

WASTEWATER TREATMENT PLANT EXPANSION - 2017

FOR THE CITY OF WARSAW, INDIANA

VOLUME 2

HONORABLE JOSEPH M. THALLEMER, MAYOR

BOARD OF PUBLIC WORKS AND SAFETY

HONORABLE JOSEPH M. THALLEMER, PRESIDENT

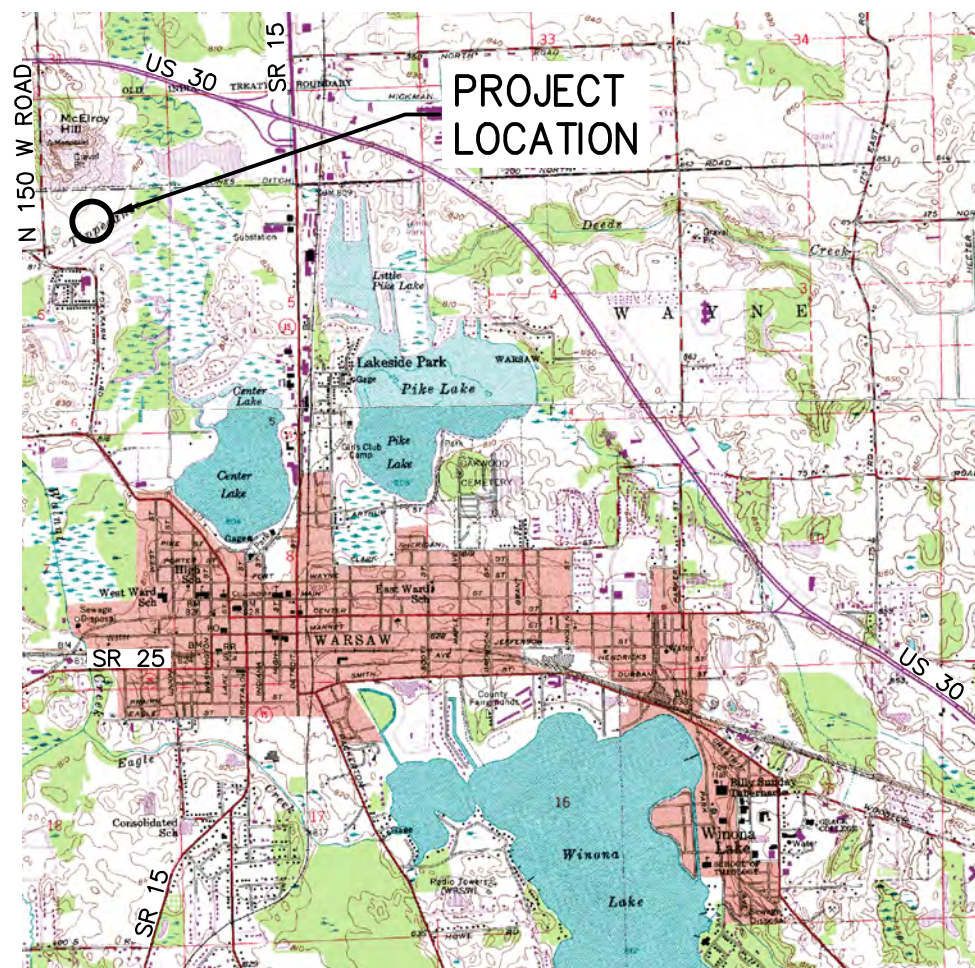
JEFF GROSE
GEORGE CLEMENS

JAMES EMANS, P.E., CITY ENGINEER

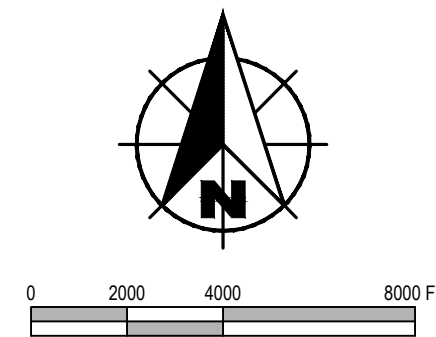
BRIAN DAVISON, UTILITY MANAGER

LARRY HYDEN, ASSISTANT UTILITY MANAGER

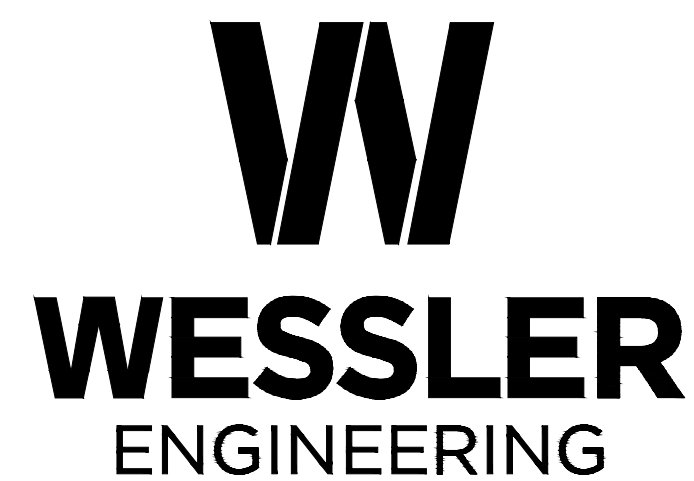
JEFF KROTKE, ASSISTANT OPERATIONS MANAGER



WARSAW
VICINITY MAP
SCALE: 1" = 4000'



STATE LOCATION MAP
SCALE: NONE



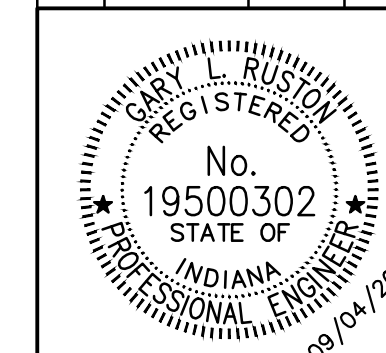
More than a Project™

6219 South East Street
Indianapolis, Indiana 46227
Phone: 317-788-4551 - Fax: 317-788-4553
www.wesslerengineering.com

PROJECT NO. 162813-04-003

SEPTEMBER 4, 2018

| NO. | DATE | INITIALS | DESCRIPTION |
|-----|------|----------|-------------|
| | | | |
| | | | |
| | | | |



Gary L. Ruston
GARY L. RUSTON
REGISTERED ENGINEER STATE OF INDIANA NO. 19500302

"For Viewing Purposes Only - Visit wesslerengineering.com to Purchase"

Drawing: J:\Warsaw\Projects\162813\Warsaw WWTTP Expansion\CAD\04-001\DWG\Sheets\162813-TS.dwg | Layout: TS-2 | Plotted: 09/04/18 @ 10:38:40 | LastSavedBy: MikeN

INDEX TO DRAWINGS

VOLUME 1

VOLUME 2

| PAGE NO. | SHEET NO. | DESCRIPTION | PAGE NO. | SHEET NO. | DESCRIPTION | PAGE NO. | SHEET NO. | DESCRIPTION | PAGE NO. | SHEET NO. | DESCRIPTION |
|-------------------------|-----------|---|---|-----------|--|--|-----------|---|--|-----------|--|
| AREA A - GENERAL | | | AREA E - OXIDATION DITCH AND ASSOCIATED STRUCTURES | | | AREA G - UV/POST AERATION CHAMBER | | | AREA J - SLUDGE HANDLING FACILITIES | | |
| 1 | | TITLE SHEET | 73 | DC03 | NEW PRIMARY CLARIFIERS AND PRIMARY CONTROL BUILDING UPPER PLAN | 143 | | TITLE SHEET | 194 | JC01 | EXISTING SOLIDS HANDLING BUILDING - DEMOLITION PLAN |
| 2 | AG01 | INDEX TO DRAWINGS | 74 | DC04 | NEW PRIMARY CLARIFIERS AND PRIMARY CONTROL BUILDING PLANS AND SECTIONS | 144 | AG01 | INDEX TO DRAWINGS | 195 | JC02 | EXISTING SOLIDS HANDLING BUILDING - DEMOLITION SECTIONS |
| 3 | AG02 | PROJECT LOCATION MAP, GENERAL NOTES AND WASTEWATER TREATMENT PLANT DESIGN SUMMARY | 75 | DC05 | NEW PRIMARY CLARIFIERS AND PRIMARY CONTROL BUILDING SECTIONS AND DETAILS | 145 | GC01 | EXISTING UV & POST AERATION CHAMBER LOWER LEVEL DEMOLITION PLAN AND SECTION | 196 | JC03 | EXISTING SOLIDS HANDLING BUILDING - DEMOLITION SECTIONS |
| 4 | AG03 | TYPICAL ABBREVIATIONS | 76 | DC06 | NEW PRIMARY CONTROL BUILDING - SECTIONS AND ELEVATIONS | 146 | GC02 | EXISTING UV & POST AERATION CHAMBER UPPER LEVEL DEMOLITION PLAN AND SECTION | 197 | JC04 | EXISTING SOLIDS HANDLING BUILDING - DEMOLITION SECTIONS |
| 5 | AG04 | HYDRAULIC PROFILE | 77 | DS01 | NEW PRIMARY CONTROL BUILDING - STRUCTURAL PLANS | 147 | GC03 | EXISTING UV & POST AERATION CHAMBER LOWER LEVEL DEMOLITION PLAN AND SECTION | 198 | JC05 | EXISTING SOLIDS HANDLING BUILDING - MODIFICATION SECTIONS |
| 6 | AG05 | PROCESS FLOW DIAGRAM | 78 | DS02 | NEW PRIMARY CONTROL BUILDING STRUCTURAL PLANS, SECTIONS AND DETAILS | 148 | GC04 | EXISTING UV & POST AERATION CHAMBER UPPER LEVEL DEMOLITION PLAN AND SECTION | 199 | JC06 | EXISTING SOLIDS HANDLING BUILDING - MODIFICATION SECTIONS |
| 7 | AG06 | SLUDGE FLOW DIAGRAM | 79 | DS03 | NEW PRIMARY CLARIFIERS - STRUCTURAL PLANS | 149 | GS01 | EXISTING UV & POST AERATION CHAMBER STRUCTURAL MODIFICATION PLAN AND DETAIL | 200 | JC07 | EXISTING SOLIDS HANDLING BUILDING MODIFICATION SECTIONS AND DETAILS |
| 8 | AS01 | GENERAL STRUCTURAL NOTES PART 1 | 80 | DS04 | NEW PRIMARY CLARIFIERS - STRUCTURAL SECTIONS AND DETAILS | 150 | GE01 | EXISTING UV & POST AERATION CHAMBER ELECTRICAL PLANS | 201 | JC08 | EXISTING DIGESTERS - LOWER DEMOLITION PLAN |
| 9 | AS02 | GENERAL STRUCTURAL NOTES PART 2 | 81 | DM01 | NEW PRIMARY CLARIFIERS AND PRIMARY CONTROL BUILDING MECHANICAL PLAN | 151 | HC01 | NEW ANAEROBIC DIGESTERS AND CONTROL BUILDING OVERALL PERSPECTIVE | 202 | JC09 | EXISTING DIGESTERS - UPPER DEMOLITION PLAN AND SECTIONS |
| 10 | AE01 | ELECTRICAL LEGEND | 82 | DE01 | OVERALL CLARIFIER - ELECTRICAL PLAN | 152 | HC02 | NEW ANAEROBIC DIGESTERS AND CONTROL BUILDING OVERALL PIPING LAYOUT PERSPECTIVE | 203 | JC10 | MODIFIED HOLDING TANKS - LOWER PLAN |
| 11 | AE02 | PLANT MAIN DISTRIBUTION SWITCHGEAR ONE-LINE DIAGRAM AND ELEVATION | 83 | DE02 | PRIMARY CONTROL BUILDING - POWER PLANS | 153 | HC03 | NEW ANAEROBIC DIGESTERS AND CONTROL BUILDING BELOW FLOOR SLAB PIPING PLAN | 204 | JC11 | MODIFIED HOLDING TANKS - UPPER PLAN AND SECTION |
| 12 | AE03 | SCREEN BUILDING MCC - ONE-LINE DIAGRAM AND ELEVATION | 84 | DE03 | PRIMARY CONTROL BUILDING - LIGHTING PLANS | 154 | HC04 | NEW ANAEROBIC DIGESTERS AND CONTROL BUILDING LOWER LEVEL FLOOR PLAN | 205 | JC12 | MODIFIED HOLDING TANKS - SECTION AND DETAILS |
| 13 | AE04 | PRIMARY CONTROL BUILDING MCC - ONE-LINE DIAGRAM | | | | 155 | HC05 | NEW ANAEROBIC DIGESTERS AND CONTROL BUILDING MAIN LEVEL FLOOR PLAN | 206 | JS01 | EXISTING SOLIDS HANDLING BUILDING NEW STRUCTURAL COMPONENTS - PLAN, SECTIONS AND DETAILS |
| 14 | AE05 | CHEMICAL BUILDING POWER PANEL - ONE-LINE DIAGRAM | | | | 156 | HC06 | NEW ANAEROBIC DIGESTERS AND CONTROL BUILDING NORTH AND SOUTH ELEVATIONS | 207 | JS02 | MODIFIED HOLDING TANKS - NEW ACCESS STAIRS FRAMING PLANS |
| 15 | AE06 | SLUDGE PUMP STATION NO. 1 MCC DEMO ONE-LINE DIAGRAM AND ELEVATION | | | | 157 | HC07 | NEW ANAEROBIC DIGESTERS AND CONTROL BUILDING SECTIONS | 208 | JS03 | MODIFIED HOLDING TANKS - NEW STAIRS AND LANDINGS STRUCTURAL SECTIONS AND DETAILS |
| 16 | AE07 | SLUDGE PUMP STATION NO. 1 MCC ONE-LINE DIAGRAM AND ELEVATION | 85 | EC01 | NEW SELECTOR TANK - LOWER PLAN | 158 | HC08 | NEW ANAEROBIC DIGESTERS AND CONTROL BUILDING SECTIONS | 209 | JS04 | MODIFIED HOLDING TANKS - NEW STAIR FOUNDATIONS STRUCTURAL PLANS AND SECTIONS |
| 17 | AE08 | SLUDGE PUMP STATION NO. 2 MCC - ONE-LINE DIAGRAM | 86 | EC02 | NEW SELECTOR TANK - UPPER PLAN | 159 | HC09 | NEW ANAEROBIC DIGESTERS AND CONTROL BUILDING SECTIONS | 210 | JS05 | MODIFIED HOLDING TANKS - NEW ACCESS STAIRS MID LANDINGS PLAN, SECTION AND DETAILS |
| 18 | AE09 | DIGESTER CONTROL BUILDING MCC ONE-LINE DIAGRAM CO-GENERATION SWITCHBOARD | 87 | EC03 | NEW SELECTOR TANK - SECTIONS | 160 | HC10 | NEW ANAEROBIC DIGESTERS AND CONTROL BUILDING SECTIONS | 211 | JS06 | MODIFIED HOLDING TANKS - NEW STAIRS AND LANDINGS STRUCTURAL CONNECTION DETAILS |
| 19 | AE10 | SOLIDS HANDLING BUILDING - ONE-LINE DIAGRAM AND ELEVATION | 88 | EC04 | NEW SELECTOR TANK - SECTIONS & DETAILS | 161 | HC11 | NEW ANAEROBIC DIGESTERS AND CONTROL BUILDING SECTIONS | 212 | JE01 | EXISTING SOLIDS HANDLING BUILDING - ELECTRICAL PLAN |
| 20 | AE11 | CONTROL ONE-LINE DIAGRAMS | 89 | EC05 | NEW SELECTOR TANK - TANK DRAINAGE PLAN AND SECTION | 162 | HC12 | NEW ANAEROBIC DIGESTERS AND CONTROL BUILDING SECTIONS | 213 | JE02 | MODIFIED HOLDING TANKS - ELECTRICAL PLAN |
| 21 | AE12 | CONTROL ONE-LINE DIAGRAMS | 90 | EC06 | NEW SELECTOR TANK - AIR GRID - PLAN AND DETAILS | 163 | HC13 | NEW ANAEROBIC DIGESTERS AND CONTROL BUILDING ELEVATIONS | 214 | KA01 | NEW CHEMICAL FEED BUILDING - PLANS AND DETAILS |
| 22 | AE13 | CONTROL ONE-LINE DIAGRAMS | 91 | EC07 | EXISTING OXIDATION DITCHES AND FINAL CLARIFIERS OVERALL UPPER LEVEL MODIFICATION PLAN | 164 | HC14 | NEW ANAEROBIC DIGESTERS AND CONTROL BUILDING LOWER LEVEL PIPING PERSPECTIVE | 215 | KA02 | NEW CHEMICAL FEED BUILDING - PLANS AND DETAILS |
| 23 | AE14 | CONTROL ONE-LINE DIAGRAMS | 92 | EC08 | EXISTING OXIDATION DITCH AND CLARIFIER PIPING CORRIDOR LOWER LEVEL DEMOLITION PLAN | 165 | HC15 | NEW ANAEROBIC DIGESTERS AND CONTROL BUILDING MAIN LEVEL PIPING PERSPECTIVE | 216 | KA03 | NEW CHEMICAL FEED BUILDING - SECTIONS |
| 24 | AE15 | CONTROL ONE-LINE DIAGRAMS | 93 | EC09 | EXISTING OXIDATION DITCH AND CLARIFIER PIPING CORRIDOR LOWER LEVEL DEMOLITION PLAN | 166 | HC16 | NEW ANAEROBIC DIGESTERS AND CONTROL BUILDING GAS PIPING ISOMETRIC | 217 | KA04 | NEW CHEMICAL FEED BUILDING - ELEVATIONS AND DETAILS |
| 25 | AE16 | CONTROL ONE-LINE DIAGRAMS | 94 | EC10 | EXISTING OXIDATION DITCHES - NEW AIR PIPING - SECTIONS | 167 | HC17 | NEW ANAEROBIC DIGESTERS AND CONTROL BUILDING WATER PIPING ISOMETRIC | 218 | KS01 | NEW CHEMICAL FEED BUILDING - FOUNDATION AND ROOF PLAN |
| 26 | AE17 | ELECTRICAL SCHEMATICS | 95 | EC11 | EXISTING OXIDATION DITCHES - MISCELLANEOUS PLANS AND SECTIONS | 168 | HC18 | NEW ANAEROBIC DIGESTERS AND CONTROL BUILDING PROCESS PIPING ISOMETRIC | 219 | KS02 | NEW CHEMICAL FEED BUILDING - SECTIONS |
| 27 | AE18 | ELECTRICAL SCHEMATICS | 96 | EC12 | EXISTING OXIDATION DITCHES - LOWER LEVEL MODIFICATION PLAN | 169 | HC19 | NEW ANAEROBIC DIGESTERS AND CONTROL BUILDING MISCELLANEOUS DETAILS | 220 | KM01 | NEW CHEMICAL FEED BUILDING - MECHANICAL PLAN |
| 28 | AN01 | PID DIAGRAM LEGEND | 97 | EC13 | EXISTING OXIDATION DITCHES - MODIFICATION SECTIONS | 170 | HC20 | NEW ANAEROBIC DIGESTERS AND CONTROL BUILDING ASSOCIATED STRUCTURES PLANS AND SECTIONS | 221 | KE01 | NEW CHEMICAL FEED BUILDING - POWER PLAN |
| 29 | AN02 | SCREENINGS AND GRIT - PID DIAGRAM | 98 | EC14 | EXISTING OXIDATION DITCHES - NEW EQUIPMENT ACCESS BRIDGE STRUCTURAL PLANS AND SECTIONS | 171 | HC21 | NEW ANAEROBIC DIGESTERS AND CONTROL BUILDING PLUMBING SCHEMATICS | 222 | KE02 | NEW CHEMICAL FEED BUILDING - LIGHTING PLAN |
| 30 | AN03 | PRIMARY CLARIFIERS - PID DIAGRAM | 99 | EC15 | EXISTING OXIDATION DITCHES - NEW EQUIPMENT ACCESS BRIDGE STRUCTURAL DETAILS | 172 | HS01 | NEW ANAEROBIC DIGESTERS AND CONTROL BUILDING FOUNDATION / SLAB-ON-GRADE PLAN | 223 | LA01 | NEW GARAGE - PLANS |
| 31 | AN04 | SELECTOR TANK AND OXIDATION DITCHES - PID DIAGRAM | 100 | EC16 | EXISTING OXIDATION DITCHES - NEW EQUIPMENT ACCESS BRIDGE STRUCTURAL DETAILS | 173 | HS02 | NEW ANAEROBIC DIGESTERS AND CONTROL BUILDING MAIN LEVEL PLAN | 224 | LA02 | NEW GARAGE - FLOOR PLAN & ELEVATIONS |
| 32 | AN05 | CLARIFIER SPLITTER STRUCTURE, FINAL CLARIFIERS AND SLUDGE PUMP STATIONS - PID DIAGRAM | 101 | EC17 | EXISTING OXIDATION DITCHES - NEW EQUIPMENT ACCESS BRIDGE STRUCTURAL DETAILS | 174 | HS03 | NEW ANAEROBIC DIGESTERS AND CONTROL BUILDING UPPER LEVEL PLAN | 225 | LA03 | NEW GARAGE - SECTIONS |
| 33 | AN06 | UV, POST AERATION, CHEMICAL FEED, GENERATOR, AND MDSC PID DIAGRAM | 102 | EC18 | EXISTING OXIDATION DITCHES - NEW EQUIPMENT ACCESS BRIDGE STRUCTURAL DETAILS | 175 | HS04 | NEW ANAEROBIC DIGESTERS AND CONTROL BUILDING SECTIONS AND DETAILS | 226 | LA04 | EXISTING OPERATIONS AND MAINTENANCE BUILDING DEMOLITION PLAN |
| 34 | AN07 | ANAEROBIC DIGESTER SLUDGE - PID DIAGRAM | 103 | EC19 | EXISTING OXIDATION DITCHES - NEW EQUIPMENT ACCESS BRIDGE STRUCTURAL DETAILS | 176 | HS05 | NEW ANAEROBIC DIGESTERS AND CONTROL BUILDING SECTIONS AND DETAILS | 227 | LS01 | NEW GARAGE - FOUNDATION PLAN |
| 35 | AN08 | HOT WATER CIRCULATION - PID DIAGRAM | 104 | ES01 | NEW SELECTOR TANK - FOUNDATION PLAN | 177 | HS06 | NEW ANAEROBIC DIGESTERS AND CONTROL BUILDING SECTIONS AND DETAILS | 228 | LS02 | NEW GARAGE - LOW ROOF PLAN |
| 36 | AN09 | DIGESTER GAS - PID DIAGRAM | 105 | ES02 | NEW SELECTOR TANK - UPPER LEVEL STRUCTURAL PLAN | 178 | HS07 | NEW ANAEROBIC DIGESTERS AND CONTROL BUILDING SECTIONS AND DETAILS | 229 | LS03 | NEW GARAGE - HIGH ROOF PLAN |
| 37 | AN10 | SOLIDS HANDLING BUILDING - PID DIAGRAM | 106 | ES03 | NEW SELECTOR TANK - STRUCTURAL SECTIONS | 179 | HS08 | NEW ANAEROBIC DIGESTERS AND CONTROL BUILDING SECTIONS AND DETAILS | 230 | LM01 | NEW GARAGE - MECHANICAL PLAN |
| 38 | AN11 | CENTER STREET PUMP STATION - PID DIAGRAM | 107 | ES04 | EXISTING OXIDATION DITCHES - NEW EQUIPMENT ACCESS BRIDGE STRUCTURAL PLANS AND SECTIONS | 180 | HS09 | NEW ANAEROBIC DIGESTERS AND CONTROL BUILDING SECTIONS AND DETAILS | 231 | LE01 | NEW GARAGE - ELECTRICAL PLAN |
| 39 | AN12 | NETWORK DIAGRAM | 108 | ES05 | EXISTING OXIDATION DITCHES - NEW EQUIPMENT ACCESS BRIDGE STRUCTURAL DETAILS | 181 | HS10 | NEW ANAEROBIC DIGESTERS AND CONTROL BUILDING SECTIONS AND DETAILS | 232 | LE02 | EXISTING OPERATIONS & MAINTENANCE BUILDING GENERATOR LAYOUT PLAN |
| 40 | BY01 | EXISTING OVERALL SITE PLAN | 109 | ES06 | EXISTING OXIDATION DITCHES - NEW EQUIPMENT ACCESS BRIDGE STRUCTURAL DETAILS | 182 | HS11 | NEW ANAEROBIC DIGESTERS AND CONTROL BUILDING CONCRETE BEAM DETAILS | 233 | LE03 | EXISTING OPERATIONS & MAINTENANCE BUILDING CENTER STREET PUMP STATION - POWER PLAN |
| 41 | BY02 | MODIFIED OVERALL SITE PLAN | 110 | EE01 | NEW FINAL CLARIFIER SPLITTER STRUCTURE STRUCTURAL PLANS AND SECTIONS | 183 | HS12 | NEW ANAEROBIC DIGESTERS AND CONTROL BUILDING CONCRETE BEAM DETAILS | 234 | LE04 | |
| 42 | BY03 | AREA A1 - NEW YARD PIPING PLAN | 111 | EE02 | NEW SELECTOR TANK - ELECTRICAL PLAN | 184 | HS13 | NEW ANAEROBIC DIGESTERS AND CONTROL BUILDING CONCRETE BEAM DETAILS | 235 | MY01 | MISCELLANEOUS SITE DETAILS |
| 43 | BY04 | AREA A2 - NEW YARD PIPING PLAN | 112 | EE03 | EXISTING OXIDATION DITCH NO. 1 - ELECTRICAL PLAN | 185 | HM01 | NEW ANAEROBIC DIGESTERS AND CONTROL BUILDING MECHANICAL PLAN | 236 | MY02 | MISCELLANEOUS SITE DETAILS |
| 44 | BY05 | AREA B1 - NEW YARD PIPING PLAN | 113 | EE04 | EXISTING OXIDATION DITCH NO. 2 - ELECTRICAL PLAN | 186 | HM02 | NEW ANAEROBIC DIGESTERS AND CONTROL BUILDING ROOF PLAN | 237 | MY03 | EROSION CONTROL DETAILS |
| 45 | BY06 | AREA B2 - NEW YARD PIPING PLAN | 114 | EE05 | NEW FINAL INFLUENT SPLITTER STRUCTURE ELECTRICAL PLAN | 187 | HM03 | NEW ANAEROBIC DIGESTERS AND CONTROL BUILDING MECHANICAL PLAN | 238 | MY04 | EROSION CONTROL DETAILS |
| 46 | BY07 | AREA A1 - SITE REGRADE & EROSION CONTROL PLAN | | | | 188 | HM04 | NEW ANAEROBIC DIGESTERS AND CONTROL BUILDING MECHANICAL SCHEDULES | 239 | MC01 | NON POTABLE WATER SCHEMATIC |
| 47 | BY08 | AREA A2 - SITE REGRADE & EROSION CONTROL PLAN | | | | 189 | HE01 | NEW ANAEROBIC DIGESTERS AND CONTROL BUILDING LOWER LEVEL POWER PLAN | 240 | MC02 | PROCESS VALVE SCHEDULE |
| 48 | BY09 | AREA B1 - SITE REGRADE & EROSION CONTROL PLAN | | | | 190 | HE02 | NEW ANAEROBIC DIGESTERS AND CONTROL BUILDING MAIN LEVEL POWER PLAN | 241 | MC03 | PROCESS VALVE SCHEDULE |
| 49 | BY10 | AREA B2 - SITE REGRADE & EROSION CONTROL PLAN | | | | 191 | HE03 | NEW ANAEROBIC DIGESTERS AND CONTROL BUILDING ROOF POWER PLAN | 242 | MC04 | MISCELLANEOUS CIVIL DETAILS |
| 50 | BY11 | NEW PLANT DRIVES PAVEMENT PLAN | | | | 192 | HE04 | NEW ANAEROBIC DIGESTERS AND CONTROL BUILDING LOWER LEVEL LIGHTING PLAN | 243 | MC05 | MISCELLANEOUS CIVIL DETAILS |
| 51 | BE01 | OVERALL ELECTRICAL SITE PLAN | | | | 193 | HE05 | NEW ANAEROBIC DIGESTERS AND CONTROL BUILDING MAIN LEVEL LIGHTING PLAN | 244 | MC06 | MISCELLANEOUS CIVIL DETAILS |
| 52 | BE02 | AREA A1 - ELECTRICAL SITE PLAN | | | | | | | 245 | MC07 | MISCELLANEOUS CIVIL DETAILS |
| 53 | BE03 | AREA A2 - ELECTRICAL SITE PLAN | | | | | | | 246 | MA01 | TYPICAL ARCHITECTURAL WALL SECTIONS AND MISCELLANEOUS ARCHITECTURAL DETAILS |
| 54 | BE04 | AREA B1 - ELECTRICAL SITE PLAN | | | | | | | 247 | MA02 | TYPICAL ARCHITECTURAL WALL SECTIONS |
| 55 | BE05 | AREA B2 - ELECTRICAL SITE PLAN | | | | | | | 248 | MA03 | DOOR SCHEDULE AND DETAILS |
| | | | | | | | | | 249 | MA04 | WINDOW SCHEDULE AND DETAILS AND MISCELLANEOUS ARCHITECTURAL DETAILS |
| | | | | | | | | | 250 | MS01 | TYPICAL FOUNDATION DETAILS |
| | | | | | | | | | 251 | MS02 | TYPICAL FOUNDATION DETAILS 2 |
| | | | | | | | | | 252 | MS03 | TYPICAL MASONRY DETAILS |
| | | | | | | | | | 253 | MS04 | TYPICAL FRAMING DETAILS |
| | | | | | | | | | 254 | ME01 | ELECTRICAL DETAILS |
| | | | | | | | | | 255 | ME02 | ELECTRICAL DETAILS |
| | | | | | | | | | 256 | ME03 | LIGHTING PANEL SCHEDULES |
| | | | | | | | | | 257 | ME04 | GAS BURNER AND DIGESTER OVERFLOW PUMP STATION ELECTRICAL DETAILS |
| | | | | | | | | | 258 | ME05 | ELECTRICAL DUCT BANK SCHEDULE |

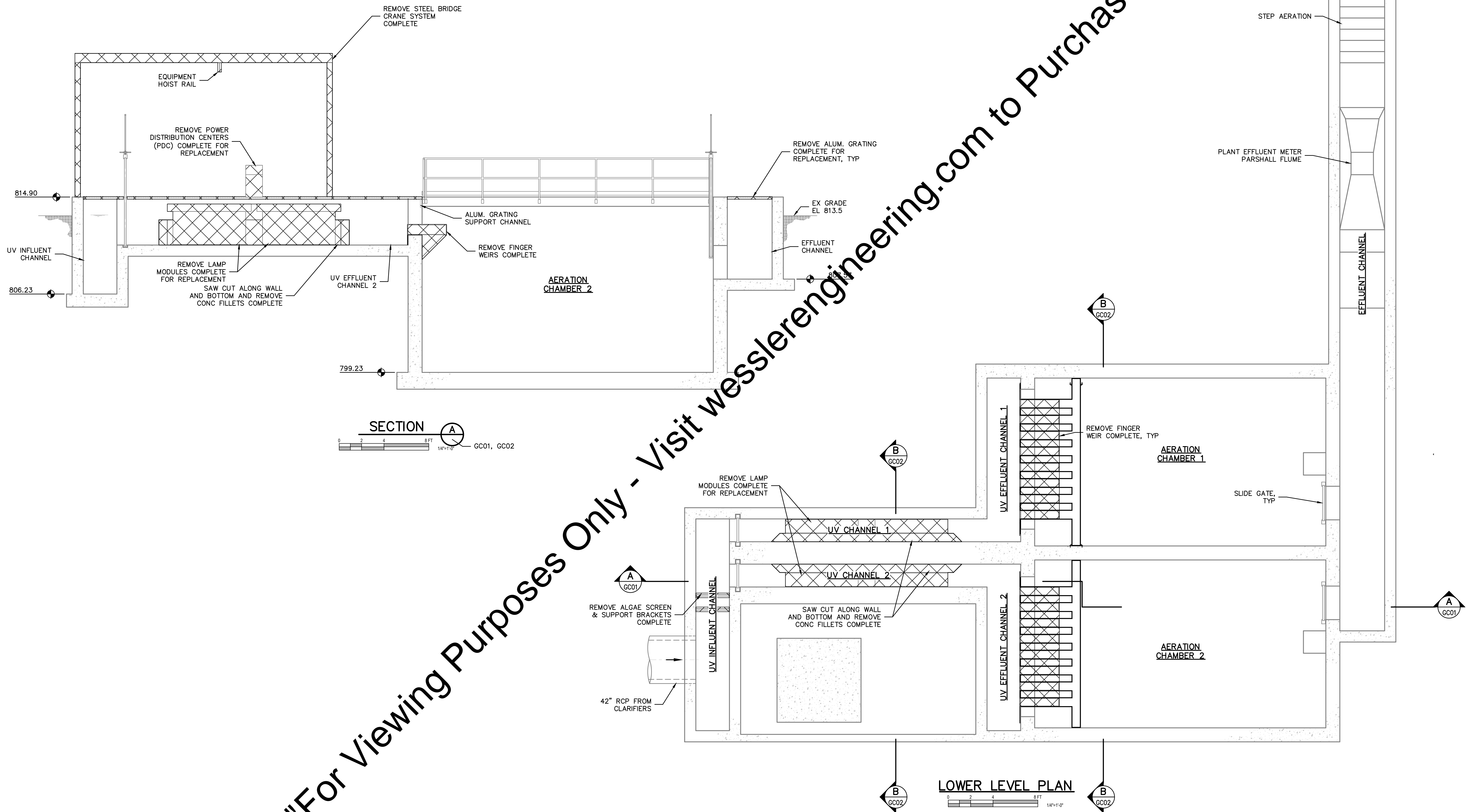
Drawing: J:\Wwaw\Projects\162813-GA-01\DWG\Sheneb\AG01_162813-GA-01-V1.dwg | Layout: AG01_162813-GA-01-V1 | Plotted: 09/04/18 @ 02:05:11 | LantSavelby, DonT

"For Viewing Purposes Only" Visit wesslerengineering.com to Purchase"


| | | | | | | |
|---|---|---|--|--|--|--|
| <p>SCALE VERIFICATION</p> <p>BAR IS ONE INCH LONG ON ORIGINAL DRAWING</p> | <p>DRAWN BY: WBJ</p> <p>CHECKED BY: ALT</p> <p>APPROVED BY: GLR</p> <p>ISSUE DATE: SEPTEMBER 4, 2018</p> <p>PROJECT NUMBER: 162813-04-003</p> | <p>NO. DATE INITIALS</p> <p>REVISION DESCRIPTIONS</p> | | | <p>WASTEWATER TREATMENT PLANT EXPANSION - 2017</p> <p>CITY OF WARSAW, INDIANA</p> <p>INDEX TO DRAWINGS</p> | <p>SHEET NO.</p> <p style="font-size: 2em; font-weight: bold;">AG01</p> <p>PAGE NO.</p> <p>144</p> |
|---|---|---|--|--|--|--|

SERVICE BUILDING GENERAL DEMOLITION NOTES:

1. THE TOP OF WALL ELEVATION ALONG THE UV INFLUENT CHANNEL HAS BEEN SHOWN AT 815.67 ON THE 2001 WASTEWATER TREATMENT PLANT PROJECT, BY JONES & HENRY ENGINEERS, LTD. THE WESSLER ENGINEERING SITE SURVEY FOR THIS PROJECT DETERMINED THE TOP OF WALL ELEVATION TO BE 814.90. ALL EXISTING VERTICAL INFORMATION SHOWN FOR THIS STRUCTURE HAS BEEN REVISED TO AGREE WITH THE SITE SURVEY, WITH THE ASSUMPTION THAT VERTICAL DISTANCES REFERENCED ON THE JONES & HENRY PROJECT ARE ACCURATE.



"For Viewing Purposes Only - Visit wesslerengineering.com to Purchase"

| SCALE VERIFICATION | DRAWN BY | NO. | DATE | INITIALS | REVISION DESCRIPTIONS |
|---|----------------|-------------------|------|----------|-----------------------|
| BAR IS ONE INCH LONG ON ORIGINAL DRAWING  | DRAWN BY | WBJ | | | |
| | CHECKED BY | ALT | | | |
| | APPROVED BY | GLR | | | |
| | ISSUE DATE | SEPTEMBER 4, 2018 | | | |
| | PROJECT NUMBER | 162813-04-003 | | | |



WASTEWATER TREATMENT PLANT EXPANSION - 2017

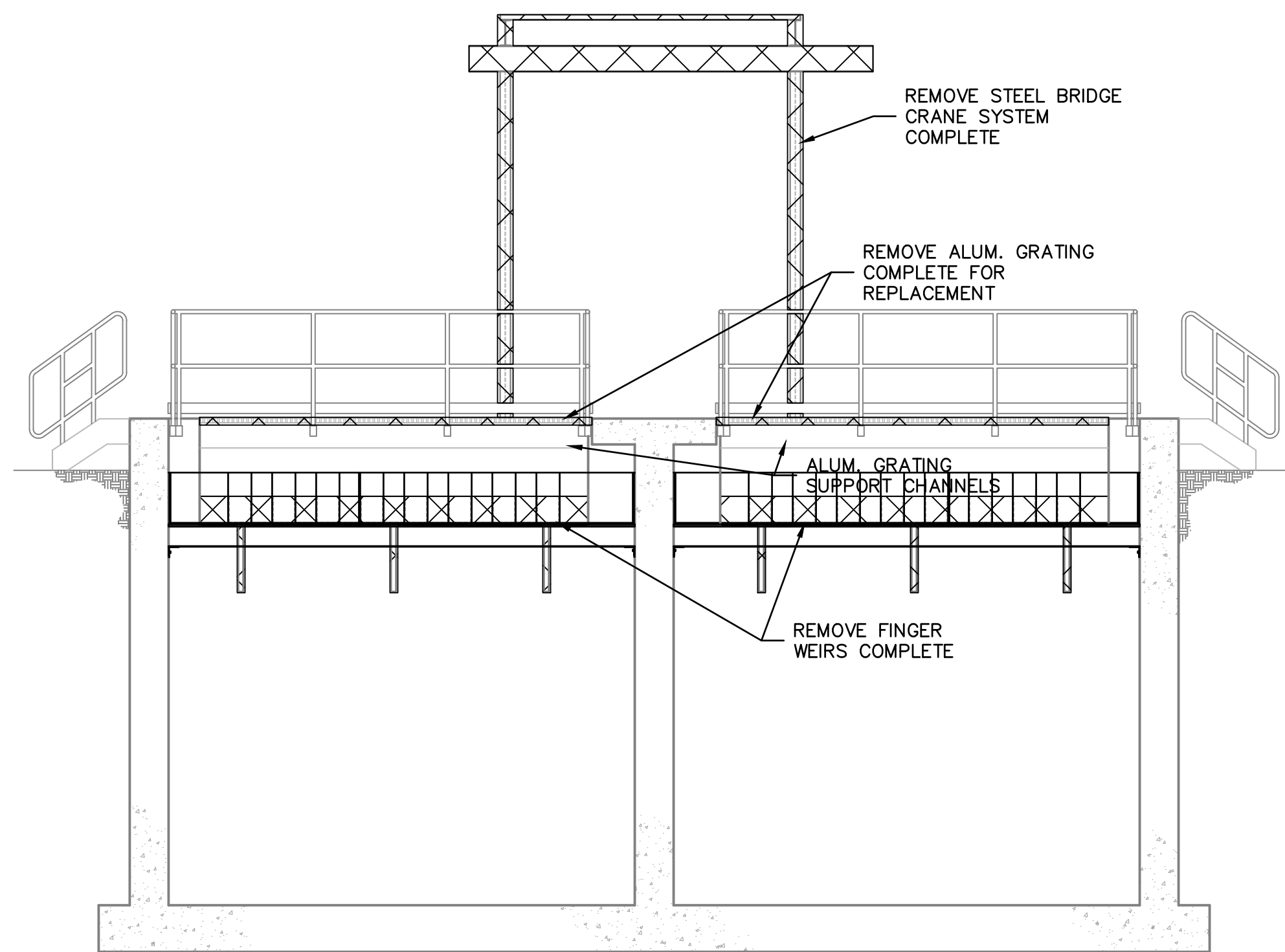
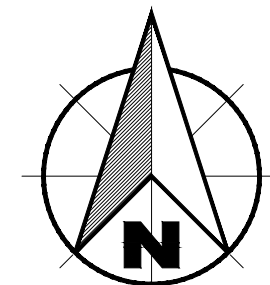
CITY OF WARSAW, INDIANA

**EXISTING UV & POST AERATION CHAMBER
LOWER LEVEL DEMOLITION PLAN AND SECTION**

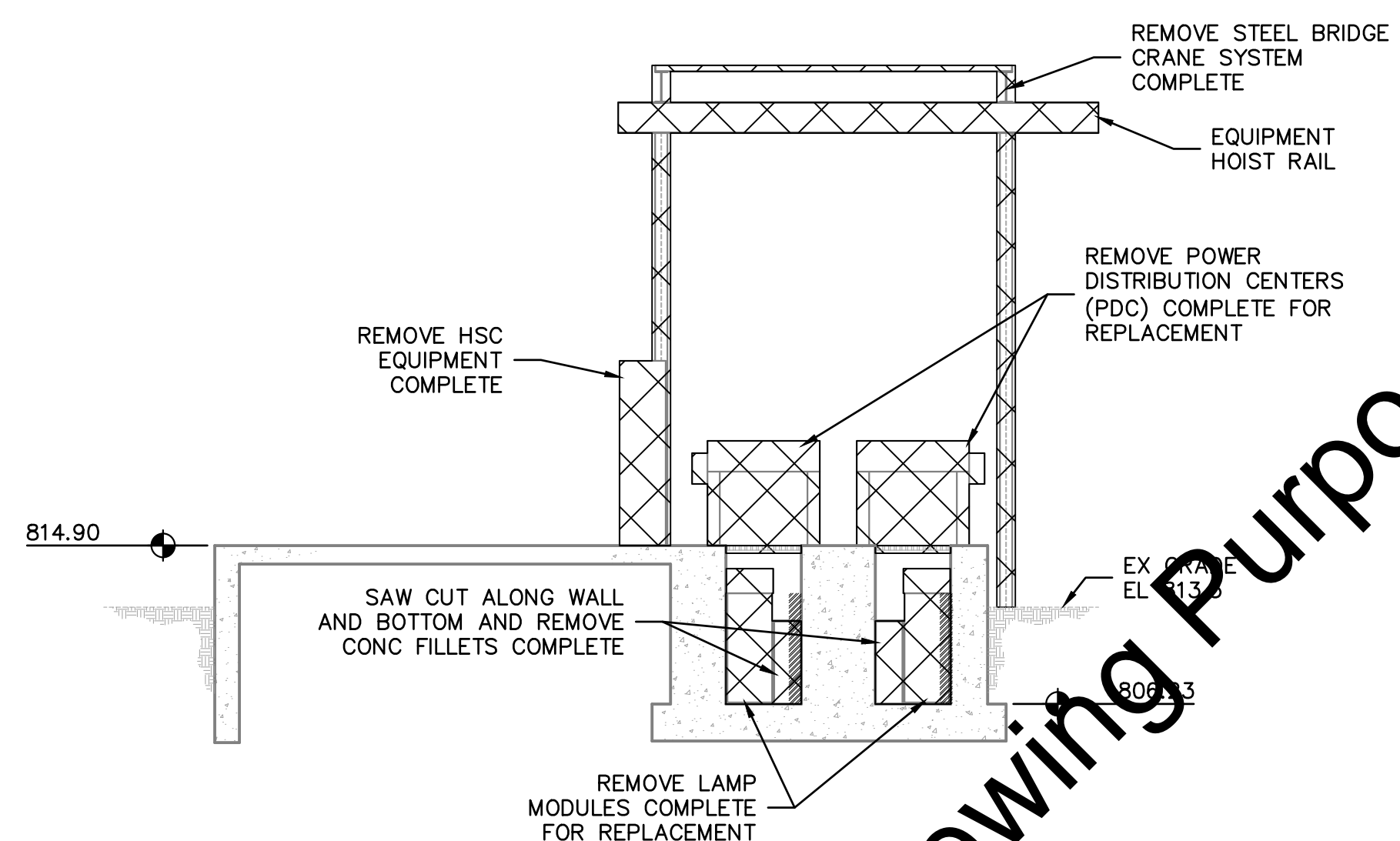
SHEET NO.
GC01

PAGE NO.
145

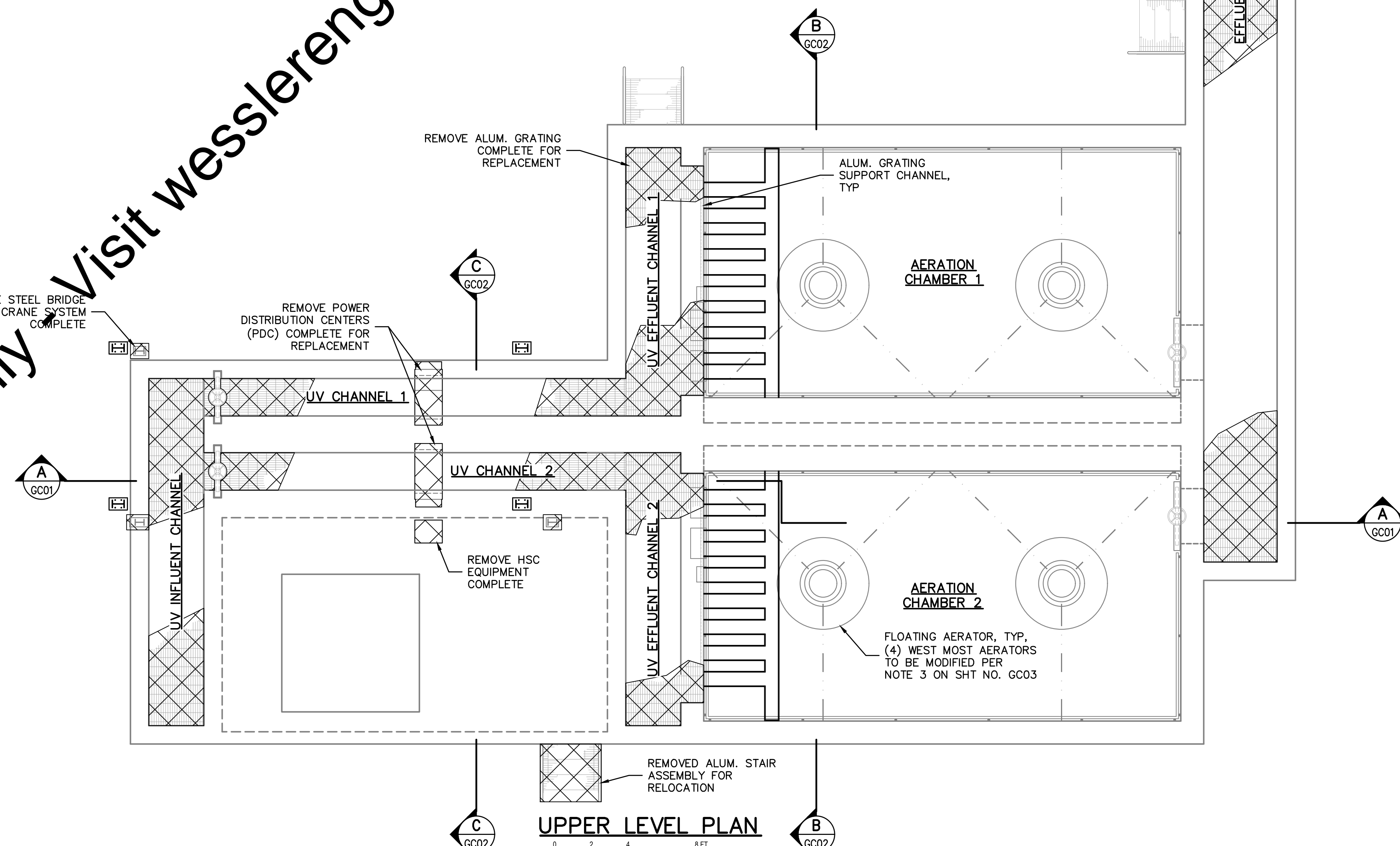
Drawing: J:\Warshaw\Projects\162813-Ex-UV-Str.dwg | Layout: GC01 | Plotted: 09/04/18 @ 10:46:53 | LastSavedBy: MikeN



SECTION B
0 2 4 8 FT
1/4"=1'-0" GC01, GC02



SECTION C
0 2 4 8 FT
1/4"=1'-0" GC01, GC02



UPPER LEVEL PLAN
0 2 4 8 FT
1/4"=1'-0" GC02

"For Viewing Purposes Only Visit wesslerengineering.com to Purchase"

Drawing: J:\Warsaw\Projects\162813-Ex-UV-Str.dwg | Layout: GC02 | Plotted: 09/04/18 @ 10:47:11 | LastSavedBy: MikeN

| SCALE VERIFICATION | DRAWN BY | NO. | DATE | INITIALS | REVISION DESCRIPTIONS |
|--|-------------------|-----|------|----------|-----------------------|
| BAR IS ONE INCH LONG ON ORIGINAL DRAWING | CHECKED BY | WBJ | | | |
| | APPROVED BY | ALT | | | |
| | ISSUE DATE | GLR | | | |
| | PROJECT NUMBER | | | | |
| | SEPTEMBER 4, 2018 | | | | |
| | 162813-04-003 | | | | |



WESSLER ENGINEERING
More than a Project™

WASTEWATER TREATMENT PLANT EXPANSION - 2017

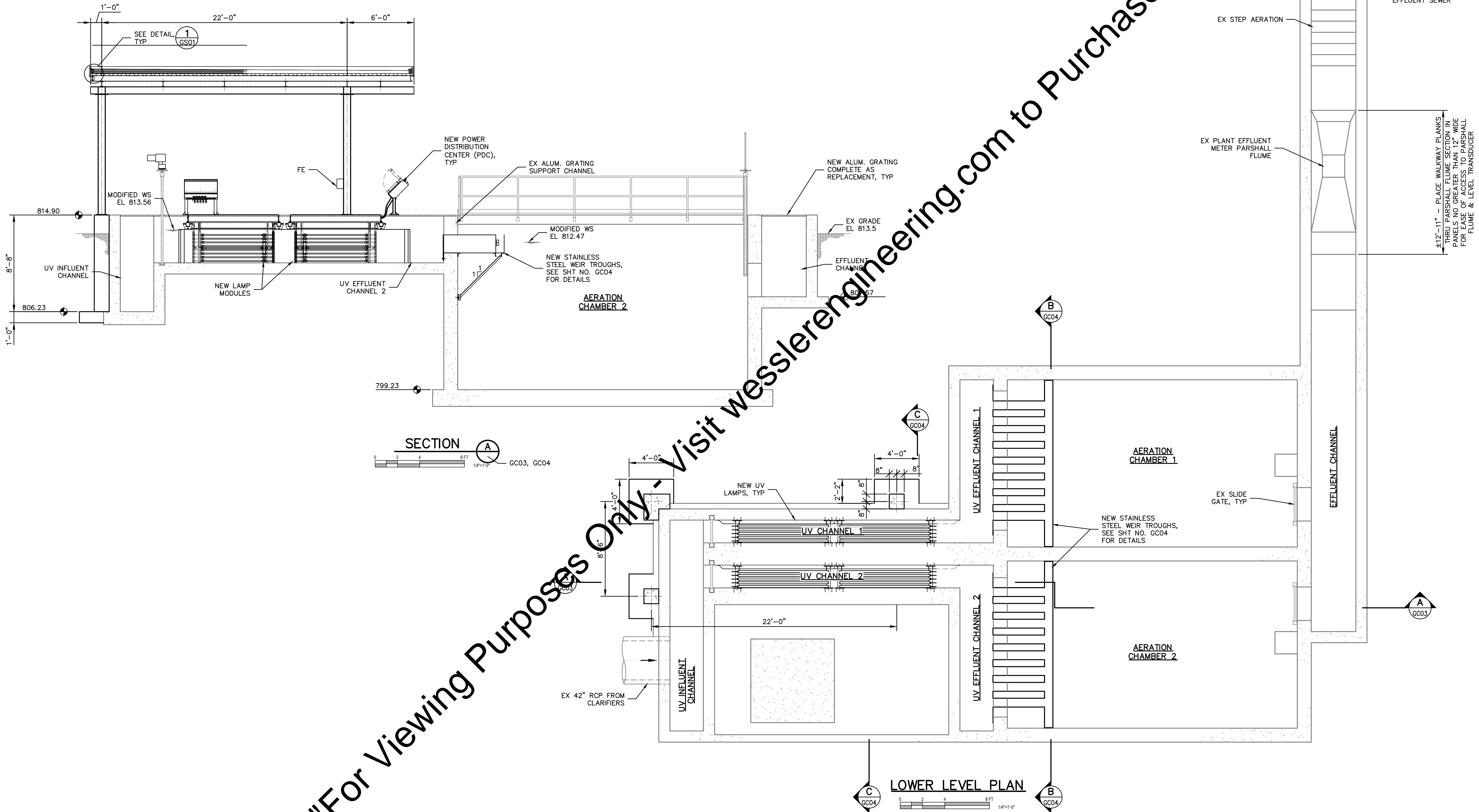
CITY OF WARSAW, INDIANA

**EXISTING UV & POST AERATION CHAMBER
UPPER LEVEL DEMOLITION PLAN AND SECTION**


SHEET NO.
GC02
PAGE NO.
146

UV/POST AERATION CHAMBER GENERAL MODIFICATION NOTES:

1. PROVIDE NEW ALUMINUM WALKWAY PLANKS THAT ARE 1/2" THICK ALONG THE ENTIRE LENGTH OF THE AERATION CHAMBER EFFLUENT CHANNEL. SINCE THE INSTALLED PLANKS WILL EXTEND ABOVE THE EXISTING TOP OF CONCRETE WALLS WRAP EACH END OF EACH PANEL WITH YELLOW PLASTIC ADHESIVE WARNING TAPE.
2. FINISHED INSTALLATION OF THE NEW ALUMINUM WALKWAY PLANKS FOR THE REST OF THE ENTIRE STRUCTURE SHALL BE FLUSH WITH THE EXISTING TOP OF CONCRETE WALLS. SUBMIT A PLANK WHICH HAS A DEPTH THE SAME AS THE DEPTH OF THE EXISTING GRATING SUPPORT ANGLES, AND IS SUITED TO SUPPORT A MAXIMUM LOADING AS DESCRIBED IN SPECIFICATION SECTION 05530.
3. ADJUST THE (4) WEST MOST EXISTING AERATOR ANCHOR POINTS TO MOVE THE AERATORS AWAY FROM THE NEW WEIR TROUGHS, AS REQUIRED TO NOT INTERFERE WITH THE NEW WEIR TROUGHS INSTALLATIONS.



Drawing: J:\Warsaw\Projects\162813-Warsaw WWTTP Expansion\CAD\04-001\DWG\Shenel\162813-Ex-UV-Str.dwg | Layout: GC03 | Plotted: 09/04/18 @ 10:47:24 | LastSavedBy: MikeH

| SCALE VERIFICATION | DRAWN BY | NO. | DATE | INITIALS | REVISION DESCRIPTIONS |
|---|-------------------|-----|------|----------|-----------------------|
| BAR IS ONE INCH LONG ON ORIGINAL DRAWING  | CHECKED BY | WBJ | | | |
| | APPROVED BY | ALT | | | |
| | ISSUE DATE | GLR | | | |
| | PROJECT NUMBER | | | | |
| | SEPTEMBER 4, 2018 | | | | |
| | 162813-04-003 | | | | |



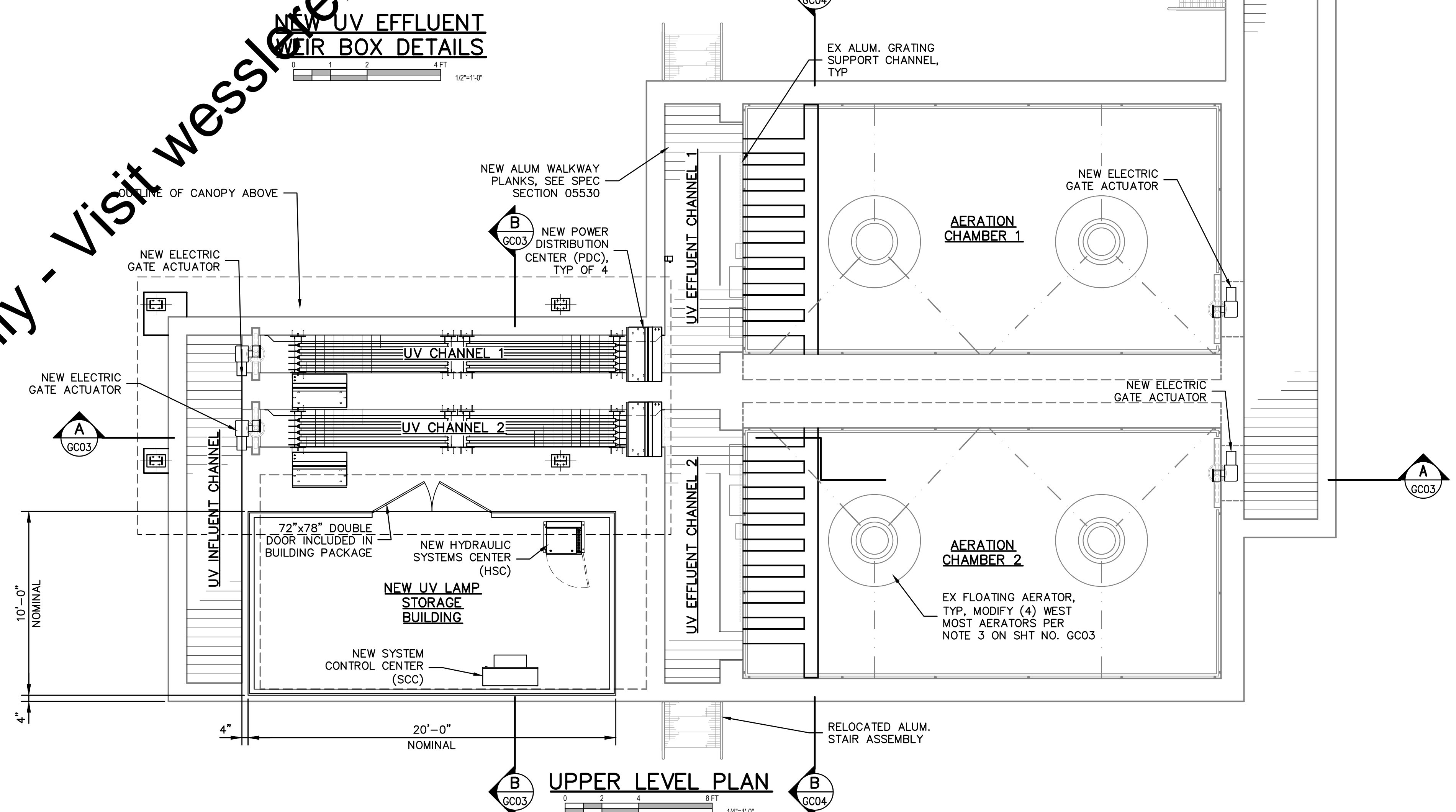
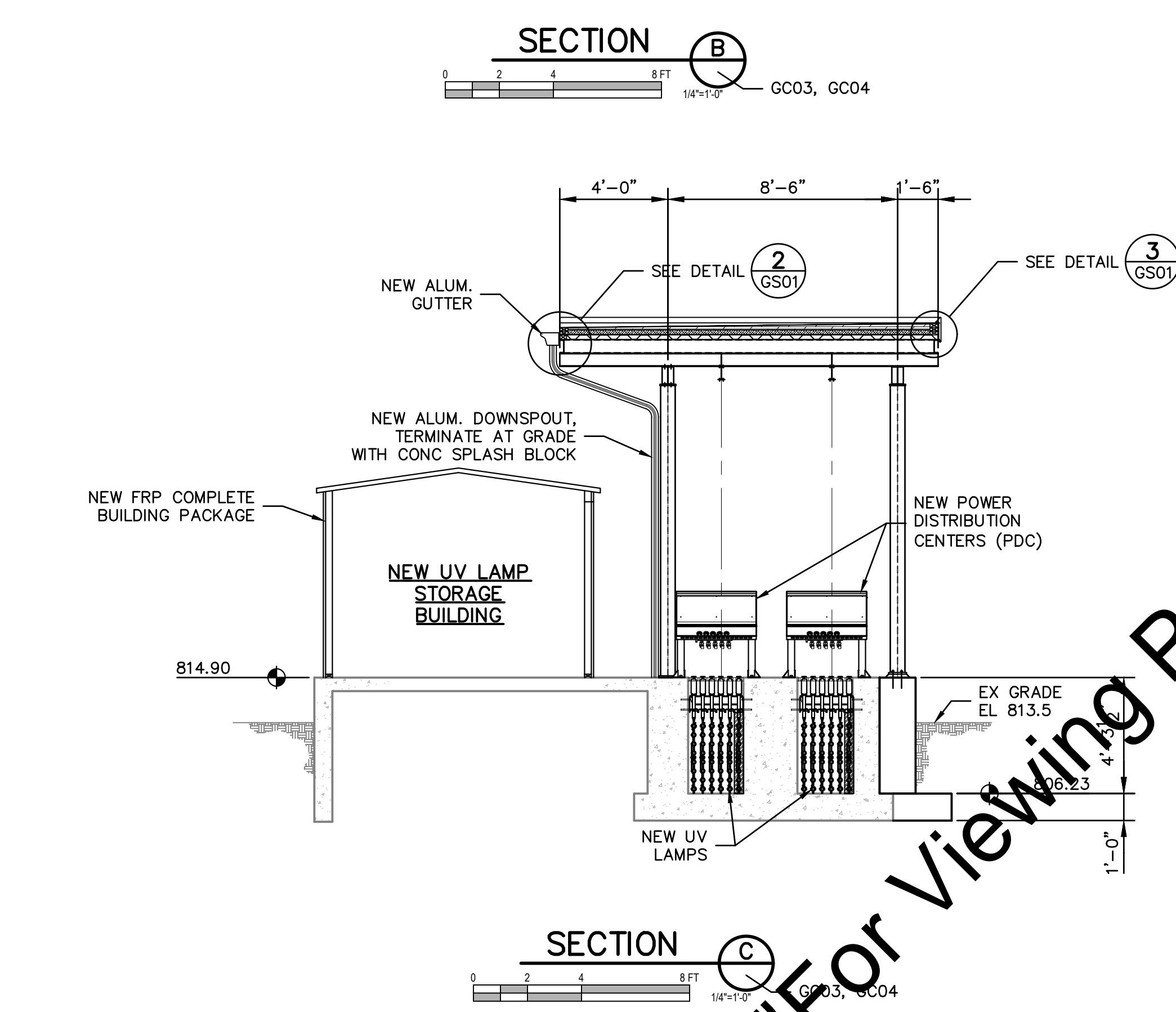
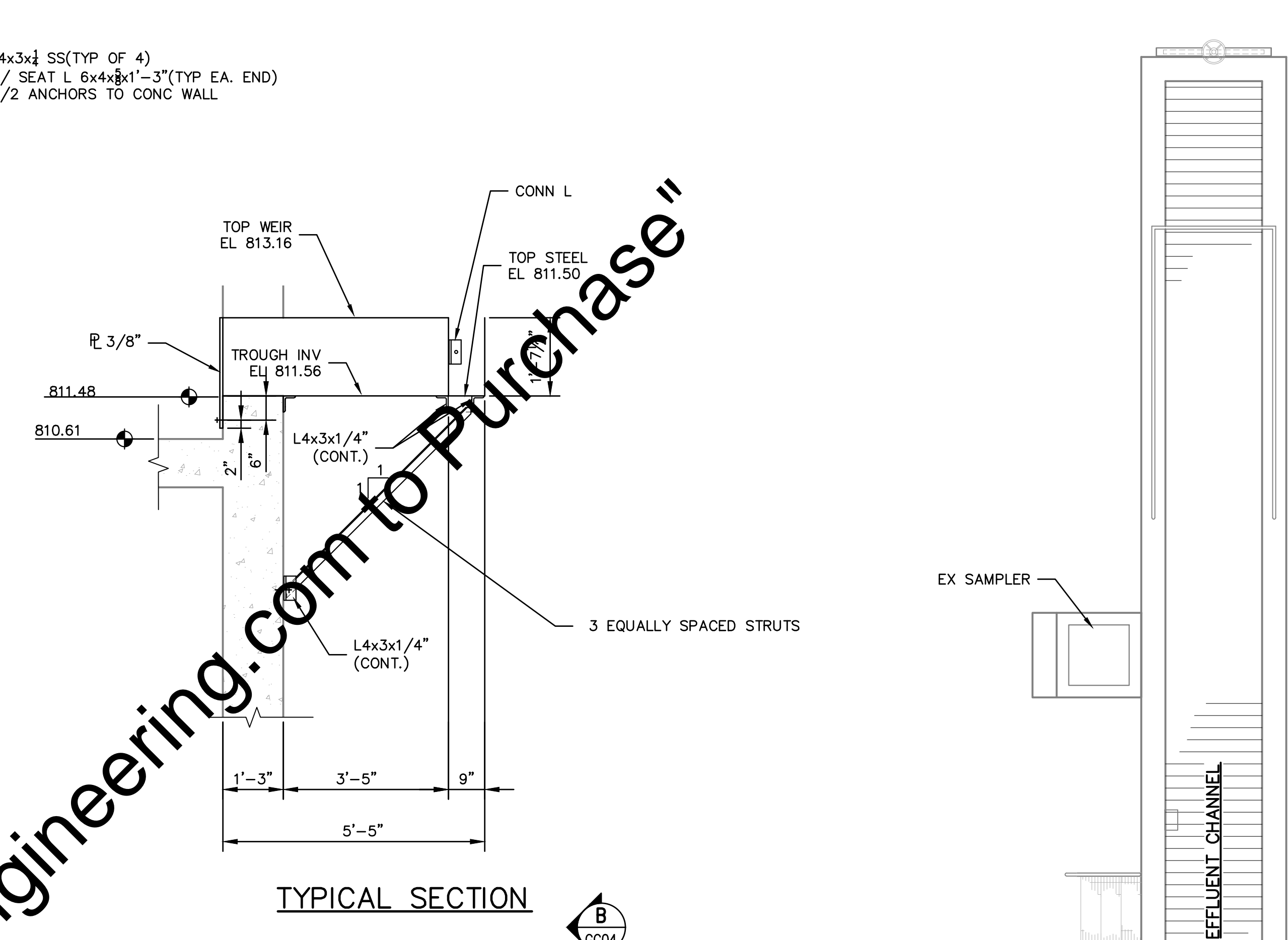
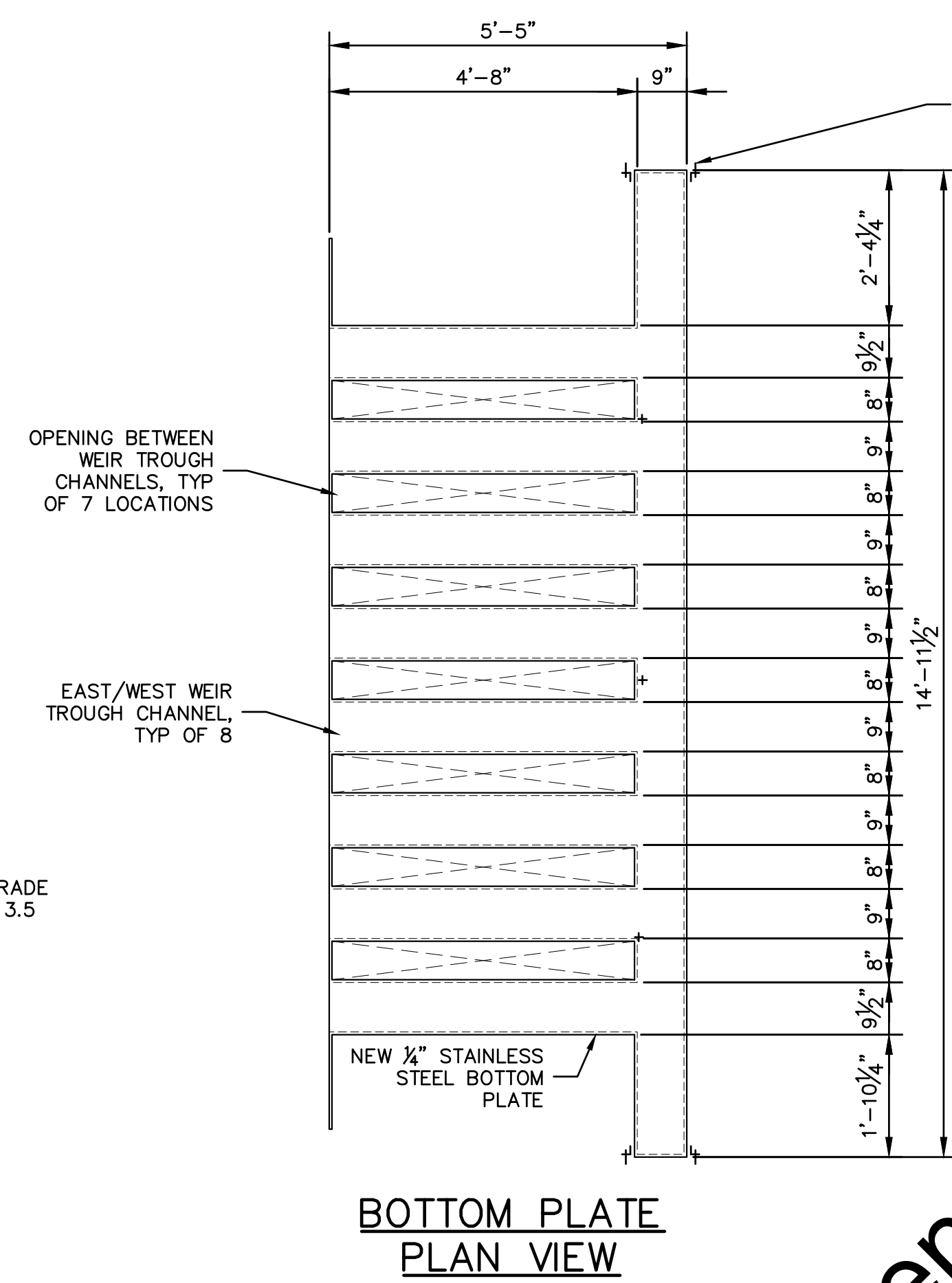
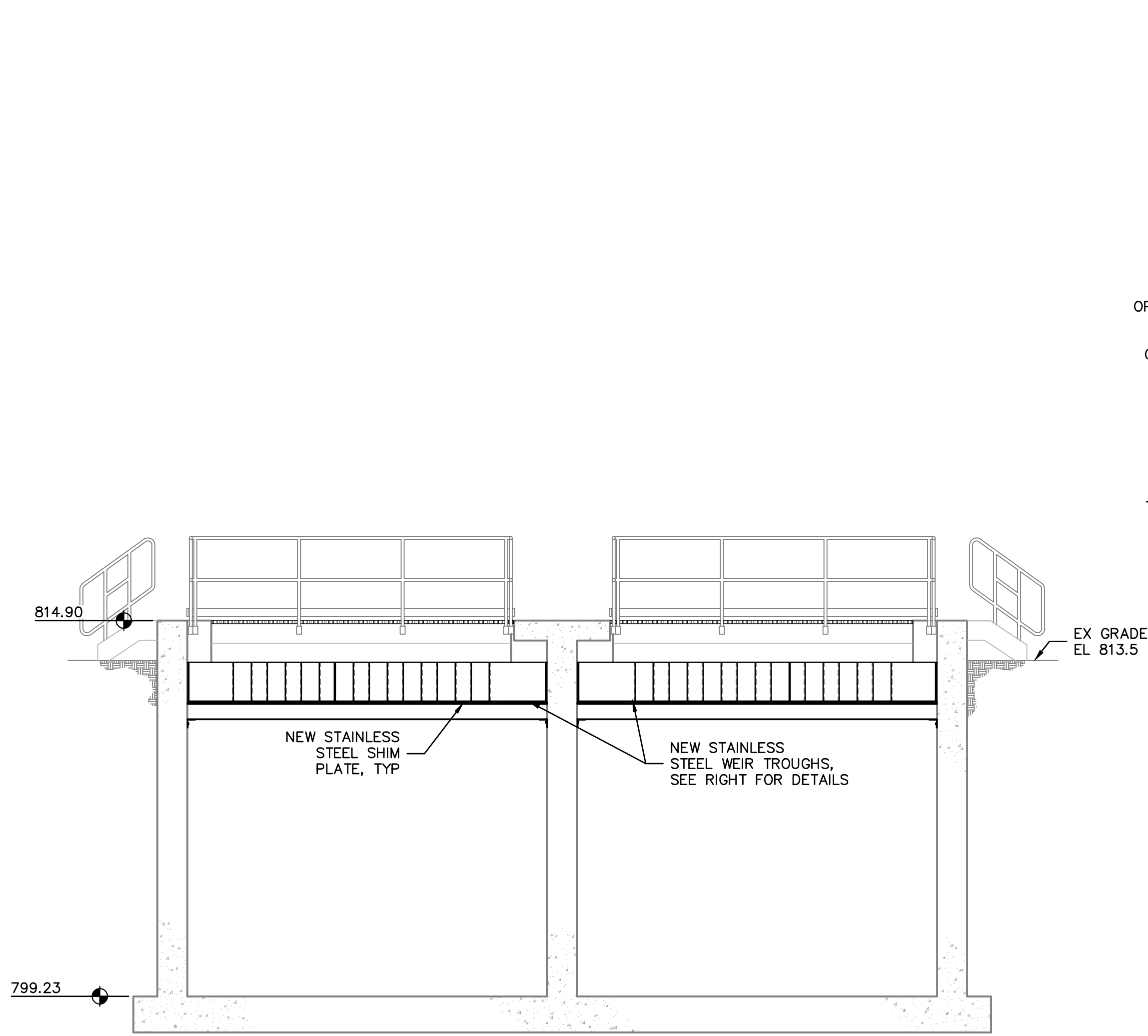
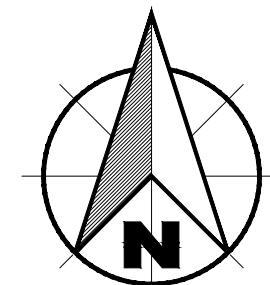
WASTEWATER TREATMENT PLANT EXPANSION - 2017

CITY OF WARSAW, INDIANA

**EXISTING UV & POST AERATION CHAMBER
LOWER LEVEL MODIFICATION PLAN AND SECTION**

SHEET NO.
GC03

PAGE NO.
147



For Viewing Purposes Only - Visit www.wesslerengineering.com to Purchase

| SCALE VERIFICATION | DRAWN BY | NO. | DATE | INITIALS | REVISION DESCRIPTIONS |
|--|-------------------|-----|------|----------|-----------------------|
| BAR IS ONE INCH LONG ON ORIGINAL DRAWING | CHECKED BY | WBJ | | | |
| | APPROVED BY | ALT | | | |
| | ISSUE DATE | GLR | | | |
| | PROJECT NUMBER | | | | |
| | SEPTEMBER 4, 2018 | | | | |
| | 162813-04-003 | | | | |



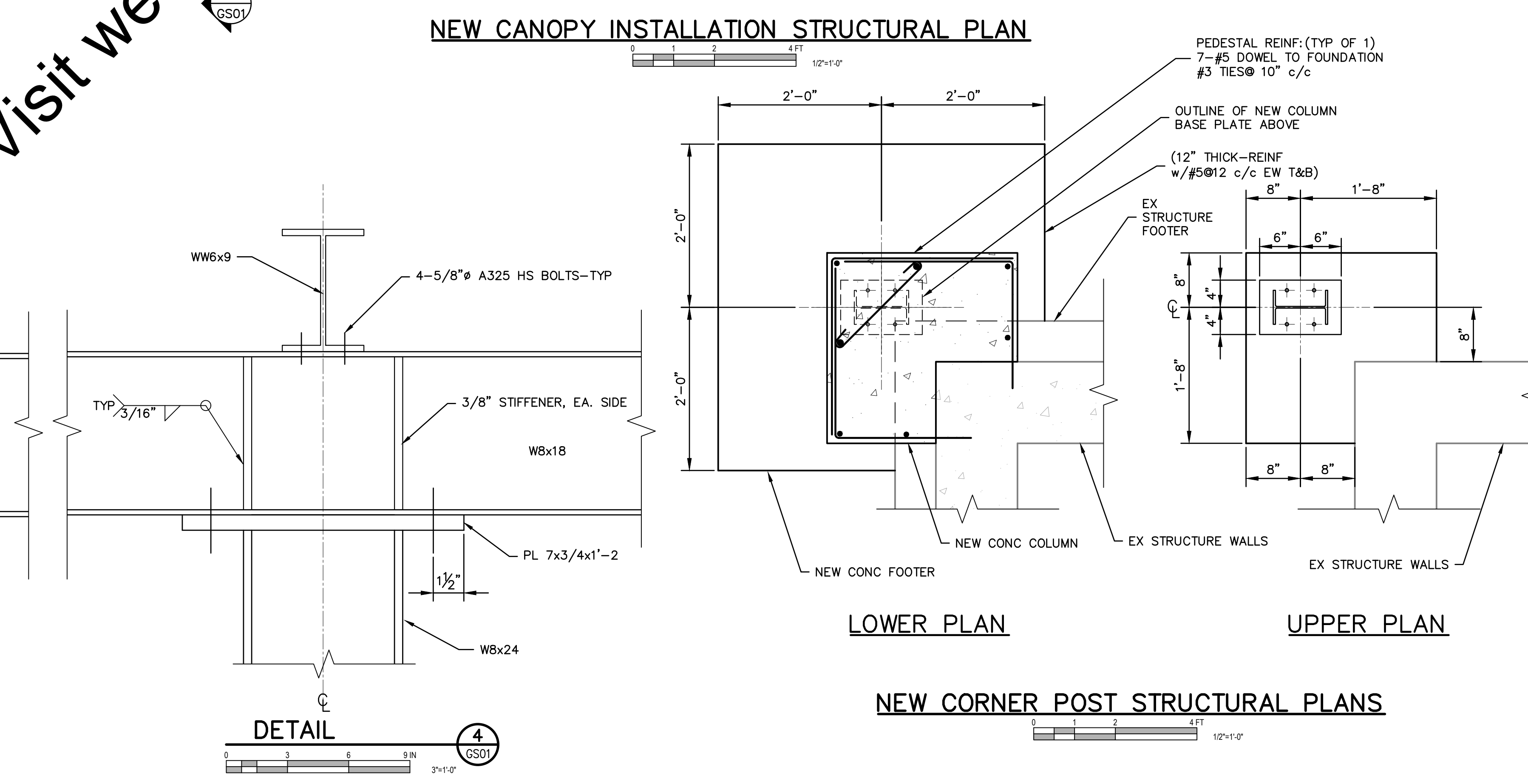
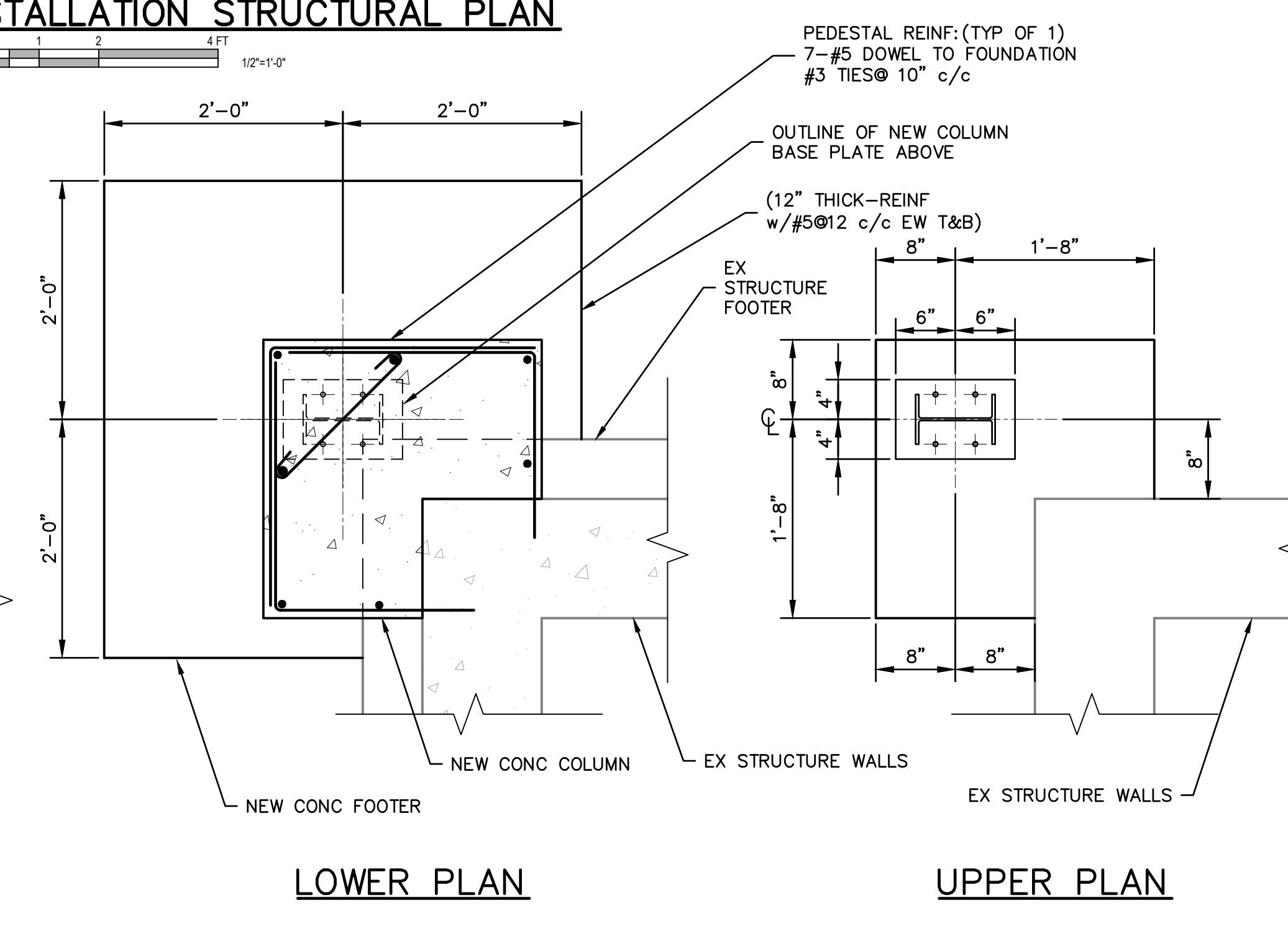
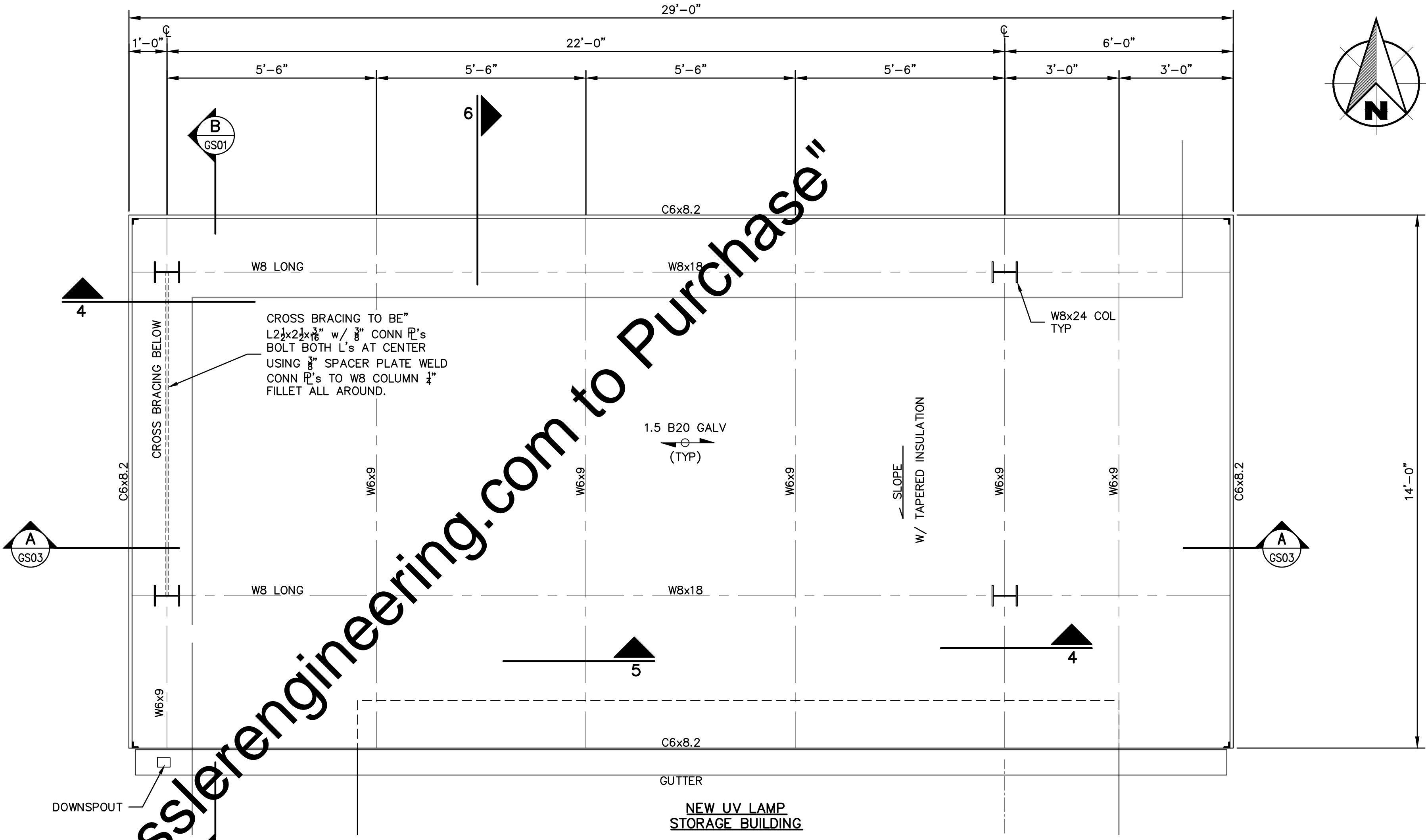
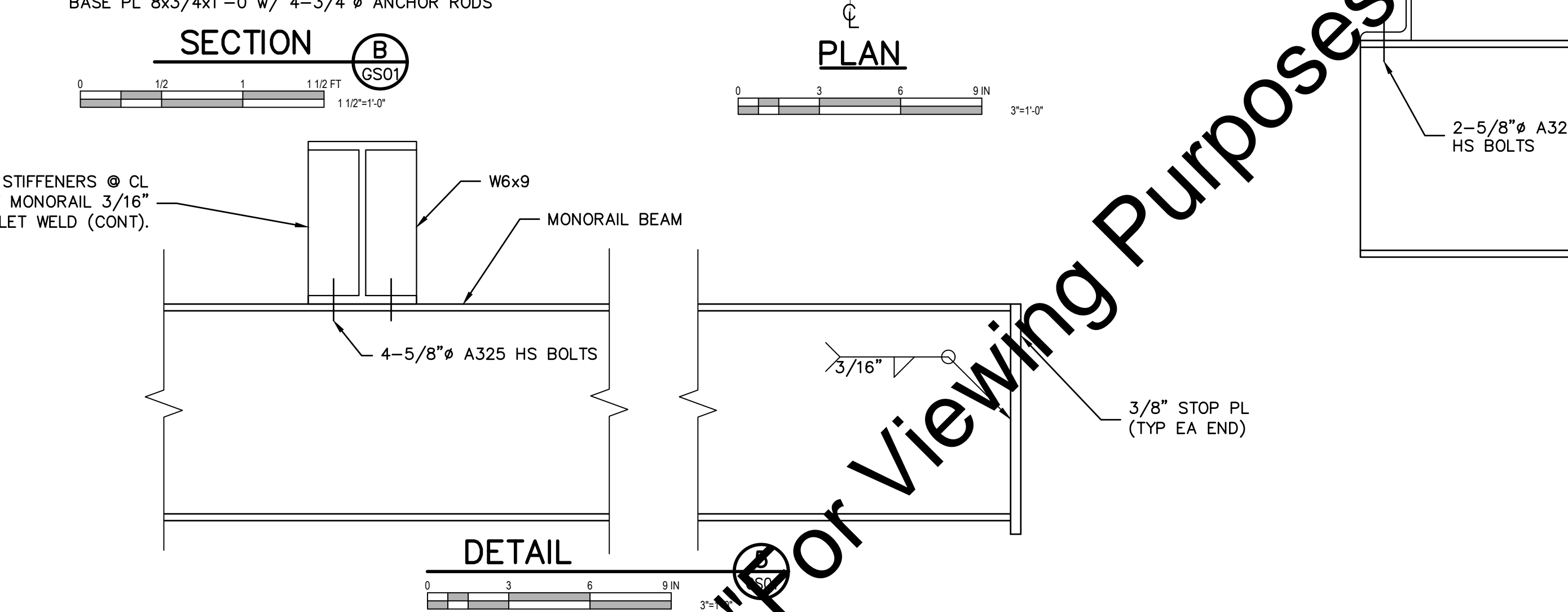
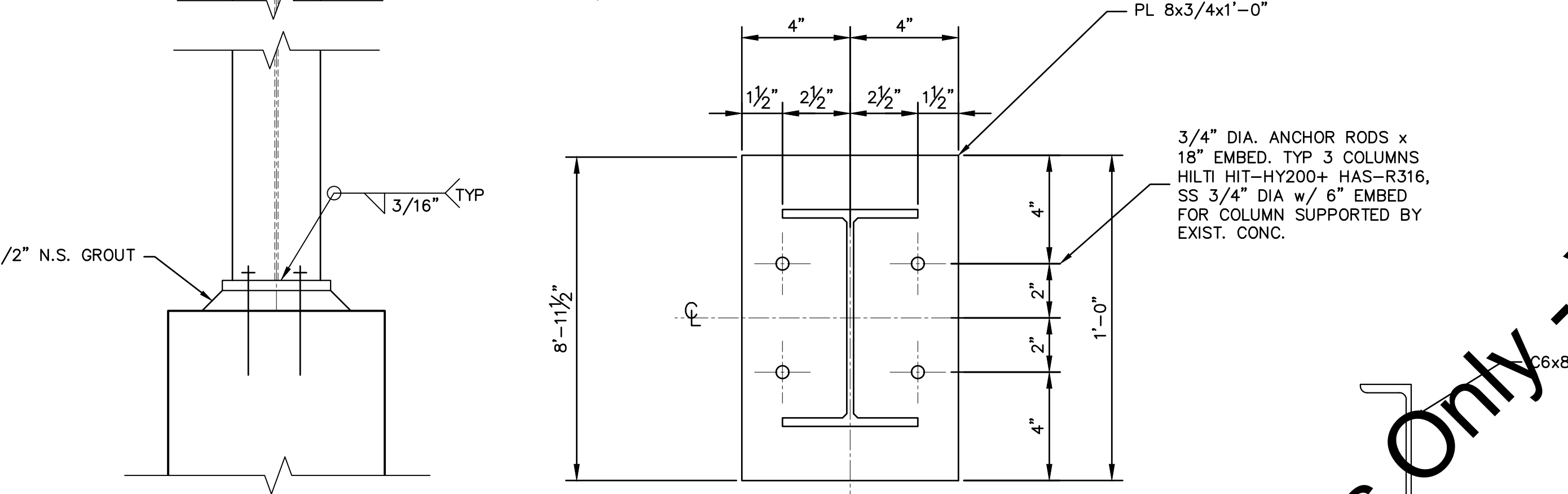
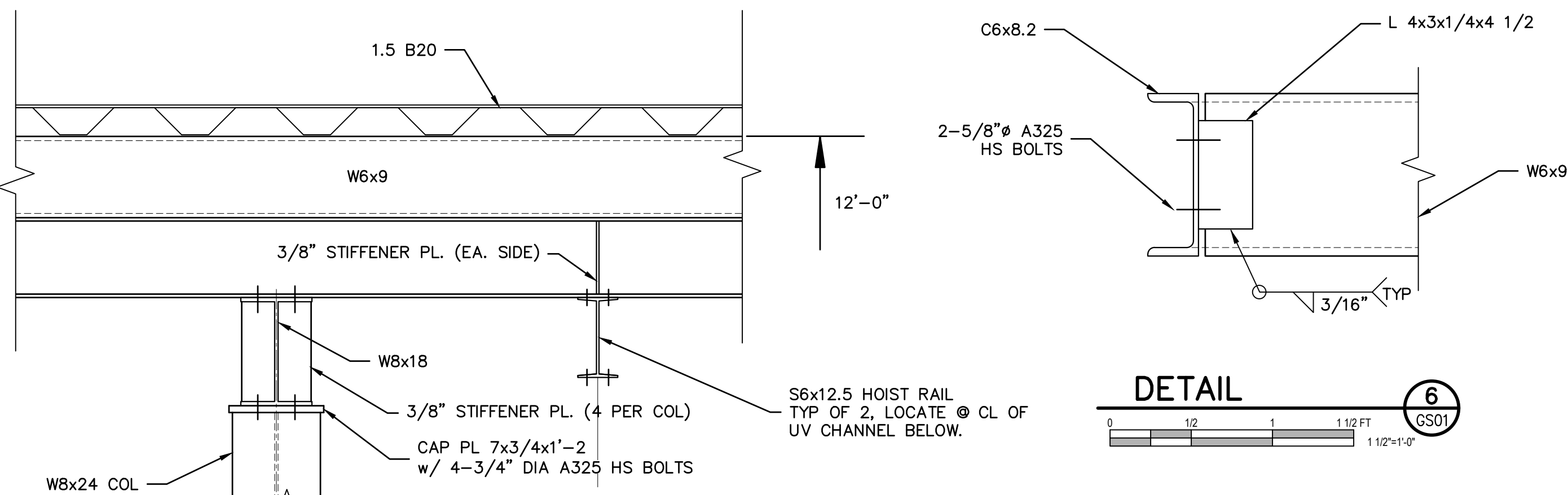
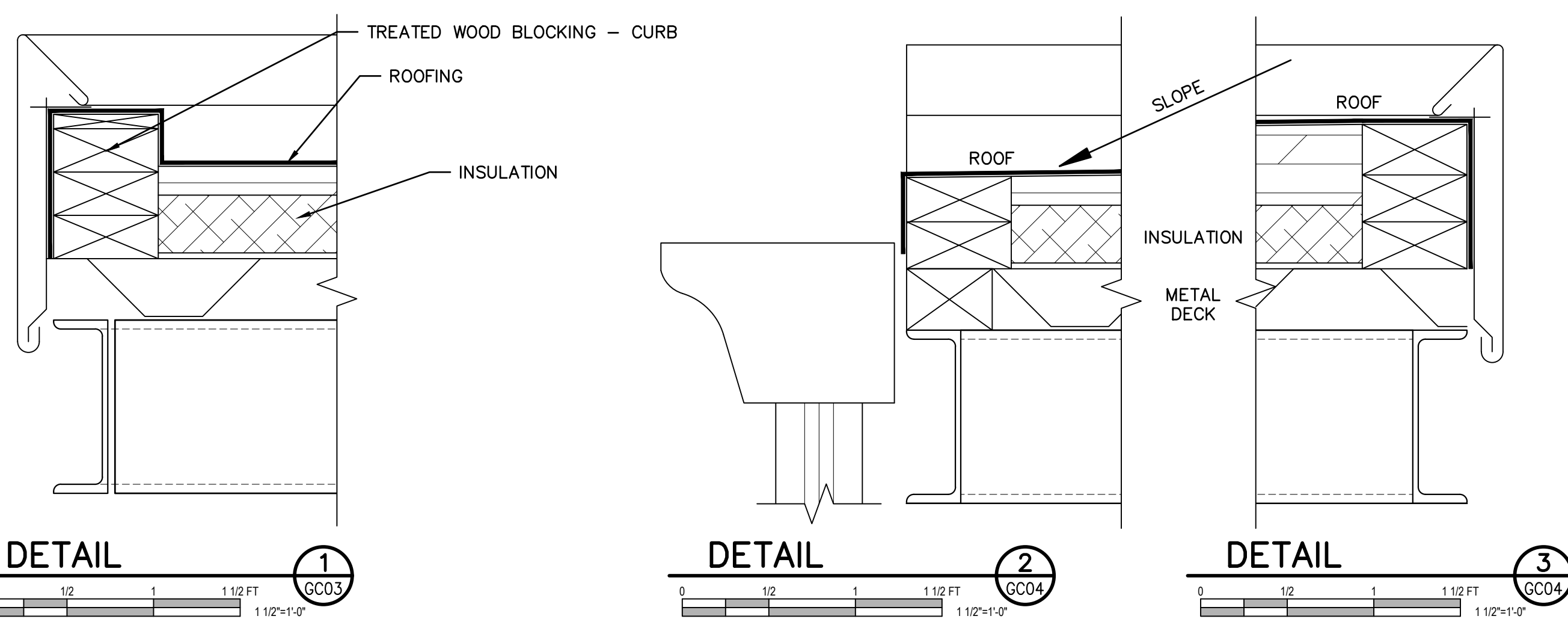
WASTEWATER TREATMENT PLANT EXPANSION - 2017

CITY OF WARSAW, INDIANA

EXISTING UV & POST AERATION CHAMBER UPPER LEVEL MODIFICATION PLAN AND SECTION

SHEET NO.
GC04
PAGE NO.
148

Drawing: J:\Warshaw\Projects\162813-Ex-UV-Str-dwg | Layout: GC04 | Plotted: 09/04/18 @ 10:47:52 | LastSavedBy: MikeN

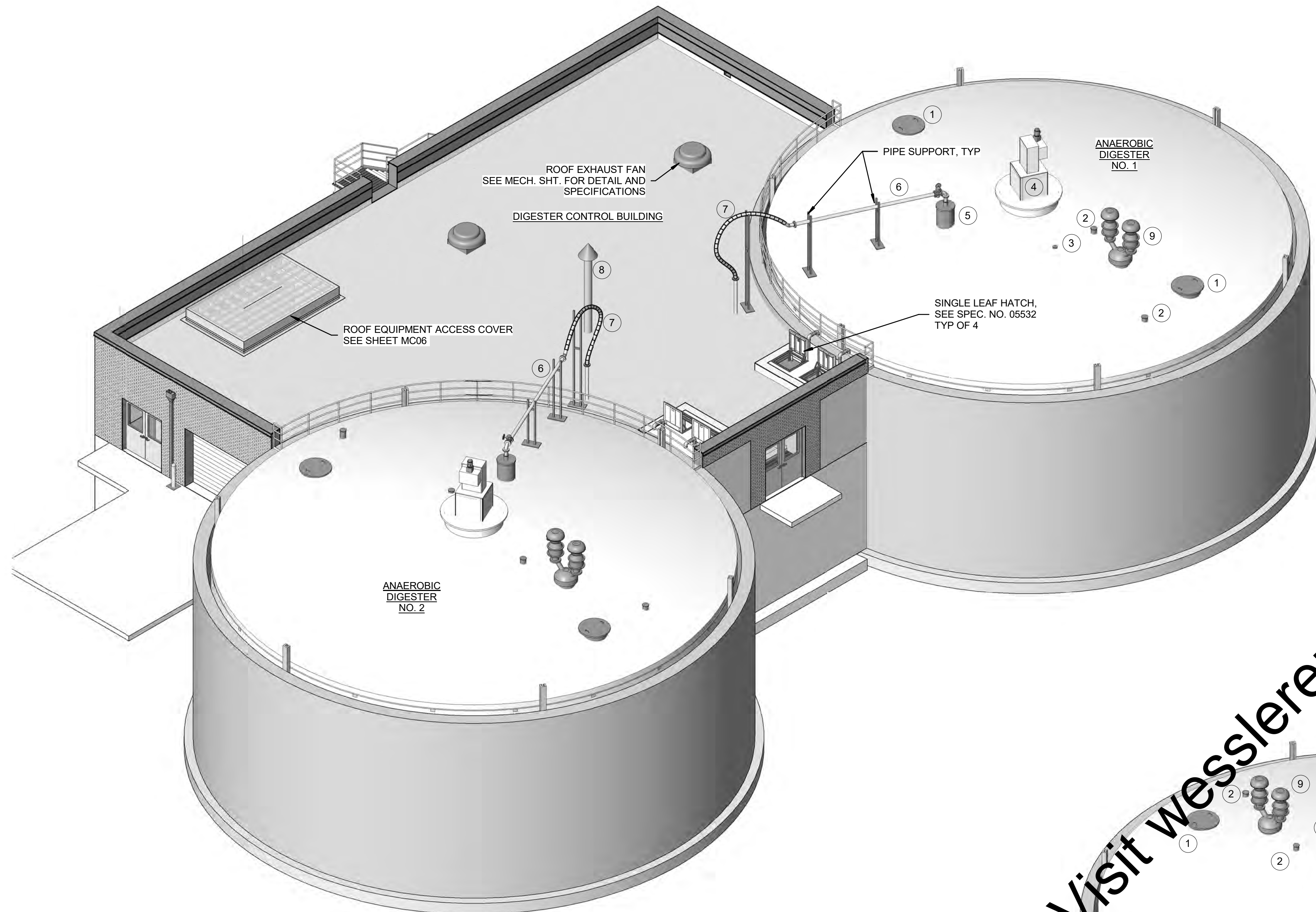


| | | | | | | | | | | | | |
|--|--|----------------|-------------------|-----|------|----------|-----------------------|--|--|--|-------------|-----------|
| SCALE VERIFICATION | | DRAWN BY | WBJ | NO. | DATE | INITIALS | REVISION DESCRIPTIONS | | | WASTEWATER TREATMENT PLANT EXPANSION - 2017 | | SHEET NO. |
| BAR IS ONE INCH LONG ON ORIGINAL DRAWING | | CHECKED BY | JRB | | | | | | | CITY OF WARSAW, INDIANA EXISTING UV & POST AERATION CHAMBER STRUCTURAL MODIFICATION PLAN AND DETAIL | GS01 | |
| | | APPROVED BY | JRB | | | | | | | | | PAGE NO. |
| | | ISSUE DATE | SEPTEMBER 4, 2018 | | | | | | | | | 149 |
| | | PROJECT NUMBER | 162813-04-003 | | | | | | | | | |

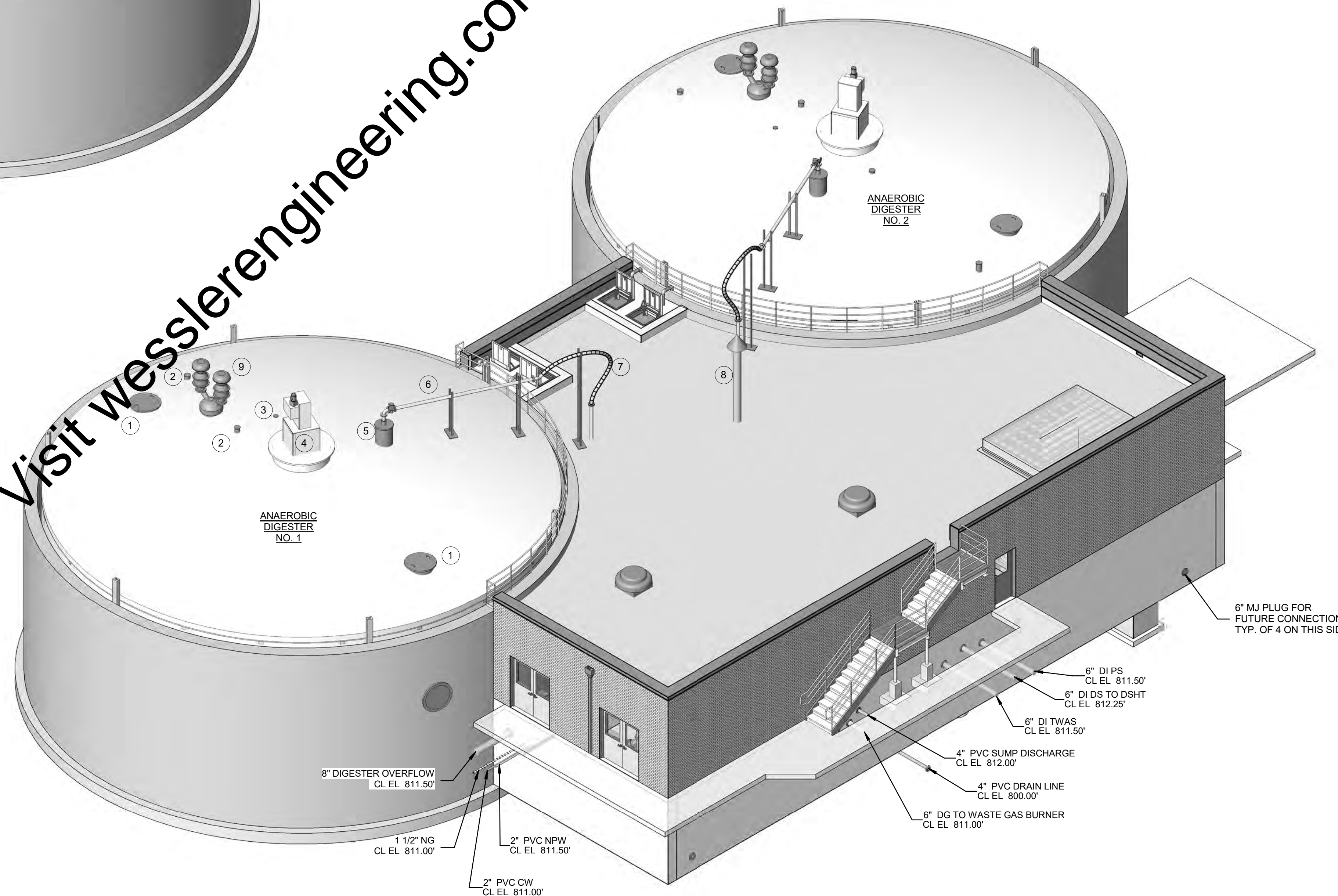
Drawing: J:\Warshaw\Projects\162813-Ex UV Str-GS01.dwg | Layout: GS01 | Pinned: 09/04/18 @ 10:52:33 | LastSavedBy: FrankKt

KEYED NOTES - C1

- | # | DESCRIPTION |
|---|--|
| 1 | 36" DIA. MANHOLE w/ BOLTED AND GASKETED COVER |
| 2 | 8" DIA. SAMPLE TUBE |
| 3 | 6" DIA. SCH 40 NOZZLE FOR PRV VALVE CONNECTION |
| 4 | LINEAR MOTION POWER ASSEMBLY |
| 5 | 18" GAS BONNET, INSULATED |
| 6 | 4" SST DIGESTER GAS LINE, INSULATED |
| 7 | 4" SST FLEXIBLE HOSE DIGESTER GAS LINE |
| 8 | 10" DIA. SST BOILER STACK AND CAP TROUGH ROOF |
| 9 | PRESSURE AND VACUUM RELIEF ASSEMBLY |



OVERALL PERSPECTIVE NORTHWEST
SCALE: NONE



OVERALL PERSPECTIVE SOUTHEAST
SCALE: NONE

"For Viewing Purposes Only - Visit wesslerengineering.com to Purchase"

| SCALE VERIFICATION | DRAWN BY | FCT | NO. | DATE | INITIALS | REVISION DESCRIPTIONS |
|---|----------------|-------------------|-----|------|----------|-----------------------|
| SCALE: NONE BAR IS ONE INCH LONG ON ORIGINAL DRAWING | CHECKED BY | ALT | | | | |
| | APPROVED BY | GLR | | | | |
| | ISSUE DATE | SEPTEMBER 4, 2018 | | | | |
| | PROJECT NUMBER | 162813-04-003 | | | | |

WESSLER ENGINEERING
More than a Project™

WASTEWATER TREATMENT PLANT EXPANSION - 2017

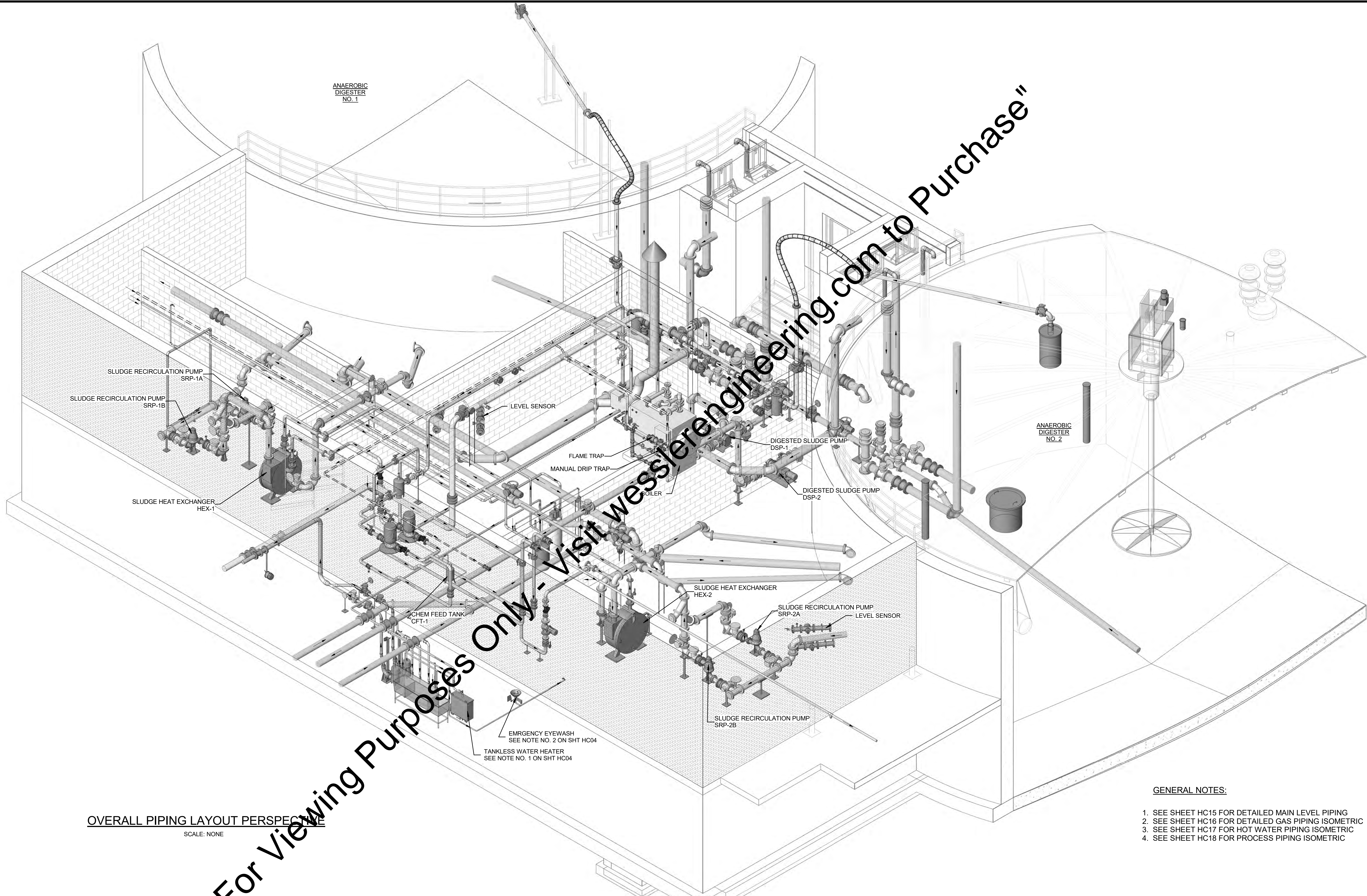
CITY OF WARSAW, INDIANA

NEW ANAEROBIC DIGESTERS AND CONTROL BUILDING
OVERALL PERSPECTIVE

SHEET NO.
HC01

PAGE NO.
151

P:\Users\don\Documents\162813 - Warsaw - CENTRAL - R17 - dtompson_wessler.rvt



OVERALL PIPING LAYOUT PERSPECTIVE
SCALE: NONE

- GENERAL NOTES:
1. SEE SHEET HC15 FOR DETAILED MAIN LEVEL PIPING
 2. SEE SHEET HC16 FOR DETAILED GAS PIPING ISOMETRIC
 3. SEE SHEET HC17 FOR HOT WATER PIPING ISOMETRIC
 4. SEE SHEET HC18 FOR PROCESS PIPING ISOMETRIC

"For Viewing Purposes Only - Visit wesslerengineering.com to Purchase"

C:\Users\doni\Documents\162813 - Warsaw, GENERAL - R17.dibompsion_wessler.rvt

| SCALE VERIFICATION | DRAWN BY | FCT | NO. | DATE | INITIALS | REVISION DESCRIPTIONS |
|--|----------------|-------------------|-----|------|----------|-----------------------|
| BAR IS ONE INCH LONG ON ORIGINAL DRAWING | CHECKED BY | ALT | | | | |
| | APPROVED BY | GLR | | | | |
| | ISSUE DATE | SEPTEMBER 4, 2018 | | | | |
| | PROJECT NUMBER | 162813-04-003 | | | | |

W

WESSLER

ENGINEERING

More than a Project™

WASTEWATER TREATMENT PLANT EXPANSION - 2017

CITY OF WARSAW, INDIANA

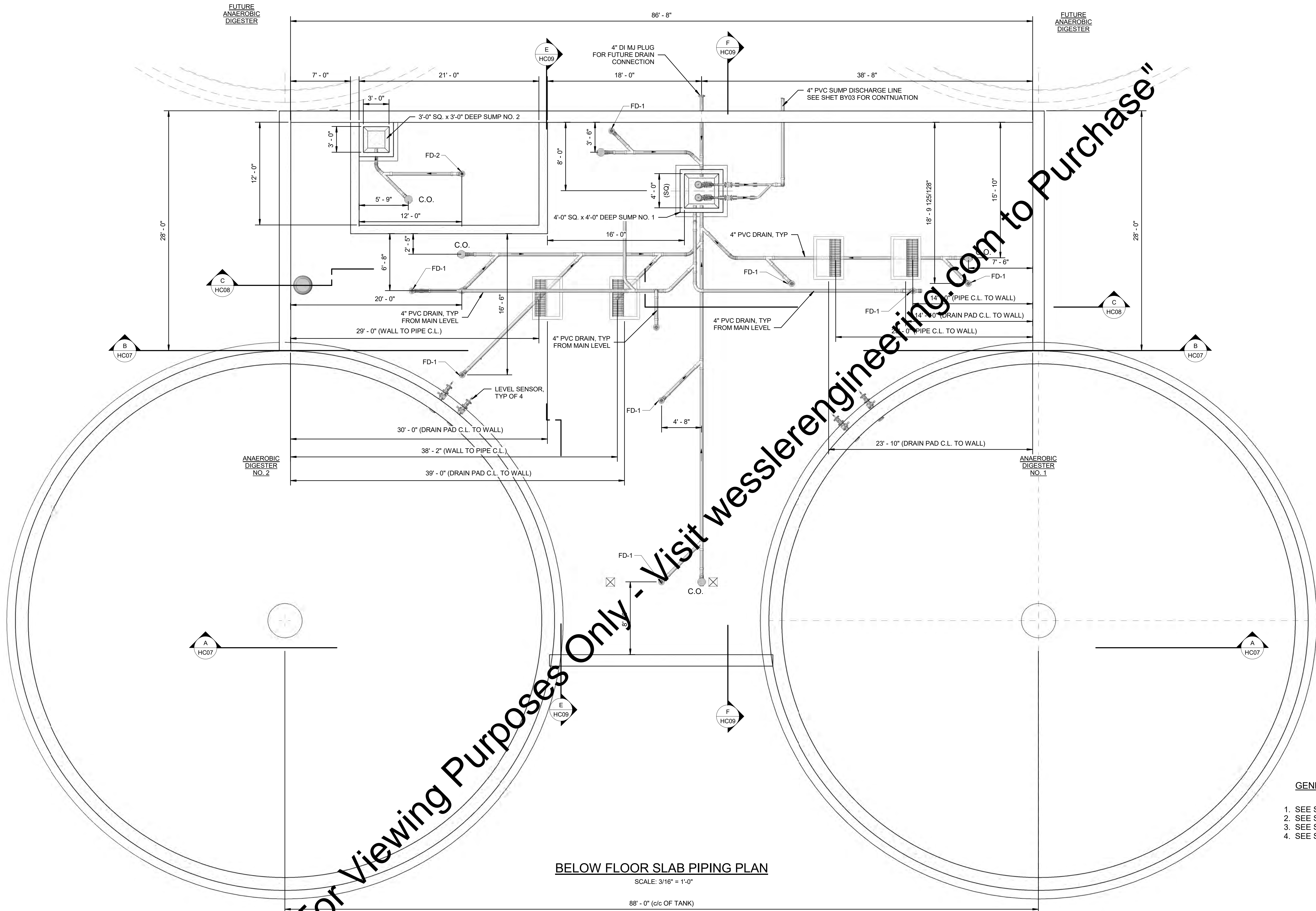
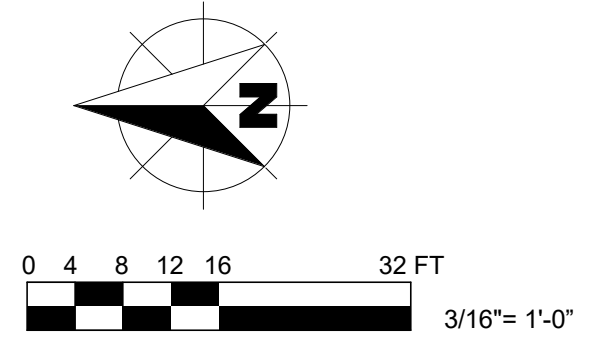
NEW ANAEROBIC DIGESTERS AND CONTROL BUILDING
OVERALL PIPING LAYOUT PERSPECTIVE

SHEET NO.

HC02

PAGE NO.

152



"For Viewing Purposes Only - Visit wesslerengineering.com to Purchase"

- GENERAL NOTES:**
1. SEE SHEET HC15 FOR DETAILED MAIN LEVEL PIPING
 2. SEE SHEET HC16 FOR DETAILED GAS PIPING ISOMETRIC
 3. SEE SHEET HC17 FOR HOT WATER PIPING ISOMETRIC
 4. SEE SHEET HC18 FOR PROCESS PIPING ISOMETRIC

BELOW FLOOR SLAB PIPING PLAN
 SCALE: 3/16" = 1'-0"
 88' - 0" (c/c OF TANK)

| SCALE VERIFICATION | DRAWN BY | FCT | NO. | DATE | INITIALS | REVISION DESCRIPTIONS |
|--|-------------------|-----|-----|------|----------|-----------------------|
| BAR IS ONE INCH LONG ON ORIGINAL DRAWING | CHECKED BY | ALT | | | | |
| | APPROVED BY | GLR | | | | |
| | ISSUE DATE | | | | | |
| | SEPTEMBER 4, 2018 | | | | | |
| | PROJECT NUMBER | | | | | |
| | 162813-04-003 | | | | | |

WESSLER ENGINEERING
 More than a Project™

WASTEWATER TREATMENT PLANT EXPANSION - 2017

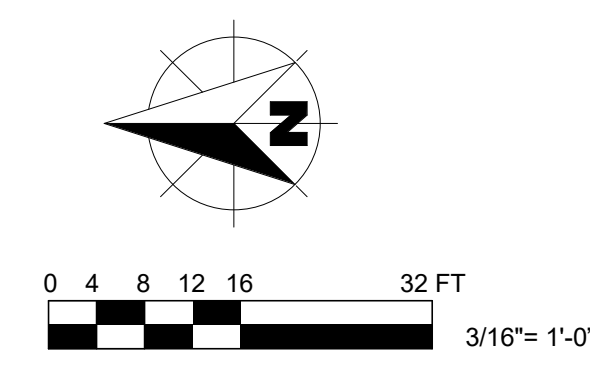
CITY OF WARSAW, INDIANA

NEW ANAEROBIC DIGESTERS AND CONTROL BUILDING
BELOW FLOOR SLAB PIPING PLAN

SHEET NO.
HC03

PAGE NO.
 153

C:\Users\don\Documents\162813 - Warsaw, GENERAL - R17.dwg - wessler.net
 Plotfile: 9/4/2018 11:44:45 AM



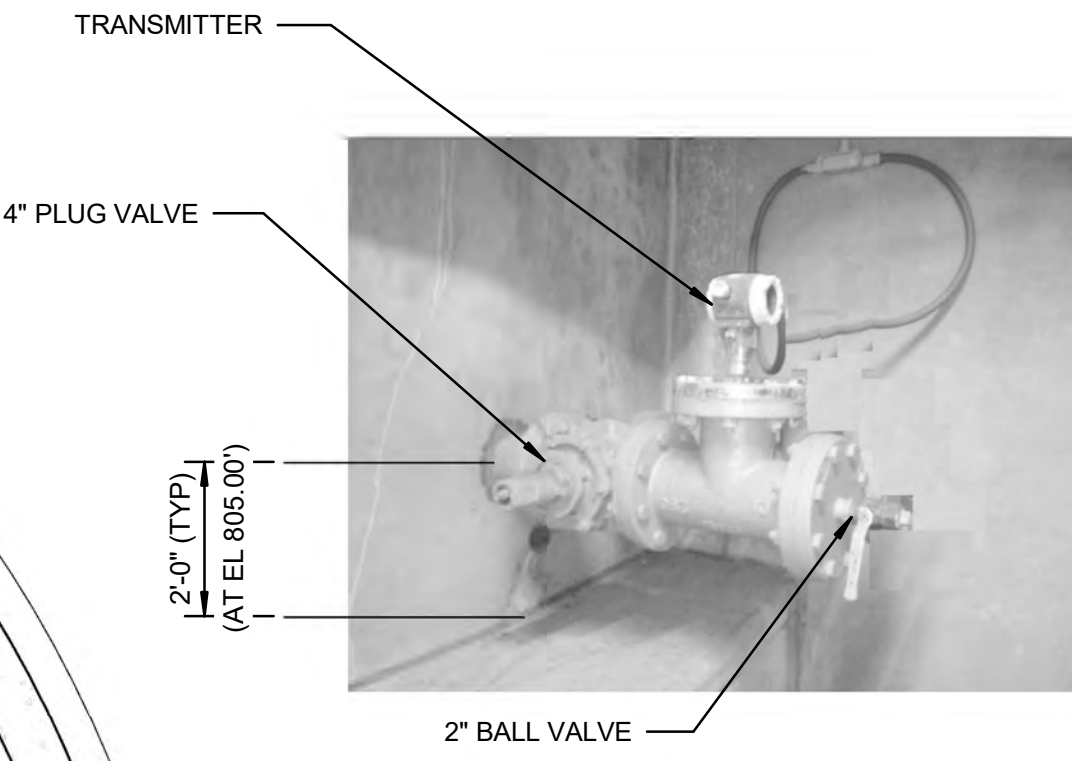
(FUTURE)
ANAEROBIC
DIGESTER

(FUTURE)
ANAEROBIC
DIGESTER

NOTES:

1. PROVIDE AND PLUMB WALL-MOUNTED ELECTRIC TANKLESS WATER HEATER, FLOW CONTROLLED WITH DIGITAL THERMOSTAT CONTROL WITH LED DISPLAY, 208V, 1P, 13.3 kW, 64A, 0.3-7.0 gpm FLOW RATE 60° F TEMPERATURE RISE AT 1.5 gpm. PLUMB TO SERVICE SINK, EMERGENCY EYEWASH MIXING VALVE, AND TO HOT WATER HOSE BIBB.
2. EMERGENCY EYEWASH AND WATER MIXING VALVE.

