

EXHIBIT N

Drawing Package

Plat (Pinnacle Design Consulting Group)
Survey (Tuttle Surveying Services, Inc.)
Floodplain Maps (Schmueser Gordan Meye Engineers & Surveyors)
Civil Plans (Pinnacle Design Consulting Group)
Civil Drainage Report (Pinnacle Design Consulting Group)
Landscape and Irrigation Plan (The Stevens Group, Inc.)
Rockfall Mitigation Plan (CTL Thompson)
Architectural Site Plan (RED Room Design, LLC)
Architectural Lot Coverage (RED Room Design, LLC)
Architectural Gross Area (RED Room Design, LLC)
Architectural Floor Plans (RED Room Design, LLC)
Architectural Elevations (RED Room Design, LLC)
Architectural Signage (RED Room Design, LLC)
Architectural 3D Renderings (RED Room Design, LLC)
Structural Retaining Wall Plan (BWR)

SHEET GENERAL NOTES

- Contractor shall verify all dimensions and jobsite conditions before commencing work and shall coordinate any discrepancies with the Engineer.
- Contractor shall review and verify all dimensions shown on Structural drawings with those shown on Architectural and Civil drawings. Contractor shall notify the Architect of any discrepancies between the drawings and receive written clarifications of discrepancies before proceeding with construction.
- Use written dimensions. Do not use scaled dimensions. Where no dimension is provided, consult the Engineer for clarification before proceeding with the work.
- The Contractor is responsible for implementing jobsite safety and construction procedures in accordance with national, state, and local safety requirements. The design, adequacy, and safety of erection bracing, shoring, temporary supports, etc., is the sole responsibility of the Contractor and has not been considered by the Engineer. The Contractor is responsible for the coordination of any penetration or use of structure for conduit, raceway, or non-structural items with the Engineer prior to the installation of the non-structural items.
- General notes shall not substitute for specifications. Conflicts between the two shall be brought to the Engineer's attention, or the stricter criteria shall be used.
- The Contractor will pay the Engineer for time and expense required to review, design, and coordinate items that were constructed not in conformance with these drawings.
- The Contractor is responsible for locating and the protection of all existing utilities and adjacent structures throughout all phases of construction.

- DESIGN CRITERIA**
- CODE: 2021 International Building Code (IBC).
 - DESIGN LOADS:

