FOR THIS SITE PREPARED BY RMG, DATED 1/20/17 SHALL BE CONSIDERED A PART OF THESE PLANS.
- 27. AT LEAST TEN DAYS PRIOR TO THE ANTICIPATED START OF CONSTRUCTION, FOR PROJECTS THAT WILL DISTURB 1 ACRE OR MORE, THE OWNER OR OPERATOR OF CONSTRUCTION ACTIVITY SHALL SUBMIT A PERMIT APPLICATION FOR STORMWATER DISCHARGE TO THE COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT, WATER QUALITY DIVISION. THE APPLICATION CONTAINS CERTIFICATION OF A STORMWATER MANAGEMENT PLAN (SWMP), OF WHICH THIS GRADING AND EROSION CONTROL PLAN MAY BE A PART. FOR INFORMATION OR APPLICATION MATERIALS CONTACT:

SEDIMENT CONTROL MAINTENANCE PROGRAM:

LEVEL REACHES ONE HALF THE HEIGHT OF THE BMP OR AT ANY TIME THAT

ESTIMATED TIME SCHEDULE:

JUNE, 2019

APRIL, 2020

SEPTEMBER, 2021

SEDIMENT OR DEBRIS ADVERSELY IMPACTS THE FUNCTION OF THE BMP.

COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT WATER QUALITY CONTROL DIVISION WQCD - PERMITS 4300 CHERRY CREEK DRIVE SOUTH

ATTN: PERMITS UNIT CONTRACTOR SHALL COMPLY WITH ALL PROVISIONS OF CDPHE GENERAL PERMIT

ELEVATION

DENVER, CO 80246-1530

EXISTING VEGETATION: NATIVE GRASSES (APPROXIMATELY 50 PERCENT COVERAGE)

SEEDING MIX:		OUNT IN PLS
<u>GRASS</u>	<u>VARIETY</u> <u>LBS</u>	S. PER ACRE
CRESTED WHEAT GRASS PERENIAL RYE WESTERN WHEATGRASS SMOOTH BROME GRASS SIDEOATS GRAMA	LINN SARTON	2.0 LBS. 3.0 LBS.
	TOTAL:	16.5 LBS.

SEEDING & FERTILIZER APPLICATION: DRILL SEED OR HYDRO-SEED PER CDOT SPEC. SECTION 212.

MULCHING APPLICATION: CONFORM TO CDOT SPEC-SECTION 213.

4 BARS @ 12" O.C.E.W. (TYP.) CLASS B. INLET MAY BE <u> – For Grating</u> -EPOXY COATED AND <u>PLAN</u> STEEL INLET GRATE 3. STRUCTURAL STEEL FOR 3227 OR EQUAL)

- 12" Center (TYPICAL) AASHTO M 199. PIPE OPENING.

TYPICAL GRATED STORM INLET DETAIL (A)

SCALE: NTS

GENERAL NOTES I. CONCRETE SHALL BE CDOT CAST-IN-PLACE OR PRECAST . REINFORCING BARS SHALL BE DEFORMED, AND SHALL HAVE A MINIMUM 2 IN. CLEARANCE.

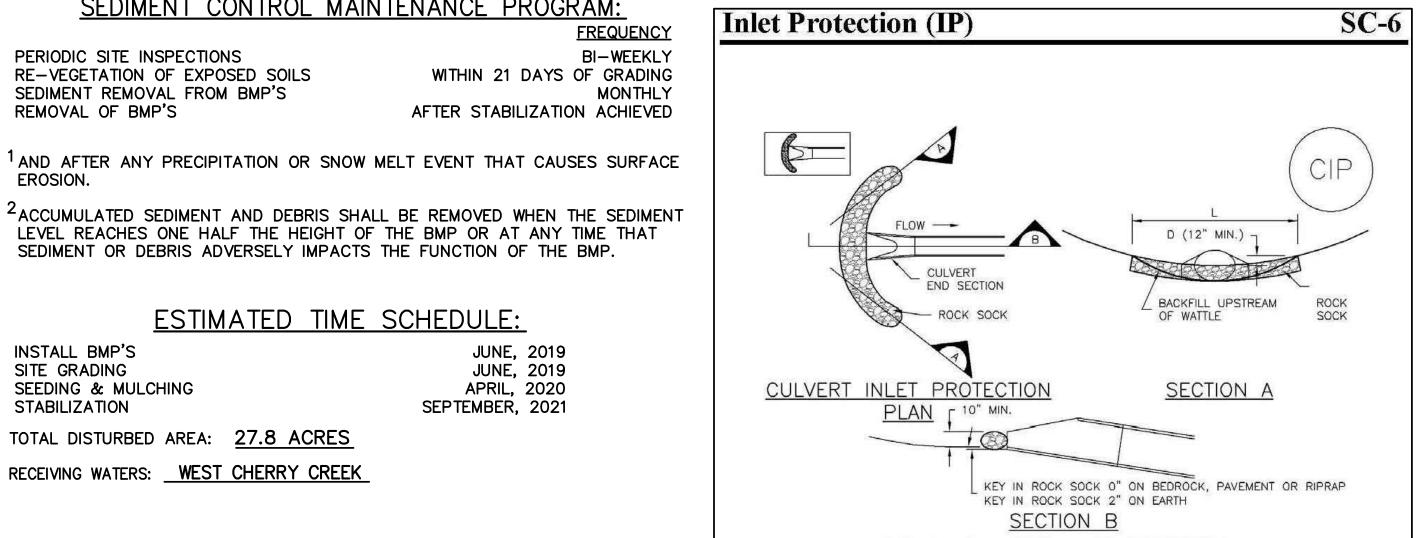
INSTALLATION HARDWARE SHALL BE GALVANIZED AND SHALL BE IN ACCORDANCE WITH CDOT 4. STEPS SHALL BE PROVIDED WHEN INLET DIMENSION "H" EXCEEDS 3 FT.-6 IN. AND SHALL BE IN ACCORDANCE WITH INLET, TYPE D, FOR