- KEYED NOTES - C5**
- | # | DESCRIPTION |
|----|---|
| 1 | 8" DI DIGESTER OVERFLOW |
| 2 | 6" DI TWAS LINE |
| 3 | 6" DI PS LINE |
| 4 | 6" DI DS LINE |
| 5 | 2" PVC NPW LINE |
| 6 | 2" PVC PW LINE |
| 7 | 1" NG LINE |
| 8 | 4" DI SUMP DISCHARGE LINE |
| 9 | 6" DI SRP SUCTION LINE |
| 10 | 6" DI TWAS/PS DISCHARGE |
| 11 | 8" DI BI-DIRECTIONAL SLUDGE TRANSFER LINE |
| 12 | 6" DI HEX SLUDGE DISCHARGE |
| 13 | 6" DI BOTTOM TANK SLUDGE SUCTION LINE |
| 14 | 6" DI SLUDGE DIGESTER SURFACE OVERFLOW |
| 15 | 6" DI SLUDGE DIGESTER SUB-SURFACE OVERFLOW |
| 16 | LEVEL SENSOR w/ 4" PLUG VALVE AND 2" FLUSHING VALVE |
| 17 | SINGLE HATCH SEE SPEC. NO XXXX-00 |
| 18 | SINGLE HATCH SEE SPEC. NO XXXX-00 |
| 19 | LINK SEAL OR EQUAL AND INSTALL NON-SHRINK GROUT. TYP. ALL PIPES ON BOTH TANKS |



LEVEL SENSOR DETAIL
SCALE: NONE

- GENERAL NOTES:**
1. SEE SHEET HC15 FOR DETAILED MAIN LEVEL PIPING
 2. SEE SHEET HC16 FOR DETAILED GAS PIPING ISOMETRIC
 3. SEE SHEET HC17 FOR HOT WATER PIPING ISOMETRIC
 4. SEE SHEET HC18 FOR PROCESS PIPING ISOMETRIC

- LEGENDS:**
- FUTURE
- NEW FEATURES

LOWER LEVEL FLOOR PLAN
SCALE: 3/16" = 1'-0"

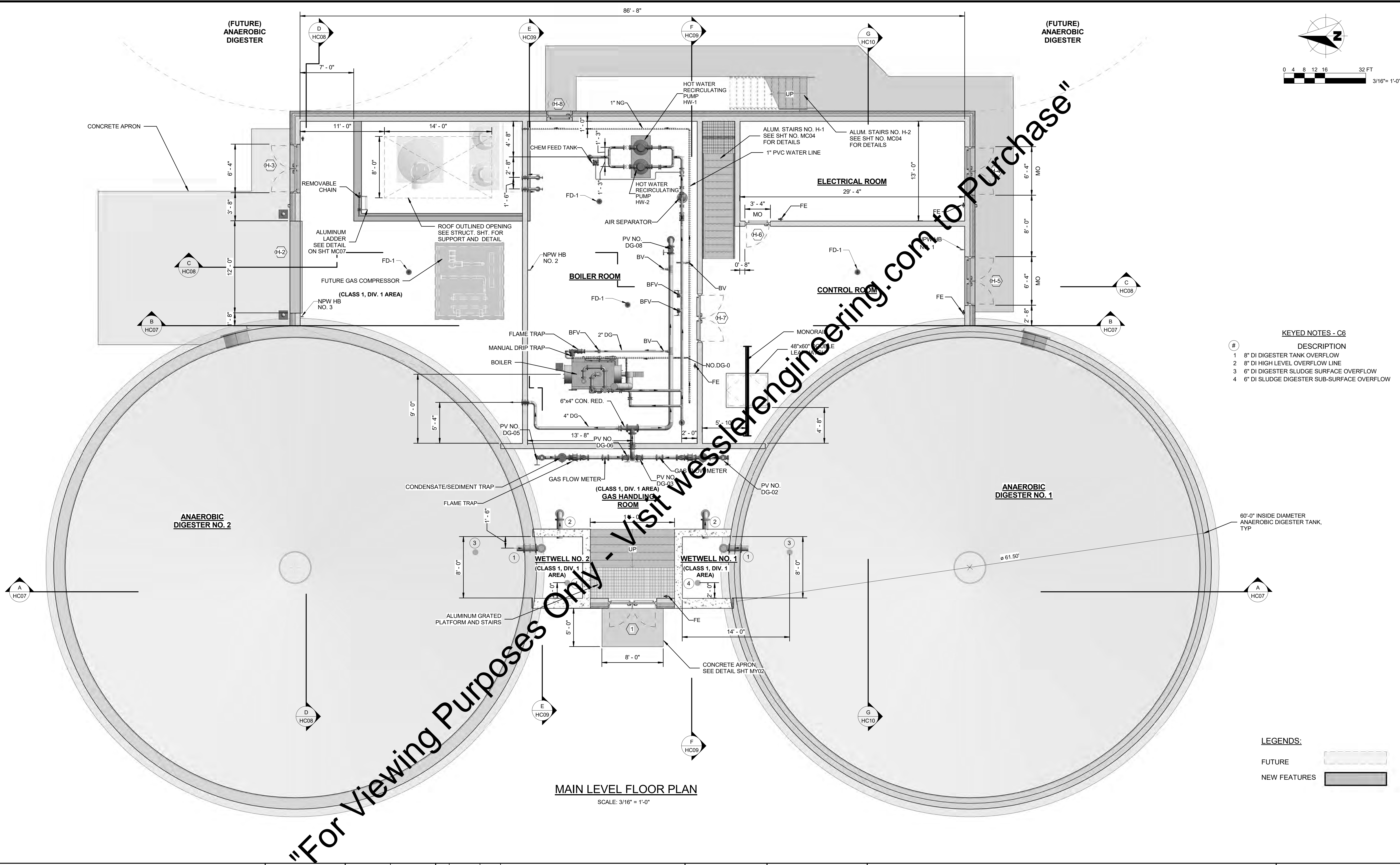
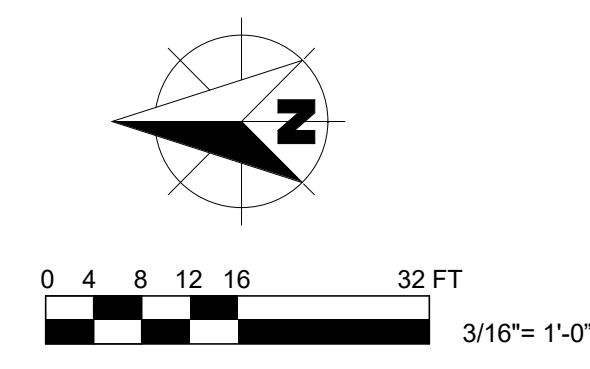
| SCALE VERIFICATION | DRAWN BY | FCT | NO. | DATE | INITIALS | REVISION DESCRIPTIONS |
|--|-------------------|-----|-----|------|----------|-----------------------|
| BAR IS ONE INCH LONG ON ORIGINAL DRAWING | CHECKED BY | ALT | | | | |
| | APPROVED BY | GLR | | | | |
| | ISSUE DATE | | | | | |
| | SEPTEMBER 4, 2018 | | | | | |
| | PROJECT NUMBER | | | | | |
| | 162813-04-003 | | | | | |

WESSLER ENGINEERING
More than a Project™

WASTEWATER TREATMENT PLANT EXPANSION - 2017
CITY OF WARSAW, INDIANA
NEW ANAEROBIC DIGESTERS AND CONTROL BUILDING
LOWER LEVEL FLOOR PLAN

SHEET NO.
HC04
PAGE NO.
154

P:\Users\don\Documents\162813 - Warsaw, CENTRAL - R17 - dtompson_wessler.rvt



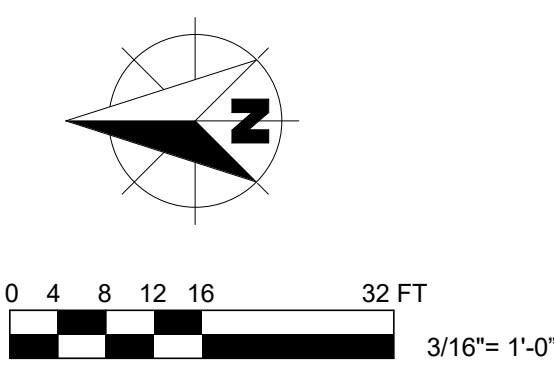
- KEYED NOTES - C6**
- | # | DESCRIPTION |
|---|--|
| 1 | 8" DI DIGESTER TANK OVERFLOW |
| 2 | 8" DI HIGH LEVEL OVERFLOW LINE |
| 3 | 6" DI DIGESTER SLUDGE SURFACE OVERFLOW |
| 4 | 6" DI SLUDGE DIGESTER SUB-SURFACE OVERFLOW |

- LEGENDS:**
- FUTURE (represented by a dashed line symbol)
 - NEW FEATURES (represented by a solid grey box symbol)

MAIN LEVEL FLOOR PLAN
SCALE: 3/16" = 1'-0"

C:\Users\don\Documents\162813 - Warsaw, CENTRAL - R17.dwg
 Plotfile: 9/4/2018 11:44:56 AM
 C:\Users\don\Documents\162813 - Warsaw, CENTRAL - R17.dwg
 Plotfile: 9/4/2018 11:44:56 AM

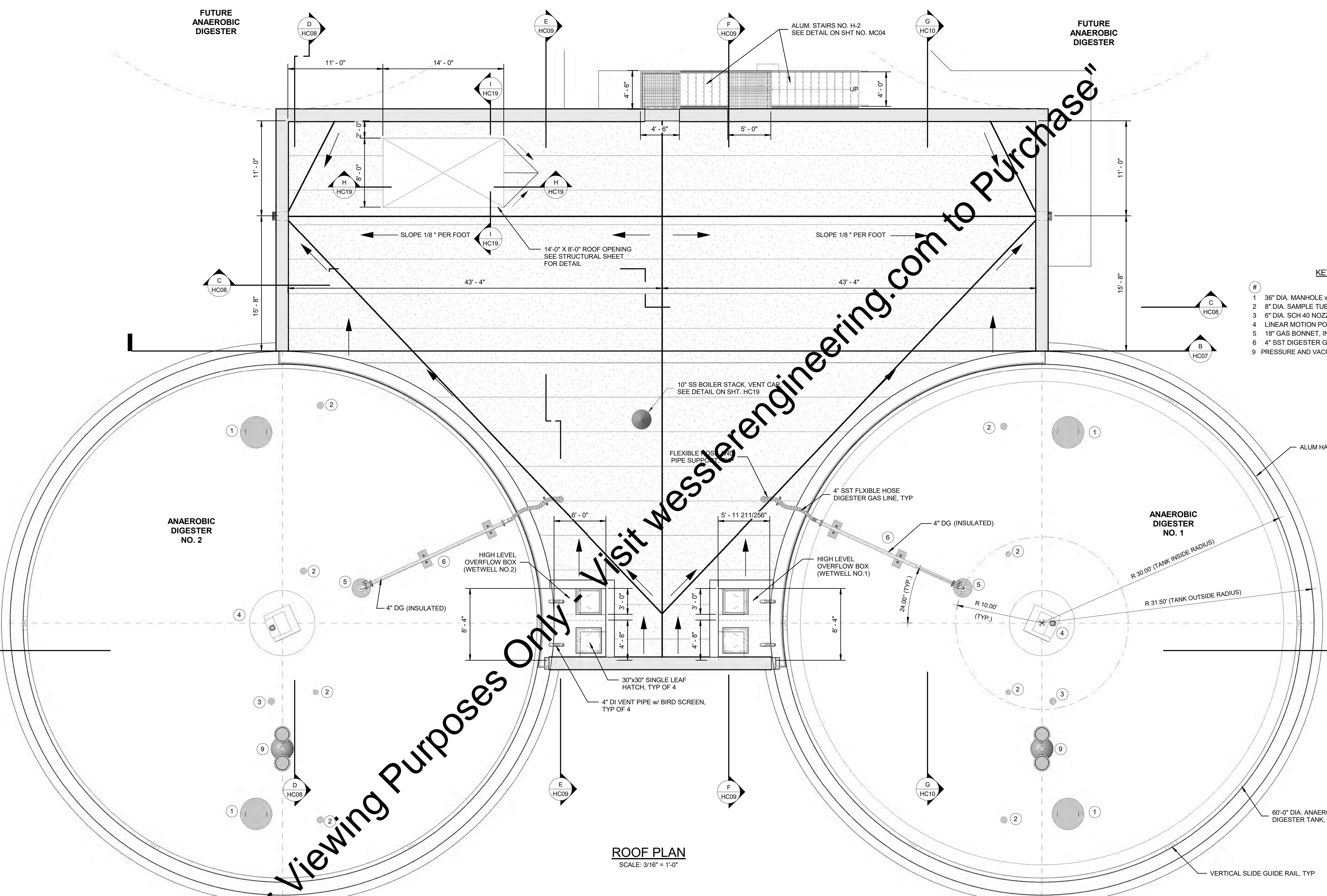
| | | | | | | | | | | | |
|--|----------------|-------------------|-----|------|----------|-----------------------|--|--|--|-------------|----------|
| SCALE VERIFICATION BAR IS ONE INCH LONG ON ORIGINAL DRAWING | DRAWN BY | FCT | NO. | DATE | INITIALS | REVISION DESCRIPTIONS | | | WASTEWATER TREATMENT PLANT EXPANSION - 2017 CITY OF WARSAW, INDIANA NEW ANAEROBIC DIGESTERS AND CONTROL BUILDING MAIN LEVEL FLOOR PLAN | SHEET NO. | |
| | CHECKED BY | ALT | | | | | | | | HC05 | |
| | APPROVED BY | GLR | | | | | | | | | PAGE NO. |
| | ISSUE DATE | SEPTEMBER 4, 2018 | | | | | | | | | 155 |
| | PROJECT NUMBER | 162813-04-003 | | | | | | | | | |



FUTURE ANAEROBIC DIGESTER

FUTURE ANAEROBIC DIGESTER

ALUM. STAIRS NO. H-2
SEE DETAIL ON SHT NO. MC04



- KEYED NOTES - C7**
- | # | DESCRIPTION |
|---|--|
| 1 | 36" DIA. MANHOLE w/ BOLTED AND GASKETED COVER |
| 2 | 8" DIA. SAMPLE TUBE |
| 3 | 6" DIA. SCH 40 NOZZLE FOR PRV VALVE CONNECTION |
| 4 | LINEAR MOTION POWER ASSEMBLY |
| 5 | 18" GAS BONNET, INSULATED |
| 6 | 4" SST DIGESTER GAS LINE, INSULATED |
| 9 | PRESSURE AND VACUUM RELIEF ASSEMBLY |

ROOF PLAN
SCALE: 3/16" = 1'-0"

"For Viewing Purposes Only. Visit www.wesslerengineering.com to Purchase"

C:\Users\doni\Documents\162813 - Warsaw, CENTRAL - R17.dibomson.wessler.rvt

| SCALE VERIFICATION | DRAWN BY | FCT | NO. | DATE | INITIALS | REVISION DESCRIPTIONS |
|--|-------------------|-----|-----|------|----------|-----------------------|
| BAR IS ONE INCH LONG ON ORIGINAL DRAWING | CHECKED BY | ALT | | | | |
| | APPROVED BY | GLR | | | | |
| | ISSUE DATE | | | | | |
| | SEPTEMBER 4, 2018 | | | | | |
| | PROJECT NUMBER | | | | | |
| | 162813-04-003 | | | | | |

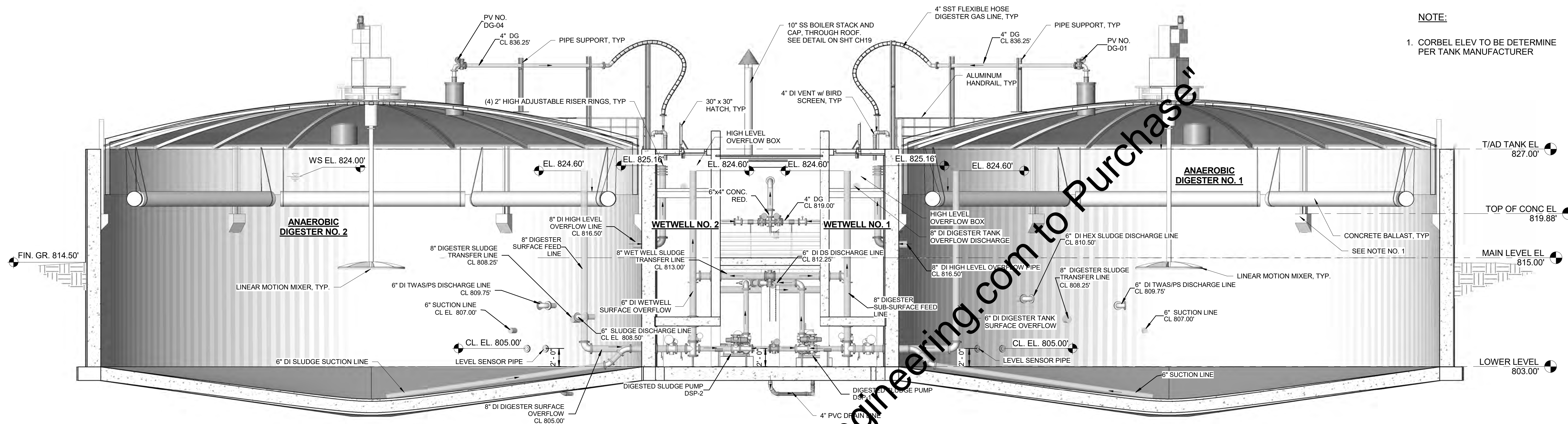
WESSLER ENGINEERING
More than a Project™

WASTEWATER TREATMENT PLANT EXPANSION - 2017
CITY OF WARSAW, INDIANA
NEW ANAEROBIC DIGESTERS AND CONTROL BUILDING
ROOF PLAN

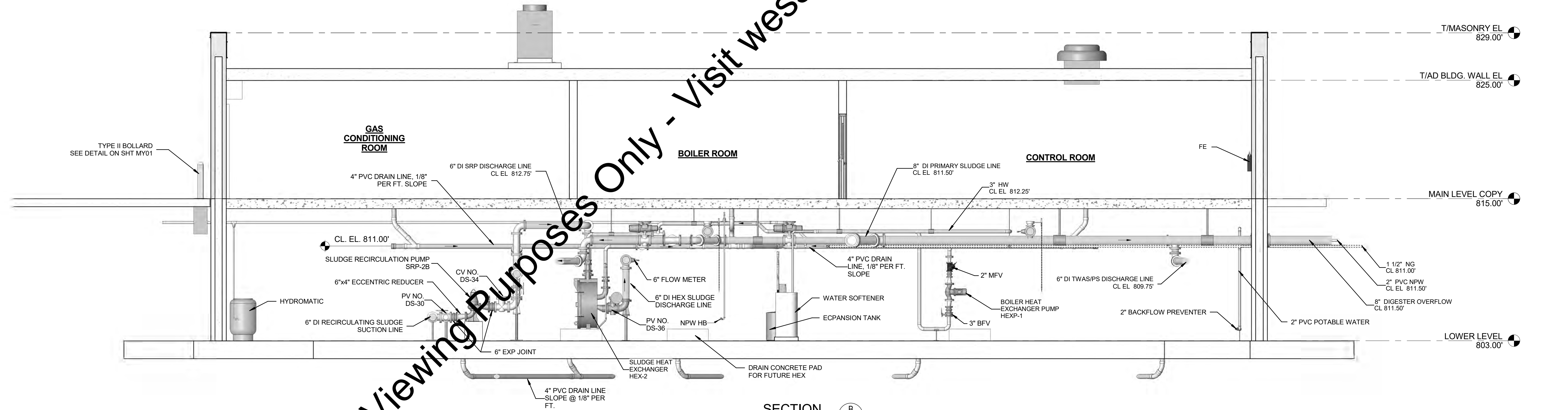
SHEET NO.
HC06
PAGE NO.
156

NOTE:

- CORBEL ELEV TO BE DETERMINE PER TANK MANUFACTURER



SECTION A-A
SCALE: 3/16" = 1'-0"



SECTION B-B
SCALE: 1/4" = 1'-0"

"For Viewing Purposes Only - Visit wesslerengineering.com to Purchase"

| SCALE VERIFICATION | DRAWN BY | FCT | NO. | DATE | INITIALS | REVISION DESCRIPTIONS |
|--|----------------|-------------------|-----|------|----------|-----------------------|
| BAR IS ONE INCH LONG ON ORIGINAL DRAWING | CHECKED BY | ALT | | | | |
| | APPROVED BY | GLR | | | | |
| | ISSUE DATE | SEPTEMBER 4, 2018 | | | | |
| | PROJECT NUMBER | 162813-04-003 | | | | |

WESSLER
ENGINEERING

More than a Project™

WASTEWATER TREATMENT PLANT EXPANSION - 2017

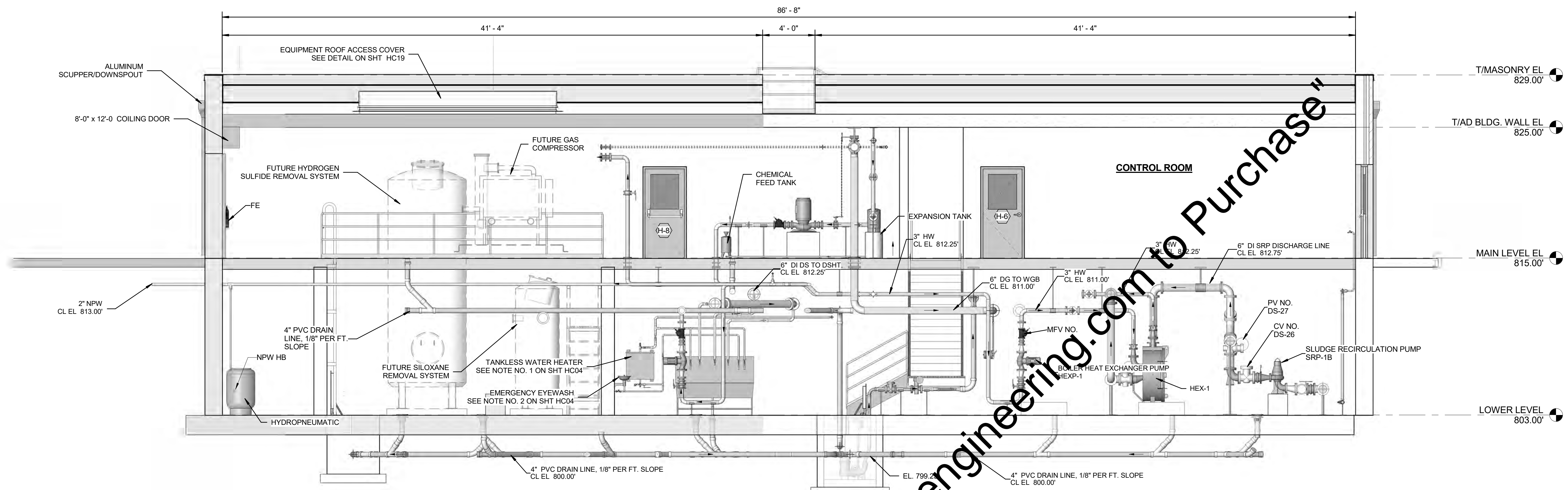
CITY OF WARSAW, INDIANA

NEW ANAEROBIC DIGESTERS AND CONTROL BUILDING SECTIONS

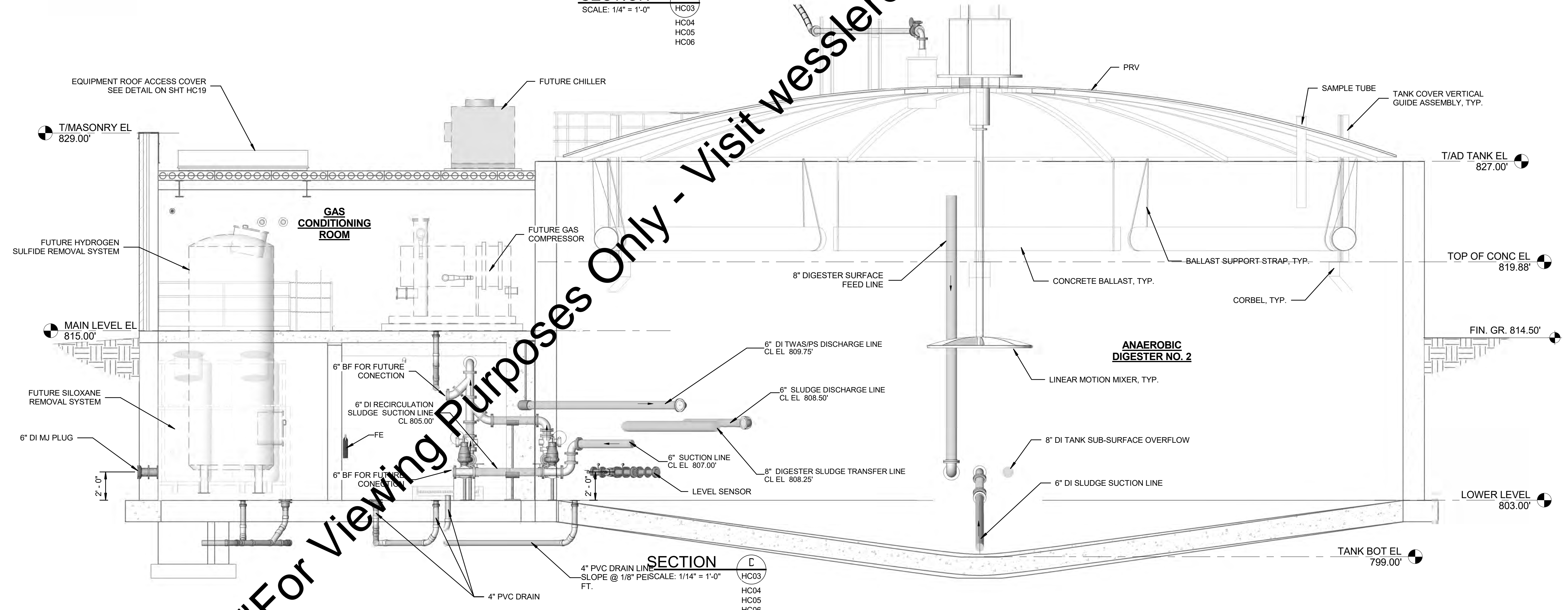
SHEET NO.
HC07

PAGE NO.
157

C:\Users\don\Documents\162813 - Warsaw - GENERAL - R17 - dthompson_wessler.rvt



SECTION C
SCALE: 1/4" = 1'-0"
HC03
HC04
HC05
HC06



SECTION C
SCALE: 1/4" = 1'-0"
HC03
HC04
HC05
HC06

LEGENDS:
FUTURE
NEW FEATURES

"For Viewing Purposes Only - Visit wesslerengineering.com to Purchase"

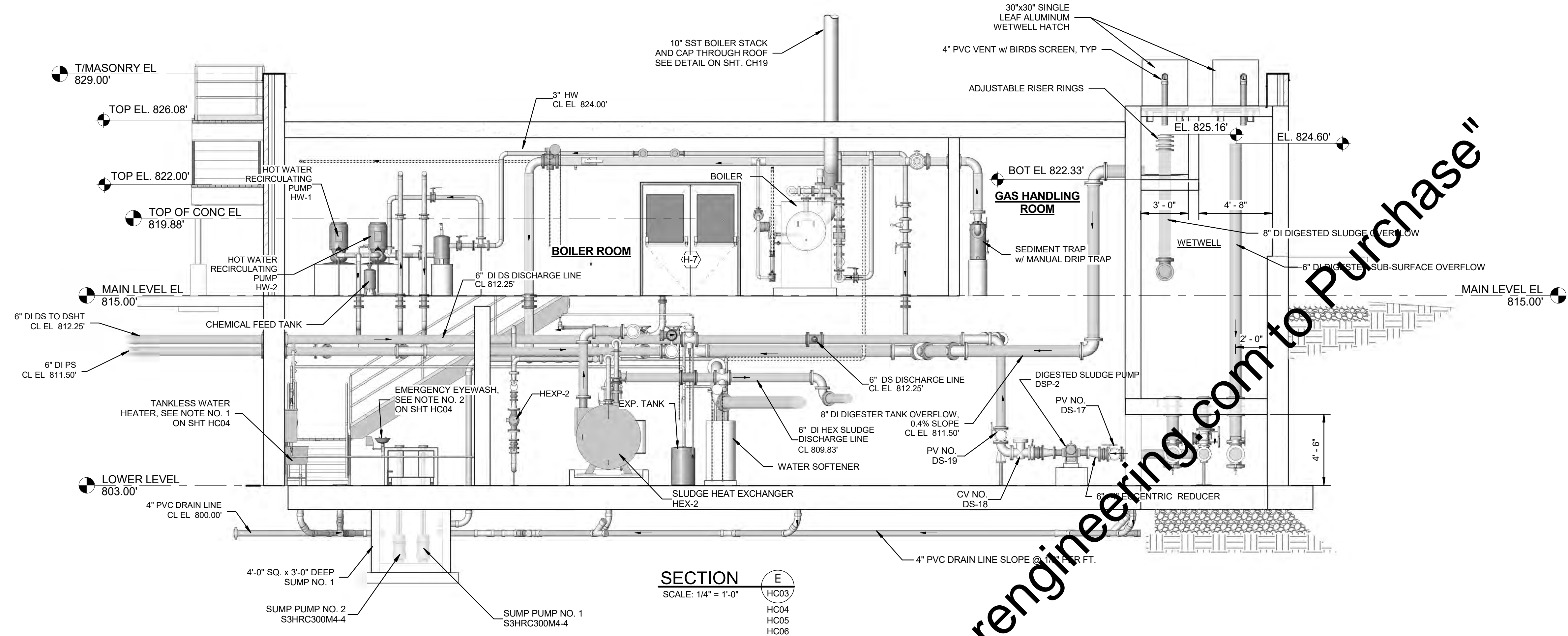
| SCALE VERIFICATION | DRAWN BY | FCT | NO. | DATE | INITIALS | REVISION DESCRIPTIONS |
|--|----------------|-------------------|-----|------|----------|-----------------------|
| BAR IS ONE INCH LONG ON ORIGINAL DRAWING | CHECKED BY | ALT | | | | |
| | APPROVED BY | GLR | | | | |
| | ISSUE DATE | SEPTEMBER 4, 2018 | | | | |
| | PROJECT NUMBER | 162813-04-003 | | | | |

WESSLER ENGINEERING
More than a Project™

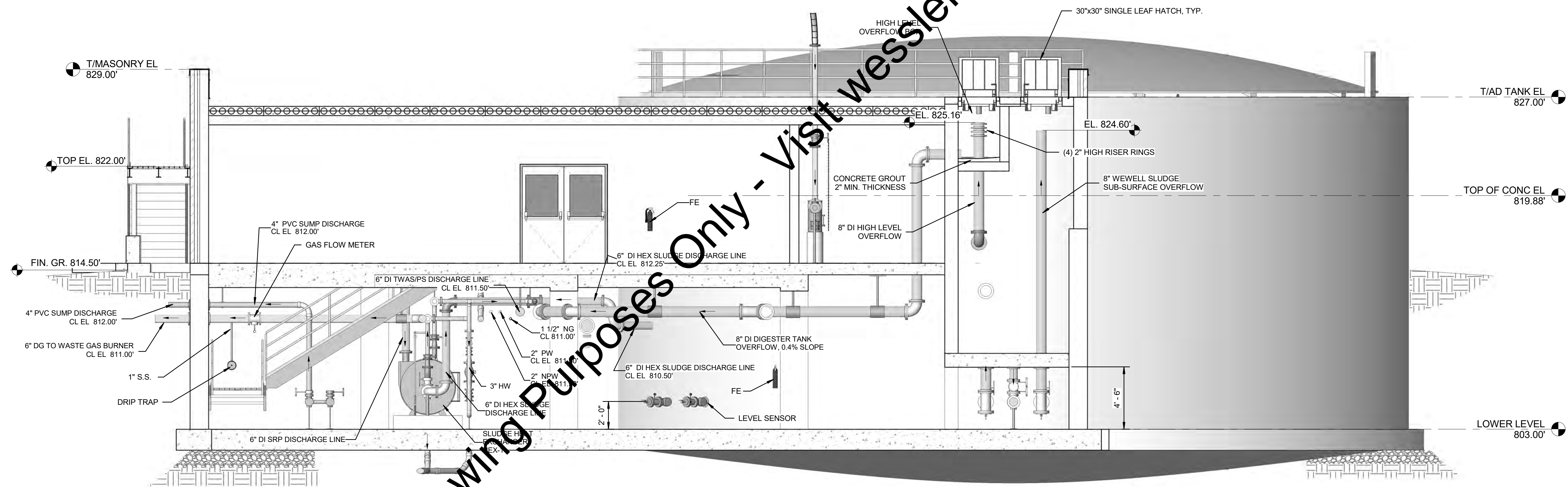
WASTEWATER TREATMENT PLANT EXPANSION - 2017
CITY OF WARSAW, INDIANA
NEW ANAEROBIC DIGESTERS AND CONTROL BUILDING SECTIONS

SHEET NO.
HC08
PAGE NO.
158

P:\Users\don\Documents\162813 - Warsaw - GENERAL - R17 - dtompson - wessler.rvt
 Plotfile: 9/4/2018 11:45:25 AM



SECTION E
SCALE: 1/4" = 1'-0"
HC03
HC04
HC05
HC06



SECTION F
SCALE: 1/4" = 1'-0"
HC03
HC04
HC05
HC06

"For Viewing Purposes Only - Visit wesslerengineering.com to Purchase"

| SCALE VERIFICATION | DRAWN BY | FCT | NO. | DATE | INITIALS | REVISION DESCRIPTIONS |
|--|----------------|-------------------|-----|------|----------|-----------------------|
| BAR IS ONE INCH LONG ON ORIGINAL DRAWING | CHECKED BY | ALT | | | | |
| | APPROVED BY | GLR | | | | |
| | ISSUE DATE | SEPTEMBER 4, 2018 | | | | |
| | PROJECT NUMBER | 162813-04-003 | | | | |

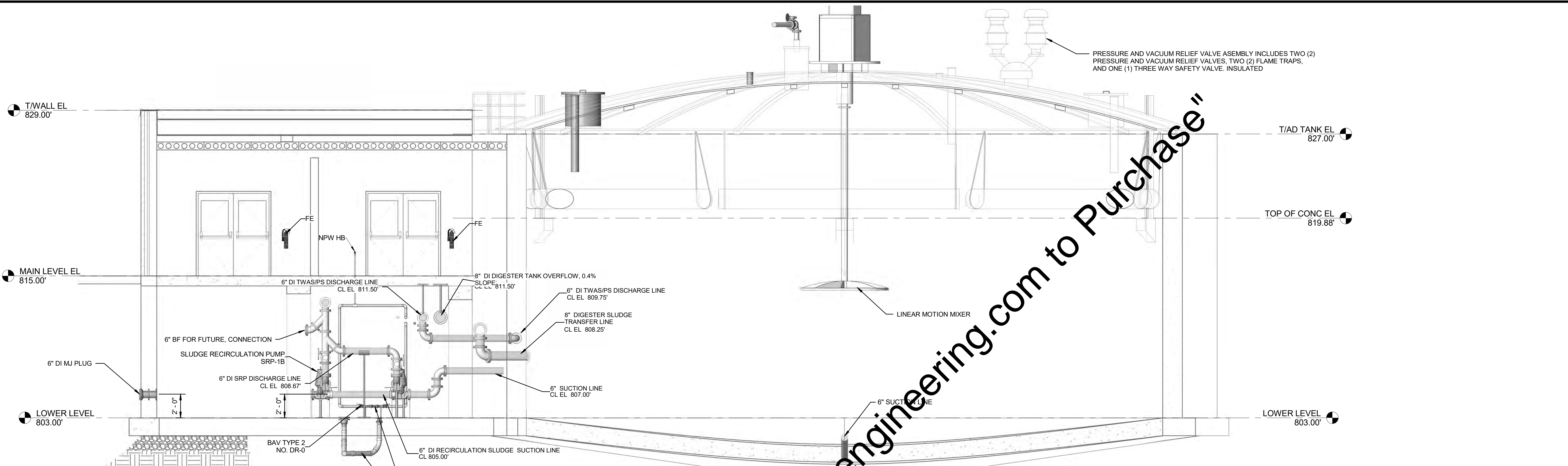


WASTEWATER TREATMENT PLANT EXPANSION - 2017

CITY OF WARSAW, INDIANA

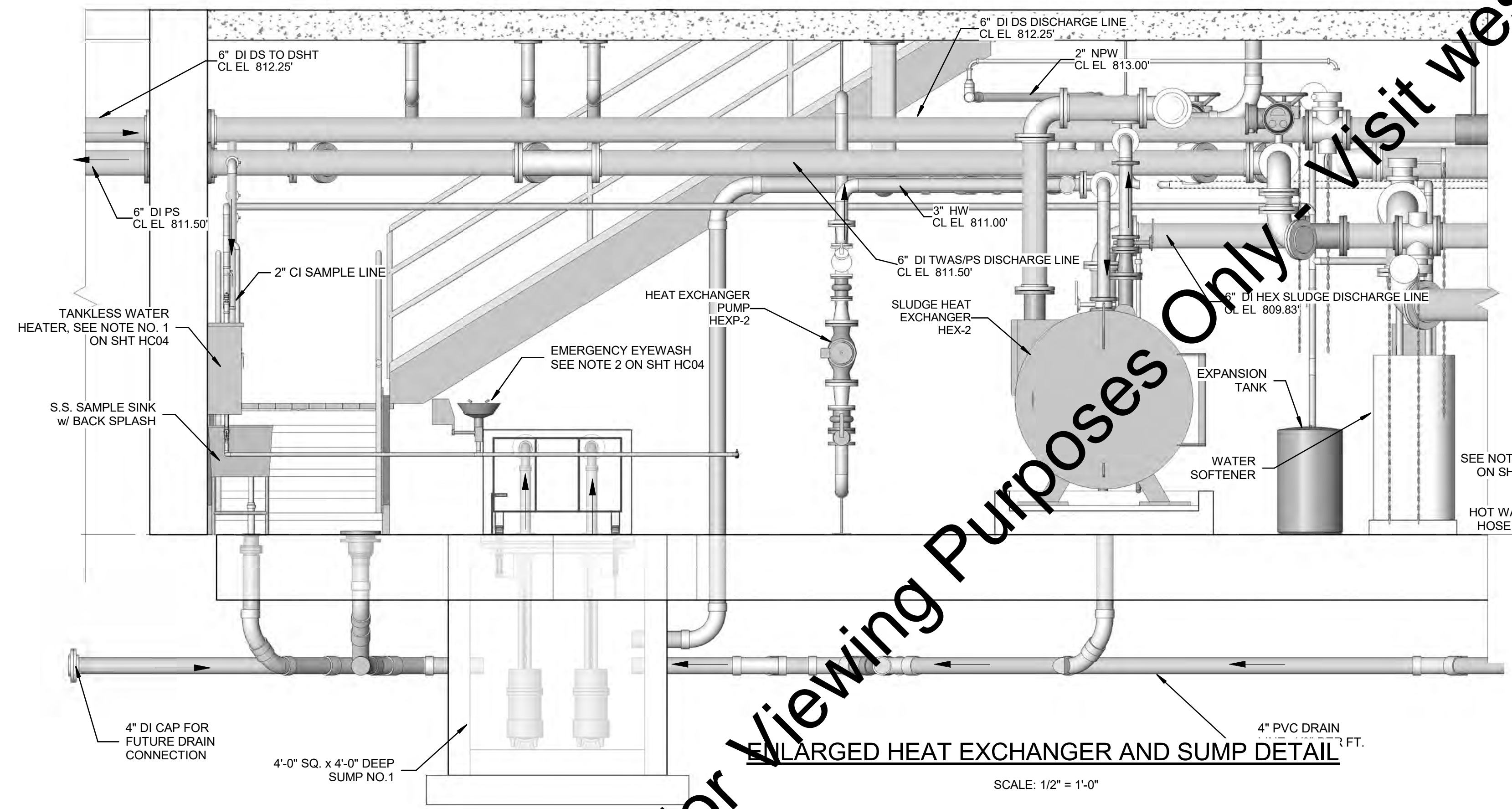
NEW ANAEROBIC DIGESTERS AND CONTROL BUILDING SECTIONS

| | |
|-----------|------|
| SHEET NO. | HC09 |
| PAGE NO. | 159 |

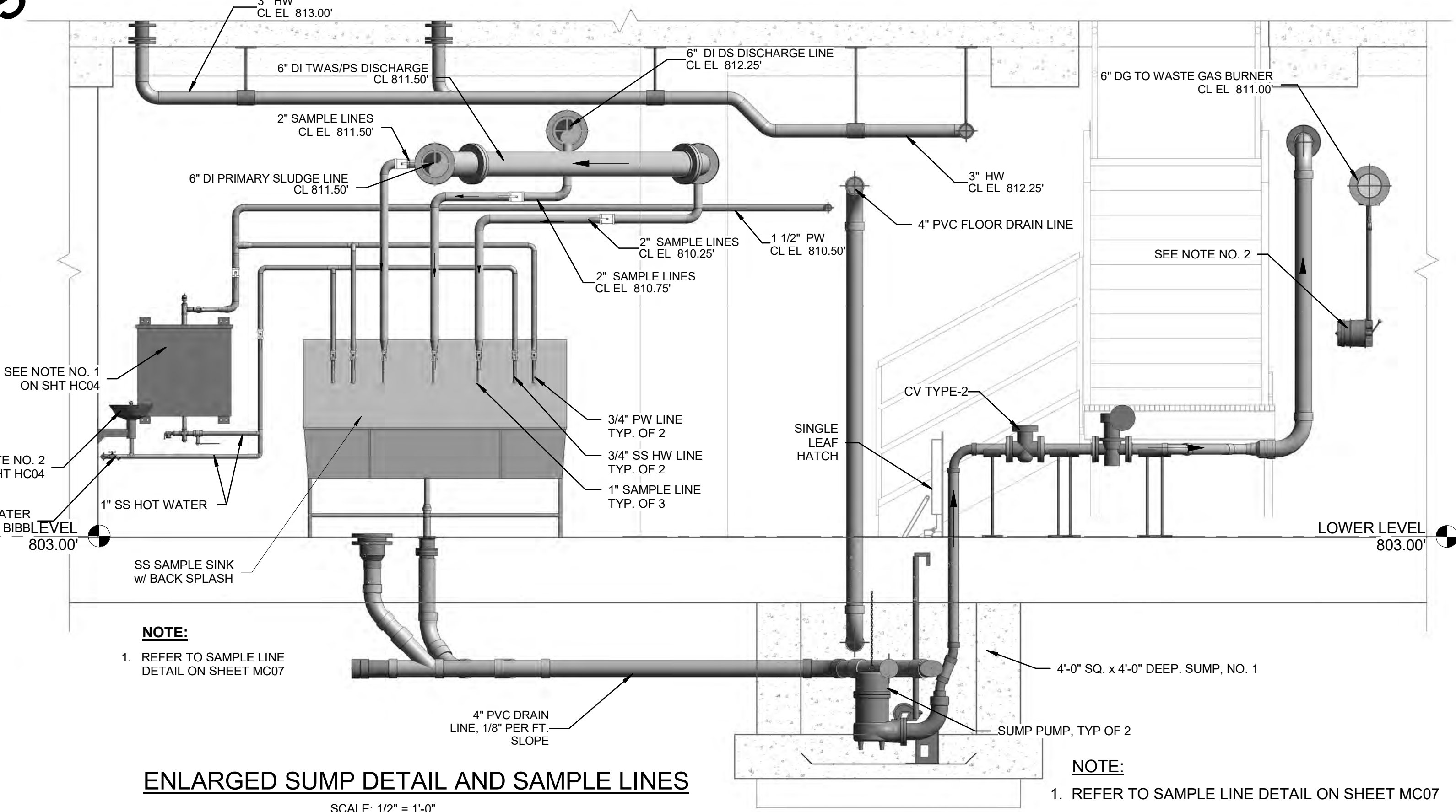


SECTION C
SCALE: 3/16" = 1'-0"
HC03
HC04
HC05
HC06

Visit wesslerengineering.com to Purchase



ENLARGED HEAT EXCHANGER AND SUMP DETAIL
SCALE: 1/2" = 1'-0"



ENLARGED SUMP DETAIL AND SAMPLE LINES
SCALE: 1/2" = 1'-0"

C:\Users\don\Documents\162813 - Warsaw, CENTRAL - R17.dwg - wessler.net

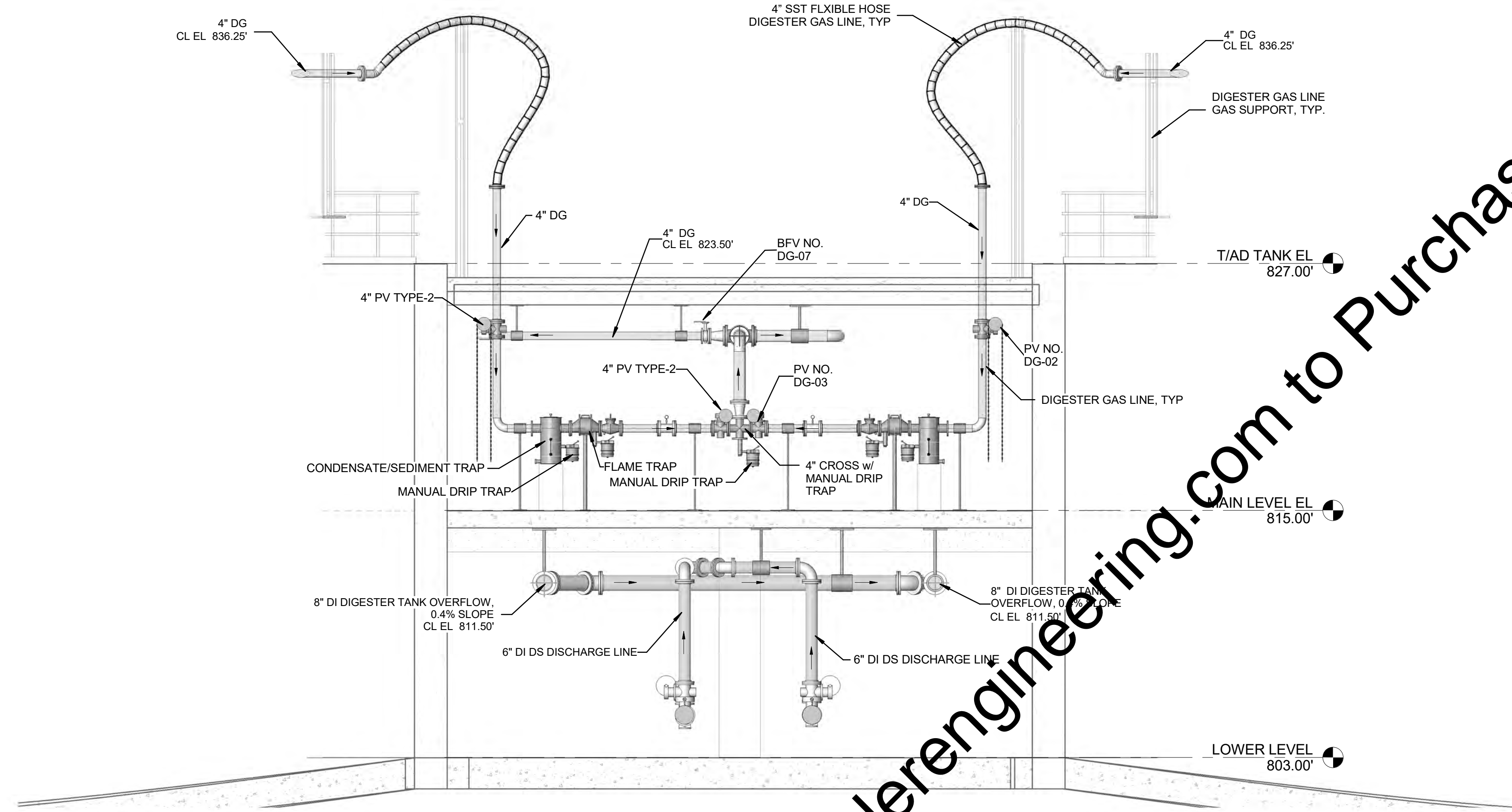
| SCALE VERIFICATION | DRAWN BY | FCT | NO. | DATE | INITIALS | REVISION DESCRIPTIONS |
|--|----------------|-------------------|-----|------|----------|-----------------------|
| BAR IS ONE INCH LONG ON ORIGINAL DRAWING | CHECKED BY | ALT | | | | |
| | APPROVED BY | GLR | | | | |
| | ISSUE DATE | SEPTEMBER 4, 2018 | | | | |
| | PROJECT NUMBER | 162813-04-003 | | | | |

WESSLER ENGINEERING
More than a Project™

WASTEWATER TREATMENT PLANT EXPANSION - 2017
CITY OF WARSAW, INDIANA
NEW ANAEROBIC DIGESTERS AND CONTROL BUILDING SECTIONS

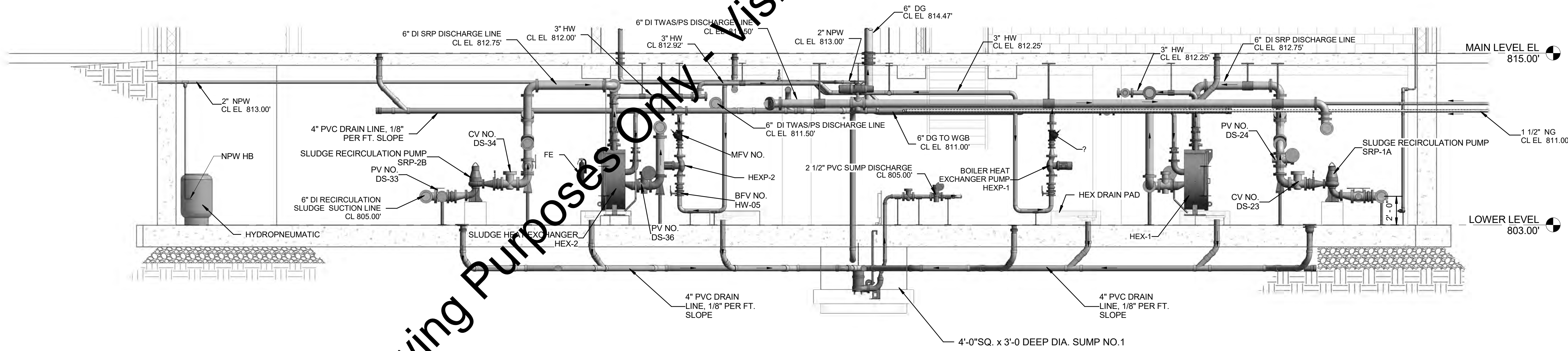
SHEET NO. **HC10**
PAGE NO. 160

- NOTE:**
- REFER TO SAMPLE LINE DETAIL ON SHEET MC07
 - MANUAL DRIP TRAP MOUNT TO WALL APPROX. 4' A.F.F. AND WITH 1" SS



GAS PIPING LAYOUT SECTION

SCALE: 1/4" = 1'-0"



HEAT EXCHANGER AND SUMP DRAIN PIPING SECTION

SCALE: 1/4" = 1'-0"

"For Viewing Purposes Only - Visit wesslerengineering.com to Purchase"

C:\Users\don\Documents\162813 - Warsaw - CENTRAL - R17.dwg wessler.rvt

| SCALE VERIFICATION | DRAWN BY | FCT | NO. | DATE | INITIALS | REVISION DESCRIPTIONS |
|--|-------------------|-----|-----|------|----------|-----------------------|
| BAR IS ONE INCH LONG ON ORIGINAL DRAWING | CHECKED BY | ALT | | | | |
| | APPROVED BY | GLR | | | | |
| | ISSUE DATE | | | | | |
| | SEPTEMBER 4, 2018 | | | | | |
| | PROJECT NUMBER | | | | | |
| | 162813-04-003 | | | | | |

GARY L. RUSTON
REGISTERED PROFESSIONAL ENGINEER
STATE OF INDIANA
No. 19500302

WESSLER
ENGINEERING
More than a Project™

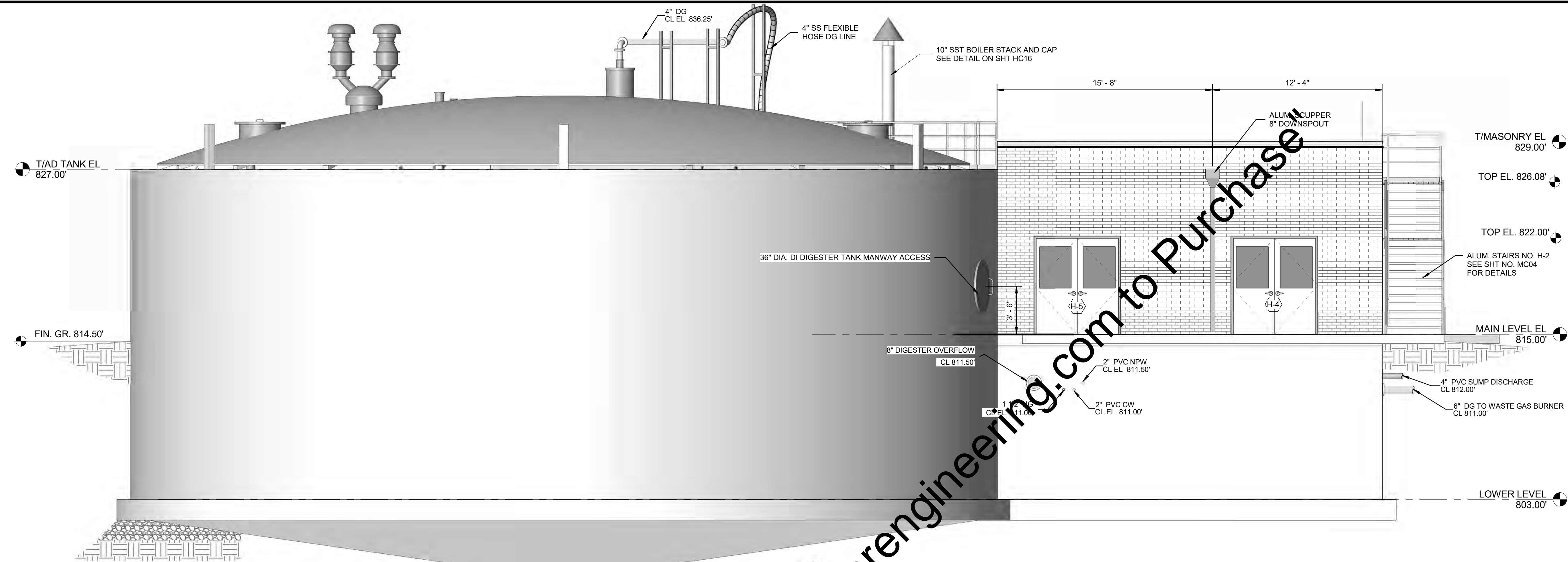
WASTEWATER TREATMENT PLANT EXPANSION - 2017

CITY OF WARSAW, INDIANA

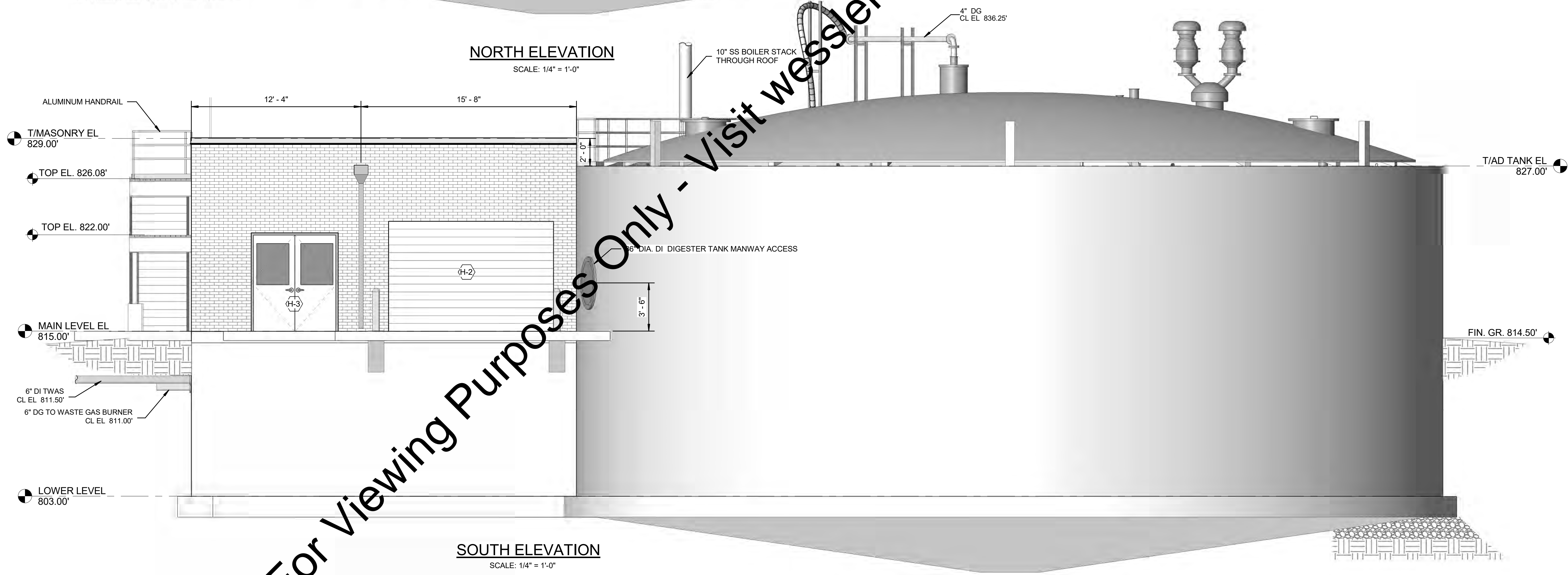
NEW ANAEROBIC DIGESTERS AND CONTROL BUILDING
SECTIONS AND DETAILS

SHEET NO.
HC11

PAGE NO.
161



NORTH ELEVATION
SCALE: 1/4" = 1'-0"



SOUTH ELEVATION
SCALE: 1/4" = 1'-0"

"For Viewing Purposes Only - Visit wesslerengineering.com to Purchase"

| SCALE VERIFICATION | DRAWN BY | FCT | NO. | DATE | INITIALS | REVISION DESCRIPTIONS |
|--|---------------------------------|-----|-----|------|----------|-----------------------|
| BAR IS ONE INCH LONG ON ORIGINAL DRAWING | CHECKED BY ALT | | | | | |
| | APPROVED BY GLR | | | | | |
| | ISSUE DATE SEPTEMBER 4, 2018 | | | | | |
| | PROJECT NUMBER 162813-04-003 | | | | | |

WESSLER
ENGINEERING
More than a Project™

WASTEWATER TREATMENT PLANT EXPANSION - 2017

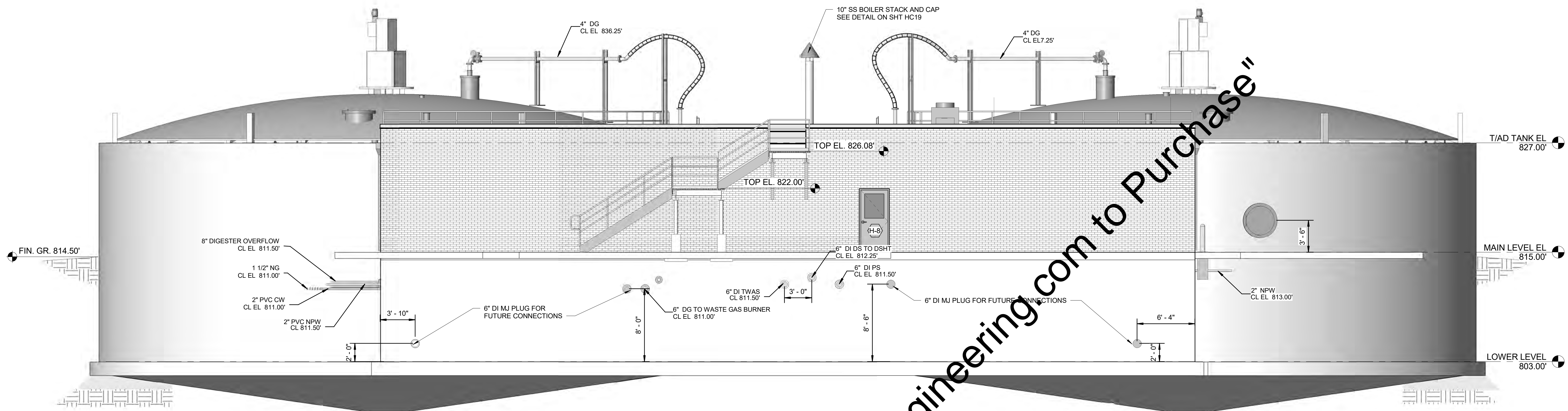
CITY OF WARSAW, INDIANA

NEW ANAEROBIC DIGESTERS AND CONTROL BUILDING
NORTH AND SOUTH ELEVATIONS

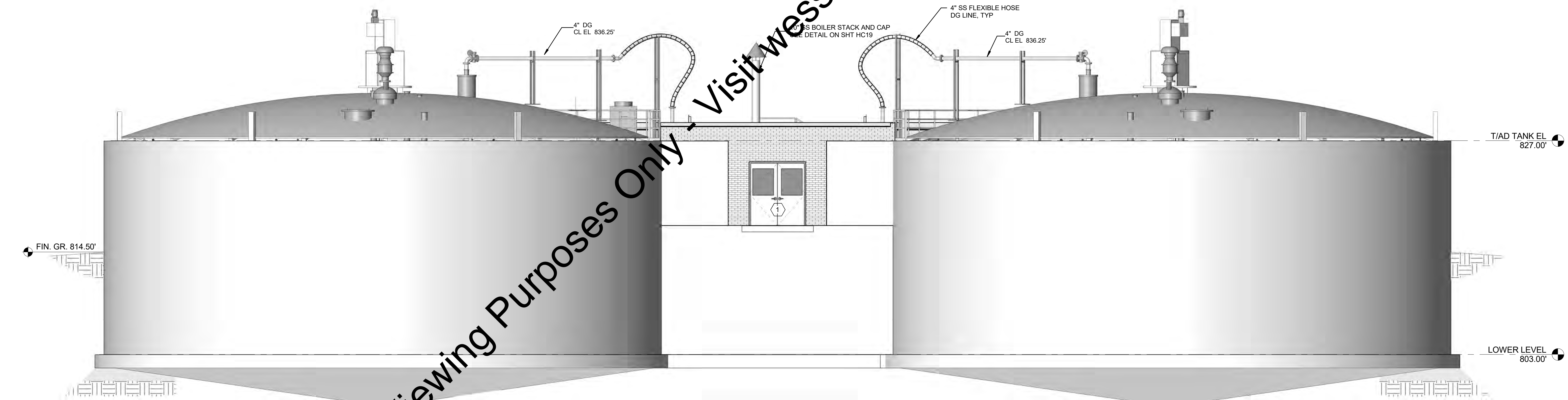
SHEET NO.
HC12

PAGE NO.
162

P:\Users\don\Documents\162813 - Warsaw, GENERAL - R17.dwg wessler.rvt



EAST ELEVATION
SCALE: 3/16" = 1'-0"



WEST ELEVATION
SCALE: 3/16" = 1'-0"

"For Viewing Purposes Only - Visit wesslerengineering.com to Purchase"

| SCALE VERIFICATION | DRAWN BY | FCT | NO. | DATE | INITIALS | REVISION DESCRIPTIONS |
|--|-------------------|-----|-----|------|----------|-----------------------|
| BAR IS ONE INCH LONG ON ORIGINAL DRAWING | CHECKED BY | ALT | | | | |
| | APPROVED BY | GLR | | | | |
| | ISSUE DATE | | | | | |
| | SEPTEMBER 4, 2018 | | | | | |
| | PROJECT NUMBER | | | | | |
| | 162813-04-003 | | | | | |

WESSLER
ENGINEERING
More than a Project™

WASTEWATER TREATMENT PLANT EXPANSION - 2017

CITY OF WARSAW, INDIANA

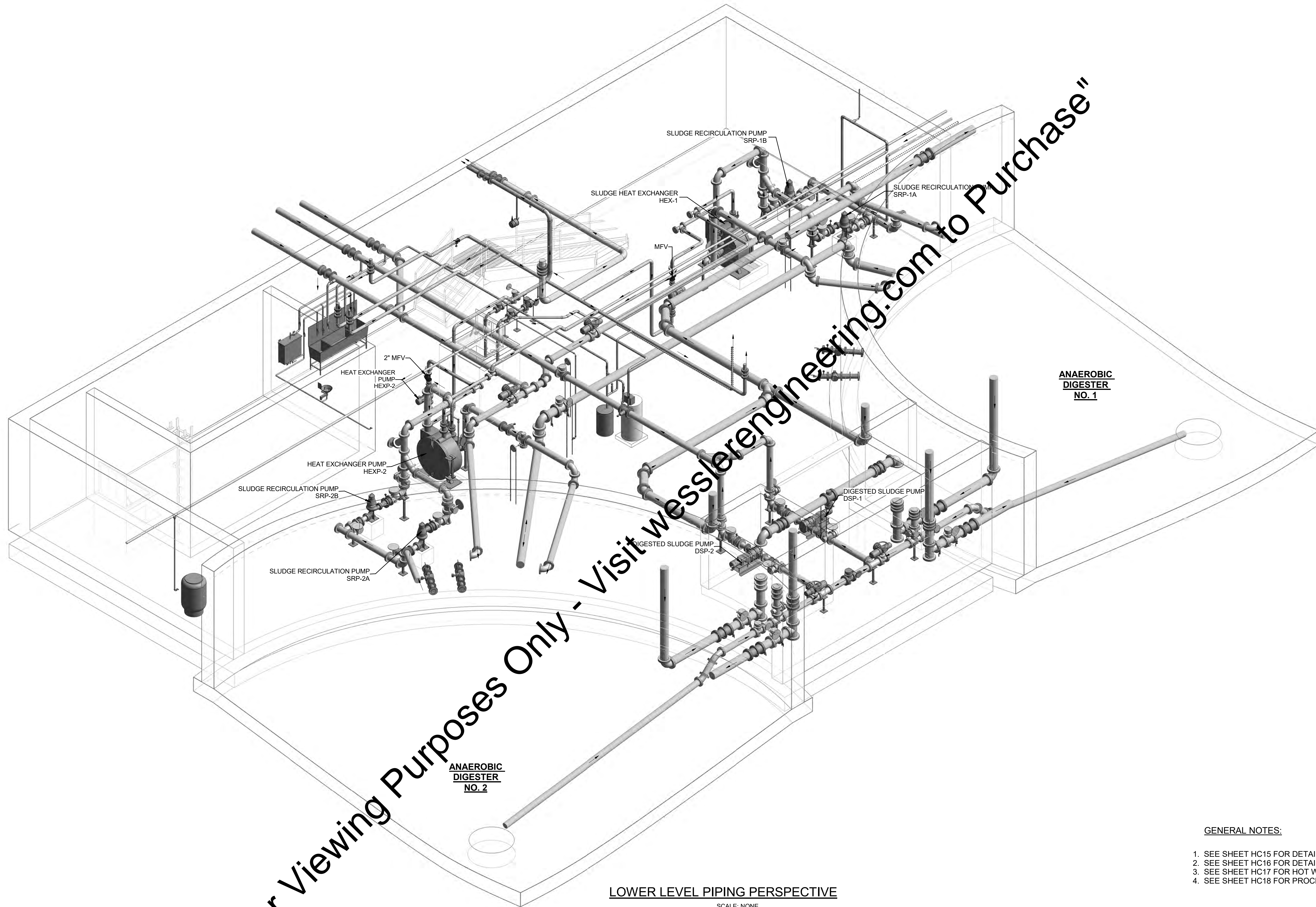
NEW ANAEROBIC DIGESTERS AND CONTROL BUILDING ELEVATIONS

SHEET NO.
HC13

PAGE NO.
163

P:\Users\don\Documents\162813 - Warsaw, CENTRAL - R17.dib\wessler.rvt

"For Viewing Purposes Only - Visit wesslerengineering.com to Purchase"



LOWER LEVEL PIPING PERSPECTIVE

SCALE: NONE

GENERAL NOTES:

1. SEE SHEET HC15 FOR DETAILED MAIN LEVEL PIPING
2. SEE SHEET HC16 FOR DETAILED GAS PIPING ISOMETRIC
3. SEE SHEET HC17 FOR HOT WATER PIPING ISOMETRIC
4. SEE SHEET HC18 FOR PROCESS PIPING ISOMETRIC

C:\Users\don\Documents\162813_Wastwaw_GENERAL - R17.dibompson_wessler.rvt

| | | | | | | |
|--|----------------|-------------------|-----|------|----------|-----------------------|
| SCALE VERIFICATION | DRAWN BY | FCT | NO. | DATE | INITIALS | REVISION DESCRIPTIONS |
| BAR IS ONE INCH LONG ON ORIGINAL DRAWING | CHECKED BY | ALT | | | | |
| | APPROVED BY | GLR | | | | |
| | ISSUE DATE | SEPTEMBER 4, 2018 | | | | |
| | PROJECT NUMBER | 162813-04-003 | | | | |

GARY L. RUSTON
REGISTERED PROFESSIONAL ENGINEER
STATE OF INDIANA
No. 19500302

WESSLER
ENGINEERING
More than a Project™

WASTEWATER TREATMENT PLANT EXPANSION - 2017

CITY OF WARSAW, INDIANA

NEW ANAEROBIC DIGESTER AND CONTROL BUILDING

LOWER LEVEL PIPING PERSPECTIVE

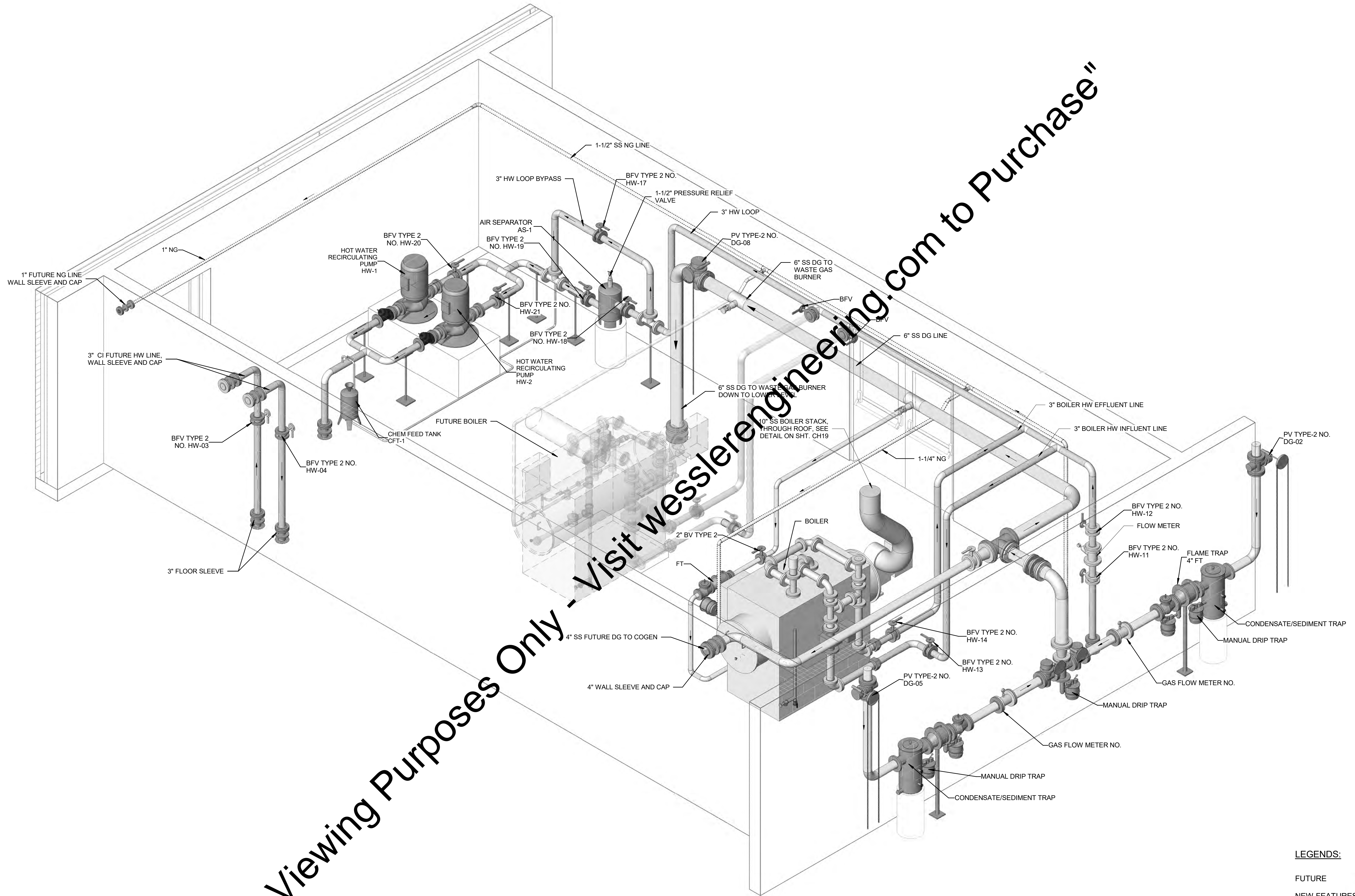
SHEET NO.

HC14

PAGE NO.

164

"For Viewing Purposes Only - Visit [wesslerengineering.com](http://www.wesslerengineering.com) to Purchase"



LEGENDS:

- FUTURE
- NEW FEATURES

| SCALE VERIFICATION | DRAWN BY | FCT | NO. | DATE | INITIALS | REVISION DESCRIPTIONS |
|---|----------------|-------------------|-----|------|----------|-----------------------|
| BAR IS ONE INCH LONG ON ORIGINAL DRAWING <div style="width: 20px; height: 10px; background-color: black; margin: 5px auto;"></div> | CHECKED BY | ALT | | | | |
| | APPROVED BY | GLR | | | | |
| | ISSUE DATE | SEPTEMBER 4, 2018 | | | | |
| | PROJECT NUMBER | 162813-04-003 | | | | |



WESSLER ENGINEERING
More than a Project™

WASTEWATER TREATMENT PLANT EXPANSION - 2017

CITY OF WARSAW, INDIANA

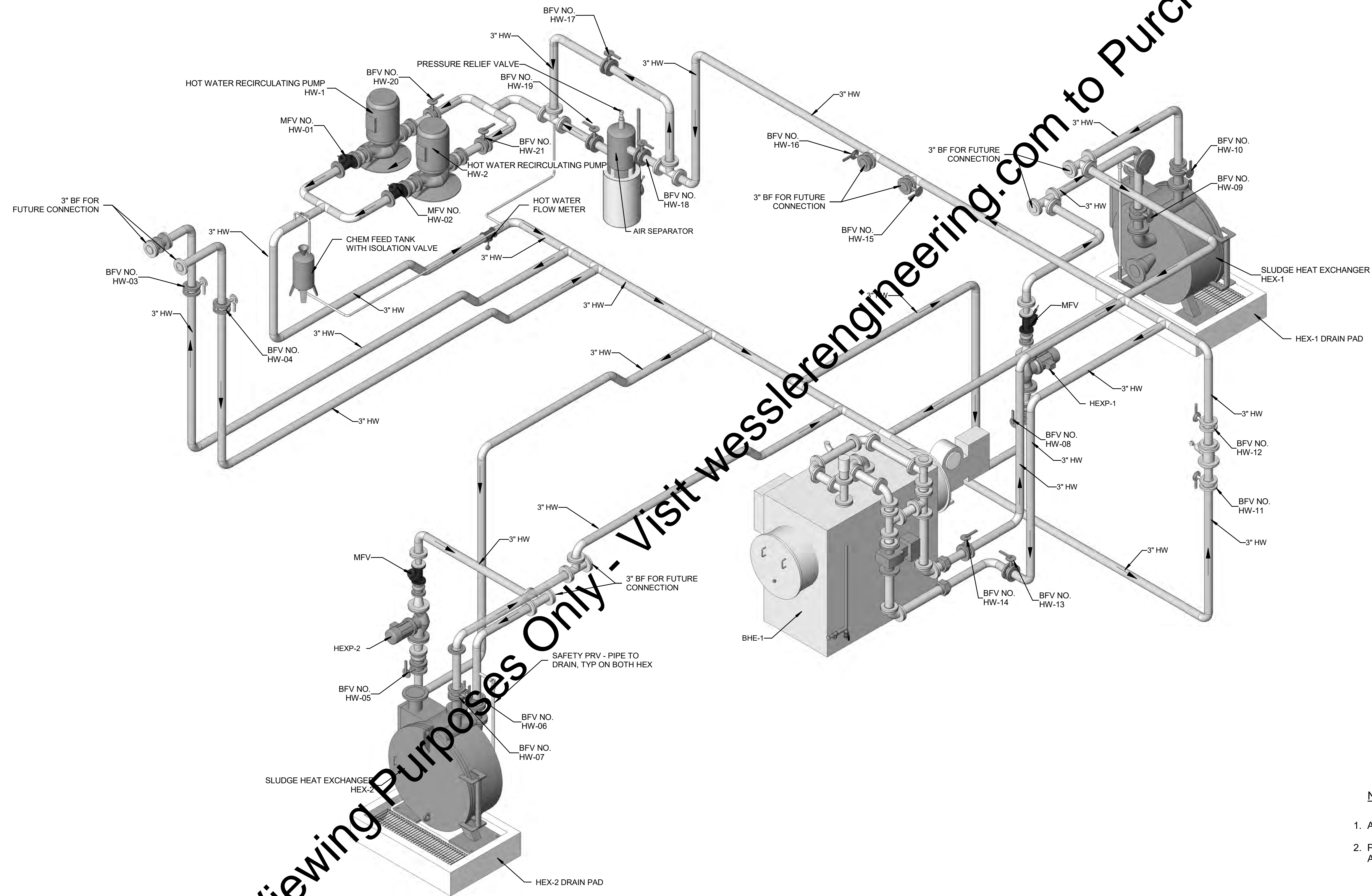
NEW ANAEROBIC DIGESTERS AND CONTROL BUILDING

MAIN LEVEL PIPING PERSPECTIVE

SHEET NO.
HC15

PAGE NO.
165

Picture: 9/4/2018 11:46:22 AM C:\Users\don\Documents\162813 - Warsaw - CENTRAL - R17 - dtbomson - wessler.rvt




HOT WATER PIPING ISOMETRIC
SCALE: NONE

NOTES:


1. ALL HOT WATER PIPING SHALL BE INSULATED CARBON STEEL.
2. PROVIDE 10 TAPS WITH 1/2" WELDO-LET, NIPPLE, BALL VALVE, AND CAP, CARBON STEEL, TO BE FIELD LOCATED.

"For Viewing Purposes Only - Visit wesslerengineering.com to Purchase"

| SCALE VERIFICATION | DRAWN BY | FCT | NO. | DATE | INITIALS | REVISION DESCRIPTIONS |
|---|----------------|-------------------|-----|------|----------|-----------------------|
| BAR IS ONE INCH LONG ON ORIGINAL DRAWING  | CHECKED BY | ALT | | | | |
| | APPROVED BY | GLR | | | | |
| | ISSUE DATE | SEPTEMBER 4, 2018 | | | | |
| | PROJECT NUMBER | 162813-04-003 | | | | |



GARY L. RUSTON
REGISTERED PROFESSIONAL ENGINEER
STATE OF INDIANA
No. 19500302



WESSLER
ENGINEERING
More than a Project™

WASTEWATER TREATMENT PLANT EXPANSION - 2017

CITY OF WARSAW, INDIANA

NEW ANAEROBIC DIGESTER AND CONTROL BUILDING

HOT WATER PIPING ISOMETRIC

SHEET NO.

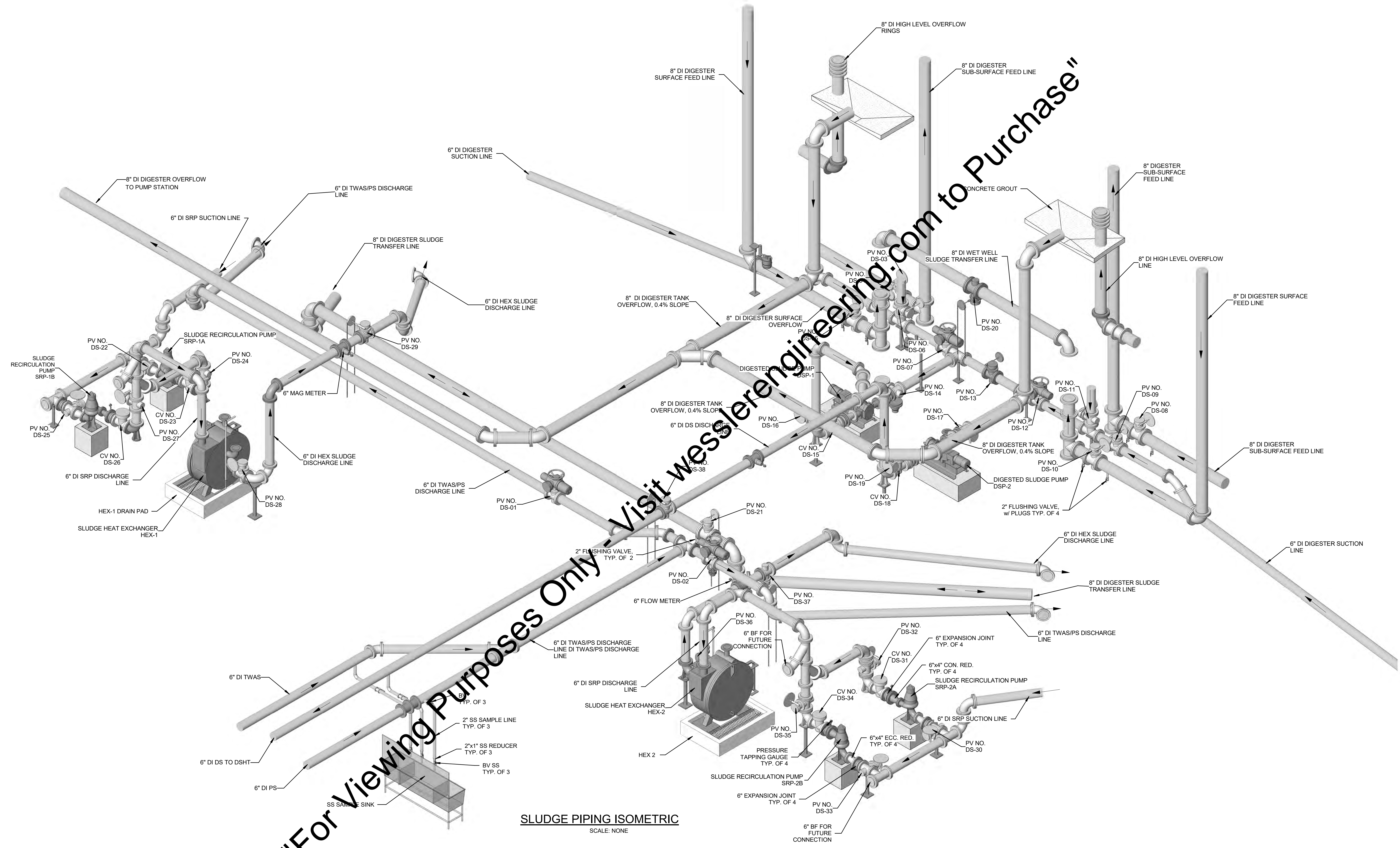
HC17

PAGE NO.

167

Picture: 9/4/2018 11:46:31 AM C:\Users\don\Documents\162813 - Warsaw, GENERAL - R17.dwg wessler.rvt

C:\Users\don\Documents\162813 - Wwraw - CENTRAL - R17 - dtompson_wessler.rvt
 Pline: 9/4/2018 11:46:36 AM



"For Viewing Purposes Only - Visit www.wesslerengineering.com to Purchase"

SLUDGE PIPING ISOMETRIC
 SCALE: NONE

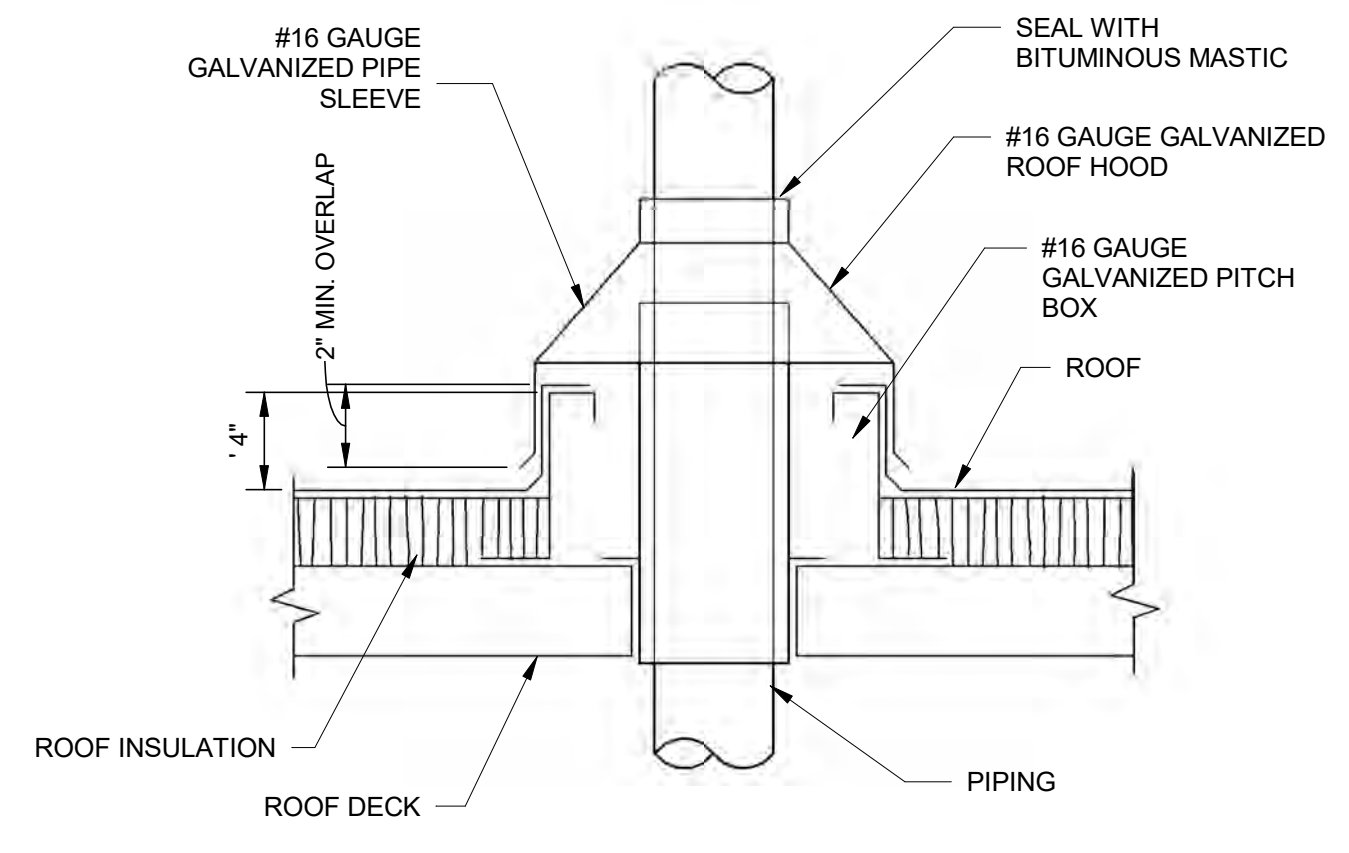
| SCALE VERIFICATION | DRAWN BY | FCT | NO. | DATE | INITIALS | REVISION DESCRIPTIONS |
|--|-------------------|-----|-----|------|----------|-----------------------|
| BAR IS ONE INCH LONG ON ORIGINAL DRAWING | CHECKED BY | ALT | | | | |
| | APPROVED BY | GLR | | | | |
| | ISSUE DATE | | | | | |
| | SEPTEMBER 4, 2018 | | | | | |
| | PROJECT NUMBER | | | | | |
| | 162813-04-003 | | | | | |

WESSLER ENGINEERING

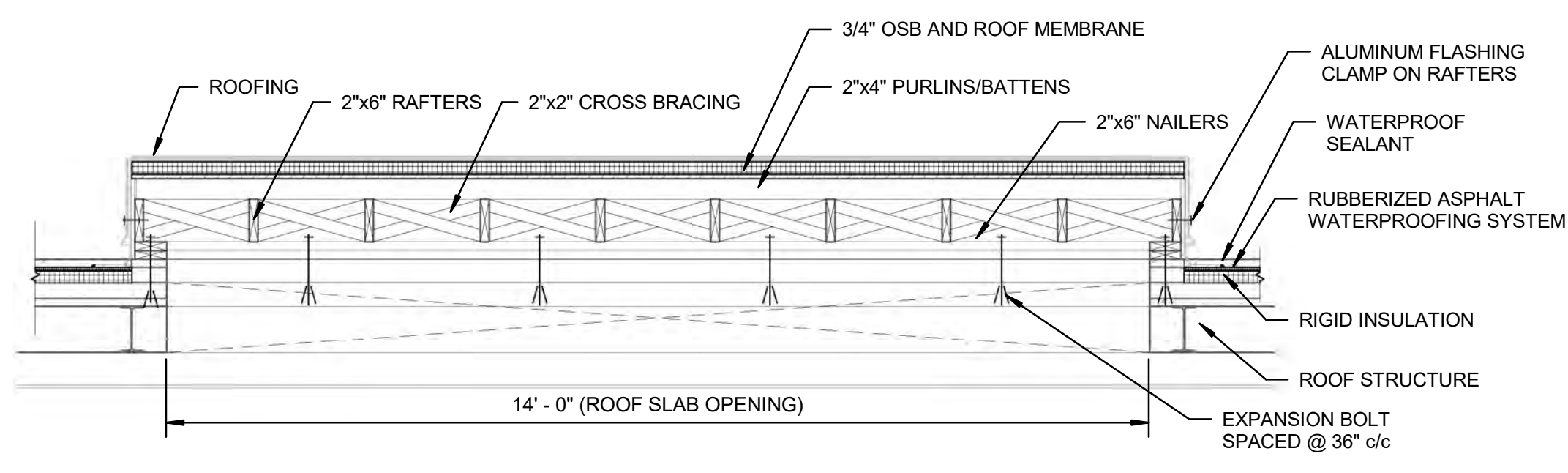
More than a Project™

WASTEWATER TREATMENT PLANT EXPANSION - 2017
 CITY OF WARSAW, INDIANA
NEW ANAEROBIC DIGESTER AND CONTROL BUILDING
SLUDGE PIPING ISOMETRIC

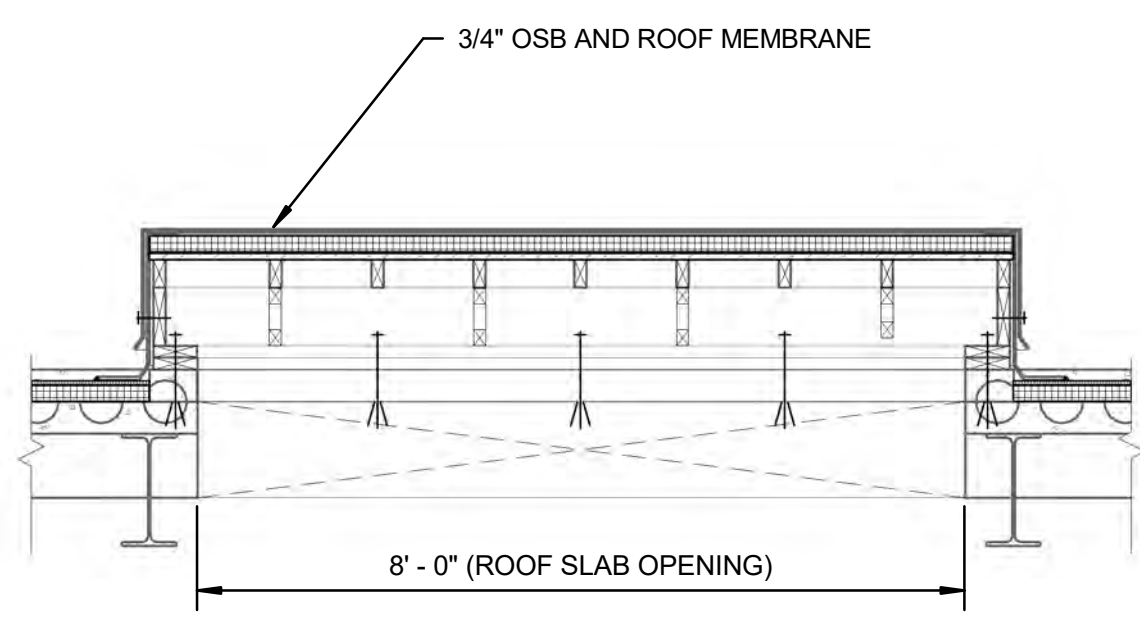
SHEET NO.
HC18
 PAGE NO.
 168



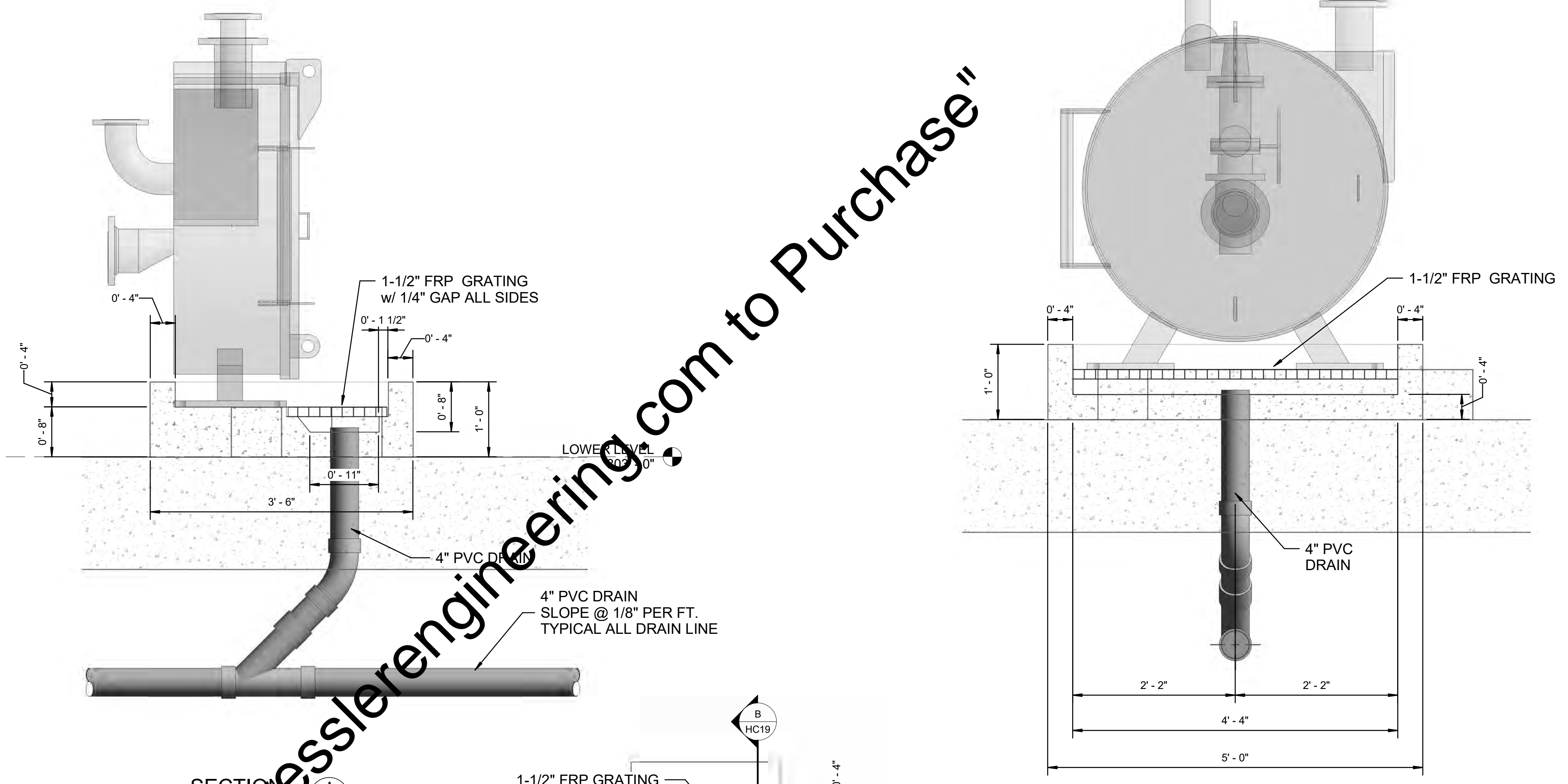
PIPE THRU ROOF DETAIL
SCALE: NONE



SECTION H
SCALE: 3/4\"/>

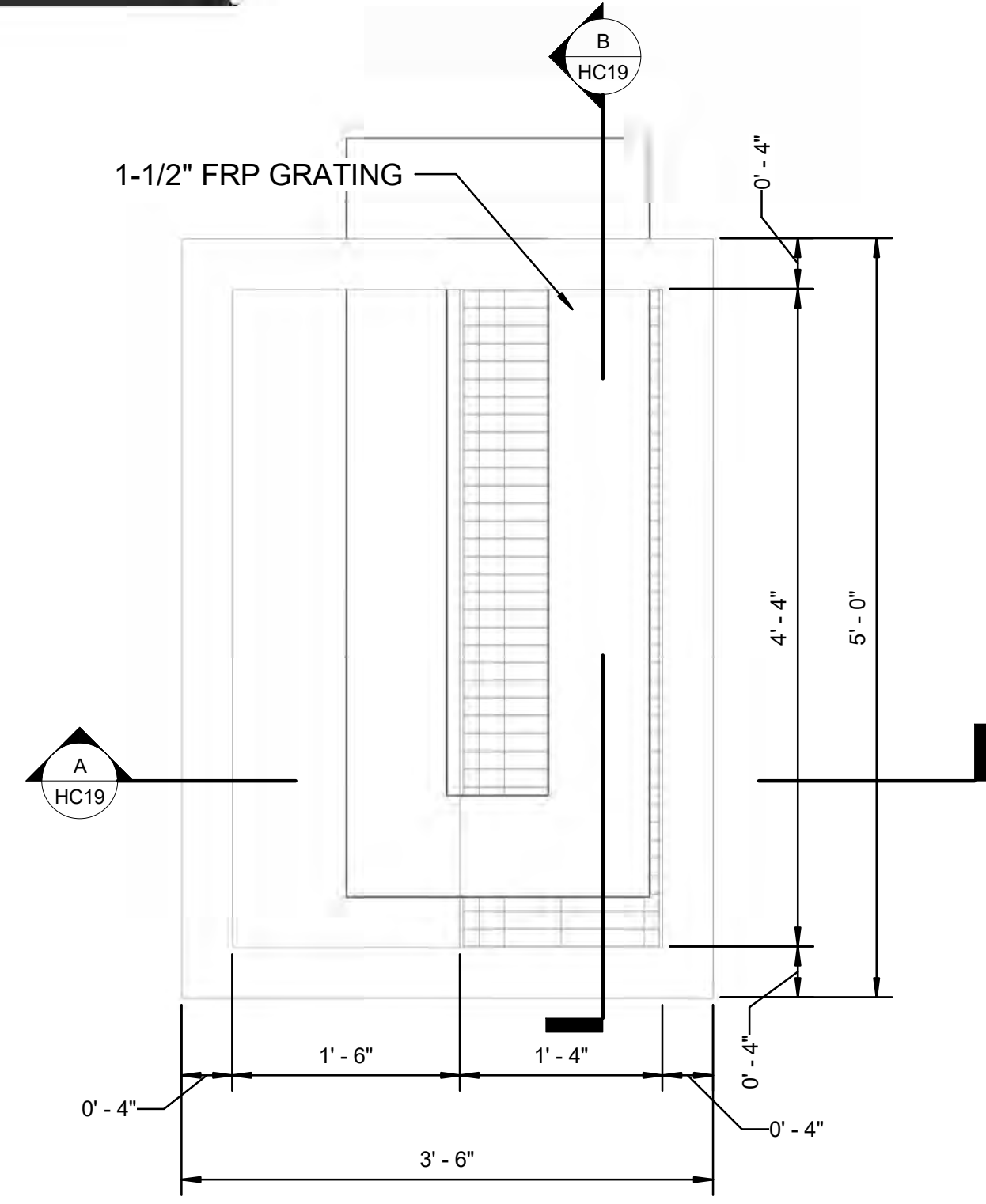


SECTION I
SCALE: 3/4\"/>



SECTION A
SCALE: 3/4\"/>

SECTION B
SCALE: 3/4\"/>



PLAN
SCALE: 1\"/>

HEAT EXCHANGER DRAIN PAD DETAIL
SCALE: 1\"/>

"For Viewing Purposes Only - Visit [wesslerengineering.com](http://www.wesslerengineering.com) to Purchase"

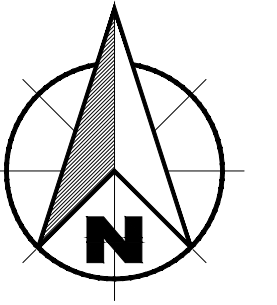
| SCALE VERIFICATION | DRAWN BY | FCT | NO. | DATE | INITIALS | REVISION DESCRIPTIONS |
|--|-------------------|-----|-----|------|----------|-----------------------|
| BAR IS ONE INCH LONG ON ORIGINAL DRAWING | CHECKED BY | ALT | | | | |
| | APPROVED BY | GLR | | | | |
| | ISSUE DATE | | | | | |
| | SEPTEMBER 4, 2018 | | | | | |
| | PROJECT NUMBER | | | | | |
| | 162813-04-003 | | | | | |

WESSLER ENGINEERING
More than a Project™

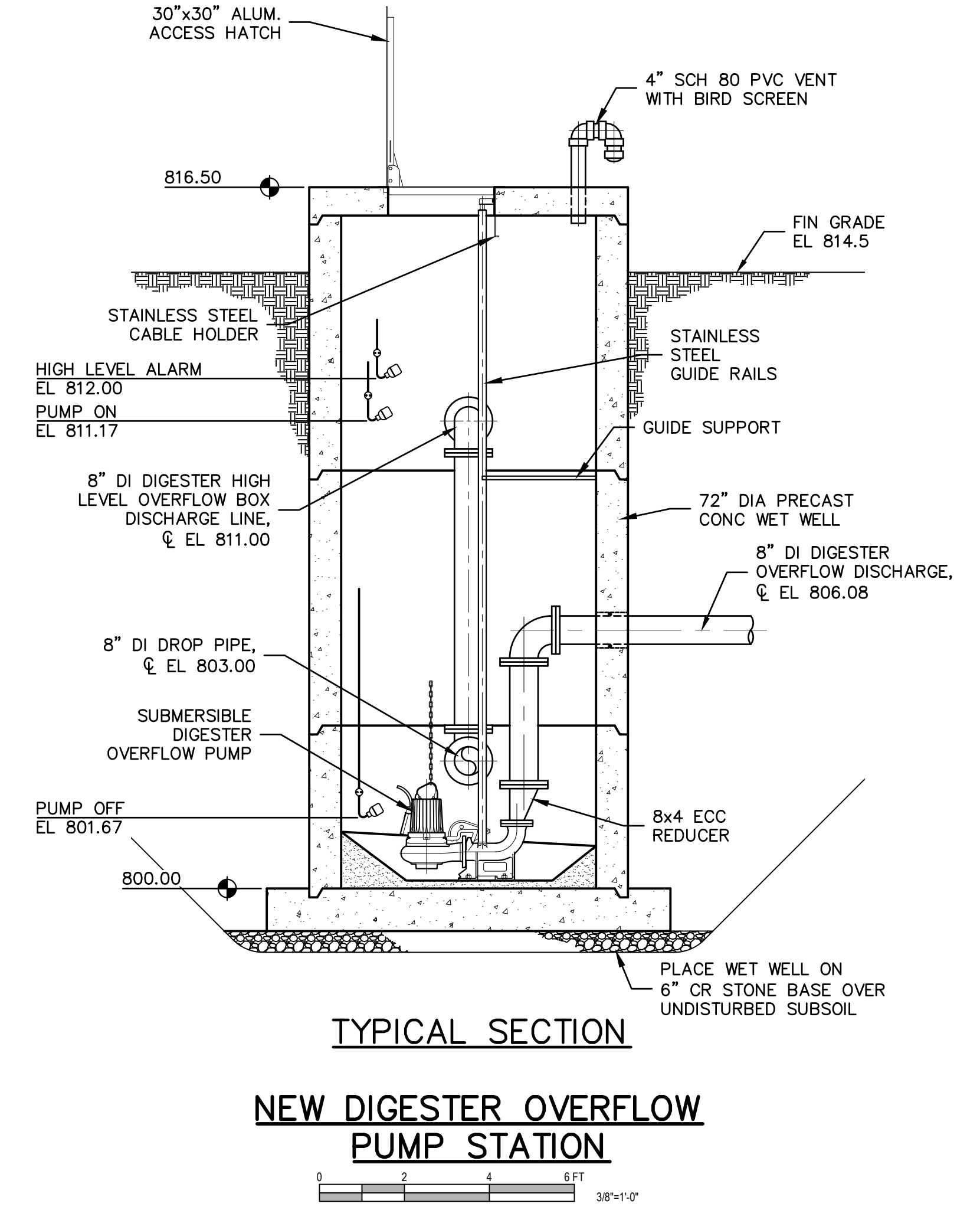
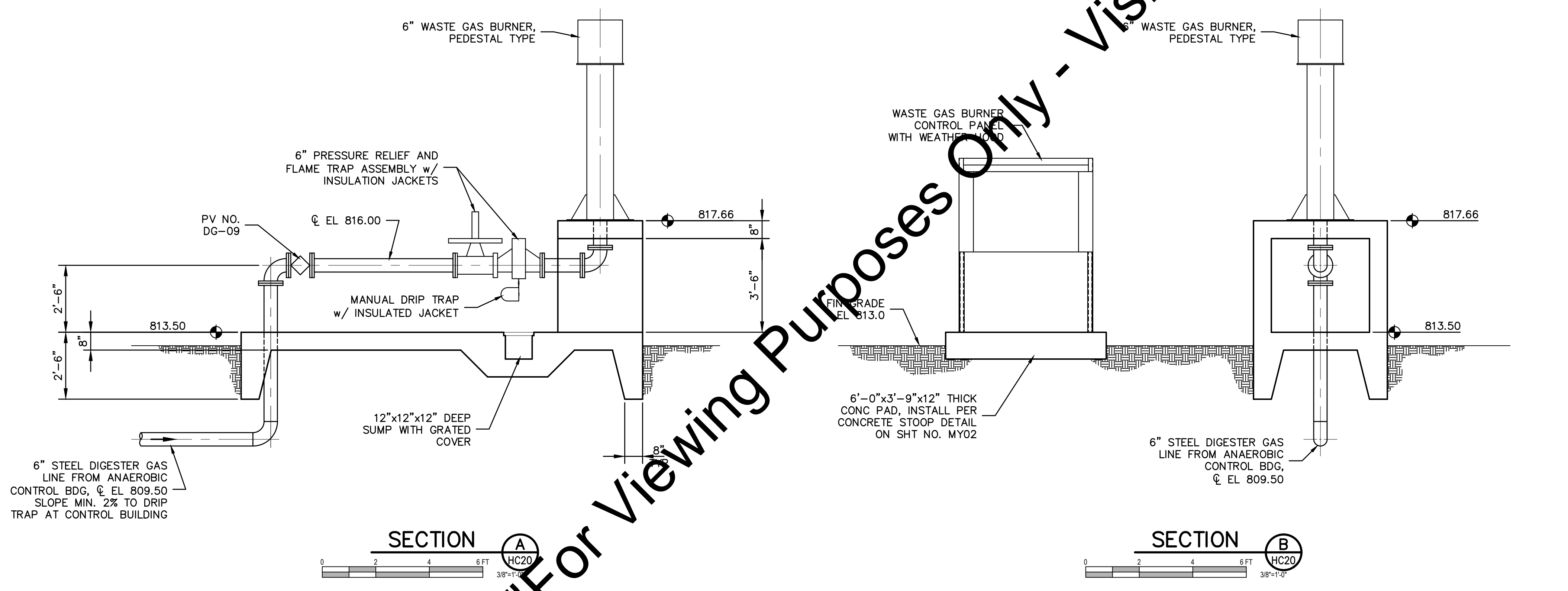
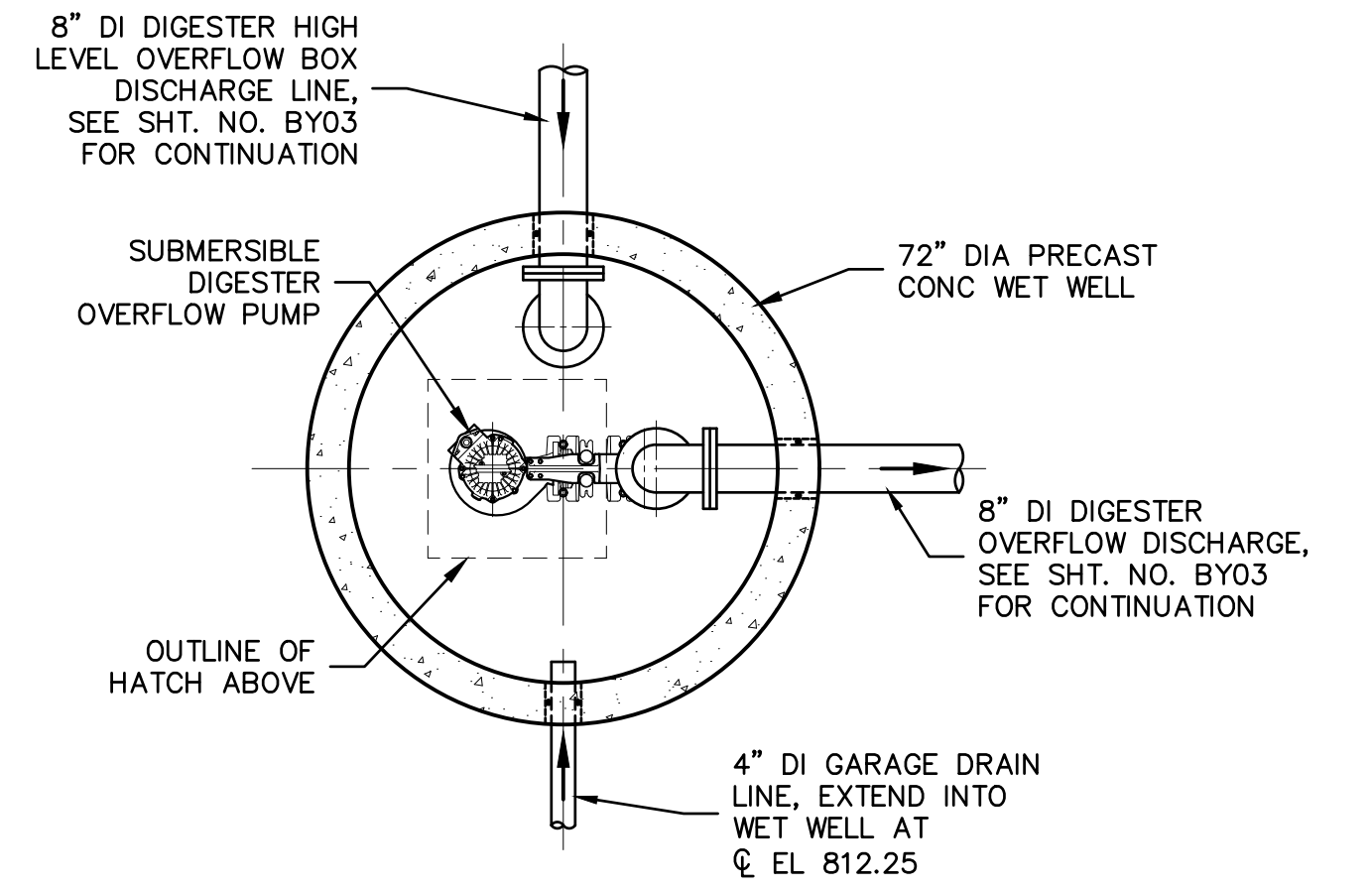
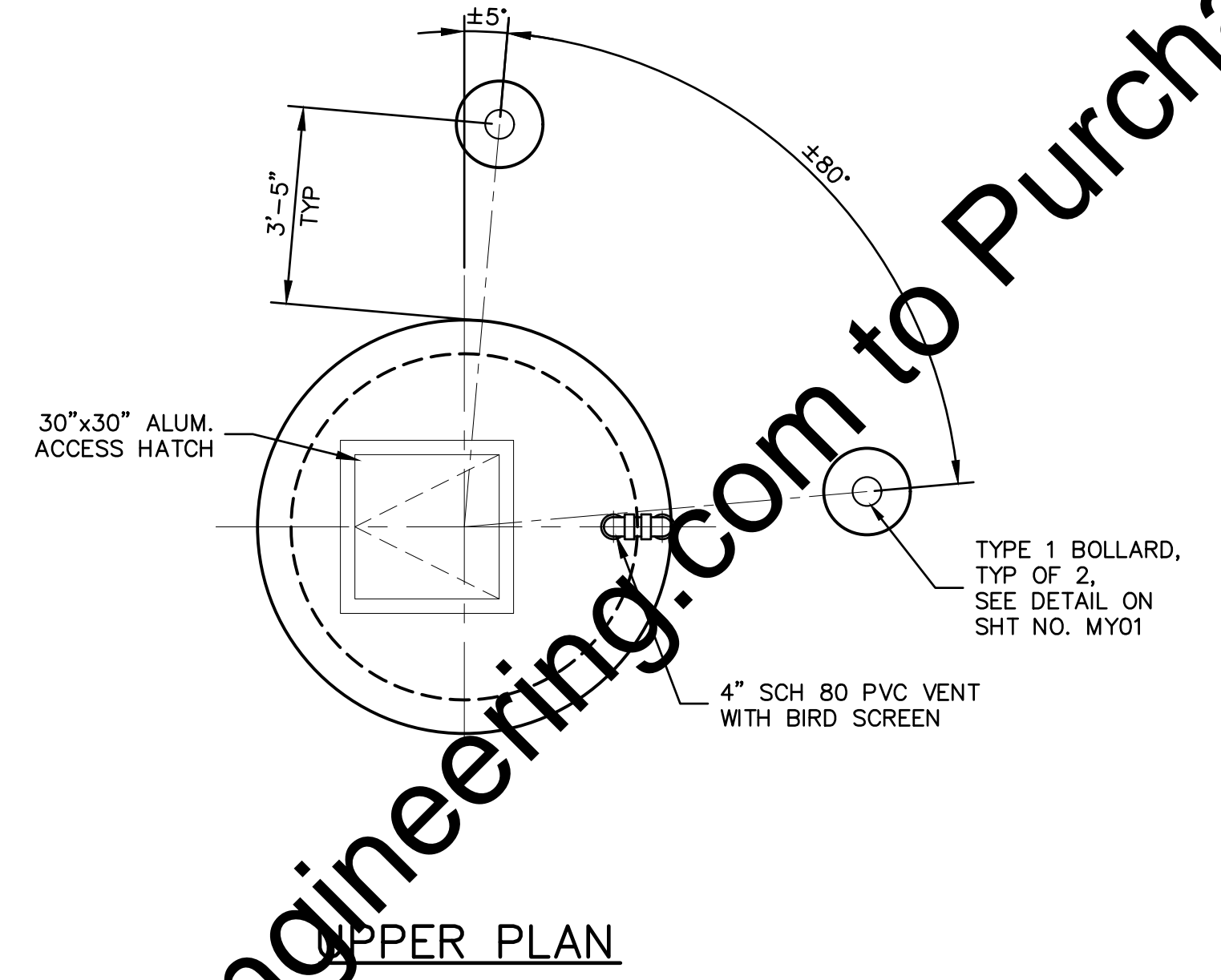
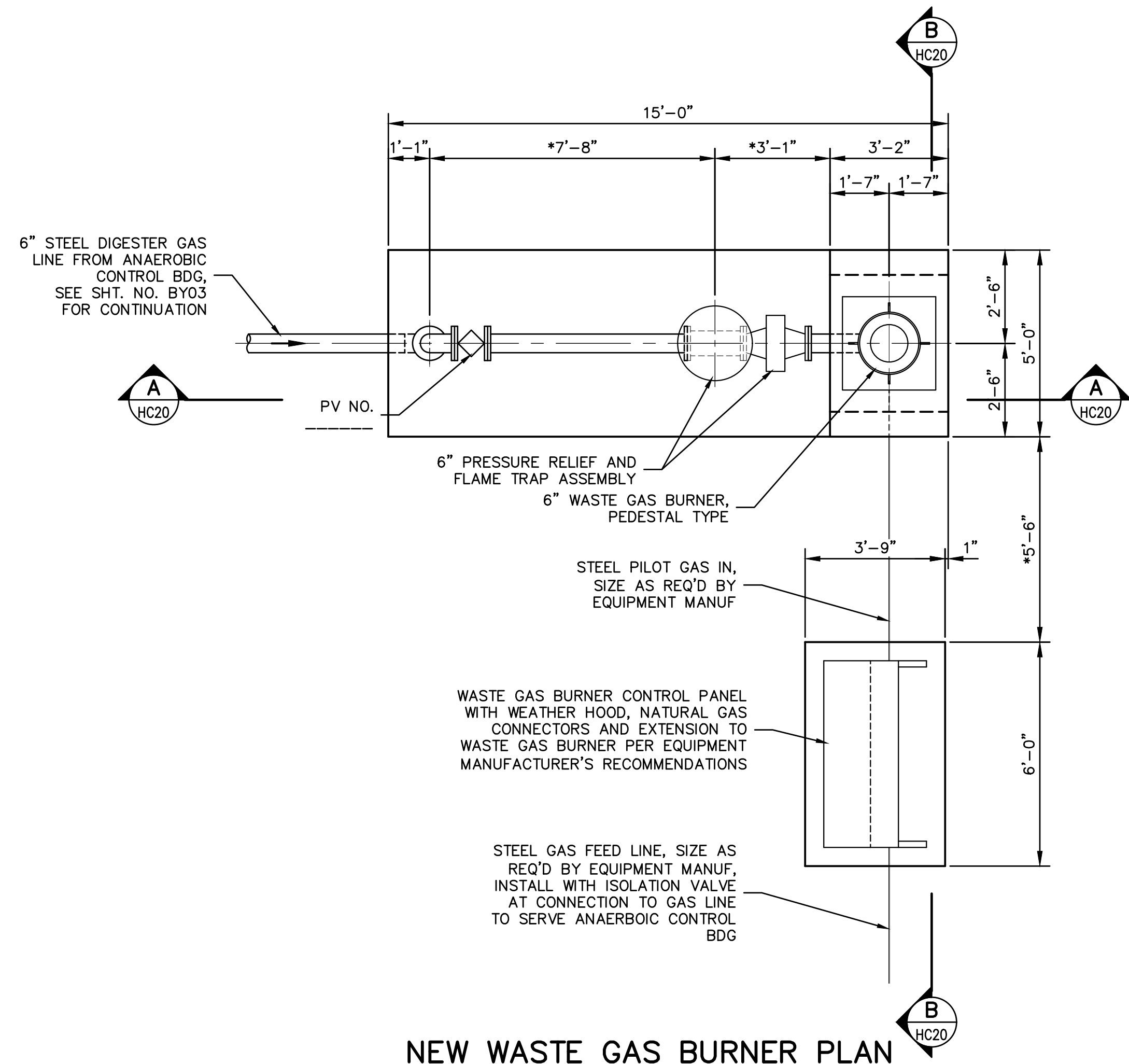
WASTEWATER TREATMENT PLANT EXPANSION - 2017
CITY OF WARSAW, INDIANA
NEW ANAEROBIC DIGESTERS AND CONTROL BUILDING
MISCELLANEOUS DETAILS

SHEET NO.
HC19
PAGE NO.
169

P:\Users\dornd\Documents\162813 - Warsaw, GENERAL - R17.dibomson_wessler.rvt



- NEW DIGESTER OVERFLOW PUMP STATION GENERAL NOTES:**
1. THE DIGESTER OVERFLOW PUMP EQUIPMENT INCLUDING PUMPS, GUIDE RAILS AND SUPPORT BRACKETS, SHALL BE FURNISHED BY THE SAME MANUFACTURER. SEE SPECIFICATION SECTION 11200. PUMP CONTROLS AND CONTROL PANELS SHALL BE AS DESCRIBED IN ELECTRICAL DRAWINGS AND IN SPECIFICATION SECTION 11200.
 2. INSTALL CONCRETE FILLET INTO THE BOTTOM OF THE WET WELL PER PUMP MANUFACTURER'S RECOMMENDATIONS.
 3. THE WET WELL TOP SLAB SHALL BE PRECAST REINFORCED CONCRETE BY THE SAME MANUFACTURER AS THE BARREL SECTIONS. THE ACCESS HATCH SHALL BE INCLUDED IN THE CASTING OF THE TOP SLAB. THE HATCH SHALL BE INSTALLED ALONG THE CENTERLINE OF THE STRUCTURE, ALIGNED PARALLEL TO THE PUMP DISCHARGE PIPING AND POSITIONED PER THE PUMP MANUFACTURER'S RECOMMENDATIONS.
 4. ALL WALL PENETRATIONS FOR THE WET WELL SHALL BE WITH A MECHANICAL SEAL, AS SHOWN IN NEW PIPE THRU EXISTING WALL DETAIL, SHEET NO. MC02.
 5. THE ACCESS HATCH TO THE DIGESTER OVERFLOW PUMP SHALL INCLUDE HINGED SAFETY GRATING. SEE SPECIFICATION SECTION 05532.



