

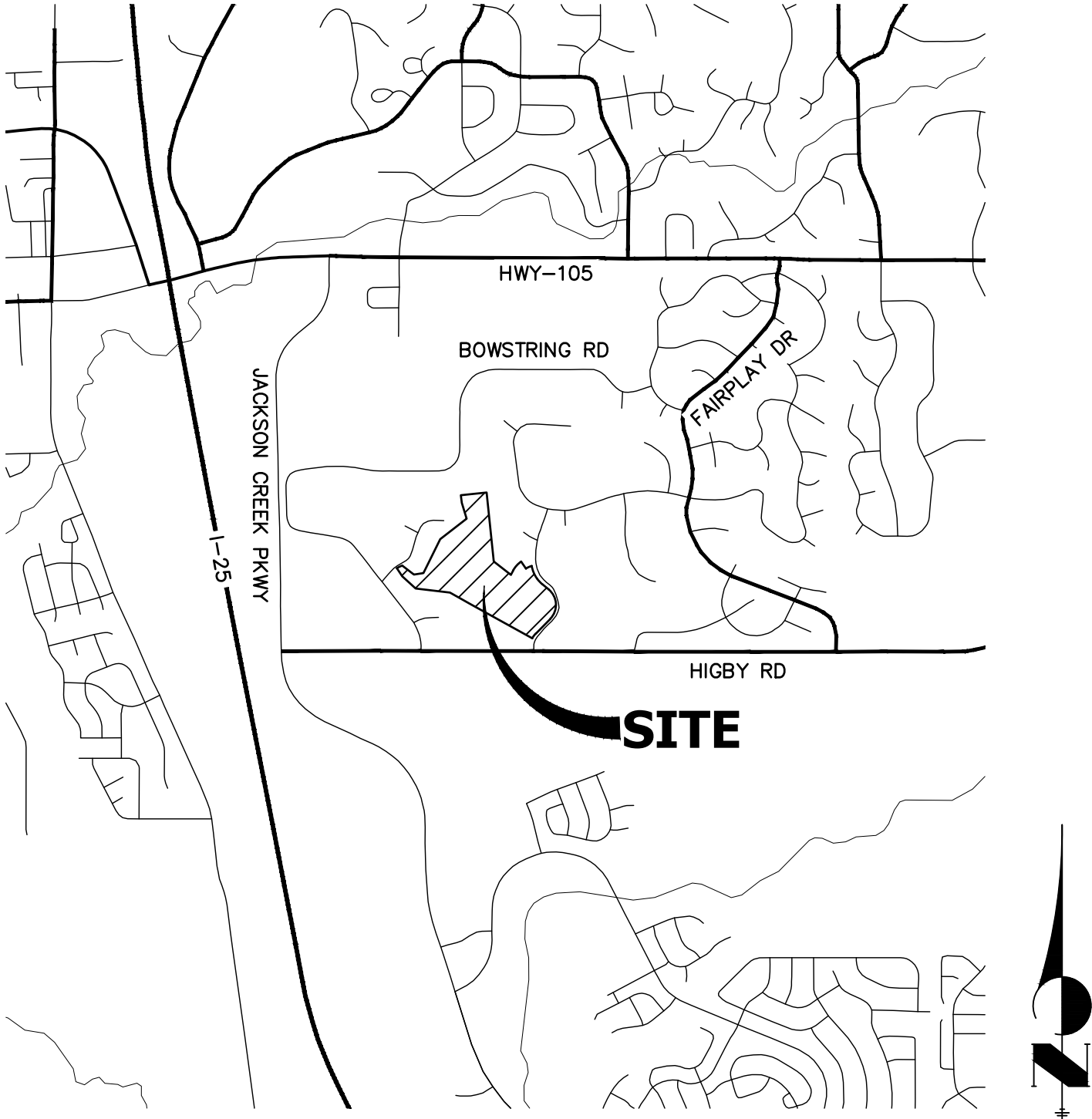
CLOVERLEAF FILING 2  
EL PASO COUNTY, COLORADO  
STORM SEWER AND POND PLANS

STANDARD NOTES FOR EL PASO COUNTY CONSTRUCTION PLANS

- ALL DRAINAGE AND ROADWAY CONSTRUCTION SHALL MEET THE STANDARDS AND SPECIFICATIONS OF THE CITY OF COLORADO SPRINGS/EL PASO COUNTY DRAINAGE CRITERIA MANUAL, VOLUMES 1 AND 2, AND THE EL PASO COUNTY ENGINEERING CRITERIA MANUAL.
- CONTRACTOR SHALL BE RESPONSIBLE FOR THE NOTIFICATION AND FIELD NOTIFICATION OF ALL EXISTING UTILITIES, WHETHER SHOWN ON THE PLANS OR NOT, BEFORE BEGINNING CONSTRUCTION. LOCATION OF EXISTING UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. CALL 811 TO CONTACT THE UTILITY NOTIFICATION CENTER OF COLORADO (UNCC).
- CONTRACTOR SHALL KEEP A COPY OF THESE APPROVED PLANS, THE GRADING AND EROSION CONTROL PLAN, THE STORMWATER MANAGEMENT PLAN (SWMP), THE SOIL AND GEOTECHNICAL REPORT, AND THE APPROPRIATE DESIGN AND CONSTRUCTION STANDARDS AND SPECIFICATIONS AT THE JOB SITE AT ALL TIMES, INCLUDING THE FOLLOWING:
  - EL PASO COUNTY ENGINEERING CRITERIA MANUAL (ECM)
  - CITY OF COLORADO SPRINGS/ EL PASO COUNTY DRAINAGE CRITERIA MANUAL, VOLUMES 1 AND 2
  - COLORADO DEPARTMENT OF TRANSPORTATION (CDOT) STANDARD SPECIFICATIONS AND BRIDGE CONSTRUCTION
  - CDOT M&S STANDARDS
- 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 VERSIONS 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. ANY MODIFICATIONS NECESSARY TO MEET CRITERIA AFTER-THE-FACT WILL BE ENTIRELY THE DEVELOPER'S RESPONSIBILITY TO RECTIFY.
- IT IS THE DESIGN ENGINEER'S RESPONSIBILITY TO ACCURATELY SHOW EXISTING CONDITIONS, BOTH ONSITE AND OFFSITE, ON THE CONSTRUCTION PLANS. ANY MODIFICATIONS NECESSARY DUE TO CONFLICTS, OMISSIONS, OR CHANGED CONDITIONS WILL BE ENTIRELY THE DEVELOPER'S RESPONSIBILITY TO RECTIFY.
- CONTRACTOR SHALL SCHEDULE A PRE-CONSTRUCTION MEETING WITH EL PASO COUNTY PLANNING AND COMMUNITY DEVELOPMENT INSPECTIONS, PRIOR TO STARTING CONSTRUCTION.
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO UNDERSTAND THE REQUIREMENTS OF ALL JURISDICTIONAL AGENCIES 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.
- CONTRACTOR SHALL NOT DEVIATE FROM THE PLANS WITHOUT FIRST OBTAINING WRITTEN APPROVAL FROM THE DESIGN ENGINEER AND PCD. CONTRACTOR SHALL NOTIFY THE DESIGN ENGINEER IMMEDIATELY UPON DISCOVERY OF ANY ERRORS OR INCONSISTENCIES.
- CONTRACTOR SHALL COORDINATE GEOTECHNICAL TESTING PER ECM STANDARDS. PAVEMENT DESIGN SHALL BE APPROVED BY EL PASO COUNTY PCD PRIOR TO PLACEMENT OF CURB AND GUTTER AND PAVEMENT.
- ALL CONSTRUCTION TRAFFIC MUST ENTER/EXIT THE SITE AT APPROVED CONSTRUCTION ACCESS POINTS.
- SIGHT VISIBILITY TRIANGLES ARE IDENTIFIED IN THE PLANS SHALL BE PROVIDED AT ALL INTERSECTIONS. OBSTRUCTIONS GREATER THAN 18 INCHES ABOVE FLOWLINE ARE NOT ALLOWED IN SIGHT TRIANGLES.
- SIGNING AND STRIPING SHALL COMPLY WITH EL PASO COUNTY DEPARTMENT OF PUBLIC WORKS AND MUTCD CRITERIA.
- CONTRACTOR SHALL OBTAIN ANY PERMITS REQUIRED BY EL PASO COUNTY DEPARTMENT OF PUBLIC WORKS, INCLUDING WORK WITHIN THE RIGHT-OF-WAY AND SPECIAL TRANSPORT PERMITS.
- THE LIMITS OF CONSTRUCTION SHALL REMAIN WITHIN THE PROPERTY LINE UNLESS OTHERWISE NOTED. THE OWENER/DEVELOPER SHALL OBTAIN WRITTEN PERMISSION AND EASEMENTS, WHERE REQUIRED, FROM ADJOINING PROPERTY OWNER(S) PRIOR TO ANY OFF-SITE DISTURBANCE, GRADING, OR CONSTRUCTION.

NOTES

- SEE SHEET 1 FOR BENCHMARK. SEE SHEET 2 FOR LEGEND.
- ALL STATIONING IS PIPE CENTERLINE UNLESS OTHERWISE NOTED.
- ALL RCP STORM SEWER SHALL BE CLASS III UNLESS OTHERWISE NOTED.
- PIPE LENGTHS ARE FROM INSIDE INLET WALL TO INSIDE INLET WALL, FROM CENTER OF MANHOLE TO INSIDE INLET WALL, OR FROM CENTER OF MANHOLE TO CENTER OF MANHOLE. PIPE LENGTHS INCLUDE FES OR HEADWALL.
- ALL MANHOLE COVERS SHALL BE ORIENTED TO AVOID CURB, GUTTER, SIDEWALK AND CROSSPANS UNLESS OTHERWISE NOTED.
- ALL MANHOLES ARE EL PASO COUNTY TYPE II UNLESS OTHERWISE SPECIFIED.
- ALL MANHOLES HAVE AN ECCENTRIC CONE UNLESS OTHERWISE SPECIFIED.
- ALL ON-GRADE INLETS ARE TO MATCH TBC ELEVATIONS AT EACH END, FOLLOWING STREET GRADES. SEE ROADWAY PLANS FOR REQUIRED ELEVATIONS.
- INLET STATIONING IS TO CENTER OF INLET.
- PIPES SHALL HAVE JOINT RESTRAINTS ON LAST 3 JOINTS AT PIPE OUTFALL.
- ALL CURVED PIPES SHALL BE BUILT IN ACCORDANCE WITH THE AMERICAN CONCRETE PIPE ASSOCIATION (ACPA) DESIGN DATA 21. PIPE MANUFACTURER TO BE USED MUST BE ABLE TO MEET LENGTH AND JOINT OPENING CRITERIA PER ACPA & ALL APPLICABLE EL PASO COUNTY CRITERIA AND STANDARDS.
- PIPE BEDDING SHALL CONFORM TO EL PASO COUNTY CONSTRUCTION STANDARDS AND SPECIFICATIONS. BEDDING FOR RCP PIPE SHALL BE AG7122 NO. 57/67 CRUSHED ROCK. SQUEEGEE OR MIXTURES CONTAINING SQUEEGEE SHALL NOT BE USED. BEDDING SHALL BE SIX TO EIGHT INCHES DEEP UNDER THE PIPE AND BACKFILLED TO THE SPRING LINE.
- ALL STORM SEWER PIPES, INLETS, MANHOLES, AND APPURTENANCES WITHIN THE R.O.W. ARE PUBLIC. STORM FACILITIES OUTSIDE OF THE PUBLIC R.O.W. ARE PRIVATE, UNLESS OTHERWISE NOTED.
- WHERE PIPES ENTER STRUCTURES ON A SKEW, CONTRACTOR IS REQUIRED TO EXTEND PIPE TO ENSURE THAT BOTH EDGES OF THE PIPE EXTEND INTO THE STRUCTURE. CONTRACTOR WILL THEN BE REQUIRED TO CUT PIPE FLUSH WITH THE INSIDE FACE OF THE STRUCTURE AND GROUT IN PLACE. UNLESS OTHERWISE NOTED.
- ALL MATERIALS AND INSTALLATION PROCEDURES SHALL BE IN COMPLIANCE WITH MANUFACTURERS SPECIFICATIONS AND EL PASO COUNTY STANDARDS AND SPECIFICATION.
- SEE DETAIL SHEETS FOR APPLICABLE DETAILS.
- ALL INLETS REQUIRE A CURB TYPE AND FL TRANSITION (LOCAL DEPRESSION) DETAILED PER CDOT (M-604-12) TYPE R INLET DETAIL. SEE JR ROADWAY PLAN SHEETS AND DETAIL SHEET.
- PIPES WITH PRESSURE HEAD SHALL USE WATER TIGHT JOINTS WITH A 100-YEAR SERVICE LIFE.
- CONTRACTOR TO SUBMIT SHOP DRAWINGS FOR ALL EL PASO COUNTY TYPE I MANHOLES PRIOR TO CONSTRUCTION OR ORDERING MATERIALS.



VICINITY MAP

SCALE: 1"=2000'

SHEET INDEX

- |       |   |                              |
|-------|---|------------------------------|
| 1     | - | COVER SHEET                  |
| 2     | - | LEGEND                       |
| 3-8   | - | STORM SEWER PLAN AND PROFILE |
| 9-25  | - | POND PLANS AND DETAILS       |
| 26-28 | - | DETAIL SHEET                 |

CONTACTS:

OWNER	CND-CLOVERLEAF, LLC ATTN: AZIZ SIDDIQUI 1111 N. POST OAK ROAD HOUSTON, TX 77055 P~224-415-6619
DEVELOPER	MONUMENT HILL CM LLC ATTN: JOE DESJARDIN 1864 WOODMOOR DRIVE, SUITE 100 COLORADO SPRINGS, CO 80920 P~719-476-0800
CONTRACTOR/OPERATOR (EROSION CONTROL)	MONUMENT HILL CM LLC ATTN: CHARLIE WILLIAMS 1864 WOODMOOR DRIVE, SUITE 100 COLORADO SPRINGS, CO 80920 P~719-492-1933
ENGINEER/SURVEYOR	JR ENGINEERING, LLC ATTN: MIKE A. BRAMLETT 5475 TECH CENTER DRIVE, SUITE 235 COLORADO SPRINGS, CO 80919 P~303-267-6240
FIRE PROTECTION DISTRICT	TRI-LAKES MONUMENT FPD 16055 OLD FOREST POINT, SUITE 103 MONUMENT, CO 80132 P~719-484-0911
DISTRICT	WOODMOOR WATER & SANITATION DISTRICT NO. 1 1845 WOODMOOR DRIVE MONUMENT, CO 80132 P~719-488-2525 EXT. 0
EL PASO COUNTY	PLANNING AND COMMUNITY DEVELOPMENT 2880 INTERNATIONAL CIRCLE, SUIT 110 COLORADO SPRINGS, CO 80910 P~719-520-6819  DEPARTMENT OF PUBLIC WORKS 3275 AKERS DR COLORADO SPRINGS, CO 80922 P~719-529-6460

BENCHMARK

NGS MONUMENT T 294 BEING MONUMENTED BY A 3-1/4" BRASS DISC SET IN A 4'X4' BOULDER, LOCATED 1.8 MILES EAST ALONG HIGBY ROAD FROM ITS INTERSECTION WITH JACKSON CREEK PARKWAY, 40 FEET SOUTH OF THE CENTERLINE OF THE ROAD, 6 FEET SOUTH OF A FENCE, AND 6.2 FEET SOUTH OF A WITNESS POST. SAID MONUMENT HAVING A PUBLISHED ELEVATION OF 7247.10 FEET, NAVD88.

BASIS OF BEARING

THE BASIS OF BEARINGS IS THE WESTERLY LINE OF TRACT, B, WOODMOOR PLACER, BEING MONUMENTED BY A 1-1/4" YELLOW PLASTIC CAP ILLEGIBLE AT BOTH ENDS. SAID LINE BEARING N26°20'33"E AS REFERENCED TO COLORADO STATE PLANE CENTRAL ZONE.

OWNER/DEVELOPER STATEMENT

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

✓ *Joseph W. Desjardin* 11/12/2021

JOE DESJARDIN DATE

MONUMENT HILL CM LLC  
1864 WOODMOOR DRIVE, SUITE 100  
COLORADO SPRINGS, CO 80920

EL PASO COUNTY STATEMENT

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

FILED IN ACCORDANCE WITH THE REQUIREMENTS OF THE EL PASO COUNTY LAND DEVELOPMENT CODE, DRAINAGE CRITERIA MANUAL, VOLUMES 1 AND 2, AND ENGINEERING CRITERIA MANUAL AS AMENDED.

IN ACCORDANCE WITH ECM SECTION 1.12, THESE CONSTRUCTION DOCUMENTS WILL BE VALID FOR CONSTRUCTION FOR A PERIOD OF 2 YEARS FROM THE DATE SIGNED BY THE EL PASO COUNTY ENGINEER. IF CONSTRUCTION HAS NOT STARTED WITHIN THOSE 2 YEARS, THE PLANS WILL NEED TO BE RESUBMITTED FOR APPROVAL, INCLUDING PAYMENT OF REVIEW FEES AT THE PLANNING AND COMMUNITY DEVELOPMENT DIRECTORS DISCRETION.

JENNIFER IRVINE, P.E. DATE

COUNTY ENGINEER/ECM ADMINISTRATOR

ENGINEER'S STATEMENT

THESE DETAILED PLANS AND SPECIFICATIONS WERE PREPARED UNDER MY DIRECT 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 PLAN 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 ANY LIABILITY CAUSED BY ANY NEGLIGENT ACTS, ERRORS OR OMISSIONS ON MY PART IN PREPARATION OF THESE DETAILED PLANS AND SPECIFICATIONS.


*Mike A. Bramlett* 11/11/21

MIKE A. BRAMLETT, P.E. 32314 DATE

COLORADO PROFESSIONAL ENGINEER  
FOR AND ON BEHALF OF JR ENGINEERING, LLC

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE AGENCIES, OR ENGINEERING APPROVES THEIR USE, DESIGNATED BY WRITTEN AUTHORIZATION.

PREPARED FOR  
MONUMENT HILL CM LLC  
1864 WOODMOOR DR, SIE 100  
COLORADO SPRINGS, CO 80920  
ATTN: JOE DESJARDIN  
(719) 476-0800  
JDESJARDIN@PROTERRACO.COM

J.R. ENGINEERING  
A Western Company  
  
Central 303-740-9888 • Colorado Springs 719-583-2583  
Fort Collins 970-491-9888 • www.jrengineering.com

BY	DATE	REVISION	No.	1"=2000'	H-SCALE	V-SCALE	N/A	11/11/21	DESIGNED BY	DRAWN BY	CHECKED BY
CLOVERLEAF FILING 2											
COVER SHEET											
SHEET 1 OF 28											
JOB NO. 25158.01											



Know what's below.  
Call before you dig.

LAYER LINETYPE LEGEND

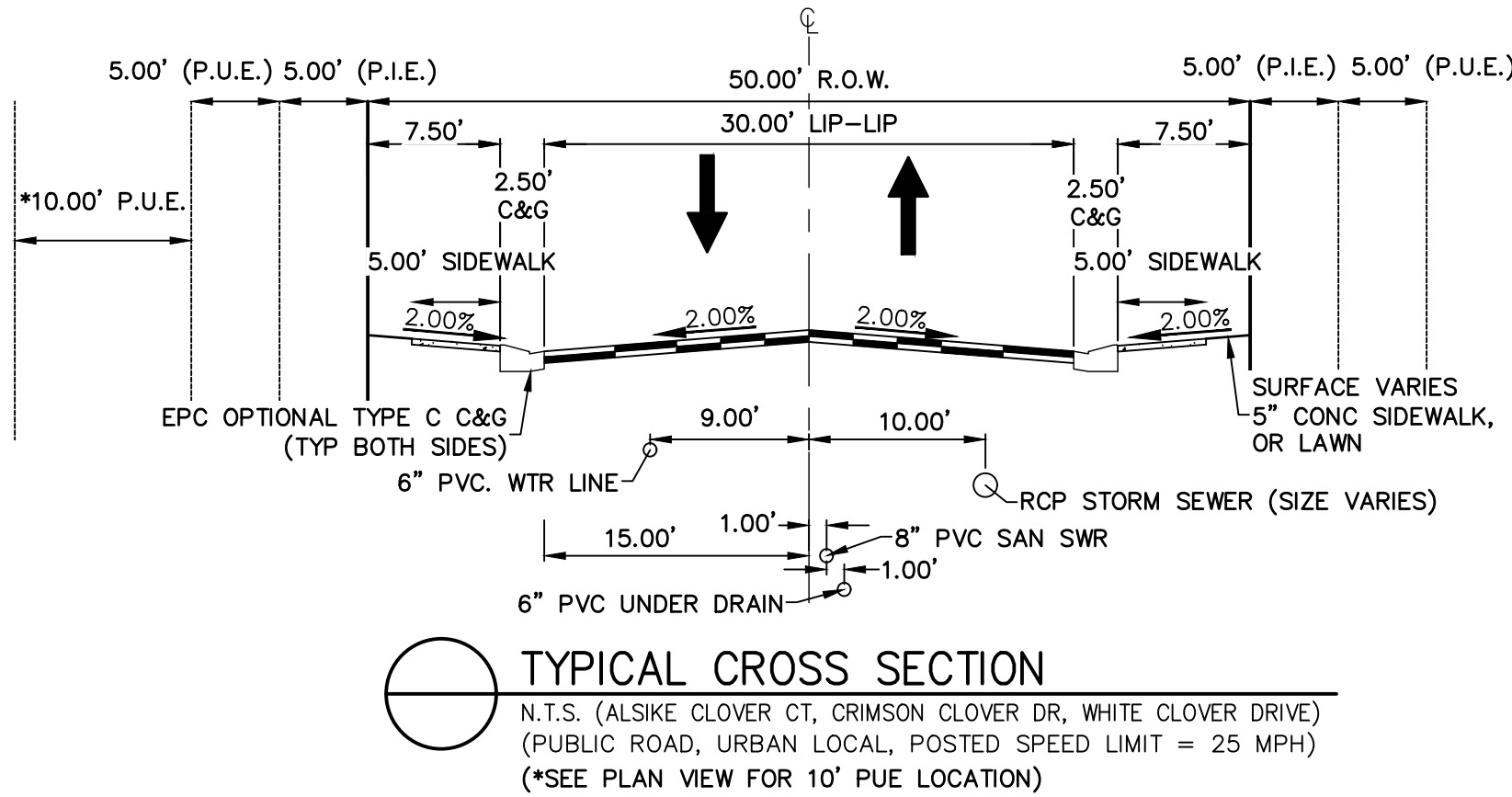
	EXISTING	PROPOSED
PHASE LINE		
MATCH LINE		
SECTION LINE		
BOUNDARY LINE		
PROPERTY LINE		
EASEMENT LINE		
RIGHT OF WAY		
R.O.W. A LINE		
CENTERLINE		
CITY LIMITS		
WIRE FENCE		
CHAIN LINK FENCE		
WOOD FENCE		
MASONRY FENCE		
GUARDRAIL		
CONC. BARRIER		
CABLE TV		
ELECTRIC		
FIBER OPTIC		
GAS MAIN		
IRRIGATION MAIN		
OIL/PETRO. MAIN		
OVERHEAD UTILITY		
SANITARY SEWER		
STORM DRAIN		
TELEPHONE		
WATER MAIN		
RAW WATER LINE		
SWALE/WATERWAY FLOWLINE		
DIVERSION DITCH		
DIVERSION CHANNEL		
MAJOR DRAINAGE BASIN		
MINOR DRAINAGE BASIN		
TOP OF SLOPE		
TOE OF SLOPE		
EDGE OF WATER		
INDEX CONTOUR		
INTERMEDIATE CONTOUR		
DEPRESSION CONT. (INDEX)		
DEPRESSION CONT. (INTER)		
TOP OF CUTS		
TOE OF FILLS		
CUT AND FILL LINE		
SILT FENCE		
100 YEAR FLOODPLAIN		
500 YEAR FLOODPLAIN		
FLOODWAY		
BASE FLOOD ELEVATION		
EDGE OF WETLANDS		
STONE WALL		

LANDSCAPE LEGEND

	EXISTING	PROPOSED
TREE - CONIFEROUS		
TREE - DECIDUOUS		
SHRUB/BUSH		
SHRUBS AND BUSHES		
IRRIGATION BOX		
IRRIGATION SPRINKLER		
IRRIGATION VALVE		
BOLLARD		
FLAGPOLE		

UTILITIES LEGEND

	EXISTING	PROPOSED
STORM SEWER		
MANHOLE		
STORM INLET		
AREA INLET - SQUARE		
AREA INLET - ROUND		
FLARED END SECTION		
RIPRAP		
SANITARY SEWER		
LINE MARKER		
SERVICE MARKER		
CLEAN-OUT		
MANHOLE W/ DIRECTIONAL FLOW ARROW		
WATER LINE		
LINE MARKER		
SERVICE MARKER		
FIRE HYDRANT		
FIRE CONNECTION		
MANHOLE		
BEND		
BLOW-OFF VALVE		
WELL		
METER		
VALVE		
REDUCER		
THRUST BLOCK		
CROSS		
PLUG W/ THRUST BLOCK		
TEE		
REVERSE ANCHOR		
ANODE		
AIR & VACUUM VALVE ASSEMBLY		
TRANSMISSION BLOW-OFF ASSEMBLY		
GAS LINE		
MARKER		
SERVICE MARKER		
METER		
VALVE		
PLUG		
TEE		
DRY UTILITIES		
CABLE TV MARKER		
CABLE TELEVISION PEDESTAL		
ELECTRIC MARKER		
ELECTRIC SERVICE MARKER		
ELECTRICAL PEDESTAL		
ELECTRICAL METER		
ELECTRICAL MANHOLE		
FIBER-OPTIC MARKER		
IRRIGATION PEDESTAL		
TELEPHONE MARKER		
TELEPHONE PEDESTAL		
TELEPHONE MANHOLE		
UTILITY POLE		
GUY ANCHOR		
GUY POLE		
MISC. UTILITIES		
VENT PIPE		
TEST HOLE DESIGNATOR		



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MIKE A. BRAMLETT, P.E.  
COLORADO P.E. 32314  
FOR AND ON BEHALF OF JR ENGINEERING, INC.  
DATE 11/11/21

PREPARED FOR

MONUMENT HILL CM LLC  
1864 WOODMOOR DR, STE 100  
COLORADO SPRINGS, CO 80920  
ATTN: JOE DESJARDIN  
(719) 476-0800  
JDESJARDIN@PROTERRACO.COM

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Centennial 303-740-9883 • Colorado Springs 719-583-2593  
Fort Collins 970-491-9888 • www.jrengineering.com

BY

DATE

REVISION

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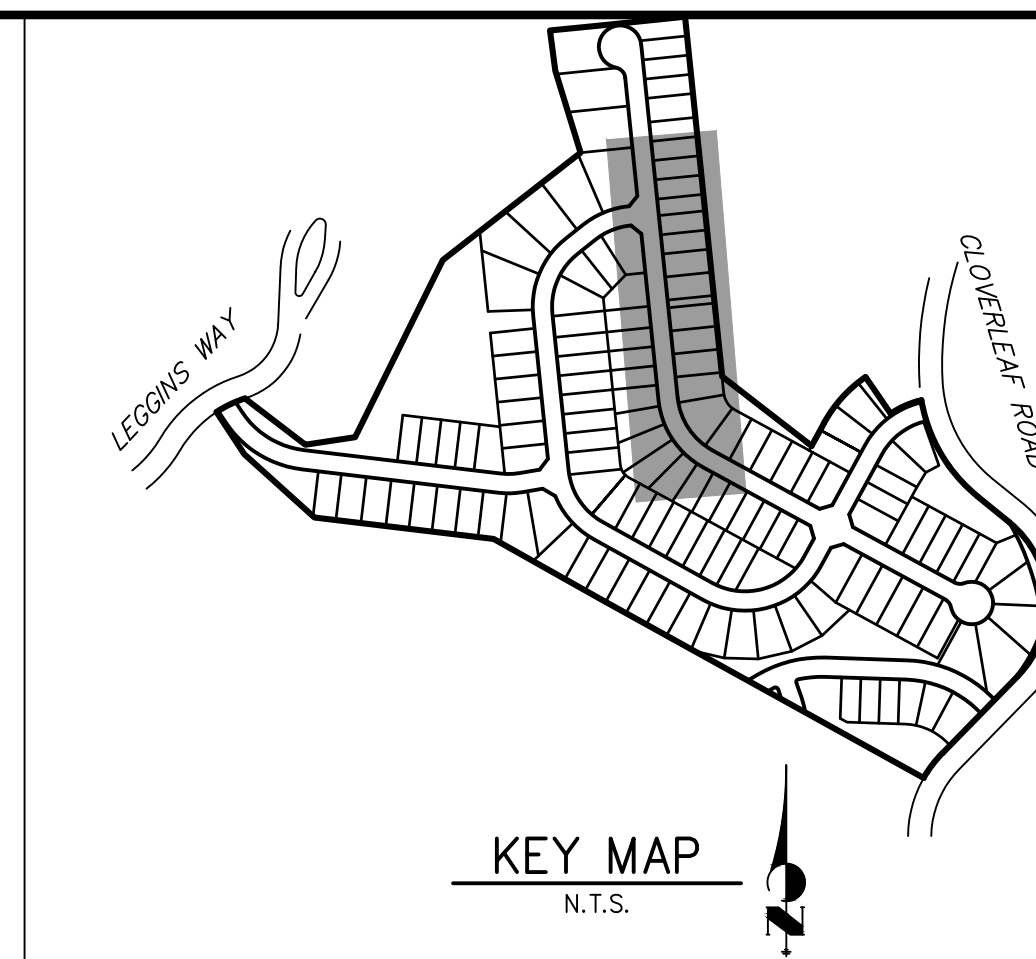
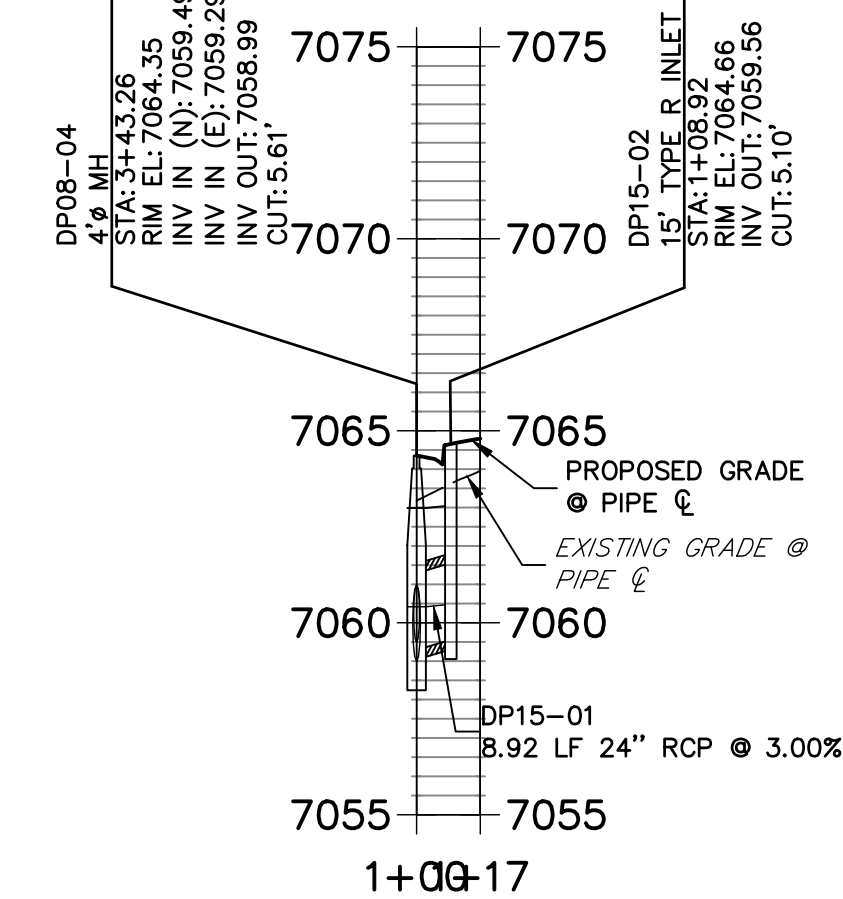
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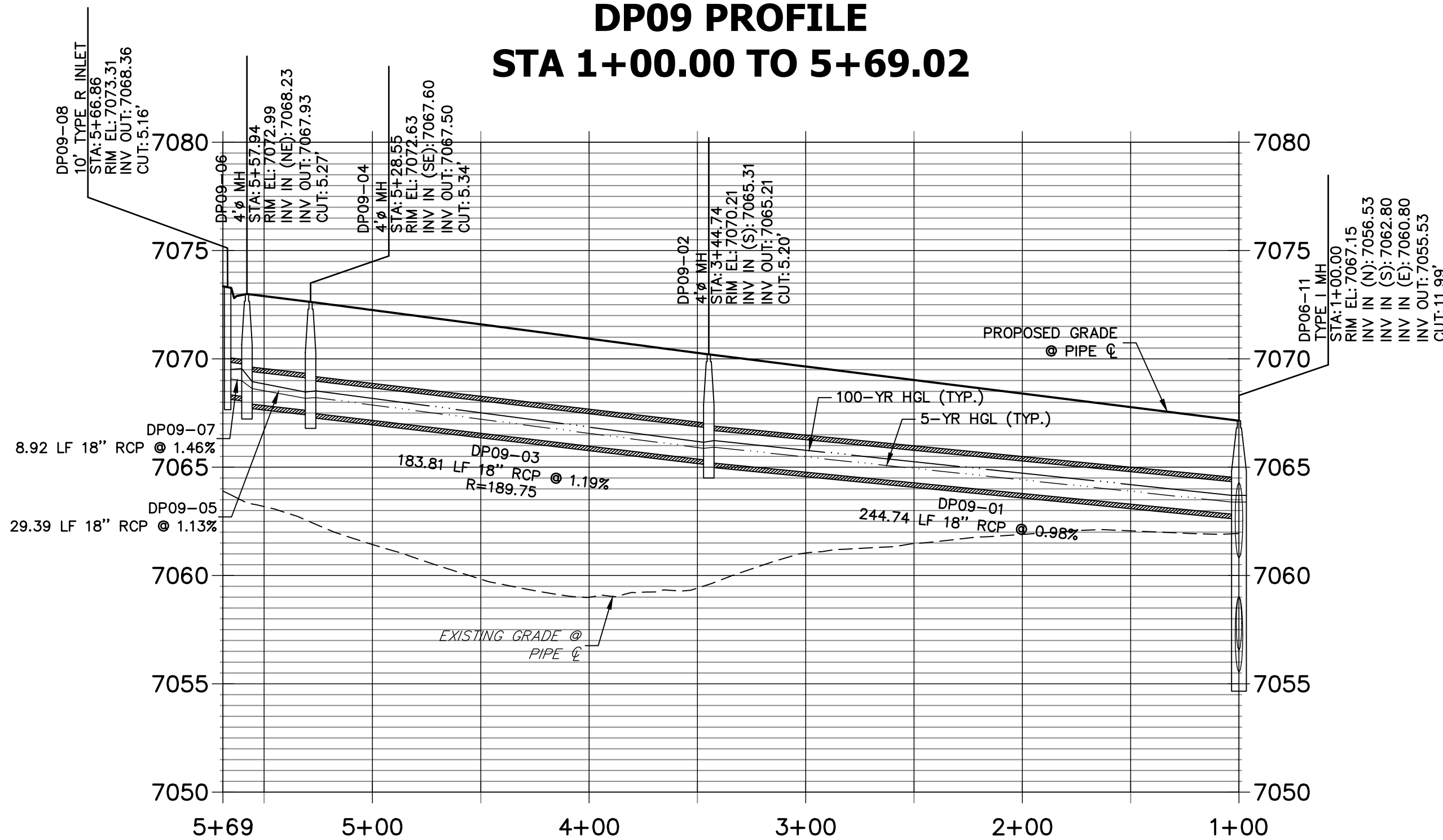
**MONUMENT HILL CM LLC**  
1864 WOODMOOR DR, STE 1  
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**J·R ENGINEERING**  
A Westrian Company

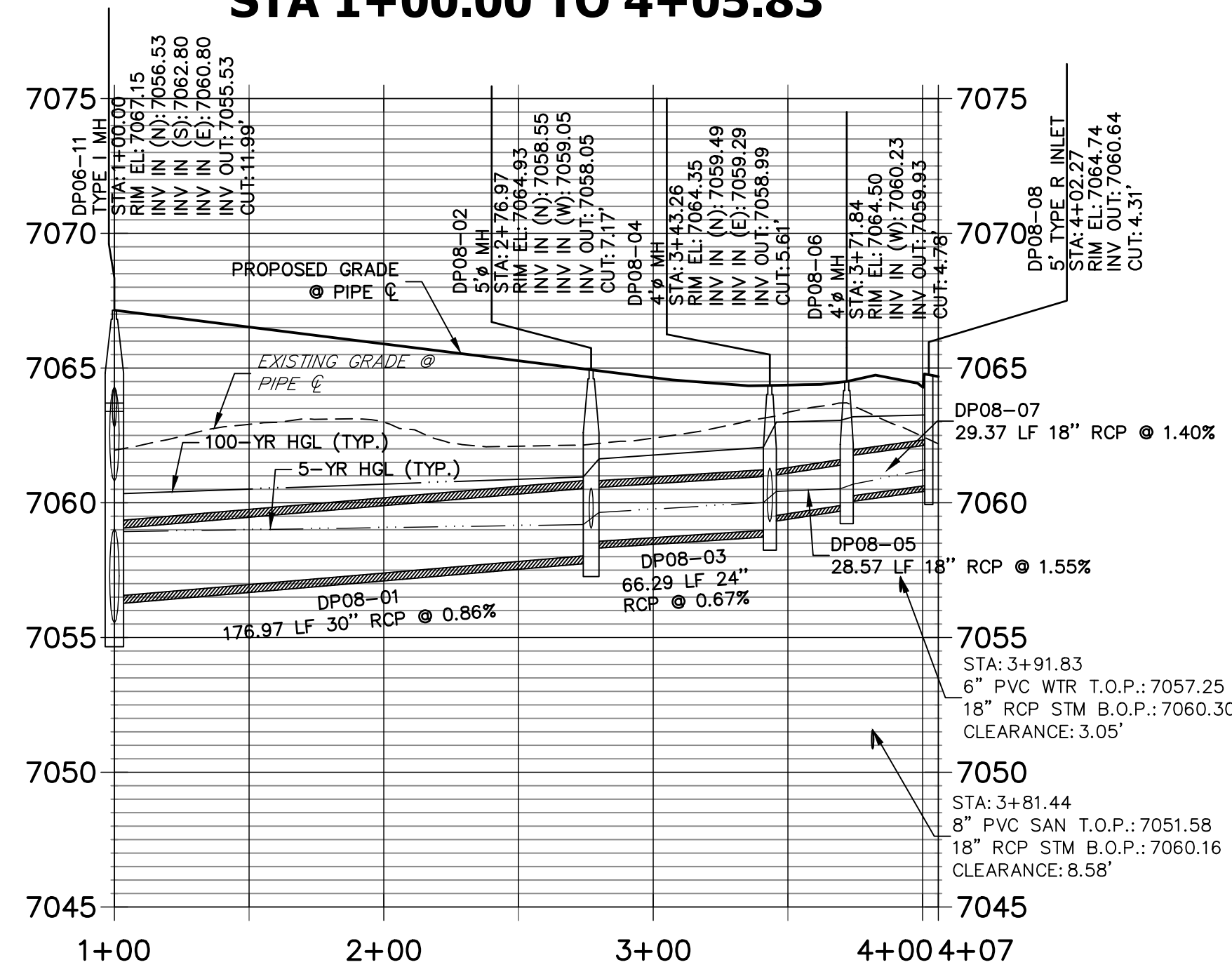


Centennial 303-740-9393 • Colorado Springs 719-593-2593  
Fort Collins 970-491-9888 • [www.jirandmeeringa.com](http://www.jirandmeeringa.com)

**DP09 PROFILE**  
**STA 1+00.00 TO 5+69.02**

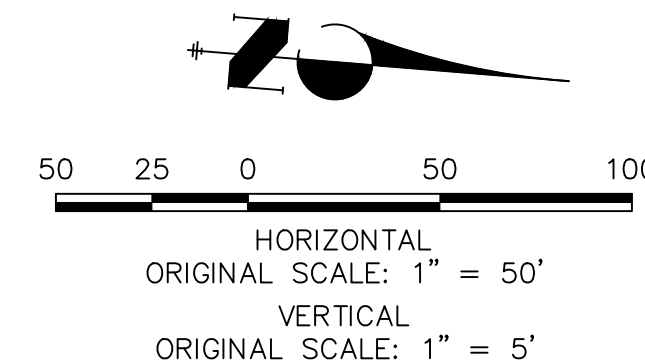
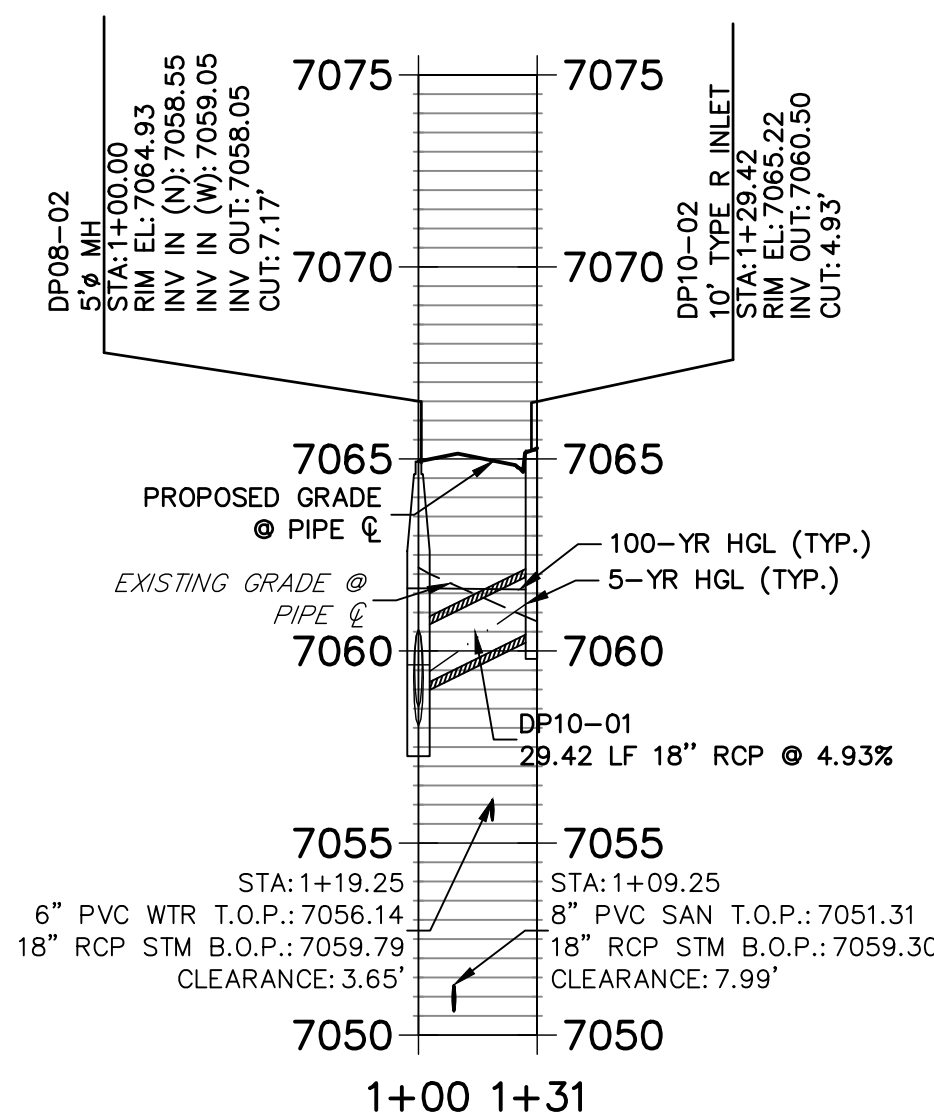


**DP08 PROFILE**  
**STA 1+00.00 TO 4+05.83**



# DP10 PROFILE

## STA 1+00.00 TO 1+30.92



Know what's **below**.  
**Call** before you dig.

