

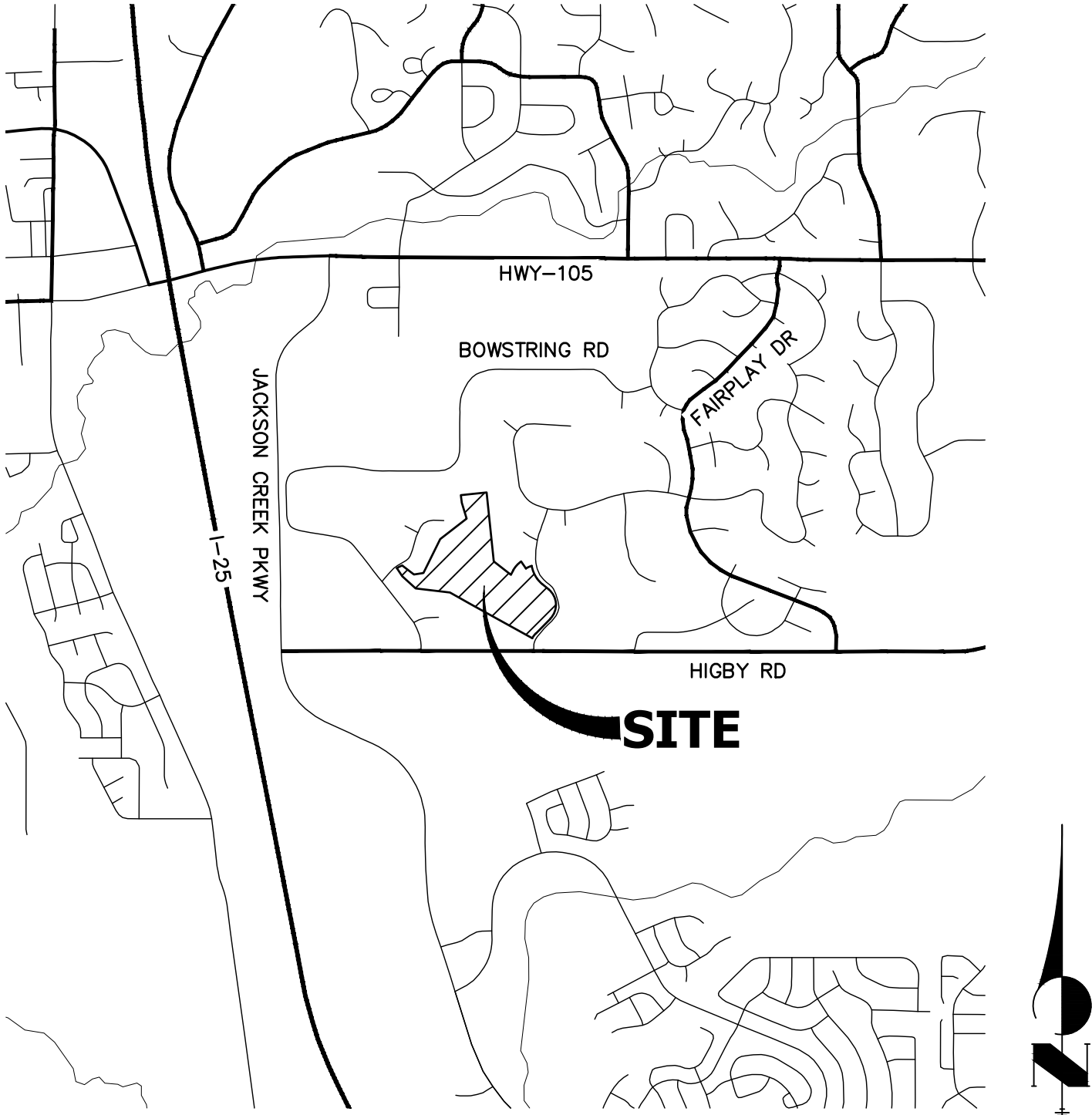
CLOVERLEAF FILING 2  
EL PASO COUNTY, COLORADO  
STORM SEWER AND POND PLANS

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 OWNER/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, P.E.  
COLORADO P.E. 32314

FOR AND ON BEHALF OF JR ENGINEERING, LLC

DATE



Know what's below.  
Call before you dig.

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

DATE

DESIGNED BY

DRAWN BY

CHECKED BY

CLOVERLEAF FILING 2

COVER SHEET

SHEET 1 OF 28

JOB NO. 25158.01



LAYER LINETYPE LEGEND

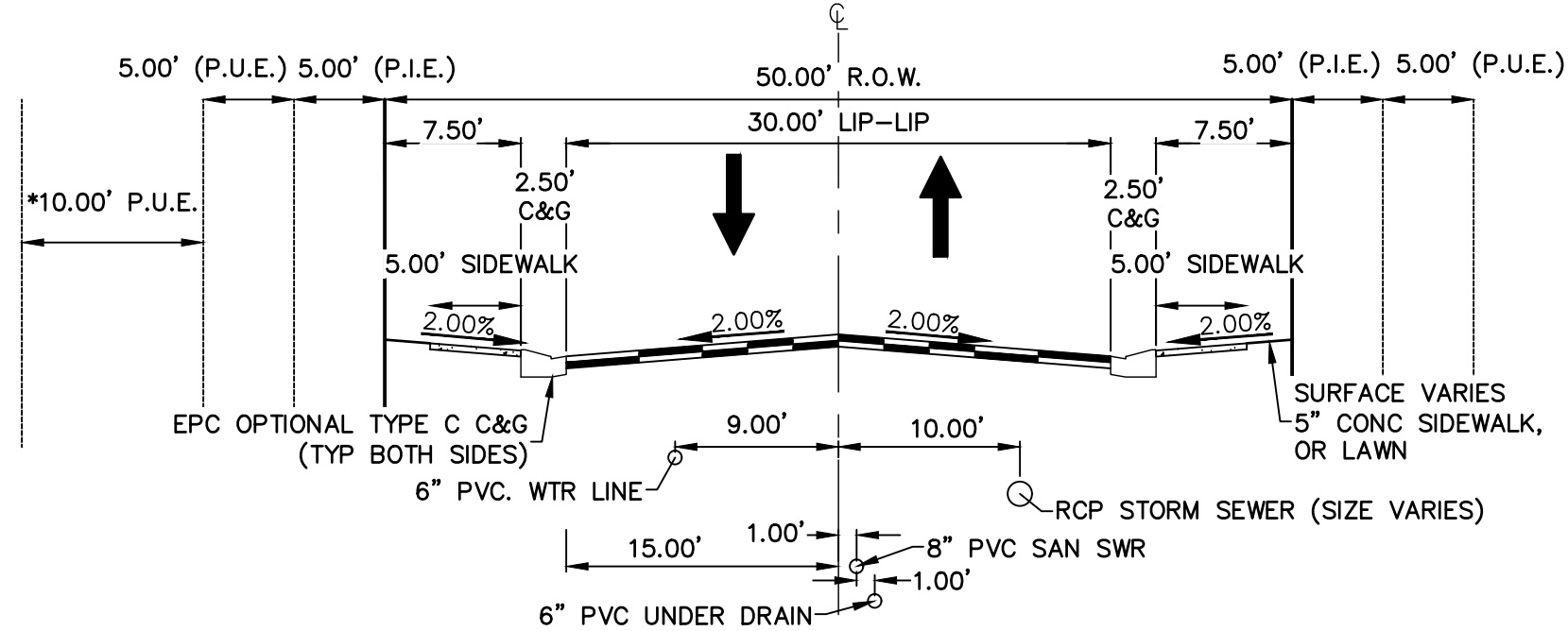
	EXISTING	PROPOSED
PHASE LINE		
MATCH LINE		
SECTION LINE		
BOUNDARY LINE		
PROPERTY LINE		
EASEMENT LINE		
RIGHT OF WAY		
R.O.W. A LINE		
CENTERLINE		
CITY LIMITS		
WIRE FENCE		
CHAIN LINK FENCE		
WOOD FENCE		
MASONRY FENCE		
GUARDRAIL		
CONC. BARRIER		
CABLE TV		
ELECTRIC		
FIBER OPTIC		
GAS MAIN		
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		



TYPICAL CROSS SECTION  
N.T.S. (ALSKE CLOVER CT, CRIMSON CLOVER DR, WHITE CLOVER DRIVE)  
(PUBLIC ROAD, URBAN LOCAL, POSTED SPEED LIMIT = 25 MPH)  
(\*SEE PLAN VIEW FOR 10' PUE LOCATION)

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 Z1. 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.

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, P.E.  
COLORADO P.E. 32314  
FOR AND ON BEHALF OF JR ENGINEERING, INC.

CLOVERLEAF FILING 2

LEGEND

SHEET 2 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



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

BY DATE

No. REVISION

N/A

H-SCALE

V-SCALE

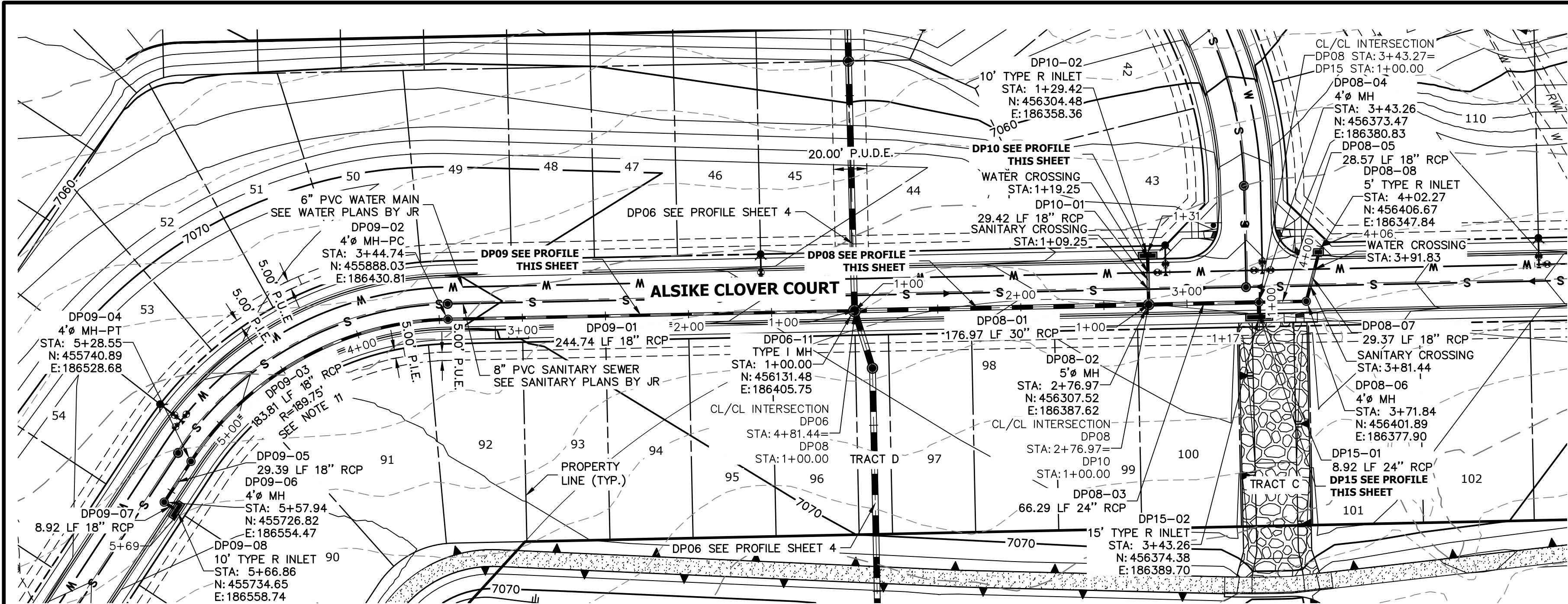
DATE

DESIGNED BY

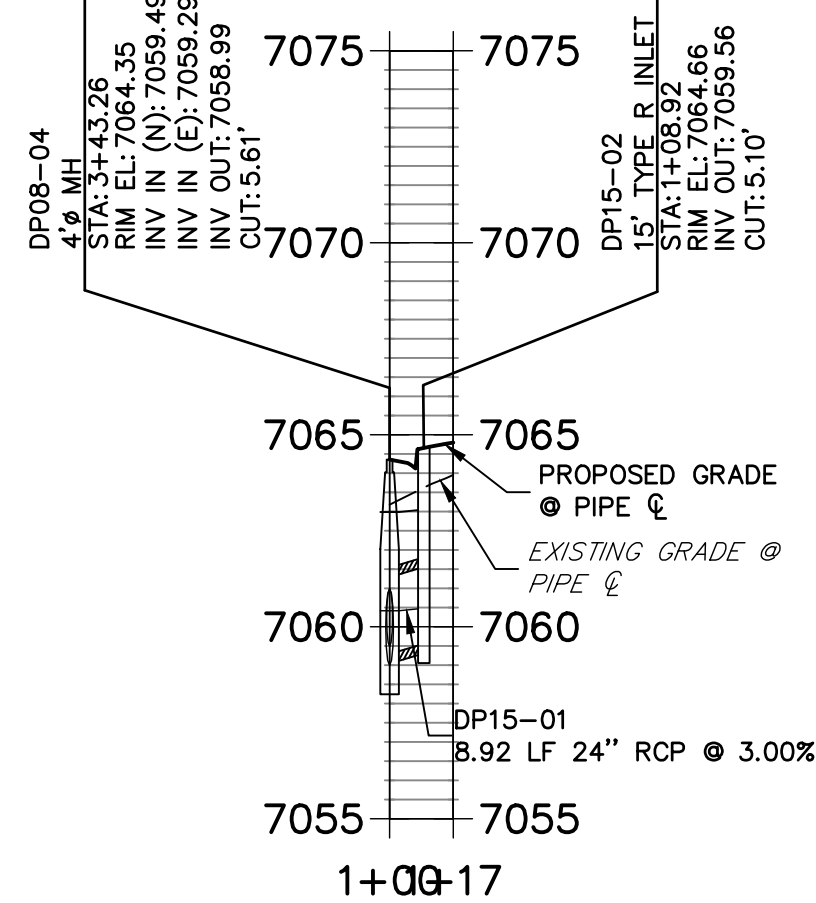
DRAWN BY

CHECKED BY

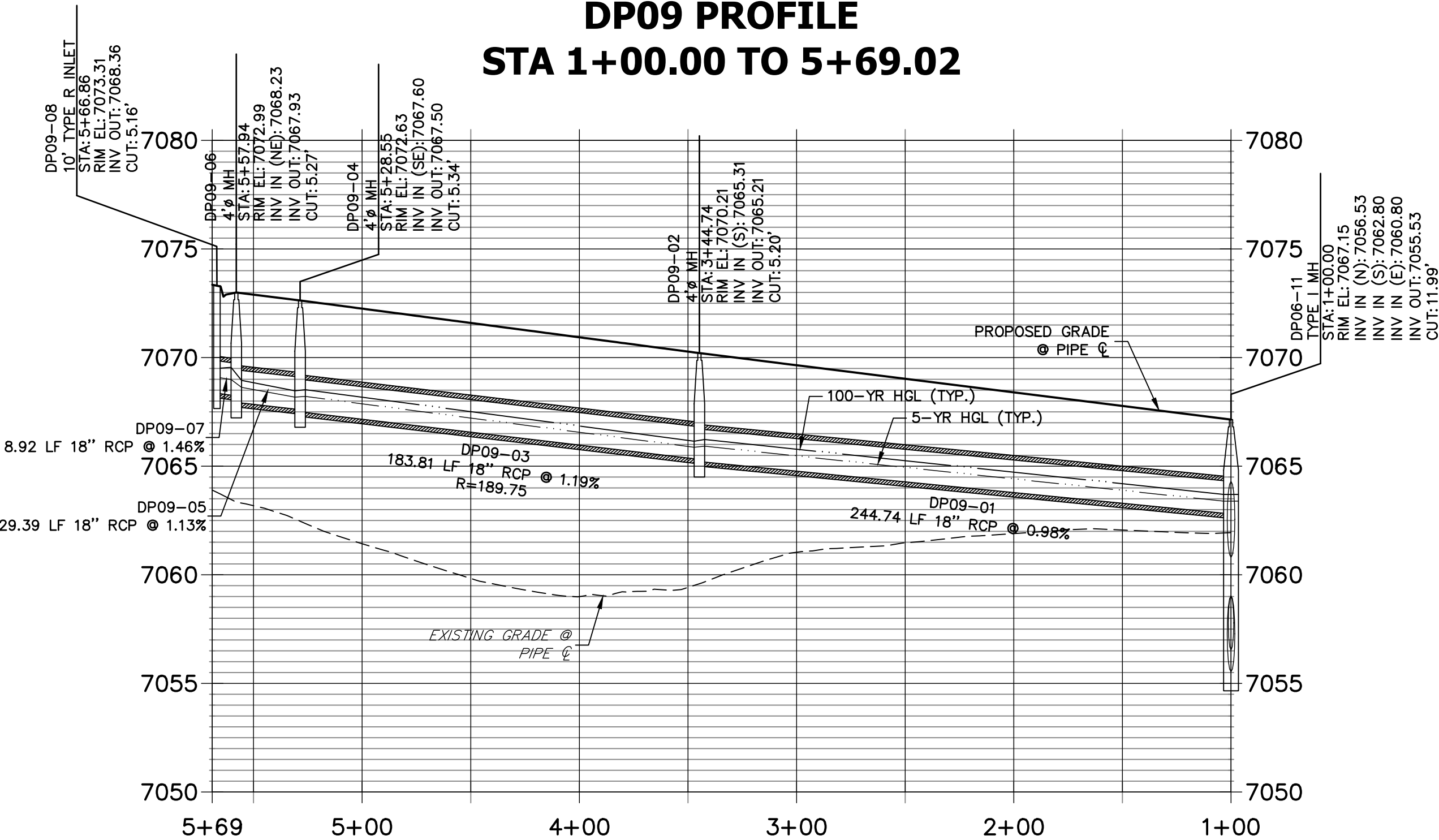




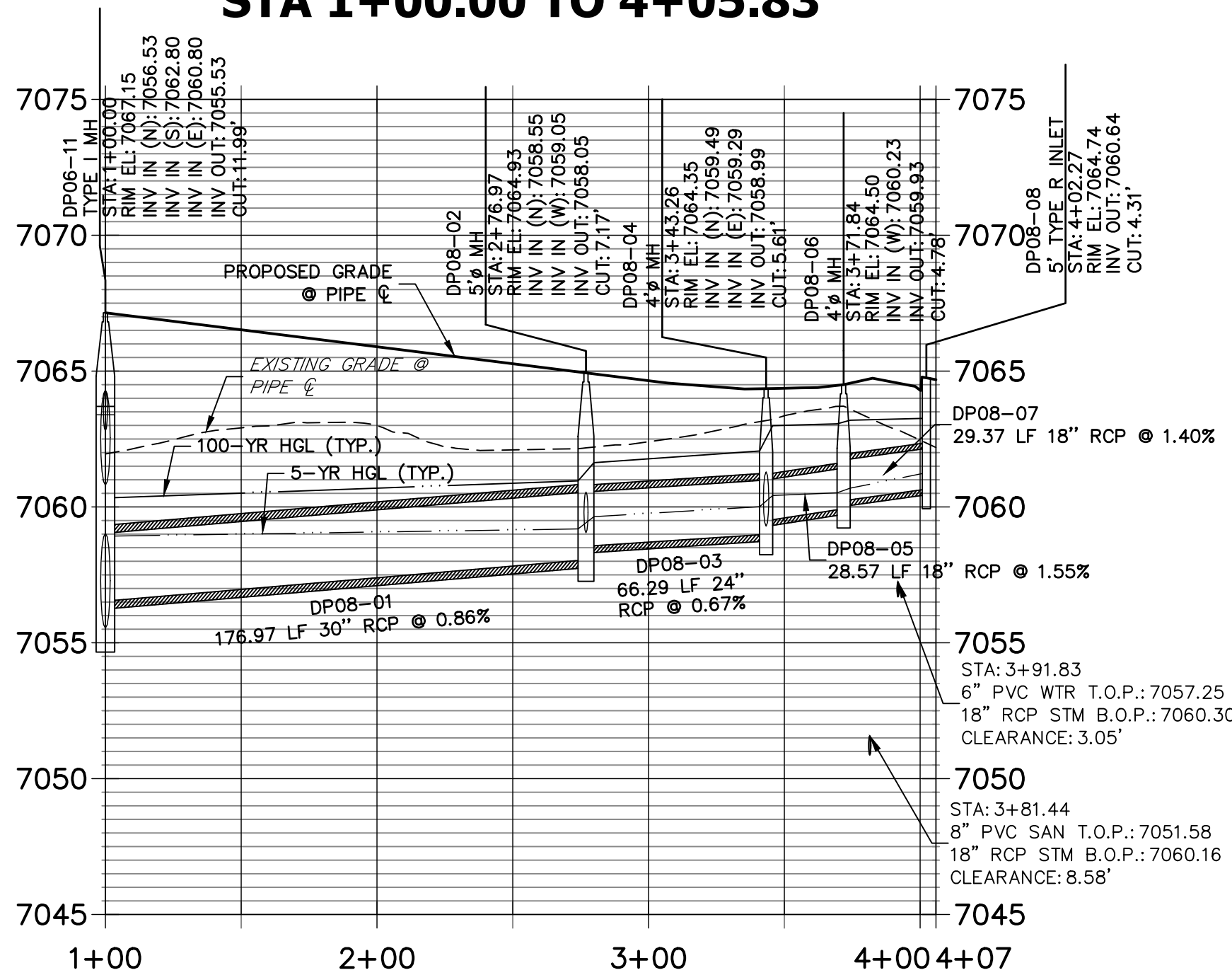
DP15 PROFILE  
STA 1+00.00 TO 1+16.59



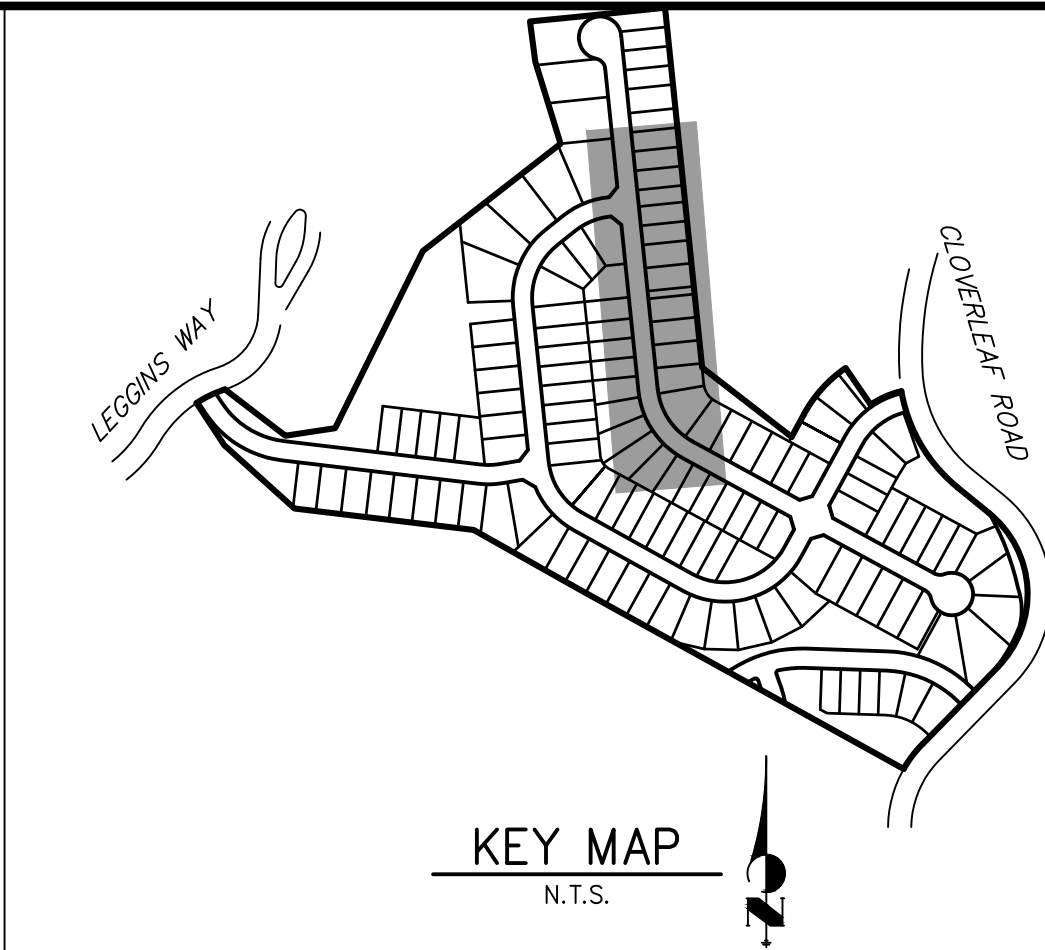
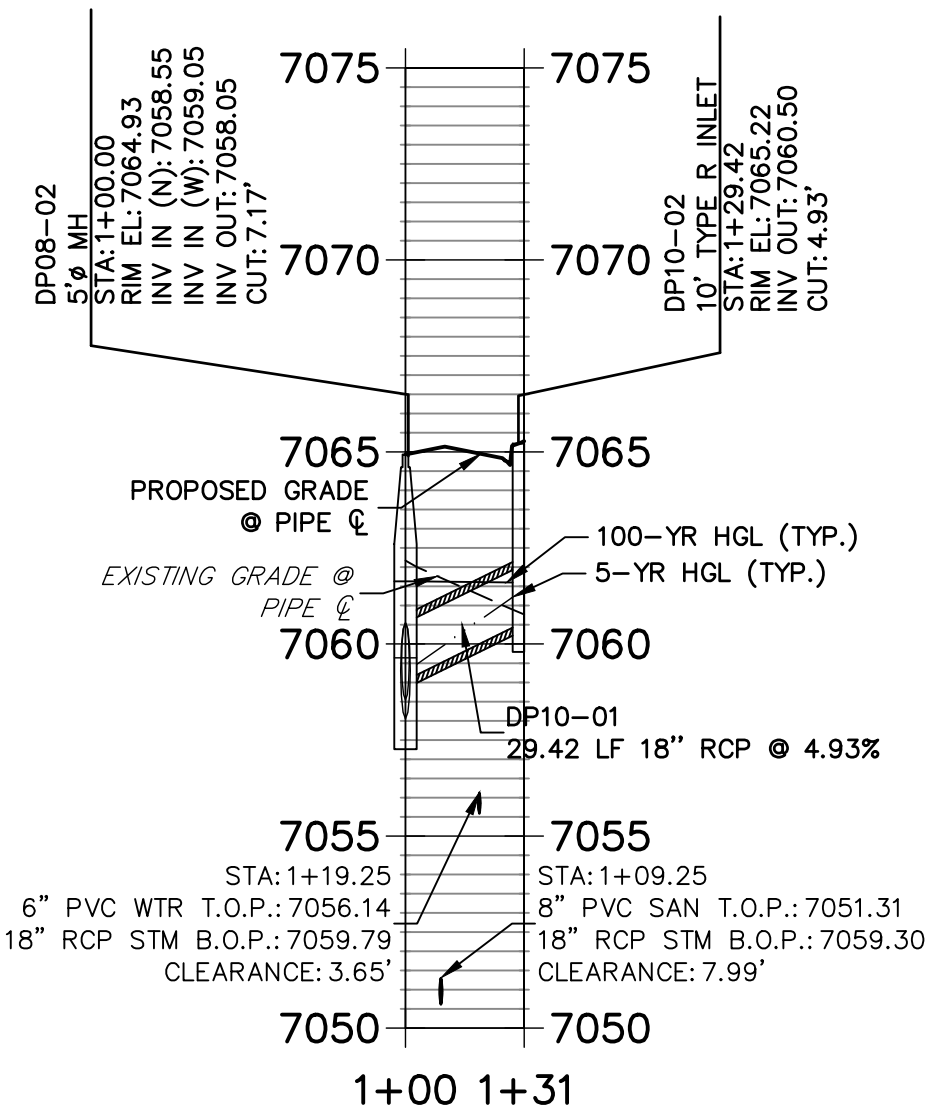
DP09 PROFILE  
STA 1+00.00 TO 5+69.02



DP08 PROFILE  
STA 1+00.00 TO 4+05.83

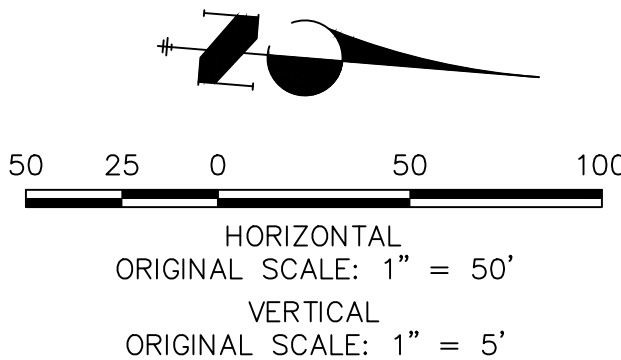


DP10 PROFILE  
STA 1+00.00 TO 1+30.92



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.
14. 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.
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.  
32314  
11/11/21

FOR AND ON BEHALF OF JR ENGINEERING, LOCAL ENGINEERING

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

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 Westman Company  
Central 303-740-9888 • Colorado Springs 719-583-2593  
Fort Collins 970-491-9888 • www.jrengineering.com

No.	REVISION	BY	DATE	DESIGNED BY	DRAWN BY	CHECKED BY
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						
31						
32						
33						
34						
35						
36						
37						
38						
39						
40						
41						
42						
43						
44						
45						
46						
47						
48						
49						
50						
51						
52						
53						
54						
55						
56						
57						
58						
59						
60						
61						
62						
63						
64						
65						
66						
67						
68						
69						
70						
71						
72						
73						
74						
75						
76						
77						
78						
79						
80						
81						
82						
83						
84						
85						
86						
87						
88						
89						
90						
91						
92						
93						
94						
95						
96						
97						
98						
99						
100						
101						
102						
103						
104						
105						
106						
107						
108						
109						
110						
111						
112						
113						
114						
115						
116						
117						
118						
119						
120						
121						
122						
123						
124						
125						
126						
127						
128						
129						
130						
131						
132						
133						
134						
135						
136						
137						
138						
139						
140						
141						
142						
143						
144						
145						
146						
147						
148						
149						
150						
151						
152						
153						
154						
155						
156						
157						
158						
159						
160						
161						
162						
163						
164						
165						
166						
167						
168						
169						
170						
171						
172						
173						
174						
175						
176						
177						
178						
179						
180						
181						
182						
183						
184						
185						
186						
187						
188						
189						
190						
191						
192						
193						
194						
195						
196						
197						
198						
199						
200						

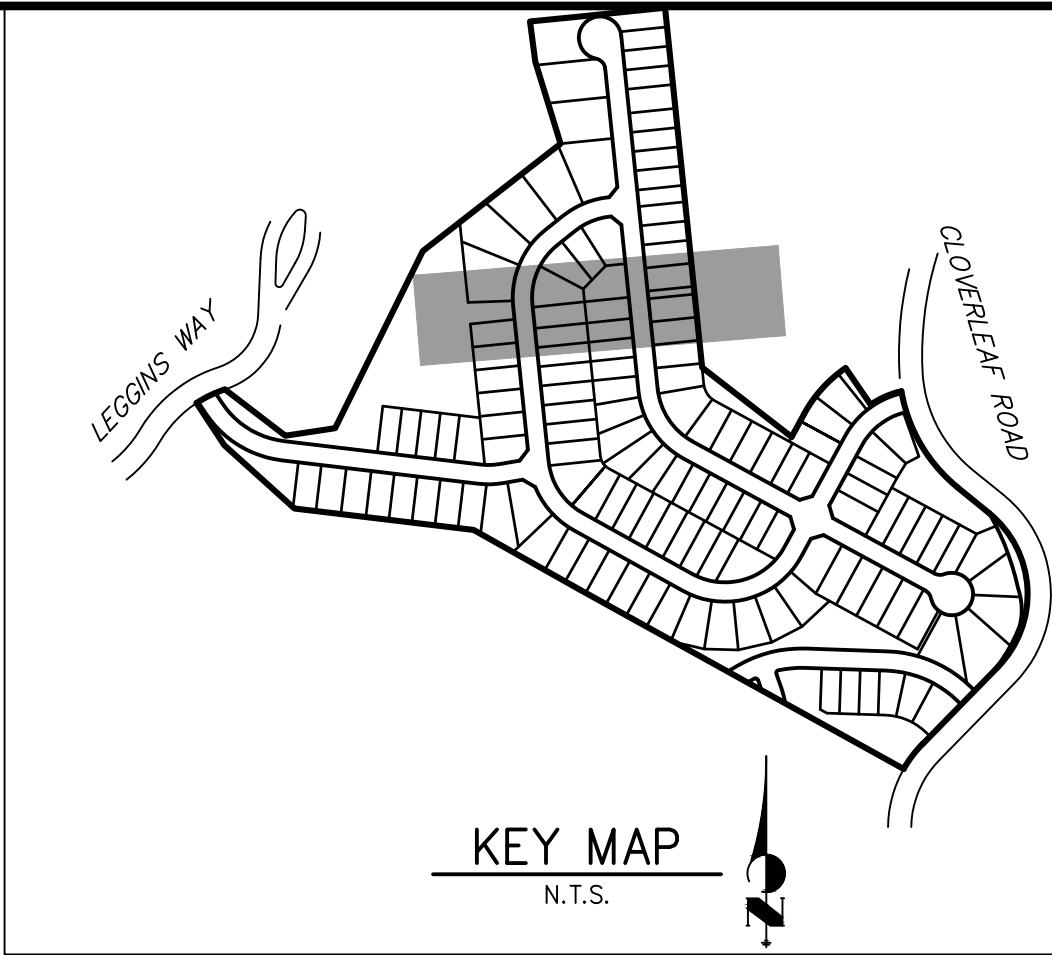
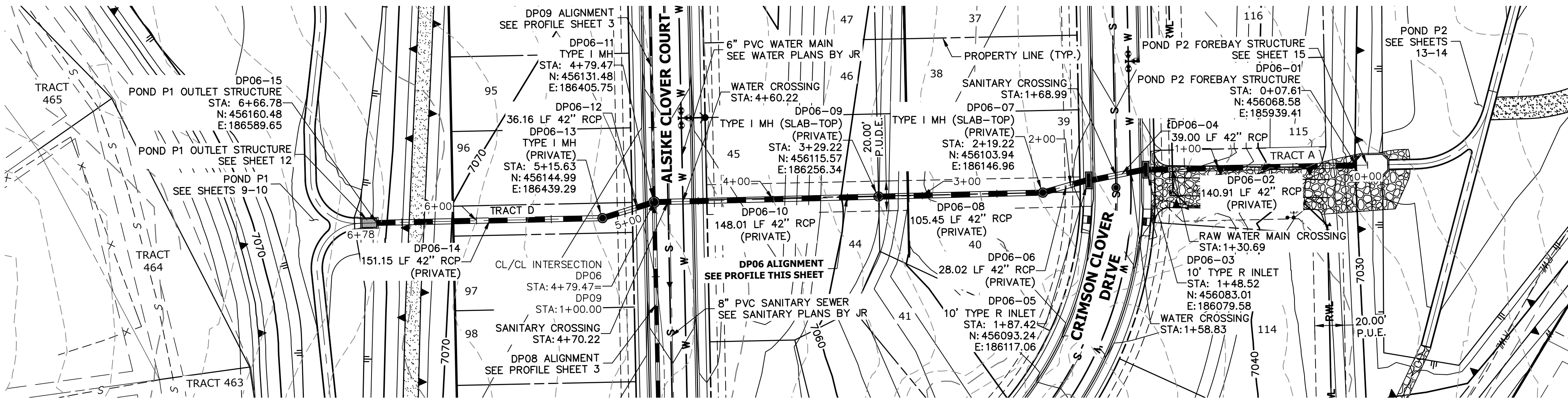
CLOVERLEAF FILING 2