Drawing: J:\Warsaw\Projects\162813-New Dig Digs.dwg | Layout: HC20 | Plotter: 09/04/18 @ 11:00:50 | LastSavedBy: MikeN

"For Viewing Purposes Only - Visit wesslerengineering.com to Purchase"

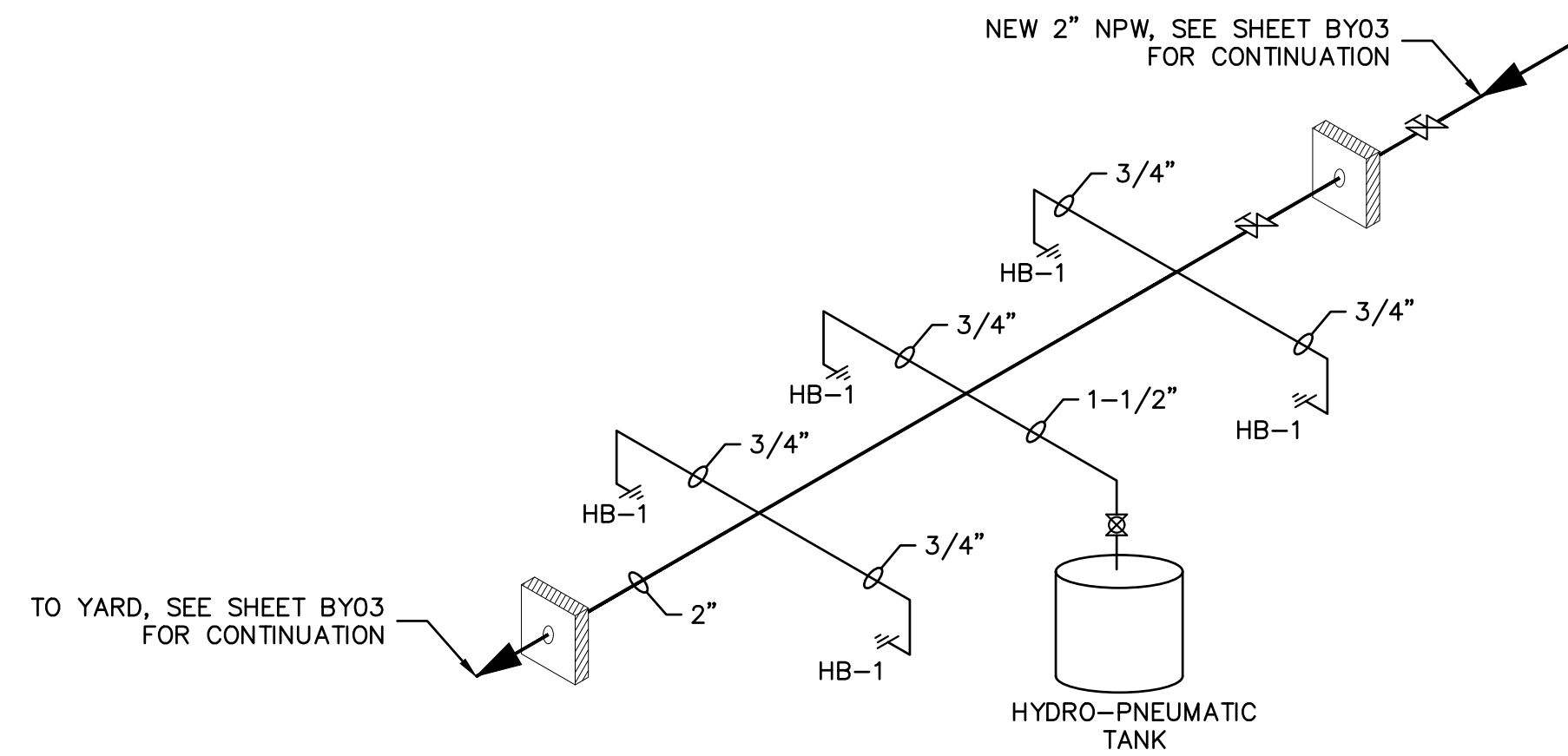
| SCALE VERIFICATION | DRAWN BY | NO. | DATE | INITIALS | REVISION DESCRIPTIONS |
|--|-------------------|-----|------|----------|-----------------------|
| BAR IS ONE INCH LONG ON ORIGINAL DRAWING | CHECKED BY | WBJ | | | |
| | APPROVED BY | ALT | | | |
| | ISSUE DATE | GLR | | | |
| | PROJECT NUMBER | | | | |
| | SEPTEMBER 4, 2018 | | | | |
| | 162813-04-003 | | | | |



WASTEWATER TREATMENT PLANT EXPANSION - 2017
CITY OF WARSAW, INDIANA
NEW ANAEROBIC DIGESTERS AND CONTROL BUILDING
ASSOCIATED STRUCTURES PLANS AND SECTIONS

SHEET NO.
HC20
PAGE NO.
170

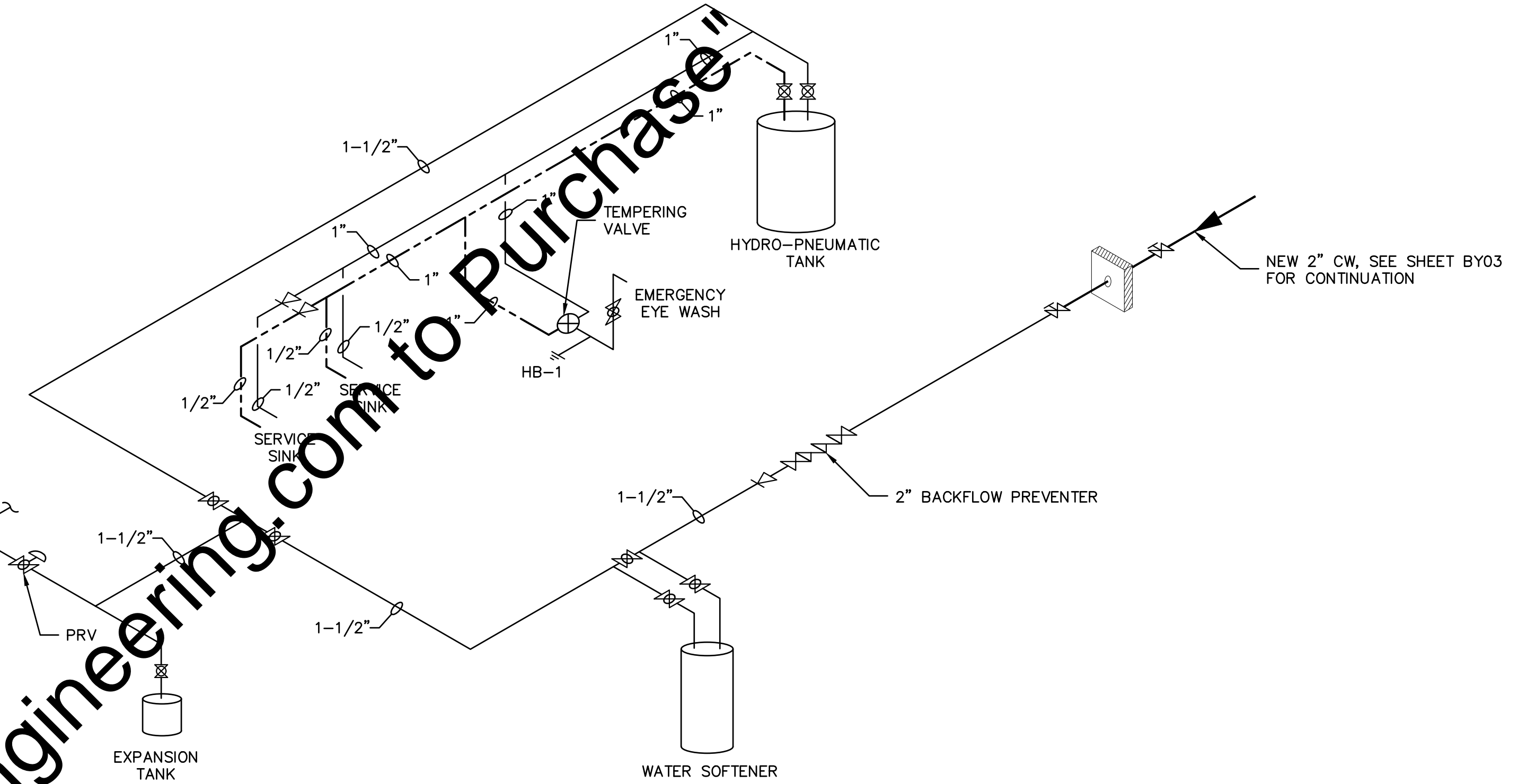
- LEGEND**
- HB-1 HOSE BIB (INDOORS)
 - HB-2 HOSE BIB (NON FREEZE)
 - WH WALL HYDRANT
 - YH-1 1" YARD HYDRANT
 - YH-2 1 1/2" YARD HYDRANT
 - PG PRESSURE GAUGE
 - PRV PRESSURE REDUCING VALVE
 - ⊗ BALL VALVE
 - ⊘ CORPORATION STOP
 - ⊘ CHECK VALVE
 - ⊘ REDUCER



**NEW ANAEROBIC DIGESTER CONTROL BUILDING
NON POTABLE WATER (NPW) SCHEMATIC**

NO SCALE

3" HOT WATER LOOP,
SEE SHEET HC-17



**NEW ANAEROBIC DIGESTER CONTROL BUILDING
CITY WATER SCHEMATIC**

NO SCALE

"For Viewing Purposes Only - Visit wesslerengineering.com to Purchase"

Drawing: J:\Warsaw\Projects\162813-Warsaw-WWTP-Expansion\CAD\04-001\DWG\Sheets\HC21_162813-New Dig Dis.dwg | Layout: HC21_162813-New Dig Dis.dwg | Ploce: 09/04/18 @ 11:06:52 | LastSavedBy: MikeN

| SCALE VERIFICATION | DRAWN BY | NO. | DATE | INITIALS | REVISION DESCRIPTIONS |
|--|----------------|-------------------|------|----------|-----------------------|
| BAR IS ONE INCH LONG ON ORIGINAL DRAWING | CHECKED BY | ALT | | | |
| | APPROVED BY | GLR | | | |
| | ISSUE DATE | SEPTEMBER 4, 2018 | | | |
| | PROJECT NUMBER | 162813-04-003 | | | |

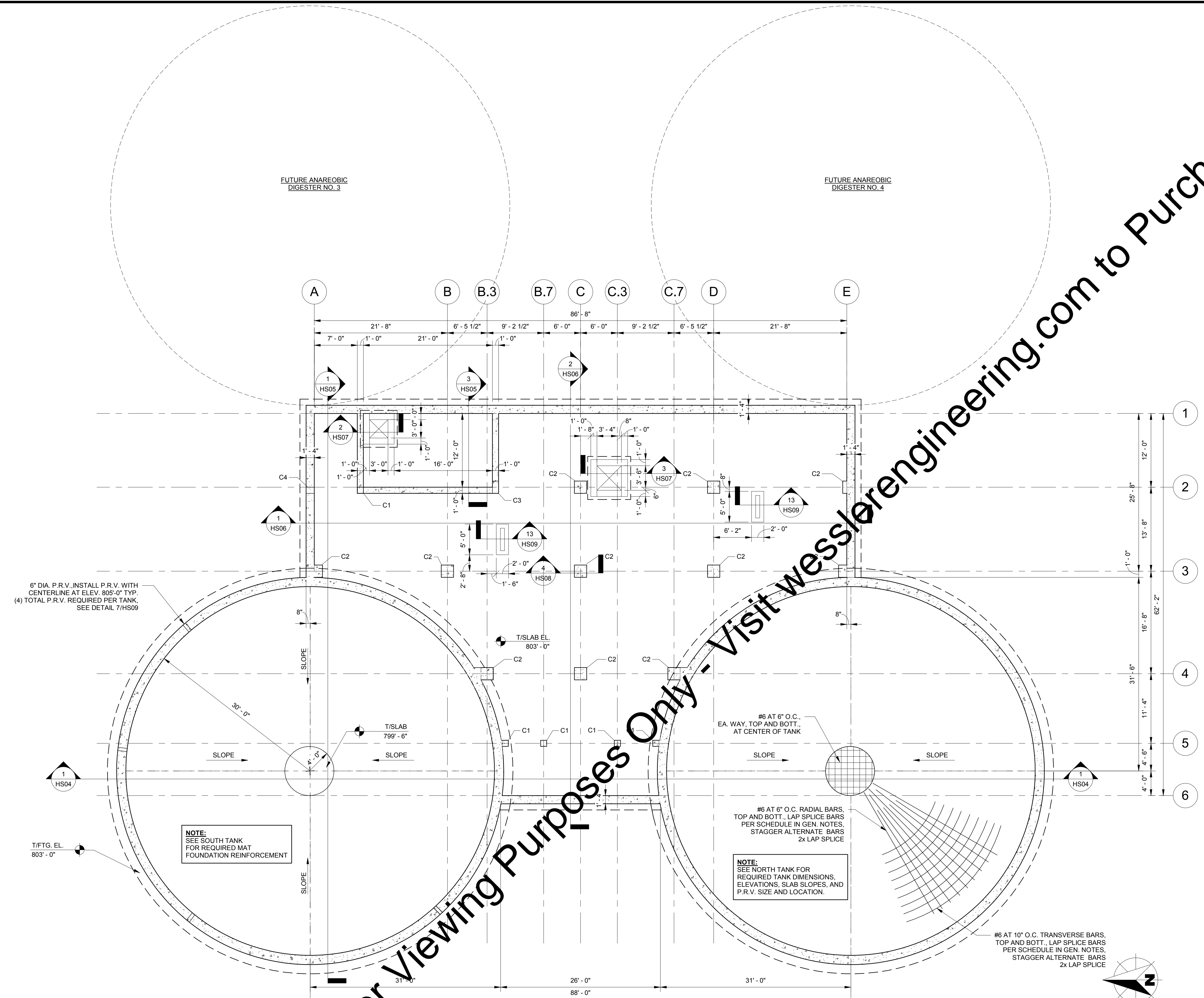


| |
|---|
| WASTEWATER TREATMENT PLANT EXPANSION - 2017 |
| CITY OF WARSAW, INDIANA |
| NEW ANAEROBIC DIGESTERS AND CONTROL BUILDING PLUMBING SCHEMATICS |

| |
|--------------------------|
| SHEET NO. HC21 |
| PAGE NO. 171 |

- FOUNDATION PLAN NOTES**
- INDICATES NOTE REFERENCED IN PLAN
 - 1. SEE GENERAL STRUCTURAL NOTES (AS01 & AS02), TYPICAL FOUNDATION DETAILS (MS01 & MS02), AND TYPICAL MASONRY DETAILS (MS03) FOR ADDITIONAL INFORMATION.
 - 2. T/SLAB ELEVATION = SEE PLAN
T/FOOTING ELEVATION = SEE PLAN
 - 3. SEE SITE PLAN FOR ALL FINAL GRADE ELEVATIONS. REFER TO THE CIVIL DRAWINGS FOR THE EXACT ELEVATION FOR THE FINISH FLOOR. ELEVATIONS SHOWN ON THE STRUCTURAL DRAWINGS DO NOT ESTABLISH THE EXACT ELEVATION OF THE BUILDING WITH RESPECT TO SEA LEVEL.
 - 4. GENERAL CONTRACTOR TO COORDINATE ALL OPENINGS, PIPE SLEEVES, EMBED ITEMS, HANDRAILS, GRATING, ETC. WITH PROCESS DRAWINGS.
 - 5. ALL DIMENSIONS AND ELEVATIONS SHALL BE VERIFIED PRIOR TO FABRICATION, CONSTRUCTION OR ERECTION. THE GENERAL CONTRACTOR SHALL ASSUME RESPONSIBILITY FOR ANY DISCREPANCIES.
 - 6. SEE SITE PLAN FOR ALL FINAL GRADE ELEVATIONS.
 - 7. SEE GEOTECHNICAL REPORT FOR ALL BACKFILLING AND COMPACTION REQUIREMENTS BEHIND WALLS AND UNDER BASE SLABS.
 - 8. GENERAL CONTRACTOR SHALL SUBMIT ALL CHANGES MADE TO THE CONSTRUCTION JOINT (CJ) AND/OR CONTRACTION JOINT (CT) LOCATIONS TO THE STRUCTURAL ENGINEER FOR APPROVAL PRIOR TO CONCRETE PLACEMENT.

| CONCRETE COLUMN SCHEDULE | | | | | |
|--------------------------|-------|--------|-----------|---------------------|-----------|
| MARK | WIDTH | LENGTH | V. REINF. | TIES | REFERENCE |
| C1 | 1'-0" | 1'-0" | 4 - #6 | #3 TIES AT 12" O.C. | 3/HS09 |
| C2 | 2'-0" | 2'-0" | 8 - #8 | #3 TIES AT 12" O.C. | 4/HS09 |
| C3 | 1'-0" | 2'-0" | 8 - #6 | #3 TIES AT 12" O.C. | 5/HS09 |
| C4 | 1'-0" | 1'-4" | 6 - #6 | #3 TIES AT 12" O.C. | 6/HS09 |



1 FOUNDATION/SLAB-ON-GRADE PLAN
HS01 1/8" = 1'-0"

"For Viewing Purposes Only - Visit wesslerengineering.com to Purchase"

10 Shoshone Drive Carmel, IN 46032
317.818.1912 cesolutionsinc.com

| SCALE VERIFICATION | DRAWN BY | RMS | NO. | DATE | INITIALS | REVISION DESCRIPTIONS |
|--|----------------|---------------|-----|------|----------|-----------------------|
| BAR IS ONE INCH LONG ON ORIGINAL DRAWING | CHECKED BY | CMB | | | | |
| | APPROVED BY | JDT | | | | |
| | ISSUE DATE | 09/04/2018 | | | | |
| | PROJECT NUMBER | 162813-04-003 | | | | |

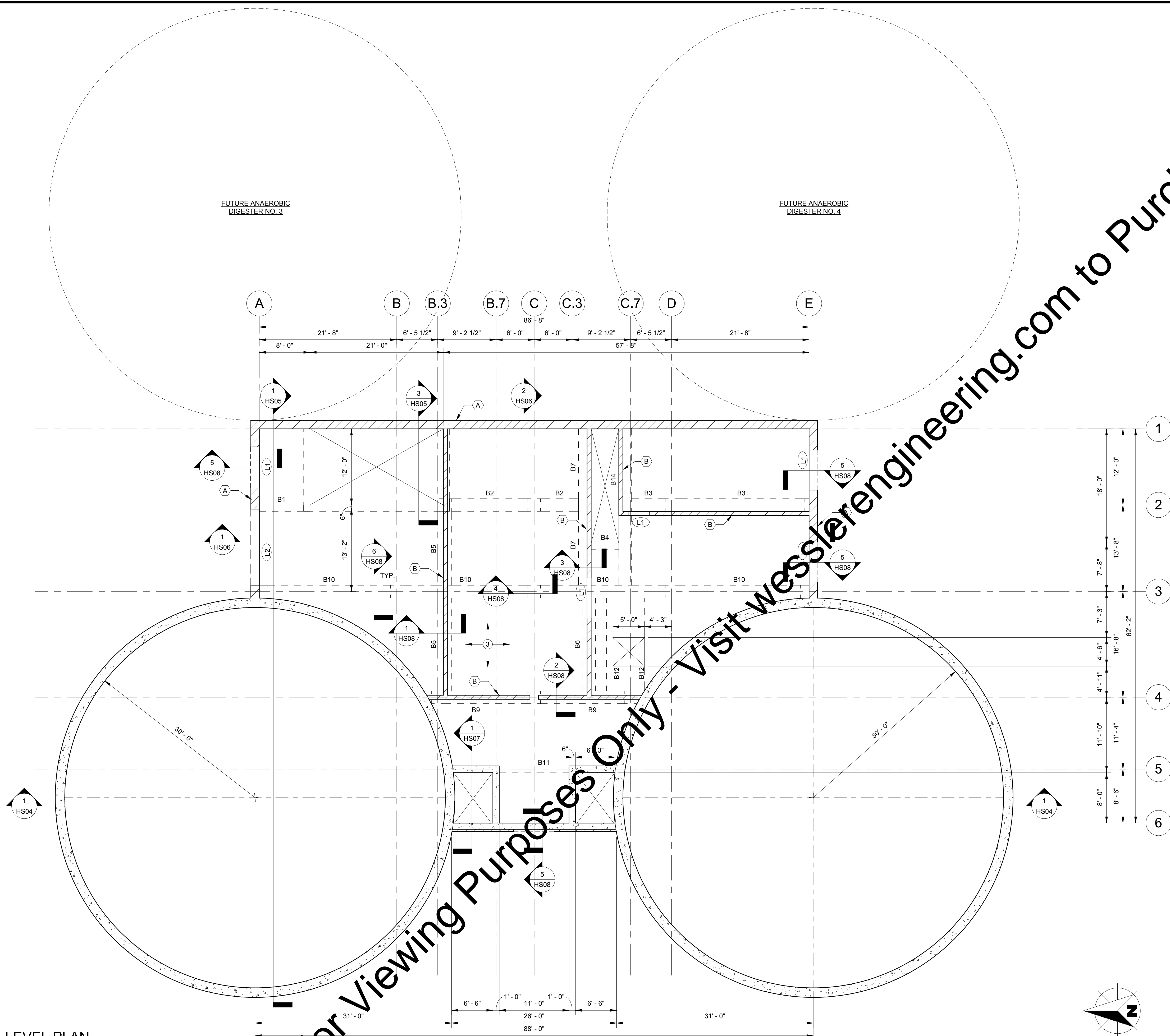
WESSLER ENGINEERING
More than a Project™

WASTEWATER TREATMENT PLANT EXPANSION - 2017
CITY OF WARSAW, INDIANA
NEW ANAEROBIC DIGESTERS AND CONTROL BUILDING FOUNDATION / SLAB-ON-GRADE PLAN

SHEET NO. **HS01**
PAGE NO. 172

Printed: 8/31/2018 10:55:20 AM C:\Users\mahar\Documents\ANAREOBIC DIGESTERS CONTROL BUILDING STRUCT. CENTRAL.mahar@cesolutionsinc.com.vrt

C:\Users\mahar\Documents\ANAREOBIC DIGESTERS CONTROL BUILDING STRUCT. CENTRAL_mahar@cesolutionsinc.com.vrt
 Plotted: 8/31/2018 10:55:21 AM



1 MAIN LEVEL PLAN
 HS02 1/8" = 1'-0"

- MAIN LEVEL PLAN NOTES**
- INDICATES NOTE REFERENCED IN PLAN
 - 1. SEE GENERAL STRUCTURAL NOTES (AS01 & AS02), TYPICAL FRAMING DETAILS (MS04), AND TYPICAL MASONRY DETAILS (MS03) FOR ADDITIONAL INFORMATION.
 - 2. T/SLAB ELEVATION = 815.00' UNO
 - 3. FLOOR SLAB SHALL CONSIST OF A 10" CONCRETE SLAB, REINFORCE SLAB WITH TWO LAYERS OF #5 AT 8" O.C. IN EAST-WEST DIRECTION, TWO LAYERS OF #5 AT 12" O.C. IN NORTH-SOUTH DIRECTION
 - 4. SEE SHEETS HS10 - HS13 FOR CONCRETE BEAM REINFORCEMENT
 - 5. (X) DENOTES MASONRY WALL TYPE, SEE SCHEDULE ON THIS SHEET.
 - 6. (XX) DENOTES STEEL LINTEL, SEE SCHEDULE ON THIS SHEET.

| MASONRY WALL REINFORCING SCHEDULE | |
|-----------------------------------|---|
| (A) | 8-INCH CMU WALL 8-INCH NORMAL WEIGHT CMU BLOCK VERTICAL: #4 BARS AT 48" O.C. HORIZONTAL: (2) #5 BARS AT T/BB ELEV. = T/WALL #9 TRUSS TYPE JOINT REINF. AT 16-INCHES O.C. (8" LAP) |
| (B) | 8-INCH CMU WALL 8-INCH NORMAL WEIGHT CMU BLOCK VERTICAL: #4 BARS AT 48" O.C. HORIZONTAL: (2) #5 BARS AT T/BB ELEV. = T/WALL #9 TRUSS TYPE JOINT REINF. AT 16-INCHES O.C. (8" LAP) |

NOTES:

1. REINFORCE ALL WALLS AS NOTED BY SCHEDULE EXCEPT AS NOTED ON PLANS AND/OR DETAILS.
2. PROVIDE A 1'-0" HOOK AT TOP OF ALL VERTICAL BARS.
3. PROVIDE #5 DOWELS WITH 1'-0" HOOK AT BOTTOM OF WALL INTO CONCRETE SLAB. DOWELS TO MATCH VERTICALS IN SPACING.

| STEEL LINTEL SCHEDULE | | | | | |
|-----------------------|--------|--------------------|----------------|-----------|------------|
| MARK | LINTEL | BRG. PLATE EA. END | B/LINTEL ELEV. | REFERENCE | REMARKS |
| L1 | W8x18 | 1/2" x W" x 2'-0" | SEE ARCH | | SEE NOTE 1 |
| L2 | W16x31 | 1/2" x W" x 2'-0" | SEE ARCH | | SEE NOTE 1 |

NOTES:

1. PROVIDE (2) 1/2" DIA. x 6" HEADED STUDS AT EACH BRG. PLATE SPECIFIED - SEE SCHEDULE.
2. ON TOP OF ALL WF LINTELS, PROVIDE 1/2" DIA. x 6" HEADED STUDS AT 16" O.C. MAX. AND A CONT. LINTEL WITH (2) - #5 CONT.
3. VERIFY ALL LINTEL ELEVATIONS WITH ARCH. DRAWINGS PRIOR TO INSTALLATION.
4. "W" SHALL BE 3/4" SMALLER THAN THE WIDTH OF THE BLOCK WALL. (FOR EXAMPLE, AT 8" BLOCKS, W = 6 7/8")

"For Viewing Purposes Only - Visit wesslerengineering.com to Purchase"

10 Shoshone Drive Carmel, IN 46032
 317.818.1912 cesolutionsinc.com

| SCALE VERIFICATION | DRAWN BY | RMS | NO. | DATE | INITIALS | REVISION DESCRIPTIONS |
|--|----------------|---------------|-----|------|----------|-----------------------|
| BAR IS ONE INCH LONG ON ORIGINAL DRAWING | CHECKED BY | CMB | | | | |
| | APPROVED BY | JDT | | | | |
| | ISSUE DATE | 09/04/2018 | | | | |
| | PROJECT NUMBER | 162813-04-003 | | | | |

WESSLER ENGINEERING
 More than a Project™

WASTEWATER TREATMENT PLANT EXPANSION - 2017
 CITY OF WARSAW, INDIANA
NEW ANAEROBIC DIGESTERS AND CONTROL BUILDING MAIN LEVEL PLAN

SHEET NO.
HS02
 PAGE NO.
 173

C:\Users\mahar\Documents\ANAEEROBIC DIGESTERS CONTROL BUILDING STRUCT. CENTRAL_mahar@cesolutionsinc.com.vrt
 Printed: 8/31/2018 10:55:22 AM

PRECAST CONCRETE PLAN NOTES

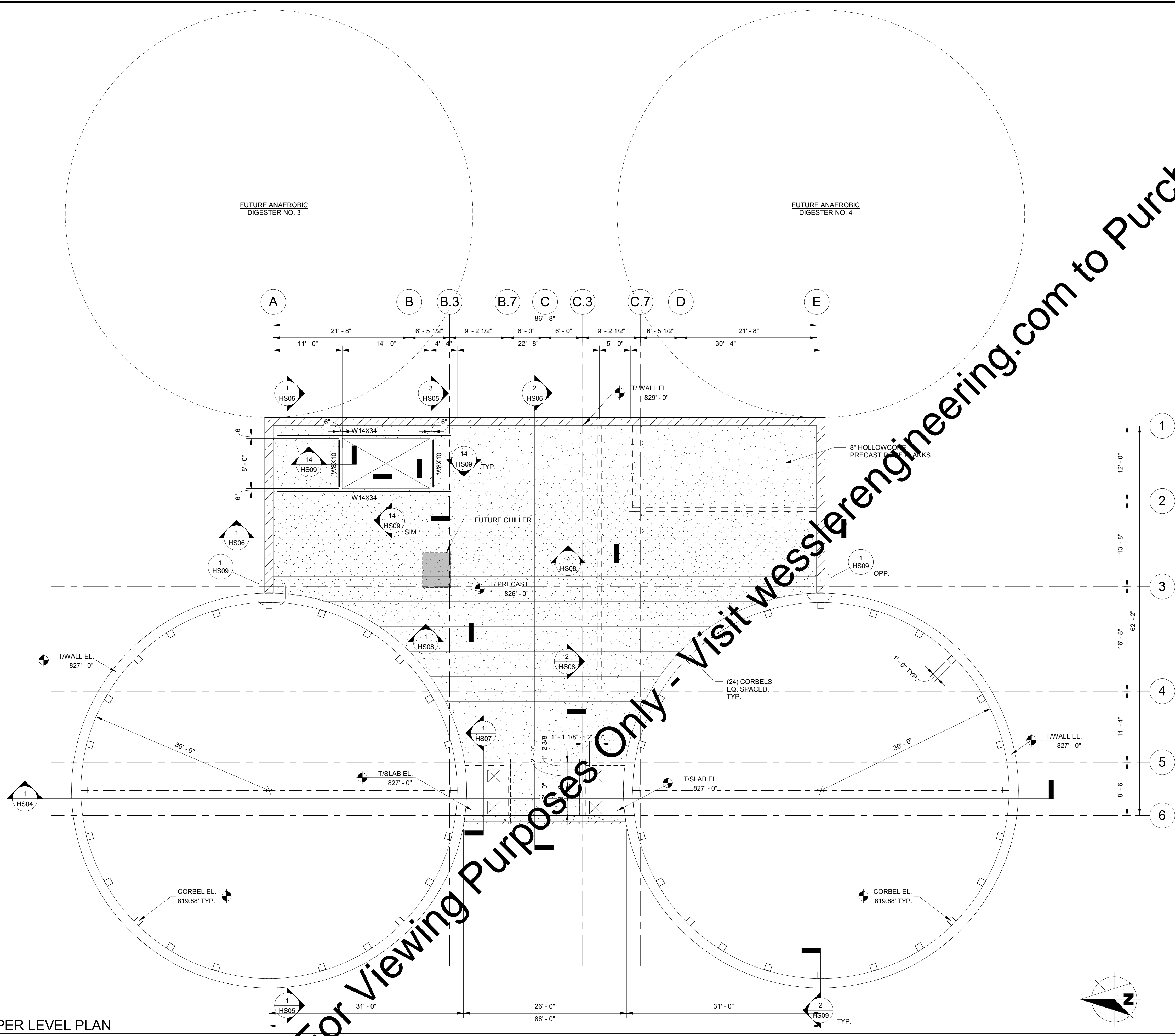
- INDICATES NOTE REFERENCED IN PLAN
1. PRECAST MANUFACTURER TO DESIGN ROOF PANELS FOR THE FOLLOWING LOADINGS:
 - SUPERIMPOSED DEAD LOAD = 20 PSF
 - SUPERIMPOSED LIVE LOAD = 25 PSF
 - SEISMIC LOAD = DESIGN PRECAST PLANKS TO RESIST A MAXIMUM DIAPHRAGM SHEAR FORCE OF E = 150 PLF.
 - WIND LOAD = DESIGN PRECAST PLANKS TO RESIST A MAXIMUM DIAPHRAGM SHEAR FORCE OF W = 150 PLF.
 - MAX. DEFLECTION CRITERIA = L/240
 2. ALL CALCULATIONS AND SHOP DRAWINGS SHALL BE SUBMITTED BY THE PRECAST MANUFACTURER AND SHALL BE STAMPED AND SIGNED BY A REGISTERED PROFESSIONAL ENGINEER IN THE STATE OF INDIANA.

ROOF FRAMING PLAN NOTES

- INDICATES NOTE REFERENCED IN PLAN
1. SEE GENERAL STRUCTURAL NOTES (AS01 & AS02), TYPICAL FRAMING DETAILS (MS04), AND TYPICAL MASONRY DETAILS (MS03) FOR ADDITIONAL INFORMATION.
 2. PROVIDE BRICK LINTELS AS FOLLOWS UNLESS NOTED OTHERWISE:

| | |
|------------------------------|---------------------------|
| FOR SPANS ≤ 4'-0": | L3-1/2" x 3-1/2" x 3/8" |
| FOR SPANS > 4'-0", ≤ 6'-0": | L5" x 3-1/2" x 3/8" (LLV) |
| FOR SPANS > 6'-0", ≤ 8'-0": | L6" x 3-1/2" x 3/8" (LLV) |
| FOR SPANS > 8'-0", ≤ 12'-0": | L7" x 4" x 3/8" (LLV) |

 ALL BRICK LINTELS TO HAVE 8 INCHES BEARING, EACH END.
 3. ALL STRUCTURAL STEEL EXPOSED TO WEATHER SHALL BE HOT-DIP GALVANIZED, G90 FINISH.



1 UPPER LEVEL PLAN
 HS03 1/8" = 1'-0"

"For Viewing Purposes Only - Visit wesslerengineering.com to Purchase"

10 Shoshone Drive Carmel, IN 46032
 317.818.1912 cesolutionsinc.com

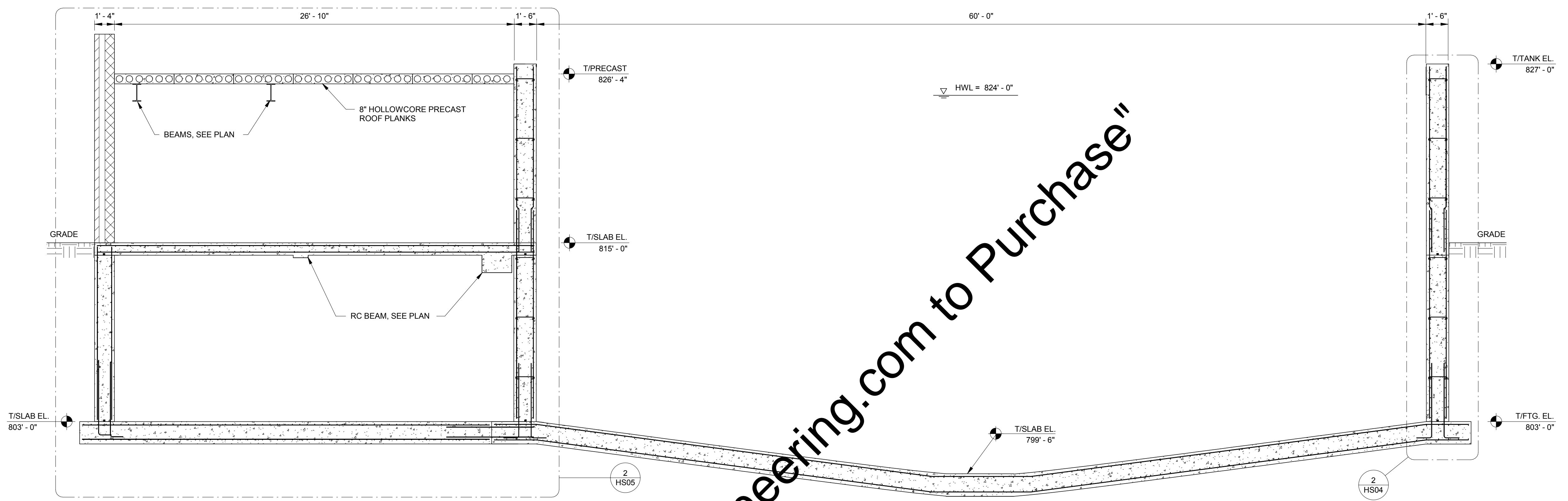
| SCALE VERIFICATION | DRAWN BY | RMS | NO. | DATE | INITIALS | REVISION DESCRIPTIONS |
|--|----------------|---------------|-----|------|----------|-----------------------|
| BAR IS ONE INCH LONG ON ORIGINAL DRAWING | CHECKED BY | CMB | | | | |
| | APPROVED BY | JDT | | | | |
| | ISSUE DATE | 09/04/2018 | | | | |
| | PROJECT NUMBER | 162813-04-003 | | | | |

WESSLER ENGINEERING
 More than a Project™

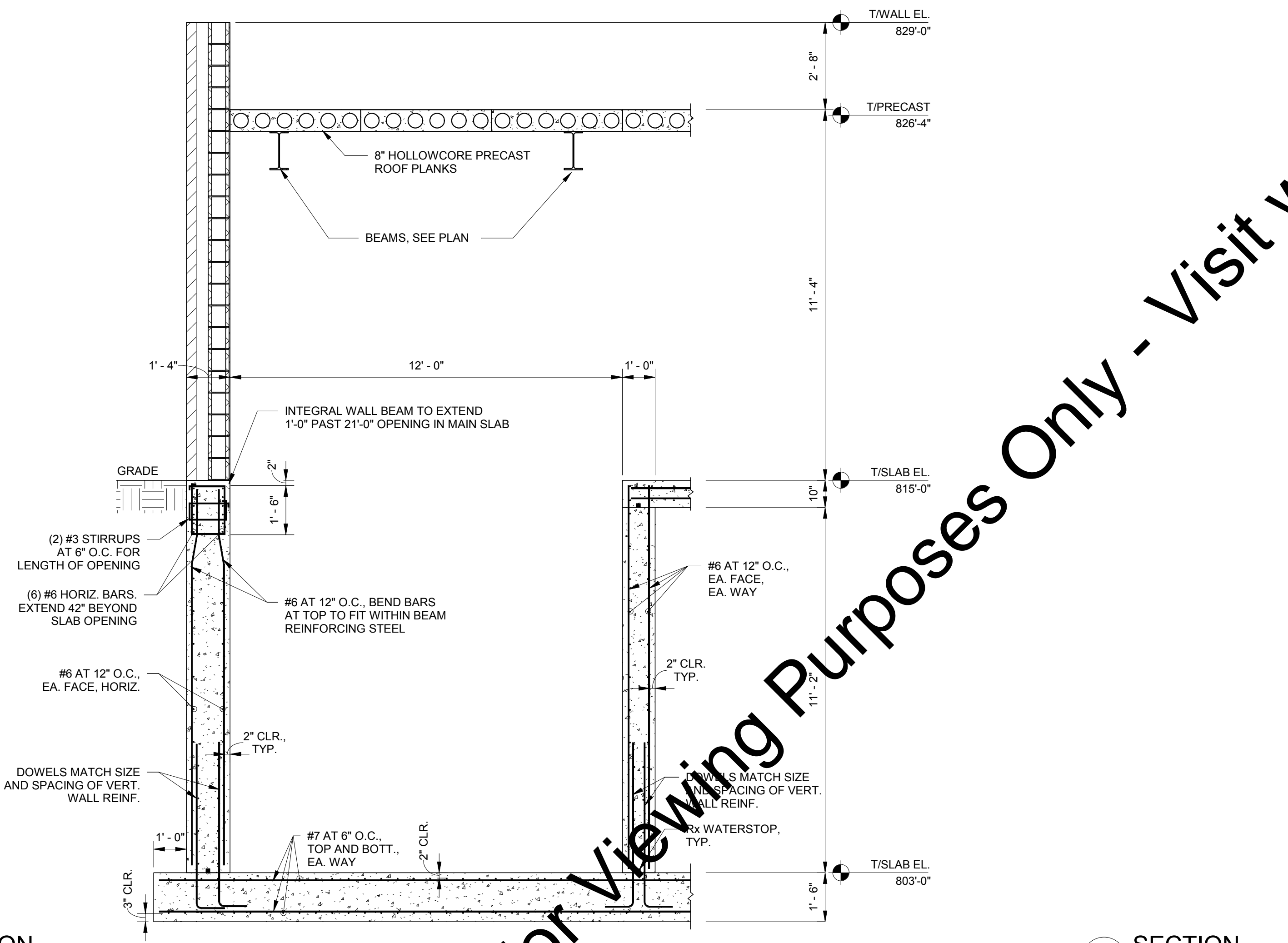
WASTEWATER TREATMENT PLANT EXPANSION - 2017
 CITY OF WARSAW, INDIANA
NEW ANAEROBIC DIGESTERS AND CONTROL BUILDING UPPER LEVEL PLAN

SHEET NO.
HS03
 PAGE NO.
 174

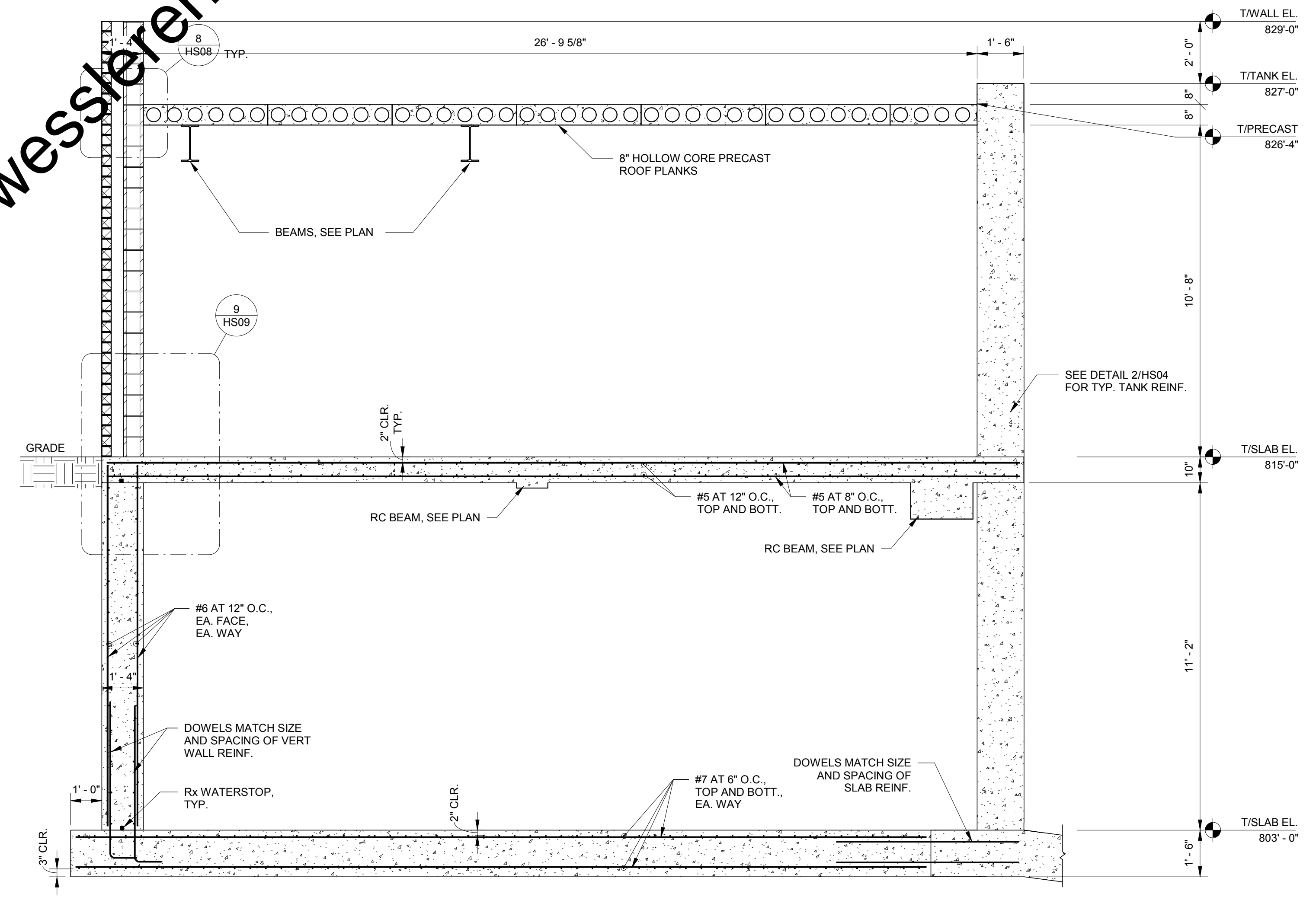
C:\Users\mahar\Documents\ANAREOBIC DIGESTERS CONTROL BUILDING STRUCT. CENTRAL_mahar@cesolutionsinc.com.vrt
 Printed: 8/31/2018 10:55:25 AM



SECTION 1
 HS05 1/4" = 1'-0"



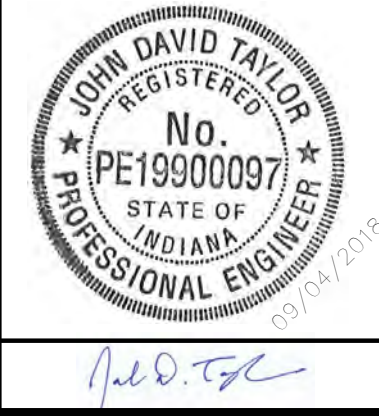
SECTION 3
 HS05 3/8" = 1'-0"



SECTION 2
 HS05 3/8" = 1'-0"

CE Solutions
 structural engineers
 10 Shoshone Drive Carmel, IN 46032 317.818.1912 cesolutionsinc.com

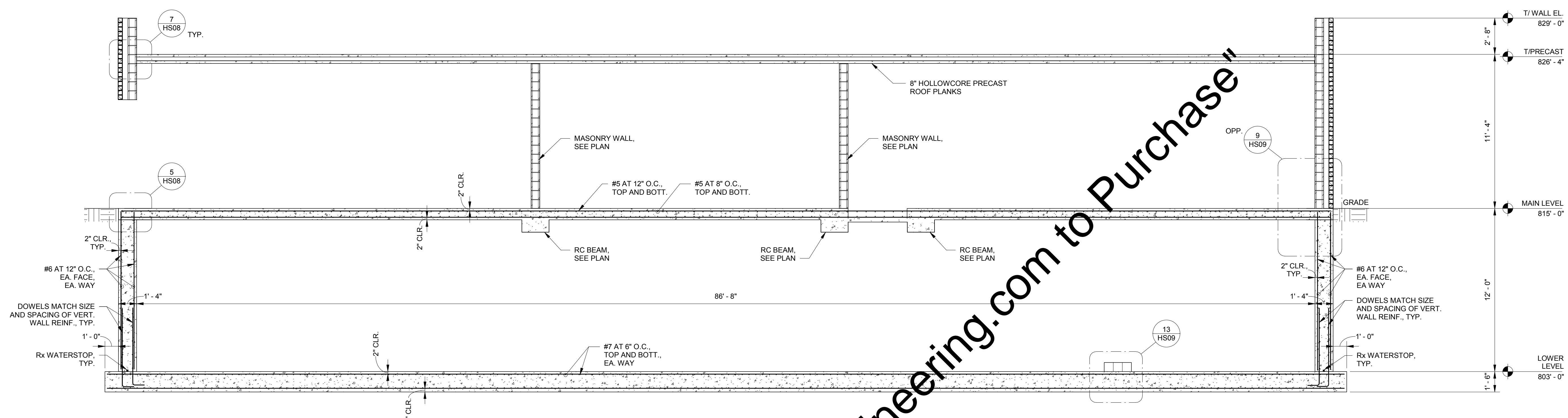
| SCALE VERIFICATION | DRAWN BY | RMS | NO. | DATE | INITIALS | REVISION DESCRIPTIONS |
|--|----------------|---------------|-----|------|----------|-----------------------|
| BAR IS ONE INCH LONG ON ORIGINAL DRAWING | CHECKED BY | CMB | | | | |
| | APPROVED BY | JDT | | | | |
| | ISSUE DATE | 09/04/2018 | | | | |
| | PROJECT NUMBER | 162813-04-003 | | | | |



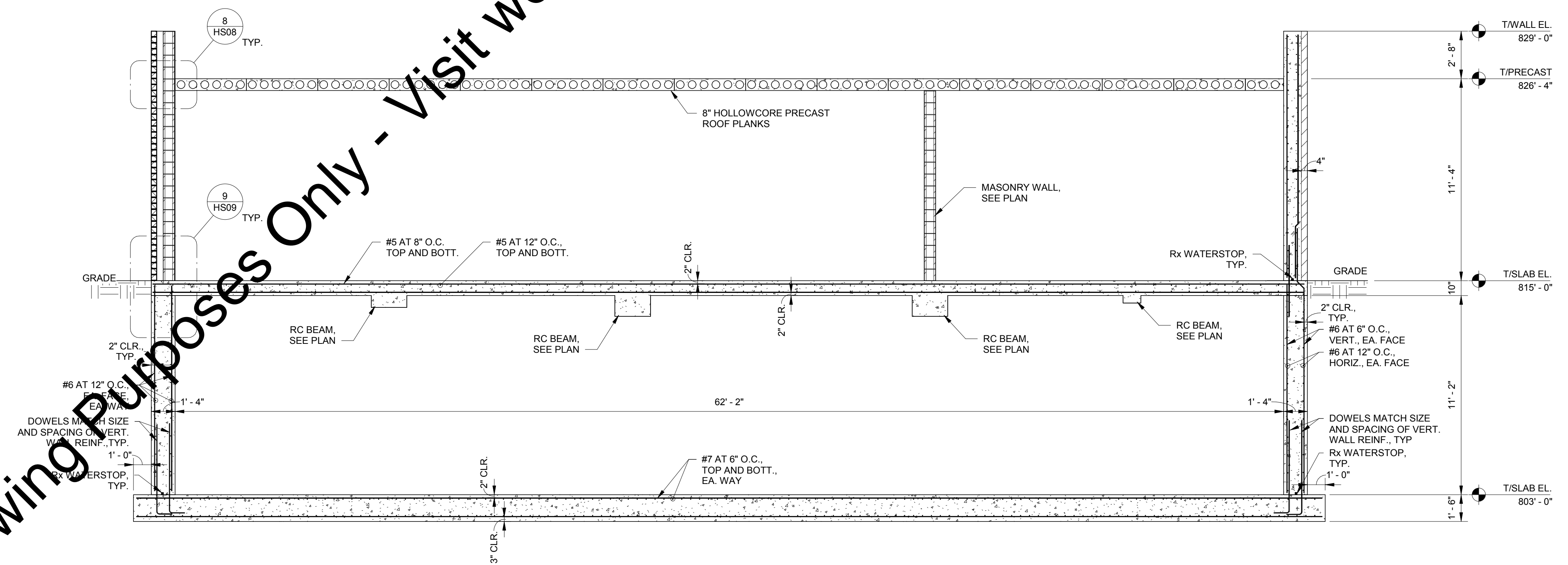
W
WESSLER
 ENGINEERING
 More than a Project™

WASTEWATER TREATMENT PLANT EXPANSION - 2017
 CITY OF WARSAW, INDIANA
NEW ANAEROBIC DIGESTERS AND CONTROL BUILDING SECTIONS AND DETAILS

SHEET NO.
HS05
 PAGE NO.
 176



SECTION
HS06 1/4" = 1'-0"

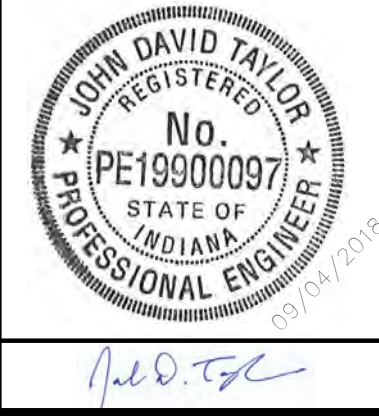


SECTION
HS06 1/4" = 1'-0"

Plotted: 8/31/2018 10:55:26 AM C:\Users\mahart\Documents\ANAREOBIC DIGESTERS CONTROL BUILDING STRUCT. CENTRAL_mahart@cesolutionsinc.com.vt

10 Shoshone Drive Carmel, IN 46032 317.818.1912 cesolutionsinc.com

| SCALE VERIFICATION | DRAWN BY | RMS | NO. | DATE | INITIALS | REVISION DESCRIPTIONS |
|--|----------------|---------------|-----|------|----------|-----------------------|
| BAR IS ONE INCH LONG ON ORIGINAL DRAWING | CHECKED BY | CMB | | | | |
| | APPROVED BY | JDT | | | | |
| | ISSUE DATE | 09/04/2018 | | | | |
| | PROJECT NUMBER | 162813-04-003 | | | | |

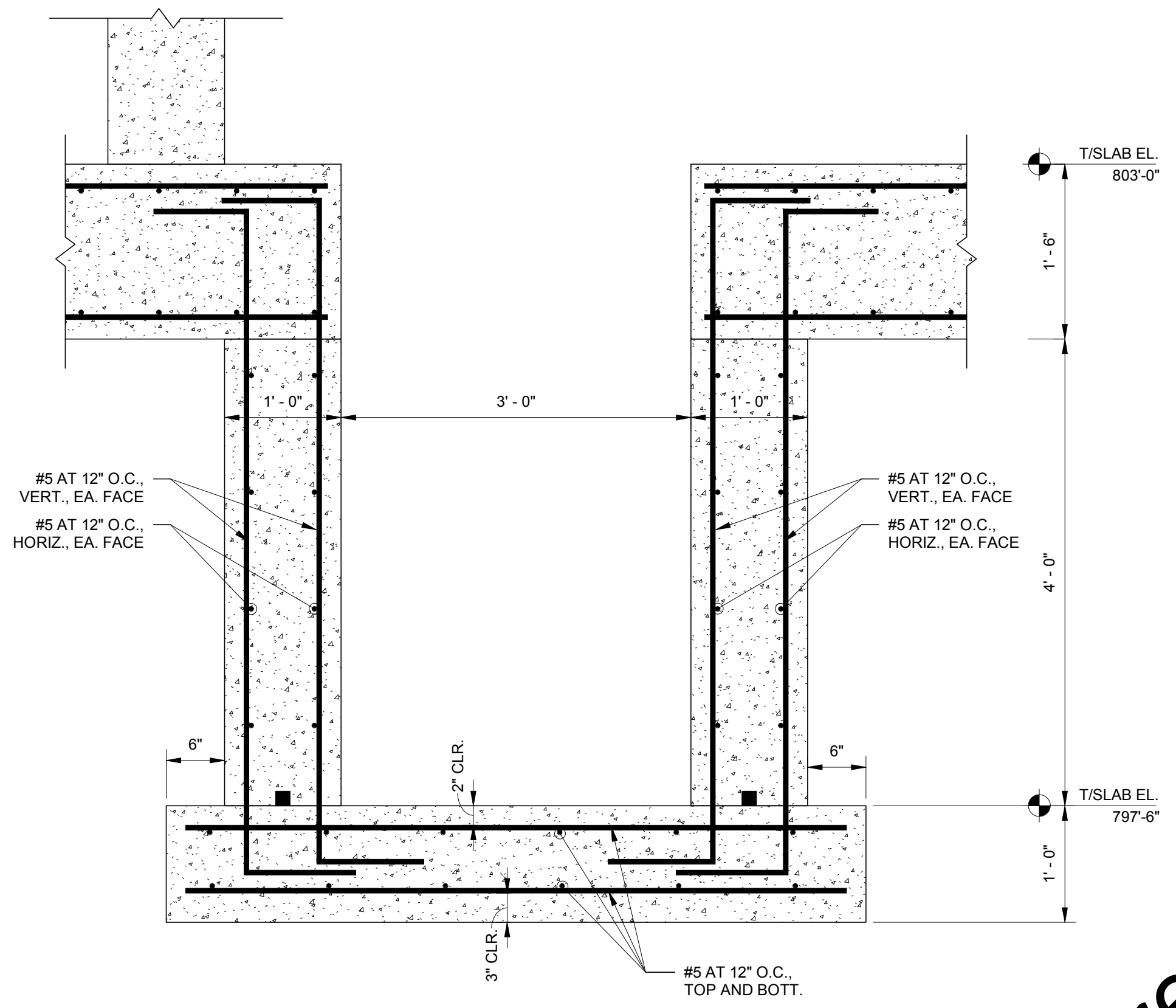


WESSLER ENGINEERING
 More than a Project™

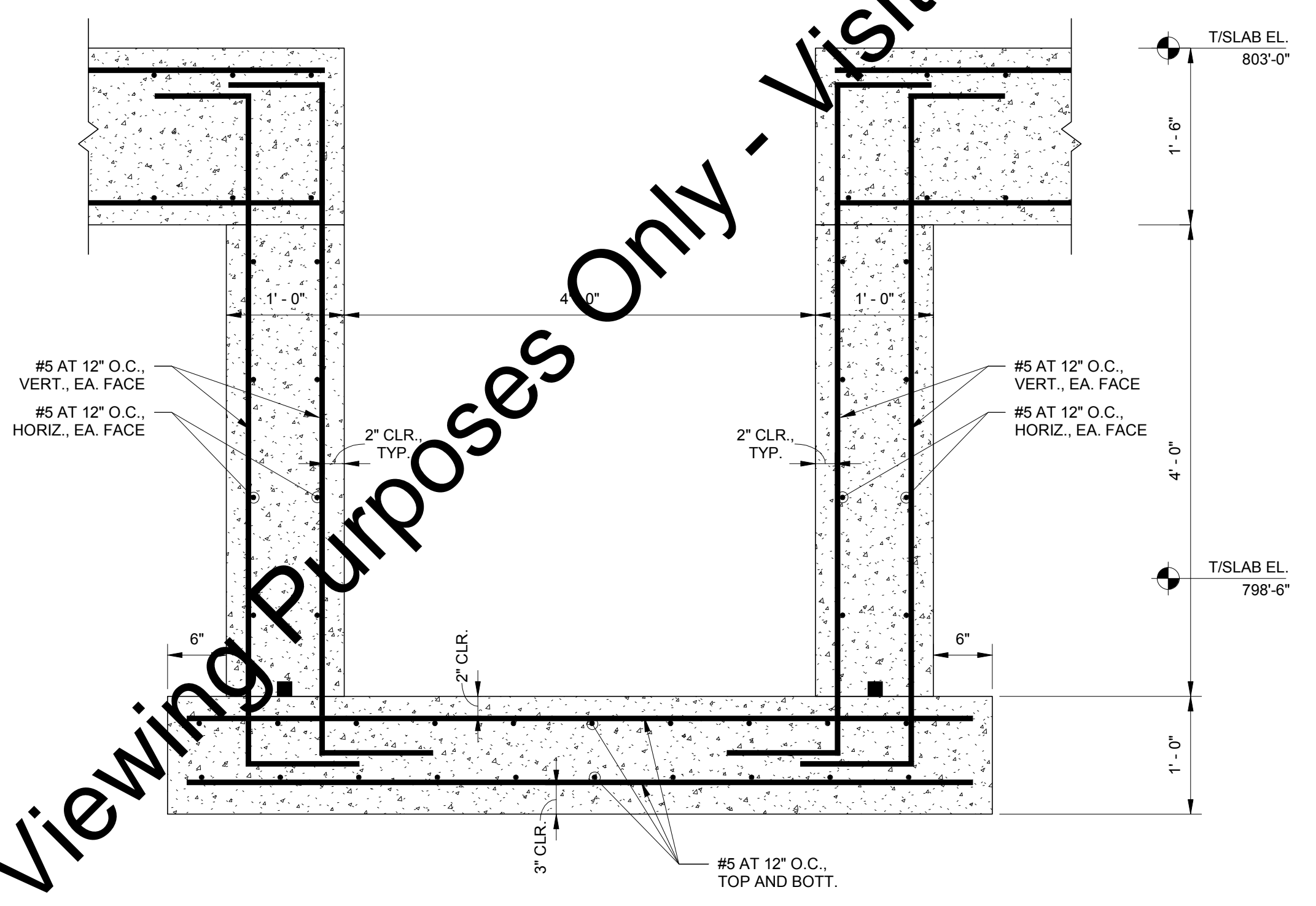
WASTEWATER TREATMENT PLANT EXPANSION - 2017
 CITY OF WARSAW, INDIANA
NEW ANAEROBIC DIGESTERS AND CONTROL BUILDING SECTIONS AND DETAILS

SHEET NO.
HS06
 PAGE NO.
 177

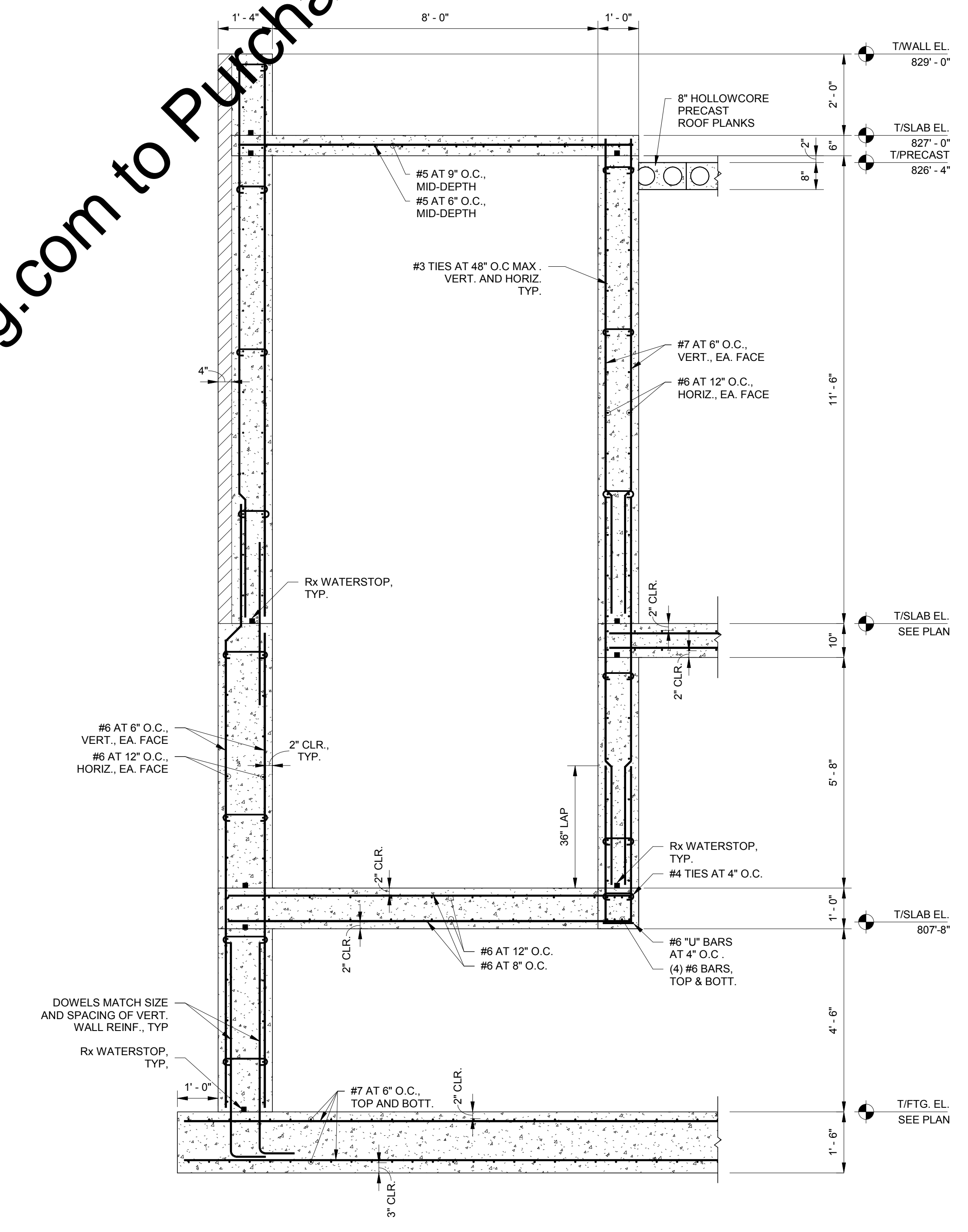
Printed: 8/31/2018 10:55:27 AM C:\Users\mahart\Documents\ANAREOBIC DIGESTERS CONTROL BUILDING STRUCT. CENTRAL_mahart@cesolutionsinc.com.vt



2 SECTION
 HS07 1" = 1'-0"



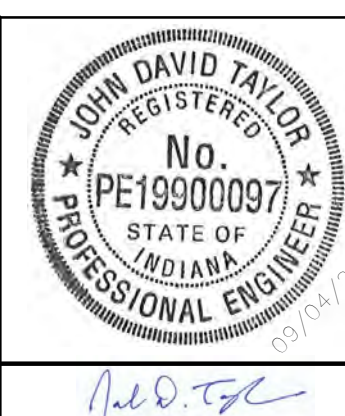
2 SECTION
 HS07 1" = 1'-0"



1 SECTION
 HS07 1/2" = 1'-0"

CE Solutions
 structural engineers
 10 Shoshone Drive Carmel, IN 46032 317.818.1912 cesolutionsinc.com

| SCALE VERIFICATION | DRAWN BY | RMS | NO. | DATE | INITIALS | REVISION DESCRIPTIONS |
|--|----------------|---------------|-----|------|----------|-----------------------|
| BAR IS ONE INCH LONG ON ORIGINAL DRAWING | CHECKED BY | CMB | | | | |
| | APPROVED BY | JDT | | | | |
| | ISSUE DATE | 09/04/2018 | | | | |
| | PROJECT NUMBER | 162813-04-003 | | | | |

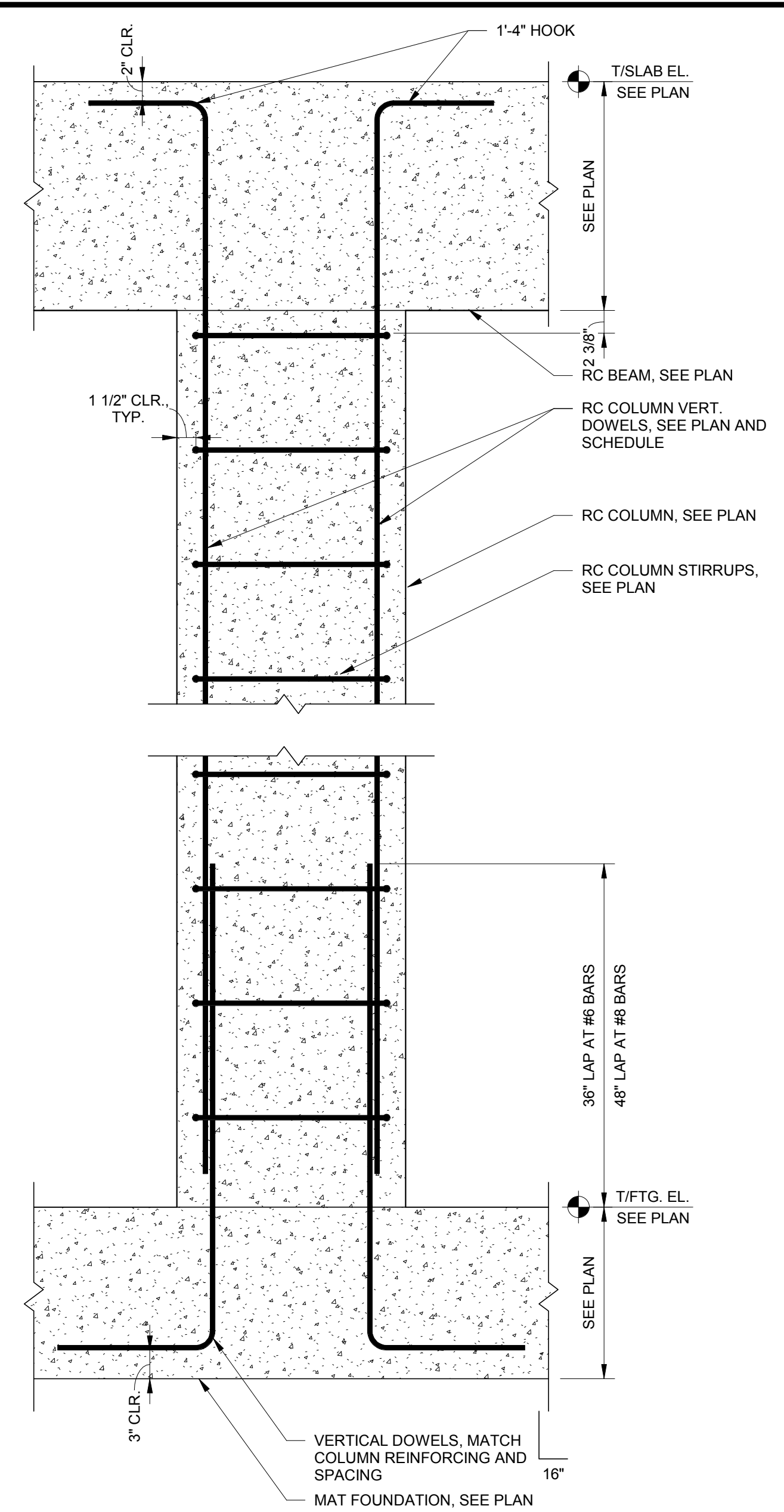


W
WESSLER
 ENGINEERING
 More than a Project™

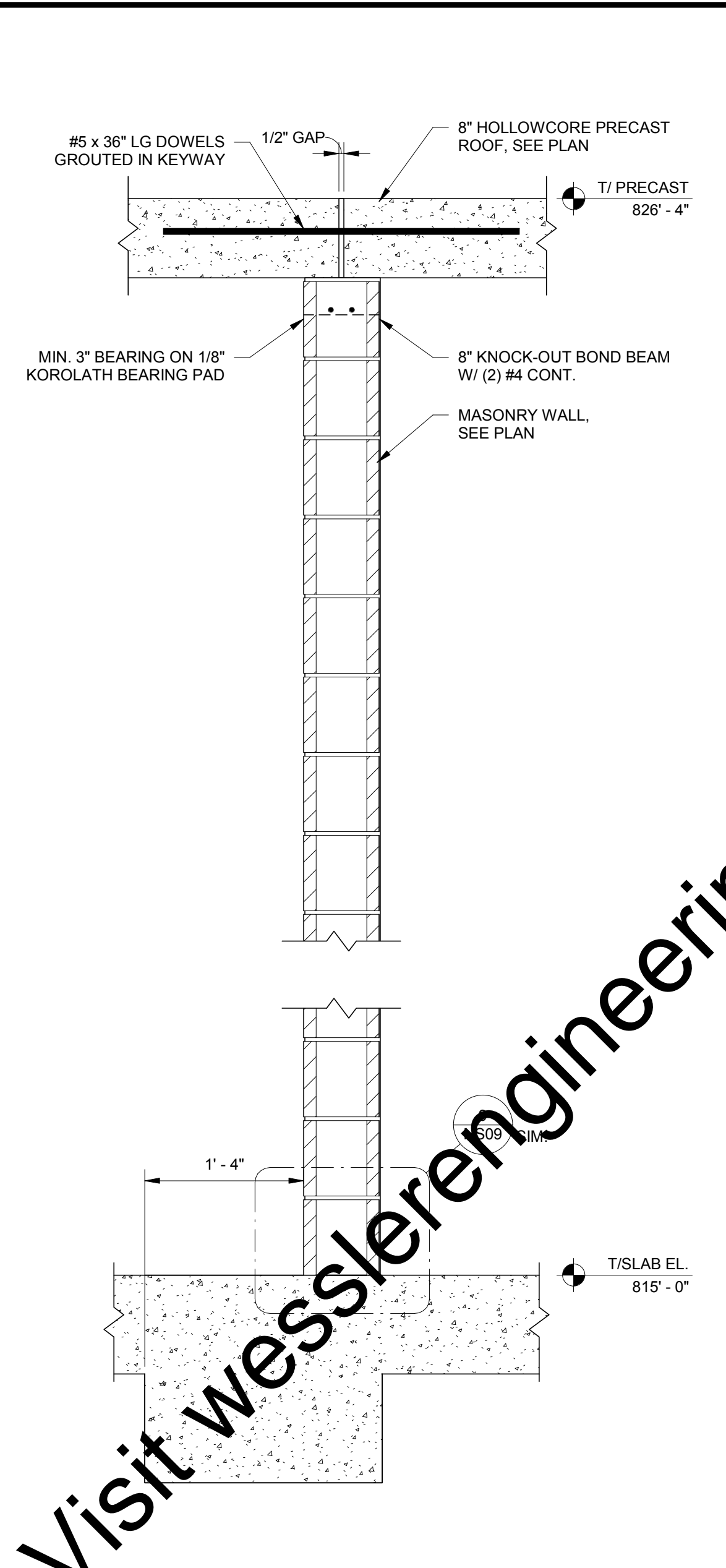
WASTEWATER TREATMENT PLANT EXPANSION - 2017
 CITY OF WARSAW, INDIANA
NEW ANAEROBIC DIGESTERS AND CONTROL BUILDING SECTIONS AND DETAILS

SHEET NO.
HS07
 PAGE NO.
 178

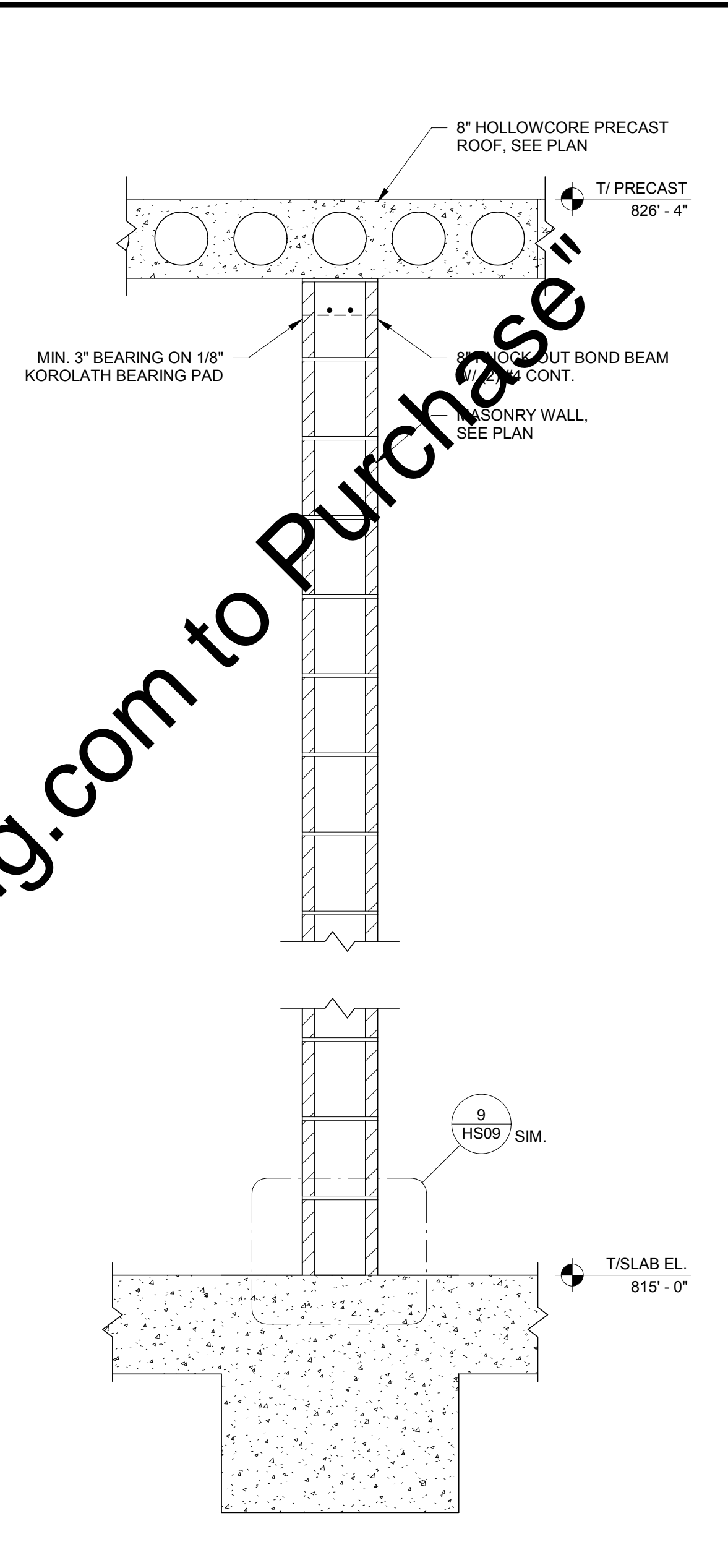
C:\Users\mahar\Documents\ANAREOBIC DIGESTERS CONTROL BUILDING STRUCT. CENTRAL_mahar@cesolutionsinc.com.vt
 Printed: 8/31/2018 10:55:28 AM



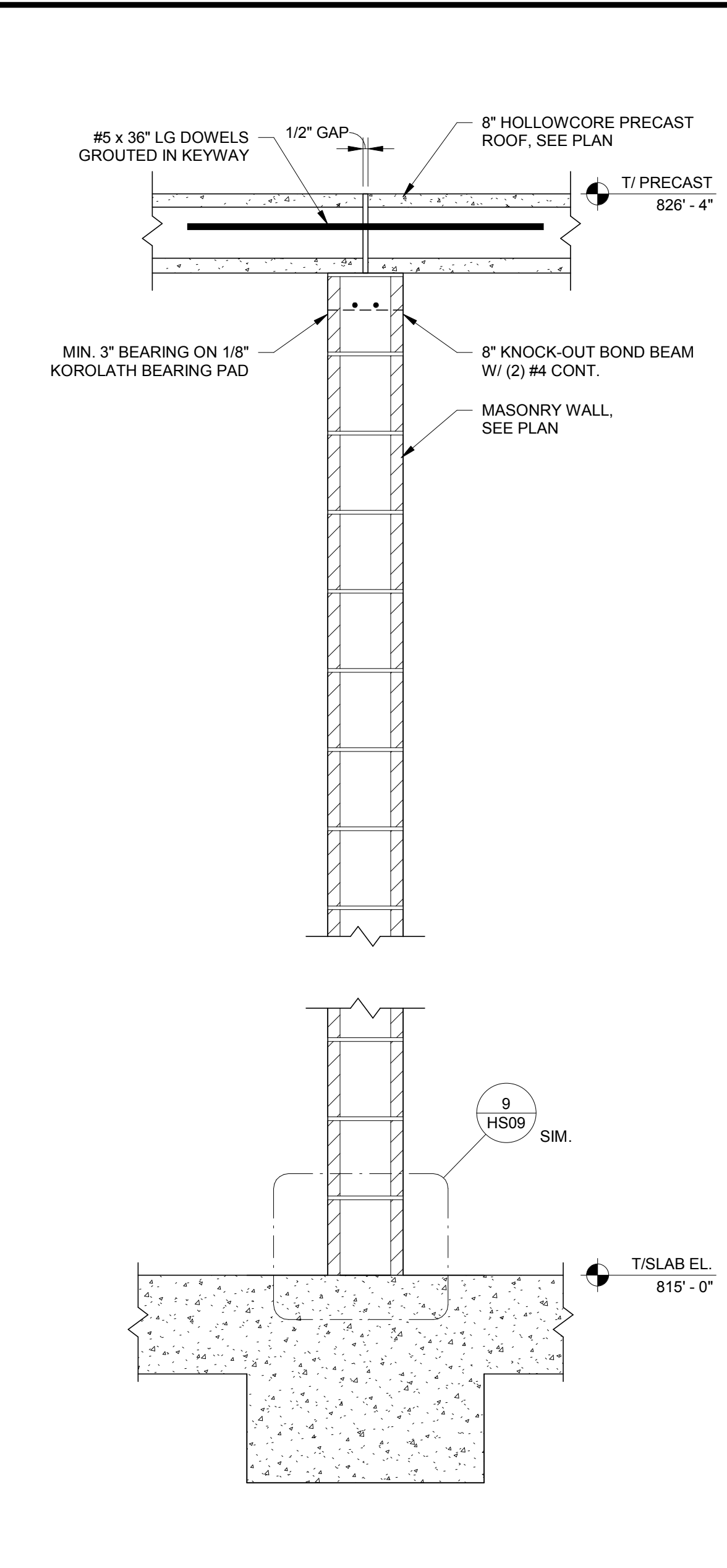
4 COLUMN REINFORCING
 HS08 1" = 1'-0"



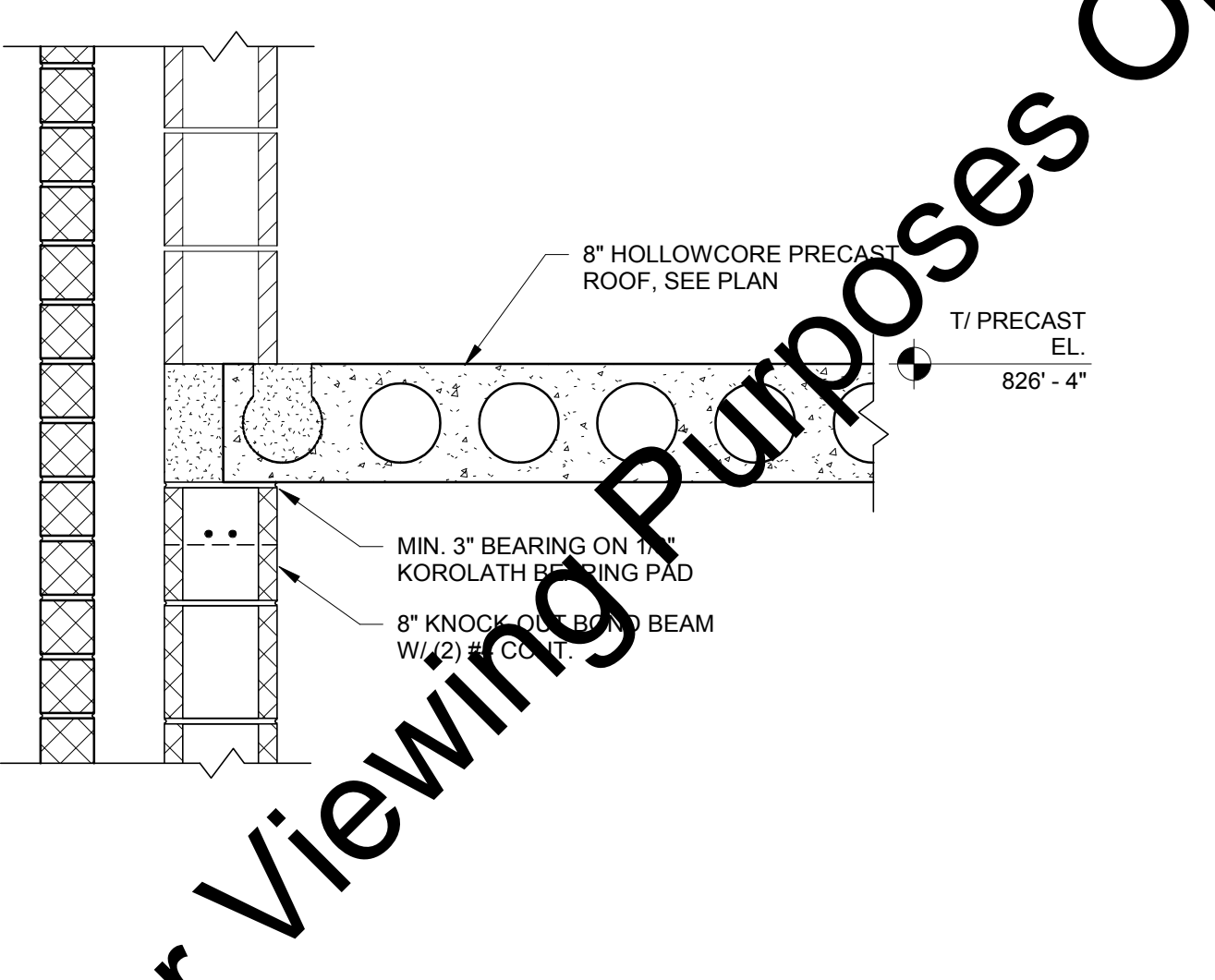
3 SECTION
 HS08 1" = 1'-0"



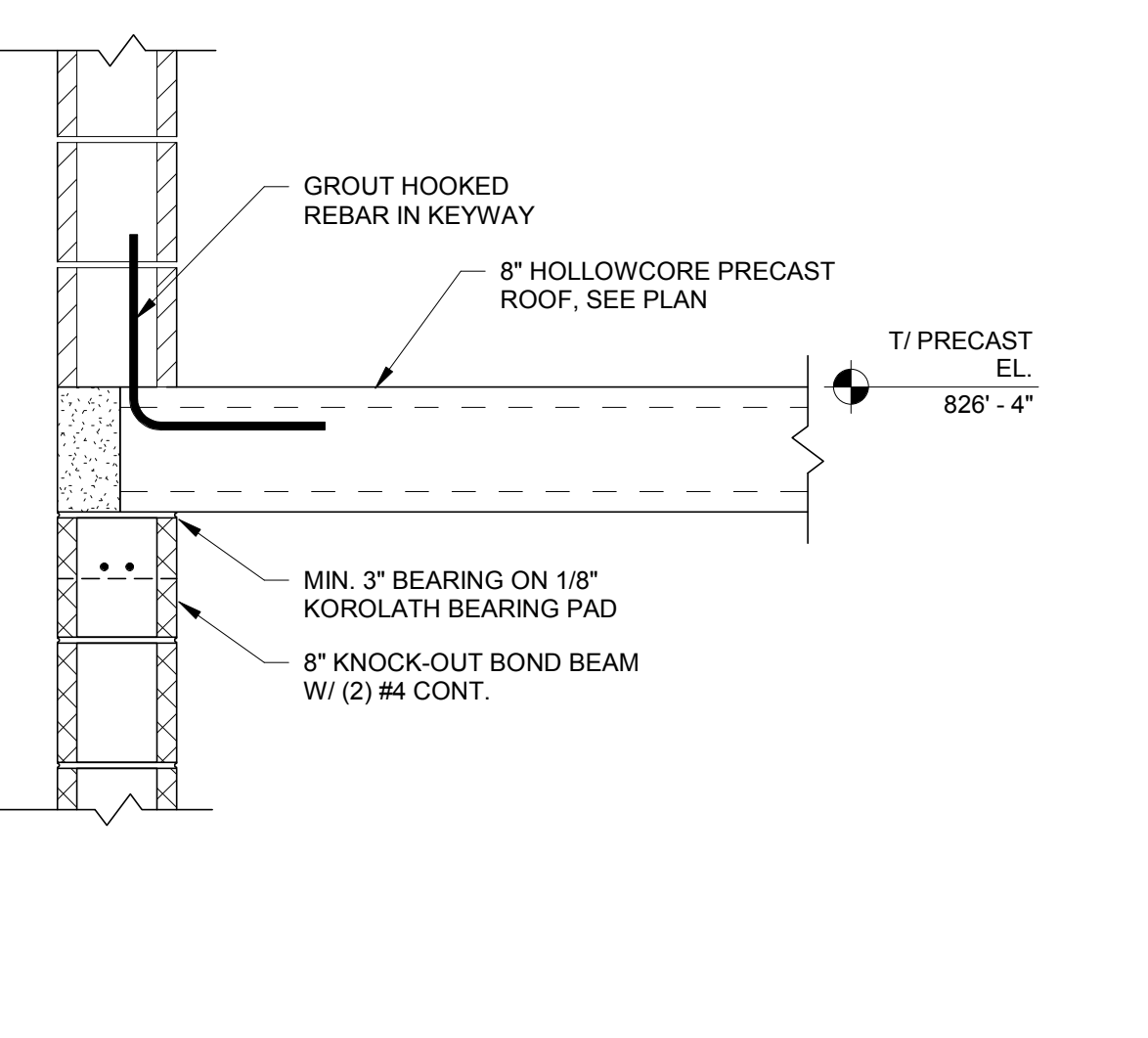
2 SECTION
 HS08 1" = 1'-0"



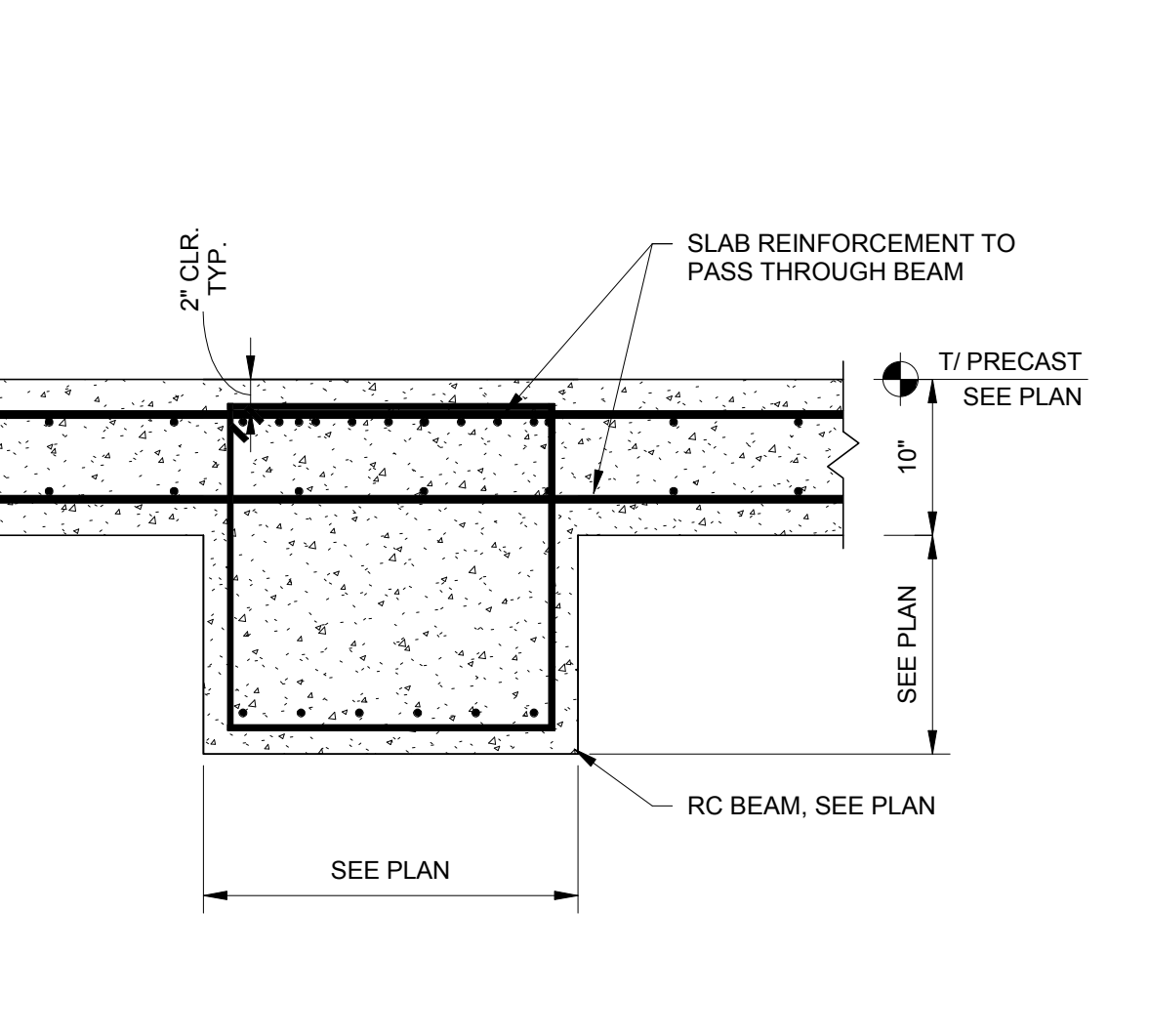
1 SECTION
 HS08 1" = 1'-0"



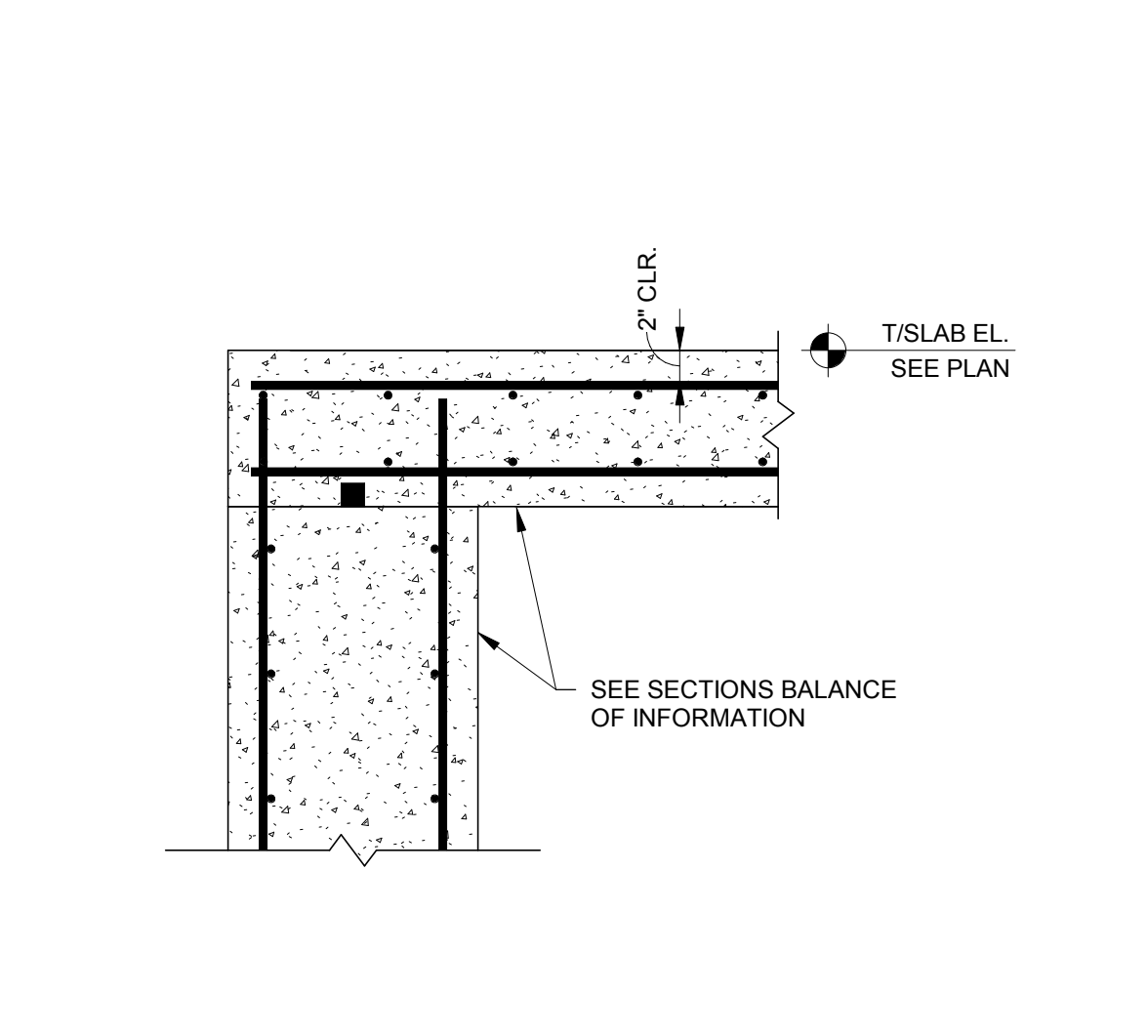
8 INTERIOR NON-BEARING WALL
 HS08 1" = 1'-0"



7 EXTERIOR BEARING WALL AT FLOOR
 HS08 1" = 1'-0"



6 SECTION
 HS08 1" = 1'-0"



5 SECTION
 HS08 1" = 1'-0"

10 Shoshone Drive Carmel, IN 46032 317.818.1912 cesolutionsinc.com

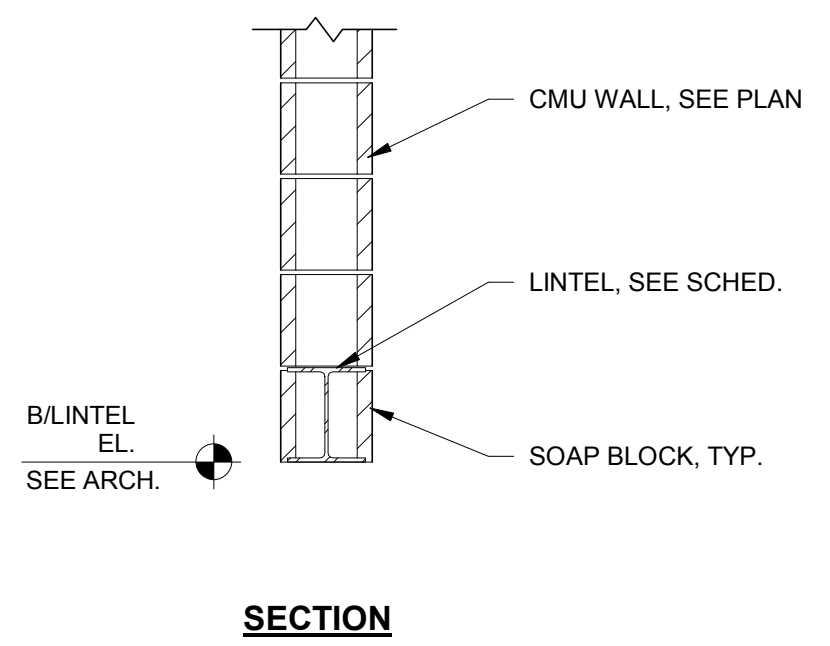
| SCALE VERIFICATION | DRAWN BY | RMS | NO. | DATE | INITIALS | REVISION DESCRIPTIONS |
|--|----------------|---------------|-----|------|----------|-----------------------|
| BAR IS ONE INCH LONG ON ORIGINAL DRAWING | CHECKED BY | CMB | | | | |
| | APPROVED BY | JDT | | | | |
| | ISSUE DATE | 09/04/2018 | | | | |
| | PROJECT NUMBER | 162813-04-003 | | | | |

WESSLER ENGINEERING
 More than a Project™

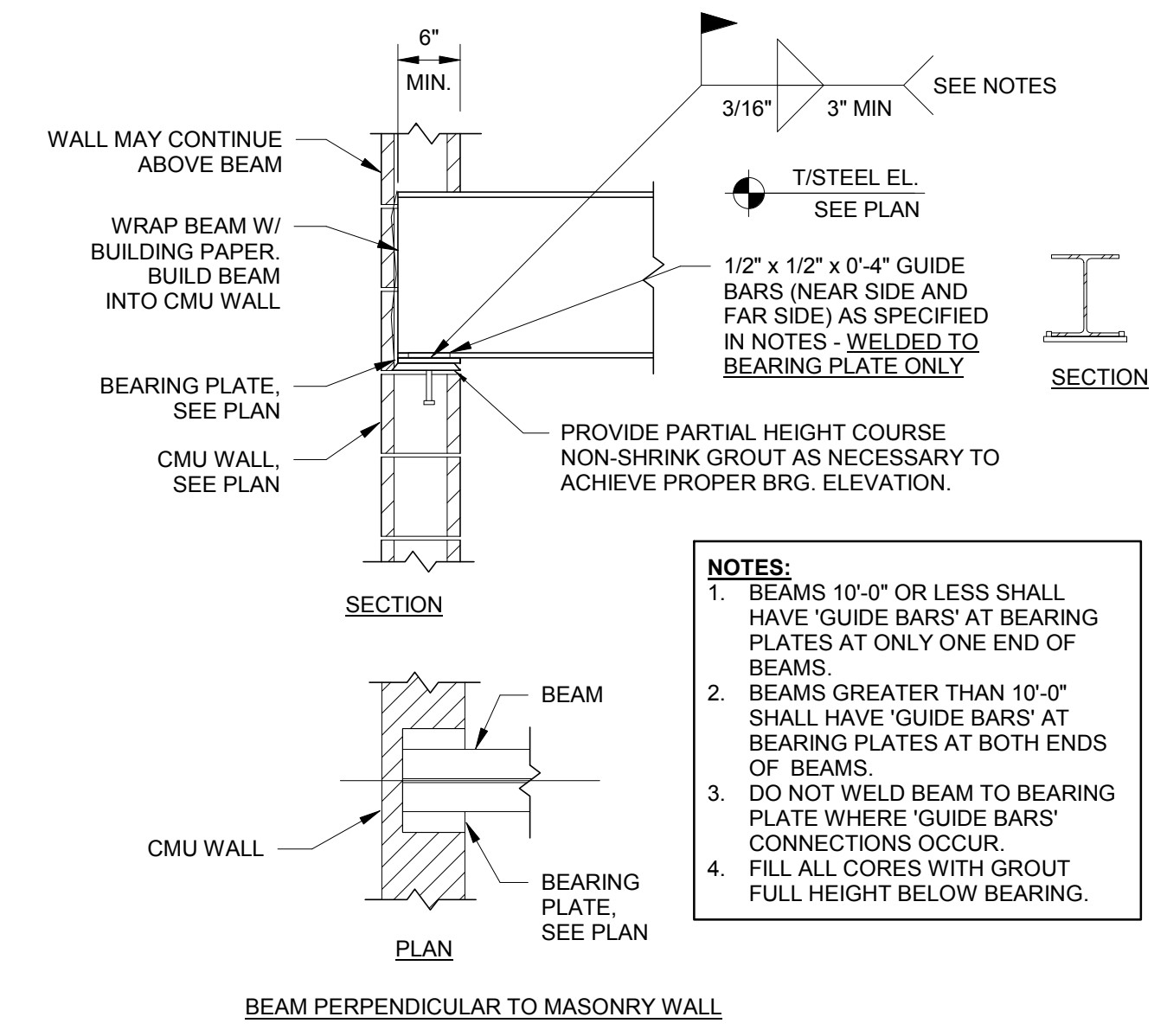
WASTEWATER TREATMENT PLANT EXPANSION - 2017
 CITY OF WARSAW, INDIANA
NEW ANAEROBIC DIGESTERS AND CONTROL BUILDING SECTIONS AND DETAILS

SHEET NO.
HS08
 PAGE NO.
 179

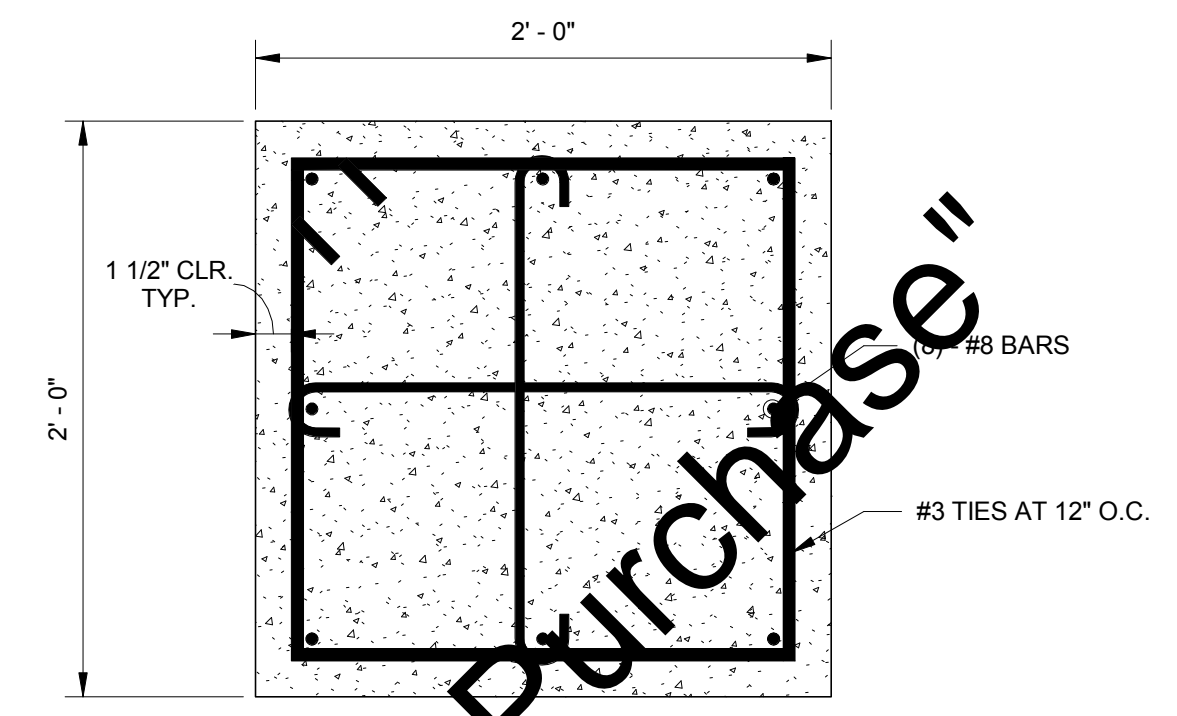
For Viewing Purposes Only Visit wesslerengineering.com to Purchase



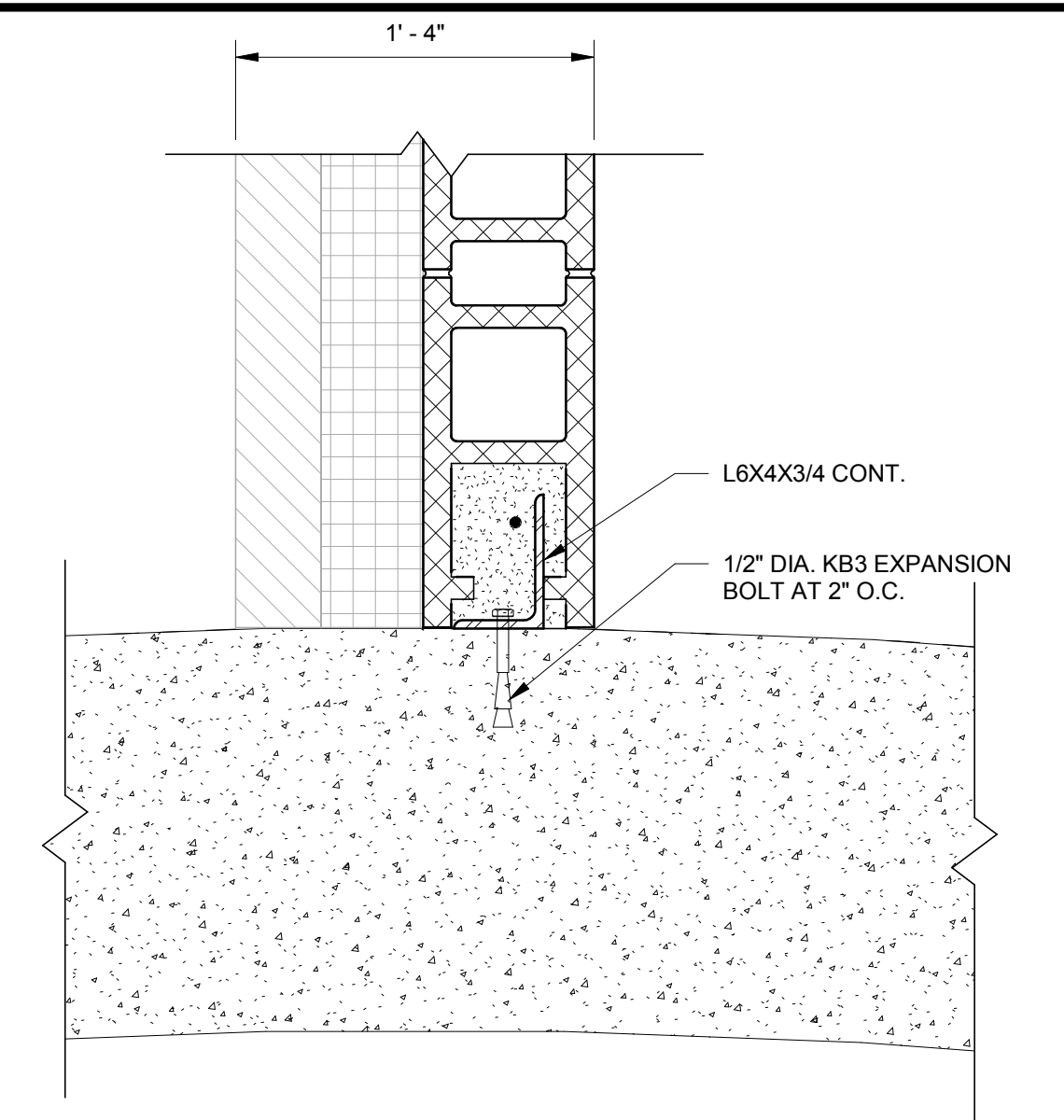
12 TYPICAL INTERIOR LINTEL DETAIL
HS09 3/4" = 1'-0"



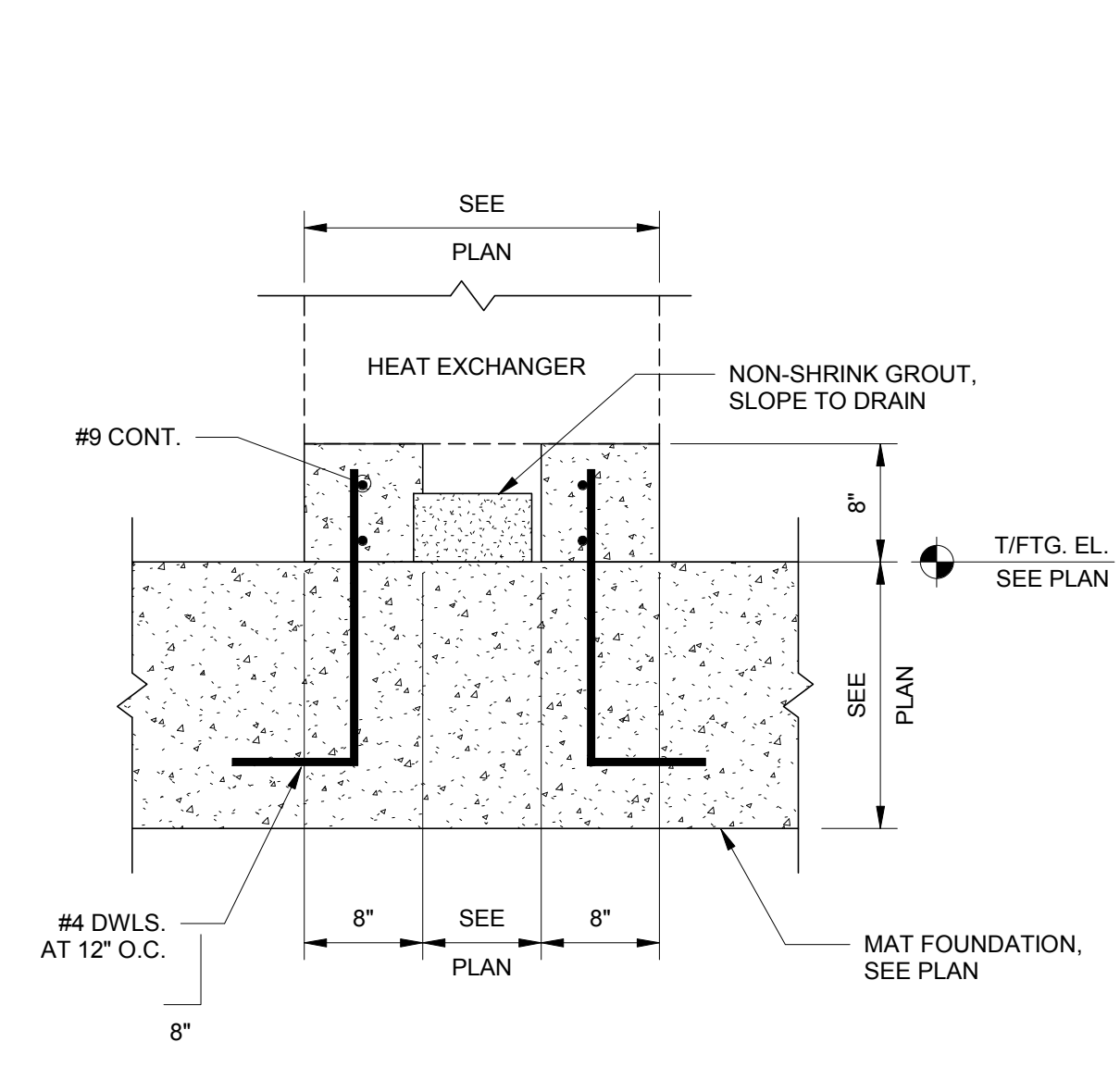
7 TYPICAL WALL MOUNTED P.R.V.
HS09 1" = 1'-0"



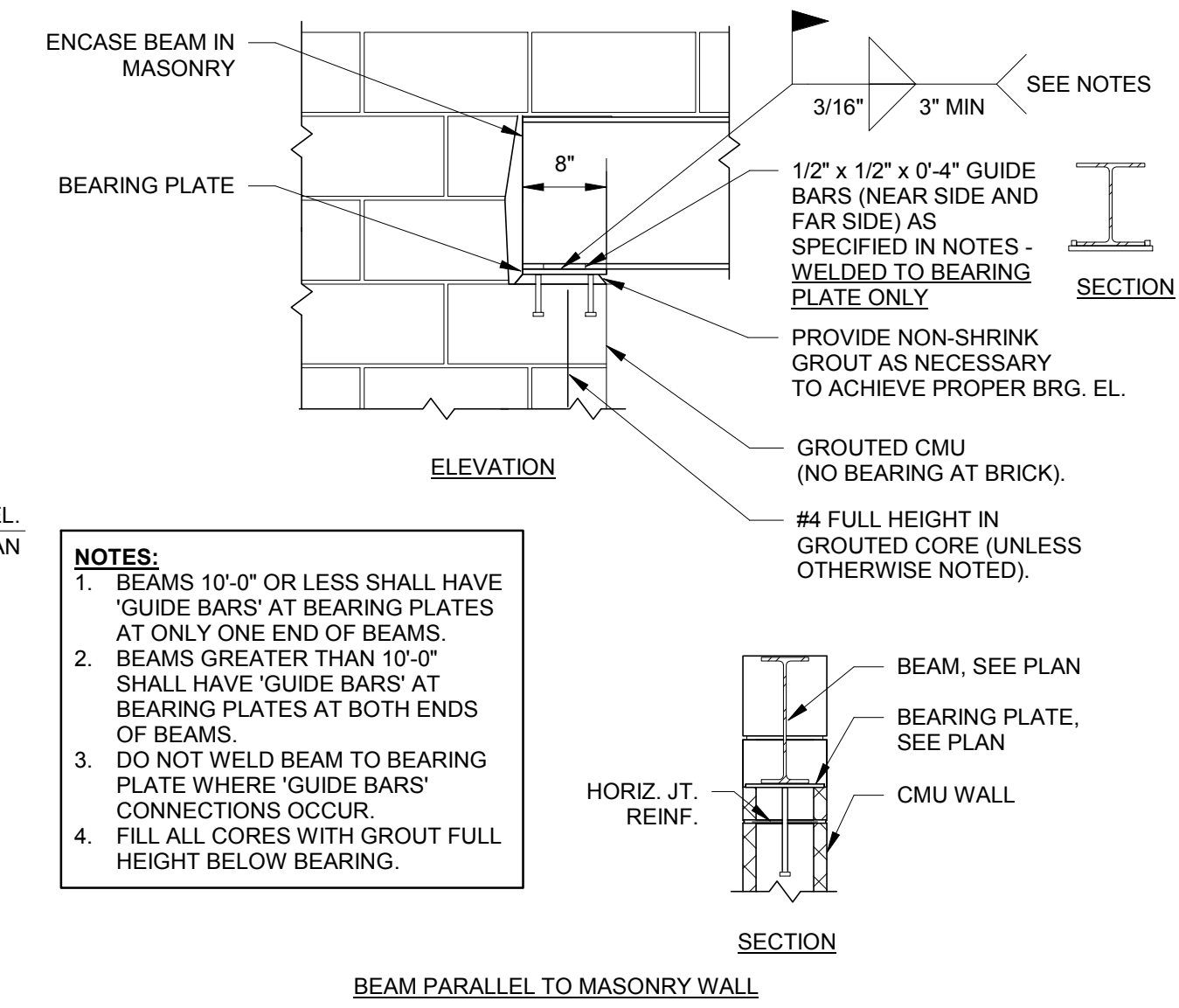
4 C3 COLUMN REFERENCE
HS09 1 1/2" = 1'-0"



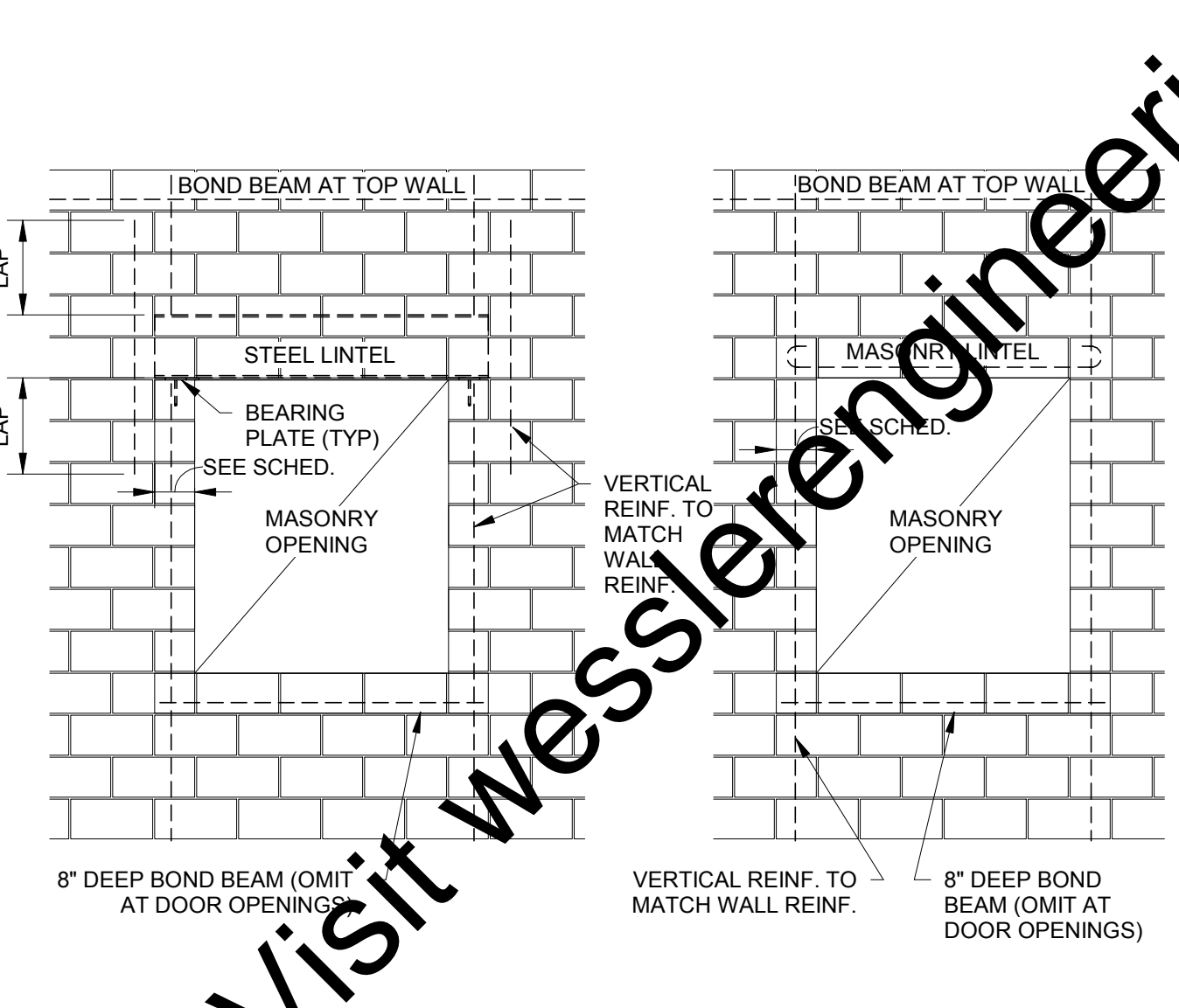
1 SECTION
HS09 1 1/2" = 1'-0"



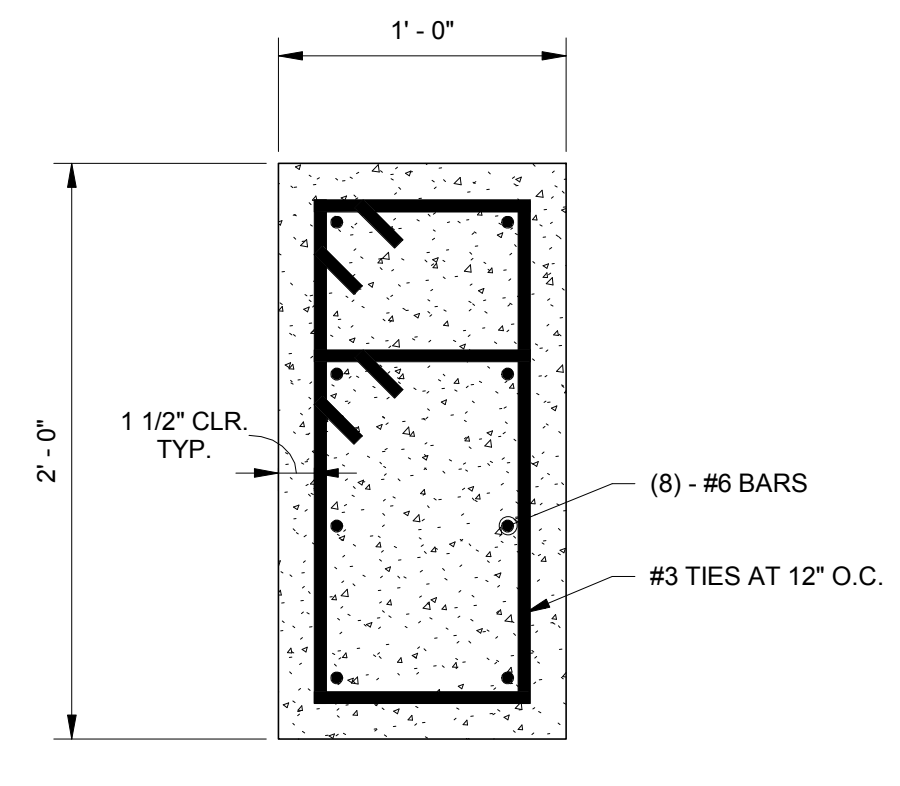
13 SECTION
HS09 1" = 1'-0"



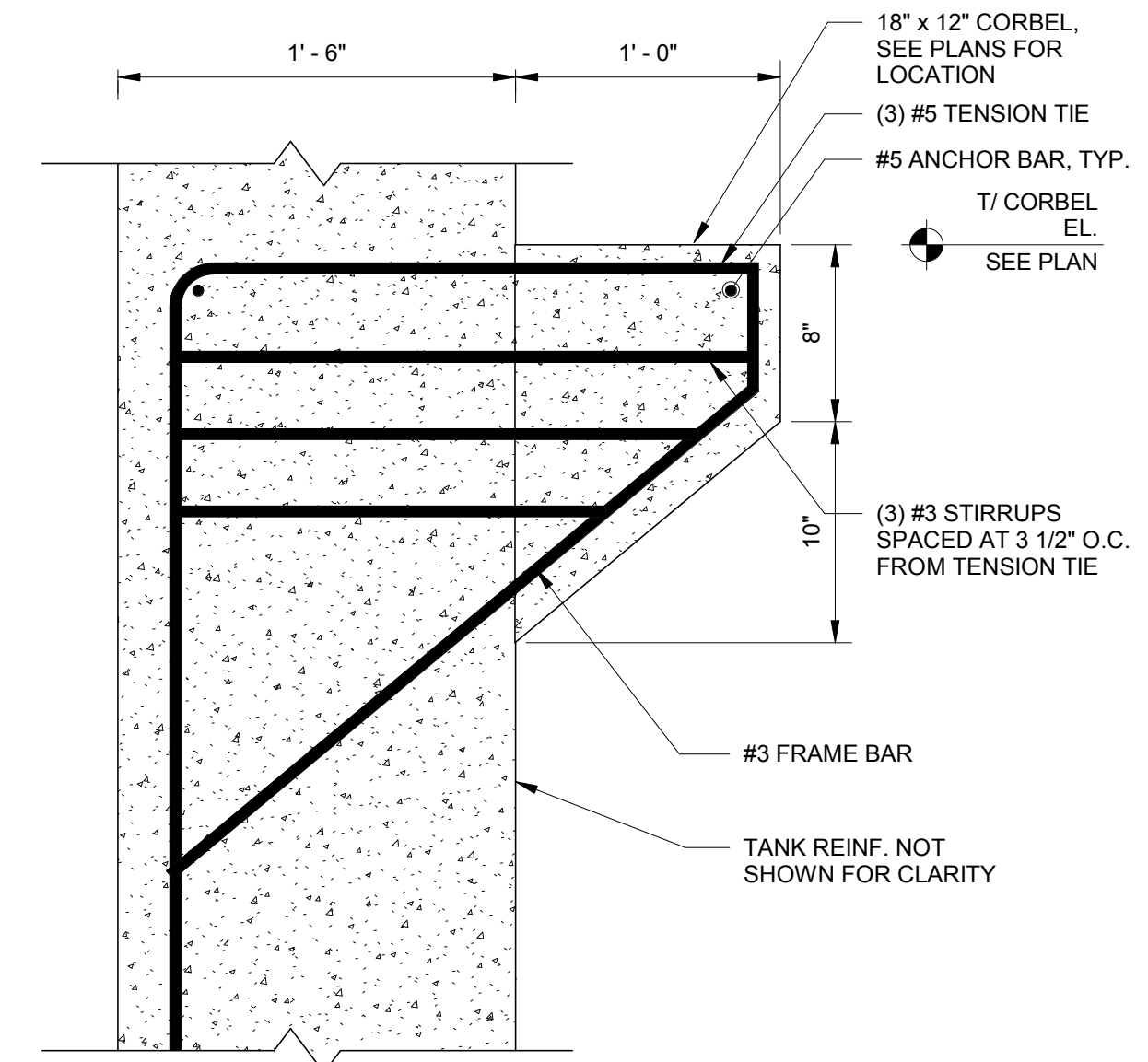
10 STEEL BEAM LINTEL DETAIL
HS09 3/4" = 1'-0"



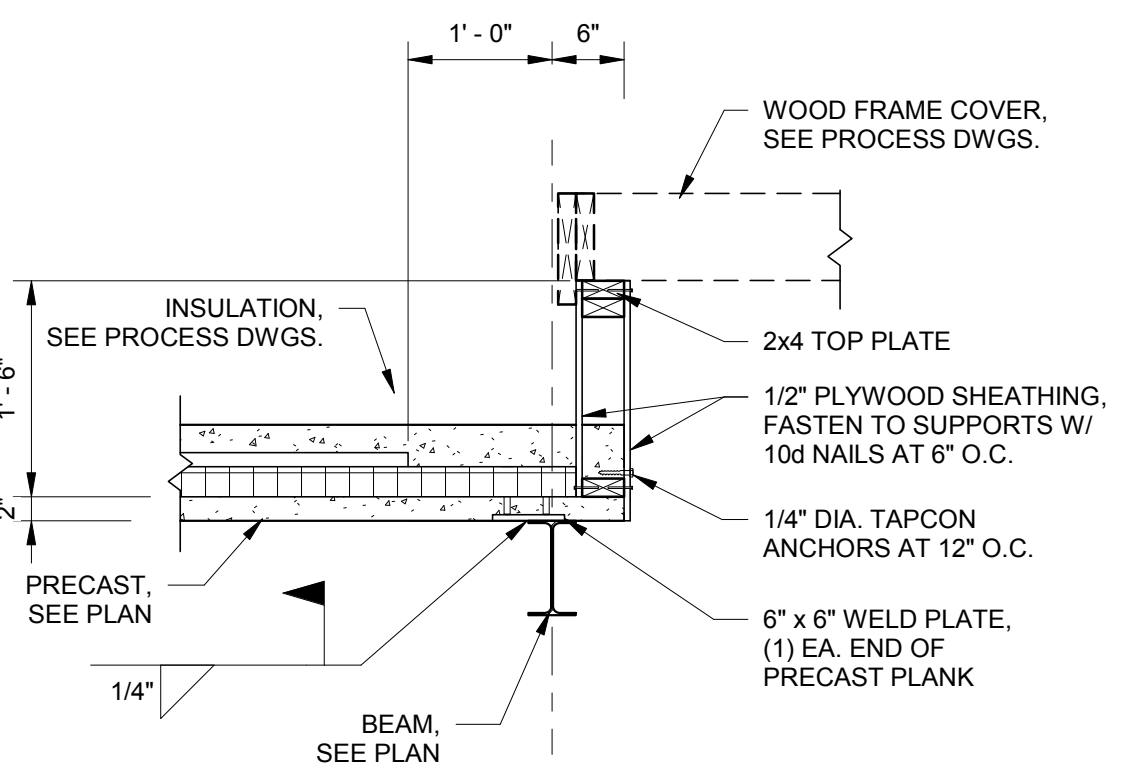
8 TYPICAL WALL OPENING REINFORCING
HS09 3/8" = 1'-0"



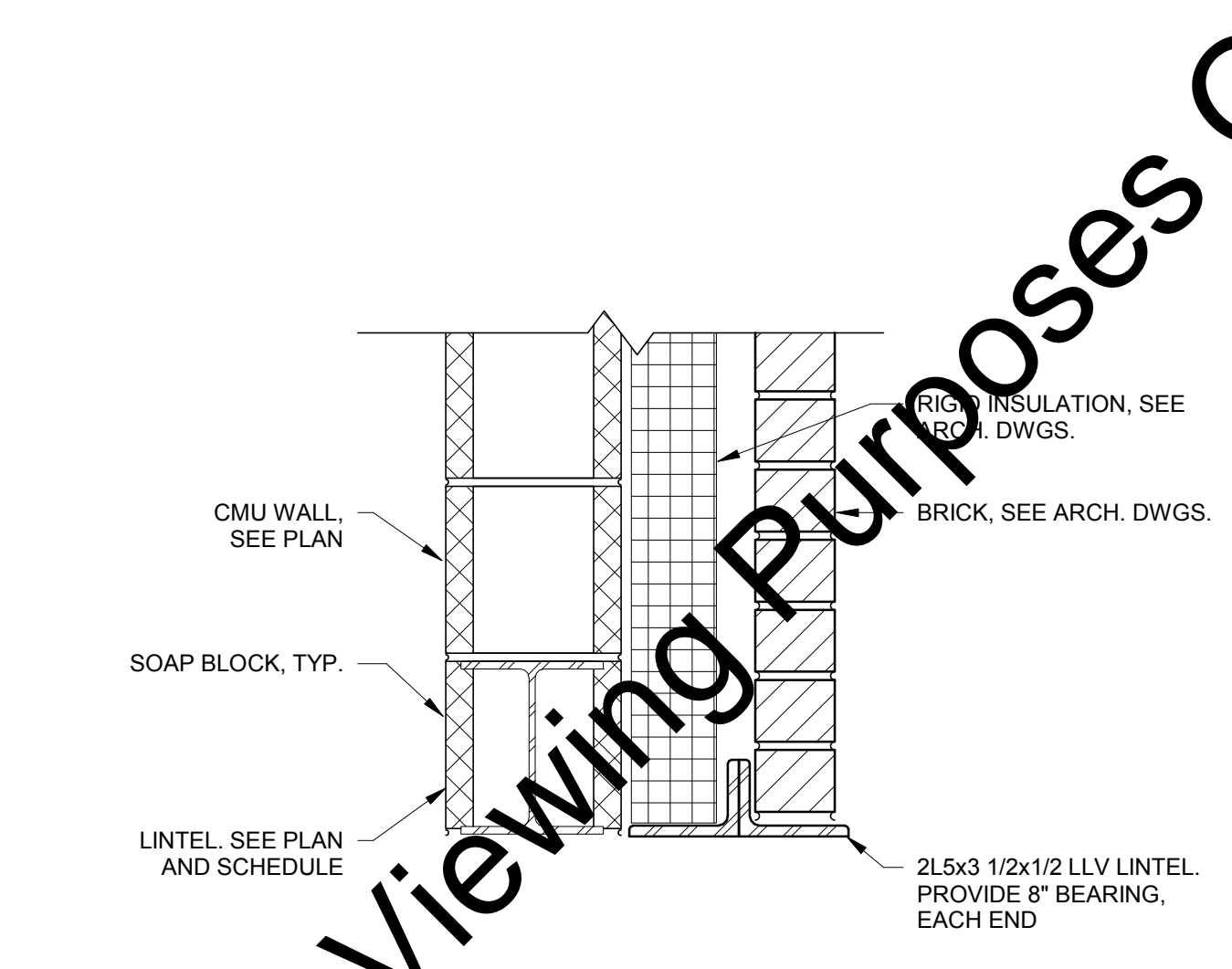
6 C4 COLUMN REFERENCE
HS09 1 1/2" = 1'-0"



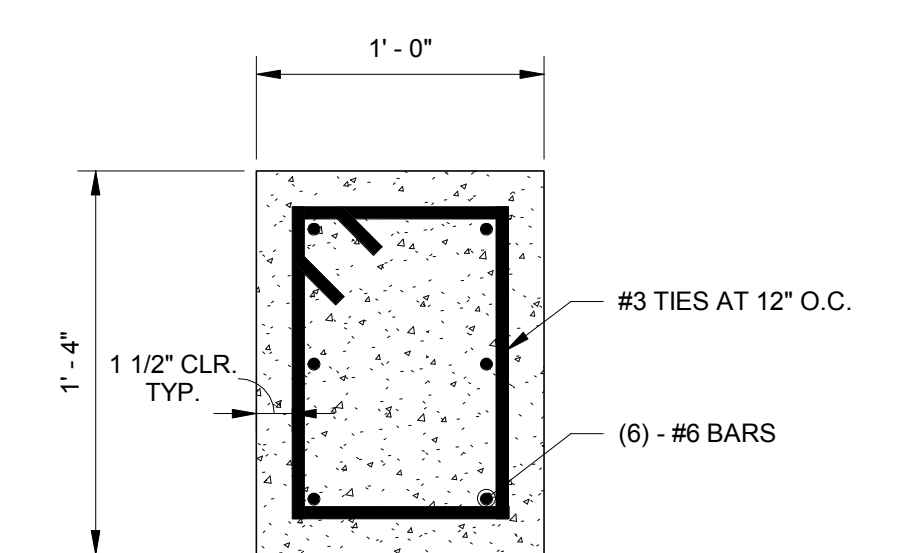
2 SECTION
HS09 1 1/2" = 1'-0"



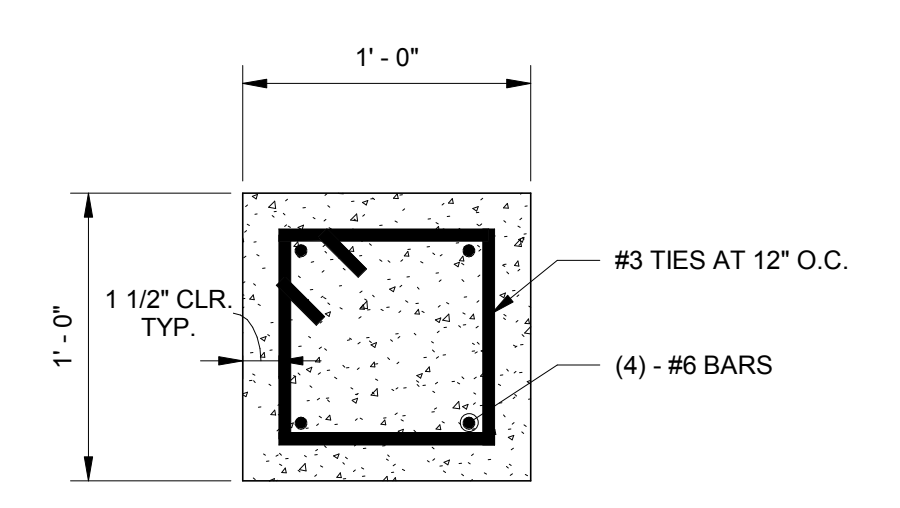
14 SECTION
HS09 3/4" = 1'-0"



9 SECTION
HS09 3/4" = 1'-0"



6 C4 COLUMN REFERENCE
HS09 1 1/2" = 1'-0"



3 C1 COLUMN REFERENCE
HS09 1 1/2" = 1'-0"

CE Solutions
structural engineers
10 Shoshone Drive Carmel, IN 46032 317.818.1912 cesolutionsinc.com

| SCALE VERIFICATION | DRAWN BY | RMS | NO. | DATE | INITIALS | REVISION DESCRIPTIONS |
|--|----------------|---------------|-----|------|----------|-----------------------|
| BAR IS ONE INCH LONG ON ORIGINAL DRAWING | CHECKED BY | JDT | | | | |
| | APPROVED BY | JDT | | | | |
| | ISSUE DATE | 09/04/2018 | | | | |
| | PROJECT NUMBER | 162813-04-003 | | | | |

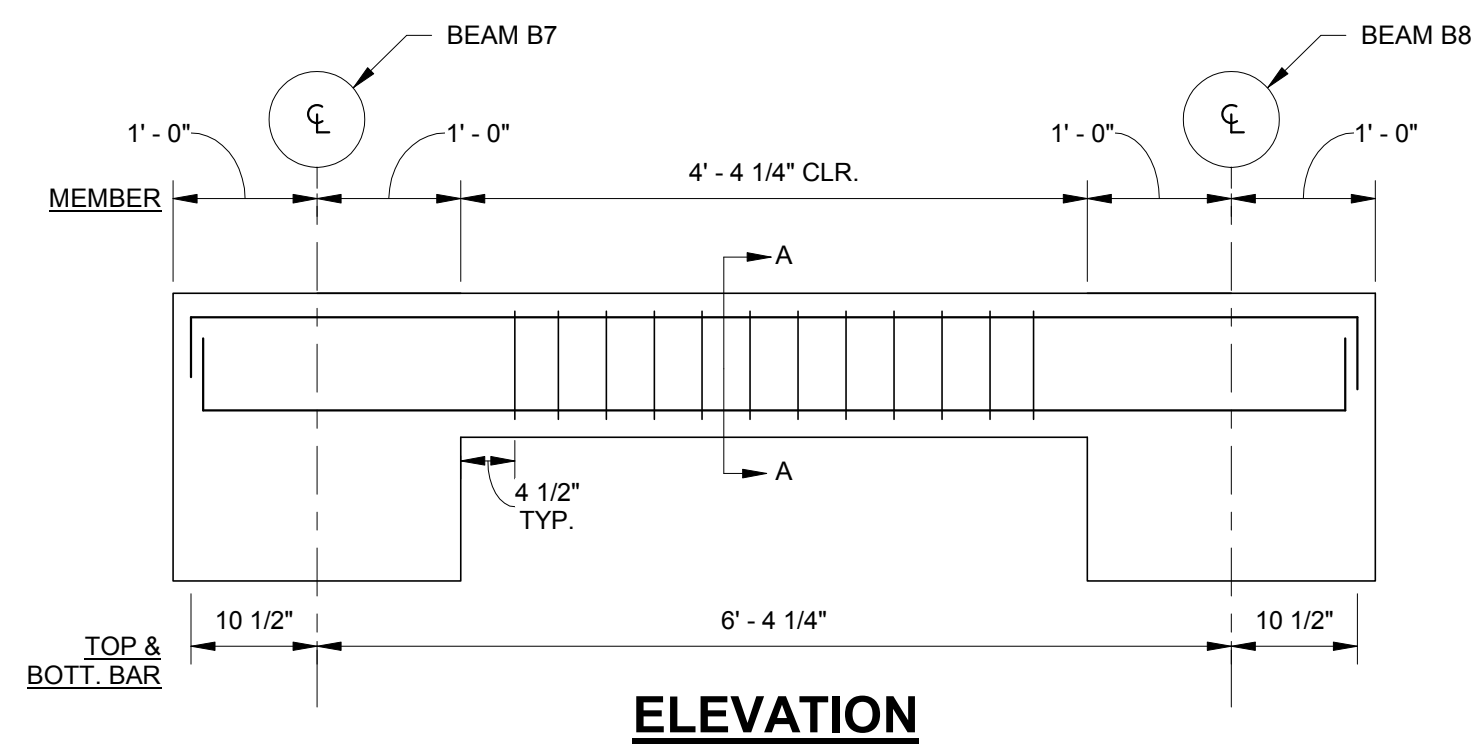
WESSLER ENGINEERING
More than a Project™

JOHN DAVID TAYLOR
REGISTERED PROFESSIONAL ENGINEER
No. PE19900097
STATE OF INDIANA
09/04/2018

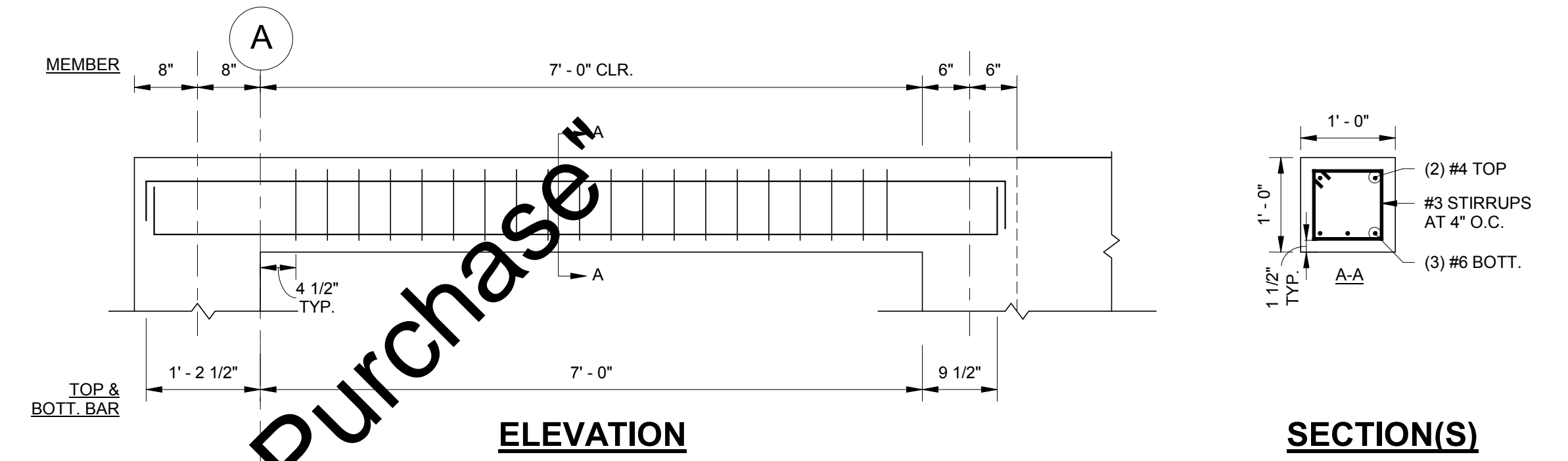
WASTEWATER TREATMENT PLANT EXPANSION - 2017
CITY OF WARSAW, INDIANA
NEW ANAEROBIC DIGESTERS AND CONTROL BUILDING SECTIONS AND DETAILS