### ENGINEER'S STATEMENT

PREPARED UNDER MY DIRECT SUPERVISION AND ON BEHALF OF JR  
ENGINEERING

Mike Braloff 32314 11/11/20

MIKE A. BRAMLETT, P.E.  
COLORADO P.E. 32314  
FOR AND ON BEHALF OF

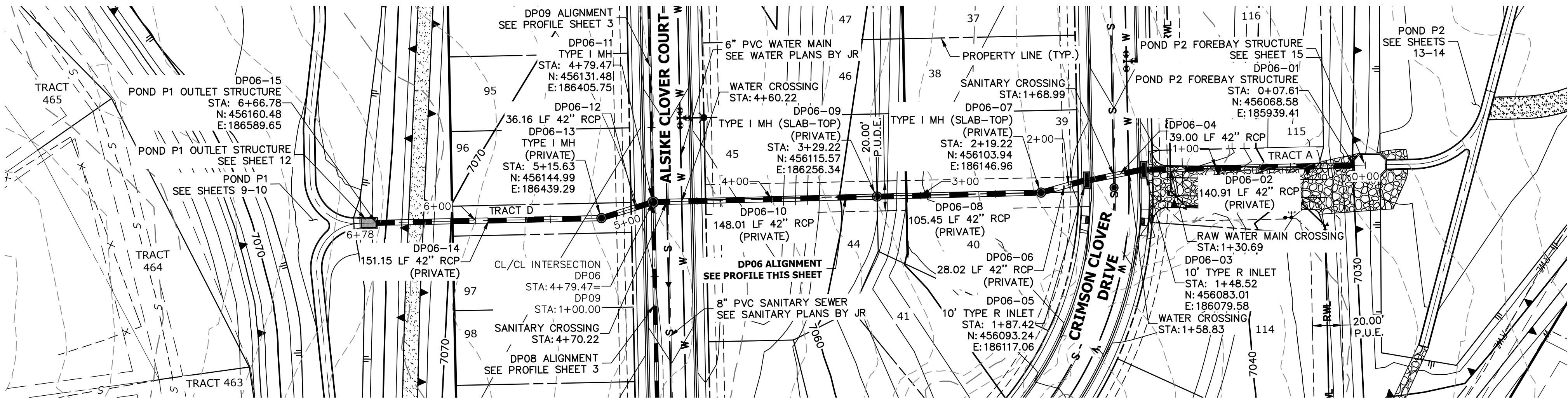
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CLOVERLEAF FILING 2

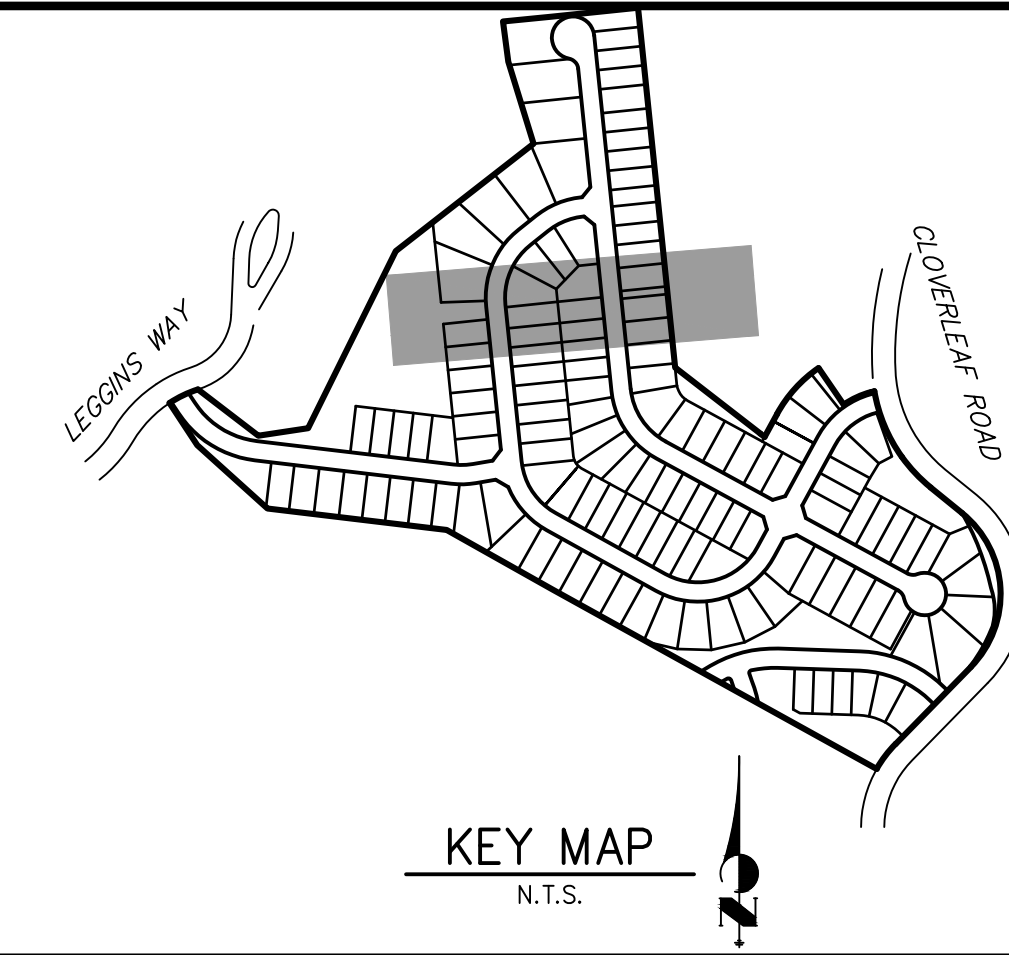
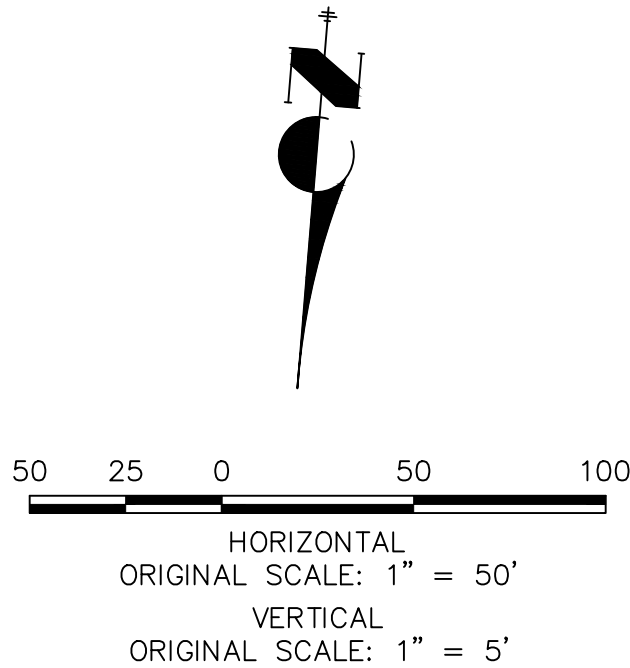
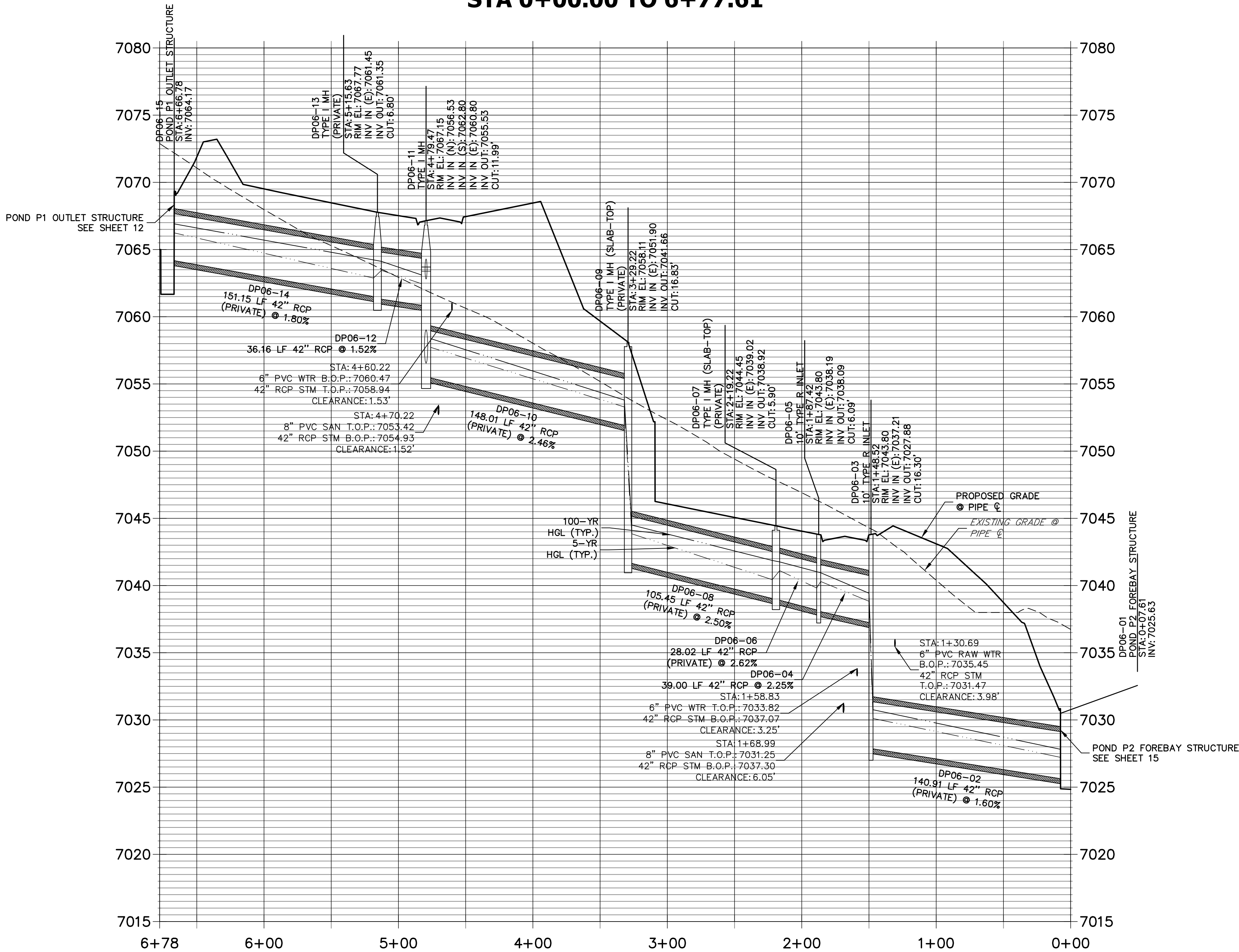
## STORM SEWER PLAN AND PROFILE

SHEET 3 OF 28

JOB NO. 25158.01



DP06 PROFILE  
STA 0+00.00 TO 6+77.61



Know what's below.  
Call before you dig.

#### NOTES

1. SEE SHEET 1 FOR BENCHMARK. SEE SHEET 2 FOR LEGEND.
2. ALL STATIONING IS PIPE CENTERLINE UNLESS OTHERWISE NOTED.
3. ALL RCP STORM SEWER SHALL BE CLASS III UNLESS OTHERWISE NOTED.
4. PIPE LENGTHS ARE FROM INSIDE INLET WALL TO INSIDE INLET WALL, FROM CENTER OF MANHOLE TO INSIDE INLET WALL, OR FROM CENTER OF MANHOLE TO CENTER OF MANHOLE. PIPE LENGTHS INCLUDE FES OR HEADWALL.
5. ALL MANHOLE COVERS SHALL BE ORIENTED TO AVOID CURB, GUTTER, SIDEWALK AND CROSSPANS UNLESS OTHERWISE NOTED.
6. ALL MANHOLES ARE EL PASO COUNTY TYPE II UNLESS OTHERWISE SPECIFIED.
7. ALL MANHOLES HAVE AN ECCENTRIC CONE UNLESS OTHERWISE SPECIFIED.
8. ALL ON-GRADE INLETS ARE TO MATCH TBC ELEVATIONS AT EACH END, FOLLOWING STREET GRADES. SEE ROADWAY PLANS FOR REQUIRED ELEVATIONS.
9. INLET STATIONING IS TO CENTER OF INLET.
10. PIPES SHALL HAVE JOINT RESTRAINTS ON LAST 3 JOINTS AT PIPE OUTFALL.
11. ALL CURVED PIPES SHALL BE BUILT IN ACCORDANCE WITH THE AMERICAN CONCRETE PIPE ASSOCIATION (ACPA) DESIGN DATA 21. PIPE MANUFACTURER TO BE USED MUST BE ABLE TO MEET LENGTH AND JOINT OPENING CRITERIA PER ACPA & ALL APPLICABLE EL PASO COUNTY CRITERIA AND STANDARDS.
12. PIPE BEDDING SHALL CONFORM TO EL PASO COUNTY CONSTRUCTION STANDARDS AND SPECIFICATIONS. BEDDING FOR RCP PIPE SHALL BE AG7122 NO. 57/67 CRUSHED ROCK, SQUEEGEE OR MIXTURES CONTAINING SQUEEGEE SHALL NOT BE USED. BEDDING SHALL BE SIX TO EIGHT INCHES DEEP UNDER THE PIPE AND BACKFILLED TO THE SPRING LINE.
13. ALL STORM SEWER PIPES, INLETS, MANHOLES, AND APPURTENANCES WITHIN THE R.O.W. ARE PUBLIC. STORM FACILITIES OUTSIDE OF THE PUBLIC R.O.W. ARE PRIVATE, UNLESS OTHERWISE NOTED.
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15. ALL MATERIALS AND INSTALLATION PROCEDURES SHALL BE IN COMPLIANCE WITH MANUFACTURERS SPECIFICATIONS AND EL PASO COUNTY STANDARDS AND SPECIFICATION.
16. SEE DETAIL SHEETS FOR APPLICABLE DETAILS.
17. ALL INLETS REQUIRE A CURB TYPE AND FL TRANSITION (LOCAL DEPRESSION) DETAILED PER CDOT (M-604-12) TYPE R INLET DETAIL. SEE JR ROADWAY PLAN SHEETS AND DETAIL SHEET.
18. PIPES WITH PRESSURE HEAD SHALL USE WATER TIGHT JOINTS WITH A 100-YEAR SERVICE LIFE.
19. CONTRACTOR TO SUBMIT SHOP DRAWINGS FOR ALL EL PASO COUNTY TYPE I MANHOLES PRIOR TO CONSTRUCTION OR ORDERING MATERIALS.

#### ENGINEER'S STATEMENT

PREPARED UNDER MY DIRECT SUPERVISION AND ON BEHALF OF JR ENGINEERING

Mike A. Bramlett, P.E.  
COLORADO P.E. 32314  
FOR AND ON BEHALF OF JR ENGINEERING, LLC

DATE: 4/11/21

CLOVERLEAF FILING 2

STORM SEWER PLAN AND  
PROFILE

SHEET 4 OF 28

JOB NO. 25158.01

J.R. ENGINEERING  
A Western Company  
Central 303-740-9883 • Colorado Springs 719-583-2583  
Fort Collins 970-491-9888 • www.jrengineering.com

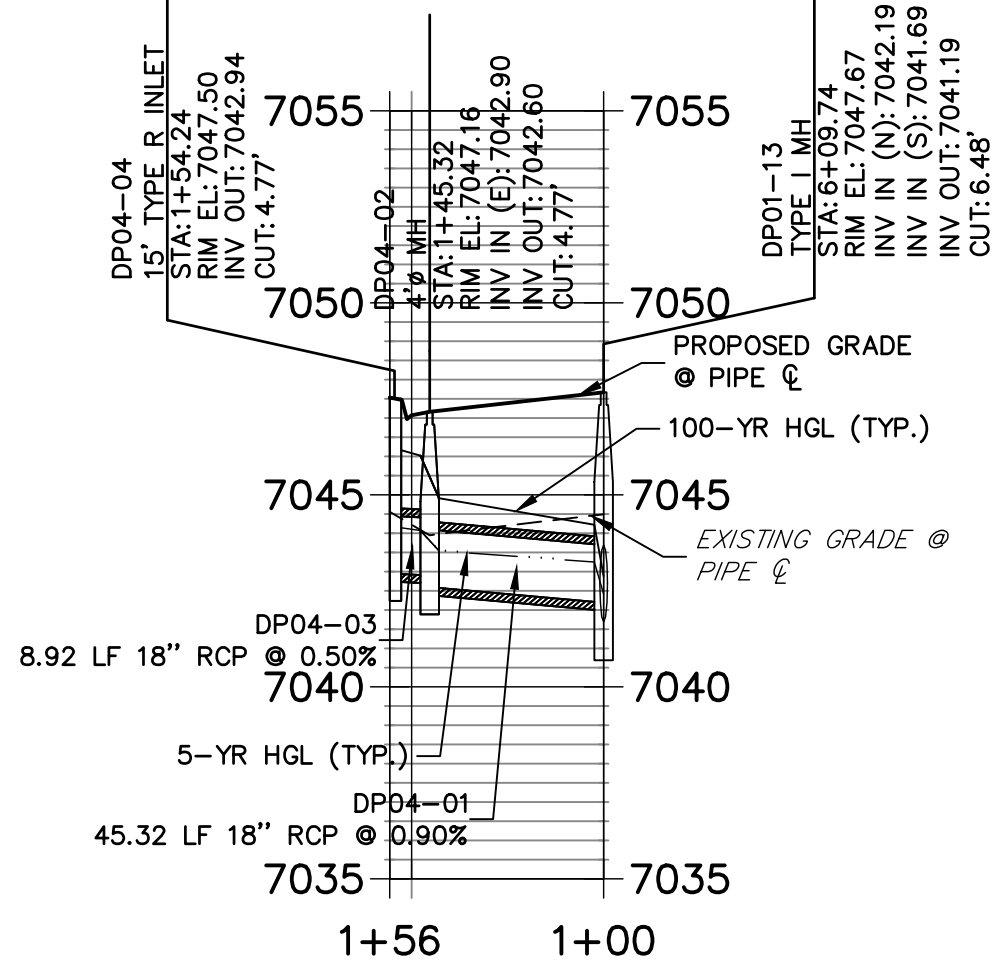
PREPARED FOR  
MONUMENT HILL CM LLC  
1864 WOODMOOR DR., STE 100  
COLORADO SPRINGS, CO 80920  
ATTN: JOE DESJARDIN  
(719) 476-0800  
JDESJARDIN@PROTERRAC.COM

UNTIL SUCH TIME AS  
THESE DRAWINGS ARE  
APPROVED BY THE  
APPROPRIATE REVIEWING  
AGENCIES, OR ENGINEERING  
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THEY ARE NOT TO BE  
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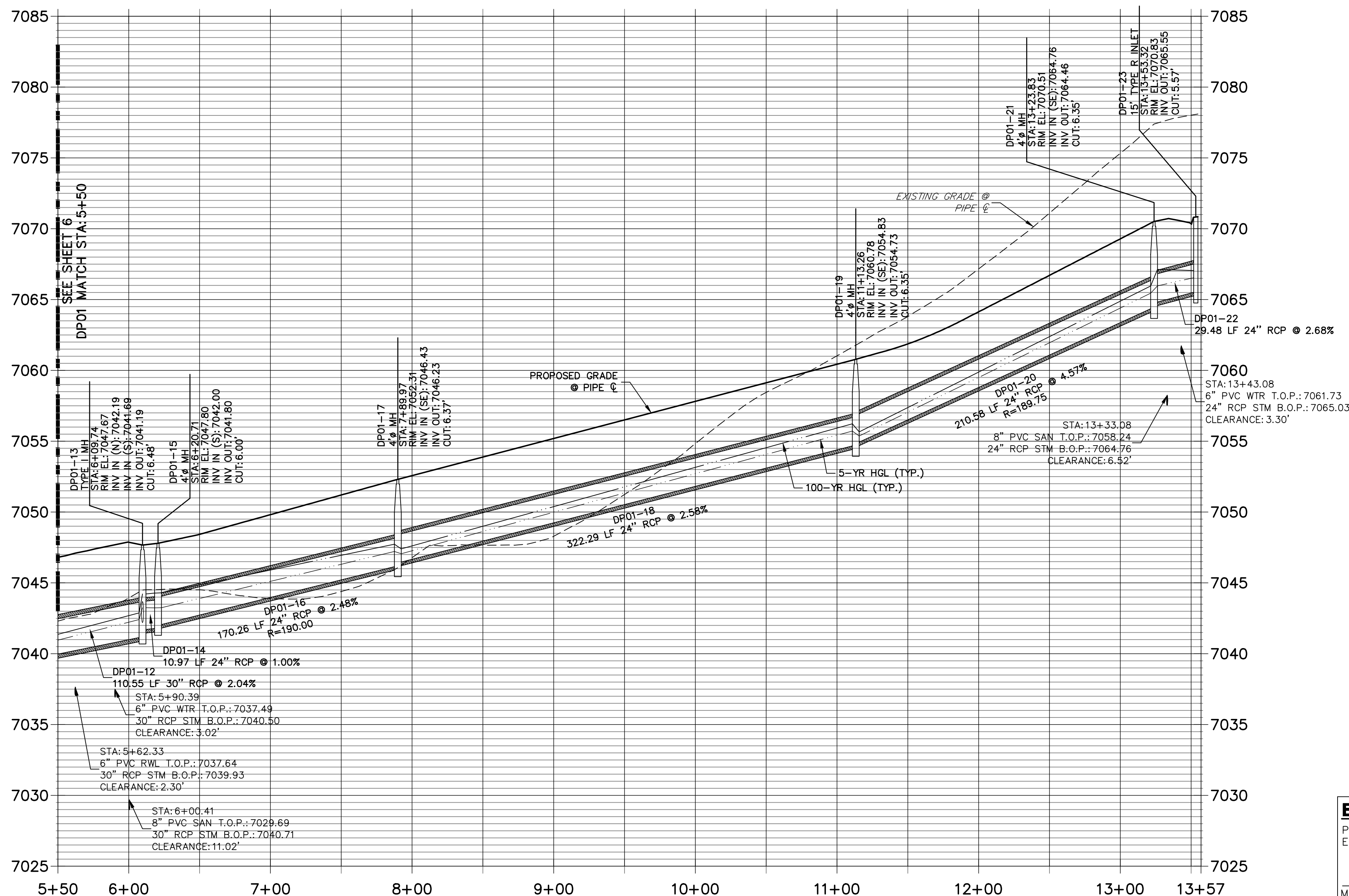


Know what's below.  
Call before you dig.

### DP04 PROFILE STA 1+00.00 TO 1+55.74

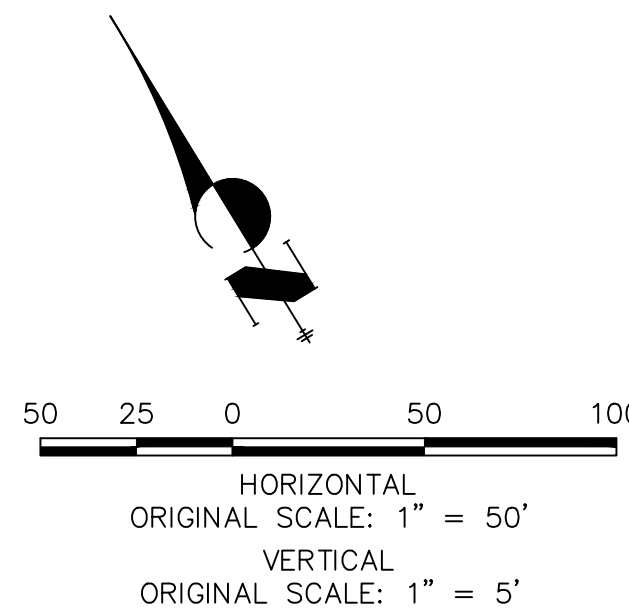


### DP01 PROFILE STA 5+50.00 TO 13+56.98



### NOTES

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- PIPES SHALL HAVE JOINT RESTRAINTS ON LAST 3 JOINTS AT PIPE OUTFALL.
- ALL CURVED PIPES SHALL BE BUILT IN ACCORDANCE WITH THE AMERICAN CONCRETE PIPE ASSOCIATION (ACPA) DESIGN DATA 21. PIPE MANUFACTURER TO BE USED MUST BE ABLE TO MEET LENGTH AND JOINT OPENING CRITERIA PER ACPA & ALL APPLICABLE EL PASO COUNTY CRITERIA AND STANDARDS.
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### ENGINEER'S STATEMENT

PREPARED UNDER MY DIRECT SUPERVISION AND ON BEHALF OF JR ENGINEERING

Mike A. Bramlett, P.E.  
COLORADO P.E. 32314  
FOR AND ON BEHALF OF JR ENGINEERING, LLC

CLOVERLEAF FILING 2

STORM SEWER PLAN AND  
PROFILE

SHEET 5 OF 28

JOB NO. 25158.01

J.R. ENGINEERING  
A Westman Company

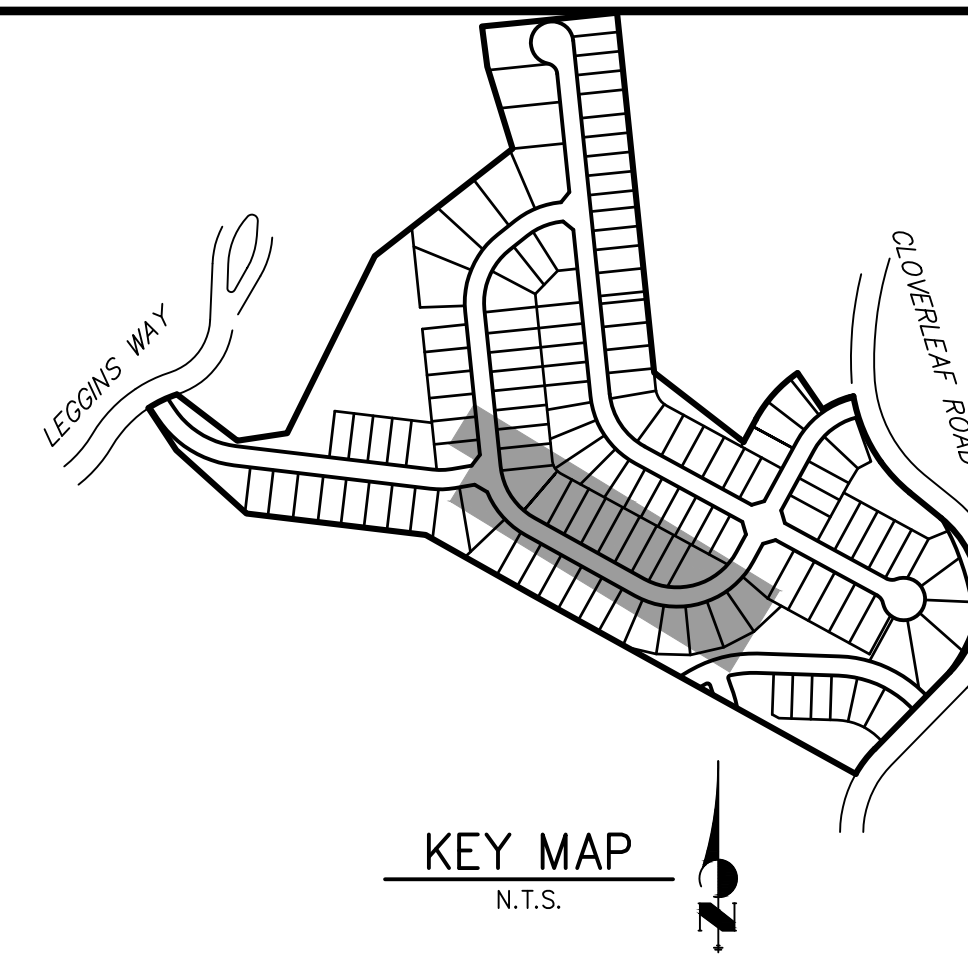


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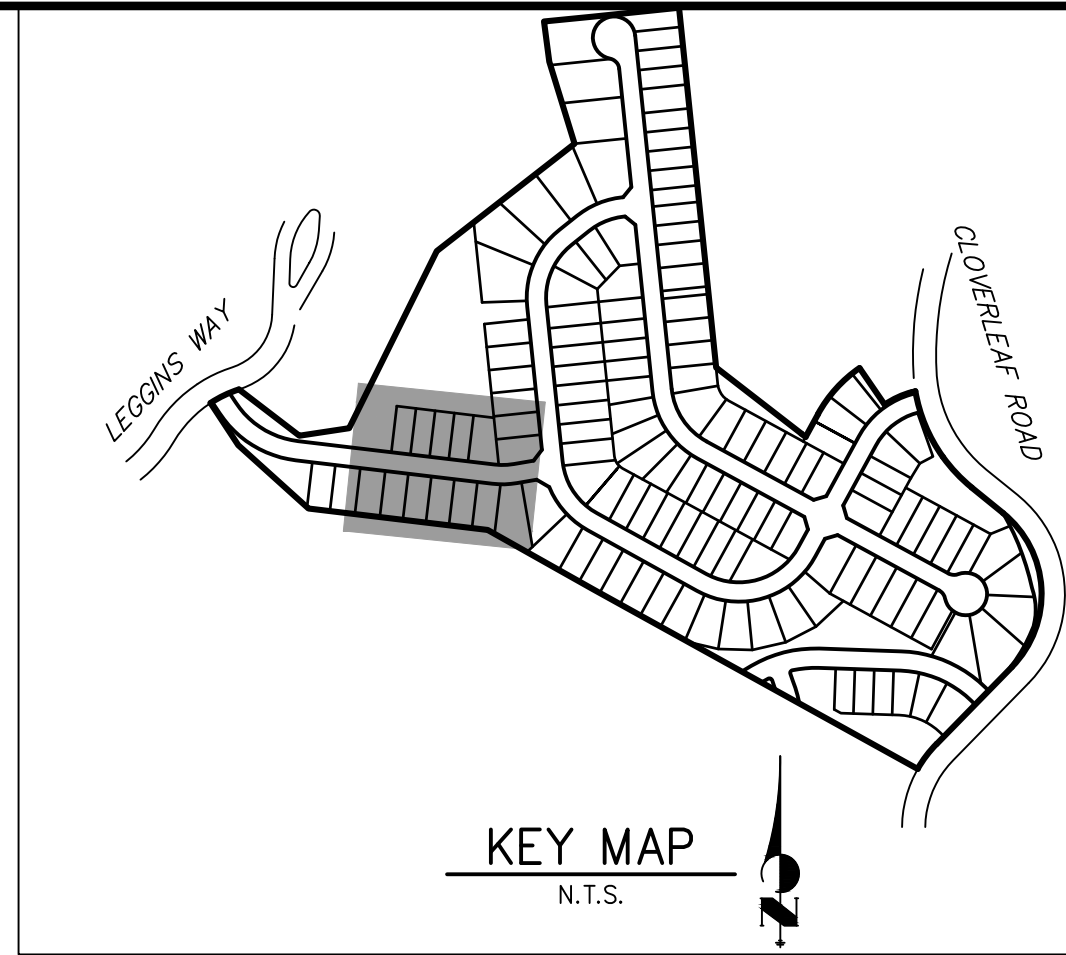
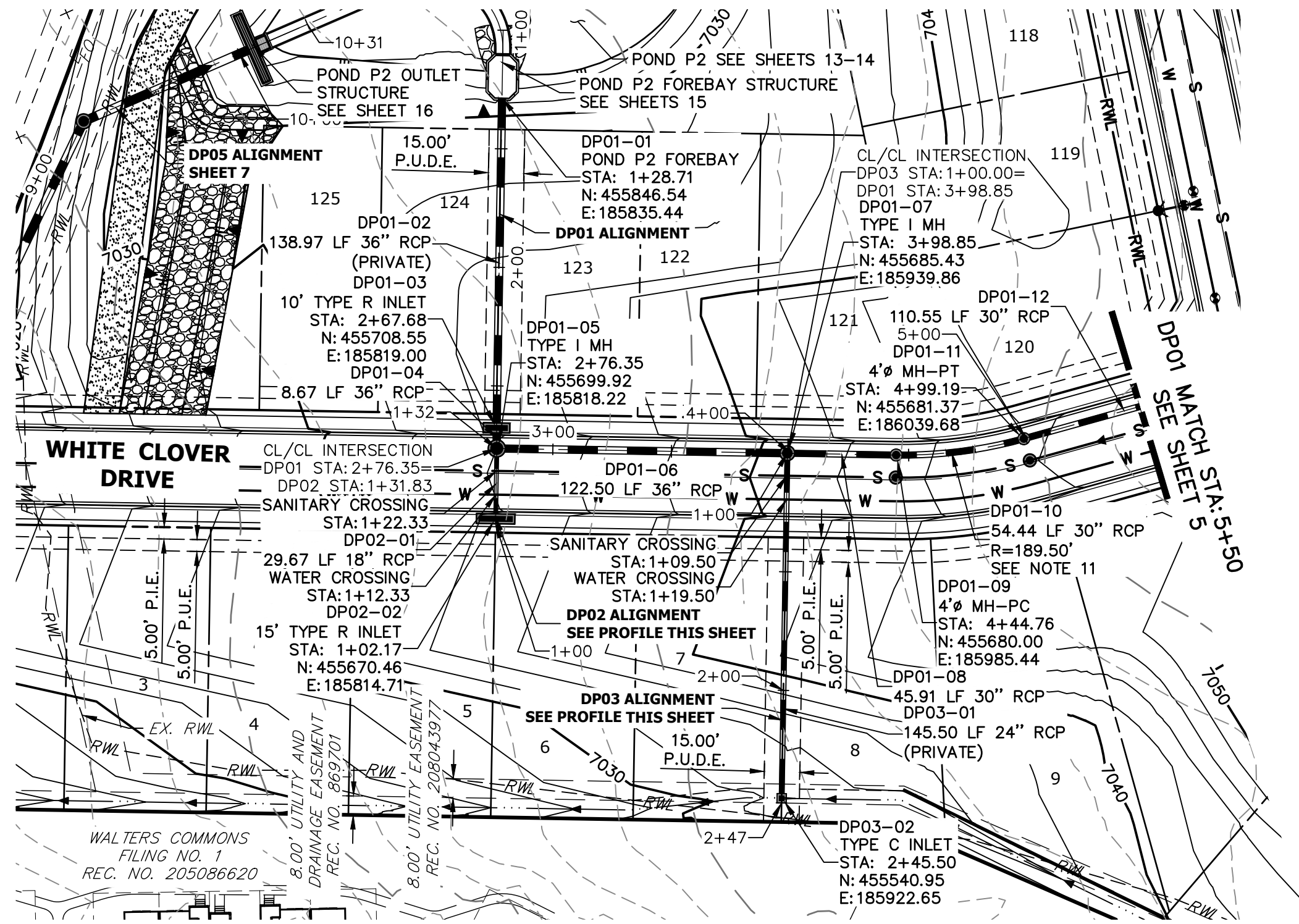
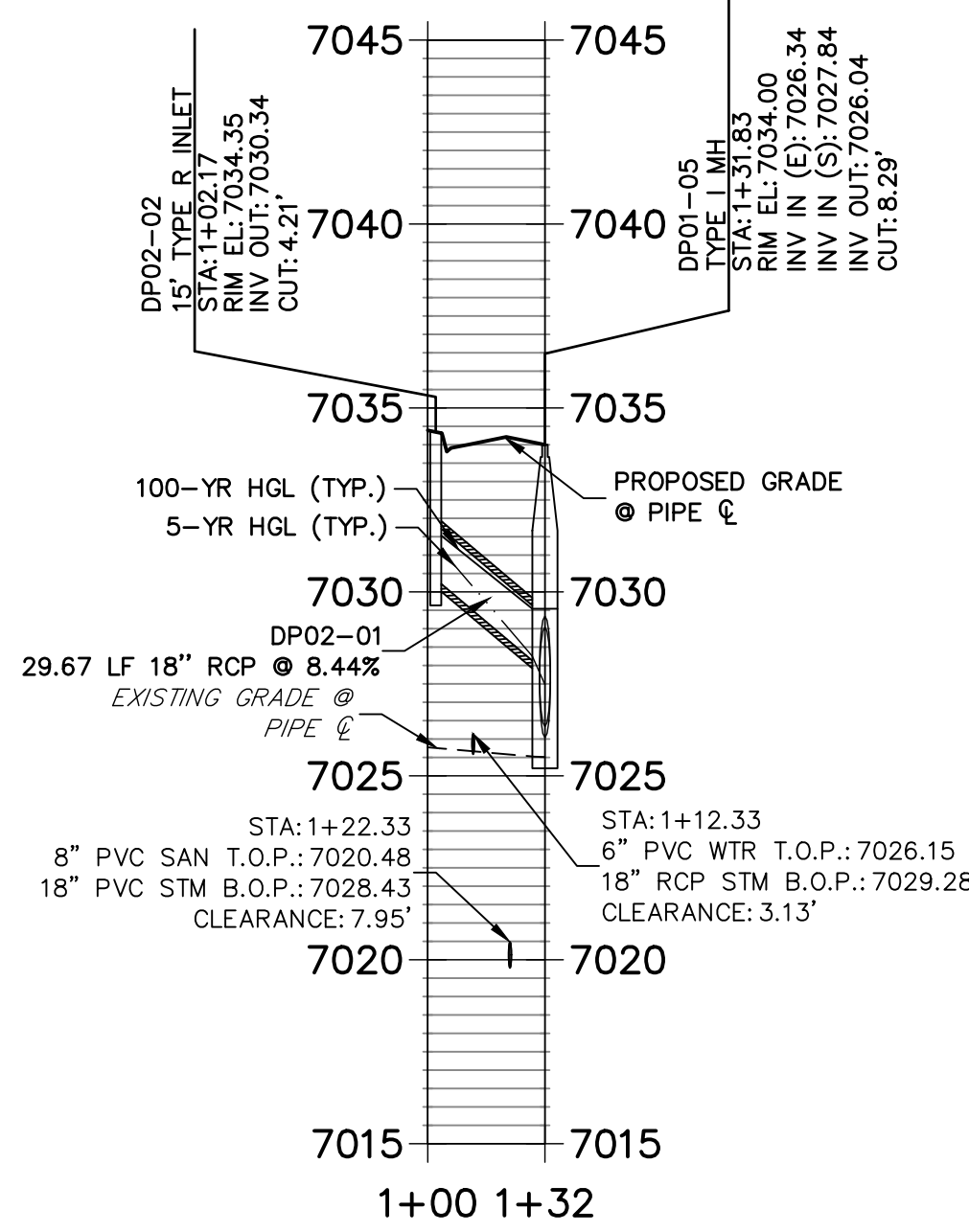
PREPARED FOR

MONUMENT HILL CM LLC  
1864 WOODMOOR DR, STE 100  
COLORADO SPRINGS, CO 80920  
ATTN: JOE DESJARDIN  
(719) 476-0800  
JDESJARDIN@PROTERRACO.COM

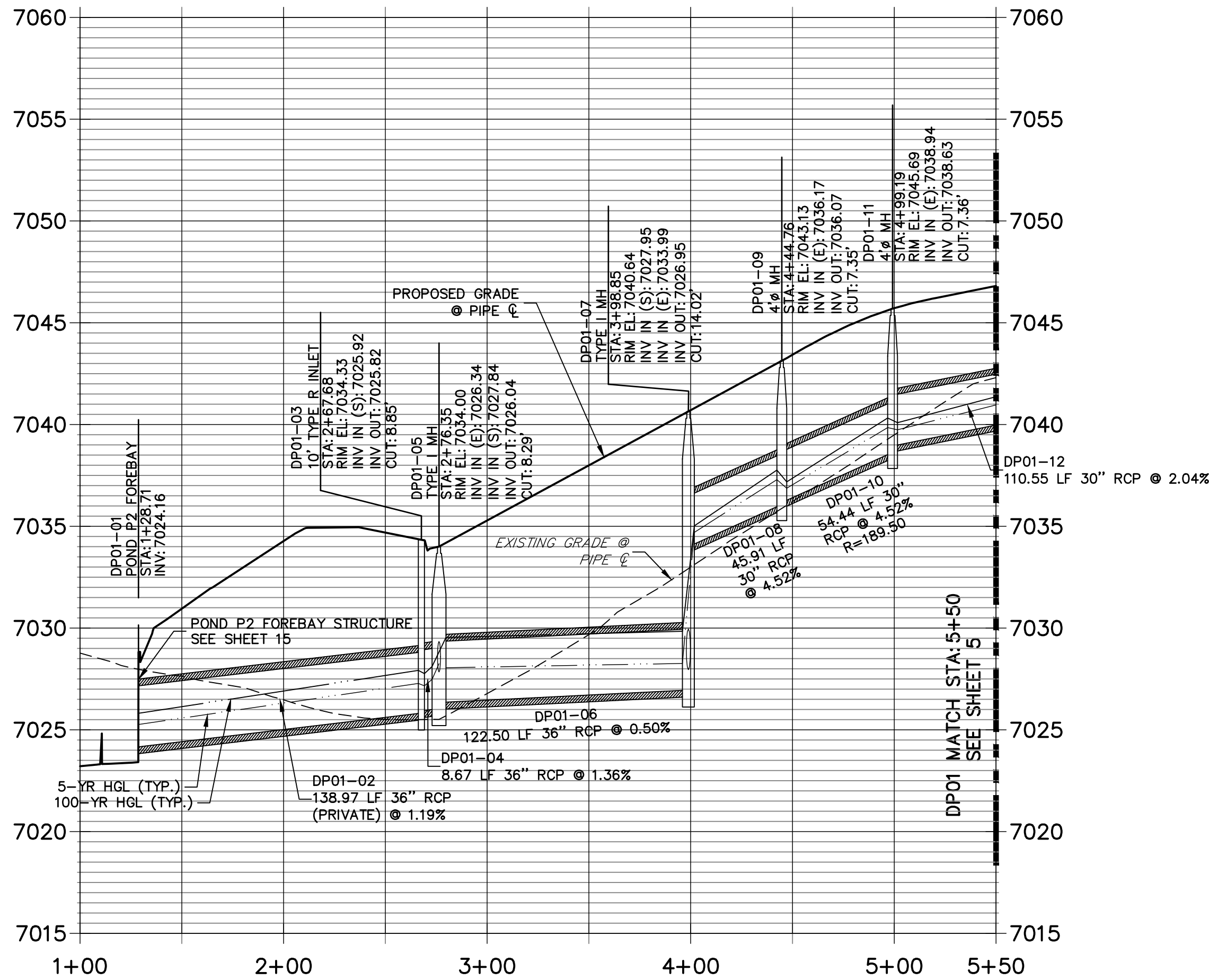
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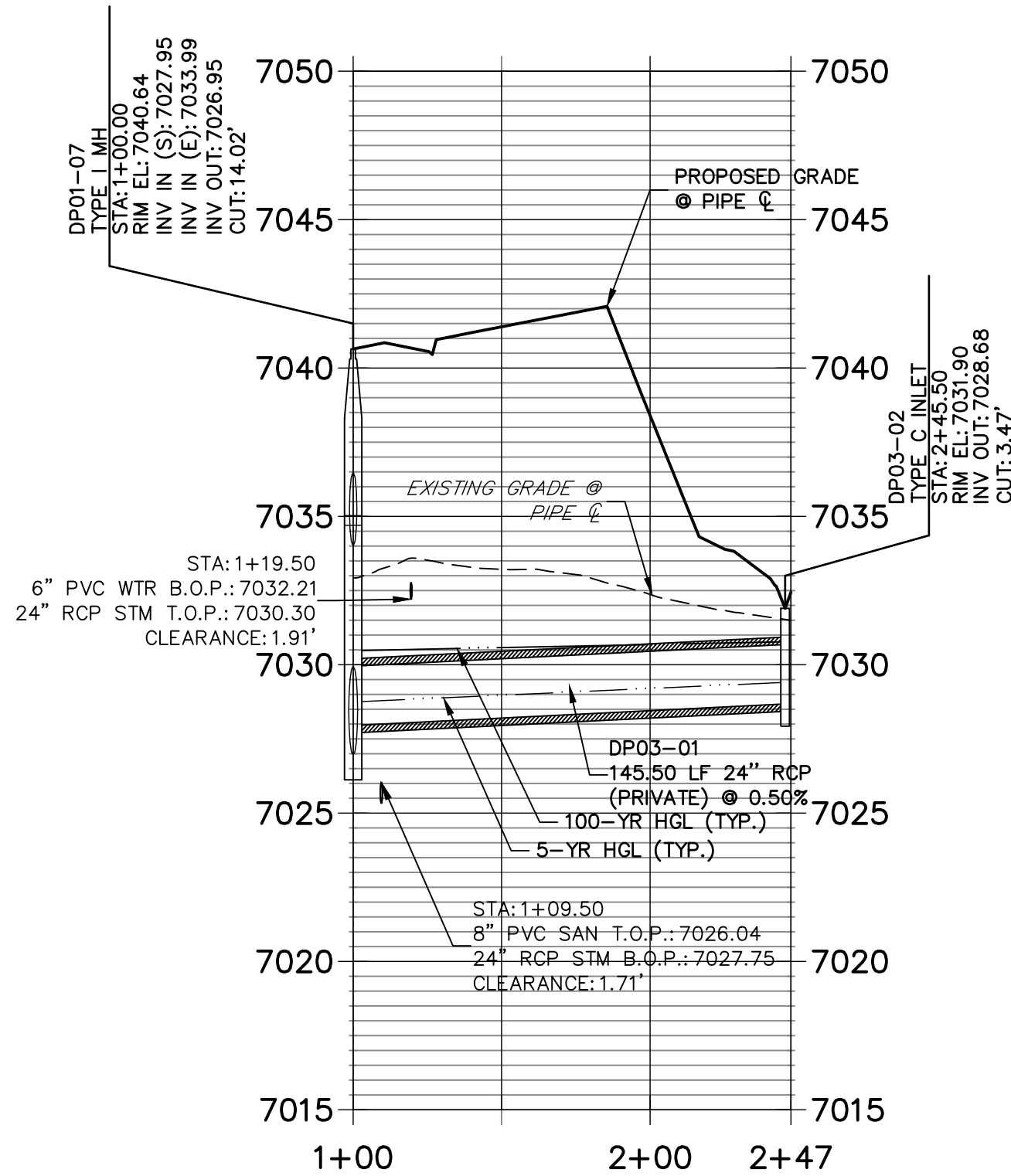
DP02 PROFILE  
STA 1+00.00 TO 1+31.83



DP01 PROFILE (1)  
STA 1+00.00 TO 5+50.00



DP03 PROFILE  
STA 1+00.00 TO 2+47.46



NOTES

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PREPARED FOR

MONUMENT HILL CM LLC

1864 WOODMOOR DR, STE 100

COLORADO SPRINGS, CO 80920

ATTN: JOE DESJARDIN

(719) 476-0800

JDESJARDIN@PROTERRACOM.COM

J.R. ENGINEERING

A Westman Company



Centennial 303-740-9383 • Colorado Springs 719-583-2593  
Fort Collins 970-491-9888 • www.jrengineering.com

BY

DATE

REVISION

No.