 SEE CDOT SHEET M-604-11, REINFORCEMENT AROUND THE

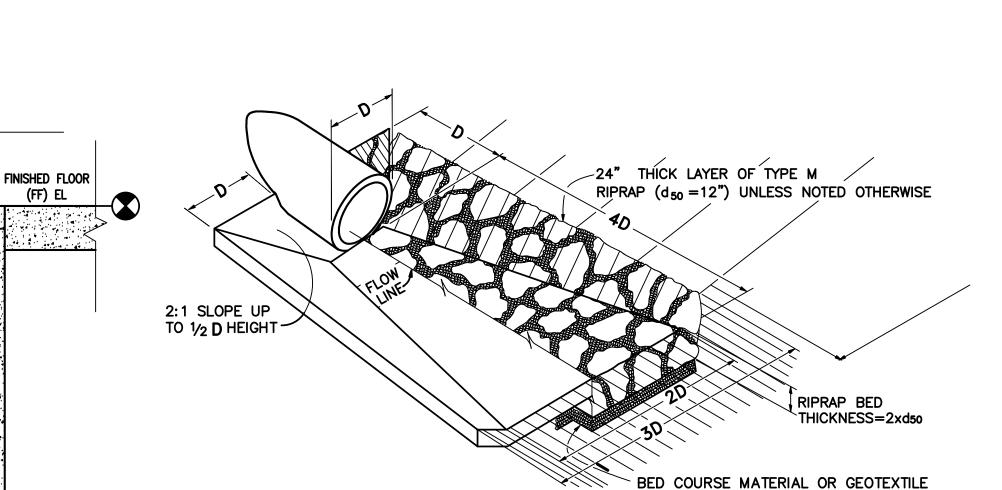
TYPICAL BUILDING DRAINAGE DETAIL (B) SCALE: NTS

TOP OF CONCRETE

CLEARANCE

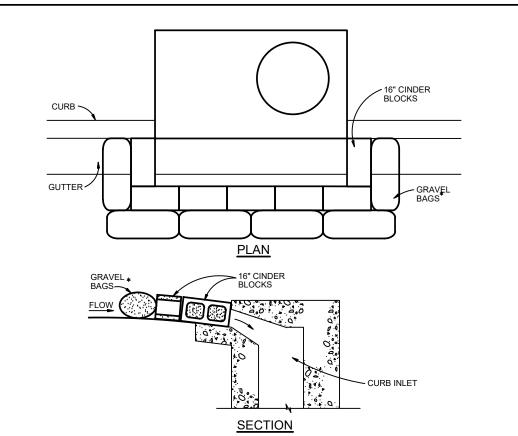


CIP-1. CULVERT INLET PROTECTION



NOTE: TYPICAL RIPRAP APRON DIMENSIONS SHALL BE 12'Lx9'Wx1.5'D UNLESS NOTED OTHERWISE

TYPICAL RIPRAP APRON/ CULVERT OUTLET PAVING NOT TO SCALE



BLOCK AND GRAVEL BAG*CURB INLET PROTECTION

BLOCK AND GRAVEL BAG*CURB INLET PROTECTION NOTES

1. INLET PROTECTION SHALL BE INSTALLED IMMEDIATELY AFTER CONSTRUCTION OF INLET. 2. CONCRETE BLOCKS ARE TO BE LAID AROUND THE INLET IN A SINGLE ROW ON THEIR SIDES, ABUTTING ONE ANOTHER WITH THE OPEN ENDS OF THE BLOCK GRAVEL BAGS ARE TO BE PLACED AROUND THE

RAVEL APPROXIMATELY 3/4 INCH IN DIAMETER.

5. BAGS ARE TO BE MADE OF 1/4" INCH WIRE MESH

. DAMAGED OR INEFFECTIVE INLET PROTECTION 3. SEDIMENT SHALL BE REMOVED WHEN SEDIMENT HAS CUMULATED TO APPROXIMATELY 1/2 THE DESIGN 4. INLET PROTECTION SHALL BE REMOVED WHEN THE DRAINAGE AREA AS APPROVED BY THE CIT

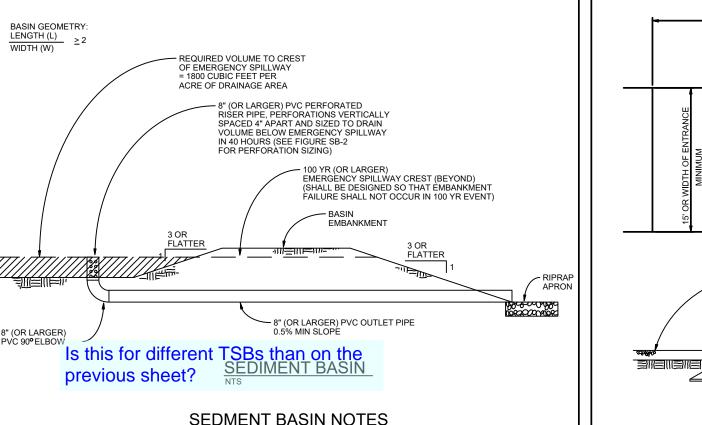
1. CONTRACTOR SHALL INSPECT INLET PROTECTION

ILY DURING PROLONGED RAINFALL, AND WEEKLY

IMMEDIATELY AFTER EACH RAINFALL, AT LEAS

* AN ALTERNATE 3/4" TO 1" GRAVEL FILTER OVER A WIRE SCREEN MAY BE USED IN PLACE OF GRAVEL BAGS. THE WIRE MESH SHALL EXTEND ABOVE THE TOP OF THE CONCRETE BLOCKS AND THE GRAVEL PLACED OVER THE WIRE SCREEN TO THE TOP OF THE CONCRETE BLOCKS

Figure IP-3 City of Colorado Springs Block & Gravel Bag Curb Inlet Protection Stormwater Quality nstruction Detail and Maintenance Requirements



MAINTENANCE REQUIREMENTS

PROLONGED RAINFALL, AND WEEKLY DURING PERIODS

SEDMENT BASIN NOTES

INSTALLATION REQUIREMENTS ANY CLEARING AND/OR GRADING IS UNDERTAKEN 2. THE AREA UNDER WHICH THE EMBANKMENT IS TO BE INSTALLED SHALL BE CLEARED, GRUBBED, AND STRIPPED OF ALL VEGETATION AND ROOT MAT. 3. THE OUTLET OF THE BASIN SHALL BE DESIGNED TO DRAIN ITS VOLUME IN 40 HOURS. . THE OUTLET IS TO BE LOCATED AT THE FURTHEST DISTANCE FROM THE INLET OF THE BASIN. BAFFLES MAY BE NEEDED TO INCREASE

2. SEDIMENT BASINS SHALL BE CLEANED OUT BEFORE SEDIMENT HAS FILLED HALF THE VOLUME OF THE BASIN. 8. SEDIMENT BASINS SHALL REMAIN OPERATIO AND PROPERLY MAINTAINED UNTIL THE SITE AREA IS PERMANENTLY STABILIZED WITH ADEQUATE VEGETATIVE COVER AND/OR OTHER PERMANENT STRUCTURE AS APPROVED BY THE CITY. HE FLOW LENGTH AND SETTLING TIME. EMBANKMENT MATERIAL SHALL CONSIST OF OIL WITH A MINIMUM OF 15% PASSING A #200 SIEVE VATED SOIL CAN BE USED IF IT MEETS THIS

6. EMBANKMENT IS TO BE COMPACTED TO AT LEAST 90% OF MAXIMUM DENSITY AND WITHIN 2% OF OPTIMUM MOISTURE CONTENT ACCORDING TO ASTM D 698. 7. WHEN A BASIN IS INSTALLED NEAR A RESIDENTIAL AREA, FOR SAFETY REASONS, A SIGN SHALL BE POSTED AND THE AREA SECURED WITH A

City of Colorado Springs Stormwater Quality		Figure SB-1 Sediment Basin Construction Detail and Maintenance Requirements	
Table M		³² I Gradation of Ordinary I	Riprap
Riprap Designation	% Smaller Than Given Size by Weight	Intermediate Rock Dimensions (inches)	d ₅₀ (inches)*
Type VL	70-100	12	
	50-70	9	
	35-50	6	6**
	2-10	2	
Гуре L	70-100	15	
	50-70	12	
	35-50	9	9**
	2-10	3	
Туре М	70-100	21	
	50-70	18	
	35-50	12	12**
	2-10	4	
Туре Н	70-100	30	
	50-70	24	
	35-50	18	18
	2-10	6	
Type VH	70-100	42	
	50-70	33	
	35-50	24	24
	2-10	9	

vibration compacted, and revegetate Basic requirements for riprap stone are as follows:

* d_{50} = mean particle size (intermediate dimension) by weight.

Rock shall be hard, durable, angular in shape, and free from cracks, overburden, shale, and organic

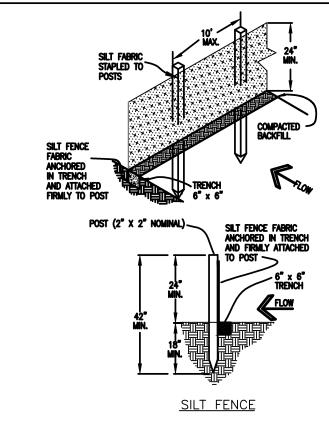
** Mix VL, L and M riprap with 35% topsoil (by volume) and bury it with 4 to 6 inches of topsoil, all

- Neither breadth nor thickness of a single stone should be less than one-third its length, and rounded stone should be avoided
- The rock should sustain a loss of not more than 40% after 500 revolutions in an abrasion test (Los Angeles machine—ASTM C-535-69) and should sustain a loss of not more than 10% after 12 cycles of freezing and thawing (AASHTO test 103 for ledge rock procedure A).
- Rock having a minimum specific gravity of 2.65 is preferred; however, in no case should rock have a specific gravity less than 2.50.