SHEET NO. **HS09**
PAGE NO. 180

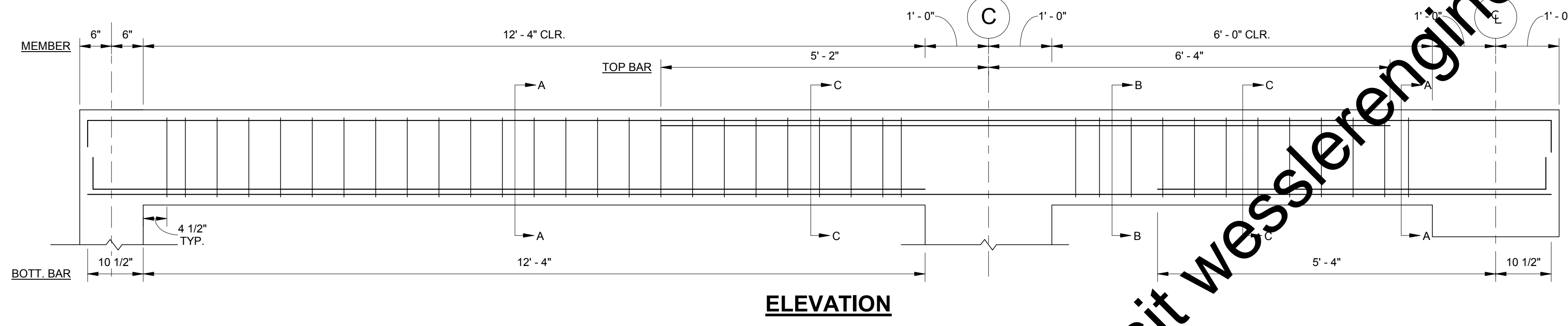
Printed: 9/3/2018 10:55:29 AM C:\Users\mahar\Documents\ANAREOBIC DIGESTERS CONTROL BUILDING STRUCT. CENTRAL_mahar\cesolutionsinc.com.vt



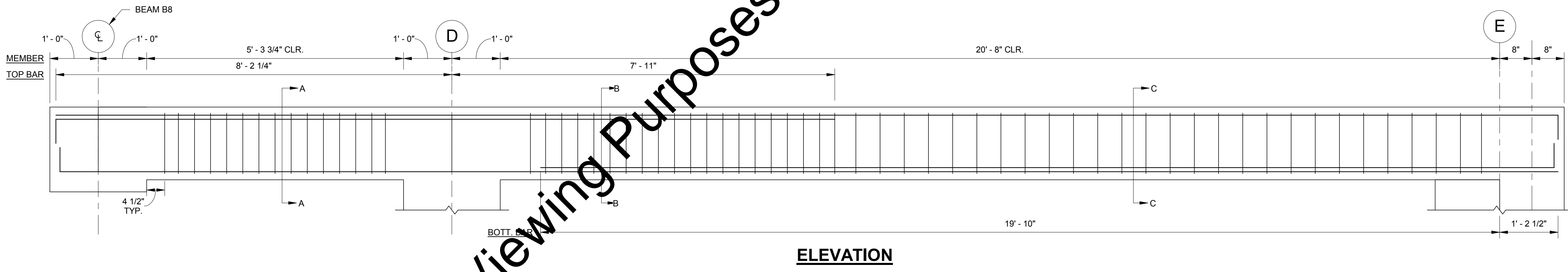
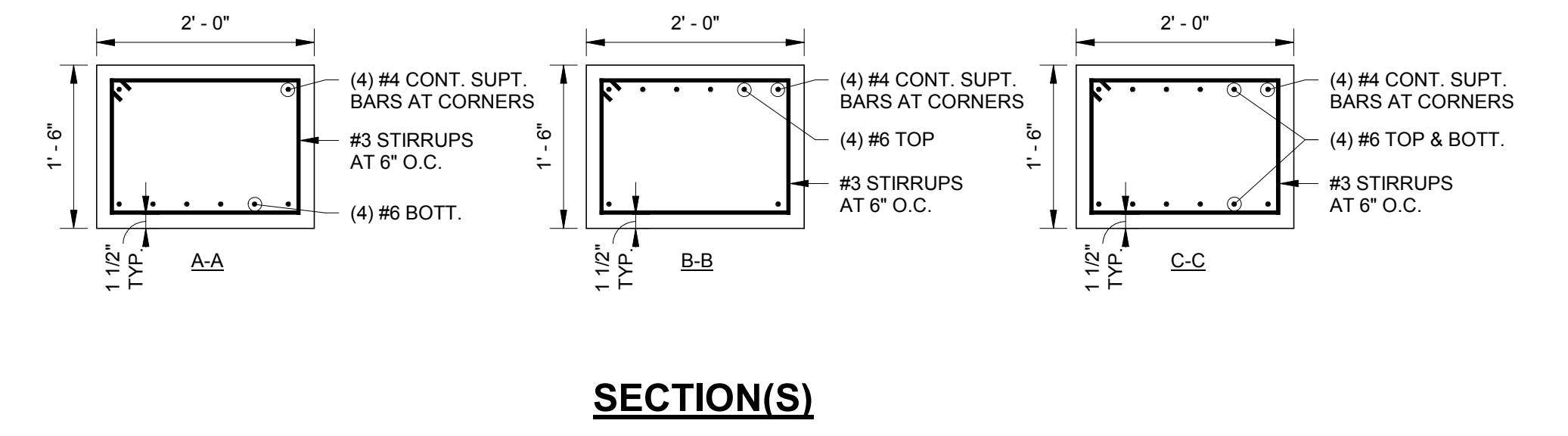
4 B4 REINFORCING
HS10 3/4" = 1'-0"



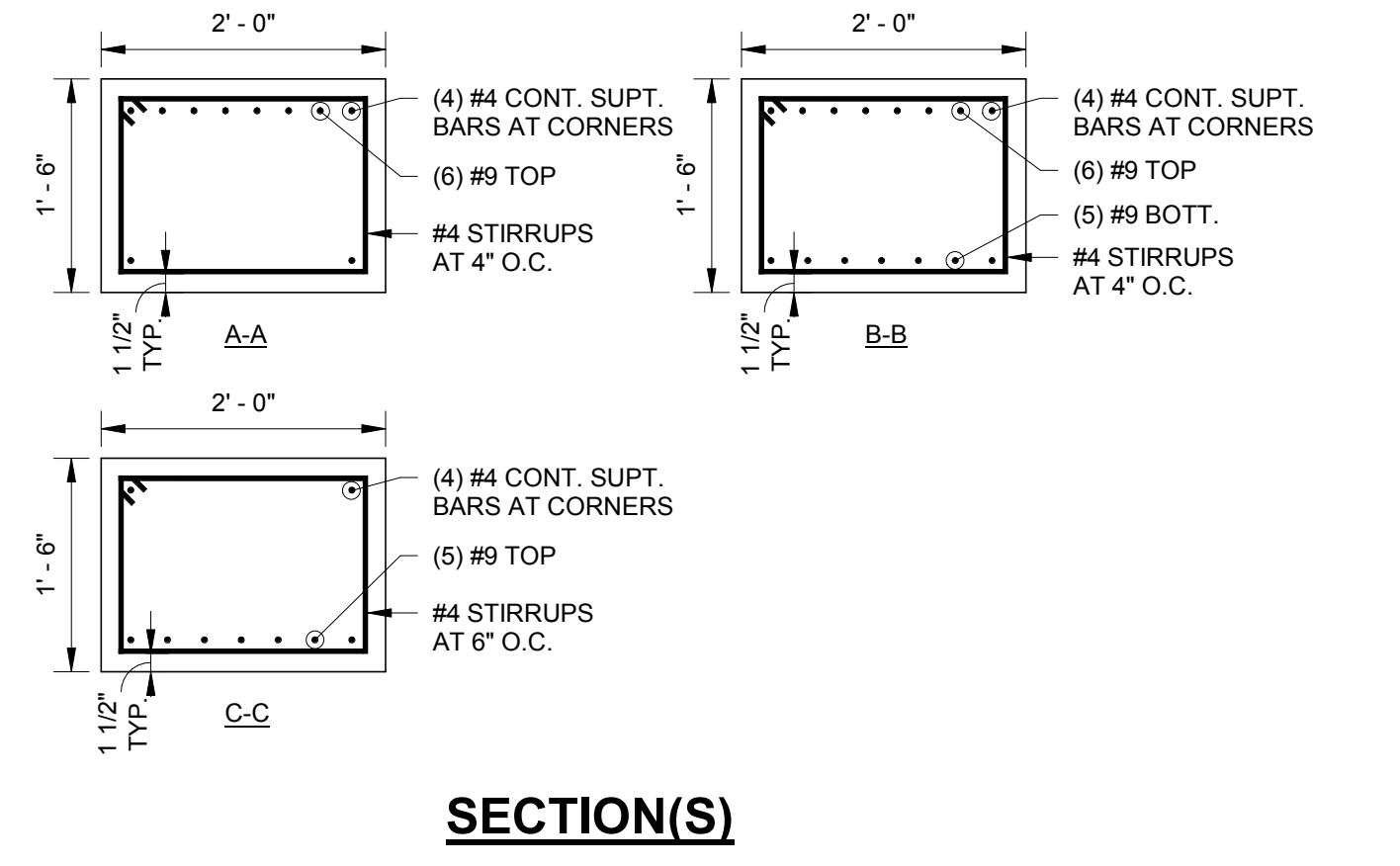
1 B4 REINFORCING
HS10 3/4" = 1'-0"



2 B2 REINFORCING
HS10 3/4" = 1'-0"

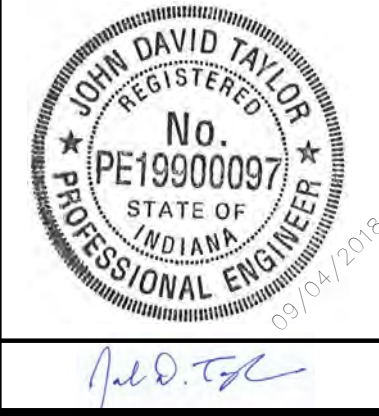


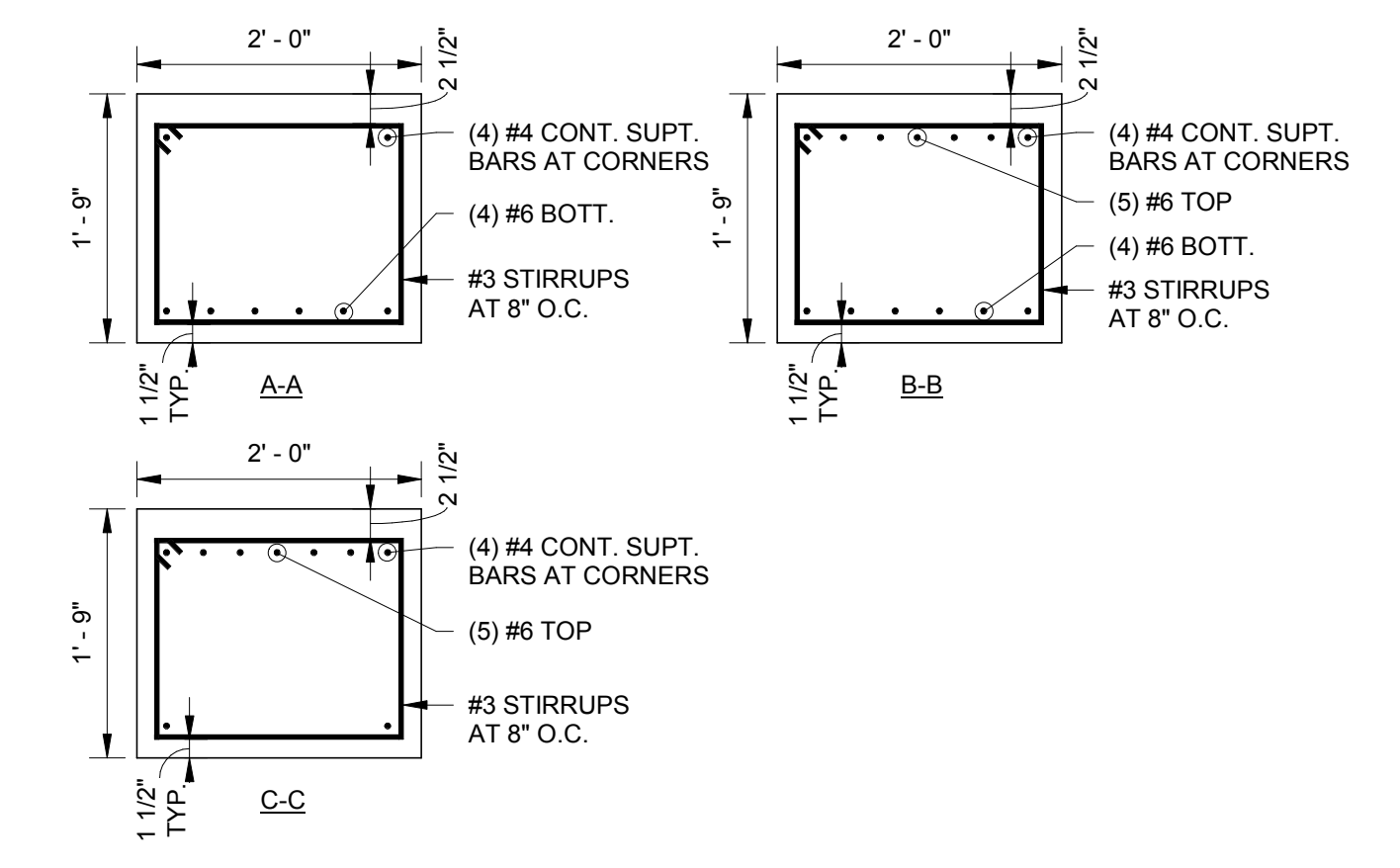
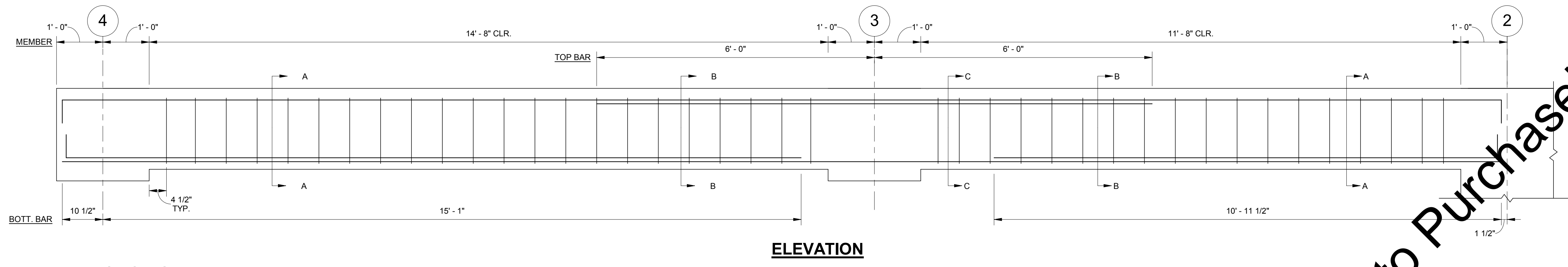
3 B3 REINFORCING
HS10 3/4" = 1'-0"



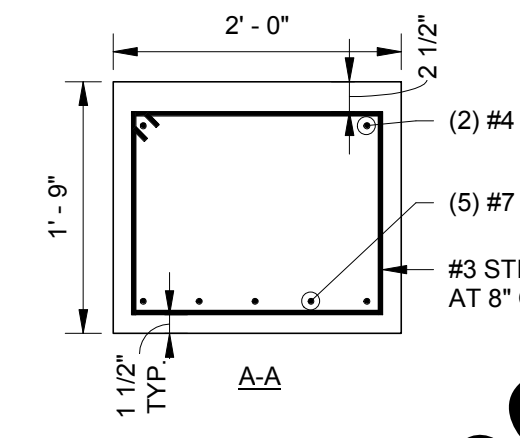
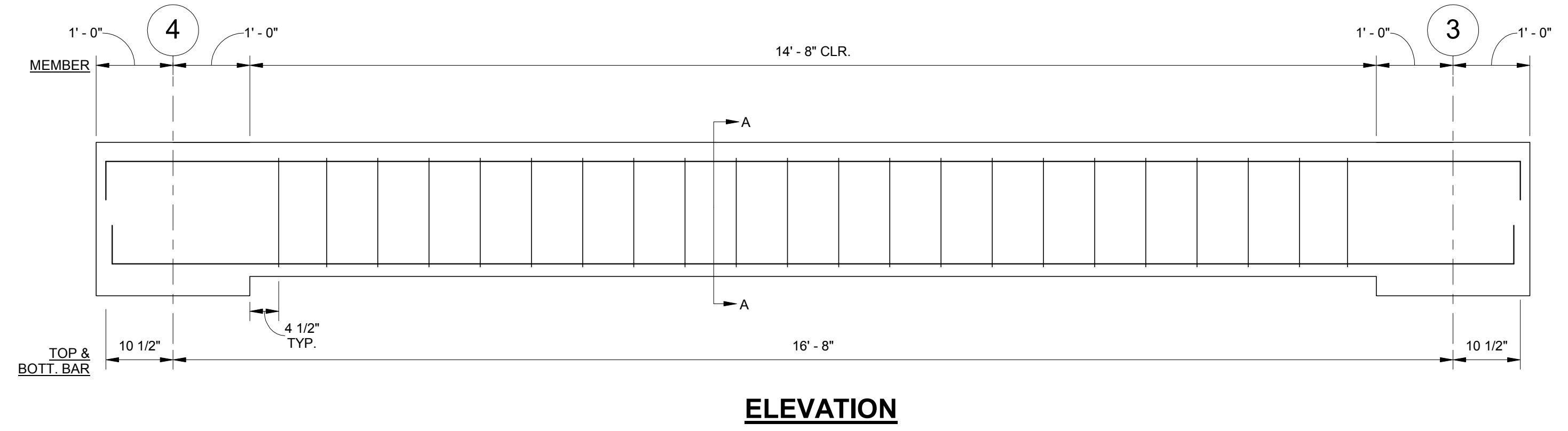
"For Viewing Purposes Only - Visit wesslerengineering.com to Purchase"

| SCALE VERIFICATION | DRAWN BY | RMS | NO. | DATE | INITIALS | REVISION DESCRIPTIONS |
|--|----------------|---------------|-----|------|----------|-----------------------|
| BAR IS ONE INCH LONG ON ORIGINAL DRAWING | CHECKED BY | JDT | | | | |
| | APPROVED BY | JDT | | | | |
| | ISSUE DATE | 09/04/2018 | | | | |
| | PROJECT NUMBER | 162813-04-003 | | | | |

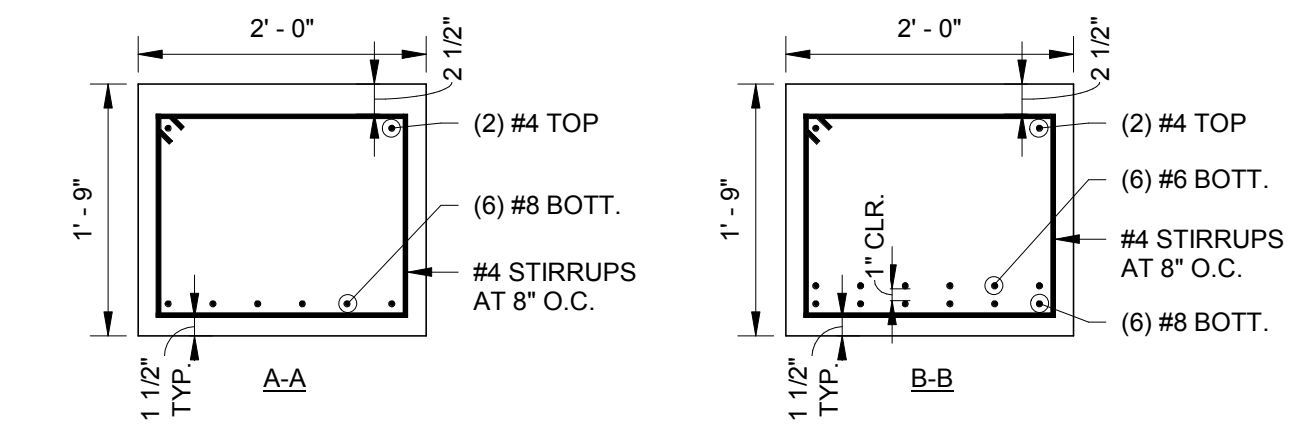
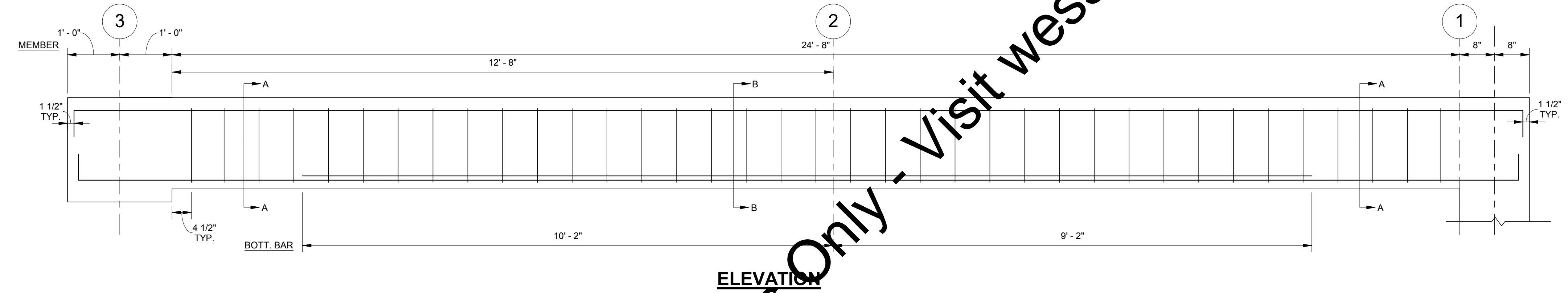




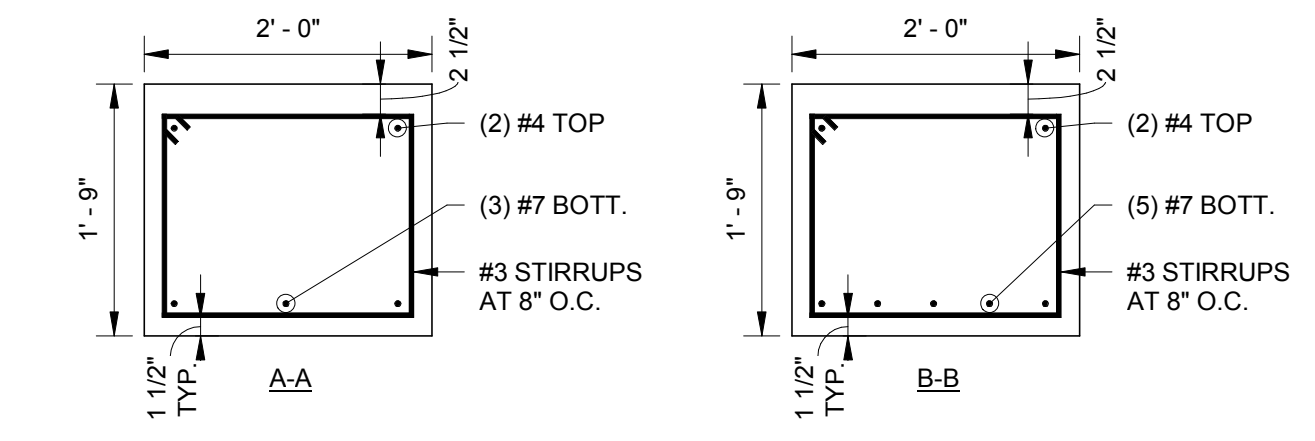
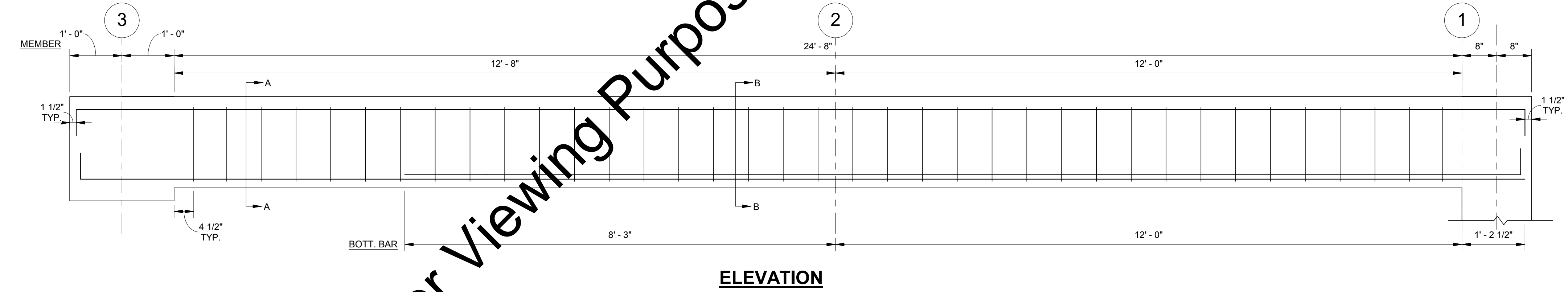
1 B5 REINFORCING
HS11 3/4" = 1'-0"



2 B6 REINFORCING
HS11 3/4" = 1'-0"



3 B7 REINFORCING
HS11 3/4" = 1'-0"



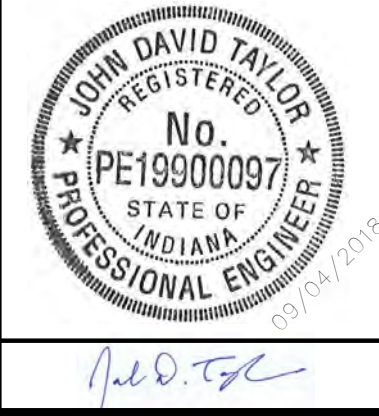
4 B8 REINFORCING
HS11 3/4" = 1'-0"

"For Viewing Purposes Only - Visit wesslerengineering.com to Purchase"

Printed: 8/31/2018 10:55:30 AM C:\Users\mahar\Documents\ANAREOBIC DIGESTERS CONTROL BUILDING STRUCT. CENTRAL_mahar@cesolutionsinc.com.vrt

10 Shoshone Drive Carmel, IN 46032 317.818.1912 cesolutionsinc.com

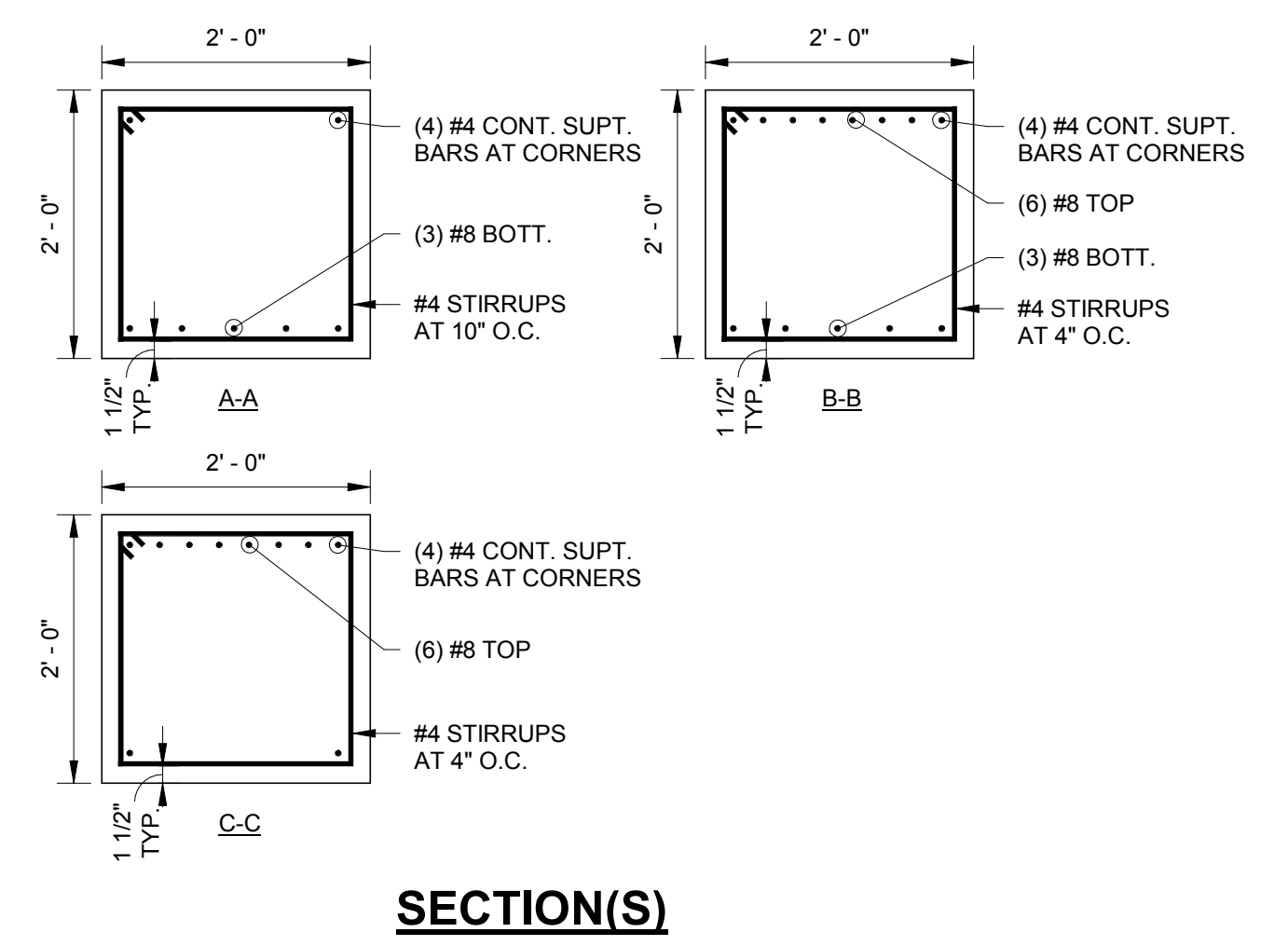
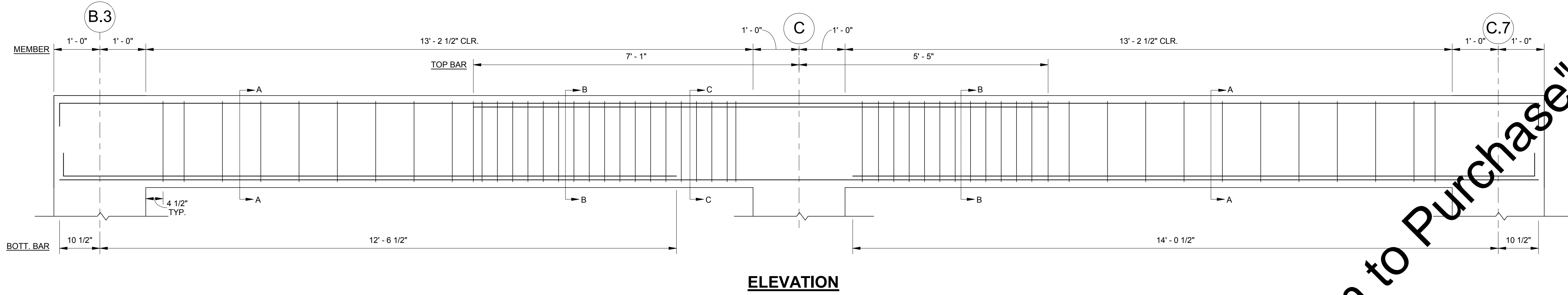
| SCALE VERIFICATION | DRAWN BY | RMS | NO. | DATE | INITIALS | REVISION DESCRIPTIONS |
|--|----------------|---------------|-----|------|----------|-----------------------|
| BAR IS ONE INCH LONG ON ORIGINAL DRAWING | CHECKED BY | JDT | | | | |
| | APPROVED BY | JDT | | | | |
| | ISSUE DATE | 09/04/2018 | | | | |
| | PROJECT NUMBER | 162813-04-003 | | | | |



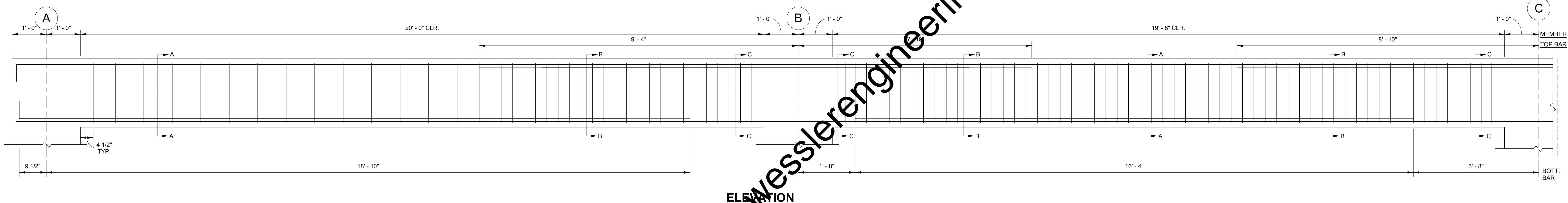
More than a Project™

WASTEWATER TREATMENT PLANT EXPANSION - 2017
CITY OF WARSAW, INDIANA
NEW ANAEROBIC DIGESTERS AND CONTROL BUILDING CONCRETE BEAM DETAILS

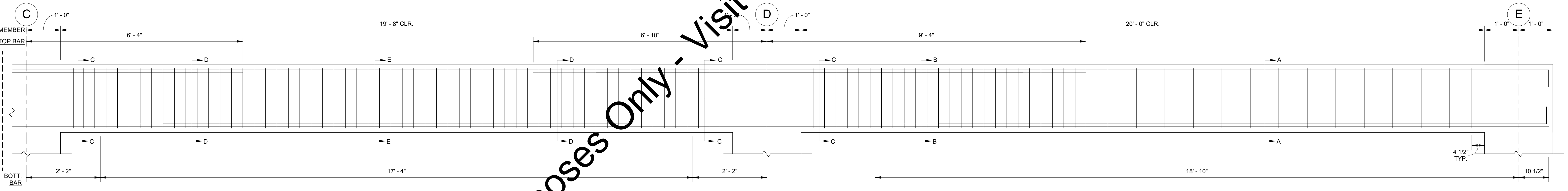
SHEET NO. **HS11**
PAGE NO. 182



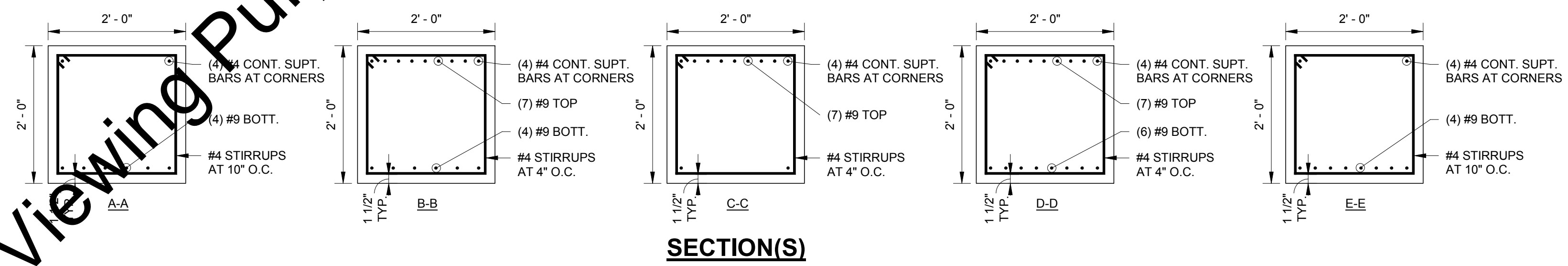
1 B9 REINFORCING
HS12 / 3/4" = 1'-0"



ELEVATION



ELEVATION



SECTION(S)

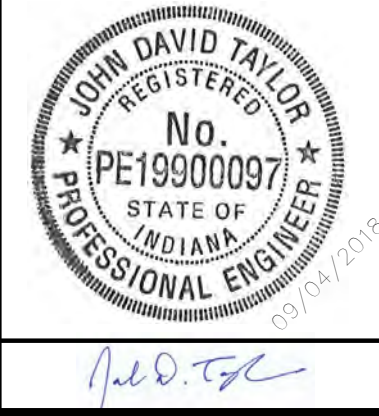
2 B10 REINFORCING
HS12 / 3/4" = 1'-0"

"For Viewing Purposes Only - Visit wesslerengineering.com to Purchase"

Plotter: 8/31/2018 10:55:30 AM C:\Users\mahart\Documents\ANAREOBIC DIGESTERS CONTROL BUILDING STRUCT. CENTRAL_mahart@cesolutionsinc.com.vt

CE Solutions
structural engineers
10 Shoshone Drive Carmel, IN 46032 317.818.1912 cesolutionsinc.com

| SCALE VERIFICATION | DRAWN BY | RMS | NO. | DATE | INITIALS | REVISION DESCRIPTIONS |
|--|----------------|---------------|-----|------|----------|-----------------------|
| BAR IS ONE INCH LONG ON ORIGINAL DRAWING | CHECKED BY | JDT | | | | |
| | APPROVED BY | JDT | | | | |
| | ISSUE DATE | 09/04/2018 | | | | |
| | PROJECT NUMBER | 162813-04-003 | | | | |



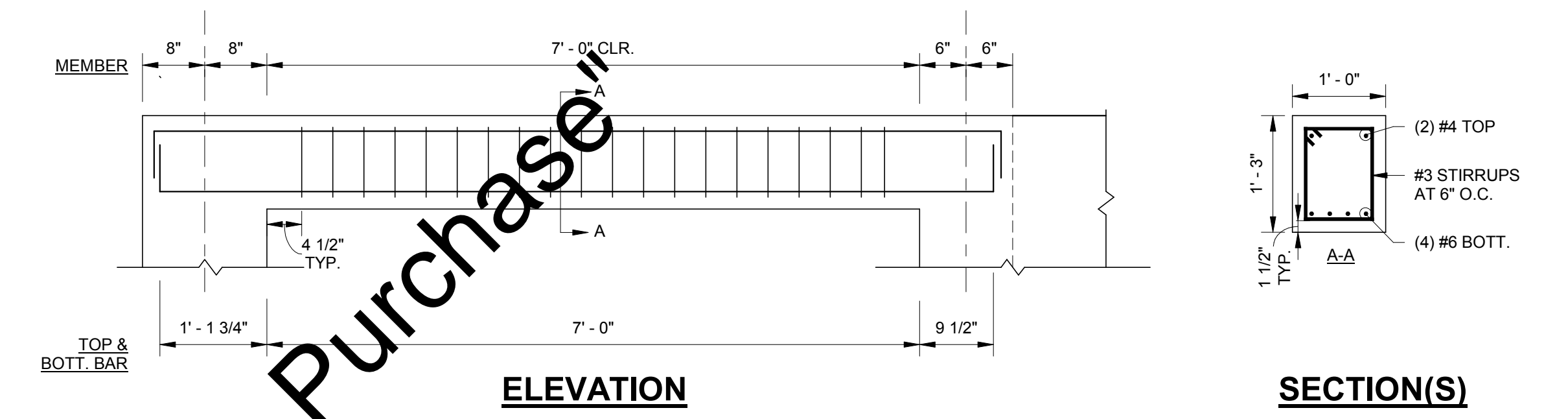
WESSLER ENGINEERING
More than a Project™

WASTEWATER TREATMENT PLANT EXPANSION - 2017
CITY OF WARSAW, INDIANA
NEW ANAEROBIC DIGESTERS AND CONTROL BUILDING CONCRETE BEAM DETAILS

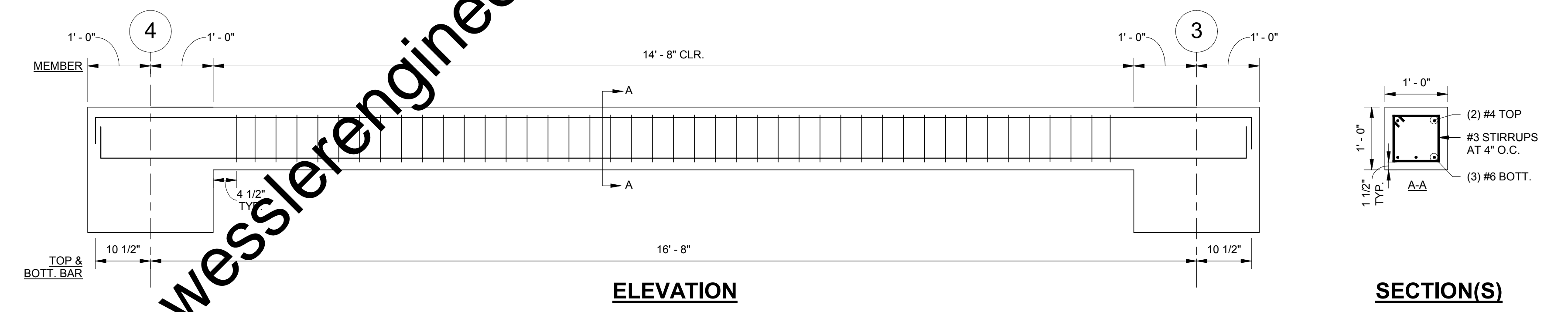
SHEET NO.
HS12
PAGE NO.
183

P:\User\mahar\Documents\ANAREBIC DIGESTERS CONTROL BUILDING STRUCT. CENTRAL_mahar@cesolutionsinc.com.vrt
 8/31/2018 10:55:31 AM

"For Viewing Purposes Only" Visit wesslerengineering.com to Purchase



1 B1 REINFORCING
HS13 3/4" = 1'-0"

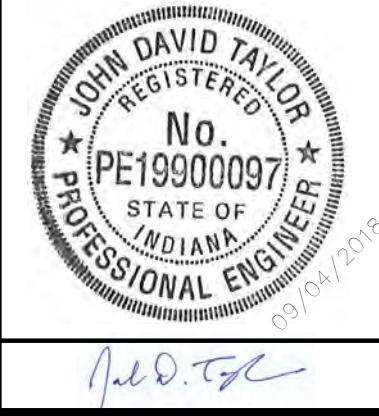


2 B12 REINFORCING
HS13 3/4" = 1'-0"

CE Solutions
structural engineers

10 Shoshone Drive Carmel, IN 46032 317.818.1912 cesolutionsinc.com

| SCALE VERIFICATION | DRAWN BY | RMS | NO. | DATE | INITIALS | REVISION DESCRIPTIONS |
|--|----------------|---------------|-----|------|----------|-----------------------|
| BAR IS ONE INCH LONG ON ORIGINAL DRAWING | CHECKED BY | JDT | | | | |
| | APPROVED BY | JDT | | | | |
| | ISSUE DATE | 09/04/2018 | | | | |
| | PROJECT NUMBER | 162813-04-003 | | | | |

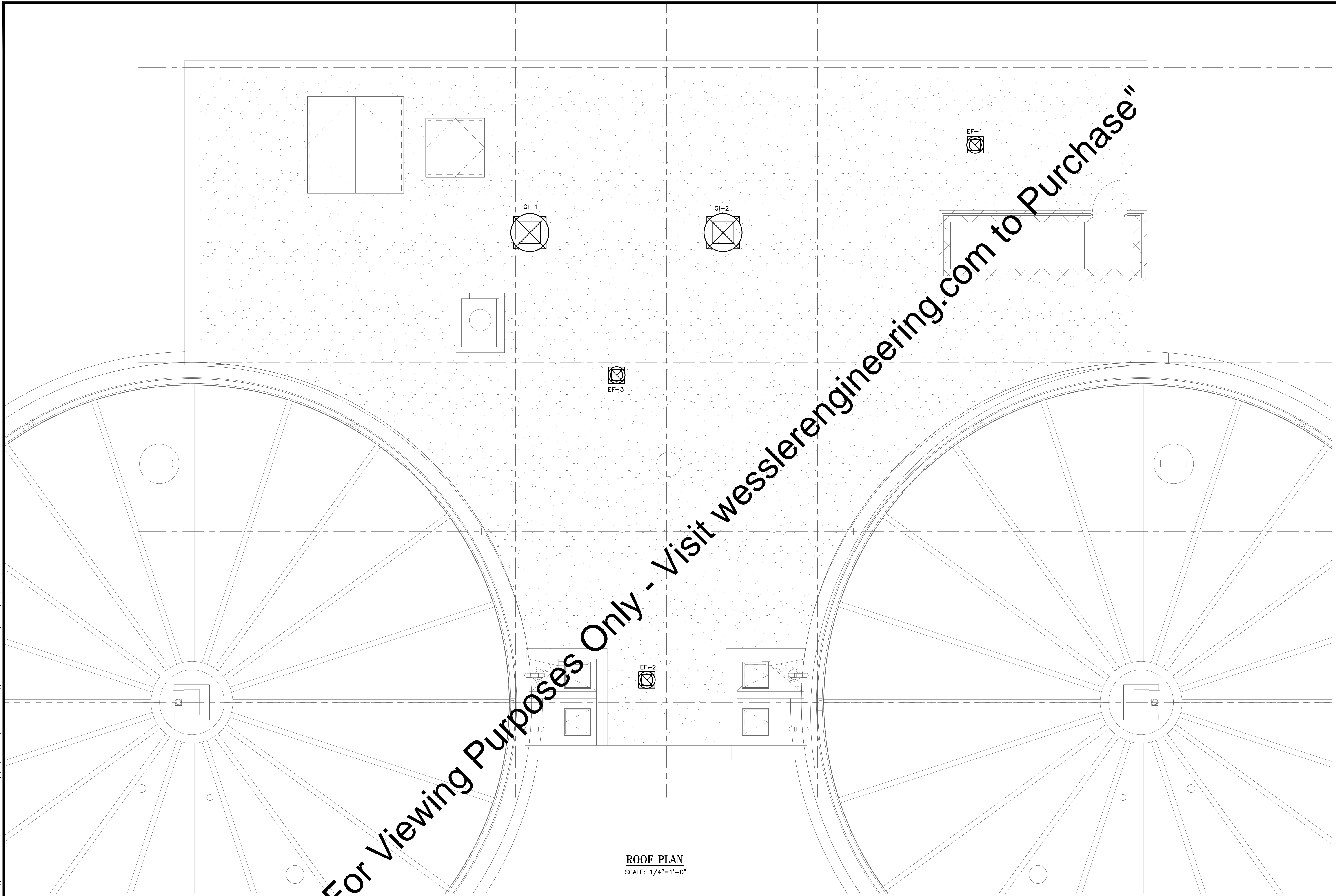


W
WESSLER
ENGINEERING
More than a Project™

WASTEWATER TREATMENT PLANT EXPANSION - 2017
CITY OF WARSAW, INDIANA
NEW ANAEROBIC DIGESTERS AND CONTROL BUILDING CONCRETE BEAM DETAILS

SHEET NO.
HS13
PAGE NO.
184

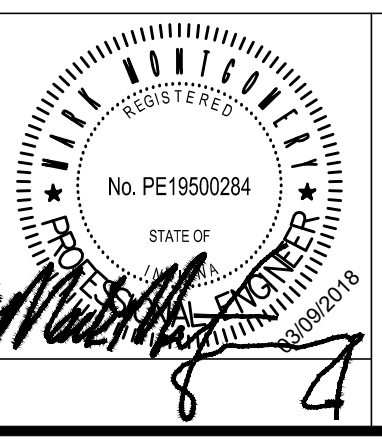
Drawing: T:\Projects\Warsaw WWT\Mechanical\Support Files\BASE-DIGEST\ROOF-HM02.dwg | Layout: HM02 | Plotted: 03/09/18 @ 04:22:09 | LastSavedBy: rmmontgomery



ROOF PLAN
SCALE: 1/4"=1'-0"



| SCALE VERIFICATION | DRAWN BY | NO. | DATE | INITIALS | REVISION DESCRIPTIONS |
|--|----------------|-----|----------|----------|-----------------------|
| BAR IS ONE INCH LONG ON ORIGINAL DRAWING | CHECKED BY | | 12/12/17 | | |
| | APPROVED BY | | | | |
| | ISSUE DATE | | | | |
| | MARCH 2018 | | | | |
| | PROJECT NUMBER | | | | |
| | 162813-04-003 | | | | |



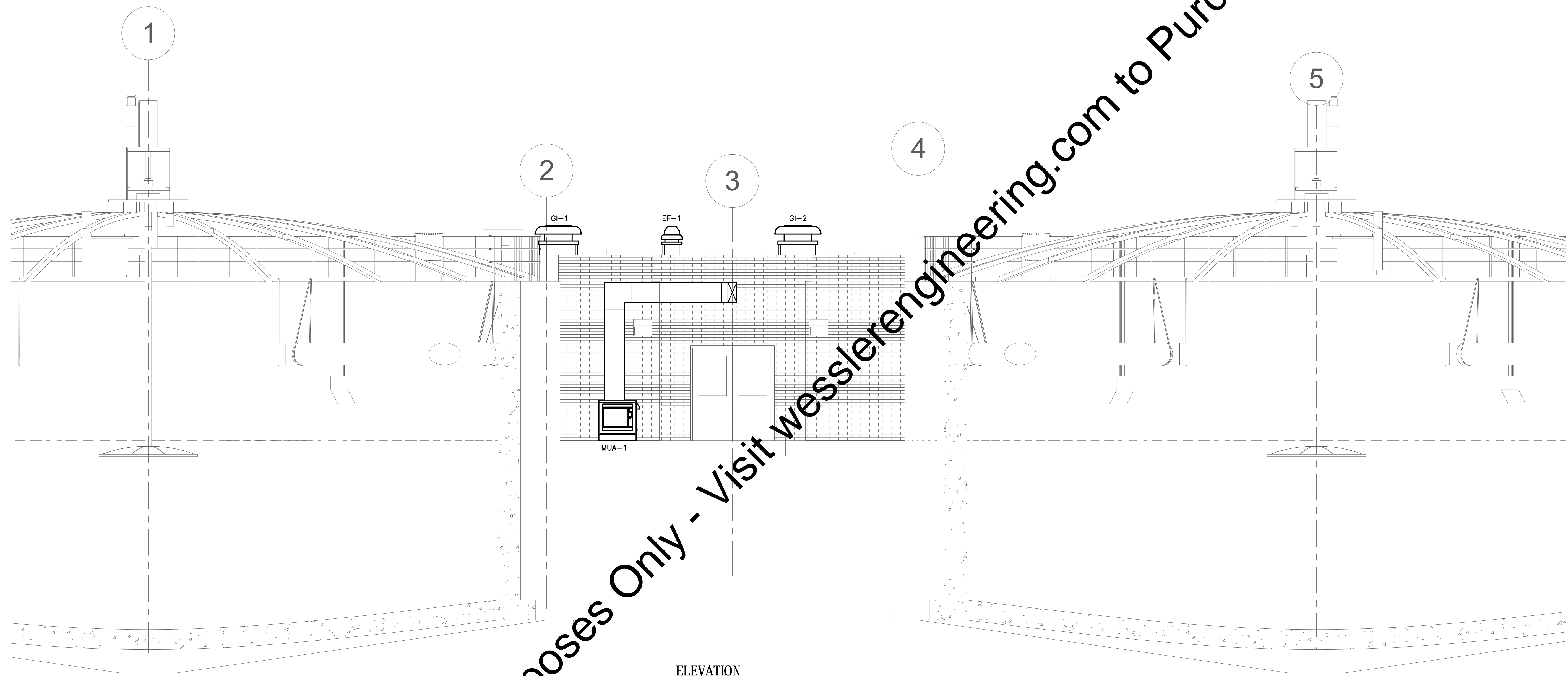
WASTEWATER TREATMENT PLANT EXPANSION - 2017

CITY OF WARSAW, INDIANA

**NEW ANAEROBIC DIGESTERS AND CONTROL BUILDING
ROOF PLAN**

SHEET NO.
HM02
PAGE NO.
186

Drawing: T:\Projects\Warsaw WWT\PM\Mechanical\Support Files\M-BASE-DIGEST-ELEV-HM03.dwg | Layout: HM03 | Plotted: 03/09/18 @ 03:46:33 | LastSavedBy: mmontgomery

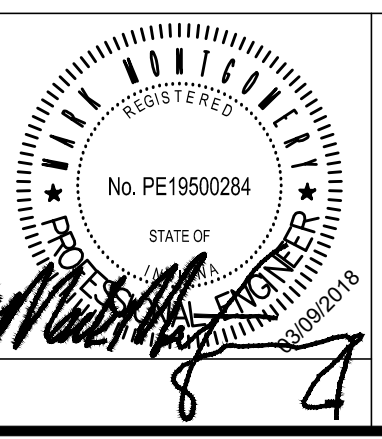


ELEVATION
SCALE: 1/4"=1'-0"

"For Viewing Purposes Only - Visit wesslerengineering.com to Purchase"



| SCALE VERIFICATION | DRAWN BY | NO. | DATE | INITIALS | REVISION DESCRIPTIONS |
|--|----------------|-----|----------|----------|-----------------------|
| BAR IS ONE INCH LONG ON ORIGINAL DRAWING | CHECKED BY | | 12/12/17 | | |
| | APPROVED BY | | | | |
| | ISSUE DATE | | | | |
| | MARCH 2018 | | | | |
| | PROJECT NUMBER | | | | |
| | 162813-04-003 | | | | |



WASTEWATER TREATMENT PLANT EXPANSION - 2017
CITY OF WARSAW, INDIANA
NEW ANAEROBIC DIGESTERS AND CONTROL BUILDING
MECHANICAL PLAN

SHEET NO.
HM03
PAGE NO.
187

Drawing: T:\Projects\Wastewater\WTPM\Mechanical\Support Files\BASE-DIGEST-SCHED-HM04.dwg | Layout: HM04 | Plotter: 03/09/18 @ 04:23:06 | LastSavedBy: rmoatgmmey

"For Viewing Purposes Only - Visit wesslerengineering.com to Purchase"

| EXHAUST FAN SCHEDULE | | | | | | | | | | | | | | | |
|----------------------|-------------------|------|-----|-------|------|-------------|-------|-------|------|------|----|-----------------|--------------|-------------------------------|----------------|
| TAG | LOCATION | TYPE | CFM | S.P. | FRPM | BHP (WATTS) | SONES | MOTOR | | | | UNIT WEIGHT LBS | ROOF OPENING | MANUFACTURER AND MODEL NUMBER | INTERLOCK WITH |
| | | | | | | | | HP | VOLT | RPM | PH | | | | |
| EF-1 | ELECTRICAL ROOM | ROOF | 500 | 0.375 | 1550 | (107) | 8.4 | 1/8 | 115 | 1725 | 1 | 35 | 13.5" SQ | LOREN COOK 90C15DH | MUA-1 |
| EF-2 | GAS HANDLING ROOM | ROOF | 500 | 0.375 | 1550 | (107) | 8.4 | 1/8 | 115 | 1725 | 1 | 35 | 13.5" SQ | LOREN COOK 90C15DH | MUA-1 |
| EF-2 | BOILER ROOM | ROOF | 500 | 0.375 | 1550 | (107) | 8.4 | 1/8 | 115 | 1725 | 1 | 35 | 13.5" SQ | LOREN COOK 90C15DH | MUA-1 |

ACCESSORIES: BACKDRAFT DAMPER, DISCONNECT

| LOUVER SCHEDULE | | | | | | | | | |
|-----------------|---------------|-------------------------------|-------|--------|--------------------|------|---------|---------------------|--|
| TAG | LOCATION | MANUFACTURER AND MODEL NUMBER | WIDTH | HEIGHT | FREE AREA (SQ. FT) | THCK | OPTIONS | NOTES | |
| L-1 | ELECTRIC ROOM | RUSKIN 206375DAX | 18 | 18 | 0.8 | 6" | 1,2 | INTERLOCK WITH EF-1 | |

OPTIONS: 1. 120V ACTUATOR 2. INTERLOCK WITH EXHAUST FAN OPERATION

| MAKE-UP AIR SCHEDULE | | | | | | | | | | | | | | | | | | |
|----------------------|-------------------------------|----------|----------------|--------|-----------|------------|-----------|----------|-----|--------------|--------|---------|-------|----------------|-----------------|---------|---------|----------------|
| TAG | MANUFACTURER AND MODEL NUMBER | LOCATION | SUPPLY AIR CFM | E.S.P. | HEATING | | | FAN DATA | | POWER SUPPLY | | | | GAS INLET SIZE | UNIT WEIGHT LBS | OPTIONS | NOTE(S) | INTERLOCK WITH |
| | | | | | MBH INPUT | MBH OUTPUT | TEMP RISE | HP | RPM | F.L.A. | M.C.A. | VOLTAGE | PHASE | | | | | |
| MUA-1 | REZNOR RDH-75 | GROUND | 563 | 0.25 | 75 | 60.75 | 99.0 | 1/4 | 554 | 12 | 15 | 460 | 3 | 1.5 | 120 | 1,3 | A | THERMOSTAT |

OPTIONS: 1. GFI CONVENIENCE OUTLET, 2. DDC CONTROLS, 3. INTEGRAL DISCONNECT, 4. ROOF CURB, 5. EXTRA FILTERS, 6. THRU-WALL INSTALLATION PACKAGE, 7. 3-WAY DISCHARGE DIFFUSER, 8. 4-WAY DISCHARGE DIFFUSER

NOTES: A. INCLUDES 2" THICK METAL MESH FILTERS.

| ELECTRIC UNIT HEATER SCHEDULE | | | | | | | | | | | | | | | | | | | |
|-------------------------------|-----------------------|---------------|---------------|-----|-------|-----------------|--------------|--------|------|-----|-----------------|------|-------|-------------|-------------------|---------------------|--------------------------------|------------------|--------------|
| MARK | LOCATION | CONFIGURATION | FAN DATA | | | | HEATING DATA | | | | ELECTRICAL DATA | | | ACCESSORIES | | | MANUFACTURER WITH MODEL NUMBER | NOTES | |
| | | | AIRFLOW (CFM) | ESP | DRIVE | DESIGN SPEED(S) | HP | MIN KW | MBH | EAT | LAT | AMPS | VOLTS | PH | DISCONNECT SWITCH | INTEGRAL THERMOSTAT | | | WALL BRACKET |
| EUH-1 | GAS CONDITIONING ROOM | UNIT HEATER | 700 | - | AXIAL | 1 | 1/100 | 5 | 17.1 | - | - | 12.1 | 480 | 3 | Y | N | Y | QMARK GUX5004832 | 1 |
| EUH-2 | ELECTRIC ROOM | UNIT HEATER | 350 | - | AXIAL | 1 | 1/100 | 5 | 17.1 | - | - | 6.0 | 480 | 3 | Y | N | Y | QMARK MUH05-41 | |
| EUH-3 | CONTROL ROOM | UNIT HEATER | 350 | - | AXIAL | 1 | 1/100 | 5 | 17.1 | - | - | 6.0 | 480 | 3 | Y | N | Y | QMARK MUH05-41 | |
| EUH-4 | BOILER ROOM | UNIT HEATER | 350 | - | AXIAL | 1 | 1/100 | 5 | 17.1 | - | - | 6.0 | 480 | 3 | Y | N | Y | QMARK MUH05-41 | |
| EUH-5 | BOILER ROOM | UNIT HEATER | 350 | - | AXIAL | 1 | 1/100 | 5 | 17.1 | - | - | 6.0 | 480 | 3 | Y | N | Y | QMARK MUH05-41 | |

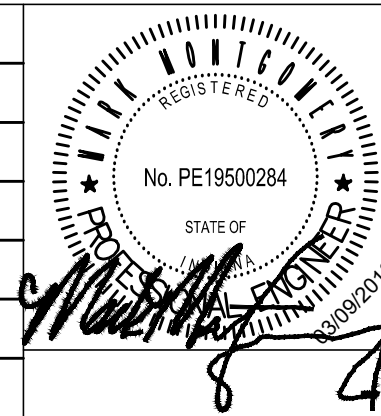
NOTES: 1. EXPLOSION PROOF CONSTRUCTION

| GRAVITY INTAKE SCHEDULE | | | | | | | | | | | |
|-------------------------|-------------------------|-------------|------|-----------------|--------------|---------------------|-----------|--------|-------|--|--|
| TAG | MANUFACTURER WITH MODEL | AREA SERVED | CFM | STATIC PRESSURE | ROOF OPENING | HOOD VELOCITY (FPM) | FREE AREA | WEIGHT | NOTES | | |
| GI-1 | LOREN COOK 24PR | BOILER ROOM | 2091 | .050 | 31.5X31.5 | 300 | 6.9 | 70 | 1 | | |
| G1-2 | LOREN COOK 24PR | BOILER ROOM | 2091 | .050 | 31.5X31.5 | 300 | 6.9 | 70 | 1 | | |

NOTES: 1. INCLUDE 115V MOTORIZED DAMPER INTERLOCKED WITH FAN OR BOILER OPERATION

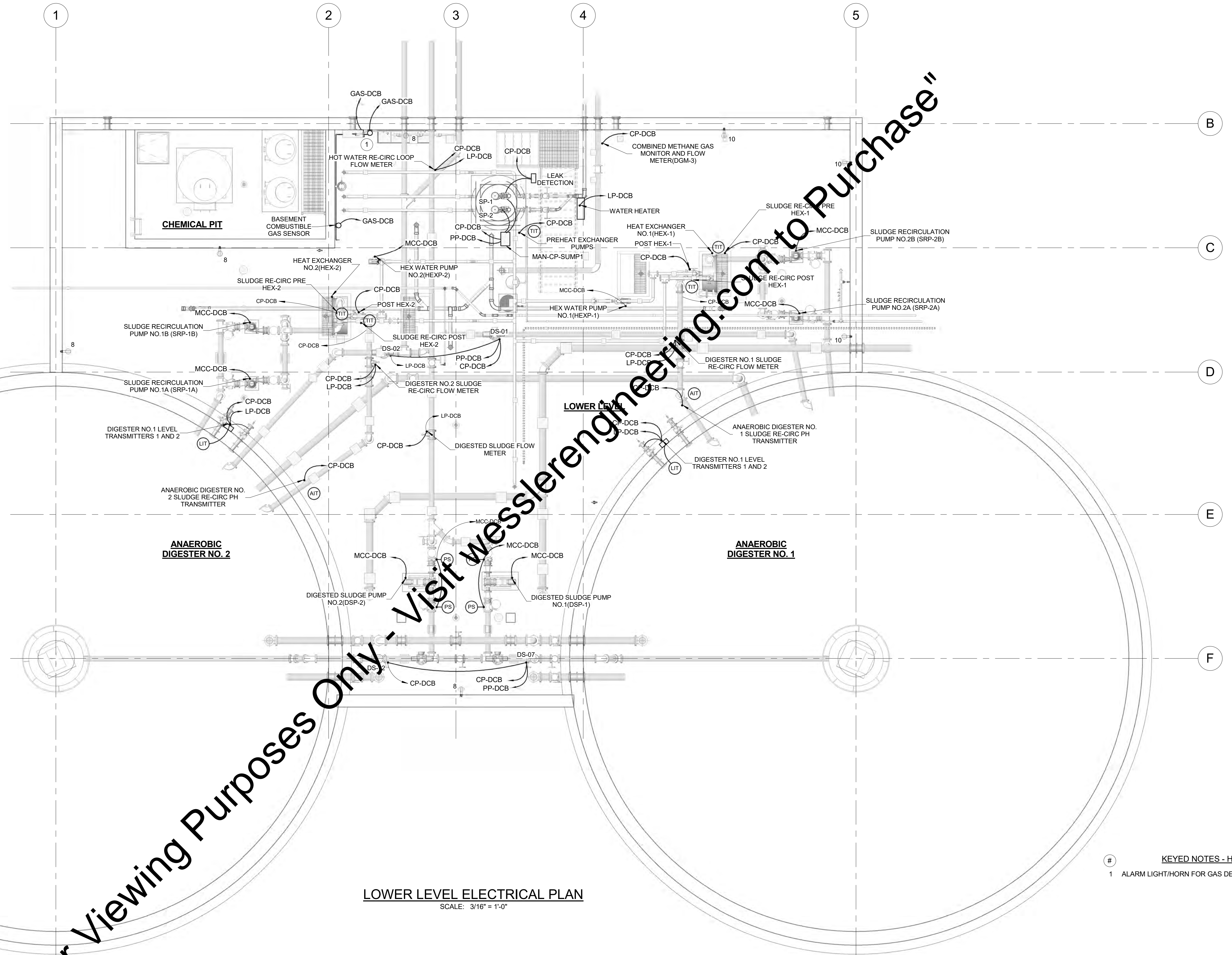
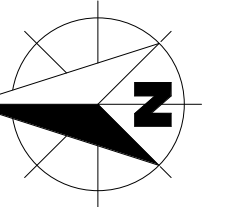


| | | | | | |
|--|----------------|-----|----------|----------|-----------------------|
| SCALE VERIFICATION | DRAWN BY | NO. | DATE | INITIALS | REVISION DESCRIPTIONS |
| BAR IS ONE INCH LONG ON ORIGINAL DRAWING | CHECKED BY | | 12/12/17 | | |
| | APPROVED BY | | | | |
| | ISSUE DATE | | | | |
| | MARCH 2018 | | | | |
| | PROJECT NUMBER | | | | |
| | | | | | 162813-04-003 |



WASTEWATER TREATMENT PLANT EXPANSION - 2017
CITY OF WARSAW, INDIANA
NEW ANAEROBIC DIGESTERS AND CONTROL BUILDING MECHANICAL SCHEDULES

SHEET NO.
HM04
PAGE NO.
188



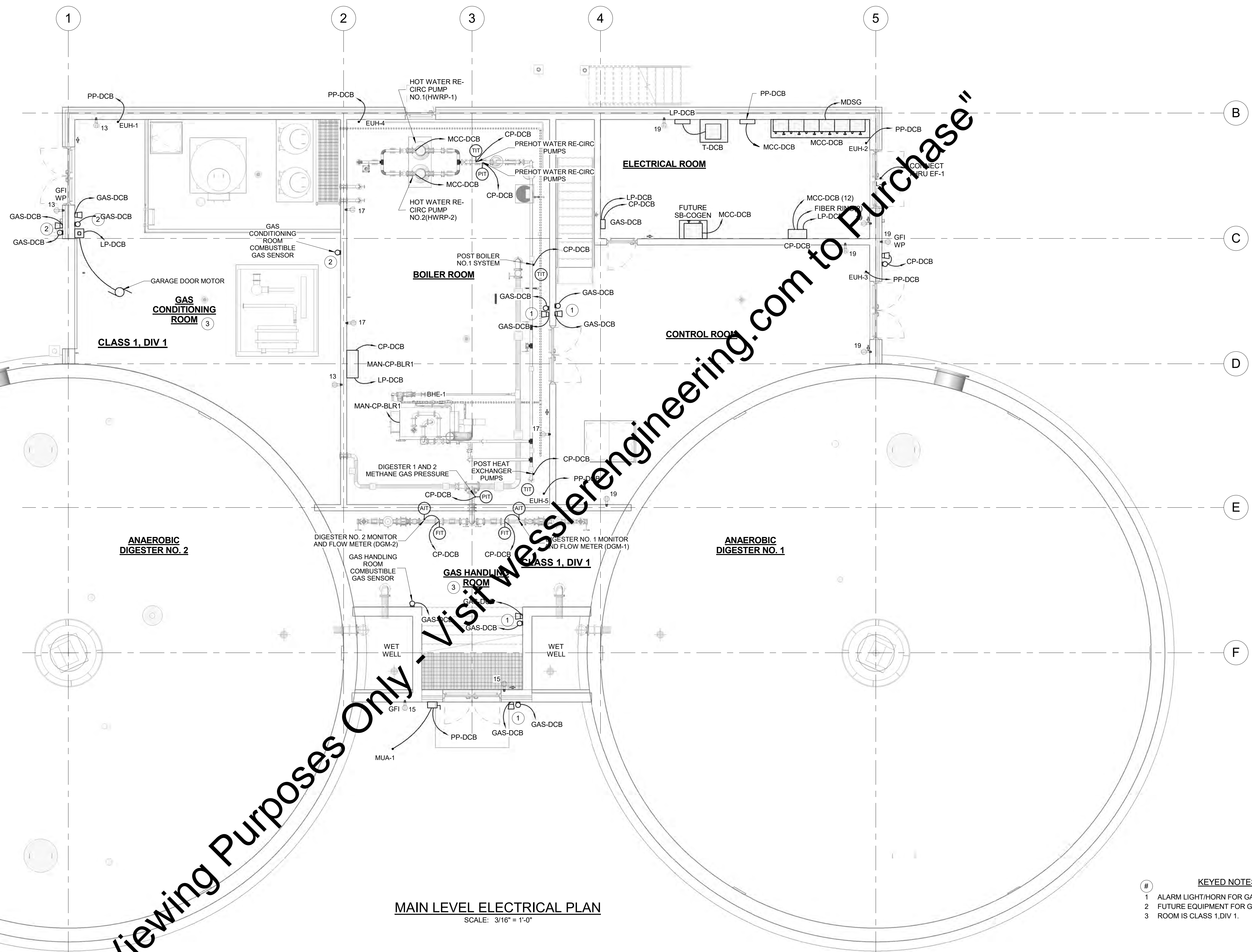
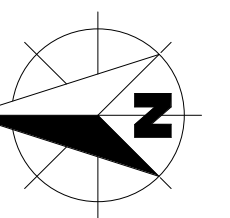
LOWER LEVEL ELECTRICAL PLAN
SCALE: 3/16" = 1'-0"

KEYED NOTES - HE01
1 ALARM LIGHT/HORN FOR GAS DETECTION SYSTEM.

"For Viewing Purposes Only - Visit WesslerEngineering.com to Purchase"

P:\Revit\162813_Warsaw\Modals\Design\162813_ELC-Warsaw_R17.rvt

| | | | | | | | | | |
|--|---------------|-------------------|-----|------|----------|-----------------------|---|--|-----------|
| SCALE VERIFICATION BAR IS ONE INCH LONG ON ORIGINAL DRAWING | DRAWN BY | EAS | NO. | DATE | INITIALS | REVISION DESCRIPTIONS | WESSLER ENGINEERING <i>More than a Project™</i> | WASTEWATER TREATMENT PLANT EXPANSION - 2017 CITY OF WARSAW, INDIANA NEW ANAEROBIC DIGESTERS AND CONTROL BUILDING LOWER LEVEL ELECTRICAL PLAN | SHEET NO. |
| | CHECKED BY | BMS | | | | | | | HE01 |
| | APPROVED BY | WCM | | | | | | | PAGE NO. |
| | ISSUE DATE | SEPTEMBER 4, 2018 | | | | | | 189 | |
| PROJECT NUMBER | 162813-04-003 | | | | | | | | |



MAIN LEVEL ELECTRICAL PLAN
SCALE: 3/16" = 1'-0"

- KEYED NOTES - HE02**
- 1 ALARM LIGHT/HORN FOR GAS DETECTION SYSTEM.
 - 2 FUTURE EQUIPMENT FOR GAS CONDITIONING ROOM.
 - 3 ROOM IS CLASS 1, DIV 1.

"For Viewing Purposes Only - Visit [wesslerengineering.com](http://www.wesslerengineering.com) to Purchase"

| SCALE VERIFICATION | DRAWN BY | EAS | NO. | DATE | INITIALS | REVISION DESCRIPTIONS |
|--|----------------|-------------------|-----|------|----------|-----------------------|
| BAR IS ONE INCH LONG ON ORIGINAL DRAWING | CHECKED BY | BMS | | | | |
| | APPROVED BY | WCM | | | | |
| | ISSUE DATE | SEPTEMBER 4, 2018 | | | | |
| | PROJECT NUMBER | 162813-04-003 | | | | |

WESSLER ENGINEERING
More than a Project™

WASTEWATER TREATMENT PLANT EXPANSION - 2017

CITY OF WARSAW, INDIANA

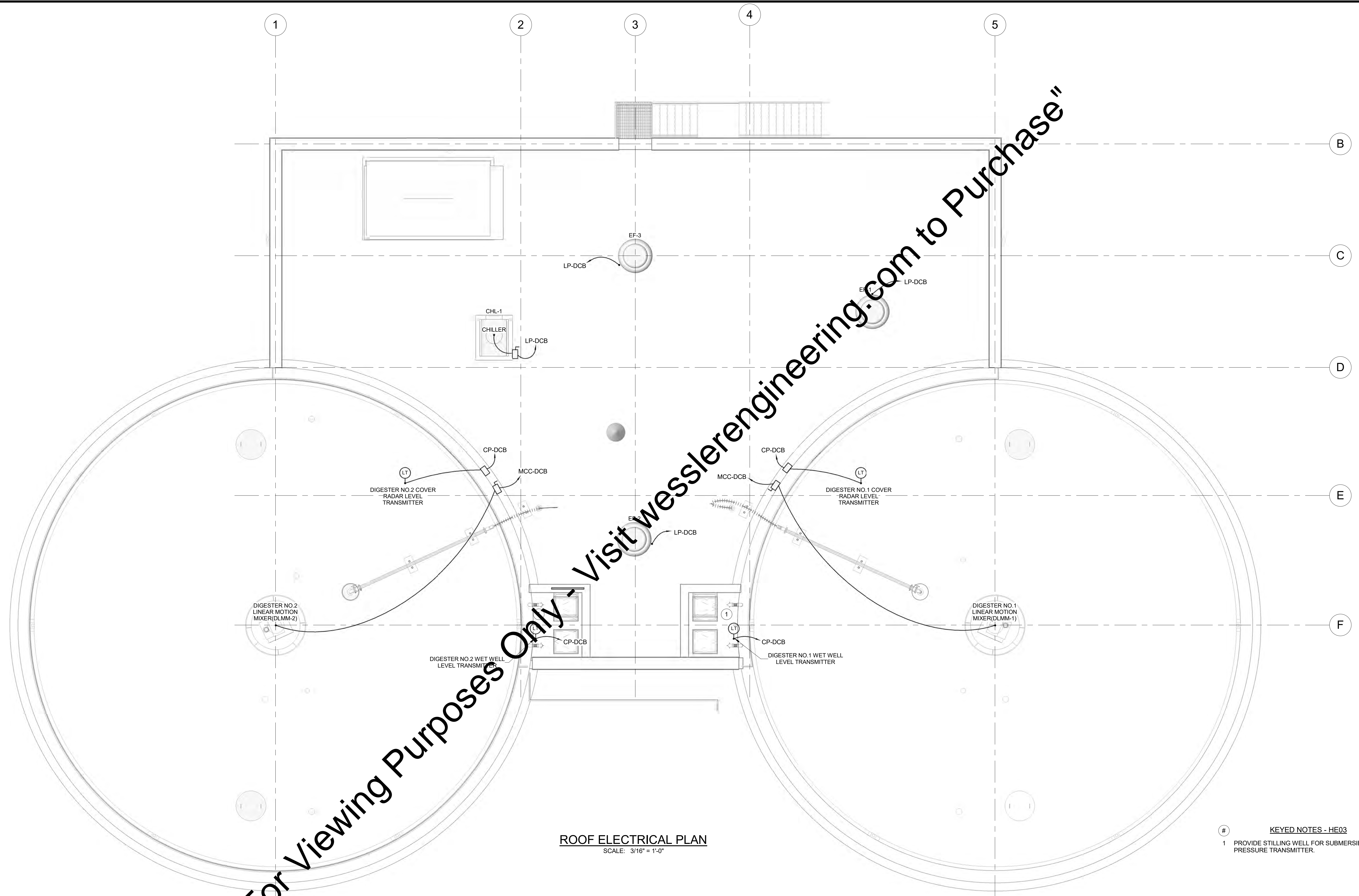
NEW ANAEROBIC DIGESTERS AND CONTROL BUILDING MAIN LEVEL ELECTRICAL PLAN

SHEET NO. **HE02**

PAGE NO. 190

P:\Revit\162813_Warsaw\Modals\Design\162813_ELC-Warsaw_R17.rvt
 9/4/2018 12:11:42 PM

P:\Revit\162813_Warsaw\Modals\Design\162813_ELC\Warsaw_R17.rvt
 9/4/2018 12:11:48 PM



ROOF ELECTRICAL PLAN
 SCALE: 3/16" = 1'-0"

KEYED NOTES - HE03
 1 PROVIDE STILLING WELL FOR SUBMERSIBLE PRESSURE TRANSMITTER.

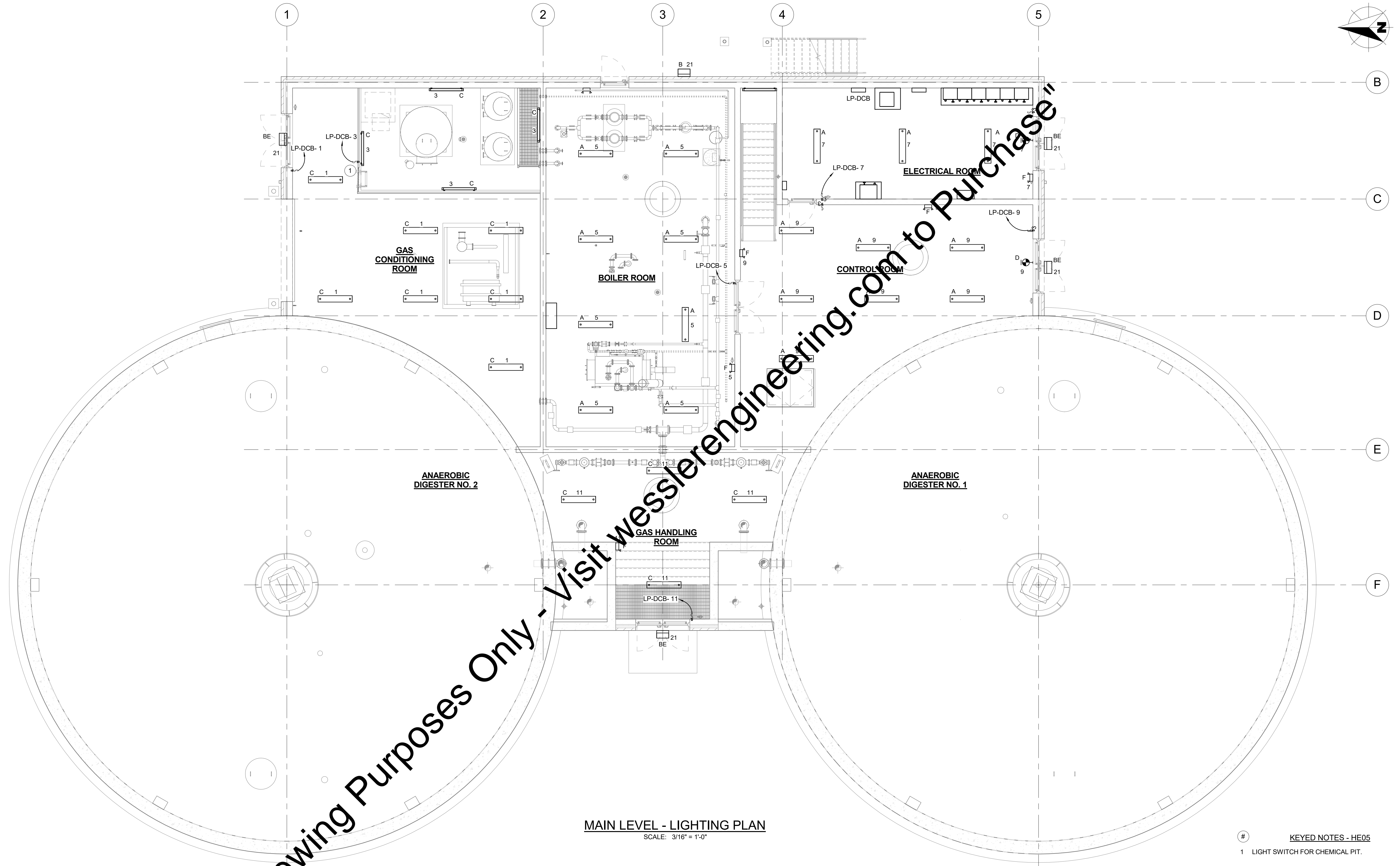
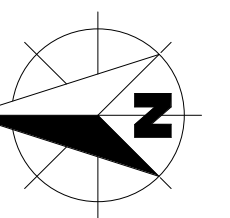
| | | | | | | |
|--|----------------|-------------------|-----|------|----------|-----------------------|
| SCALE VERIFICATION BAR IS ONE INCH LONG ON ORIGINAL DRAWING | DRAWN BY | EAS | NO. | DATE | INITIALS | REVISION DESCRIPTIONS |
| | CHECKED BY | BMS | | | | |
| | APPROVED BY | WCM | | | | |
| | ISSUE DATE | SEPTEMBER 4, 2018 | | | | |
| | PROJECT NUMBER | 162813-04-003 | | | | |

WESSLER
ENGINEERING

More than a Project™


WASTEWATER TREATMENT PLANT EXPANSION - 2017
 CITY OF WARSAW, INDIANA
NEW ANAEROBIC DIGESTERS AND CONTROL BUILDING ROOF ELECTRICAL PLAN

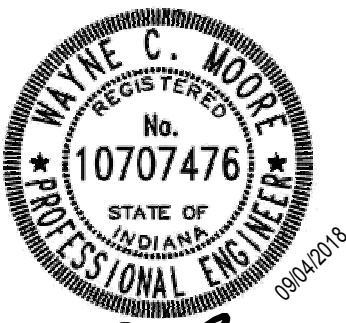
SHEET NO.
HE03
 PAGE NO.
 191



MAIN LEVEL - LIGHTING PLAN
SCALE: 3/16" = 1'-0"

KEYED NOTES - HE05
1 LIGHT SWITCH FOR CHEMICAL PIT.

| | | | | | | |
|---|----------------|-------------------|-----|------|----------|-----------------------|
| SCALE VERIFICATION | DRAWN BY | EAS | NO. | DATE | INITIALS | REVISION DESCRIPTIONS |
| BAR IS ONE INCH LONG ON ORIGINAL DRAWING  | CHECKED BY | BMS | | | | |
| | APPROVED BY | WCM | | | | |
| | ISSUE DATE | SEPTEMBER 4, 2018 | | | | |
| | PROJECT NUMBER | 162813-04-003 | | | | |



W
WESSLER
ENGINEERING
More than a Project™

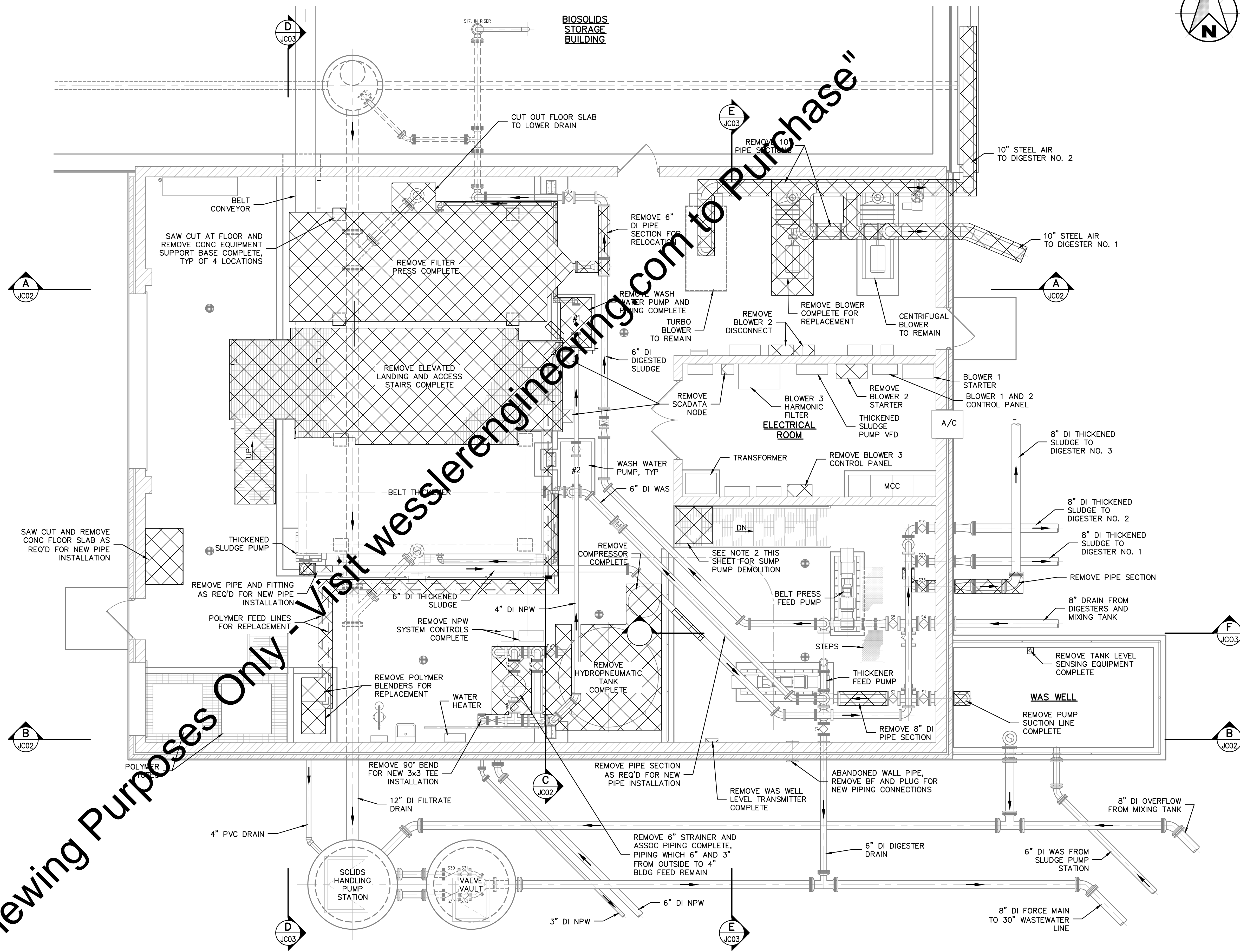
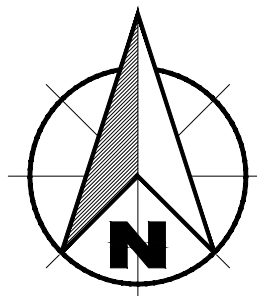
WASTEWATER TREATMENT PLANT EXPANSION - 2017
CITY OF WARSAW, INDIANA
NEW ANAEROBIC DIGESTERS AND CONTROL BUILDING MAIN LEVEL LIGHTING PLAN

SHEET NO.
HE05
PAGE NO.
193

P:\Revit\162813_Warsaw\Modals\Design\162813_ELC-Warsaw_R17.rvt
 9/4/2018 12:11:55 PM

SOLIDS HANDLING BUILDING GENERAL DEMOLITION NOTES:

1. THE FINISHED FLOOR ELEVATION FOR THE SOLIDS HANDLING BUILDING HAS BEEN SHOWN AT 817.50 ON THE 2001 WASTEWATER TREATMENT PLANT PROJECT, BY JONES & HENRY ENGINEERS, LTD. THE WESSLER ENGINEERING SITE SURVEY FOR THIS PROJECT DETERMINED THE FINISHED FLOOR ELEVATION TO BE 816.80. ALL VERTICAL INFORMATION SHOWN FOR THIS STRUCTURE HAS BEEN REVISED TO AGREE WITH THE SITE SURVEY, WITH THE ASSUMPTION THAT VERTICAL DISTANCES REFERENCED ON THE JONES & HENRY DRAWINGS ARE ACCURATE.
2. REMOVE SUMP PUMP SYSTEM COMPLETE FOR REPLACEMENT. REMOVAL INCLUDES PUMPS, VALVES, DISCHARGE PIPING AS REQUIRED, ACCESS HATCH, ELECTRICAL CONNECTIONS, AND CONTROLS.



DEMOLITION PLAN

0 2 4 8 FT 1/8"=1'-0"

"For Viewing Purposes Only - Visit wesslerengineering.com to purchase"

Drawing: J:\Warsaw\Projects\162813-Ex-Solids Hand Bldg.dwg | Layout: JCO1 | Plotted: 09/04/18 @ 11:01:59 | LastSavedBy: Miken

| SCALE VERIFICATION | DRAWN BY | NO. | DATE | INITIALS | REVISION DESCRIPTIONS |
|--|-------------------|-----|------|----------|-----------------------|
| BAR IS ONE INCH LONG ON ORIGINAL DRAWING | CHECKED BY | WBJ | | | |
| | APPROVED BY | ALT | | | |
| | ISSUE DATE | GLR | | | |
| | PROJECT NUMBER | | | | |
| | SEPTEMBER 4, 2018 | | | | |
| | 162813-04-003 | | | | |

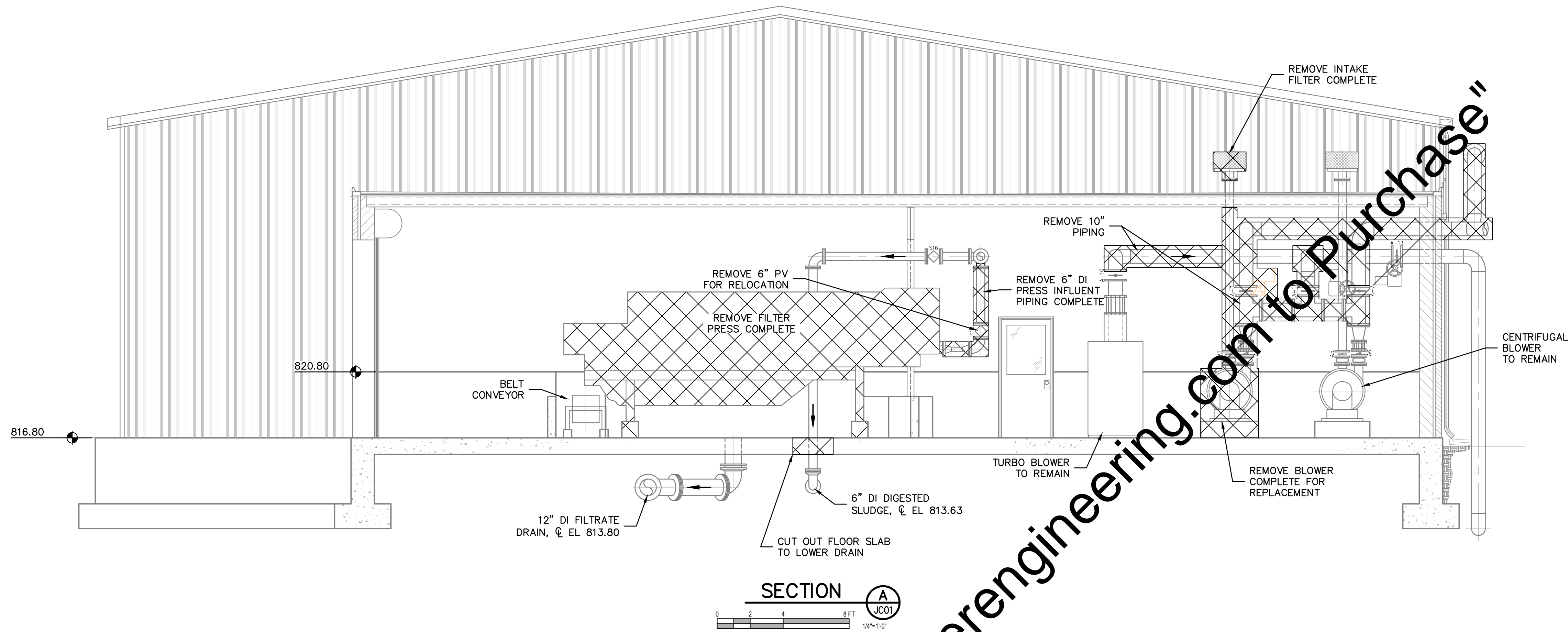


WASTEWATER TREATMENT PLANT EXPANSION - 2017

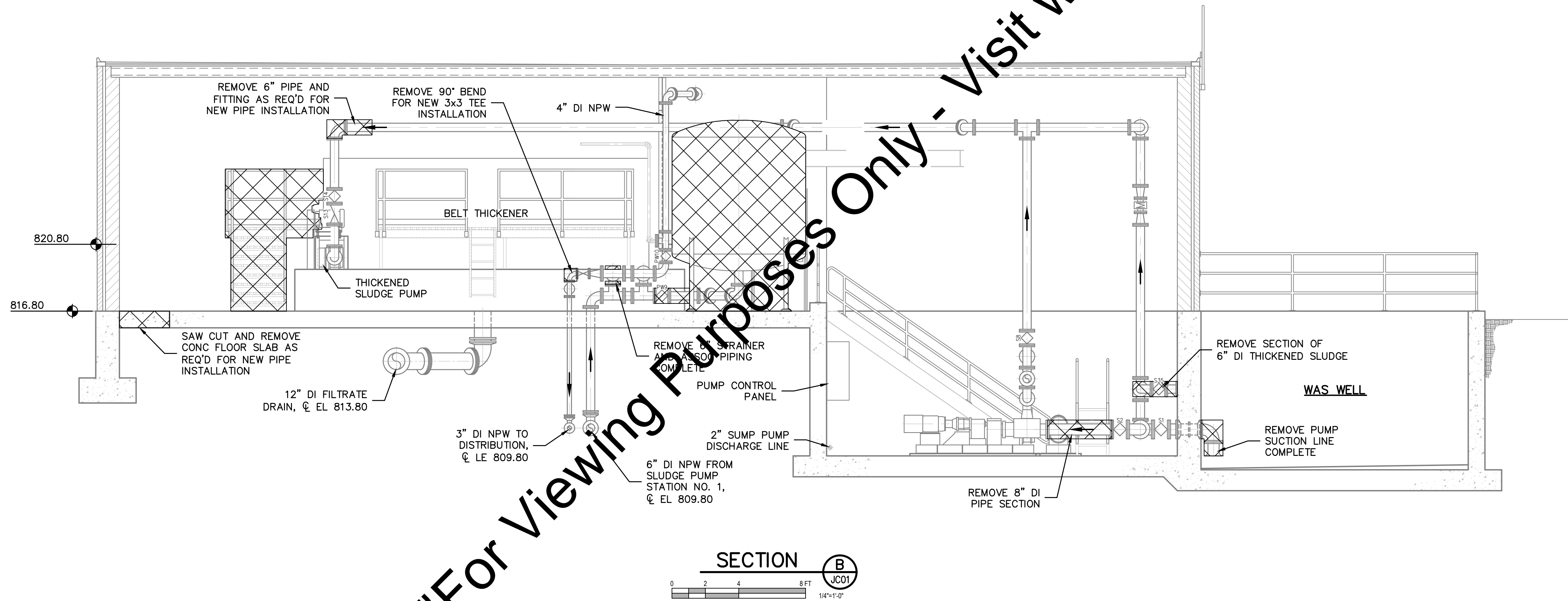
CITY OF WARSAW, INDIANA

**EXISTING SOLIDS HANDLING BUILDING
DEMOLITION PLAN**

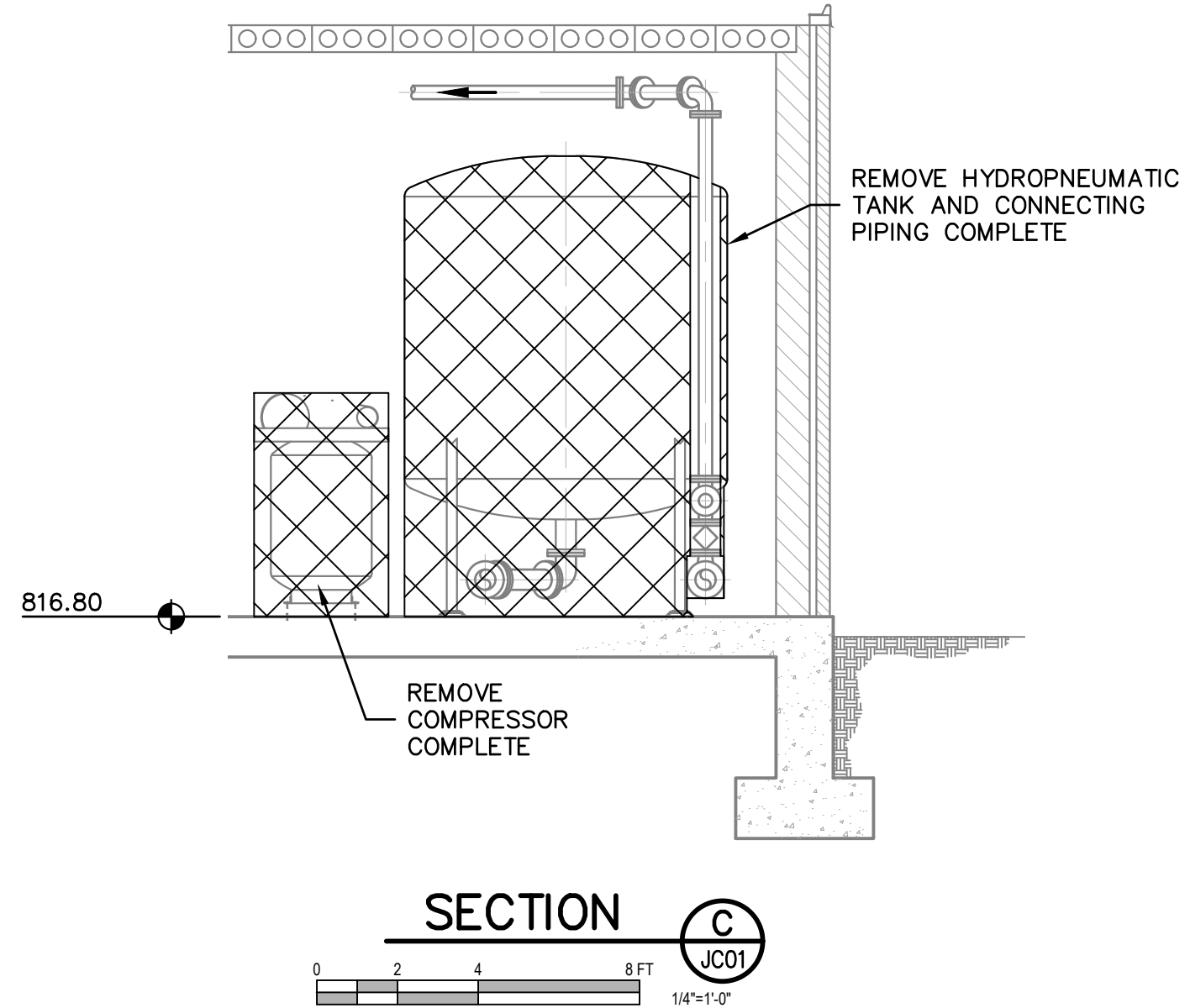
| | |
|-----------|-------------|
| SHEET NO. | JC01 |
| PAGE NO. | 194 |



SECTION A
 0 2 4 8 FT
 1/4"=1'-0"
 JC01




SECTION B
 0 2 4 8 FT
 1/4"=1'-0"
 JC01



SECTION C
 0 2 4 8 FT
 1/4"=1'-0"
 JC01

"For Viewing Purposes Only - Visit wesslerengineering.com to purchase"

Drawing: J:\Warsaw\Projects\162813-Warsaw WWTTP Expansion\CAD\04-001\DWG\Shenell\162813-Ex Solids Hand Bldg.dwg | Layout: JC02 | Plotted: 09/04/18 @ 11:02:22 | LastSavedBy: miken

| SCALE VERIFICATION | DRAWN BY | NO. | DATE | INITIALS | REVISION DESCRIPTIONS |
|---|-------------------|-----|------|----------|-----------------------|
| BAR IS ONE INCH LONG ON ORIGINAL DRAWING  | CHECKED BY | WBJ | | | |
| | APPROVED BY | ALT | | | |
| | ISSUE DATE | GLR | | | |
| | PROJECT NUMBER | | | | |
| | SEPTEMBER 4, 2018 | | | | |
| | 162813-04-003 | | | | |



WASTEWATER TREATMENT PLANT EXPANSION - 2017

CITY OF WARSAW, INDIANA

**EXISTING SOLIDS HANDLING BUILDING
 DEMOLITION SECTIONS**

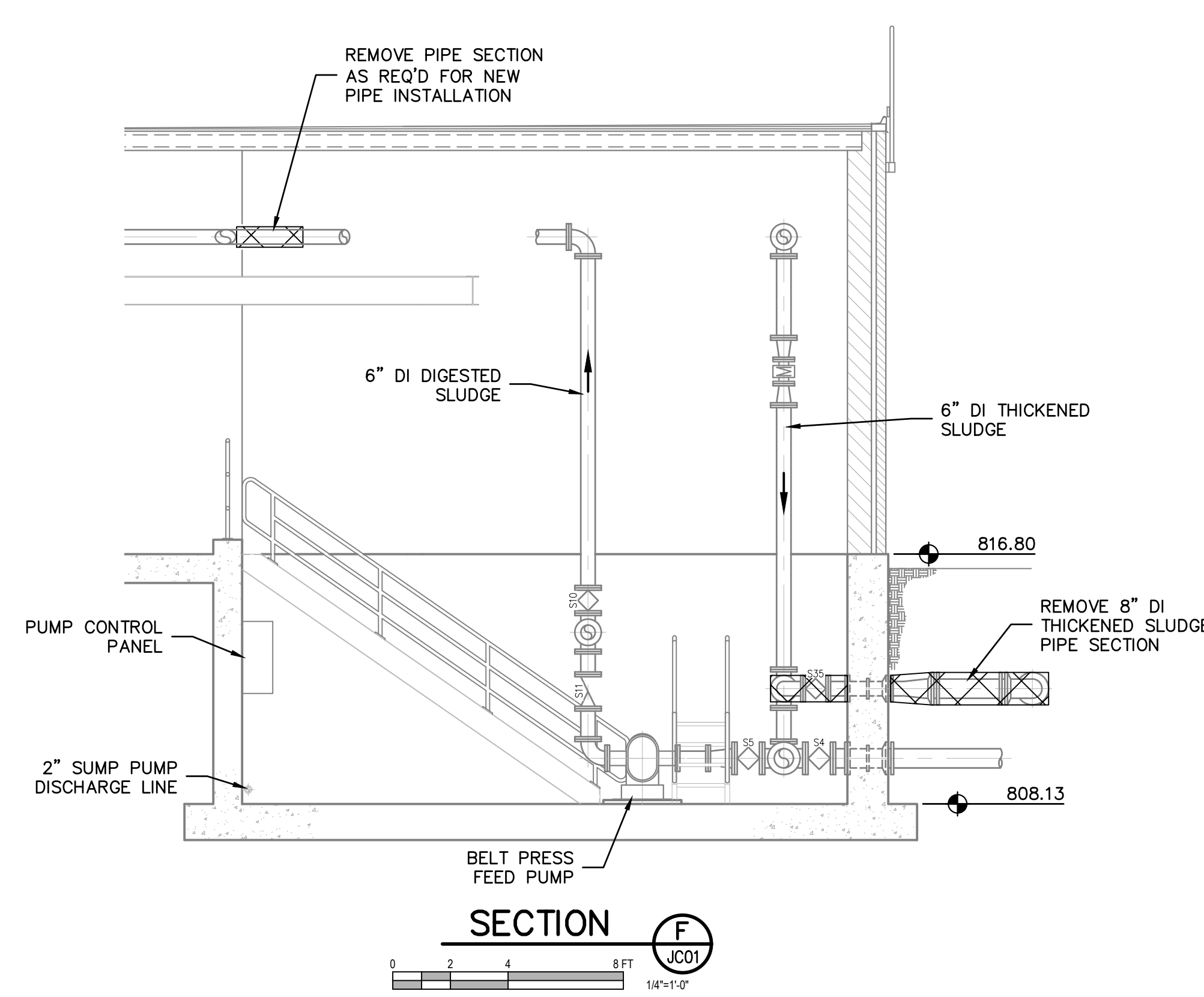
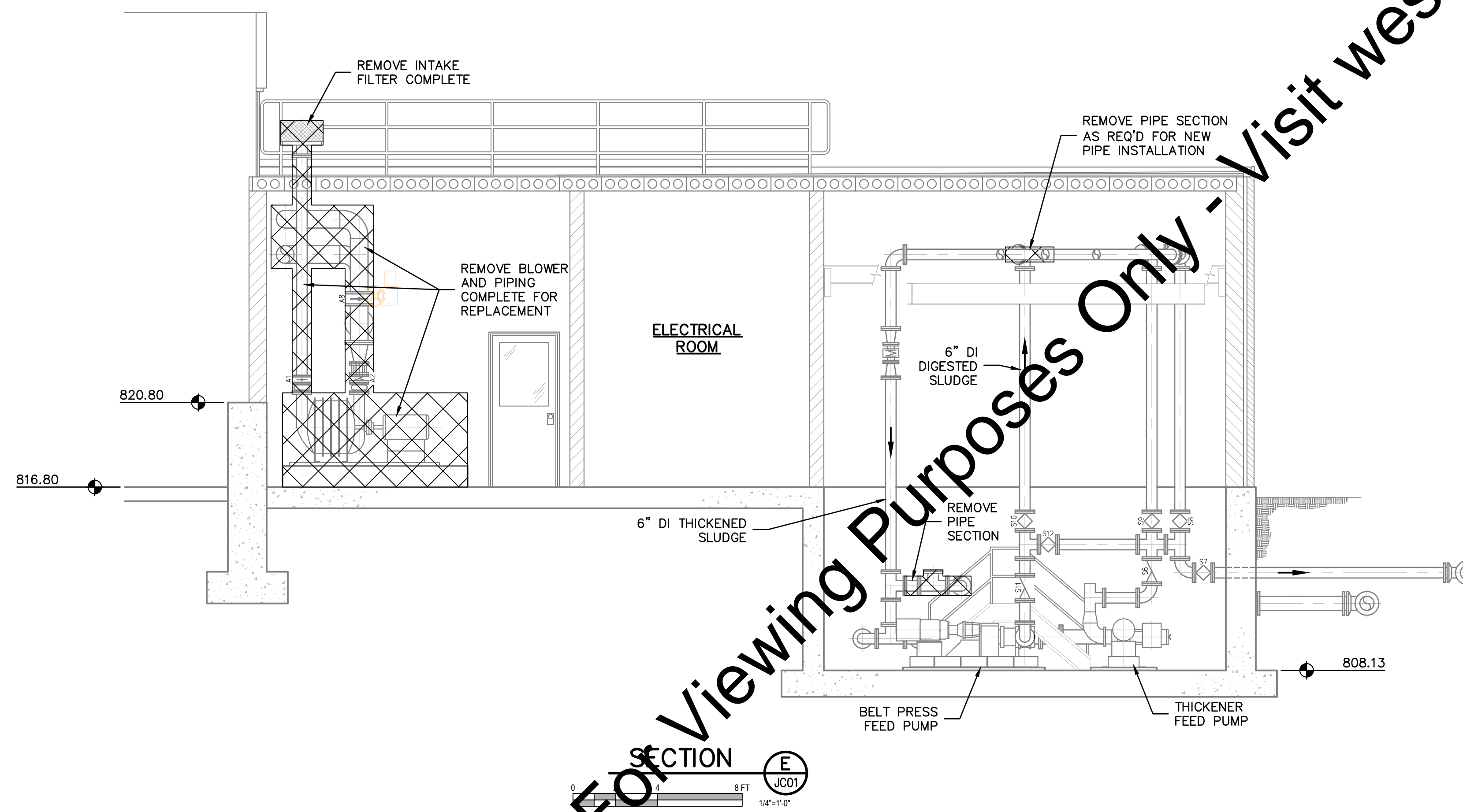
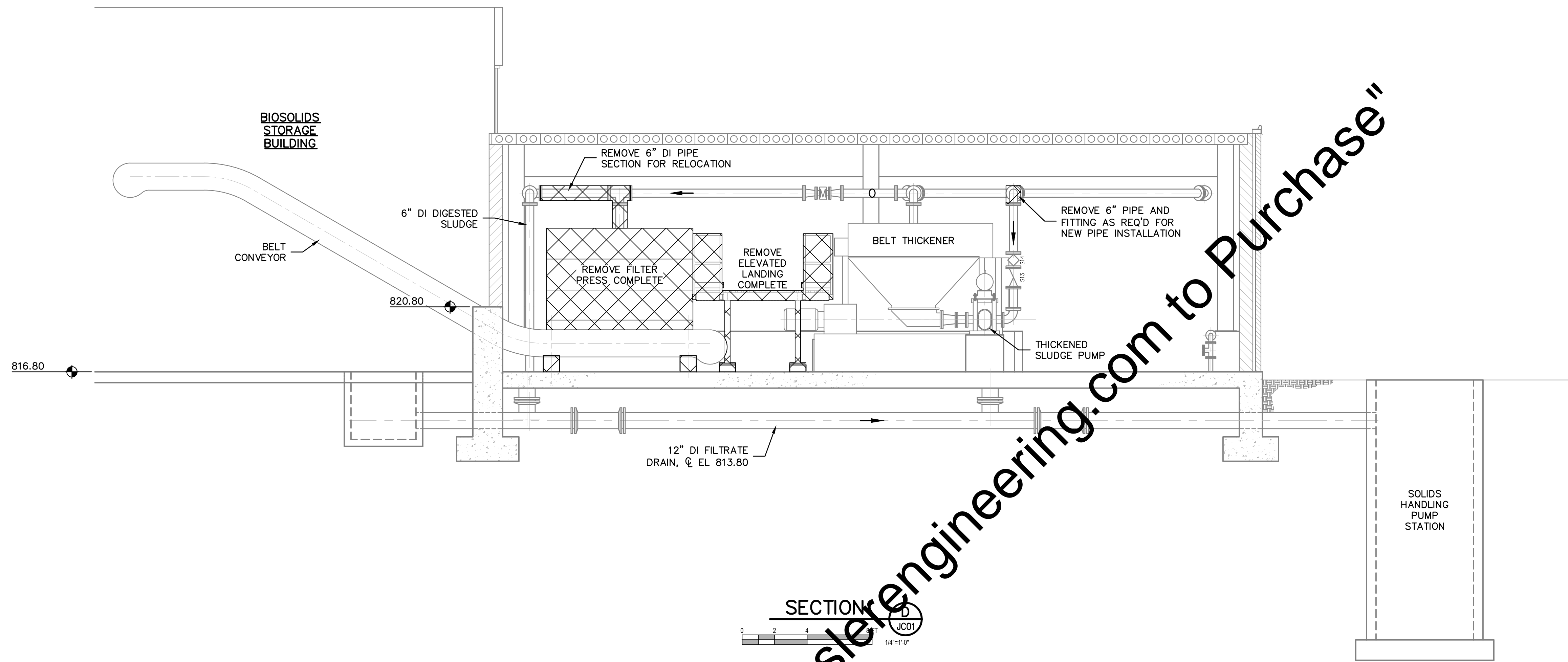
SHEET NO.

JC02

PAGE NO.

195

Drawing: J:\Warsaw\Projects\162813-WWTP Expansion\CAD\04-001\DWG\Sheets\162813-Ex Solids Hand Bldg.dwg | Layout: JC03 | Printed: 09/04/18 @ 11:02:44 | LastSavedBy: mken



"For Viewing Purposes Only - Visit wesslerengineering.com to Purchase"

| SCALE VERIFICATION | DRAWN BY | NO. | DATE | INITIALS | REVISION DESCRIPTIONS |
|--|----------------|-------------------|------|----------|-----------------------|
| BAR IS ONE INCH LONG ON ORIGINAL DRAWING | DRAWN BY | WBJ | | | |
| | CHECKED BY | ALT | | | |
| | APPROVED BY | GLR | | | |
| | ISSUE DATE | SEPTEMBER 4, 2018 | | | |
| | PROJECT NUMBER | 162813-04-003 | | | |

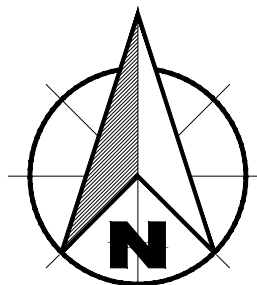


WASTEWATER TREATMENT PLANT EXPANSION - 2017

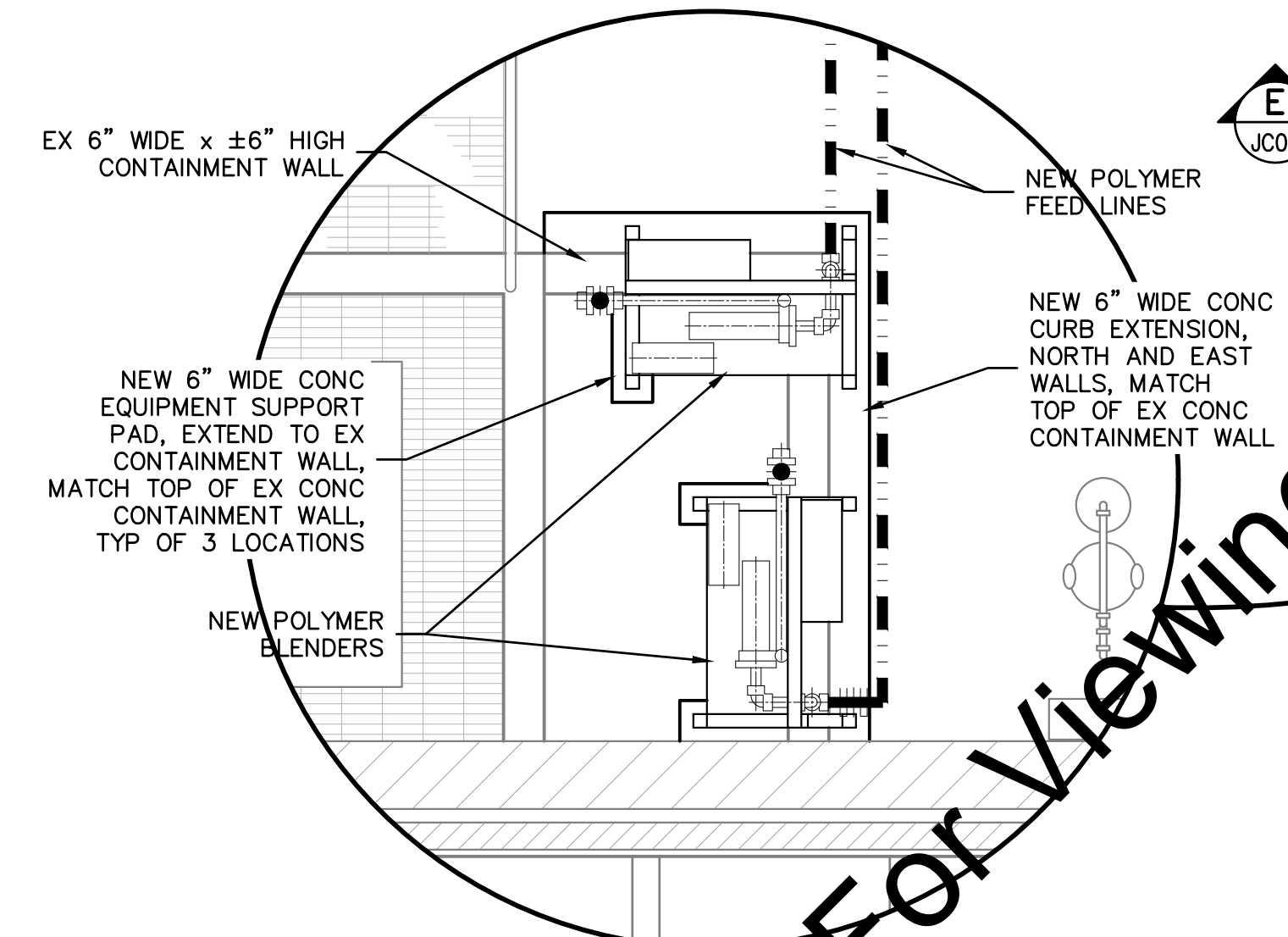
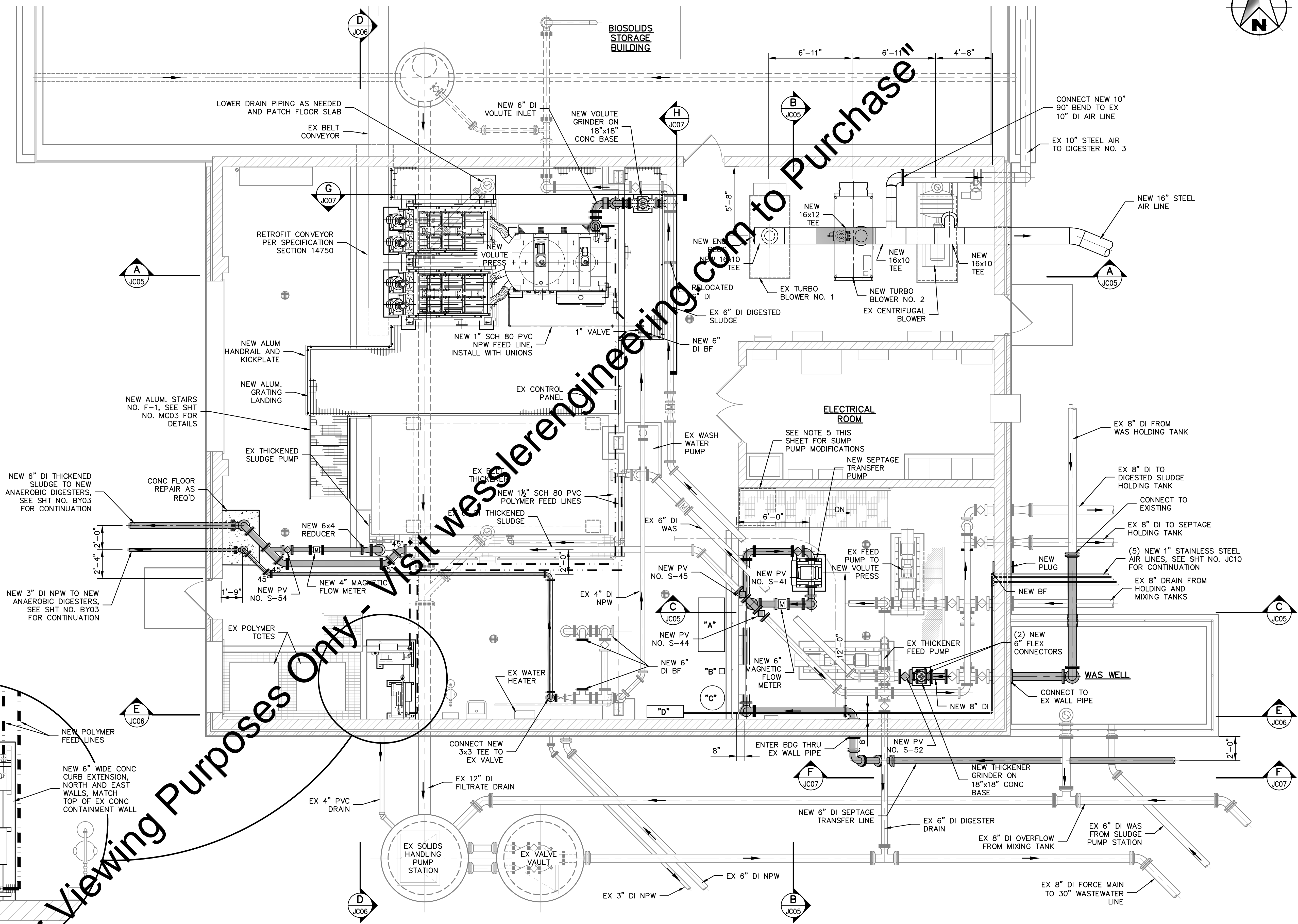
CITY OF WARSAW, INDIANA

**EXISTING SOLIDS HANDLING BUILDING
DEMOLITION SECTIONS**

| | |
|-----------|-------------|
| SHEET NO. | JC03 |
| PAGE NO. | 196 |



- SOLIDS HANDLING BUILDING GENERAL MODIFICATION NOTES:**
- SEE SPECIFICATION SECTION 11370 FOR THE NEW HIGH SPEED TURBO BLOWER.
 - SEE SPECIFICATION SECTION 11213 FOR THE NEW SEPTAGE TRANSFER PUMP.
 - SEE SPECIFICATION SECTION 11356 FOR NEW VOLUTE PRESS.
 - SEE SPECIFICATION SECTION 11355 FOR THE NEW SLUDGE MACERATOR, VOLUTE GRINDER.
 - THE NEW PULSE AIR SYSTEM, INCLUDING THE COMPONENTS LISTED BELOW, SHALL ALL BE PROVIDED BY THE SAME MANUFACTURER. SEE SPECIFICATION SECTION 11225. THESE COMPONENTS INCLUDE:
 - "A" COMPRESSOR/DRYER
 - "B" CONDENSATE, OIL AND INLET FILTER
 - "C" AIR RECEIVING TANK
 - "D" CONTROL PANEL/VALVE ENCLOSURE
 - INSTALL NEW SUMP PUMPS, PIPING, VALVES, AND ACCESS COVER IN EXISTING 3'x3' SUMP AS SHOWN IN THE BUILDING SUMP PUMP INSTALLATION DETAILS ON SHEET NO. JC07. RECONNECT TO EXISTING DISCHARGE PIPING AS REQUIRED. NEW ELECTRICAL AND CONTROLS AS SHOWN IN ASSOCIATED DRAWINGS.
 - COORDINATE NEW 3" NPW PIPE ROUTING THROUGH BUILDING TO AVOID CONFLICTS WITH EXISTING PIPING.