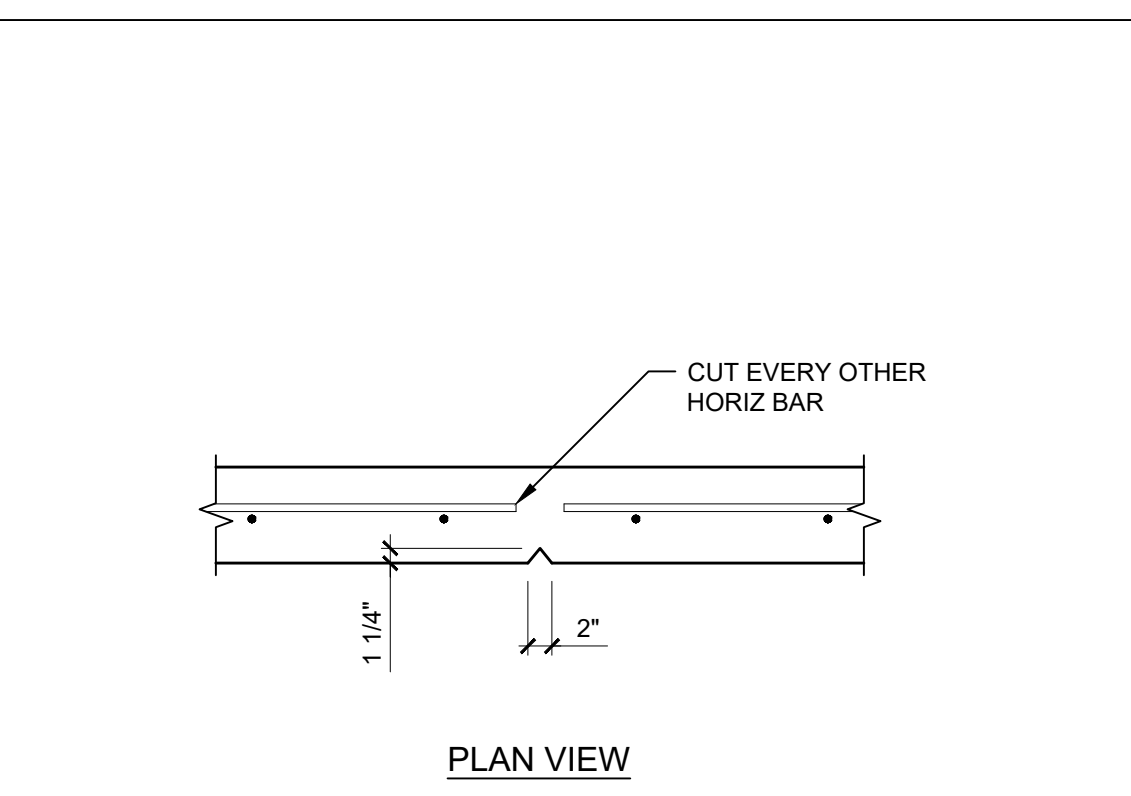
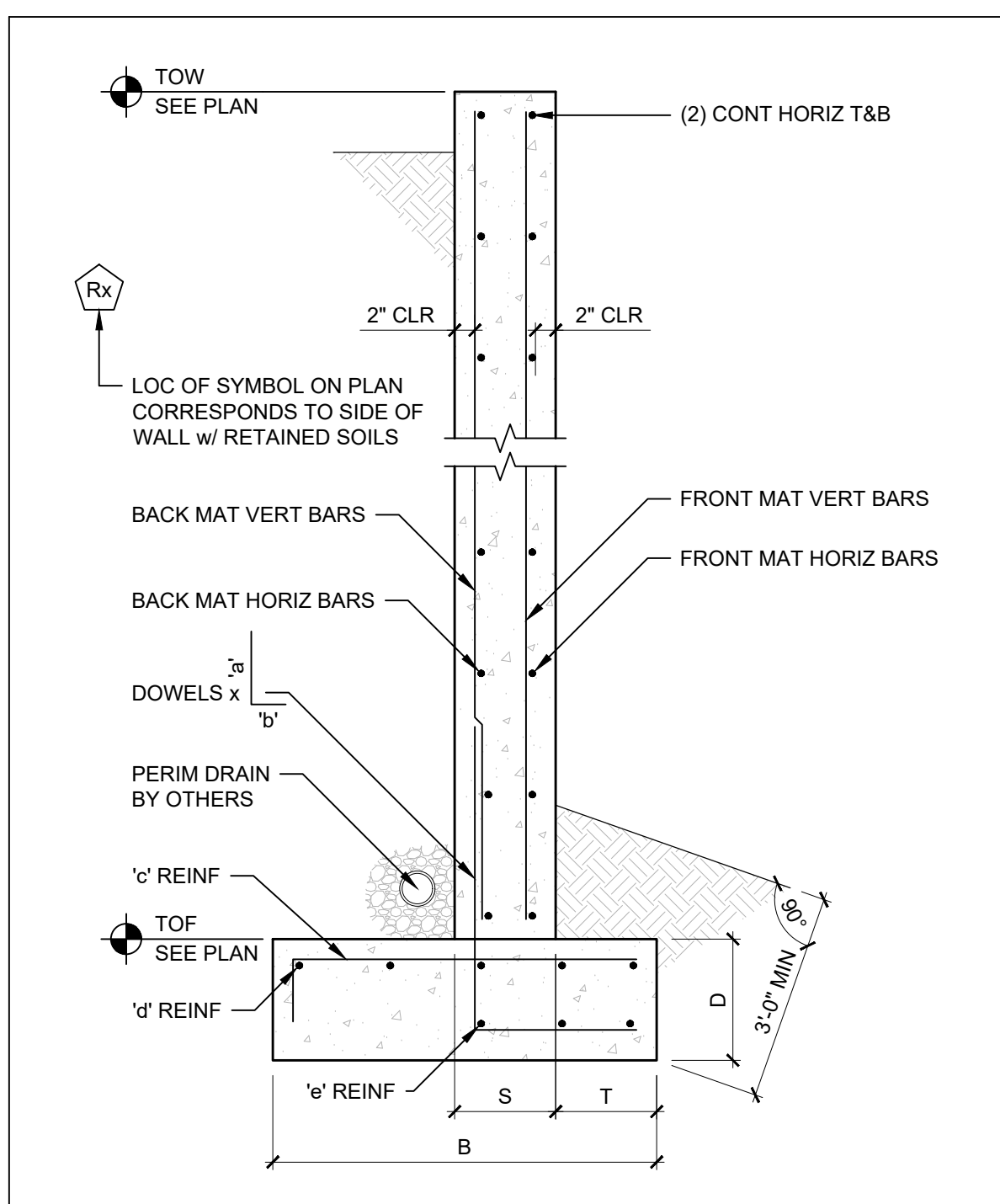
LIVE LOADS:
 SURCHARGE = 250 PSF
 VEHICLE IMPACT = 6,000 LB 27" above parking pavement
LATERAL LOADS:
 WIND 90 MPH (3 Second Gust), Exposure C
 SEISMIC Site Class D, Risk Category II, I = 1.0
 $S_s = 0.362$, $S_1 = 0.082$ g, $S_{d1} = 0.391$ g, $S_{d1} = 0.130$ g