REVISION

COUNTY COMMENTS

FOR PERMIT



SILT FENCE NOTES INSTALLATION REQUIREMENTS . SILT FENCES SHALL BE INSTALLED PRIOR TO ANY LAND 2. WHEN JOINTS ARE NECESSARY, SILT FENCE GEOTEXTILE SHALL BE SPLICED TOGETHER ONLY AT SUPPORT POST AND SECURELY SEALED. 3. METAL POSTS SHALL BE "STUDDED TEE" OR "U" TYPE WITH MINIMUM WEIGHT OF 1.33 POUNDS PER LINEAR FOOT WOOD POSTS SHALL HAVE A MINIMUM DIAMETER OR CROSS SECTION DIMENSION OF 2 INCHES. 4. THE FILTER MATERIAL SHALL BE FASTENED SECURELY TO METAL OR WOOD POSTS USING WIRE TIES, OR TO WOOD

POSTS WITH 3/4" LONG #9 HEAVY-DUTY STAPLES. THE SILT FENCE GEOTEXTILE SHALL NOT BE STAPLED TO EXISTING TREES. 5. WHILE NOT REQUIRED. WIRE MESH FENCE MAY BE USED TO SUPPORT THE GEOTEXTILE. WIRE FENCE SHALL BE FASTENED SECURELY TO THE UPSLOPE SIDE OF THE POSTS USING HEAVY-DUTY WIRE STAPLES AT LEAST 3/4 ONG, TIE WIRES OR HOG RINGS. THE WIRE SHALL EXTEND INTO THE TRENCH A MINIMUM OF 6" AND SHALL NOT EXTEND MORE THAN 3' ABOVE THE ORIGINAL GROUND SURFACE.

7. THE HEIGHT OF THE SILT FENCE FROM THE GROUND SURFACE SHALL BE MINIMUM OF 24 INCHES AND SHALL NOT EXCEED 36 INCHES: HIGHER FENCES MAY INPOUND OLUMES OF WATER SUFFICIENT TO CAUSE FAILURE OF THE STRUCTURE. MAINTENANCE REQUIREMENTS CONTRACTOR SHALL INSPECT SILT FENCE IMMEDIATELY AFTER EACH RAINFALL, AT LEA DAILY DURING PROLONGED RAINFALL, AND WEEKLY DURING PERIODS OF NO RAINFAL DAMAGED, COLLAPSED, UNENTRENCHED INEFFECTIVE SILT FENCES SHALL BE PROMPTLY REPAIRED OR REPLACED. SEDIMENT SHALL BE REMOVED FROM BEHIND SILT FENCE WHEN IT ACCUMULATES TO HALF THE EXPOSED GEOTEXTILE HEIGHT. 3. SILT FENCES SHALL BE REMOVED WHEN ADEQUATE VEGETATIVE COVER IS ATTAINED AS APPROVED BY THE CITY.

6. ALONG THE TOE OF FILLS, INSTALL THE SILT

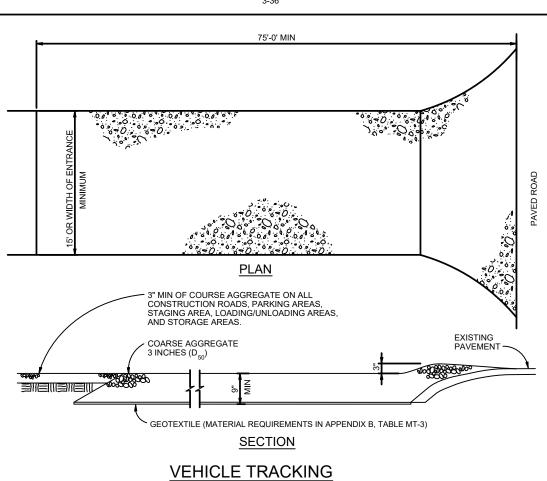
FENCE ALONG A LEVEL CONTOUR AND PROVIDE AN AREA BEHIND THE FENCE FOR RUNOFF TO PONI

ND SEDIMENT TO SETTLE. A MINIMUM DISTANCE OF

5 FEET FROM THE TOE OF THE FILL IS RECOMMENDED

City of Colorado Springs Stormwater Quality

Figure SF-2 Silt Fence Construction Detail and Maintenance Requirements



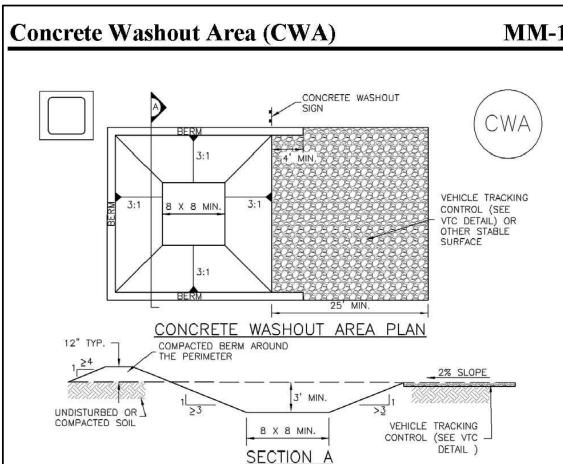
VEHICLE TRACKING NOTES **INSTALLATION REQUIREMENTS** 1. ALL ENTRANCES TO THE CONSTRUCTION SITE ARE TO BE STABILIZED PRIOR TO CONSTRUCTION AN APRON TO ALLOW FOR TURNING TRAFFIC, BU SHOULD NOT BE BUILT OVER EXISTING PAVEMENT EXCEPT FOR A SLIGHT OVERLAP. 3. AREAS TO BE STABILIZED ARE TO BE PROPERL GRADED 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.

1. REGULAR INSPECTIONS ARE TO BE MADE OF ALL STABILIZED AREAS, ESPECIALLY AFTER STORM 2. STONES ARE TO BE REAPPLIED 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 4. STORM SEWER INLET PROTECTION IS TO BE IN PLACE, INSPECTED, AND CLEANED IF NECESSARY. 5. OTHER ASSOCIATED SEDIMENT CONTROL MEASURES RE TO BE INSPECTED TO ENSURE GOOD WORKING

MAINTENANCE REQUIREMENTS

5. CONSTRUCTION ROADS ARE TO BE BUILT TO CONFORM TO SITE GRADES, BUT SHOULD NOT HAVE SIDE SLOPES OR ROAD GRADES THAT ARE City of Colorado Springs Stormwater Quality

Figure VT-2 Vehicle Tracking Application Examples



CWA-1. CONCRETE WASHOUT AREA CWA INSTALLATION NOTES

1. SEE PLAN VIEW FOR: -CWA INSTALLATION LOCATION. 2. DO NOT LOCATE AN UNLINED CWA WITHIN 400' OF ANY NATURAL DRAINAGE PATHWAY OR WATERBODY, DO NOT LOCATE WITHIN 1,000' OF ANY WELLS OR DRINKING WATER SOURCES. IF SITE CONSTRAINTS MAKE THIS INFEASIBLE, OR IF HIGHLY PERMEABLE SOILS EXIST ON SITE, THE CWA MUST BE INSTALLED WITH AN IMPERMEABLE LINER (16 MIL MIN. THICKNESS) OR SURFACE STORAGE ALTERNATIVES USING PREFABRICATED CONCRETE WASHOUT DEVICES OR A LINED ABOVE GROUND STORAGE ARE SHOULD BE USED.