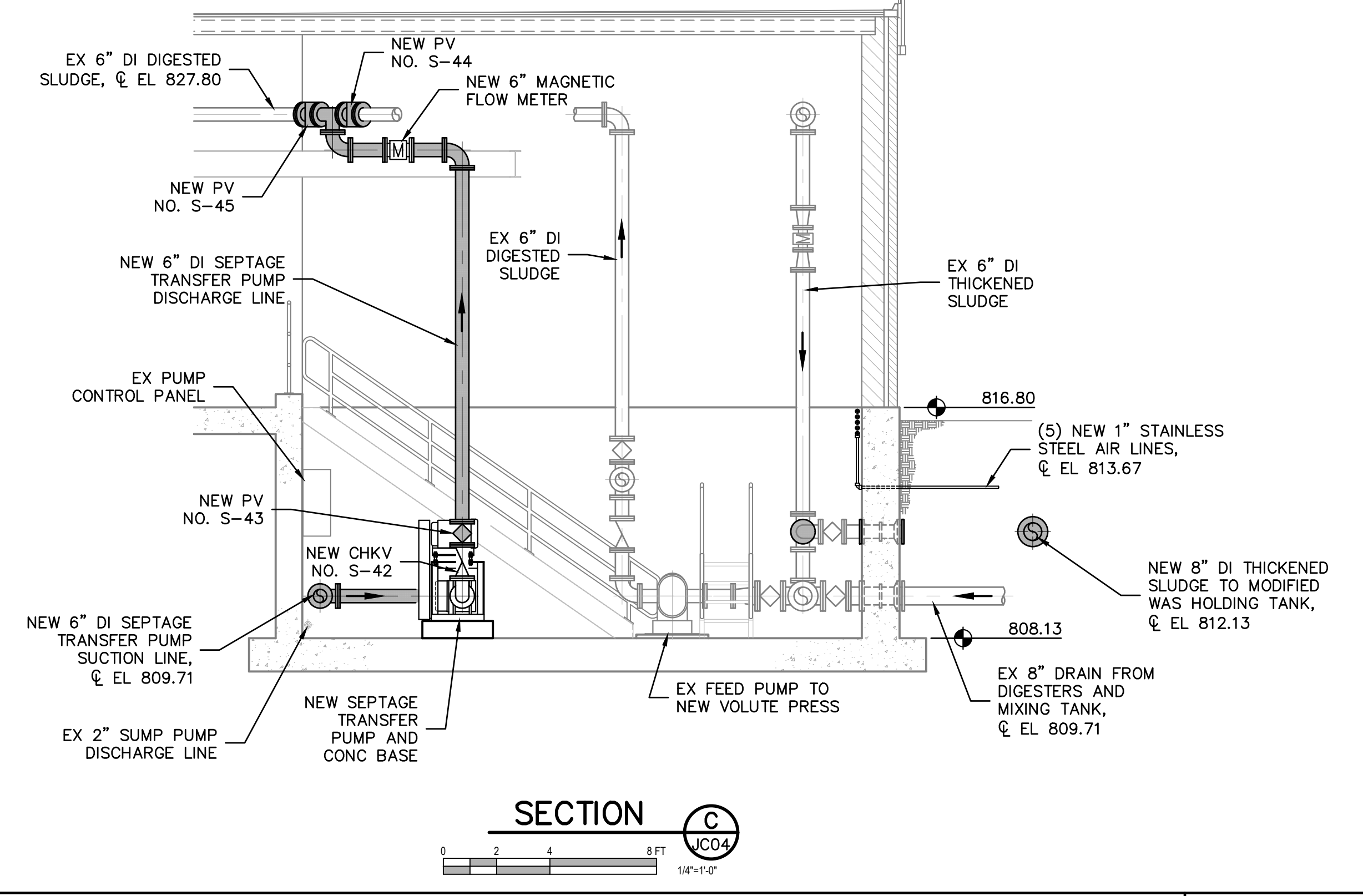
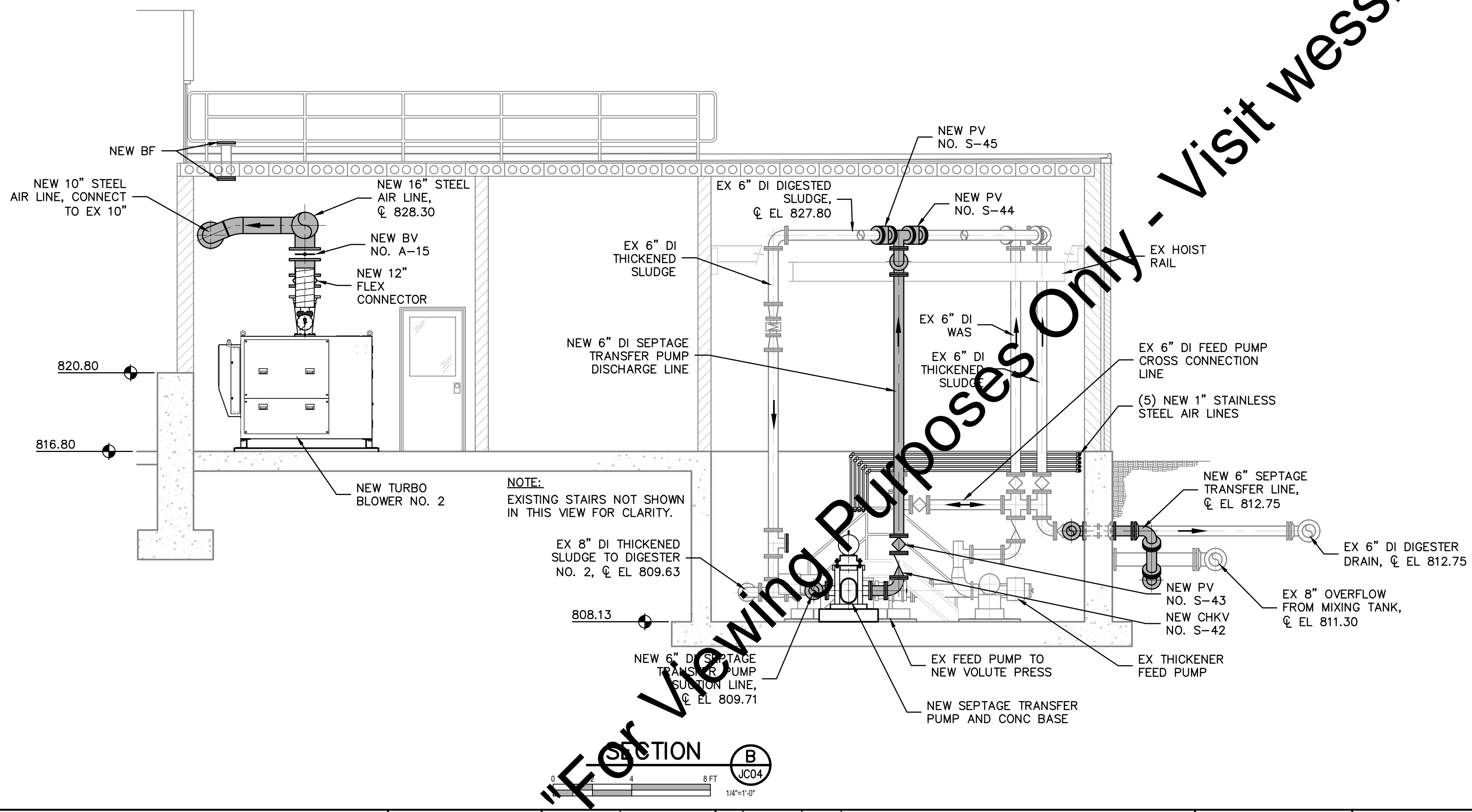
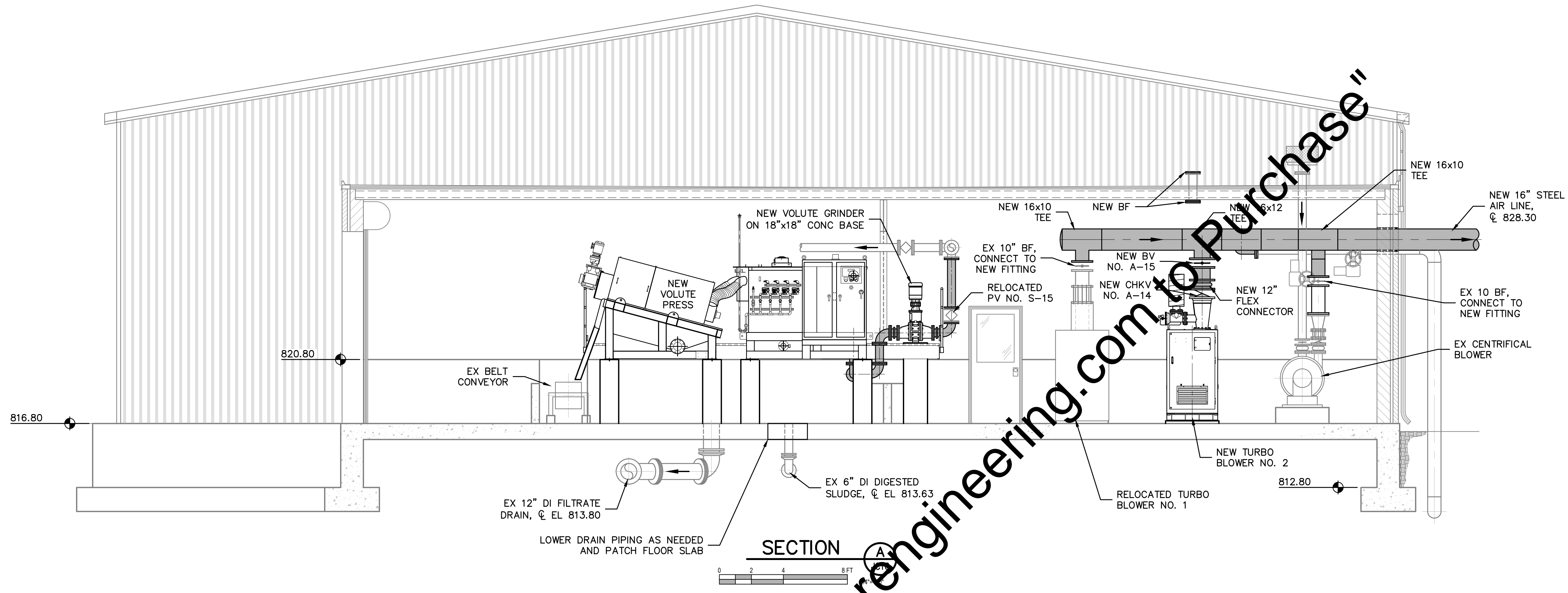
"For Viewing Purposes Only - Visit wesslerengineering.com to Purchase"

FLOOR PLAN




| | | | | | | |
|---|---|---|--|---|--|--|
| <p>SCALE VERIFICATION</p> <p>BAR IS ONE INCH LONG ON ORIGINAL DRAWING</p> | <p>DRAWN BY: WBJ</p> <p>CHECKED BY: ALT</p> <p>APPROVED BY: GLR</p> <p>ISSUE DATE: SEPTEMBER 4, 2018</p> <p>PROJECT NUMBER: 162813-04-003</p> | <p>NO. DATE INITIALS</p> <p>REVISION DESCRIPTIONS</p> | | <p>WESSLER ENGINEERING</p> <p>More than a Project™</p> | <p>WASTEWATER TREATMENT PLANT EXPANSION - 2017</p> <p>CITY OF WARSAW, INDIANA</p> <p>EXISTING SOLIDS HANDLING BUILDING MODIFICATION PLAN</p> | <p>SHEET NO.</p> <p style="font-size: 2em; font-weight: bold;">JC04</p> <p>PAGE NO.</p> <p>197</p> |
|---|---|---|--|---|--|--|


Drawing: J:\Warshaw\Projects\162813\Warshaw WWTTP Expansion\CAD\04-001\DWG\Shewels\162813-Ex Solids Hand Bldg.dwg | Layout: JC04 | Printed: 09/04/18 @ 11:03:03 | LastSavedBy: MikeN



Drawing: J:\Warsaw\Projects\162813-WWTP Expansion\CAD\04-001\DWG\Shewels\162813-Ex Solids Hand Bldg.dwg | Layout: JC05 | Printed: 09/04/18 @ 11:03:30 | LastSavedBy: MikeN

"For Viewing Purposes Only - Visit wesslerengineering.com to purchase"

| SCALE VERIFICATION | DRAWN BY | WBJ | NO. | DATE | INITIALS | REVISION DESCRIPTIONS |
|---|----------------|-------------------|-----|------|----------|-----------------------|
| BAR IS ONE INCH LONG ON ORIGINAL DRAWING  | CHECKED BY | ALT | | | | |
| | APPROVED BY | GLR | | | | |
| | ISSUE DATE | SEPTEMBER 4, 2018 | | | | |
| | PROJECT NUMBER | 162813-04-003 | | | | |



WESSLER ENGINEERING
More than a Project™

WASTEWATER TREATMENT PLANT EXPANSION - 2017

CITY OF WARSAW, INDIANA

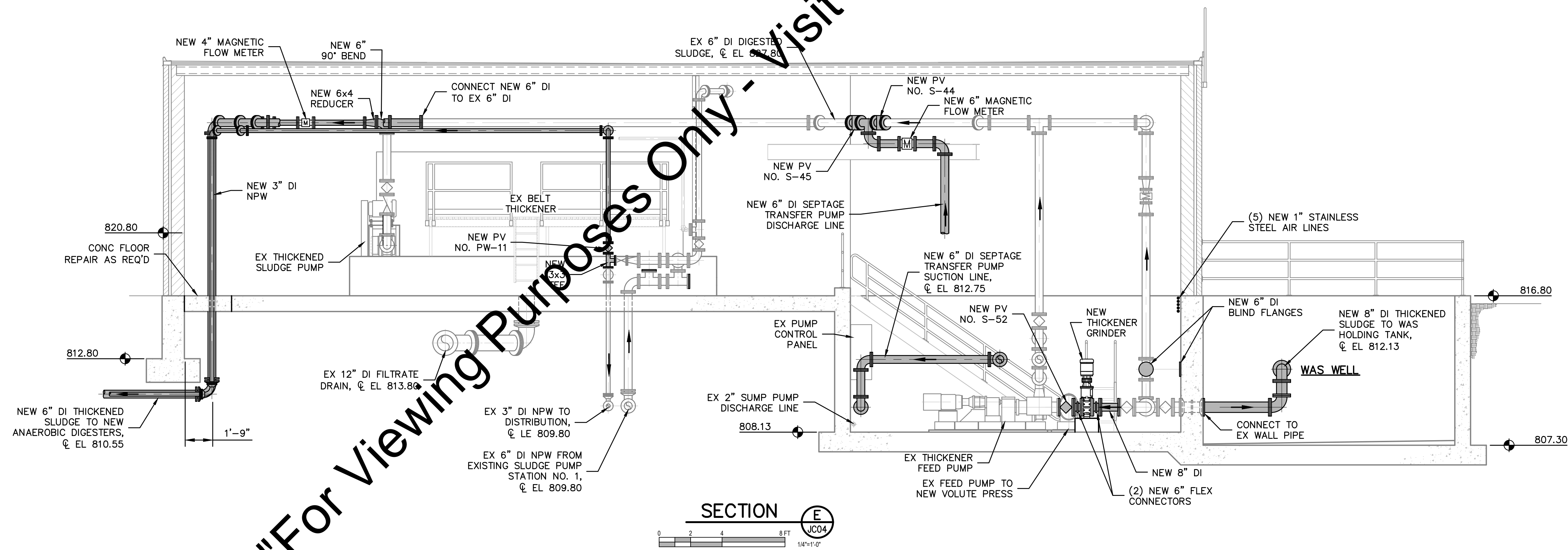
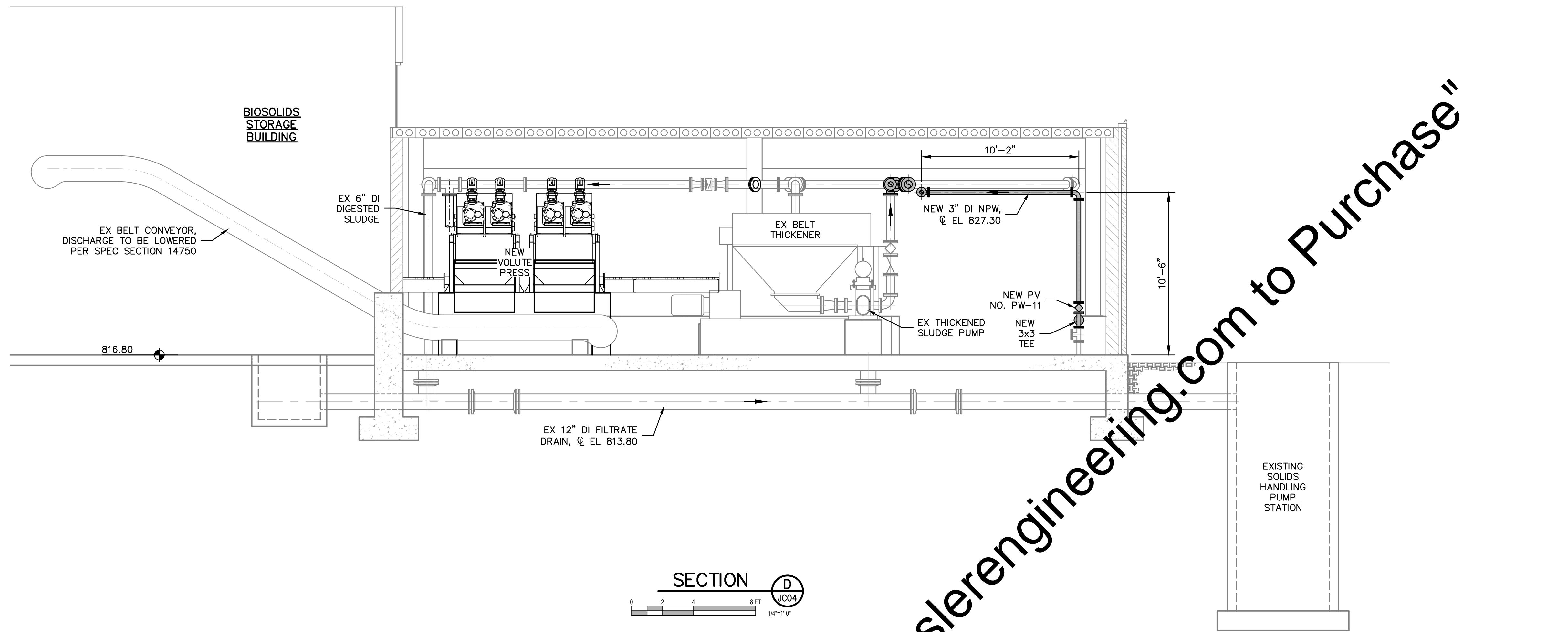
EXISTING SOLIDS HANDLING BUILDING MODIFICATION SECTIONS

SHEET NO.

JC05

PAGE NO.

198



"For Viewing Purposes Only - Visit wesslerengineering.com to Purchase"

Drawing: J:\Warsaw\Projects\162813-WWTP Expansion\CAD\04-001\DWG\Shells\162813-Ex Solids Hand Bldg.dwg | Layout: JC06 | Printed: 09/04/18 @ 11:03:47 | LastSavedBy: MikeN

| SCALE VERIFICATION | DRAWN BY | NO. | DATE | INITIALS | REVISION DESCRIPTIONS |
|--|----------------|-------------------|------|----------|-----------------------|
| BAR IS ONE INCH LONG ON ORIGINAL DRAWING | DRAWN BY | WBJ | | | |
| | CHECKED BY | ALT | JC06 | | |
| | APPROVED BY | GLR | | | |
| | ISSUE DATE | SEPTEMBER 4, 2018 | | | |
| | PROJECT NUMBER | 162813-04-003 | | | |

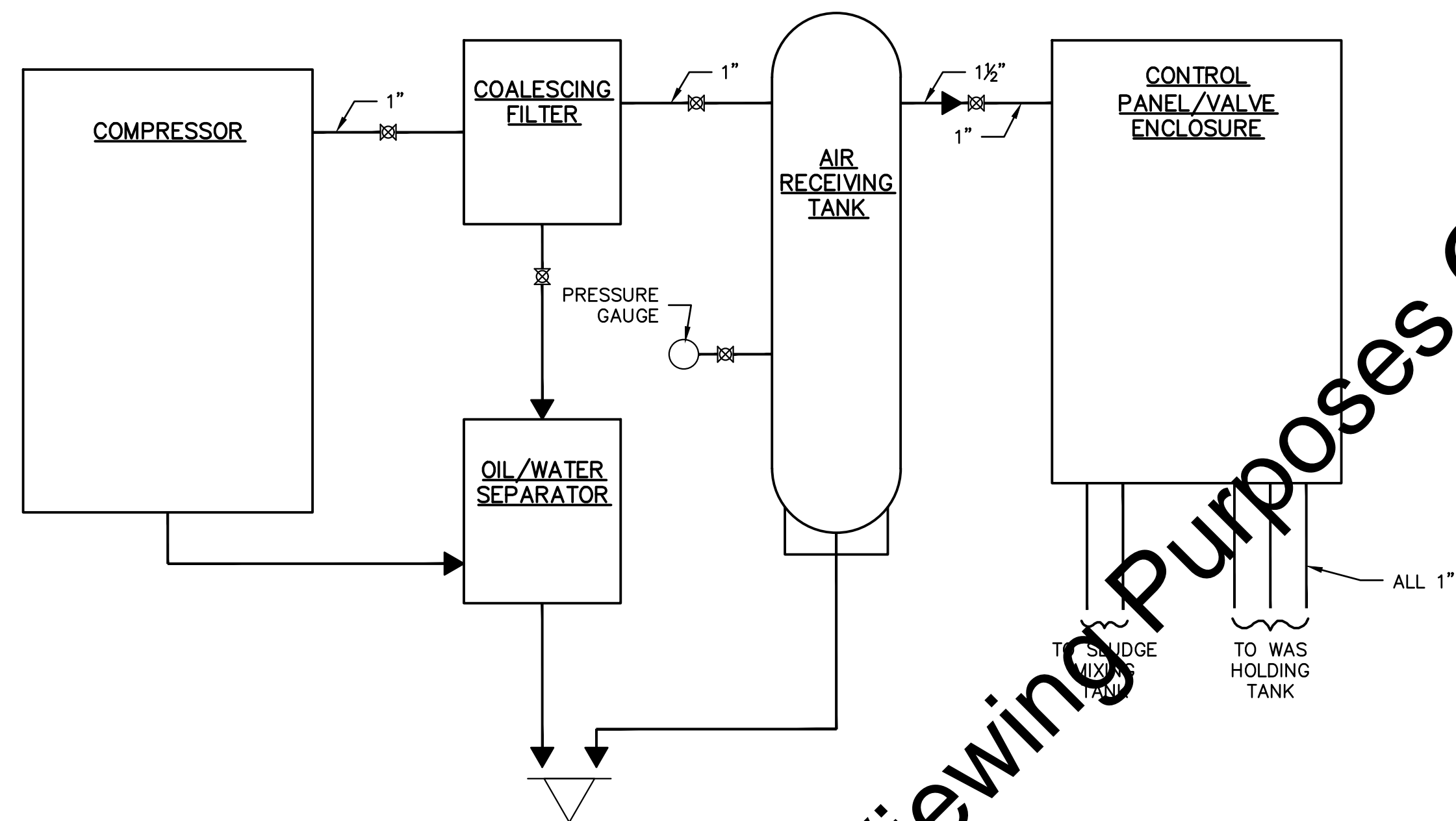
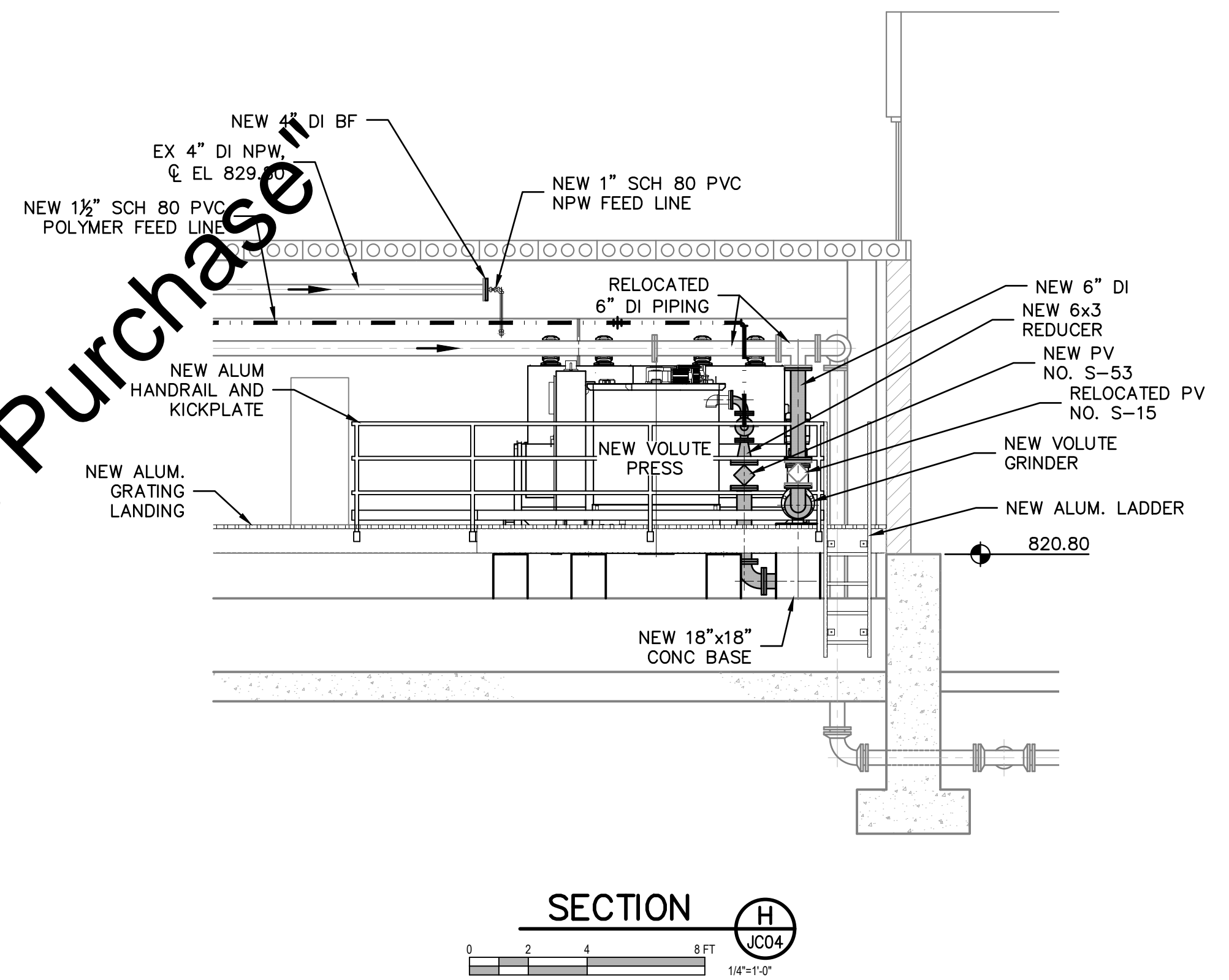
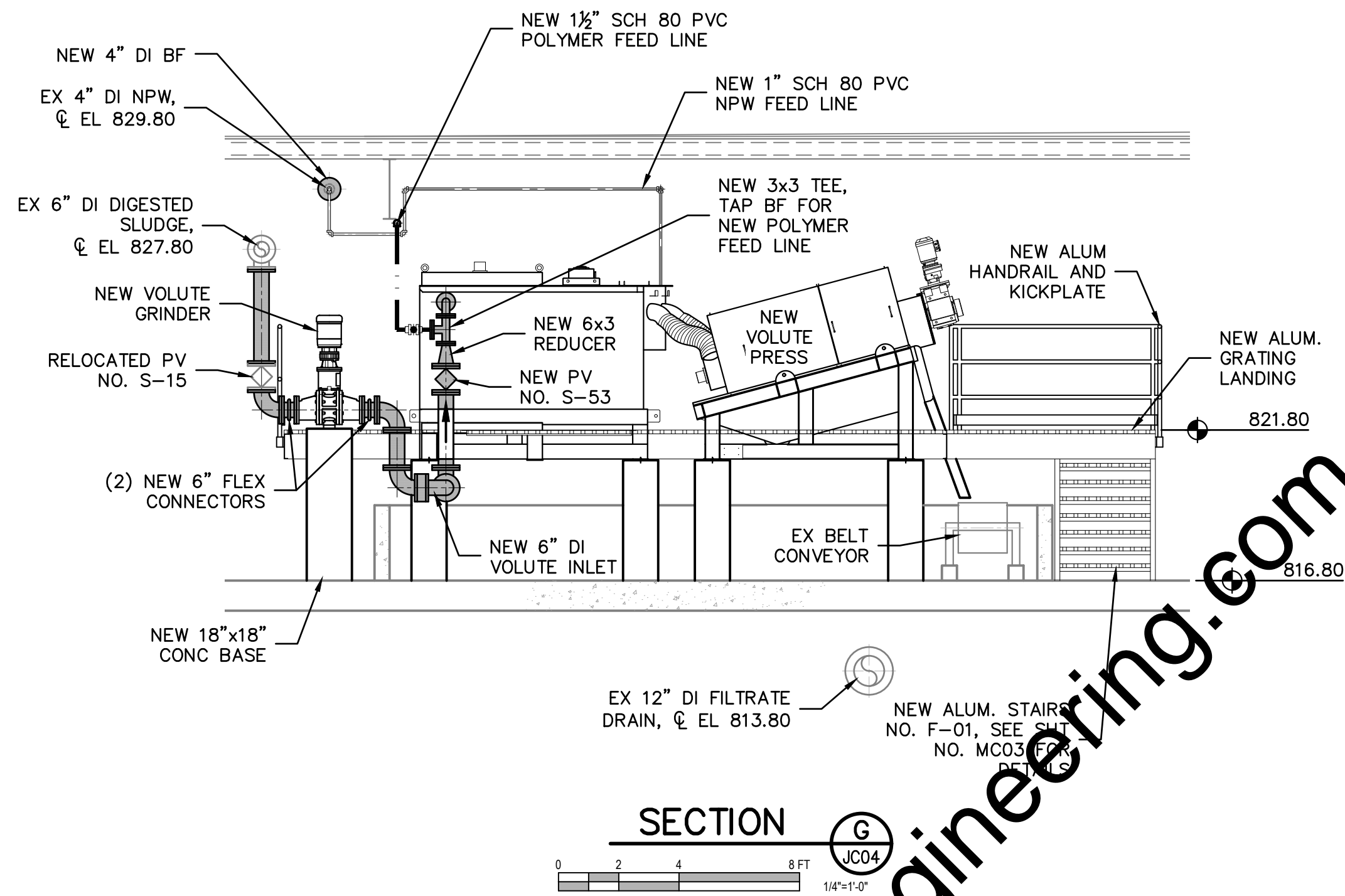
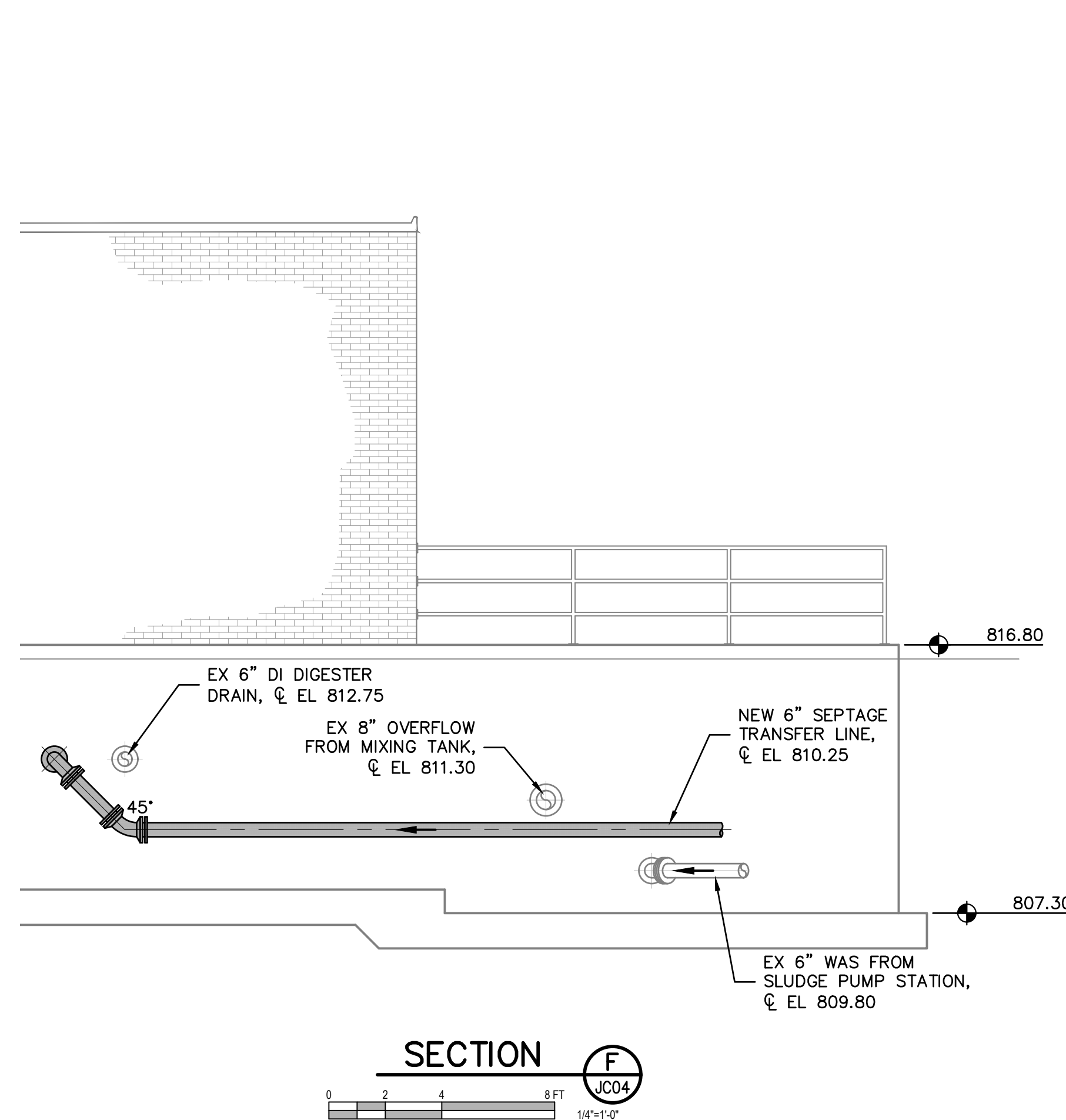


WASTEWATER TREATMENT PLANT EXPANSION - 2017

CITY OF WARSAW, INDIANA

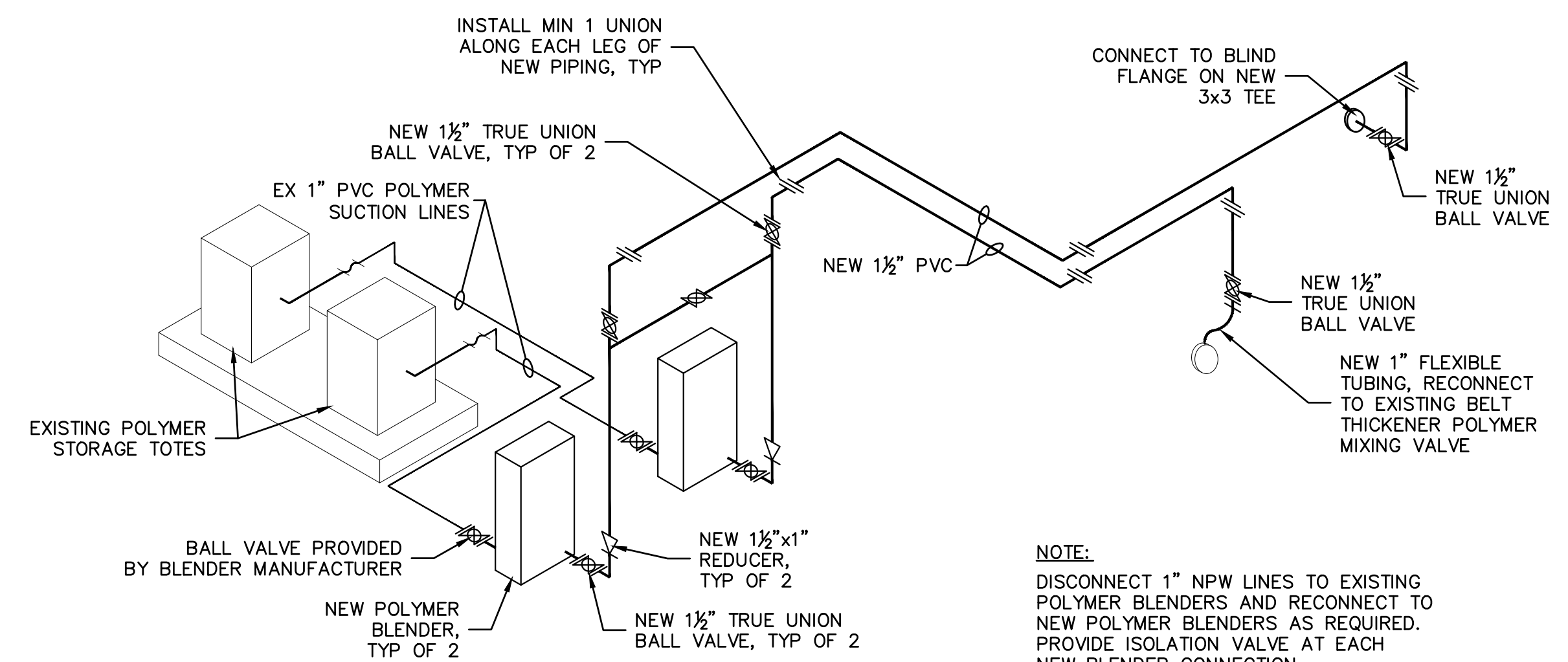
EXISTING SOLIDS HANDLING BUILDING MODIFICATION SECTIONS

| | |
|-----------|-------------|
| SHEET NO. | JC06 |
| PAGE NO. | 199 |



NEW PULSED AIR SYSTEM SCHEMATIC
NO SCALE

- NOTES:**
1. ALL AIR PIPING SHALL BE STAINLESS STEEL.
 2. BALL VALVES SHALL BE USED ON STAINLESS STEEL PIPING.



POLYMER PIPING MODIFICATIONS SCHEMATIC
NO SCALE

NOTE:
DISCONNECT 1\"/>

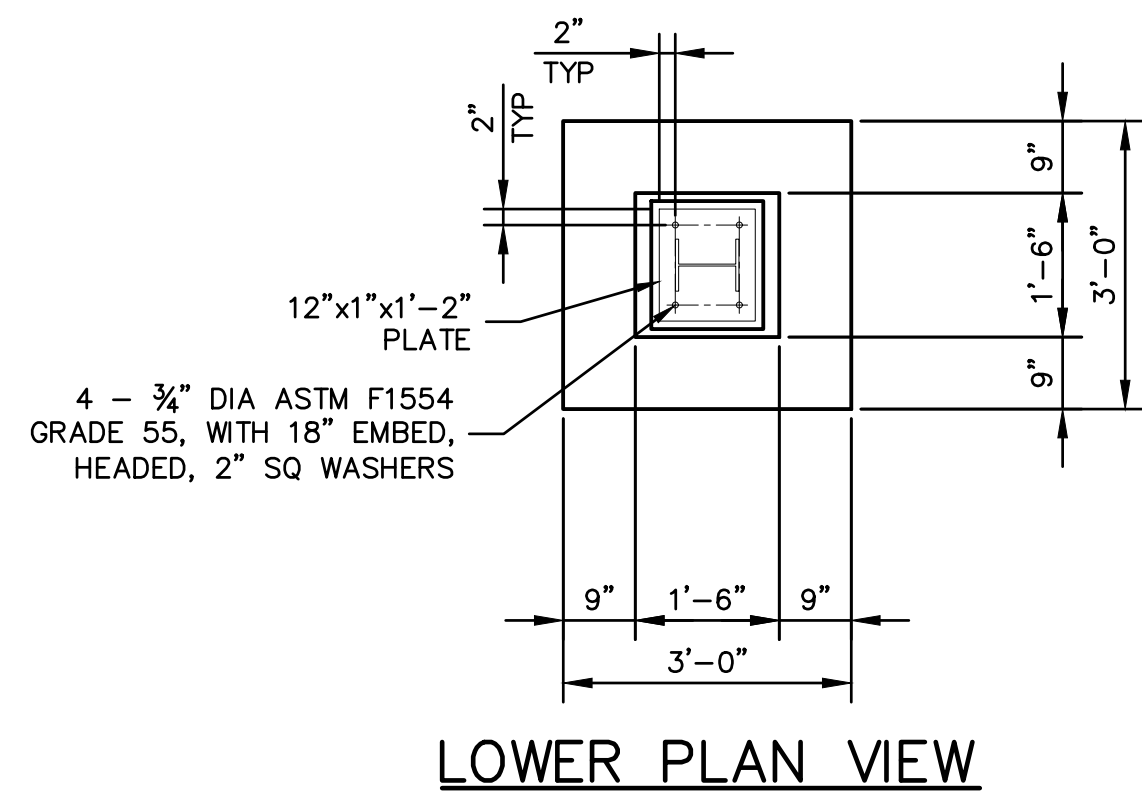
Drawing: J:\Warsaw\Projects\162813-WWTP Expansion\CAD\04-001\DWG\Shenell\162813-Ex Solids Hand Bldg.dwg | Layout: JC07 | Printed: 09/04/18 @ 11:04:10 | LastSavedBy: mken

| SCALE VERIFICATION | DRAWN BY | NO. | DATE | INITIALS | REVISION DESCRIPTIONS |
|--|-------------------|-----|------|----------|-----------------------|
| BAR IS ONE INCH LONG ON ORIGINAL DRAWING | CHECKED BY | WBJ | | | |
| | APPROVED BY | ALT | | | |
| | ISSUE DATE | GLR | | | |
| | PROJECT NUMBER | | | | |
| | SEPTEMBER 4, 2018 | | | | |
| | 162813-04-003 | | | | |

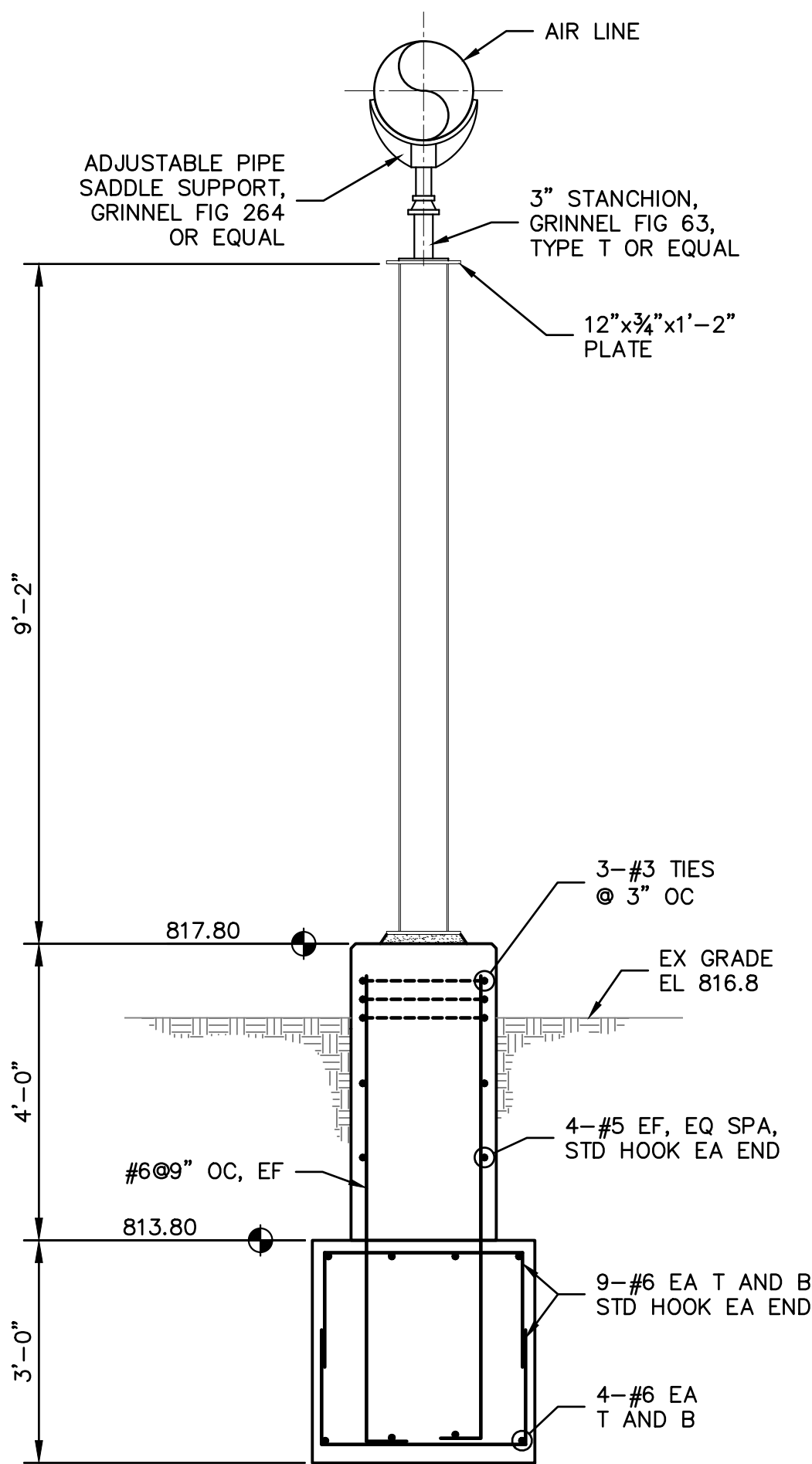


WASTEWATER TREATMENT PLANT EXPANSION - 2017
CITY OF WARSAW, INDIANA
EXISTING SOLIDS HANDLING BUILDING MODIFICATION SECTIONS AND DETAILS

SHEET NO.
JC07
PAGE NO.
200

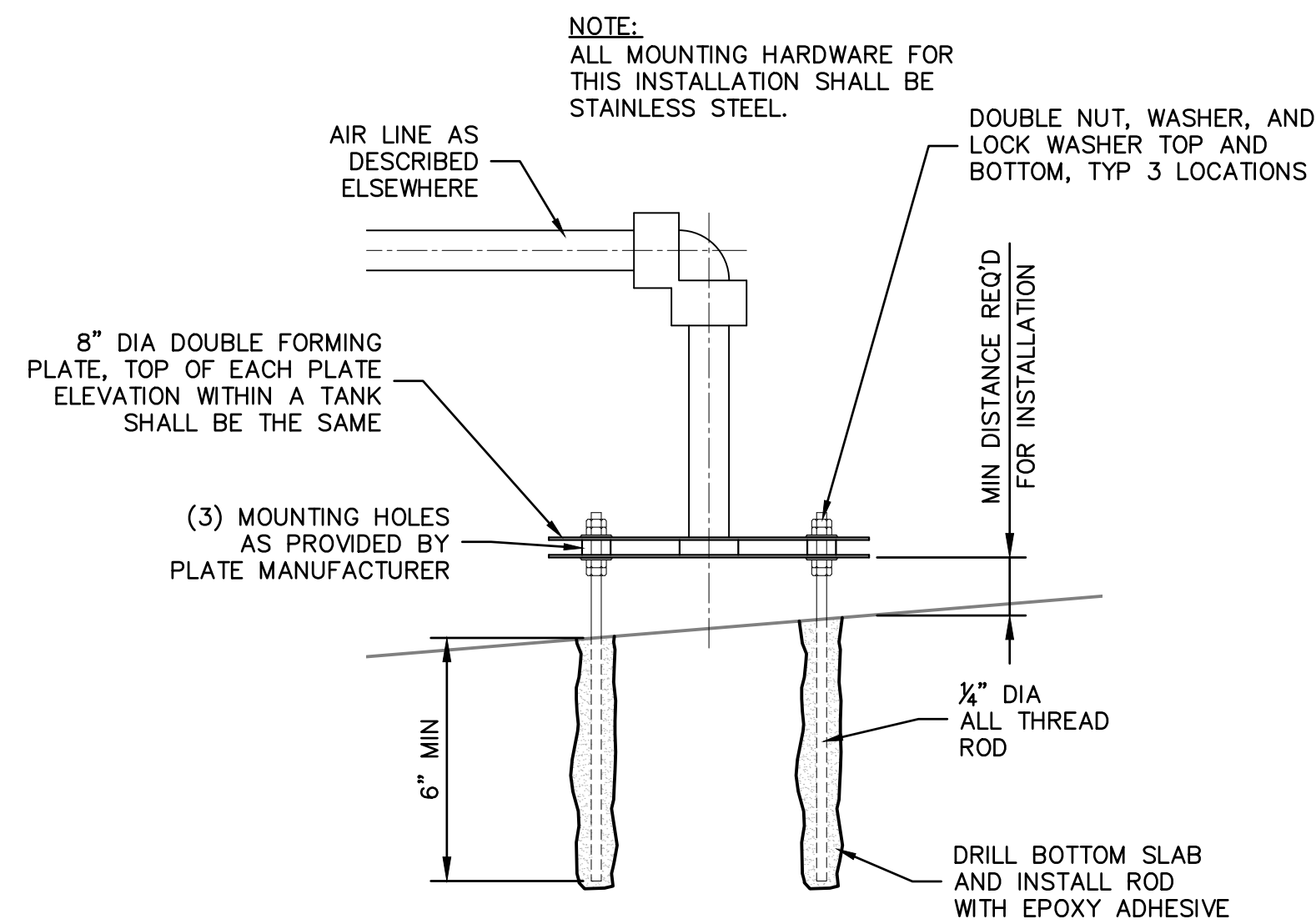
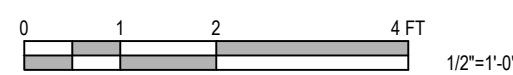


LOWER PLAN VIEW

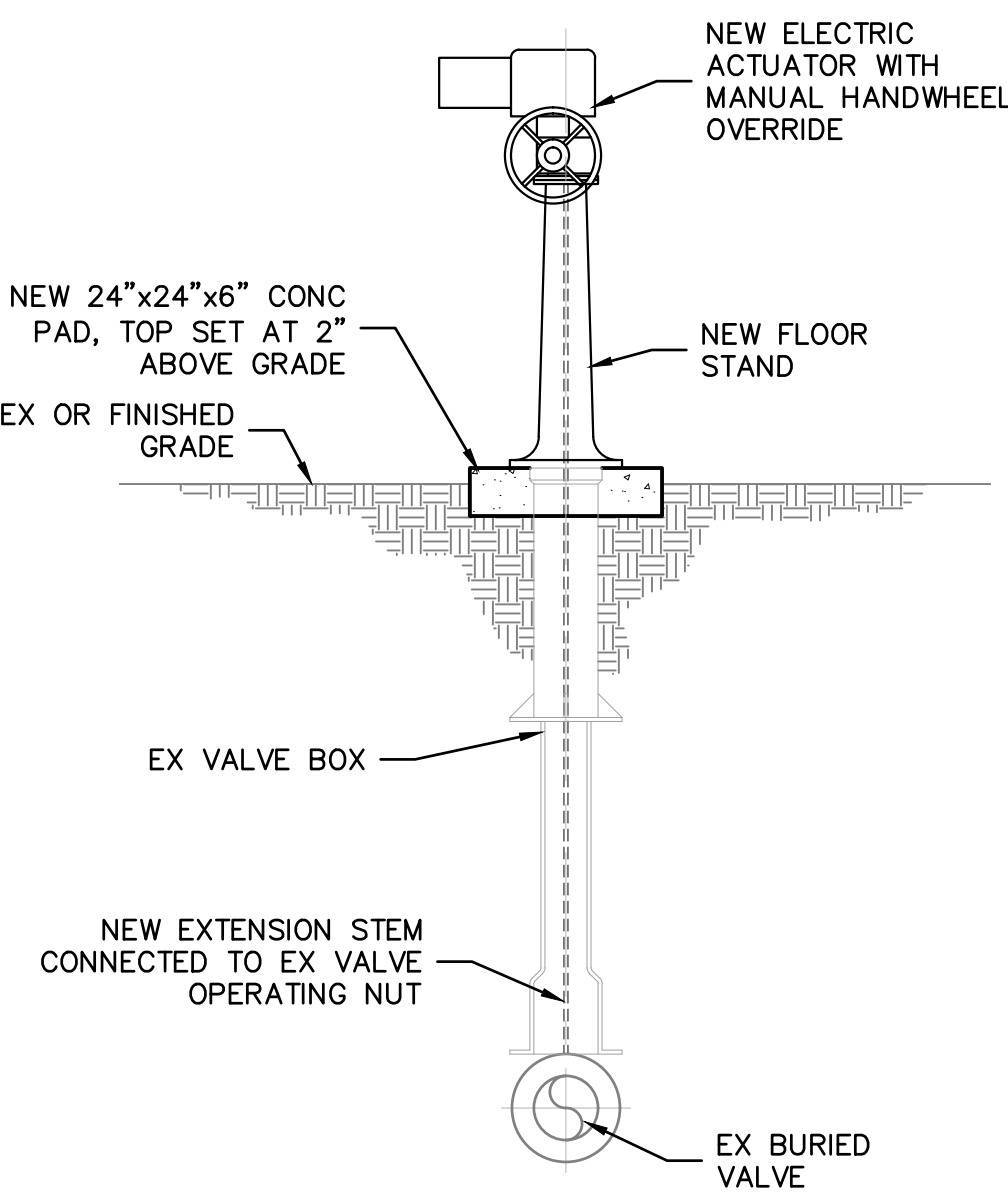
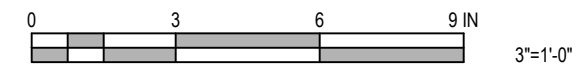


SECTION VIEW

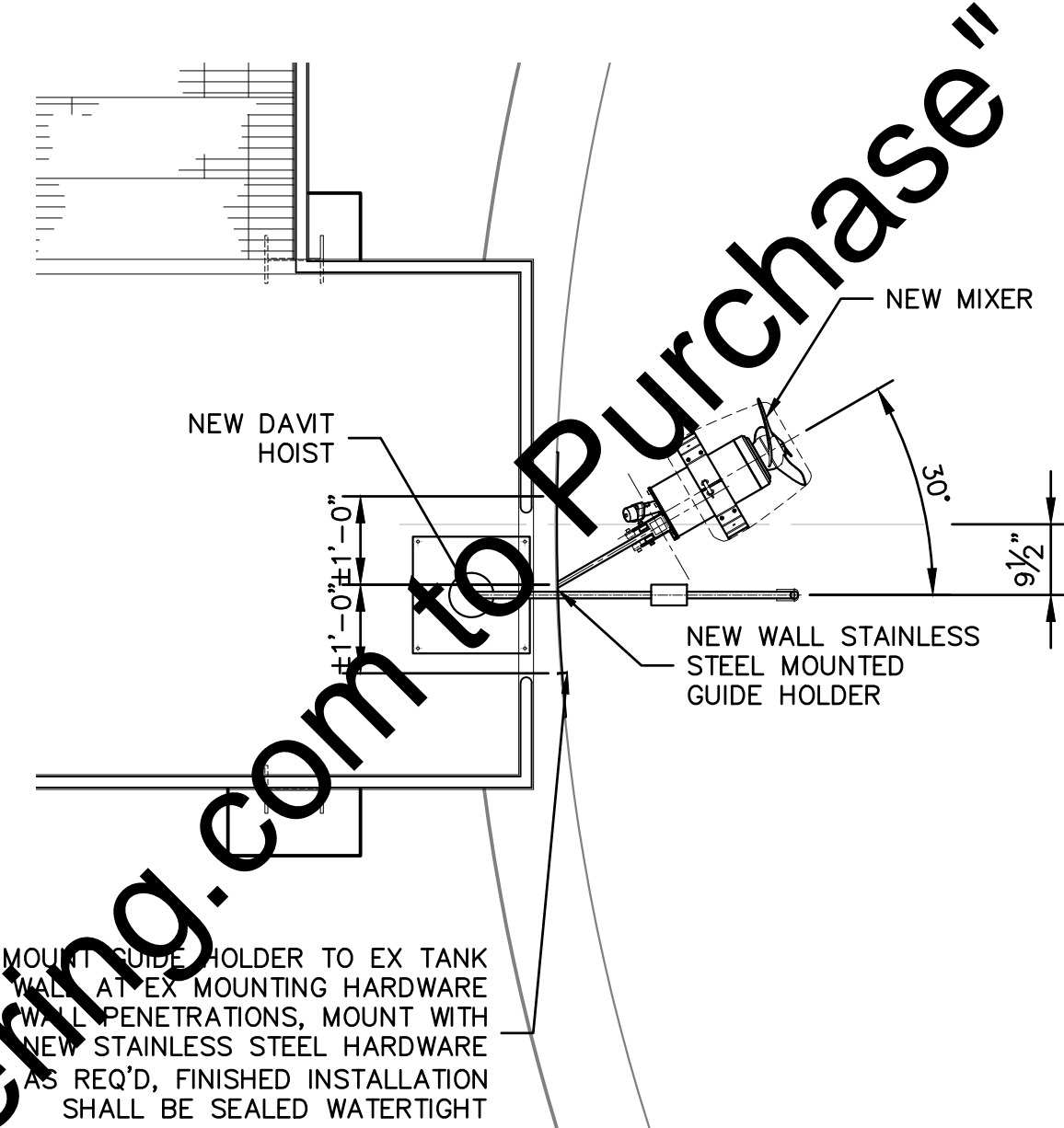
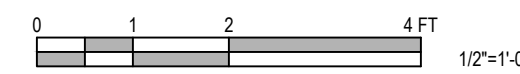
NEW AIR PIPING SUPPORT PAD AND COLUMN DETAILS



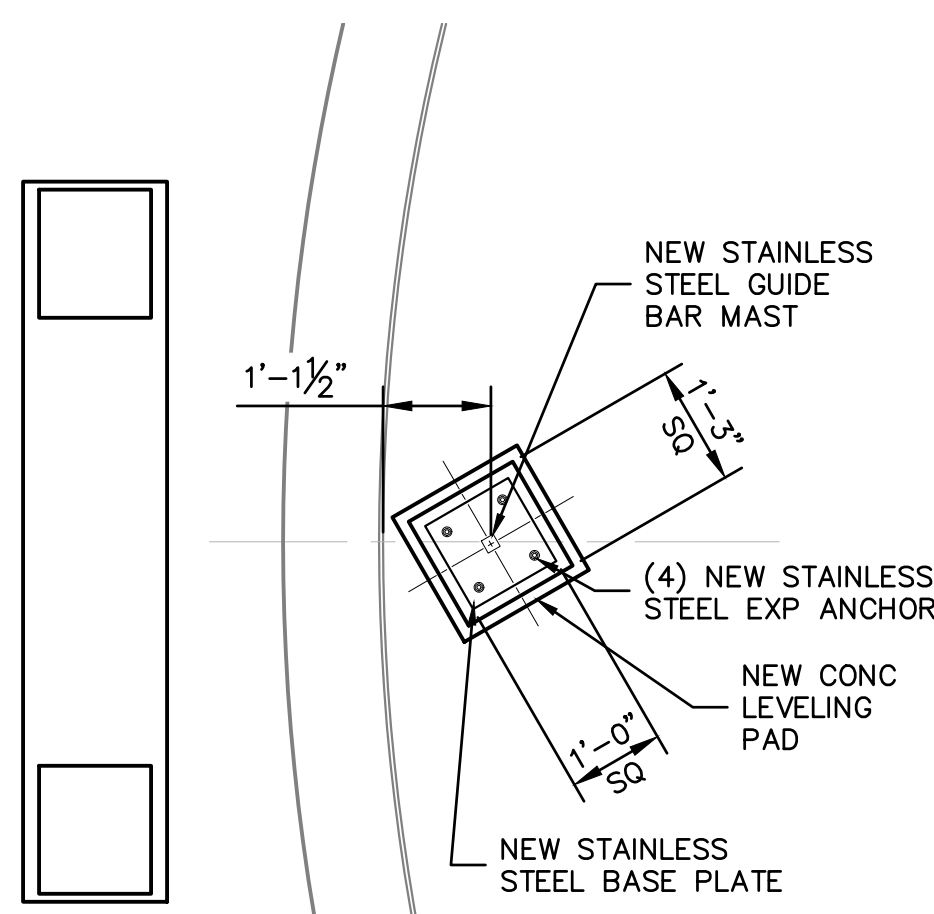
PULSED AIR FORMING PLATE INSTALLATION DETAIL



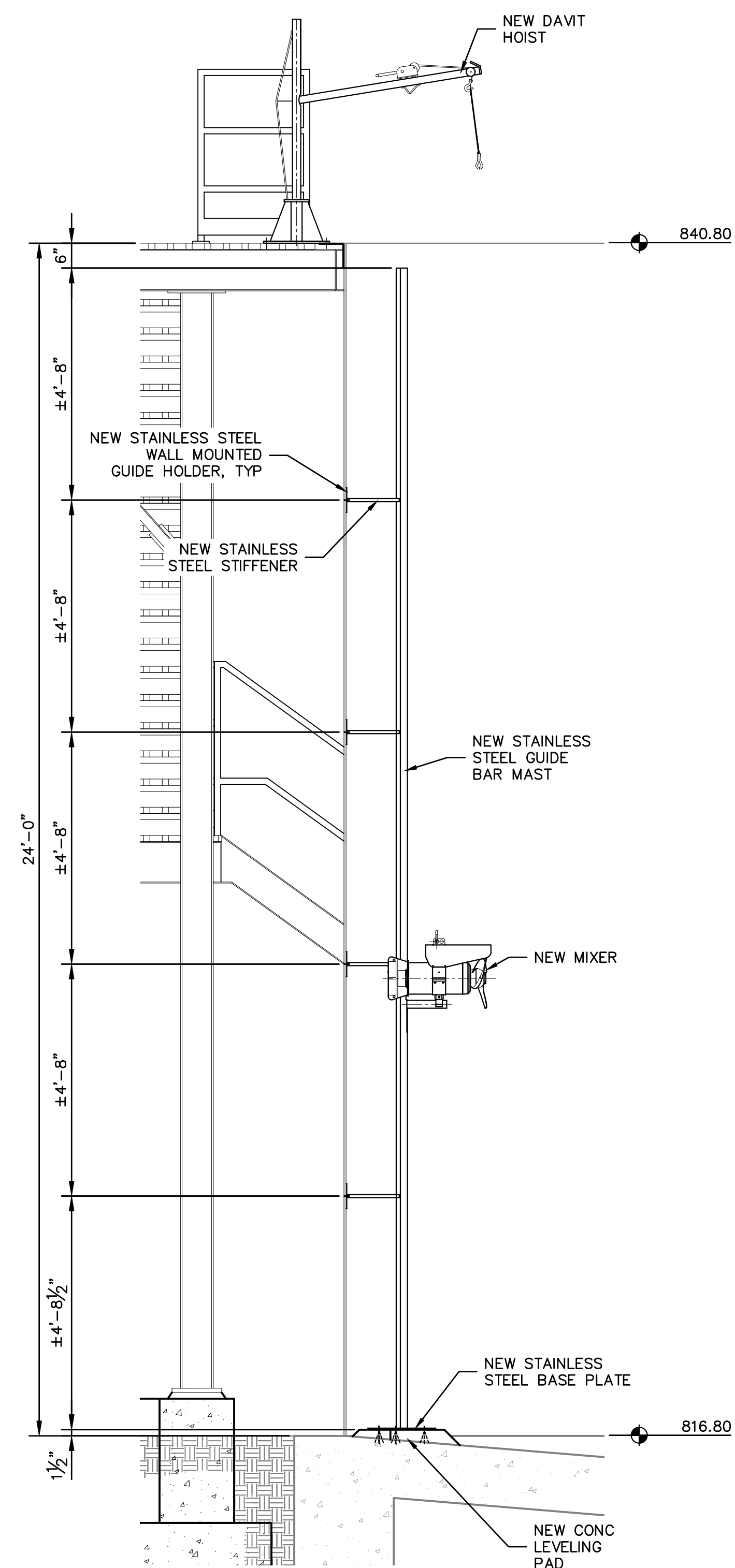
ACTUATOR INSTALLATION TO BURIED VALVE DETAIL



UPPER PLAN VIEW



LOWER PLAN VIEW



SECTION VIEW

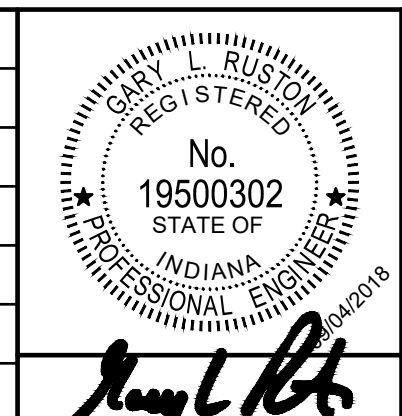
HOLDING TANK MIXER INSTALLATION DETAILS



"For Viewing Purposes Only - Visit wesslerengineering.com to Purchase"

* VERIFY ELEVATION AND/OR DIMENSION WITH EQUIPMENT MANUFACTURER.

| SCALE VERIFICATION | DRAWN BY | NO. | DATE | INITIALS | REVISION DESCRIPTIONS |
|--|-------------------|-----|------|----------|-----------------------|
| BAR IS ONE INCH LONG ON ORIGINAL DRAWING | CHECKED BY | WBJ | | | |
| | APPROVED BY | ALT | | | |
| | ISSUE DATE | GLR | | | |
| | PROJECT NUMBER | | | | |
| | SEPTEMBER 4, 2018 | | | | |
| | 162813-04-003 | | | | |

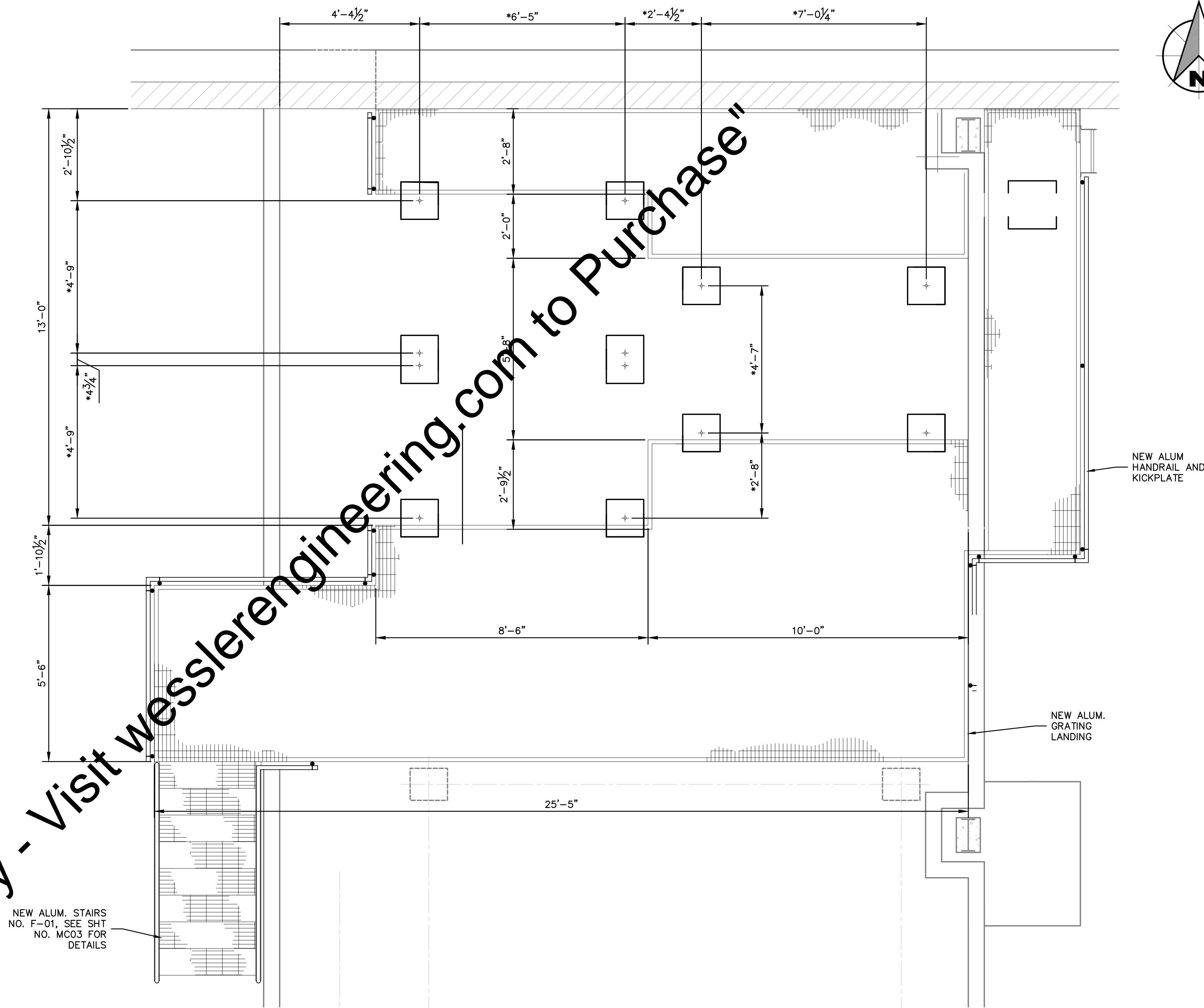
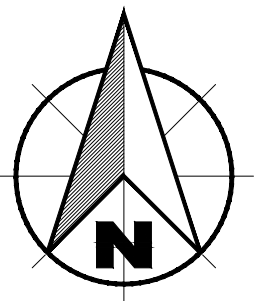


WESSLER ENGINEERING
More than a Project™

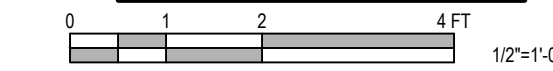
WASTEWATER TREATMENT PLANT EXPANSION - 2017
CITY OF WARSAW, INDIANA
MODIFIED HOLDING TANKS SECTION AND DETAILS

SHEET NO.
JC12
PAGE NO.
205

Drawing: J:\Warshaw\Projects\162813\Warshaw WWTTP Expansion\CAD\04-001\DWG\Shells\ISOB_162813\EX.Dwg | Layout: JC12 | Plotted: 09/04/18 @ 11:06:12 | LastSavedBy: MikeN



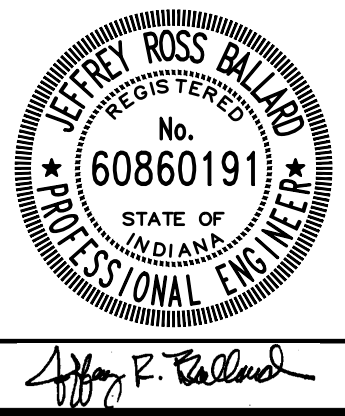
**NEW GRATING AND EQUIPMENT SUPPORTS
LAYOUT PLAN**



For Viewing Purposes Only - Visit wesslerengineering.com to Purchase

* VERIFY ELEVATION AND/OR DIMENSION WITH EQUIPMENT MANUFACTURER.

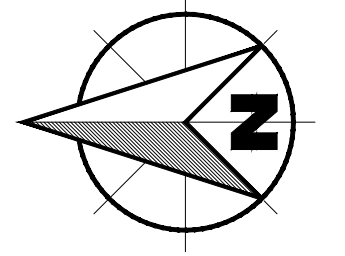
| SCALE VERIFICATION | DRAWN BY | NO. | DATE | INITIALS | REVISION DESCRIPTIONS |
|--|-------------------|-----|------|----------|-----------------------|
| BAR IS ONE INCH LONG ON ORIGINAL DRAWING | CHECKED BY | WBJ | | | |
| | APPROVED BY | JRB | | | |
| | ISSUE DATE | GLR | | | |
| | SEPTEMBER 4, 2018 | | | | |
| | PROJECT NUMBER | | | | |
| | 162813-04-003 | | | | |



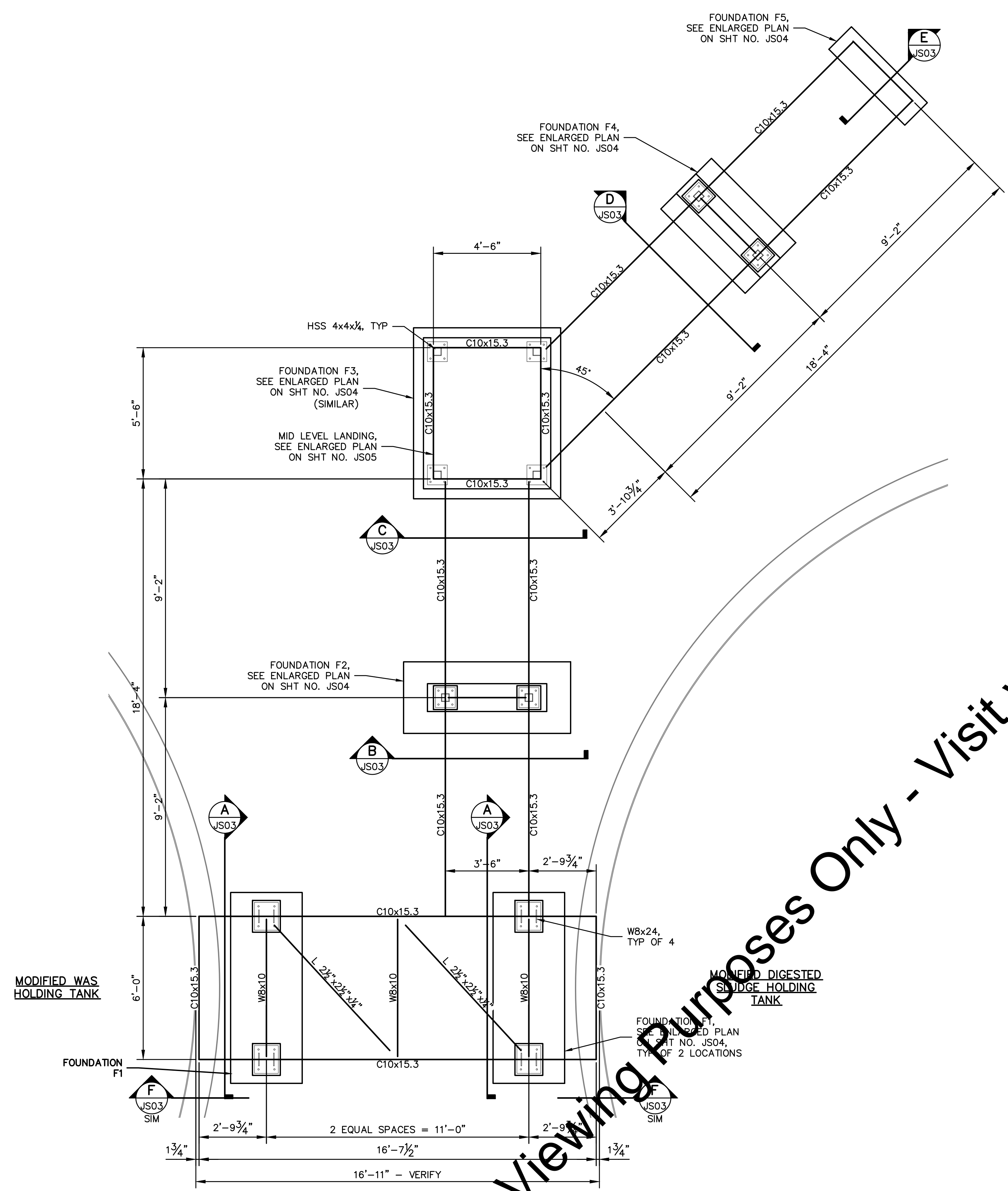
WASTEWATER TREATMENT PLANT EXPANSION - 2017
CITY OF WARSAW, INDIANA
**EXISTING SOLIDS HANDLING BUILDING
NEW STRUCTURAL COMPONENTS
PLAN, SECTIONS AND DETAILS**

SHEET NO.
JS01
PAGE NO.
206

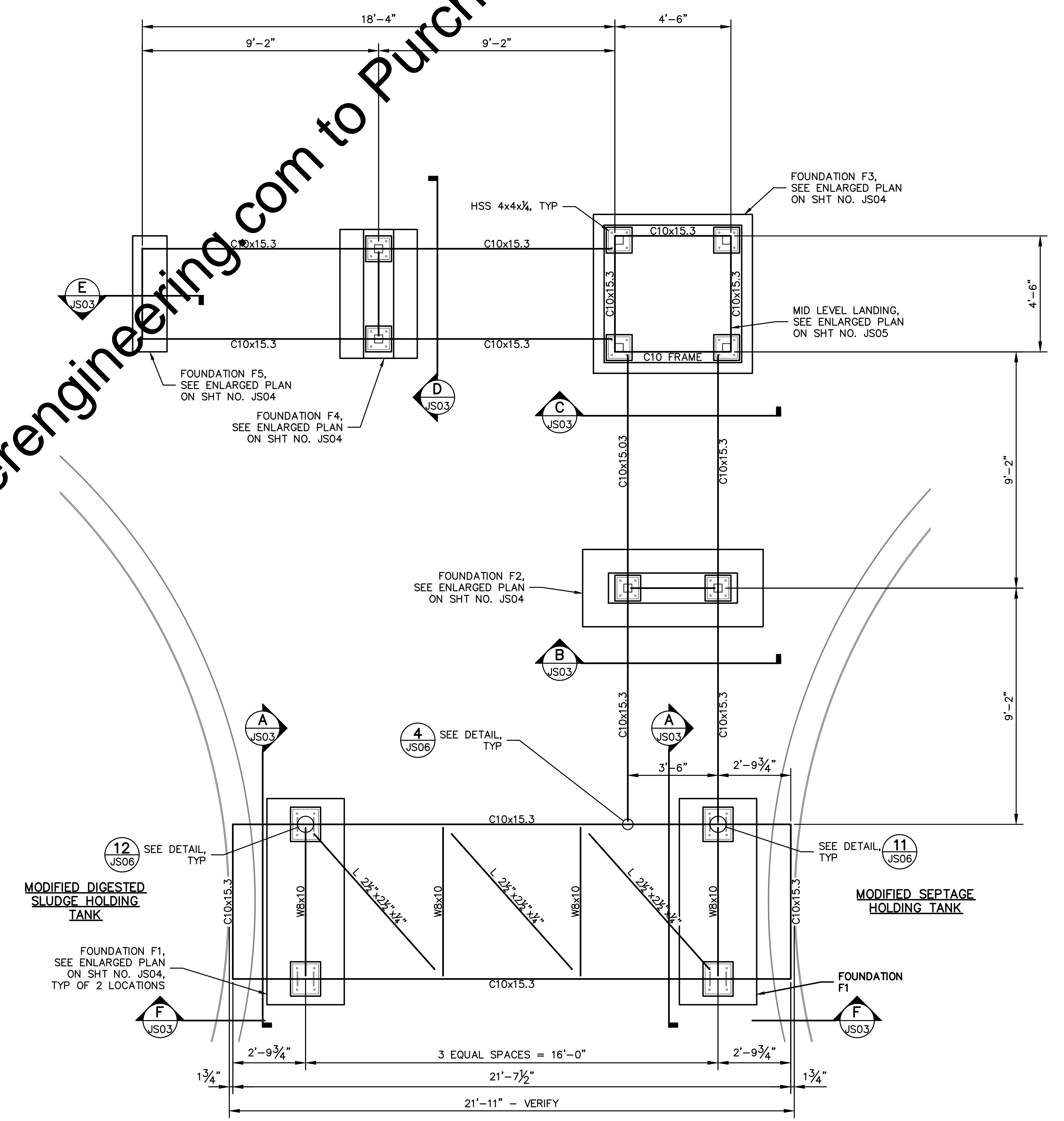
Drawing: J:\Warsaw\Projects\162813\WwTP_Expansion\CAD\04-001\DWG\Sheets\162813-Ex_Solids_Handl_Bldg.dwg | Layout: JS01 | Plotted: 09/04/18 @ 11:06:44 | LastSavedBy: MikeN



- NEW STAIRS AND LANDINGS GENERAL NOTES:
1. FIELD VERIFY THE DISTANCE BETWEEN THE HOLDING TANKS PRIOR TO FABRICATION OF THE NEW STAIRS. COORDINATE ANY DISCREPANCIES FOUND WITH THE ENGINEER.
 2. THE NEW STAIRS NO. J-2 AND J-3 SHALL HAVE 11" WIDE TREADS.
 3. THE NEW STAIRS TREADS AND RISERS QUANTITY SHALL BE AS DESCRIBED IN THE METAL STAIR SCHEDULE ON SHEET NO. ###.
 4. NEW HANDRAIL INSTALLATION SHALL BE AS DESCRIBED IN THE TYPICAL METAL STAIR SECTION ON SHEET NO. ###.



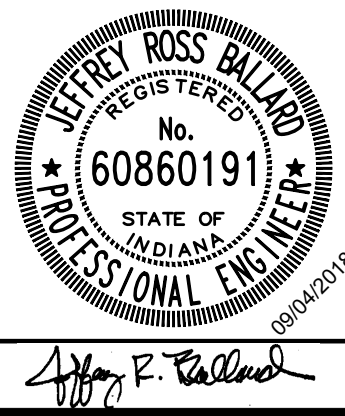
**NEW ACCESS STAIRS NO. J-3
FRAMING PLAN**



**NEW ACCESS STAIRS NO. J-2
FRAMING PLAN**

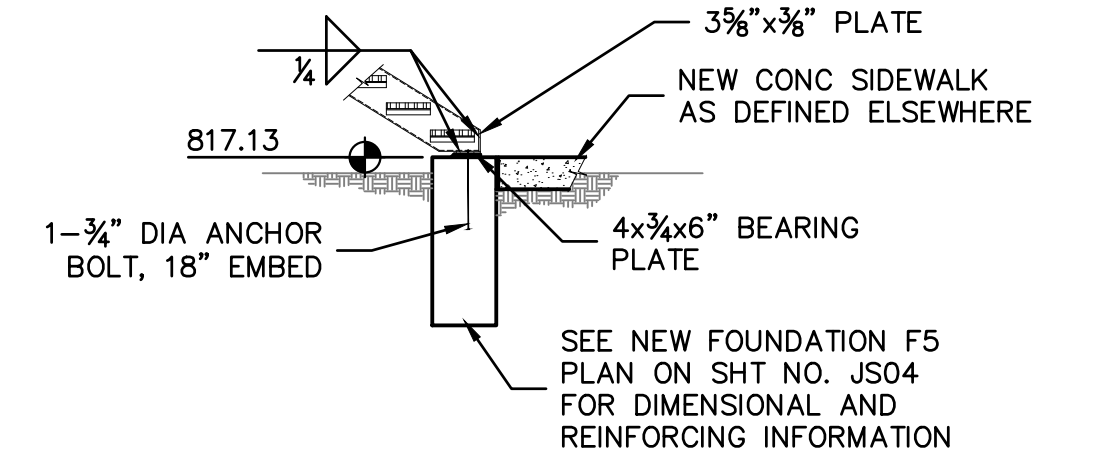
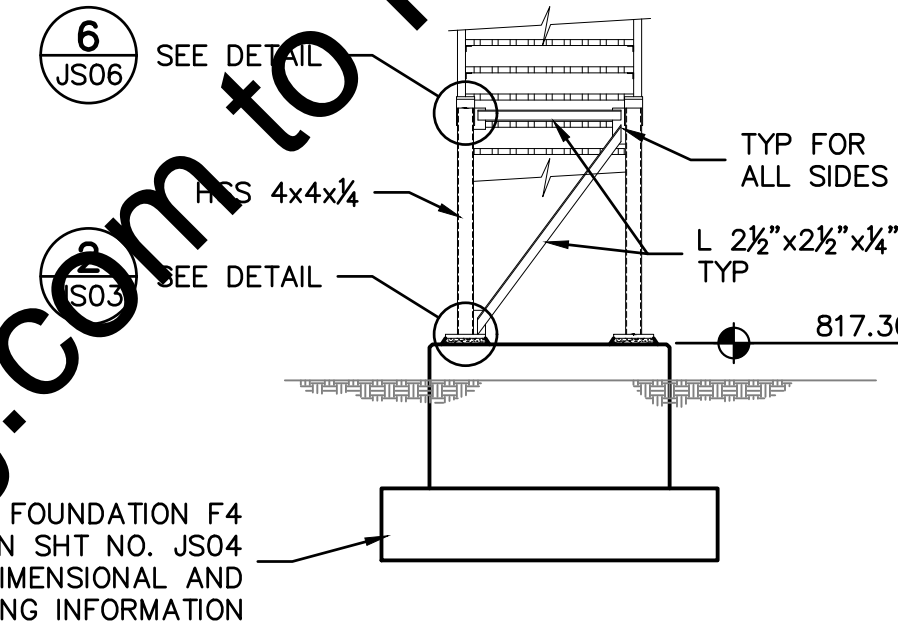
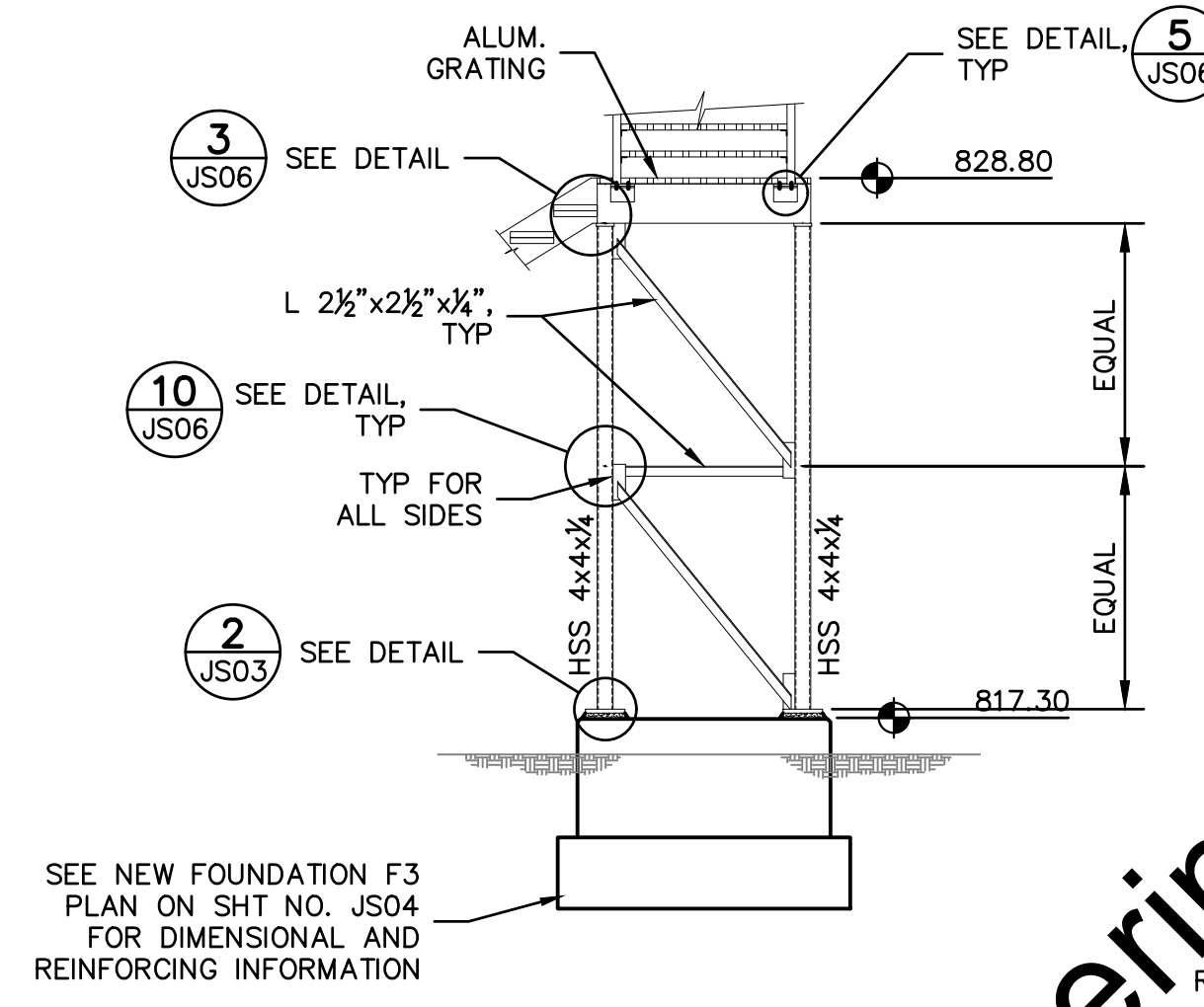
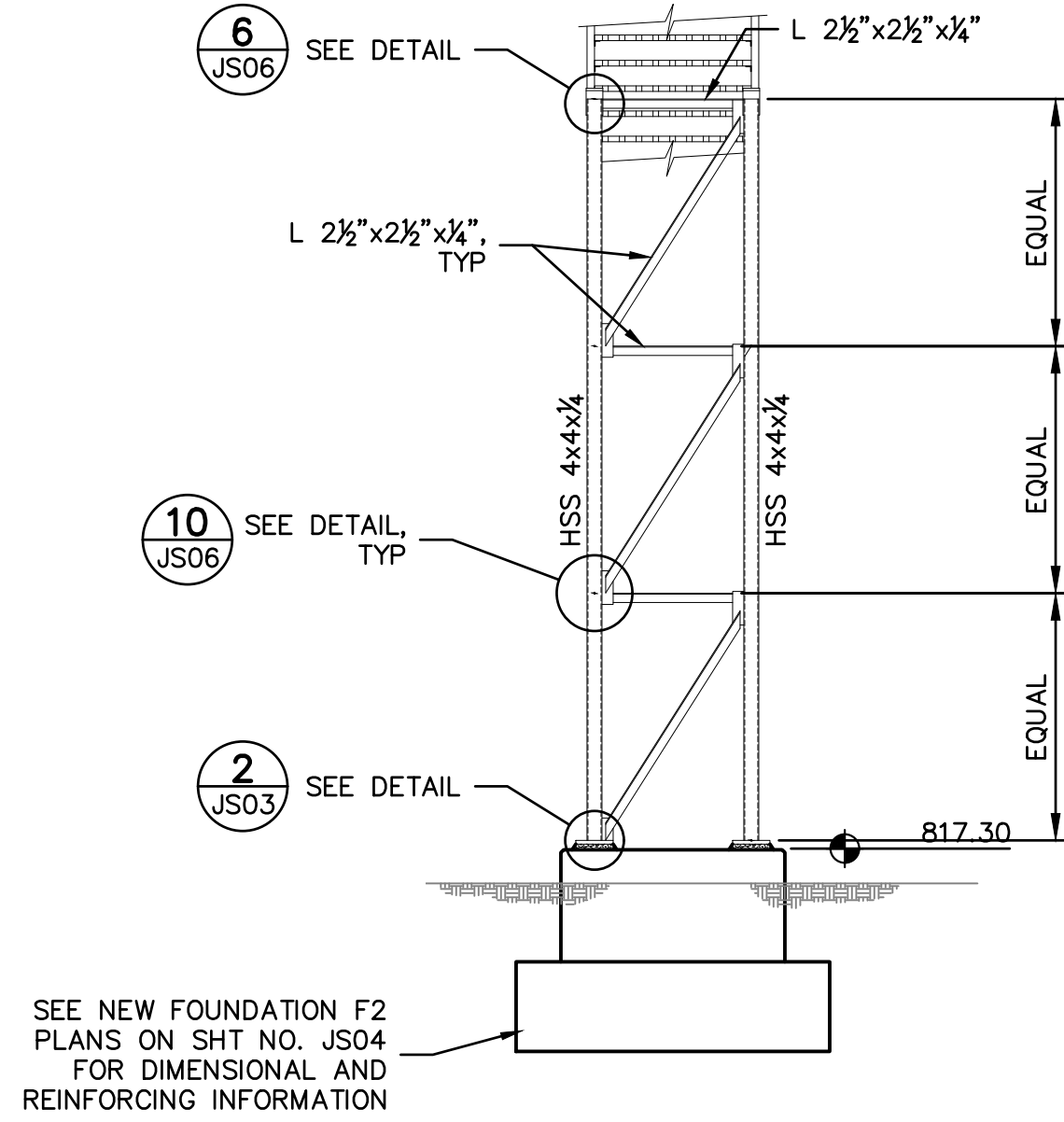
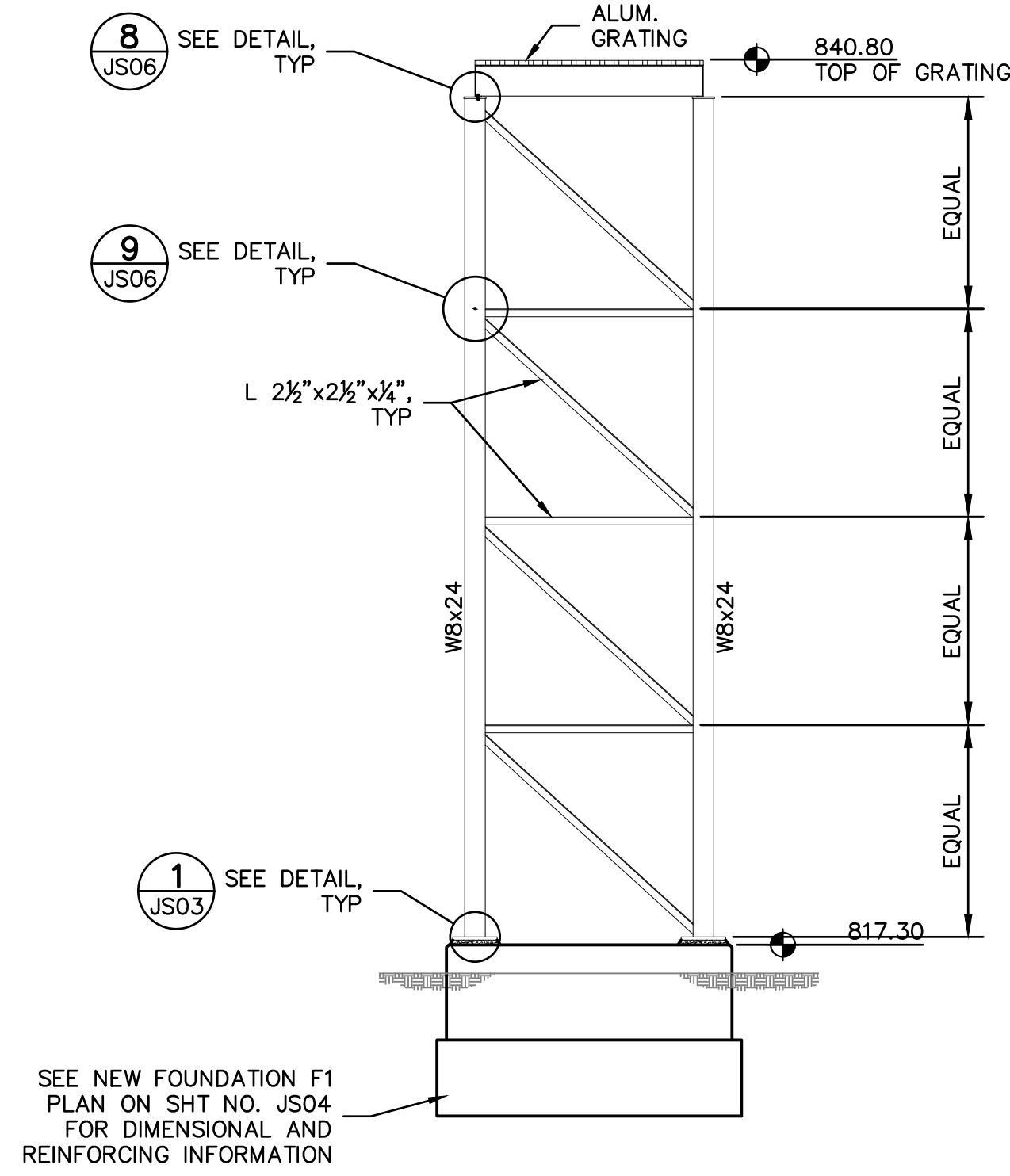
Drawing: J:\Warsaw\Projects\162813\DWG\Shells\JS06_162813EX.dwg | Layout: JS02_162813EX.dwg | Plotted: 09/04/18 @ 11:07:22 | LantSaveBy: MikeN

| SCALE VERIFICATION | DRAWN BY | NO. | DATE | INITIALS | REVISION DESCRIPTIONS |
|--|-------------------------------|-----|------|----------|-----------------------|
| BAR IS ONE INCH LONG ON ORIGINAL DRAWING | WBJ | | | | |
| | CHECKED BY: ALT | | | | |
| | APPROVED BY: JRB | | | | |
| | ISSUE DATE: SEPTEMBER 4, 2018 | | | | |
| | PROJECT NUMBER: 162813-04-003 | | | | |



WASTEWATER TREATMENT PLANT EXPANSION - 2017
CITY OF WARSAW, INDIANA
**MODIFIED HOLDING TANKS
NEW ACCESS STAIRS FRAMING PLANS**

SHEET NO.
JS02
PAGE NO.
207



FOUNDATION F1

SECTION A JS02

FOUNDATION F2

SECTION B JS02

FOUNDATION F3

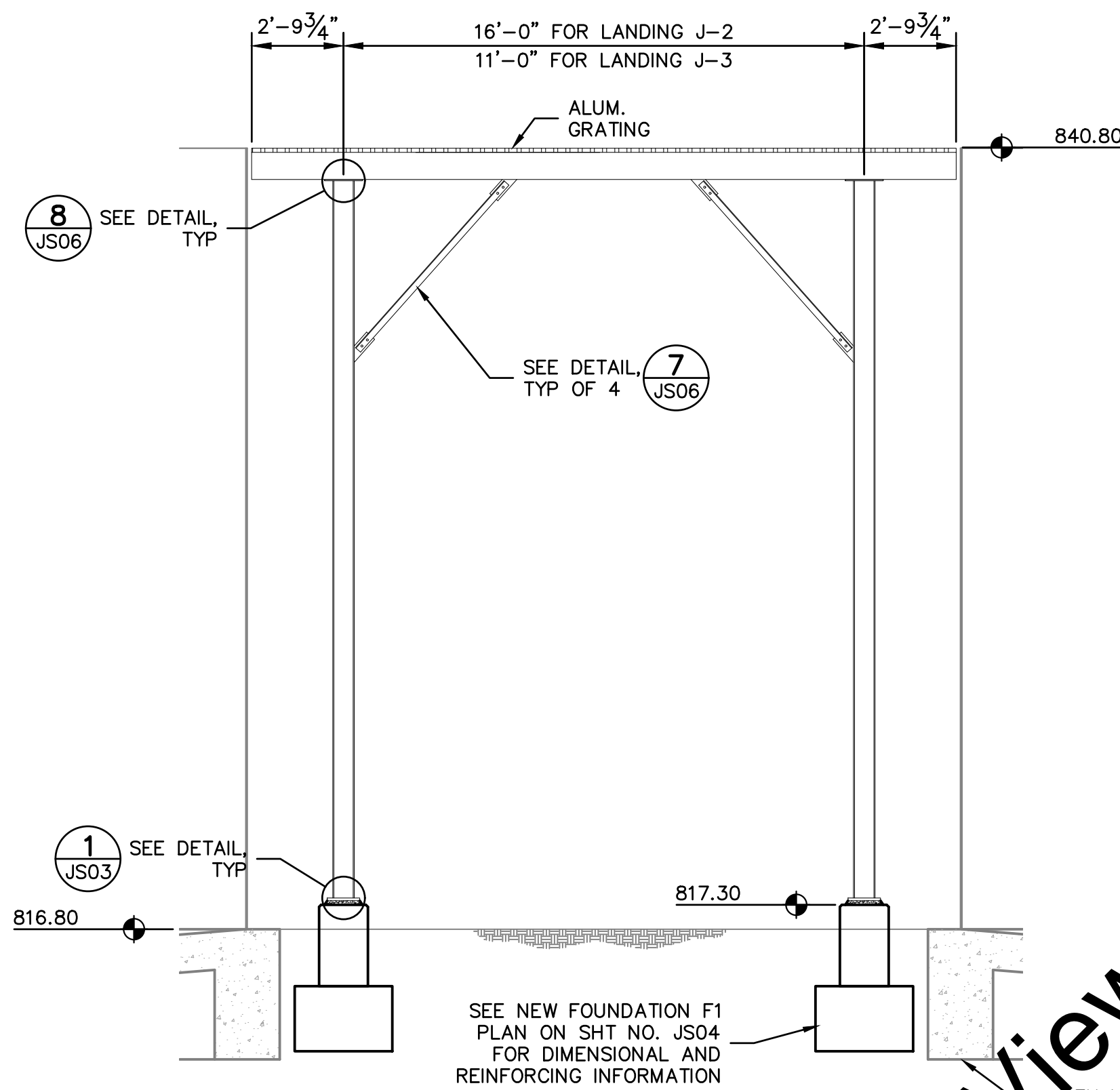
SECTION C JS02

FOUNDATION F4

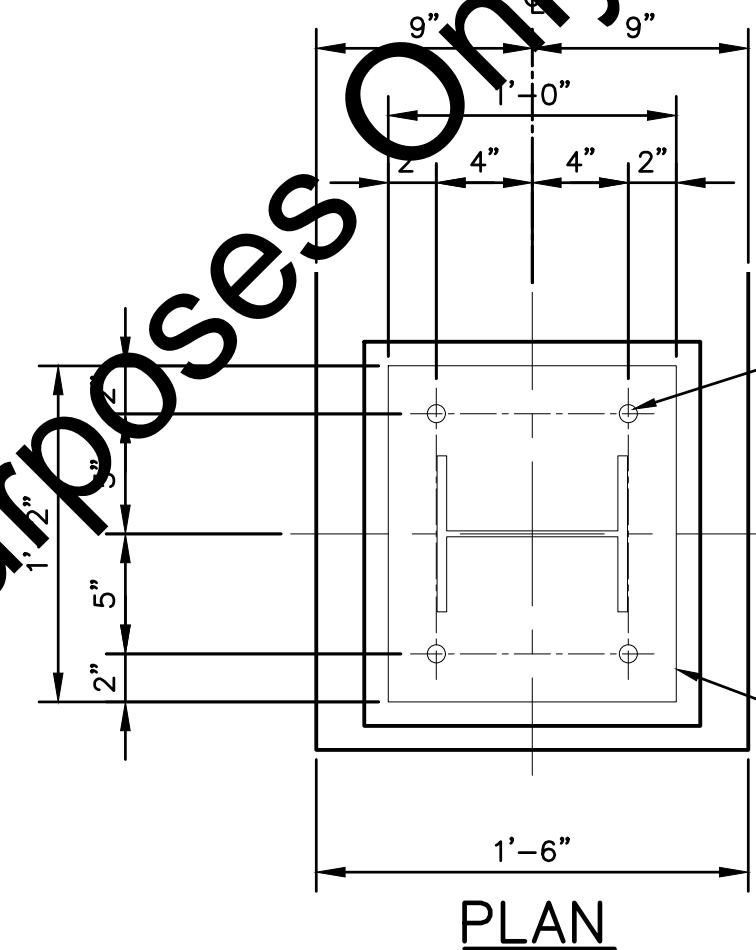
SECTION D JS02

FOUNDATION F5

SECTION E JS02

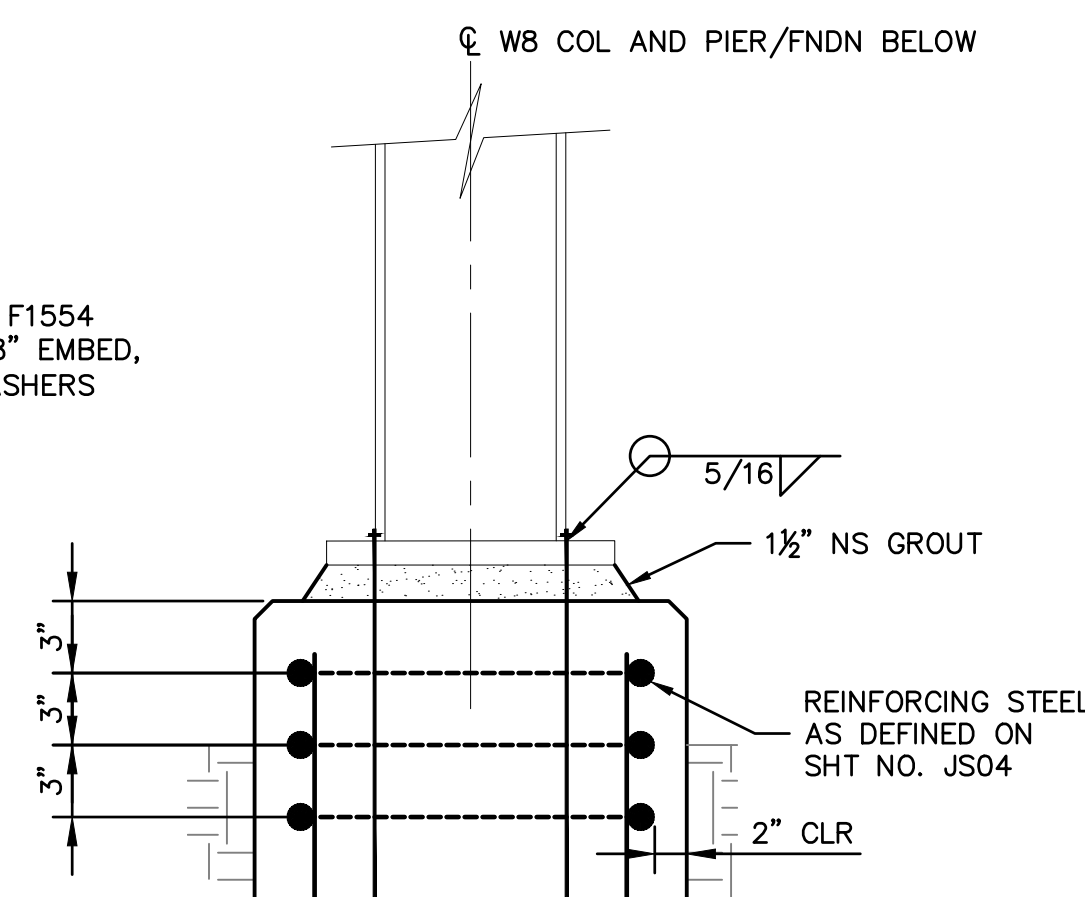


SECTION F JS02

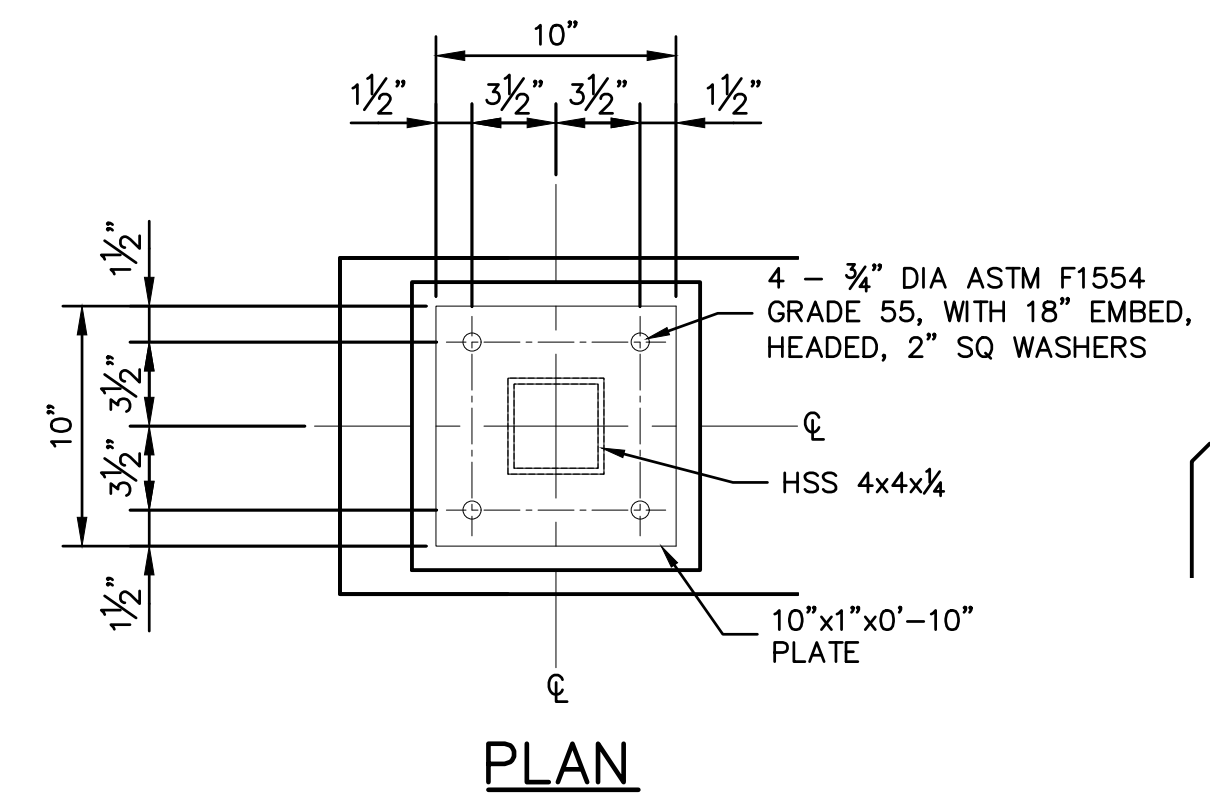


FOUNDATION F1 BASE PLATE

DETAIL 1



SECTION



PLAN

SECTION

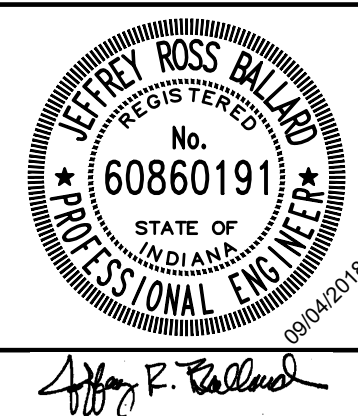
FOUNDATION F2 THRU F4 BASE PLATES

DETAIL 2

Drawing: J:\Warsaw\Projects\162813\162813-WWTP-Expansion\CAD\04-001\DWG\Shells\JS06_162813-EX.Dwg | Layout: JS03 | Plotter: 09/04/18 @ 11:08:23 | LastSavedBy: MikeN

"For Viewing Purposes Only - Visit wesslerengineering.com to Purchase"

| SCALE VERIFICATION | DRAWN BY | NO. | DATE | INITIALS | REVISION DESCRIPTIONS |
|--|-------------------|-----|------|----------|-----------------------|
| BAR IS ONE INCH LONG ON ORIGINAL DRAWING | WBJ | | | | |
| | ALB | | | | |
| | JRB | | | | |
| | ISSUE DATE | | | | |
| | SEPTEMBER 4, 2018 | | | | |
| | PROJECT NUMBER | | | | |
| | 162813-04-003 | | | | |



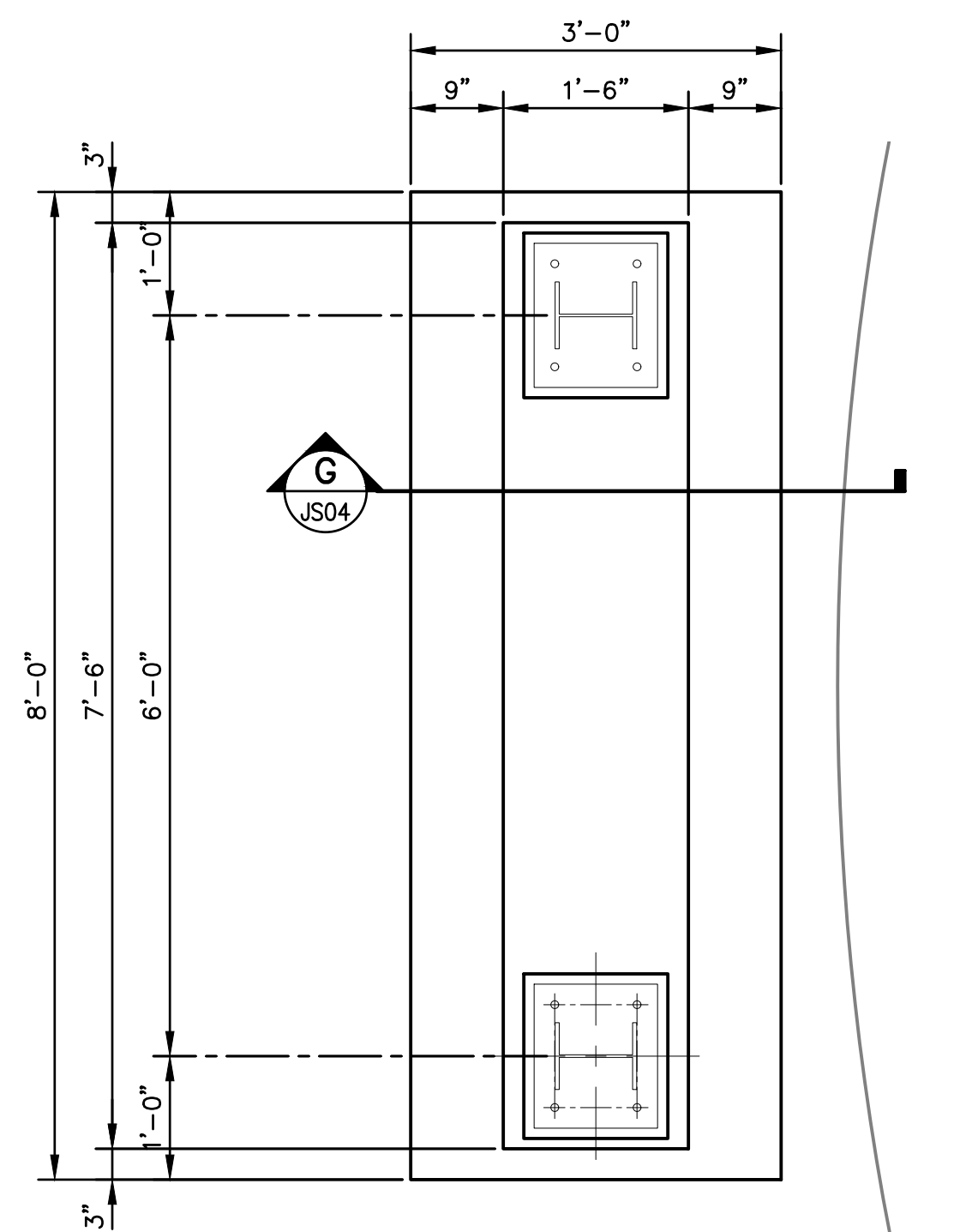
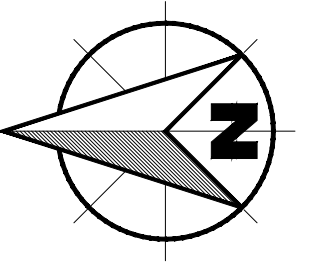
WASTEWATER TREATMENT PLANT EXPANSION - 2017

CITY OF WARSAW, INDIANA

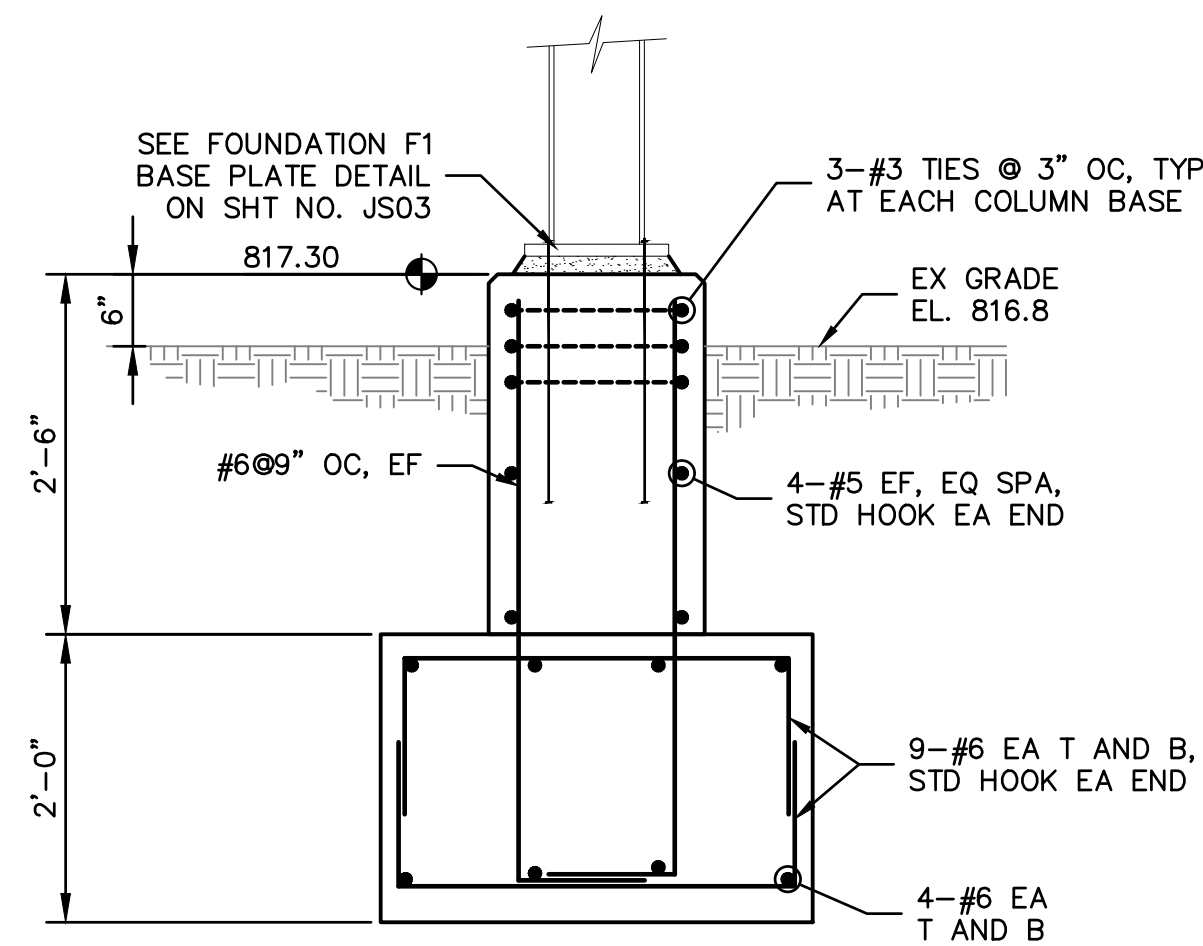
**MODIFIED HOLDING TANKS
NEW STAIRS AND LANDINGS
STRUCTURAL SECTIONS AND DETAILS**

SHEET NO.
JS03

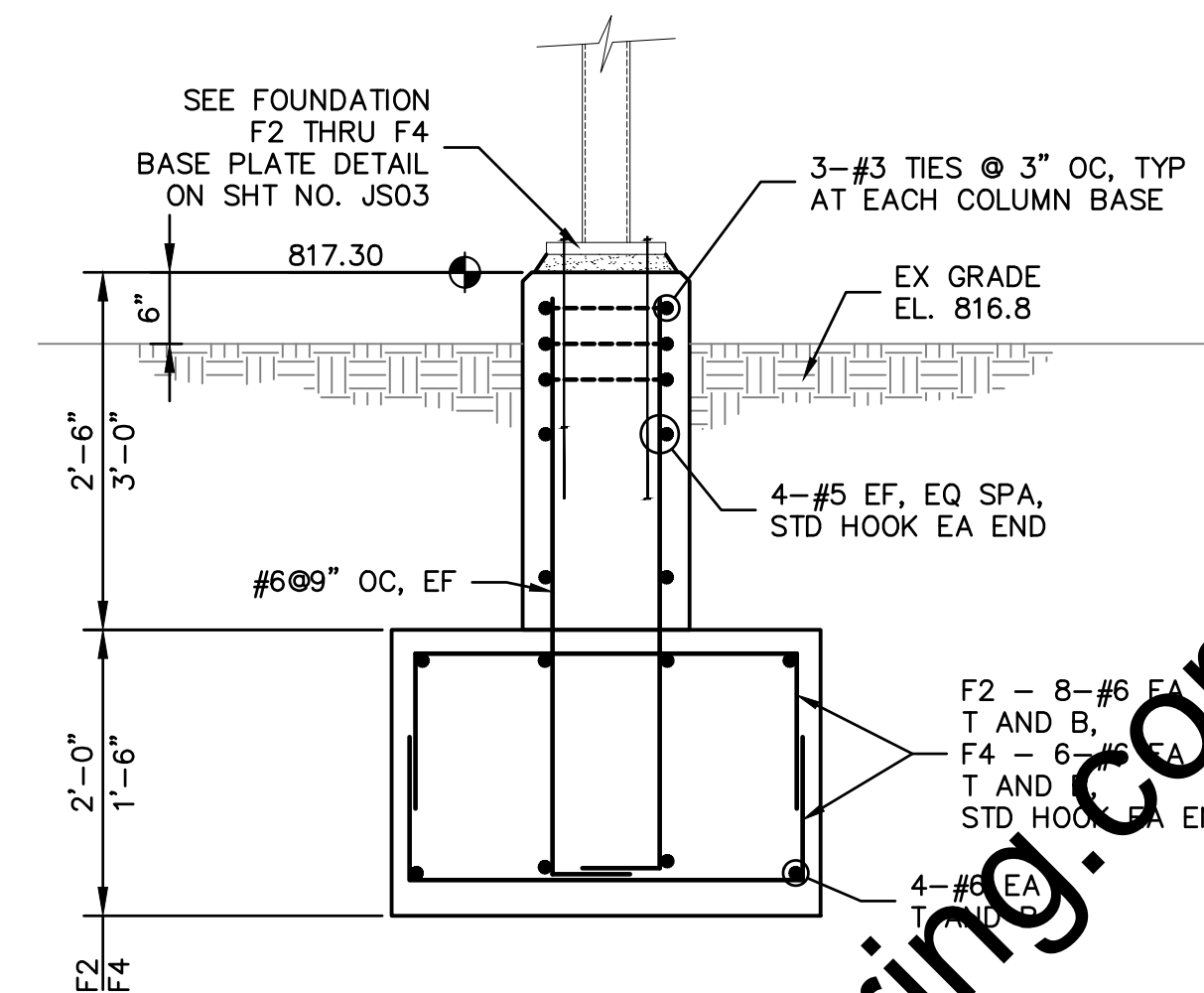
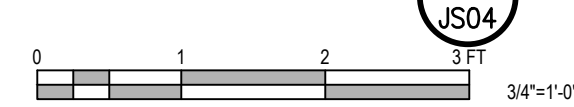
PAGE NO.
208



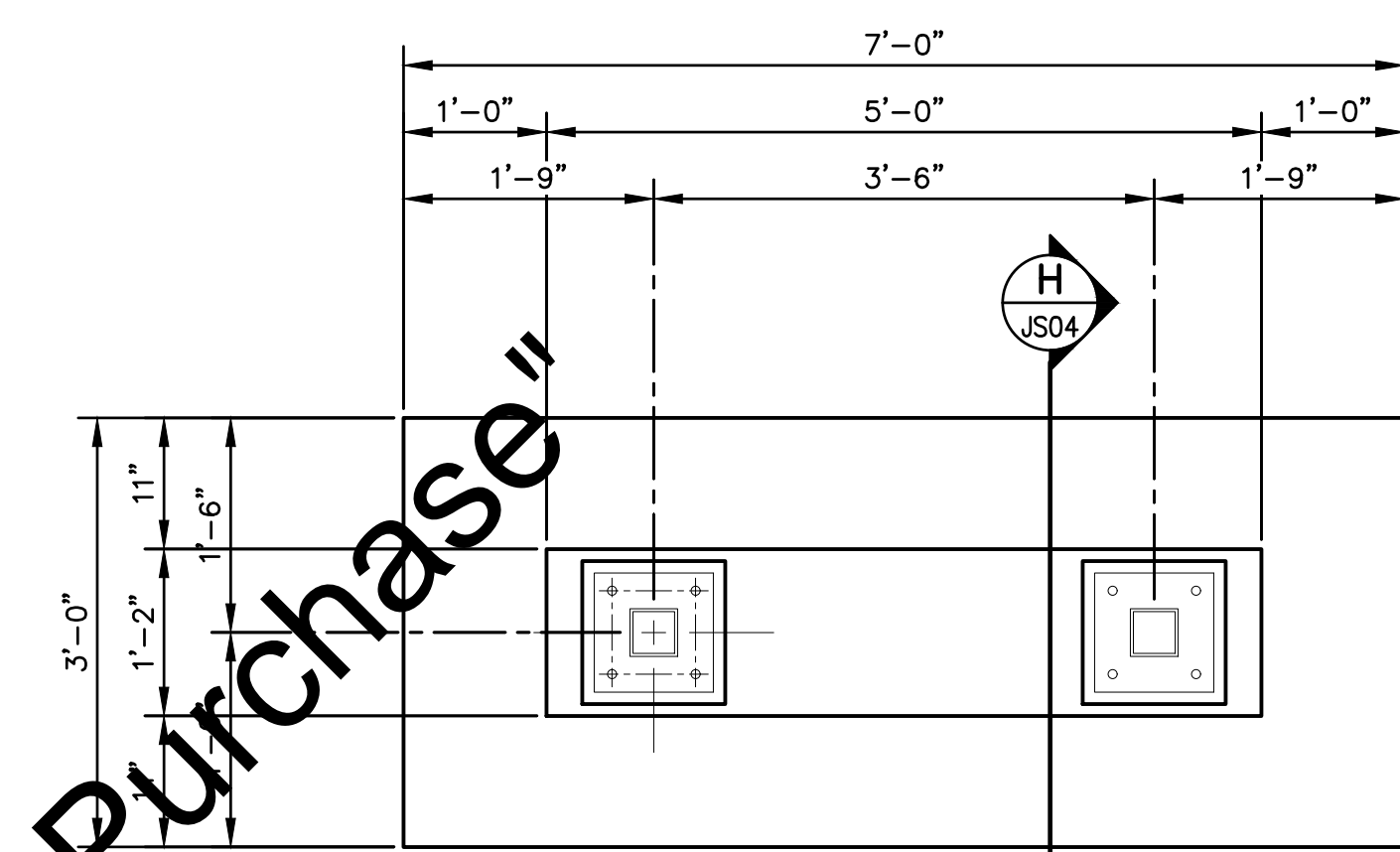
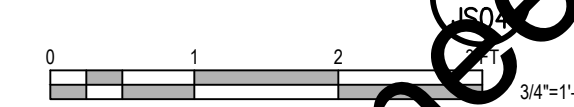
NEW FOUNDATION F1 — PLAN
(4 REQUIRED)



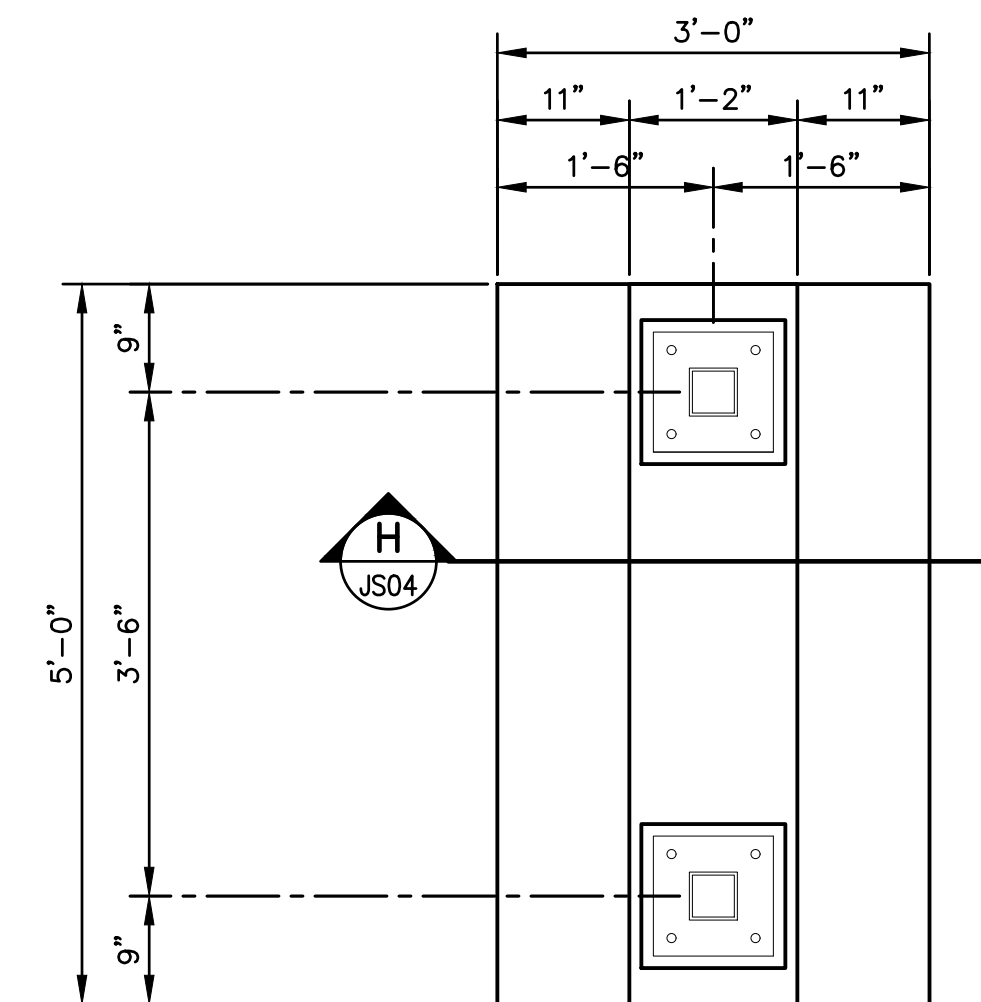
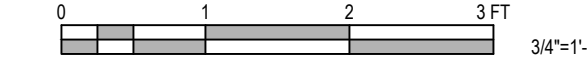
SECTION G



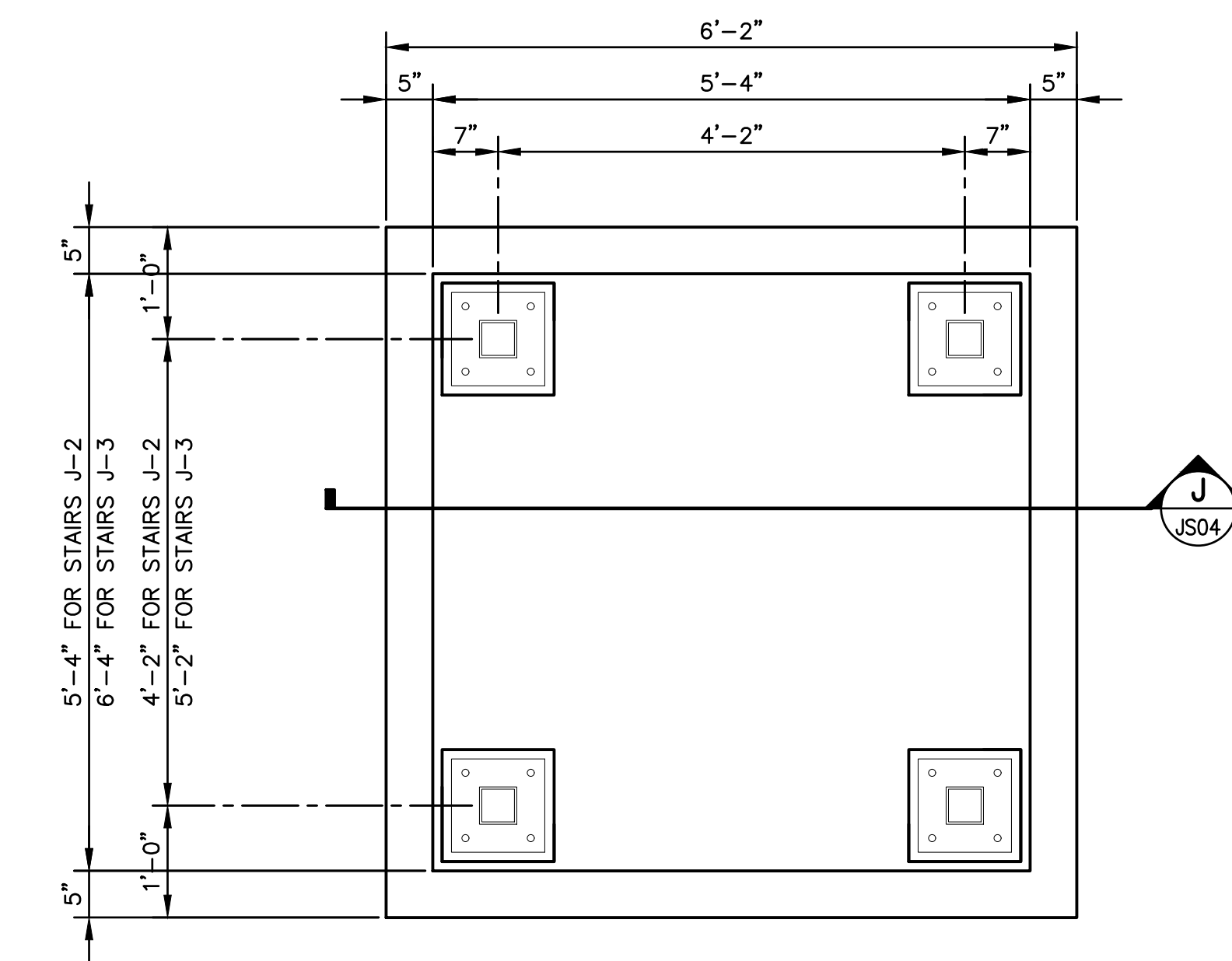
SECTION H



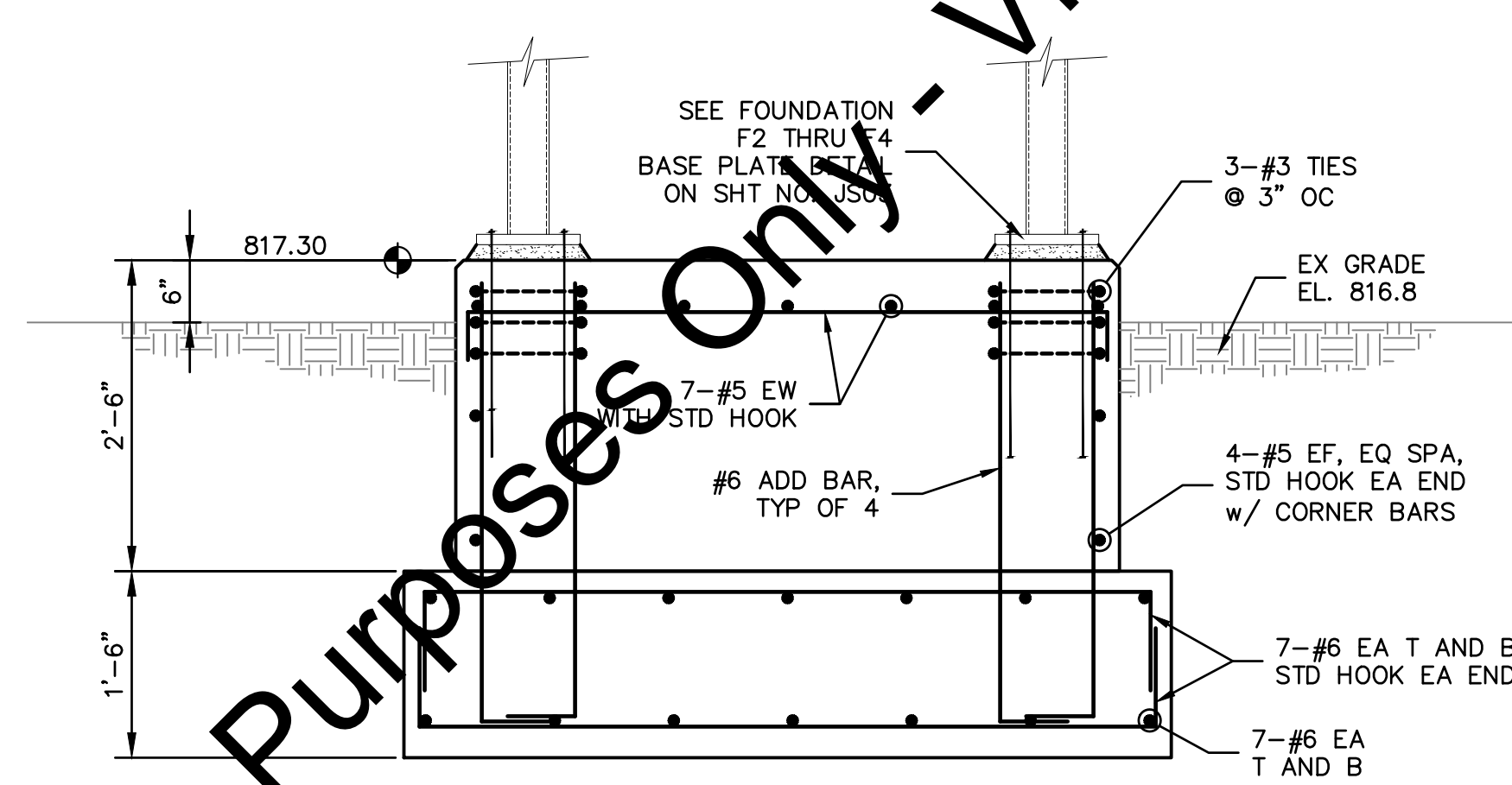
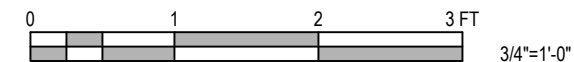
NEW FOUNDATION F2 — PLAN