STORM SEWER PLAN AND  
PROFILE

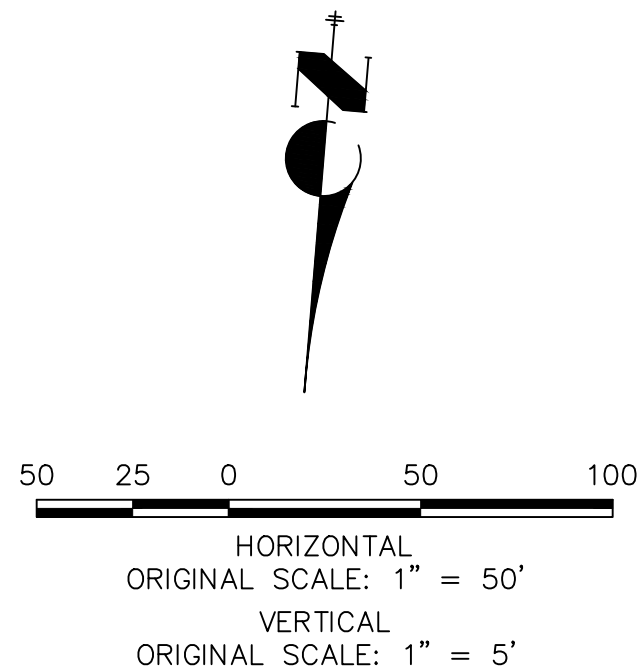
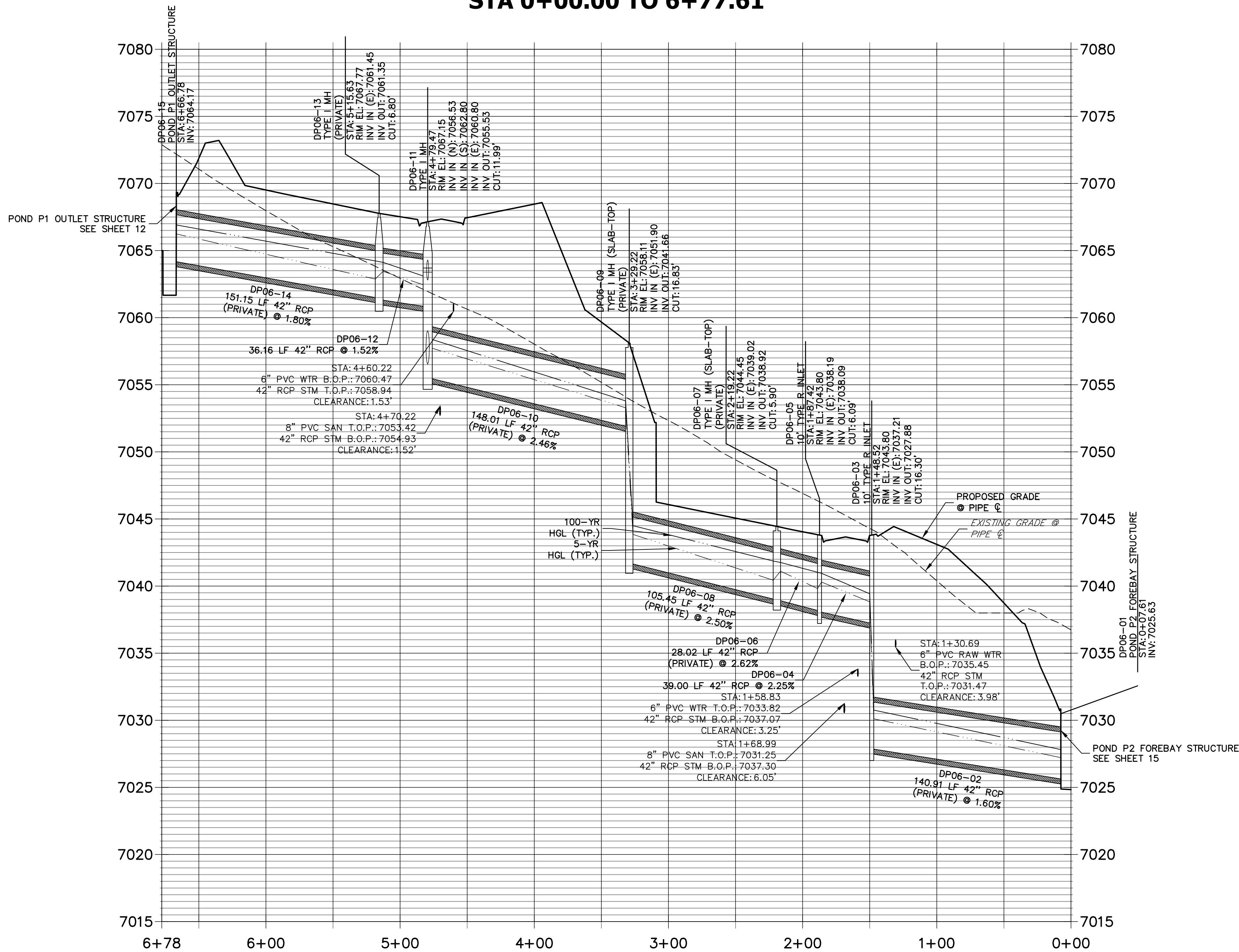
SHEET 3 OF 28

JOB NO. 25158.01





DP06 PROFILE  
STA 0+00.00 TO 6+77.61



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.
14. 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.
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

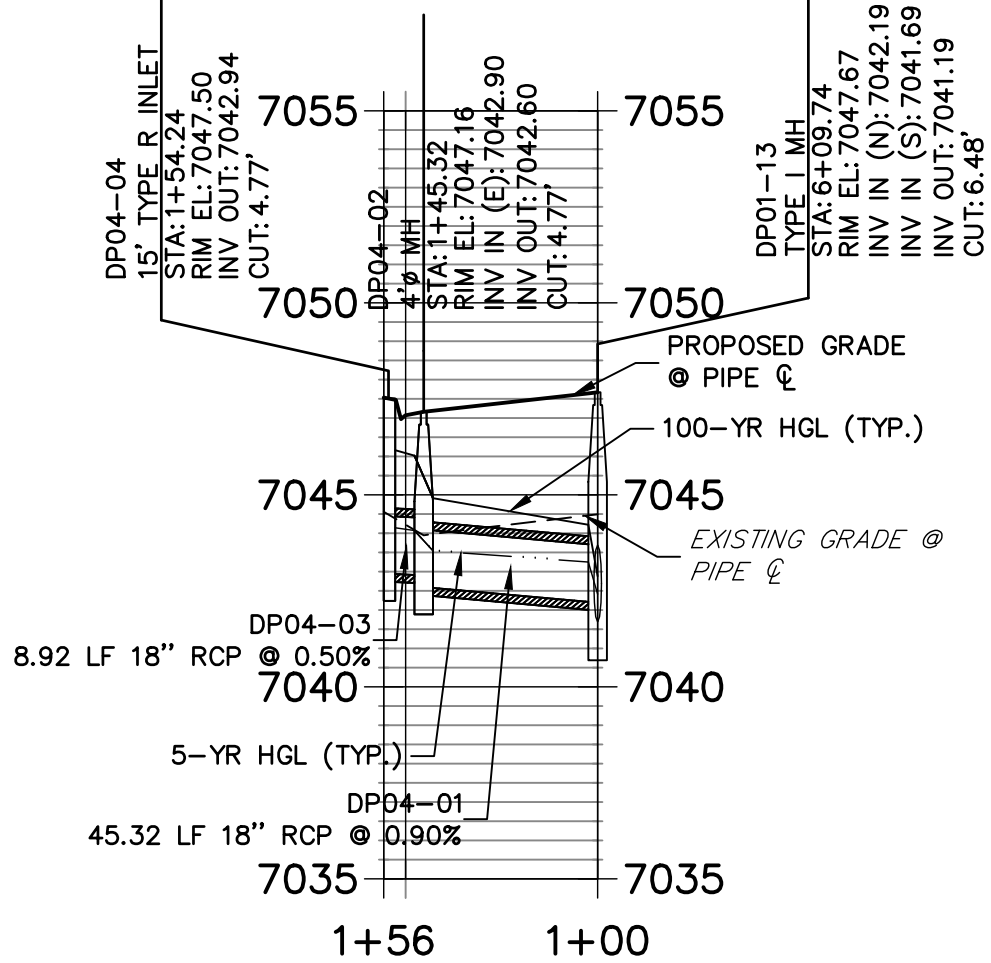
CLOVERLEAF FILING 2		H-SCALE 1"=50'		No.		REVISION		BY		DATE		PREPARED FOR		UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE AGENCIES, OR ENGINEERING APPROVES THEIR USES DESIGNATED BY WRITTEN AUTHORIZATION.	
STORM SEWER PLAN AND PROFILE		V-SCALE 1"=5'		DATE		11/11/21		DESIGNED BY		APL		MONUMENT HILL CM LLC 1864 WOODMOOR DR, STE 100 COLORADO SPRINGS, CO 80920 ATTN: JOE DESJARDIN (719) 476-0800 JDESJARDIN@PROTERRACO.COM			
		DRAWN BY		APL		CHECKED BY									
SHEET 4 OF 28															
JOB NO. 25158.01															



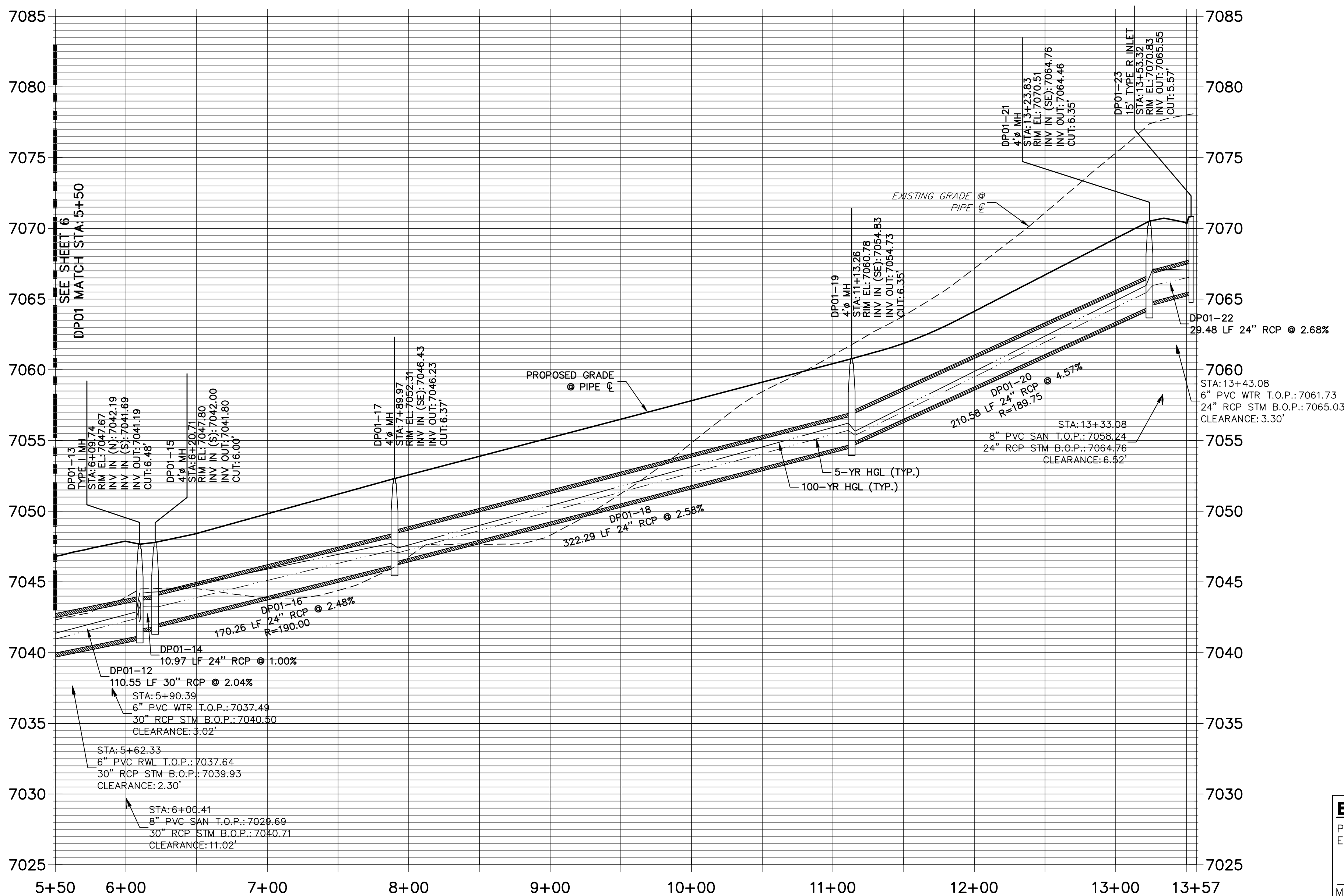


Know what's below.  
Call before you dig.

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

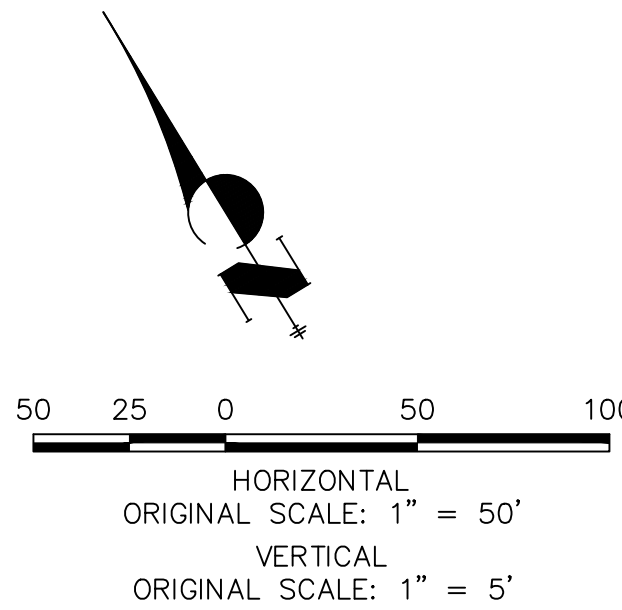


### DP01 PROFILE STA 5+50.00 TO 13+56.98



### NOTES

- 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.



### 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 Western Company

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

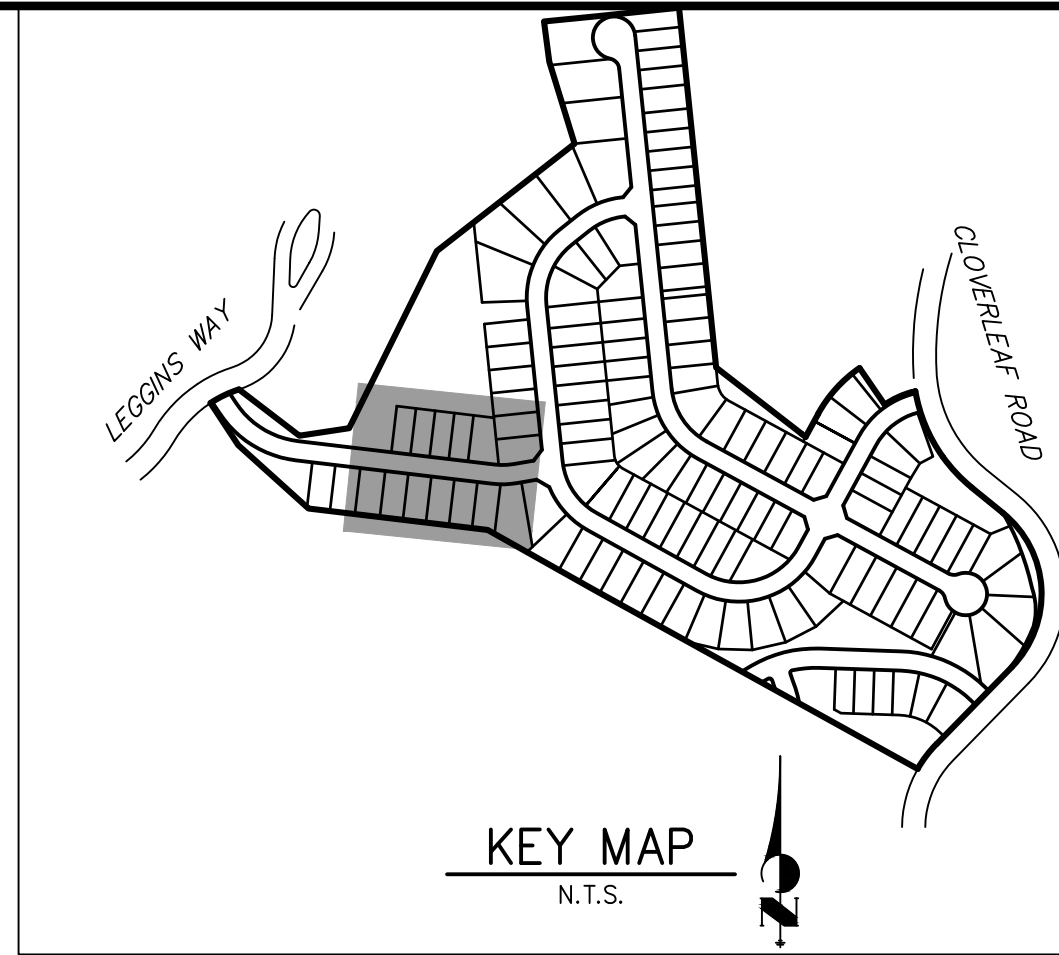
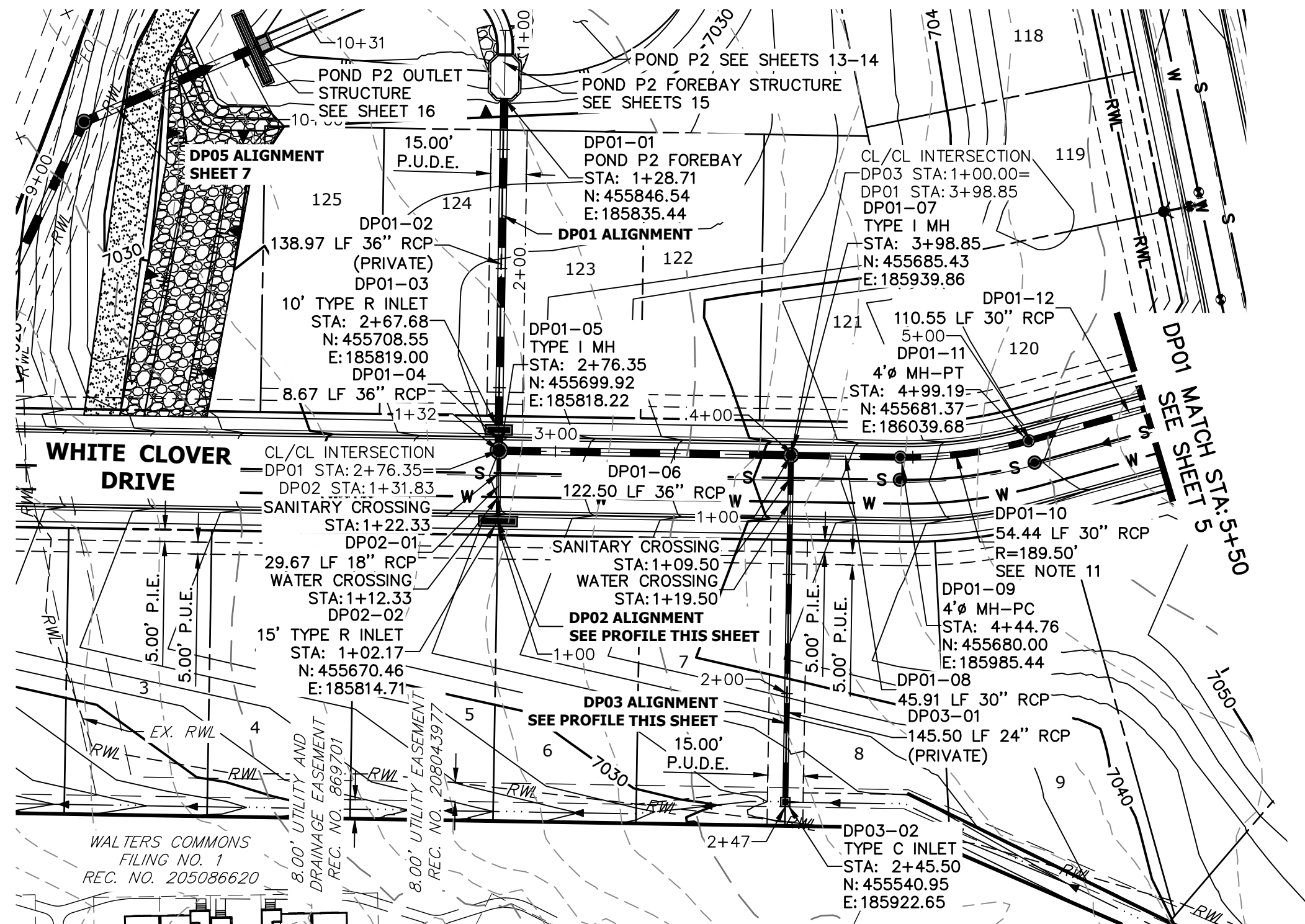
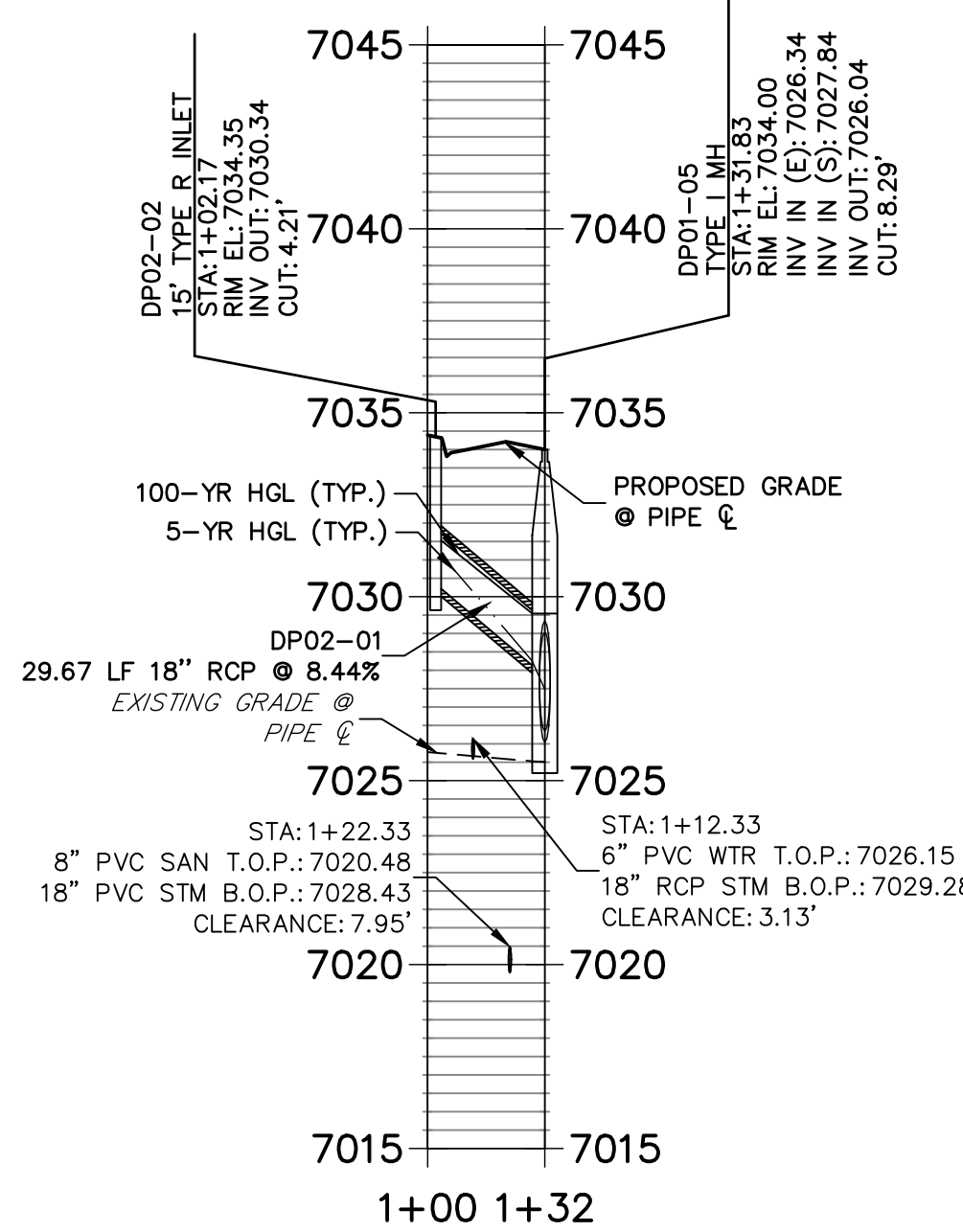
PREPARED FOR

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

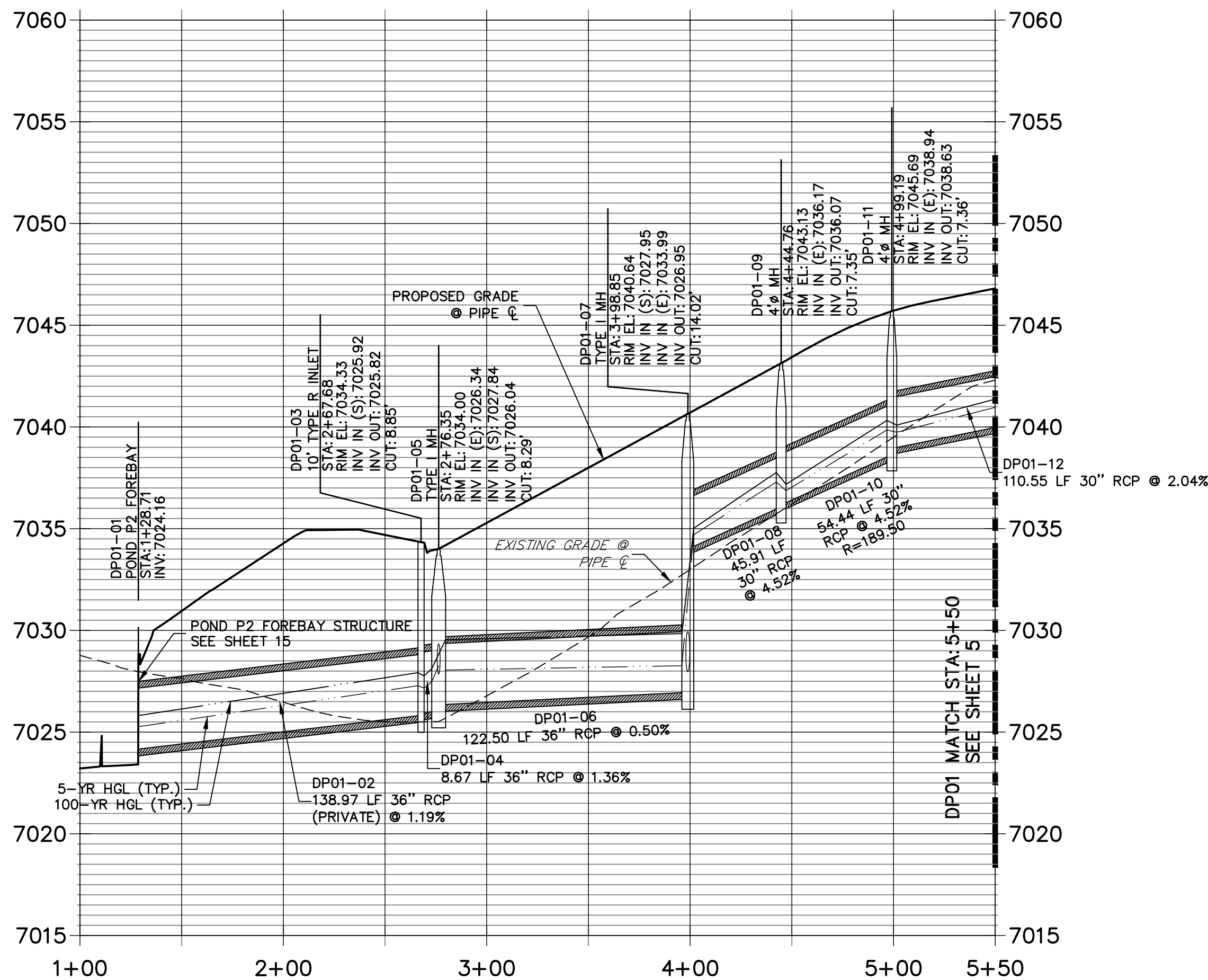
UNTIL SUCH TIME AS  
THESE DRAWINGS ARE  
APPROVED BY THE  
APPROPRIATE REVIEWING  
AGENCIES, OR ENGINEERING  
APPROVES THEIR USE,  
THESE DRAWINGS ARE  
DESIGNATED BY WRITTEN  
AUTHORIZATION.



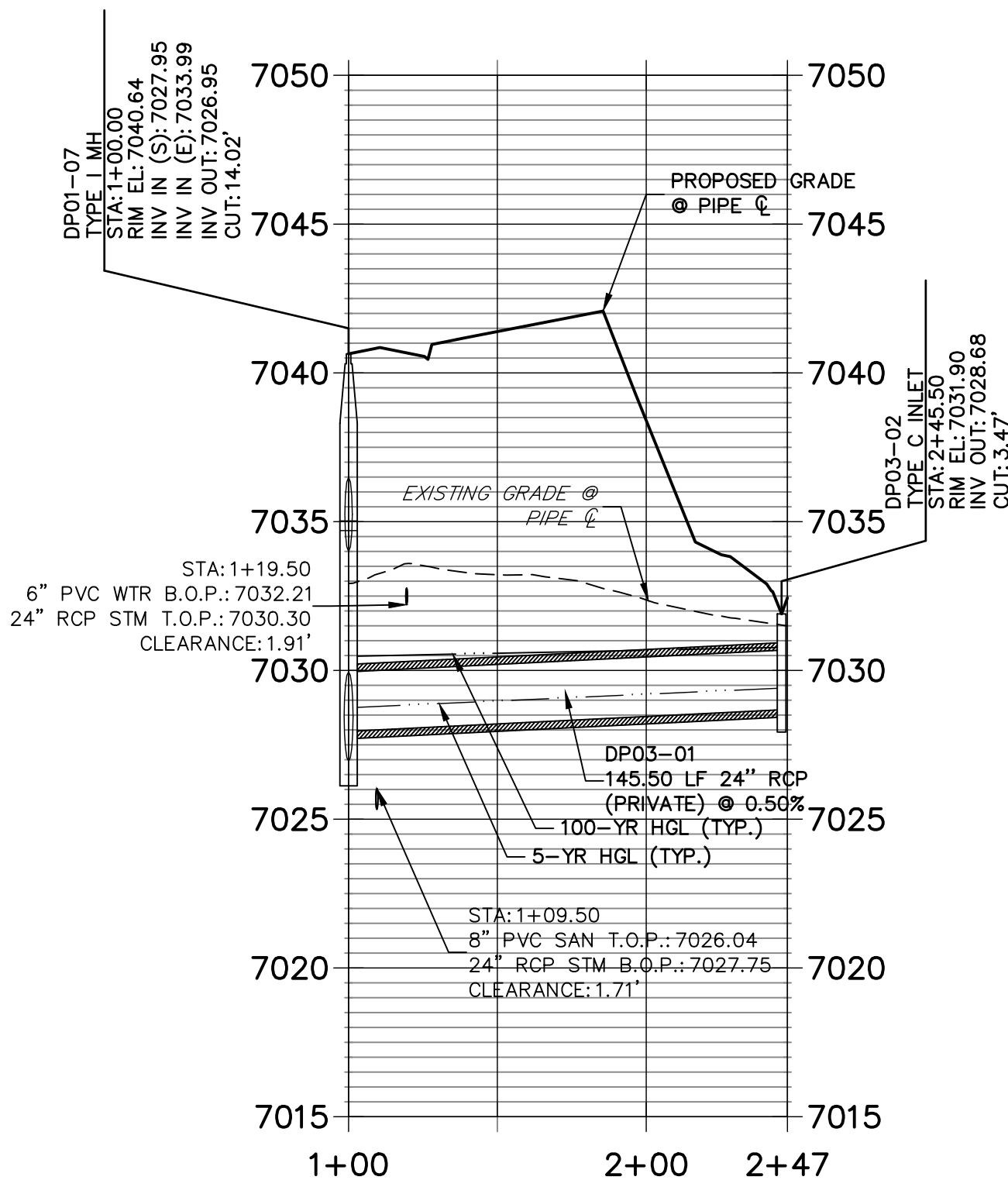
DP02 PROFILE  
STA 1+00.00 TO 1+31.83



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



DP03 PROFILE  
STA 1+00.00 TO 2+47.46



NOTES

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.
14. 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.
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.

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.	H-SCALE 1"=50'	V-SCALE 1"=5'	DATE	DESIGNED BY APL	DRAWN BY APL	CHECKED BY	SHEET 6 OF 28	JOB NO. 25158.01