- FOUNDATION**
- Recommendations for foundation type and design criteria were provided by the geotechnical report "Subsoil Study For Foundation Design Proposed Riverside Park Townhome Development," dated August 8, 1999, by Hepworth-Pawlak Geotechnical, Inc., a separate consultant to the Owner. Contractor shall read and be familiar with all aspects and requirements for site and foundation sub-grade preparation. Unless noted otherwise, the geotechnical report shall be considered part of the construction documents and shall be followed.
 - Design Parameters:
 Maximum Allowable Bearing Capacity = 2,000 psf
 Active Lateral Soil Pressure = 45 psf
 Passive Soil Pressure = 300 psf ultimate
 Coefficient of Friction = 0.35 ultimate

- The retaining walls are supported on spread footings bearing on competent subgrade. The bottom of all footings to bear 30" minimum below finished grade.
- The bottom of all footings shall bear on solid native, inorganic, undisturbed soil or approved compacted fill per the geotechnical report.
- A Geotechnical Engineer shall perform an open excavation inspection prior to placing foundations to ensure the bearing capacity is satisfactory.
- No concrete shall be placed on frozen soil or in excavation containing water.
- No concrete shall be placed in footings or foundation wall without 48 hours notification to allow Engineer to observe the reinforcement if deemed necessary.
- The design and erection of all shoring, sheeting, soil stability, and dewatering is the sole responsibility of the Contractor. The Contractor shall hire a licensed Engineer to design all shoring and sheeting.
- Utility and plumbing lines shall not go through or beneath the foundation unless indicated otherwise.