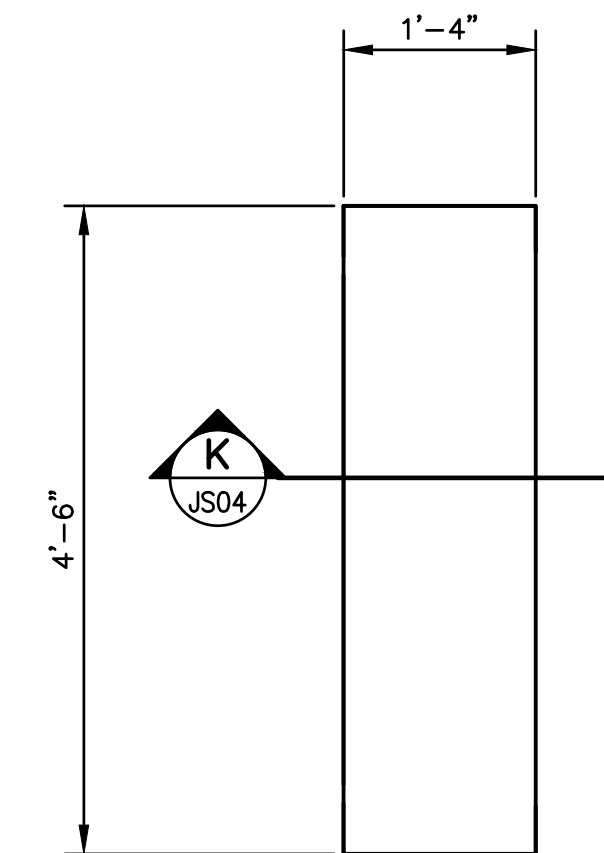
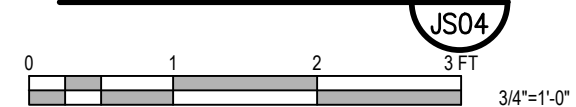
NEW FOUNDATION F4 — PLAN



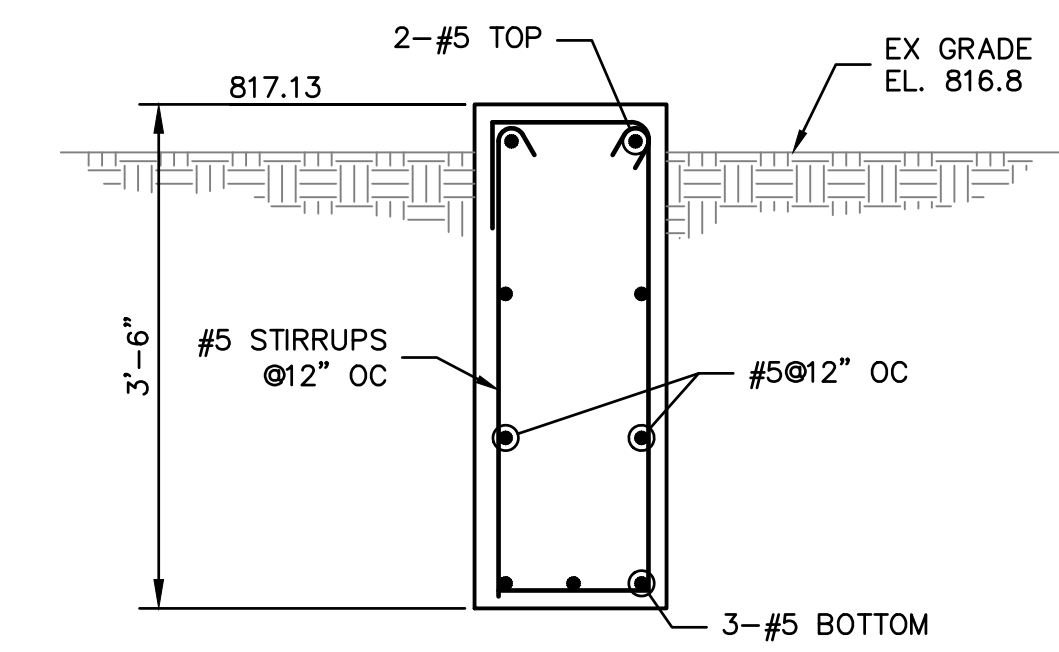
NEW FOUNDATION F3 — PLAN



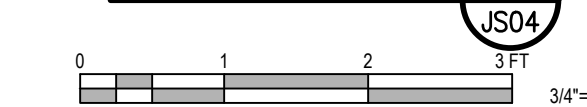
SECTION J



NEW FOUNDATION F5 — PLAN



SECTION K



"For Viewing Purposes Only - Visit wesslerengineering.com to Purchase"

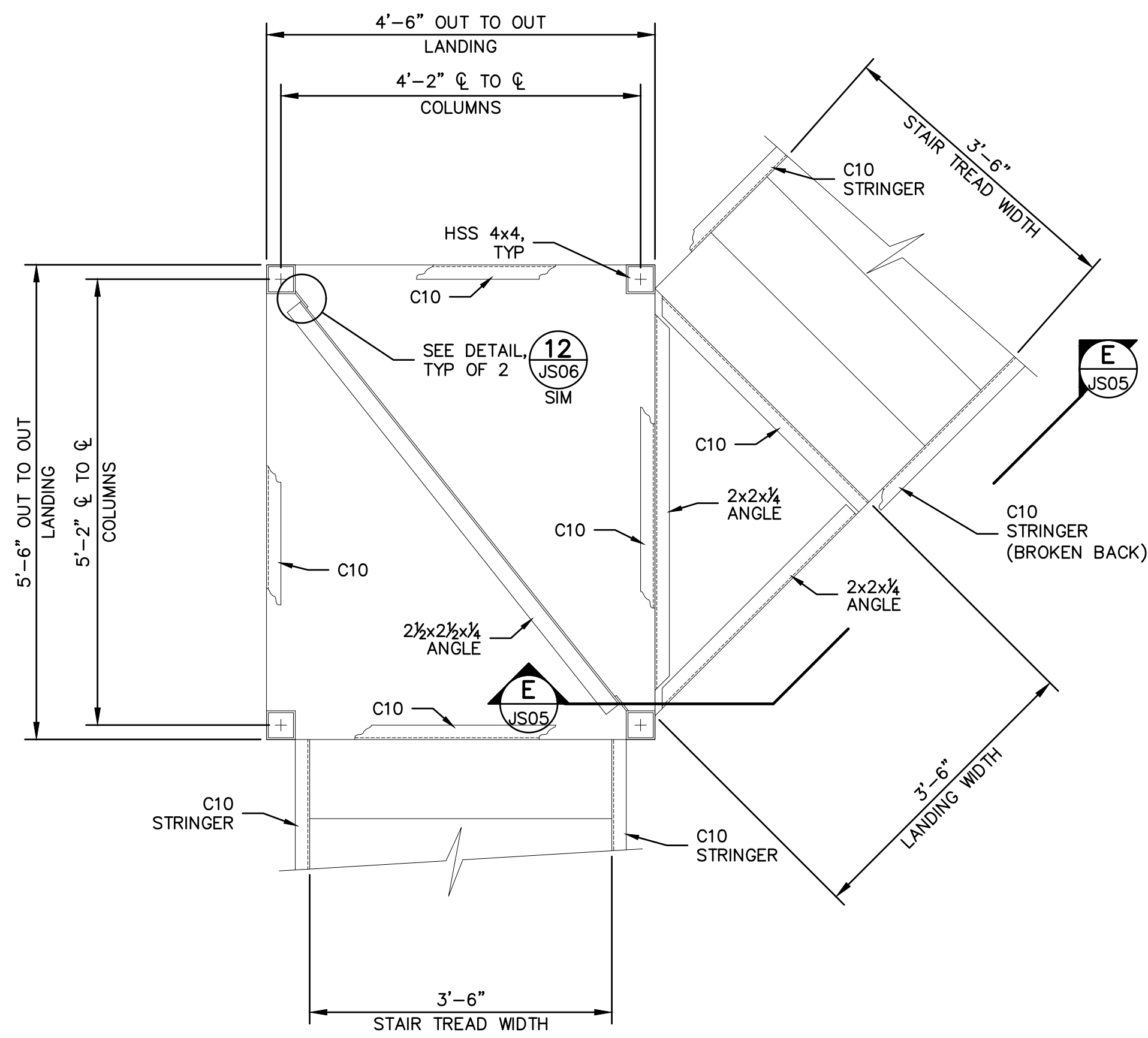
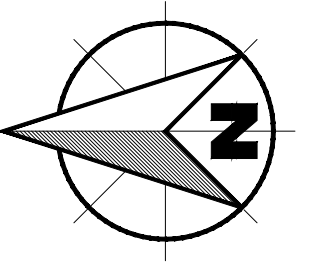
Drawing: J:\Warsaw\Projects\162813\162813\DWG\Shells\JOB 162813\EXP.DWG | Layout: JS04 | Plotted: 09/04/18 @ 11:09:16 | LastSavedBy: MikeN

| SCALE VERIFICATION | DRAWN BY | NO. | DATE | INITIALS | REVISION DESCRIPTIONS |
|--|----------------|-------------------|------|----------|-----------------------|
| BAR IS ONE INCH LONG ON ORIGINAL DRAWING | DRAWN BY | WBJ | | | |
| | CHECKED BY | ALT | | | |
| | APPROVED BY | JRB | | | |
| | ISSUE DATE | SEPTEMBER 4, 2018 | | | |
| | PROJECT NUMBER | 162813-04-003 | | | |

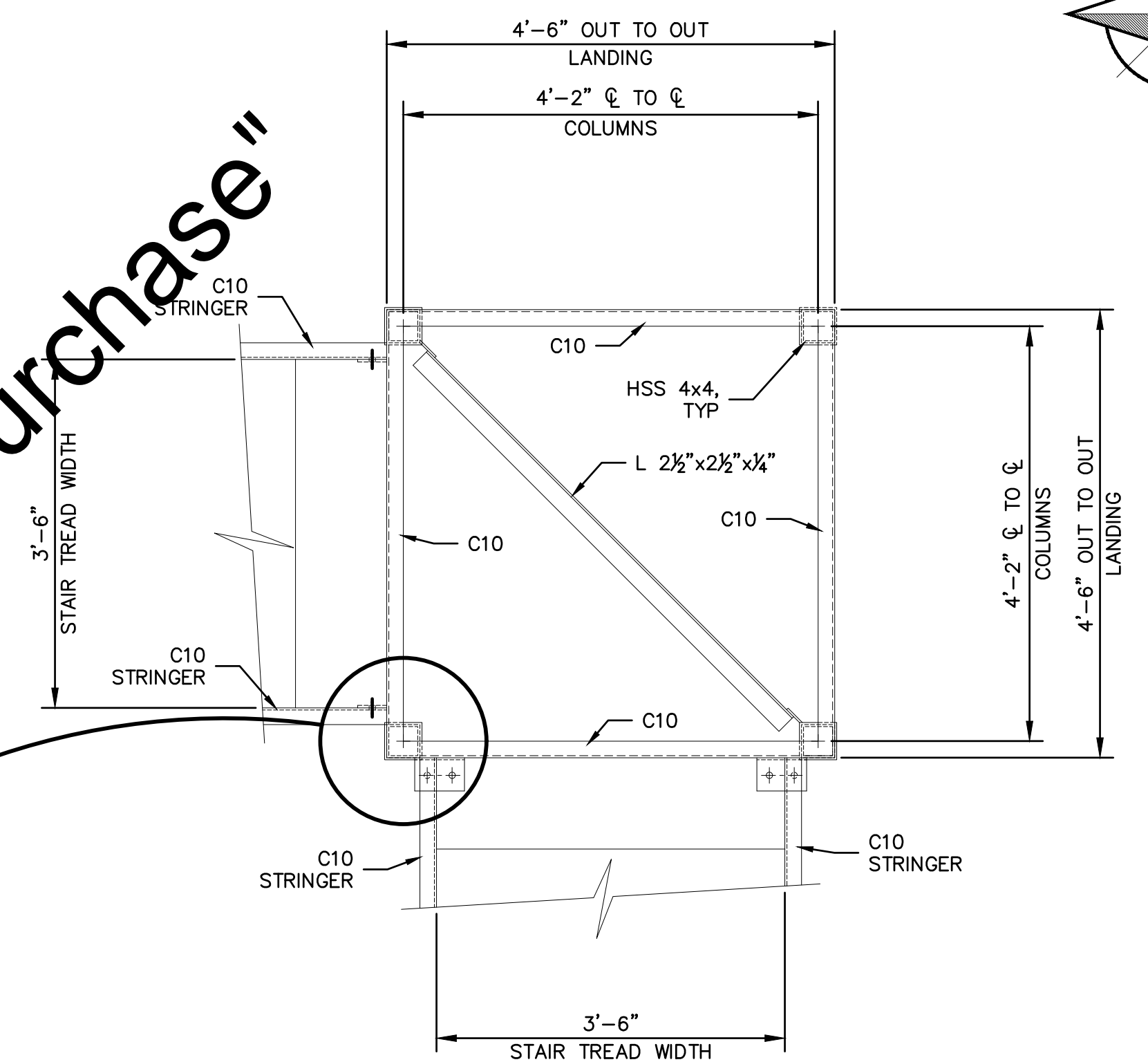


WASTEWATER TREATMENT PLANT EXPANSION - 2017
 CITY OF WARSAW, INDIANA
MODIFIED HOLDING TANKS
NEW STAIR FOUNDATIONS
STRUCTURAL PLANS AND SECTIONS

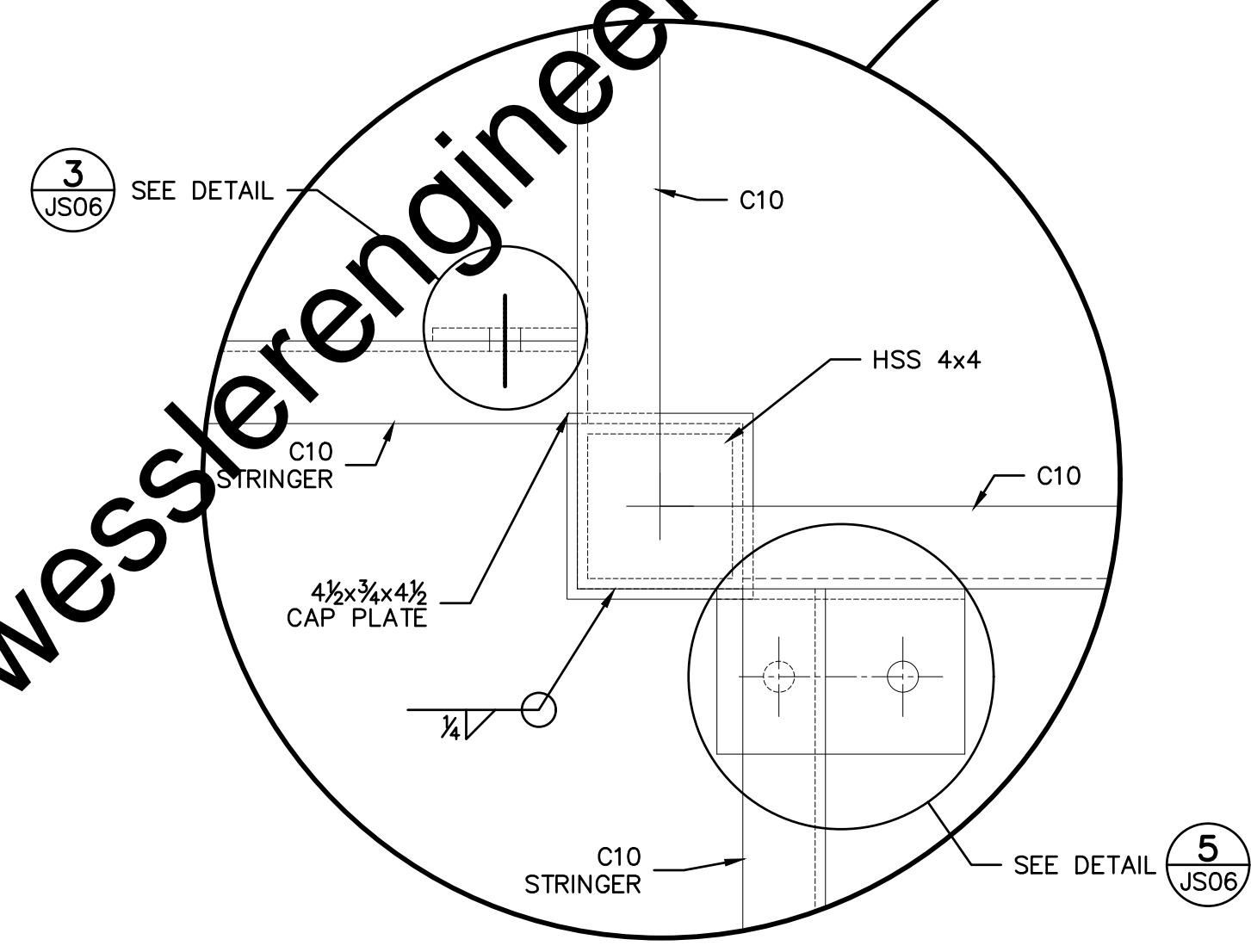
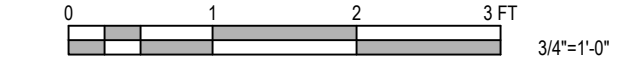
SHEET NO.
JS04
 PAGE NO.
 209



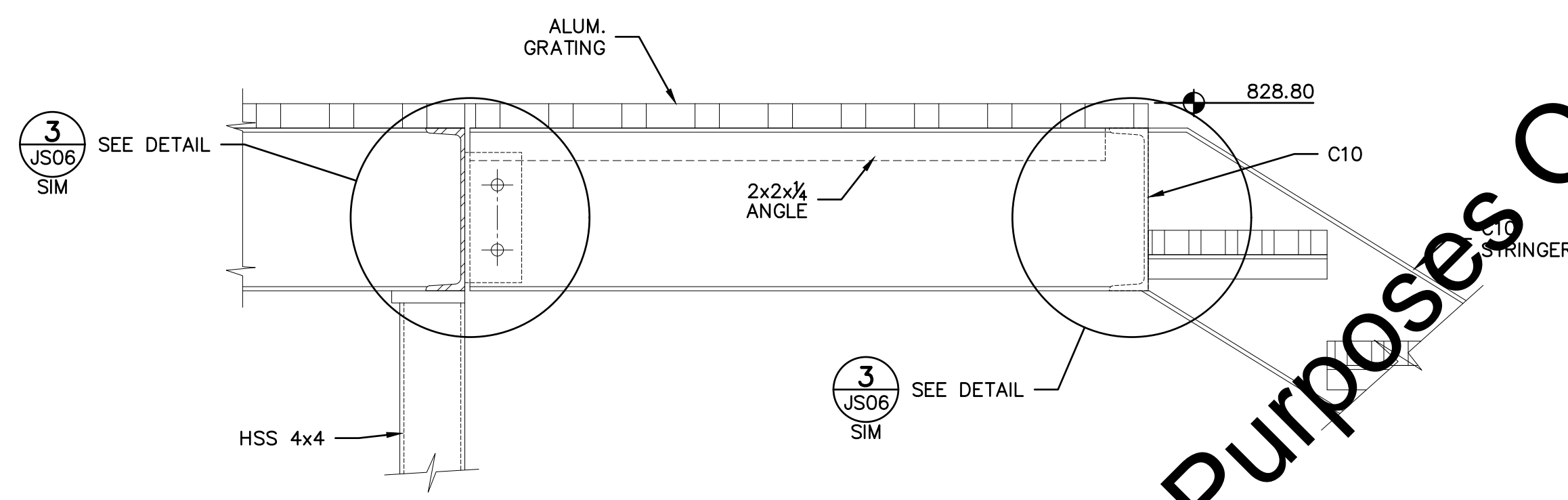
NEW ACCESS STAIRS NO. J-3
MID LEVEL LANDING FRAMING PLAN



NEW ACCESS STAIRS NO. J-2
MID LEVEL LANDING FRAMING PLAN



FRAMING AT MID LEVEL LANDING

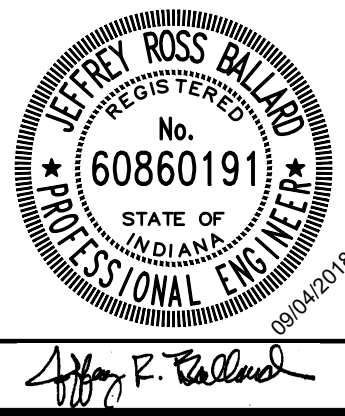


SECTION



"For Viewing Purposes Only - Visit wesslerengineering.com to Purchase"

| SCALE VERIFICATION | DRAWN BY | NO. | DATE | INITIALS | REVISION DESCRIPTIONS |
|--|----------------|-------------------|------|----------|-----------------------|
| BAR IS ONE INCH LONG ON ORIGINAL DRAWING | DRAWN BY | WBJ | | | |
| | CHECKED BY | ALT | | | |
| | APPROVED BY | JRB | | | |
| | ISSUE DATE | SEPTEMBER 4, 2018 | | | |
| | PROJECT NUMBER | 162813-04-003 | | | |



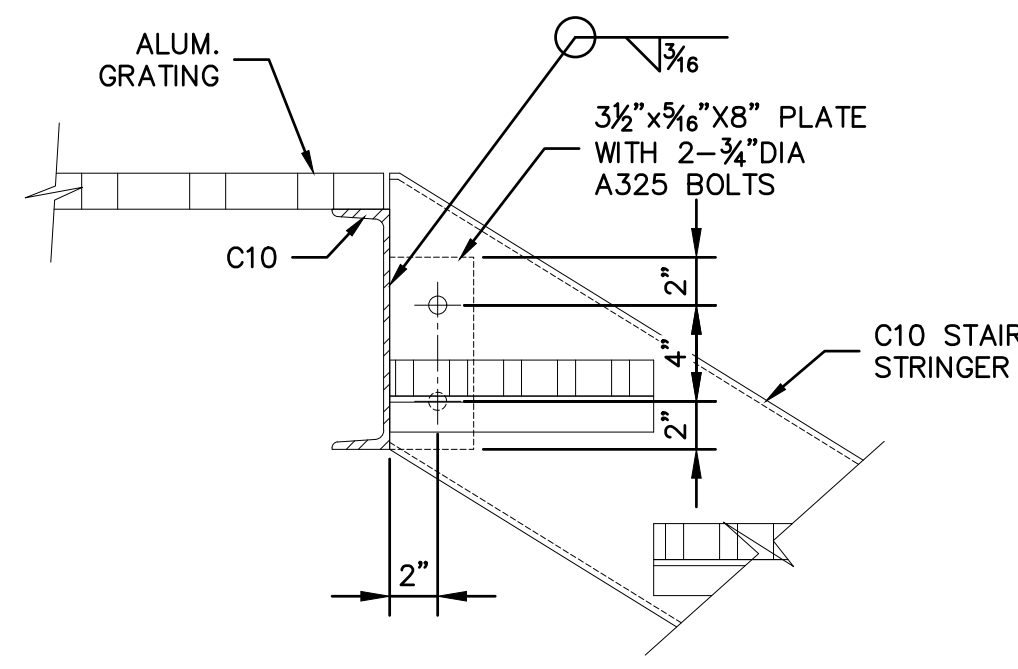
WASTEWATER TREATMENT PLANT EXPANSION - 2017

CITY OF WARSAW, INDIANA

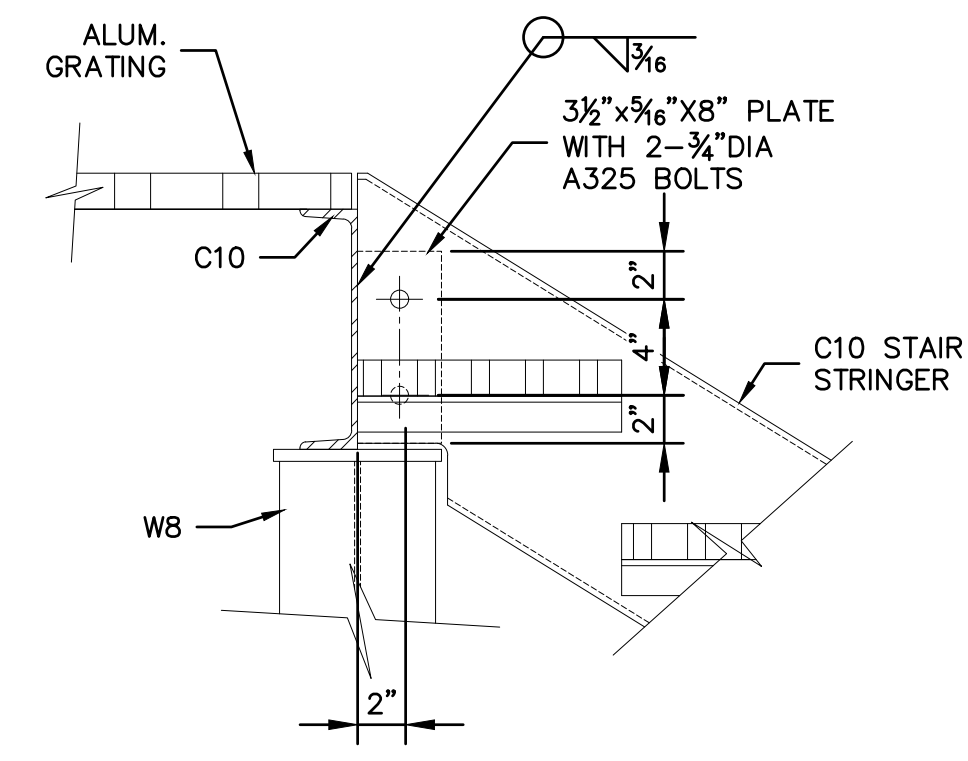
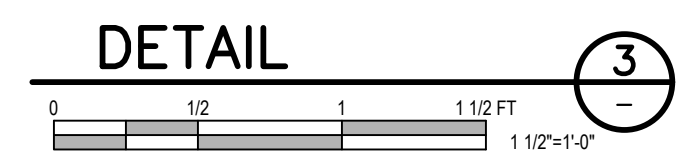
**MODIFIED HOLDING TANKS
NEW ACCESS STAIRS MID LANDINGS
PLAN, SECTION AND DETAILS**

| | |
|-----------|------|
| SHEET NO. | JS05 |
| PAGE NO. | |

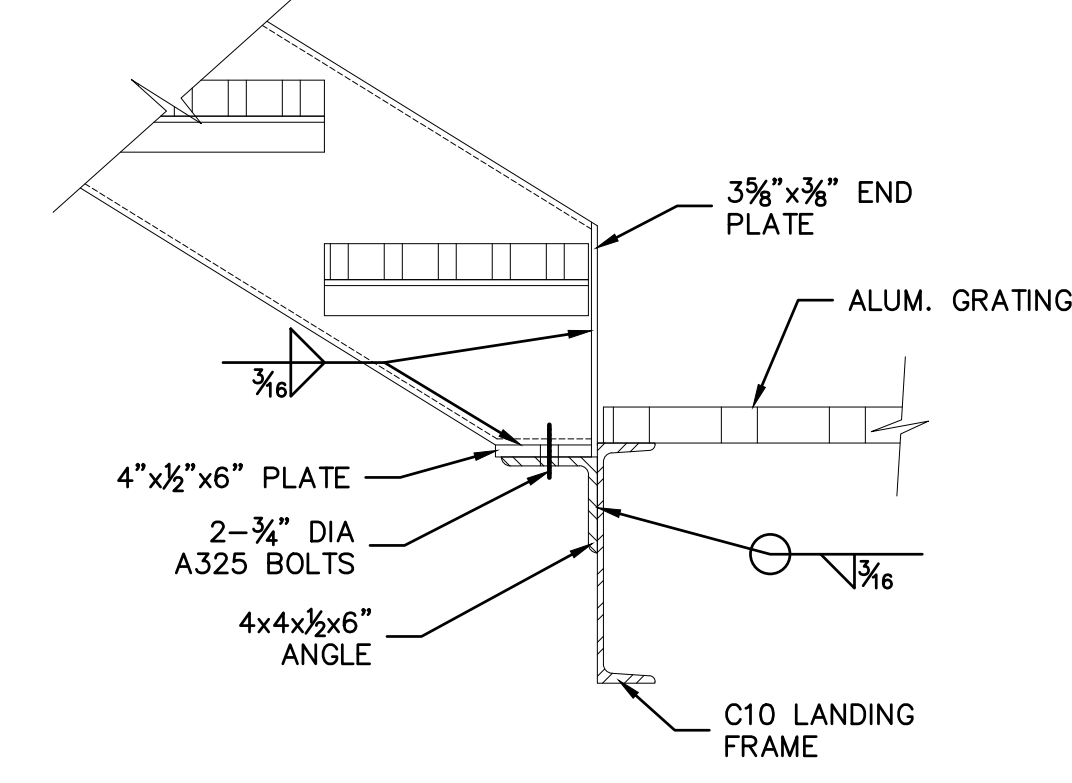
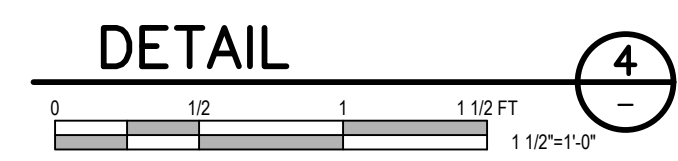
Drawing: J:\Warshaw\Projects\162813\Warshaw WWTTP Expansion\CAD\04-001\DWG\Shells\JS05_162813\EX.Dwg | Layout: JS05 | Plotter: 09/04/18 @ 11:09:41 | LastSavedBy: MikeN



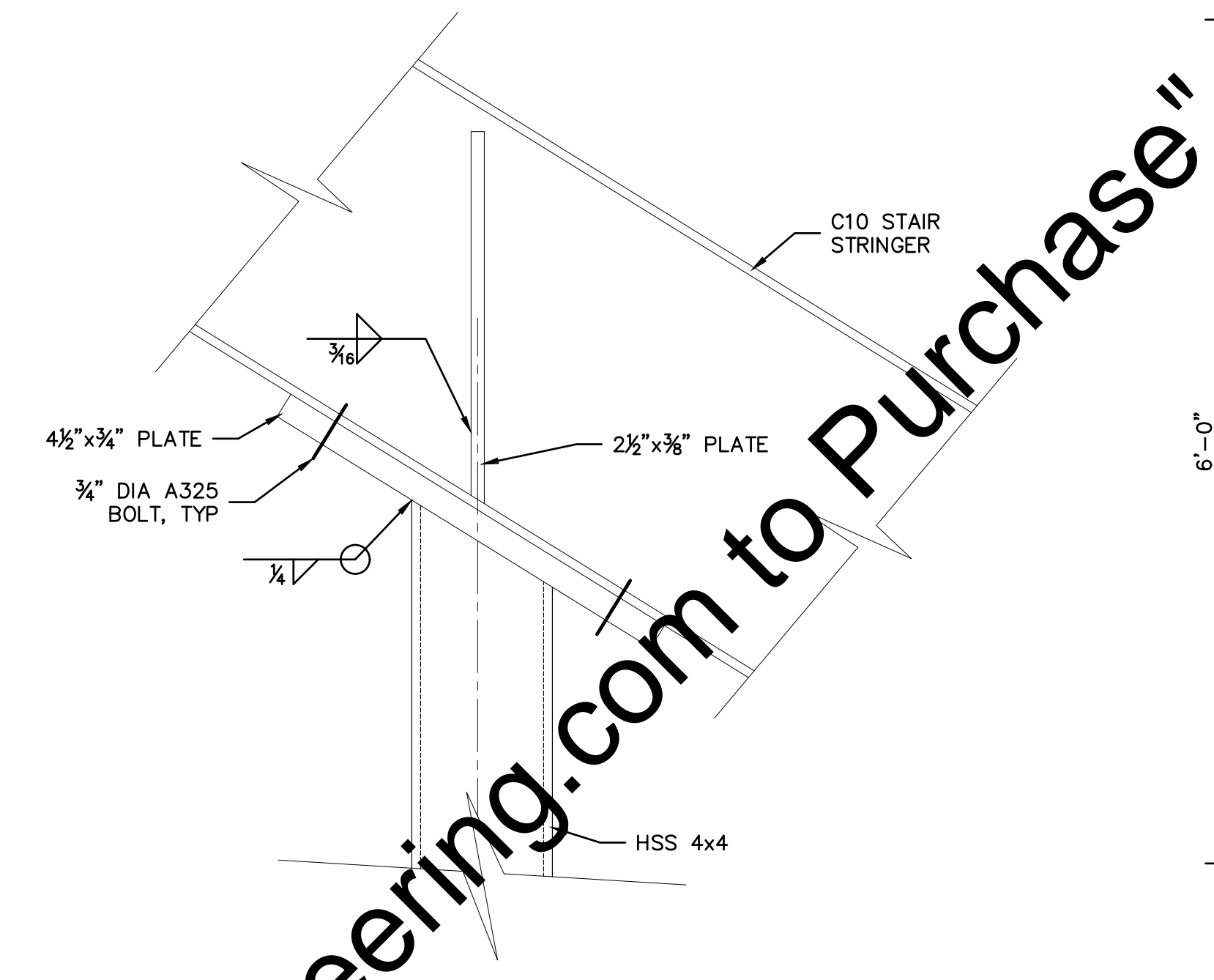
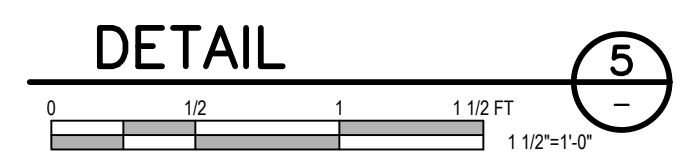
STRINGER TOP CONNECTION



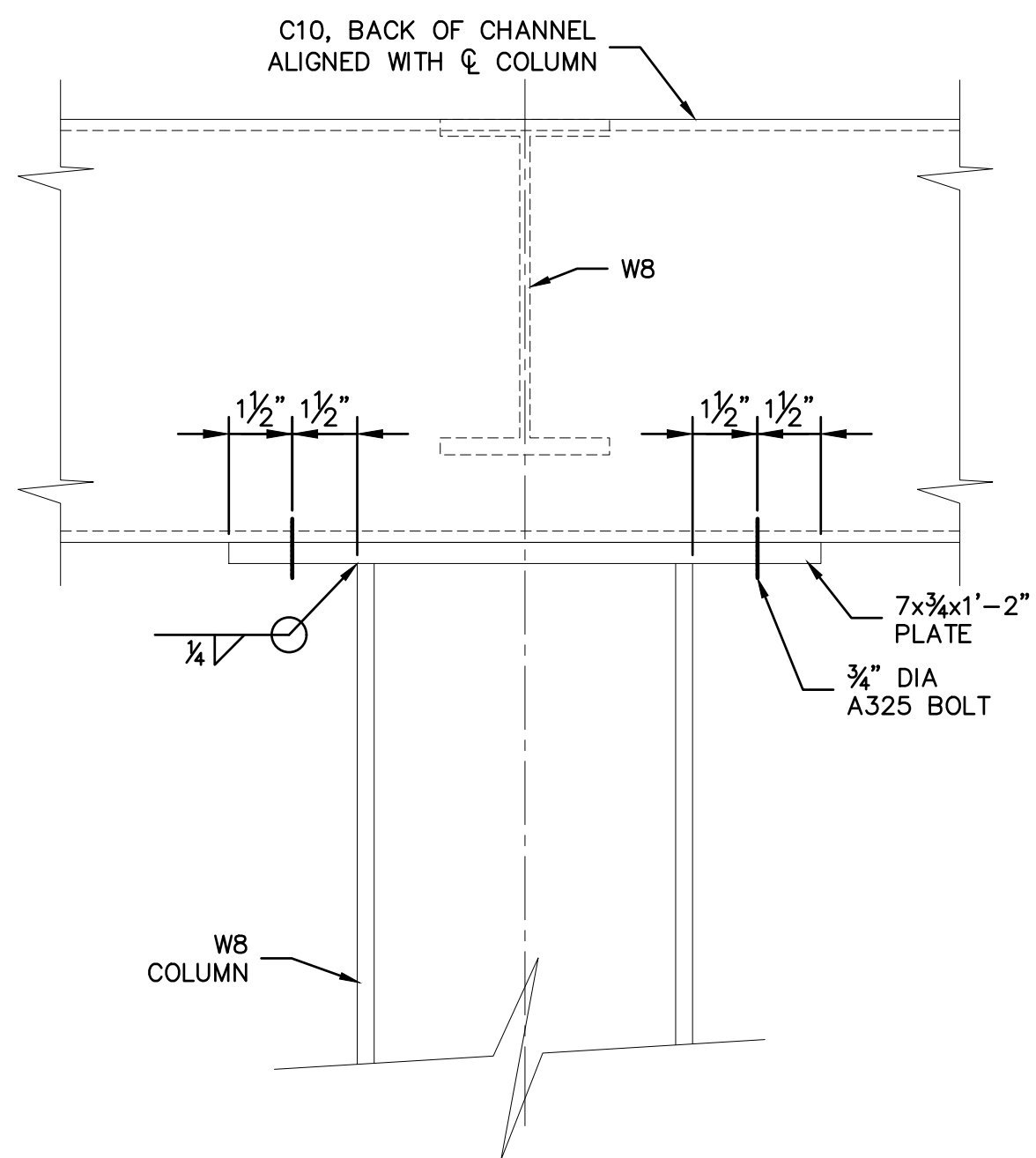
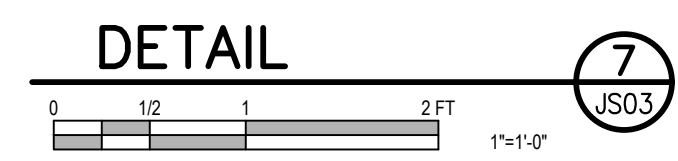
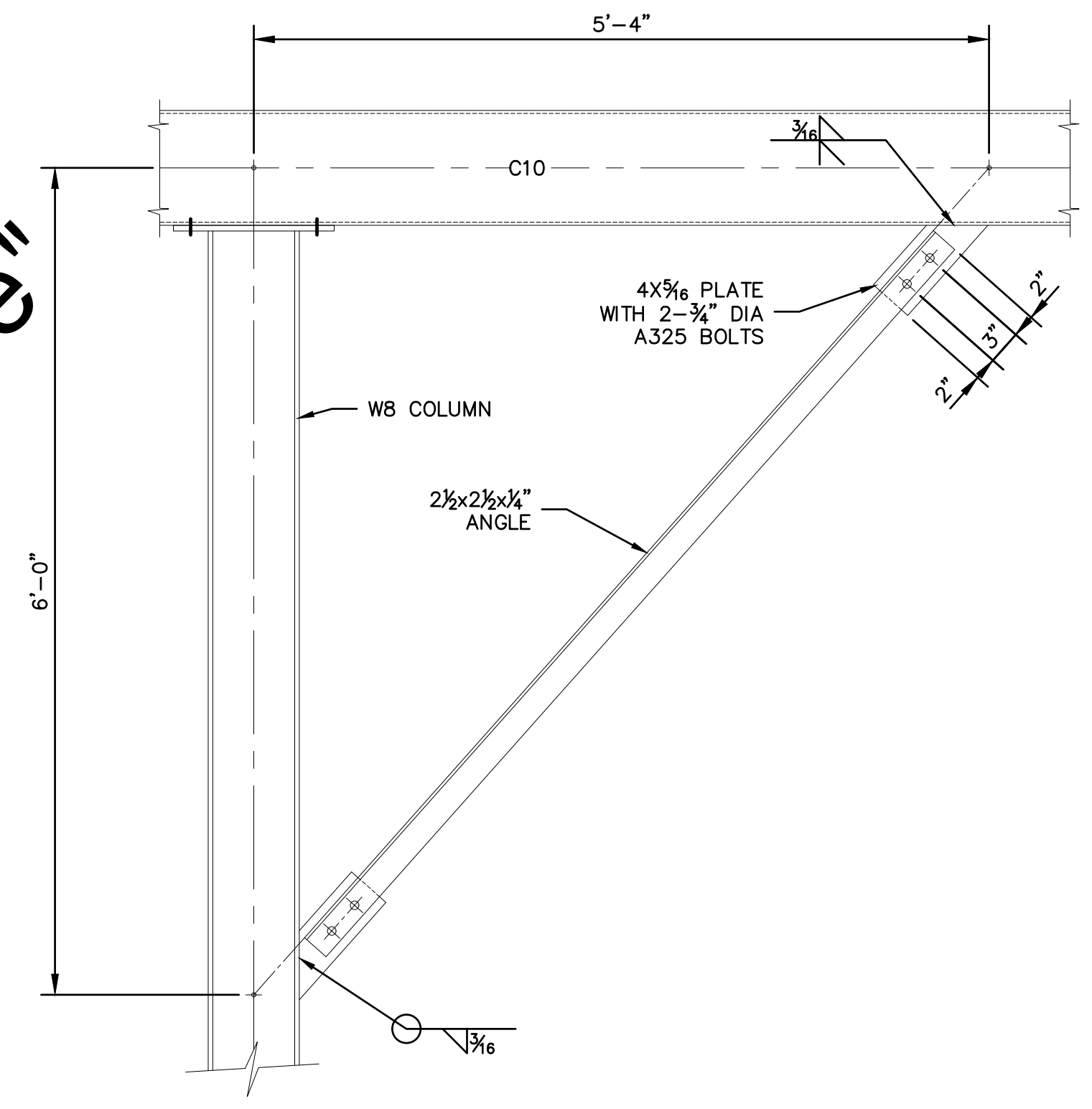
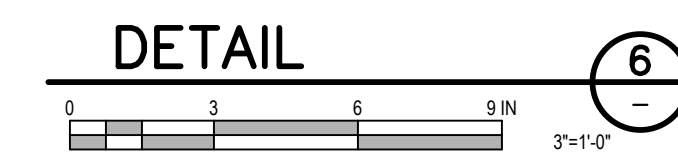
STRINGER TOP CONNECTION AT W8 BEAM



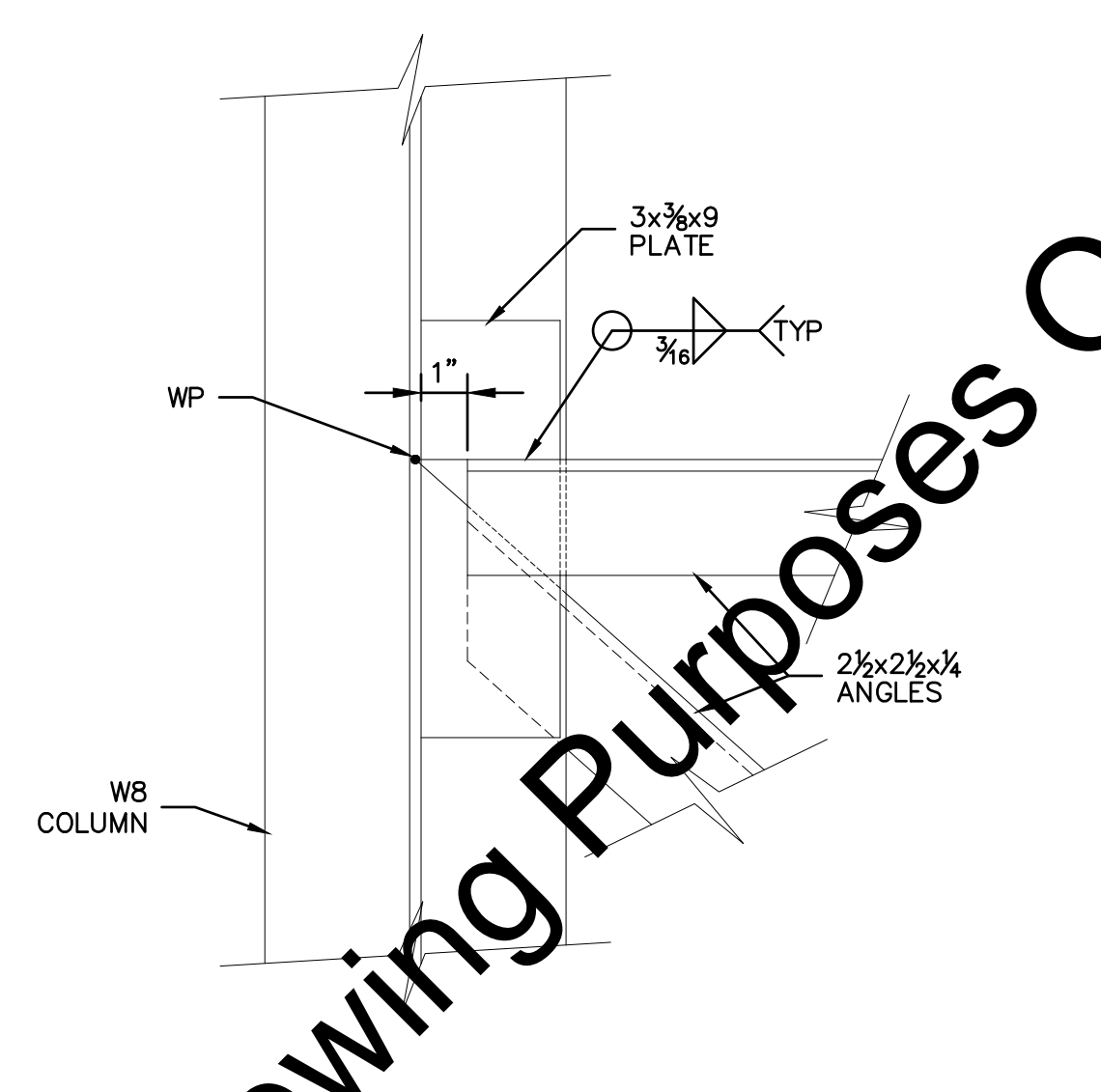
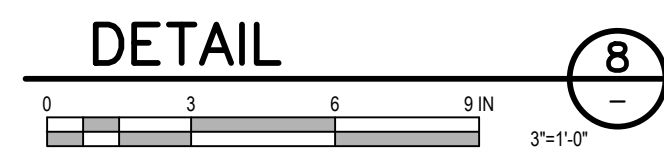
STRINGER BOTTOM CONNECTION



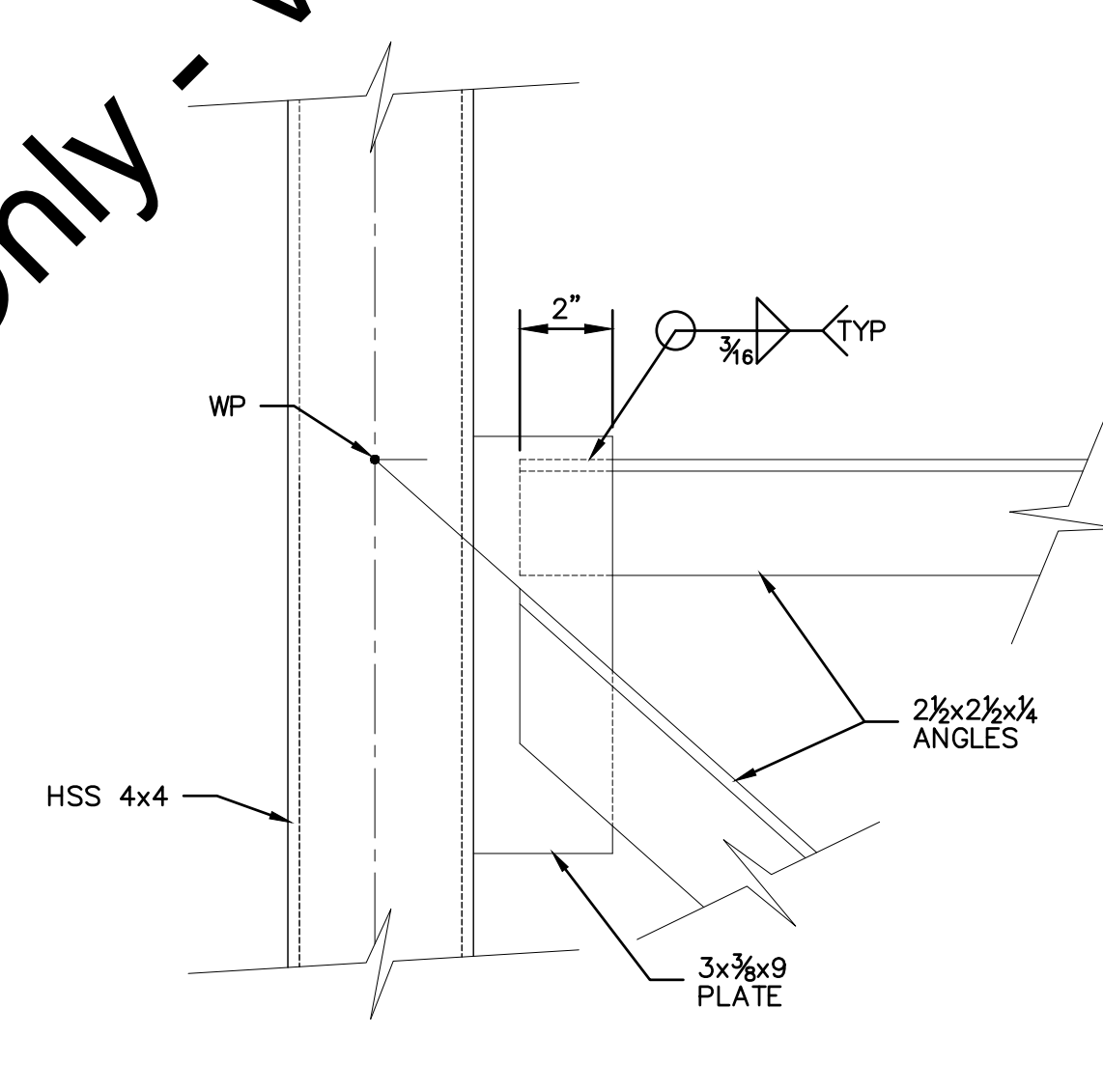
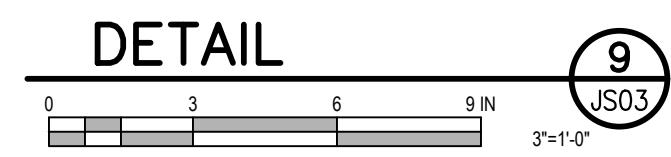
FOUNDATIONS F2 AND F4 TOP CONNECTION



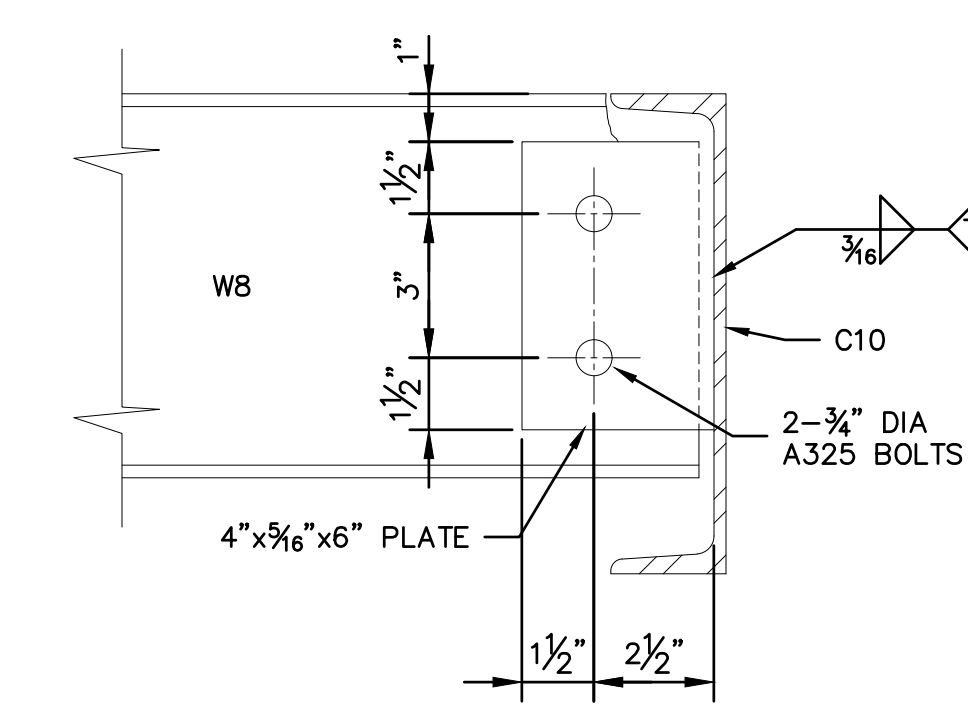
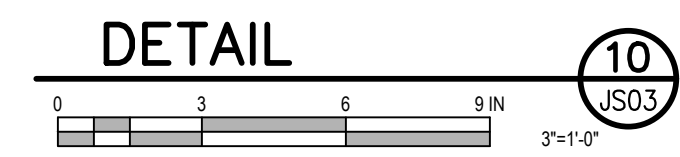
C10 TO W8 COLUMN CONNECTION



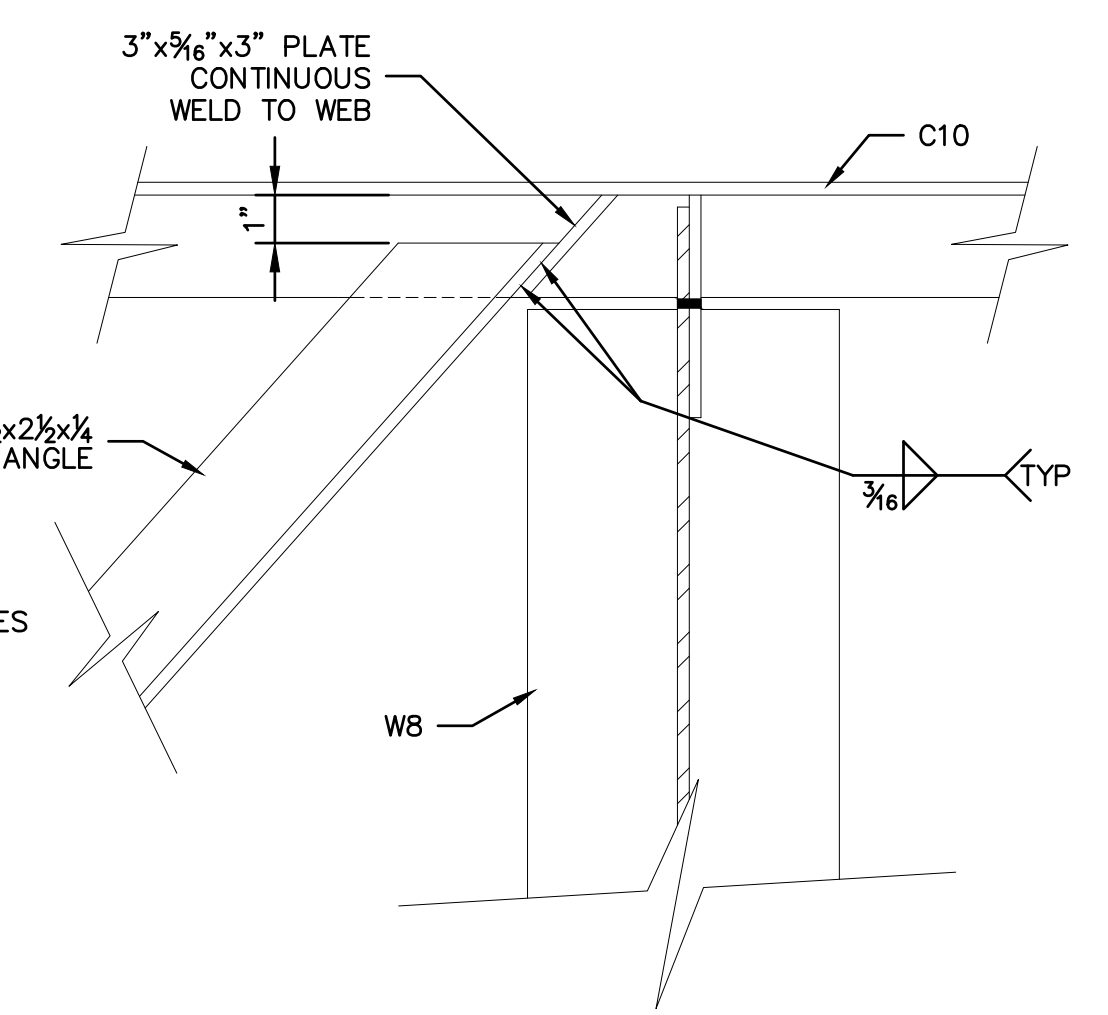
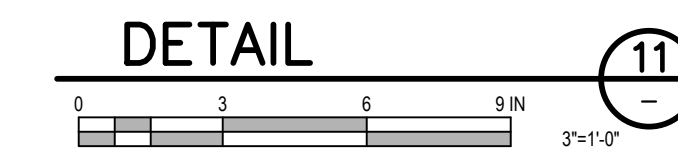
TOWER DIAGONAL AND HORIZONTAL W8 COLUMN CONNECTION



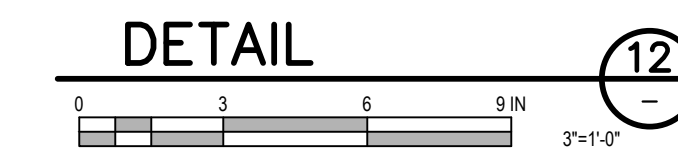
TOWER DIAGONAL AND HORIZONTAL TO HSS 4x4 COLUMN CONNECTION



W8 TO C10 CONNECTION



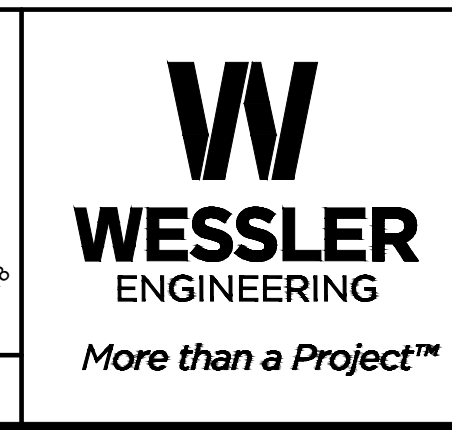
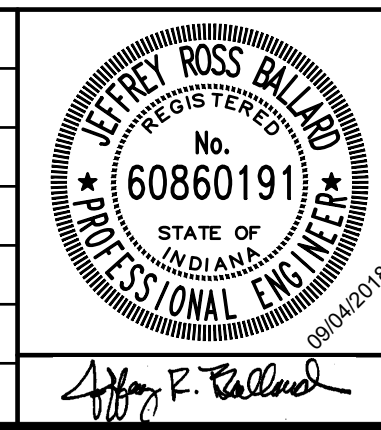
L2 1/2 x 2 1/2 TO C10 CONNECTION



"For Viewing Purposes Only - Visit wesslerengineering.com to Purchase"

Drawing: J:\WwTP\Projects\162813\WwTP_Expansion\CAD\04-001\DWG\Shells\ISO6_162813_Exp.dwg | Layout: JS06 | Plotter: 09/04/18 @ 11:10:39 | LastSavedBy: MikeN

| SCALE VERIFICATION | DRAWN BY | NO. | DATE | INITIALS | REVISION DESCRIPTIONS |
|--|----------------|-------------------|------|----------|-----------------------|
| BAR IS ONE INCH LONG ON ORIGINAL DRAWING | DRAWN BY | WBJ | | | |
| | CHECKED BY | ALT | | | |
| | APPROVED BY | JRB | | | |
| | ISSUE DATE | SEPTEMBER 4, 2018 | | | |
| | PROJECT NUMBER | 162813-04-003 | | | |

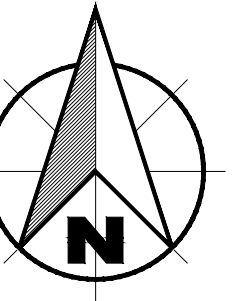


WASTEWATER TREATMENT PLANT EXPANSION - 2017

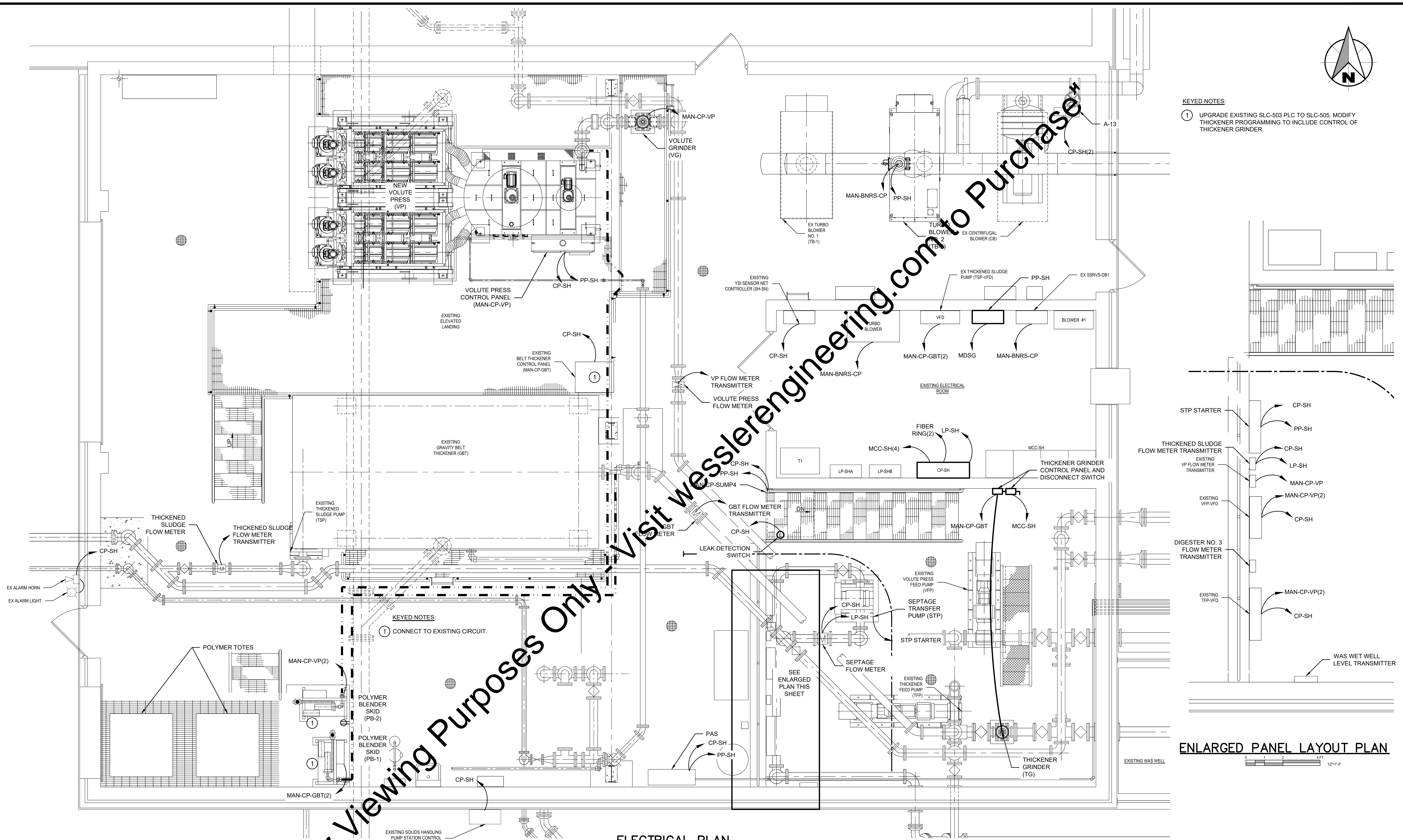
CITY OF WARSAW, INDIANA

**MODIFIED HOLDING TANKS
NEW STAIRS AND LANDINGS
STRUCTURAL CONNECTION DETAILS**

| | |
|-----------|-------------|
| SHEET NO. | JS06 |
| PAGE NO. | 211 |



- KEYED NOTES:**
- UPGRADE EXISTING SLC-503 PLC TO SLC-505. MODIFY THICKENER PROGRAMMING TO INCLUDE CONTROL OF THICKENER GRINDER.



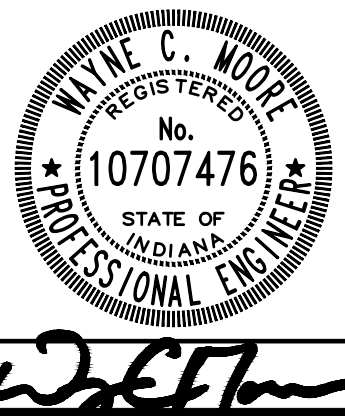
KEYED NOTES:
 1 CONNECT TO EXISTING CIRCUIT.

ELECTRICAL PLAN
 3/8" = 1'-0"

ENLARGED PANEL LAYOUT PLAN
 1/2" = 1'-0"

Drawing: J:\Wwtp\Projects\162813-EE-Ex Solids Hand Bldg.dwg | Layout: JE01 | Plot: 09/04/18 @ 10:35:41 | LastSavedBy: JohnH | Project No.: 162813-04-003

| SCALE VERIFICATION | DRAWN BY | EAS | NO. | DATE | INITIALS | REVISION DESCRIPTIONS |
|--|----------------|-------------------|-----|------|----------|-----------------------|
| BAR IS ONE INCH LONG ON ORIGINAL DRAWING | CHECKED BY | BMS | | | | |
| | APPROVED BY | WCM | | | | |
| | ISSUE DATE | SEPTEMBER 4, 2018 | | | | |
| | PROJECT NUMBER | 162813-04-003 | | | | |



WASTEWATER TREATMENT PLANT EXPANSION - 2017

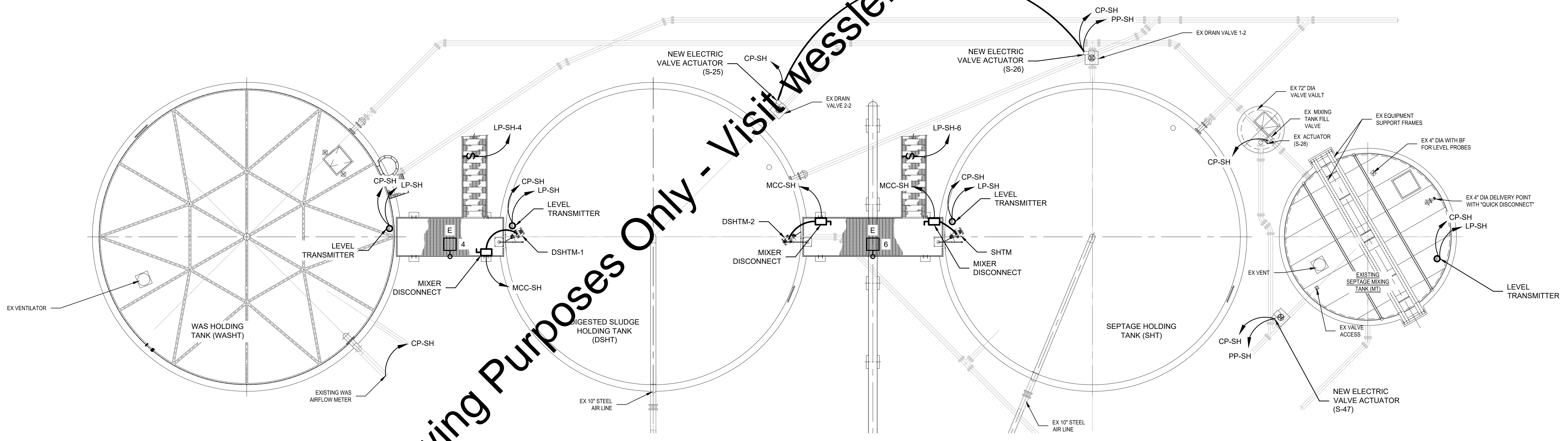
CITY OF WARSAW, INDIANA

EXISTING SOLIDS HANDLING BUILDING ELECTRICAL PLAN

SHEET NO.
JE01
 PAGE NO.
 212

Drawing: J:\Warsaw\Projects\162813-EE-Exp.Dwg | Layout: JE02 | Plotter: 09/04/18 @ 09:19:08 | Layout: JE02 | Plotter: 09/04/18 @ 09:19:08 | Layout: JE02 | Plotter: 09/04/18 @ 09:19:08 | Project No.: 162813-04-003

"For Viewing Purposes Only - Visit wesslerengineering.com to Purchase"



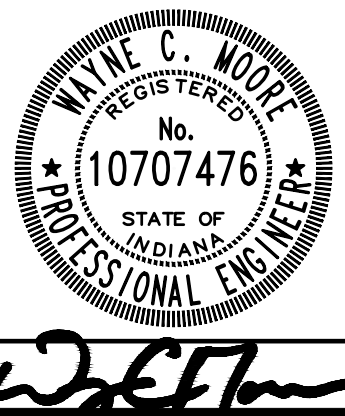
ELECTRICAL MODIFICATION PLAN



KEYED NOTES:

- ① PROVIDE UNISTRUT STRUCTURE AS REQUIRED FOR NEW DISCONNECT SWITCH FOR VENTILATOR.

| | | | | | |
|--|--|-----|------|----------|-----------------------|
| SCALE VERIFICATION BAR IS ONE INCH LONG ON ORIGINAL DRAWING | DRAWN BY EAS | NO. | DATE | INITIALS | REVISION DESCRIPTIONS |
| | CHECKED BY BMS | | | | |
| | APPROVED BY WCM | | | | |
| | ISSUE DATE SEPTEMBER 4, 2018 | | | | |
| | PROJECT NUMBER 162813-04-003 | | | | |

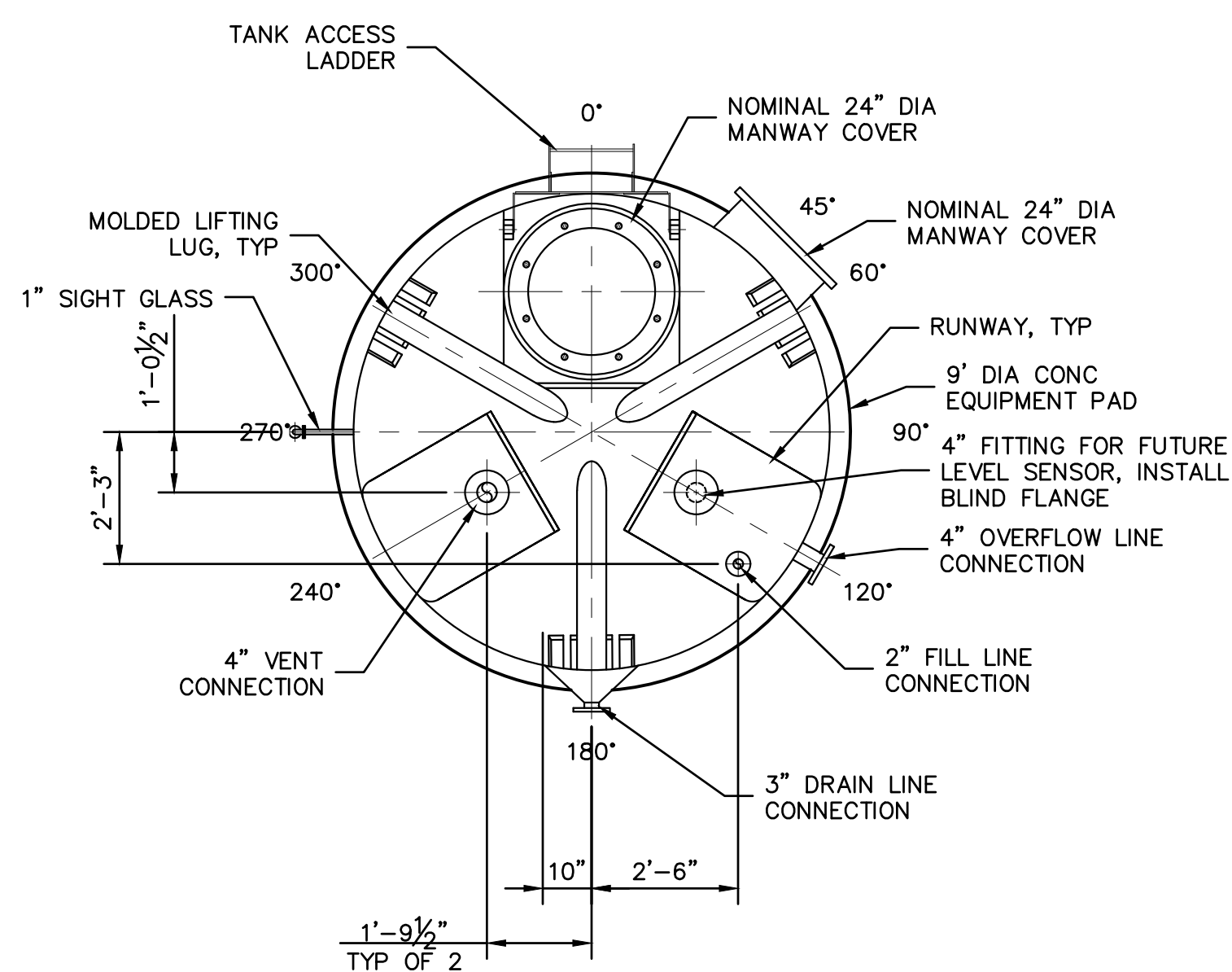
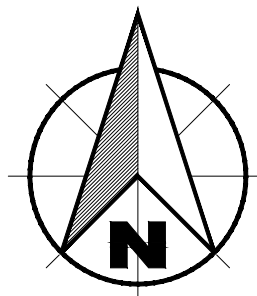


WASTEWATER TREATMENT PLANT EXPANSION - 2017

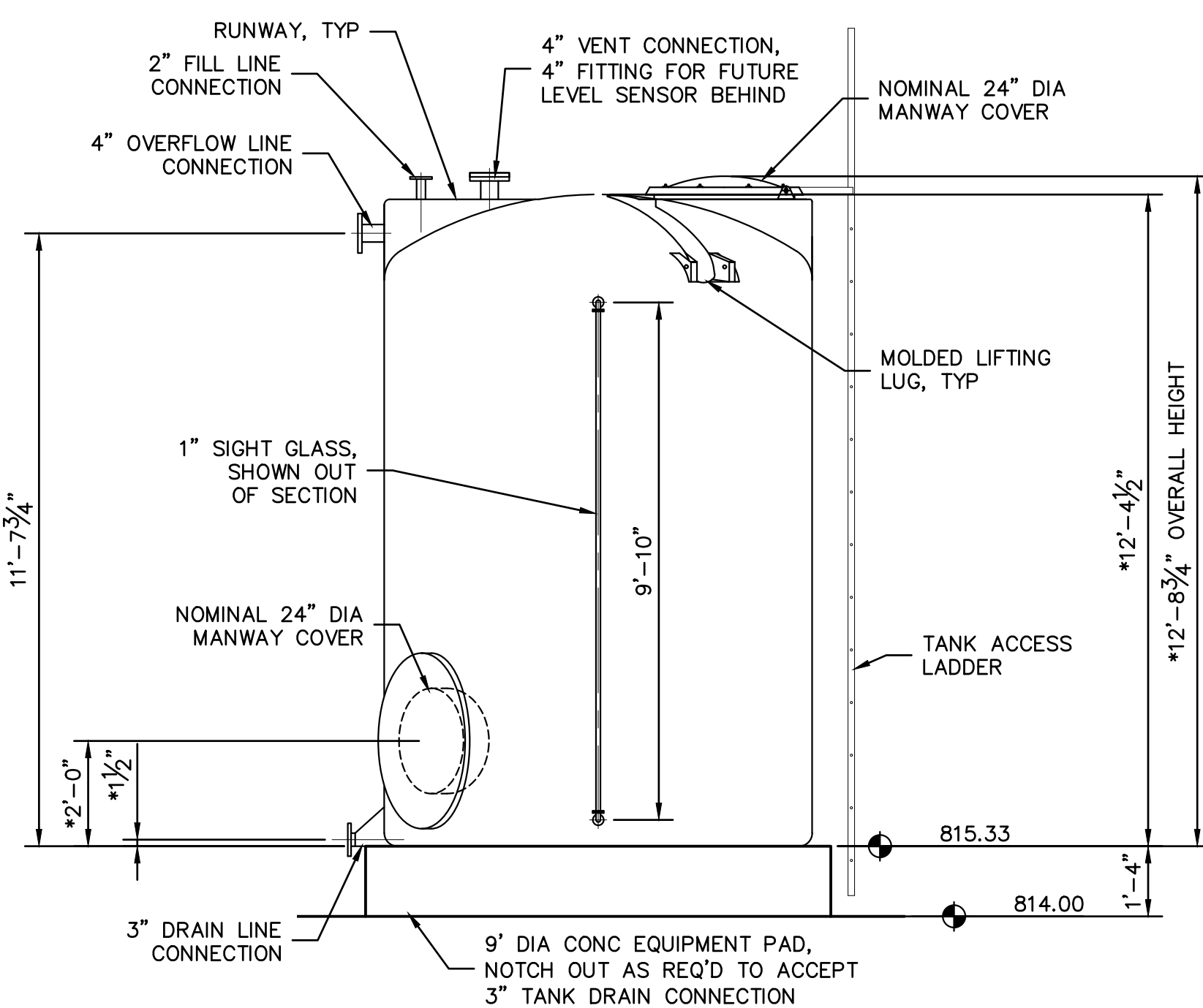
CITY OF WARSAW, INDIANA

**MODIFIED HOLDING TANKS
ELECTRICAL PLAN**

| |
|--------------------------|
| SHEET NO. JE02 |
| PAGE NO. 213 |



TANK NO. 1 PLAN



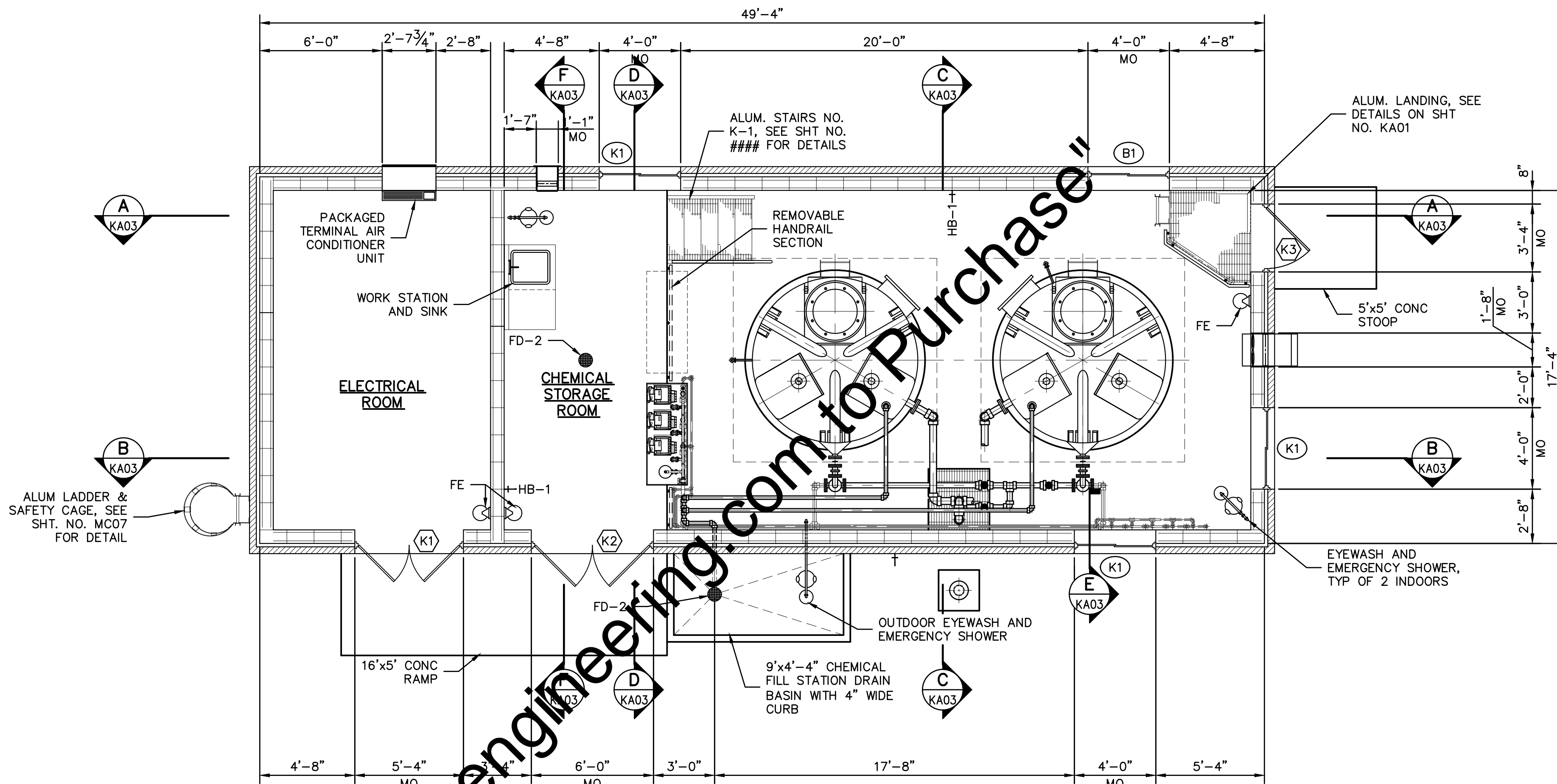
TYPICAL ELEVATION

CHEMICAL STORAGE TANK NOTES:

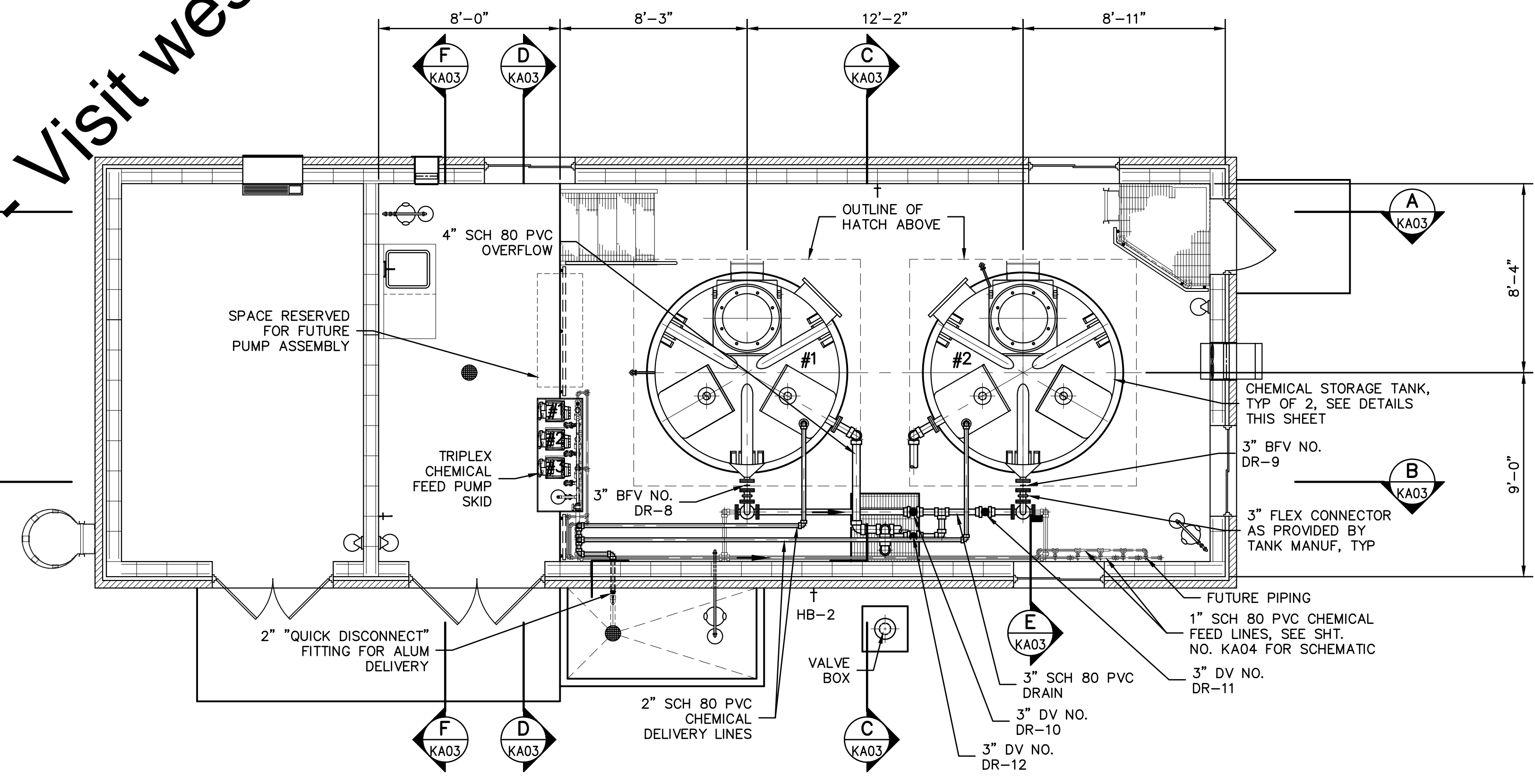
1. PLAN LAYOUT ORIENTATION FOR TANK NO. 2 IS THE SAME AS SHOWN IN THE TANK NO. 1 PLAN, MIRRORED.
2. LAYOUT EXCEPTION, SIGHT GLASS LOCATION FOR TANK NO. 1 IS 270\"/>
3. FEATURES HAVE BEEN SHOWN IN THE TYPICAL ELEVATION TO NO SPECIFIC PLAN ORIENTATION

CHEMICAL STORAGE TANK DETAILS

SCALE: 3/8"=1'-0"




FINISHED FLOOR PLAN - BUILDING LAYOUT



FINISHED FLOOR PLAN - EQUIPMENT LAYOUT

"For Viewing Purposes Only - Visit wesslerengineering.com to Purchase"

* VERIFY ELEVATION AND/OR DIMENSION WITH EQUIPMENT MANUFACTURER.

| SCALE VERIFICATION | DRAWN BY | NO. | DATE | INITIALS | REVISION DESCRIPTIONS |
|---|-------------------|-----|------|----------|-----------------------|
| BAR IS ONE INCH LONG ON ORIGINAL DRAWING  | CHECKED BY | WBJ | | | |
| | APPROVED BY | ALT | | | |
| | ISSUE DATE | GLR | | | |
| | PROJECT NUMBER | | | | |
| | SEPTEMBER 4, 2018 | | | | |
| | 162813-04-003 | | | | |



WASTEWATER TREATMENT PLANT EXPANSION - 2017

CITY OF WARSAW, INDIANA

NEW CHEMICAL FEED BUILDING PLANS AND DETAILS

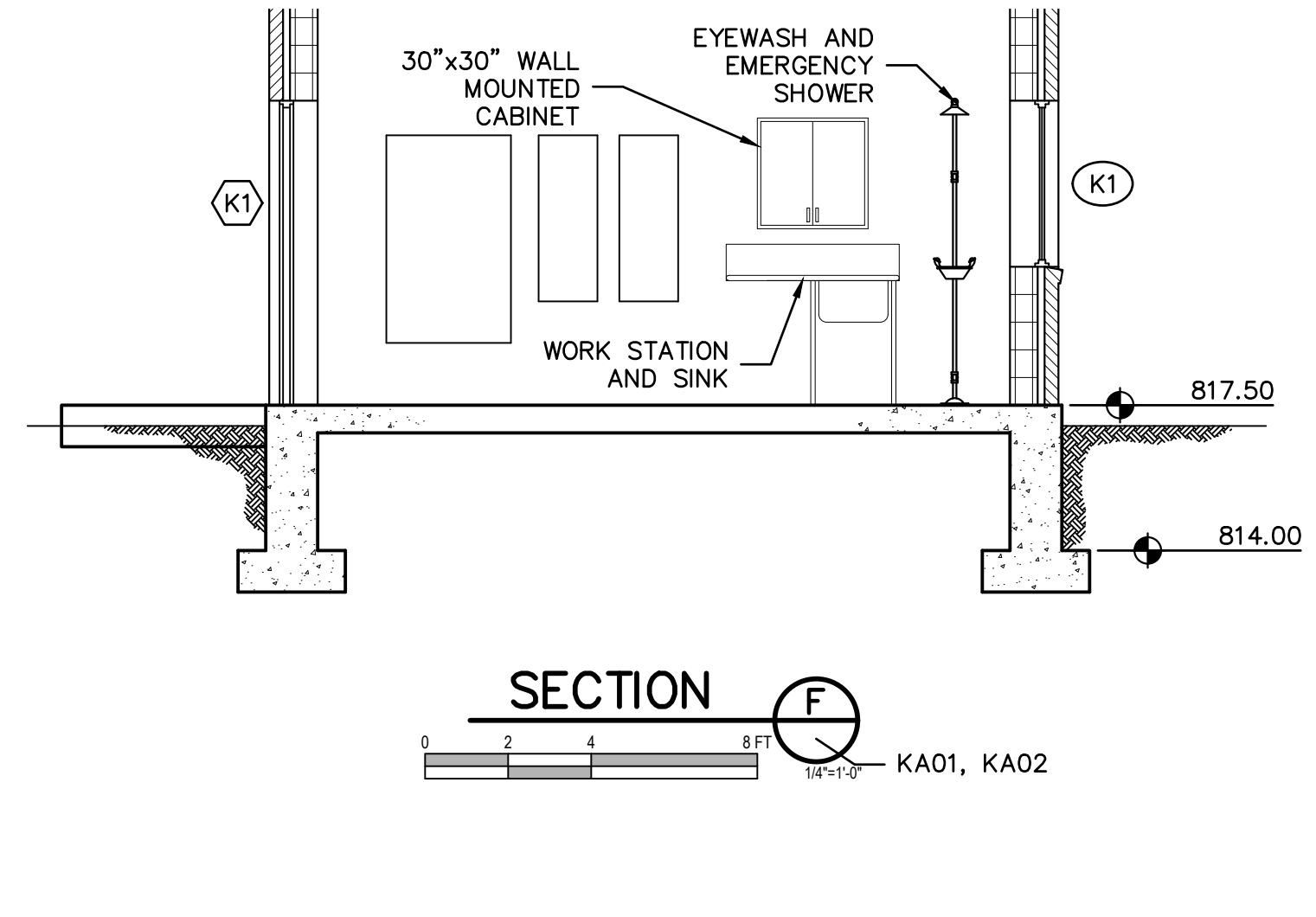
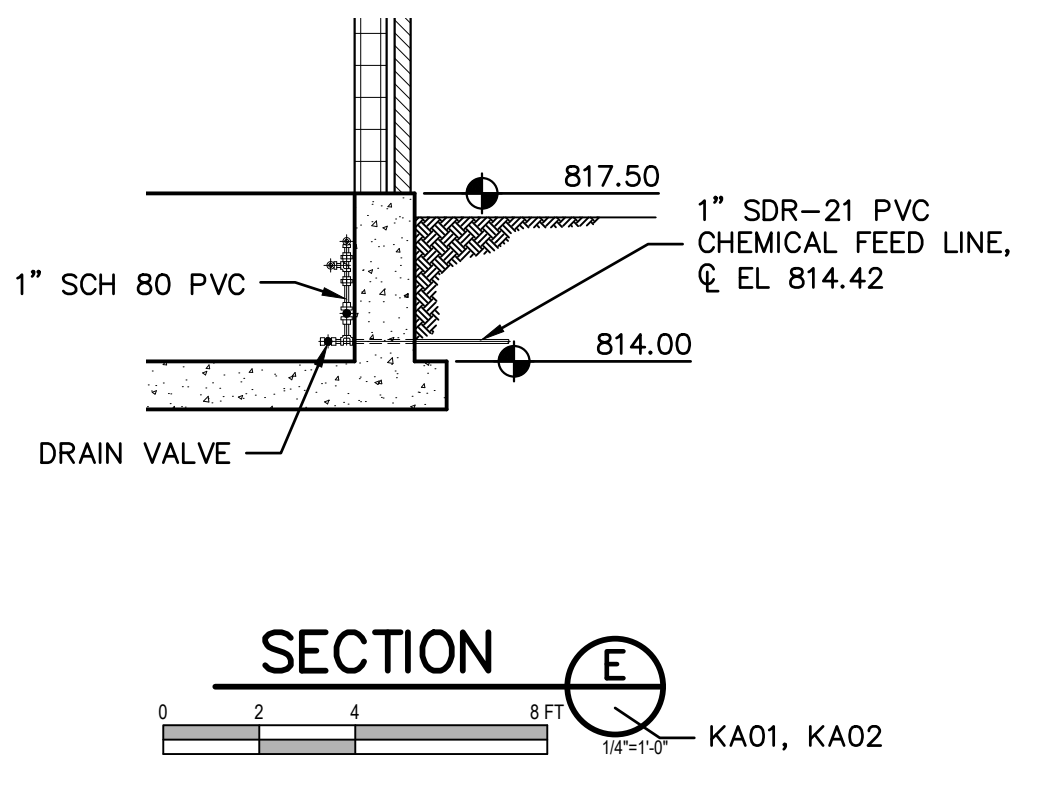
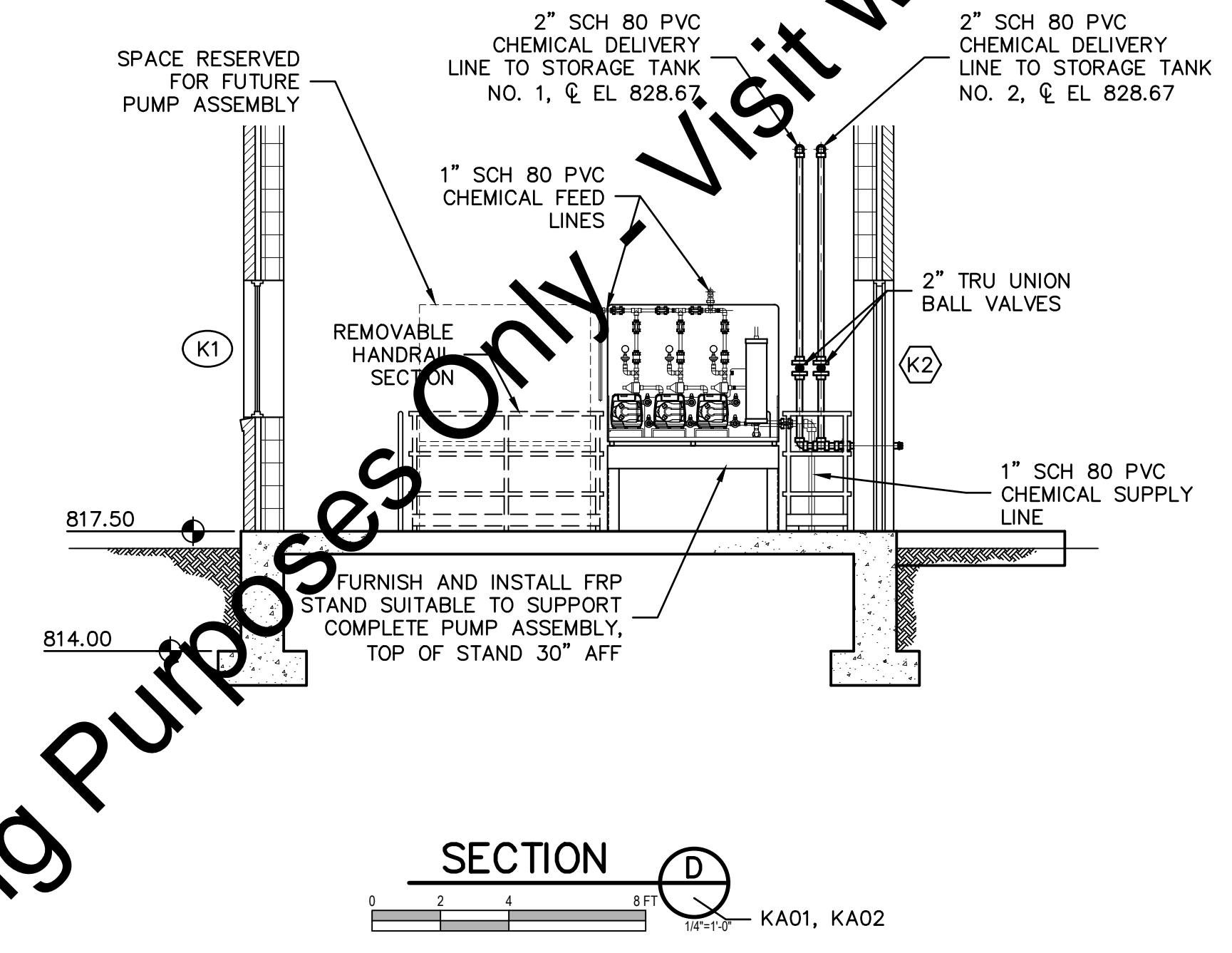
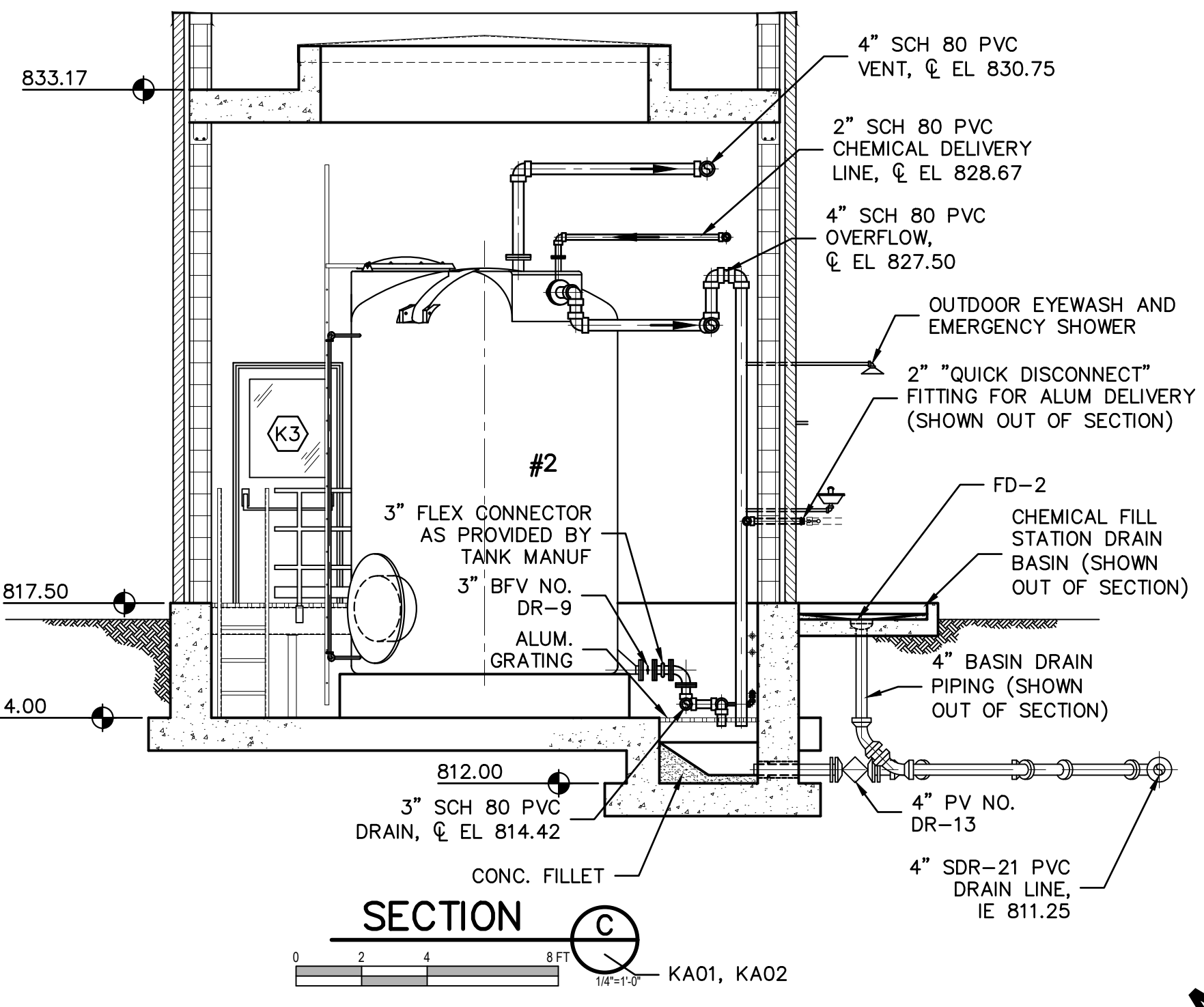
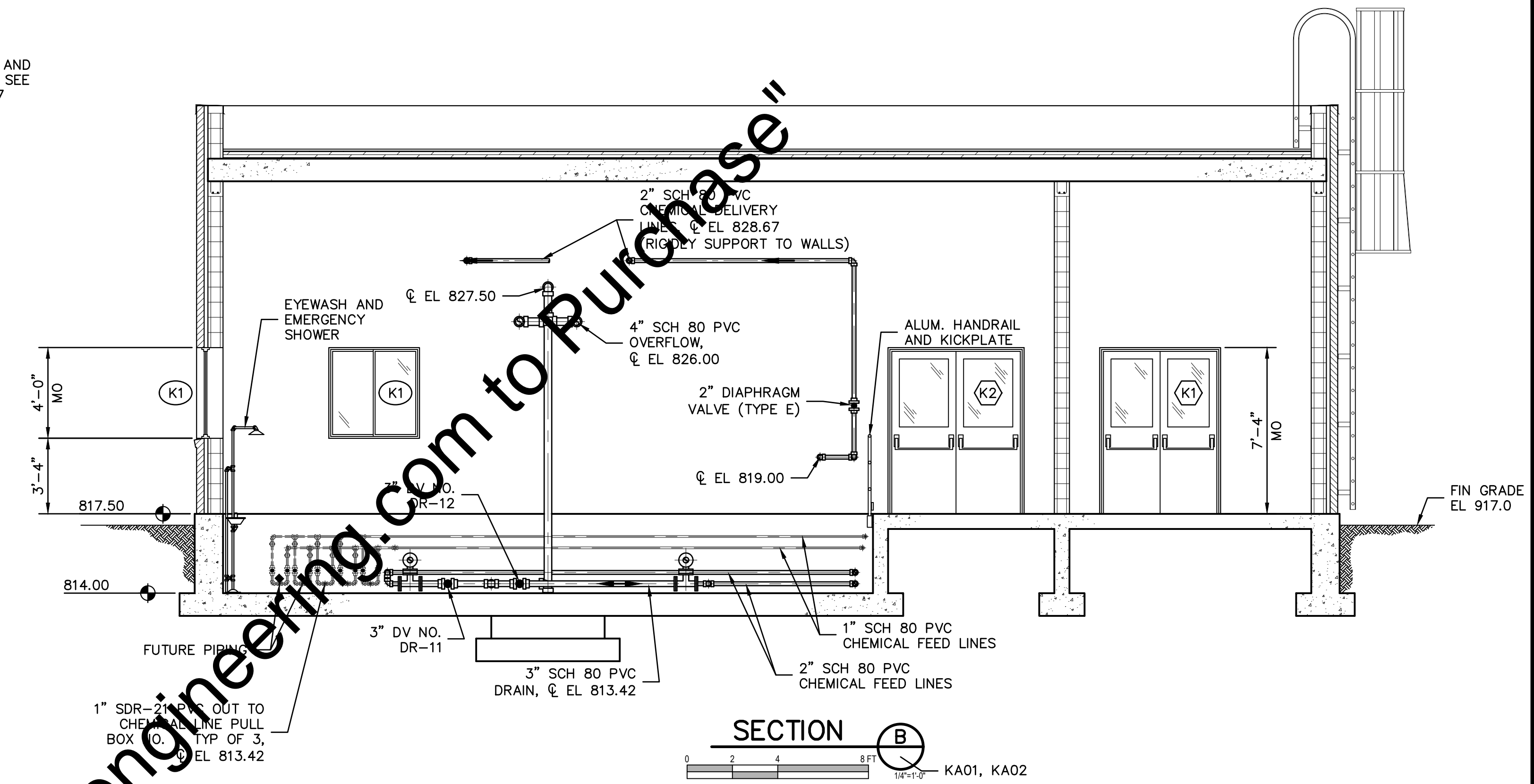
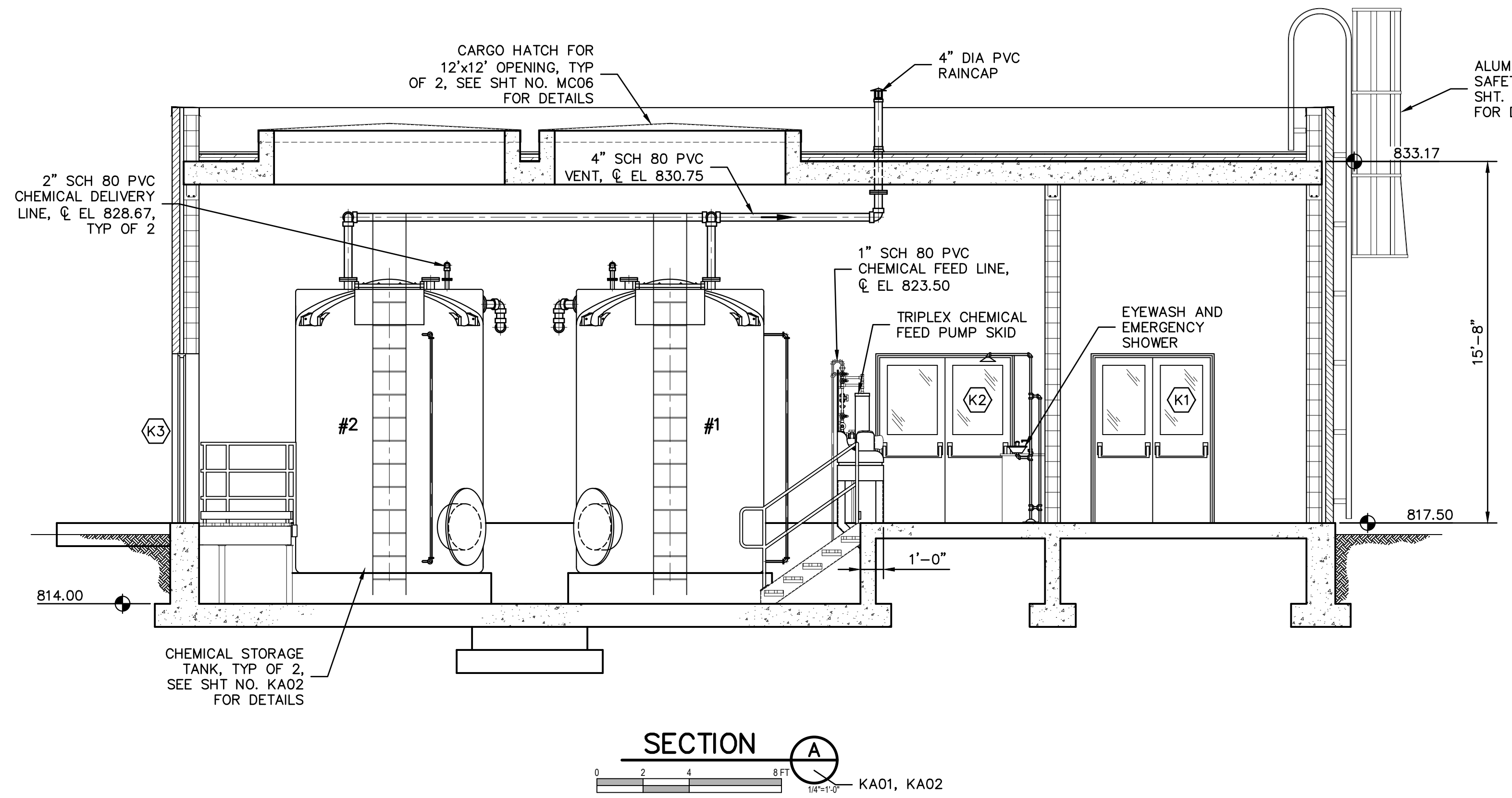
SHEET NO.

KA02

PAGE NO.

215

Drawing: \\Warsaw\Projects\162813-WWTP-Expansion\CAD\04-001\DWG\Shells\KA01_162813-Chem Bldg.dwg | Layout: KA02 | Plotted: 09/04/18 @ 11:16:03 | LaidOutBy: MikeN



"For Viewing Purposes Only - Visit wesslerengineering.com to Purchase"

* VERIFY ELEVATION AND/OR DIMENSION WITH EQUIPMENT MANUFACTURER.

| SCALE VERIFICATION | DRAWN BY | NO. | DATE | INITIALS | REVISION DESCRIPTIONS |
|--|-------------------|---------------|------|----------|-----------------------|
| BAR IS ONE INCH LONG ON ORIGINAL DRAWING | CHECKED BY | WBJ | | | |
| | APPROVED BY | ALT | | | |
| | ISSUE DATE | GLR | | | |
| | SEPTEMBER 4, 2018 | | | | |
| | PROJECT NUMBER | | | | |
| | | 162813-04-003 | | | |



W
WESSLER
ENGINEERING
More than a Project™

WASTEWATER TREATMENT PLANT EXPANSION - 2017

CITY OF WARSAW, INDIANA

NEW CHEMICAL FEED BUILDING SECTIONS

SHEET NO.
KA03
PAGE NO.
216

Drawing: J:\Warshaw\Projects\162813\Warshaw WWTPT Expansion\CAD\04-001\DWG\Shells\KA01_162813-Chem Bldg.dwg | Layout: KA03 | Plotted: 09/04/18 @ 11:16:40 | LaidOutBy: Miken

FOUNDATION PLAN NOTES: ○ INDICATES NOTE REFERENCED ON PLAN

- SEE SHEET AS01 AND AS02 FOR GENERAL STRUCTURAL NOTES. SEE SHEETS MS01 TO MS04 FOR TYPICAL STRUCTURAL DETAILS.
 - SEE PROCESS DRAWINGS FOR ADDITIONAL REQUIREMENTS INCLUDING CONCRETE FILL, GROUT BEDS, PIPE PENETRATIONS, ETC.
 - SEE SITE CIVIL FOR FINAL GRADE ELEVATIONS.
 - SEE GEOTECHNICAL REPORT FOR ALL BACKFILLING AND COMPACTION REQUIREMENTS BEHIND WALLS AND UNDER SLAB-ON-GRADE.
 - ALL DIMENSIONS AND ELEVATIONS SHALL BE VERIFIED PRIOR TO FABRICATION, CONSTRUCTION, OR ERECTION. THE GENERAL CONTRACTOR SHALL ASSUME RESPONSIBILITY FOR ANY DISCREPANCIES.
 - ALL FOOTINGS ARE CENTERED BENEATH BEARING WALLS UNLESS NOTED OTHERWISE.
 - REFER TO CIVIL DRAWINGS FOR WALL LAYOUT, OPENING SIZES AND LOCATIONS.
- Ⓢ SLAB-ON-GRADE IS 8" THICK, SEE SECTION A/KS02 FOR REINFORCING INFORMATION.

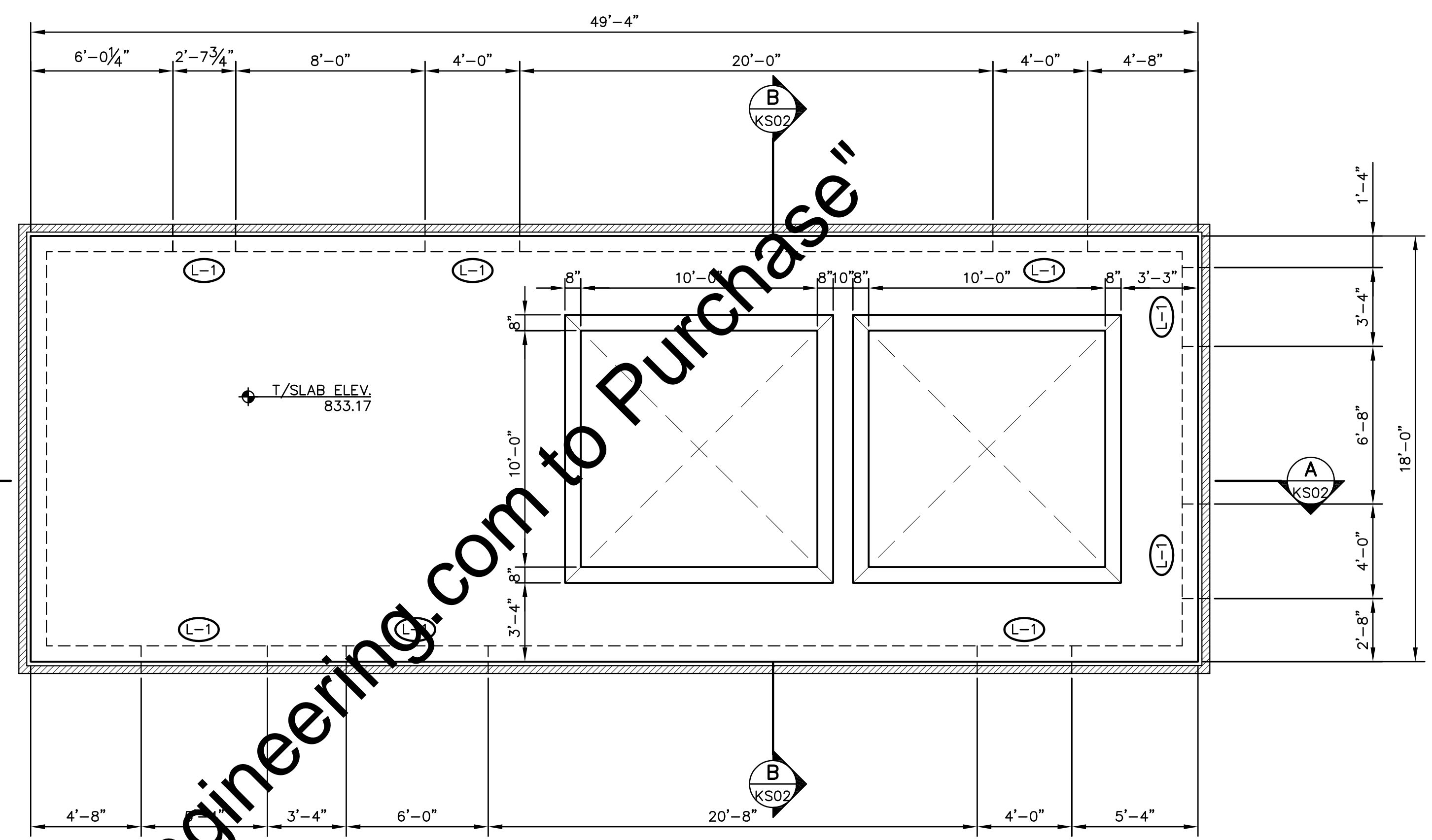
ROOF FRAMING PLAN NOTES: ○ INDICATES NOTE REFERENCED ON PLAN

- SEE SHEET AS01 AND AS02 FOR GENERAL STRUCTURAL NOTES. SEE SHEETS MS01 TO MS04 FOR TYPICAL STRUCTURAL DETAILS.
- (L-1) DENOTES W8X24 STEEL LINTEL.
- STEEL LINTELS SHALL BE HOT-DIP GALVANIZED.
- REFER TO CIVIL PLANS FOR OPENING SIZES AND LOCATIONS.
- "C.J." INDICATES LOCATION OF MASONRY CONTROL JOINTS.
- REFER TO CIVIL DRAWINGS FOR WALL LAYOUT, OPENING SIZES AND LOCATIONS.