CLOVERLEAF FILING 2

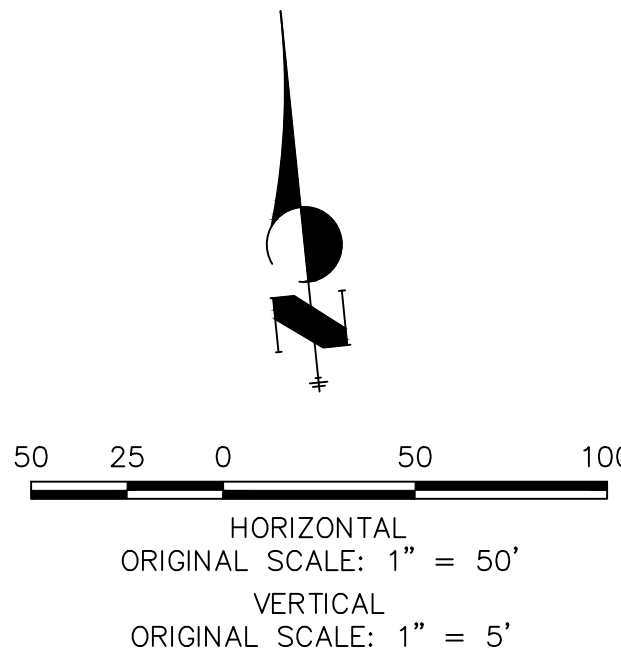
STORM SEWER PLAN AND  
PROFILE

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

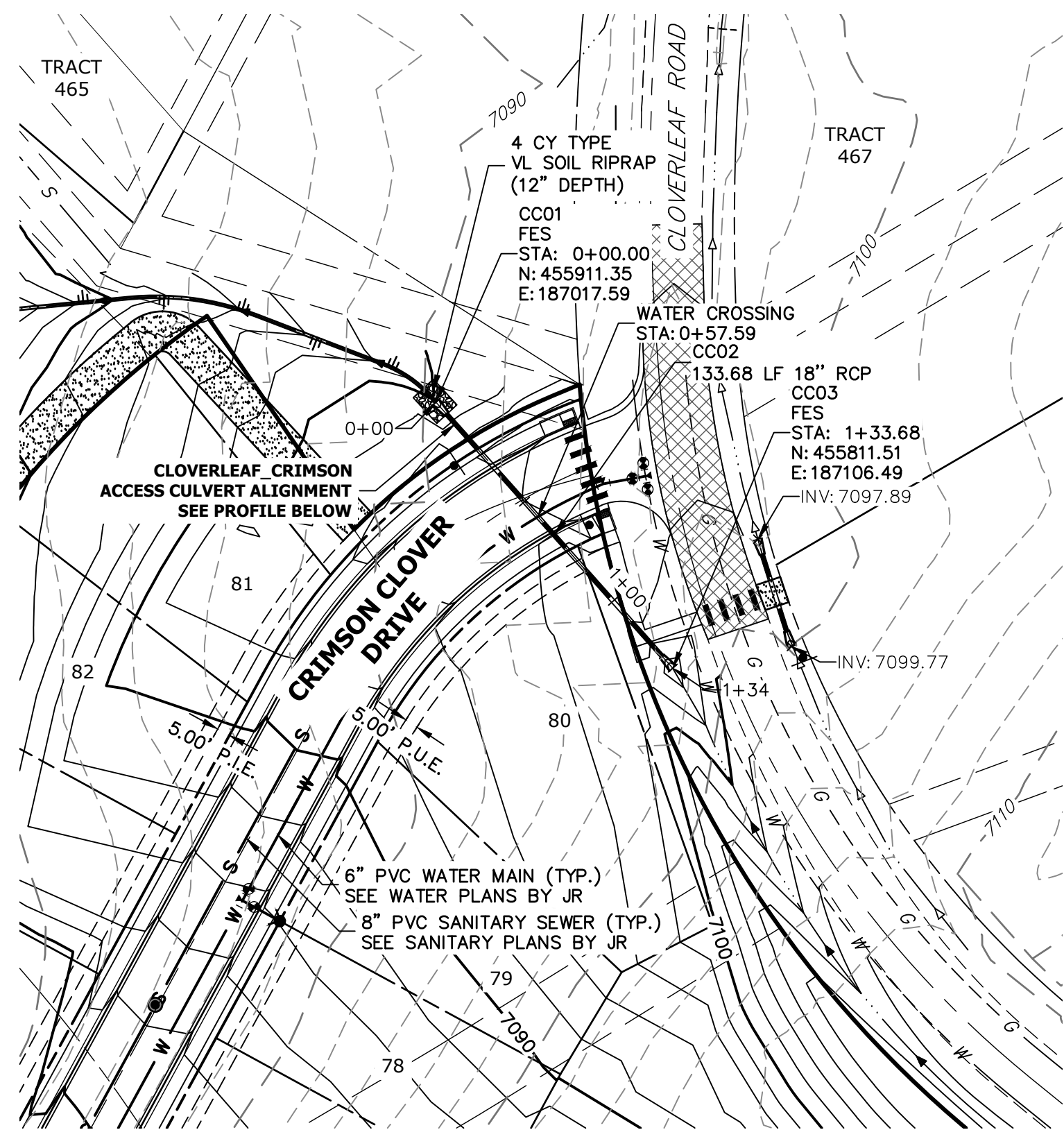
DATE 11/11/21



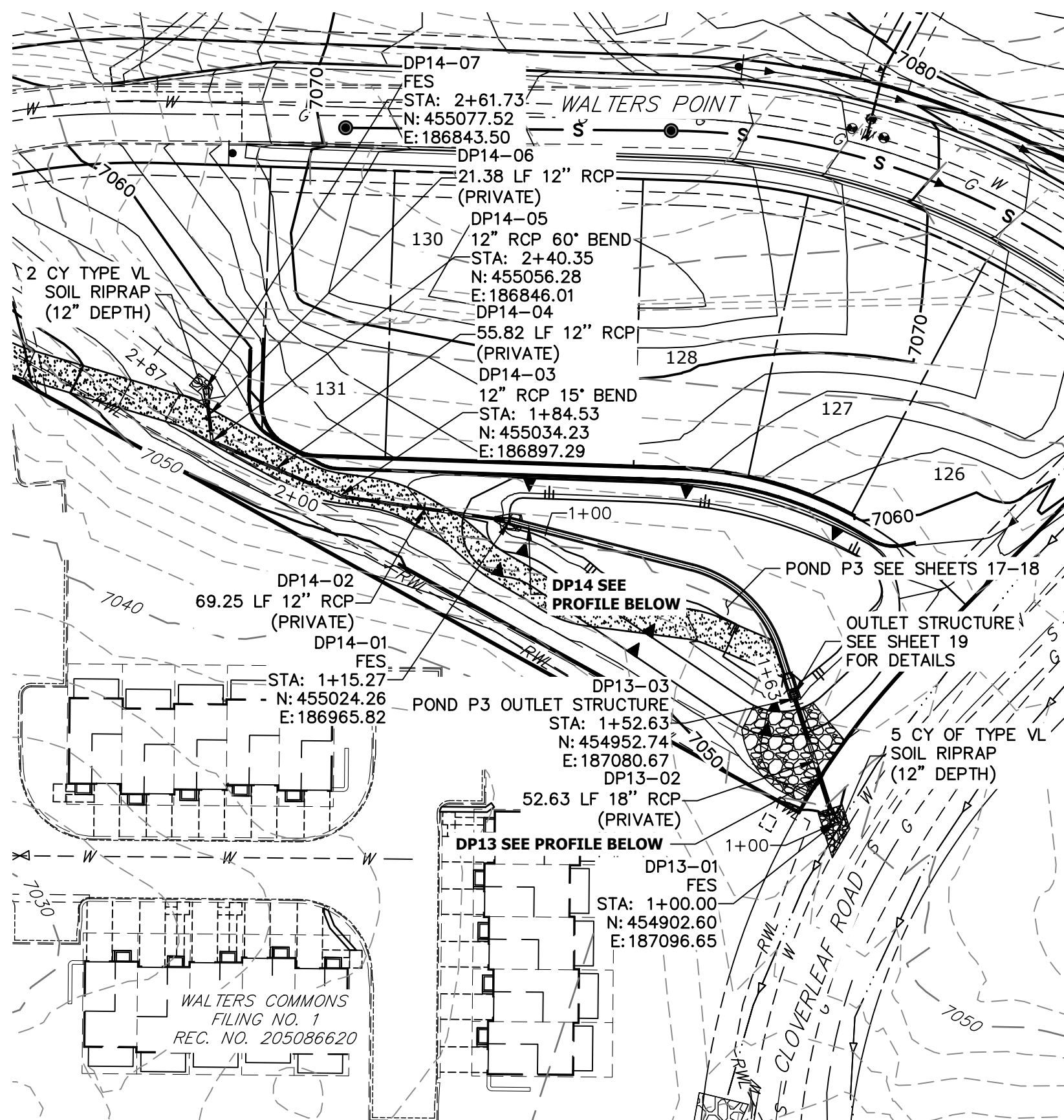




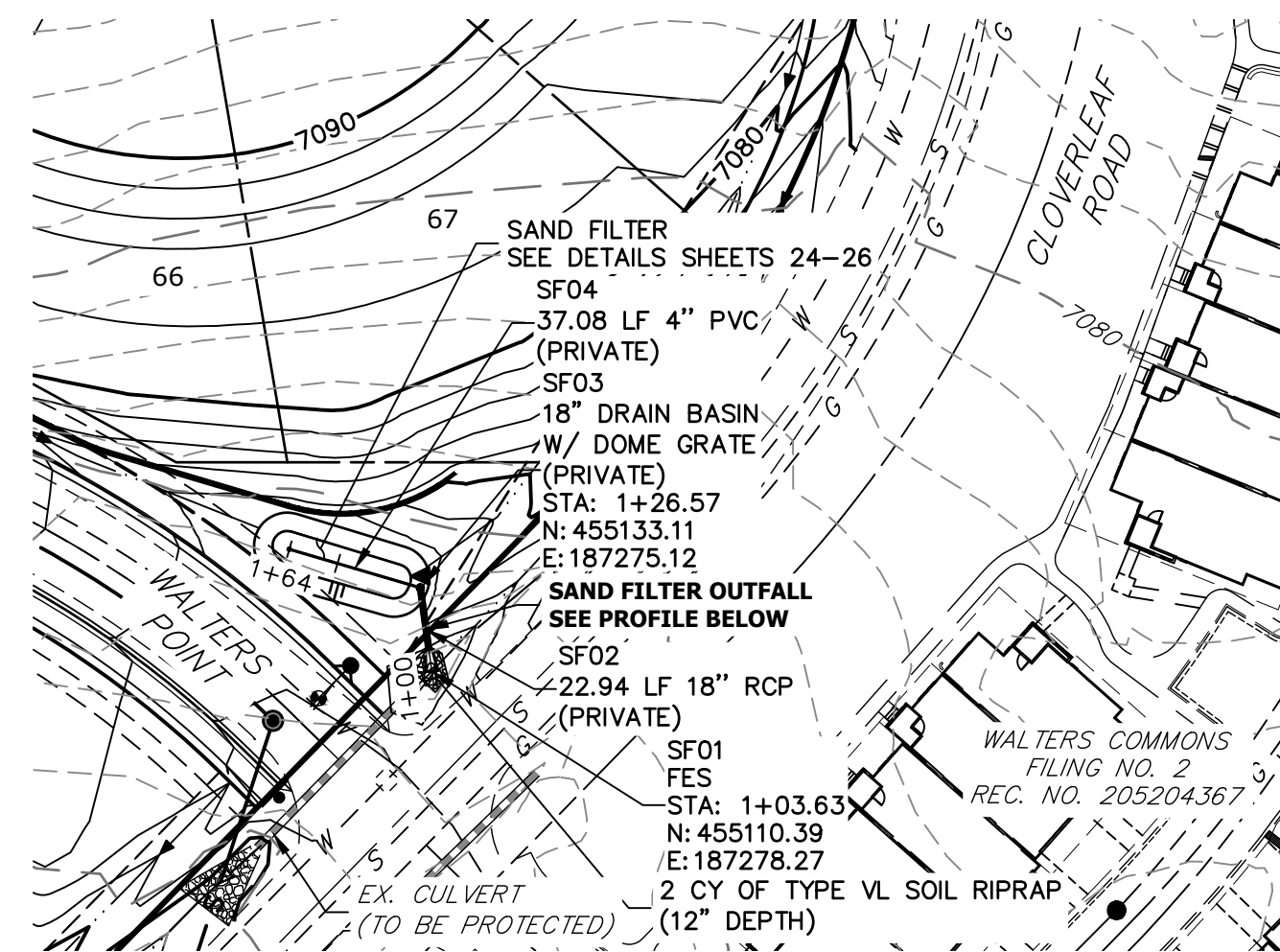




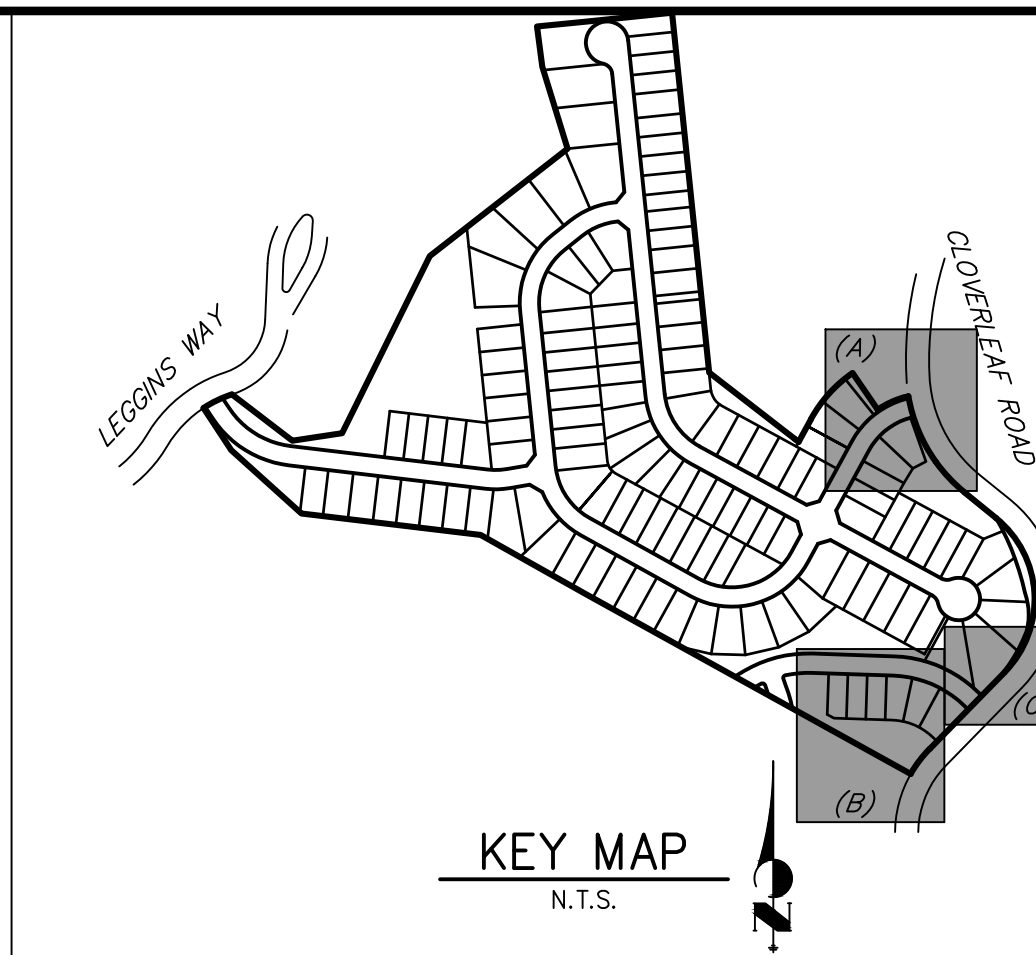
(A)



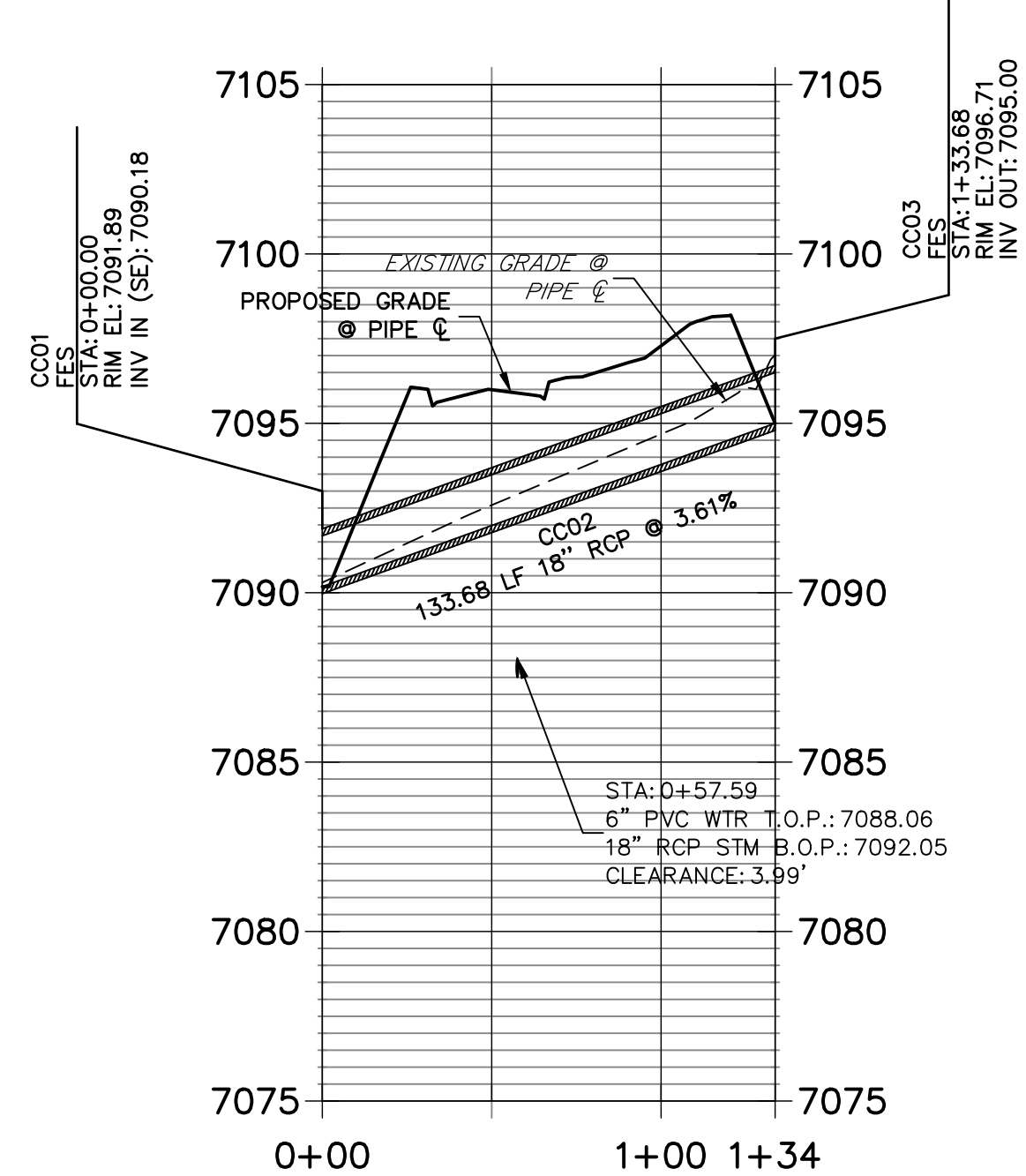
(B)



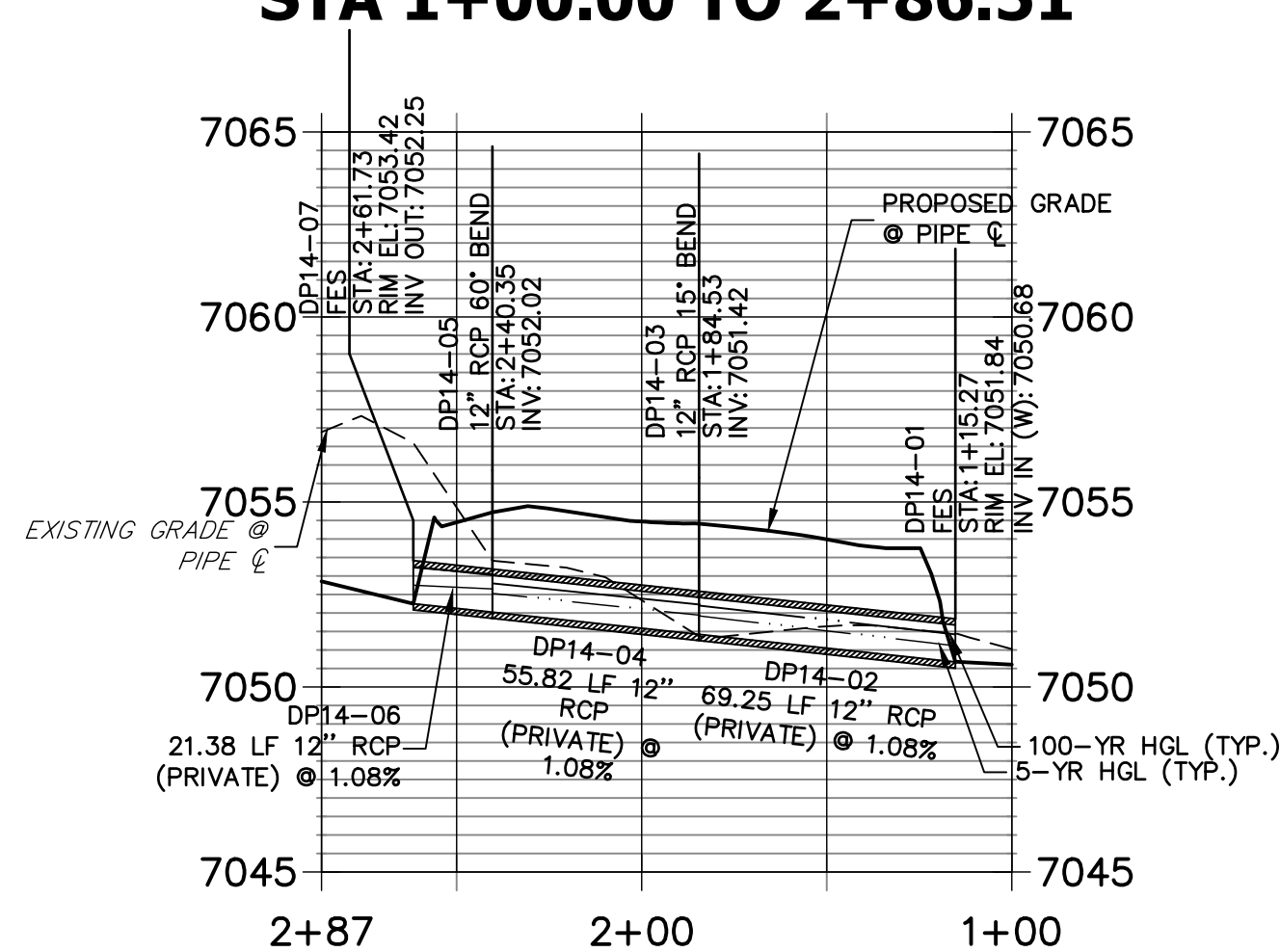
(C)



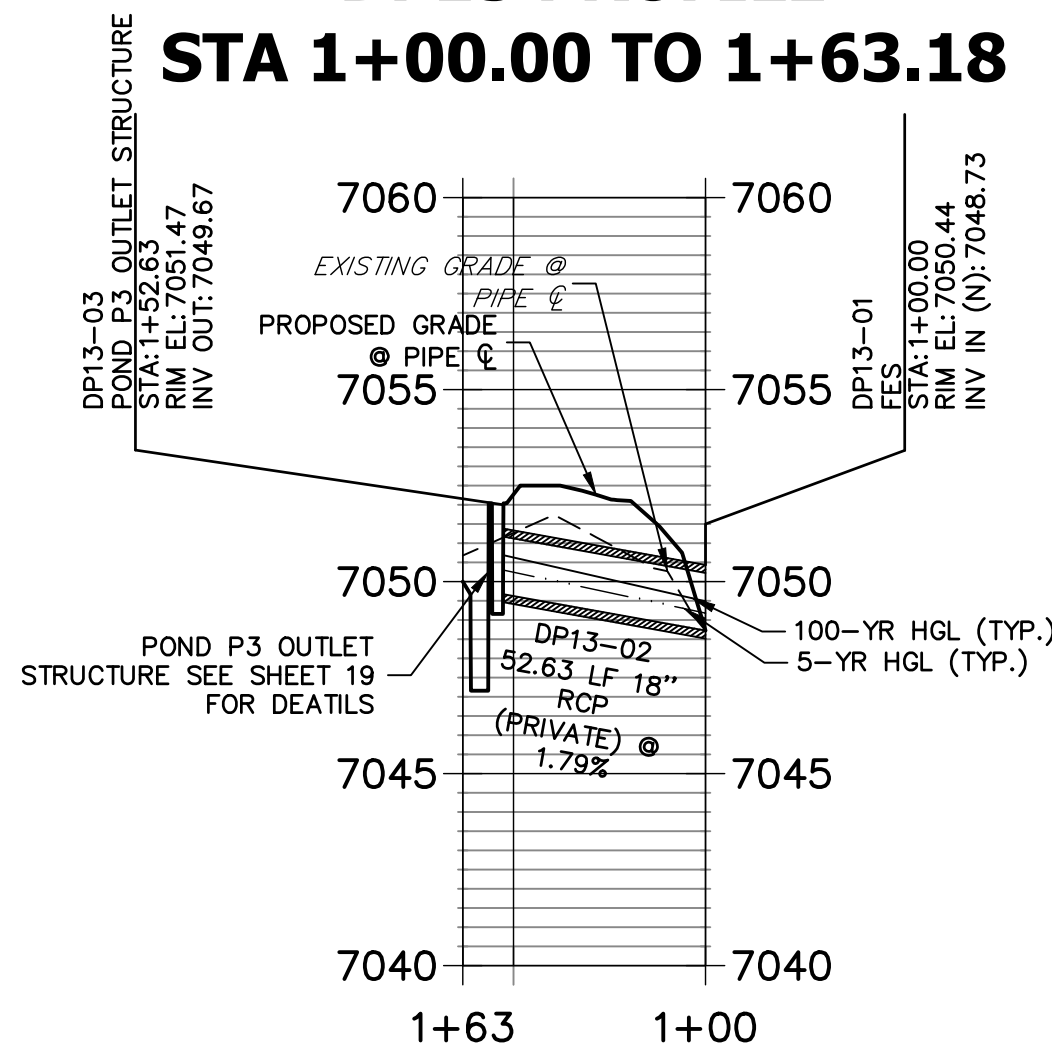
## CLOVERLEAF\_CRIMSON ACCESS CULVERT PROFILE STA 0+00.00 TO 1+33.68



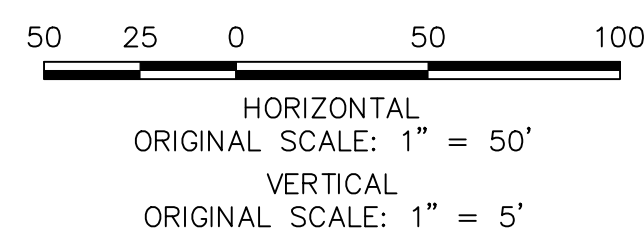
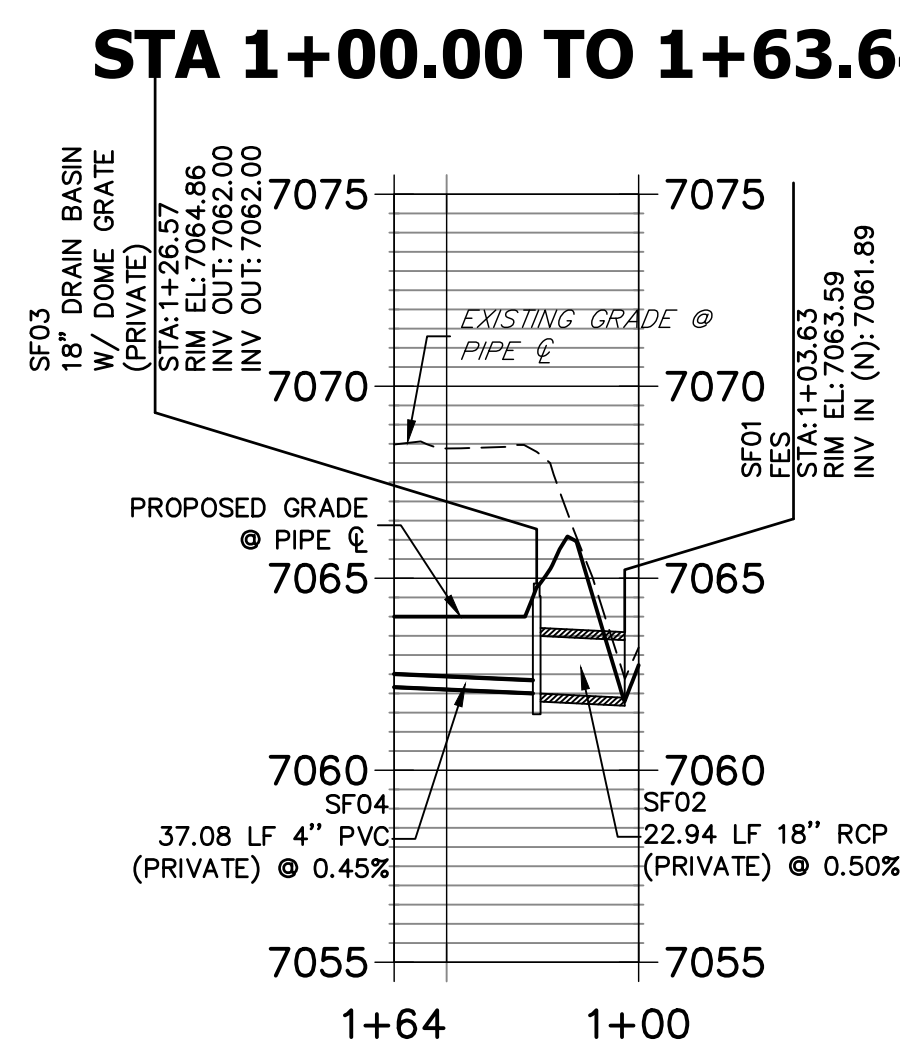
## DP14 PROFILE STA 1+00.00 TO 2+86.51



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



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

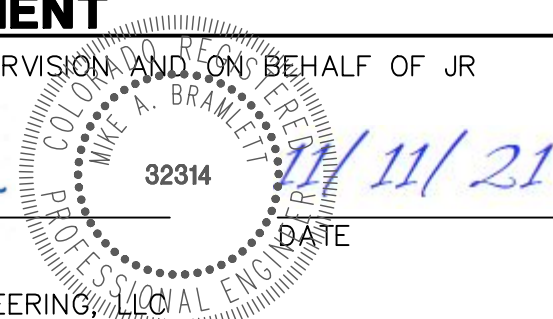


### ENGINEER'S STATEMENT

PREPARED UNDER MY DIRECT SUPERVISION AND ON BEHALF OF JR ENGINEERING

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 8 OF 28

JOB NO. 25158.01

BY DATE

No. REVISION

H-SCALE 1"=50'  
V-SCALE 1"=5'  
DATE 11/11/21  
DESIGNED BY APL  
DRAWN BY APL  
CHECKED BY



J.R. ENGINEERING

Central 303-740-9383 • Colorado Springs 719-583-2593  
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  
APPROVES THEIR USE,  
THESE DRAWINGS ARE  
DESIGNATED BY WRITTEN  
AUTHORIZATION.

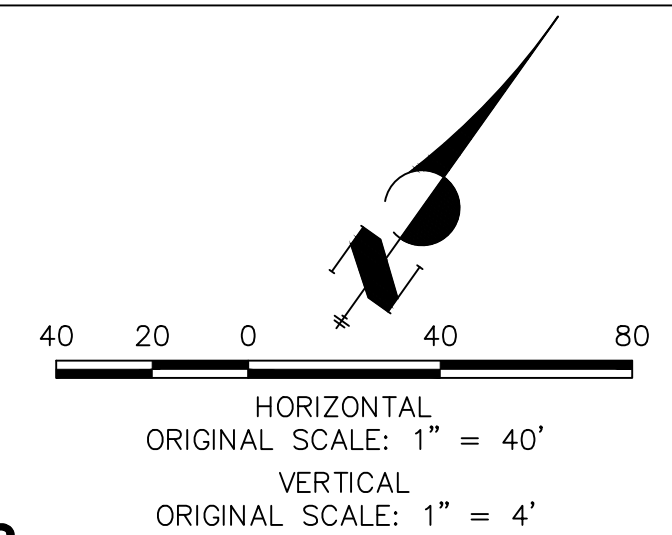






Profile view of the proposed concrete trickle channel. The vertical axis shows elevation from 7060 to 7080 feet. The horizontal axis shows stationing from 0+00 to 1+46. The profile includes a proposed concrete trickle channel (dashed line), existing ground (solid line), and proposed grade (dotted line). Key features include a match existing structure at station 0+07.43, a berm at station 1+09.17, and a berm at station 1+19.17. Slopes are indicated as 4:1, 3:1, 4:1, 3:1, and 5:1. Elevation points are provided for various stations along the profile.

Station	Elevation (ft)	Feature
0+07.43	7075.12	MATCH EXIST.
0+43.41	7066.79	GB
0+58.66	7066.34	TC
1+09.17	7073.02	BERM
1+19.17	7073.22	BERM
1+22.42	7066.81	GB
1+22.42	7066.33	TC
1+35.78	7069.92	GB
1+35.78	7069.92	EX. GRADE



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.



10.00'

2.00% TYP.

4:1 MAX


4:1 MAX

CRUSHED LIMESTONE  
SEE DETAIL SHEET 27  
FOR SPECIFICATION

**GRAVEL TRAIL TYPICAL SECTION**

N.T.S. (RUNS WITHIN POND)

PREPARED UNDER MY DIRECT SUPERVISION AND ON BEHALF OF JR  
ENGINEERING


  
 \_\_\_\_\_ 32314 \_\_\_\_\_ 11/11/21
   
 DATE
   
 FOR AND ON BEHALF OF JR ENGINEERING, LLC



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

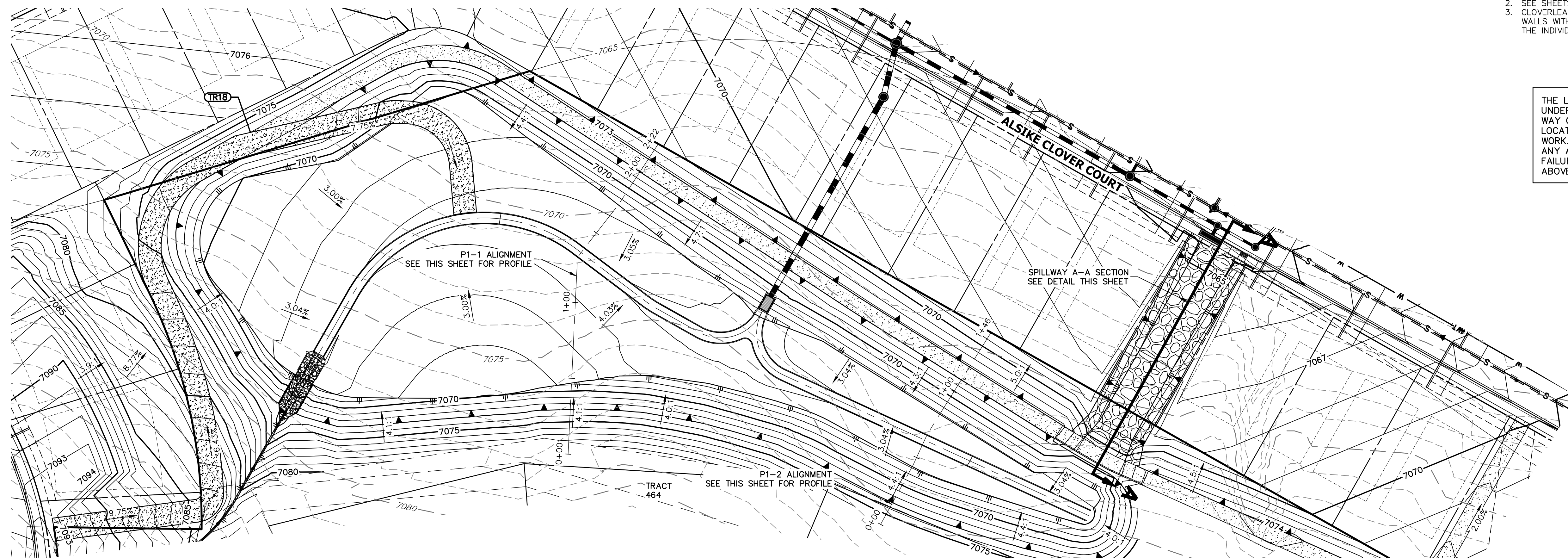
UNTIL SUCH TIME AS  
THESE DRAWINGS ARE  
APPROVED BY THE  
APPROPRIATE REVIEWING  
AGENCIES, JR ENGINEER  
APPROVES THEIR USE  
ONLY FOR THE PURPOSES  
DESIGNATED BY WRITTEN  
AUTHORIZATION.

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



ROADWAY / INLET VARIES

142.47'

±1.5%

INLET ON ALSIKE CLOVER COURT ROADWAY TO CAPTURE EMERGENCY FLOWS

POND 1 EMERGENCY SPILLWAY  
W/ CONCRETE CUTOFF WALL  
SECTION A-A

SCALE: 1"=10'

SPILLWAY CREST = 7070.75' (MIN, TYP.)

15.71'

10.00'

VARIES

±2.0%

±21.75'

PROPOSED 3" CONCRETE CUTOFF WALL

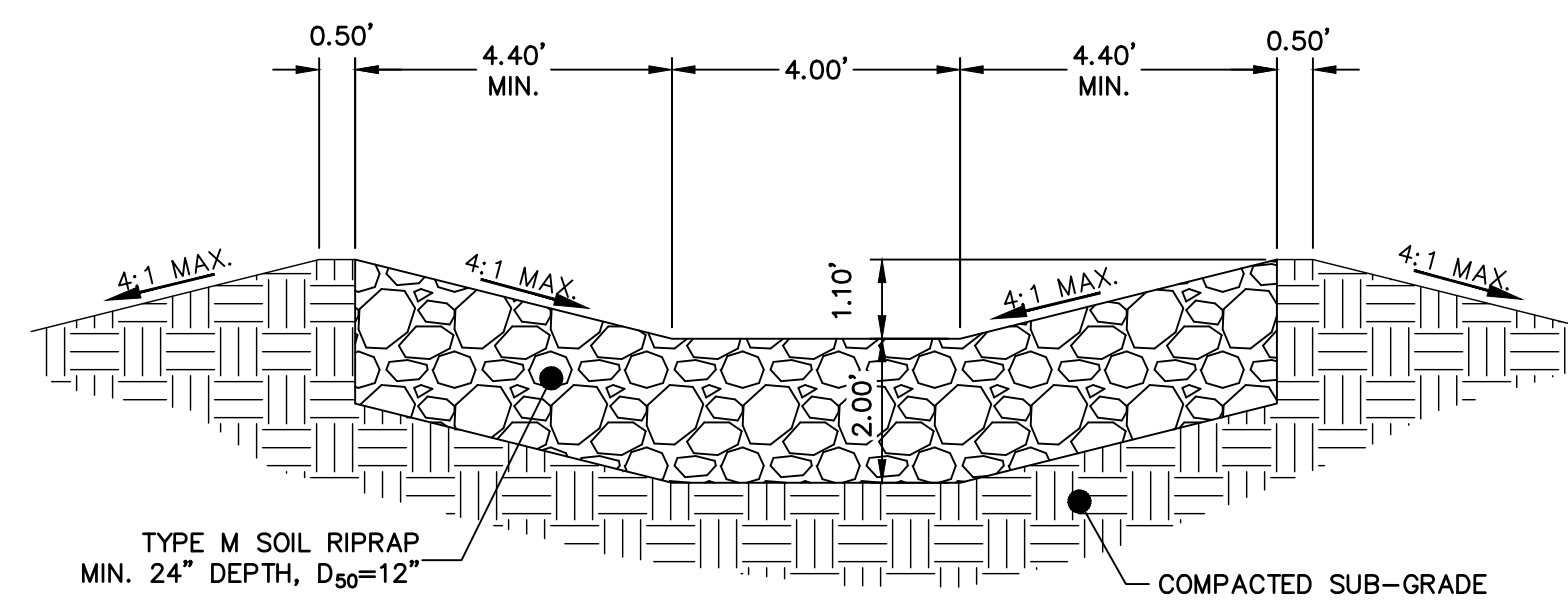
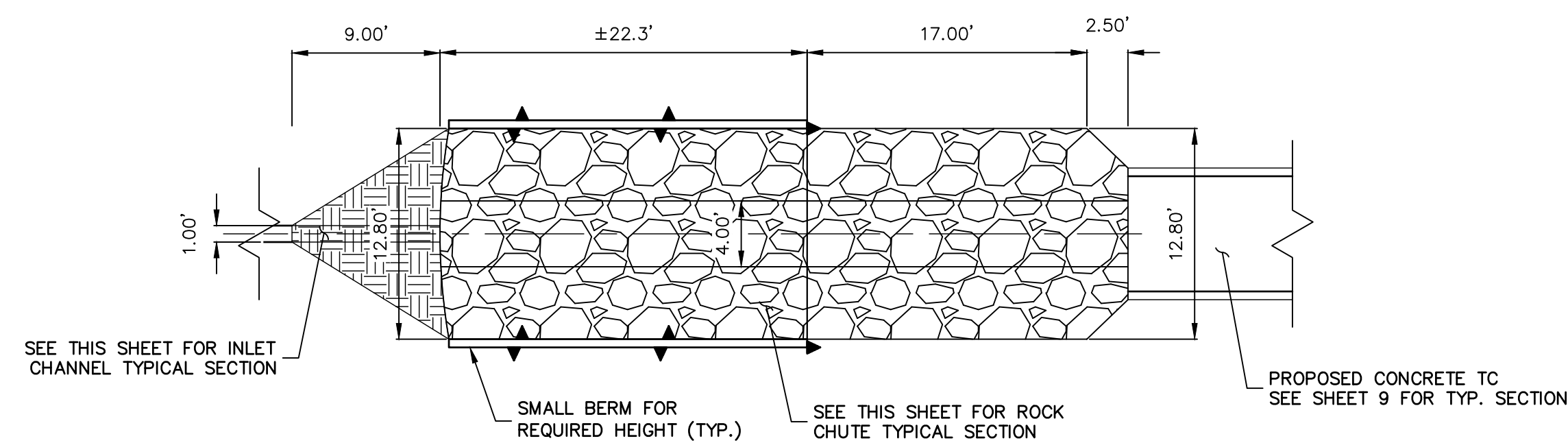
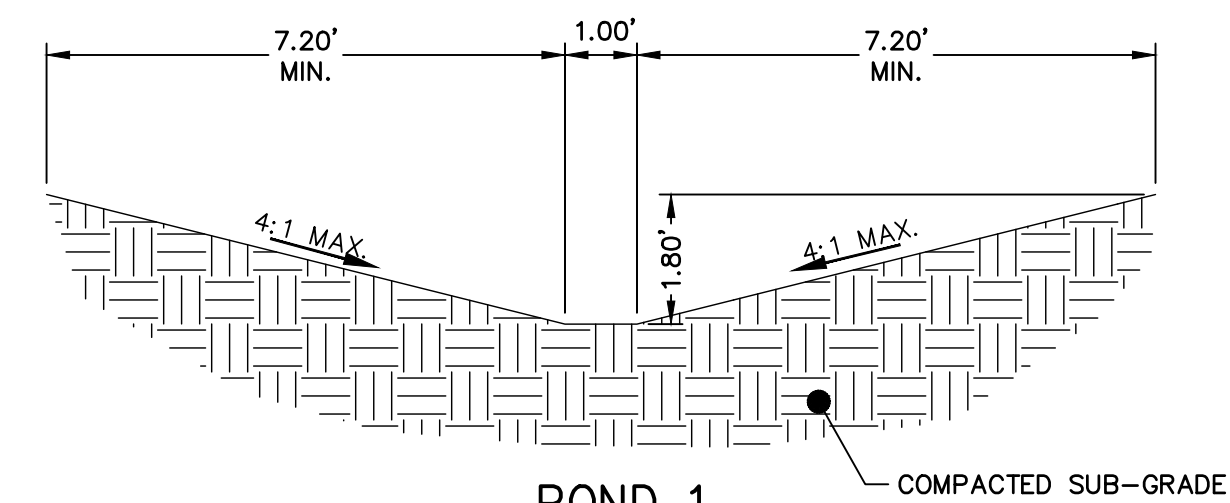
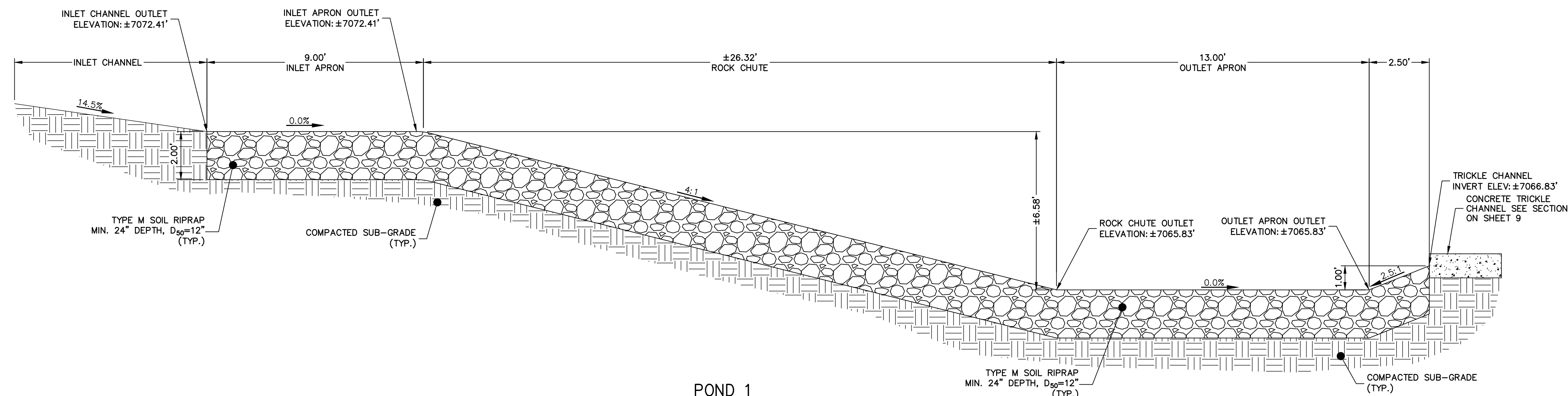
PROPOSED GRAVEL TRAIL SEE DETAIL THIS SHEET