3. THE CWA SHALL BE INSTALLED PRIOR TO CONCRETE PLACEMENT ON SITE. 4. CWA SHALL INCLUDE A FLAT SUBSURFACE PIT THAT IS AT LEAST 8' BY 8' SLOPES LEADING OUT OF THE SUBSURFACE PIT SHALL BE 3:1 OR FLATTER. THE PIT SHALL BE AT

- 5. BERM SURROUNDING SIDES AND BACK OF THE CWA SHALL HAVE MINIMUM HEIGHT OF 1'. 6. VEHICLE TRACKING PAD SHALL BE SLOPED 2% TOWARDS THE CWA. 7. SIGNS SHALL BE PLACED AT THE CONSTRUCTION ENTRANCE, AT THE CWA, AND ELSEWHERE AS NECESSARY TO CLEARLY INDICATE THE LOCATION OF THE CWA TO OPERATORS OF CONCRETE TRUCKS AND PUMP RIGS.
- 8. USE EXCAVATED MATERIAL FOR PERIMETER BERM CONSTRUCTION.

| BY |

DATE

JPS 4/01/19

| JPS | 4/29/19

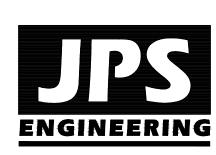
PCD PROJECT NO. PPR-19-009

Urban Drainage and Flood Control District

Urban Storm Drainage Criteria Manual Volume 3

MONUMENT **ACADEMY** HIGH SCHOOL

FOR CONSTRUCTION



19 E. Willamette Ave. Colorado Springs, CO 80903 PH: 719-477-9429

FAX: 719-471-0766 www.jpsengr.com

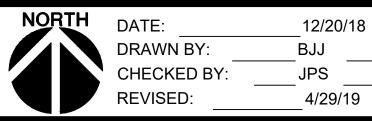
OWNERSHIP OF INSTRUMENTS OF SERVICE: ALL REPORTS, PLANS, SPECIFICATIONS, COMPUTER FILES, FIELD DATA, NOTES AND OTHER DOCUMENTS AND INSTRUMENTS PREPARED BY DESIGN PROFESSIONAL AS INSTRUMENTS OF SERVICE SHALL REMAIN THE PROPERTY OF THE DESIGN PROFESSIONAL. THE DESIGN PROFESSIONAL SHALL RETAIN ALL COMMON LAW STATUTORY AND OTHER RESERVED RIGHTS INCLUDING THE COPYRIGHT THERETO.

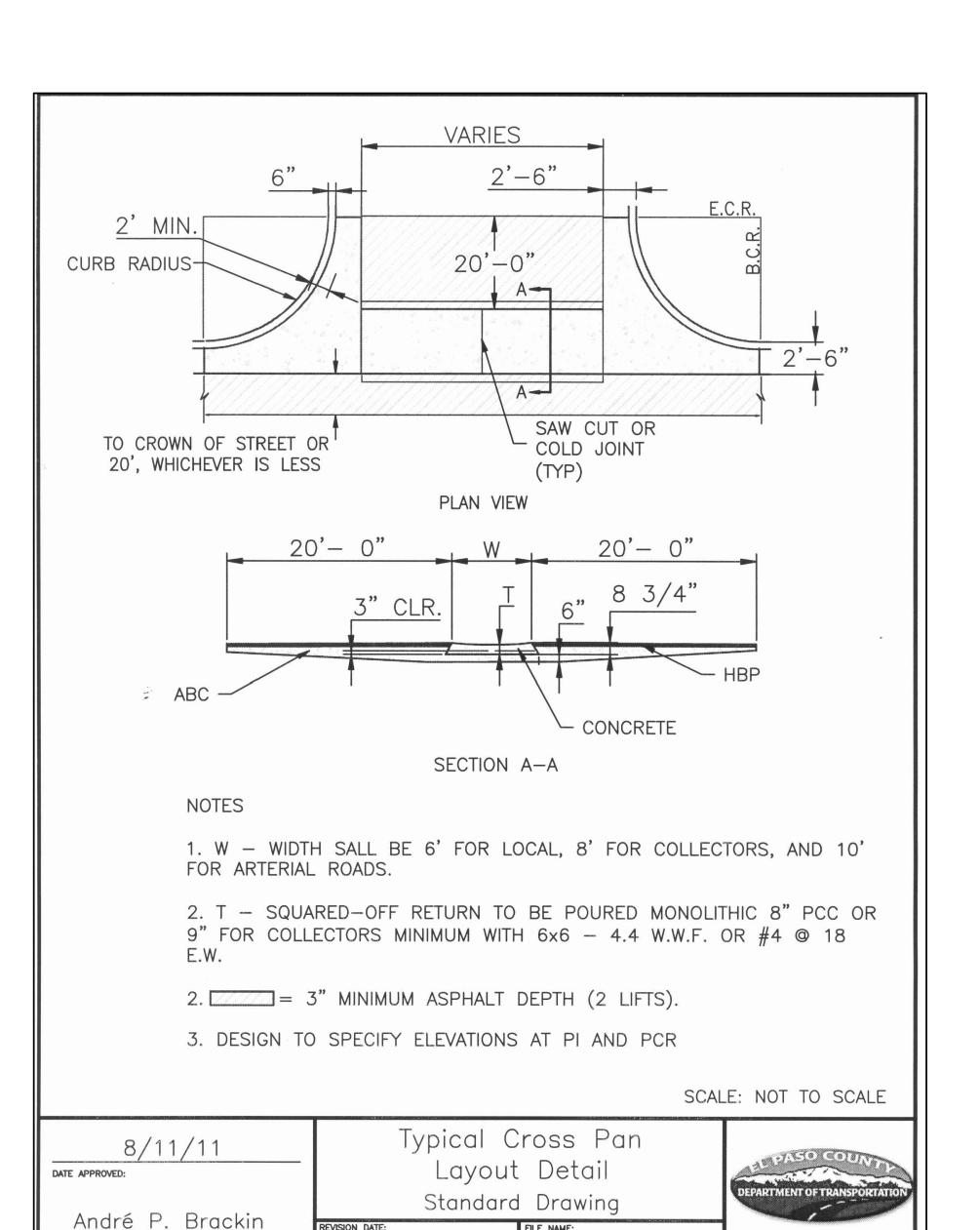


CWA-3

ARCHITECTS AIA 00 E. St. Vrain, Suite 300 Colorado Springs, Colorado 80903

SITE GRADING & EROSION CONTROL NOTES & DETAILS





SIDEWALK

SIDEWALK

__**C**

VARIES

EARTH.

SECTION A-A FLOW TO GUTTER

Curb Opening with Drainage

Chase Detail 1 of 2

Standard Drawing

 SD_3-25

11/10/04

SCALE: NOT TO SCALE

OUTLET TREATMENT

SUBJECT TO DETAIL

DESIGN.