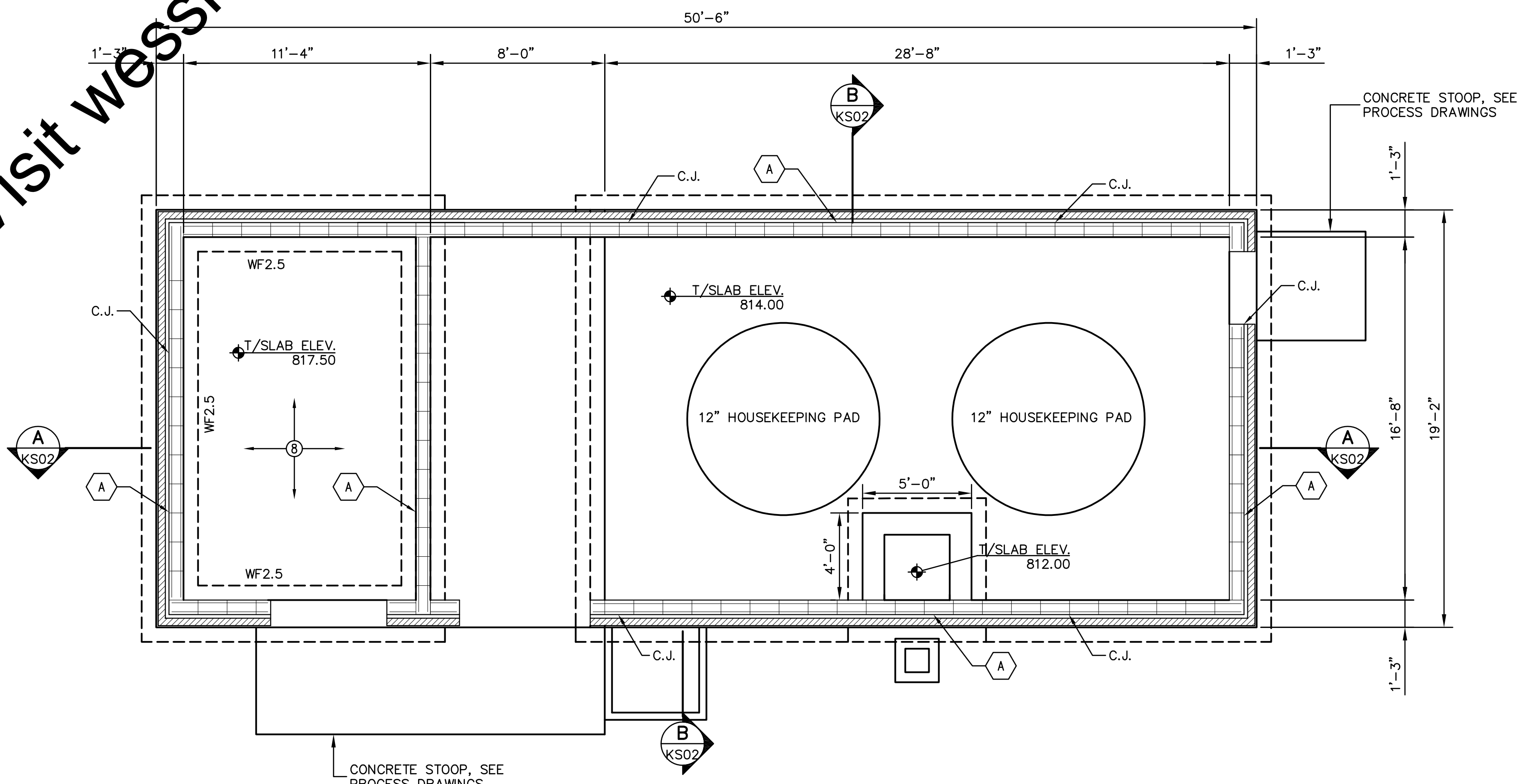
| WALL FOOTING SCHEDULE | | | | | |
|-----------------------|-------------------|-------|-----|---------------|--------------|
| MARK | FOOTING DIMENSION | | | REINFORCEMENT | |
| | W | L | T | W | L |
| WF2.5 | 2'-6" | CONT. | 12" | #4 AT 18" | 4 - #5 CONT. |

FOUNDATION DESIGN VALUES:
ALLOWABLE BEARING PRESSURE = 2,500 PSF

| MASONRY WALL REINFORCING SCHEDULE | |
|---|--|
| (A) | 8-INCH CMU WALL 8-INCH NORMAL WEIGHT CMU BLOCK VERTICAL: #5 BARS AT 32-INCHES O.C. MAX., SEE ELEVATION FOR TYPICAL REINFORCEMENT PLACEMENT HORIZONTAL: (2) #5 BARS IN 8" BOND BEAM AT BOTTOM OF ELEVATED CONCRETE SLAB AND AT BOTTOM OF WINDOW GLASS BLOCK #9 TRUSS TYPE JOINT REINF. AT 16-INCHES O.C. (8" LAP) |
| MASONRY NOTES: | |
| 1. REINFORCE ALL WALLS AS NOTED BY SCHEDULE EXCEPT AS NOTED ON PLANS AND/OR DETAILS. 2. PROVIDE A 1'-0" HOOK AT TOP OF ALL VERTICAL BARS. 3. SEE CIVIL DWGS. FOR LOCATION OF CMU WALLS. | |



ROOF PLAN
SCALE: 1/4"=1'-0"



FOUNDATION PLAN
SCALE: 1/4"=1'-0"

"For Viewing Purposes Only - Visit wesslerengineering.com to Purchase"

CE Solutions
structural engineers
10 Shoshone Drive Carmel, IN 46032 317.818.1912 cesolutionsinc.com

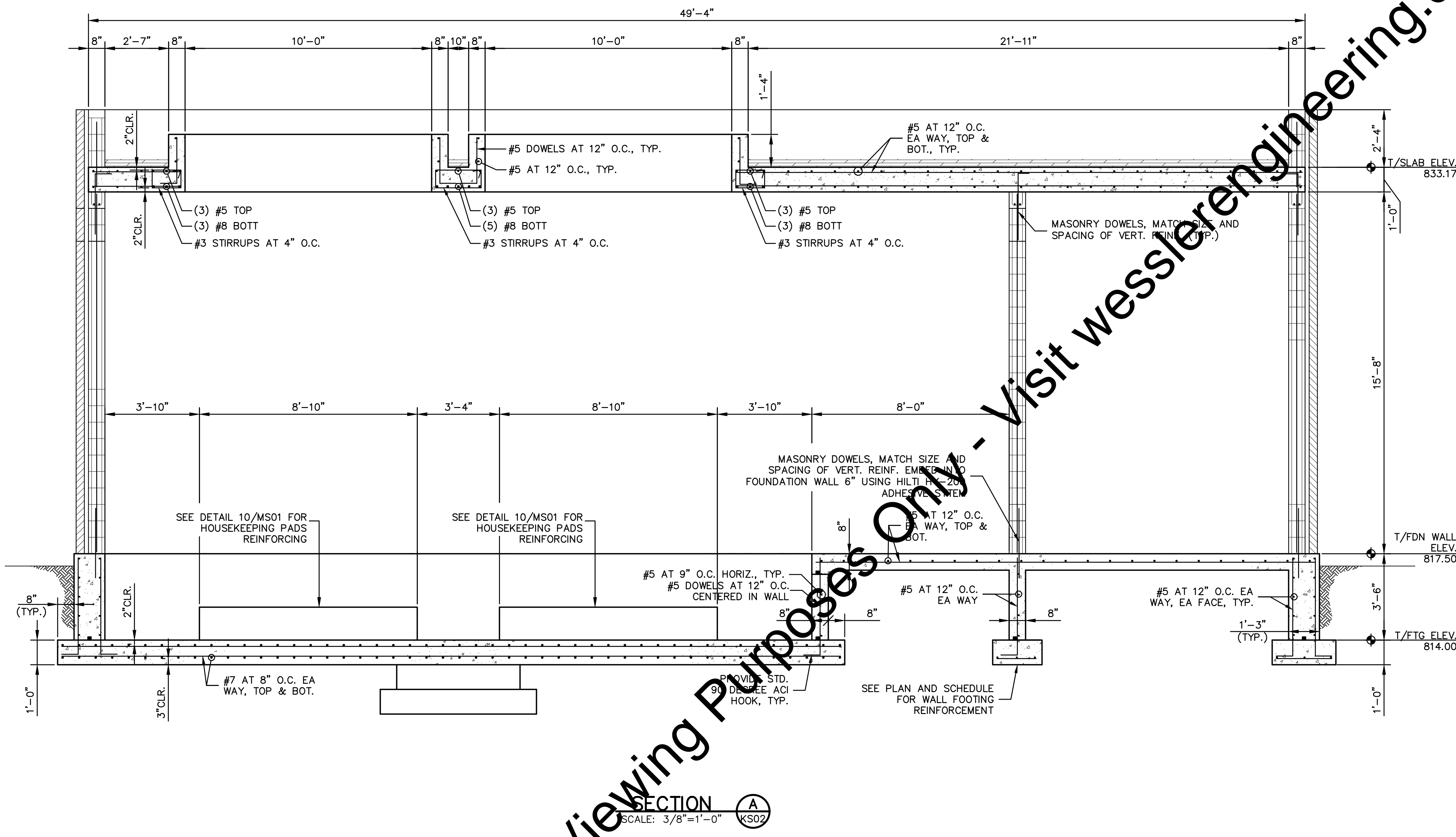
| SCALE VERIFICATION | DRAWN BY | MAS | NO. | DATE | INITIALS | REVISION DESCRIPTIONS |
|--|----------------|-------------------|-----|------|----------|-----------------------|
| BAR IS ONE INCH LONG ON ORIGINAL DRAWING | CHECKED BY | CEB | | | | |
| | APPROVED BY | CEB | | | | |
| | ISSUE DATE | SEPTEMBER 4, 2018 | | | | |
| | PROJECT NUMBER | 162813-04-003 | | | | |

WASTEWATER TREATMENT PLANT EXPANSION - 2017
CITY OF WARSAW, INDIANA
NEW CHEMICAL FEED BUILDING
FOUNDATION AND ROOF PLAN

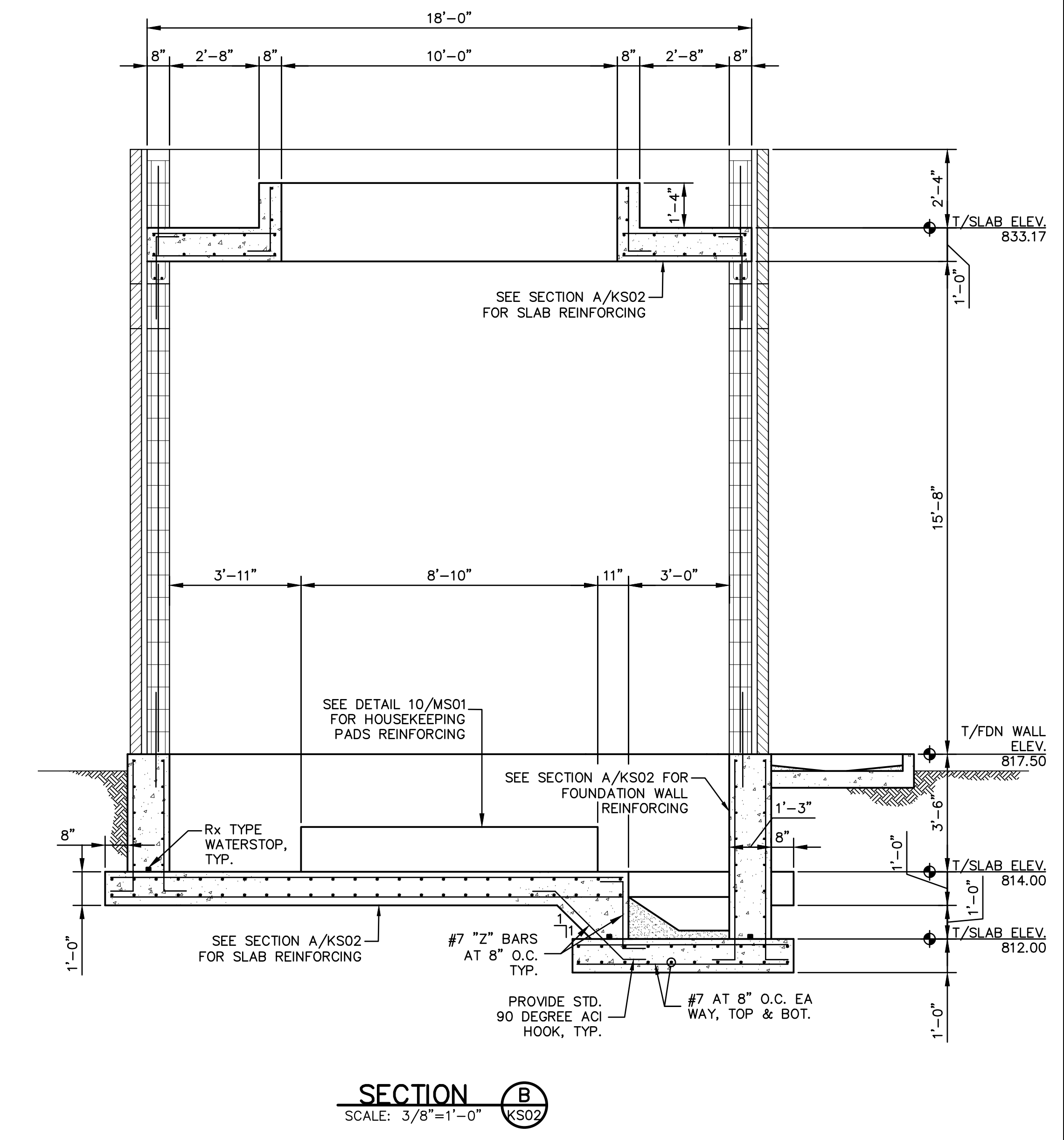
SHEET NO.
KS01
PAGE NO.
218

Drawing: S:\project files\17-176 Anaerobic Digesters and Control Building - Warsaw WWTP Improvements Project\drawing\structural\Old Building Files\KS01 - New Chemical Feed Building.dwg | Plotter: 08/31/18 @ 01:32:58 | LastSavedBy: msians

Drawing: S:\project files\17-176-Anaerobic Digesters and Control Building - Warsaw WWTP Improvements\Structural\Old Building\Final\KS01 - New Chemical Feed Building.dwg | Layout: KS02-Sections | Plotted: 08/31/18 @ 11:17:31 | LastSavedBy: jabanrios



SECTION A
SCALE: 3/8"=1'-0"
KS02

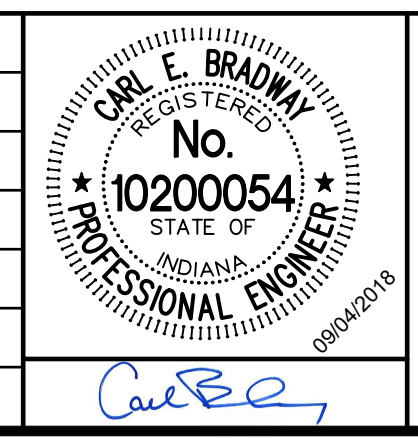


SECTION B
SCALE: 3/8"=1'-0"
KS02

"For Viewing Purposes Only - Visit wesslerengineering.com to Purchase"



| SCALE VERIFICATION | DRAWN BY | MAS | NO. | DATE | INITIALS | REVISION DESCRIPTIONS |
|--|----------------|-------------------|-----|------|----------|-----------------------|
| BAR IS ONE INCH LONG ON ORIGINAL DRAWING | CHECKED BY | CEB | | | | |
| | APPROVED BY | CEB | | | | |
| | ISSUE DATE | SEPTEMBER 4, 2018 | | | | |
| | PROJECT NUMBER | 162813-04-003 | | | | |



WASTEWATER TREATMENT PLANT EXPANSION - 2017
CITY OF WARSAW, INDIANA
NEW CHEMICAL FEED BUILDING SECTIONS

SHEET NO.
KS02
PAGE NO.
219

| EXHAUST FAN SCHEDULE | | | | | | | | | | | | | | | |
|----------------------|-----------|------|------|-------|------|-------------|-------|-------|------|------|----|-------------------|--------------|-------------------------------|----------------|
| TAG | LOCATION | TYPE | CFM | S.P. | FRPM | BHP (WATTS) | SONES | MOTOR | | | | UNIT WEIGHT (LBS) | ROOF OPENING | MANUFACTURER AND MODEL NUMBER | INTERLOCK WITH |
| | | | | | | | | HP | VOLT | RPM | PH | | | | |
| EF-1 | EAST WALL | WALL | 1270 | 0.250 | 1725 | .297 | 25.0 | 1/3 | 115 | 1725 | 1 | 71 | 21.25" SQ | LOREN COOK 16P17DA | L-1 CO SENSOR |

ACCESSORIES: WEATHER HOOD, BACKDRAFT DAMPER, DISCONNECT

| NATURAL GAS-FIRED UNIT HEATER SCHEDULE | | | | | | | | | | | | | |
|--|---------------|-------|-----|--------------|------------|------------|------------|-----------------|-------|----|-------------------|--------------------------------|-------|
| MARK | FAN DATA | | | HEATING DATA | | | | ELECTRICAL DATA | | | UNIT WEIGHT (LBS) | MANUFACTURER WITH MODEL NUMBER | NOTES |
| | AIRFLOW (CFM) | DRIVE | HP | INPUT MBH | MIN AFUE % | OUTPUT MBH | TEMP. RISE | AMPS | VOLTS | PH | | | |
| GUH-1 | 1141 | AXIAL | 1/8 | 55 | 93 | 51.1 | 43 | 4.4 | 115 | 1 | 93 | MODINE PTC-55 | 1 |

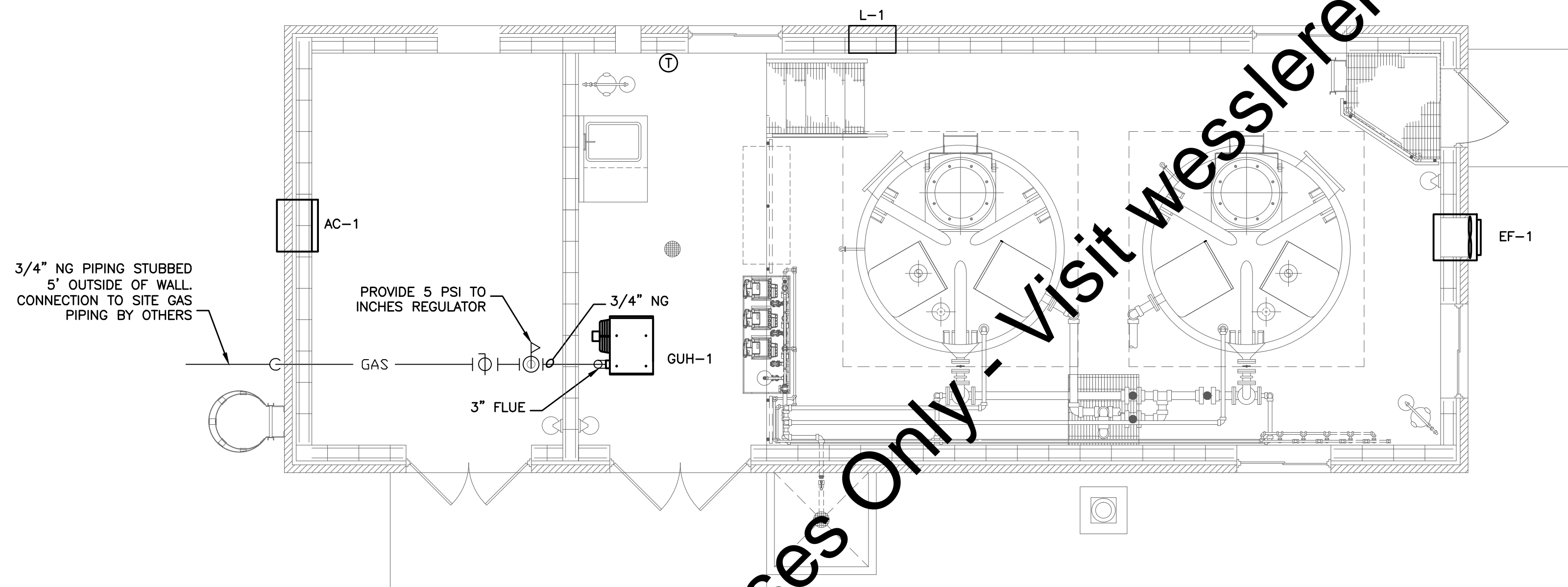
NOTES:
1. PROVIDE REMOTE THERMOSTAT

| THROUGH WALL AIR CONDITIONER SCHEDULE | | | | | | | | | |
|---------------------------------------|-------------------------------|-----------------|------------------------|-----|---------|-------|------|------|---------|
| TAG | MANUFACTURER AND MODEL NUMBER | LOCATION | COOLING CAPACITY (BTU) | CFM | VOLTAGE | PHASE | AMPS | MOCB | OPTIONS |
| AC-1 | FREDRICH WS16-3 | ELECTRICAL ROOM | 15,000 | 290 | 208/230 | 1 | 18.5 | 20 | 1,2,4 |

OPTIONS:
1. WALL SLEEVE, 2. COND DRAIN KIT, 3. REMOTE THERMOSTAT, 4. ARCH EXT GRILL, 5. SUB-BASE KIT

| LOUVER SCHEDULE | | | | | | | | | |
|-----------------|------------|-------------------------------|-------|--------|--------------------|-----------|---------|---------------------|--|
| TAG | LOCATION | MANUFACTURER AND MODEL NUMBER | WIDTH | HEIGHT | FREE AREA (SQ. FT) | THICKNESS | OPTIONS | NOTES | |
| L-1 | ELECTRICAL | RUSKIN ELC6375DAX | 24 | 24 | 1.5 | 6" | 1,2 | INTERLOCK WITH EF-1 | |
| L-2 | CHEM STORE | RUSKIN ELC6375DAX | 24 | 24 | 1.5 | 6" | 1,2 | INTERLOCK WITH EF-1 | |

OPTIONS:
1. 120V ACTUATOR 2. INTERLOCK WITH EXHAUST FAN OPERATION

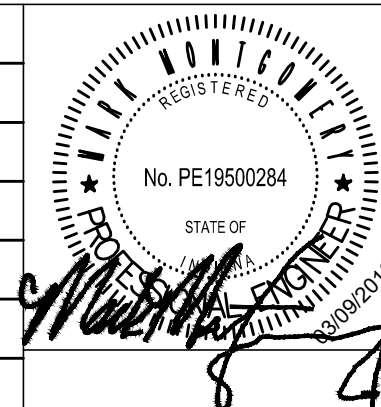


MECHANICAL PLAN
SCALE: 1/4"=1'-0"

"For Viewing Purposes Only - Visit wesslerengineering.com to Purchase"

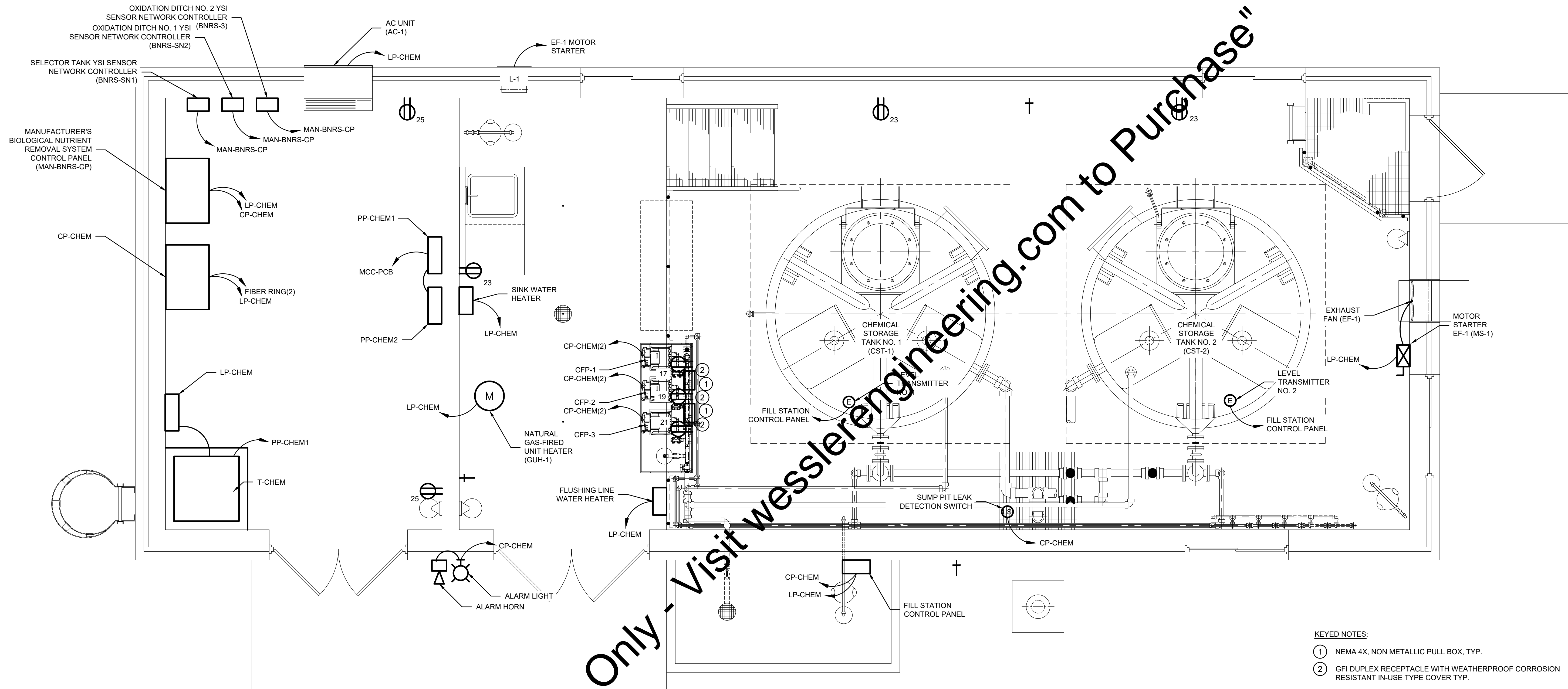
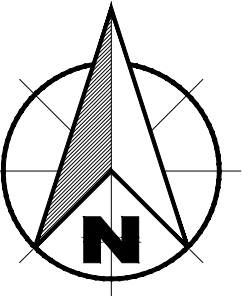


| SCALE VERIFICATION | DRAWN BY | NO. | DATE | INITIALS | REVISION DESCRIPTIONS |
|--|----------------|-----|----------|----------|-----------------------|
| BAR IS ONE INCH LONG ON ORIGINAL DRAWING | CHECKED BY | | 12/12/17 | | |
| | APPROVED BY | | | | |
| | ISSUE DATE | | | | |
| | MARCH 2018 | | | | |
| | PROJECT NUMBER | | | | |
| | | | | | 162813-04-003 |



WASTEWATER TREATMENT PLANT EXPANSION - 2017
CITY OF WARSAW, INDIANA
**CHEMICAL FEED BUILDING
MECHANICAL PLAN**

SHEET NO.
KM01
PAGE NO.
220



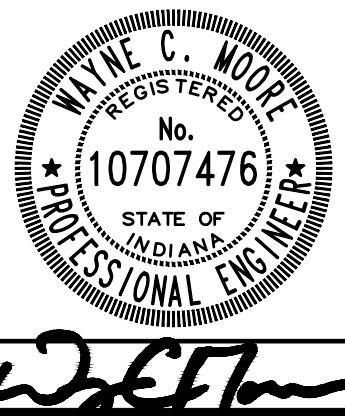
- KEYED NOTES:**
- ① NEMA 4X, NON METALLIC PULL BOX, TYP.
 - ② GFI DUPLEX RECEPTACLE WITH WEATHERPROOF CORROSION RESISTANT IN-USE TYPE COVER TYP.

POWER PLAN
0 1 2 4 FT
1/2"=1'-0"

"For Viewing Purposes Only - Visit wesslerengineering.com to Purchase"

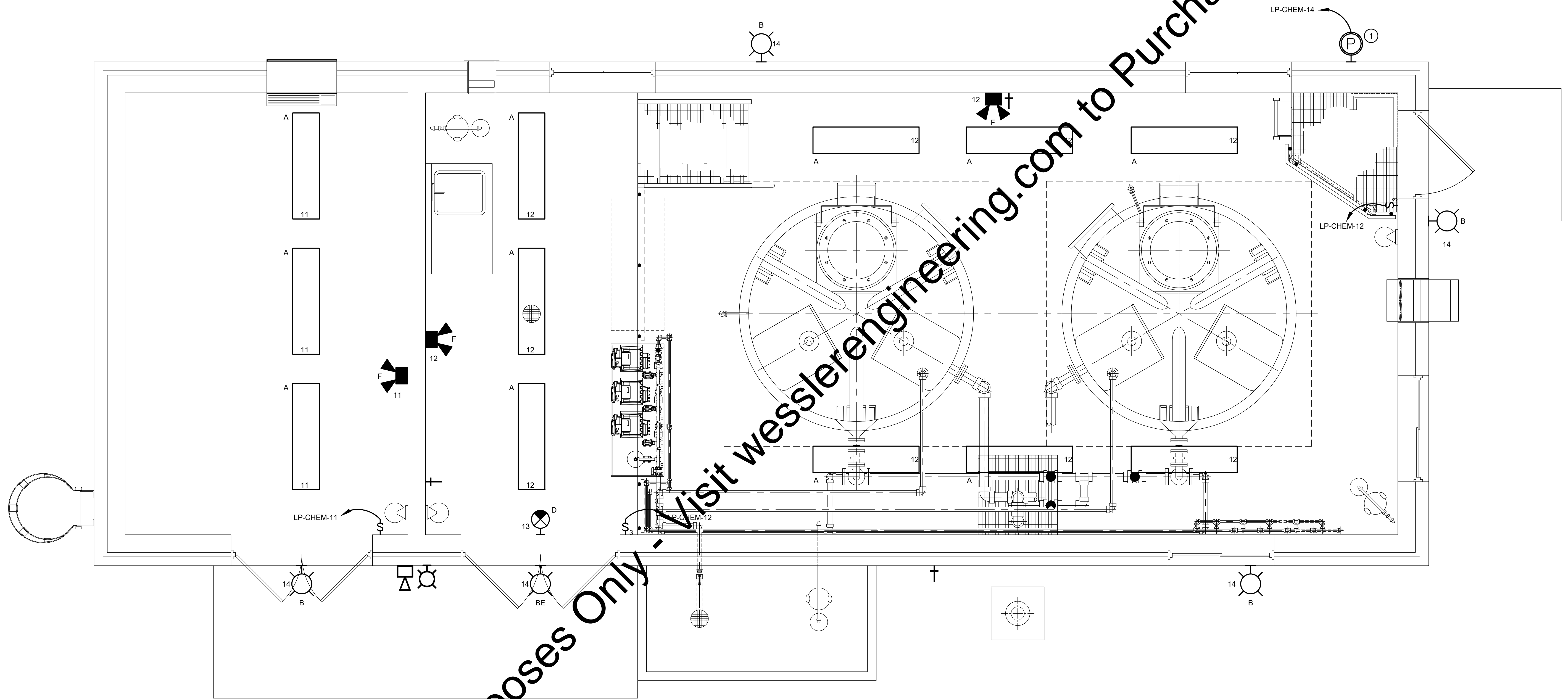
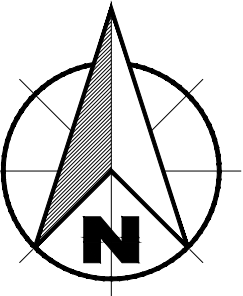
Drawing: J:\Warsaw\Projects\162813\WwTP Expansion\CAD\04-001\DWG\Shwbl\Elect\162813-E-Chem Bldg.dwg | Layout: KE01 | Plotter: 09/04/18 @ 09:19:50 | Plotter: 09/04/18 @ 09:19:50 | Project No.: 162813-04-003

| SCALE VERIFICATION | DRAWN BY | EAS | NO. | DATE | INITIALS | REVISION DESCRIPTIONS |
|--|----------------|-------------------|-----|------|----------|-----------------------|
| BAR IS ONE INCH LONG ON ORIGINAL DRAWING | CHECKED BY | BMS | | | | |
| | APPROVED BY | WCM | | | | |
| | ISSUE DATE | SEPTEMBER 4, 2018 | | | | |
| | PROJECT NUMBER | 162813-04-003 | | | | |



WASTEWATER TREATMENT PLANT EXPANSION - 2017
CITY OF WARSAW, INDIANA
NEW CHEMICAL FEED BUILDING
POWER PLAN

SHEET NO.
KE01
PAGE NO.
221



LIGHTING PLAN



KEYED NOTES:

- ① MOUNT PHOTO CELL ON NORTH WALL OF BUILDING.
- ② CONNECT AE FIXTURE(EMERGENCY BALLAST) TO UNSWITCH CIRCUIT.

"For Viewing Purposes Only - Visit wesslerengineering.com to Purchase"

Drawing: J:\Warsaw\Projects\162813\Warsaw WWTP Expansion\CAD 04-001\DWG\Shw\Elect\162813-E-Chem Bldg.dwg | Layout: KE02 | Plotter: 09/04/18 @ 09:20:11 | User: Sawdy, John | Project No.: 162813-04-003

| SCALE VERIFICATION | DRAWN BY | EAS | NO. | DATE | INITIALS | REVISION DESCRIPTIONS |
|--|-------------------|-----|-----|------|----------|-----------------------|
| BAR IS ONE INCH LONG ON ORIGINAL DRAWING | CHECKED BY | BMS | | | | |
| | APPROVED BY | WCM | | | | |
| | ISSUE DATE | | | | | |
| | SEPTEMBER 4, 2018 | | | | | |
| | PROJECT NUMBER | | | | | |
| | 162813-04-003 | | | | | |



WASTEWATER TREATMENT PLANT EXPANSION - 2017

CITY OF WARSAW, INDIANA

**NEW CHEMICAL FEED BUILDING
LIGHTING PLAN**

SHEET NO.

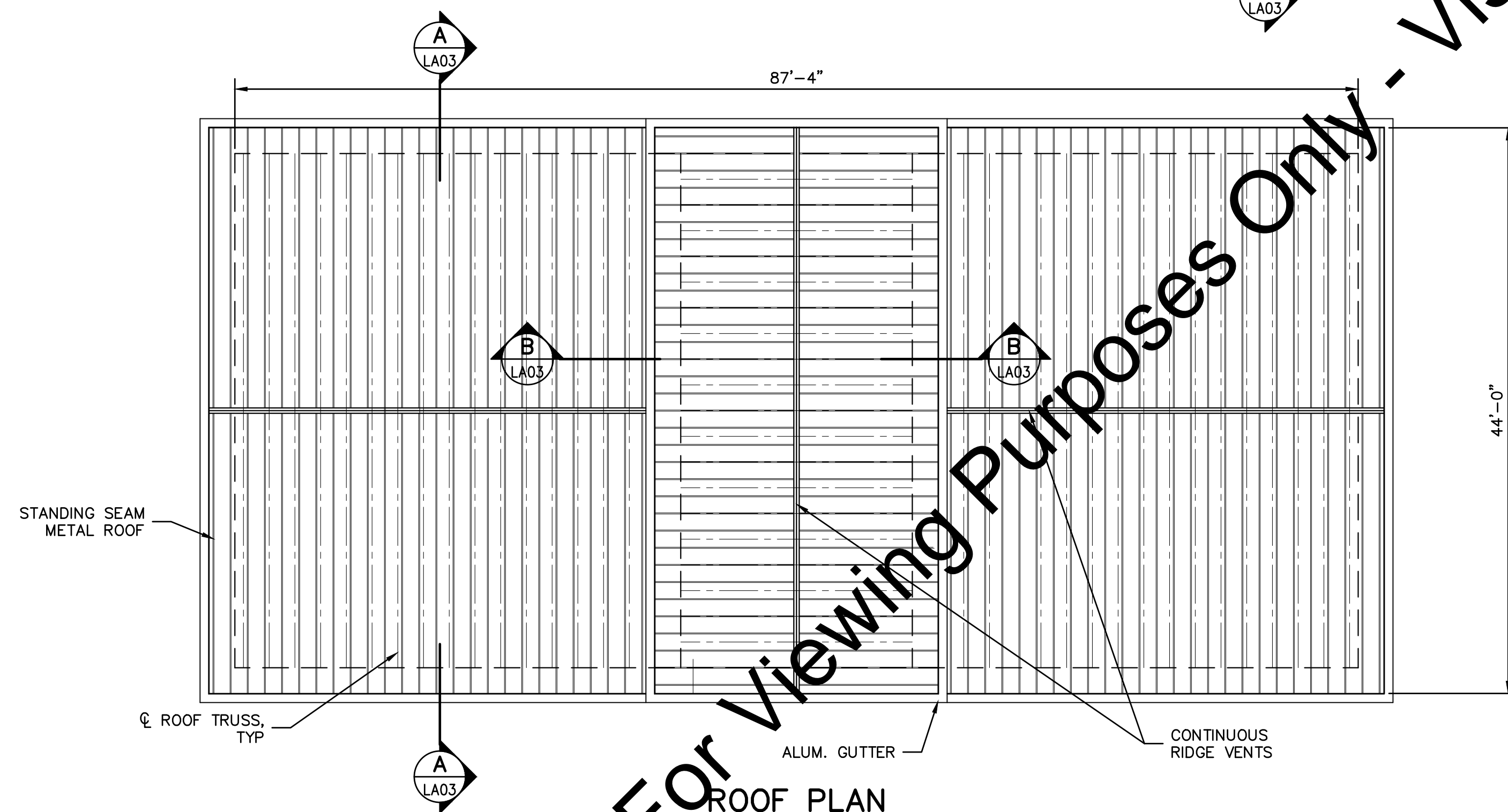
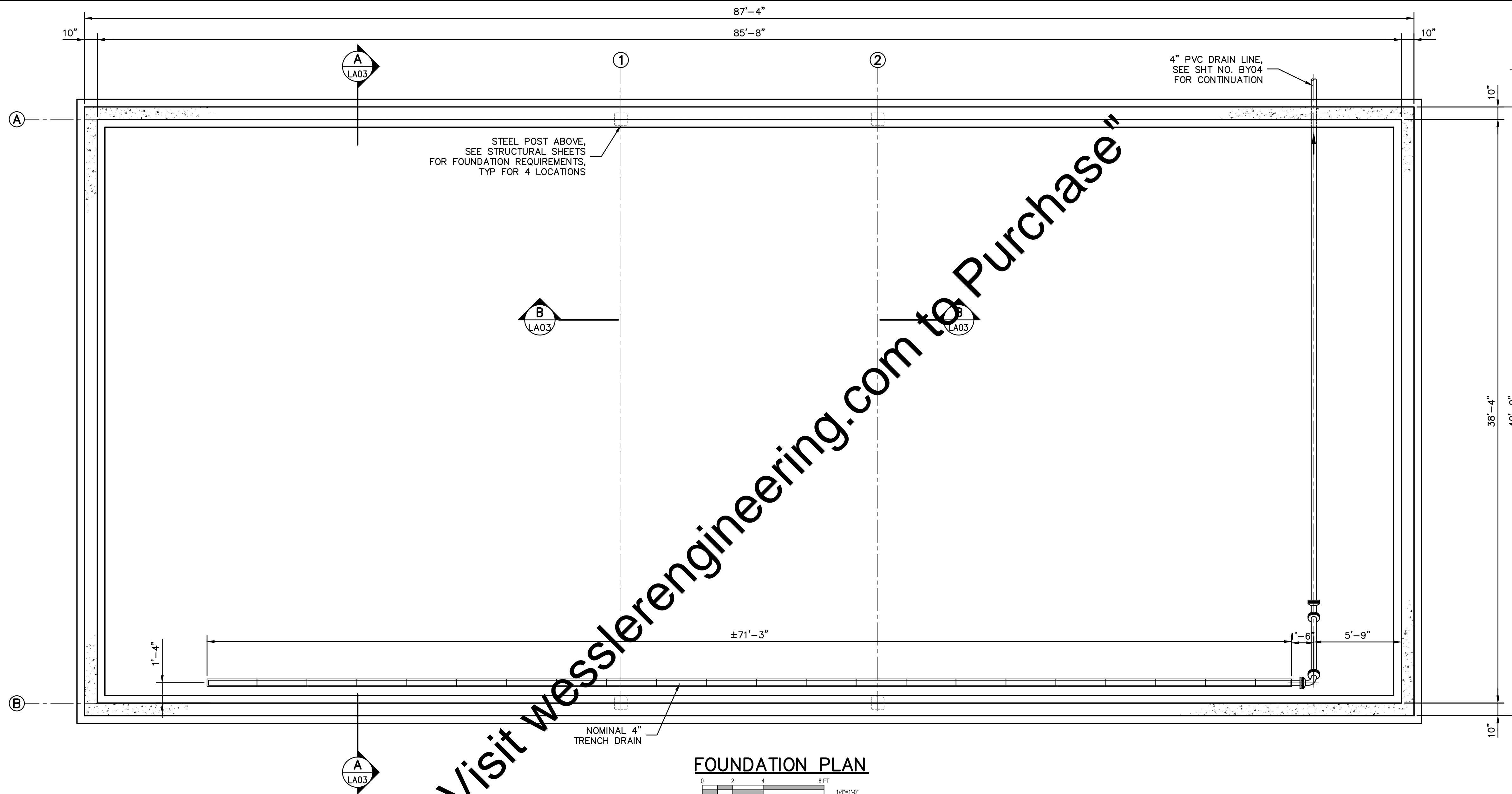
KE02

PAGE NO.

222

GARAGE GENERAL NOTES:

1. THE EXTERIOR FEATURES AND FINISH OF THE NEW GARAGE SHALL MATCH THE NEARBY EXISTING ADMINISTRATION BUILDING; INCLUDING MASONRY SHAPE, TEXTURE AND COLOR, ROOF PANELS COLOR, TEXTURE, AND CONFIGURATION, AND SIDING MATERIAL, COLOR, TEXTURE, AND CONFIGURATION.
2. SKYLIGHT INSTALLATION SHALL MATCH THE INSTALLATION ON THE NEARBY EXISTING BIOSOLIDS STORAGE BUILDING; INCLUDING MATERIAL, COLOR AND TEXTURE.



Drawing: J:\Warsaw\Projects\162813-Warsaw WWTTP Expansion\CAD 04-001\DWG\Sheets\162813-Garage.dwg | Layout: LA01 | Plotter: 09/04/18 @ 11:22:42 | LastSavedBy: Mkn

"For Viewing Purposes Only - Visit wesslerengineering.com to Purchase"

| SCALE VERIFICATION | DRAWN BY | KBJ | NO. | DATE | INITIALS | REVISION DESCRIPTIONS |
|--|----------------|-------------------|-----|------|----------|-----------------------|
| BAR IS ONE INCH LONG ON ORIGINAL DRAWING | CHECKED BY | ALT | | | | |
| | APPROVED BY | GLR | | | | |
| | ISSUE DATE | SEPTEMBER 4, 2018 | | | | |
| | PROJECT NUMBER | 162813-04-003 | | | | |



WESSLER ENGINEERING
More than a Project™

WASTEWATER TREATMENT PLANT EXPANSION - 2017

CITY OF WARSAW, INDIANA

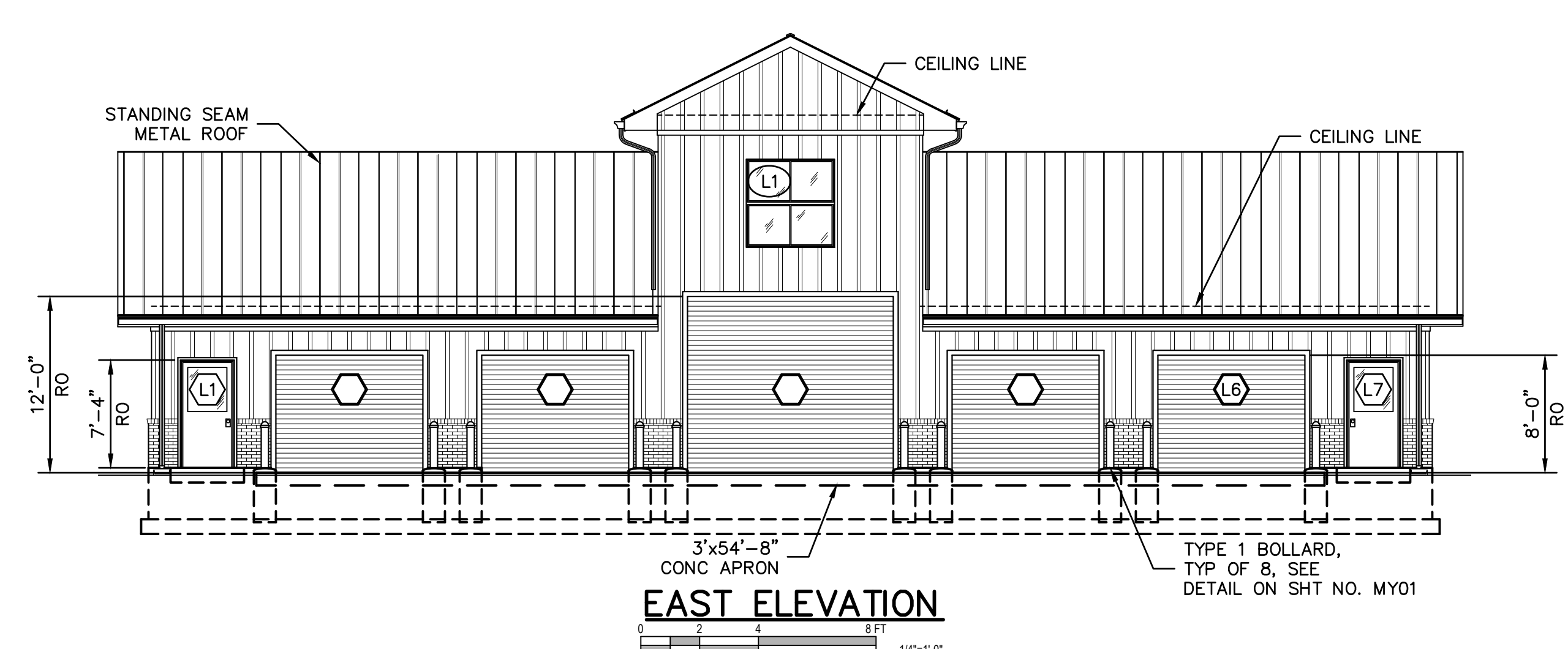
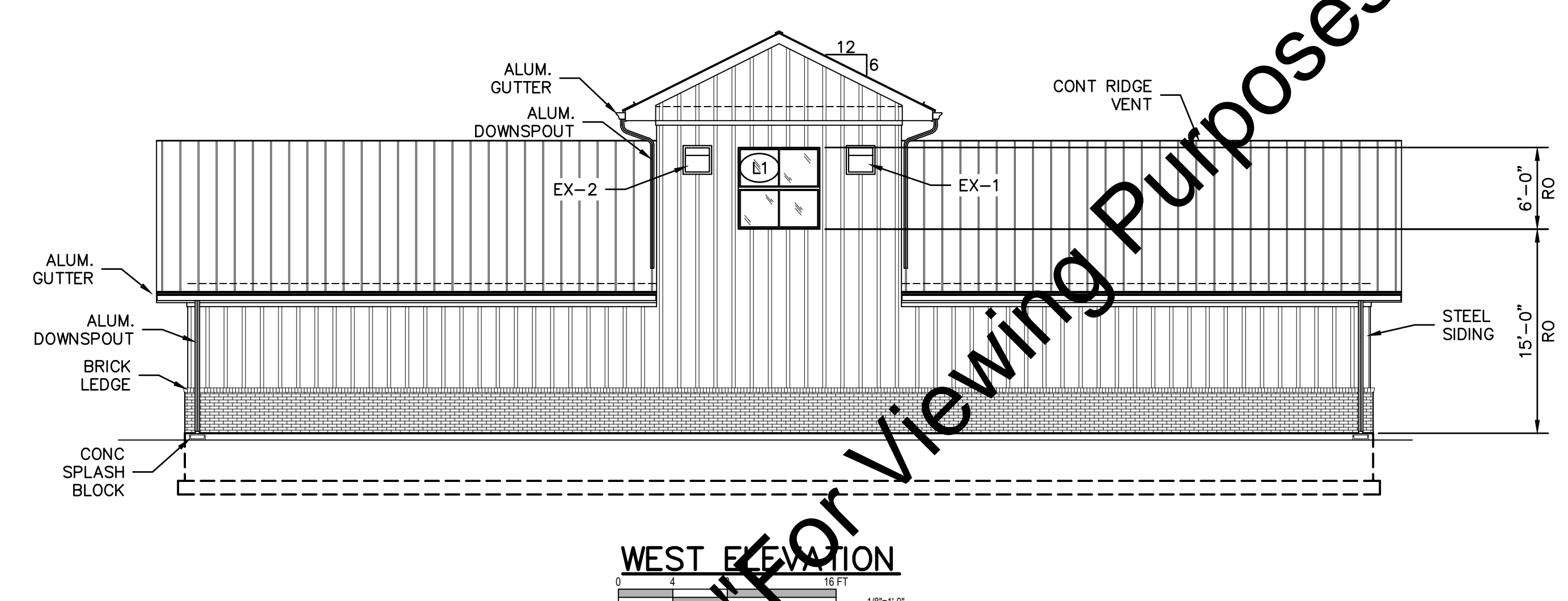
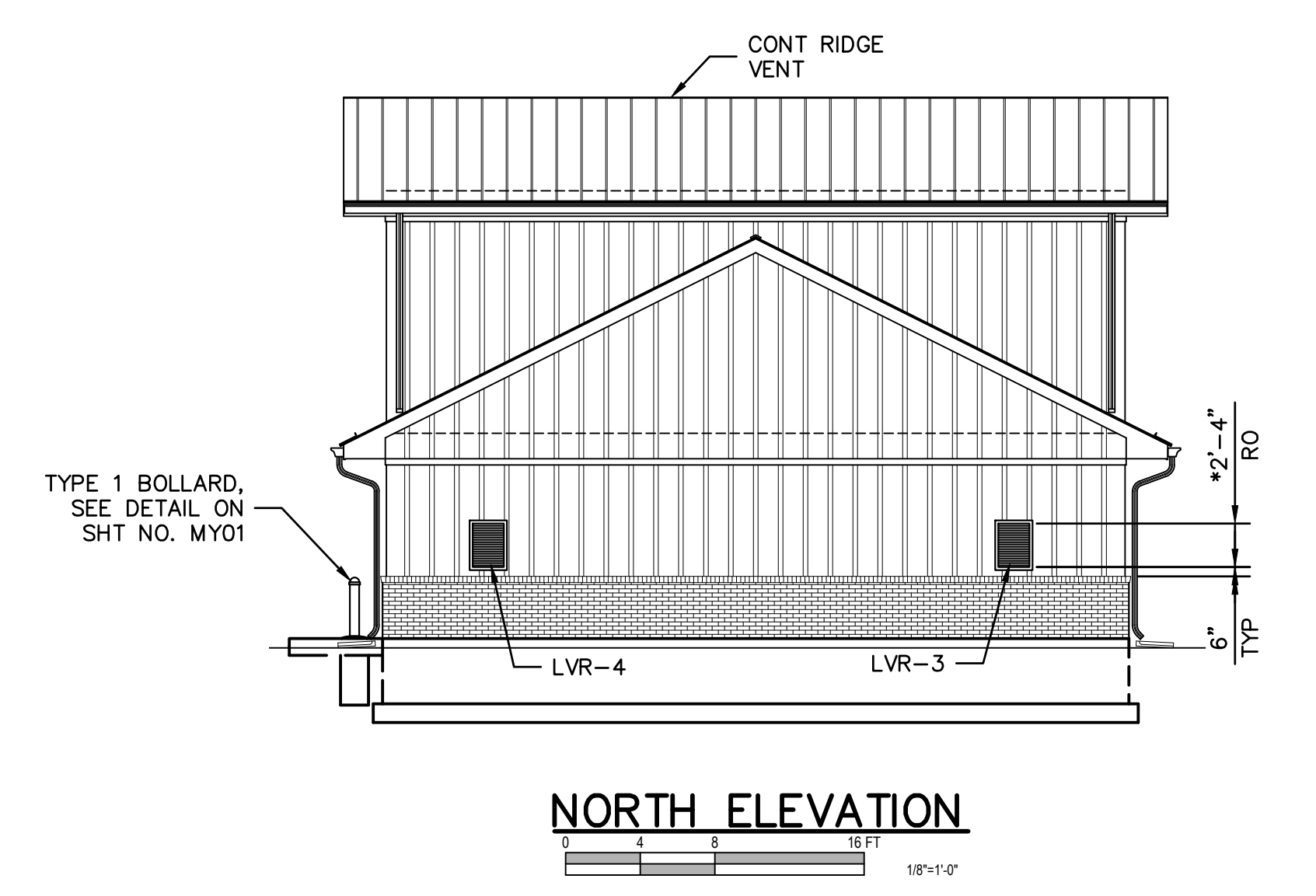
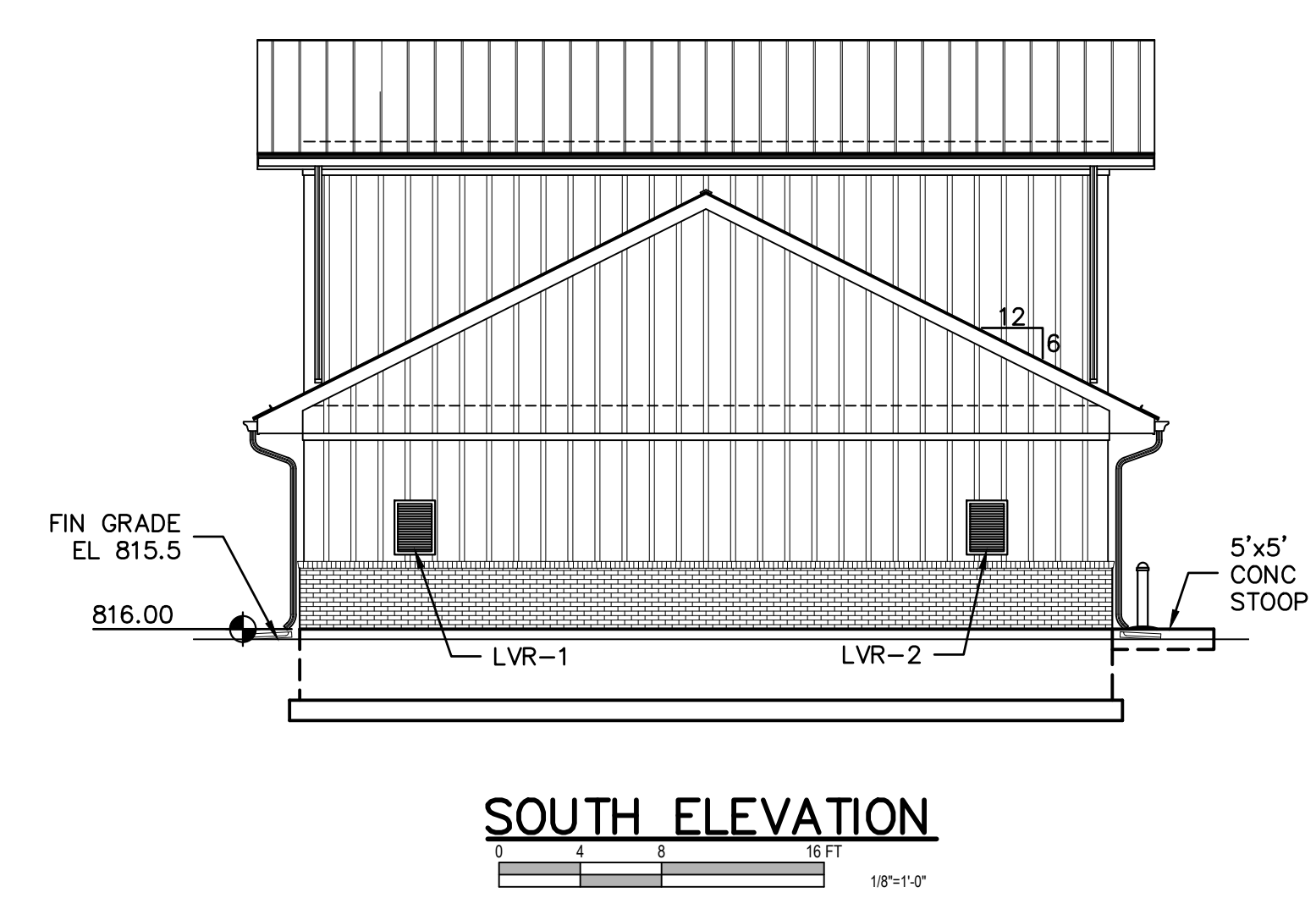
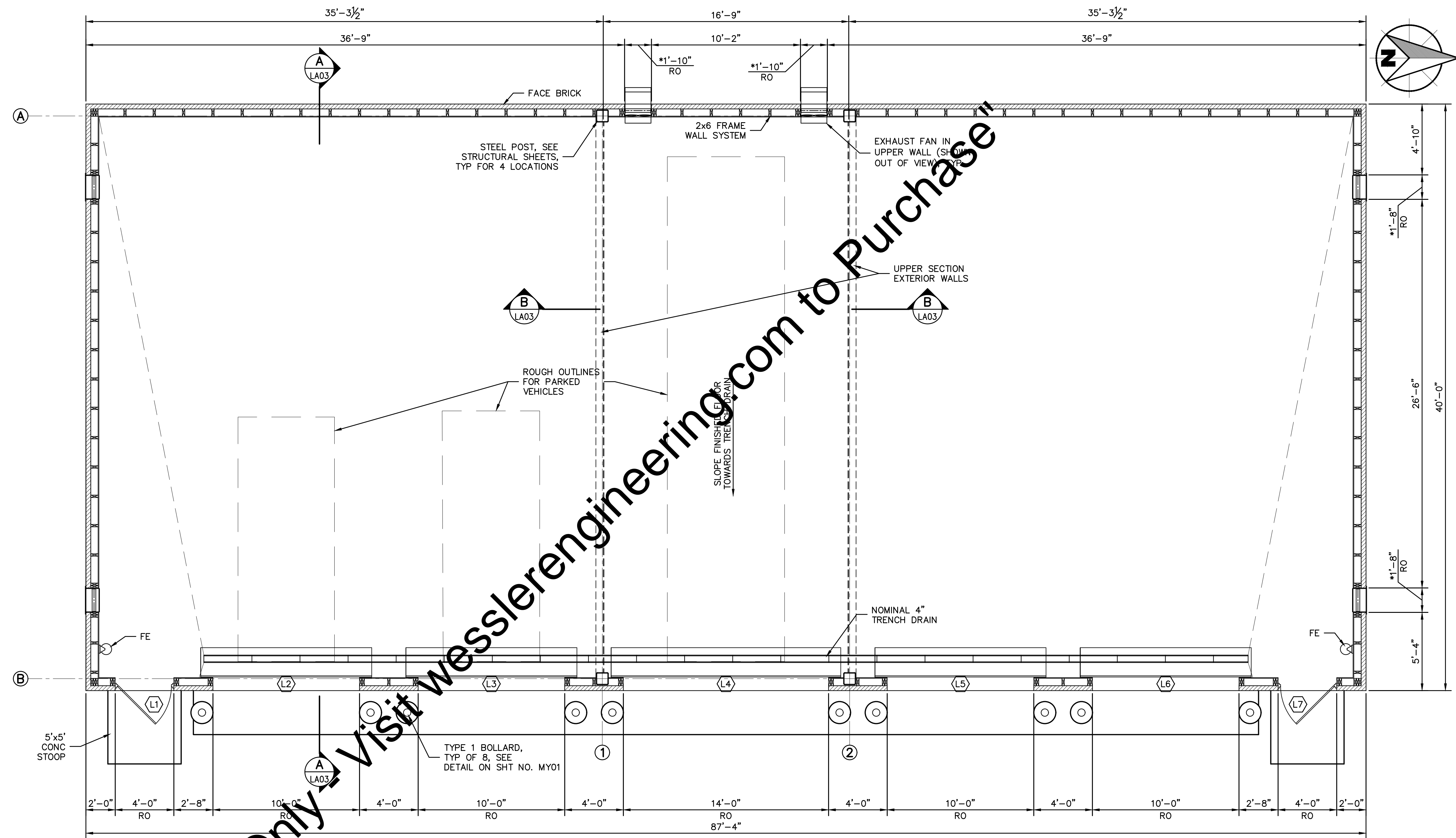
NEW GARAGE PLANS

SHEET NO.

LA01

PAGE NO.

223



Drawing: J:\Warsaw\Projects\162813-WWTP Expansion\CAD 04-001\DWG\Sheets\162813-Garage.dwg | Layout: LA02 | Plotter: 09/04/18 @ 11:23:02 | LastSavedBy: MknE

For Viewing Purposes Only - Visit www.wesslerengineering.com to Purchase

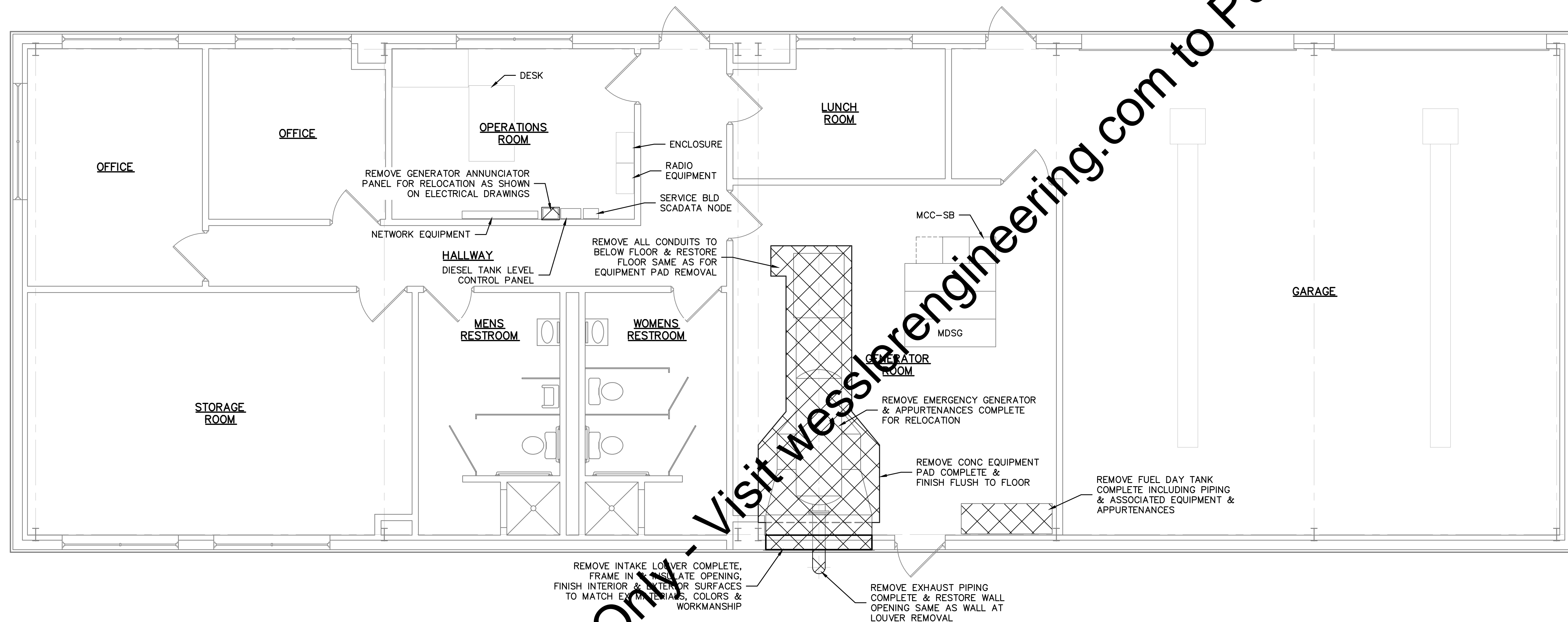
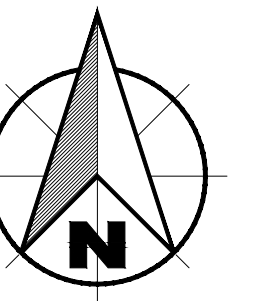
| SCALE VERIFICATION | DRAWN BY | KBJ | NO. | DATE | INITIALS | REVISION DESCRIPTIONS |
|--|----------------|-------------------|-----|------|----------|-----------------------|
| BAR IS ONE INCH LONG ON ORIGINAL DRAWING | CHECKED BY | ALT | | | | |
| | APPROVED BY | GLR | | | | |
| | ISSUE DATE | SEPTEMBER 4, 2018 | | | | |
| | PROJECT NUMBER | 162813-04-003 | | | | |



WASTEWATER TREATMENT PLANT EXPANSION - 2017
CITY OF WARSAW, INDIANA
NEW GARAGE FLOOR PLAN & ELEVATIONS

SHEET NO.
LA02
PAGE NO.
224

* VERIFY ELEVATION AND/OR DIMENSION WITH EQUIPMENT MANUFACTURER.



DEMOLITION PLAN
 0 2 4 8 FT
 1/8"=1'-0"

"For Viewing Purposes Only - Visit wesslerengineering.com to Purchase"

Drawing: J:\Warsaw\Projects\162813\Warsaw WWTPE Expansion\CAD 04-001\DWG\Sheets\162813-Ex-Sew Bldg.dwg | Layout: LA04 | Plotter: 08/04/18 @ 11:23:44 | LastSavedBy: BILU

| SCALE VERIFICATION | DRAWN BY | KBJ | NO. | DATE | INITIALS | REVISION DESCRIPTIONS |
|--|----------------|-------------------|-----|------|----------|-----------------------|
| BAR IS ONE INCH LONG ON ORIGINAL DRAWING | CHECKED BY | ALT | | | | |
| | APPROVED BY | GLR | | | | |
| | ISSUE DATE | SEPTEMBER 4, 2018 | | | | |
| | PROJECT NUMBER | 162813-04-003 | | | | |



WASTEWATER TREATMENT PLANT EXPANSION - 2017
 CITY OF WARSAW, INDIANA
EXISTING OPERATIONS AND MAINTENANCE BUILDING
DEMOLITION PLAN

SHEET NO.
LA04
 PAGE NO.
XXX

PLAN NOTES: ○ INDICATES NOTE REFERENCED ON PLAN

- SEE SHEET AS01 AND AS02 FOR GENERAL STRUCTURAL NOTES. SEE SHEETS MS01 TO MS04 FOR TYPICAL STRUCTURAL DETAILS.
- GENERAL CONTRACTOR TO COORDINATE ALL OPENINGS, PIPE SLEEVES, EMBED ITEMS, HANDRAILS, GRATING, ETC. WITH PROCESS DRAWINGS.
- ALL DIMENSIONS AND ELEVATIONS SHALL BE VERIFIED PRIOR TO FABRICATION, CONSTRUCTION OR ERECTION. THE GENERAL CONTRACTOR SHALL ASSUME RESPONSIBILITY FOR ANY DISCREPANCIES.
- SEE SITE PLAN FOR ALL FINAL GRADE ELEVATIONS.
- SEE GEOTECHNICAL REPORT FOR ALL BACKFILLING AND COMPACTION REQUIREMENTS BEHIND WALLS AND UNDER BASE SLABS.
- TOP OF FOOTING ELEVATION = 813.00'
- FLOOR SLAB SHALL CONSIST OF A 6-INCH CONCRETE SLAB-ON-GROUND OVER 8-INCHES OF COMPACTED AGGREGATE FILL AND A 10-MIL VAPOR RETARDER. REINFORCE SLAB WITH ONE LAYER OF 6x6 - W4.0xW4.0 WWF.
- SAW CUT OR WET CUT CONTRACTION JOINTS IN SLABS AS SHOWN ON PLANS. WET CUTS ARE TO BE MADE AFTER FINAL FLOATING WHILE CONCRETE IS STILL PLIABLE. SAW CUTS ARE TO BE MADE AS SOON AS PRACTICAL AFTER FINAL HARD TROWELING BUT MUST BE COMPLETED WITHIN 2-HOURS OF FINAL TROWELING. JOINTS IN SLAB SHALL FORM APPROXIMATE SQUARES NOT EXCEEDING 100 SQUARE FEET.
- GENERAL CONTRACTOR MAY SUBMIT ALTERNATE CONSTRUCTION / CONTRACTION JOINT PLAN TO ACCOMMODATE CONSTRUCTION. APPROVAL IS REQUIRED ON ALTERNATE PLANS PRIOR TO CONSTRUCTION.
- ALL FLOOR SLABS SHALL CONFORM TO THE FOLLOWING ACI F-NUMBER REQUIREMENTS:

| | | |
|------------------------|---|---------------|
| SPECIFIC OVERALL VALUE | - | Ff-36 / F1-20 |
| MINIMUM LOCAL VALUE | - | Ff-15 / F1-10 |
- MAINTAIN STRUCTURAL SLAB THICKNESSES AT ALL FLOOR SLOPES AND DEPRESSIONS.
- AT RE-ENTRANT SLAB CORNER CONDITIONS, PROVIDE (2) #4 x 4'-0" LONG AT 3-INCHES O.C. PLACED 2-INCHES CLEAR FROM CORNER, CENTERED IN SLAB, TYPICAL.
- REFER TO CIVIL DRAWINGS FOR WALL LAYOUT, OPENING SIZES AND LOCATIONS.

| WALL FOOTING SCHEDULE | | | | |
|-----------------------|-------------------|-------|-----|---------------|
| MARK | FOOTING DIMENSION | | | REINFORCEMENT |
| | W | L | T | L |
| WF2.0 | 2'-0" | CONT. | 12" | #4 AT 18" |

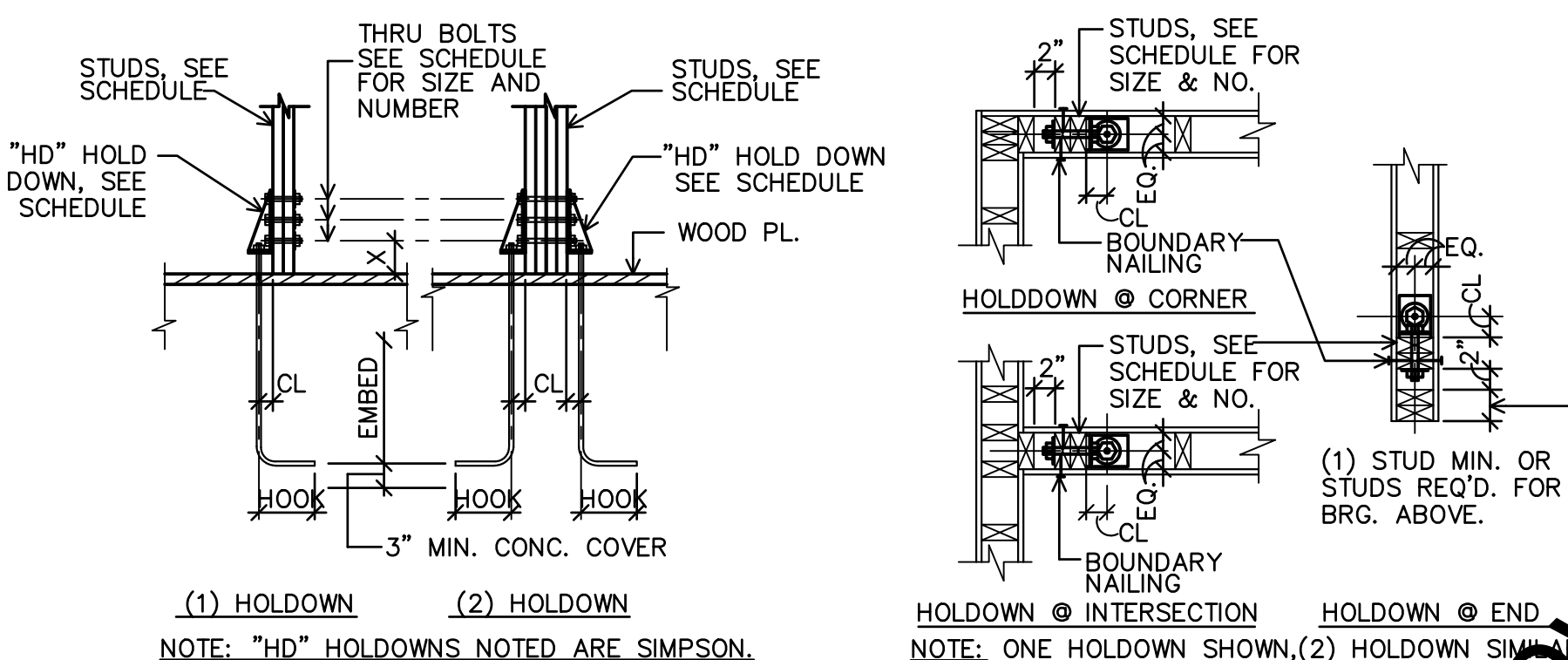
FOUNDATION DESIGN VALUES:
ALLOWABLE BEARING PRESSURE = 2,500 PSF

| SPREAD FOOTING SCHEDULE | | | | | |
|-------------------------|-------------------|-------|-----|------------------------|-------------------------|
| MARK | FOOTING DIMENSION | | | REINFORCEMENT | |
| | W | L | T | TOP & BOT LONG. REINF. | TOP & BOT TRANS. REINF. |
| F6 | 6'-0" | 6'-0" | 18" | 8 - #6 | 8 - #6 |

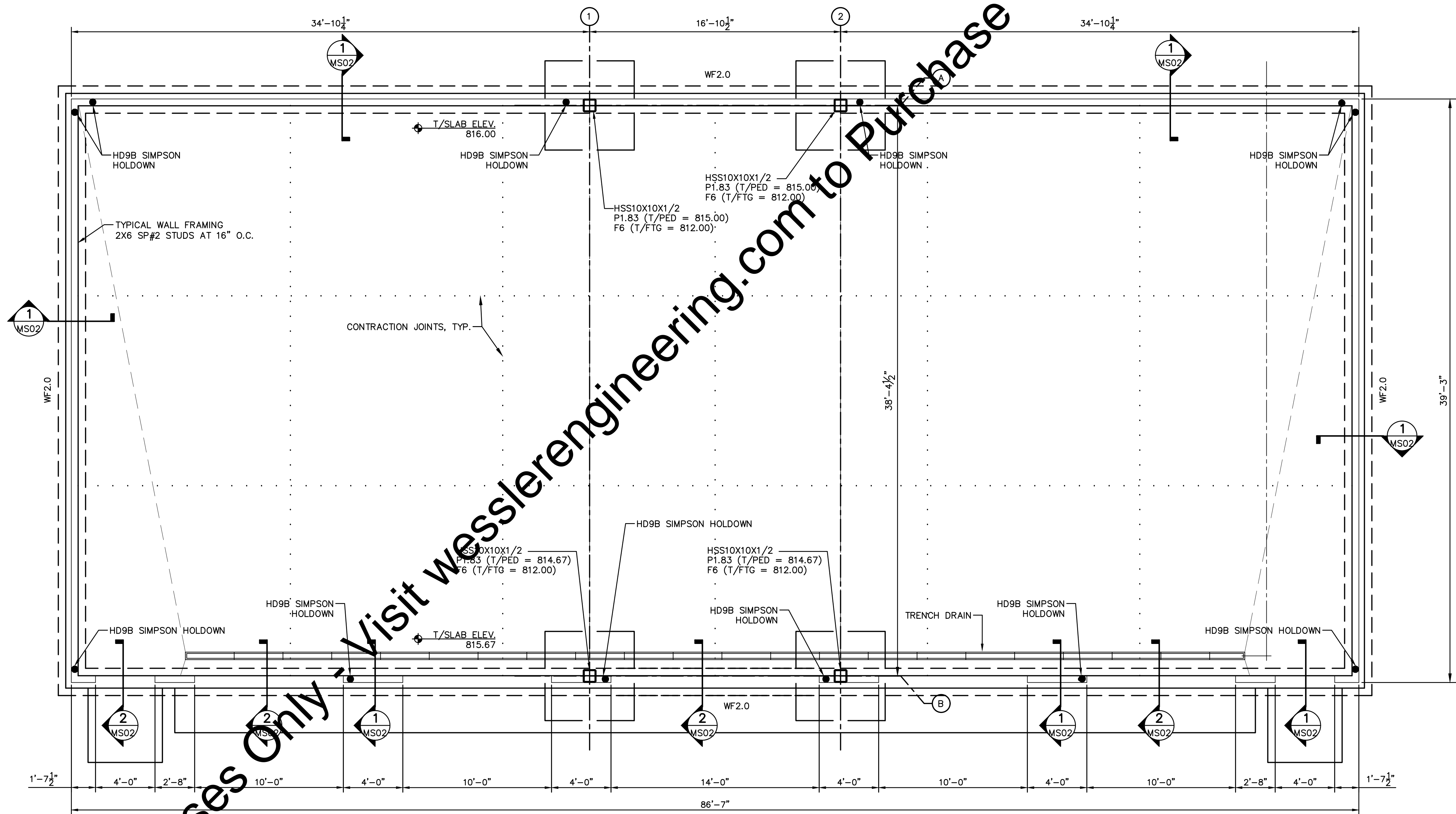
FOUNDATION DESIGN VALUES:
ALLOWABLE BEARING PRESSURE = 2,500 PSF

| PEDESTAL SCHEDULE | | | | | |
|-------------------|--------|--------|--------------|-----------------------|--------------------------|
| MARK | W | L | VERT. REINF. | TIES | |
| | | | | 3 X #3 AT 3" O.C. TOP | #3 AT 12" O.C. REMAINDER |
| P1.83 | 1'-10" | 1'-10" | 8 - #6 | 3/MS02 | |

| COLUMN SCHEDULE | | | |
|-----------------|---------------|--------------|-----------|
| COLUMN SIZE | BASE PLATE | ANCHOR BOLTS | REFERENCE |
| HSS 10X10X1/2 | PL 17"x17"x2" | 8 - 1" DIA. | 4/MS02 |



| HOLDOWN SCHEDULE | | | | | | | | | | |
|------------------|-------|-----|------------|-----|----------|------|--------|------|---------|--------|
| TYPE | STUDS | | STUD BOLTS | | CONCRETE | | ANCHOR | | REMARKS | |
| | SIZE | NO. | SIZE | NO. | "X" DIM | SIZE | NO. | "CL" | | |
| 1-HD9B | 2x6 | 3 | 3/4" | 2 | 5 1/4" | 7/8" | 1 | 12" | 9" | 1 1/4" |

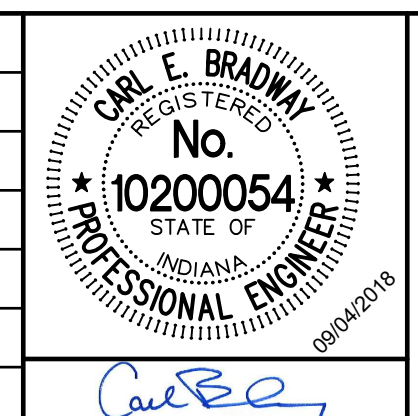


FOUNDATION PLAN
SCALE: 1/4"=1'-0"

Drawing: S:\project files\17-176\Anerobic Digesters and Control Building - Warsaw WWTP Improvements\ProjectDrawings\Structural\Old Building Files\LS01 - New Garage.dwg | Layout: LS01 - New Garage - Foundation Plan | Plotted: 08/21/18 @ 12:26:15 | LastSavedBy: msars

10 Shoshone Drive
Carmel, IN 46032
317.818.1912
cesolutionsinc.com

| | | | | | | |
|--|----------------|-------------------|-----|------|----------|-----------------------|
| SCALE VERIFICATION | DRAWN BY | MAS | NO. | DATE | INITIALS | REVISION DESCRIPTIONS |
| BAR IS ONE INCH LONG ON ORIGINAL DRAWING | CHECKED BY | CEB | | | | |
| | APPROVED BY | CEB | | | | |
| | ISSUE DATE | SEPTEMBER 4, 2018 | | | | |
| | PROJECT NUMBER | 162813-04-003 | | | | |



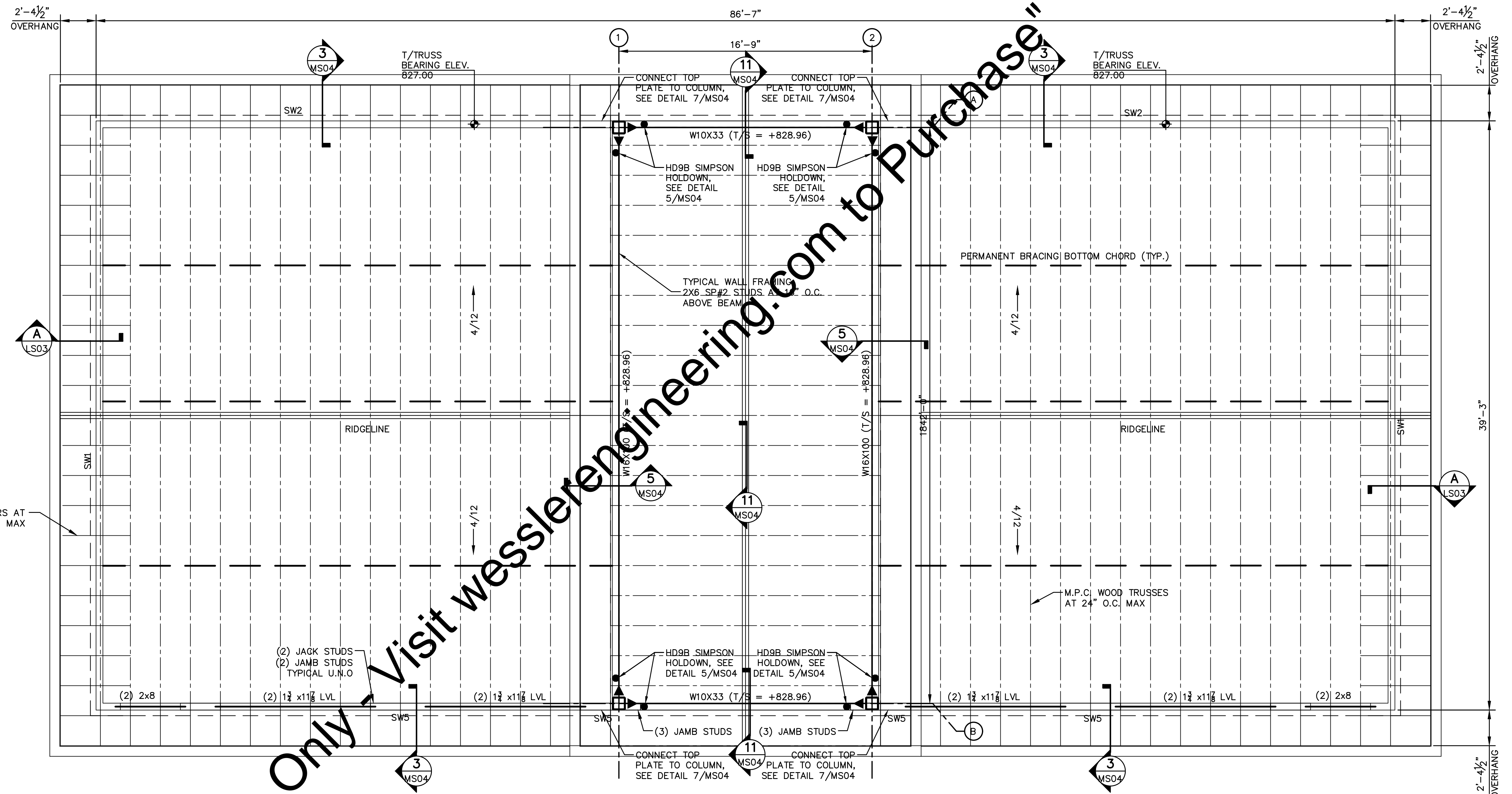
WESSLER ENGINEERING
More than a Project™

WASTEWATER TREATMENT PLANT EXPANSION - 2017
CITY OF WARSAW, INDIANA
NEW GARAGE FOUNDATION PLAN

SHEET NO.
LS01
PAGE NO.
227

ROOF FRAMING PLAN NOTES: ○ INDICATES NOTE REFERENCED ON PLAN

- SEE SHEET AS01 AND AS02 FOR GENERAL STRUCTURAL NOTES. SEE SHEETS MS01 TO MS04 FOR TYPICAL STRUCTURAL DETAILS.
- TOP PLATE HEIGHTS MAY VARY. SEE PLAN, SECTIONS AND TRUSS ELEVATIONS FOR BEARING HEIGHTS.
- OVERHANGS MAY VARY. SEE PLAN, SECTIONS, TRUSS ELEVATIONS AND EXTERIOR ELEVATIONS.
- REFER TO CIVIL PLANS FOR CONFIGURATION OF VENTS ON BUILDING.
- ROOF DECK SHALL BE APA 32/16 SPAN RATED SHEATHING, 1/2-INCH NOMINAL THICKNESS, EXPOSURE 1. ATTACH WITH 8d COMMON NAILS AT 12-INCHES O.C. IN FIELD AND 6-INCHES O.C. AT EDGES AND DIAPHRAGM BOUNDARIES, UNLESS NOTED OTHERWISE ON PLANS. PROVIDE SHEATHING SUPPORT CLIPS BETWEEN TRUSSES AT UNBLOCKED PANEL EDGES (SIMPSON PSCL OR EQUAL).
- PROVIDE BLOCKING IN ROOF TRUSSES AT EXTERIOR WALL LOCATIONS AS INDICATED ON PLANS AND SECTIONS.
- REFER TO CIVIL DRAWINGS FOR WALL LAYOUT, OPENING SIZES AND LOCATIONS.
- MULTIPLE HEADER MEMBERS SHALL BE NAILED TOGETHER PER NDS REQUIREMENTS
- CONNECTION OF JACK TRUSS TO GIRDER TRUSS DESIGN SHALL BE BY TRUSS SUPPLIER.
- ▶ DENOTES MOMENT CONNECTION - SEE DETAIL 10/MS04



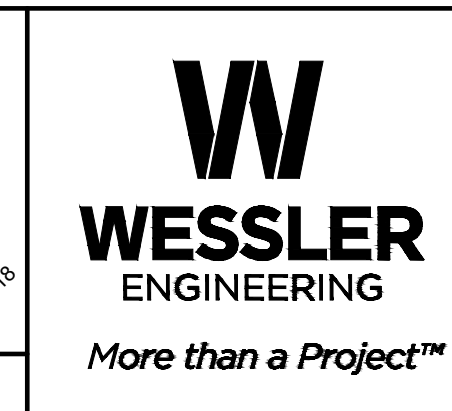
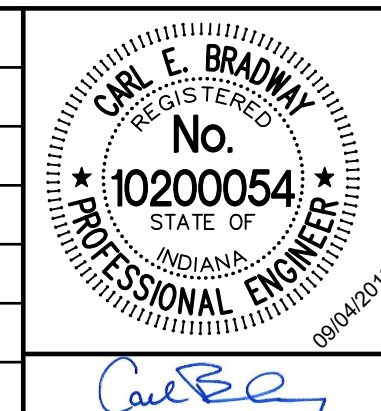
LOW ROOF PLAN
SCALE: 1/4"=1'-0"

| SHEARWALL SCHEDULE | | | | | | | | | | |
|--------------------|--------------|-------|-------------|-------|-------------------|---|----|------------------|------------|--|
| MARK | MAT'L. | SIDES | BLK'G REQ'D | NAILS | SPACING IN INCHES | | | SILL BOLTS/NAILS | HOLD DOWNS | REMARKS |
| | | | | | B | E | F | | | |
| SW1 | 1/2" PLYWOOD | 1 | NO | 8d | 6 | 6 | 12 | 1/2" DIA. AT 32" | Y | SEE PLAN FOR HOLD DOWNS |
| SW2 | 1/2" PLYWOOD | 1 | NO | 8d | 6 | 6 | 12 | 1/2" DIA. AT 32" | Y | SEE PLAN FOR HOLD DOWNS |
| SW3 | 1/2" PLYWOOD | 1 | NO | 8d | 6 | 6 | 12 | 6d AT 12" O.C | Y | SILL FASTENING INTO NAILER ON STEEL BEAM |
| SW4 | 1/2" PLYWOOD | 1 | NO | 8d | 6 | 6 | 12 | 6d AT 12" O.C | Y | SILL FASTENING INTO NAILER ON STEEL BEAM |
| SW5 | 1/2" PLYWOOD | 1 | NO | 8d | 3 | 3 | 12 | 1/2" DIA. AT 18" | Y | SEE PLAN FOR HOLD DOWNS |

- NOTES:
- B=BOUNDARY, E=EDGE, F=FIELD
 - AT SHEARWALL ENDS, PROVIDE MIN (2) STUDS, TYP
 - SEE SHEET S10 FOR HOLDDOWN INFORMATION



| | | | | | | |
|--|----------------|-------------------|-----|------|----------|-----------------------|
| SCALE VERIFICATION | DRAWN BY | MAS | NO. | DATE | INITIALS | REVISION DESCRIPTIONS |
| BAR IS ONE INCH LONG ON ORIGINAL DRAWING | CHECKED BY | CEB | | | | |
| | APPROVED BY | CEB | | | | |
| | ISSUE DATE | SEPTEMBER 4, 2018 | | | | |
| | PROJECT NUMBER | 162813-04-003 | | | | |



WASTEWATER TREATMENT PLANT EXPANSION - 2017
CITY OF WARSAW, INDIANA
NEW GARAGE LOW ROOF PLAN

Drawing: S:\project files\17-176-Anaerobic Digesters and Control Building - Warsaw WWTTP Improvements\ProjectDrawings\Structural\Old Building\Final\LS01 - New Garage.dwg | Layout: LS02 - New Garage - Low Roof Plan | Plotted: 08/31/18 @ 12:26:16 | LastSavedBy: mreas

| EXHAUST FAN SCHEDULE | | | | | | | | | | | | | | | |
|----------------------|----------|------|------|-------|------|-------------|-------|-------|------|------|-------------------|--------------|-------------------------------|--------------------|---------------|
| TAG | LOCATION | TYPE | CFM | S.P. | FRPM | BHP (WATTS) | SONES | MOTOR | | | UNIT WEIGHT (LBS) | ROOF OPENING | MANUFACTURER AND MODEL NUMBER | INTERLOCK WITH | |
| | | | | | | | | HP | VOLT | RPM | | | | | |
| EF-1 | GARAGE | WALL | 1270 | 0.250 | 1725 | .297 | 25.0 | 1/3 | 115 | 1725 | 1 | 71 | 21.25" SQ | LOREN COOK 16P17DA | L-1 CO SENSOR |
| EF-2 | GARAGE | WALL | 1270 | 0.250 | 1725 | .297 | 25.0 | 1/3 | 115 | 1725 | 1 | 71 | 21.25" SQ | LOREN COOK 16P17DA | L-1 CO SENSOR |

ACCESSORIES: WEATHER HOOD, BACKDRAFT DAMPER, DISCONNECT

| NATURAL GAS-FIRED UNIT HEATER SCHEDULE | | | | | | | | | | | | | |
|--|---------------|-------|-----|--------------|------------|------------|------------|-----------------|-------|----|-------------------|--------------------------------|-------|
| MARK | FAN DATA | | | HEATING DATA | | | | ELECTRICAL DATA | | | UNIT WEIGHT (LBS) | MANUFACTURER WITH MODEL NUMBER | NOTES |
| | AIRFLOW (CFM) | DRIVE | HP | INPUT MBH | MIN AFUE % | OUTPUT MBH | TEMP. RISE | AMPS | VOLTS | PH | | | |
| GUH-1 | 1141 | AXIAL | 1/8 | 65 | 93 | 60.5 | 49 | 4.4 | 115 | 1 | 103 | MODINE PTC-65 | 1 |
| GUH-2 | 1141 | AXIAL | 1/8 | 65 | 93 | 60.5 | 49 | 4.4 | 115 | 1 | 103 | MODINE PTC-65 | 1 |

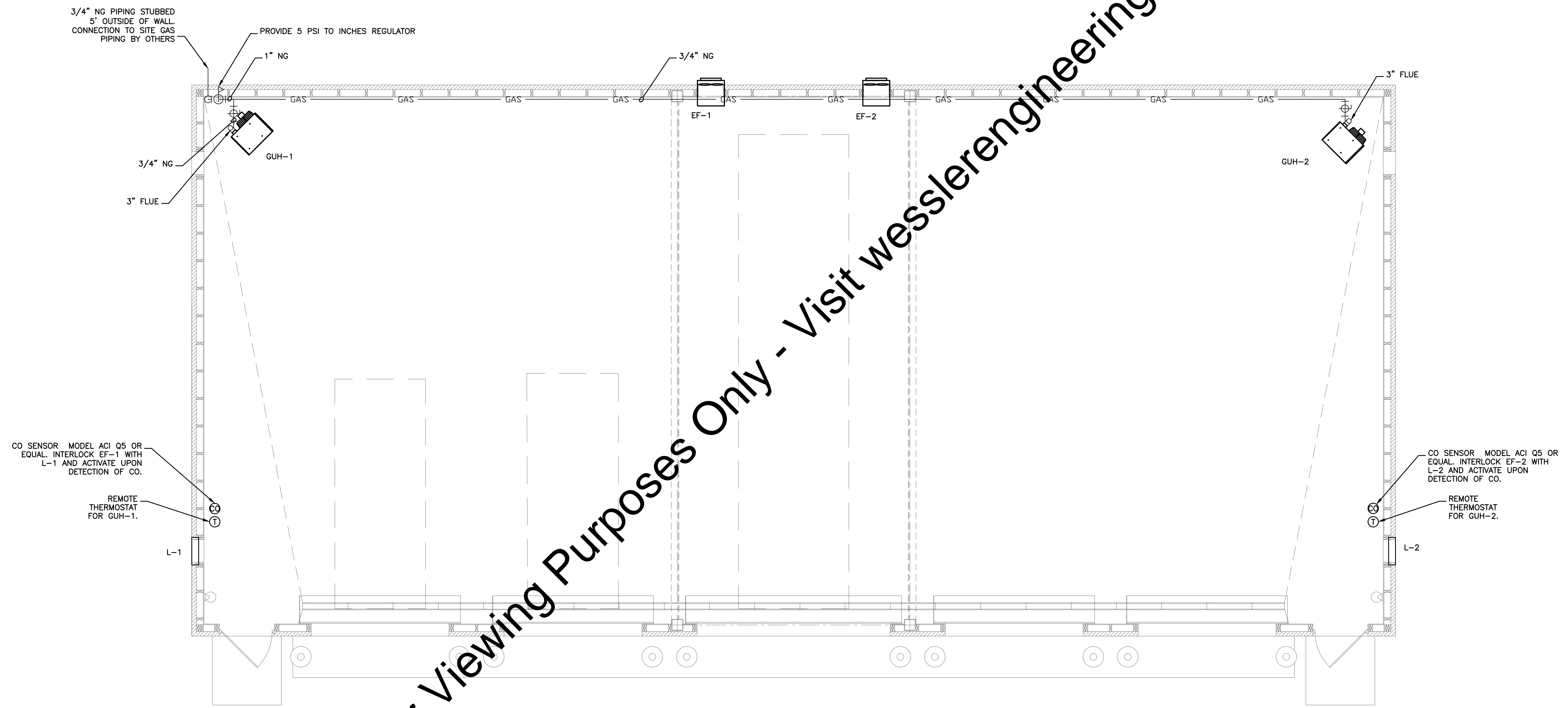
NOTES:

1. PROVIDE REMOTE THERMOSTAT

| LOUVER SCHEDULE | | | | | | | | |
|-----------------|----------|-------------------------------|-------|--------|--------------------|-----------|---------|---------------------|
| TAG | LOCATION | MANUFACTURER AND MODEL NUMBER | WIDTH | HEIGHT | FREE AREA (SQ. FT) | THICKNESS | OPTIONS | NOTES |
| L-1 | GARAGE | RUSKIN ELC6375DAX | 24 | 24 | 1.5 | 6" | 1,2 | INTERLOCK WITH EF-1 |
| L-2 | GARAGE | RUSKIN ELC6375DAX | 24 | 24 | 1.5 | 6" | 1,2 | INTERLOCK WITH EF-2 |

OPTIONS:

1. 120V ACTUATOR 2. INTERLOCK WITH EXHAUST FAN OPERATION

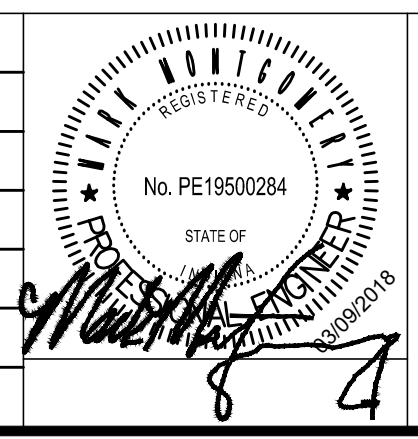


"For Viewing Purposes Only - Visit wesslerengineering.com to Purchase"

Drawing: T:\Projects\Wastewater\WTP\Mechanical\Support Files\BASE-GARAGE-LM01.dwg | Layout: LM01 | Plotted: 03/09/18 @ 04:25:22 | LastSavedBy: mmonigomey

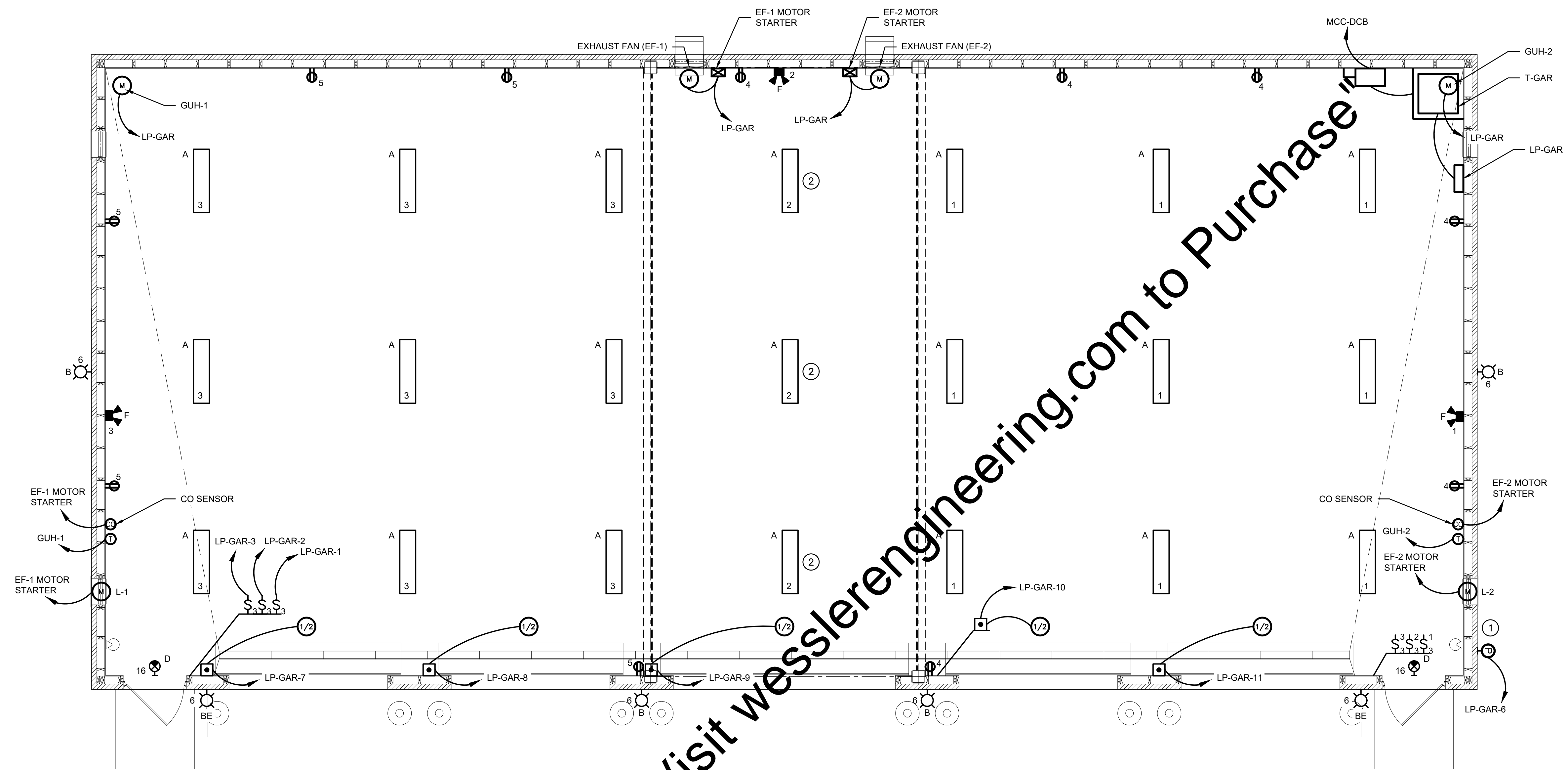
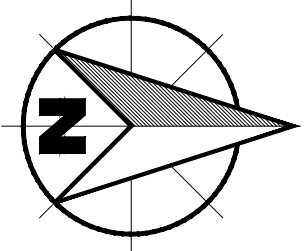


| | | | | | |
|--|----------------|-----|----------|----------|-----------------------|
| SCALE VERIFICATION | DRAWN BY | NO. | DATE | INITIALS | REVISION DESCRIPTIONS |
| BAR IS ONE INCH LONG ON ORIGINAL DRAWING | CHECKED BY | | 12/12/17 | | |
| | APPROVED BY | | | | |
| | ISSUE DATE | | | | |
| | MARCH 2018 | | | | |
| | PROJECT NUMBER | | | | |
| | | | | | 162813-04-003 |

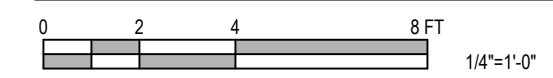


WASTEWATER TREATMENT PLANT EXPANSION - 2017
CITY OF WARSAW, INDIANA
NEW GARAGE MECHANICAL PLAN

SHEET NO.
LM01
PAGE NO.
230



ELECTRICAL PLAN



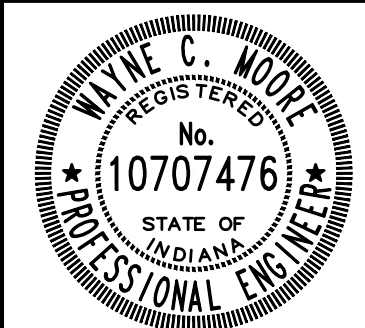
KEYED NOTES:

- ① MOUNT PHOTO CELL ON NORTH WALL.
- ② LIGHT FIXTURE TO BE MOUNTED AT 12'-6" A.F.F.

"For Viewing Purposes Only - Visit wesslerengineering.com to Purchase"

Drawing: J:\Warsaw\Projects\162813\162813-E-Garage.dwg | Plotter: 09/04/18 @ 09:20:41 | Plotter: 09/04/18 @ 09:20:41 | Project No.: 162813-04-003

| SCALE VERIFICATION | DRAWN BY | EAS | NO. | DATE | INITIALS | REVISION DESCRIPTIONS |
|--|----------------|-----|-----|------|----------|-----------------------|
| BAR IS ONE INCH LONG ON ORIGINAL DRAWING | CHECKED BY | BMS | | | | |
| | APPROVED BY | WCM | | | | |
| | ISSUE DATE | | | | | |
| | PROJECT NUMBER | | | | | |
| | | | | | | 162813-04-003 |



Wayne C. Modle



WASTEWATER TREATMENT PLANT EXPANSION - 2017

CITY OF WARSAW, INDIANA

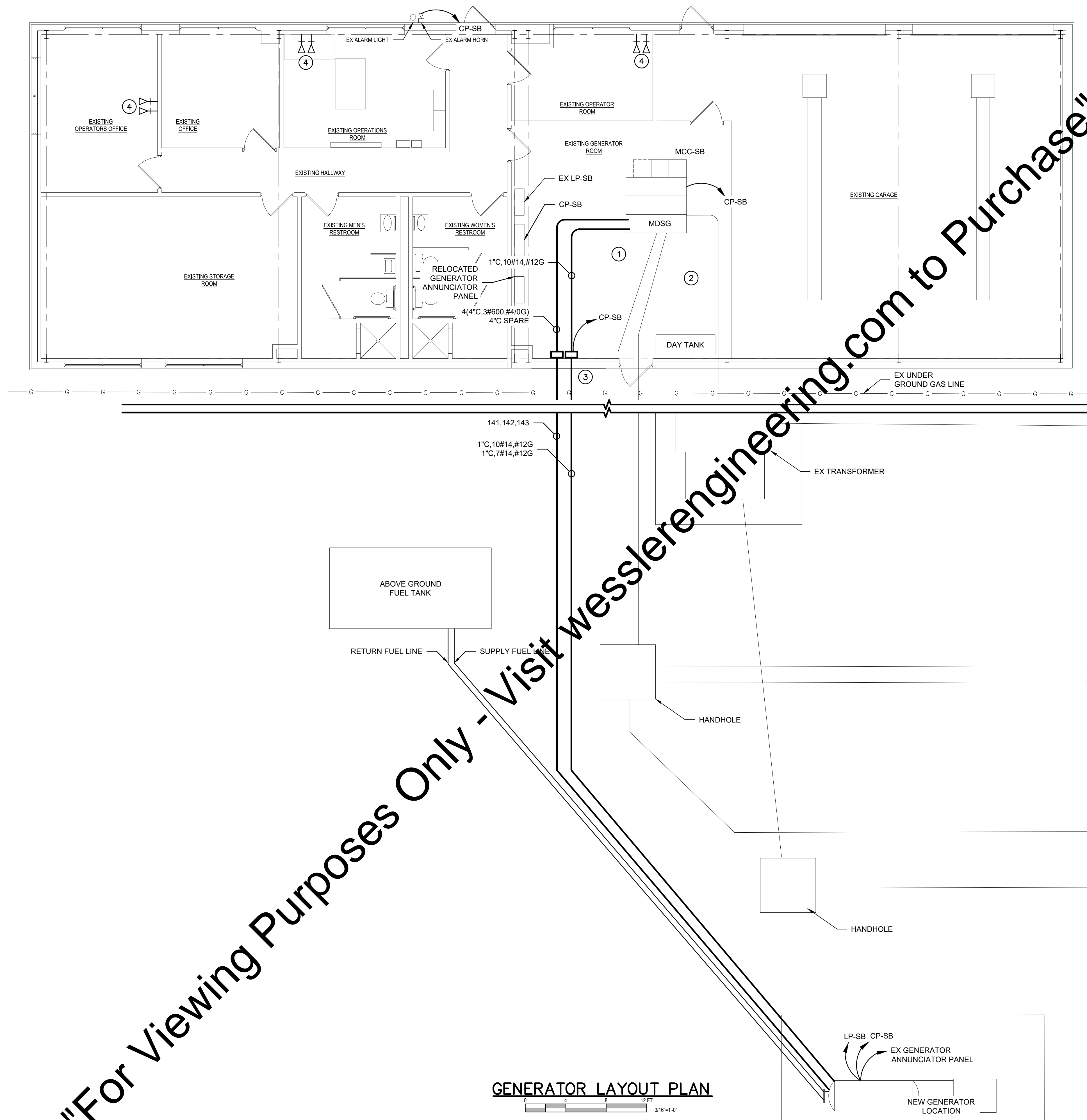
NEW GARAGE ELECTRICAL PLAN

SHEET NO.

LE01

PAGE NO.

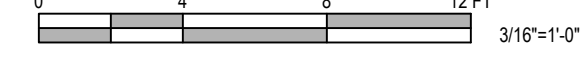
231



"For Viewing Purposes Only - Visit wesslerengineering.com to Purchase"

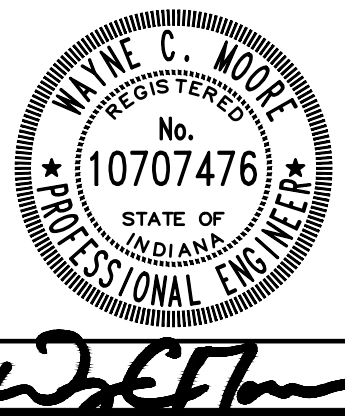
- KEYED NOTES:**
- ① REMOVE ALL EXISTING GENERATOR EQUIPMENT NO LONGER IN-USE IN THIS ROOM. REMOVE DAY TANK AND LINE AS REQUIRED.
 - ② REMOVE ALL CONDUIT AND WIRING BACK TO SOURCE THAT IS NO LONGER IN-USE.
 - ③ REPAIR WALL AND INSULATION TO MATCH EXISTING INFRASTRUCTURE.
 - ④ SCADA NETWORK DROPS.

GENERATOR LAYOUT PLAN



Drawing: J:\Wwarsaw\Projects\162813\Wwarsaw WWTPT Expansion\CAD 04-001\DWG\Sheet\Elect\162813-EE-EX-Serv-Bldg.dwg | Layout: LE02 | Project: 09/04/18 @ 09:21:18 | LastSavedBy: JohnH | Project No.: 162813-04-003

| | | | | | | |
|--|----------------|-------------------|-----|------|----------|-----------------------|
| SCALE VERIFICATION BAR IS ONE INCH LONG ON ORIGINAL DRAWING | DRAWN BY | EAS | NO. | DATE | INITIALS | REVISION DESCRIPTIONS |
| | CHECKED BY | BMS | | | | |
| | APPROVED BY | WCM | | | | |
| | ISSUE DATE | SEPTEMBER 4, 2018 | | | | |
| | PROJECT NUMBER | 162813-04-003 | | | | |

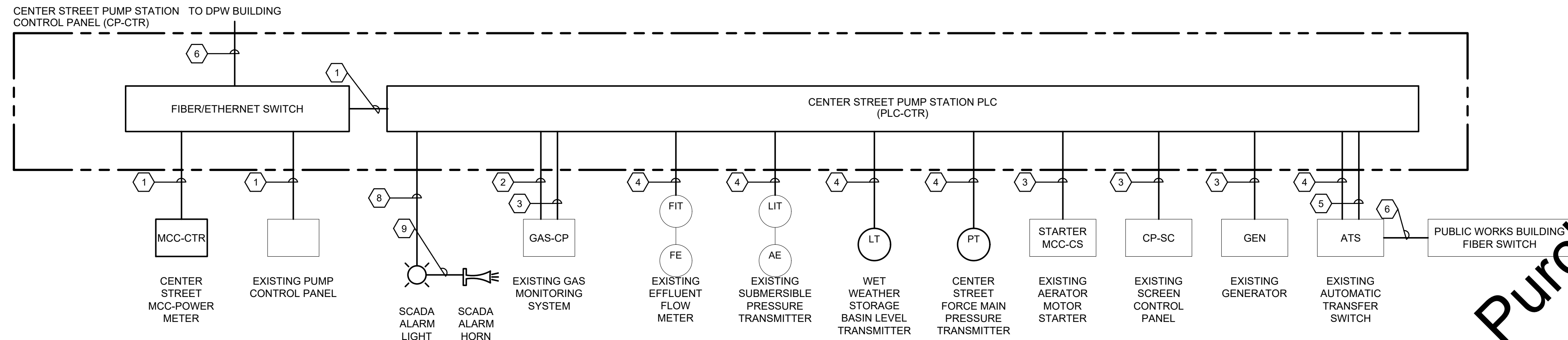
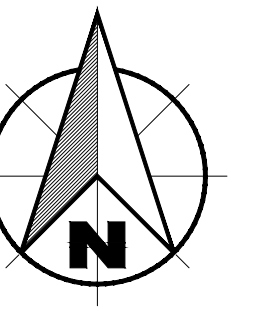


WASTEWATER TREATMENT PLANT EXPANSION - 2017

CITY OF WARSAW, INDIANA

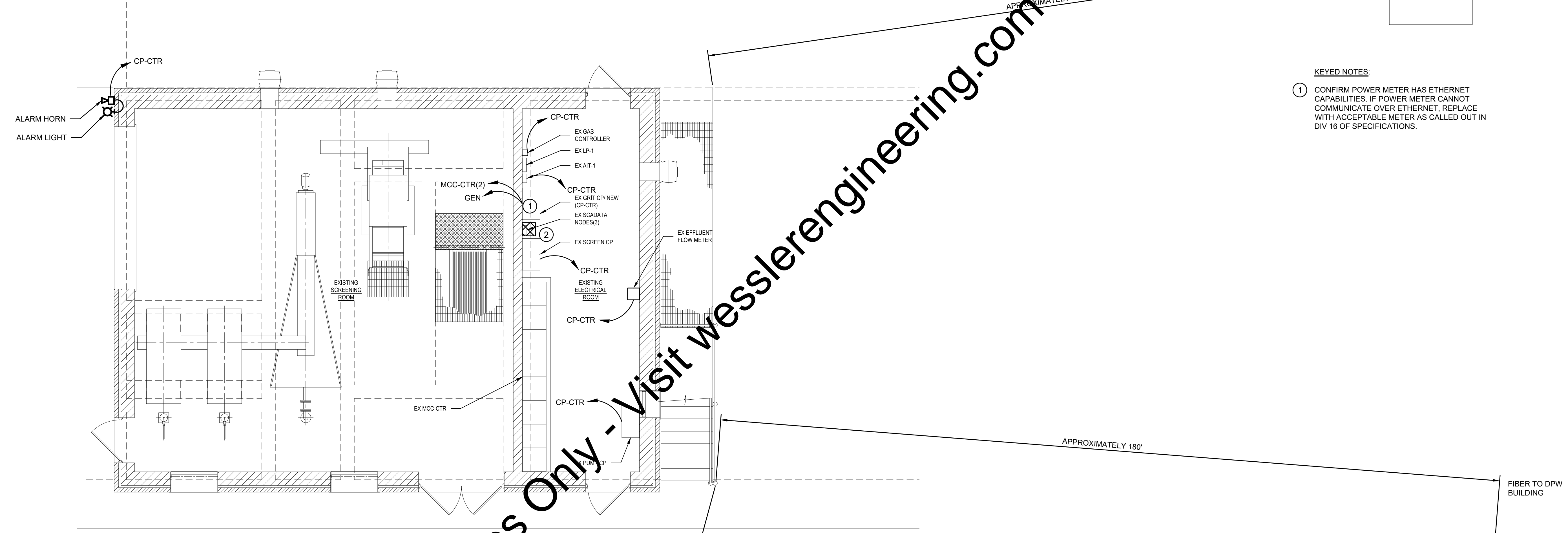
**EXISTING OPERATIONS & MAINTENANCE BUILDING
GENERATOR LAYOUT PLAN**

| |
|--------------------------|
| SHEET NO. LE02 |
| PAGE NO. 232 |



- CONDUIT AND WIRE SCHEDULE:**
- 1 1" CAT5E ETHERNET CABLE
 - 2 1" 2 - (2/C#16TPS)
 - 3 1" 8#14
1" SPARE
 - 4 3/4" 2/C#16TPS
 - 5 EXISTING 4" 4#14
 - 6 2" C. FIBER

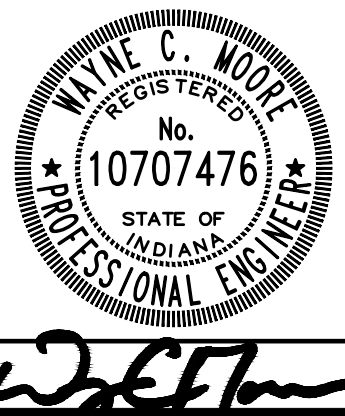
CENTER STREET ONE-LINE DIAGRAM



- KEYED NOTES:**
- 1 UTILIZE EXISTING GRIT CP ENCLOSURE FOR NEW CP-CTR.
 - 2 ONCE COMMUNICATIONS AND PLC ARE INSTALLED AND FUNCTIONAL, DEMO EXISTING SCADATA NODES(3) AND CONTROL PANELS (3).

"For Viewing Purposes Only - Visit wesslerengineering.com to Purchase"

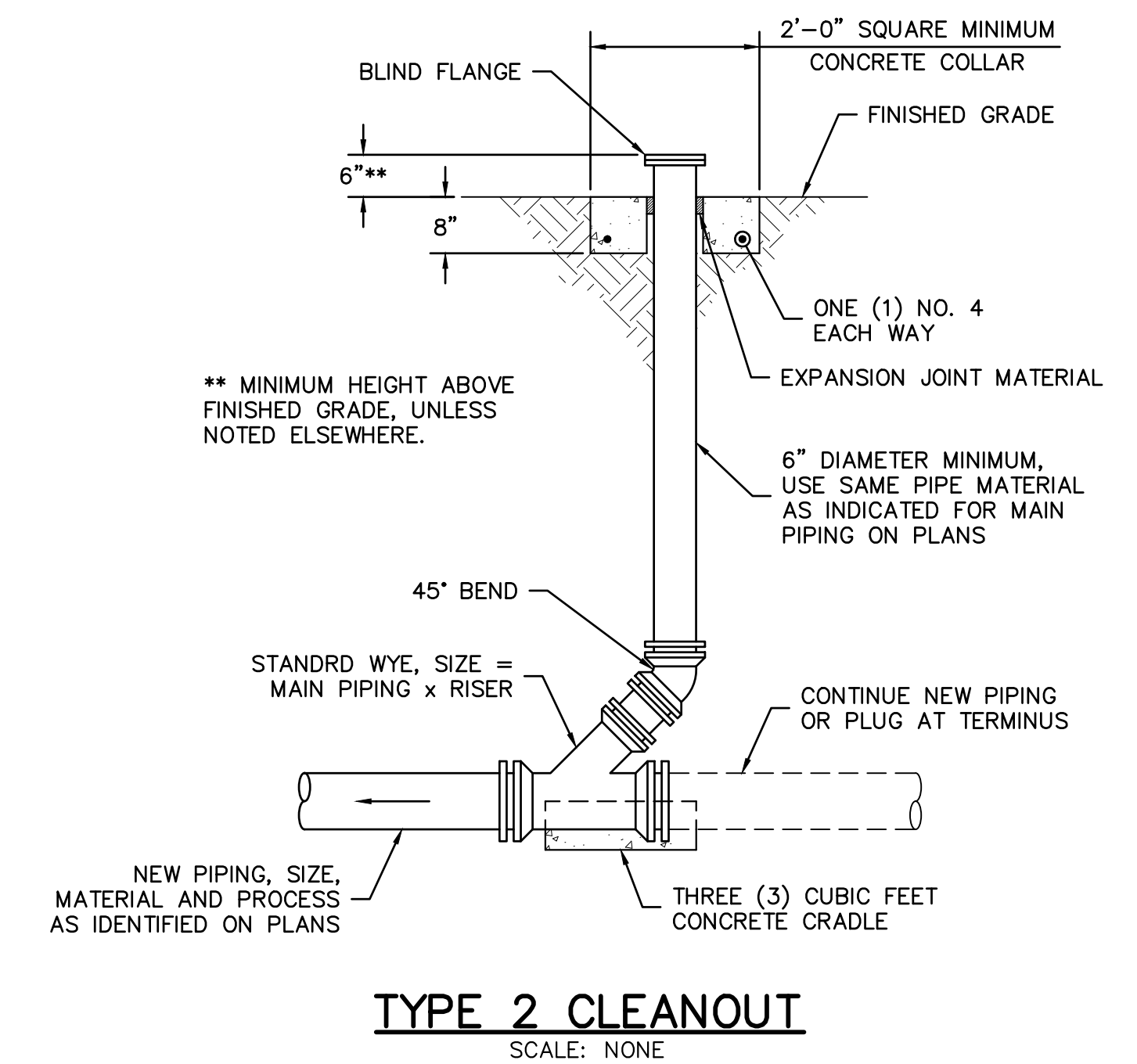
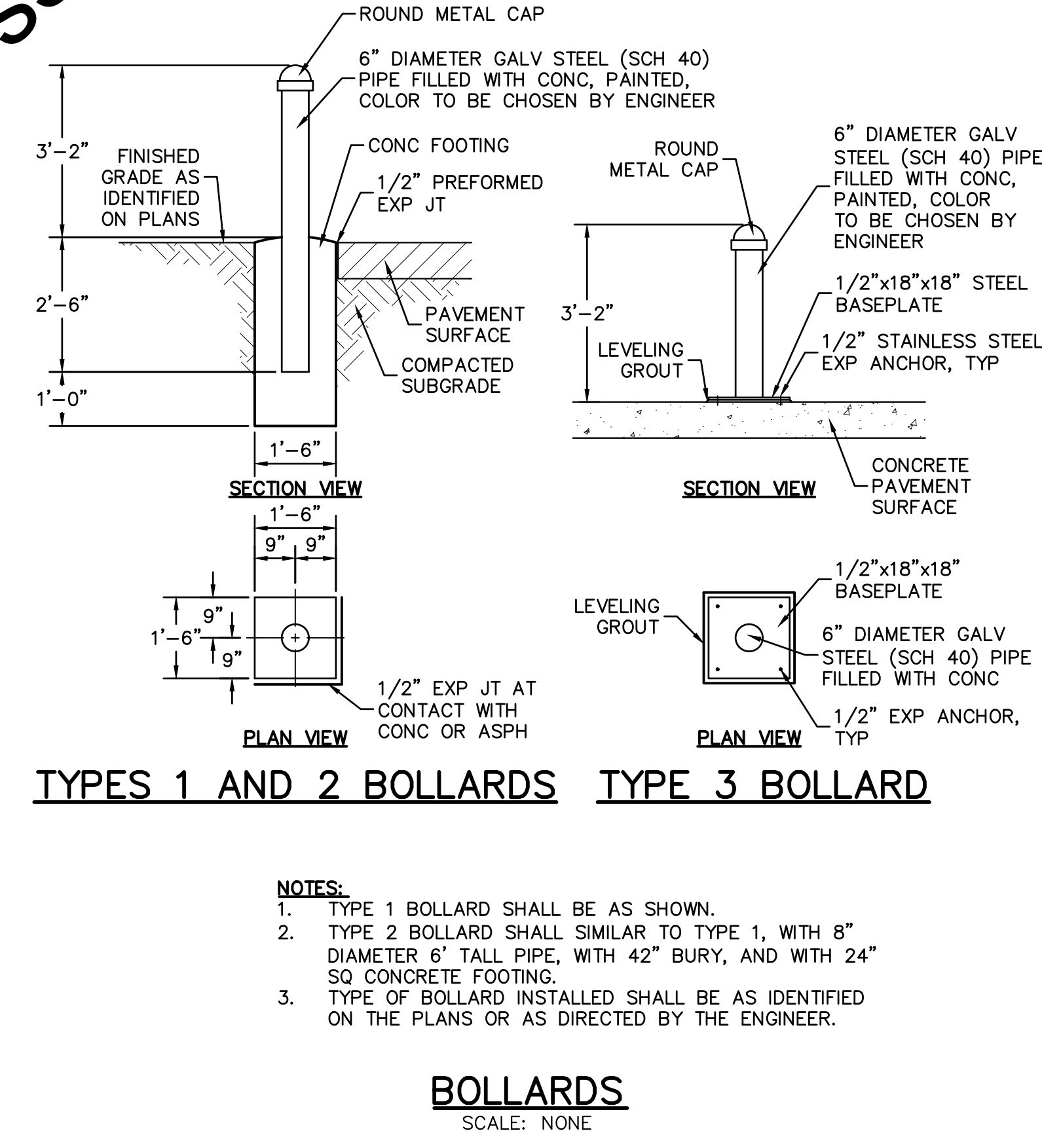
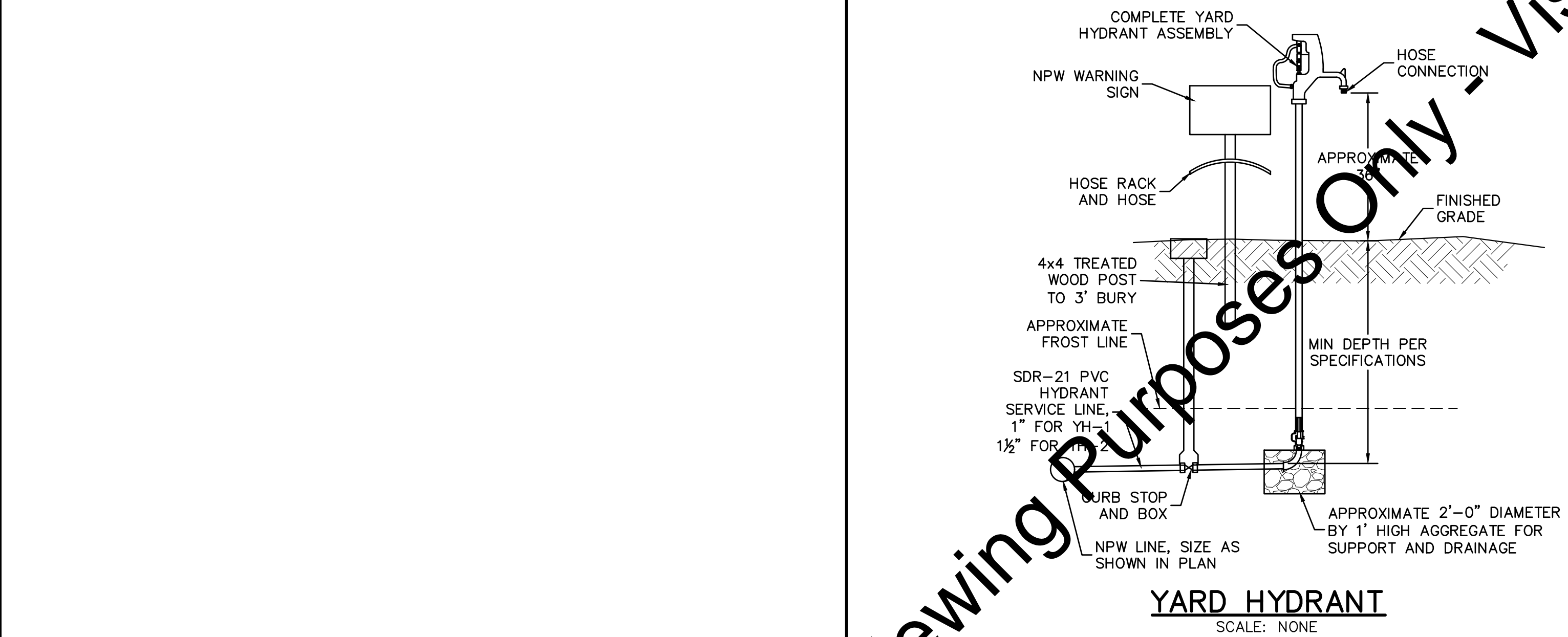
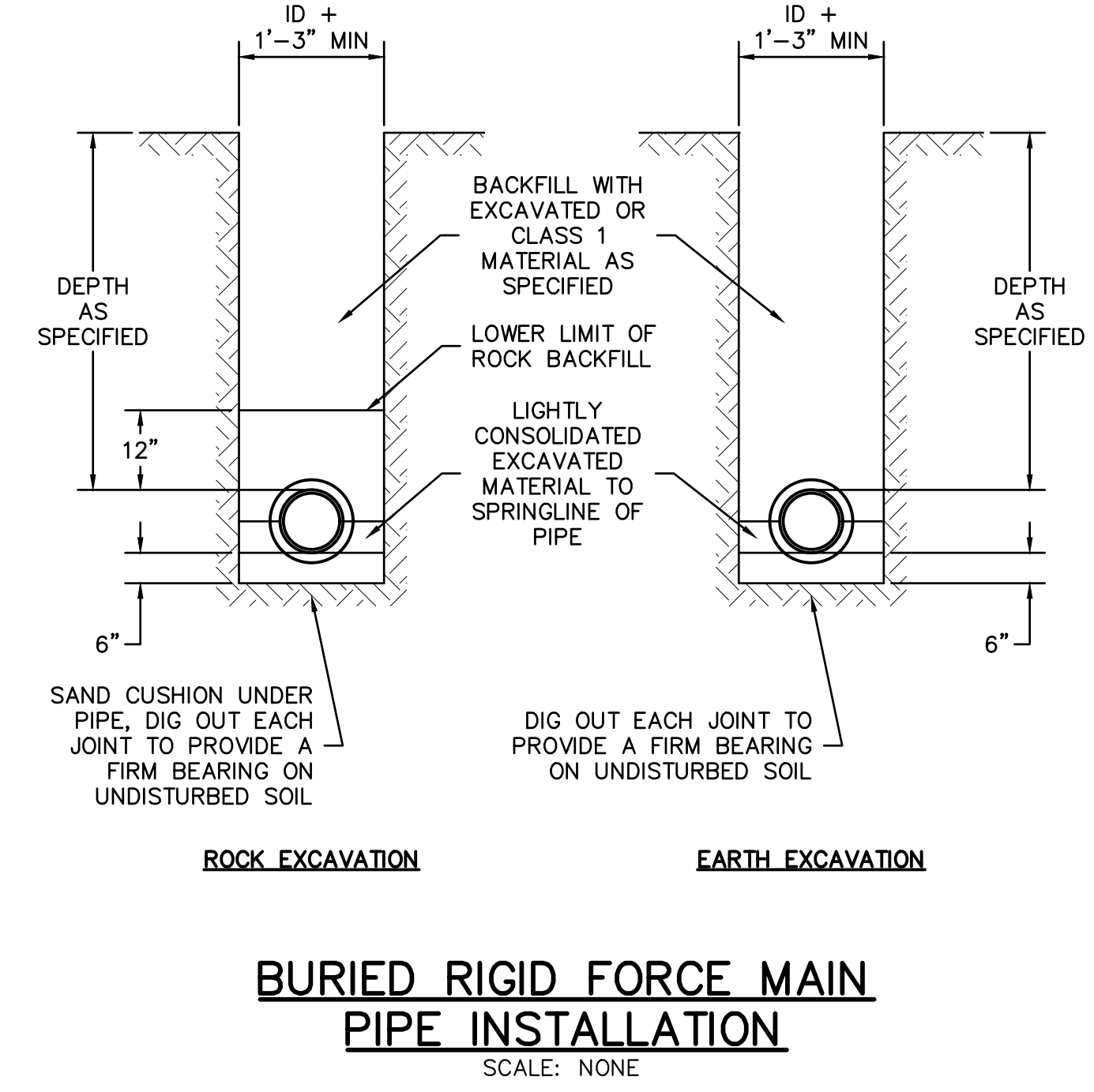
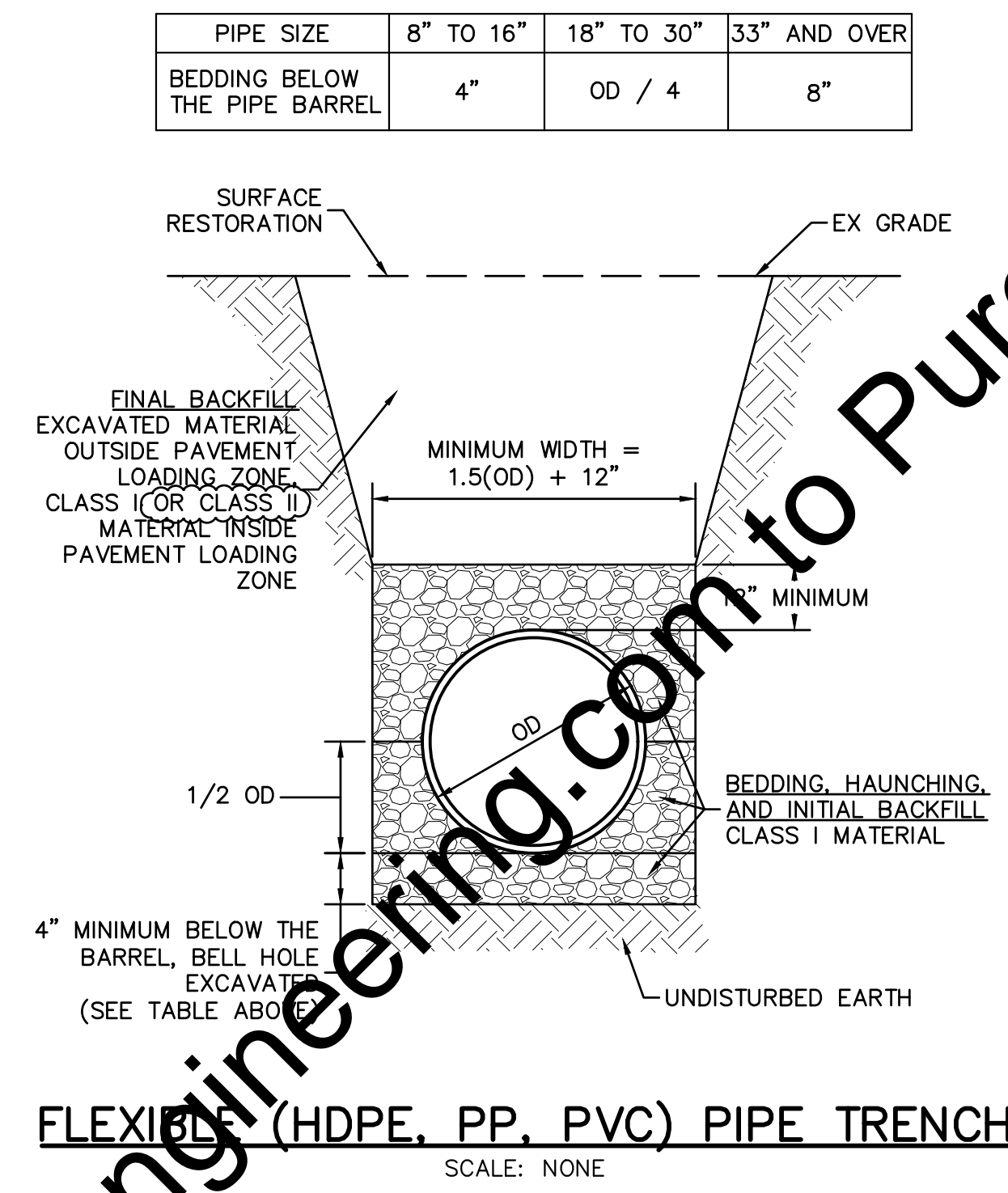
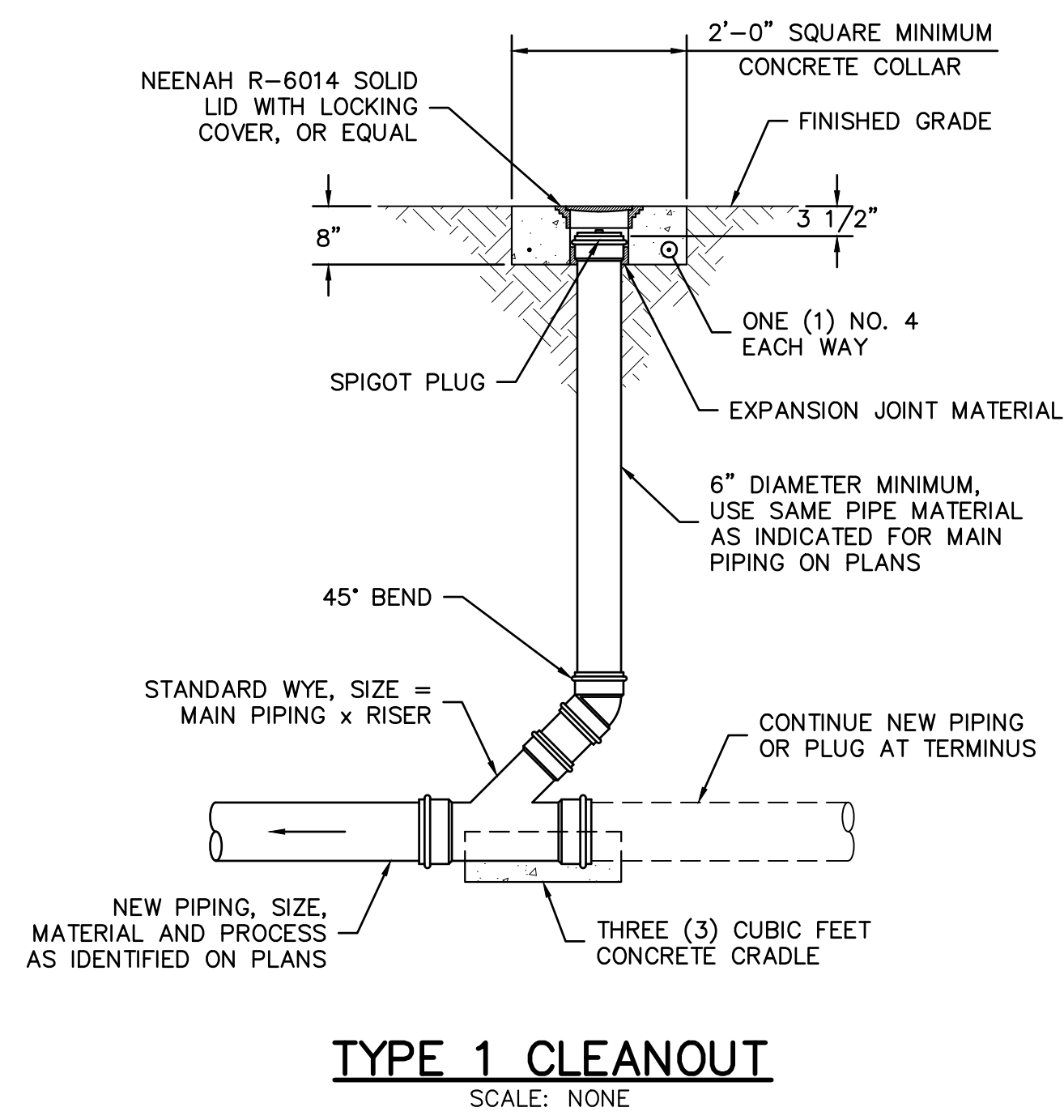
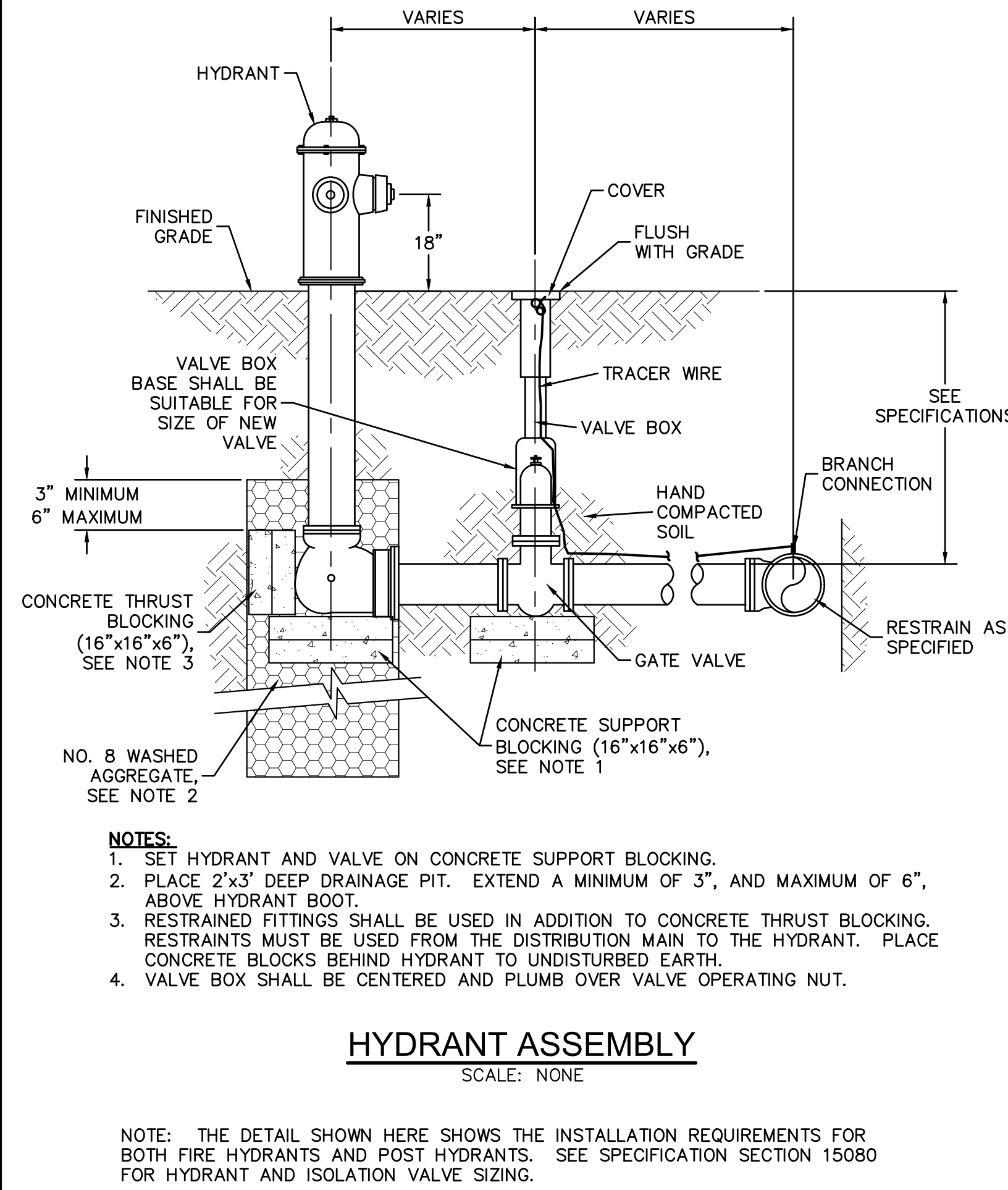
| SCALE VERIFICATION | DRAWN BY | EAS | NO. | DATE | INITIALS | REVISION DESCRIPTIONS |
|--|----------------|-------------------|-----|------|----------|-----------------------|
| BAR IS ONE INCH LONG ON ORIGINAL DRAWING | CHECKED BY | BMS | | | | |
| | APPROVED BY | WCM | | | | |
| | ISSUE DATE | SEPTEMBER 4, 2018 | | | | |
| | PROJECT NUMBER | 162813-04-003 | | | | |



WASTEWATER TREATMENT PLANT EXPANSION - 2017
CITY OF WARSAW, INDIANA
**CENTER STREET PUMP STATION
POWER PLAN**

SHEET NO.
LE04
PAGE NO.
234

Drawing: J:\Wwtp\Projects\162813\Wwtp Expansion\CAD\04-001\DWG\Sheet\Elect\162813-E-Center ST PS Bldg.dwg | Layout: LEM | Plotter: 09/04/18 @ 09:21:58 | Plotted By: JohnH | Project No.: 162813-04-003



"For Viewing Purposes Only - Visit wesslerengineering.com to Purchase"

| SCALE VERIFICATION | DRAWN BY | NO. | DATE | INITIALS | REVISION DESCRIPTIONS |
|--|-------------------|-----|------|----------|-----------------------|
| BAR IS ONE INCH LONG ON ORIGINAL DRAWING | CHECKED BY | WBJ | | | |
| | APPROVED BY | ALT | | | |
| | ISSUE DATE | GLR | | | |
| | PROJECT NUMBER | | | | |
| | SEPTEMBER 4, 2018 | | | | |
| | 162813-04-003 | | | | |

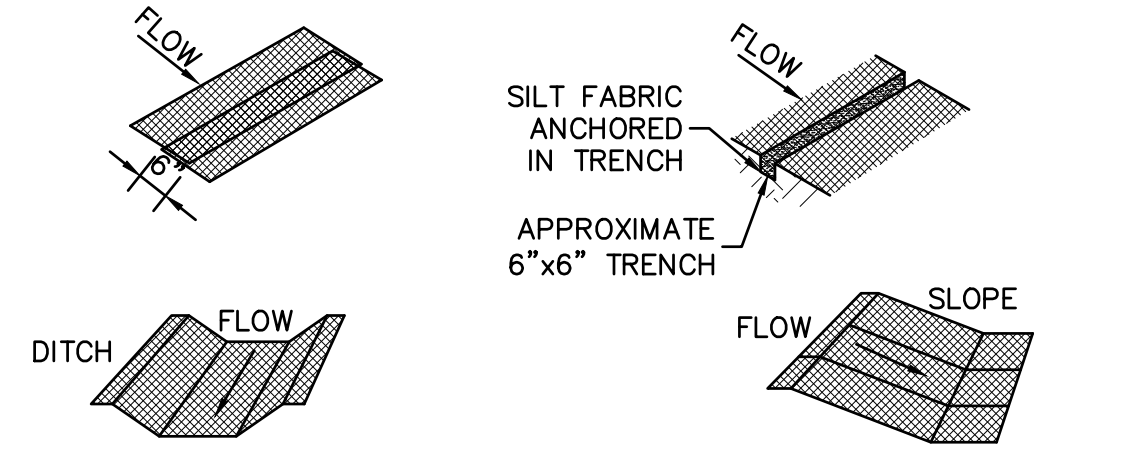
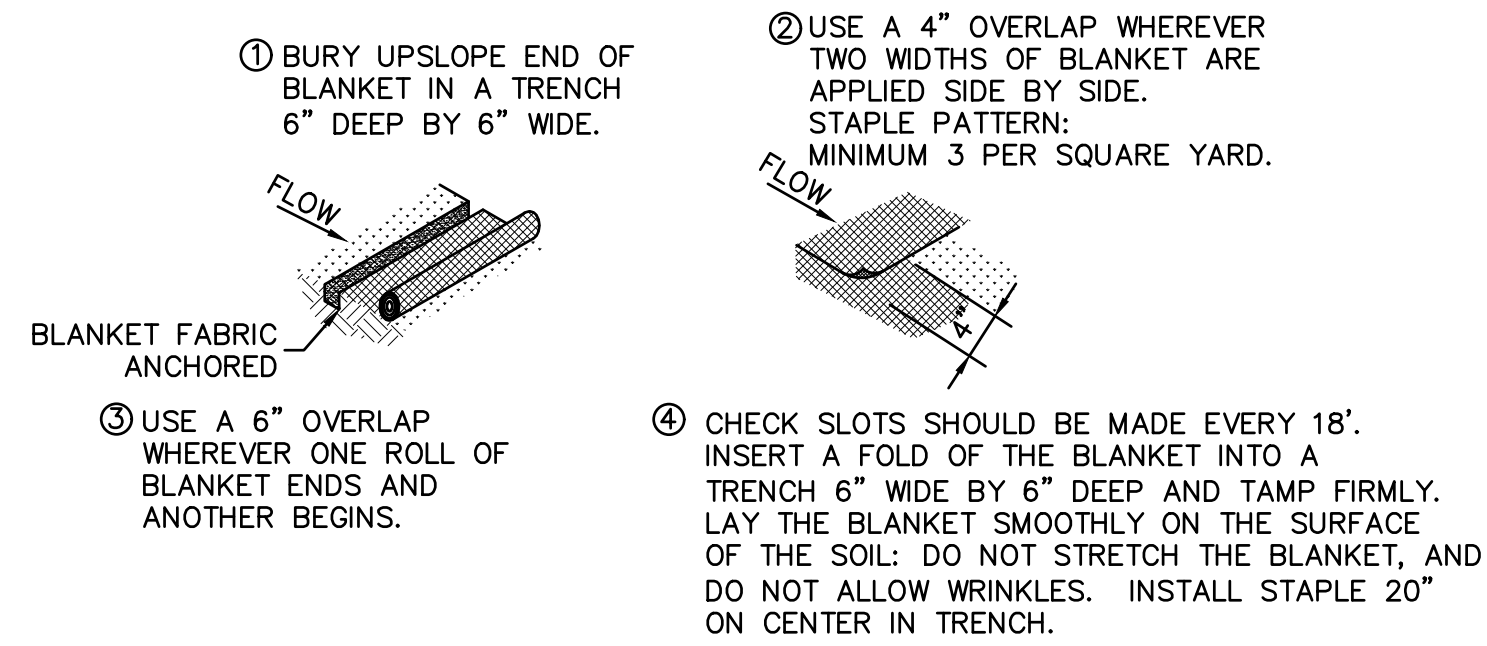


WESSLER ENGINEERING
More than a Project™

WASTEWATER TREATMENT PLANT EXPANSION - 2017
CITY OF WARSAW, INDIANA
MISCELLANEOUS SITE DETAILS

SHEET NO.
MY01
PAGE NO.
235

Drawing: J:\Warshaw\Projects\162813-04-001\DWG\Shenell\162813-04-003.dwg | Layout: MY01 | Plotted: 09/04/18 @ 11:26:00 | LantSavelleBy: MlnE



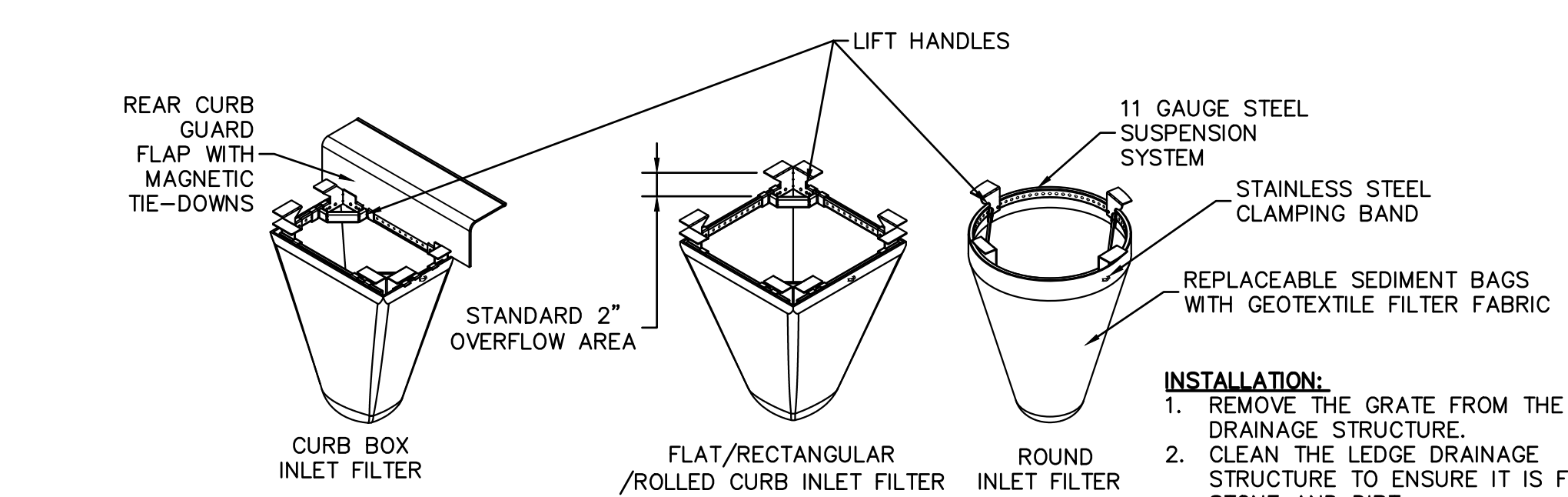
PLACE BLANKET PARALLEL TO THE DIRECTION OF FLOW. DO NOT JOIN STRIPS IN THE CENTER OF THE DITCH. USE CHECK SLOTS AS REQUIRED.