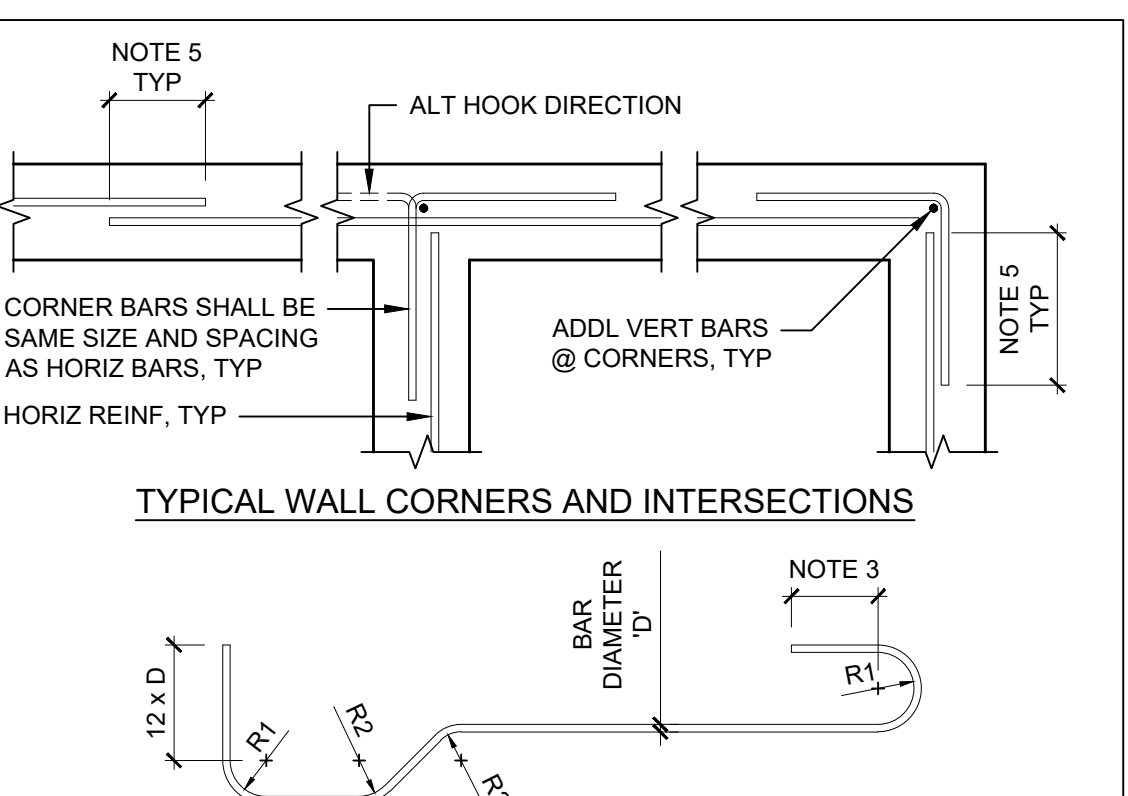
CAST-IN-PLACE CONCRETE

- Concrete properties shall be determined from designated Exposure Category F Class F3 as described in Section 19.3.1 of the latest edition of ACI 318 unless noted otherwise.
 - Minimum Compressive Strength: $f_c = 5,000$ psi at 28 days, normal weight.
 - Maximum water/cement ratio (w/c): 0.40
 - Air Entrainment with 3/4" aggregate size where exposed to freeze/thaw = 6% +/- 1.5%
- Concrete shall be ready-mixed in accordance with ASTM C94. Portland cement shall conform to ASTM C150, Type I or II. Normalweight aggregate shall conform to ASTM C33. Calcium Chloride shall not be added to concrete.
- Material, mixing, placement, and workmanship shall be in accordance with the requirements of the latest edition of the "Building Code Requirements for Reinforced Concrete" (ACI 318) and Section 1905 of the IBC. Each proposed concrete mix shall include test data.
- Concrete Placement: Cold weather is defined by ACI 308 as "The air temperature has fallen to, or is expected to fall below, 40°F; when cold weather conditions exist, place concrete complying with ACI 308. Hot weather is defined by ACI 308 as "any combination of high air temperature, low relative humidity, and wind velocity tending to impair the quality of fresh or hardened concrete or otherwise resulting in abnormal properties; when hot weather conditions exist, place concrete complying with ACI 308."
- Testing of composite samples of fresh concrete obtained according to ASTM C 172 shall be performed on at least one composite sample for each 100 cubic yard or fraction thereof of each concrete mixture placed each day. Cast and laboratory- and/or field cure at least two sets of two standard cylinder specimens for each composite sample according to ASTM C 311/C 31M. Test one set of two specimens at 7 days and one set of two specimens at 28 days according to ASTM C 39/C 39M. A compressive-strength test shall be the average compressive strength from a set of two specimens obtained from same composite sample and tested at age indicated. Strength of each concrete mixture will be satisfactory if every average of any three consecutive compressive-strength tests equals or exceeds specified compressive strength and no compressive-strength test value falls below specified compressive strength by more than 500 psi.
- All Detailing, Fabrication, and Erection of reinforcing shall conform to latest edition of ACI "Manual of Standard Practice for Detailing Reinforced Concrete Structures" (ACI 315) and the current "Building Code Requirements for Reinforced Concrete" (ACI 318).
- Reinforcing Steel:
 ASTM A615: Grade 40 for #3, Grade 60 for #4 and larger.
 The following minimum concrete cover shall be provided for reinforcement per ACI 318.
 Concrete cast against and permanently exposed to earth: 3"
 Concrete cast against forms and exposed to earth or weather
 #6 through #18 bars: 2"
 #5 bar and smaller: 1-1/2"
- Unless noted otherwise, lap splices in concrete shall be class "B" tension lap splices (2-0" minimum) per the latest edition of ACI 318. Stagger alternate splices a minimum of one lap length. Extend all horizontal reinforcing continuous around corners and intersections or provide bent corner bars to match and lap with horizontal bars at corners and intersections of footings and walls.
- Provide bar supports and spacers to support all reinforcement in proper locations and wire adequately at intersections to hold bars firmly in position while concrete is placed. Bar supports and spacers which rest on exposed surfaces shall be hot dipped-galvanized or epoxy-coated.
- Welding of reinforcement is not permitted unless specifically noted or approved in writing by the Engineer.
- Isolation Joint Material shall be 1/2" thick full height of joint, unless noted otherwise.