1"=50'

1"=5'

DATE

DESIGNED BY

DRAWN BY

CHECKED BY

CLOVERLEAF FILING 2

STORM SEWER PLAN AND  
PROFILE

SHEET

6

OF

28

JOB NO.

25158.01

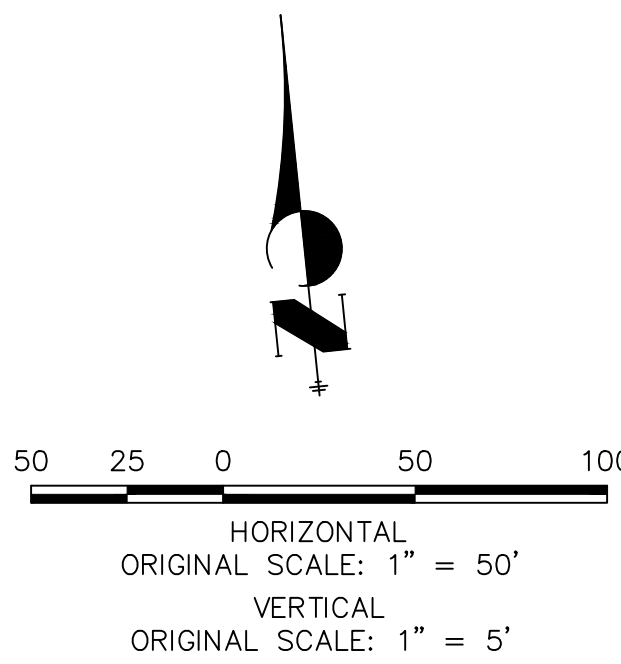
ENGINEER'S STATEMENT

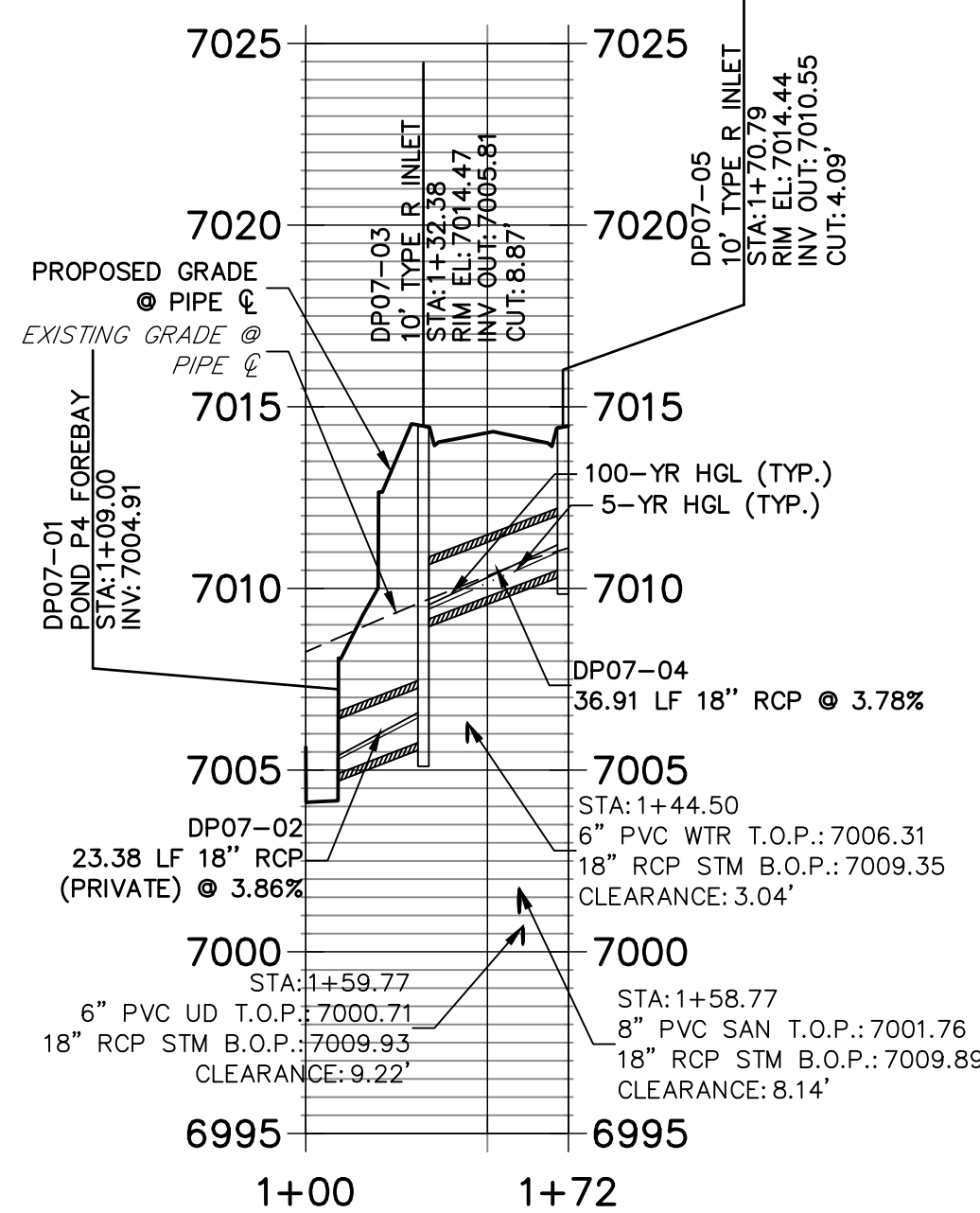
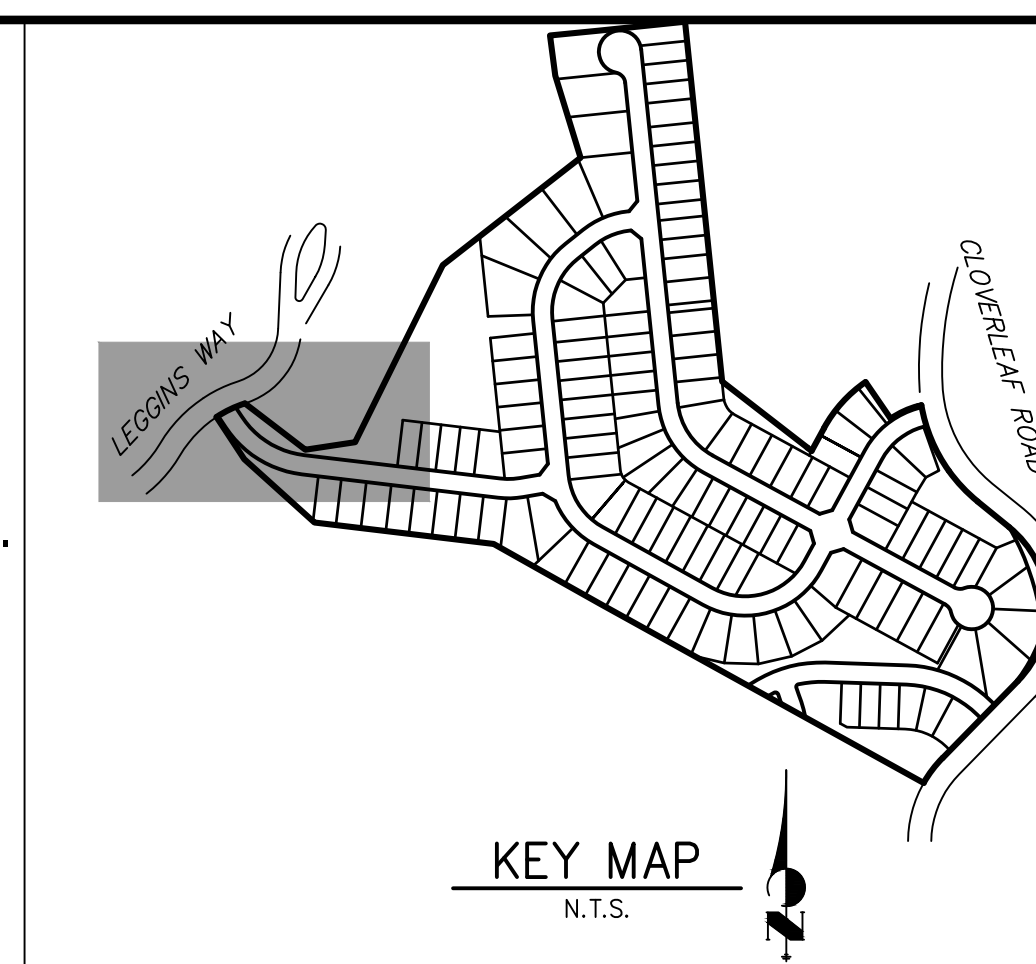
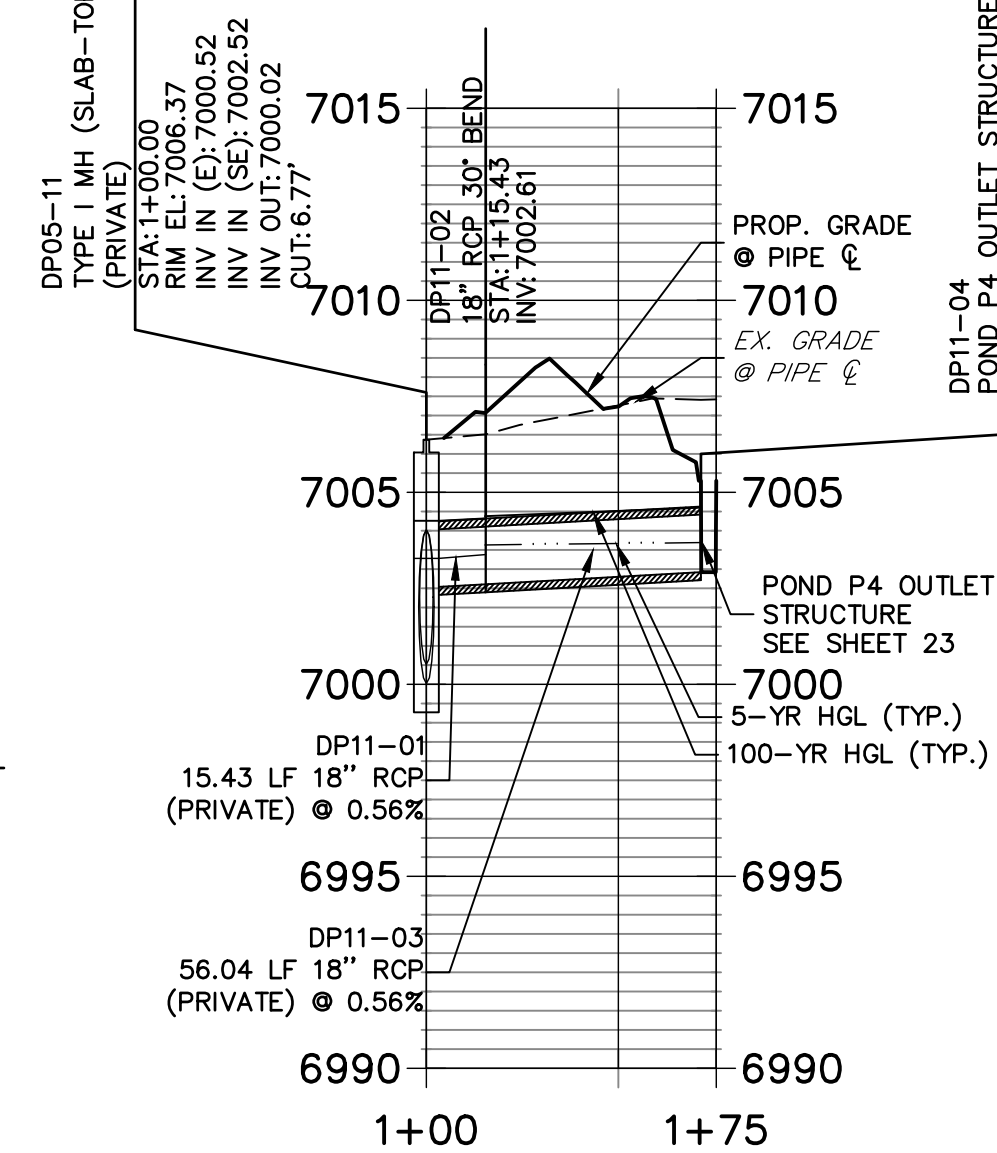
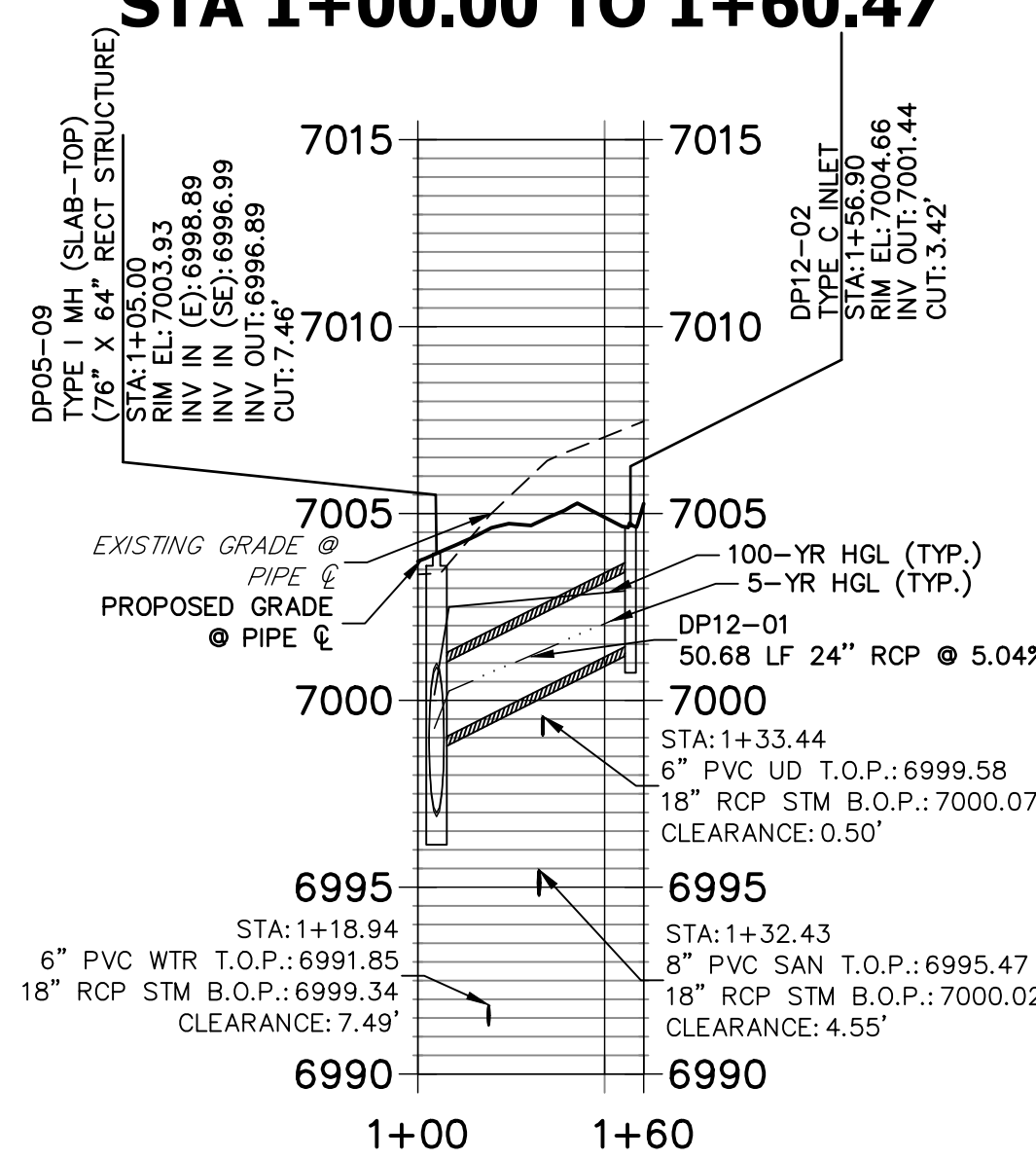
PREPARED UNDER MY DIRECT SUPERVISION AND ON BEHALF OF JR ENGINEERING

Mike A. Bramlett, P.E.  
COLORADO P.E. 32314

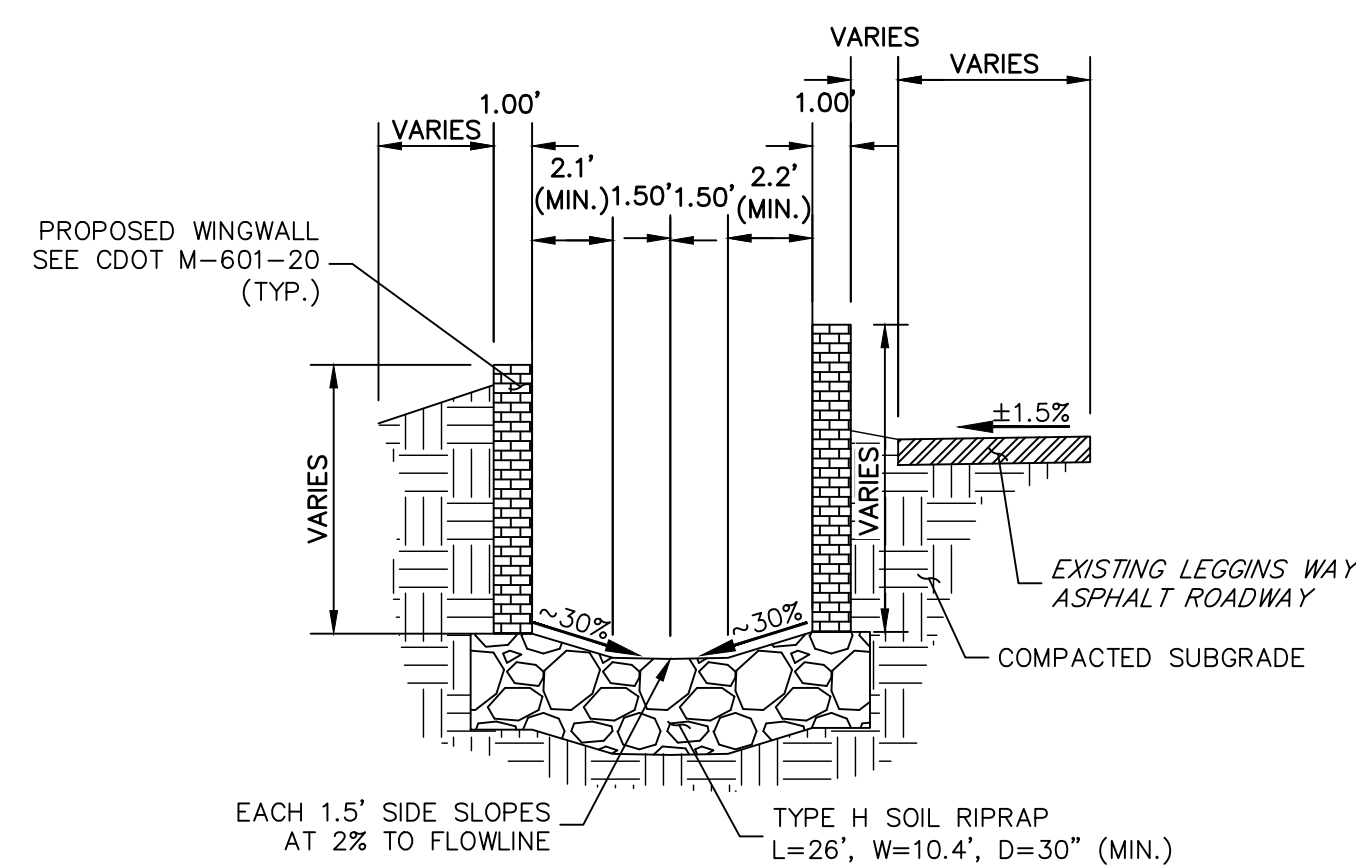
FOR AND ON BEHALF OF JR ENGINEERING, LOCAL ENGINEERING

DATE 11/11/21





1. SEE SHEET 1 FOR BENCHMARK. SEE SHEET 2 FOR LEGEND.
2. SEE SHEET 2 FOR ADDITIONAL NOTES.



OUTFALL WINGWALL AND  
SWALE SECTION A-A  
SCALE: 1"=5'

PREPARED UNDER MY DIRECT SUPERVISION AND ON BEHALF OF JR  
ENGINEERING

  
 MIKE A. BRAMLETT, P.E.  
 COLORADO P.E. 32314

PREPARED FOR

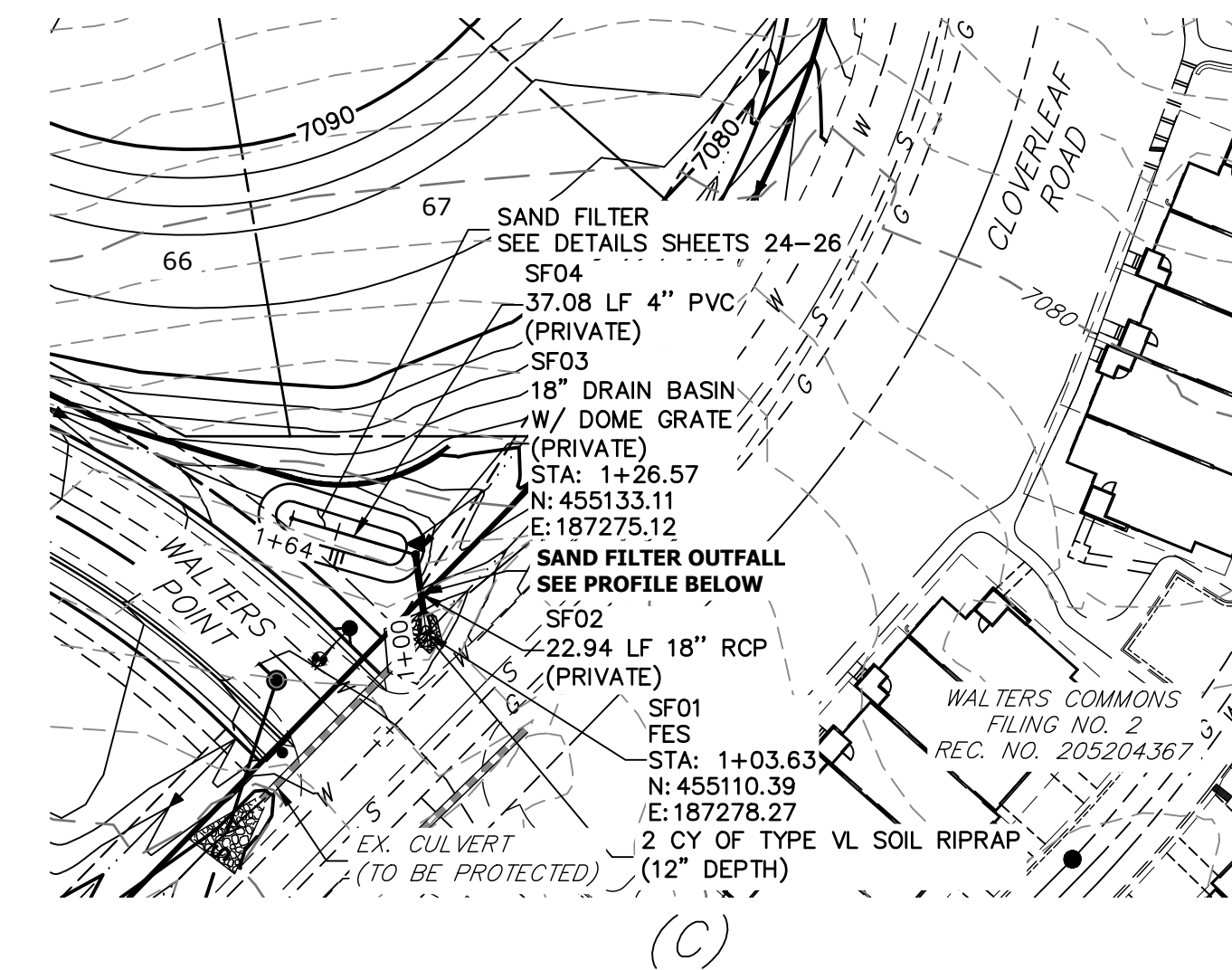
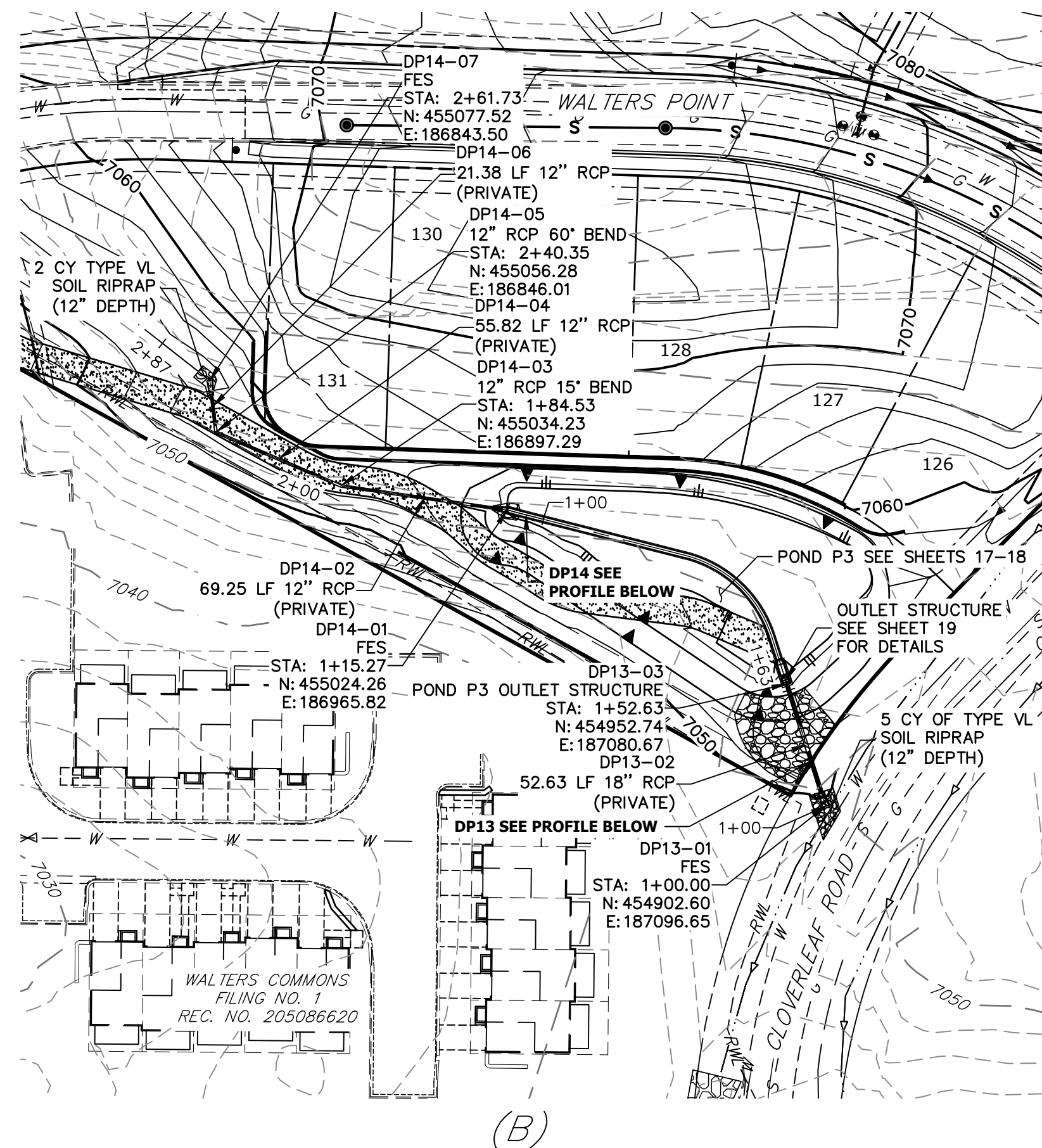
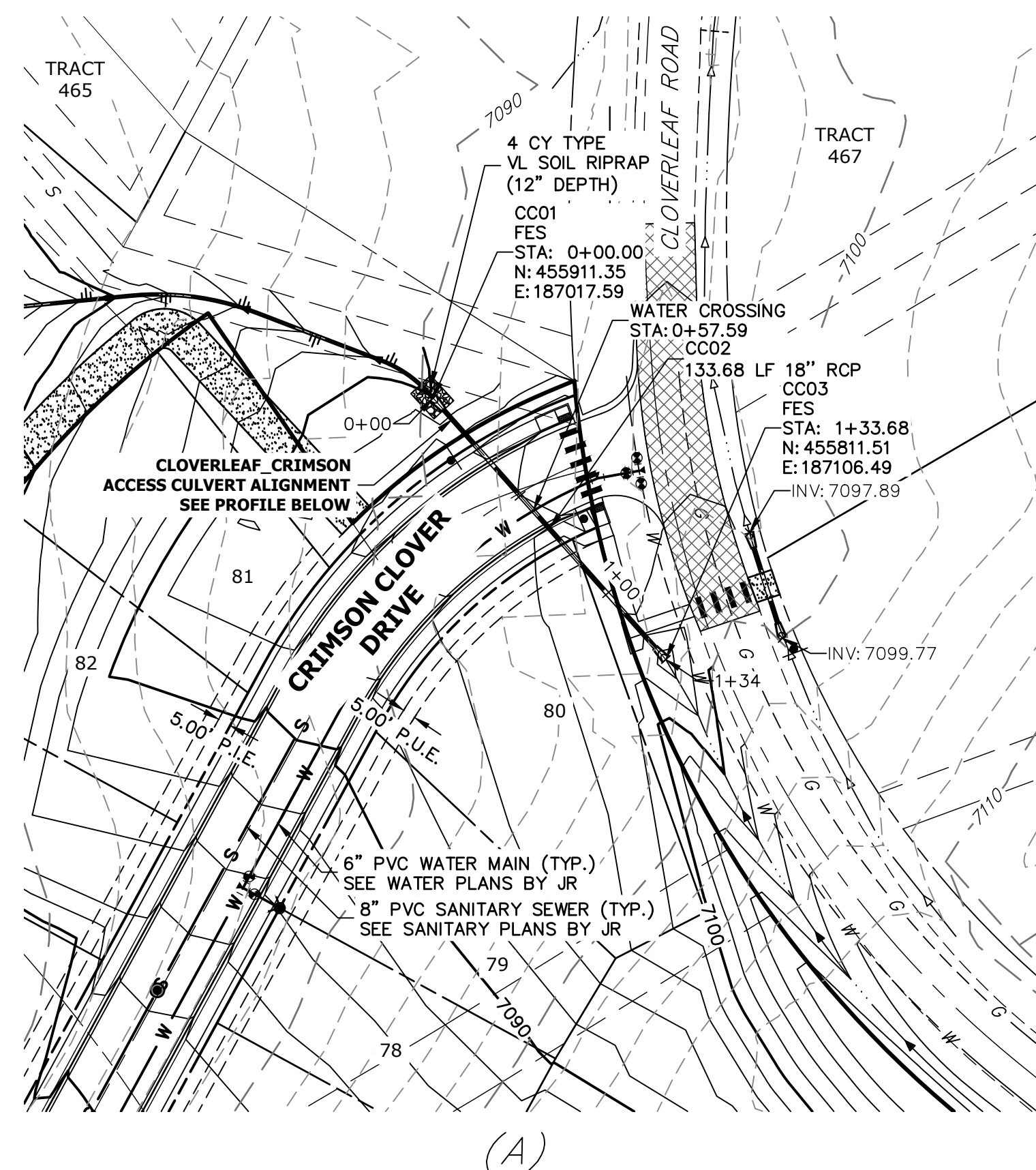
**MONUMENT HILL CM LLC**  
1864 WOODMOOR DR, STE 100  
COLORADO SPRINGS, CO 80920  
ATTN: JOE DESJARDIN  
(719) 476-0800  
JDESJARDIN@PROTERRACO.COM

**J·R ENGINEERING**  
A Westrian Company



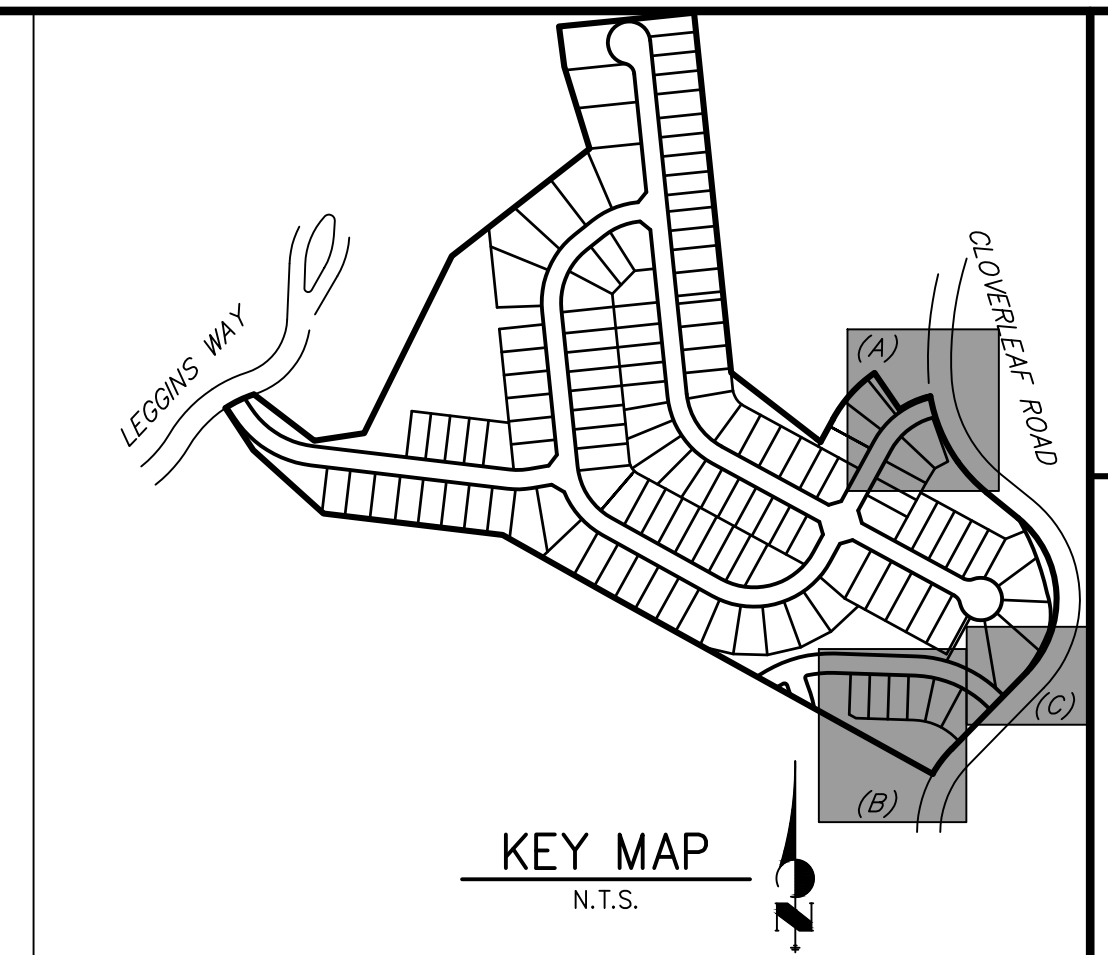
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SHEET	7	OF	28
CLOVERLEAF FILING 2			
STORM SEWER PLAN AND PROFILE			
H-SCALE V-SCALE		1"=50' 1"=5'	
DATE		11/11/21	
DESIGNED BY		APL	
DRAWN BY		APL	
CHECKED BY			
No.		REVISION	BY DATE



## NOTES

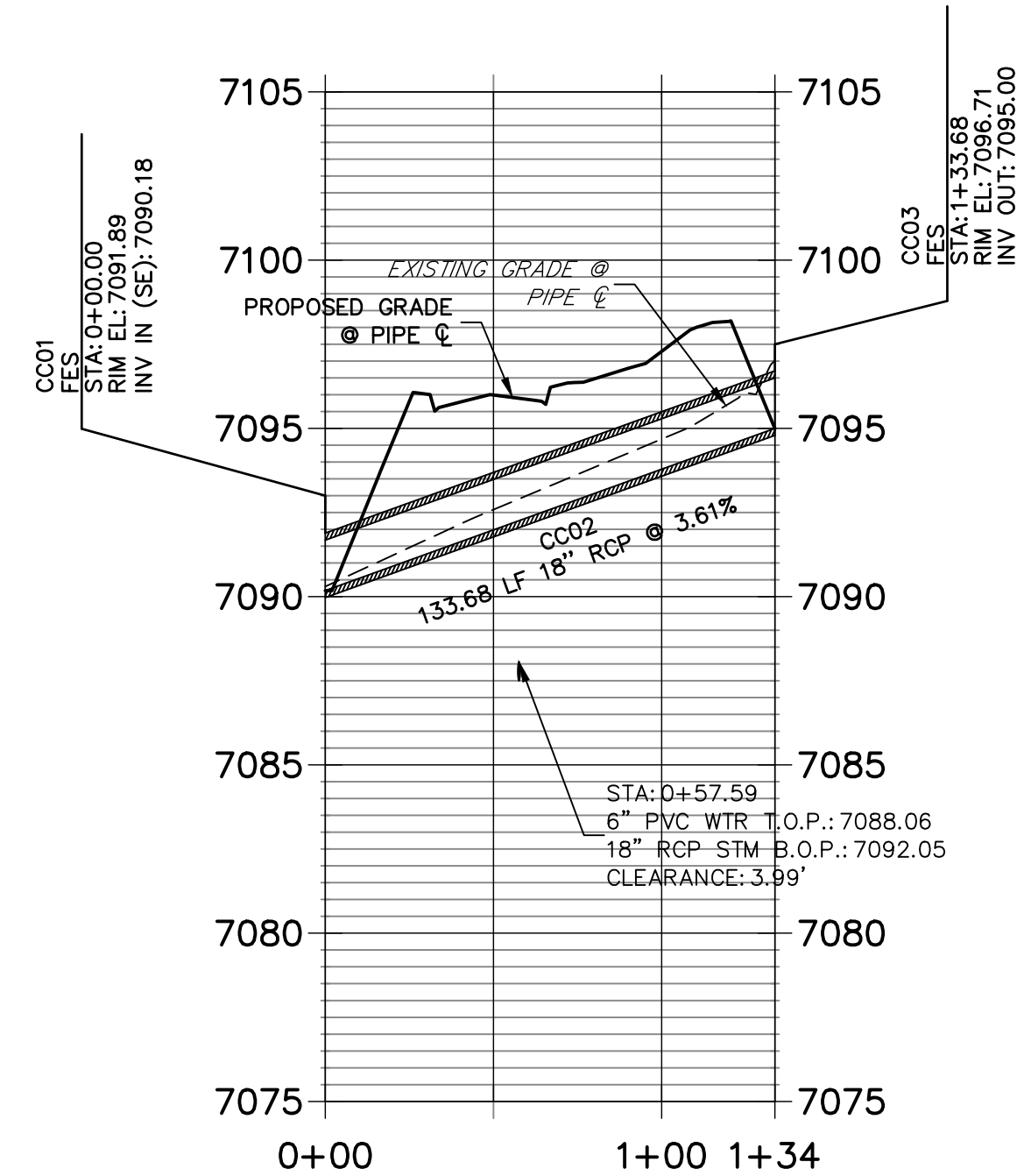
1. SEE SHEET 1 FOR BENCHMARK. SEE SHEET 2 FOR LEGEND.
2. SEE SHEET 2 FOR ADDITIONAL NOTES.