3" TOPSOIL ON RIPRAP

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

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





### ENGINEER'S STATEMENT

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

Mit Braß

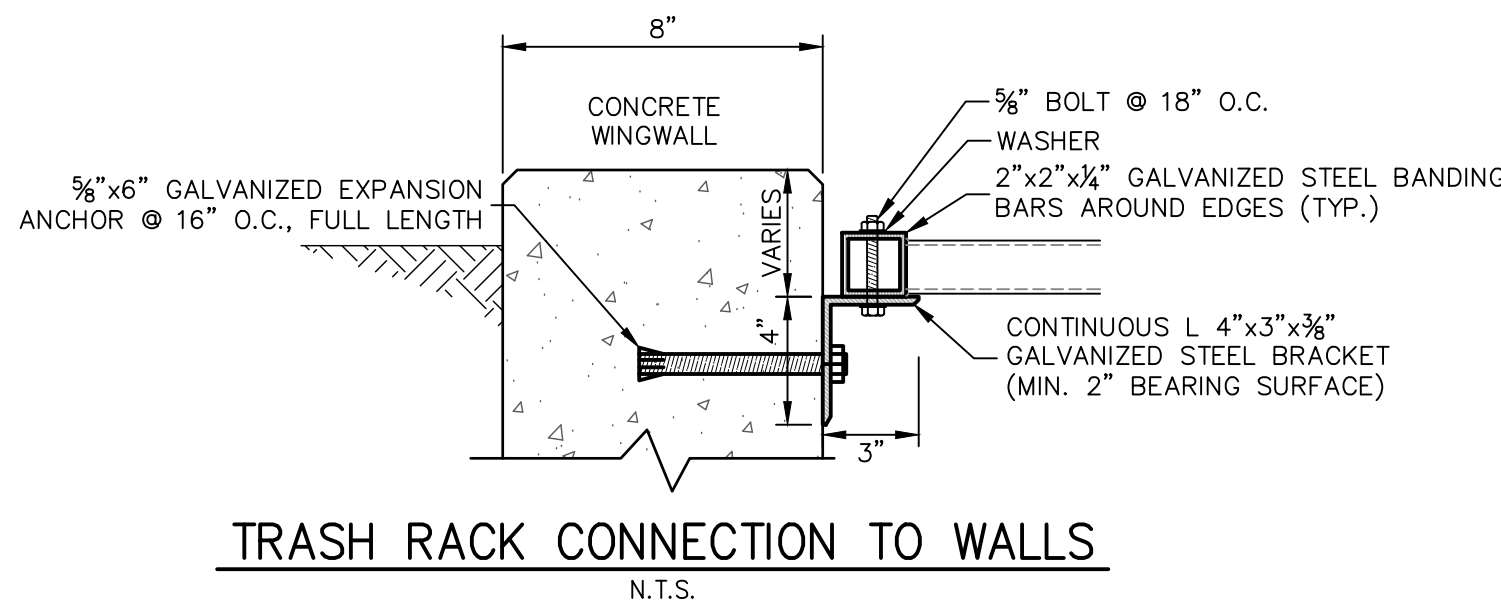
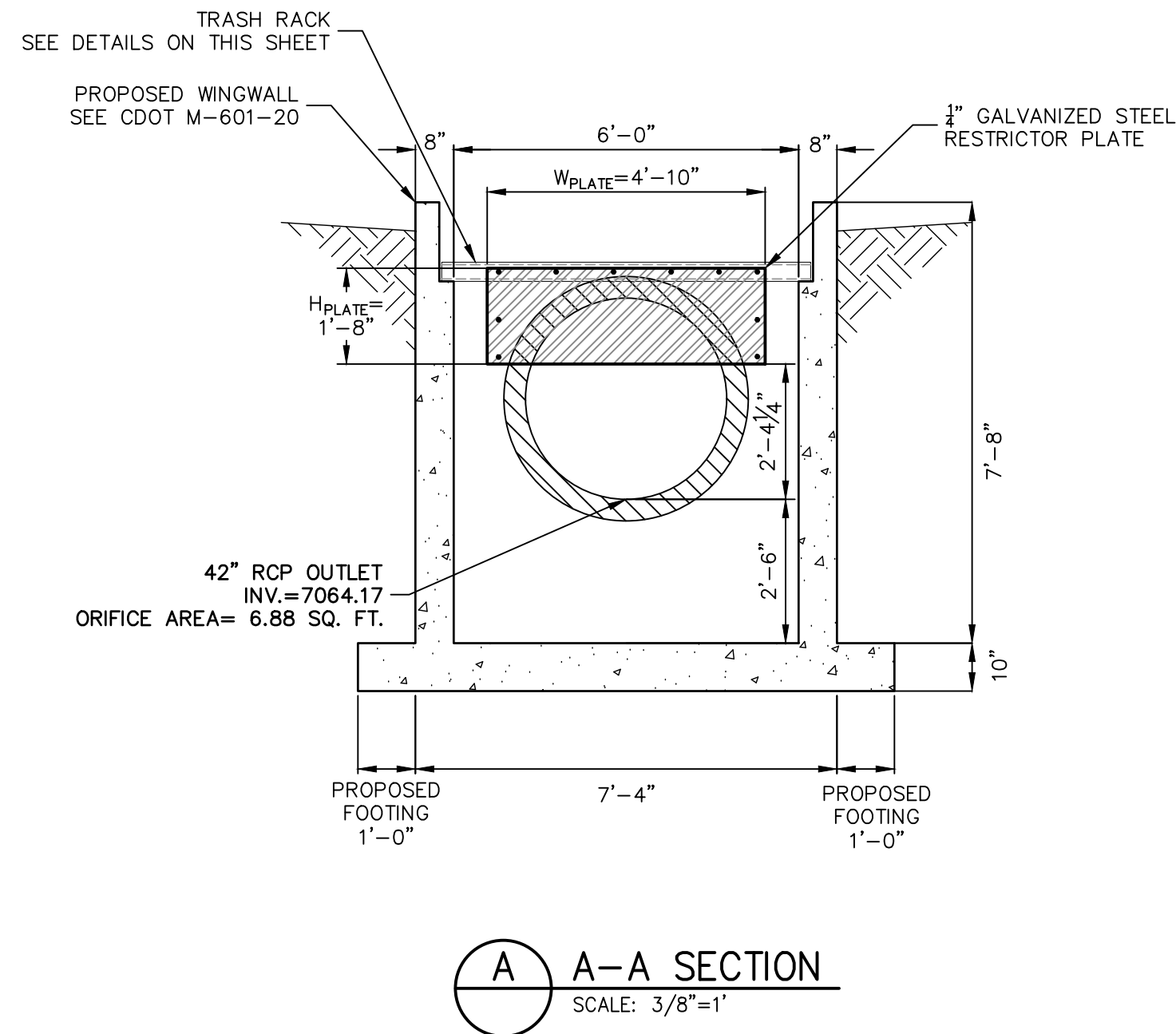
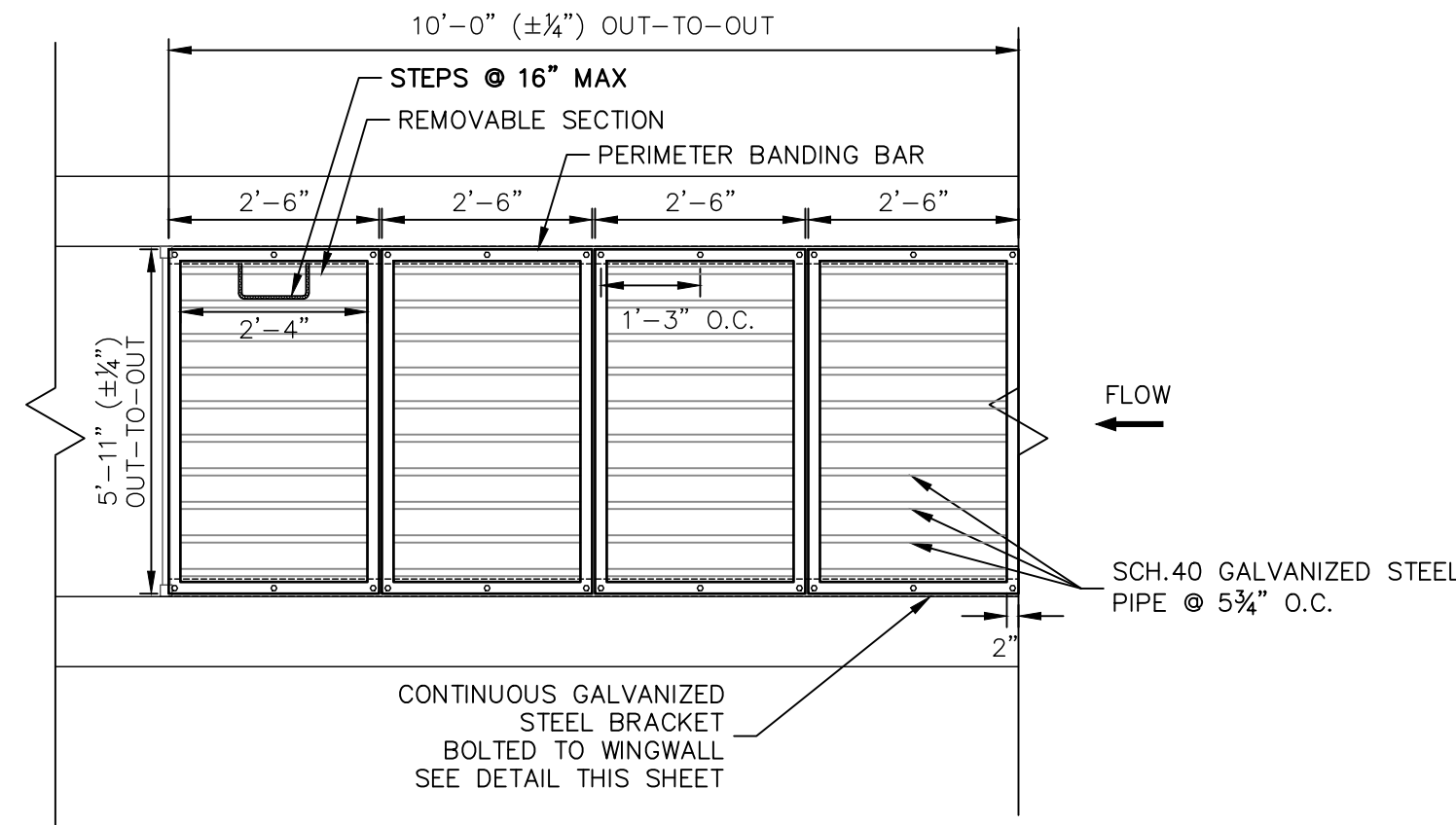
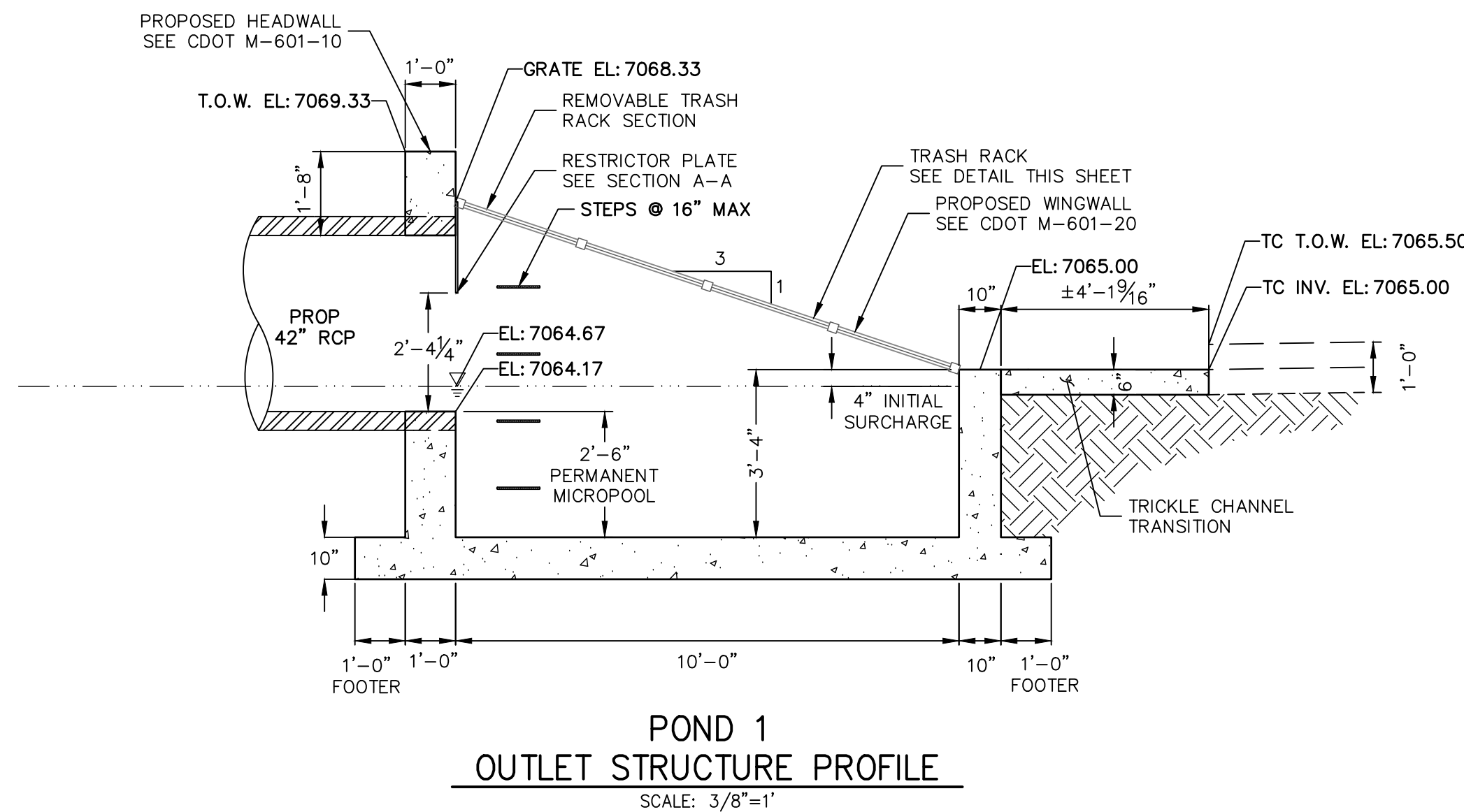
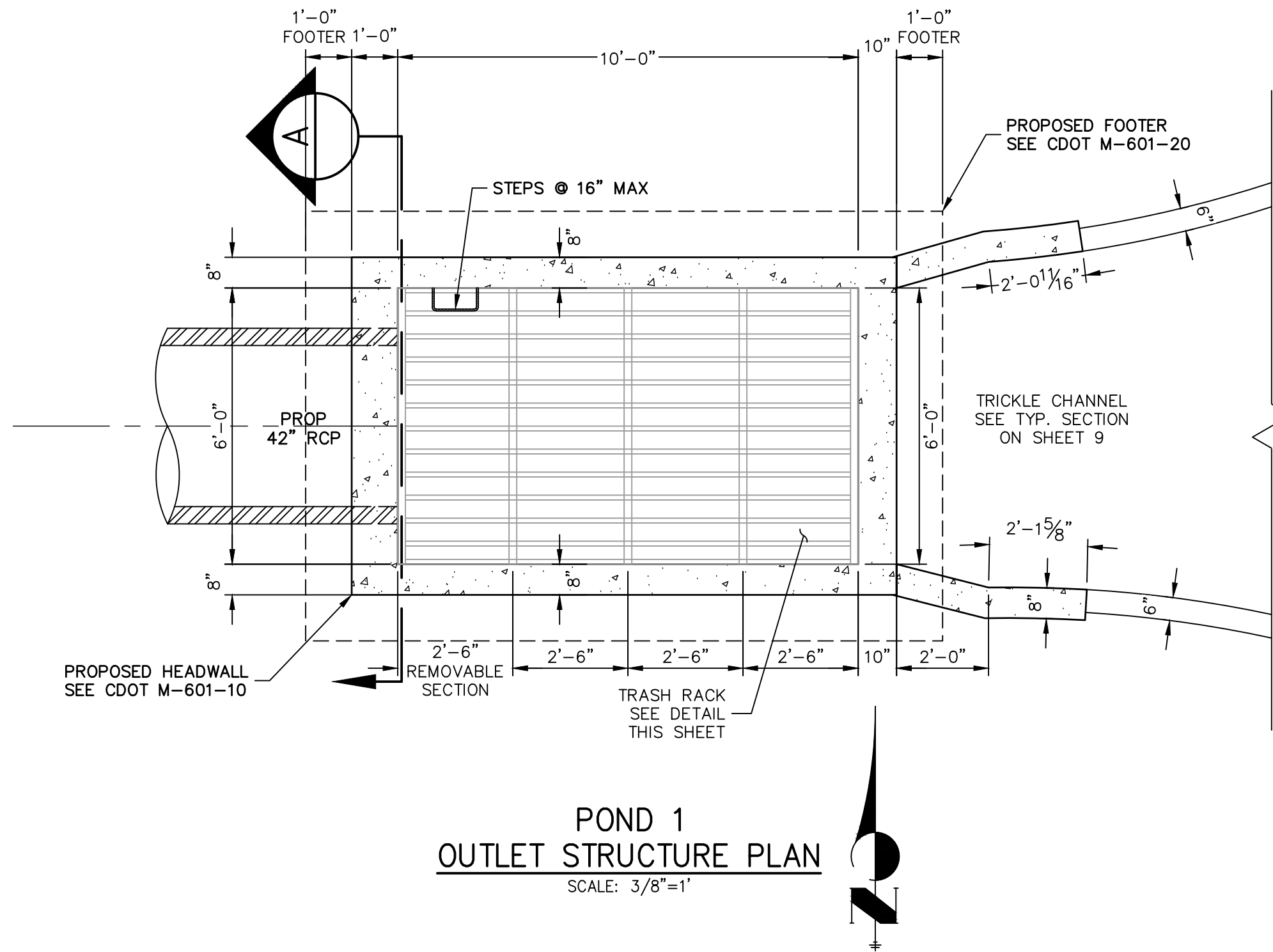
MIKE A. BRAMLETT, P.E.  
COLORADO P.E. 32314

FOR AND ON BEHALF OF JR ENGINEERING

MENT  
ERVISION AND ON BEHALF OF JR  
COLONIAL REGISTERED  
MIKE A. BRAMLETT  
32314  
11/11/2  
DATE  
PROFESSIONAL ENGINEER  
NEERING, LLC

JOB NO.	SHEET		CLOVERLEAF FILING 2		H-SCALE	VARIES	No.	REVISION	BY	DATE
	11	OF	28	POND PLANS AND DETAILS	V-SCALE	VARIES				
					DATE	11/11/21				
					DESIGNED BY	GAG				
					DRAWN BY	GAG				
				CHECKED BY						





### 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.

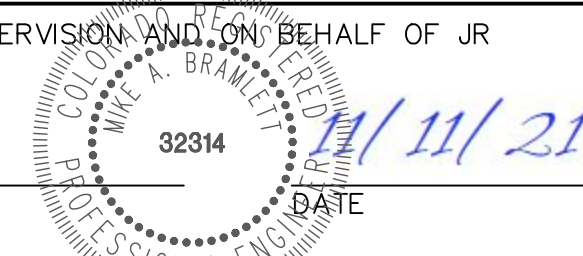


### ENGINEER'S STATEMENT

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

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  
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

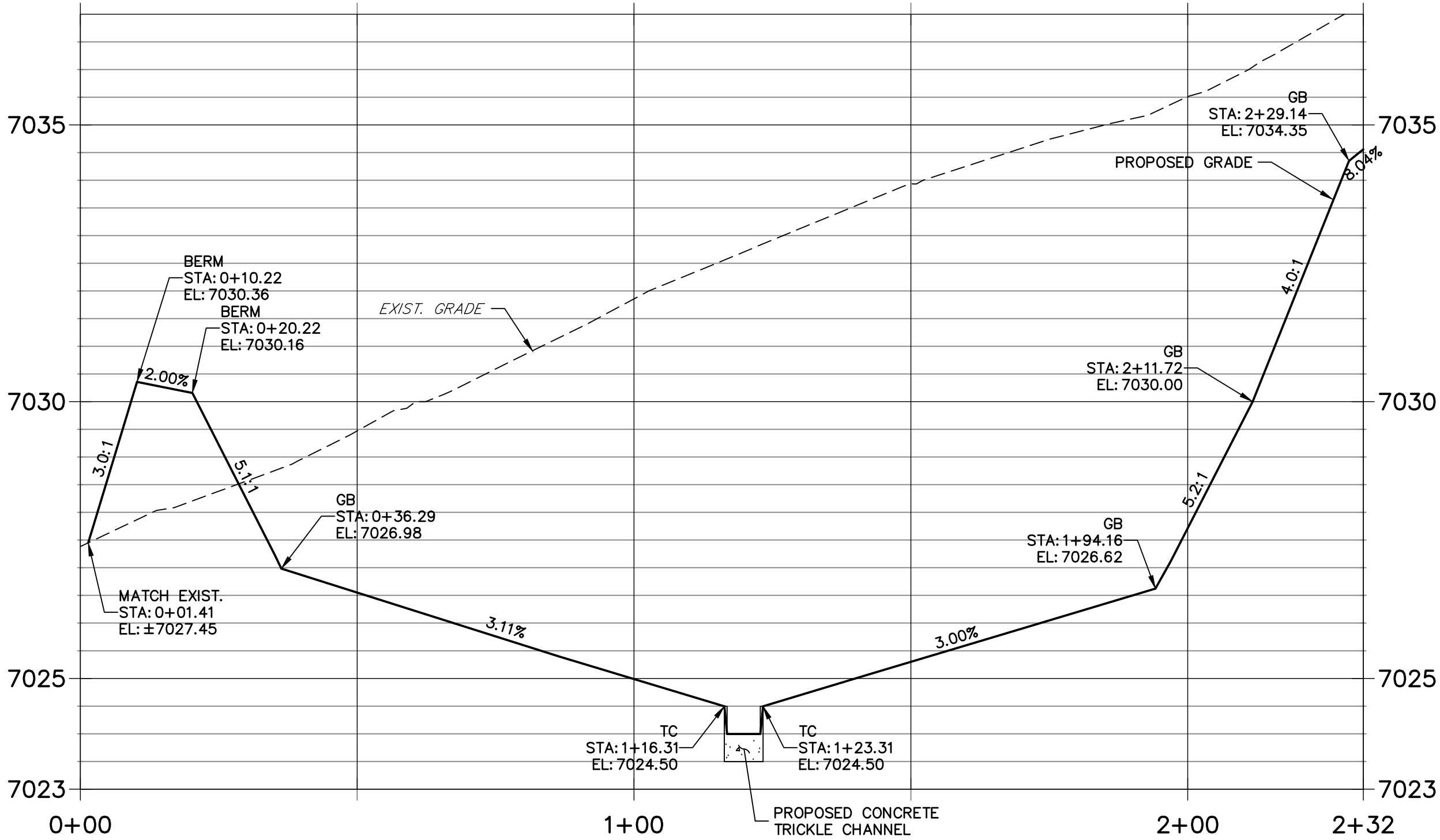
UNTIL SUCH TIME AS  
THESE DRAWINGS ARE  
APPROVED BY THE  
APPROPRIATE REVIEWING  
AGENCIES, OR ENGINEERING  
APPROVES THEIR USE  
DESIGNATED BY WRITTEN  
AUTHORIZATION.



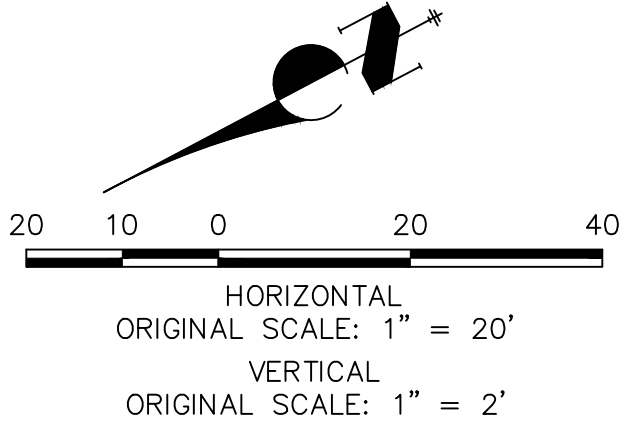
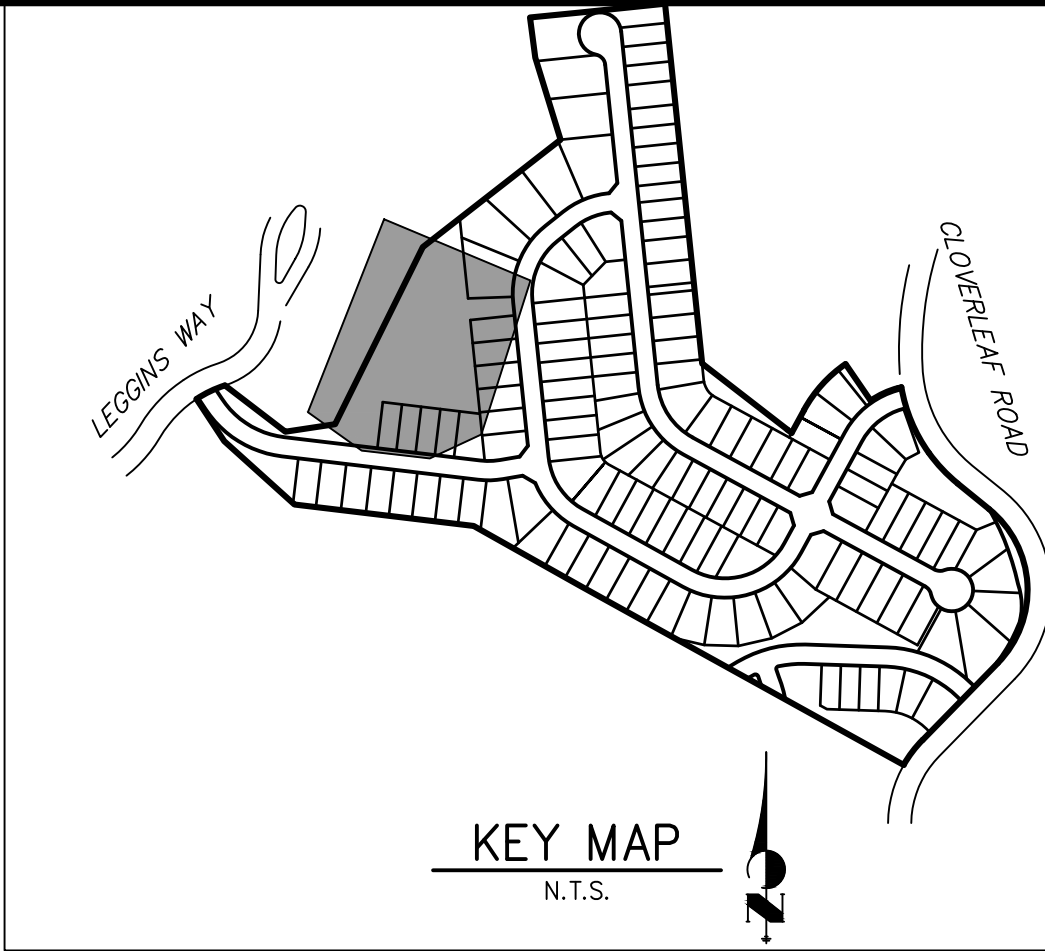
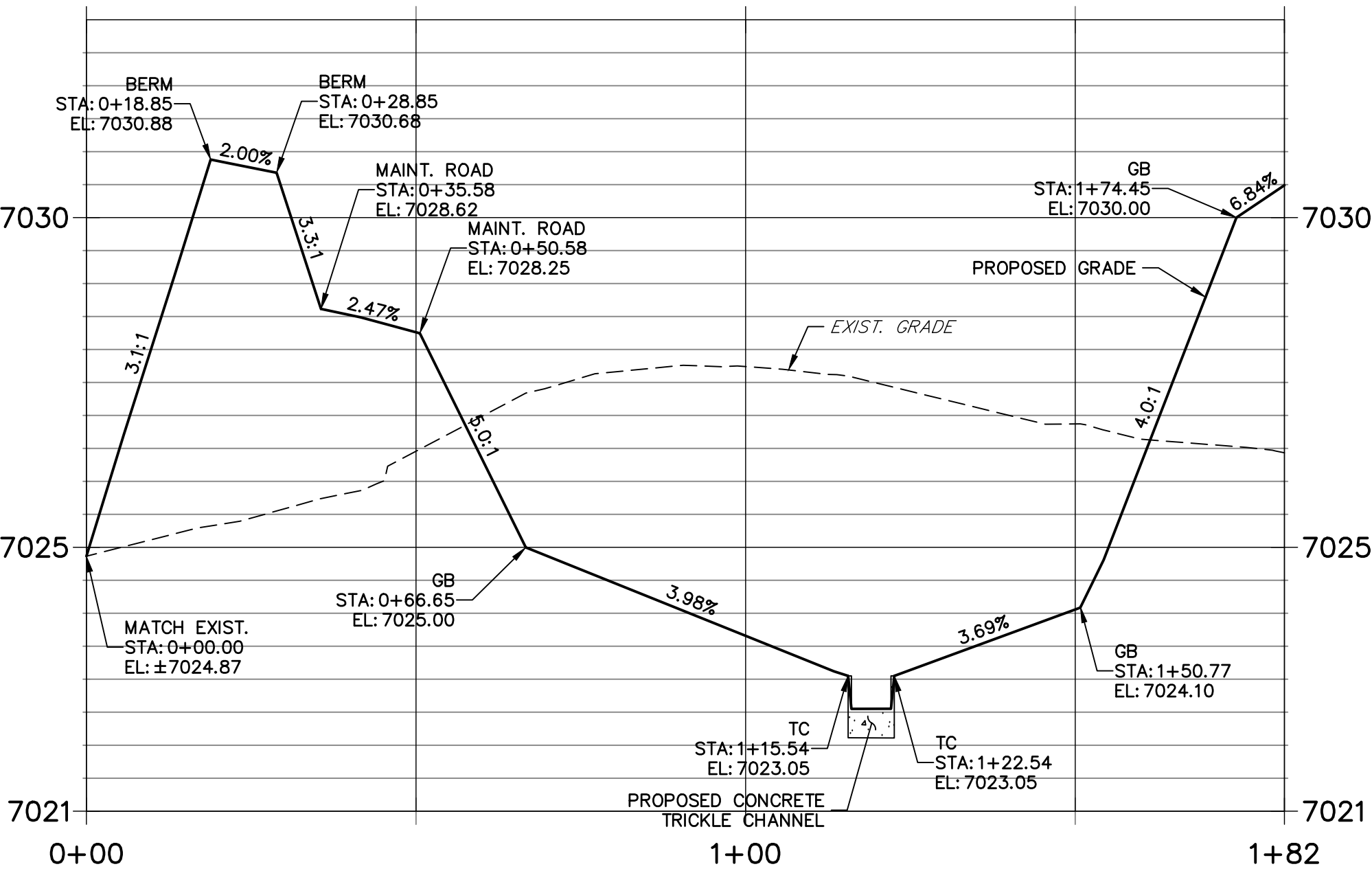




POND P2-1 PROFILE  
STA 0+00.00 TO 2+31.71

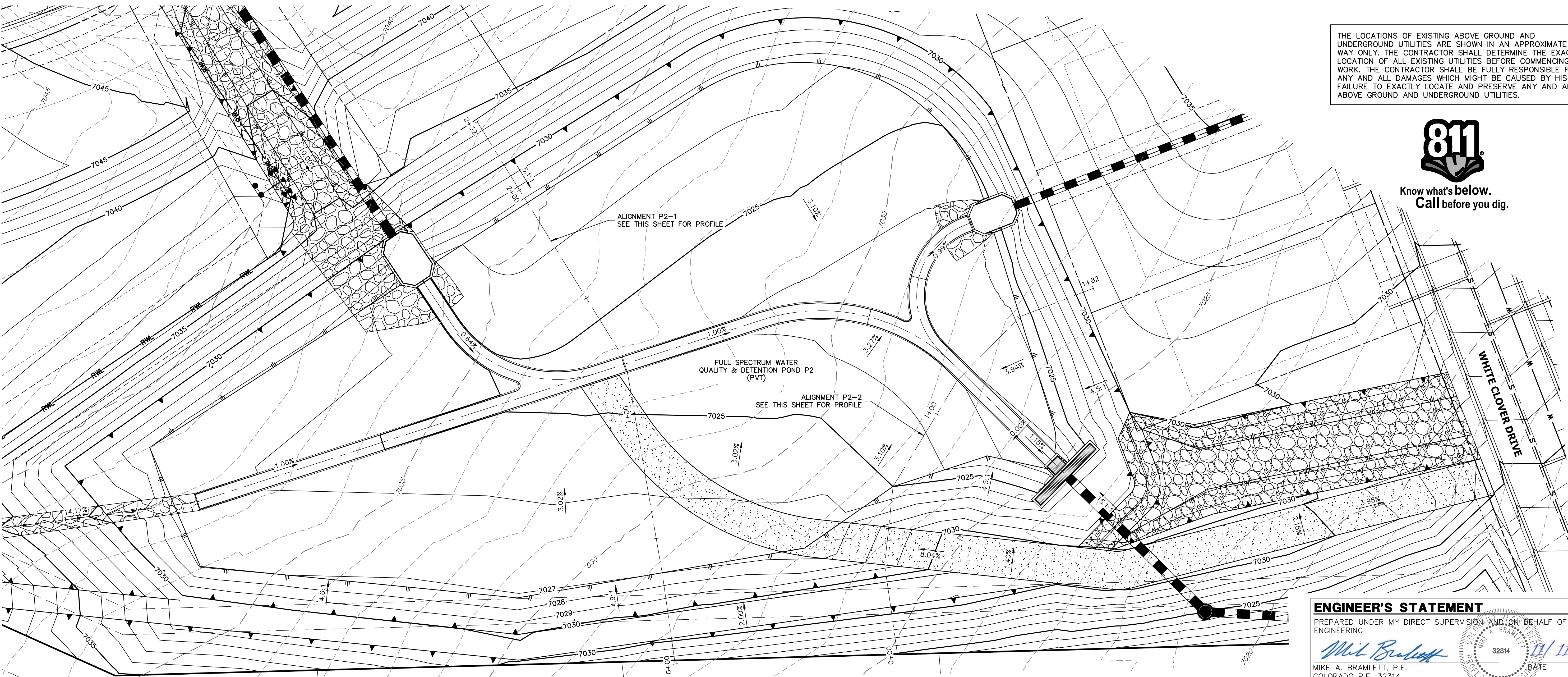


POND P2-2 PROFILE  
STA 0+00.00 TO 1+81.73



- NOTES**
- 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.

THE LOCATIONS OF EXISTING ABOVE GROUND AND UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE CAUSED BY HIS FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL ABOVE GROUND AND UNDERGROUND UTILITIES.