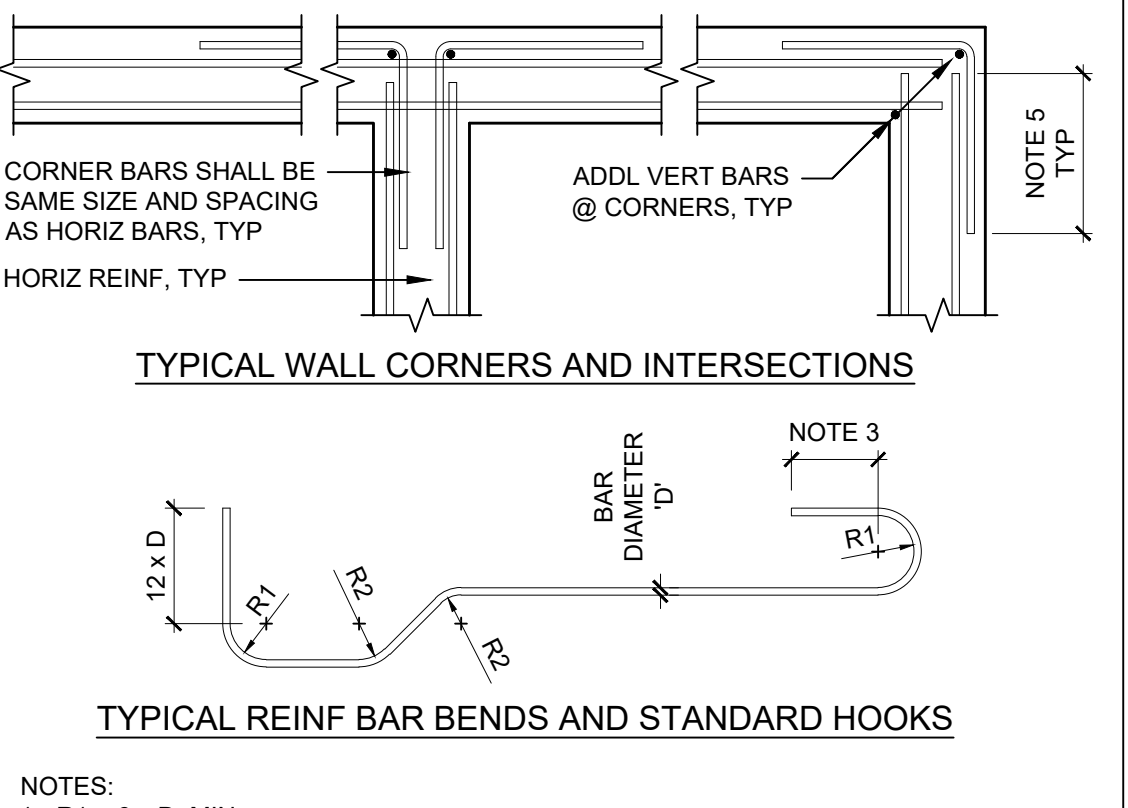
- NOTES:**
- INSTALL CONTROL JOINTS AT 3x WALL HEIGHT ON CENTER HORIZONTAL SPACING (20'-0" OC MAX).
 - JOINT LOCATION TO BE APPROVED BY ARCH.
 - EXTEND CONTROL JOINT OVER TOP SURFACE AND DOWN BACK SIDE WHERE EXPOSED TO VIEW.

TYP VERT CONTROL JNT IN CONC WALL



- NOTES:**
- R1 = 6 x D, MIN.
 - R2 = 4 x D, MIN.
 - GREATER OF 4 x D AND 2 1/2' MIN.
 - MINIMUM DEVELOPMENT LENGTH SHALL BE 55 x D FOR STRAIGHT BARS AND 22 x D FOR HOOKED BARS.
 - LAP SPLICE LENGTHS SHALL BE 45 x D FOR #3 THROUGH #6 BARS AND 71 x D FOR #7 BARS AND LARGER, BUT NO LESS THAN 24".

TYPICAL CONCRETE REINF DETAILS SINGLE MAT



- NOTES:**
- R1 = 6 x D, MIN.
 - R2 = 4 x D, MIN.
 - GREATER OF 4 x D AND 2 1/2' MIN.
 - MINIMUM DEVELOPMENT LENGTH SHALL BE 55 x D FOR STRAIGHT BARS AND 22 x D FOR HOOKED BARS.
 - LAP SPLICE LENGTHS SHALL BE 45 x D FOR #3 THROUGH #6 BARS AND 71 x D FOR #7 BARS AND LARGER, BUT NO LESS THAN 24".