Know what's **below**.  
**Call** before you dig.

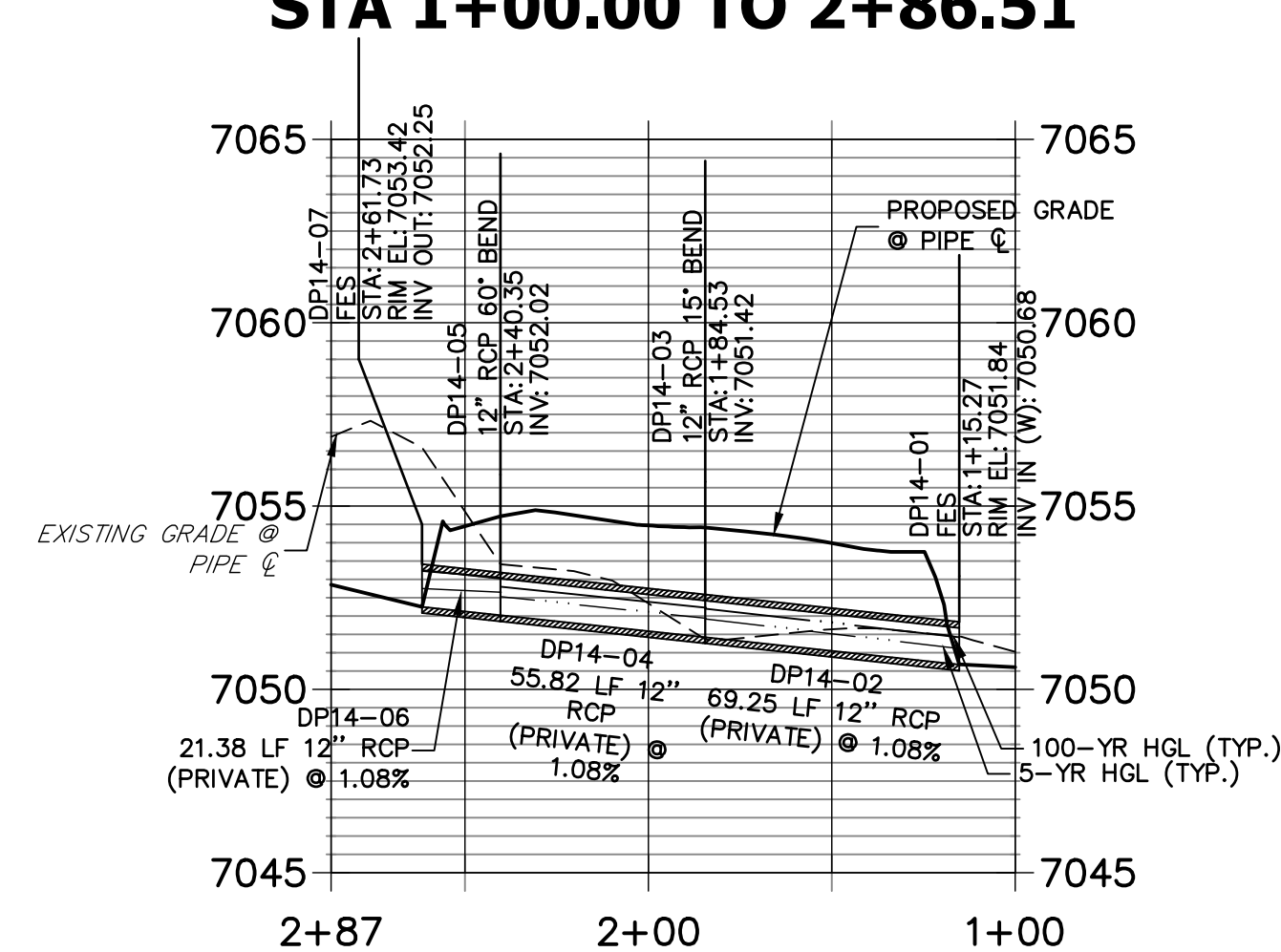


**CLOVERLEAF\_Crimson Access Culvert Profile**  
**STA 0+00.00 TO 1+33.68**

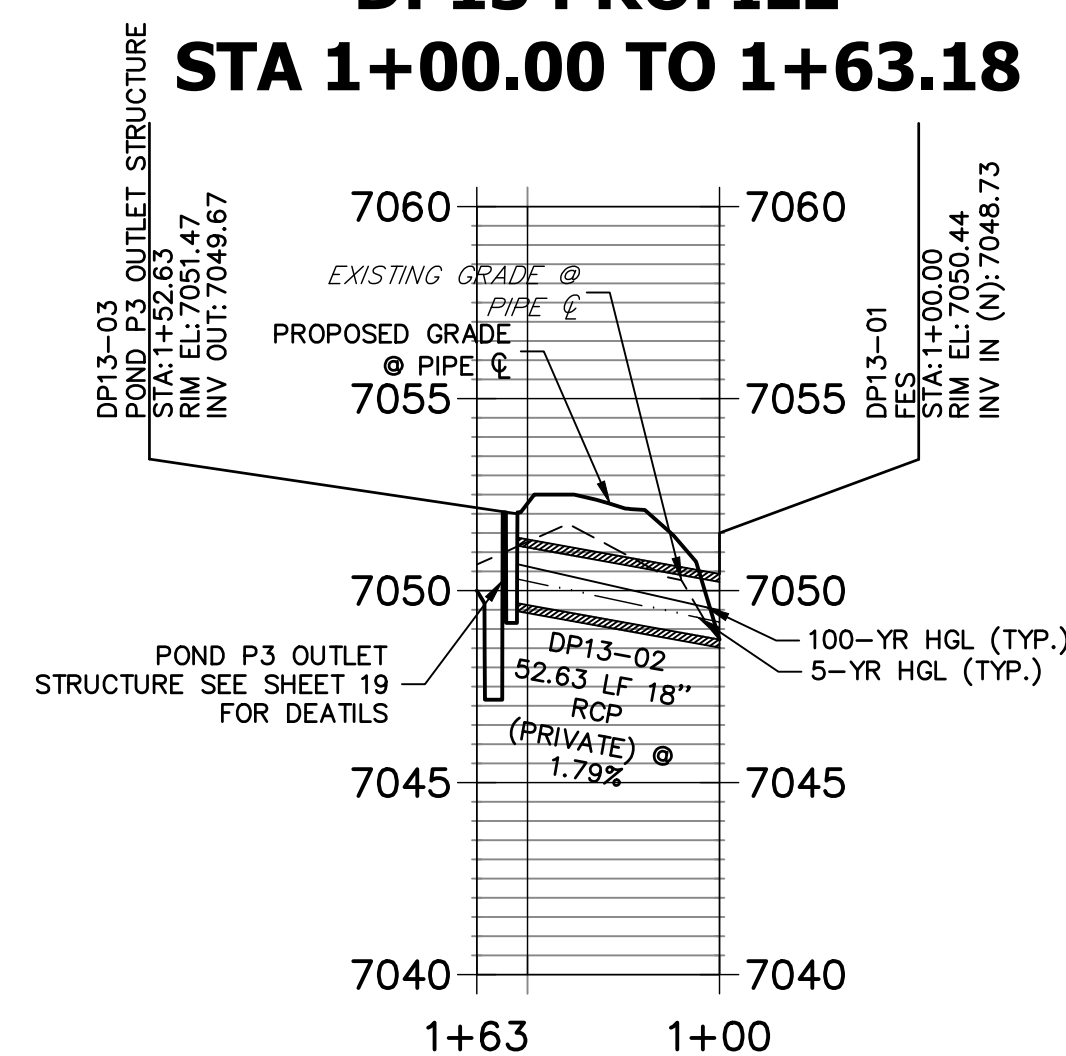


# DP14 PROFILE

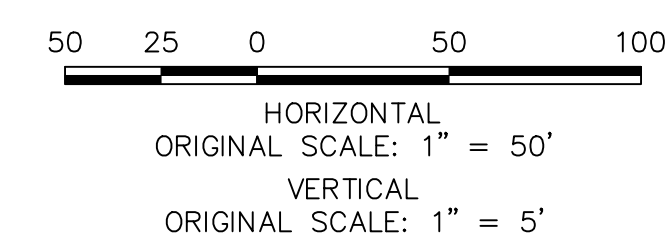
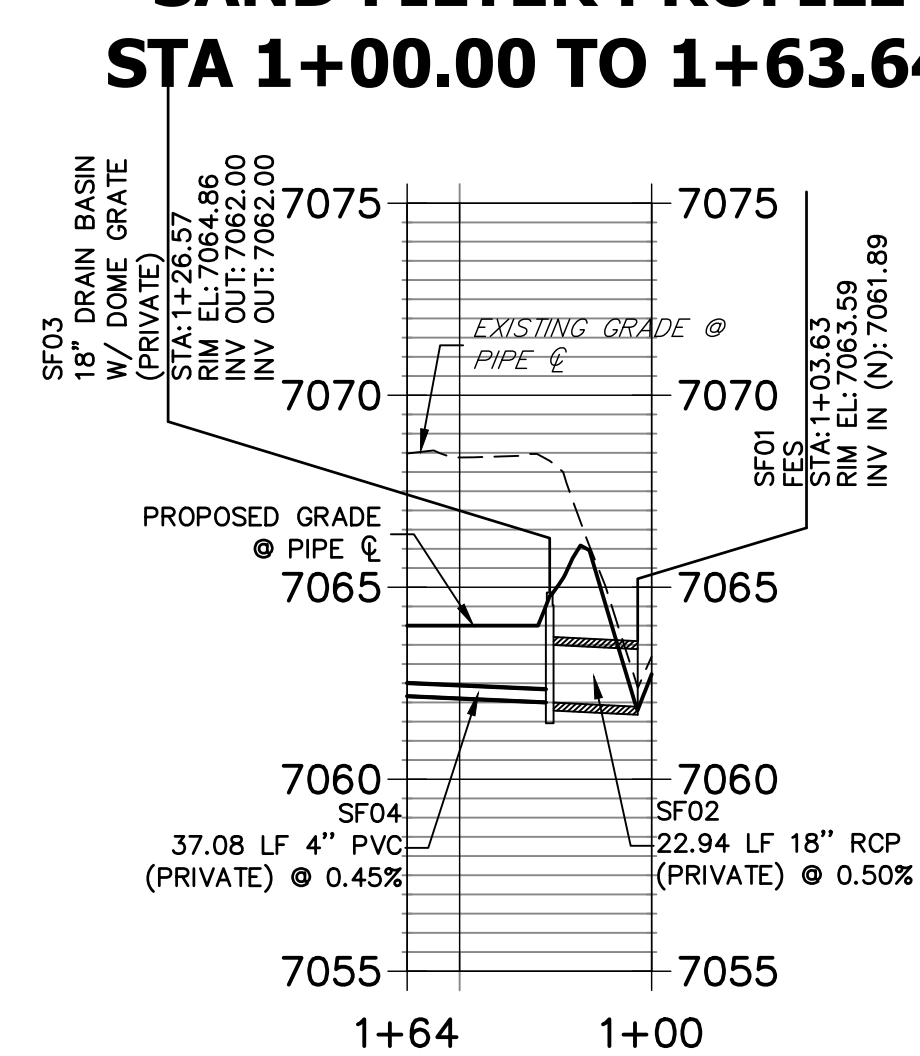
## STA 1+00.00 TO 2+86.51



**DP13 PROFILE**  
**STA 1+00.00 TO 1+63.18**



## SAND FILTER PROFILE STA 1+00.00 TO 1+63.64



### ENGINEER'S STATEMENT

PREPARED UNDER MY DIRECT SUPERVISION AND ON BEHALF OF JR  
ENGINEERING

Mit Br

MIKE A. BRAMLETT, P.E.  
COLORADO P.E. 32314  
FOR AND ON BEHALF OF JR ENGINEERING

32314

CLOVERLEAF FILING 2

## STORM SEWER PLAN AND PROFILE

SHEET 8 OF 28

DB NO. 25158.01



**J·R ENGINEERING**  
A Westrian Company

Fort Collins 970-491-9888 • [www.jirengineering.com](http://www.jirengineering.com)

**MONUMENT HILL CM LLC**  
1864 WOODMOOR DR, STE 100  
COLORADO SPRINGS, CO 80920  
ATTN: JOE DESJARDIN  
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100

UNTIL SUCH TIME AS  
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APPROVES THEIR USE  
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POINT TABULATION			
ID NO.	DESCRIPTION	NORTHING/EASTING	ELEVATION
M1	MAINT. ROAD	N: 455859.27 E: 186982.75	7093.41
M2	MAINT. ROAD	N: 455929.11 E: 186917.87	7084.58
M3	MAINT. ROAD	N: 455929.52 E: 186912.45	7084.23
M4	MAINT. ROAD	N: 455824.20 E: 186824.05	7075.94
M5	MAINT. ROAD	N: 455796.60 E: 186739.15	7073.31
M6	MAINT. ROAD	N: 455811.38 E: 186707.97	7073.31
M7	MAINT. ROAD	N: 455876.36 E: 186634.66	7070.00
M8	MAINT. ROAD	N: 455886.75 E: 186625.77	7069.29
M9	MAINT. ROAD	N: 455890.96 E: 186623.06	7069.19
M10	MAINT. ROAD	N: 455949.19 E: 186631.67	7067.59
M11	MAINT. ROAD	N: 455970.30 E: 186656.43	7066.58
M12	MAINT. ROAD	N: 455959.22 E: 186668.55	7066.66
M13	MAINT. ROAD	N: 455937.78 E: 186641.41	7067.67
M14	MAINT. ROAD	N: 455899.07 E: 186635.68	7068.73
M15	MAINT. ROAD	N: 455894.86 E: 186638.38	7068.78
M16	MAINT. ROAD	N: 455886.91 E: 186645.38	7069.43
M17	MAINT. ROAD	N: 455824.02 E: 186716.33	7073.00
M18	MAINT. ROAD	N: 455810.15 E: 186745.57	7073.01
M19	MAINT. ROAD	N: 455831.37 E: 186810.88	7075.63
M20	MAINT. ROAD	N: 455941.26 E: 186903.11	7083.93
M21	MAINT. ROAD	N: 455939.32 E: 186928.86	7084.20
M22	MAINT. ROAD	N: 455869.86 E: 186993.39	7093.83
S1	SPILLWAY	N: 456366.57 E: 186547.17	7073.25
S2	SPILLWAY	N: 456382.81 E: 186546.04	7070.93

POINT TABULATION			
ID NO.	DESCRIPTION	NORTHING/EASTING	ELEVATION
S3	SPILLWAY	N: 456413.47 E: 186542.29	7070.93
S4	SPILLWAY	N: 456429.93 E: 186539.01	7073.20
S5	SPILLWAY	N: 456417.32 E: 186526.83	7068.83
S6	SPILLWAY	N: 456409.36 E: 186527.65	7066.79
S7	SPILLWAY	N: 456384.49 E: 186530.21	7066.79
S8	SPILLWAY	N: 456376.53 E: 186531.03	7068.83
T1	TOE	N: 456413.61 E: 186593.15	7067.01
T2	TOE	N: 456328.97 E: 186620.43	7066.90
T3	TOE	N: 456306.32 E: 186625.94	7066.82
T4	TOE	N: 456240.96 E: 186633.60	7066.36
T5	TOE	N: 456203.99 E: 186643.21	7066.25
T6	TOE	N: 456180.89 E: 186659.64	7066.47
T7	TOE	N: 456124.98 E: 186678.53	7066.91
T8	TOE	N: 456093.67 E: 186705.02	7068.38
T9	TOE	N: 455983.58 E: 186797.19	7068.58
T10	TOE	N: 455954.31 E: 186810.68	7067.69
T11	TOE	N: 455929.48 E: 186813.19	7067.67
T12	TOE	N: 455897.60 E: 186806.09	7068.55
T13	TOE	N: 455873.20 E: 186798.26	7069.20
T14	TOE	N: 455858.29 E: 186794.84	7069.61
T15	TOE	N: 455832.24 E: 186776.72	7070.24
T16	TOE	N: 455827.42 E: 186737.04	7070.15
T17	TOE	N: 455832.38 E: 186726.82	7070.00
T18	TOE	N: 455876.42 E: 186681.51	7068.79

POINT TABULATION			
ID NO.	DESCRIPTION	NORTHING/EASTING	ELEVATION
T19	TOE	N: 455883.90 E: 186660.93	7068.81
T20	TOE	N: 455893.70 E: 186621.30	7069.12
T21	TOE	N: 455819.72 E: 186606.28	7069.23
T22	TOE	N: 455930.48 E: 186595.60	7068.74
T23	TOE	N: 456105.81 E: 186601.23	7066.90
T24	TOE	N: 456167.68 E: 186599.52	7066.05
T25	TOE	N: 456205.64 E: 186593.52	7066.70
T26	TOE	N: 456368.66 E: 186593.49	7066.90
T27	TOE	N: 456409.74 E: 186569.20	7067.31
T28	TOE	N: 456414.59 E: 186580.00	7066.98
T29	TOP	N: 456442.05 E: 186579.64	7073.00
T30	TOP	N: 456419.31 E: 186617.68	7073.00
T31	TOP	N: 456335.84 E: 186645.93	7073.00
T32	TOP	N: 456296.42 E: 186655.10	7073.00
T33	TOP	N: 456249.94 E: 186661.20	7073.00
T34	TOP	N: 456221.20 E: 186666.17	7073.00
T35	TOP	N: 456168.72 E: 186685.03	7073.00
T36	TOP	N: 456136.14 E: 186700.45	7073.00
T37	TOP	N: 456103.33 E: 186721.00	7073.00
T38	TOP	N: 456075.98 E: 186742.05	7073.00
T39	TOP	N: 455979.98 E: 186823.14	7073.00
T40	TOP	N: 455950.58 E: 186833.42	7073.00
T41	TOP	N: 455903.27 E: 186828.70	7073.00
T42	TOP	N: 455868.63 E: 186812.93	7073.00

POINT TABULATION			
ID NO.	DESCRIPTION	NORTHING/EASTING	ELEVATION
T43	TOP	N: 455853.68 E: 186807.47	7073.00
T44	TOP	N: 455812.76 E: 186774.67	7073.00
T45	TOP	N: 455819.72 E: 186725.40	7073.00
T46	TOP	N: 455847.07 E: 186667.71	7073.00
T47	TOP	N: 455869.22 E: 186616.76	7073.00
T48	TOP	N: 455897.46 E: 186586.05	7073.00
T49	TOP	N: 455931.76 E: 186576.66	7073.00
T50	TOP	N: 456218.27 E: 186565.74	7073.00
T51	TOP	N: 456367.16 E: 186557.36	7073.00
T52	TOP	N: 456207.73 E: 186565.98	7073.00
TC1	TRICKLE CHANNEL	N: 455939.64 E: 186792.76	7066.83
TC2	TRICKLE CHANNEL	N: 455935.22 E: 186747.86	7066.60
TC3	TRICKLE CHANNEL	N: 456037.60 E: 186638.10	7065.72
TC4	TRICKLE CHANNEL	N: 456094.31 E: 186639.72	7065.43
TC5	TRICKLE CHANNEL	N: 456104.39 E: 186639.33	7065.38
TC6	TRICKLE CHANNEL	N: 456135.29 E: 186636.04	7065.22
TC7	TRICKLE CHANNEL	N: 456161.67 E: 186600.41	7065.00
TC8	TRICKLE CHANNEL	N: 456197.06 E: 186626.73	7065.32
TC9	TRICKLE CHANNEL	N: 456414.78 E: 186585.67	7066.43
TR1	TRAIL	N: 455842.31 E: 186673.08	7073.04
TR2	TRAIL	N: 455869.12 E: 186616.53	7073.04
TR3	TRAIL	N: 455929.77 E: 186576.56	7073.04
TR4	TRAIL	N: 456208.10 E: 186566.22	7073.00
TR5	TRAIL	N: 456367.14 E: 186557.15	7073.05

POINT TABULATION			
ID NO.	DESCRIPTION	NORTHING/EASTING	ELEVATION
TR6	TRAIL	N: 456408.08 E: 186553.54	7070.73
TR7	TRAIL	N: 456424.26 E: 186550.33	7071.99
TR8	TRAIL	N: 456613.63 E: 186512.82	7072.77
TR9	TRAIL	N: 456629.64 E: 186491.15	7072.47
TR10	TRAIL	N: 456616.97 E: 186368.07	7070.00
TR11	TRAIL	N: 456607.02 E: 186369.10	7069.74
TR12	TRAIL	N: 456619.69 E: 186492.18	7072.67
TR13	TRAIL	N: 456611.69 E: 186503.01	7072.97
TR14	TRAIL	N: 456406.51 E: 186543.65	7070.93
TR15	TRAIL	N: 456207.73 E: 186556.23	7073.20
TR16	TRAIL	N: 455929.40 E: 186566.57	7073.24
TR17	TRAIL	N: 455880.09 E: 186612.24	7073.24
TR18	TRAIL	N: 455818.52 E: 186699.92	7073.25

LINE TABLE		
LINE	BEARING	DISTANCE
L6	S84°22'20"W	45.12'
L8	N01°38'18"E	56.74'
L10	N06°04'25"W	21.04'
L12	N10°04'50"W	221.56'

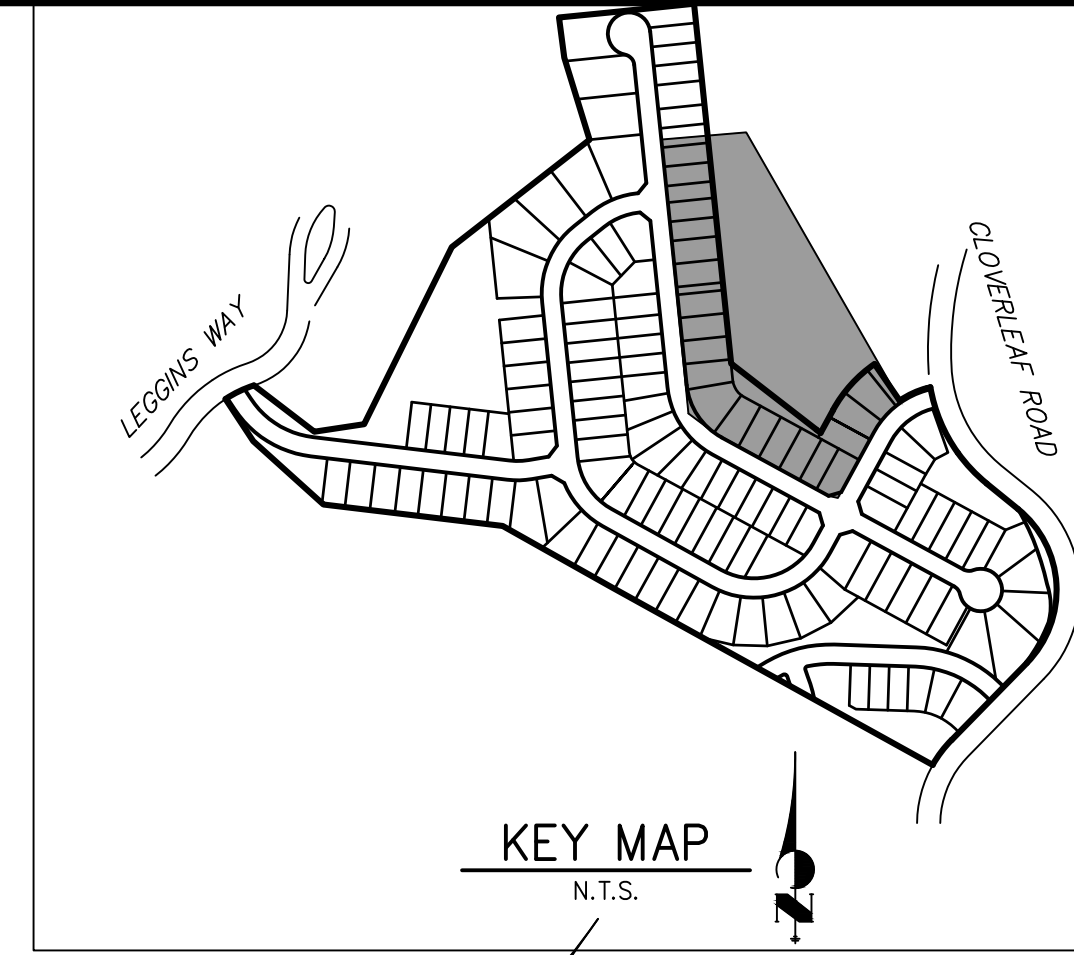
CURVE TABLE			
CURVE	DELTA	RADIUS	LENGTH
C6	97°15'58"	100.00'	169.76'
C7	7°42'43"	75.00'	10.09'
C8	95°00'29"	30.01'	49.77'
C9	94°37'15"	30.00'	49.54'

### NOTES

- ALL PROPOSED POND IMPROVEMENTS ARE PRIVATE UNLESS OTHERWISE NOTED.
- SEE SHEETS 3-8 FOR PROPOSED STORM SEWER DESIGN.
- CLOVERLEAF METROPOLITAN DISTRICT WILL OWN AND MAINTAIN ALL RETAINING WALLS WITHIN TRACTS. WALLS ON LOTS WILL BE OWNED AND MAINTAINED BY THE INDIVIDUAL LOT OWNER.

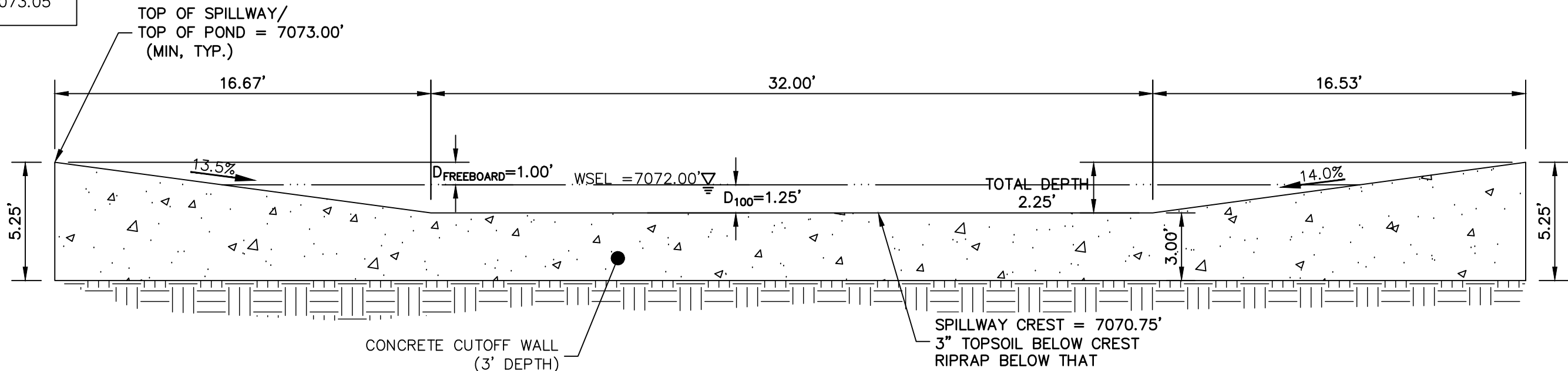
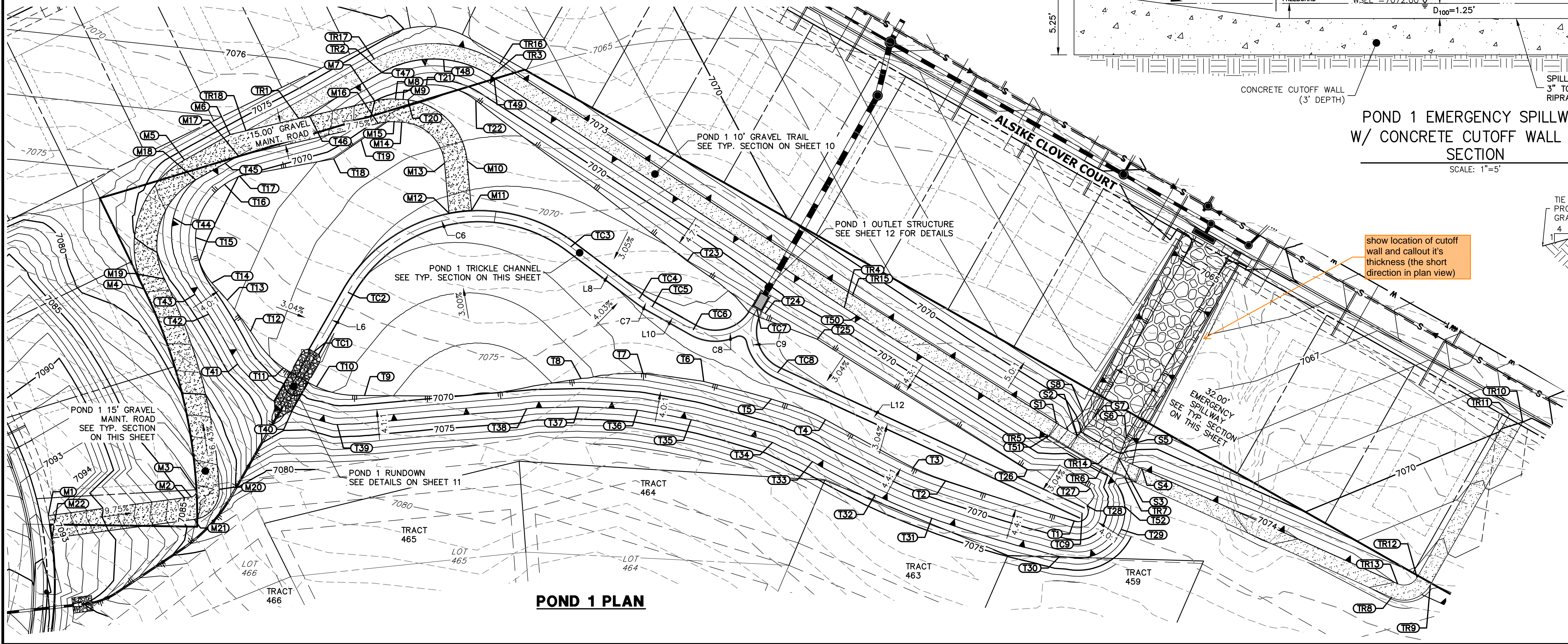


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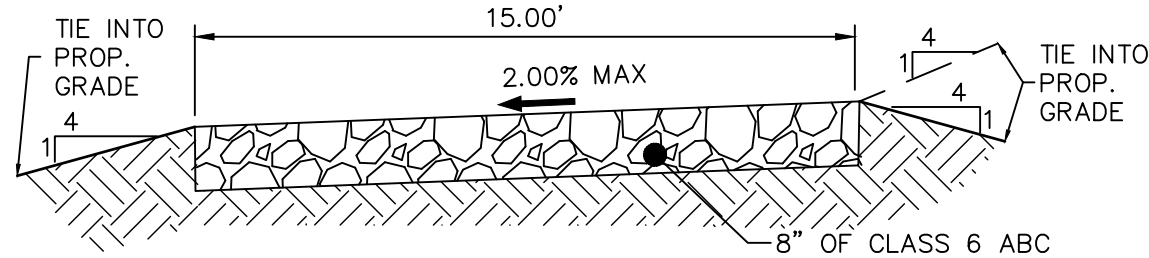


40 20 0 40 80  
ORIGINAL SCALE: 1" = 40'

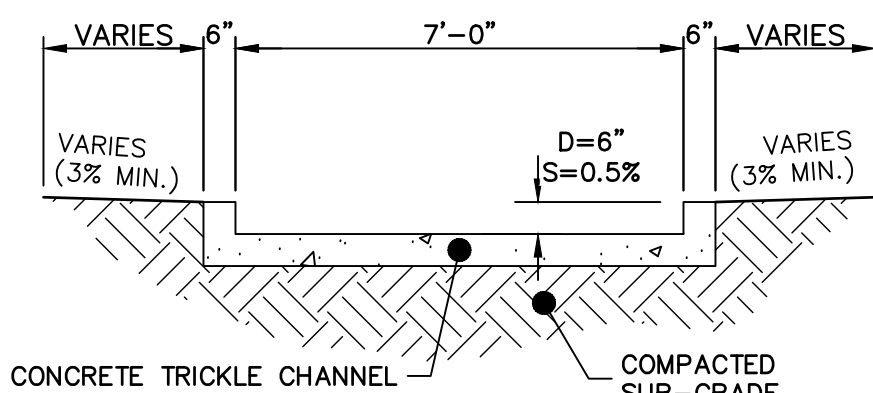
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POND 1 EMERGENCY SPILLWAY  
W/ CONCRETE CUTOFF WALL TYP.  
SECTION  
SCALE: 1"=5'



15' GRAVEL MAINTENANCE  
ACCESS ROAD TYPICAL SECTION  
N.T.S.



POND 1 TRICKLE CHANNEL  
SCALE: 1"=3'

### ENGINEER'S STATEMENT

PREPARED UNDER MY DIRECT SUPERVISION AND ON BEHALF OF JR ENGINEERING

*Mike Bramlett*  
32314

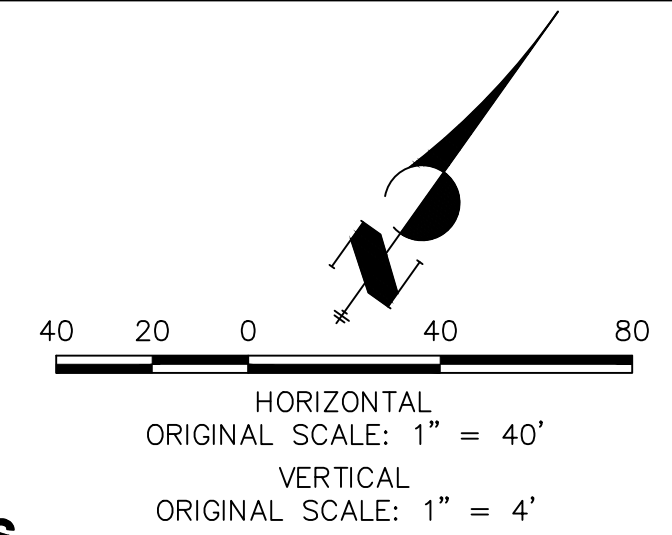
MIKE A. BRAMLETT, P.E.  
COLORADO P.E. 32314  
FOR AND ON BEHALF OF JR ENGINEERING, LLC

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE AGENCIES, JR ENGINEERING APPROVES THEIR USE. DESIGNED BY: JDESUARDIN  
JDESUARDIN@PROTERRACO.COM

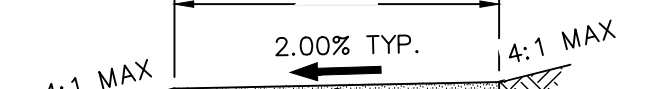
PREPARED FOR  
**MONUMENT HILL CM LLC**  
1864 WOODMOOR DR., STE 100  
COLORADO SPRINGS, CO 80920  
ATTN: JOE DESUARDIN  
(719) 476-0800  
JDESUARDIN@PROTERRACO.COM

**J.R. ENGINEERING**  
A Western Company  
  
Central 303-740-9383 • Colorado Springs 719-583-2583  
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE	H-SCALE	V-SCALE	DATE	DESIGNED BY	DRAWN BY	CHECKED BY	SHEET	OF	JOB NO.
1				1"=40'	N/A	11/11/21	GVT	GVT		9	28	25158.01




1. ALL PROPOSED POND IMPROVEMENTS ARE PRIVATE UNLESS OTHERWISE NOTED.
2. SEE SHEETS 3-8 FOR PROPOSED STORM SEWER DESIGN.
3. CLOVERLEAF METROPOLITAN DISTRICT WILL OWN AND MAINTAIN ALL RETAINING WALLS WITHIN TRACTS. WALLS ON LOTS WILL BE OWNED AND MAINTAINED BY THE INDIVIDUAL LOT OWNER.



A cross-sectional diagram of a gravel trail. The top surface is a flat line with a horizontal dimension line above it labeled "10.00'". Below this line, a horizontal arrow points to the left, labeled "2.00% TYP.". The sides of the trail are sloped, with labels "4:1 MAX" on both the left and right. The trail is composed of two layers: a top layer of gravel, indicated by a diagonal hatching pattern, and a bottom layer of "CRUSHED LIMESTONE", indicated by a stippled pattern. A leader line points from the text "CRUSHED LIMESTONE SEE DETAIL SHEET 27 FOR SPECIFICATION" to the bottom layer. Below the diagram, the text "GRAVEL TRAIL TYPICAL SECTION" is written in large, bold, capital letters, and "N.T.S. (RUNS WITHIN POND)" is written in smaller, bold, capital letters.

PREPARED UNDER MY DIRECT SUPERVISION AND, ON BEHALF OF JR  
ENGINEERING


 32314  
 DATE 11/11/21  
 MIKE A. BRAMLETT, P.E.  
 COLORADO P.E. 32314  
 FOR AND ON BEHALF OF JR ENGINEERING, LLC



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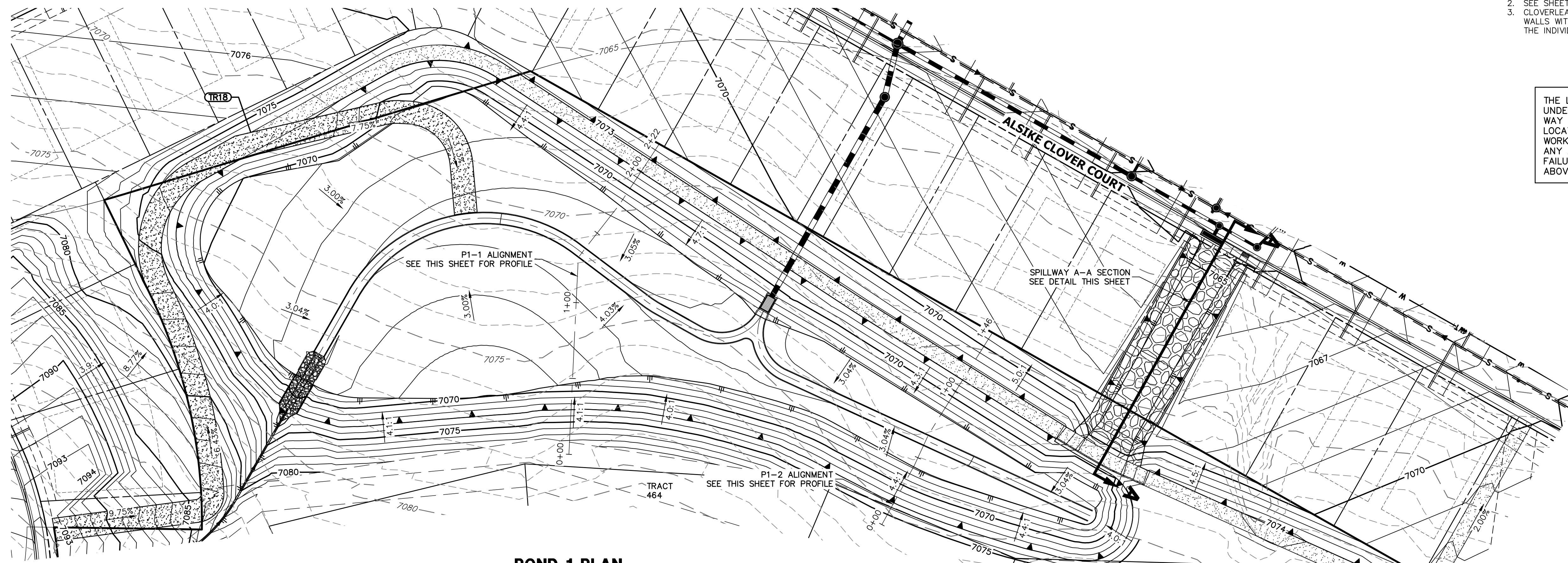
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AUTHORIZATION.