CUT-OFF WALL MAY

DOWN-STREAM AREA IS HARD SURFACED

CUT-OFF WALL CAST

AGAINST UNDISTURBED

BE DELETED IF UPSTREAM OR

8/11/11

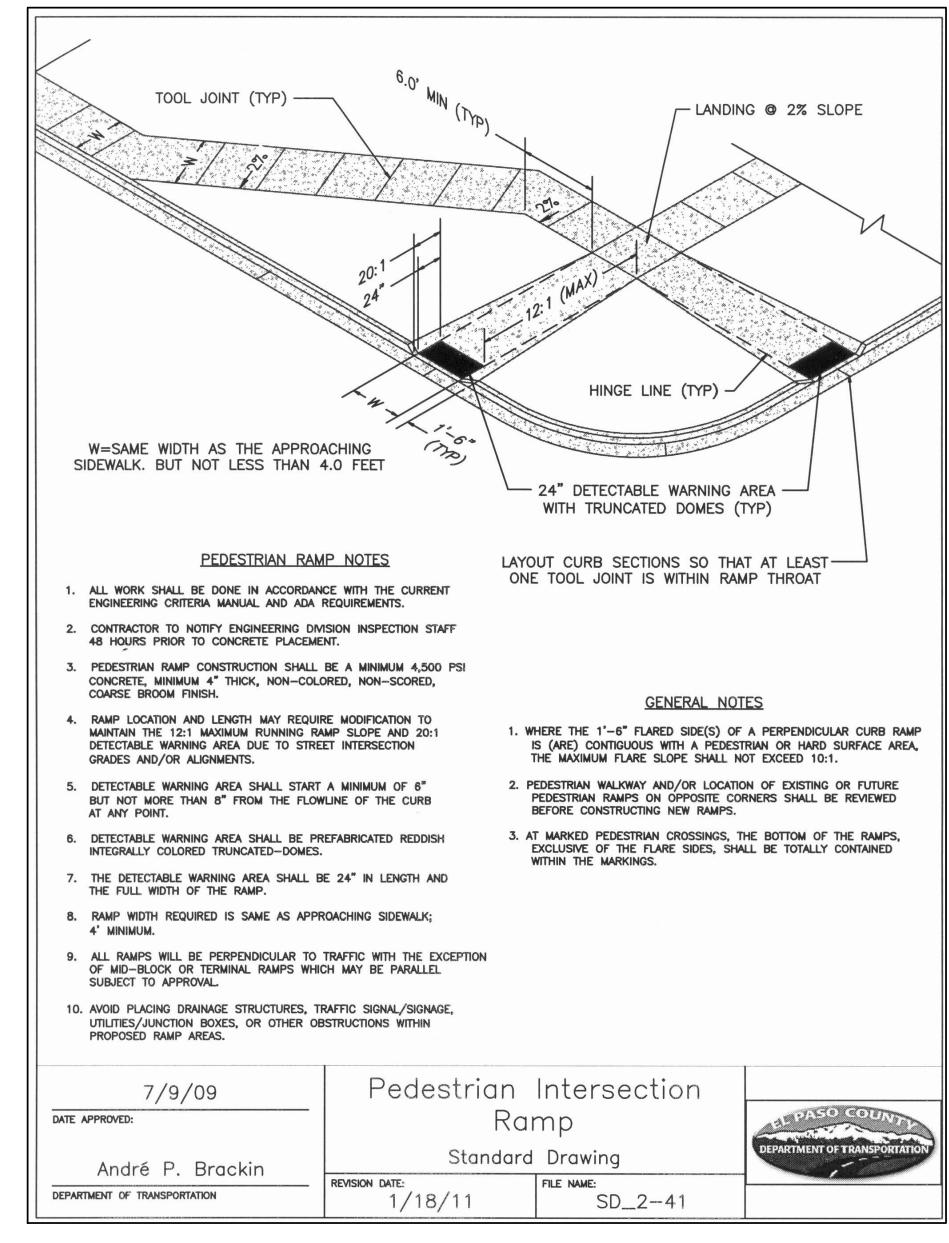
André P. Brackin

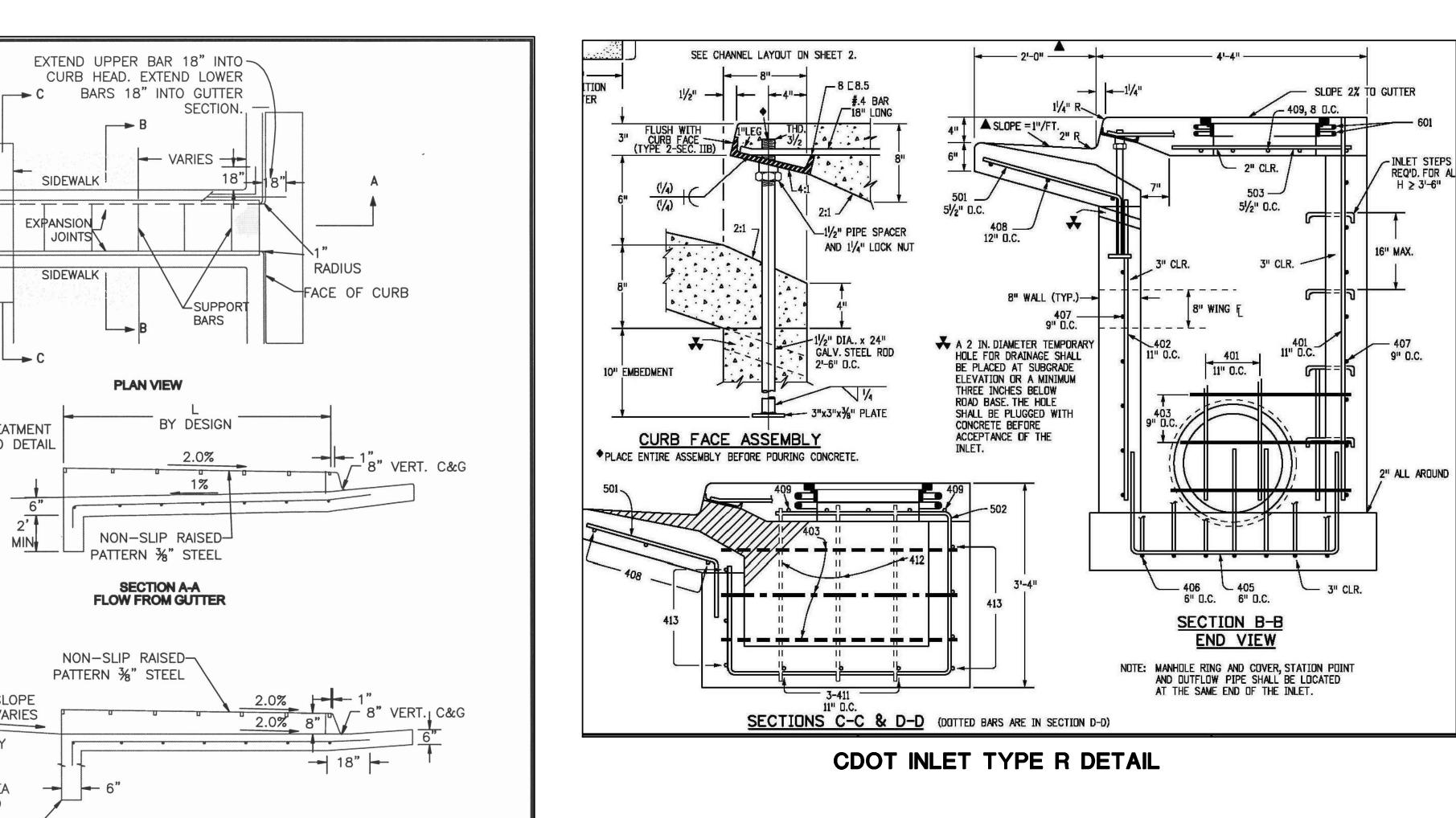
DEPARTMENT OF TRANSPORTATION

DATE APPROVED:

BY DESIGN

DEPARTMENT OF TRANSPORTATION





MONUMENT **ACADEMY** HIGH SCHOOL



Delete this sheet for Phase 1a grading or label as Phase 1b (see comment letter).