**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

CLOVERLEAF FILING 2

POND PLANS AND DETAILS

SHEET 14 OF 28

JOB NO. 25158.01

**J.R. ENGINEERING**  
A Western Company  
1864 WOODMOOR DR., STE 100  
COLORADO SPRINGS, CO 80920  
ATTN: JOE DESJARDIN  
(719) 476-0800  
JDESJARDIN@PROTERRACO.COM

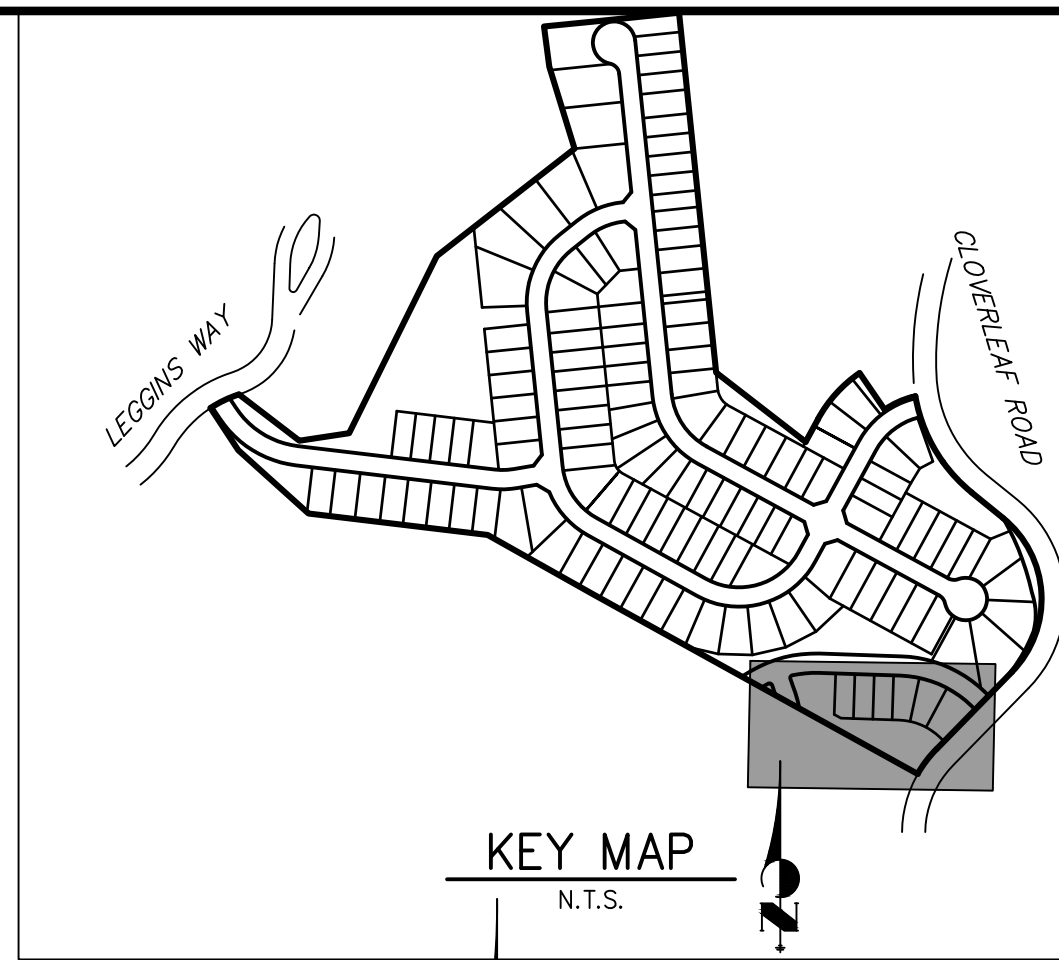
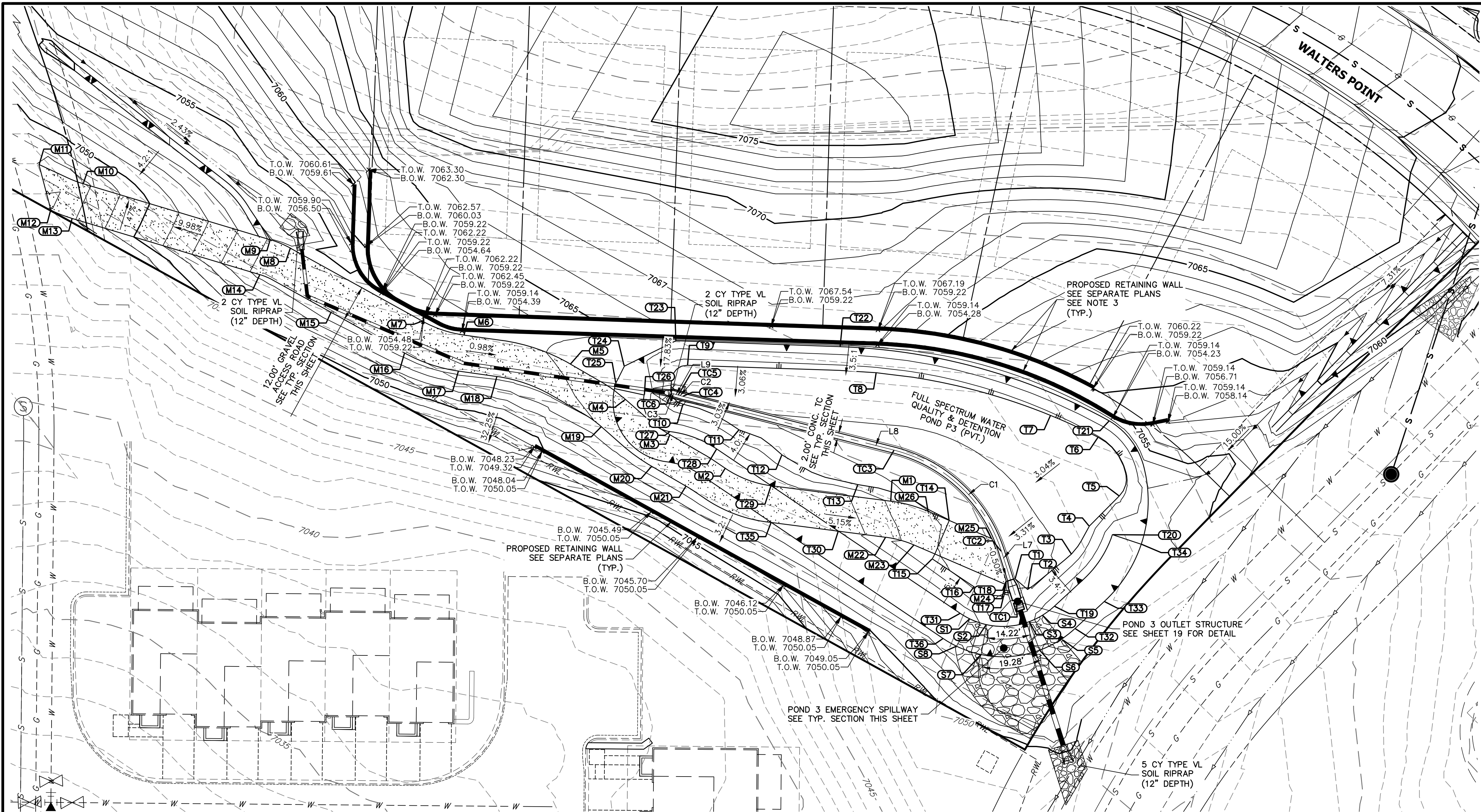






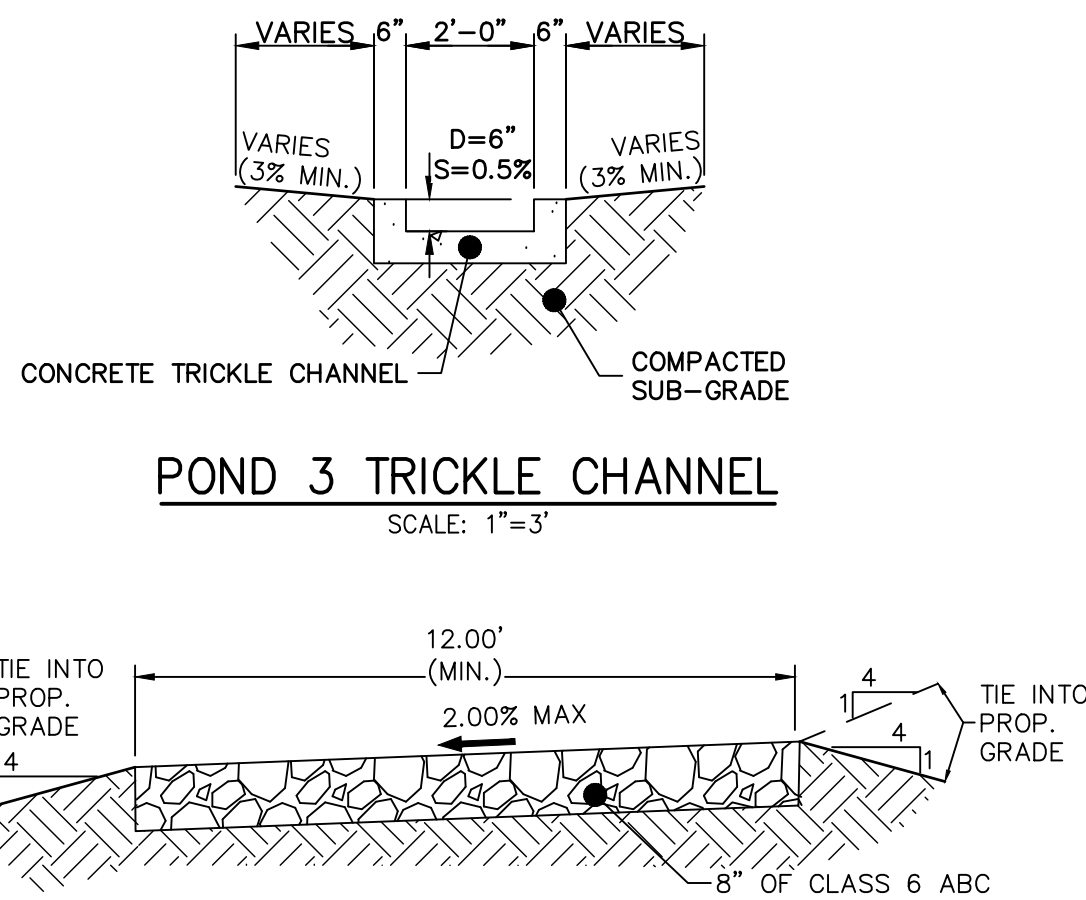






### NOTES

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.



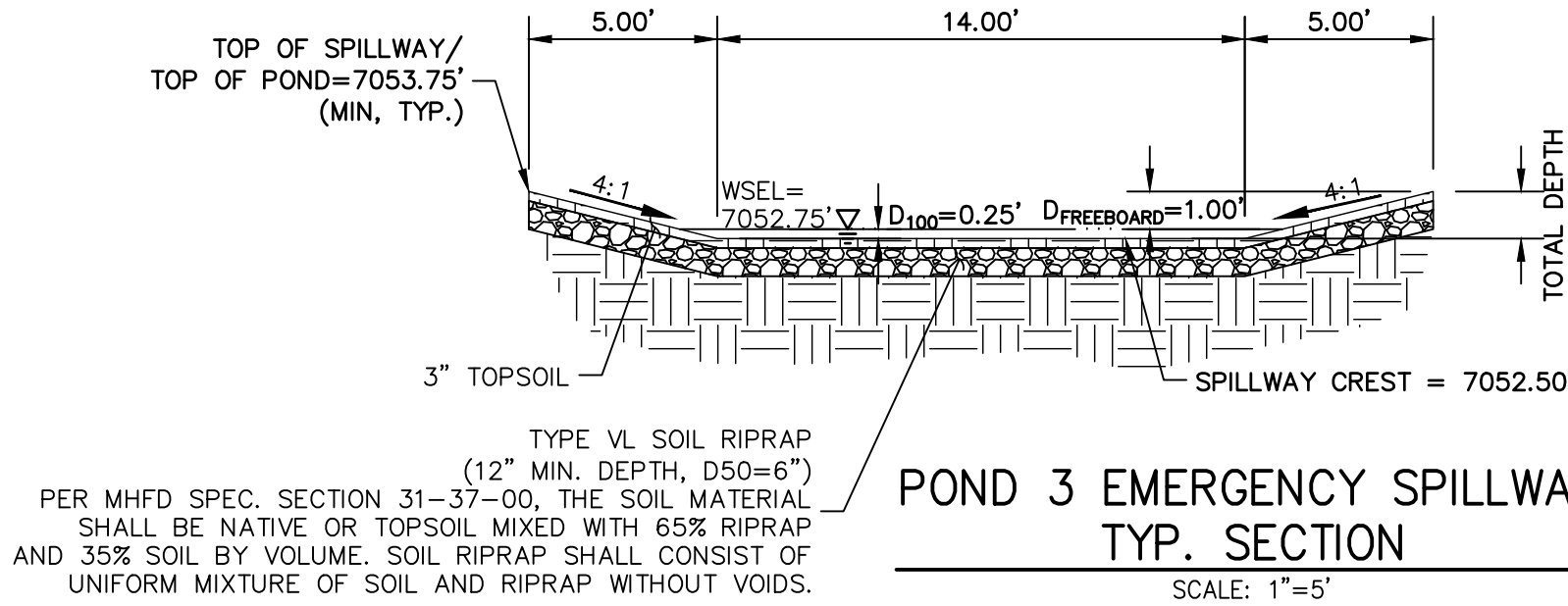
POINT TABULATION		
ID NO.	DESCRIPTION	NORTHING/EASTING ELEVATION
M1	MAINT. ROAD/TOP	N: 454988.78 E: 187037.94 7051.84
M2	MAINT. ROAD	N: 454999.56 E: 186983.63 7053.75
M3	MAINT. ROAD	N: 455010.61 E: 186965.42 7053.75
M4	MAINT. ROAD	N: 455022.27 E: 186950.74 7053.75
M5	MAINT. ROAD	N: 455033.95 E: 186932.54 7053.91
M6	MAINT. ROAD	N: 455043.49 E: 186897.47 7054.27
M7	MAINT. ROAD	N: 455048.04 E: 186883.88 7054.41
M8	TOE/MAINT. ROAD	N: 455072.07 E: 186840.47 7054.25
M9	TOE/MAINT. ROAD	N: 455074.85 E: 186833.87 7054.11
M10	TOE/MAINT. ROAD	N: 455093.34 E: 186772.12 7047.73
M11	TOE/MAINT. ROAD	N: 455099.65 E: 186757.64 7047.94
M12	TOE/MAINT. ROAD	N: 455084.57 E: 186761.60 7047.39
M13	TOE/MAINT. ROAD	N: 455081.85 E: 186768.67 7047.89
M14	TOE/MAINT. ROAD	N: 455063.35 E: 186830.42 7054.35
M15	TOE/MAINT. ROAD	N: 455050.93 E: 186853.88 7054.92
M16	TOE/MAINT. ROAD	N: 455037.54 E: 186878.07 7054.53
M17	TOE/MAINT. ROAD	N: 455031.61 E: 186895.79 7054.47
M18	TOE/MAINT. ROAD	N: 455029.81 E: 186908.46 7054.34
M19	TOE/MAINT. ROAD	N: 455013.27 E: 186942.80 7053.95
M20	TOE/MAINT. ROAD	N: 455000.23 E: 186959.40 7053.87

POINT TABULATION		
ID NO.	DESCRIPTION	NORTHING/EASTING ELEVATION
M21	TOE/MAINT. ROAD	N: 455016.99 E: 186906.68 7053.87
M22	TOE/MAINT. ROAD	N: 455031.07 E: 187036.40 7052.44
M23	TOE/MAINT. ROAD	N: 454974.34 E: 187045.70 7051.63
M24	TOE/MAINT. ROAD	N: 454961.31 E: 187075.90 7050.51
M25	TOE/MAINT. ROAD	N: 454976.41 E: 187071.33 7050.53
M26	TOE/MAINT. ROAD	N: 454985.37 E: 187050.43 7051.03
S1	SPILLWAY TOP	N: 454950.02 E: 187064.05 7053.75
S2	SPILLWAY TOP	N: 454948.12 E: 187069.55 7052.50
S3	SPILLWAY TOP	N: 454949.07 E: 187083.55 7052.50
S4	SPILLWAY TOP	N: 454951.18 E: 187087.92 7053.75
S5	SPILLWAY TOP	N: 454943.10 E: 187094.58 7053.75
S6	SPILLWAY TOP	N: 454939.69 E: 187087.00 7052.50
S7	SPILLWAY TOP	N: 454938.26 E: 187067.79 7052.50
S8	SPILLWAY TOP	N: 454941.01 E: 187059.70 7053.75
T1	TOE/OUTLET	N: 454963.26 E: 187078.92 7050.50
T2	TOE	N: 454959.69 E: 187083.09 7051.21
T3	TOE	N: 454971.39 E: 187097.55 7051.16
T4	TOE	N: 454980.59 E: 187103.42 7051.38
T5	TOE	N: 454990.53 E: 187113.28 7051.78
T6	TOE	N: 455009.80 E: 187106.34 7051.92

POINT TABULATION		
ID NO.	DESCRIPTION	NORTHING/EASTING ELEVATION
T7	TOE	N: 455016.99 E: 187090.68 7051.72
T8	TOE	N: 455031.07 E: 187033.32 7051.50
T9	TOE/MAINT. ROAD	N: 455033.53 E: 186971.07 7051.41
T10	TOE/MAINT. ROAD	N: 455020.69 E: 186969.70 7051.17
T11	TOE	N: 455012.24 E: 186988.13 7051.16
T12	TOE	N: 455004.00 E: 187002.27 7051.20
T13	TOE	N: 454994.23 E: 187027.29 7051.15
T14	TOE	N: 454982.43 E: 187057.29 7050.82
T15	TOE	N: 454969.77 E: 187051.70 7051.07
T16	TOE	N: 454960.52 E: 187065.54 7050.83
T17	TOE	N: 454957.46 E: 187075.29 7051.26
T18	TOE/OUTLET	N: 454962.35 E: 187076.06 7050.50
T19	TOP	N: 454954.16 E: 187091.86 7053.75
T20	TOP	N: 454977.75 E: 187110.99 7053.75
T21	TOP	N: 455015.21 E: 187109.99 7053.75
T22	TOP	N: 455039.65 E: 187021.29 7053.75
T23	TOP	N: 455041.60 E: 186967.35 7053.75
T24	TOP	N: 455027.72 E: 186950.35 7053.75
T25	TOP	N: 455023.74 E: 186947.58 7053.75
T26	TOP	N: 455023.74 E: 186956.85 7053.75

POINT TABULATION		
ID NO.	DESCRIPTION	NORTHING/EASTING ELEVATION
T27	TOP	N: 455011.69 E: 186965.42 7053.75
T28	TOP	N: 455005.95 E: 186980.79 7053.75
T29	TOP	N: 454993.86 E: 186998.68 7053.75
T30	TOP	N: 454978.89 E: 187020.83 7053.75
T31	TOP	N: 454951.82 E: 187060.91 7053.75
T32	TOP	N: 454946.81 E: 187098.65 7053.75
T33	TOP	N: 454955.72 E: 187108.30 7053.75
T34	TOP	N: 454974.60 E: 187120.48 7053.75
T35	TOP	N: 454981.75 E: 186998.74 7053.75
T36	TOP	N: 454943.53 E: 187055.32 7053.75
TC1	TRICKLE CHANNEL	N: 454956.40 E: 187079.53 7052.04
TC2	TRICKLE CHANNEL	N: 454972.28 E: 187074.48 7050.05
TC3	TRICKLE CHANNEL	N: 455005.57 E: 187039.18 7050.30
TC4	TRICKLE CHANNEL	N: 455023.33 E: 186969.50 7050.66
TC5	TRICKLE CHANNEL	N: 455023.73 E: 186968.01 7050.67
TC6	TRICKLE CHANNEL	N: 455024.26 E: 186965.82 7050.68

LINE TABLE			CURVE TABLE			
LINE	BEARING	DISTANCE	CURVE	DELTA	RADIUS	LENGTH
L7	S17°39'02"E	16.66'	C1	58°03'03"	50.00'	50.66'
L8	S75°42'05"E	71.91'	C2	1°46'13"	50.00'	1.54'
L9	S73°55'52"E	0.88'	C3	7°47'49"	10.12'	1.38'



THE LOCATIONS OF EXISTING ABOVE GROUND AND UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MAY BE CAUSED BY HIS FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL ABOVE GROUND AND UNDERGROUND UTILITIES.

### 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

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, 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	REVISION	No.	1"	20'	H-SCALE	N/A	V-SCALE	11/11/21	DATE	DESIGNED BY	GVT	DRAWN BY	GVT	CHECKED BY

CLOVERLEAF FILING 2

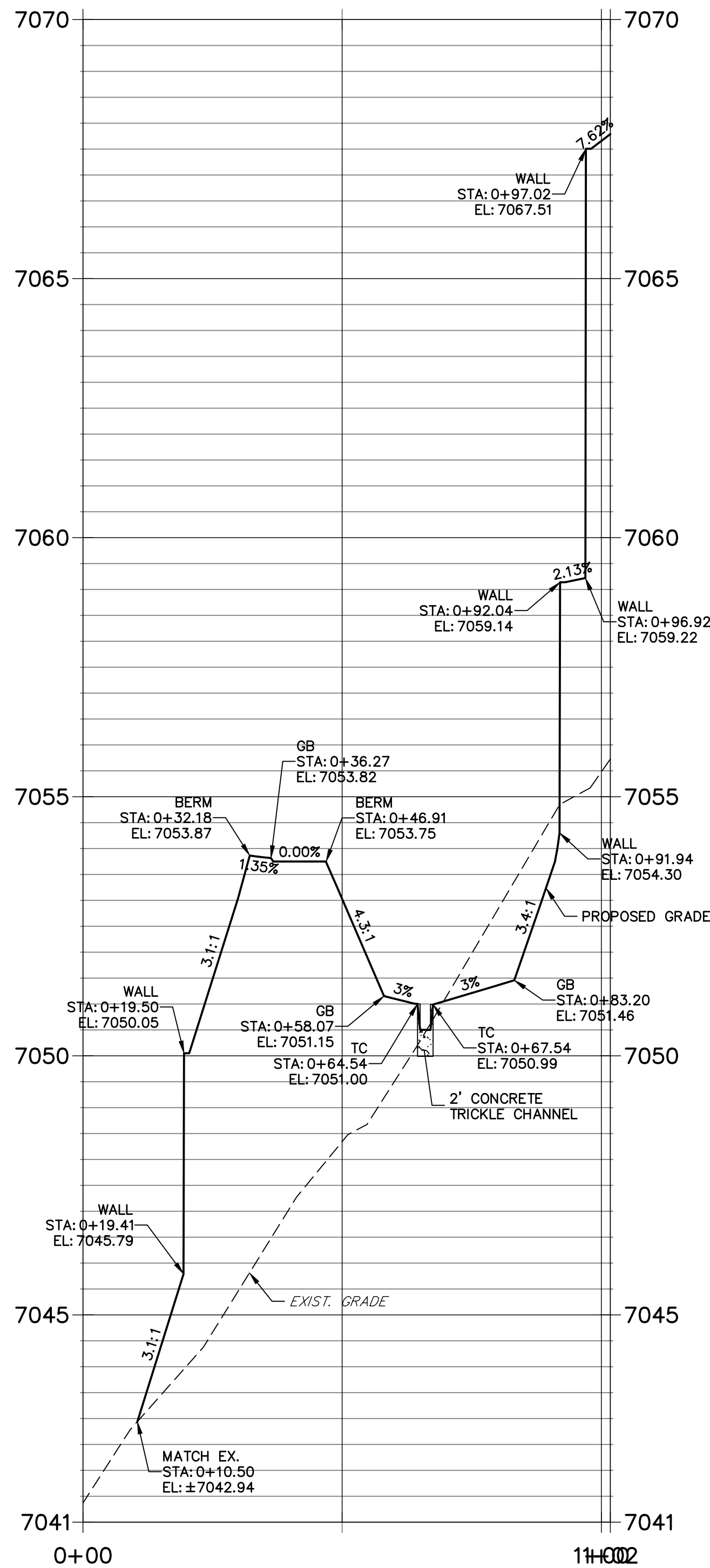
POND PLANS AND DETAILS

SHEET 17 OF 28

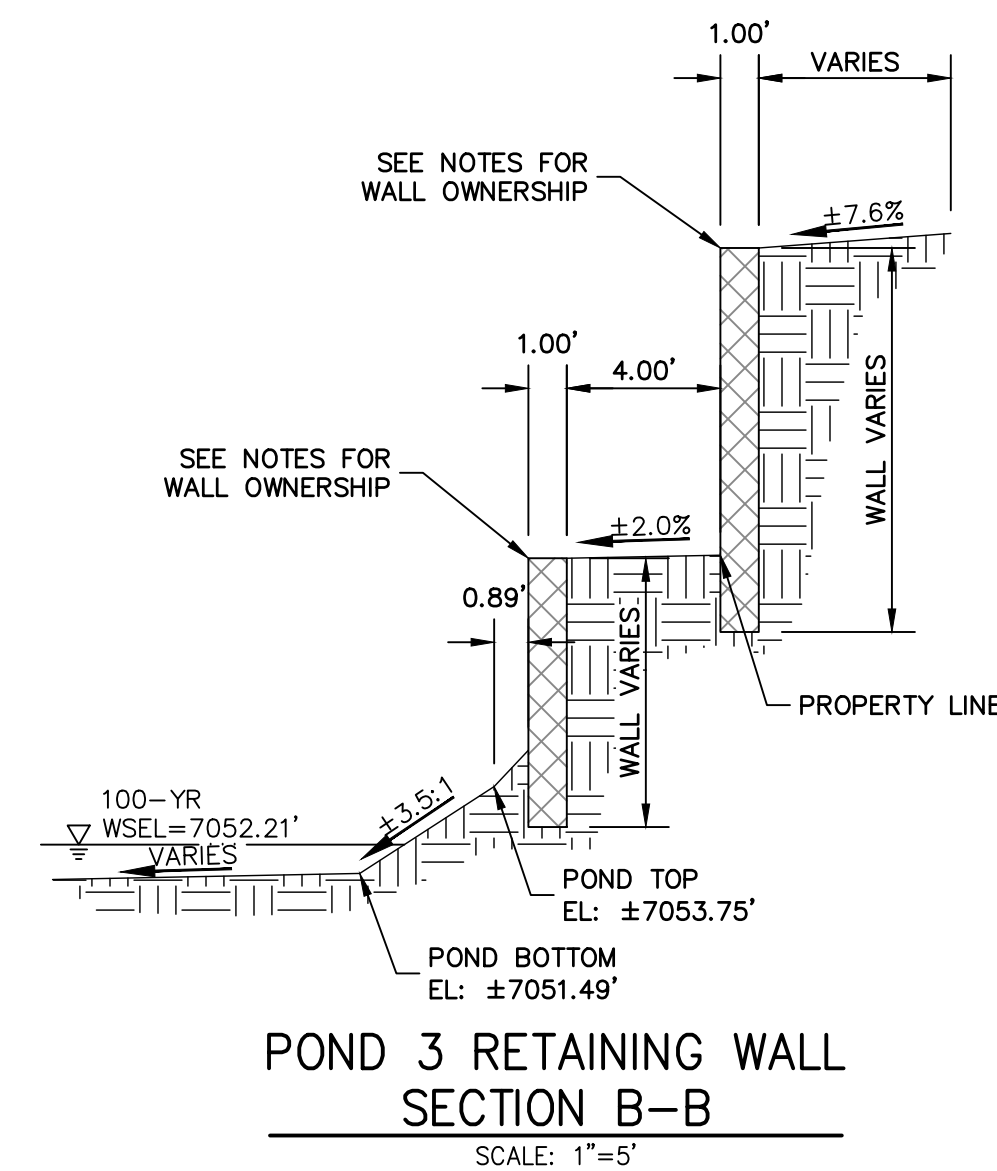
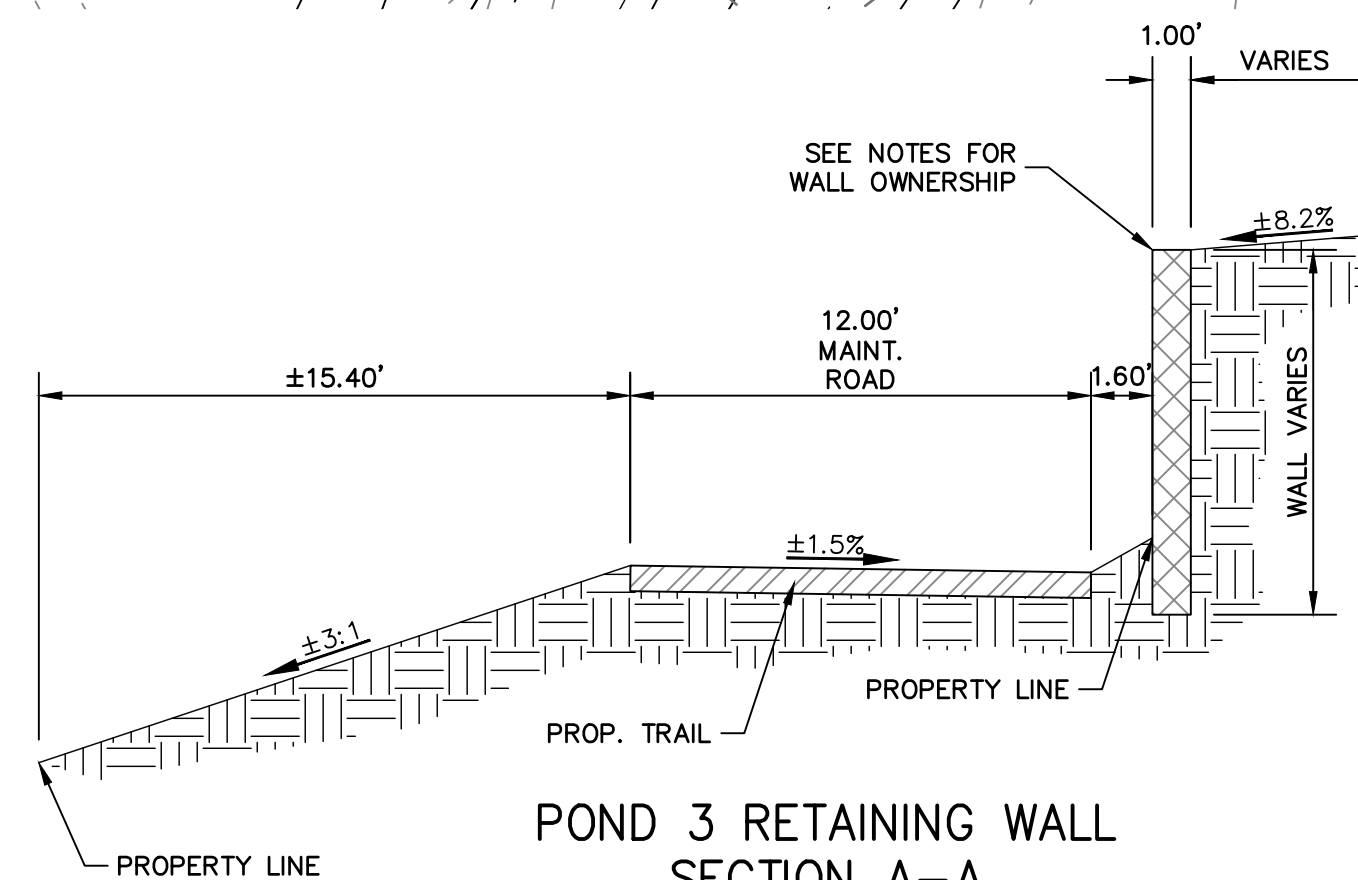
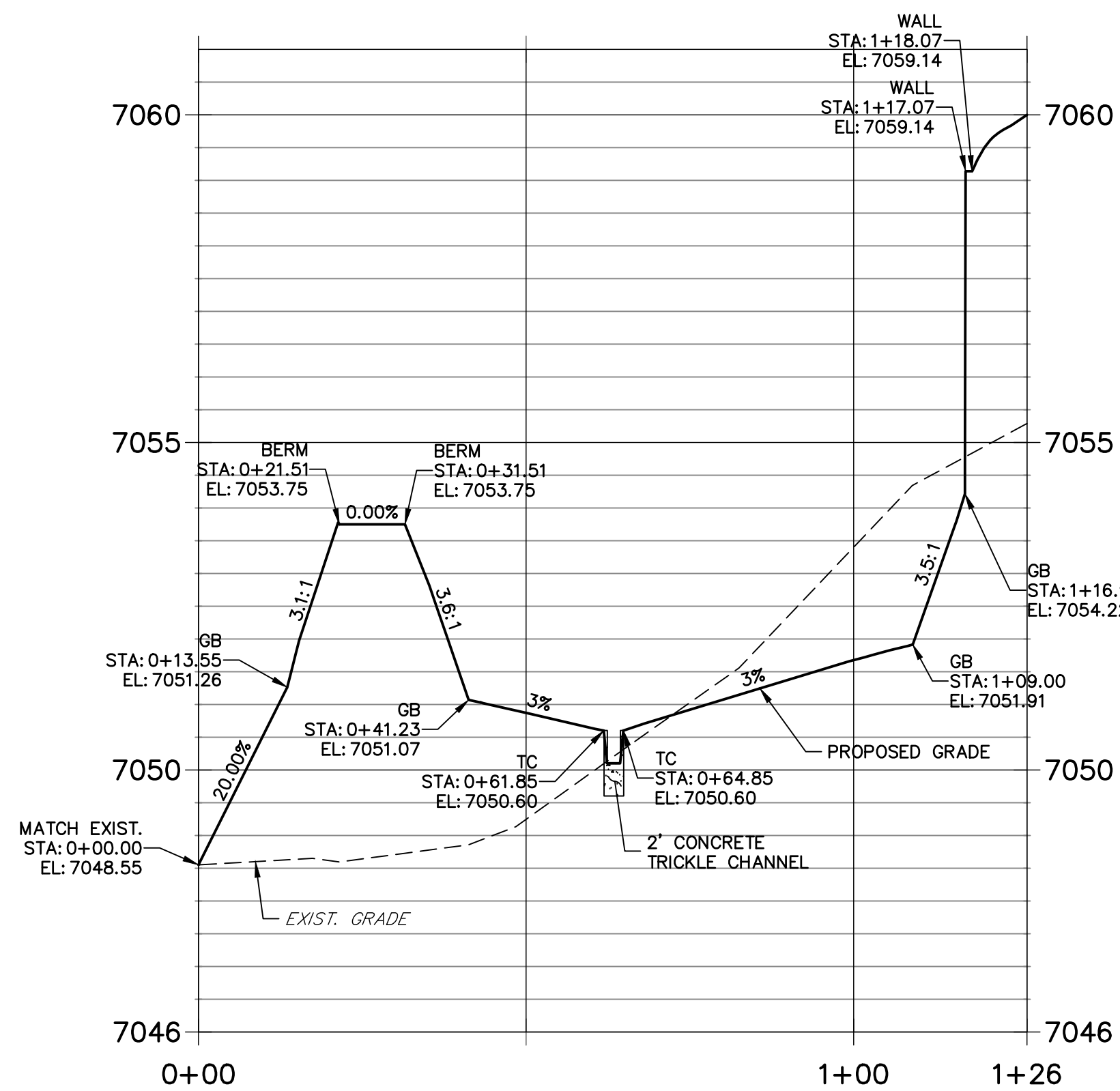
JOB NO. 25158.01



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.

THE LOCATIONS OF EXISTING ABOVE GROUND AND UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE CAUSED BY HIS FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL ABOVE GROUND AND UNDERGROUND UTILITIES.