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ATTN: JOE DESJARDIN  
(719) 476-0800  
JDESJARDIN@PROTERRA.CO.COM

V-SCALE	1" = 4'				
DATE	11/11/21				
DESIGNED BY	GVF				
DRAWN BY	GVF				
CHECKED BY					

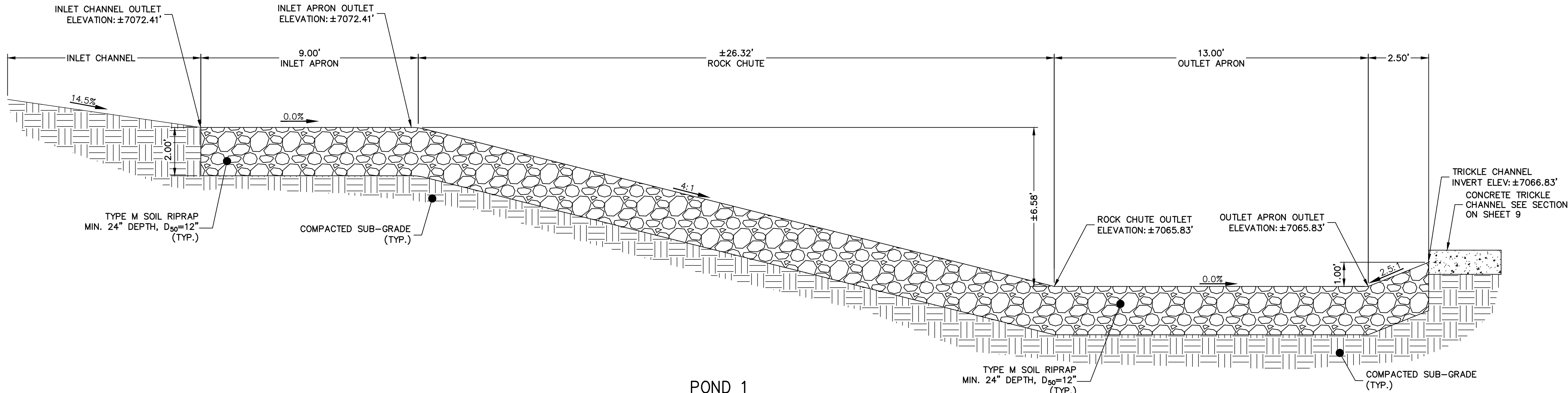
## POND PLANS AND DETAILS

DB NO. 25158.01

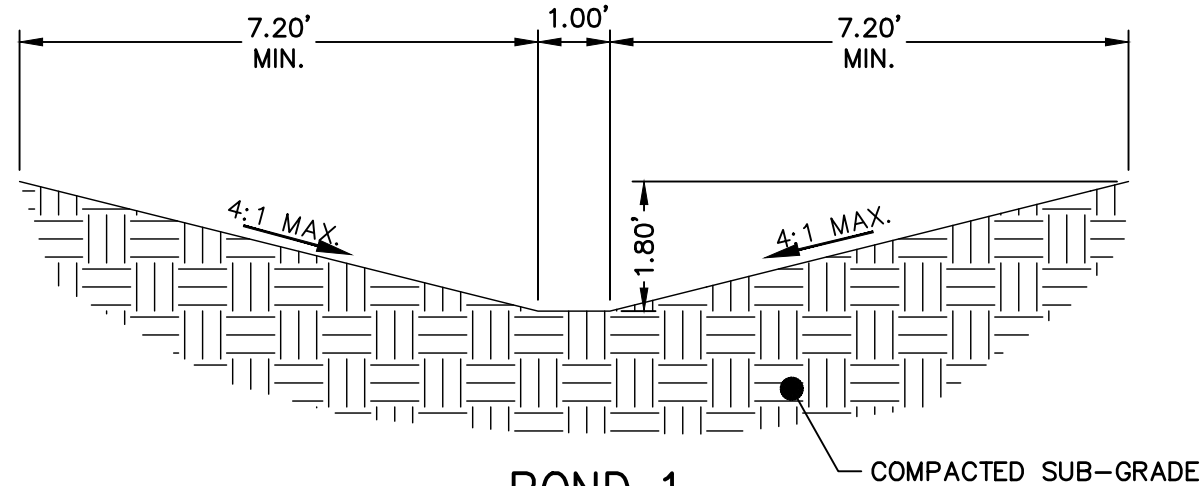


SCALE: 1"=10'

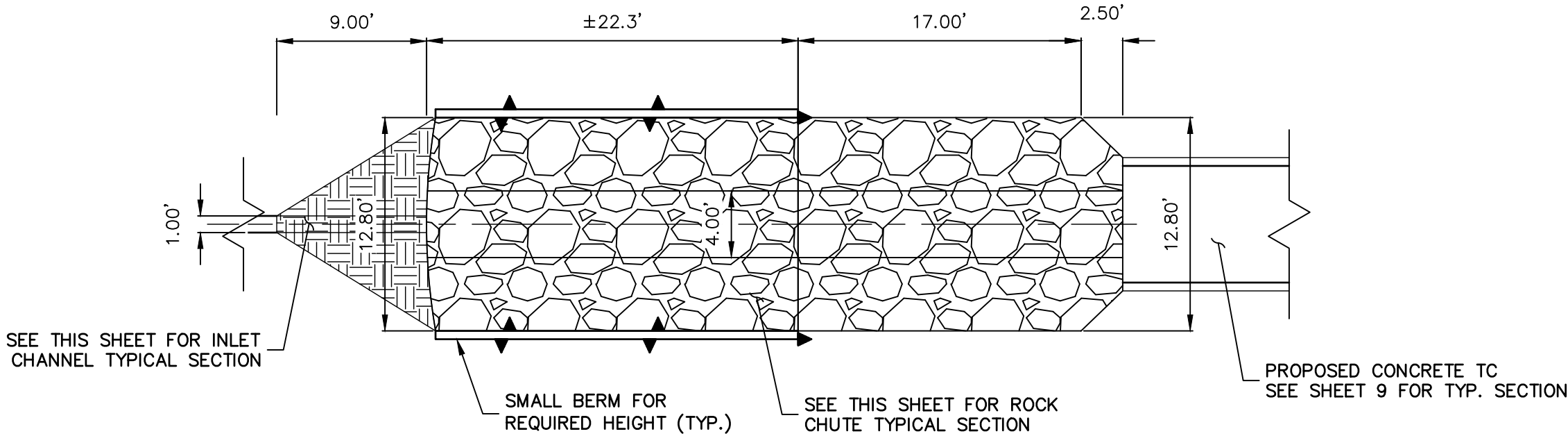
TYPE L SOIL RIPRAP  
(18" MIN. DEPTH, D50=9")  
PER MHFD SPEC. SECTION 31-37-00, THE SOIL MATERIAL  
SHALL BE NATIVE OR TOPSOIL AND MIXED WITH 65% RIPRAP  
AND 35% SOIL BY VOLUME. SOIL RIPRAP SHALL CONSIST OF  
UNIFORM MIXTURE OF SOIL AND RIPRAP WITHOUT VOIDS



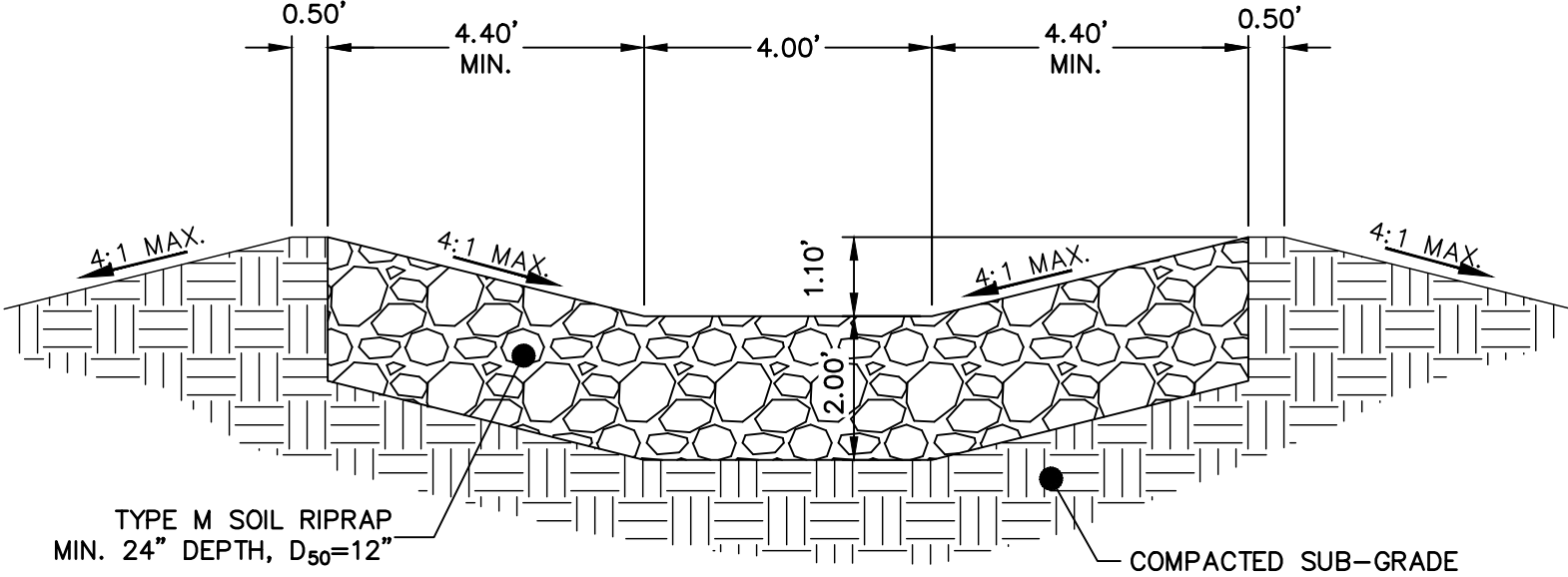
POND 1  
ROCK CHUTE AND BASIN  
SCALE: 3/8" = 1'



POND 1  
INLET CHANNEL  
TYP. CROSS-SECTION  
SCALE: 3/8" = 1'



POND 1  
ROCK CHUTE AND BASIN  
PLAN VIEW  
SCALE: 1/8" = 1'



POND 1  
ROCK CHUTE AND BASIN  
TYP. CROSS-SECTION  
SCALE: 3/8" = 1'



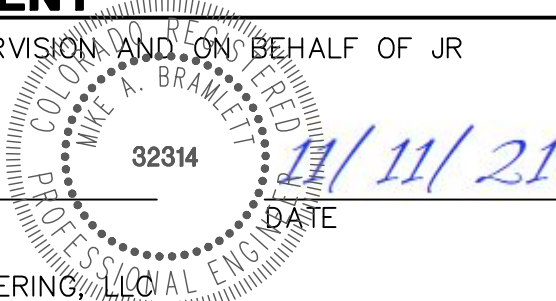
Know what's below.  
Call before you dig.

ENGINEER'S STATEMENT

PREPARED UNDER MY DIRECT SUPERVISION AND ON BEHALF OF JR ENGINEERING

Mike A. Bramlett  
Mike A. Bramlett, P.E.  
COLORADO P.E. 32314

FOR AND ON BEHALF OF JR ENGINEERING, LLC



CLOVERLEAF FILING 2

POND PLANS AND DETAILS

SHEET 11 OF 28

JOB NO. 25158.01

BY DATE

No. REVISION

H-SCALE V-SCALE DATE DESIGNED BY GAG DRAWN BY GAG CHECKED BY

VARIES VARIES 11/11/21

VARIES VARIES 11/11/21

VARIES VARIES 11/11/21

PREPARED FOR

MONUMENT HILL CM LLC

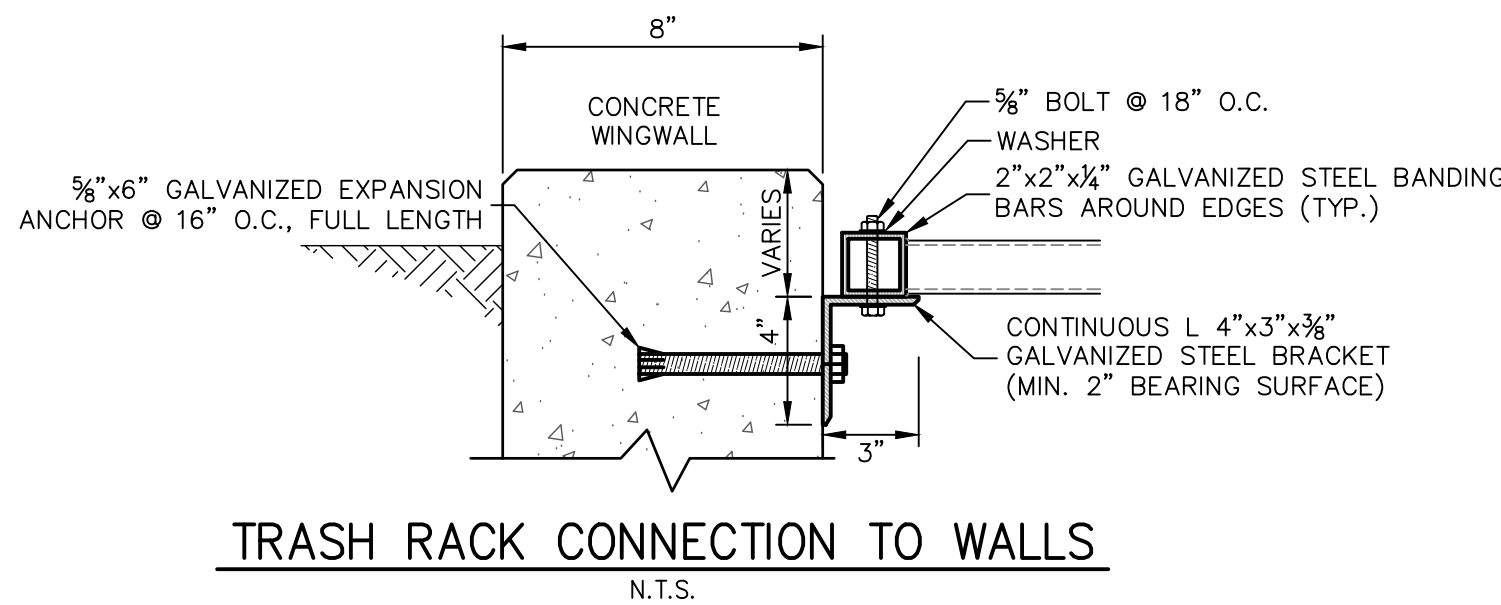
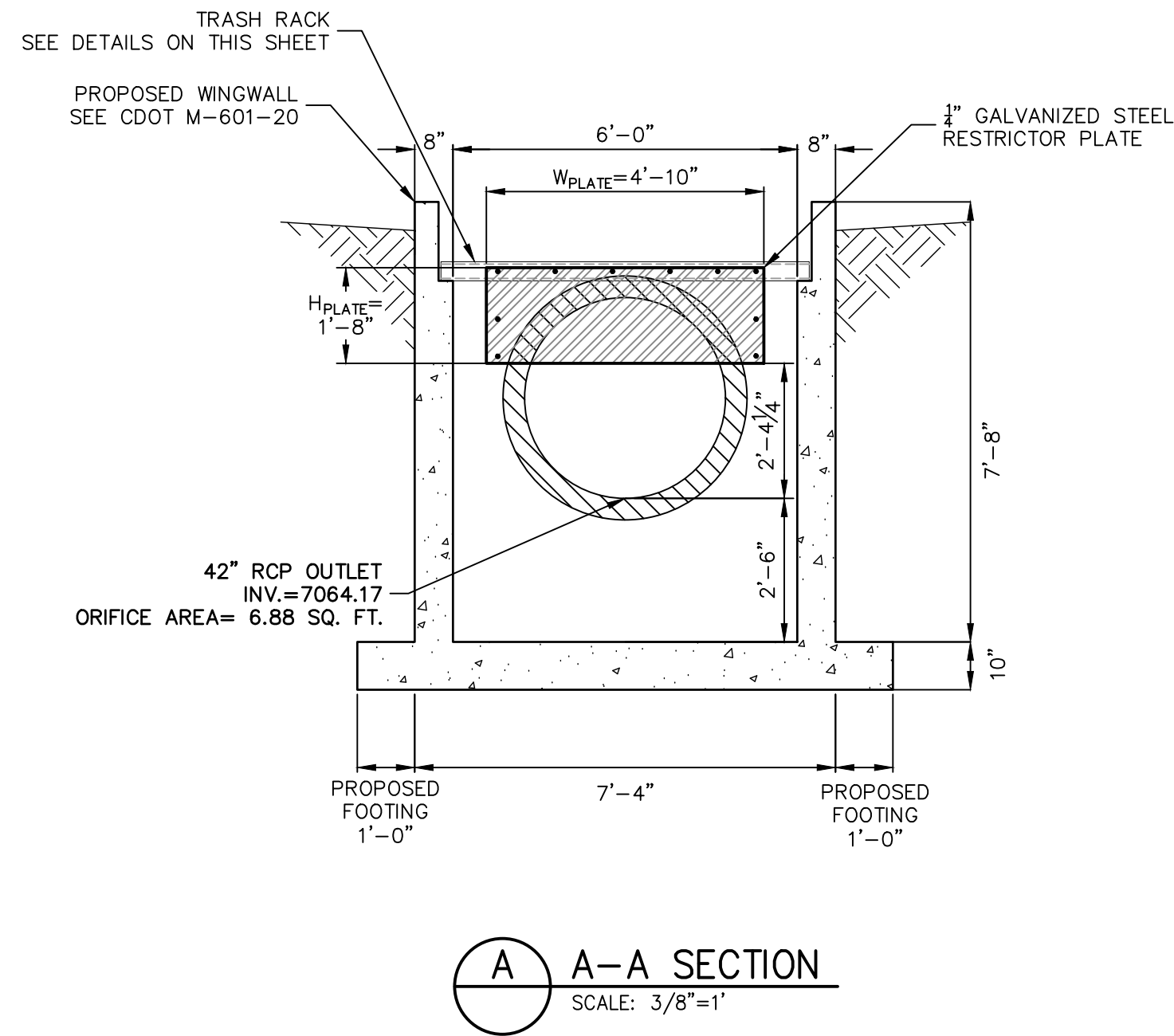
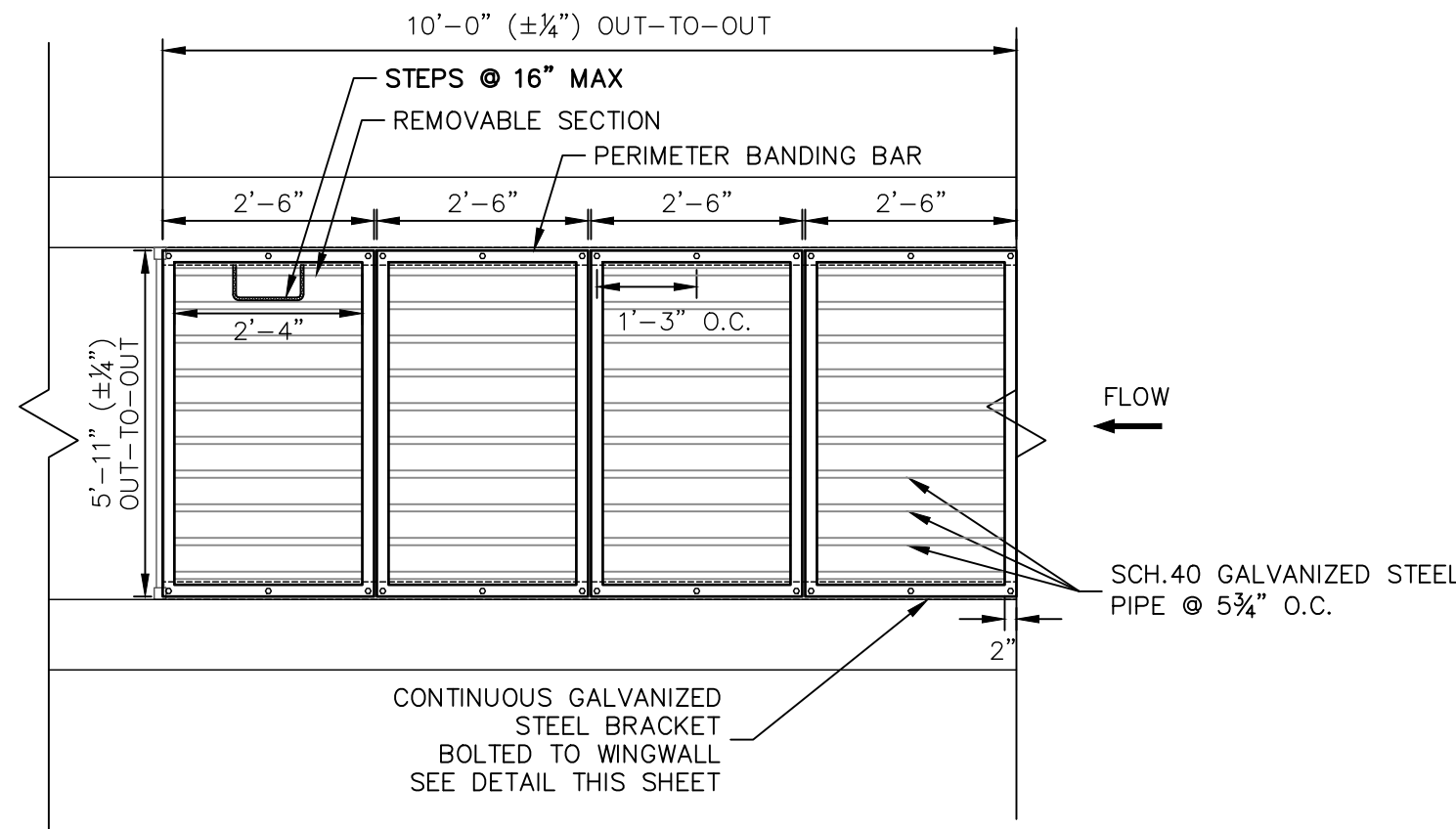
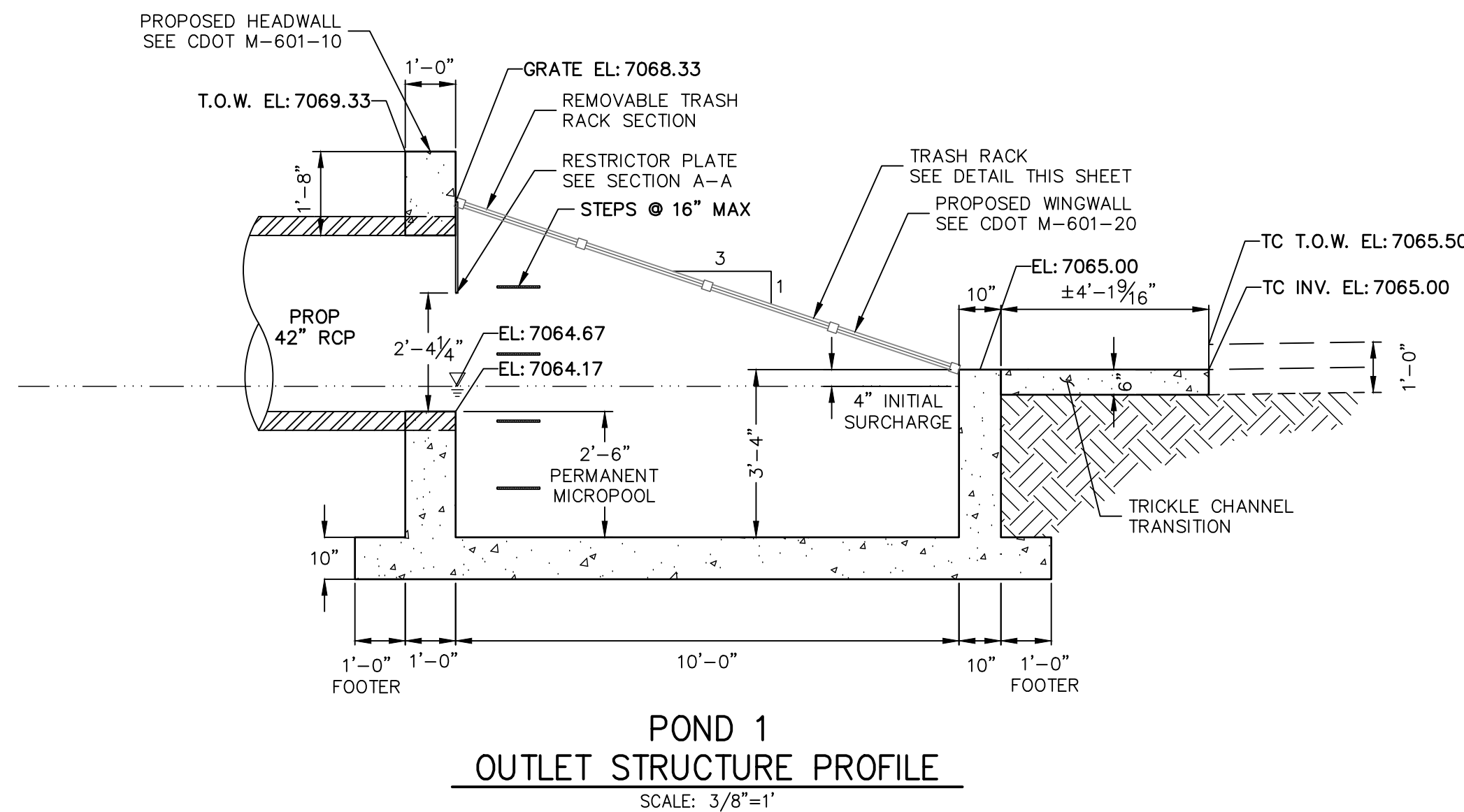
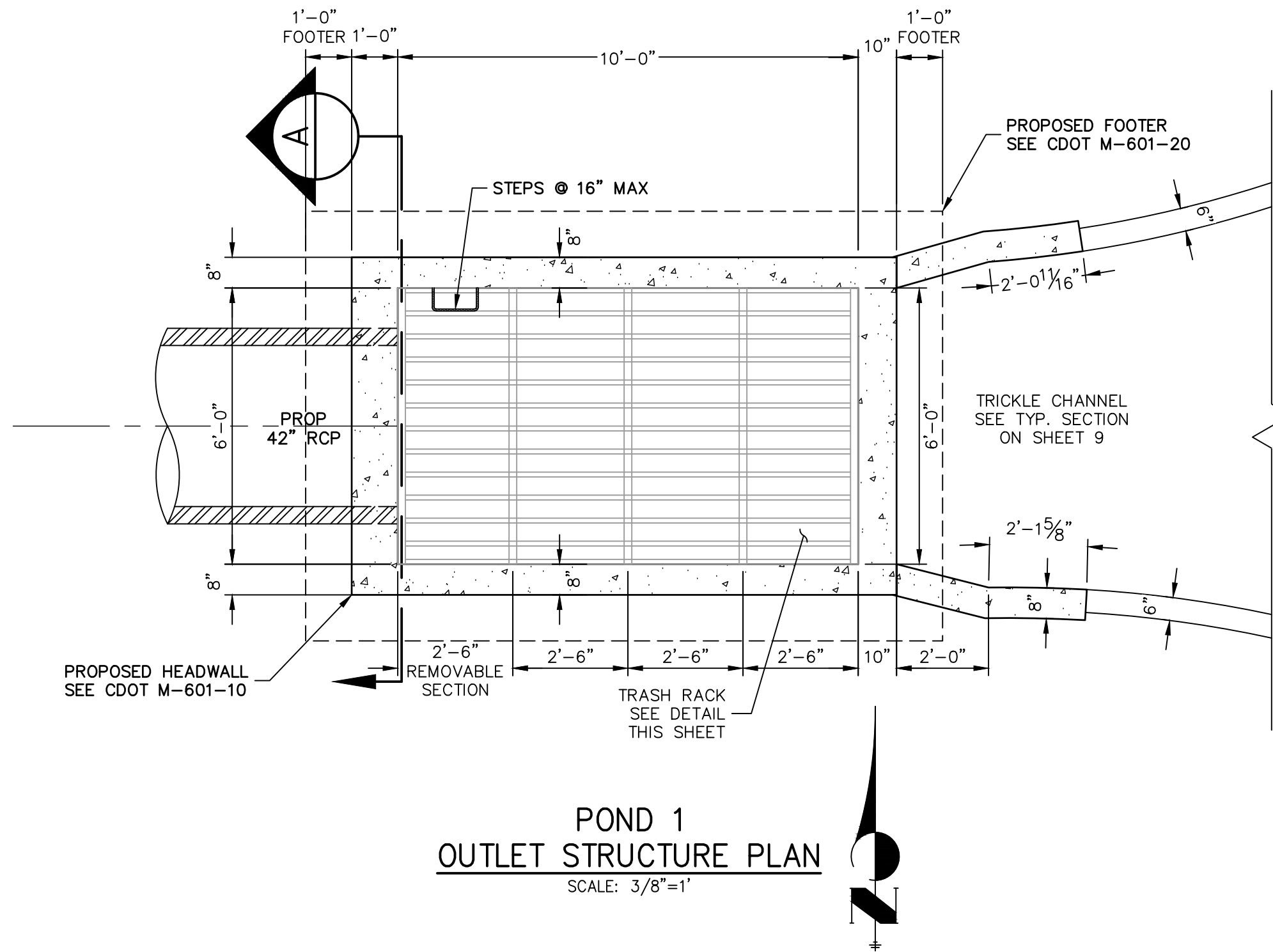
1864 WOODMOOR DR, STE 100  
COLORADO SPRINGS, CO 80920  
ATTN: JOE DESJARDIN  
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JDESJARDIN@PROTERRACO.COM

J.R. ENGINEERING  
A Western Company



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### POND 1 OUTLET STRUCTURE NOTES:

- TRASH RACKS:**
1. TRASH RACKS SHALL BE 1 1/2" SCH.40 STEEL PIPE, GALVANIZED, @ 6" CENTERS. SUPPORT BARS SHALL BE 1/2"x2" STEEL RECTANGULAR BARS, GALVANIZED, @ 36". ALL TRASH RACKS SHALL BE MOUNTED USING STAINLESS STEEL HARDWARE.
  2. REMOVABLE TRASH RACK SECTIONS SHALL BE MOUNTED USING STAINLESS STEEL HARDWARE AND PROVIDED WITH HINGED & LOCKABLE OR BOLTABLE ACCESS PANELS AS SHOWN ON THE PLANS.
  3. STEEL TRASH RACKS SHALL BE HOT DIP GALVANIZED AND MAY BE HOT POWDER COATED AFTER GALVANIZING.
  4. STRUCTURAL STEEL FOR GRATES AND BARS SHALL BE GALVANIZED AND SHALL BE IN ACCORDANCE WITH CDOT STANDARD SPECIFICATIONS, SUBSECTION 712.06.
  5. ALL HARDWARE, BOLTS, AND FASTENERS SHALL BE STAINLESS STEEL.
  6. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR ALL PLATES AND GRATING FOR ENGINEER'S APPROVAL PRIOR TO CONSTRUCTION.

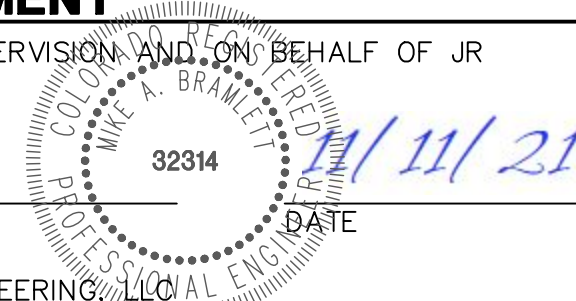


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Mike A. Bramlett, P.E.  
COLORADO P.E. 32314

FOR AND ON BEHALF OF JR ENGINEERING, LLC



CLOVERLEAF FILING 2

POND PLANS AND DETAILS

SHEET 12 OF 28

JOB NO. 25158.01

PREPARED FOR

MONUMENT HILL CM LLC

1864 WOODMOOR DR, STE 100  
COLORADO SPRINGS, CO 80920  
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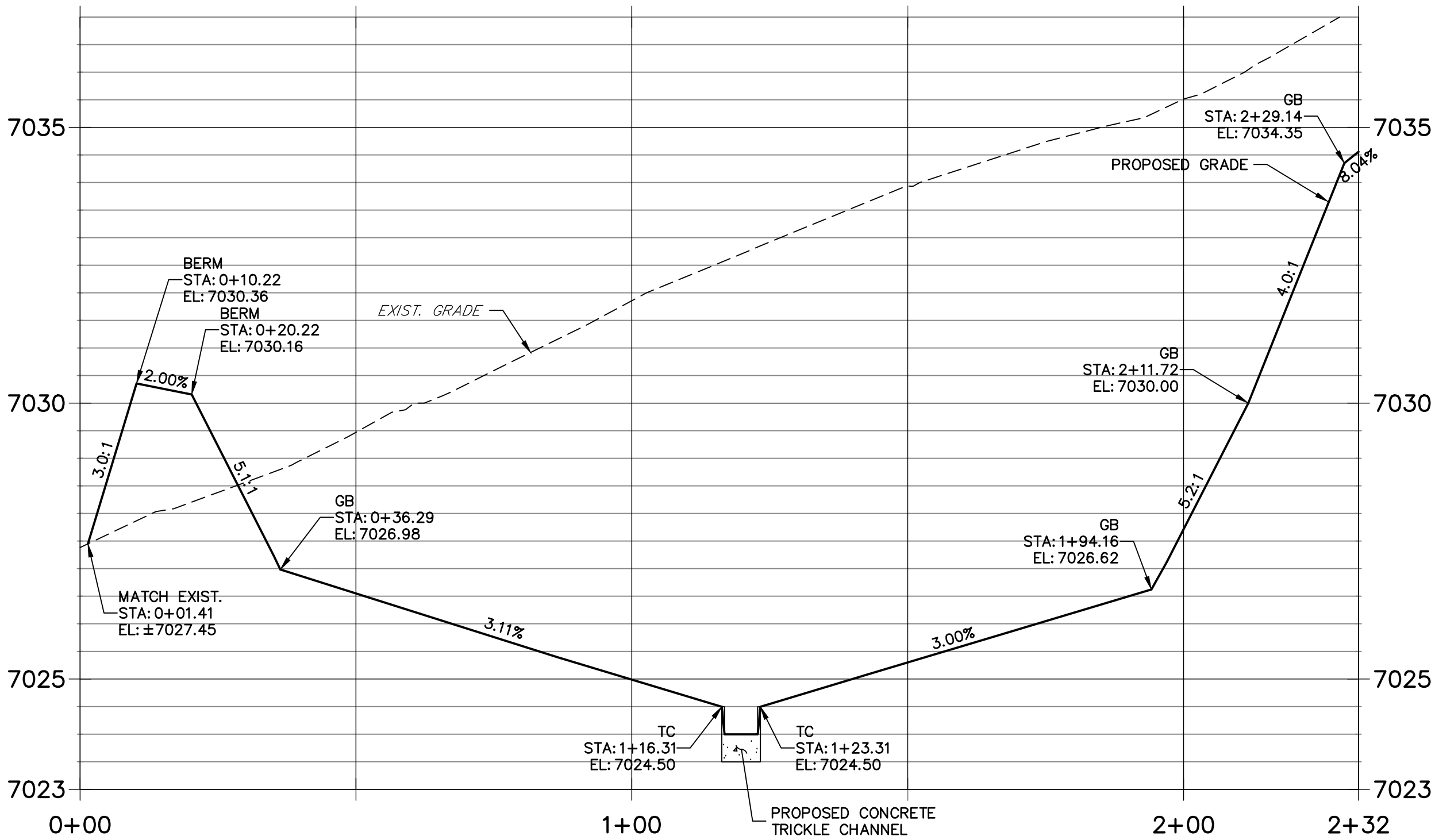


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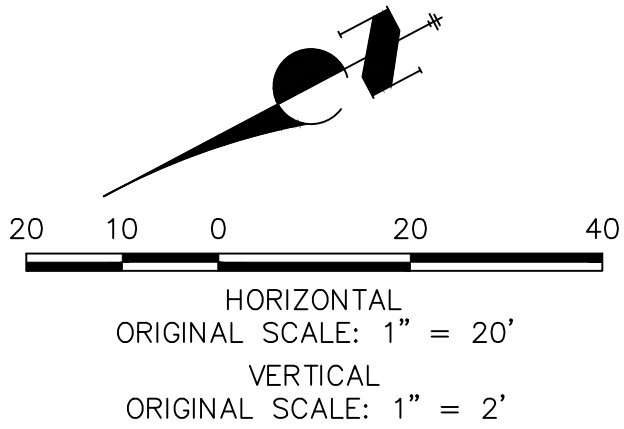
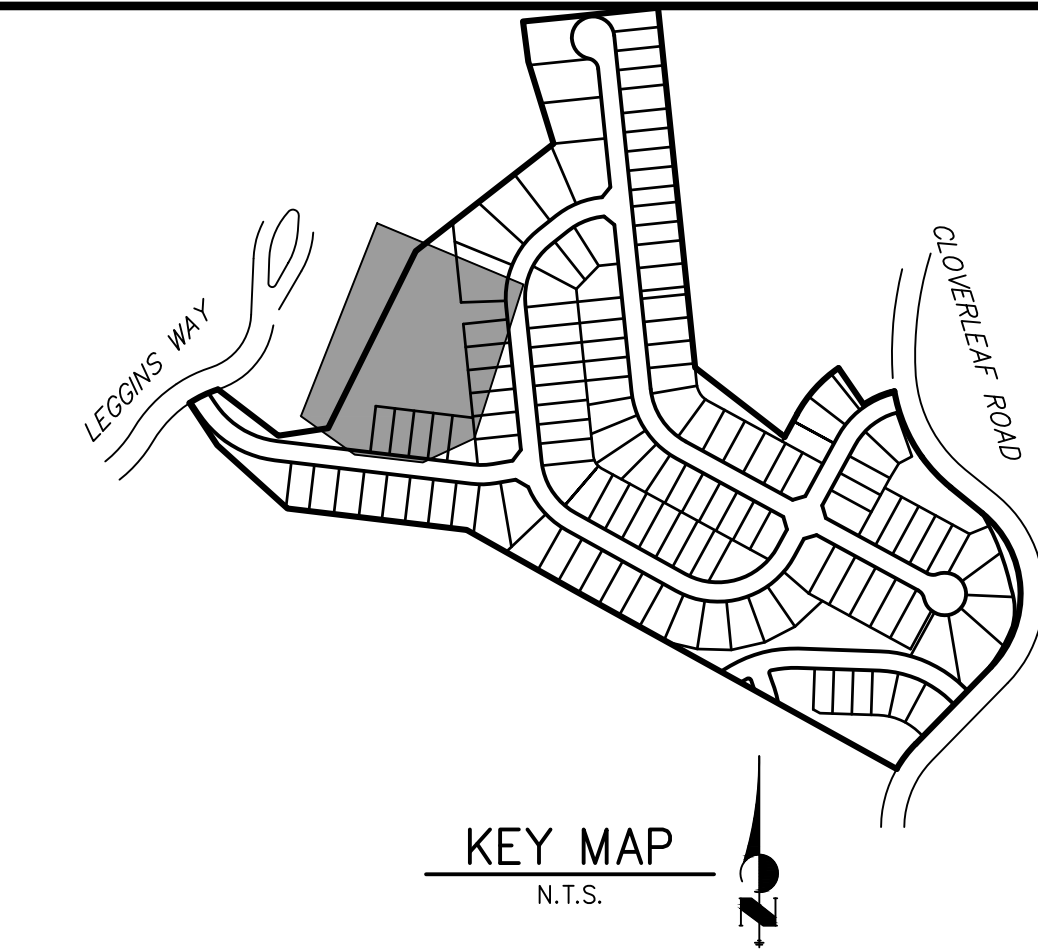
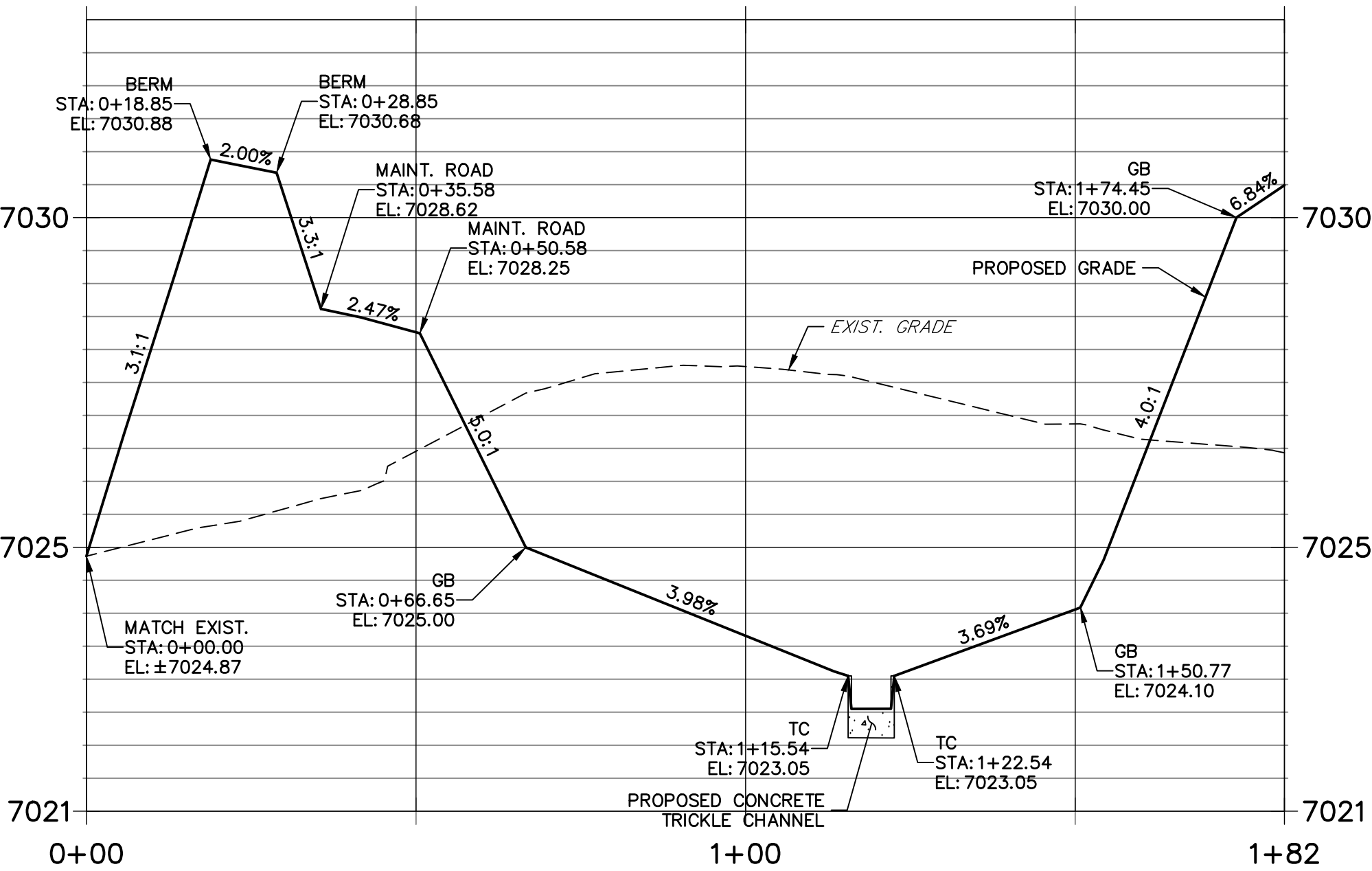
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POND P2-1 PROFILE  
STA 0+00.00 TO 2+31.71