30' FC-FC

TYPICAL ACCESS DRIVE SECTION (1)

1"=2.5' V

TYPICAL CONCRETE CROSSPAN (2)

SCALE: 1" = 1'-0"

SCALE: 1"=5' H

14' LANE

└─12" SCARIFIED &

RE-COMPACTED SUBGRADE

— ASPHALT ROADWAY* ATTACHED SIDEWALK

<u>2.0%</u>

-TYPE 3 CARRY CURB & GUTTER

14' LANE

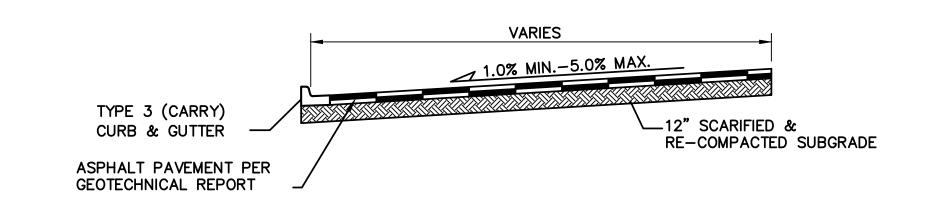
* PAVEMENT DESIGN BASED

∠#4's @ 12" 0/C

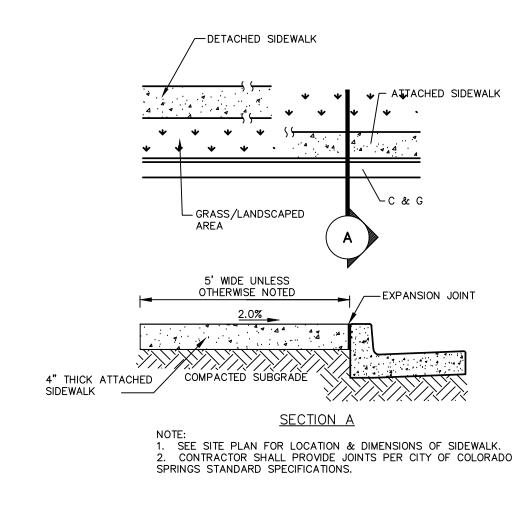
ON GEOTECHNICAL REPORT

TYPE 3 CARRY

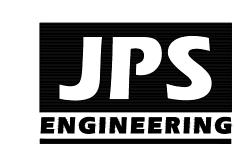
CURB & GUTTER



TYPICAL PARKING SECTION (3) SCALE: 1"=5"



CONCRETE SIDEWALK DETAIL 4



19 E. Willamette Ave. Colorado Springs, CO 80903

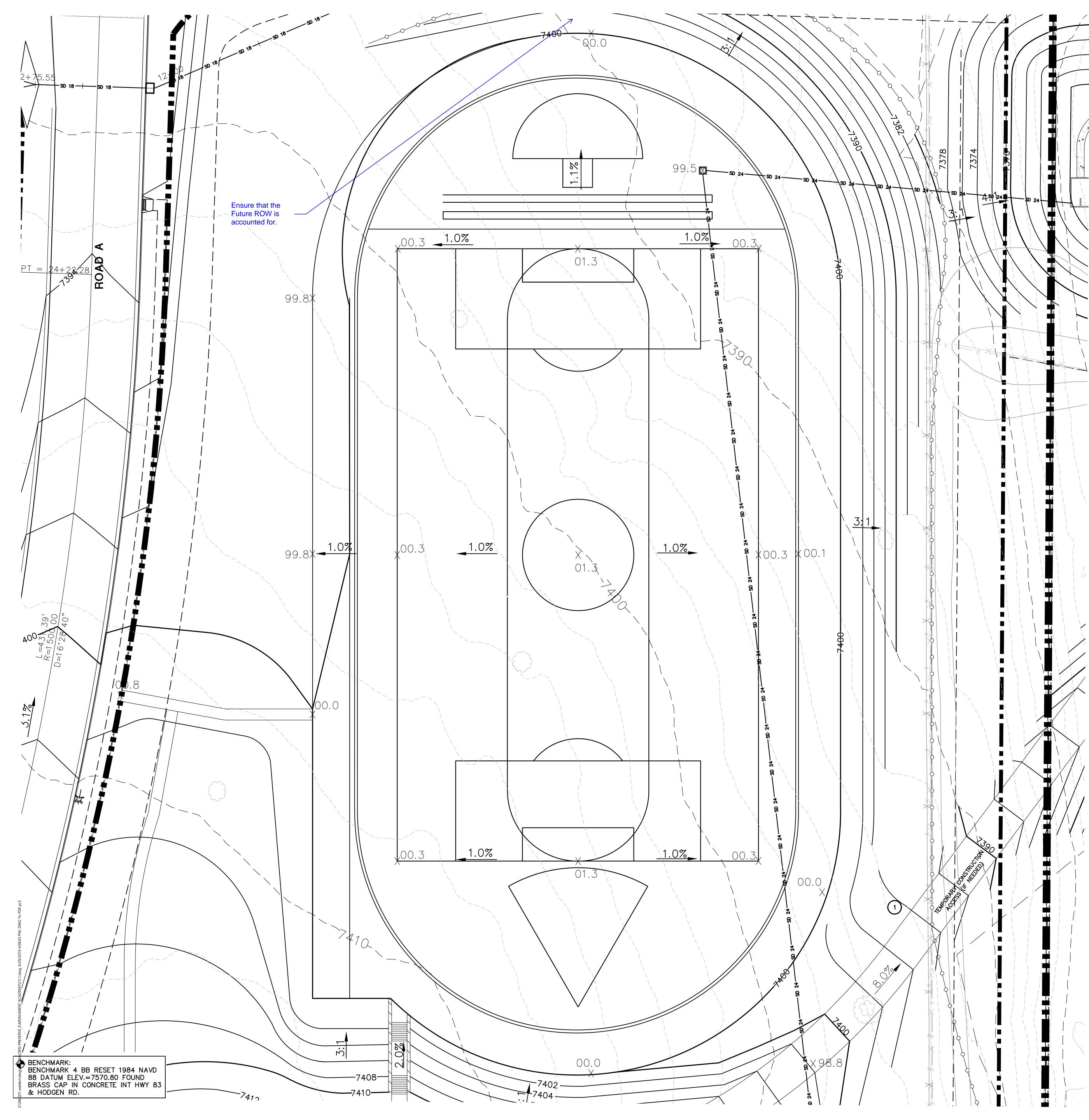
PH: 719-477-9429 FAX: 719-471-0766 www.jpsengr.com

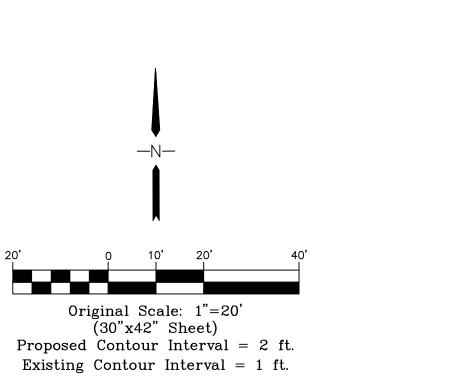
OWNERSHIP OF INSTRUMENTS OF SERVICE: ALL REPORTS, PLANS, SPECIFICATIONS, COMPUTER FILES, FIELD DATA, NOTES AND OTHER DOCUMENTS AND INSTRUMENTS PREPARED BY DESIGN PROFESSIONAL AS INSTRUMENTS OF SERVICE SHALL REMAIN THE PROPERTY OF THE DESIGN PROFESSIONAL. THE DESIGN PROFESSIONAL SHALL RETAIN ALL COMMON LAW STATUTORY AND OTHER RESERVED RIGHTS INCLUDING THE COPYRIGHT THERETO.



CIVIL DETAILS

NO.	REVISION	BY	DATE
A	FOR PERMIT	JPS	4/01/19
A	COUNTY COMMENTS	JPS	4/29/19



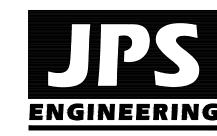


MONUMENT **ACADEMY** HIGH SCHOOL

FOR CONSTRUCTION

<u>LEGEND</u> — -- — PROPERTY LINE

— — — EASEMENT -----6520 EXISTING CONTOUR $imes \frac{99.0}{ imes \frac{99.0}{ imes 100}}$ PROPOSED SPOT ELEVATION (FLOWLINE)



19 E. Willamette Ave. Colorado Springs, CO 80903

FAX: 719-471-0766 www.jpsengr.com

PH: 719-477-9429

OWNERSHIP OF INSTRUMENTS OF SERVICE: ALL REPORTS, PLANS, SPECIFICATIONS, COMPUTER FILES, FIELD DATA, NOTES AND OTHER DOCUMENTS AND INSTRUMENTS PREPARED BY DESIGN PROFESSIONAL AS INSTRUMENTS OF SERVICE SHALL REMAIN THE PROPERTY OF THE DESIGN PROFESSIONAL. THE DESIGN PROFESSIONAL SHALL RETAIN ALL

COMMON LAW STATUTORY AND OTHER RESERVED RIGHTS INCLUDING THE COPYRIGHT THERETO.