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

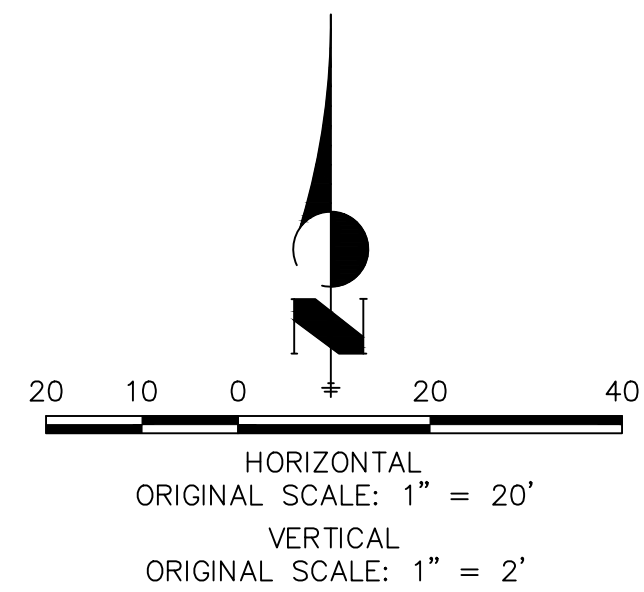
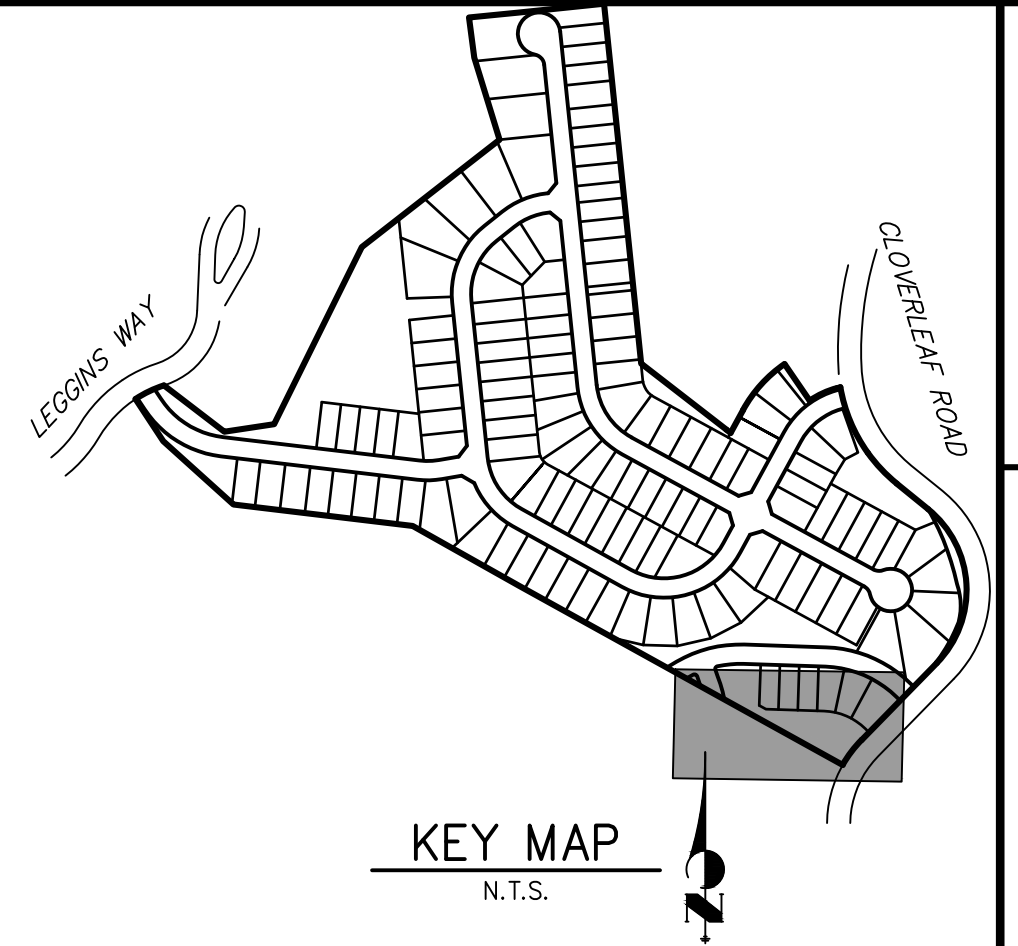
J.R. ENGINEERING  
A Western Company

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

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

PREPARED FOR

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









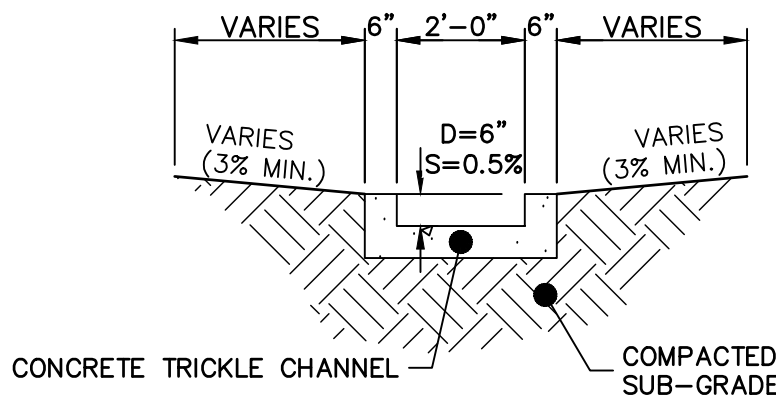
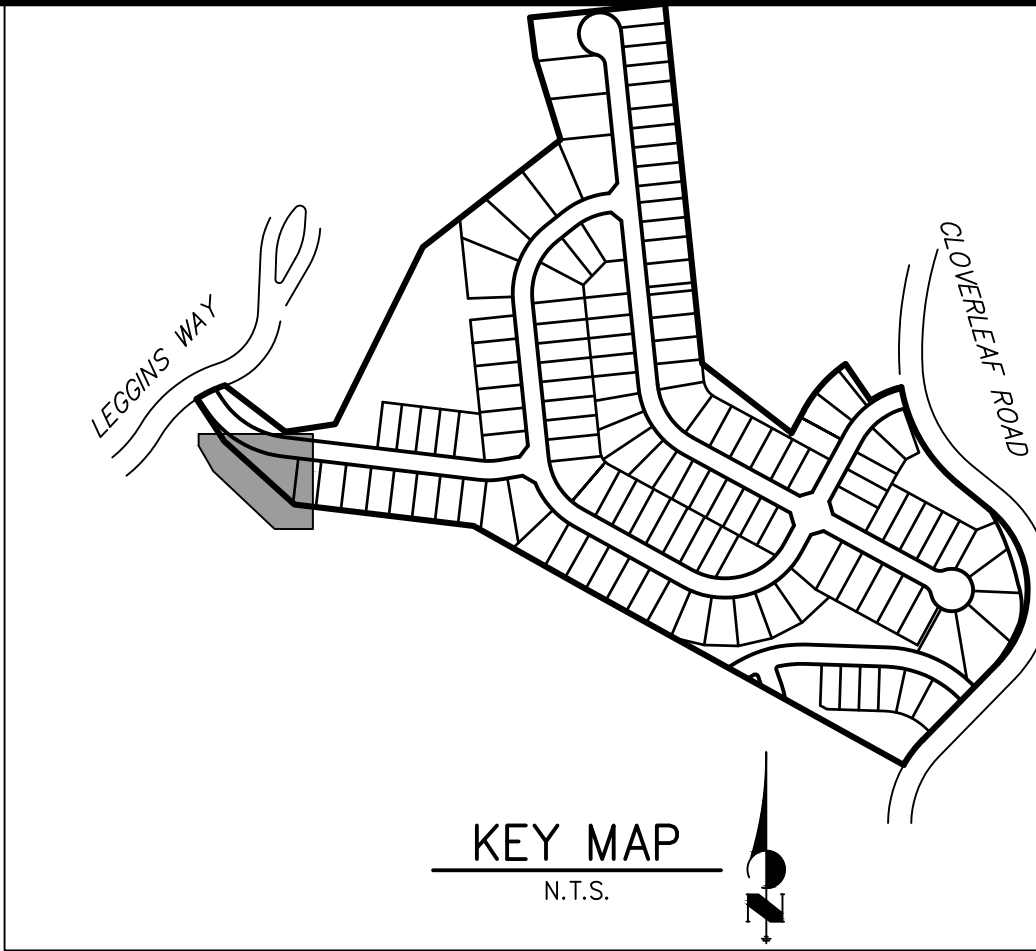
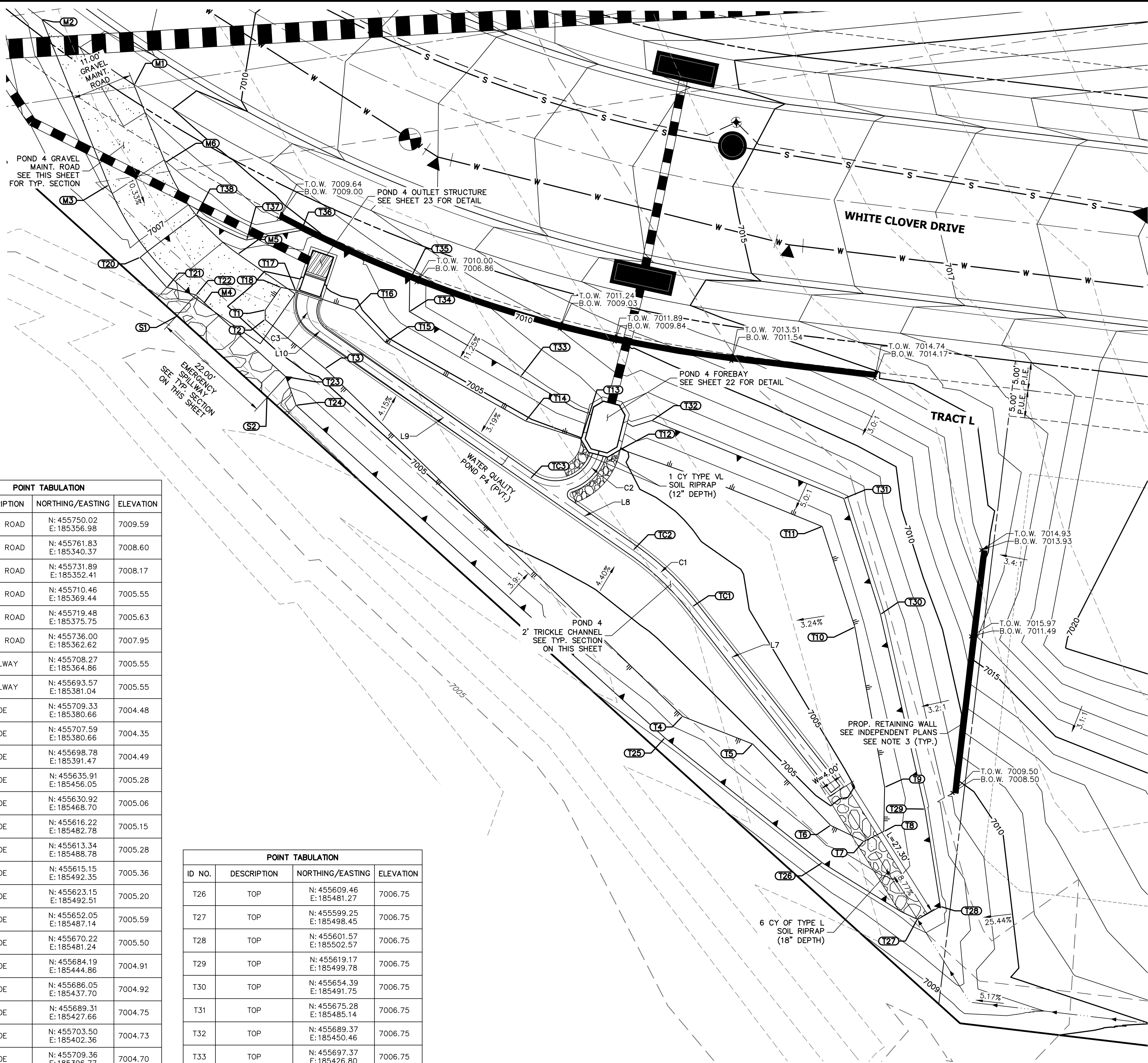
POINT TABULATION			
ID NO.	DESCRIPTION	NORTHING/EASTING	ELEVATION
M1	MAINT. ROAD	N: 455750.02 E: 185356.98	7009.59
M2	MAINT. ROAD	N: 455761.83 E: 185340.37	7008.60
M3	MAINT. ROAD	N: 455731.89 E: 185352.41	7008.17
M4	MAINT. ROAD	N: 455710.46 E: 185369.44	7005.55
M5	MAINT. ROAD	N: 455719.48 E: 185375.75	7005.63
M6	MAINT. ROAD	N: 455736.00 E: 185362.62	7007.95
S1	SPILLWAY	N: 455708.27 E: 185364.86	7005.55
S2	SPILLWAY	N: 455693.57 E: 185381.04	7005.55
T1	TOE	N: 455709.33 E: 185380.66	7004.48
T2	TOE	N: 455707.59 E: 185380.66	7004.35
T3	TOE	N: 455698.78 E: 185391.47	7004.49
T4	TOE	N: 455635.91 E: 185456.05	7005.28
T5	TOE	N: 455630.92 E: 185468.70	7005.06
T6	TOE	N: 455616.22 E: 185482.78	7005.15
T7	TOE	N: 455613.34 E: 185488.78	7005.28
T8	TOE	N: 455615.15 E: 185492.35	7005.36
T9	TOE	N: 455623.15 E: 185492.51	7005.20
T10	TOE	N: 455652.05 E: 185487.14	7005.59
T11	TOE	N: 455670.22 E: 185481.24	7005.50
T12	TOE	N: 455684.19 E: 185444.86	7004.91
T13	TOE	N: 455686.05 E: 185437.70	7004.92
T14	TOE	N: 455689.31 E: 185427.66	7004.75
T15	TOE	N: 455703.50 E: 185402.36	7004.73
T16	TOE	N: 455709.36 E: 185396.77	7004.70
T17	TOE	N: 455712.88 E: 185386.20	7004.34
T18	TOE	N: 455713.43 E: 185383.53	7004.54
T20	TOP	N: 455718.82 E: 185358.07	7006.75
T21	TOP/SPILLWAY	N: 455713.43 E: 185362.88	7006.75
T22	TOP/SPILLWAY	N: 455712.06 E: 185368.12	7005.55
T23	TOP/SPILLWAY	N: 455697.27 E: 185384.40	7005.55
T24	TOP/SPILLWAY	N: 455692.14 E: 185386.23	7006.75
T25	TOP	N: 455632.02 E: 185452.86	7006.75

POINT TABULATION			
ID NO.	DESCRIPTION	NORTHING/EASTING	ELEVATION
T26	TOP	N: 455609.46 E: 185481.27	7006.75
T27	TOP	N: 455599.25 E: 185498.45	7006.75
T28	TOP	N: 455601.57 E: 185502.57	7006.75
T29	TOP	N: 455619.17 E: 185499.78	7006.75
T30	TOP	N: 455654.39 E: 185491.75	7006.75
T31	TOP	N: 455675.28 E: 185485.14	7006.75
T32	TOP	N: 455689.37 E: 185450.46	7006.75
T33	TOP	N: 455697.37 E: 185426.80	7006.75
T34	TOP	N: 455709.06 E: 185406.69	7006.75
T35	TOP	N: 455714.85 E: 185406.77	7006.75
T36	TOP	N: 455723.72 E: 185387.16	7006.75
T37	TOP	N: 455721.98 E: 185377.28	7006.75
T38	TOP	N: 455726.53 E: 185368.21	7006.75
TC1	TRICKLE CHANNEL	N: 455655.80 E: 185457.80	7004.22
TC2	TRICKLE CHANNEL	N: 455665.97 E: 185447.07	7004.14
TC3	TRICKLE CHANNEL	N: 455678.94 E: 185428.51	7004.03

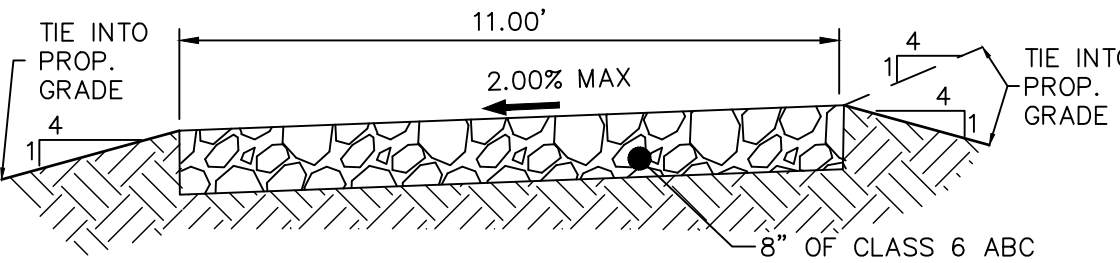
POND 4- PLAN

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'

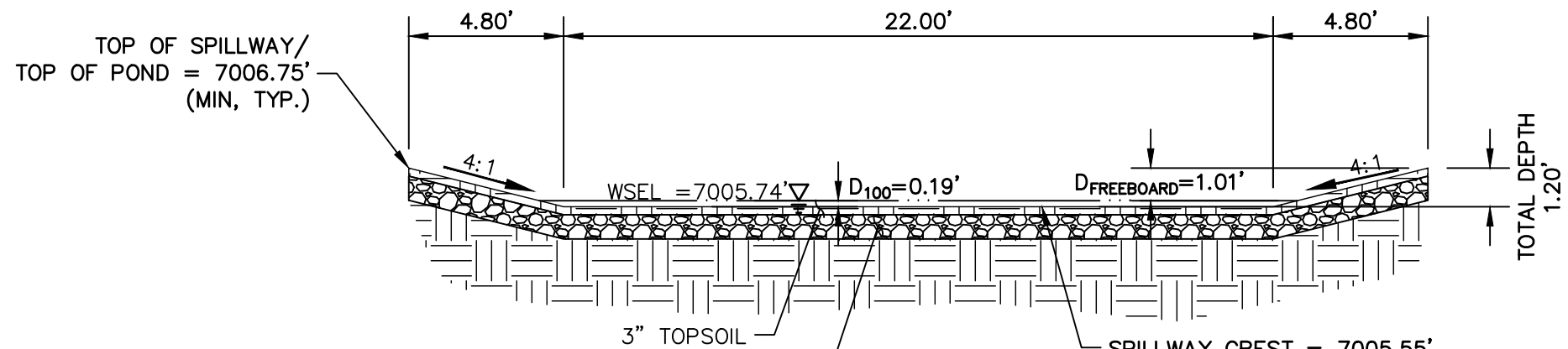
CURVE TABLE			
CURVE	DELTA	RADIUS	LENGTH
C1	17°00'45"	50.00'	14.85'
C2	108°16'49"	8.00'	15.12'
C3	76°09'24"	5.16'	6.86'



POND 4 TRICKLE CHANNEL



11' GRAVEL MAINTENANCE ACCESS ROAD TYPICAL SECTION



POND 4 EMERGENCY SPILLWAY TYP. SECTION

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.



THE LOCATIONS OF EXISTING ABOVE GROUND AND UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE CAUSED BY HIS FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL ABOVE GROUND AND UNDERGROUND UTILITIES.

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

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, 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	REVISION	No.	1"	10'	H-SCALE	1"	10'	V-SCALE	N/A	DATE	11/11/21	DESIGNED BY	GVT	DRAWN BY	GAG	CHECKED BY

CLOVERLEAF FILING 2

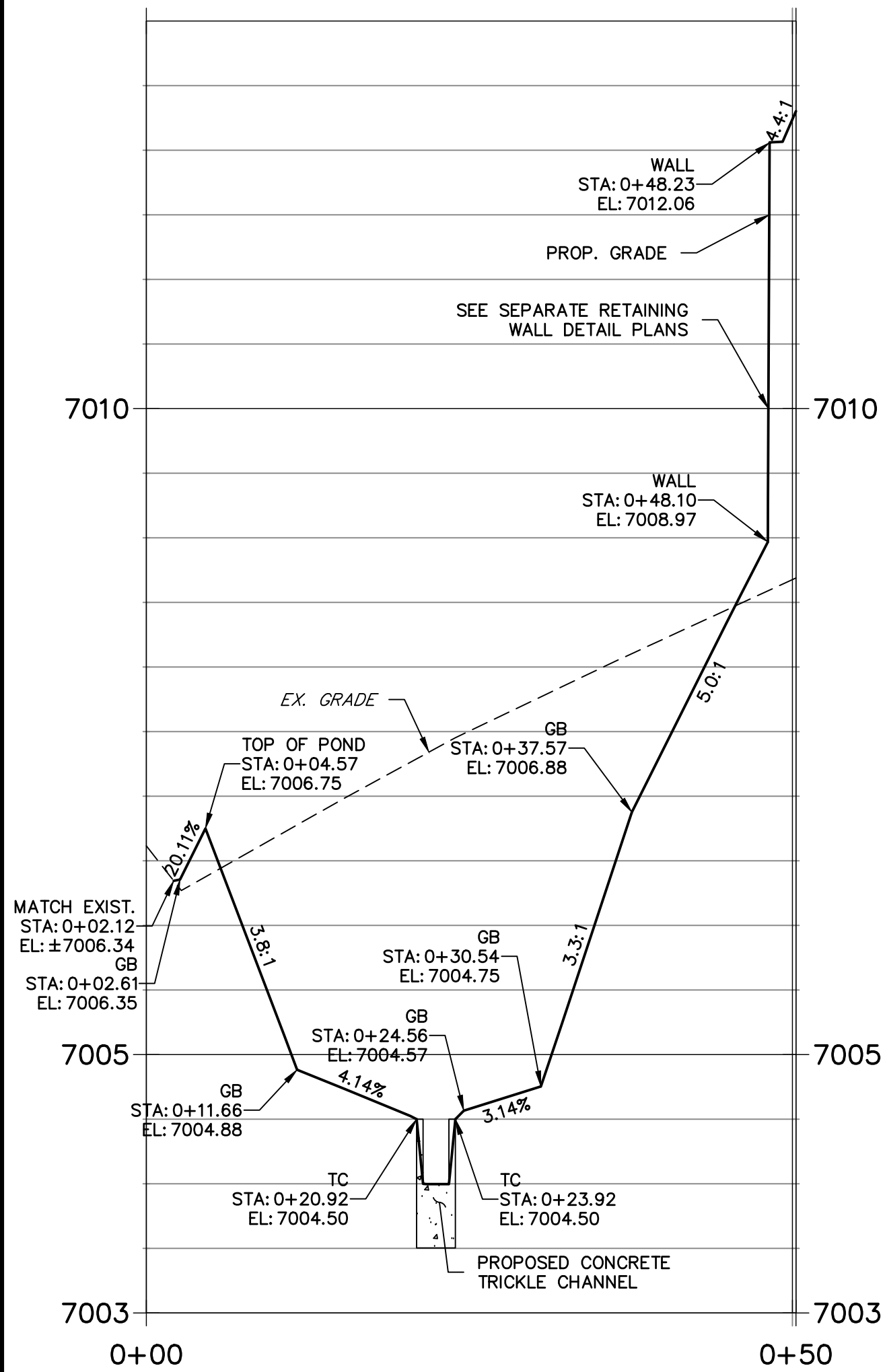
POND PLANS AND DETAILS

SHEET 20 OF 28

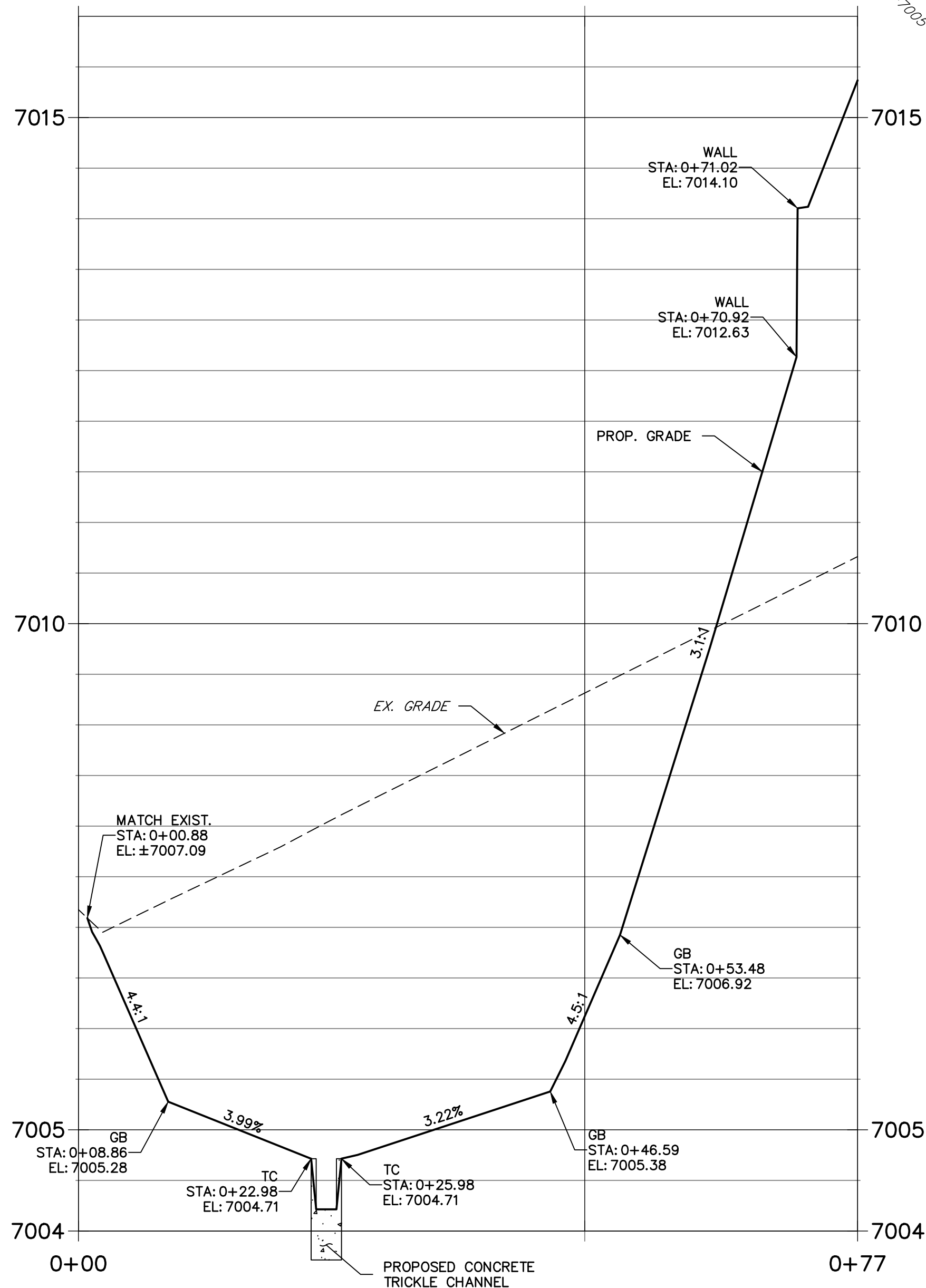
JOB NO. 25158.01



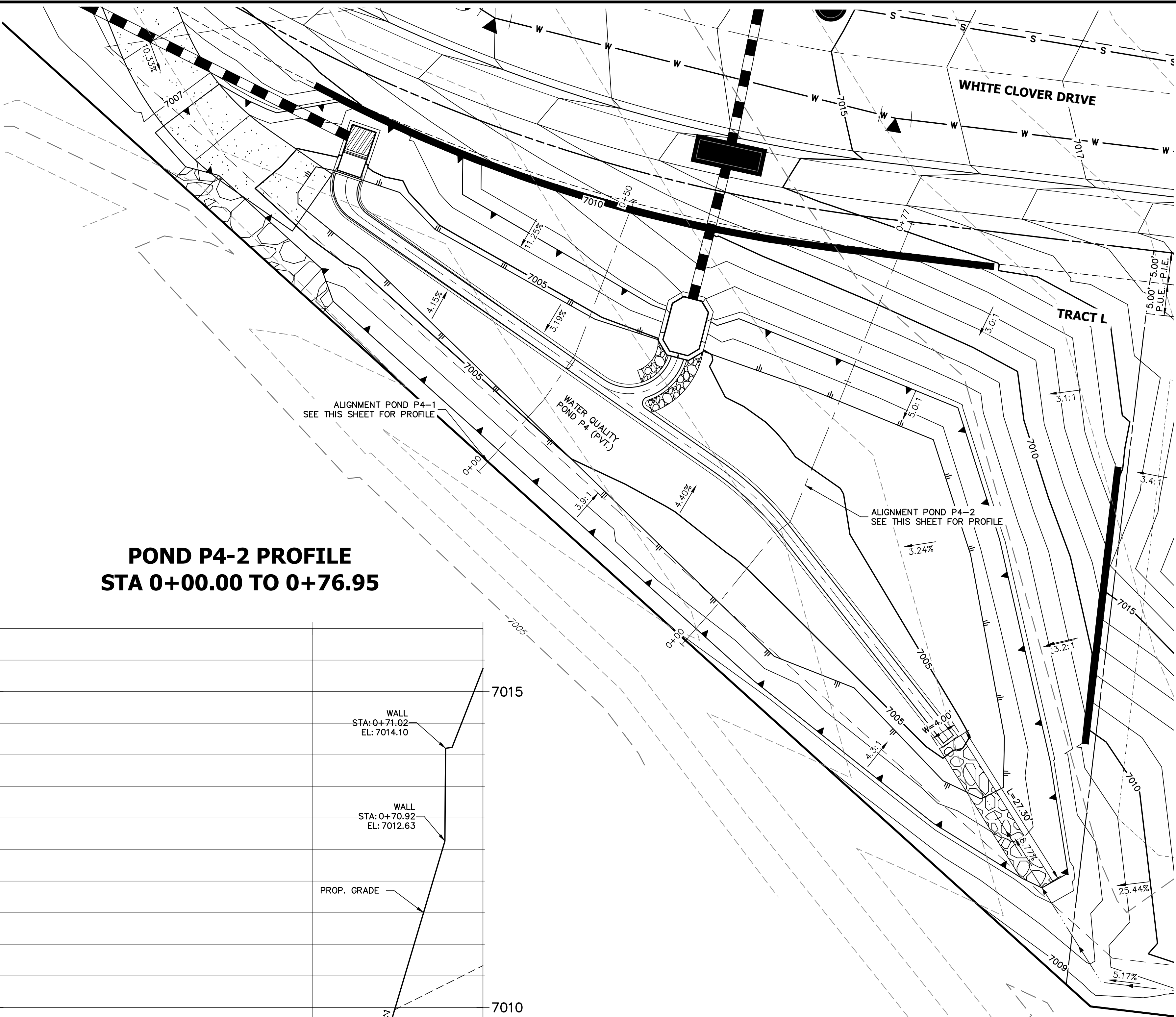
POND P4-1 PROFILE  
STA 0+00.00 TO 0+50.27



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



POND 4- PLAN



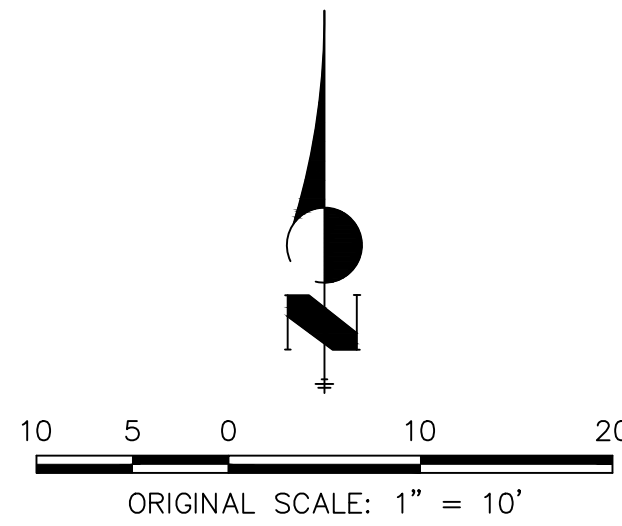
NOTES

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.

THE LOCATIONS OF EXISTING ABOVE GROUND AND UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE CAUSED BY HIS FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL ABOVE GROUND AND UNDERGROUND UTILITIES.



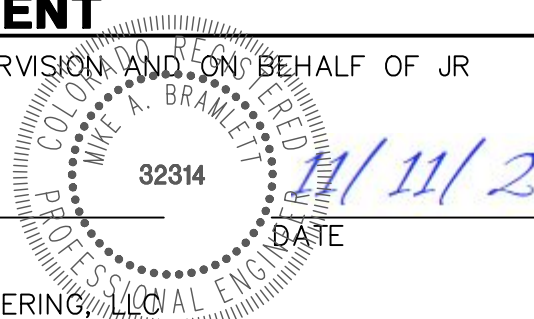
Know what's below.  
Call before you dig.



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



CLOVERLEAF FILING 2

POND PLANS AND DETAILS

SHEET 21 OF 28

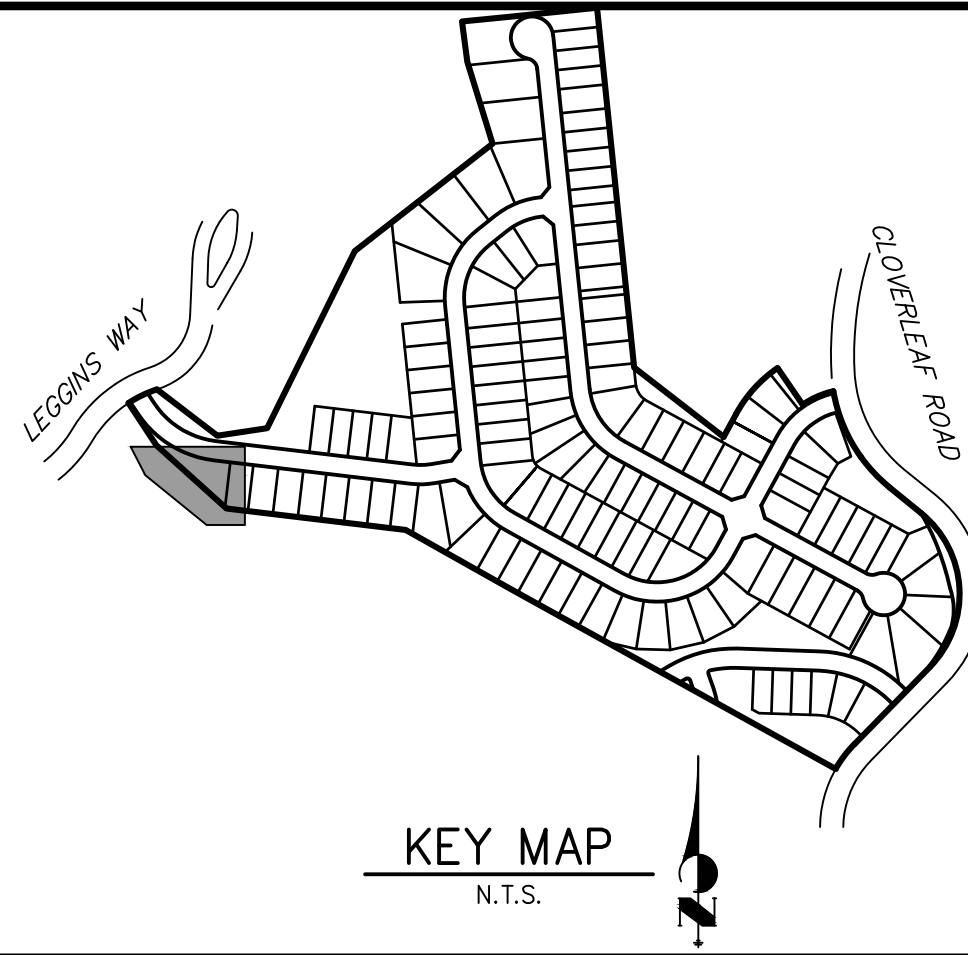
JOB NO. 25158.01

J.R. ENGINEERING  
A Western Company

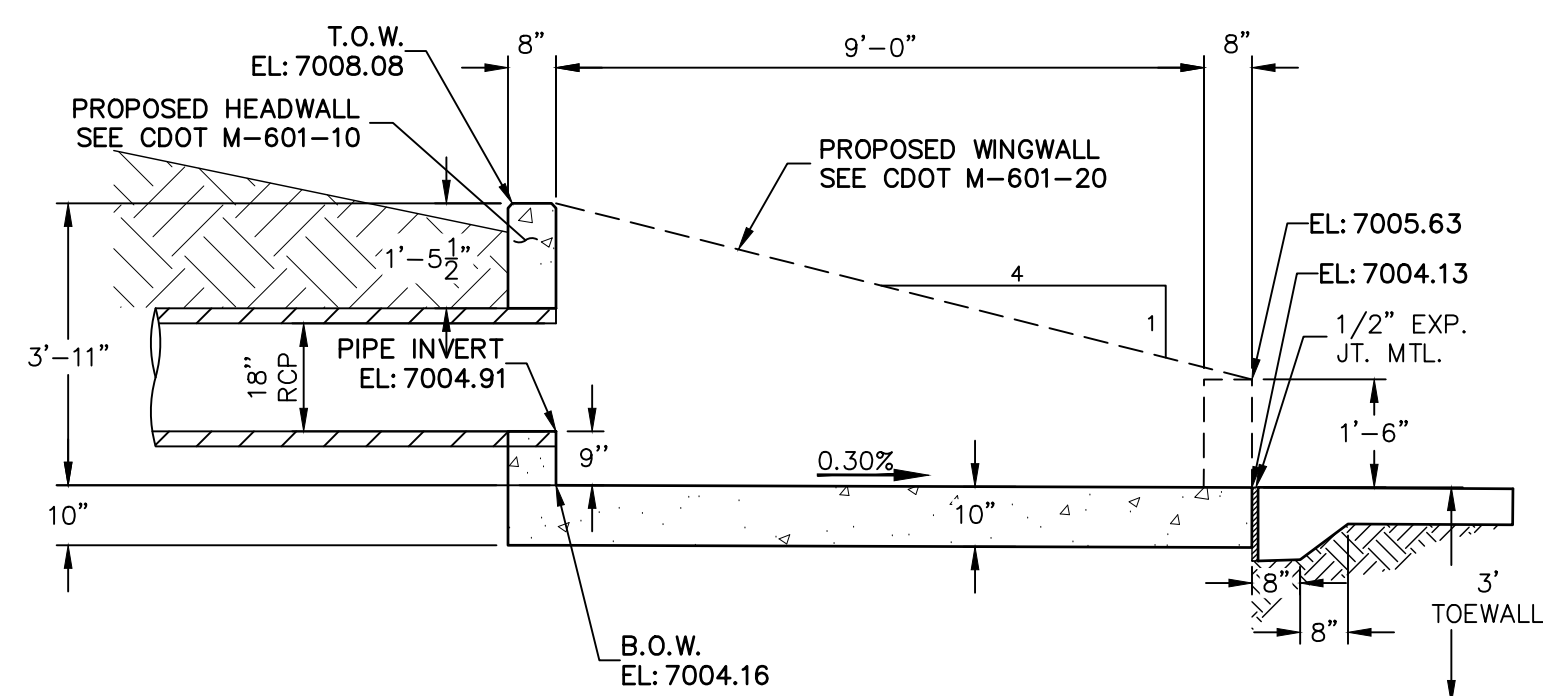
Central 303-740-9888 • Colorado Springs 719-583-2583  
Fort Collins 970-491-9888 • www.jrengineering.com

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

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







FORM MONOLITHICALLY  
W/ FOREBAY BOTTOM

FOREBAY INV.

1'-6"

1'-0"

1'-0" 1'-3"

3"

CLASS B CONCRETE

3/4" CHAMFER  
(TYP.)

HEIGHT VARIES  
(3'-9 1/2" MAX)

#4 @ 12"

18"

#4 @ 12"

10"

3" (CLR.)

POND 4 FOREBAY WINGWALL  
REINFORCING DETAIL

SCALE: N.T.S.