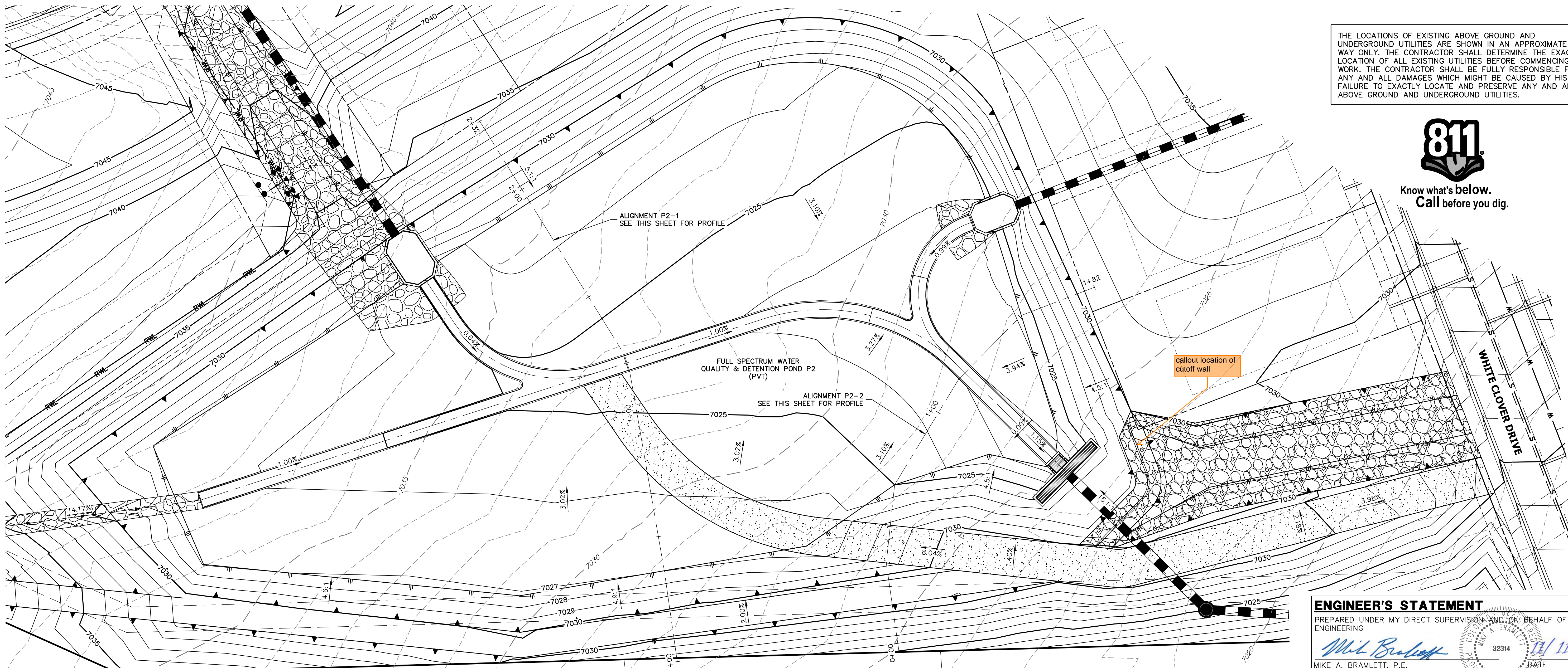


POND P2-2 PROFILE  
STA 0+00.00 TO 1+81.73



- NOTES**
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  - SEE SHEETS 3-8 FOR PROPOSED STORM SEWER DESIGN.
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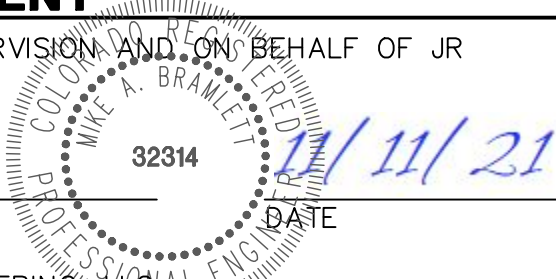
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PREPARED UNDER MY DIRECT SUPERVISION AND ON BEHALF OF JR ENGINEERING

Mike A. Bramlett, P.E.  
COLORADO P.E. 32314  
FOR AND ON BEHALF OF JR ENGINEERING, LLC



CLOVERLEAF FILING 2

POND PLANS AND DETAILS

SHEET 14 OF 28

JOB NO. 25158.01

No.	REVISION	BY	DATE

H-SCALE	V-SCALE	DATE	DESIGNED BY	DRAWN BY	CHECKED BY
1"=20'	1"=2'	11/11/21	GVT	GVT	GVT

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A Western Company

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JDESJARDIN@PROTERRACO.COM

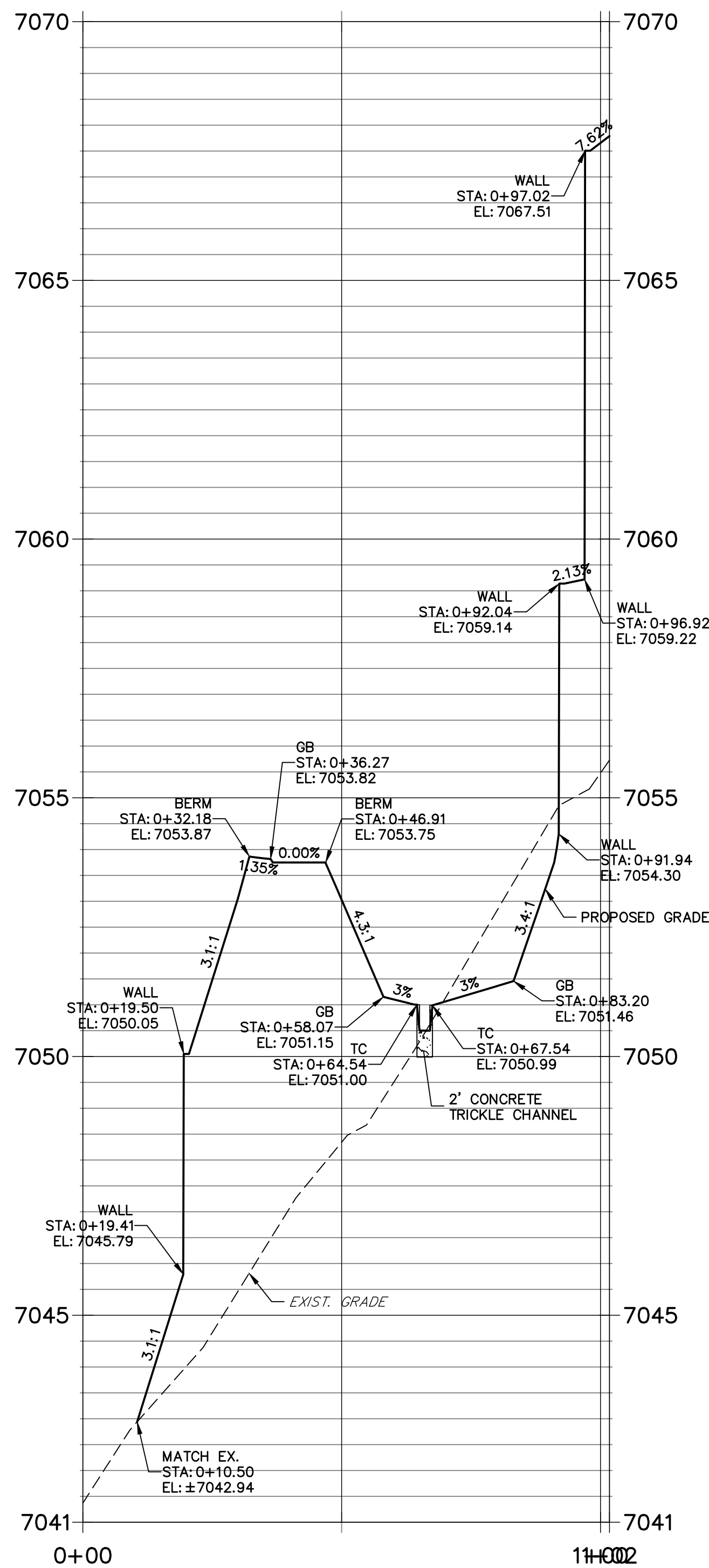
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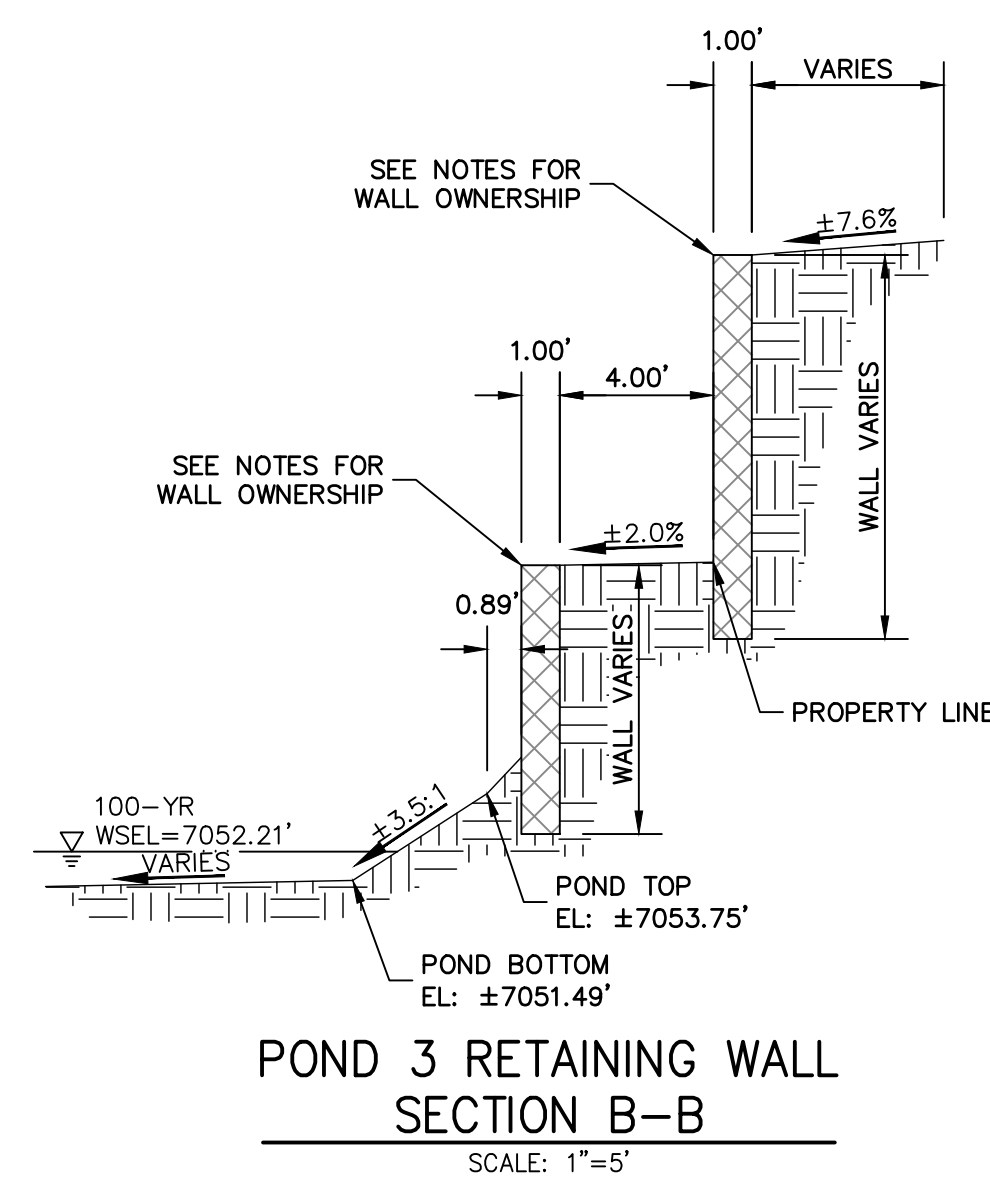
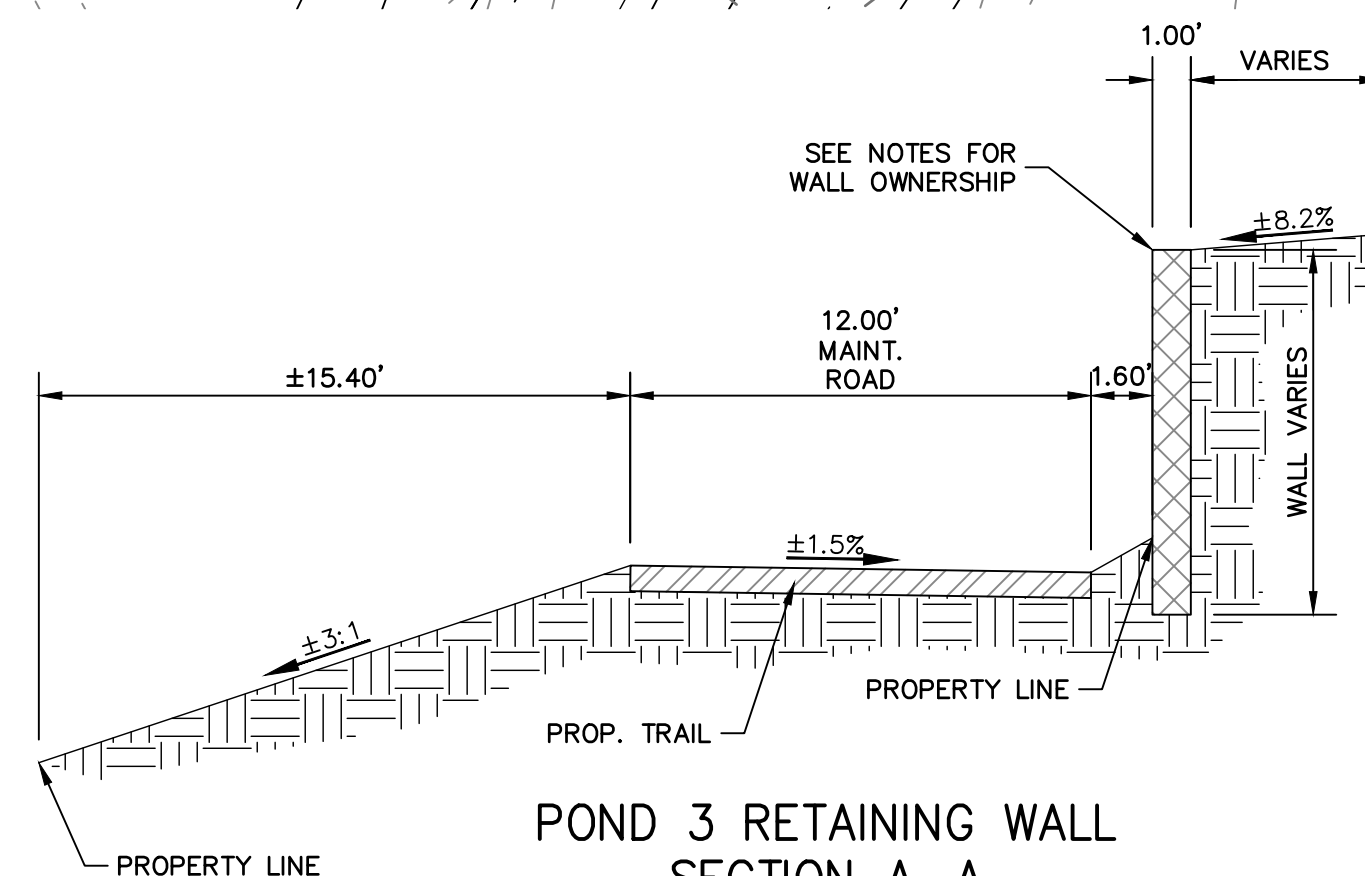
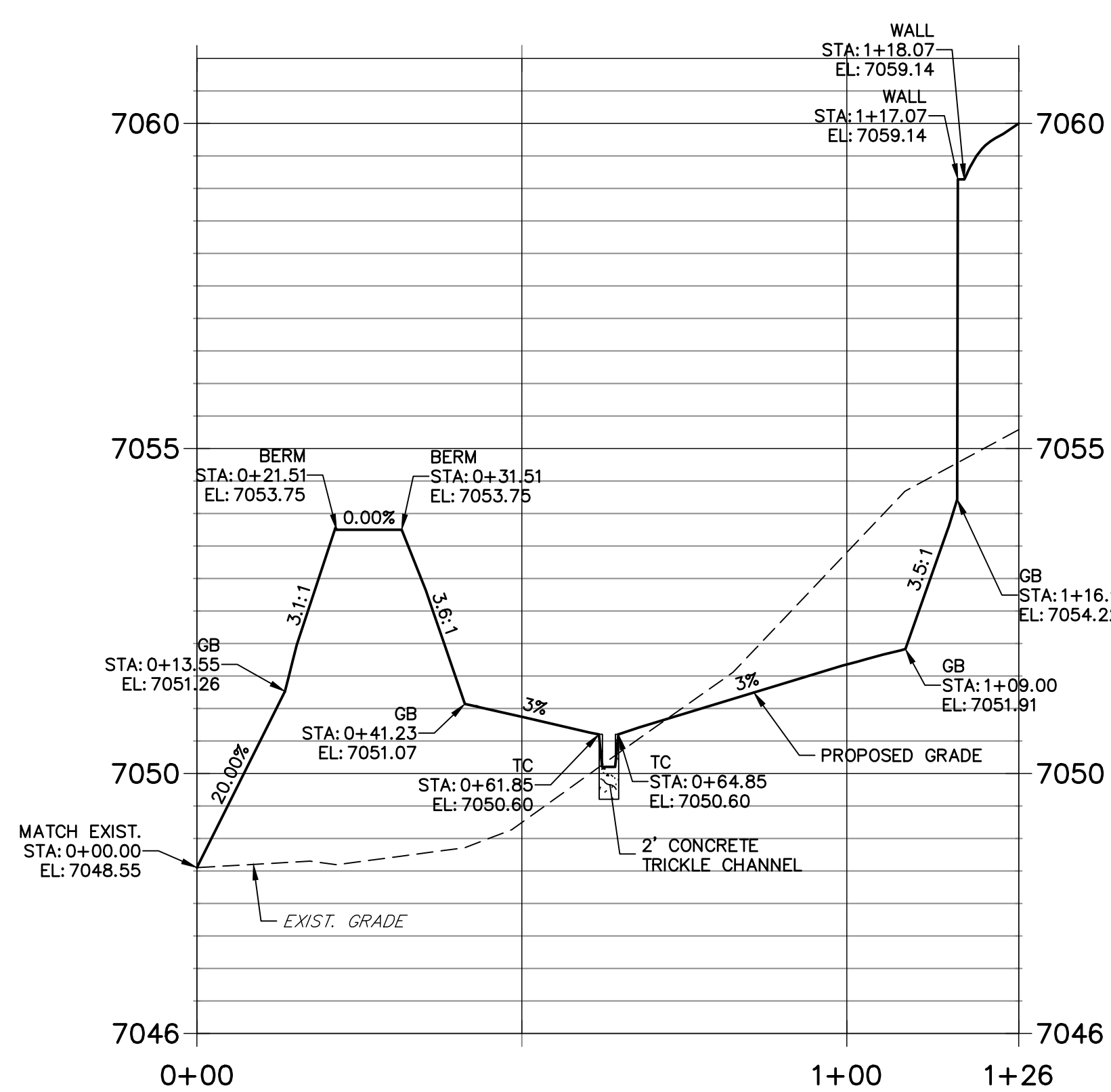




POND P3-1 PROFILE  
STA 0+00.00 TO 1+01.74



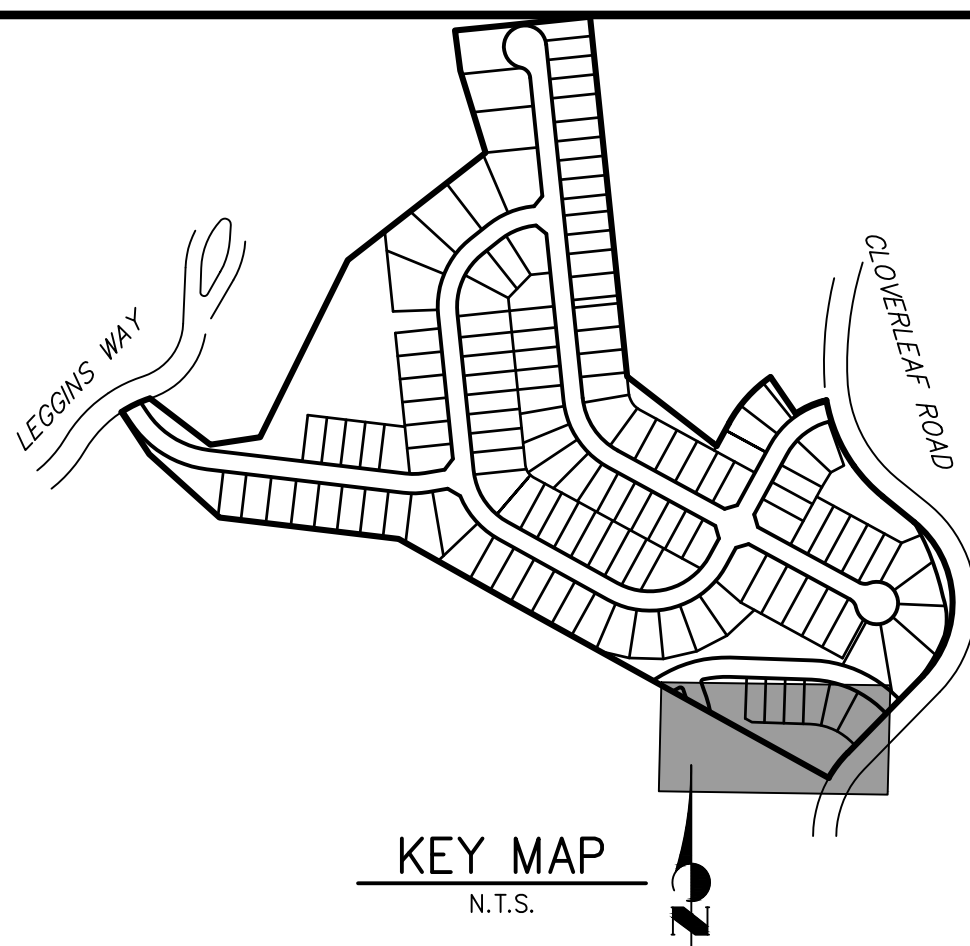
POND P3-2 PROFILE  
STA 0+00.00 TO 1+26.44



- NOTES**
1. ALL PROPOSED POND IMPROVEMENTS ARE PRIVATE UNLESS OTHERWISE NOTED.
  2. SEE SHEETS 3-8 FOR PROPOSED STORM SEWER DESIGN.
  3. CLOVERLEAF METROPOLITAN DISTRICT WILL OWN AND MAINTAIN ALL RETAINING WALLS WITHIN TRACTS. WALLS ON LOTS WILL BE OWNED AND MAINTAINED BY THE INDIVIDUAL LOT OWNER.

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**ENGINEER'S STATEMENT**  
PREPARED UNDER MY DIRECT SUPERVISION AND ON BEHALF OF JR ENGINEERING  
*Mike Bramlett*  
MIKE A. BRAMLETT, P.E.  
COLORADO P.E. 32314  
FOR AND ON BEHALF OF JR ENGINEERING, LLC  
DATE 11/11/21



CLOVERLEAF FILING 2		H-SCALE		1"=20'		No.		REVISION		BY		DATE	
POND PLANS AND DETAILS		V-SCALE		1"=2'									
		DATE		11/11/21									
		DESIGNED BY		GVT									
		DRAWN BY		GVT									
		CHECKED BY											
SHEET 18 OF 28													
JOB NO. 25158.01													

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POND PLANS AND DETAILS		V-SCALE		1"=2'									
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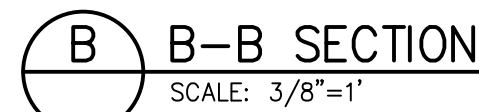
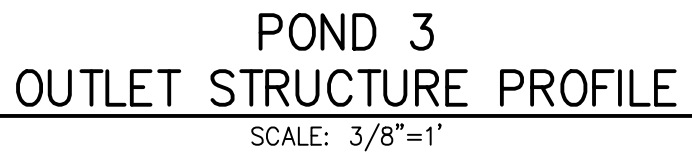
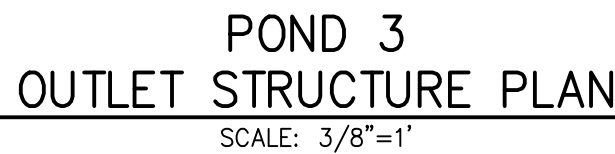
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JOB NO. 25158.01

Centennial 303-740-9393 • Colorado Springs 719-593-2593  
Fort Collins 970-491-9888 • [www.jirengineering.com](http://www.jirengineering.com)

MONUMENT HILL CM LLC  
1864 WOODMOOR DR, STE 100  
COLORADO SPRINGS, CO 80920  
ATTN: JOE DESJARDIN  
(719) 476-0800  
IDFS.JARDIN@PROTERRACCO.COM



LINE TABLE		
LINE	BEARING	DISTANCE
L7	S38°02'12"E	41.93'
L8	S55°02'56"E	22.64'
L9	S55°02'56"E	45.61'
L10	S52°30'58"E	1.00'

PREPARED FOR

MONUMENT HILL CM LLC  
1864 WOODMOOR DR, STE 200  
COLORADO SPRINGS, CO 80909  
ATTN: JOE DESJARDIN  
(719) 476-0800  
JDESJARDIN@PROTERRACO.COM

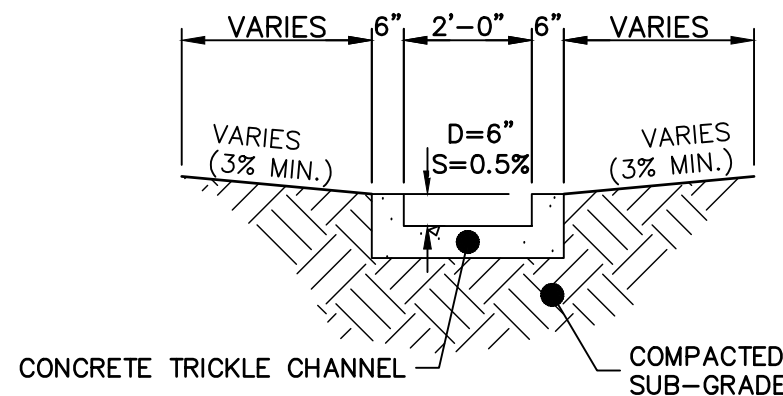
(719) 476-0800  
JDESJARDIN@PROTERRACO.COM

**J·R ENGINEERING**  
A Westrian Company



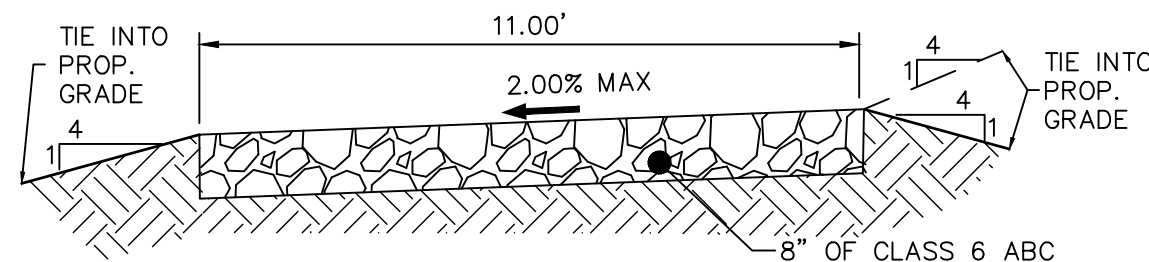
Centennial 303-740-9393 • Colorado Springs 719-593-2593  
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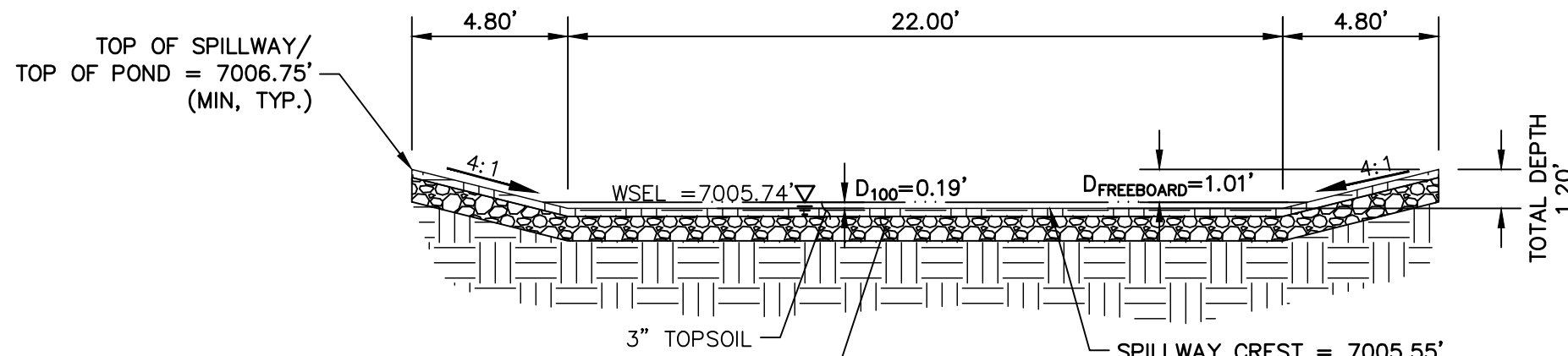
## POND 4 TRICKLE CHANNEL

SCALE: 1"=3'



### 11' GRAVEL MAINTENANCE ACCESS ROAD TYPICAL SECTION

N.T.S.



POND 4 EMERGENCY SPILLWAY  
TYP. SECTION

SCALE: 1"=5'

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Know what's **below**.  
**Call** before you dig.

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PREPARED UNDER MY DIRECT SUPERVISION AND ON BEHALF OF JR  
ENGINEERING

M. J. R. 14

Mar 1968

MIKE A. BRAMLETT, P.E.  
COLORADO P.E. 32314

COLORADO P.E. 32514  
FOR AND ON BEHALF OF JR ENGINEERING, LLC

\_\_\_\_\_

CLOVERLEAF FILING 2

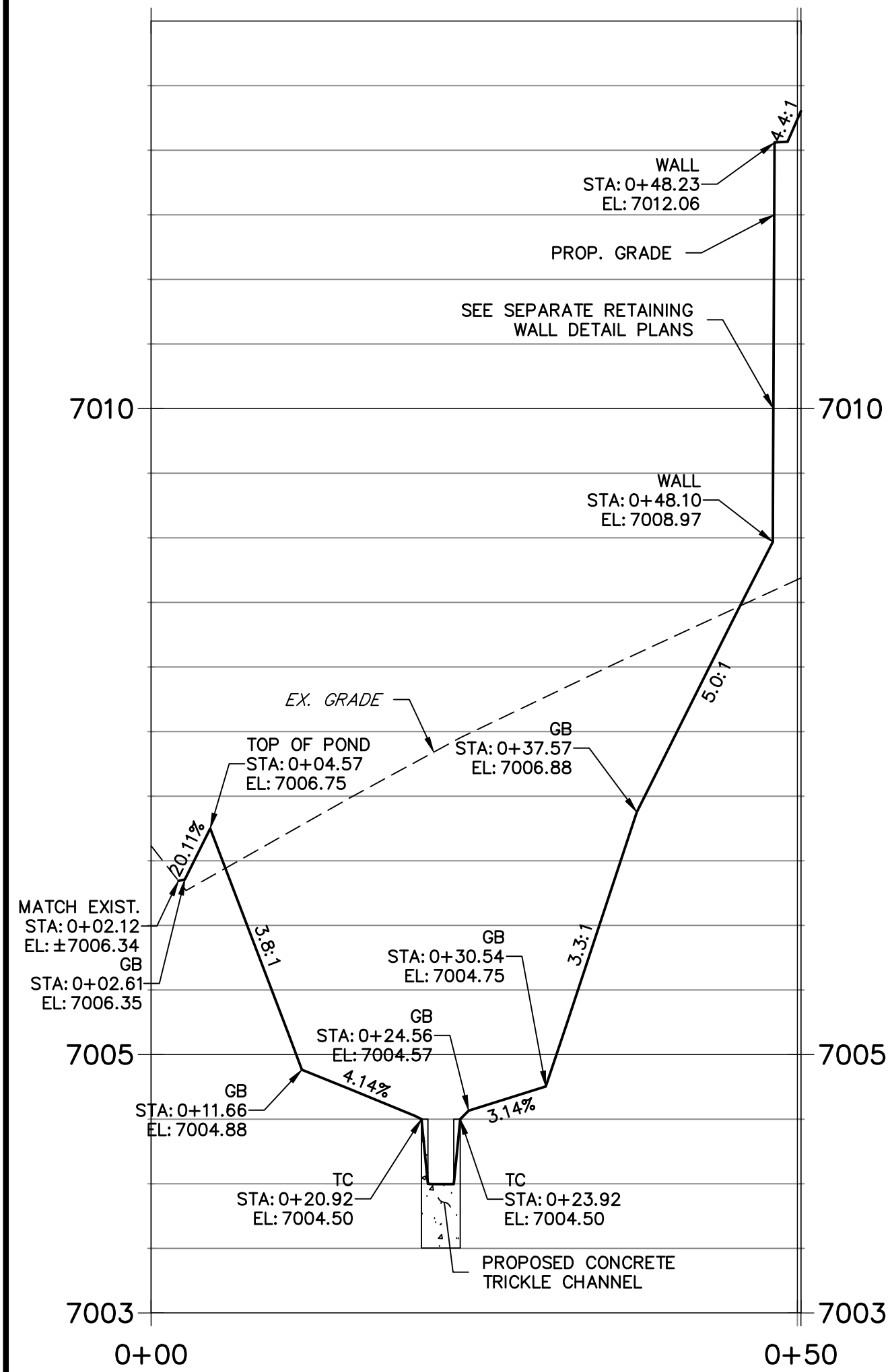
## POND PLANS AND DETAILS

SHEET 20 OF 28

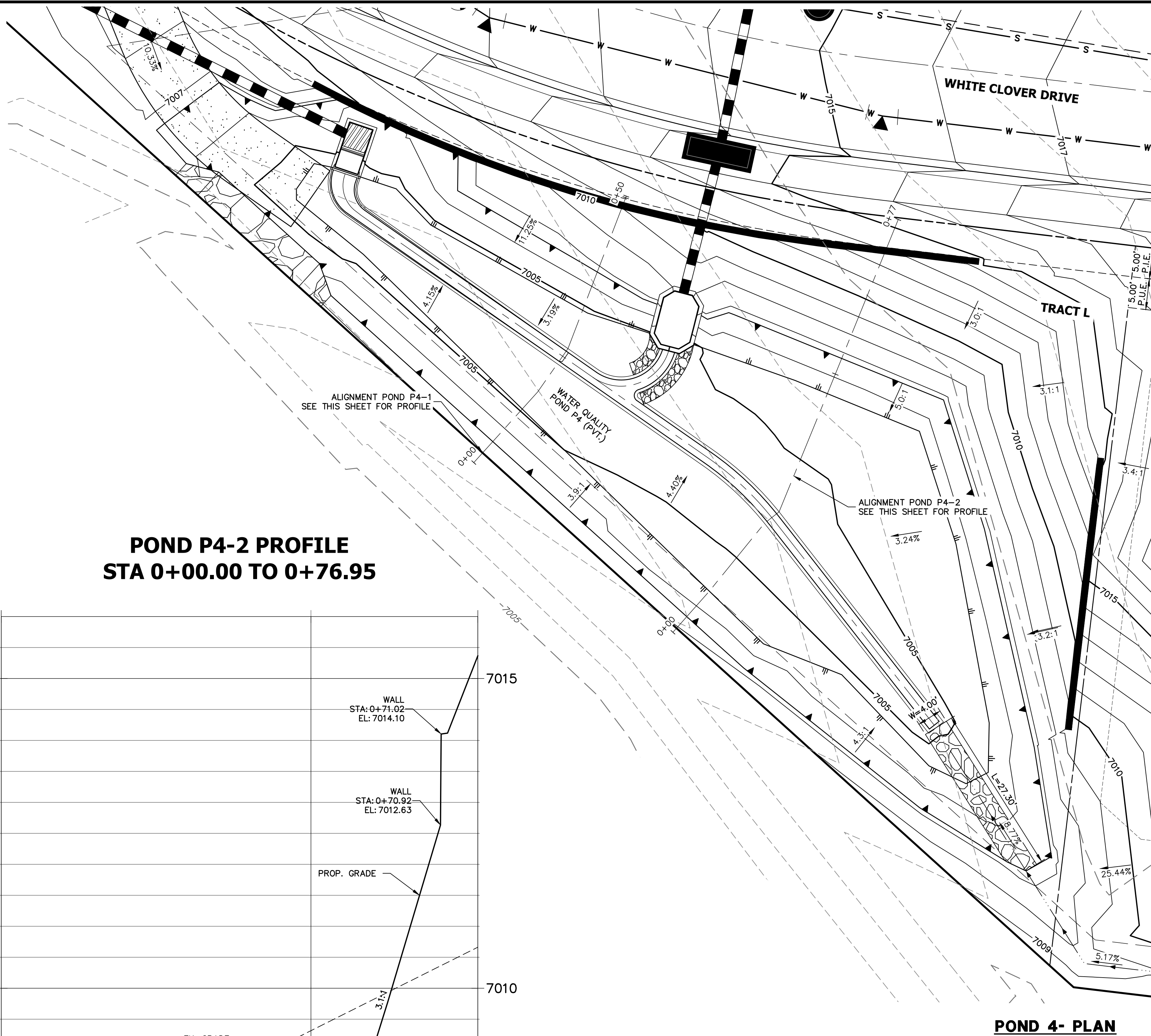
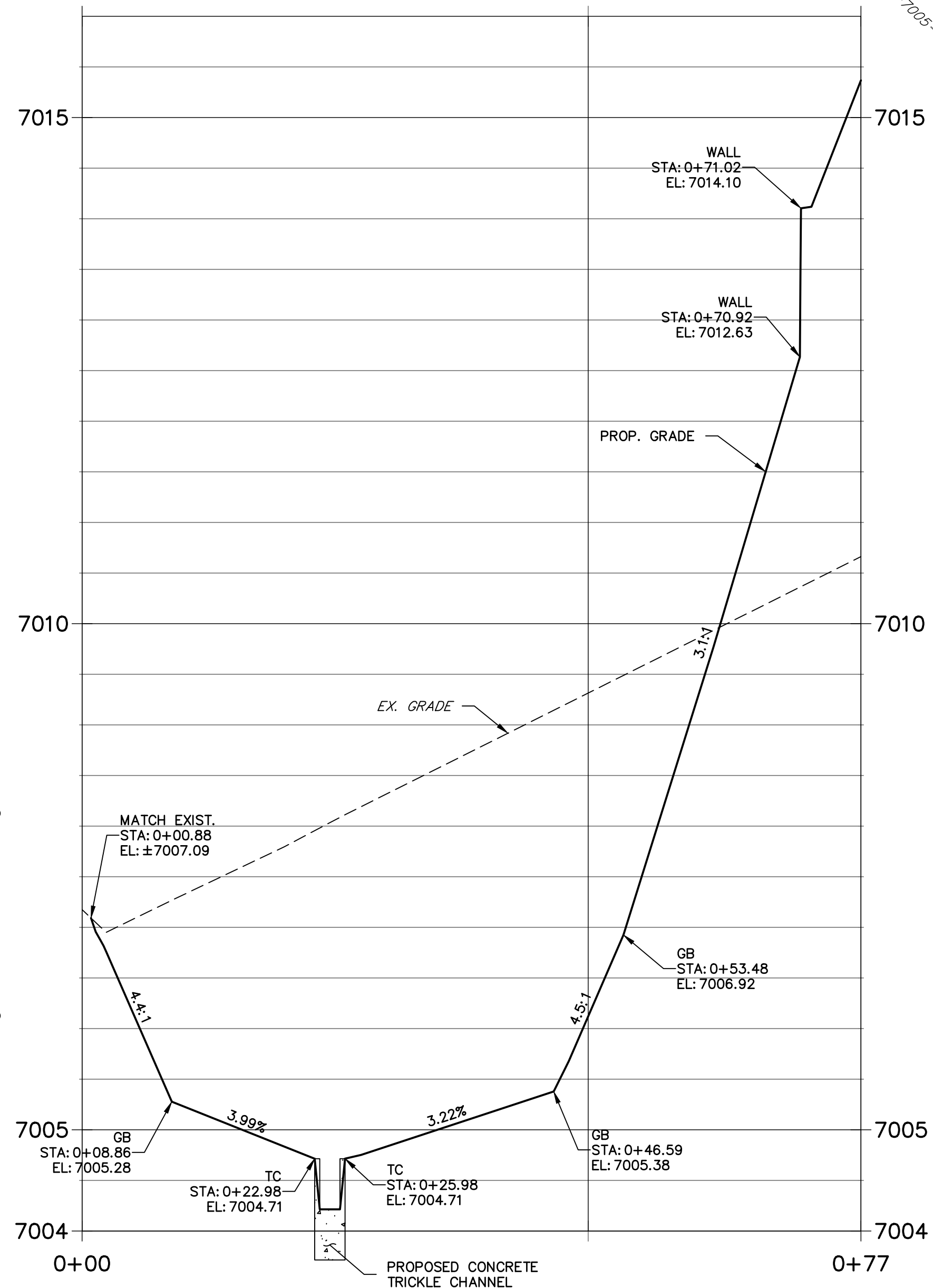
JOB NO. 25158.01

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**POND P4-1 PROFILE  
STA 0+00.00 TO 0+50.27**



**POND P4-2 PROFILE  
STA 0+00.00 TO 0+76.95**



**POND 4- PLAN**

**NOTES**

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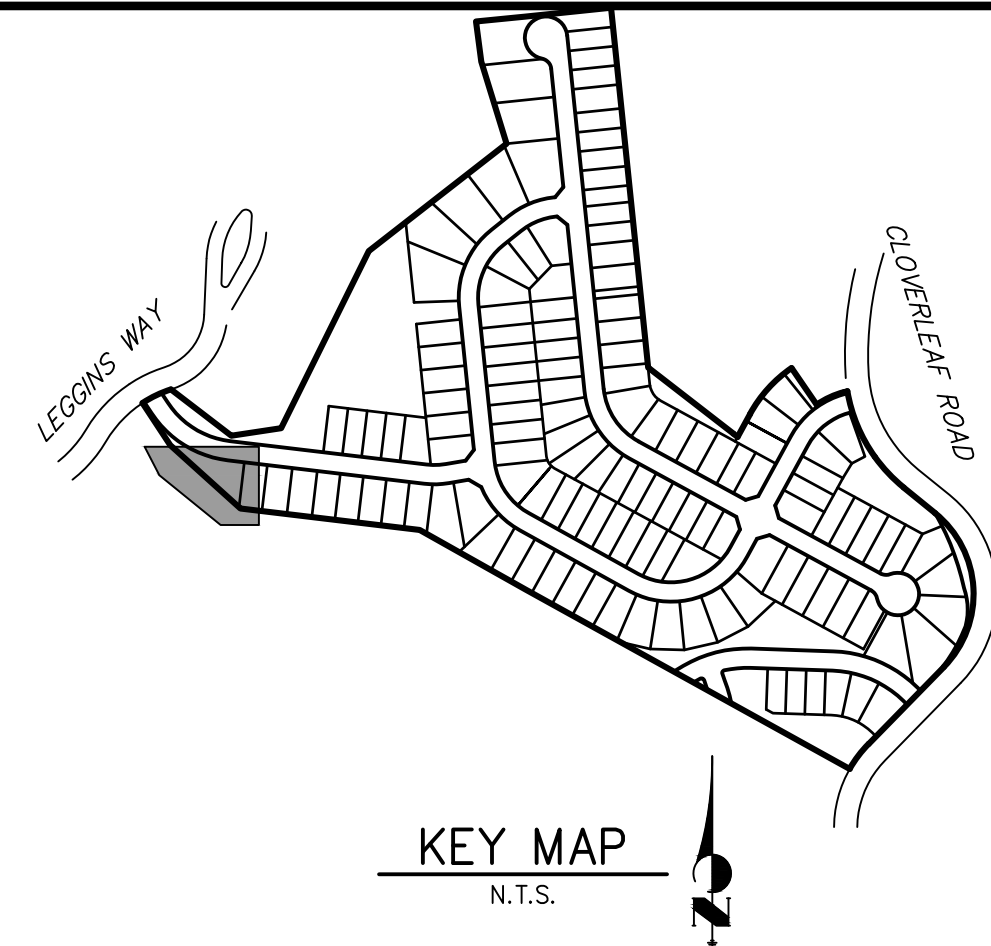
Know what's below.  
Call before you dig.