KEYED NOTES:

- CONTRACTOR MAY WASTE EXCESS CUT MATERIAL OR BORROW SUITABLE FILL MATERIAL FROM THIS AREA . MAINTAIN POSITIVE DRAINAGE & MATCH INTO EXISTING GRADES WITH 3:1 MAX. SLOPE.
- 2 PREPARE AND COMPACT BUILDING FOUNDATION & SLABS PER PROJECT GEOTECHNICAL REPORT
- HEAVY DUTY ASPHALT PAVEMENT:
 5" HBP OVER 5" ABC (REFER TO GEOTECH REPORT)
- 4 LIGHT DUTY ASPHALT PAVEMENT:
- 4" HBP OVER 5" ABC (REFER TO GEOTECH REPORT)
- 5 2' CURB CHASE
- 6 BUILDING MATERIAL STORAGE AREA
- 7 TOPSOIL STOCKPILE AREA

NO.	REVISION	BY	DATE
\bigcirc	FOR PERMIT	JPS	4/01/19
B	COUNTY COMMENTS	JPS	4/29/19

PCD PROJECT NO. PPR-19-009

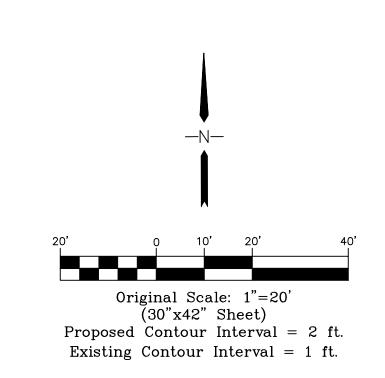


ENLARGED GRADING PLAN - NORTH FIELD

SCALE: 1"=20'

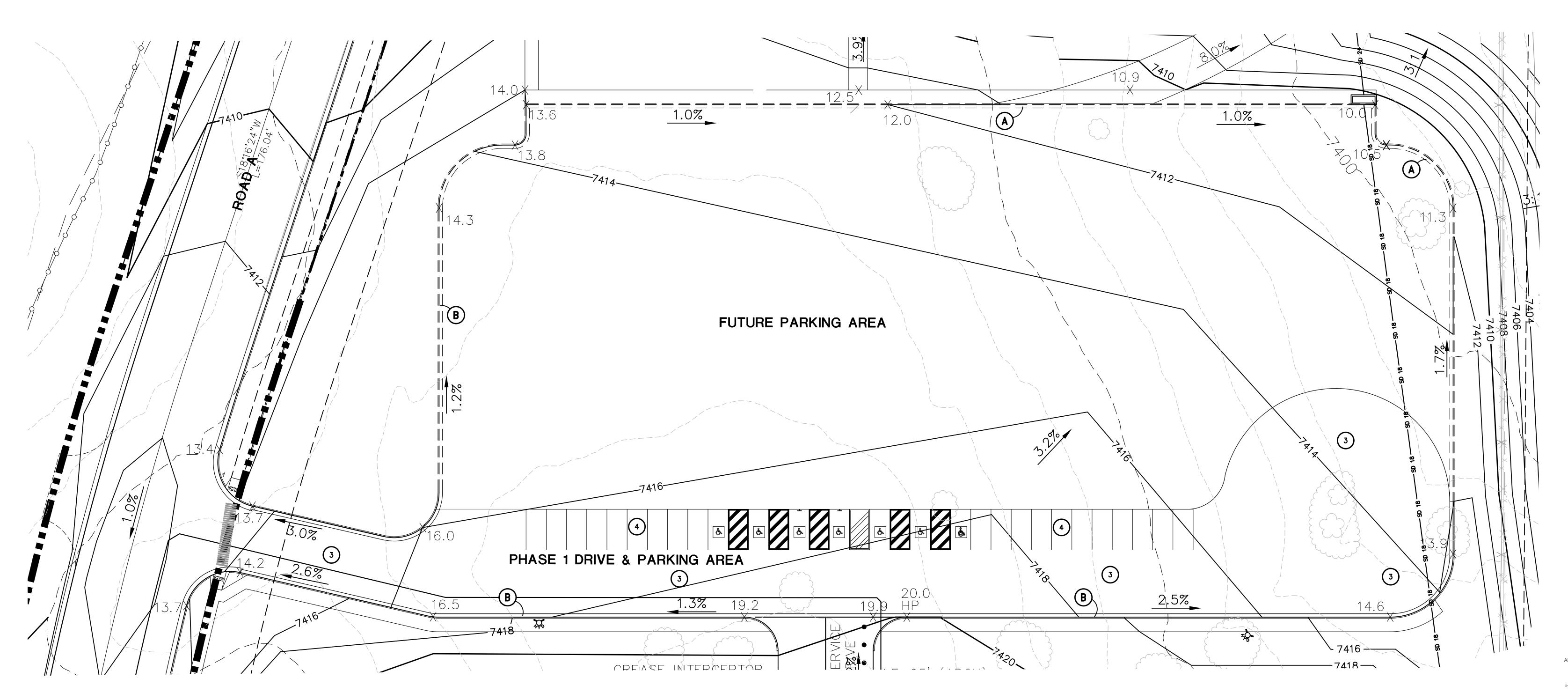
NORTH DATE:

C5.1



MONUMENT **ACADEMY** HIGH SCHOOL

FOR CONSTRUCTION



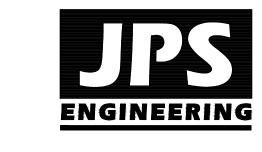
<u>LEGEND</u>

— -- — PROPERTY LINE

----- 6520 EXISTING CONTOUR

× 99.0 PROPOSED SPOT ELEVATION (FLOWLINE)

 $\times \frac{99.0}{}$ EXIST. SPOT ELEVATION



19 E. Willamette Ave. Colorado Springs, CO

PH: 719-477-9429 FAX: 719-471-0766 www.jpsengr.com

OWNERSHIP OF INSTRUMENTS OF SERVICE: ALL REPORTS, PLANS, SPECIFICATIONS, COMPUTER FILES, FIELD DATA, NOTES AND OTHER DOCUMENTS AND INSTRUMENTS PREPARED BY DESIGN PROFESSIONAL AS INSTRUMENTS OF SERVICE SHALL REMAIN THE PROPERTY OF THE DESIGN PROFESSIONAL. THE DESIGN PROFESSIONAL SHALL RETAIN ALL COMMON LAW STATUTORY AND OTHER RESERVED RIGHTS INCLUDING THE COPYRIGHT THERETO.

KEYED NOTES:

- CONTRACTOR MAY WASTE EXCESS CUT MATERIAL OR BORROW SUITABLE FILL MATERIAL FROM THIS AREA . MAINTAIN POSITIVE DRAINAGE & MATCH INTO EXISTING GRADES WITH 3:1 MAX. SLOPE.
- PREPARE AND COMPACT BUILDING FOUNDATION & SLABS PER PROJECT GEOTECHNICAL REPORT
- HEAVY DUTY ASPHALT PAVEMENT:
 5" HBP OVER 5" ABC (REFER TO GEOTECH REPORT)
- LIGHT DUTY ASPHALT PAVEMENT:

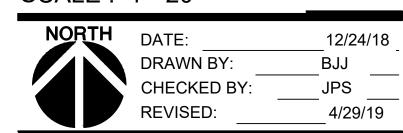
 4" HBP OVER 5" ABC (REFER TO GEOTECH
- 5 2' CURB CHASE
- 6 BUILDING MATERIAL STORAGE AREA
- 7 TOPSOIL STOCKPILE AREA