**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

SHEET	22	OF	28
JOB NO.	25158.01		
CLOVERLEAF FILING 2			
POND PLANS AND DETAILS			
V-SCALE H-SCALE $\frac{3}{8}'' = 1'$	V-SCALE $\frac{3}{8}'' = 1'$	No.	REVISION
DESIGNED BY	GAG	BY	DATE
DRAWN BY	GAG		
CHECKED BY			









**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**



**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.



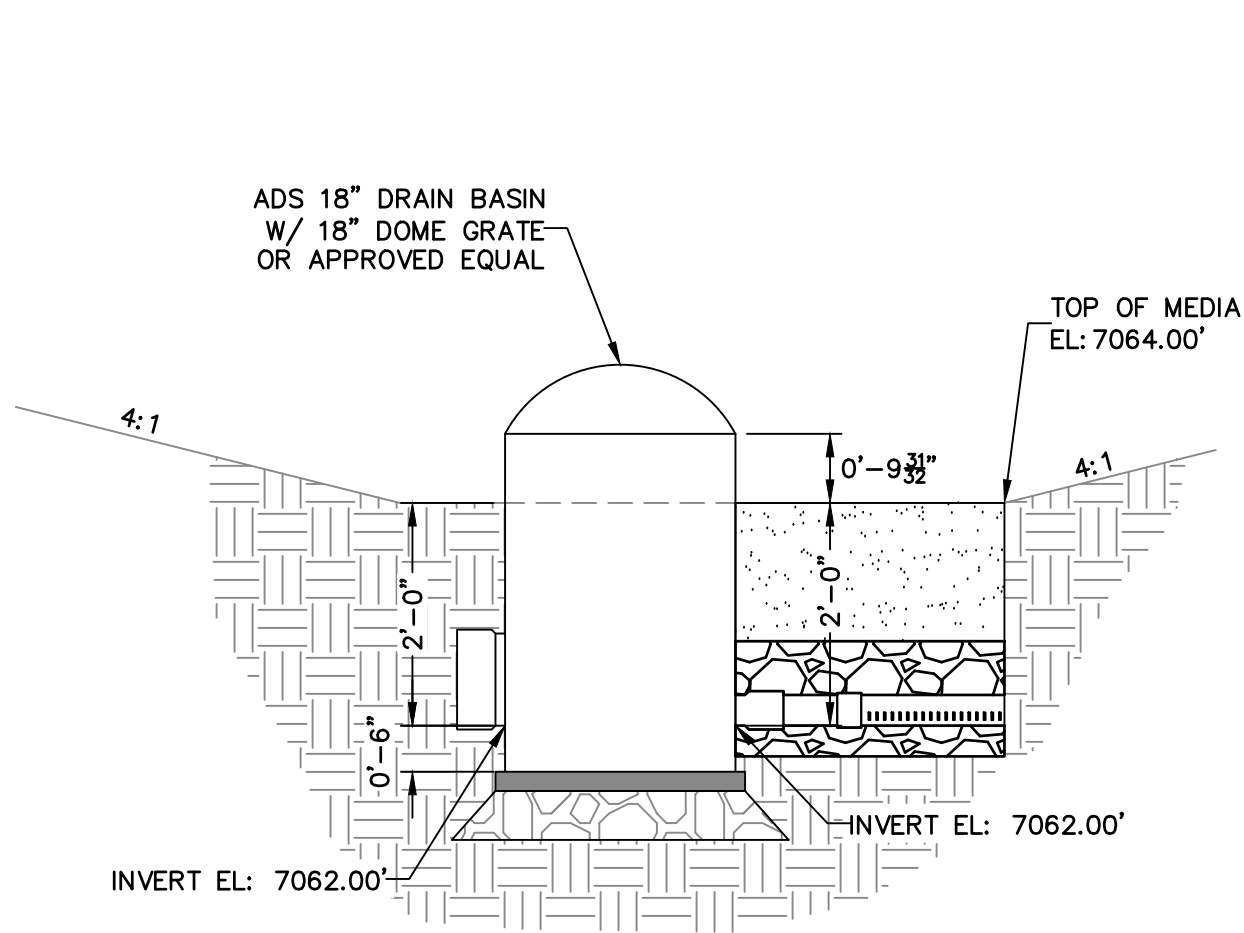
THE LOCATIONS OF EXISTING ABOVE GROUND AND UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE CAUSED BY HIS FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL ABOVE GROUND AND UNDERGROUND UTILITIES.

**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

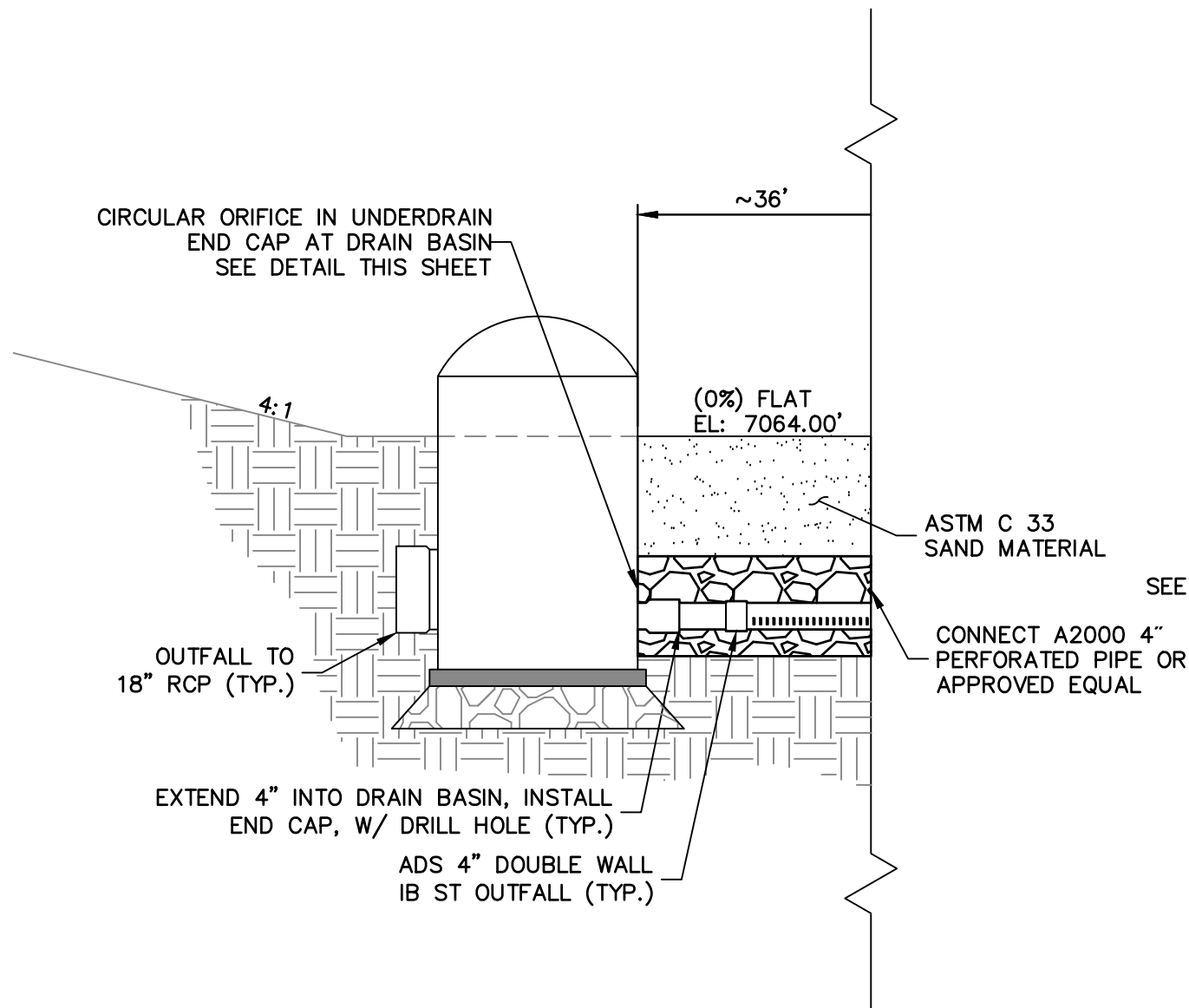
DATE: 11/11/21

CLOVERLEAF FILING 2  
POND PLANS AND DETAILS  
SHEET 24 OF 28  
JOB NO. 25158.01



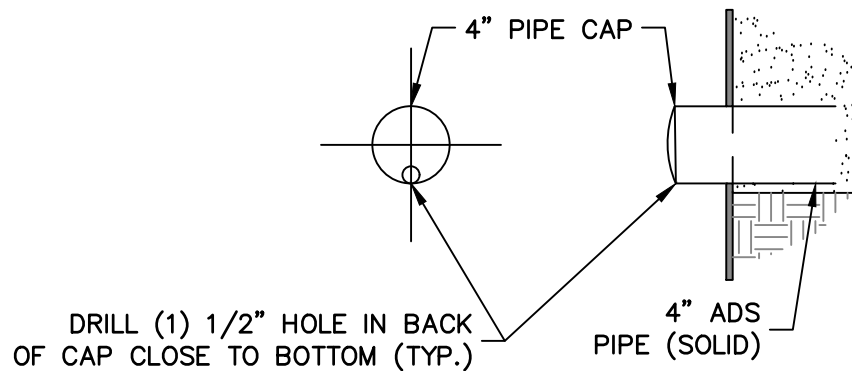


DRAIN BASIN  
OUTLET FRONT DETAIL  
SCALE: N.T.S.

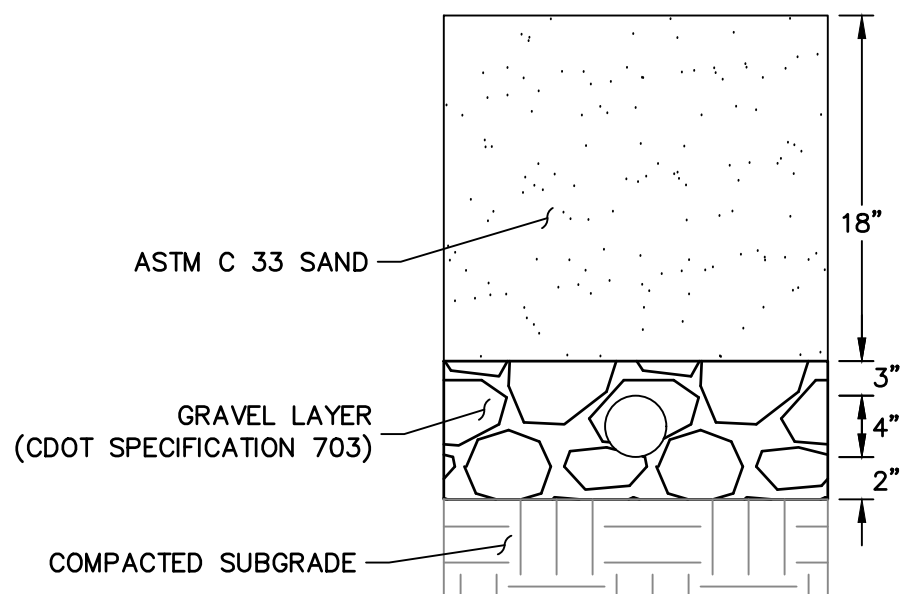


SAND FILTER  
LONGITUDINAL CROSS  
SECTION DETAILS  
SCALE: N.T.S.

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



SAND FILTER UNDERDRAIN  
END CAP DETAIL  
SCALE: N.T.S.



SAND FILTER  
SUB-SURFACE  
TYP. SECTION  
SCALE: N.T.S.

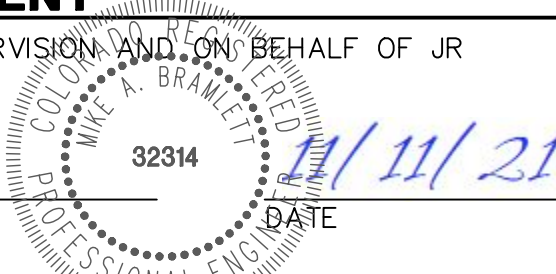


ENGINEER'S STATEMENT

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



CLOVERLEAF FILING 2

POND PLANS AND DETAILS

SHEET 25 OF 28

JOB NO. 25158.01

REVISION	BY	DATE
No.		
N.T.S.		
N.T.S.		
11/11/21		
GAG		
GAG		
DESIGNED BY		
DRAWN BY		
CHECKED BY		

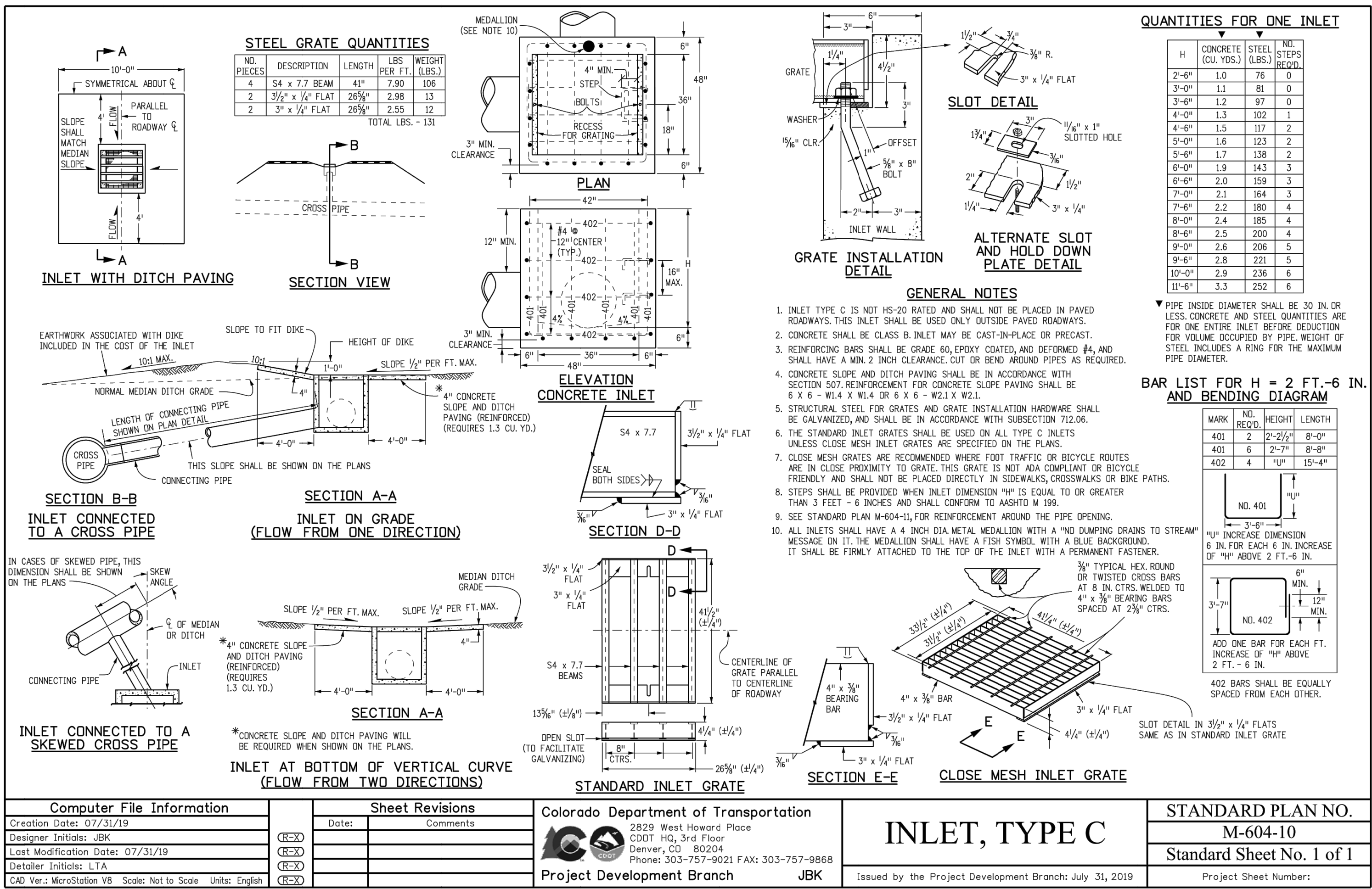
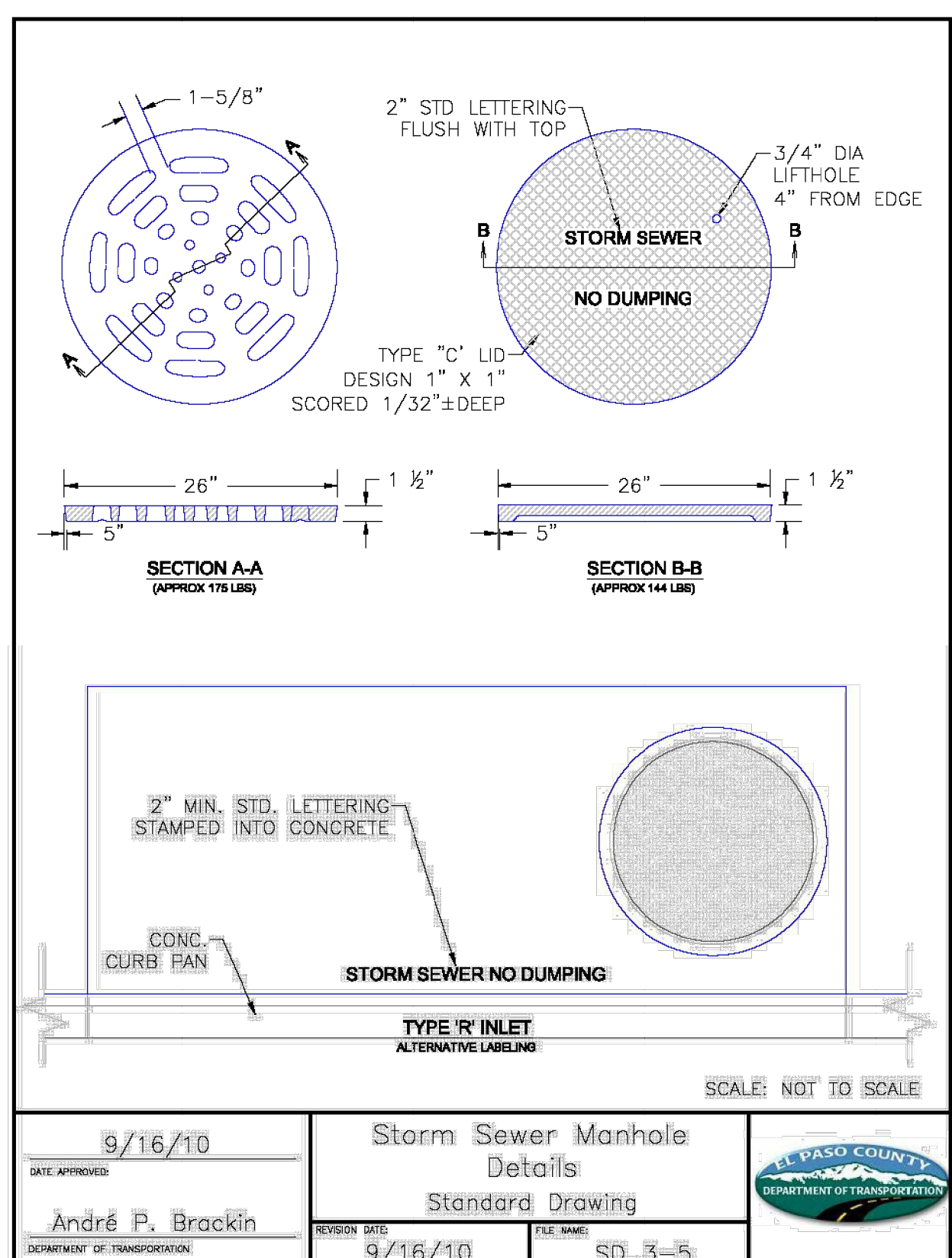
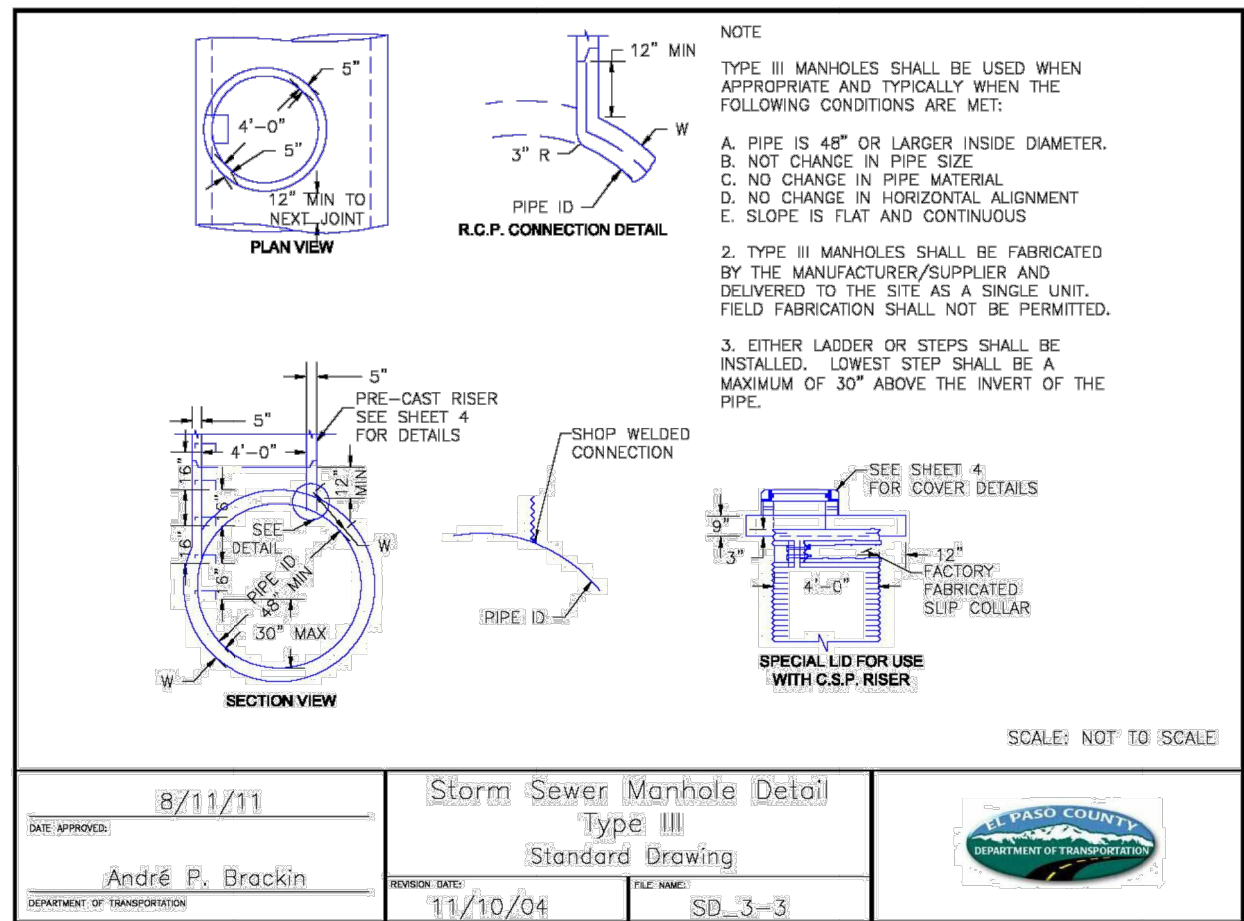
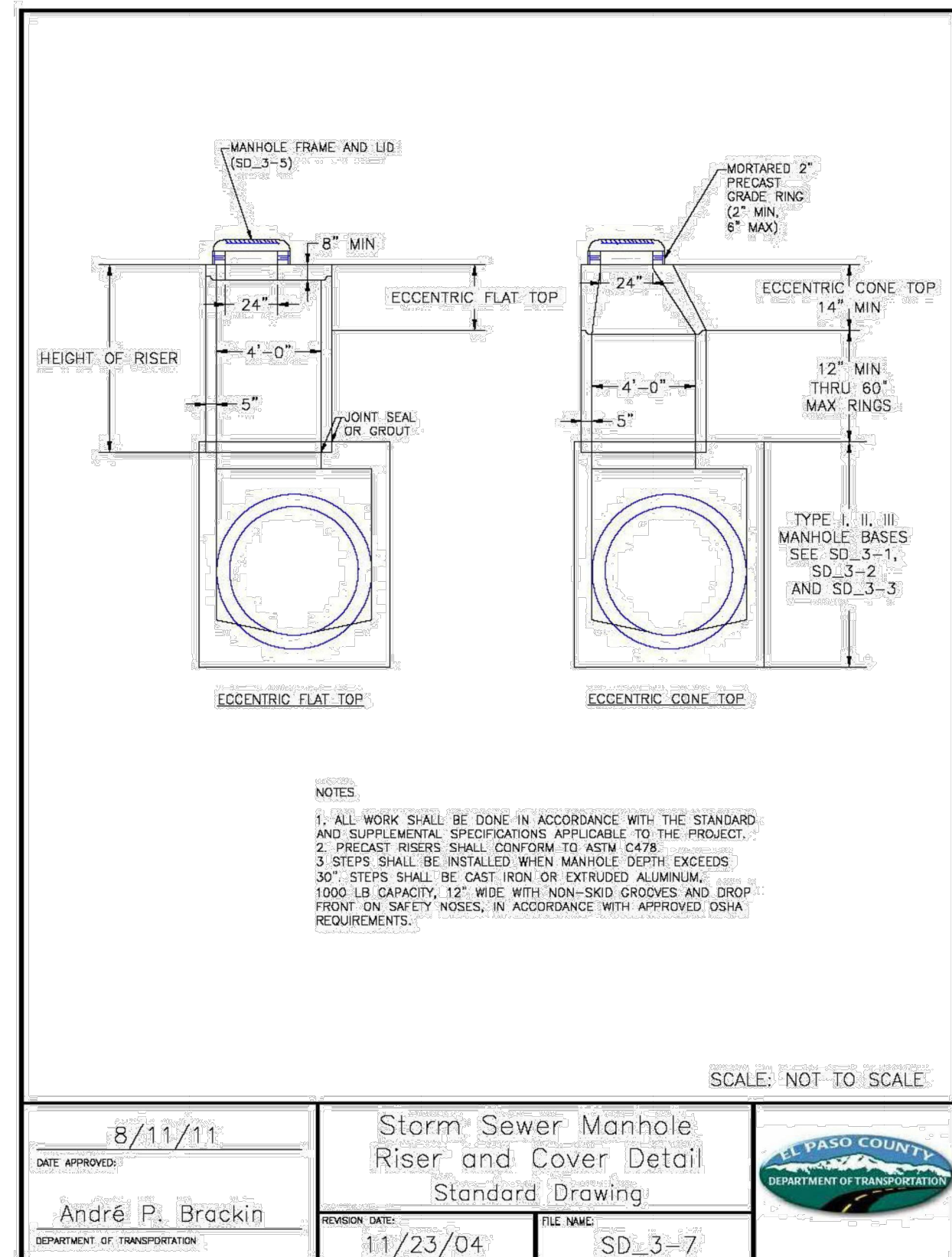


Central 303-740-9888 • Colorado Springs 719-583-2583  
Fort Collins 970-491-9888 • www.jrengineering.com

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  
APPROVES THEIR USE  
FOR THE PROJECTS  
DESIGNATED BY WRITTEN  
AUTHORIZATION.





**ENGINEER'S STATEMENT**

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

*Mike Bramlett*

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

FOR AND ON BEHALF OF JR ENGINEERING, LLC

32314

11/11/21

DATE

**J&R ENGINEERING**  
A Western Company  
Central 302-740-6338 • Colorado Springs 719-552-2539  
Fort Collins 970-491-3638 • wwww.jrengineering.com

---

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

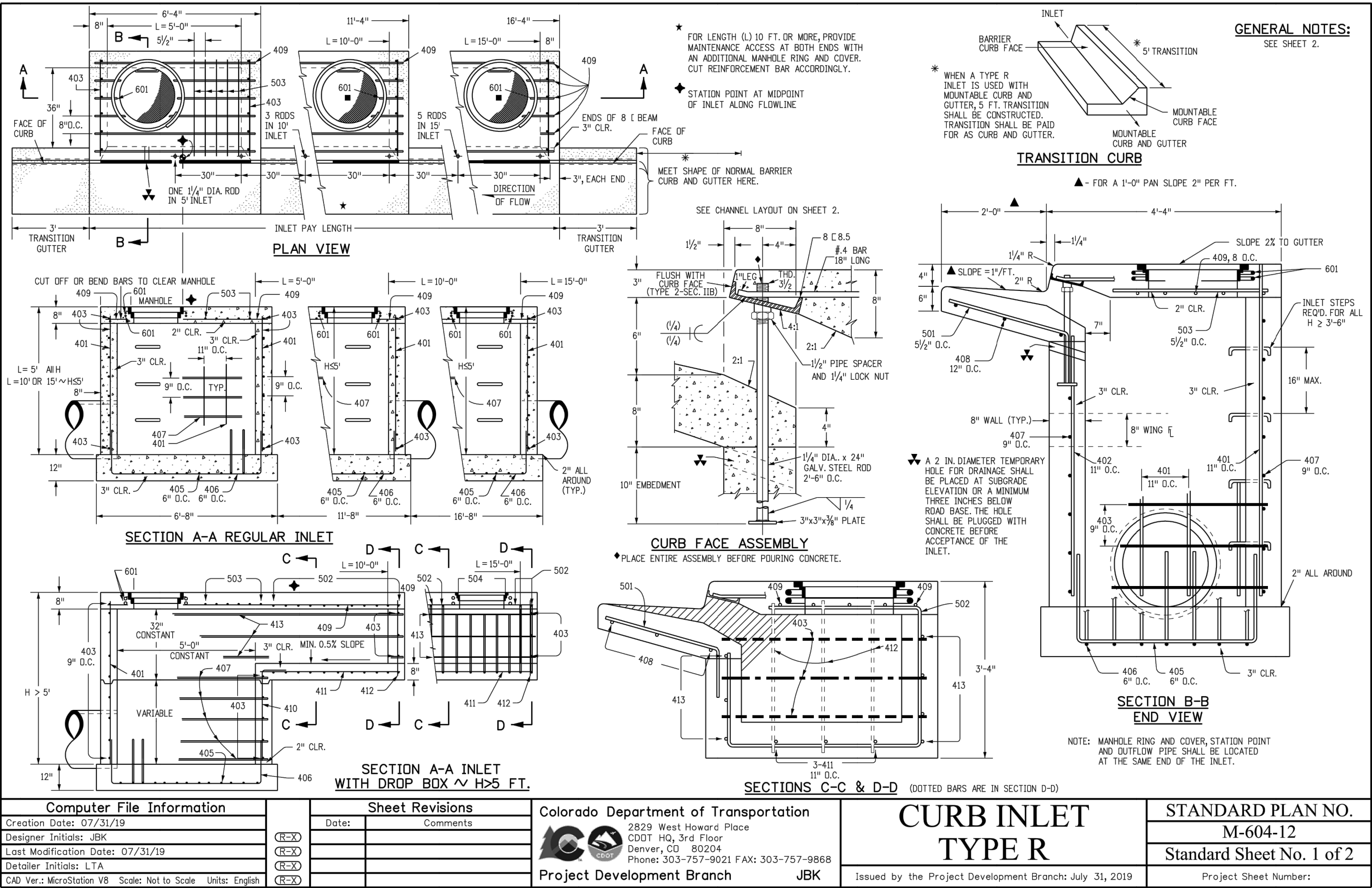
---

UNTIL SUCH TIME AS THE CONTRACTORS ARE APPROVED BY THE AGENCIES, JR ENGINEERING SHALL BE RESPONSIBLE ONLY FOR THE PURPOSES DESIGNATED BY WRITTEN AUTHORIZATION.

CLOVERLEAF FILING 2	SHEET 26 OF 28		No.	REVISION	BY	DATE
DETAIL SHEET	H-SCALE	1"=50'				
	V-SCALE	N/A				
	DATE	11/11/21				
	DESIGNED BY	SAV				
	DRAWN BY	SAV				
	CHECKED BY					
JOB NO.	25158.01					

X:\2510000\all\2515801\Drawings\Sheet Dwgs\CDs\2515801DT01.dwg, DT01, 11/11/2021 2:17:57 PM, CS





MARK	BAR # OR SIZE	O.C. SPACING	TYPE	ALL INLETS						INLETS: H ≤ 5 FT.						INLETS: H > 5 FT.					
				L = 5 FT.		L = 10 FT.		L = 15 FT.		L = 10 FT.		L = 15 FT.		L = 10 FT.		L = 15 FT.		L = 10 FT.		L = 15 FT.	
				NO. REQ'D	LENGTH	NO. REQ'D	LENGTH	NO. REQ'D	LENGTH	NO. REQ'D	LENGTH	NO. REQ'D	LENGTH	NO. REQ'D	LENGTH	NO. REQ'D	LENGTH	NO. REQ'D	LENGTH	NO. REQ'D	LENGTH
401	4	11"	II	15	*	21	*	26	*	11	*	11	*	7	*	7	*	7	*	7	*
402	4	9"	II	7	*	13	*	18	*	7	*	7	*	4	*	4	*	4	*	4	*
403	4	9"	II	*	4'-0"	*	4'-0"	*	4'-0"	*	4'-0"	*	4'-0"	*	4'-0"	*	4'-0"	*	4'-0"	*	4'-0"
405	4	6"	VI	11	6'-10"	21	6'-10"	31	6'-10"	11	6'-10"	11	6'-10"	7	6'-10"	7	6'-10"	7	6'-10"	7	6'-10"
406	4	6"	VIII	7	8'-10"	7	8'-10"	7	8'-10"	7	8'-10"	7	8'-10"	7	8'-10"	7	8'-10"	7	8'-10"	7	8'-10"
407	4	9"	II	*	5'-10"	*	10'-10"	*	15'-10"	*	5'-10"	*	10'-10"	*	5'-10"	*	10'-10"	*	5'-10"	*	10'-10"
408	4	12"	II	3	6'-10"	3	11'-10"	3	16'-10"	3	11'-10"	3	16'-10"	3	11'-10"	3	16'-10"	3	11'-10"	3	16'-10"
409	4	8"	II	6	5'-10"	6	10'-10"	6	15'-10"	6	10'-10"	6	15'-10"	6	10'-10"	6	15'-10"	6	10'-10"	6	15'-10"
410	4	11"	VII	3	5'-10"	3	5'-10"	3	5'-10"	3	5'-10"	3	5'-10"	3	5'-10"	3	5'-10"	3	5'-10"	3	5'-10"
411	4	11"	II	3	5'-10"	3	5'-10"	3	5'-10"	3	5'-10"	3	5'-10"	3	5'-10"	3	5'-10"	3	5'-10"	3	5'-10"
412	4	11"	II	3	5'-10"	3	5'-10"	3	5'-10"	3	5'-10"	3	5'-10"	3	5'-10"	3	5'-10"	3	5'-10"	3	5'-10"
413	4	9"	II	3	5'-10"	3	5'-10"	3	5'-10"	3	5'-10"	3	5'-10"	3	5'-10"	3	5'-10"	3	5'-10"	3	5'-10"
501	5	5/8"	IV	11	3'-4"	22	3'-4"	33	3'-4"	22	3'-4"	33	3'-4"	11	11'-5"	17	11'-5"	11	11'-5"	17	11'-5"
502	5	5/8"	III	5	3'-6"	16	3'-6"	27	3'-6"	16	3'-6"	27	3'-6"	5	3'-6"	16	3'-6"	5	3'-6"	16	3'-6"
503	5	5/8"	II	5	3'-6"	16	3'-6"	27	3'-6"	16	3'-6"	27	3'-6"	5	3'-6"	16	3'-6"	5	3'-6"	16	3'-6"
504	5	5/8"	IX	5	3'-6"	16	3'-6"	27	3'-6"	16	3'-6"	27	3'-6"	5	3'-6"	16	3'-6"	5	3'-6"	16	3'-6"
601	6	2 1/2"	V	2	8'-10"	2	8'-10"	2	8'-10"	2	8'-10"	2	8'-10"	2	8'-10"	2	8'-10"	2	8'-10"	2	8'-10"
REGS				1	5'-10"	1	10'-10"	1	15'-10"	1	10'-10"	1	15'-10"	1	10'-10"	1	15'-10"	1	10'-10"	1	15'-10"
				2 BARS, 1 ROD		11 BARS, 3 RODS		8 BARS, 3 RODS		4 BARS, 3 RODS		6 BARS, 3 RODS		4 BARS, 3 RODS		6 BARS, 3 RODS		4 BARS, 3 RODS		6 BARS, 3 RODS	

\* VARIABLE REFER TO TABLE TWO.  
\* INCLUDE #4, 18 IN. BARS (SEE CHANNEL LAYOUT).