**ENGINEER'S STATEMENT**

PREPARED UNDER MY DIRECT SUPERVISION AND ON BEHALF OF JR ENGINEERING

Mike A. Bramlett, P.E.  
COLORADO P.E. 32314  
FOR AND ON BEHALF OF JR ENGINEERING, LLC  
DATE 11/11/21



**KEY MAP**  
N.T.S.

CLOVERLEAF FILING 2

POND PLANS AND DETAILS

SHEET 21 OF 28

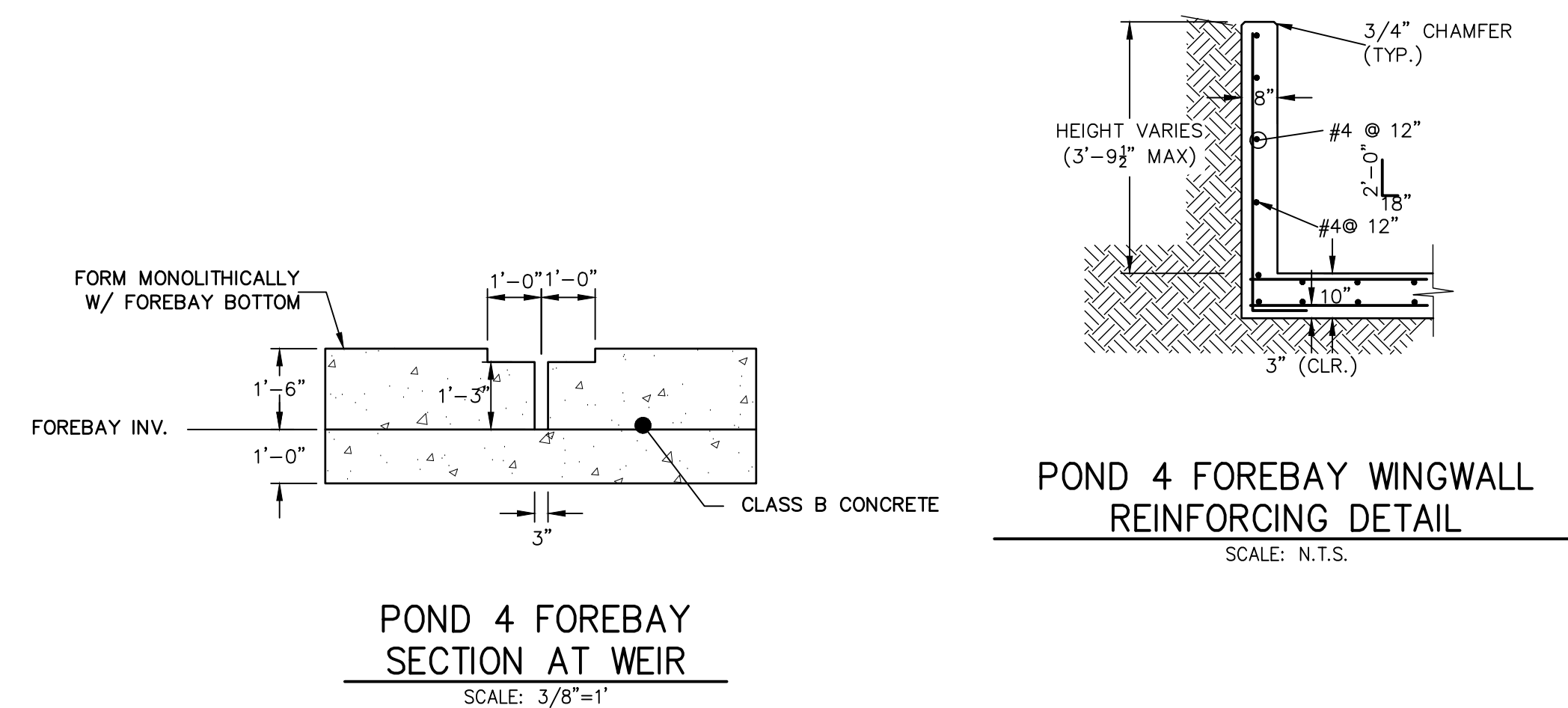
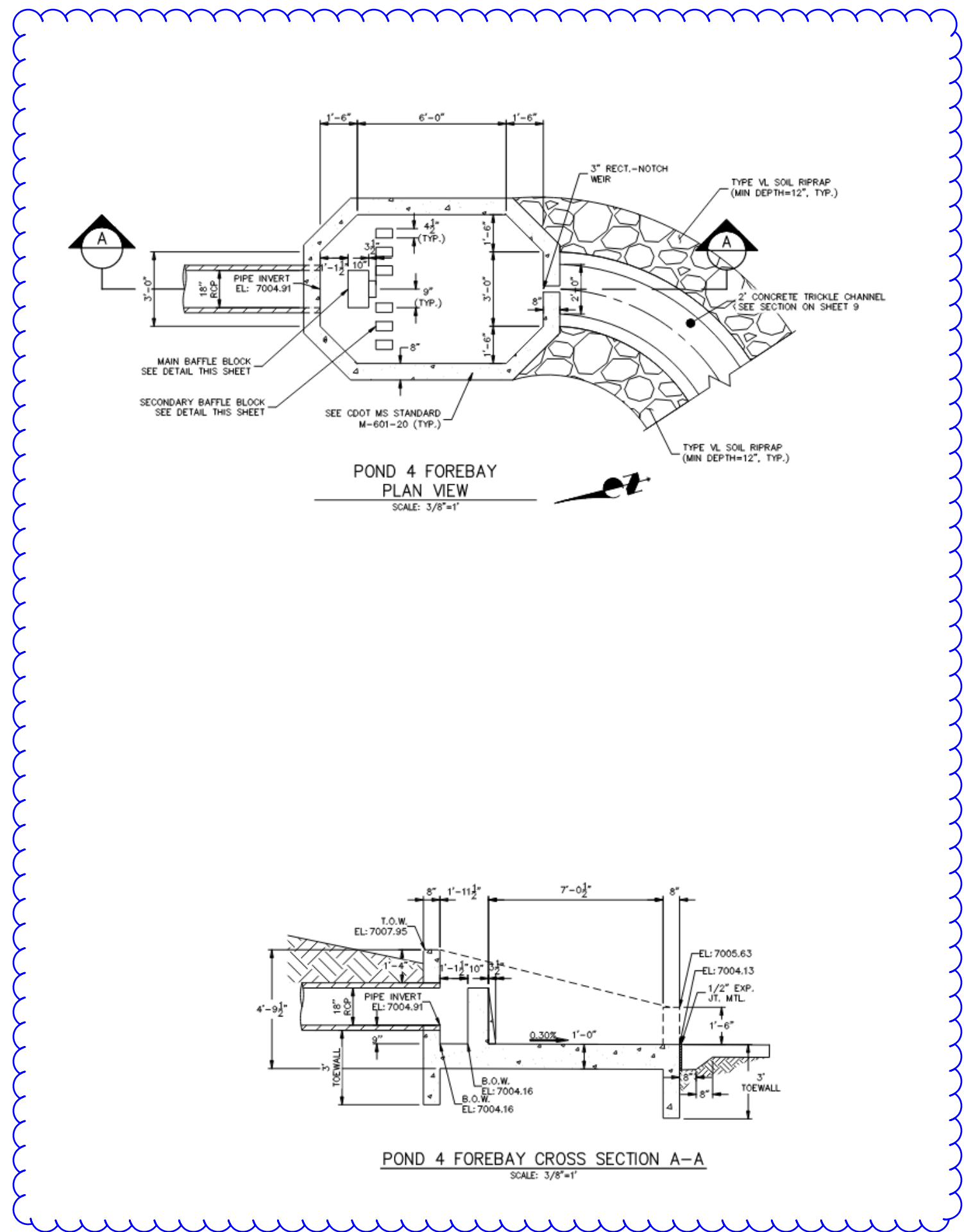
JOB NO. 25158.01



**J.R. ENGINEERING**  
A Western Company  
Central 303-740-9888 • Colorado Springs 719-583-2583  
Fort Collins 970-491-9888 • www.jrengineering.com

PREPARED FOR  
**MONUMENT HILL CM LLC**  
1864 WOODMOOR DR, STE 100  
COLORADO SPRINGS, CO 80920  
ATTN: JOE DESJARDIN  
(719) 476-0800  
JDESJARDIN@PROTERRACO.COM

UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, OR ENGINEERING AGENCIES, THEIR USE FOR ANY PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.



UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE APPROPRIATE REVIEWING AGENCIES, JR ENGINEERING APPROVES THEIR USE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

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COLORADO SPRINGS, CO 80920  
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JDESJARDIN@PROTERRACO.COM



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A Westrian Company

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Fort Collins 970-491-9888 • [www.jrengineering.com](http://www.jrengineering.com)

H-SCALE	REVISION	BY	DATE
V-SCALE	NO.		
3/8"=1'			
3/8"=1'			
DATE			
11/11/21			
DESIGNED BY			
GAG			
DRAWN BY			
GAG			
CHECKED BY			

CLOVERLEAF FILING 2

ND PLANS AND DETAILS

SHEET 22 OF 28

JOB NO. 25158.01

### ENGINEER'S STATEMENT

PREPARED UNDER MY DIRECT SUPERVISION AND ON BEHALF OF JR  
ENGINEERING

Mit Bräutigam

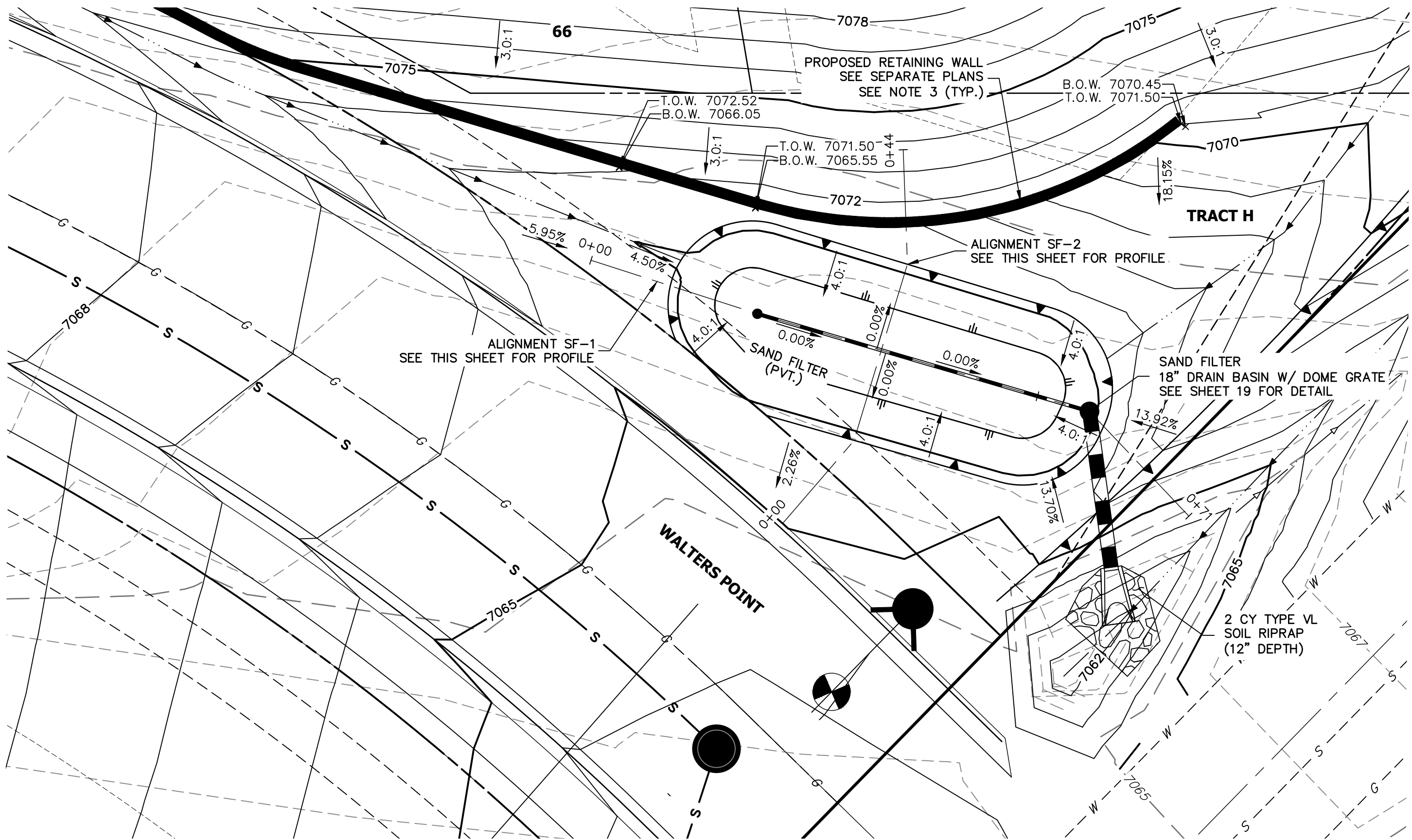
MIKE A. BRAMLETT, P.E.  
COLORADO P.E. 32314

FOR AND ON BEHALF OF JR ENGINEERING



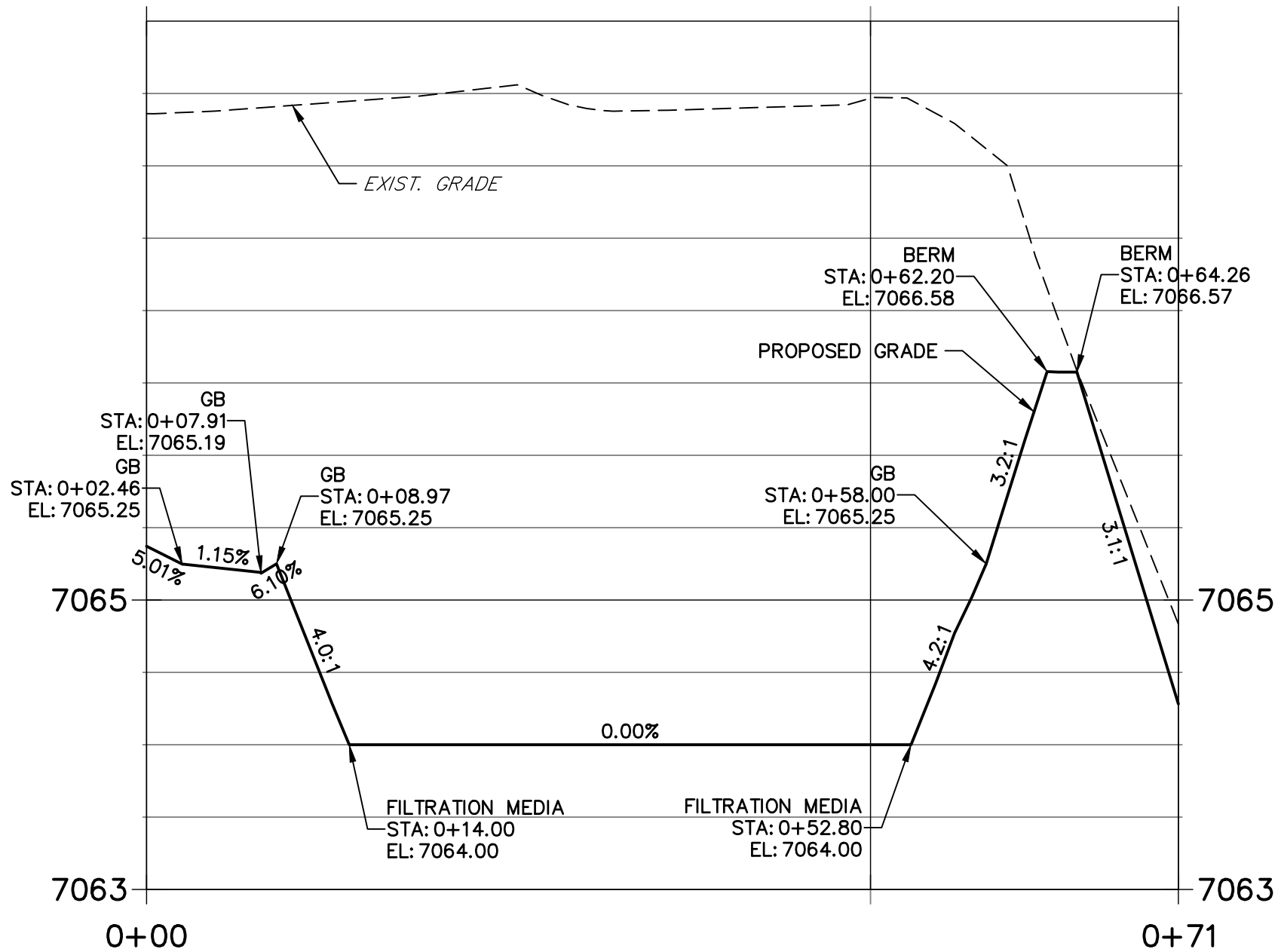
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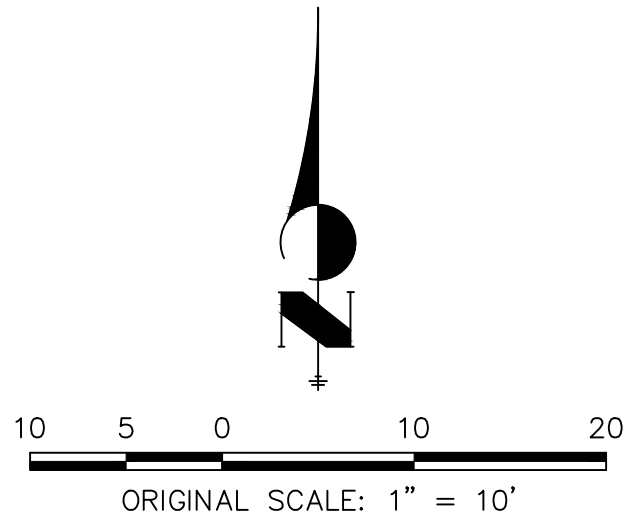
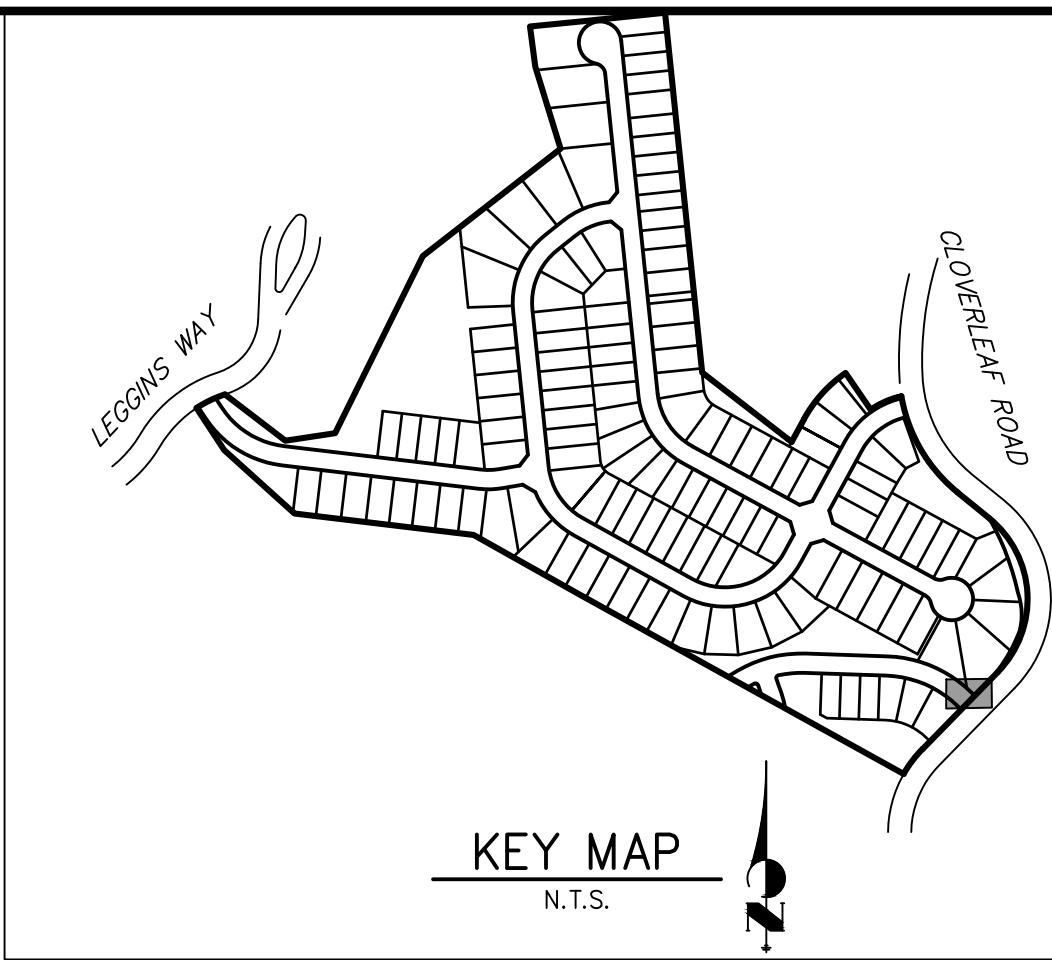
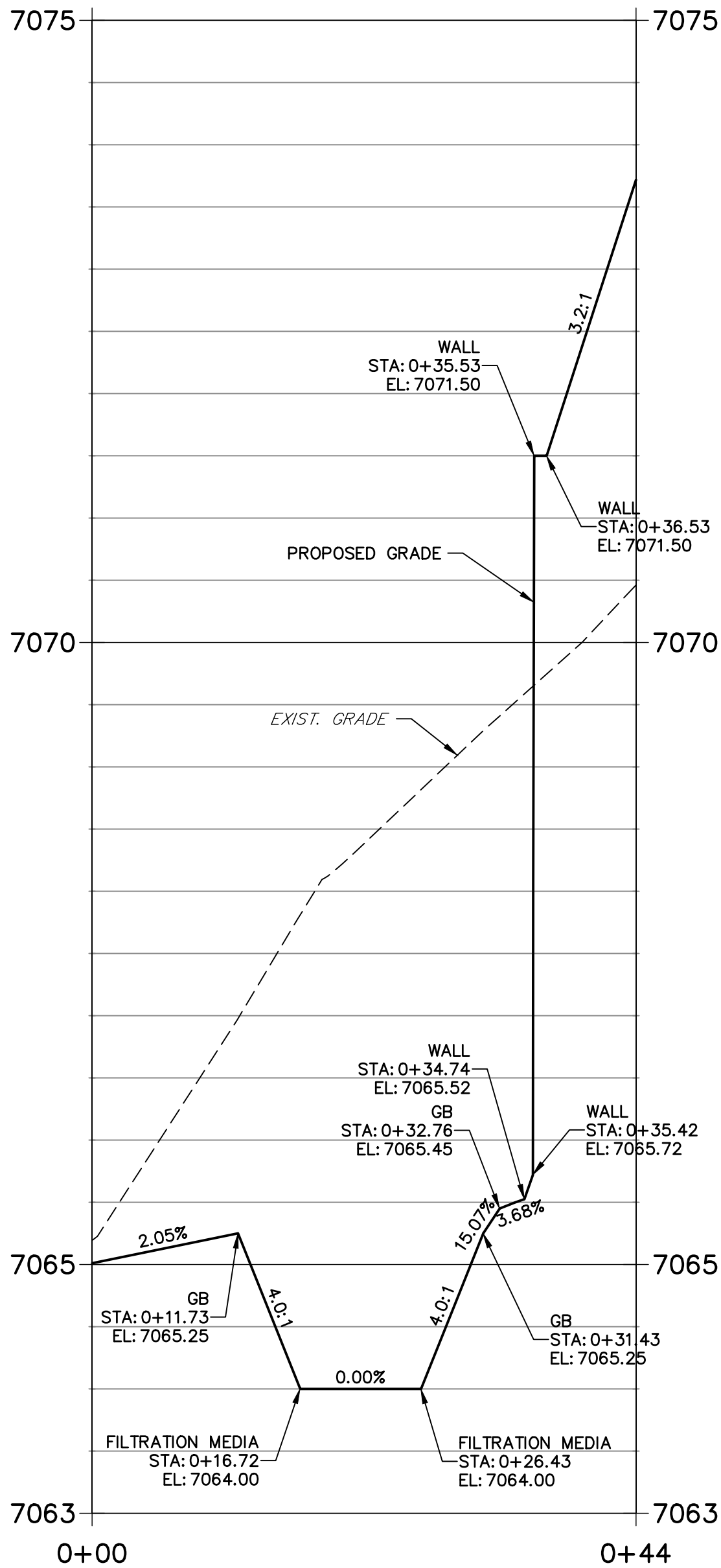


SAND FILTER-PLAN

POND SF-1 PROFILE  
STA 0+00.00 TO 0+71.26



POND SF-2 PROFILE  
STA 0+00.00 TO 0+43.72



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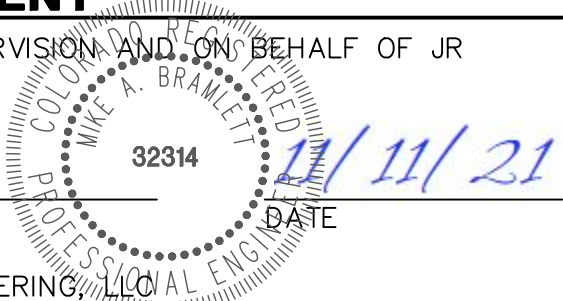
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PREPARED UNDER MY DIRECT SUPERVISION AND ON BEHALF OF JR ENGINEERING

Mike A. Bramlett

MIKE A. BRAMLETT, P.E.  
COLORADO P.E. 32314

FOR AND ON BEHALF OF JR ENGINEERING, LLC



CLOVERLEAF FILING 2

POND PLANS AND DETAILS

SHEET 24 OF 28

JOB NO. 25158.01

PREPARED FOR

MONUMENT HILL CM LLC

1864 WOODMOOR DR, STE 100  
COLORADO SPRINGS, CO 80920

ATTN: JOE DESJARDIN

(719) 476-0800

JDESJARDIN@PROTERRACO.COM

J.R. ENGINEERING

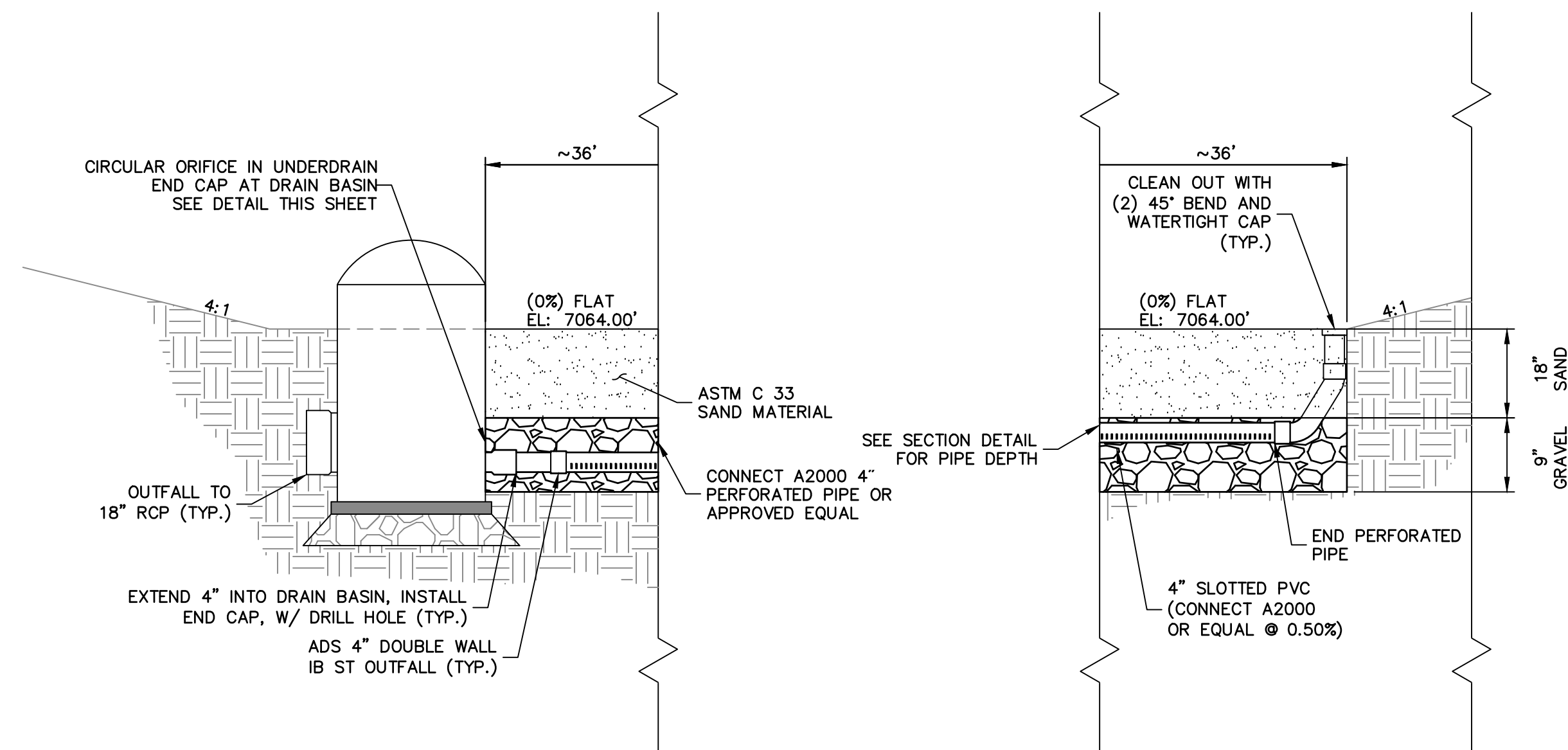
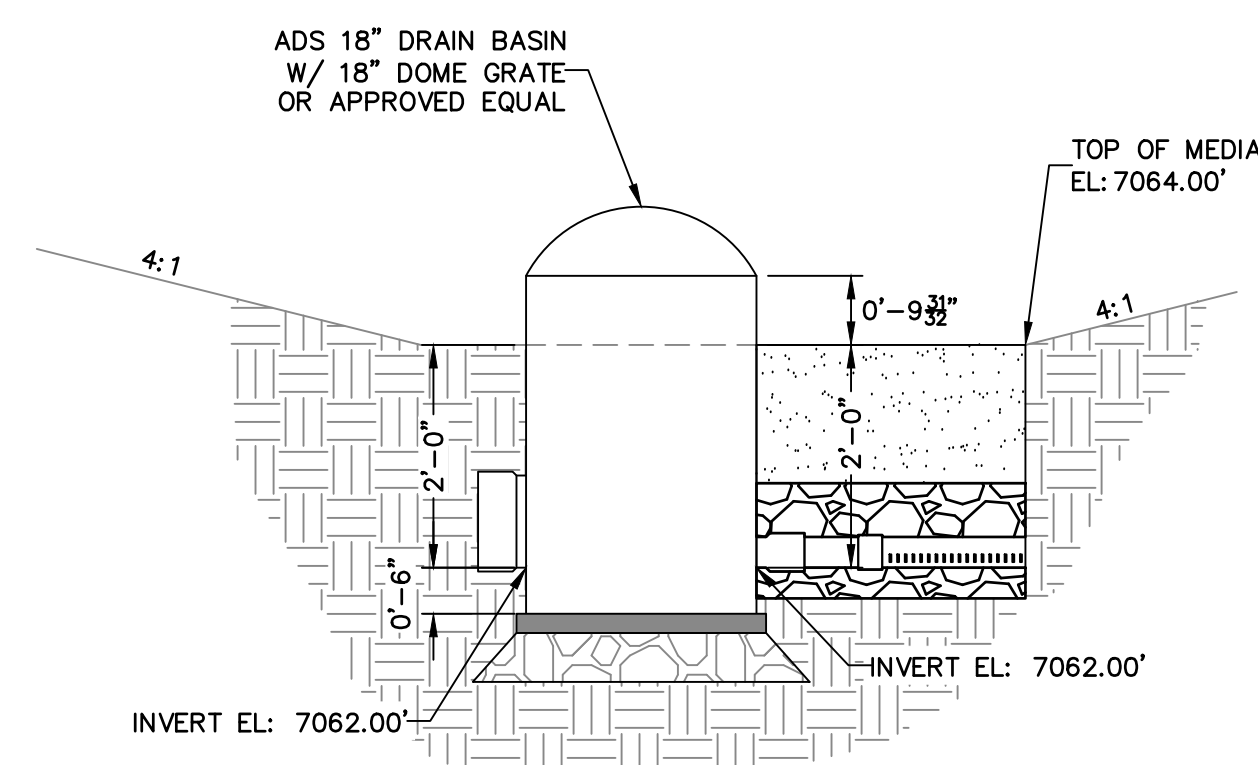
A Western Company



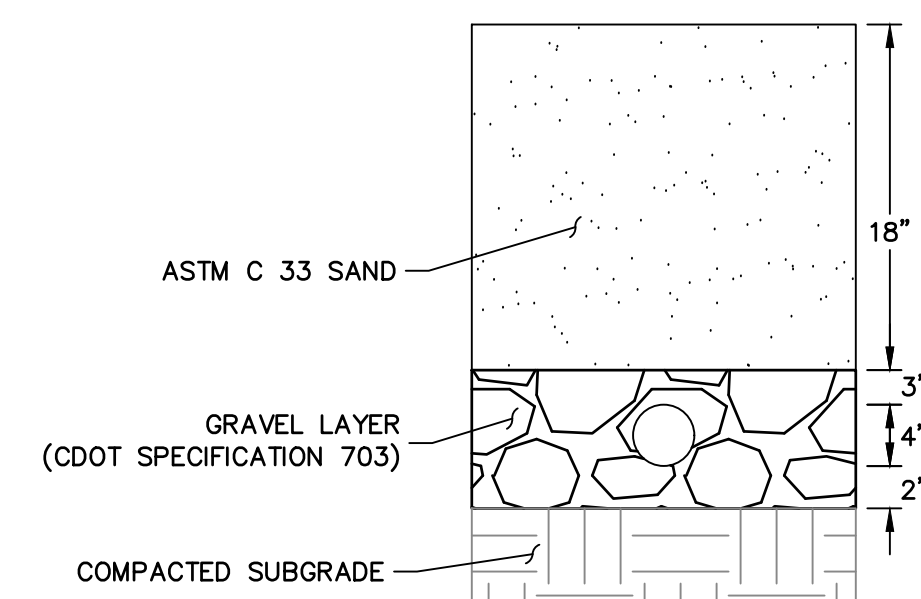
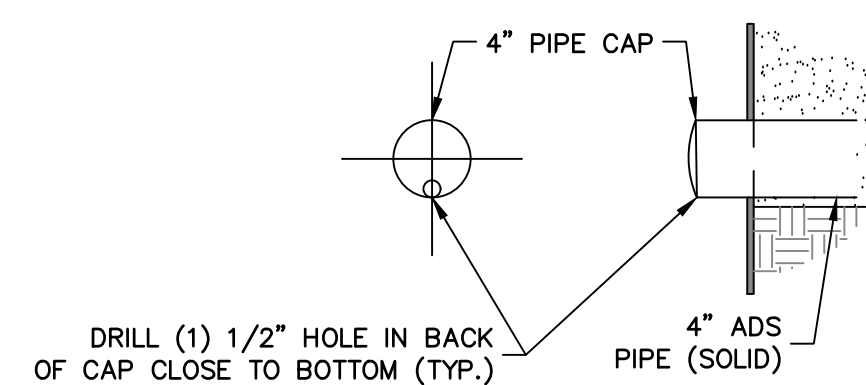
Central 303-740-9888 • Colorado Springs 719-583-2583  
Fort Collins 970-491-9888 • www.jrengineering.com

BY	DATE	No.	REVISION

H-SCALE	V-SCALE	DATE	DESIGNED BY	DRAWN BY	CHECKED BY
1"=10'	1"=1'	11/11/21	GAG	GAG	



NOTE: SEE URBAN DRAINAGE VOLUME 3 FACT SHEETS T-6 FOR FURTHER DETAILS AND SPECIFICATIONS.



Know what's **below**.  
**Call** before you dig.