TYPICAL CONCRETE REINF DETAILS DOUBLE MAT

BWR STANDARD ABBREVIATIONS

AB	Anchor Bolt	K	King Stud
ABV	Above	KIP	Thousand Pounds
ADDL	Additional	KIP FT	Thousand Pound-feet
AL	Alternate	L	Length, Steel Angle
APPROX	Approximate(y)	LLH	Long Leg Horizontal
ARCH	Architect, Architectural	LVL	Long Leg Vertical
B PL	Base Plate	LOC	Location
BF	Both Faces	LONG	Longitudinal
BLDG	Building	LSL	Laminated Strand Lumber
BLKG	Blocking	LVL	Laminated Veneer Lumber
B.O.	Bottom Of	MATL	Material
BOF	Bottom Of Footing	MAX	Maximum
BOS	Bottom Of Steel	MC	Moment Connection
BOT	Bottom	MCH	Mechanical
BOW	Bottom Of Wall	MFR	Manufacturer
BRGC	Bracing	MIN	Minimum
BRG	Bearing	MO	Masonry Opening
BS	Both Sides	(N)	New
BTWN	Between	NIC	Not In Contract
BWP	Brace Wall Panel	NS	Near Side
C	Steel Channel	N-S	North-South
CANTIL	Can'tilever	NTS	Not To Scale
CL	Clear	OC	On Center
CMU	Concrete Masonry Unit	O.F.	Outside Face
COL	Column	OPNG	Opening
CONN	Concrete Connection	OSL	Omit(s)
CONN	Connection	OPT	Oriented Strand Board
CONT	Continu(e)s, Continuous	PERIM	Perimeter
CP	Cripple Post	PERP	Perpendicular
CSK	Countersink, Countersunk	PL	Plate
CTR	Center	PLAT	Parallel
D	Deep, Depth	PLYWD	Plywood
DBL	Double	PREFAB	Prefabricated
DEMO	Demolition, Demolish	PSL	Parallel Strand Lumber
DET	Detail	PT	Pressure Preservative Treated
DIAG	Diagonal	RD	Roof Drain
DIM	Dimension	REF	Reference
DWG	Drawing	REINF	Reinforce(d), Reinforcement
DWL	Dowel	REQD	Required
EA	Each	REV	Reverse(d)
EF	Each Face	RO	Rough Opening
EJ	Expansion Joint	RS	Rough Sawn
EL	Elevation	SCHED	Schedule
ELEV	Elevator	SHTHG	Sheathing
EMBED	Embedment	SGN	Structural General Notes
EN	Edge Nail	SIM	Similar
ENGR	Engineer	SIP	Structural Insulated Panel
EOS	Edge of Slab	SOC	Slab On Ground
EQ	Equal	SO	Square
EQL SP	Equally Spaced	SST	Stainless Steel
EW	East-West	STAG	Staggered
(E), EXIST	Existing	STD	Standard
EXP	Expansion	STIFF	Stiffener
EXT	Exterior	STL	Steel
FAS	Fascia(e)	STRUCT	Structure, Structural
FD	Floor Drain	SW	Shear Wall
FDN	Foundation	T	Trimmer
FLG	Flange	T&B	Top And Bottom
FLR	Floor	T&G	Tongue-And-Groove
FO	Face Of	TB	Trough Bolt
FOC	Face Of Concrete	TBR	To Be Removed
FOM	Face Of Masonry	TEMP	Temporary
FOS	Face Of Stud	THD	Thread(ed)
FS	Far Side	T.O.	Top Of
FSTNR	Fastener	TOB	Top Of Beam
FTG	Footing	TOC	Top Of Concrete
GA	Gauge	TOF	Top Of Footing
GALV	Galvanize(d)	TOS	Top Of Steel
GC	General Contractor	TOW	Top Of Wall
GL	Glued-Laminated Wood	TRANSV	Transverse
GLC	Glued-Laminated Wood	TYP	Typical
H	Height	UNO	Unless Noted Otherwise
HD	Hold-down	VERT	Vertical
HR	Header	VIF	Verify In Field
HGR	Hanger	VNR	Veneer
HORIZ	Horizontal	W	Wide-Flange Beam, Wide, Width
HSS	Hollow Structural Section	w	With
I.F.	Inside Face	WF	Wide-Flange
INCL	Included(s), Including	w/o	Without
INSUL	Insulation	WP	Working Point
INT	Interior	WWF	Welded-Wire Fabric
JNT	Joint		
JST	Joist		