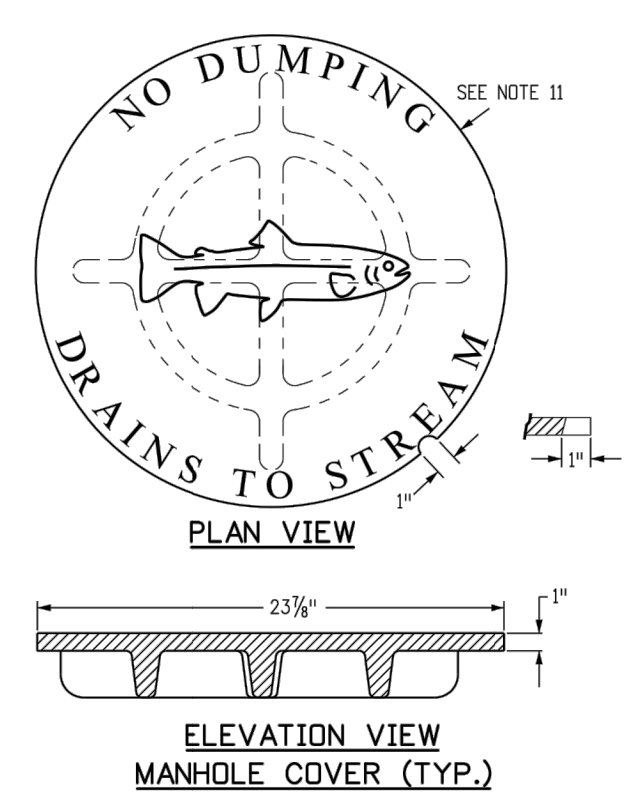
TABLE ONE ~ BAR LIST FOR CURB INLETS, TYPE "R"

H" IN.	LENGTH	NO. REQ'D		NO. REQ'D		L = 5 FT.		L = 10 FT.		L = 15 FT.	
		REGULAR		DROP BOX		CONC. CU. YDS.		STEEL LBS.		CONC. CU. YDS.	
		401	402	403	407	403	407	403	407	403	407
3'-0"	2'-8"	1'-8"		10	7			3.2	285	5.3	497
3'-6"	3'-2"	2'-2"		10	7			3.4	305	5.7	528
4'-0"	3'-8"	2'-8"		12	9			3.7	326	6.0	559
4'-6"	4'-2"	3'-2"		12	9			3.9	334	6.4	571
5'-0"	4'-8"	3'-8"		14	11			4.1	354	6.7	602
5'-6"	5'-2"	4'-2"	3'-5"	16	13	15	6	4.4	375	6.0	607
6'-0"	5'-8"	4'-8"	3'-11"	16	13	16	6	4.4	382	6.0	616
6'-6"	6'-2"	5'-2"	4'-5"	18	15	18	8	4.8	402	6.4	637
7'-0"	6'-8"	5'-8"	4'-11"	20	17	19	10	5.0	423	6.6	654
7'-6"	7'-2"	6'-2"	5'-5"	20	17	20	10	5.3	430	6.9	664
8'-0"	7'-8"	6'-8"	5'-11"	22	19	22	12	5.5	451	7.1	684
8'-6"	8'-2"	7'-2"	6'-5"	24	21	23	14	5.7	471	7.3	702
9'-0"	8'-8"	7'-8"	6'-11"	24	21	24	14	6.0	479	7.6	711
9'-6"	9'-2"	8'-2"	7'-5"	26	23	26	16	6.2	499	7.8	732
10'-0"	9'-8"	8'-8"	7'-11"	28	25	28	18	6.4	520	8.0	749
10'-6"	10'-2"	9'-2"	8'-5"	28	25	28	18	6.7	527	8.3	759
11'-0"	10'-8"	9'-8"	8'-11"	30	27	30	20	6.9	547	8.5	779

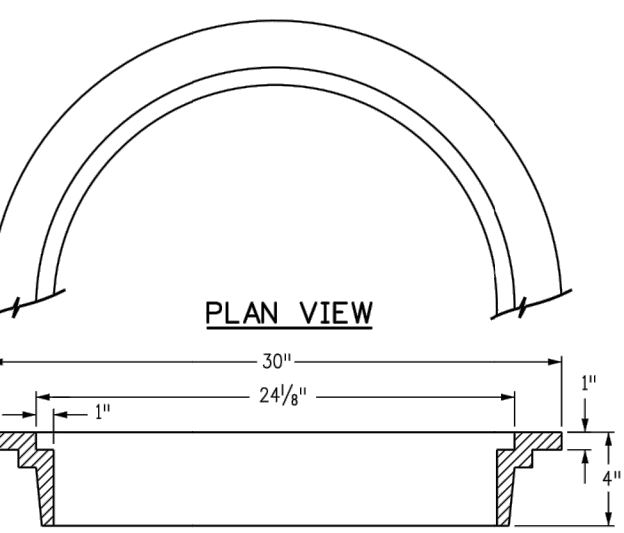
NOTES: FOR L=5 FT., L=10 FT., AND L=15 FT.  
REGULAR INLETS: TOTAL QUANTITIES NEEDED ARE OUTSIDE THE HEAVY BLACK LINE.  
DROP BOX INLETS: TOTAL QUANTITIES NEEDED ARE INSIDE THE HEAVY BLACK LINE.  
STEEL WEIGHTS DO NOT INCLUDE STRUCTURAL STEEL CHANNEL.

TABLE TWO ~ BARS AND QUANTITIES VARIABLE WITH "H"

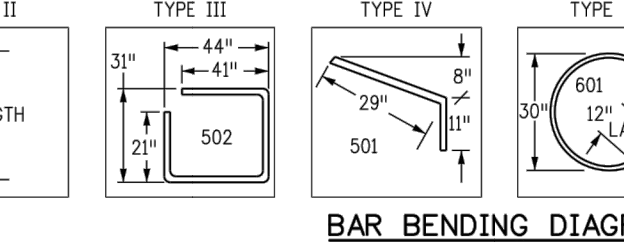
Computer File Information		Sheet Revisions		Colorado Department of Transportation		STANDARD PLAN NO.	
Creation Date: 07/31/19		Date:	Comments:	2829 West Howard Place		M-604-12	
Designer Initials: JBK				CDOT HQ, 3rd Floor		Standard Sheet No. 1 of 2	
Last Modification Date: 07/31/19				Denver, CO 80204		Project Sheet Number:	
Detailer Initials: LTA				Phone: 303-757-9021 FAX: 303-757-9868			
CAD Ver.: MicroStation V8 Scale: Not to Scale Units: English				Project Development Branch JBK			



ELEVATION VIEW MANHOLE COVER (TYP.)



ELEVATION VIEW MANHOLE RING (TYP.)



CHANNEL LAYOUT DETAILS

SEE CURB FACE ASSEMBLY ON SHEET 1.

WEIGHTS: COVER = 125 LBS.  
RING = 135 LBS.  
TOTAL = 260 LBS.

BAR BENDING DIAGRAMS ~ (DIMENSIONS ARE OUT-TO-OUT OF BAR)

TYPE II TYPE III TYPE IV TYPE V TYPE VI TYPE VII TYPE VIII TYPE X

# GENERAL NOTES

- CONCRETE SHALL BE CLASS B. INLET MAY BE CAST-IN-PLACE OR PRECAST.
- CONCRETE WALLS SHALL BE FORMED ON BOTH SIDES AND SHALL BE 8 INCHES THICK.
- INLET STEPS SHALL BE IN CONFORMANCE WITH AASHTO M 199.
- CURB FACE ASSEMBLY SHALL BE GALVANIZED AFTER WELDING.
- EXPOSED CONCRETE CORNERS SHALL BE CHAMFERED 3/4" OF A INCH CURB AND GUTTER CORNERS SHALL BE FINISHED TO MATCH THE EXISTING CURB AND GUTTER BEYOND THE TRANSITION GUTTER.
- REINFORCING BARS SHALL BE DEFORMED AND SHALL HAVE A 2 INCH MINIMUM CLEARANCE. ALL REINFORCING BARS SHALL BE GRADE 60 AND EPOXY COATED.
- DIMENSIONS AND WEIGHTS OF TYPICAL MANHOLE RING AND COVER ARE NOMINAL.
- MATERIAL FOR MANHOLE RINGS AND COVERS SHALL BE GRAY OR DUCTILE CAST IRON IN ACCORDANCE WITH SECTION 712.06.
- SINCE PIPE ENTRIES INTO THE INLET ARE VARIABLE, THE DIMENSIONS SHOWN ARE TYPICAL. ACTUAL DIMENSIONS AND QUANTITIES FOR CONCRETE AND REINFORCEMENT SHALL BE AS REQUIRED IN THE WORK. QUANTITIES INCLUDE VOLUMES OCCUPIED BY PIPES.
- STRUCTURAL STEEL SHALL BE GALVANIZED AND SHALL BE IN ACCORDANCE WITH SECTION 712.06.
- ALL MANHOLE COVERS SHALL BE CAST WITH A "NO DUMPING DRAINS TO STREAM" MESSAGE AND A FISH SYMBOL. THE SURFACE OF THE MANHOLE COVER SHALL HAVE A NON-SLIP PATTERN.

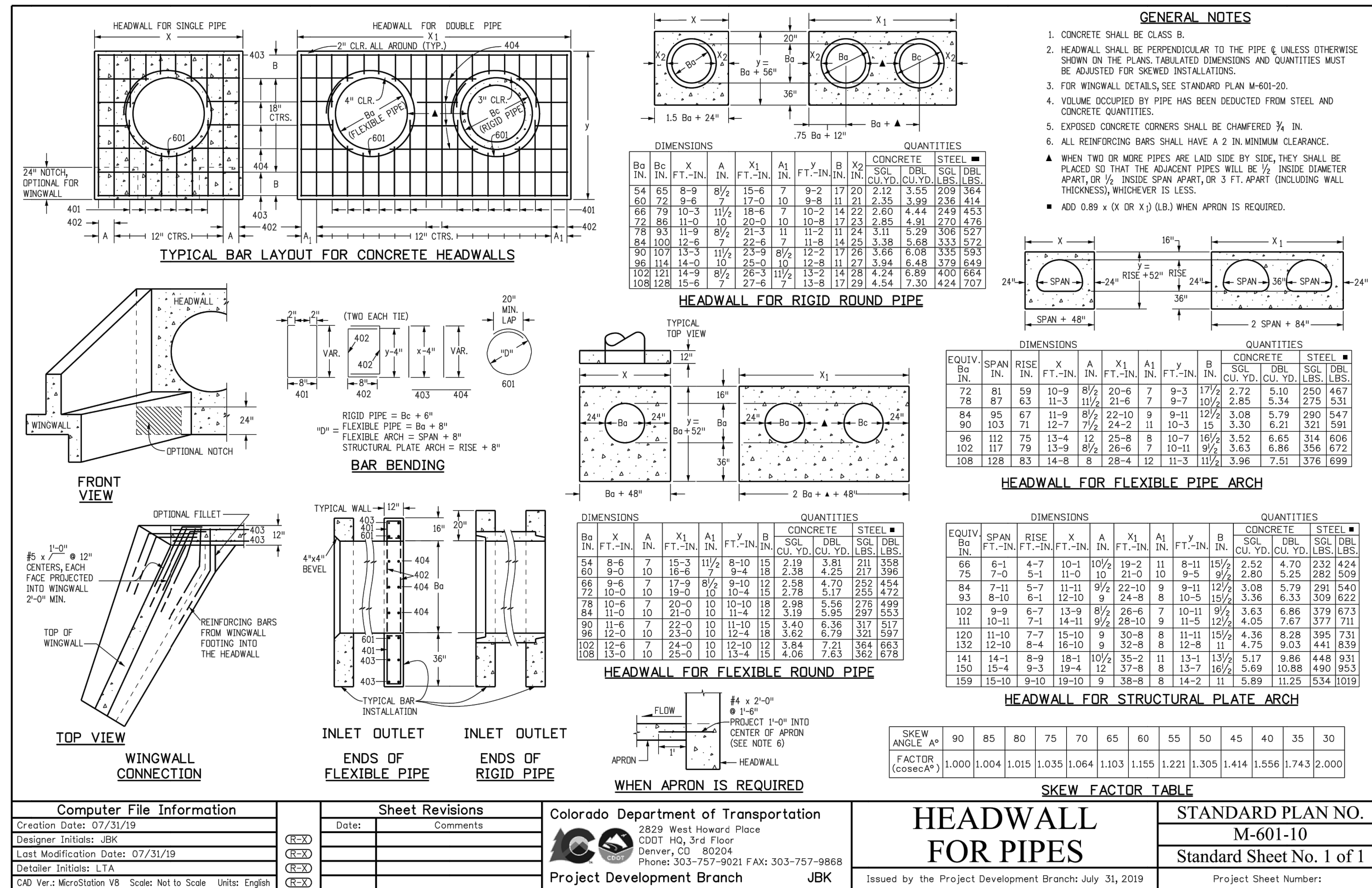
UNTIL SUCH TIME AS THESE DRAWINGS ARE APPROVED BY THE AGENCIES, OR ENGINEERING APPROVES THEIR USE, THEY ARE DESIGNATED BY WRITTEN AUTHORIZATION.

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 Westman Company

Central 303-740-9383 • Colorado Springs 719-583-2593  
Fort Collins 970-497-9888 • www.jrengineering.com



## Crushed Limestone Trail Surfacing:

- This item consists of supplying, placing and compacting crushed limestone surfacing on the existing base material and/or newly placed base course trail platform as described in project specifications, or as directed by the Engineer. This material is sometimes labeled as "crushed limestone", "Colorado white fines", or "breeze".
- Crushed limestone surfacing shall consist of 3/8" minus crushed limestone to a compacted depth of 4" and meeting the following grading requirements:

Sieve Size	% Passing
3/8"	100%
#4	70 - 100%
#8	45 - 70%
#16	30 - 55%
#30	20 - 45%
#200	7 - 15%

- The rock must be crushed into irregular and angular particles to allow interlocking into a tight matrix. The crushed rock must have adequate fines and some natural binders in order to cement the particles together after the fines are moistened, compacted, and allowed to dry. The fines, when laid to a depth of 4 inches, should bind to each other in a consolidated slab which is porous yet resistant to water falling on the surface. If the gradation of crusher fines does not meet the 7% passing the #200, clay fines may be added and mixed with the aggregate.
- Crushed limestone surfacing shall be "dense grade" limestone. The material shall be uniform in quality and substantially free from extraneous material.
- Limestone shall be placed with a method that provides a finished surface of evenly mixed material free from large pockets of separated rock.
- Crushed limestone material shall be within +/- 2% of the optimum moisture content at time of compaction.
- Crushed limestone shall be compacted by mechanical methods to 95% of Standard Proctor maximum dry density (per ASTM D698 or AASHTO T-99).



## ENGINEER'S STATEMENT

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

Mike Bramlett  
11/11/21

MIKE A. BRAMLETT, P.E.  
COLORADO P.E. 32314  
FOR AND ON BEHALF OF JR ENGINEERING, LLC (A PROFESSIONAL ENGINEERING FIRM)  
DATE

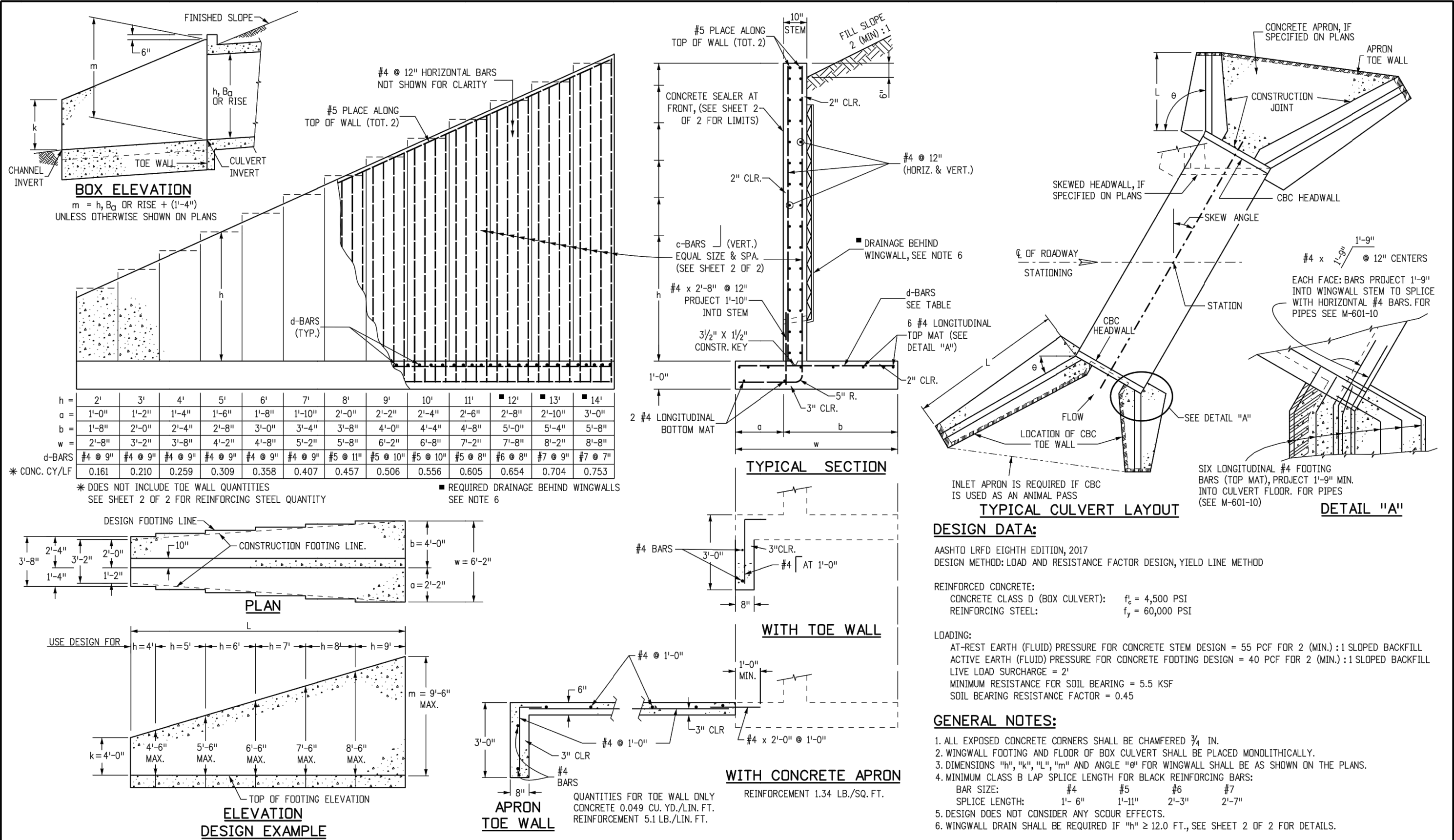
CLOVERLEAF FILING 2

DETAIL SHEET

SHEET 27 OF 28

JOB NO. 25158.01





Computer File Information				Sheet Revisions				Colorado Department of Transportation				STANDARD PLAN NO.			
Creation Date: 07/31/19				Date:				2829 West Howard Place				M-601-20			
Designer Initials: JBK								CDOT HQ, 3rd Floor							
Last Modification Date: 07/31/19								Denver, CO 80204				Standard Sheet No. 1 of 2			
Detailer Initials: LTA								Phone: 303-757-9021 FAX: 303-757-9868							
CAD Ver.: MicroStation V8 Scale: Not to Scale Units: English								Project Development Branch				Project Sheet Number:			

## 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.

#4	1'-3"	#5	1'-7"
#6	2'-5"	#7	2'-10"
#8	3'-8"	#9	4'-8"
#10	5'-11"	#11	7'-3"

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. = FACE  
N.F. = NEAR FACE  
I.F. = INSIDE FACE  
T.W. = TWO WAY  
E.S. = EACH SIDE

O.F. = OUTSIDE FACE  
T.&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.													
L (MULTIPLE OF m)	≤ (1.0 x m)	≤ (1.25 x m)	≤ (1.5 x m)	≤ (1.75 x m)	≤ (2.0 x m)	≤ (2.25 x m)	≤ (2.5 x m)	≤ (2.75 x m)	≤ (3.0 x m)	≤ (3.25 x m)	≤ (3.5 x m)														
h (FT)	k (FT)	* REINF. LB./L.F.	* REINF. LB./L.F.	* REINF. LB./L.F.	* REINF. LB./L.F.	* REINF. LB./L.F.	* REINF. LB./L.F.	* REINF. LB./L.F.	* REINF. LB./L.F.	* REINF. LB./L.F.	* REINF. LB./L.F.														
4	#4 @ 10"	53.60	#5 @ 10"	57.95	#5 @ 10"	57.10	#5 @ 8"	60.22	#5 @ 7"	62.43	#5 @ 7"	62.09	#5 @ 6"	65.38	#5 @ 6"	65.15	#6 @ 8"	67.10	#6 @ 8"	66.94	#6 @ 7"	70.66	#6 @ 7"	70.66	
5	#4 @ 10"	55.88	#5 @ 10"	60.46	#5 @ 10"	59.60	#5 @ 8"	62.89	#5 @ 7"	65.23	#5 @ 7"	64.88	#5 @ 6"	68.34	#5 @ 6"	68.11	#6 @ 8"	70.17	#6 @ 8"	70.00	#6 @ 7"	73.90	#6 @ 7"	73.90	
6	#5 @ 10"	64.43	#6 @ 10"	70.76	#6 @ 10"	69.69	#6 @ 8"	74.93	#6 @ 8"	74.45	#6 @ 7"	78.30	#6 @ 6"	83.64	#6 @ 6"	83.40	#6 @ 6"	83.22	#6 @ 6"	83.05	#7 @ 7"	89.64	#7 @ 7"	89.64	
7	#5 @ 10"	67.29	#6 @ 10"	73.76	#6 @ 10"	72.83	#6 @ 8"	78.32	#6 @ 8"	77.84	#6 @ 7"	81.87	#6 @ 6"	87.45	#6 @ 6"	87.21	#6 @ 6"	87.02	#6 @ 6"	86.86	#7 @ 7"	93.73	#7 @ 7"	93.73	
8	#5 @ 8"	74.71	#6 @ 8"	83.46	#6 @ 7"	87.09	#6 @ 6"	92.54	#7 @ 7"	99.47	#7 @ 7"	99.08	#7 @ 6"	107.11	#7 @ 6"	106.86	#7 @ 6"	106.66	#7 @ 6"	106.49	#7 @ 6"	106.35	#7 @ 6"	106.35	
9	#5 @ 8"	78.10	#6 @ 8"	87.23	#6 @ 7"	91.03	#6 @ 6"	96.72	#7 @ 7"	103.93	#7 @ 7"	103.54	#7 @ 6"	111.90	#7 @ 6"	111.65	#7 @ 6"	111.45	#7 @ 6"	111.28	#7 @ 6"	111.13	#7 @ 6"	111.13	
4	#4 @ 10"	50.51	#4 @ 10"	49.25	#5 @ 10"	53.71	#5 @ 10"	53.09	#5 @ 10"	52.36	#5 @ 9"	53.85	#5 @ 8"	55.54	#5 @ 7"	57.85	#5 @ 7"	57.67	#5 @ 7"	57.51	#5 @ 9"	59.93	#5 @ 9"	59.93	
5	#4 @ 10"	52.66	#4 @ 10"	51.37	#5 @ 10"	56.09	#5 @ 10"	55.46	#5 @ 10"	54.99	#5 @ 9"	56.29	#5 @ 8"	58.08	#5 @ 7"	60.51	#5 @ 7"	60.33	#5 @ 7"	60.17	#5 @ 9"	62.72	#5 @ 9"	62.72	
6	#4 @ 10"	54.92	#5 @ 10"	59.48	#5 @ 9"	60.31	#5 @ 9"	67.56	#6 @ 9"	67.08	#6 @ 9"	66.70	#6 @ 8"	69.53	#6 @ 8"	69.28	#6 @ 7"	73.12	#6 @ 7"	72.95	#6 @ 7"	72.81	#6 @ 7"	72.81	
7	#4 @ 10"	57.35	#5 @ 10"	62.16	#5 @ 9"	63.05	#5 @ 9"	70.66	#6 @ 9"	70.16	#6 @ 9"	69.78	#6 @ 8"	72.75	#6 @ 8"	72.50	#6 @ 7"	76.52	#6 @ 7"	76.35	#6 @ 7"	76.20	#6 @ 7"	76.20	
8	#5 @ 10"	66.39	#6 @ 10"	72.82	#6 @ 8"	77.97	#6 @ 7"	81.68	#6 @ 7"	81.10	#6 @ 6"	86.87	#6 @ 6"	86.37	#7 @ 7"	93.18	#7 @ 7"	92.97	#7 @ 7"	92.80	#7 @ 7"	92.64	#7 @ 7"	92.64	
9	#5 @ 10"	69.37	#6 @ 10"	76.10	#6 @ 8"	81.49	#6 @ 7"	85.37	#6 @ 7"	84.87	#6 @ 6"	90.59	#6 @ 6"	90.29	#7 @ 7"	97.59	#7 @ 7"	97.18	#7 @ 7"	97.00	#7 @ 7"	96.85	#7 @ 7"	96.85	
2	#4 @ 10"	43.91	#4 @ 10"	42.65	#4 @ 10"	41.82	#4 @ 10"	41.22	#4 @ 10"	40.78	#4 @ 9"	41.29	#5 @ 10"	44.61	#5 @ 10"	44.37	#5 @ 10"	44.18	#5 @ 10"	44.01	#5 @ 10"	43.87	#5 @ 10"	43.87	
3	#4 @ 10"	45.82	#4 @ 10"	44.55	#4 @ 10"	43.71	#4 @ 10"	43.11	#4 @ 10"	42.66	#4 @ 9"	43.22	#5 @ 10"	46.75	#5 @ 10"	46.51	#5 @ 10"	46.32	#5 @ 10"	46.15	#5 @ 10"	46.01	#5 @ 10"	46.01	
4	#4 @ 10"	47.80	#4 @ 10"	46.51	#4 @ 10"	45.65	#5 @ 10"	50.06	#5 @ 10"	49.59	#5 @ 10"	49.23	#5 @ 10"	48.94	#5 @ 10"	48.69	#5 @ 9"	50.00	#5 @ 9"	51.72	#5 @ 8"	51.57	#5 @ 8"	51.57	
5	#4 @ 10"	49.84	#4 @ 10"	48.53	#4 @ 10"	47.66	#5 @ 10"	52.33	#5 @ 10"	51.85	#5 @ 10"	51.48	#5 @ 10"	51.19	#5 @ 10"	50.94	#5 @ 9"	52.33	#5 @ 9"	54.14	#5 @ 8"	54.00	#5 @ 8"	54.00	
6	#4 @ 10"	51.99	#4 @ 10"	50.65	#5 @ 10"	55.34	#5 @ 10"	55.41	#5 @ 9"	57.53	#5 @ 10"	60.60	#5 @ 10"	60.29	#5 @ 9"	62.42	#5 @ 9"	62.22	#5 @ 9"	62.04	#5 @ 8"	64.89	#5 @ 8"	64.89	
7	#4 @ 10"	54.30	#5 @ 10"	58.80	#5 @ 10"	57.87	#5 @ 8"	61.10	#5 @ 8"	60.61	#5 @ 10"	63.43	#6 @ 10"	63.11	#6 @ 9"	65.35	#6 @ 9"	65.15	#6 @ 9"	64.97	#6 @ 8"	67.96	#6 @ 8"	67.96	
8	#5 @ 10"	62.91	#5 @ 10"	61.45	#5 @ 7"	67.46	#5 @ 6"	70.68	#5 @ 6"	70.20	#6 @ 7"	76.44	#6 @ 7"	76.13	#6 @ 7"	75.87	#6 @ 6"	81.30	#6 @ 6"	81.12	#6 @ 6"	80.98	#6 @ 6"	80.98	
9	#5 @ 10"	65.64	#5 @ 10"	64.15	#5 @ 7"	70.44	#5 @ 6"	73.82	#5 @ 6"	73.33	#6 @ 7"	79.86	#6 @ 7"	79.54	#6 @ 7"	79.28	#6 @ 6"	84.95	#6 @ 6"	84.77	#6 @ 6"	84.62	#6 @ 6"	84.62	
2	#4 @ 10"	41.70	#4 @ 10"	40.42	#4 @ 10"	39.57	#4 @ 10"	38.96	#4 @ 10"	38.50	#4 @ 10"	38.15	#4 @ 10"	37.87	#4 @ 10"	37.63	#4 @ 9"	38.25	#5 @ 10"	41.46	#5 @ 10"	41.31	#5 @ 10"	41.31	
3	#4 @ 10"	43.57	#4 @ 10"	42.27	#4 @ 10"	41.40	#4 @ 10"	40.79	#4 @ 10"	40.33	#4 @ 10"	39.97	#4 @ 10"	39.69	#4 @ 10"	39.45	#4 @ 9"	40.12	#5 @ 10"	43.54	#5 @ 10"	43.39	#5 @ 10"	43.39	
4	#4 @ 10"	45.48	#4 @ 10"	44.16	#4 @ 10"	43.28	#4 @ 10"	42.66	#4 @ 9"	43.09	#5 @ 10"	46.57	#5 @ 10"	46.27	#5 @ 10"	46.02	#5 @ 10"	45.82	#5 @ 10"	45.65	#5 @ 10"	45.50	#5 @ 10"	45.50	
5	#4 @ 10"	47.46	#4 @ 10"	46.10	#4 @ 10"	45.21	#4 @ 10"	44.58	#4 @ 9"	45.06	#5 @ 10"	48.74	#5 @ 10"	48.44	#5 @ 10"	48.19	#5 @ 10"	47.99	#5 @ 10"	47.81	#5 @ 10"	47.67	#5 @ 10"	47.67	
6	#4 @ 10"	49.52	#4 @ 10"	48.14	#4 @ 10"	47.23	#5 @ 10"	51.88	#5 @ 10"	51.38	#5 @ 9"	52.57	#5 @ 9"	52.27	#5 @ 8"	53.99	#5 @ 8"	53.79	#5 @ 7"	56.16	#5 @ 7"	56.01	#5 @ 7"	56.01	
7	#4 @ 10"	51.73	#4 @ 10"	50.31	#4 @ 9"	50.43	#5 @ 10"	54.29	#5 @ 10"	53.78	#5 @ 9"	55.04	#5 @ 9"	54.73	#5 @ 8"	56.55	#5 @ 8"	56.35	#5 @ 7"	58.84	#5 @ 7"	58.70	#5 @ 7"	58.70	
8	#4 @ 10"	54.00	#5 @ 10"	58.44	#5 @ 10"	57.45	#5 @ 8"	60.64	#5 @ 7"	62.92	#5 @ 6"	66.25	#5 @ 6"	65.94	#5 @ 6"	65.69	#5 @ 9"	67.76	#6 @ 8"	67.57	#6 @ 7"	71.45	#6 @ 7"	71.45	
9	#4 @ 10"	56.20	#5 @ 10"	60.87	#5 @ 10"	59.85	#5 @ 8"	63.21	#5 @ 7"	65.60	#5 @ 6"	69.09	#5 @ 6"	68.78	#5 @ 6"	68.52	#6 @ 8"	70.69	#6 @ 8"	70.51	#6 @ 7"	74.57	#6 @ 7"	74.57	
2	#4 @ 10"	39.84	#4 @ 10"	38.53	#4 @ 10"	37.65	#4 @ 10"	37.03	#4 @ 10"	36.57	#4 @ 10"	36.20	#4 @ 10"	35.91	#4 @ 10"	35.67	#4 @ 10"	35.48	#4 @ 9"	36.07	#4 @ 9"	35.93	#4 @ 9"	35.93	
3	#4 @ 10"	41.68	#4 @ 10"	40.35	#4 @ 10"	39.47	#4 @ 10"	38.84	#4 @ 10"	38.36	#4 @ 10"	38.00	#4 @ 10"	37.71	#4 @ 10"	37.46	#4 @ 10"	37.27	#4 @ 10"	37.91	#4 @ 9"	37.76	#4 @ 9"	37.76	
4	#4 @ 10"	43.58	#4 @ 10"	42.22	#4 @ 10"	41.31	#4 @ 10"	40.67	#4 @ 10"	40.19	#4 @ 10"	39.82	#4 @ 10"	39.53	#4 @ 10"	39.28	#4 @ 10"	39.08	#4 @ 9"	39.77	#4 @ 9"	39.63	#4 @ 9"	39.63	
5	#4 @ 10"	45.53	#4 @ 10"	44.14	#4 @ 10"	43.21	#4 @ 10"	42.56	#4 @ 10"	42.07	#5 @ 10"	46.44	#5 @ 10"	46.13	#5 @ 10"	45.87	#5 @ 10"	45.67	#5 @ 10"	45.49	#5 @ 10"	45.34	#5 @ 10"	45.34	
6	#4 @ 10"	47.58	#4 @ 10"	46.14	#4 @ 10"	45.20	#4 @ 10"	44.53	#4 @ 10"	44.03	#5 @ 10"	48.67	#5 @ 10"	48.35	#5 @ 10"	48.08	#5 @ 10"	47.88	#5 @ 10"	47.69	#5 @ 10"	47.54	#5 @ 10"	47.54	
7	#4 @ 10"	49.79	#4 @ 10"	48.31	#4 @ 10"	47.34	#5 @ 10"	51.97	#5 @ 10"	51.45	#5 @ 10"	51.04	#5 @ 9"	52.29	#5 @ 9"	52.03	#5 @ 8"	53.79	#5 @ 8"	53.61	#5 @ 7"	56.00	#5 @ 7"	56.00	
8	#4 @ 10"	52.06	#4 @ 10"	50.54	#4 @ 10"	49.54	#5 @ 10"	54.43	#5 @ 10"	53.89	#5 @ 10"	53.47	#5 @ 9"	54.80	#5 @ 9"	54.53	#5 @ 8"	56.39	#5 @ 8"	56.20	#5 @ 7"	58.72	#5 @ 7"	58.72	
2	#4 @ 10"	38.01	#4 @ 10"	36.75	#4 @ 10"	35.85	#4 @ 10"	35.21	#4 @ 10"	34.73	#4 @ 10"	34.36	#4 @ 10"	34.06	#4 @ 10"	33.81	#4 @ 10"	33.61	#4 @ 10"	33.44	#4 @ 10"	33.30	#4 @ 10"	33.30	
3	#4 @ 10"	39.93	#4 @ 10"	38.56	#4 @ 10"	37.64	#4 @ 10"	36.99	#4 @ 10"	36.51	#4 @ 10"	36.13	#4 @ 10"	35.83	#4 @ 10"	35.58	#4 @ 10"	35.38	#4 @ 10"	35.21	#4 @ 10"	35.06	#4 @ 10"	35.06	
4	#4 @ 10"	41.81	#4 @ 10"	40.40	#4 @ 10"	39.47	#4 @ 10"	38.81	#4 @ 10"	38.33	#4 @ 10"	37.93	#4 @ 10"	37.63	#4 @ 10"	37.37	#4 @ 10"	37.17	#4 @ 10"	36.99	#4 @ 10"	36.84	#4 @ 10"	36.84	
5	#4 @ 10"	43.75	#4 @ 10"	42.30	#4 @ 10"	41.35	#4 @ 10"	40.67	#4 @ 10"	40.17	#4 @ 10"	39.78	#4 @ 10"	39.47	#4 @ 10"	39.20	#4 @ 10"	38.97	#4 @ 10"	38.86	#4 @ 10"	38.70	#4 @ 10"	38.70	
6	#4 @ 10"	45.79	#4 @ 10"	44.30	#4 @ 10"	43.31	#4 @ 10"	42.62	#4 @ 10"	42.10	#4 @ 10"	41.71	#4 @ 10"	41.39	#4 @ 10"	41.12	#4 @ 10"	40.82	#4 @ 10"	40.68	#4 @ 10"	40.50	#4 @ 10"	40.50	
7	#4 @ 10"	47.90	#4 @ 10"	46.35	#4 @ 10"	45.34	#4 @ 10"	44.63	#4 @ 10"	44.10	#4 @ 10"	43.69	#4 @ 10"	43.36	#4 @ 10"	43.09	#4 @ 10"	42.77	#4 @ 10"	42.56	#4 @ 10"	42.37	#4 @ 10"	42.37	
8	#4 @ 10"	50.43	#4 @ 10"	48.84	#4 @ 10"	47.80	#4 @ 10"	47.06	#5 @ 10"	51.83	#5 @ 10"	51.40	#5 @ 10"	51.05	#5 @ 10"	50.77	#5 @ 10"	50.54	#5 @ 10"	50.35	#5 @ 10"	50.18	#5 @ 10"	50.18	
2	#4 @ 10"	36.41	#4 @ 10"	35.01	#4 @ 10"	34.08	#4 @ 10"	33.42	#4 @ 10"	32.92	#4 @ 10"	32.54	#4 @ 10"	32.23	#4 @ 10"	31.97	#4 @ 10"	31.77	#4 @ 10"	31.59	#4 @ 10"	31.44	#4 @ 10"	31.44	
3	#4 @ 10"	38.23	#4 @ 10"	36.81	#4 @ 10"	35.85	#4 @ 10"	35.18	#4 @ 10"	34.67	#4 @ 10"	34.28	#4 @ 10"	33.97	#4 @ 10"	33.70	#4 @ 10"	33.50	#4 @ 10"	33.32	#4 @ 10"	33.17	#4 @ 10"	33.17	
4	#4 @ 10"	40.09	#4 @ 10"	38.60	#4 @ 10"	37.64	#4 @ 10"	36.95	#4 @ 10"	36.44	#4 @ 10"	36.04	#4 @ 10"	35.72	#4 @ 10"	35.45	#4 @ 10"	35.25	#4 @ 10"	35.07	#4 @ 10"	34.91	#4 @ 10"	34.91	
5	#4 @ 10"	42.07	#4 @ 10"	40.57	#4 @ 10"	39.61	#4 @ 10"	38.92	#4 @ 10"	38.40	#4 @ 10"	37.99	#4 @ 10"	37.63	#4 @ 10"	37.30	#4 @ 10"	37.10	37.23	#4 @ 10"	36.88	#4 @ 10"	36.88	#4 @ 10"	36.88
6	#4 @ 10"	43.97	#4 @ 10"	42.40	#4 @ 10"	41.36	#4 @ 10"	40.64	#4 @ 10"	40.10	#4 @ 10"	39.68	#4 @ 10"	39.35	#4 @ 10"	39.07	#4 @ 10"	38.77	#4 @ 10"	43.33	#4 @ 10"	43.15	#4 @ 10"	42.96	42.96
7	#4 @ 10"	46.19	#4 @ 10"	44.56	#4 @ 10"	43.49	#4 @ 10"	42.74	#4 @ 10"	42.18	#4 @ 10"	41.75	#4 @ 10"	41.41	#4 @ 10"	41.13	#4 @ 10"	40.87	#4 @ 10"	40.65	#4 @ 10"	40.48	#4 @ 10"	40.48	40.48
2	#4 @ 10"	34.90	#4 @ 10"	33.44	#4 @ 10"	32.47	#4 @ 10"	31.78	#4 @ 10"	31.27	#4 @ 10"	30.86	#4 @ 10"	30.56	#4 @ 10"	30.27	#4 @ 10								