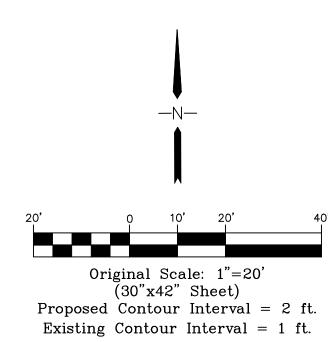
NO.	REVISION	BY	DATE
A	FOR PERMIT	JPS	4/01/1
A	COUNTY COMMENTS	JPS	4/29/1

	BY	DATE
	JPS	4/01/19
NTS	JPS	4/29/19

ARCHITECTS AIA 100 E. St. Vrain, Suite 300 Colorado Springs, Colorado 80903 **ENLARGED GRADING PLAN**

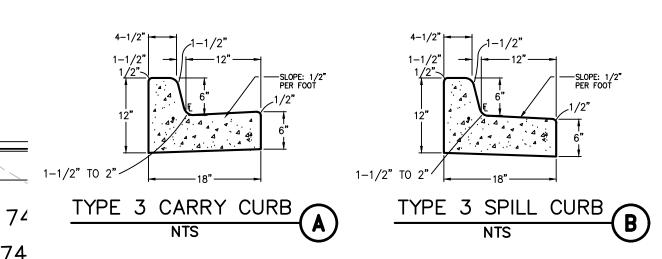
- NORTH PARKING LOT SCALE: 1"=20'





MONUMENT **ACADEMY** HIGH SCHOOL

FOR CONSTRUCTION



2.5%

FUTURE

BUILDING



19 E. Willamette Ave. Colorado Springs, CO 80903

PH: 719-477-9429 FAX: 719-471-0766 www.jpsengr.com

OWNERSHIP OF INSTRUMENTS OF SERVICE: ALL REPORTS, PLANS, SPECIFICATIONS, COMPUTER FILES, FIELD DATA, NOTES AND OTHER DOCUMENTS AND INSTRUMENTS PREPARED BY DESIGN PROFESSIONAL AS INSTRUMENTS OF SERVICE SHALL REMAIN THE PROPERTY OF THE DESIGN PROFESSIONAL. THE DESIGN PROFESSIONAL SHALL RETAIN ALL COMMON LAW STATUTORY AND OTHER RESERVED RIGHTS INCLUDING THE COPYRIGHT THERETO.

KEYED NOTES:

- CONTRACTOR MAY WASTE EXCESS CUT MATERIAL OR BORROW SUITABLE FILL MATERIAL FROM THIS AREA . MAINTAIN POSITIVE DRAINAGE & MATCH INTO EXISTING GRADES WITH 3:1 MAX. SLOPE.
- 2 PREPARE AND COMPACT BUILDING FOUNDATION & SLABS PER PROJECT GEOTECHNICAL REPORT
- HEAVY DUTY CONCRETE PAVEMENT:
 6.5" CONCRETE (REFER TO GEOTECH REPORT)

<u>LEGEND</u>

————— PROPERTY LINE

-----6520 EXISTING CONTOUR

PROPOSED SPOT ELEVATION (FLOWLINE)

— — — EASEMENT

- LIGHT DUTY ASPHALT PAVEMENT:
 4" HBP OVER 5" ABC (REFER TO GEOTECH REPORT)
- 5 2' CURB CHASE
- 6 BUILDING MATERIAL STORAGE AREA
- 7 TOPSOIL STOCKPILE ARI

REA			
NO.	REVISION	BY	DATE
\triangle	FOR PERMIT	JPS	4/01/19
B	COUNTY COMMENTS	JPS	4/29/19

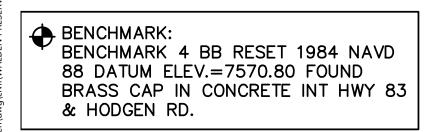
SCALE: 1"=20' 12/24/18 CHECKED BY:

ENLARGED GRADING

PLAN - BUILDING AREA

ARCHITECTS AIA

100 E. St. Vrain, Suite 300 Colorado Springs, Colorado 80903



FF**-**7422.0

PROPOSED BUILDING FF**-**7422.0

SD 12 SD 8 SD 8 SD 8

30 18 30 18

1.3%

NOTE: PHASE 1 SITEWORK INCLUDES GRADING & COMPACTION OF FUTURE BUILDING ADDITION AREAS TO SUBGRADE ELEVATION.

FUTURE

BUILDING

FF-7422.0

19.2

PCD PROJECT NO. PPR-19-009

KEYED NOTES:

CONTRACTOR MAY WASTE EXCESS CUT MATERIAL OR BORROW SUITABLE FILL MATERIAL FROM THIS AREA. MAINTAIN POSITIVE DRAINAGE & MATCH INTO EXISTING GRADES WITH 3:1 MAX. SLOPE.

2 PREPARE AND COMPACT BUILDING FOUNDATION & SLABS PER PROJECT GEOTECHNICAL REPORT

3 HEAVY DUTY ASPHALT PAVEMENT:
5" HBP OVER 5" ABC (REFER TO GEOTECH REPORT)

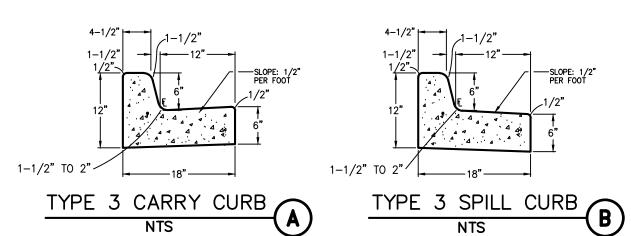
4 LIGHT DUTY ASPHALT PAVEMENT:
4" HBP OVER 5" ABC (REFER TO GEOTECH REPORT)

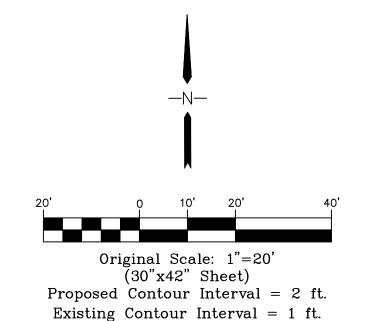
2' CURB CHASE W/RIPRAP APRON (15'Lx5'Wx2'D; d50=12" RR)

6 BUILDING MATERIAL STORAGE AREA

7 TOPSOIL STOCKPILE AREA

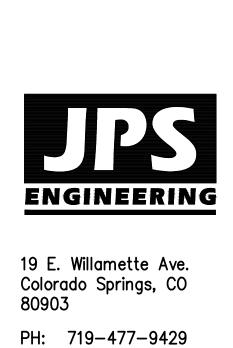
 $imes rac{99.0}{}$ Exist. Spot elevation





MONUMENT
ACADEMY
HIGH SCHOOL

FOR CONSTRUCTION



OWNERSHIP OF INSTRUMENTS OF SERVICE:

ALL REPORTS, PLANS, SPECIFICATIONS, COMPUTER FILES, FIELD DATA, NOTES AND OTHER DOCUMENTS AND INSTRUMENTS PREPARED BY DESIGN PROFESSIONAL AS INSTRUMENTS OF

FAX: 719-471-0766 www.jpsengr.com

ALL REPORTS, PLANS, SPECIFICATIONS, COMPUTER FILES, FIELD DATA, NOTES AND OTHER DOCUMENTS AND INSTRUMENTS PREPARED BY DESIGN PROFESSIONAL AS INSTRUMENTS OF SERVICE SHALL REMAIN THE PROPERTY OF THE DESIGN PROFESSIONAL. THE DESIGN PROFESSIONAL SHALL RETAIN ALL COMMON LAW STATUTORY AND OTHER RESERVED RIGHTS INCLUDING THE COPYRIGHT THERETO.



ENLARGED GRADING PLAN
- SOUTH PARKING LOT

SCALE: 1"=20'

NORTH	DATE:	12/24/18
	DRAWN BY:	BJJ
	CHECKED BY:	JPS
	REVISED:	4/29/19