RETAINING WALL SCHEDULE

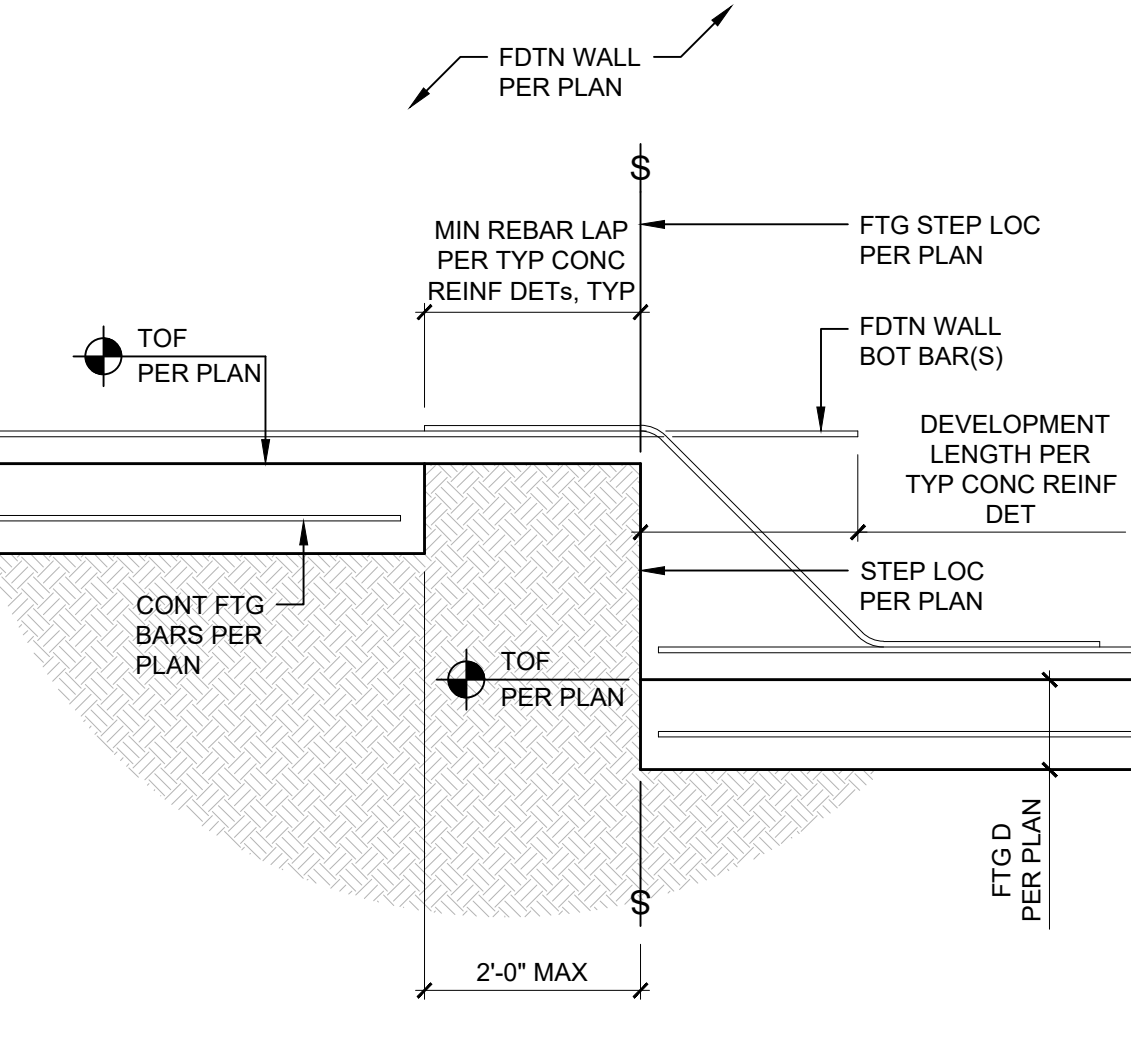
PLAN MARK	FRONT MAT		BACK MAT	
	HORIZ BARS	VERT BARS	HORIZ BARS	VERT BARS
R1	#5 @ 18" OC	#5 @ 12" OC	#5 @ 18" OC	(2) #7 @ 12" OC
R2	#5 @ 18" OC	#5 @ 12" OC	#5 @ 18" OC	(2) #5 @ 12" OC
R3	#5 @ 18" OC	#5 @ 16" OC	#5 @ 18" OC	#5 @ 16" OC
R4	-	#5 @ 18" OC	(2) #5 @ 18" OC	(2) #5 @ 18" OC
R5	-	#5 @ 18" OC	(2) #5 @ 18" OC	(2) #5 @ 16" OC

PLAN MARK	DOWELS		WALL/FOOTING DIMENSIONS			
	SIZE & SPACING	DIM 'A'	DIM 'B'	DIM 'S'	DIM 'T'	DIM 'D'
R1	#5 @ 12" OC	96"	38"	16'-0"	1'-0"	2'-5"
R2	#5 @ 12" OC	62"	24"	12'-6"	1'-0"	1'-4"
R3	#5 @ 18" OC	62"	20"	10'-0"	1'-0"	1'-4"
R4	#5 @ 18" OC	62"	8"	10'-0"	8"	4"
R5	#5 @ 16" OC	62"	8"	11'-0"	8"	1'-0"