### ENGINEER'S STATEMENT

PREPARED UNDER MY DIRECT SUPERVISION AND ON BEHALF OF JR  
ENGINEERING

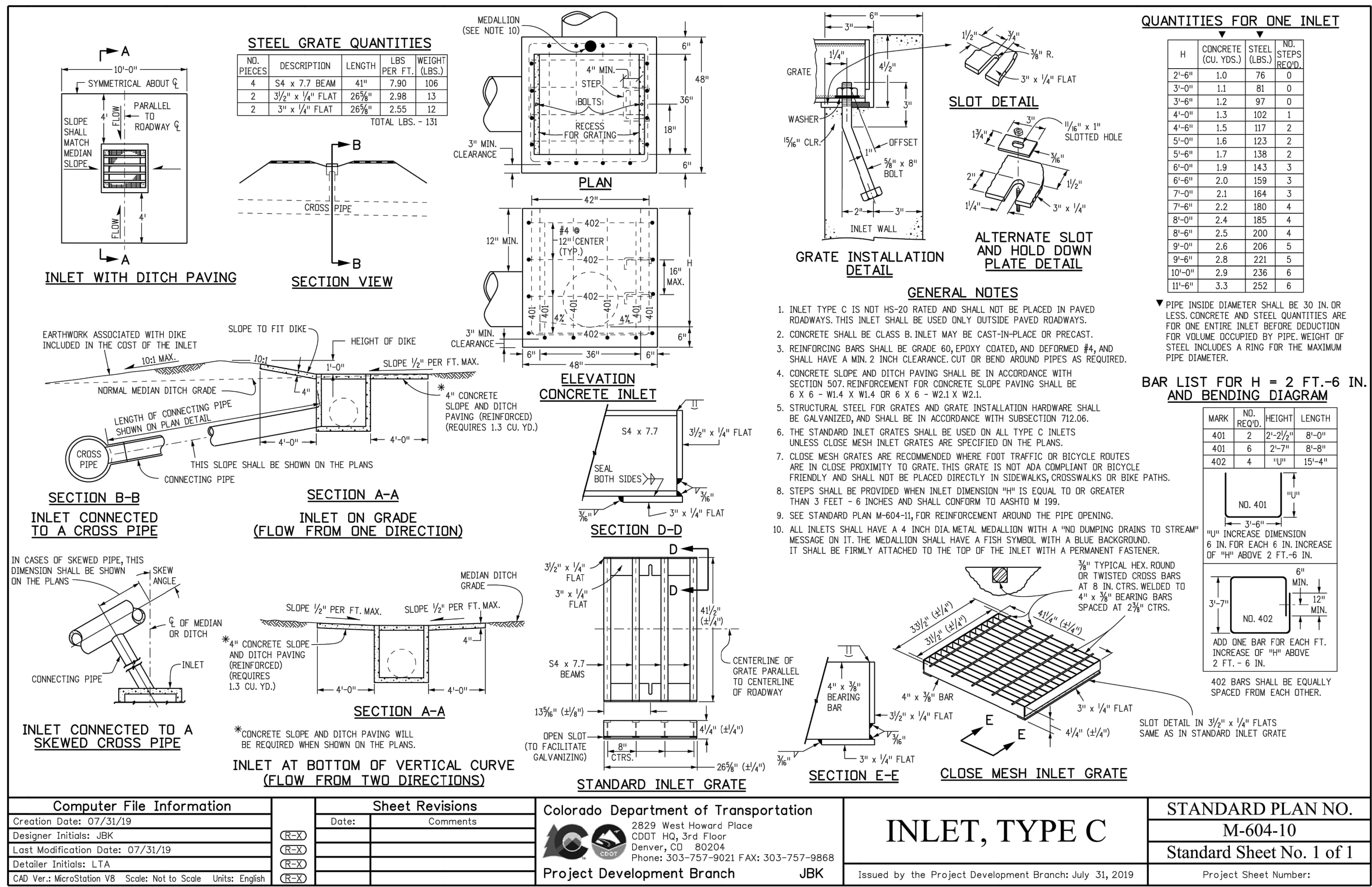
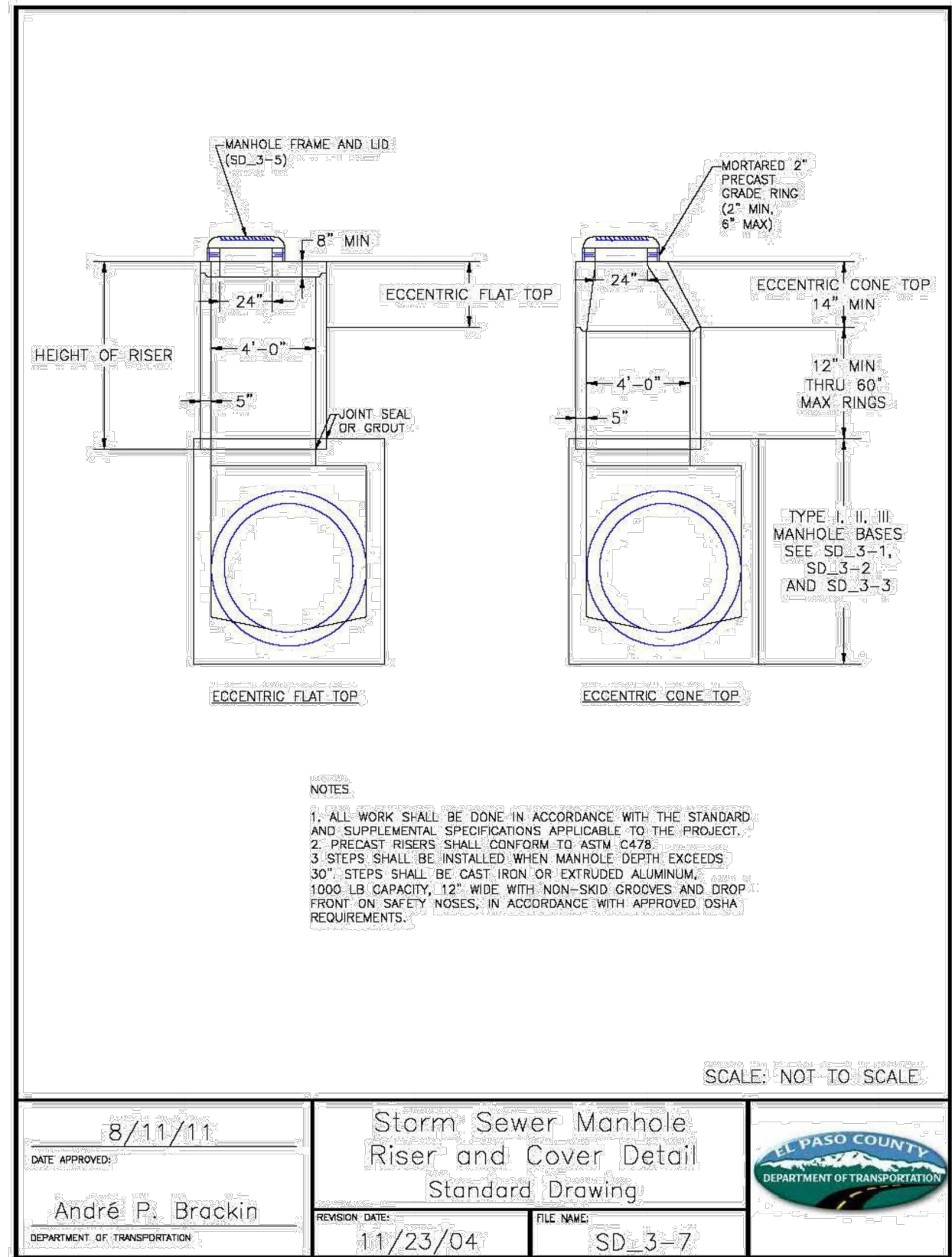
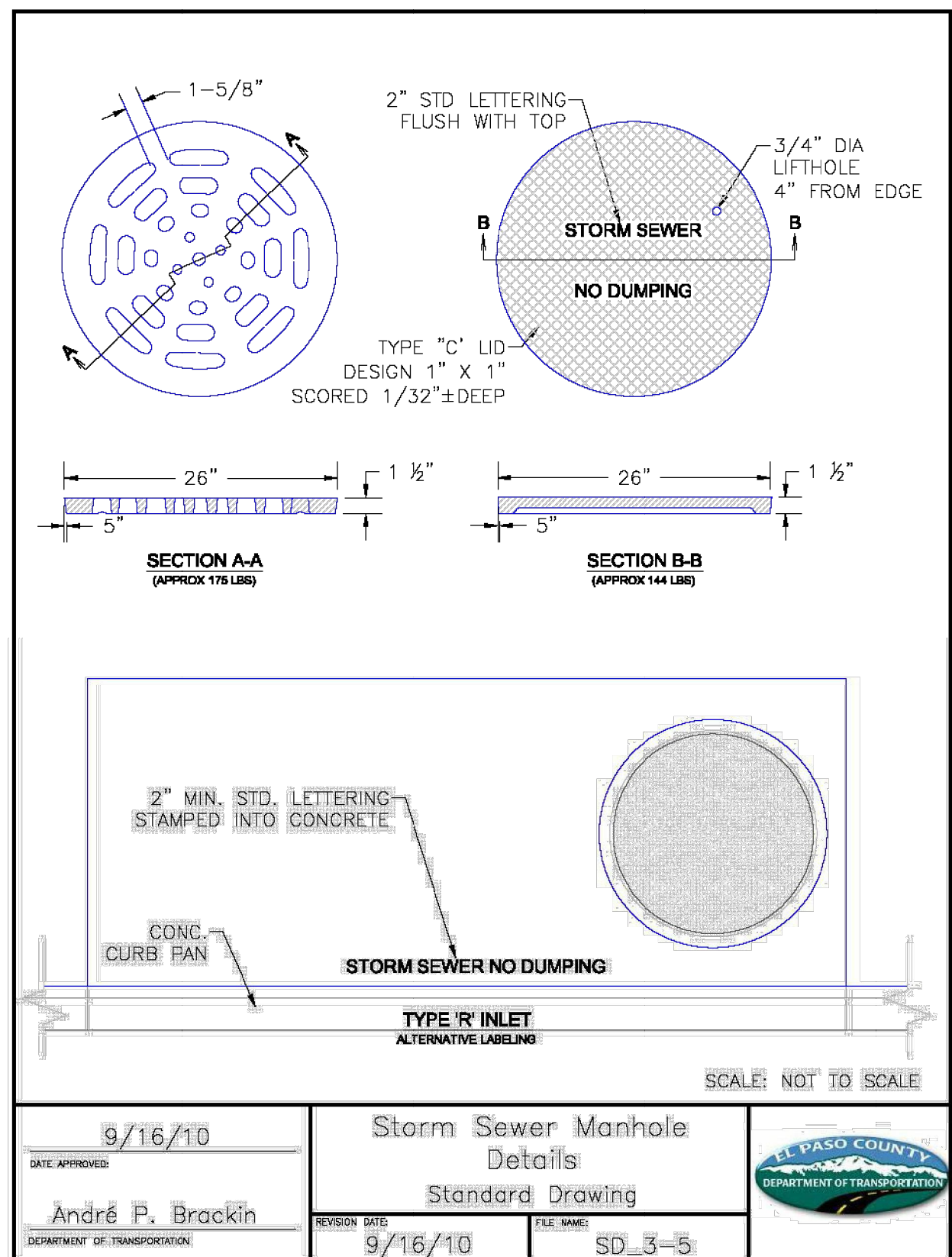
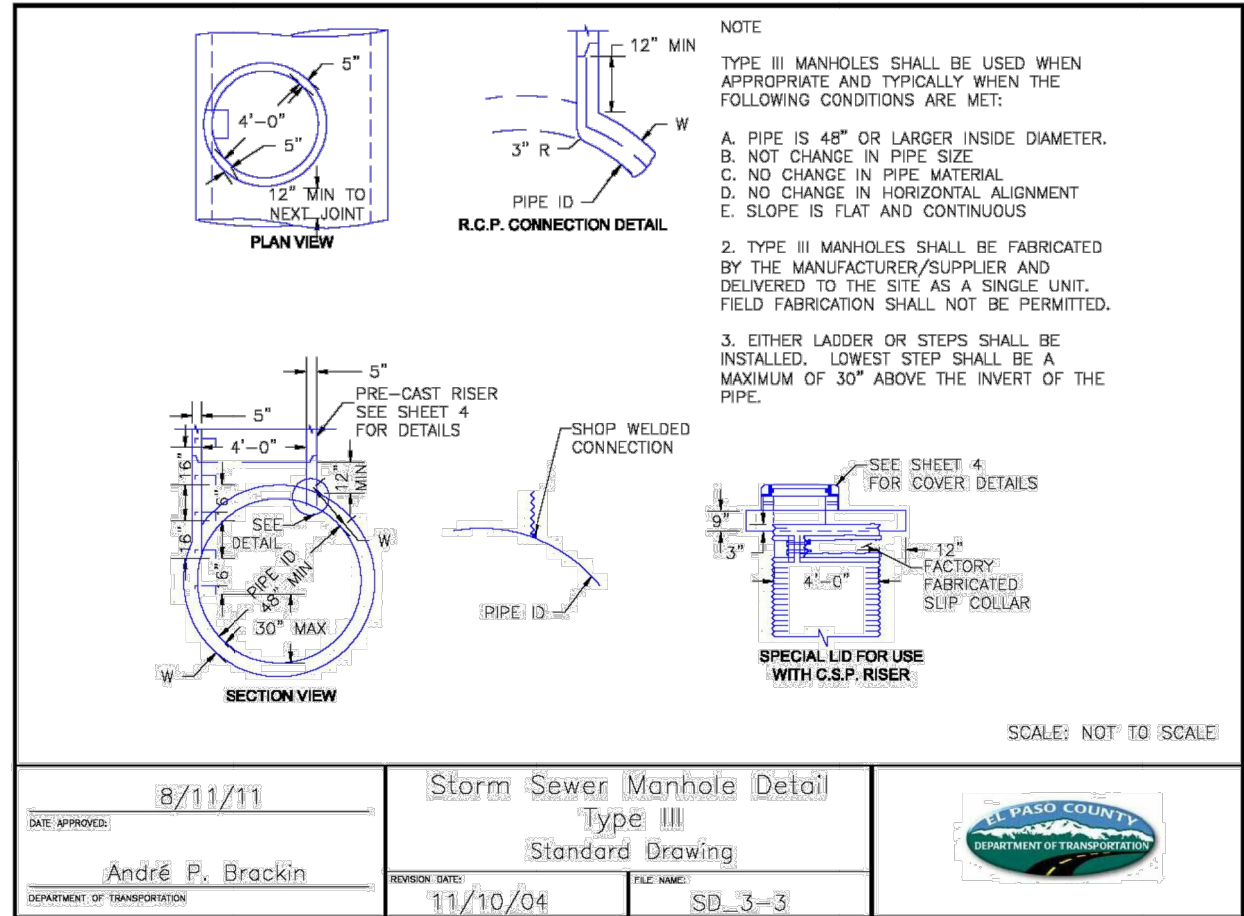
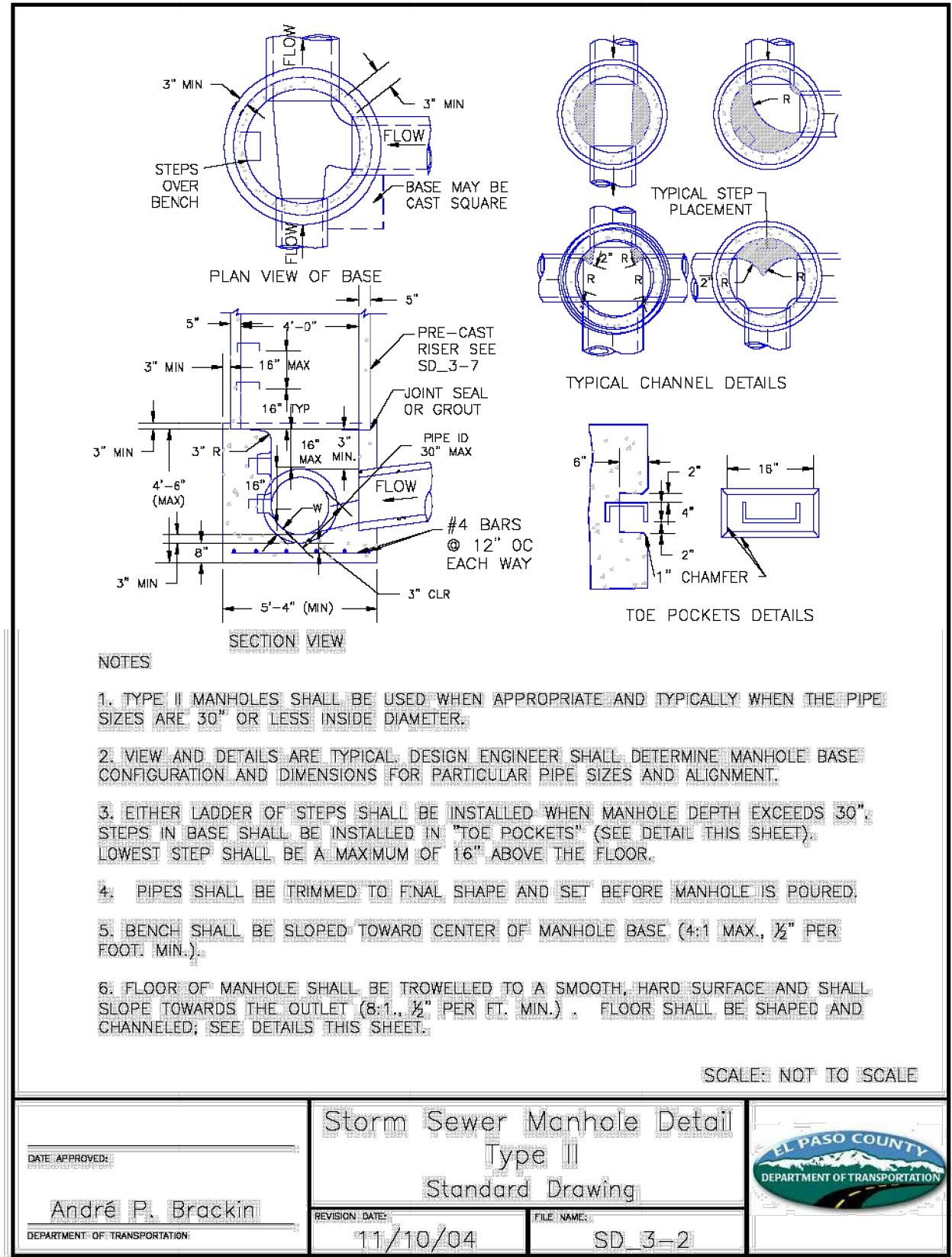
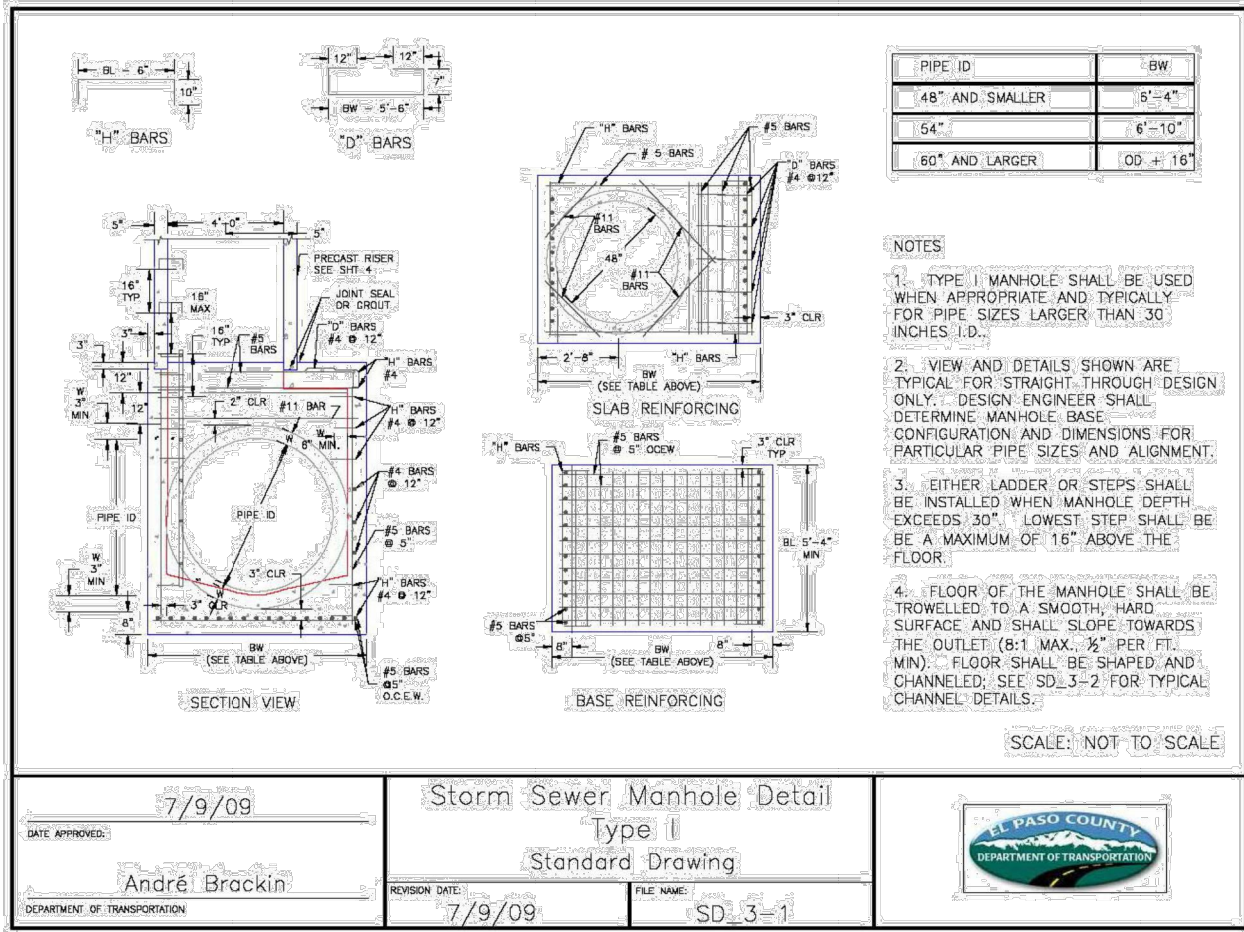
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MIKE A. BRAMLETT, P.E.  
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11/11/21  
DATE  
EERING, LLC

JOB NO.	SHEET	CLOVERLEAF FILING 2				H-SCALE	N.T.S.	No.	REVISION	BY	DATE
		25	OF	28	POND PLANS AND DETAILS	V-SCALE	N.T.S.				
						DATE	11/11/21				
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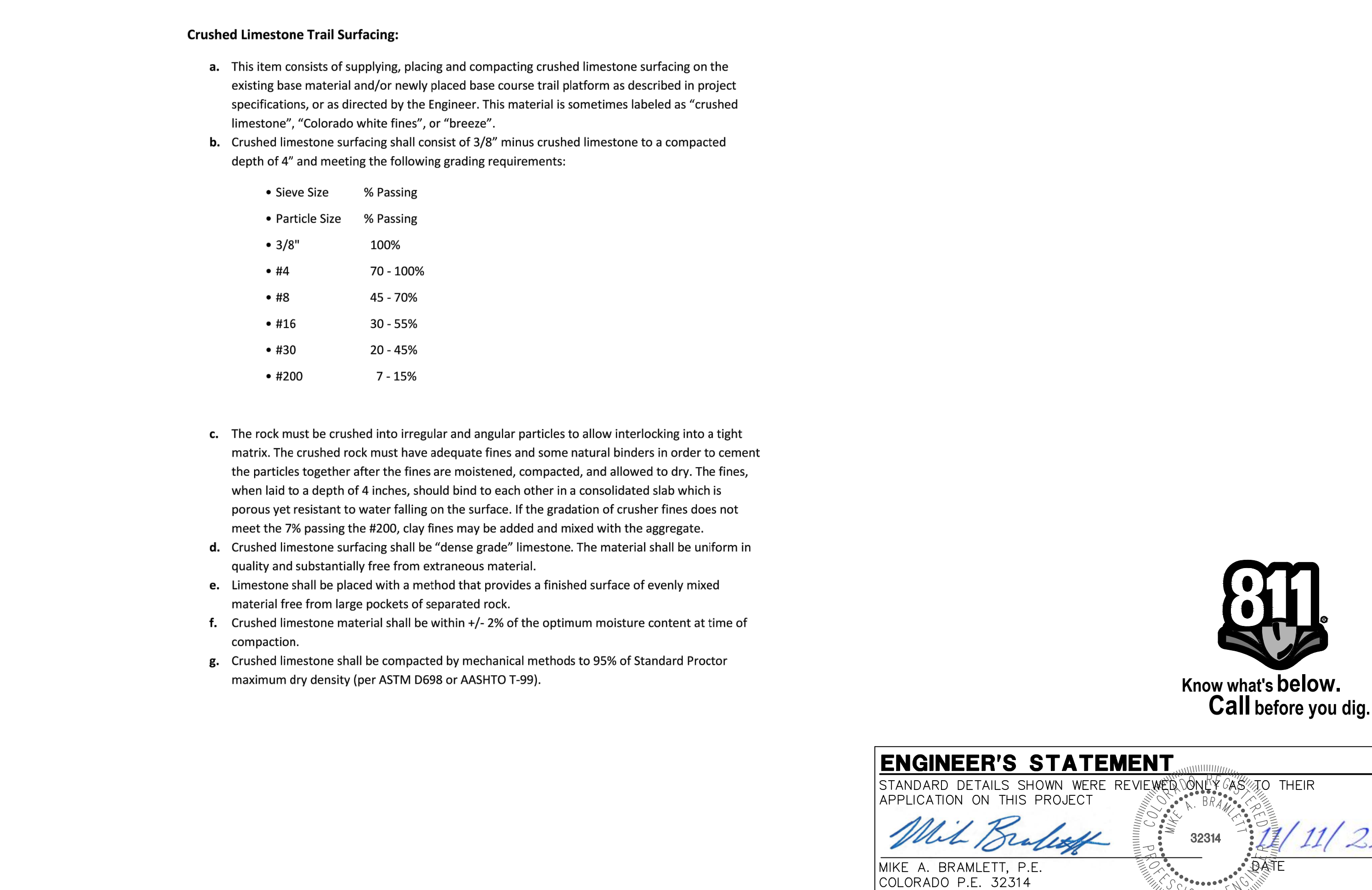
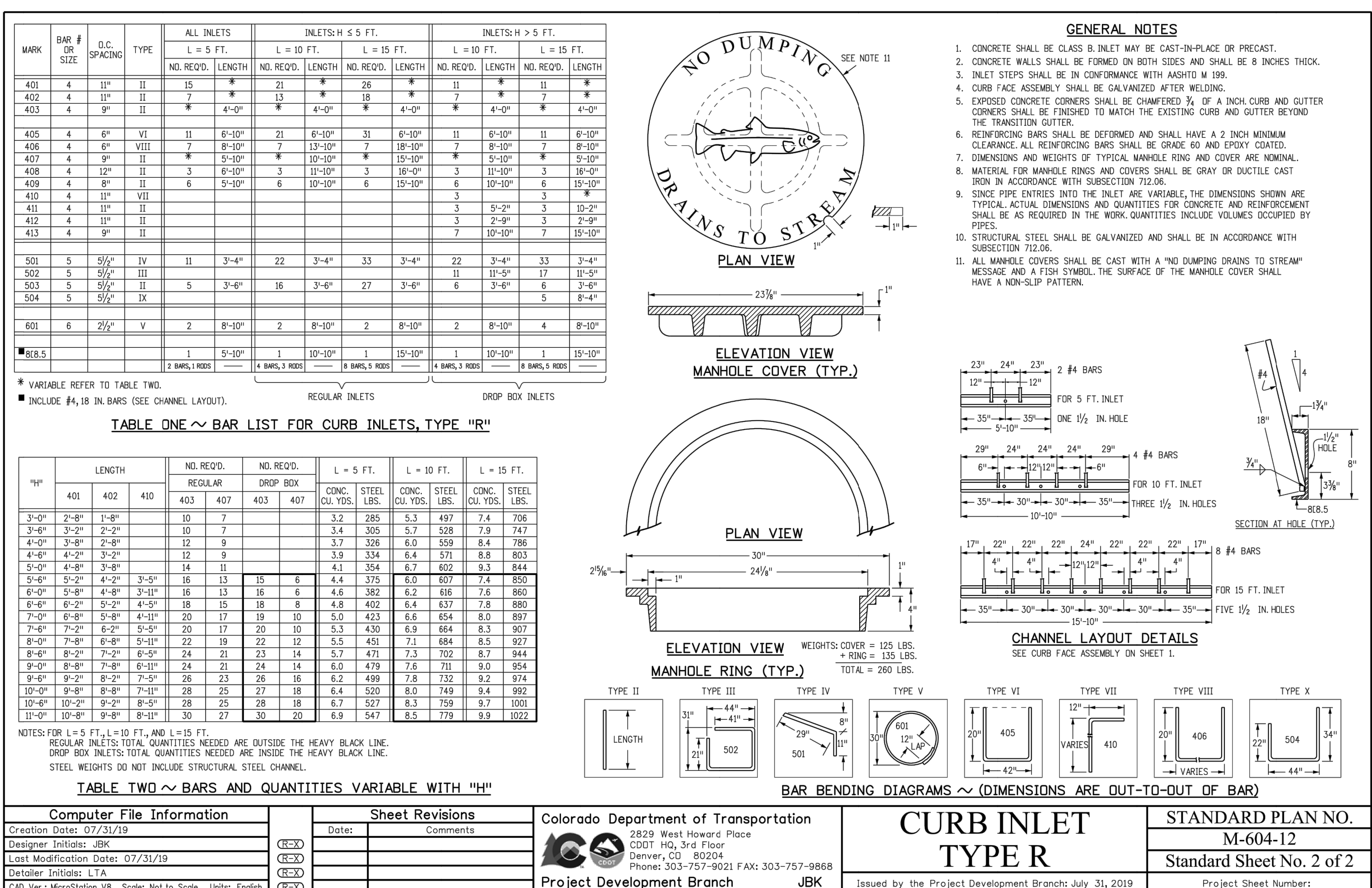
ENGINEER'S STATEMENT

STANDARD DETAILS SHOWN WERE REVIEWED ONLY AS TO THEIR APPLICATION ON THIS PROJECT

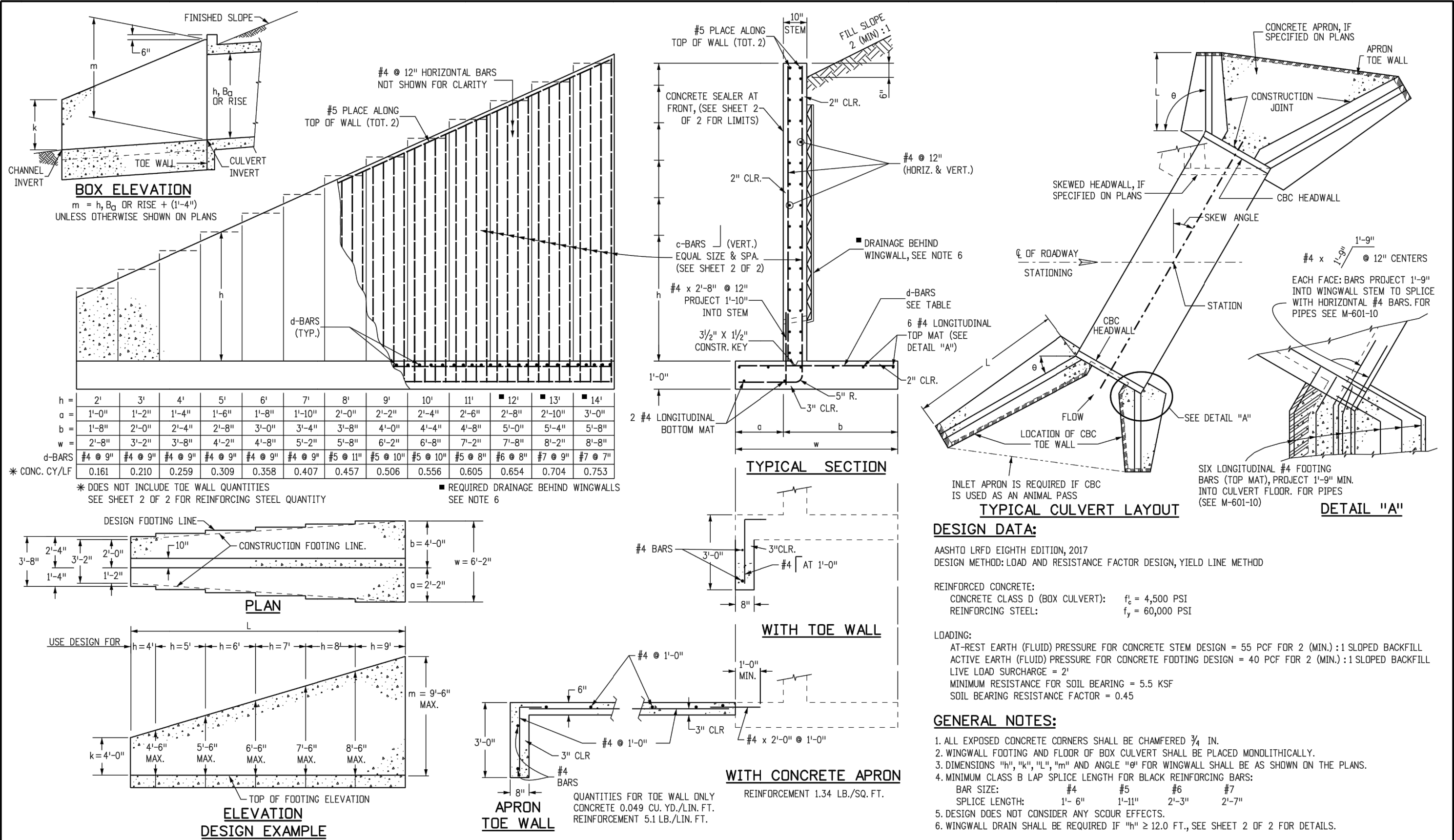
Mike A. Bramlett, P.E.

COLORADO P.E. 32314

FOR AND ON BEHALF OF JR ENGINEERING, LLC



SHEET 27 OF 28	CLOVERLEAF FILING 2	H-SCALE	N/A	No.	REVISION	BY	DATE
		V-SCALE	N/A				
		DATE	11/11/21				
		DESIGNED BY	SAV				
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Computer File Information, Sheet Revisions, Colorado Department of Transportation, Project Development Branch, WINGWALLS FOR PIPE OR BOX CULVERTS, STANDARD PLAN NO. M-601-20, Standard Sheet No. 1 of 2

GENERAL STRUCTURE NOTES.

ALL WORK SHALL BE DONE IN ACCORDANCE WITH CITY OR COUNTY STANDARD CONSTRUCTION SPECIFICATIONS. EXCEPT AS SHOWN IN THE PLANS, STRUCTURE EXCAVATION AND BACKFILL SHALL BE IN ACCORDANCE WITH CDOT M-206-1, AND M-206-2 EXPANSION JOINT MATERIAL SHALL MEET AASHTO SPECIFICATION M-213

THE INFORMATION SHOWN ON THESE PLANS CONCERNING THE TYPE AND LOCATION OF UNDERGROUND UTILITIES IS NOT GUARANTEED TO BE ACCURATE OR ALL INCLUSIVE. THE CONTRACTOR IS RESPONSIBLE FOR MAKING HIS OWN DETERMINATION AS TO THE TYPE AND LOCATION OF UNDERGROUND UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE THERETO. THE CONTRACTOR SHALL CONTACT THE UTILITY NOTIFICATION CENTER OF COLORADO A 1-800-922-1987 AT LEAST 2 DAYS (NOT INCLUDING THE DAY OF NOTIFICATION) PRIOR TO ANY EXCAVATION OF OTHER.

THE CONTRACTOR IS SOLELY RESPONSIBLE FOR DESIGNING AND PROVIDING ALL BRACING AND SHORING AS REQUIRED FOR THE PROTECTION OF LIFE AND PROPERTY DURING CONSTRUCTION. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR THE EXCAVATION PROCEDURES INCLUDING ANY SHORING REQUIRED FOR THE PROTECTION OF LIFE AND PROPERTY DURING CONSTRUCTION.

THE CONTRACTOR IS SOLELY RESPONSIBLE FOR ALL METHODS AND MEANS OF CONSTRUCTION AS WELL AS ALL JOB SITE SAFETY & HEALTH PRECAUTIONS.

ALL SOILS WORK INCLUDING (BUT NOT LIMITED TO) PIER DRILLING AND CONSTRUCTION, SOILS EXCAVATION, FILL PLACEMENT, AND STRUCTURE BACKFILL SHALL BE IN ACCORDANCE WITH THE PROJECT GEOTECHNICAL REPORT, UNLESS MORE STRINGENT REQUIREMENTS ARE PRINTED ON THE "IRRIGATION NOTES".

BACKFILL SHALL NOT BEGIN UNTIL CONCRETE WALLS REACH COMPRESSION STRENGTH AT LEAST 80 PERCENT OF THE REQUIRED 28 DAY STRENGTH, 0.8fc'.

REINFORCED CONCRETE: CLASS D CONCRETE: fc'=4,500 psi REINFORCING STEEL: fy=60,000 PSI ALL CAST-IN-PLACE CONCRETE SHALL BE CLASS D UNLESS NOTED OTHERWISE.

REINFORCING BARS SHALL CONFORM TO ASTM A615, GRADE 60 U.N.O. REINFORCING BARS TO BE WELDED SHALL CONFORM TO ASTM A706, GRADE 60. ALL REINFORCING, EXCEPT PIER REINFORCING, SHALL BE EPOXY COATED AND SHALL CONFORM TO ASTM A775. ALL REINFORCING SHALL HAVE 2" CONCRETE COVER, N.O. ON PLANS, 3" AGAINST GROUND (BOTTOM SLAB) ALL REINFORCING SHALL BE HOOKED AROUND CORNERS AND LAPPED, SEE DETAILS. ALL LAP SPLICE LOCATIONS SHALL BE SUBMITTED TO ENGINEER FOR REVIEW AND APPROVAL PRIOR TO CONSTRUCTION.

THE FOLLOWING TABLE GIVES THE MINIMUM CLASS B (STAGGERED) LAP SPLICE LENGTH FOR EPOXY COATED REINFORCING BARS PLACE IN ACCORDANCE WITH SUBSECTION 602.06. THESE SPLICE LENGTHS SHALL BE INCREASED BY 25% FOR BARS SPACED AT LESS THAN 6" ON CENTER, INCREASED BY 40% FOR HORIZONTAL BARS WITH MORE THAN 12" OF CONCRETE BELOW (TOP BARS.), AND INCREASED BY 75% IF BOTH CONDITIONS EXIST. THE INCREASES ABOVE FOR #6 THRU #11 BARS MAY BE 25%, 13%, AND 42% RESPECTIVELY.

Table with 2 columns: Bar Size (#) and Splice Length (ft-in)

WHEN THE CONTRACTOR ELECTS TO SUBSTITUTE EPOXY COATED REINFORCEMENT FOR BLACK REINFORCING BARS. THE MINIMUM LAP SPLICE SHALL BE AS DESCRIBED ABOVE.

STATIONS, ELEVATIONS, AND DIMENSIONS CONTAINED IN THESE PLANS ARE CALCULATED FROM A RECENT FIELD SURVEY. THE CONTRACTOR SHALL VERIFY ALL DEPENDENT DIMENSIONS IN THE FIELD BEFORE ORDERING OR FABRICATING ANY MATERIAL.

THE CONTRACTOR SHALL SUBMIT REINFORCING STEEL PLACING DRAWINGS (PRIOR TO CONSTRUCTION) TO THE ENGINEER FOR REVIEW FOR CONFORMANCE WITH THE DESIGN DRAWINGS. THE DESIGN DRAWINGS SHALL GOVERN OVER PLACING DRAWINGS IN ALL CASES UNLESS MODIFICATIONS ARE APPROVED IN WRITING BY ENGINEER.

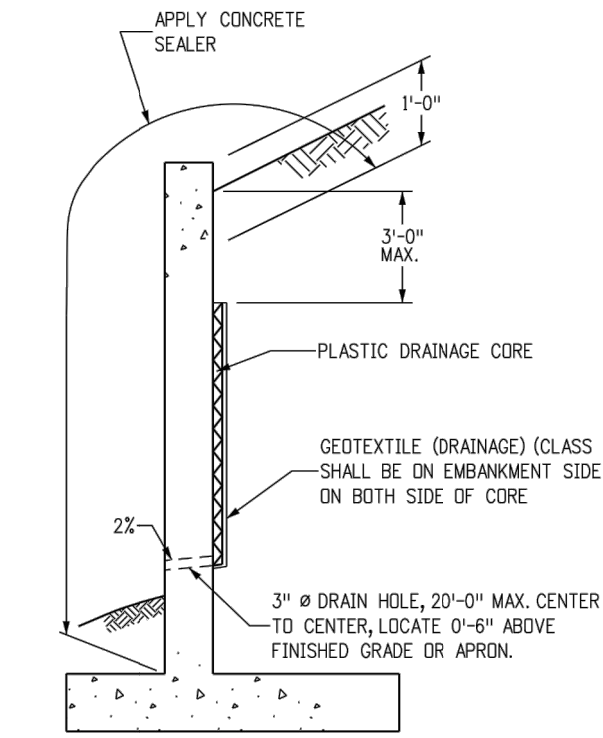
THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE STABILITY OF THE STRUCTURE DURING CONSTRUCTION.

E.F. = EACH FACE F.A.B. = FAR FACE N.F. = NEAR FACE I.F. = INSIDE FACE T.W. = TWO WAY E.S. = EACH SIDE O.F. = OUTSIDE FACE T.A.B. = TOP AND BOTTOM T.F. = TOP FACE B.F. = BOTTOM FACE T.F. = TWO FACES Lp = LAP LENGTH

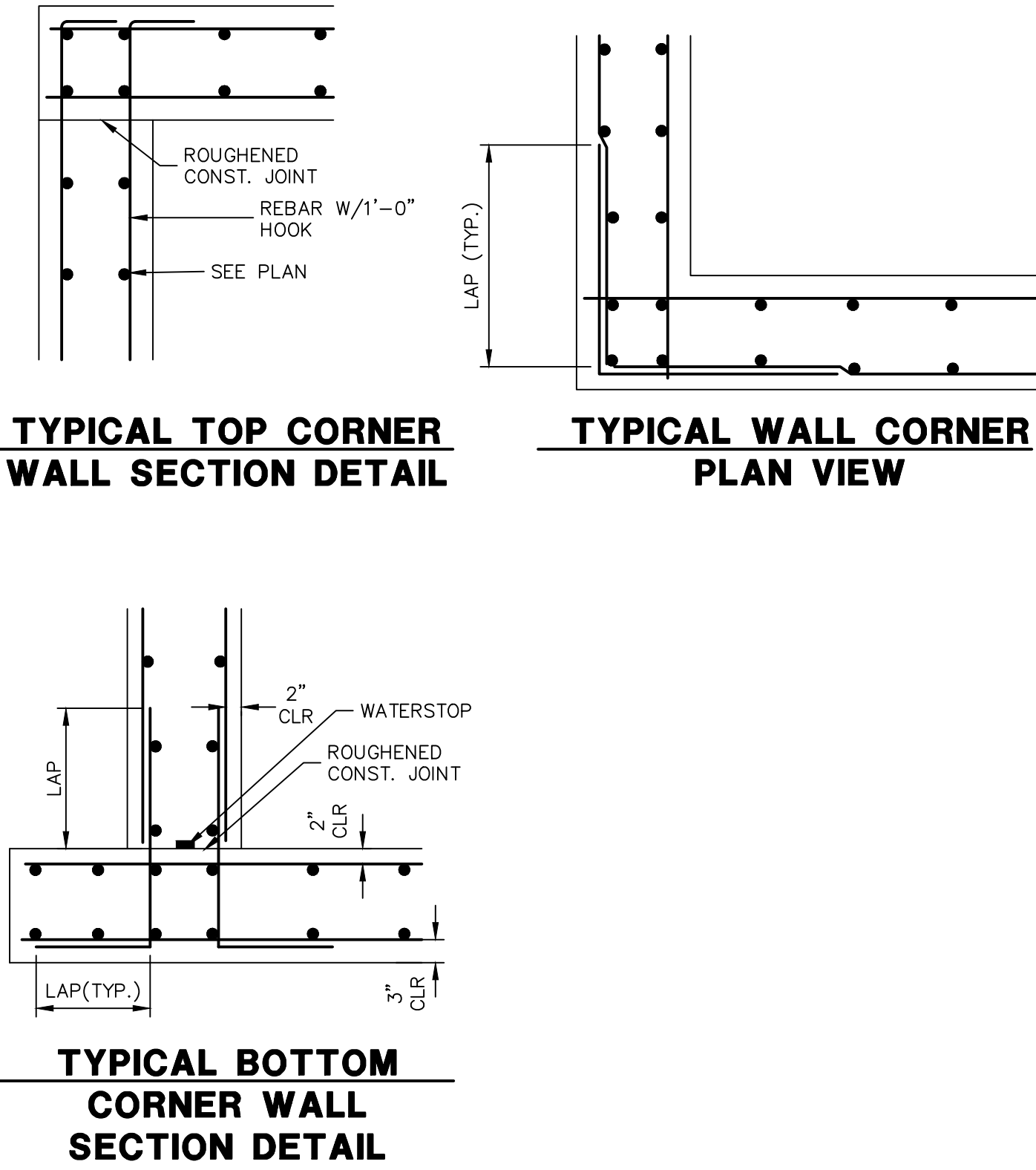
c-BARS AND REINFORCING STEEL QUANTITY (EXCLUDE TOE WALL), REINFORCING STEEL QUANTITY INCLUDES STEM AND FOOTING QUANTITIES, BUT DOES NOT INCLUDE TOE WALL QUANTITIES. Includes tables for L (MULTIPLE OF m), h (FT), and various bar sizes (#4 to #14) with quantities for different wall heights and widths.

EXAMPLE: SELECT THE c-BARS SIZE, SPACING AND STEEL QUANTITY FOR A 25.0 FEET LONG WINGWALL WITH m = 11.8 FT. AND k = 6.3 FT.

SOLUTION: 1. DETERMINE WINGWALL LENGTH IN MULTIPLE OF m: L / m = 25.0 / 11.8 = 2.12 L = (2.12 x m), USE L ≤ (2.25 x m) 2. ROUND TO NEAREST WHOLE NUMBER FOR m AND k: m = 11.8 FT., USE m = 12.0 FT. k = 6.3 FT., USE k = 6.0 FT. 3. DETERMINE c-BARS BY USING THE TABLE: L ≤ (2.25 x m) m = 12 k = 6 c-BARS #6 @ 10" REIN. STEEL = 60.60 LB / LF 4. DETERMINE REINFORCING STEEL QUANTITY OF WHOLE WINGWALL: REINFORCING STEEL QUANTITY = 25.0 x 60.60 = 1,515 LB.



LIMITS OF CONCRETE SEALER AND WINGWALL DRAIN DETAILS. NOTES: 1. THE GEOTEXTILE SHALL BE SECURED TO THE WALL TO PREVENT MOVEMENT DURING BACKFILLING. 2. COST OF GEOTEXTILE DRAIN AND CONCRETE SEALER SHALL BE INCLUDED IN THE WORK.



CAST-IN-PLACE STRUCTURAL NOTES.

- 1. ALL CONSTRUCTION JOINTS SHALL BE THOROUGHLY CLEANED BEFORE FRESH CONCRETE IS POURED.
- 2. ALL CONSTRUCTION JOINTS NOT SHOWN ON THE PLANS SHALL BE APPROVED BY THE ENGINEER.
- 3. THE CONTRACTOR IS RESPONSIBLE FOR THE STABILITY OF THE STRUCTURE DURING CONSTRUCTION.
- 4. DO NOT BACKFILL UNTIL CONCRETE HAS REACHED DESIGN STRENGTH, F'c.
- 5. ALL EXPOSED CONCRETE CORNERS SHALL BE CHAMFERED 3/4".
- 6. CONTRACTOR SHALL SUBMIT STEEL REINFORCING SHOP DRAWINGS FOR ALL CAST-IN-PLACE STRUCTURES FOR ENGINEER'S APPROVAL PRIOR TO CONSTRUCTION.
- 7. HEADWALLS FOR PIPES SHALL BE CONSTRUCTED PER CDOT M-601-10.
- 8. WINGWALLS SHALL BE CONSTRUCTED PER CDOT M-601-20.



ENGINEER'S STATEMENT. STANDARD DETAILS SHOWN WERE REVIEWED ONLY AS TO THEIR APPLICATION ON THIS PROJECT. Mike A. Bramlett, P.E. COLORADO P.E. 32314 DATE 11/11/21 FOR AND ON BEHALF OF JR ENGINEERING, LLC

Prepared for: MONUMENT HILL CM LLC, 1864 WOODMOOR DR., STE 100, COLORADO SPRINGS, CO 80920. Attn: JOE DESJARDIN. JDESJARDIN@PROTERRACCO.COM. J.R. ENGINEERING, A Westman Company. Centennial 303-740-9383 • Colorado Springs 719-583-2593 Fort Collins 970-491-9988 • www.jrengineering.com. CLOVERLEAF FILING 2, SHEET 28 OF 28, JOB NO. 25158.01