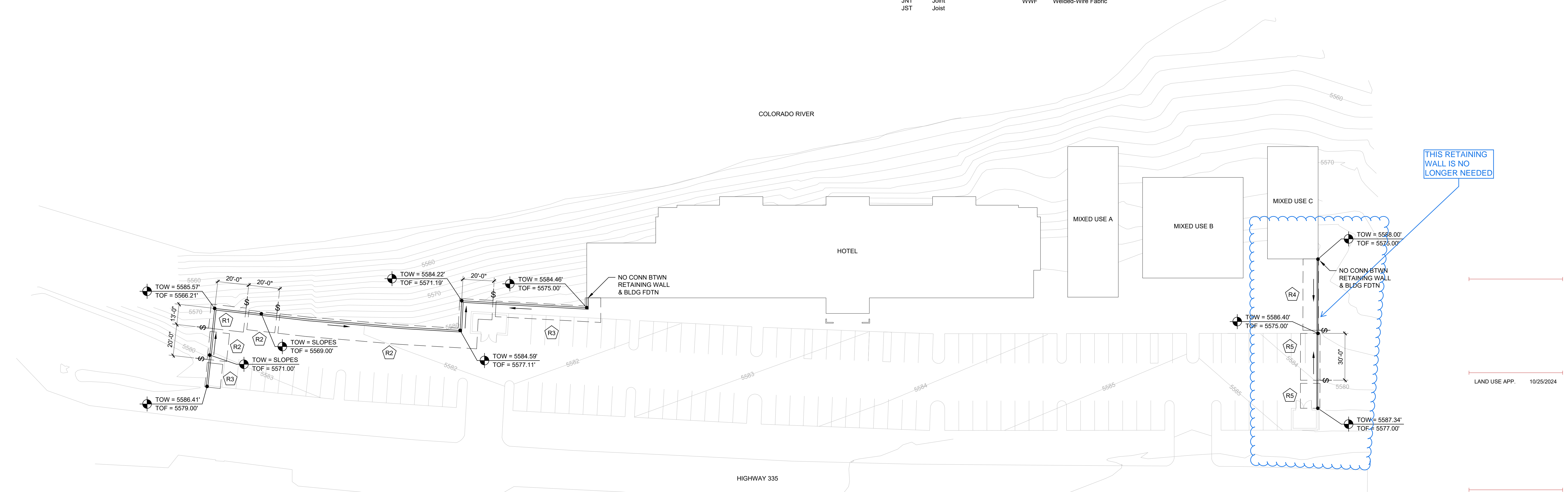
PLAN MARK	FOOTING REINF		W REINFORCING	
	W REINFORCING	W REINFORCING	W REINFORCING	W REINFORCING
R1	(2) #9 @ 12" OC	(16) #7 CONT	(4) #7 CONT	(4) #7 CONT
R2	(2) #9 @ 12" OC	(11) #5 CONT	(3) #5 CONT	(3) #5 CONT
R3	#5 @ 16" OC	(9) #5 CONT	(2) #5 CONT	(2) #5 CONT
R4	(2) #5 @ 18" OC	(9) #5 CONT	(2) #5 CONT	(2) #5 CONT
R5	(2) #9 @ 16" OC	(9) #5 CONT	(3) #5 CONT	(3) #5 CONT

- NOTES:**
- SEE PLAN FOR RETAINING WALL LOCATIONS, NOTED AS (R#).
 - BARS SHALL BE BUNDLED IN CONTACT SIDE-BY-SIDE IN DIRECTION PARALLEL TO FACE OF WALL.

TYP RETAINING WALL DETAILS



TYPICAL FOOTING STEP



SITE RETAINING WALL PLAN

- SCALE: 1" = 30'
- PLAN NOTES:**
- SITE ELEVATION CONTOURS TAKEN FROM CIVIL GRADING PLAN FOR REFERENCE. SEE CIVIL FOR ACTUAL GRADING PLAN.
 - PROVIDE VERT CONTROL JOINTS PER 'TYP VERT CONTROL JNT IN CONC WALL' THIS SHEET.
 - INDICATES FOOTING STEP. SEE 'TYP FOOTING STEP' THIS SHEET.
 - INDICATES TOP OF WALL (TOW) SLOPE DOWNWARD.
 - (R#) INDICATES RETAINING WALL TYPE. SEE 'TYP RETAINING WALL DETAILS' THIS SHEET.

RED

1001 Grand Ave, Suite 103
 Glenwood Springs, CO 81601

bwr

1010 W 24th St
 Rifle, Colorado 81650
 (970) 462-8853
 bwr@bwr.pe
 BWR Project No. 24011

These documents have been specifically prepared for 7051 335 County Rd. They are not suitable for use on other projects or in other locations without the approval and participation of the architect. Reproduction prohibited without approval of the architect.

2024

PROFESSIONAL ENGINEER

Lot 1 Highway PUD

7051 335 County Rd New Castle Colorado 81647

LAND USE APP. 10/25/2024

Site Retaining Wall Plan

S-001