PLACE BLANKET PARALLEL TO THE DIRECTION OF FLOW AND ANCHOR SECURELY. BRING BLANKET TO A LEVEL AREA BEFORE TERMINATING THE INSTALLATION.

PRODUCT:
1. NORTH AMERICAN GREEN SC150, OR EQUAL.

- NOTES:**
1. PROTECT THE SLOPES WITH AN EROSION CONTROL BLANKET WHERE CONSTRUCTION DISTURBS SLOPES EQUAL OR STEEPER THAN 3:1.
- MAINTENANCE:**
1. INSPECT FOR EROSION AFTER EACH STORM EVENT DURING VEGETATION ESTABLISHMENT, AND AT LEAST ONCE EVERY 7 CALENDAR DAYS.
2. IF ANY AREAS SHOW EROSION, PULL BACK THAT PORTION OF THE BLANKET, ADD SOIL, RESEED, RELAY AND STAPLE THE BLANKET.
3. CHECK AREAS PERIODICALLY AFTER VEGETATION ESTABLISHMENT.

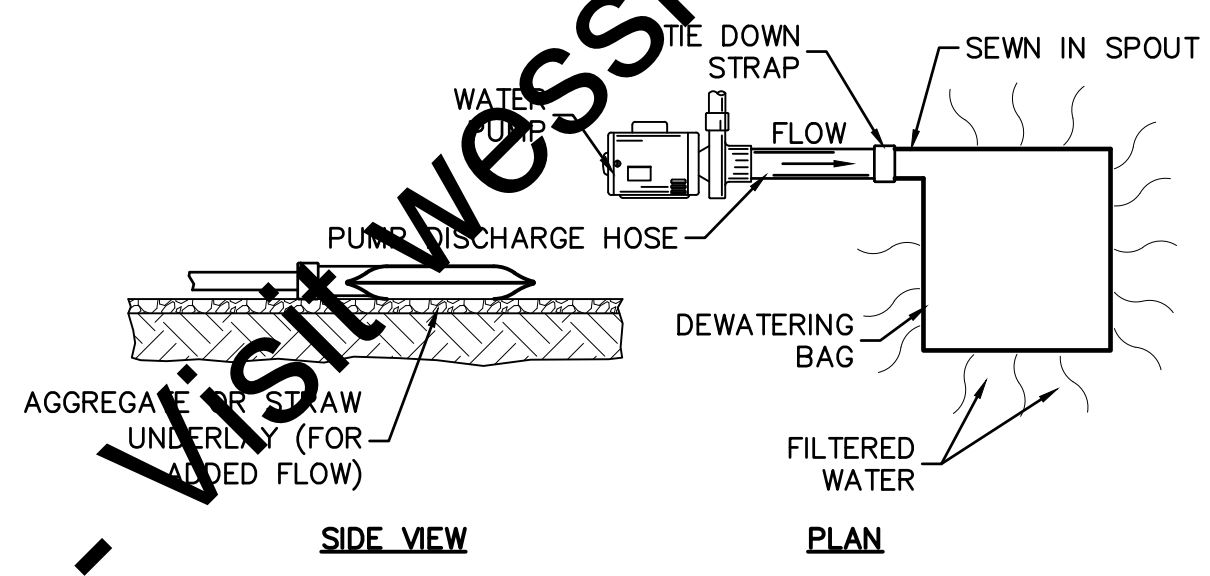
EROSION CONTROL BLANKET
SCALE: NONE



| INLET FILTER SPECIFICATIONS | | |
|--|-------------|---------------------|
| WOVEN GEOTEXTILE SEDIMENT BAG SPECS (2 FT VOL) | | |
| MATERIAL PROPERTY | TEST METHOD | VALUE (AVG) |
| GRAB TENSILE | ASTM D4632 | 255 X 275 |
| PUNCTURE STRENGTH | ASTM D4833 | 135 LB |
| TRAPEZOIDAL TEAR | ASTM D4533 | 75 LB |
| UV RESISTANCE | ASTM D4355 | 90% |
| APP OPEN SIZE (AOS) | ASTM D4751 | NO. 20 SIEVE |
| PERMITTIVITY | ASTM D4491 | 1.5 S ⁻¹ |
| WATER FLOW RATE | ASTM D4491 | 200 GPM/SQFT |
| SEDIMENT REMOVAL EFFICIENCY (8% MIX) | ASTM D7351 | 82% |

SOURCE: FLEX STORM INLET FILTER

INLET PROTECTION
SCALE: NONE

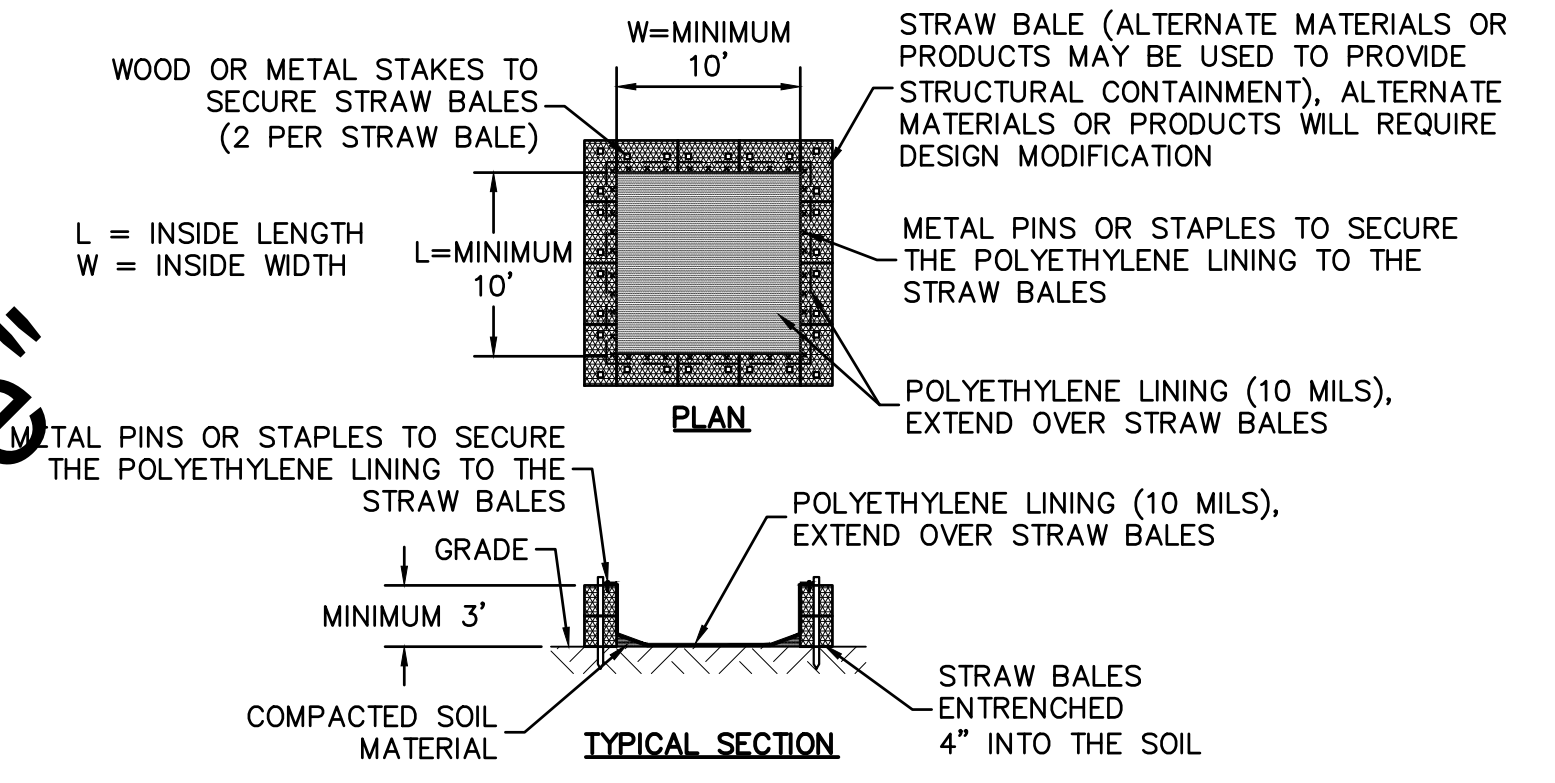


| MECHANICAL PROPERTIES | TEST METHOD | UNITS | INDUSTRY STANDARD |
|-------------------------|-------------|---|-----------------------|
| GRAB TENSILE STRENGTH | ASTM D4632 | kN (LB) | 0.9 (205) X 0.9 (205) |
| GRAB TENSILE ELONGATION | ASTM D4632 | % | 50 X 50 |
| PUNCTURE STRENGTH | ASTM D4833 | kN (LB) | 0.58 (130) |
| MULLEN BURST STRENGTH | ASTM D3786 | kPa (PSI) | 2618 (380) |
| TRAPEZOID TEAR STRENGTH | ASTM D4533 | kN (LB) | 0.36 (80) X 0.36 (80) |
| UV RESISTANCE | ASTM D4355 | % | 70 |
| APPARENT OPENING SIZE | ASTM D4751 | Mm (US STD SIEVE) | 0.180 (80) |
| FLOW RATE | ASTM D4491 | 1/MIN/M ² (GAL/MIN/FT ²) | 3866 (95) |
| PERMITTIVITY | ASTM D4491 | S ⁻¹ | 1.2 |

- MAINTENANCE:**
1. DURING THE ACTIVE DEWATERING PROCESS, INSPECTION OF THE PUMPING BAG SHOULD BE REVIEWED FREQUENTLY. SPECIAL ATTENTION SHOULD BE PAID TO THE BUFFER AREA FOR ANY SIGN OF EROSION AND CONCENTRATION OF FLOW. OBSERVE WHERE POSSIBLE THE VISUAL QUALITY OF THE EFFLUENT AND DETERMINE IF ADDITIONAL TREATMENT CAN BE PROVIDED.
2. DISPOSE OF ACCUMULATED SEDIMENT REMOVED DURING PUMPING OPERATIONS IN CONFORMANCE WITH THE SPECIFICATIONS.
3. REPLACE THE BAG OR DISPOSE OF SILT WHEN HALF FULL OF SEDIMENT OR WHEN SEDIMENT HAS REDUCED THE FLOW RATE TO AN IMPRACTICAL RATE.

SOURCE:
KRISTAR
DANDY DEWATERING BAG
SEDCATCH

PUMPING BAG
SCALE: NONE

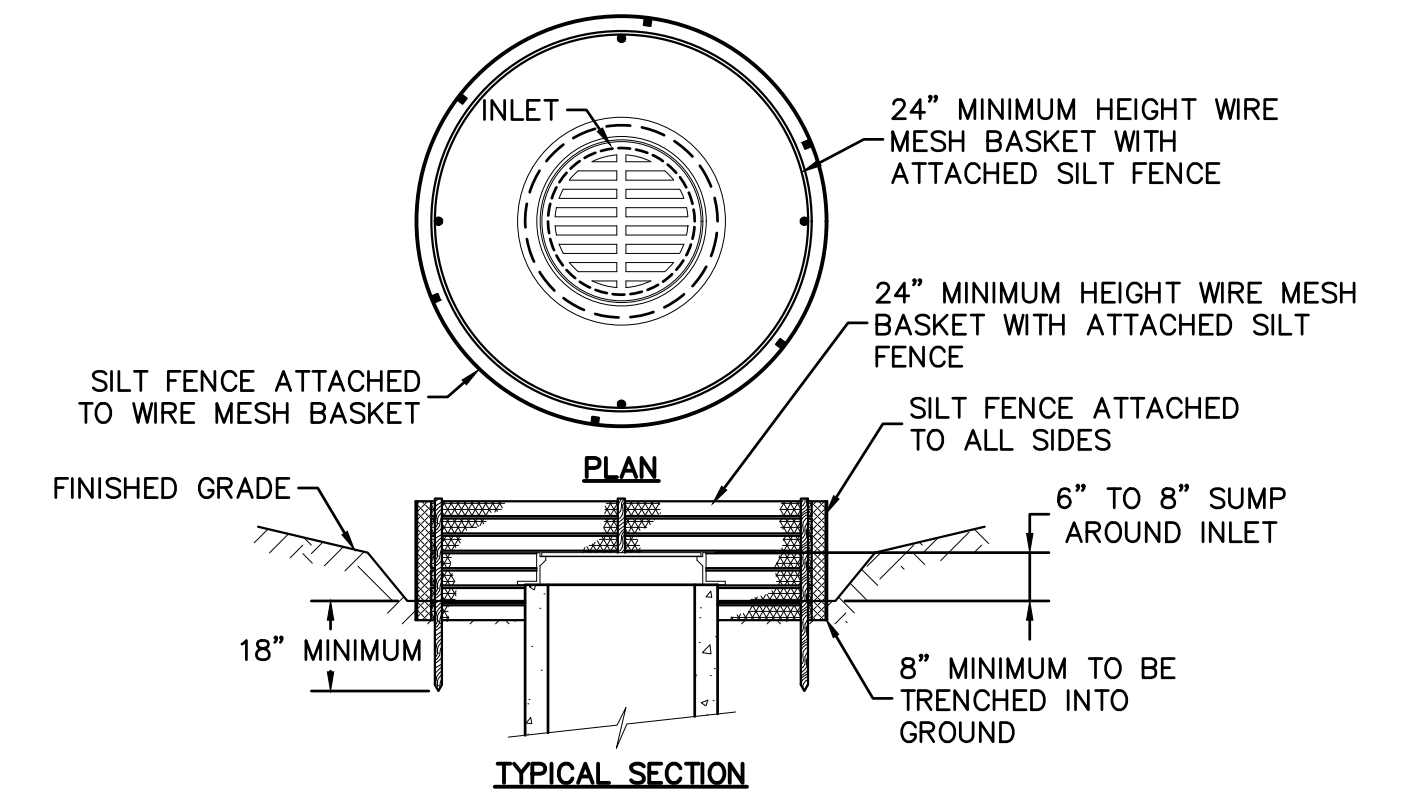


- NOTES:**
1. LOCATE WASHOUTS AT LEAST 50' FROM ANY CREEKS, WETLANDS, DITCHES, KARST FEATURES, OR STORM DRAIN/CONVEYANCES.

- WASHOUT PROCEDURES:**
1. DO NOT LEAVE EXCESS MUD IN THE CHUTES OR HOPPER AFTER POURING CONCRETE. MAKE EVERY EFFORT TO EMPTY THE CHUTE AND HOPPER AT THE POUR. THE LESS MATERIAL LEFT IN THE CHUTES AND HOPPER, THE QUICKER AND EASIER THE CLEANOUT. SMALL AMOUNTS OF EXCESS CONCRETE (NOT WASHOUT WATER) MAY BE DISPOSED OF IN AREAS THAT WILL NOT FLOW TO AN AREA THAT IS TO BE PROTECTED.
2. SCRAPE AS MUCH MATERIAL FROM THE CHUTES AS POSSIBLE BEFORE WASHING THEM. USE NON-WATER CLEANING METHODS TO MINIMIZE THE CHANCE FOR WASTE TO FLOW OFF SITE.
3. STOP WASHING OUT IN AN AREA IF YOU OBSERVE WATER RUNNING OFF THE DESIGNATED AREA OR IF THE WATER IS NOT BEING CONTAINED WITHIN THE WASHOUT AREA.
4. DO NOT BACK FLUSH EQUIPMENT AT THE PROJECT SITE.
5. DO NOT USE ADDITIVES WITH WASH WATER.
6. DO NOT WASH OUT OR DRAIN WASTE WATERS TO STORM DRAINS, WETLANDS, STREAMS, RIVERS, CREEKS, DITCHES OR STREETS.

MAINTENANCE:
1. MAINTENANCE REQUIREMENTS PROVIDED IN SPECIFICATIONS.

CONCRETE WASHOUT
SCALE: NONE



- NOTES:**
1. SYNTHETIC FILTER FABRIC SHALL BE A PERVIOUS SHEET OF WOVEN OR NON-WOVEN GEOTEXTILE FABRIC AND SHALL BE CERTIFIED BY THE MANUFACTURER OR SUPPLIER AS CONFORMING TO THE FOLLOWING REQUIREMENTS:
a. TEXTILE STRENGTH AT 20% (MAXIMUM) ELONGATION, PER ASTM D4632.
b. WOVEN EXTRA STRENGTH - 50 LB/LIN IN. (MINIMUM), NON-WOVEN EXTRA STRENGTH - 70 LB/LIN. (MINIMUM).
c. WOVEN STANDARD STRENGTH - 30 LB/LIN IN. (MINIMUM), NON-WOVEN STANDARD STRENGTH - 50 LB/LIN. (MINIMUM).
d. APPARENT OPENING SIZE (AOS) (U.S. SIEVE) - NO. 30 PARTICLE SIZE OF 0.6 mm (MAXIMUM), PER ASTM D4751.
e. PERMITTIVITY - 0.05 S⁻¹ (MAXIMUM), PER ASTM D4491.
2. WHEN STANDARD STRENGTH FILTER FABRIC IS USED WITH A WIRE MESH SUPPORT FENCE FASTEN THE FABRIC SECURELY TO THE UPSLOPE SIDE OF THE POSTS USING HEAVY DUTY 1\"/>

- MAINTENANCE:**
1. INSPECT WITHIN 24 HOURS OF A RAIN EVENT AND DAILY DURING PROLONGED RAINFALL. INSPECT AT LEAST ONCE EVERY 7 CALENDAR DAYS.
2. REPLACE THE FABRIC PROMPTLY IF THE FABRIC DECOMPOSES OR BECOMES INEFFECTIVE. IMMEDIATELY MAKE ANY REQUIRED REPAIRS.
3. REMOVE SEDIMENT DEPOSITS FROM THE POOL AREA AFTER EACH STORM EVENT AND WHEN IT REACHES HALF THE HEIGHT OF THE BARRIER.
4. SPREAD ANY SEDIMENT DEPOSITS REMAINING IN PLACE AFTER THE SILT FENCE IS NO LONGER REQUIRED, AND DRESS TO CONFORM WITH THE FINISHED GRADING.

SILT FENCE INLET SEDIMENT BARRIER
SCALE: NONE

"For Viewing Purposes Only - Visit wesslerengineering.com to Purchase"

| | | | | | | | |
|---|--|--|------------------------------|--|--|--|--|
| <p>SCALE VERIFICATION</p> <p>BAR IS ONE INCH LONG ON ORIGINAL DRAWING</p> | <p>DRAWN BY</p> <p>WBJ</p> | <p>NO.</p> <p>DATE</p> <p>INITIALS</p> | <p>REVISION DESCRIPTIONS</p> | | <p>WESSLER ENGINEERING More than a Project™</p> | <p>WASTEWATER TREATMENT PLANT EXPANSION - 2017</p> <p>CITY OF WARSAW, INDIANA</p> <p>EROSION CONTROL DETAILS</p> | <p>SHEET NO.</p> <p>MY04</p> <p>PAGE NO.</p> <p>238</p> |
| <p>CHECKED BY</p> <p>ALT</p> | <p>APPROVED BY</p> <p>GLR</p> | | | | | | |
| | <p>ISSUE DATE</p> <p>SEPTEMBER 4, 2018</p> | | | | | | |
| | <p>PROJECT NUMBER</p> <p>162813-04-003</p> | | | | | | |

Drawing: J:\Warsaw\Projects\162813-Warsaw-WWTP-Expansion\CAD-04-001\DWG\Sheets\162813-DWG-Silt.dwg | Layout: MY04 | Plotted: 09/04/18 @ 11:26:03 | LastSavedBy: MlnE



VALVE SCHEDULE

| NO. | SIZE & TYPE | FITTING | LOCATION & SERVICE | OPERATOR | ACCESSORIES | REMARKS | NO. | SIZE & TYPE | FITTING | LOCATION & SERVICE | OPERATOR | ACCESSORIES | REMARKS |
|---|-----------------|---------|--|-----------|--|------------------------------|---|-----------------|---------|--|----------------|--|------------------------------------|
| AREA B – SITE | | | | | | | AREA F – FINAL CLARIFIERS AND SLUDGE PUMP STATIONS | | | | | | |
| PW-33 | 6" PLUG VALVE | MJ | DISTRIBUTION – NEW NPW SYSTEM ISOLATION | NUT | EXT STEM, VALVE BOX AND COVER | | DR-03 | 14" DPV | MJ | NEW FINAL CLARIFIER NO. 2 – DRAIN LINE | NUT | | PROVIDED BY EQUIPMENT MANUFACTURER |
| PW-34 | 6" PLUG VALVE | MJ | DISTRIBUTION – NEW NPW SYSTEM ISOLATION | NUT | EXT STEM, VALVE BOX AND COVER | | RAS-1 | 14" PLUG VALVE | FLANGE | EX SLUDGE PUMP STA NO. 1 – RAS FROM CLARIFIER 1 | HANDWHEEL | NEW ELECTRIC ACTUATOR | INSTALL ON EX VALVE |
| AREA C – HEADWORKS STRUCTURE | | | | | | | AREA G – PRIMARY CLARIFIERS AND CONTROL BUILDING | | | | | | |
| FM-01 | 10" PLUG VALVE | MJ | NEW METER VAULT – 10" DANEK FM ISOLATION | NUT | GEAR OPERATOR, EXT STEM, VALVE BOX AND COVER | | RAS-2 | 14" PLUG VALVE | FLANGE | EX SLUDGE PUMP STA NO. 1 – RAS FROM CLARIFIER 2 | HANDWHEEL | NEW ELECTRIC ACTUATOR | INSTALL ON EX VALVE |
| FM-02 | 10" PLUG VALVE | MJ | NEW METER VAULT – 10" DANEK FM ISOLATION | NUT | GEAR OPERATOR, EXT STEM, VALVE BOX AND COVER | | PW-31 | 4 PLUG VALVE | FLANGE | EX SLUDGE PUMP STA NO. 1 – NEW NPW PUMP SUCTION | HANDWHEEL | | |
| FM-03 | 16" PLUG VALVE | MJ | NEW METER VAULT – 16" ANCHORAGE FM ISOLATION | NUT | GEAR OPERATOR, EXT STEM, VALVE BOX AND COVER | | PW-32 | 4 PLUG VALVE | FLANGE | EX SLUDGE PUMP STA NO. 1 – NEW NPW PUMP DISCHARGE | HANDWHEEL | | |
| FM-04 | 16" PLUG VALVE | MJ | NEW METER VAULT – 16" ANCHORAGE FM ISOLATION | NUT | GEAR OPERATOR, EXT STEM, VALVE BOX AND COVER | | PW-33 | 6" BUTTERFLY V | FLANGE | EX SLUDGE PUMP STA NO. 1 – NEW NPW FILTER INFLUENT ISOLATION | LEVER | | |
| FM-05 | 20" PLUG VALVE | MJ | NEW METER VAULT – 20" CENTER ST FM ISOLATION | NUT | GEAR OPERATOR, EXT STEM, VALVE BOX AND COVER | | PW-34 | 6" BUTTERFLY V | FLANGE | EX SLUDGE PUMP STA NO. 1 – NEW NPW FILTER DISCHARGE ISOLATION | LEVER | | |
| FM-06 | 20" PLUG VALVE | MJ | NEW METER VAULT – 20" CENTER ST FM ISOLATION | NUT | GEAR OPERATOR, EXT STEM, VALVE BOX AND COVER | | PW-35 | 4" BUTTERFLY V | FLANGE | EX SLUDGE PUMP STA NO. 1 – NEW NPW BYPASS FILTER INFLUENT ISOLATION | LEVER | | |
| A-16 | 6" PLUG VALVE | FLANGE | NEW GRIT TANKS – AIR FLOW CONTROL | NUT | ELECTRIC ACTUATOR | TYPE 3 | PW-36 | 4" BUTTERFLY V | FLANGE | EX SLUDGE PUMP STA NO. 1 – NEW NPW BYPASS FILTER DISCHARGE ISOLATION | LEVER | | |
| A-17 | 3" BUTTERFLY V | FLANGE | NEW GRIT TANK NO. 1 – AIR ISOLATION | LEVER | | | RAS-19 | 14" PLUG VALVE | MJ | EX SLUDGE PUMP STA NO. 1 – RAS TO SELECTOR TANK | NUT | GEAR OPERATOR, EXT STEM, VALVE BOX AND COVER | |
| A-18 | 3" BUTTERFLY V | FLANGE | NEW GRIT TANK NO. 2 – AIR ISOLATION | LEVER | | | RAS-20 | 14" PLUG VALVE | MJ | EX SLUDGE PUMP STA NO. 1 – RAS TO SELECTOR TANK NO. 1 | NUT | GEAR OPERATOR, EXT STEM, VALVE BOX AND COVER | |
| DR-01 | 6" PLUG VALVE | FLANGE | NEW GRIT TANK NO. 1 – DRAIN DRAWN DOWN ISOLATION | HANDWHEEL | | | RAS-21 | 14" PLUG VALVE | FLANGE | NEW SLUDGE PUMP STA NO. 2 – RAS FROM CLARIFIER 3 | HANDWHEEL | GEAR OPERATOR | |
| DR-02 | 6" PLUG VALVE | FLANGE | NEW GRIT TANK NO. 2 – DRAIN DRAWN DOWN ISOLATION | HANDWHEEL | | | RAS-22 | 14" PLUG VALVE | FLANGE | NEW SLUDGE PUMP STA NO. 2 – RAS FROM CLARIFIER 4 | HANDWHEEL | GEAR OPERATOR | |
| AREA D – PRIMARY CLARIFIERS AND CONTROL BUILDING | | | | | | | AREA H – ANAEROBIC DIGESTERS AND CONTROL BUILDING | | | | | | |
| SC-11 | 6" PLUG VALVE | FLANGE | SCUM WELL SUCTION LINE ISOLATION | HANDWHEEL | | | RAS-23 | 14" PLUG VALVE | FLANGE | NEW SLUDGE PUMP STA NO. 2 – RAS HEADER ISOLATION | HANDWHEEL | GEAR OPERATOR | |
| SC-12 | 6" PLUG VALVE | FLANGE | PRIMARY SCUM PUMP NO. 1 – SUCTION ISOLATION | HANDWHEEL | | | RAS-24 | 14" PLUG VALVE | FLANGE | NEW SLUDGE PUMP STA NO. 2 – RAS PUMP 3 SUCTION | HANDWHEEL | GEAR OPERATOR | |
| SC-13 | 6" PLUG VALVE | FLANGE | PRIMARY SCUM PUMP NO. 1 – DISCHARGE ISOLATION | HANDWHEEL | | | RAS-25 | 14" PLUG VALVE | FLANGE | NEW SLUDGE PUMP STA NO. 2 – RAS PUMP 4 SUCTION | HANDWHEEL | GEAR OPERATOR | |
| SC-14 | 6" PLUG VALVE | FLANGE | SCUM DISCHARGE LINE ISOLATION | HANDWHEEL | | | RAS-26 | 12" CHECK VALVE | FLANGE | NEW SLUDGE PUMP STA NO. 2 – RAS PUMP 3 DISCHARGE | | | |
| SC-15 | 6" PLUG VALVE | FLANGE | SCUM DISCHARGE LINE ISOLATION | HANDWHEEL | | | RAS-27 | 12" PLUG VALVE | FLANGE | NEW SLUDGE PUMP STA NO. 2 – RAS PUMP 3 DISCHARGE | HANDWHEEL | GEAR OPERATOR | |
| PS-01 | 6" PLUG VALVE | FLANGE | PRIMARY SLUDGE LINE – CLARIFIER NO. 1 ISOLATION | NUT | ELECTRIC ACTUATOR | | RAS-28 | 12" CHECK VALVE | FLANGE | NEW SLUDGE PUMP STA NO. 2 – RAS PUMP 4 DISCHARGE | | | |
| PS-02 | 6" PLUG VALVE | FLANGE | PRIMARY SLUDGE LINE – SUCTION ISOLATION | HANDWHEEL | | | RAS-29 | 12" PLUG VALVE | FLANGE | NEW SLUDGE PUMP STA NO. 2 – RAS PUMP 4 DISCHARGE | HANDWHEEL | GEAR OPERATOR | |
| PS-03 | 6" PLUG VALVE | FLANGE | PRIMARY SLUDGE LINE – SUCTION ISOLATION | HANDWHEEL | | | RAS-30 | 14" PLUG VALVE | FLANGE | NEW SLUDGE PUMP STA NO. 2 – DISCHARGE HEADER | HANDWHEEL | GEAR OPERATOR | |
| PS-04 | 6" PLUG VALVE | FLANGE | PRIMARY SLUDGE LINE – SUCTION ISOLATION | HANDWHEEL | | | SC-16 | 6" PLUG VALVE | FLANGE | NEW SLUDGE PUMP STA NO. 2 – SCUM PUMP 2 SUCTION | HANDWHEEL | | |
| PS-05 | 6" PLUG VALVE | FLANGE | PRIMARY SLUDGE LINE – SUCTION ISOLATION | HANDWHEEL | | | SC-17 | 6" CHECK VALVE | FLANGE | NEW SLUDGE PUMP STA NO. 2 – SCUM PUMP 2 DISCHARGE | | | |
| PS-06 | 6" PLUG VALVE | FLANGE | PRIMARY SLUDGE LINE – CLARIFIER NO. 2 ISOLATION | NUT | ELECTRIC ACTUATOR | | SC-18 | 6" PLUG VALVE | FLANGE | NEW SLUDGE PUMP STA NO. 2 – SCUM PUMP 2 DISCHARGE | HANDWHEEL | | |
| PS-07 | 6" PLUG VALVE | FLANGE | PRIMARY SLUDGE LINE – SUCTION ISOLATION | HANDWHEEL | | | SC-19 | 6" PLUG VALVE | FLANGE | NEW SLUDGE PUMP STA NO. 2 – SCUM PUMP 2 DISCHARGE | HANDWHEEL | | |
| PS-08 | 6" PLUG VALVE | FLANGE | PRIMARY SLUDGE LINE – BYPASS ISOLATION | HANDWHEEL | | | | | | | | | |
| PS-09 | 6" PLUG VALVE | FLANGE | PRIMARY SLUDGE LINE – BYPASS ISOLATION | HANDWHEEL | | | | | | | | | |
| PS-10 | 6" PLUG VALVE | FLANGE | PRIMARY SLUDGE PUMP NO. 1 – SUCTION ISOLATION | HANDWHEEL | | | | | | | | | |
| PS-11 | 6" PLUG VALVE | FLANGE | PRIMARY SLUDGE PUMP NO. 1 – DISCHARGE ISOLATION | HANDWHEEL | | | | | | | | | |
| PS-12 | 6" PLUG VALVE | FLANGE | PRIMARY SLUDGE PUMP NO. 2 – SUCTION ISOLATION | HANDWHEEL | | | | | | | | | |
| PS-13 | 6" PLUG VALVE | FLANGE | PRIMARY SLUDGE PUMP NO. 2 – DISCHARGE ISOLATION | HANDWHEEL | | | | | | | | | |
| PS-14 | 6" PLUG VALVE | FLANGE | PRIMARY SLUDGE LINE – DISCHARGE ISOLATION | HANDWHEEL | | | | | | | | | |
| PS-15 | 6" PLUG VALVE | FLANGE | PRIMARY SLUDGE LINE – DISCHARGE ISOLATION | HANDWHEEL | | | | | | | | | |
| PS-16 | 6" PLUG VALVE | FLANGE | PRIMARY SLUDGE LINE – FLOW METER ISOLATION | HANDWHEEL | | | | | | | | | |
| PS-17 | 6" PLUG VALVE | FLANGE | PRIMARY SLUDGE LINE – FLOW METER ISOLATION | HANDWHEEL | | | | | | | | | |
| PS-18 | 6" PLUG VALVE | FLANGE | PRIMARY SLUDGE LINE – DISCHARGE ISOLATION | HANDWHEEL | | | | | | | | | |
| PS-19 | 6" PLUG VALVE | FLANGE | PRIMARY SLUDGE LINE – DISCHARGE ISOLATION | HANDWHEEL | | | | | | | | | |
| PS-20 | 6" PLUG VALVE | FLANGE | PRIMARY SLUDGE LINE – DISCHARGE ISOLATION | HANDWHEEL | | | | | | | | | |
| PS-21 | 6" PLUG VALVE | FLANGE | PRIMARY SLUDGE LINE – DISCHARGE ISOLATION | HANDWHEEL | | | | | | | | | |
| PS-22 | 6" PLUG VALVE | FLANGE | PRIMARY SLUDGE LINE – DISCHARGE ISOLATION | HANDWHEEL | ELECTRIC ACTUATOR | | | | | | | | |
| PS-23 | 6" PLUG VALVE | FLANGE | PRIMARY SLUDGE LINE – FUTURE CLARIFIER NO. 3 ISOLATION | HANDWHEEL | | NUMBER HOLD FOR FUTURE VALVE | | | | | | | |
| AREA E – OXIDATION DITCH AND ASSOCIATED STRUCTURES | | | | | | | AREA I – ANAEROBIC DIGESTERS AND CONTROL BUILDING | | | | | | |
| A-19 | 4" PLUG VALVE | FLANGE | NEW SELECTOR TANK AIR FLOW CONTROL | NUT | ELECTRIC ACTUATOR | TYPE 3 | | | | | | | |
| A-20 | 4" BUTTERFLY V | FLANGE | NEW SELECTOR TANK CELL NO. 3 – AIR ISOLATION | LEVER | | TYPE 3 | | | | | | | |
| RAS-31 | 14" PLUG VALVE | MJ | NEW SELECTOR TANK – SLUDGE PUMP STATION #1 RAS ISOLATION | NUT | GEAR OPERATOR, EXT STEM, VALVE BOX AND COVER | | DS-01 | 3" GATE VALVE | | EXISTING SLUDGE PUMP STATION – NPW | NEW CHAINWHEEL | | EXISTING VALVE |
| RAS-32 | 14" PLUG VALVE | MJ | NEW SELECTOR TANK – SLUDGE PUMP STATION #2 RAS ISOLATION | NUT | GEAR OPERATOR, EXT STEM, VALVE BOX AND COVER | | DS-02 | 6" PLUG VALVE | FLANGE | DIGESTER NO. 1 – INFLUENT ISOLATION | NUT | ELECTRIC ACTUATOR | |
| DR-03 | 8" PLUG VALVE | MJ | NEW SELECTOR TANK CELL NO. 1 – DRAIN LINE | NUT | GEAR OPERATOR, EXT STEM, VALVE BOX AND COVER | | DS-03 | 6" PLUG VALVE | FLANGE | DIGESTER NO. 2 – INFLUENT ISOLATION | NUT | ELECTRIC ACTUATOR | |
| DR-04 | 8" PLUG VALVE | MJ | NEW SELECTOR TANK CELL NO. 2 – DRAIN LINE | NUT | GEAR OPERATOR, EXT STEM, VALVE BOX AND COVER | | DS-04 | 6" PLUG VALVE | FLANGE | DIGESTER NO. 1 – SUBSURFACE WET WELL FEED | HANDWHEEL | GEAR OPERATOR | |
| DR-05 | 8" PLUG VALVE | MJ | NEW SELECTOR TANK CELL NO. 3 – DRAIN LINE | NUT | GEAR OPERATOR, EXT STEM, VALVE BOX AND COVER | | DS-05 | 8" PLUG VALVE | FLANGE | DIGESTER NO. 1 – TANK WITHDRAWAL | HANDWHEEL | | |
| DR-06 | 8" PLUG VALVE | MJ | NEW SELECTOR TANK BYPASS CHANNEL – DRAIN LINE | NUT | GEAR OPERATOR, EXT STEM, VALVE BOX AND COVER | | DS-06 | 8" PLUG VALVE | FLANGE | DIGESTER NO. 1 – SURFACE WET WELL FEED | HANDWHEEL | GEAR OPERATOR | |
| A-21 | 12" PLUG VALVE | FLANGE | EX OXIDATION DITCH NO. 1 AIR FLOW CONTROL | NUT | ELECTRIC ACTUATOR, GEAR OPERATOR | TYPE 3 | DS-07 | 6" PLUG VALVE | FLANGE | DIGESTER NO. 1 – WET WELL ISOLATION | HANDWHEEL | | |
| A-22 | 12" BUTTERFLY V | FLANGE | EX OXIDATION DITCH NO. 1 – AIR HEADER ISOLATION | HANDWHEEL | GEAR OPERATOR | TYPE 3 | DS-08 | 8" PLUG VALVE | FLANGE | DIGESTER NO. 1 – SLUDGE FLOW ISOLATION | NUT | ELECTRIC ACTUATOR | |
| A-23 | 6" BUTTERFLY V | FLANGE | EX OXIDATION DITCH ZONE 1A – AIR HEADER ISOLATION | LEVER | GEAR OPERATOR | | DS-09 | 6" PLUG VALVE | FLANGE | DIGESTER NO. 2 – SUBSURFACE WET WELL FEED | HANDWHEEL | GEAR OPERATOR | |
| A-24 | 8" BUTTERFLY V | FLANGE | EX OXIDATION DITCH ZONE 1B – AIR HEADER ISOLATION | LEVER | GEAR OPERATOR | | DS-10 | 6" PLUG VALVE | FLANGE | DIGESTER NO. 2 – TANK WITHDRAWAL | HANDWHEEL | | |
| A-25 | 6" BUTTERFLY V | FLANGE | EX OXIDATION DITCH ZONE 1C – AIR HEADER ISOLATION | LEVER | GEAR OPERATOR | | DS-11 | 6" PLUG VALVE | FLANGE | DIGESTER NO. 2 – SURFACE WET WELL FEED | HANDWHEEL | GEAR OPERATOR | |
| A-26 | 12" PLUG VALVE | FLANGE | EX OXIDATION DITCH NO. 2 AIR FLOW CONTROL | NUT | ELECTRIC ACTUATOR, GEAR OPERATOR | TYPE 3 | DS-12 | 6" PLUG VALVE | FLANGE | DIGESTER NO. 2 – WET WELL ISOLATION | HANDWHEEL | | |
| A-27 | 12" BUTTERFLY V | FLANGE | EX OXIDATION DITCH NO. 2 – AIR HEADER ISOLATION | HANDWHEEL | GEAR OPERATOR | TYPE 3 | DS-13 | 6" PLUG VALVE | FLANGE | DIGESTER NO. 2 – SLUDGE FLOW ISOLATION | NUT | ELECTRIC ACTUATOR | |
| A-28 | 8" BUTTERFLY V | FLANGE | EX OXIDATION DITCH ZONE 2A – AIR HEADER ISOLATION | LEVER | GEAR OPERATOR | | DS-14 | 6" PLUG VALVE | FLANGE | DSP NO. 1 AND NO. 2 – SUCTION ISOLATION | HANDWHEEL | | |
| A-29 | 6" BUTTERFLY V | FLANGE | EX OXIDATION DITCH ZONE 2B – AIR HEADER ISOLATION | LEVER | GEAR OPERATOR | | DS-15 | 6" CHECK VALVE | FLANGE | DSP NO. 1 – DISCHARGE ISOLATION | | | |
| A-30 | 6" BUTTERFLY V | FLANGE | EX OXIDATION DITCH ZONE 2C – AIR HEADER ISOLATION | LEVER | GEAR OPERATOR | | DS-16 | 6" PLUG VALVE | FLANGE | DSP NO. 1 – DISCHARGE ISOLATION | HANDWHEEL | | |
| | | | | | | | DS-17 | 6" PLUG VALVE | FLANGE | DSP NO. 2 – SUCTION ISOLATION | HANDWHEEL | | |
| | | | | | | | DS-18 | 6" CHECK VALVE | FLANGE | DSP NO. 2 – DISCHARGE ISOLATION | | | |
| | | | | | | | DS-19 | 6" PLUG VALVE | FLANGE | DSP NO. 2 – DISCHARGE ISOLATION | HANDWHEEL | | |
| | | | | | | | DS-20 | 8" PLUG VALVE | FLANGE | BI-DIRECTIONAL WET WELL TRANSFER | HANDWHEEL | GEAR OPERATOR | |
| | | | | | | | DS-21 | 8" PLUG VALVE | FLANGE | BI-DIRECTIONAL TANK TRANSFER | HANDWHEEL | GEAR OPERATOR | |
| | | | | | | | DS-22 | 6" PLUG VALVE | FLANGE | SRP NO. 1A – SUCTION ISOLATION | HANDWHEEL | | |
| | | | | | | | DS-23 | 6" CHECK VALVE | FLANGE | SRP NO. 1A – DISCHARGE ISOLATION | | | |
| | | | | | | | DS-24 | 6" PLUG VALVE | FLANGE | SRP NO. 1A – DISCHARGE ISOLATION | HANDWHEEL | | |
| | | | | | | | DS-25 | 6" PLUG VALVE | FLANGE | SRP NO. 1B – SUCTION ISOLATION | HANDWHEEL | | |
| | | | | | | | DS-26 | 6" CHECK VALVE | FLANGE | SRP NO. 1B – DISCHARGE ISOLATION | | | |
| | | | | | | | DS-27 | 6" PLUG VALVE | FLANGE | SRP NO. 1B – DISCHARGE ISOLATION | HANDWHEEL | | |
| | | | | | | | DS-28 | 6" PLUG VALVE | FLANGE | HEX NO. 1 – SLUDGE DISCHARGE ISOLATION | HANDWHEEL | | |
| | | | | | | | DS-29 | 6" PLUG VALVE | FLANGE | DIGESTER NO. 1 – SLUDGE RECIRC FLOW METER ISOLATION | HANDWHEEL | | |
| | | | | | | | DS-30 | 6" PLUG VALVE | FLANGE | SRP NO. 2A – SUCTION ISOLATION | HANDWHEEL | | |
| | | | | | | | DS-31 | 6" CHECK VALVE | FLANGE | SRP NO. 2A – DISCHARGE ISOLATION | | | |
| | | | | | | | DS-32 | 6" PLUG VALVE | FLANGE | SRP NO. 2A – DISCHARGE ISOLATION | HANDWHEEL | | |
| | | | | | | | DS-33 | 6" PLUG VALVE | FLANGE | SRP NO. 2B – SUCTION ISOLATION | HANDWHEEL | | |
| | | | | | | | DS-34 | 6" CHECK VALVE | FLANGE | SRP NO. 2B – DISCHARGE ISOLATION | | | |
| | | | | | | | DS-35 | 6" PLUG VALVE | FLANGE | SRP NO. 2B – DISCHARGE ISOLATION | HANDWHEEL | | |
| | | | | | | | DS-36 | 6" PLUG VALVE | FLANGE | HEX NO. 2 – SLUDGE DISCHARGE ISOLATION | HANDWHEEL | | |
| | | | | | | | DS-37 | 6" PLUG VALVE | FLANGE | DIGESTER NO. 2 – SLUDGE RECIRC FLOW METER ISOLATION | HANDWHEEL | | |

NOTE: ALL VALVE NOTES AND THE VALVE IDENTIFICATION LEGEND ARE AT THE END OF THE VALVE SCHEDULE ON SHEET NO. MC03.

"For Viewing Purposes Only - Visit wesslerengineering.com to purchase"

Drawing: W:\Projects\162813\WTP Expansion\CAD\04-001\DWG\Shells\MCO2_162813-DWG-CAD.dwg | Layout: MCO2 | Plotter: 09/04/18 @ 11:26:46 | L:\Users\wbyr\MyDoc

| | | | | | |
|--|--|---|---|--|---|
| SCALE VERIFICATION DRAWN BY: WBJ CHECKED BY: ALT APPROVED BY: GLR ISSUE DATE: SEPTEMBER 4, 2018 PROJECT NUMBER: 162813-04-003 | NO. DATE INITIALS REVISION DESCRIPTIONS |  |  | WASTEWATER TREATMENT PLANT EXPANSION - 2017 CITY OF WARSAW, INDIANA PROCESS VALVE SCHEDULE | SHEET NO. MC02 PAGE NO. 240 |
|--|--|---|---|--|---|

VALVE SCHEDULE

| NO. | SIZE & TYPE | FITTING | LOCATION & SERVICE | OPERATOR | ACCESSORIES | REMARKS | NO. | SIZE & TYPE | FITTING | LOCATION & SERVICE | OPERATOR | ACCESSORIES | REMARKS |
|---|----------------|-----------|--|-----------|-------------|------------------------------|-------------------------------------|------------------|-----------|---|-----------|-------------|---|
| AREA H - ANAEROBIC DIGESTERS AND BUILDING - CONTINUED | | | | | | | AREA J - SLUDGE HANDLING FACILITIES | | | | | | |
| DS-38 | 6" PLUG VALVE | FLANGE | DIGESTED SLUDGE FLOW METER ISOLATION | HANDWHEEL | | | S-15 | 6" PLUG VALVE | FLANGE | NEW VOLUTE GRINDER - INLET ISOLATION | HANDWHEEL | | EX VALVE, RELOCATED |
| HW-01 | 3" MULTI VALVE | FLANGE | HWRP NO. 1 - DISCHARGE ISOLATION AND BALANCE | - | | MULTIPLE OPERATION FUNCTIONS | S-25 | 6" PLUG VALVE | MJ | SLUDGE HOLDING TANK - DIGESTED SLUDGE DRAW OFF | NUT | | NEW FLOOR STAND, CONC PAD AND ELECTRIC ACTUATOR |
| HW-02 | 3" MULTI VALVE | FLANGE | HWRP NO. 2 - DISCHARGE ISOLATION AND BALANCE | - | | MULTIPLE OPERATION FUNCTIONS | S-26 | 6" PLUG VALVE | MJ | SEPTAGE HOLDING TANK - DIGESTED SLUDGE DRAW OFF | NUT | | NEW FLOOR STAND, CONC PAD AND ELECTRIC ACTUATOR |
| HW-03 | 3" BUTTERFLY V | WAFER LUG | HOT WATER LOOP - COGEN ISOLATION | LEVER | | | S-41 | 6" PLUG VALVE | FLANGE | NEW SEPTAGE TRANSFER PUMP - SUCTION ISOLATION | HANDWHEEL | | |
| HW-04 | 3" BUTTERFLY V | WAFER LUG | HOT WATER LOOP - COGEN ISOLATION | LEVER | | | S-42 | 6" CHECK VALVE | FLANGE | NEW SEPTAGE TRANSFER PUMP - DISCHARGE ISOLATION | HANDWHEEL | | |
| HW-05 | 3" BUTTERFLY V | WAFER LUG | HEXP NO. 2 - SUCTION ISOLATION | LEVER | | | S-43 | 6" PLUG VALVE | FLANGE | NEW SEPTAGE TRANSFER PUMP - DISCHARGE ISOLATION | HANDWHEEL | | |
| HW-06 | 3" BUTTERFLY V | WAFER LUG | HEX NO. 2 - HWL INFLUENT ISOLATION | LEVER | | | S-44 | 6" PLUG VALVE | FLANGE | EX SEPTAGE TRANSFER LINE - FLOW ISOLATION | HANDWHEEL | | |
| HW-07 | 3" BUTTERFLY V | WAFER LUG | HEX NO. 2 - HWL DISCHARGE ISOLATION | LEVER | | | S-45 | 6" PLUG VALVE | FLANGE | EX SEPTAGE TRANSFER LINE - FLOW ISOLATION | HANDWHEEL | | |
| HW-08 | 3" BUTTERFLY V | WAFER LUG | HEXP NO. 1 - SUCTION ISOLATION | LEVER | | TYPE 2 | S-46 | 6" PLUG VALVE | MJ | EX MIXING TANK - SEPTAGE TRANSFER ISOLATION | NUT | | EXT STEM, VALVE BOX AND COVER |
| HW-09 | 3" BUTTERFLY V | WAFER LUG | HEX NO. 1 - HWL INFLUENT ISOLATION | LEVER | | TYPE 2 | S-47 | 8" PLUG VALVE | MJ | EX MIXING TANK - SEPTAGE TRANSFER ISOLATION | NUT | | FLOOR STAND, CONC PAD AND ELECTRIC ACTUATOR |
| HW-10 | 3" BUTTERFLY V | WAFER LUG | HEX NO. 1 - HWL DISCHARGE ISOLATION | LEVER | | TYPE 2 | S-48 | 8" PLUG VALVE | MJ | SEPTAGE HOLDING TANK - SLUDGE TRANSFER ISOLATION | NUT | | EXT STEM, VALVE BOX AND COVER |
| HW-11 | 3" BUTTERFLY V | WAFER LUG | HOT WATER LOOP - FLOW METER ISOLATION | LEVER | | TYPE 2 | S-49 | 8" PLUG VALVE | MJ | SEPTAGE HOLDING TANK - SLUDGE TRANSFER ISOLATION | NUT | | EXT STEM, VALVE BOX AND COVER |
| HW-12 | 3" BUTTERFLY V | WAFER LUG | HOT WATER LOOP - FLOW METER ISOLATION | LEVER | | TYPE 2 | S-50 | 6" PLUG VALVE | MJ | SEPTAGE HOLDING TANK - SLUDGE TRANSFER ISOLATION | NUT | | EXT STEM, VALVE BOX AND COVER |
| HW-13 | 3" BUTTERFLY V | WAFER LUG | BOILER - INFLUENT ISOLATION | LEVER | | TYPE 2 | S-51 | 6" PLUG VALVE | MJ | YARD - WAS TRANSFER TO PRIMARY CLARIFIERS | NUT | | EXT STEM, VALVE BOX AND COVER |
| HW-14 | 3" BUTTERFLY V | WAFER LUG | BOILER - DISCHARGE ISOLATION | LEVER | | TYPE 2 | S-52 | 8" PLUG VALVE | FLANGE | NEW THICKENER GRINDER - DISCHARGE ISOLATION | HANDWHEEL | | GEAR OPERATOR |
| HW-15 | 3" BUTTERFLY V | WAFER LUG | HOT WATER LOOP - FUTURE BOILER ISOLATION | LEVER | | TYPE 2 | S-53 | 6" PLUG VALVE | FLANGE | NEW VOLUTE PRESSURE INLET ISOLATION | HANDWHEEL | | |
| HW-16 | 3" BUTTERFLY V | WAFER LUG | HOT WATER LOOP - FUTURE BOILER ISOLATION | LEVER | | TYPE 2 | S-54 | 4" PLUG VALVE | FLANGE | THICKENED SLUDGE LINE - FLOW METER ISOLATION | HANDWHEEL | | |
| HW-17 | 3" BUTTERFLY V | WAFER LUG | HOT WATER LOOP - AIR SEPARATOR BYPASS | LEVER | | TYPE 2 | A-14 | 12" CHECK VALVE | WAFER LUG | NEW TURBO BLOWER NO. 2 - DISCHARGE ISOLATION | - | | FURNISHED BY EQUIPMENT MANUFACTURER |
| HW-18 | 3" BUTTERFLY V | WAFER LUG | HOT WATER LOOP - AIR SEPARATOR ISOLATION | LEVER | | TYPE 2 | A-15 | 12" BUTTERFLY V | WAFER LUG | NEW TURBO BLOWER NO. 2 - DISCHARGE ISOLATION | HANDWHEEL | | GEAR OPERATOR |
| HW-19 | 3" BUTTERFLY V | WAFER LUG | HOT WATER LOOP - AIR SEPARATOR ISOLATION | LEVER | | TYPE 2 | PW-11 | 4" PLUG VALVE | FLANGE | NEW NPW DISTRIBUTION TO DIGESTER CONTROL BUILDING | HANDWHEEL | | |
| HW-20 | 3" BUTTERFLY V | WAFER LUG | HWRP NO. 1 - SUCTION ISOLATION | LEVER | | TYPE 2 | AREA K - CHEMICAL FEED BUILDING | | | | | | |
| HW-21 | 3" BUTTERFLY V | WAFER LUG | HWRP NO. 2 - SUCTION ISOLATION | LEVER | | TYPE 2 | DR-8 | 3" BUTTERFLY V | FLANGE | NEW CHEMICAL FEED BDG - TANK 1 ISOLATION | LEVER | | |
| DG-01 | 4" PLUG VALVE | FLANGE | DIGESTER NO. 1 - DG ISOLATION | HANDWHEEL | | TYPE 2 | DR-9 | 3" BUTTERFLY V | FLANGE | NEW CHEMICAL FEED BDG - TANK 2 ISOLATION | LEVER | | |
| DG-02 | 4" PLUG VALVE | FLANGE | DIGESTER NO. 1 - DG ISOLATION | HANDWHEEL | | TYPE 2 | DR-10 | 3" DIAPHRAGM VLV | TRU UNION | NEW CHEMICAL FEED BDG - TANK 1 DRAIN | HANDWHEEL | | |
| DG-03 | 4" PLUG VALVE | FLANGE | DIGESTER NO. 1 - DG ISOLATION | HANDWHEEL | | TYPE 2 | DR-11 | 3" DIAPHRAGM VLV | TRU UNION | NEW CHEMICAL FEED BDG - TANK 2 DRAIN | HANDWHEEL | | |
| DG-04 | 4" PLUG VALVE | FLANGE | DIGESTER NO. 2 - DG ISOLATION | HANDWHEEL | | TYPE 2 | DR-12 | 3" DIAPHRAGM VLV | TRU UNION | NEW CHEMICAL FEED BDG - DRAIN HEADER | HANDWHEEL | | |
| DG-05 | 4" PLUG VALVE | FLANGE | DIGESTER NO. 2 - DG ISOLATION | HANDWHEEL | | TYPE 2 | DR-13 | 4" PLUG VALVE | MJ | NEW CHEMICAL FEED BDG - CONTAINMENT SUMP DRAIN | NUT | | EXT STEM, VALVE BOX AND COVER |
| DG-06 | 4" PLUG VALVE | FLANGE | DIGESTER NO. 2 - DG ISOLATION | HANDWHEEL | | TYPE 2 | | | | | | | |
| DG-07 | 4" PLUG VALVE | FLANGE | DIGESTER CONTROL BUILDING - COGEN DG ISOLATION | HANDWHEEL | | TYPE 2 | | | | | | | |
| DG-08 | 6" PLUG VALVE | FLANGE | DIGESTER CONTROL BUILDING - WGB ISOLATION | HANDWHEEL | | TYPE 2 | | | | | | | |
| DG-09 | 6" PLUG VALVE | FLANGE | WASTE GAS BURNER - ISOLATION | HANDWHEEL | | TYPE 2 | | | | | | | |
| DL-01 | 4" PLUG VALVE | FLANGE | DIGESTER NO. 1 - LEVEL SENSOR ISOLATION | NUT | | | | | | | | | |
| DL-02 | 4" PLUG VALVE | FLANGE | DIGESTER NO. 1 - LEVEL SENSOR ISOLATION | NUT | | | | | | | | | |
| DL-03 | 4" PLUG VALVE | FLANGE | DIGESTER NO. 2 - LEVEL SENSOR ISOLATION | NUT | | | | | | | | | |
| DL-04 | 4" PLUG VALVE | FLANGE | DIGESTER NO. 2 - LEVEL SENSOR ISOLATION | NUT | | | | | | | | | |

NOTES:

- THIS SCHEDULE LISTS ONLY PROCESS VALVES, 3" AND LARGER. THE SCHEDULE DOES NOT GUARANTEE THAT ALL VALVES HAVE BEEN INCLUDED, THAT ARE PART OF THIS PROJECT. THE CONTRACTOR SHALL PROVIDE ALL VALVES SHOWN ON THE DRAWINGS WHETHER OR NOT THEY ARE SHOWN IN THE SCHEDULE.
- ALL BUTTERFLY AND PLUG VALVES NOT INDICATED AS TYPE 2 OR TYPE 3 ARE TYPE 1.

VALVE NUMBER CODE IDENTIFICATION LEGEND:

| | | |
|-----|-------------------------|---|
| A | AIR | NUMBERING STARTS WITH A-11 THIS PROJECT |
| PS | PRIMARY SLUDGE | NUMBERING STARTS WITH PS-01 THIS PROJECT |
| PW | PLANT WATER (NPW) | NUMBERING STARTS WITH PW-31 THIS PROJECT |
| RAS | RETURN ACTIVATED SLUDGE | NUMBERING STARTS WITH RAS-19 THIS PROJECT |
| S | SLUDGE | NUMBERING STARTS WITH S-41 THIS PROJECT |
| SC | SCUM | NUMBERING STARTS WITH SC-11 THIS PROJECT |
| WAS | WASTE ACTIVATED SLUDGE | NUMBERING STARTS WITH WAS-21 THIS PROJECT |
| FM | FORCE MAIN | NUMBERING STARTS WITH FM-01 THIS PROJECT |
| DS | DIGESTED SLUDGE | NUMBERING STARTS WITH DS-01 THIS PROJECT |
| DG | DIGESTER GAS | NUMBERING STARTS WITH DG-01 THIS PROJECT |
| HW | HOT WATER | NUMBERING STARTS WITH HW-01 THIS PROJECT |
| DR | DRAIN | NUMBERING STARTS WITH DR-01 THIS PROJECT |
| DL | DIGESTER LEVEL | NUMBERING STARTS WITH DL-01 THIS PROJECT |

"For Viewing Purposes Only - Visit www.wesslerengineering.com to Purchase"

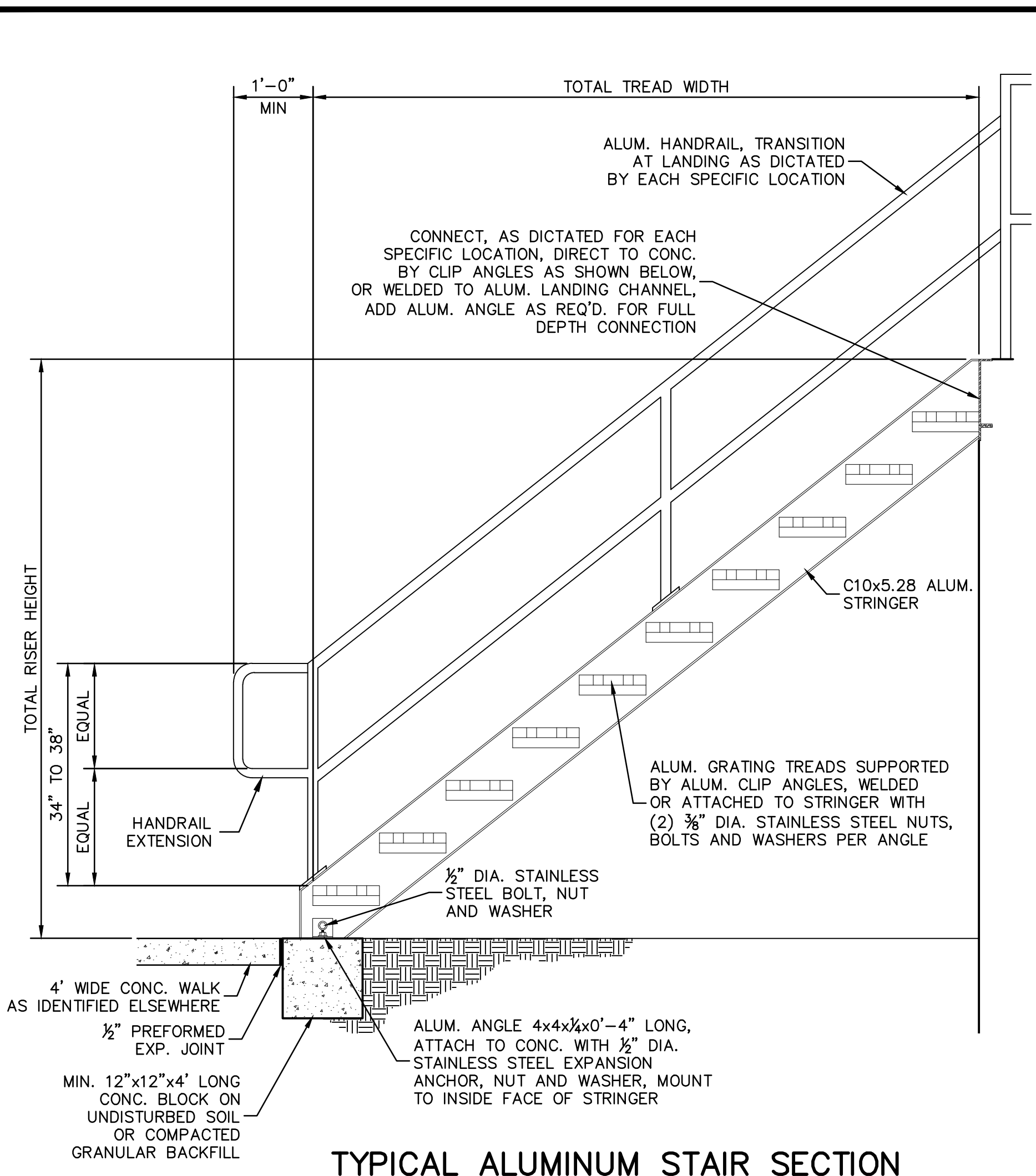
| | | | | | | |
|--|----------------|-------------------|-----|------|----------|-----------------------|
| SCALE VERIFICATION BAR IS ONE INCH LONG ON ORIGINAL DRAWING | DRAWN BY | WBJ | NO. | DATE | INITIALS | REVISION DESCRIPTIONS |
| | CHECKED BY | ALT | | | | |
| | APPROVED BY | GLR | | | | |
| | ISSUE DATE | SEPTEMBER 4, 2018 | | | | |
| | PROJECT NUMBER | 162813-04-003 | | | | |



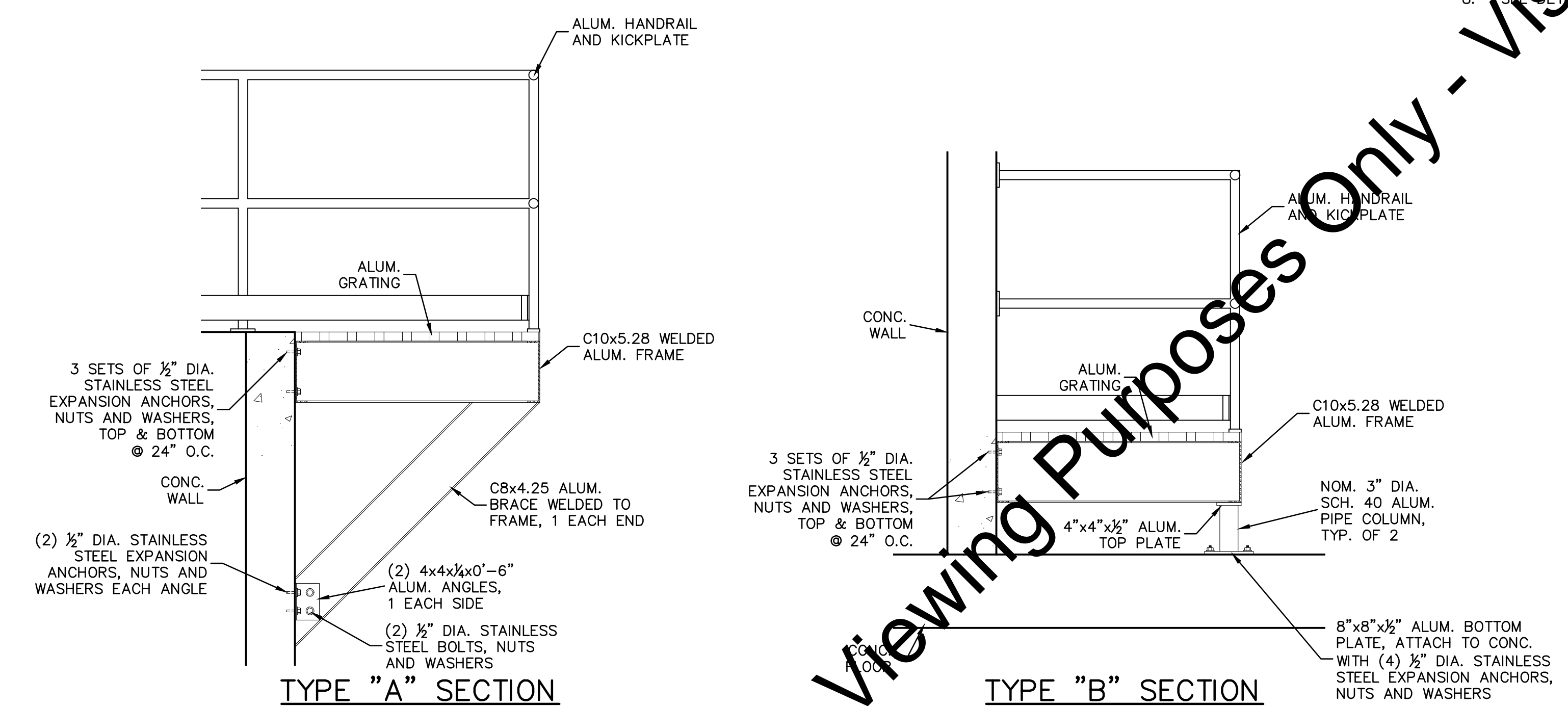
| | |
|--|--|
| WASTEWATER TREATMENT PLANT EXPANSION - 2017 | |
| CITY OF WARSAW, INDIANA | |
| PROCESS VALVE SCHEDULE | |

| |
|--------------------------|
| SHEET NO. MC03 |
| PAGE NO. 241 |

Drawing: J:\Warsaw\Projects\162813-Warsaw-WWTP-Expansion\CAD\04-001\DWG\Sheets\MC03.dwg | Layout: MC03 | Plotter: 09/04/18 @ 01:09:37 | L:\esaweb\Bj.Dont



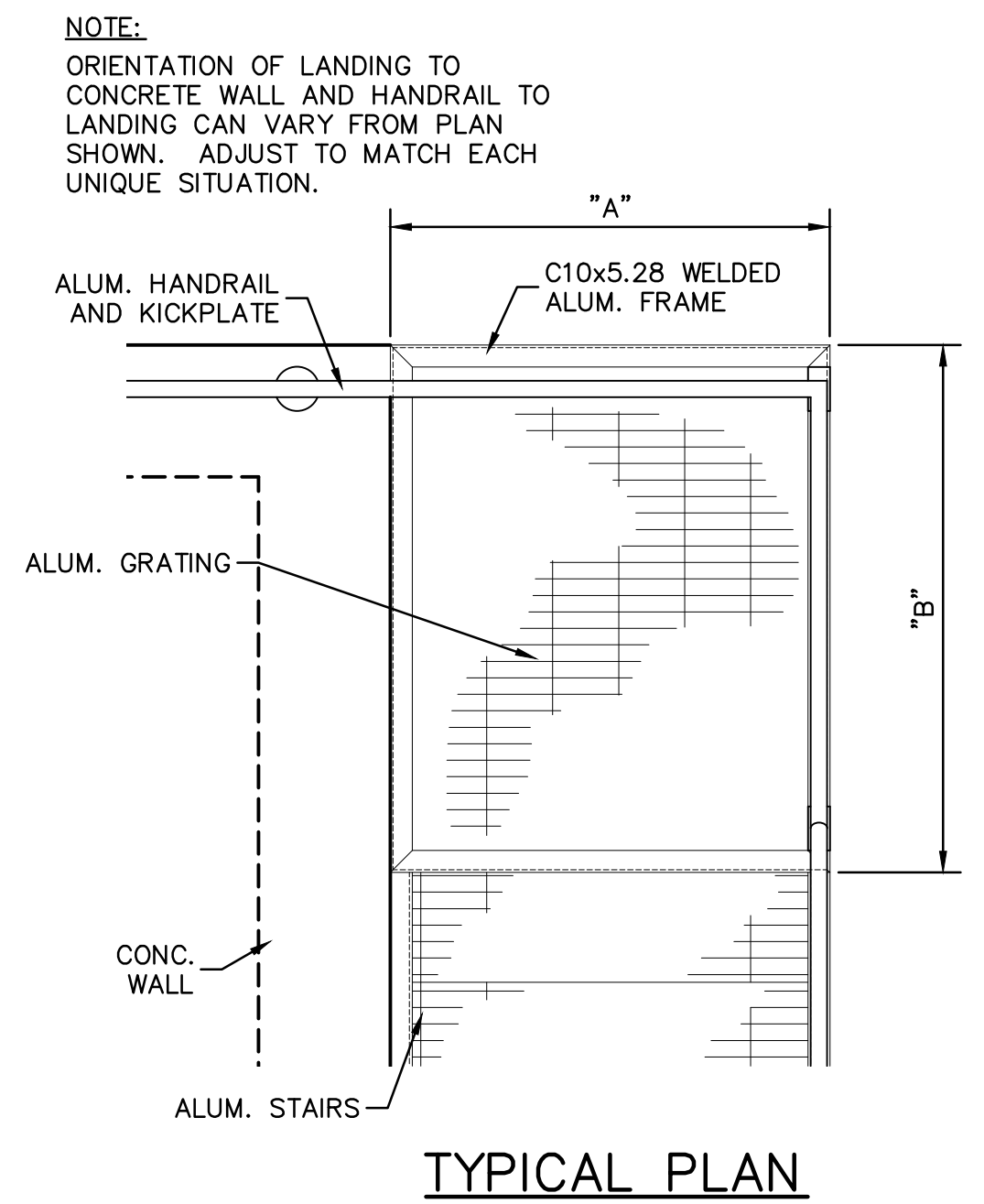
TYPICAL ALUMINUM STAIR SECTION



NEW STAIR LANDING DETAILS

| NO. | LOCATION | TREADS | | RISERS | | STAIRS INSIDE WIDTH | STAIR TREAD WIDTH | LANDING | | REMARKS |
|-----|---|----------|--------------|----------|--------------|---------------------|-------------------|---------|---------|--|
| | | QUANTITY | TOTAL LENGTH | QUANTITY | TOTAL HEIGHT | | | "A" | "B" | |
| C-1 | NEW GRIT TANKS | 5 | 4'-2" | 6 | 3'-6" | 3'-0" | 10" | 18'-0" | 6'-0" | ADDITIONAL BRACING AS SHOWN ON SHT NO. CC05 |
| C-2 | NEW GRIT TANKS | 10 | 8'-4" | 11 | 6'-10" | 3'-0" | 10" | | | |
| D-1 | NEW PRIMARY CONTROL BUILDING | 5 | 4'-2" | 6 | ±3'-8 1/4" | 3'-0" | 10" | 4'-4" | 4'-1" | UPPER LANDING - SEE SUPPORT LANDING DETAIL, TYPE "B" SECTION |
| | | 13 | 10'-10" | 14 | ±8'-6 1/2" | 3'-0" | 10" | 4'-4" | 4'-1" | LOWER LANDING - SEE SUPPORT LANDING DETAIL, TYPE "B" SECTION |
| | | 9 | 7'-6" | 10 | ±6'-1 1/4" | 3'-0" | 10" | | | 18'-4" TOTAL STAIR HEIGHT |
| D-2 | NEW PRIMARY CLARIFIER NO. 1 | 8 | 6'-8" | 9 | 5'-9" | 3'-0" | 10" | | | SEE NOTE 5 BELOW |
| D-3 | NEW PRIMARY CLARIFIER NO. 2 | 8 | 6'-8" | 9 | 5'-9" | 3'-0" | 10" | | | SEE NOTE 5 BELOW |
| E-1 | NEW SELECTOR TANK | 6 | 5'-0" | 7 | 4'-0" | 3'-0" | 10" | | | |
| E-2 | NEW SELECTOR TANK | 6 | 5'-0" | 7 | ±4'-2 1/2" | 3'-0" | 10" | 5'-0" | 4'-0" | TOP LANDING - SEE SUPPORT LANDING DETAIL, TYPE "B" SECTION |
| | | 7 | 5'-10" | 8 | ±4'-2 1/2" | 3'-0" | 10" | 4'-0" | 3'-0" | MID LANDING - SEE SUPPORT LANDING DETAIL, TYPE "A" SECTION |
| E-3 | NEW SELECTOR TANK | 6 | 5'-0" | 7 | 5'-0" | 3'-0" | 10" | | | |
| E-4 | EXISTING OXIDATION DITCHES - STEEL STAIRS | 6 | 4'-2" | 7 | | 3'-0" | 10" | | | |
| E-5 | NEW FINAL CLARIFIER SPLITTER STRUCTURE | 5 | 4'-2" | 6 | 3'-3" | 3'-0" | 10" | | | |
| F-1 | EXISTING FINAL CLARIFIER NO. 2 | 5 | 4'-2" | 6 | 3'-6" | 3'-0" | 10" | | | |
| F-2 | NEW FINAL CLARIFIER NO. 3 | 6 | 5'-0" | 6 | 3'-6" | 3'-0" | 10" | | | TOP STEP FLUSH WITH TOP OF WALL |
| F-3 | NEW FINAL CLARIFIER NO. 3 | 5 | 4'-2" | 6 | 3'-6" | 3'-0" | 10" | | | |
| F-4 | NEW SLUDGE PUMP STATION NO. 2 | 14 | 11'-8" | 15 | 8'-8" | 3'-0" | 10" | | | 20'-3" TOTAL STAIR HEIGHT |
| | | 14 | 11'-8" | 15 | 8'-0" | 3'-0" | 10" | 4'-0" | 7'-0" | MID LANDING - SEE SUPPORT LANDING DETAIL, TYPE "A" SECTION |
| | | 4 | 3'-4" | 5 | 3'-7" | 3'-0" | 10" | ±4'-10" | ±4'-10" | SEE NOTE 6 BELOW |
| H-1 | NEW ANAEROBIC DIGESTERS AND CONTROL BDG | 13 | 10'-10" | 14 | 8'-0" | 3'-0" | 11" | | | 12'-0" TOTAL STAIR HEIGHT |
| | | 6 | 5'-0" | 7 | 4'-0" | 3'-0" | 11" | ±4'-10" | ±4'-10" | MID LANDING - SEE SUPPORT LANDING DETAIL, TYPE "B" SECTION |
| H-2 | NEW ANAEROBIC DIGESTERS AND CONTROL BDG | 23 | | 24 | 10'-0" | 3'-0" | 11" | size | size | SEE NOTE 7 BELOW |
| J-1 | EXISTING SOLIDS HANDLING BUILDING | 8 | 6'-8" | 9 | 5'-0" | 3'-0" | 10" | | | |
| J-2 | MODIFIED HOLDING TANKS - STEEL STAIRS | 20 | 18'-4" | 21 | 11'-11" | 3'-6" | 11" | | | SEE NOTE 7 BELOW |
| | | 20 | 18'-4" | 21 | 11'-11" | 3'-6" | 11" | 4'-6" | 4'-6" | BOTTOM LANDING - SEE NOTE 7 BELOW |
| J-3 | MODIFIED HOLDING TANKS - STEEL STAIRS | | 18'-4" | 21 | 11'-11" | 3'-6" | 11" | | | SEE NOTE 8 BELOW |
| | | | 18'-4" | 21 | 13'-6" | 3'-6" | 11" | VARIES | 4'-6" | BOTTOM LANDING - SEE NOTE 7 BELOW |
| K-1 | NEW CHEMICAL FEED BUILDING | | 4'-2" | 6 | | | 10" | | | |

- NOTES:
- ALL STAIR SYSTEMS SHOWN IN THIS SCHEDULE ARE ALUMINUM UNLESS SPECIFICALLY NOTED OTHERWISE. ASSEMBLY DETAILS FOR NON ALUMINUM STAIR SYSTEMS ARE SHOWN ELSEWHERE IN THESE DRAWINGS.
 - THE LANDING WIDTHS AND LENGTHS SHOWN ARE BASED ON THE ASSUMPTION OF THE GRATING BEING PLACED DIRECTLY OVER 2' WIDE STRUCTURAL CHANNELS. ACTUAL CONSTRUCTION TECHNIQUES MAY ALTER DIMENSIONS.
 - VERIFY ALL INFORMATION SHOWN WITH THE DRAWINGS AND ACTUAL FIELD CONDITIONS AND FINAL ELEVATIONS.
 - INSTALLATIONS TERMINATING AT SIDEWALKS SHALL BE LEVEL, WITHOUT HAVE A CHANGE OF ELEVATION, UNTIL A MINIMUM OF 4' OUT FROM BOTTOM STEP OF ANY STAIRWAY ALONG THE SIDEWALK.
 - AT STRUCTURES ON THE SITE REGRADE PLANS, WHERE SITE LANDSCAPING STONE IS SHOWN ADJACENT TO STAIRS, EXTEND THE STONE COMPLETELY UNDER THE STAIRS.
 - THE TOTAL HEIGHT FOR THE PRIMARY AND FINAL CLARIFIER STAIRS IS BASED ON EQUIPMENT MANUFACTURER PROVIDED DRAWINGS INDICATING A SPECIFIC DISTANCE FROM THE TOP OF WALL TO THE TOP OF LANDING ON BRIDGE. CONFIRM WITH THE CLARIFIER EQUIPMENT MANUFACTURER SELECTED THE TRUE DISTANCE AND ADJUST THE VERTICAL TREAD SPACING TO SUIT.
 - SEE SUPPORT LANDING DETAIL, TYPE "A" SECTION FOR STAIRS NO. F-4. SEE SHEET NO. FC17 FOR STAIR LANDING LAYOUT PLAN.
 - SEE DETAILS ON SHEETS NO. JS02 THROUGH JS06 FOR STAIRS AND LANDINGS CONFIGURATION AND SUPPORT.



TYPICAL PLAN

"For Viewing Purposes Only - Visit WesslerEngineering.com to Purchase"

| | | | | | |
|--|-------------------|-----|------|----------|-----------------------|
| SCALE VERIFICATION | DRAWN BY | NO. | DATE | INITIALS | REVISION DESCRIPTIONS |
| BAR IS ONE INCH LONG ON ORIGINAL DRAWING | CHECKED BY | NO. | DATE | INITIALS | REVISION DESCRIPTIONS |
| | APPROVED BY | NO. | DATE | INITIALS | REVISION DESCRIPTIONS |
| | ISSUE DATE | NO. | DATE | INITIALS | REVISION DESCRIPTIONS |
| | PROJECT NUMBER | NO. | DATE | INITIALS | REVISION DESCRIPTIONS |
| | WBJ | | | | |
| | ALT | | | | |
| | GLR | | | | |
| | SEPTEMBER 4, 2018 | | | | |
| | 162813-04-003 | | | | |

WESSLER ENGINEERING
More than a Project™

WASTEWATER TREATMENT PLANT EXPANSION - 2017

CITY OF WARSAW, INDIANA

MISCELLANEOUS CIVIL DETAILS

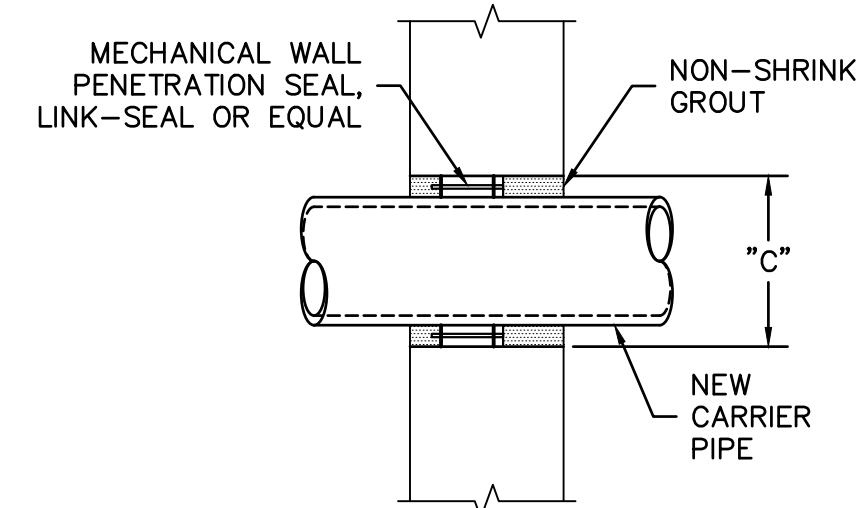
SHEET NO.
MC04

PAGE NO.
242

Drawing: W:\Warshaw\Projects\162813-04-001\DWG\Shells\MCO7_162813-Disc-Civil.dwg | Layout: MCO4 | Plotter: 09/04/18 @ 12:52:04 | LastSavedBy: DonT

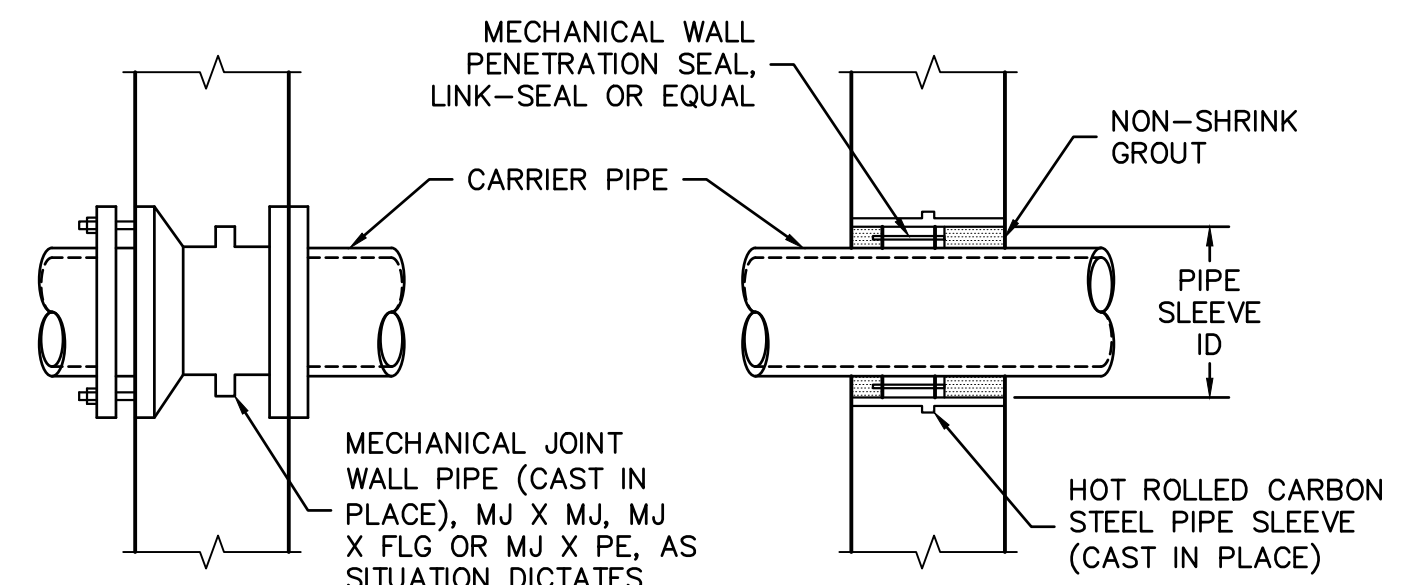
Drawing: J:\Warsaw\Projects\162813-Warsaw-WWTP-Expansion\CAD\04-001\DWG\Shells\MCO7_162813-Disc-Civil.dwg | Layout: MCO6 | Plotter: 09/04/18 @ 11:26:58 | LastSavedBy: MCo6

"For Viewing Purposes Only - Visit wesslerengineering.com to Purchase"



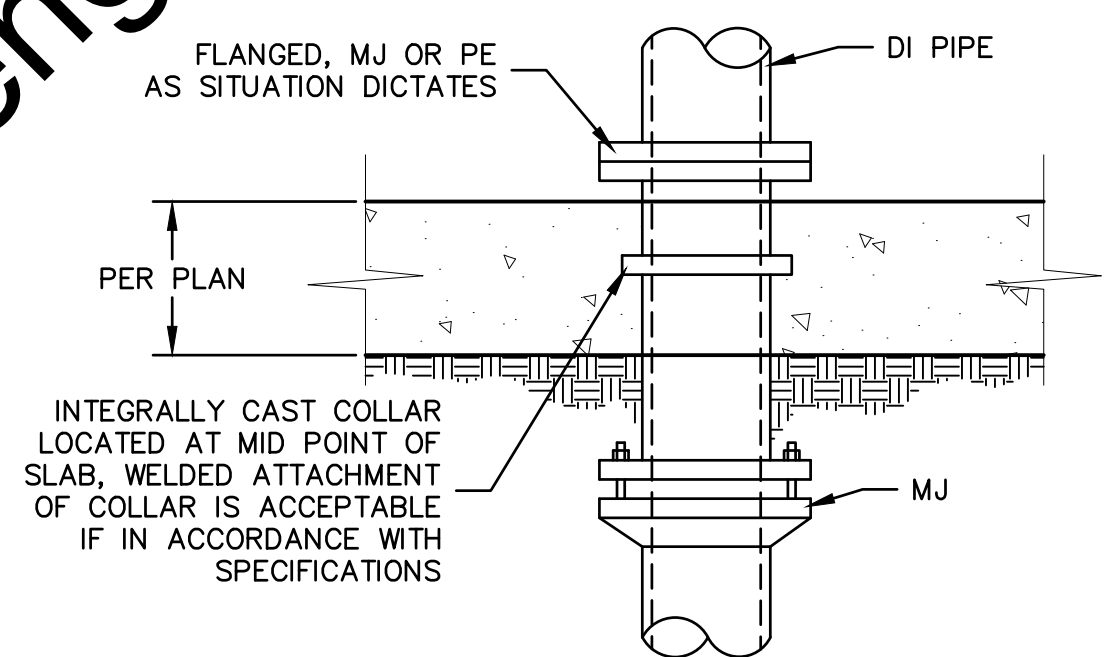
- NOTES:**
- "S" DIMENSION FOR NEW PIPE THRU NEW WALL APPLICATION SHALL BE THE I.D. OF THE PIPE SLEEVE.
 - "C" DIMENSION FOR NEW PIPE THRU EXISTING WALL APPLICATION SHALL BE THE DIAMETER OF THE CORE DRILLED HOLE REQUIRED.
 - THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE "S" OR "C" DIMENSION REQUIRED FOR THE SIZE OF CARRIER PIPE BEING INSTALLED.
 - ALL TYPE A WALL PIPE FASTENERS, STUDS, BOLTS, NUTS AND WASHERS, SHALL BE STAINLESS STEEL.

NEW PIPE THROUGH EXISTING WALL
SCALE: NONE

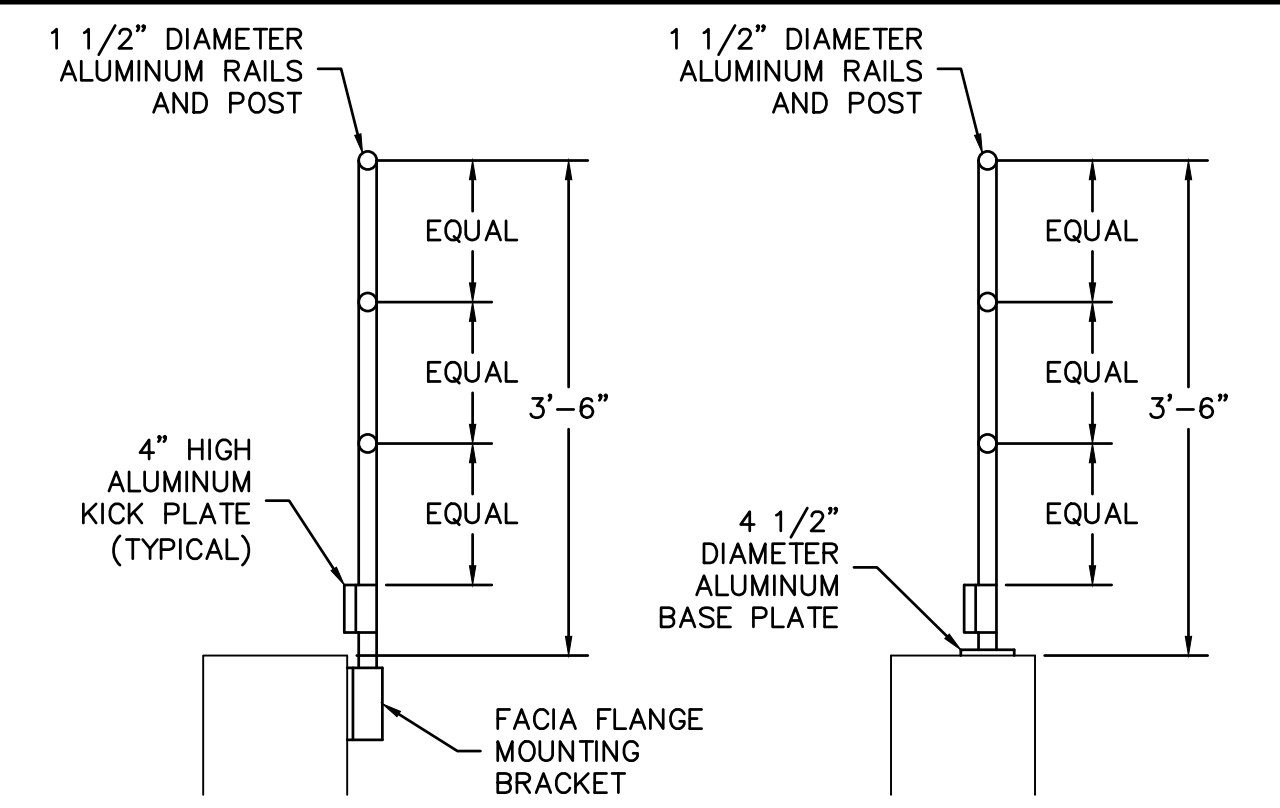


TYPE A (SUBMERGED APPLICATION)
TYPE B (NON-SUBMERGED APPLICATION)

NEW PIPE THROUGH NEW WALL
SCALE: NONE



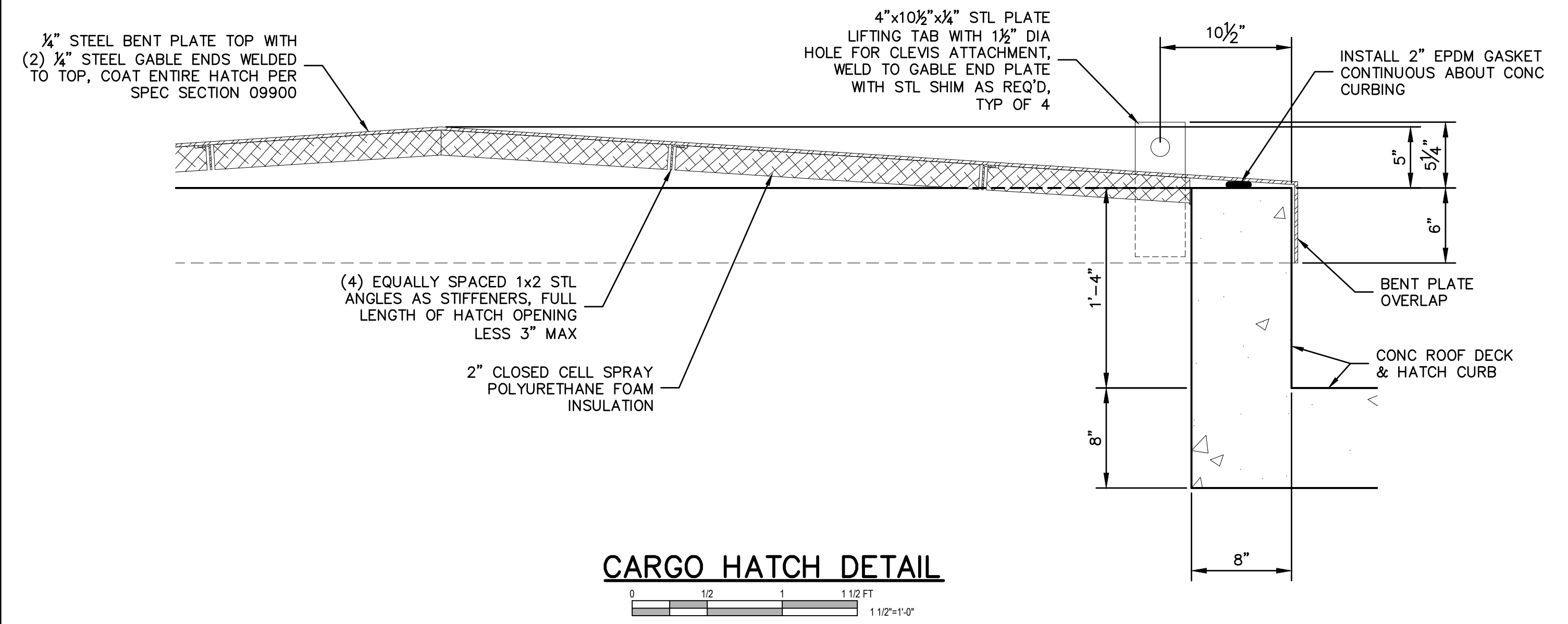
NEW PIPE THRU NEW BELOW GRADE SLAB
SCALE: NONE



SIDE MOUNT **TOP MOUNT**

- NOTES:**
- MOUNT HANDRAIL ON TOP OR SIDE AS INDICATED ON THE PLANS. MOUNT WITH STAINLESS STEEL EXPANSION ANCHORS, SIZED AS RECOMMENDED BY THE HANDRAIL MANUFACTURER.
 - TOP MOUNTED HANDRAIL SHOWN AS OFFSET ON PLANS, SHOULD BE OFFSET FROM WALL EDGE AS DIMENSIONED IN THIS DETAIL. CENTER ALL OTHER TOP MOUNTED HANDRAIL.

3-RAIL HANDRAIL
SCALE: NONE



CARGO HATCH DETAIL
0 1/2 1 1 1/2 FT
1 1/2"=1'-0"

| SCALE VERIFICATION | DRAWN BY | NO. | DATE | INITIALS | REVISION DESCRIPTIONS |
|--|-------------------|---------------|------|----------|-----------------------|
| BAR IS ONE INCH LONG ON ORIGINAL DRAWING | CHECKED BY | WBJ | | | |
| | APPROVED BY | ALT | | | |
| | ISSUE DATE | GLR | | | |
| | SEPTEMBER 4, 2018 | | | | |
| | PROJECT NUMBER | | | | |
| | | 162813-04-003 | | | |



WASTEWATER TREATMENT PLANT EXPANSION - 2017

CITY OF WARSAW, INDIANA

MISCELLANEOUS CIVIL DETAILS

SHEET NO.

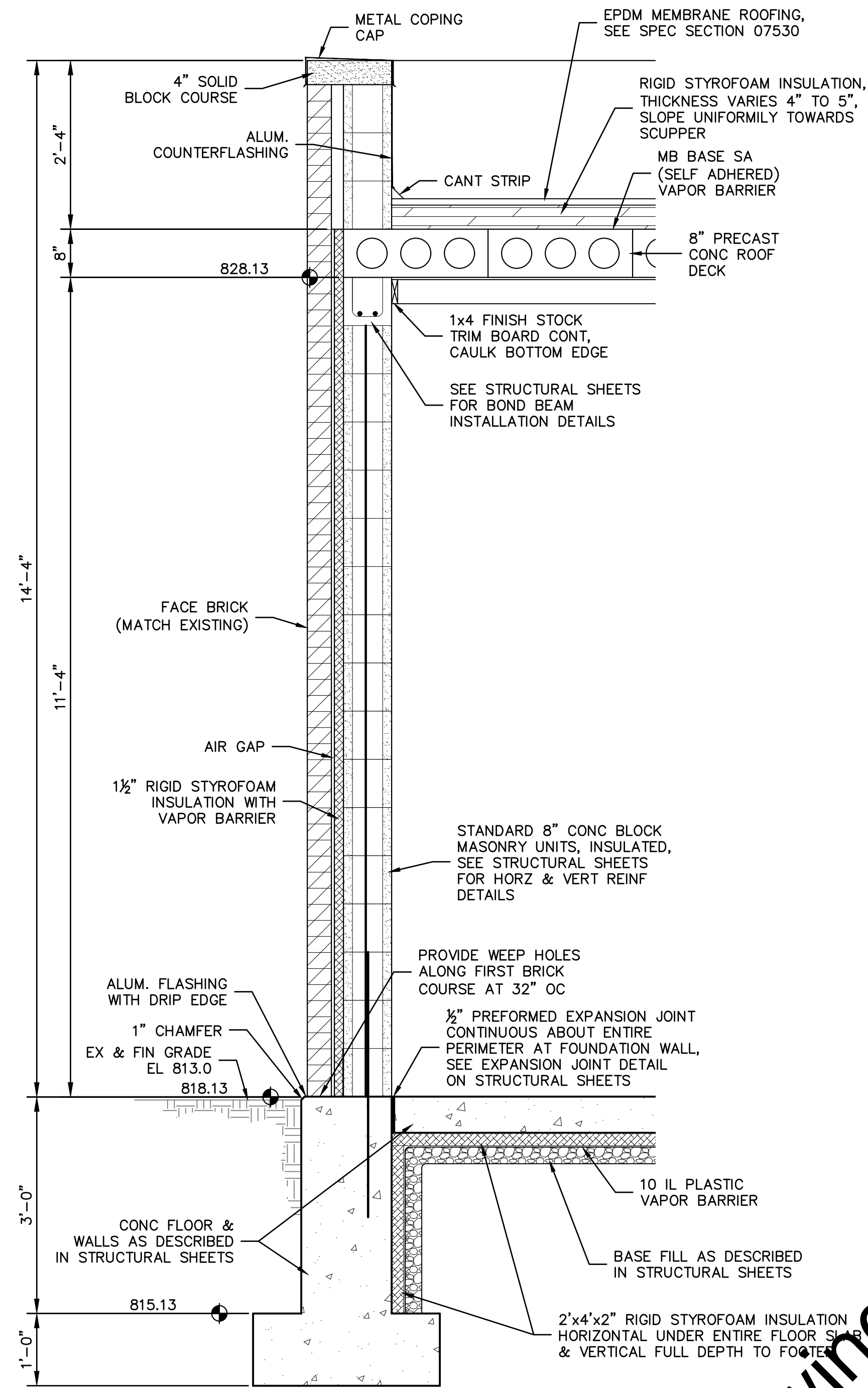
MC06

PAGE NO.

244

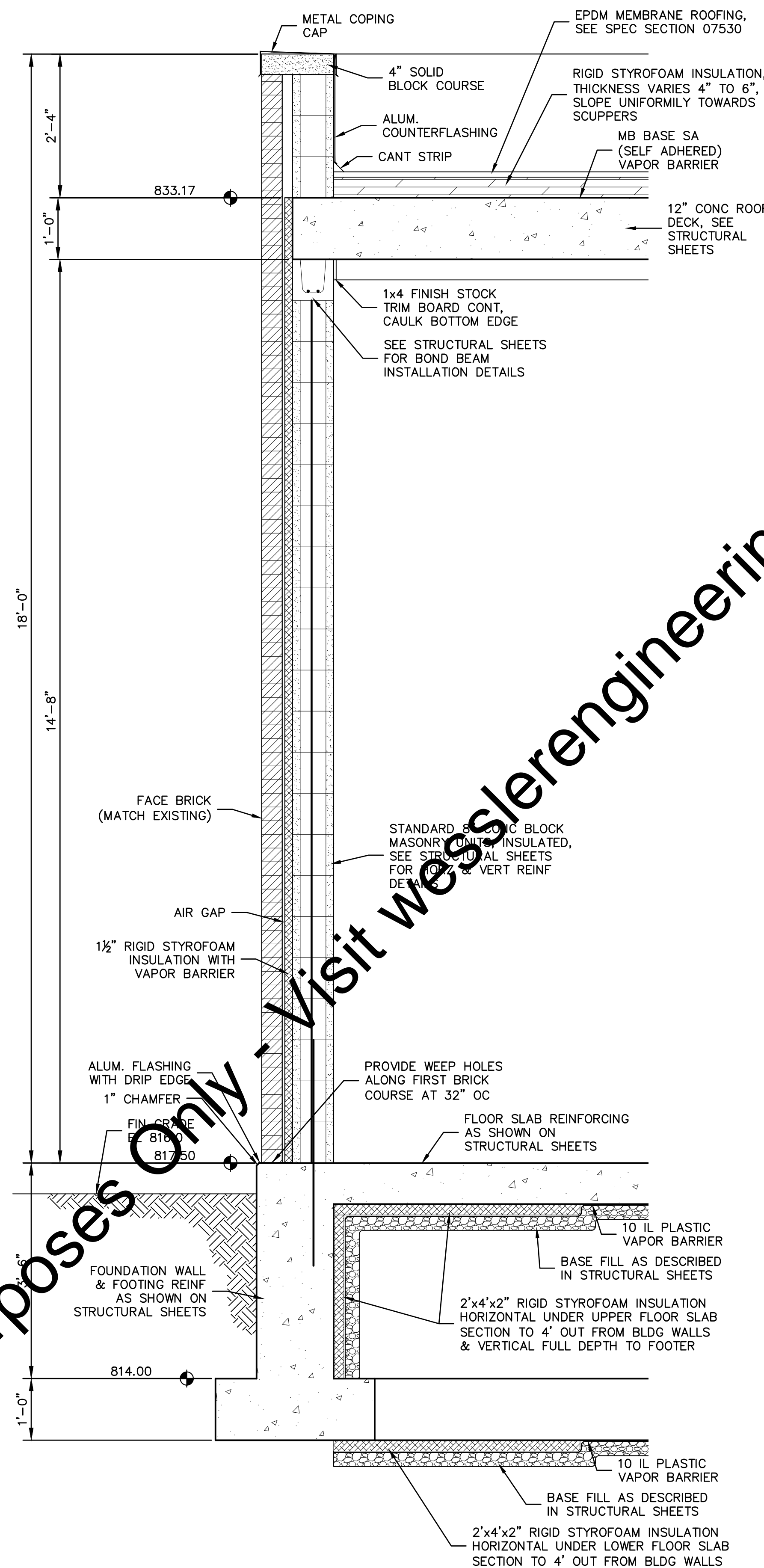
ARCHITECTURAL GENERAL NOTES:

- THE EXTERIOR FEATURES AND FINISHES FOR THE NEW BUILDINGS INCLUDED IN THIS PROJECT SHALL MATCH THE EXISTING BUILDINGS ON THIS SITE, INCLUDING MASONRY SHAPE, TEXTURE AND COLOR, METAL SIDING AND ROOF SHAPE, TEXTURE AND COLOR, DOOR/WINDOW FRAMES SHAPE, TEXTURE AND COLOR, AND SOFFITS, GUTTERS AND DOWNSPOUTS SHAPES, TEXTURES AND COLOR.



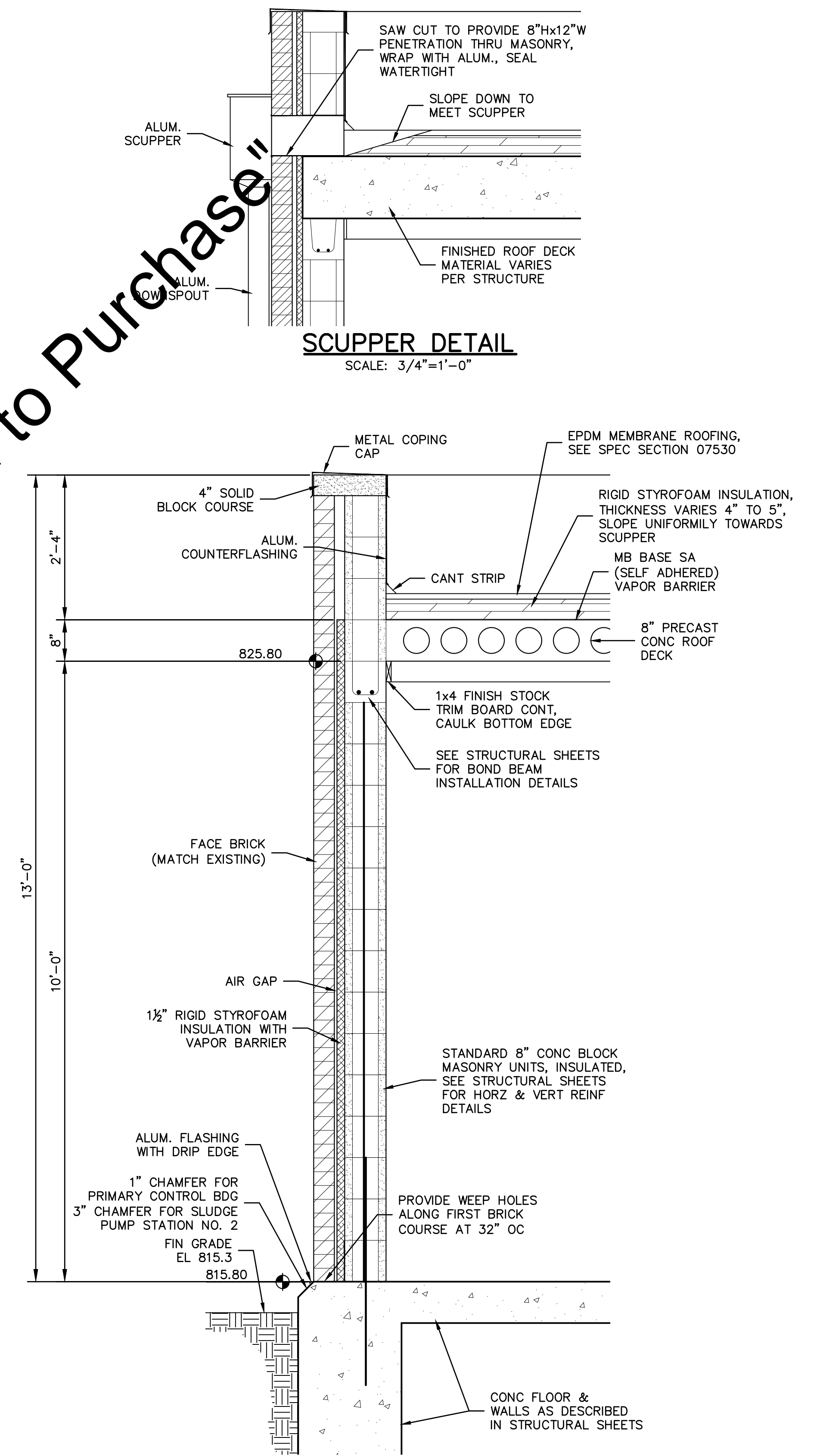
NEW BUMP OUT TO EXISTING SCREEN BUILDING TYPICAL WALL SECTION

0 1 2 3 FT 3/4"=1'-0"



NEW CHEMICAL FEED BUILDING TYPICAL WALL SECTION

0 1 2 3 FT 3/4"=1'-0"




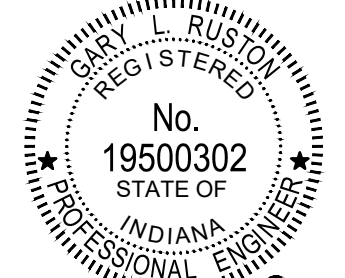
SCUPPER DETAIL
SCALE: 3/4"=1'-0"

NEW PRIMARY CONTROL BUILDING AND NEW SLUDGE PUMP STATION NO. 2 TYPICAL WALL SECTION

0 1 2 3 FT 3/4"=1'-0"

Drawing: J:\Warsaw\Projects\162813\WwTP_Expansion\CAD\04-001\DWG\Shells\MA02_162813-DWG-Arch.dwg | Layout: MA01 | Plotted: 09/04/18 @ 11:28:50 | LastSavedBy: Miken

| SCALE VERIFICATION | DRAWN BY | NO. | DATE | INITIALS | REVISION DESCRIPTIONS |
|---|----------------|-------------------|------|----------|-----------------------|
| BAR IS ONE INCH LONG ON ORIGINAL DRAWING  | CHECKED BY | WBJ | | | |
| | APPROVED BY | ALT | | | |
| | ISSUE DATE | GLR | | | |
| | PROJECT NUMBER | SEPTEMBER 4, 2018 | | | |
| | | 162813-04-003 | | | |

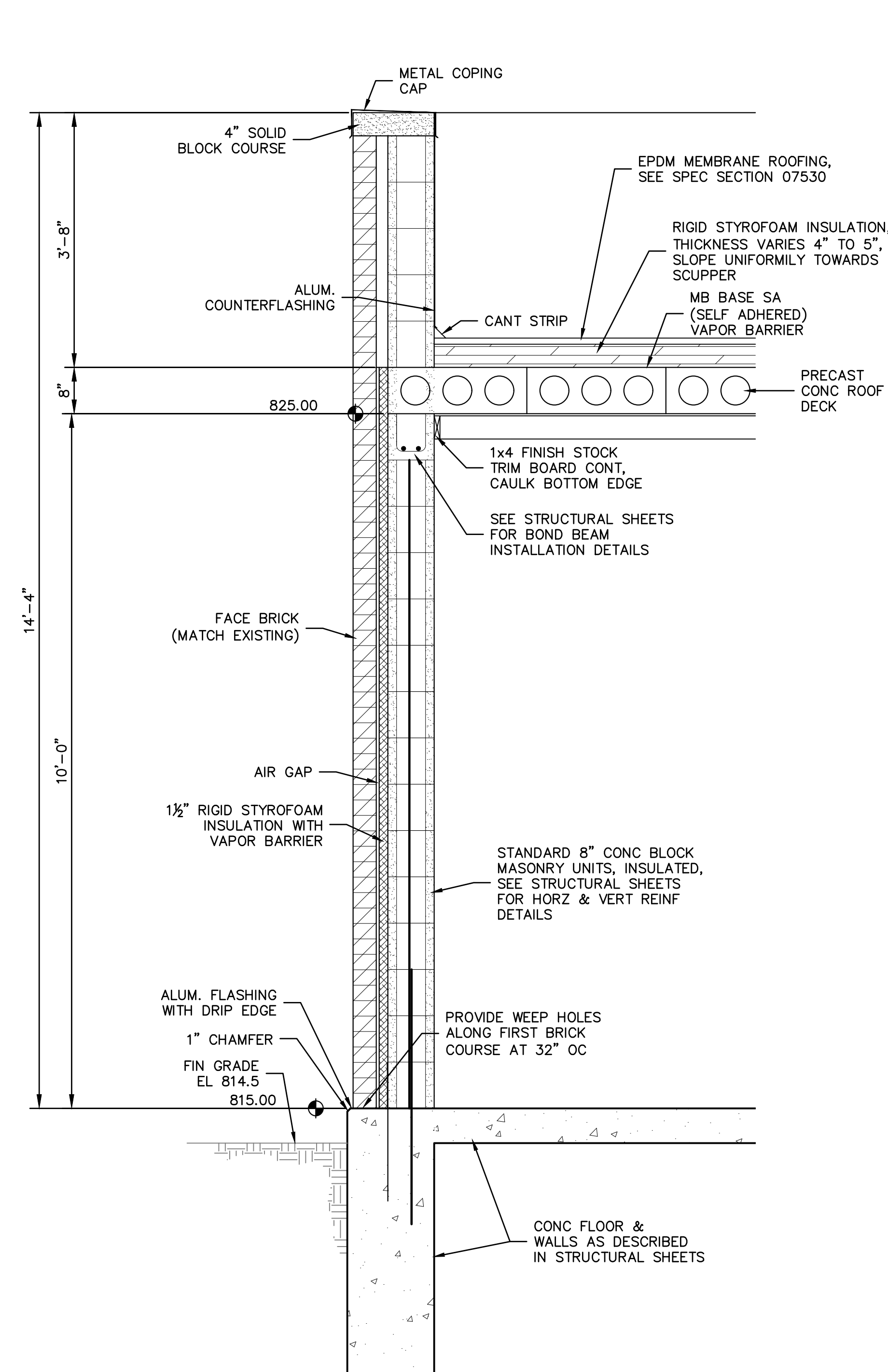

WESSLER ENGINEERING
More than a Project™

WASTEWATER TREATMENT PLANT EXPANSION - 2017
 CITY OF WARSAW, INDIANA
TYPICAL ARCHITECTURAL WALL SECTIONS AND MISCELLANEOUS ARCHITECTURAL DETAILS

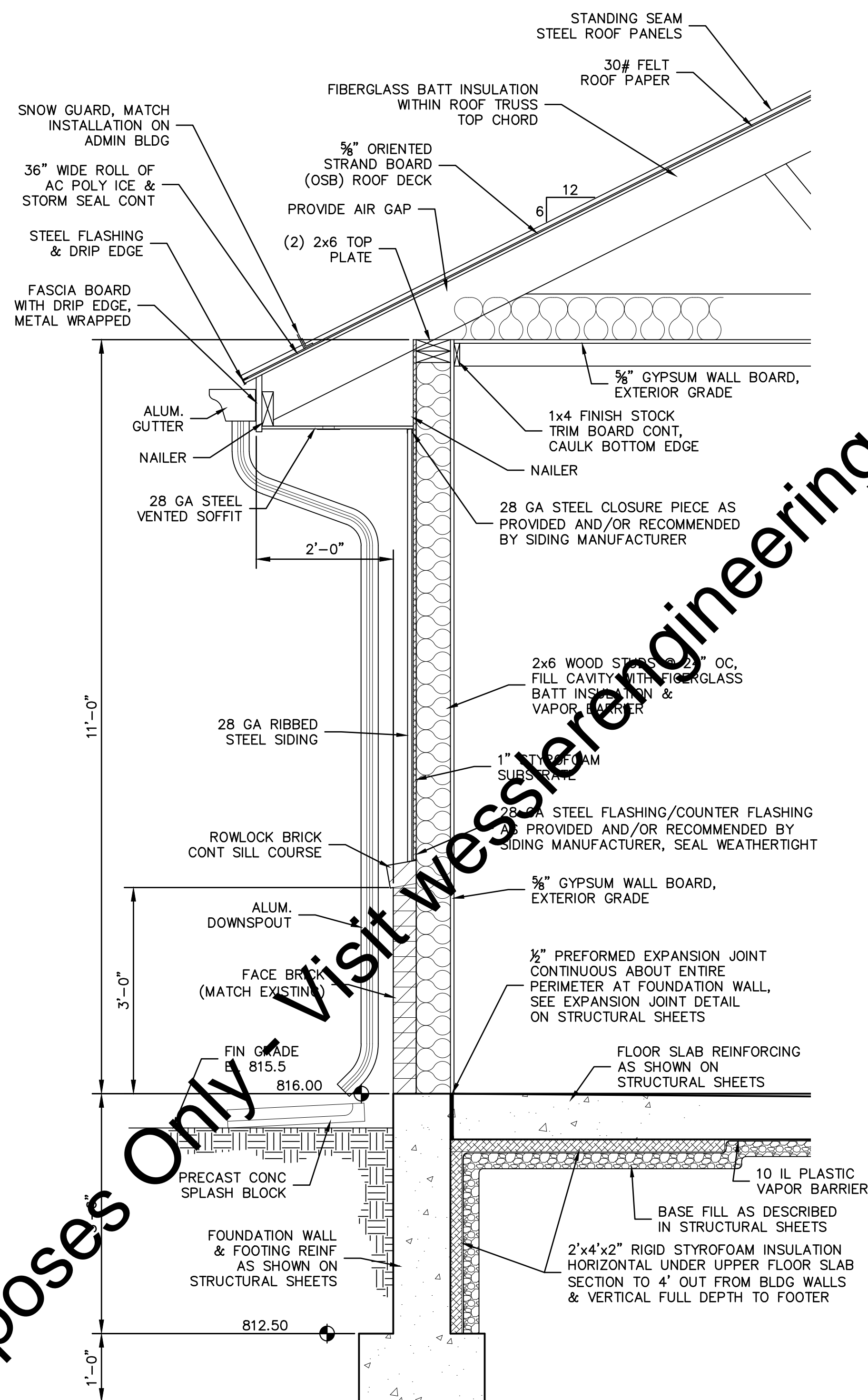
SHEET NO.
MA01
 PAGE NO.
 246

ARCHITECTURAL GENERAL NOTES:

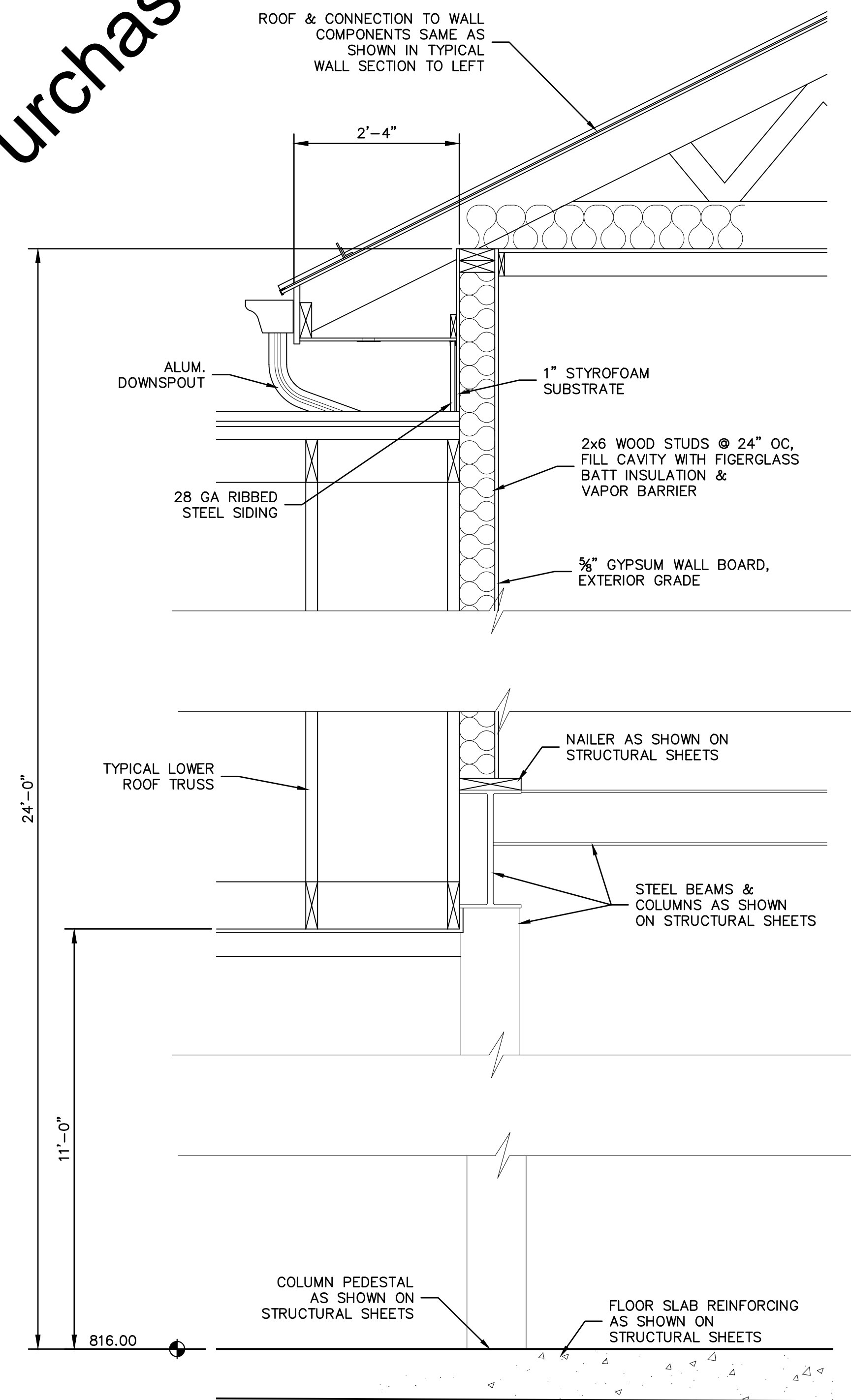
- THE EXTERIOR FEATURES AND FINISHES FOR THE NEW BUILDINGS INCLUDED IN THIS PROJECT SHALL MATCH THE EXISTING BUILDINGS ON THIS SITE, INCLUDING MASONRY SHAPE, TEXTURE AND COLOR, METAL SIDING AND ROOF SHAPE, TEXTURE AND COLOR, DOOR/WINDOW FRAMES SHAPES, TEXTURE AND COLOR, AND SOFFITS, GUTTERS AND DOWNSPOUTS SHAPES, TEXTURES AND COLOR.



**NEW ANAEROBIC DIGESTER CONTROL BUILDING
TYPICAL MASONRY WALL SECTION**



**NEW GARAGE
TYPICAL PERIMETER WALL SECTION**



**NEW GARAGE
TYPICAL UPPER SECTION WALL SECTION**



"For Viewing Purposes Only. Visit www.wesslerengineering.com to Purchase"

| SCALE VERIFICATION | DRAWN BY | NO. | DATE | INITIALS | REVISION DESCRIPTIONS |
|--|----------------|-------------------|------|----------|-----------------------|
| BAR IS ONE INCH LONG ON ORIGINAL DRAWING | DRAWN BY | WBJ | | | |
| | CHECKED BY | ALT | | | |
| | APPROVED BY | GLR | | | |
| | ISSUE DATE | SEPTEMBER 4, 2018 | | | |
| | PROJECT NUMBER | 162813-04-003 | | | |

WESSLER ENGINEERING
More than a Project™

WASTEWATER TREATMENT PLANT EXPANSION - 2017

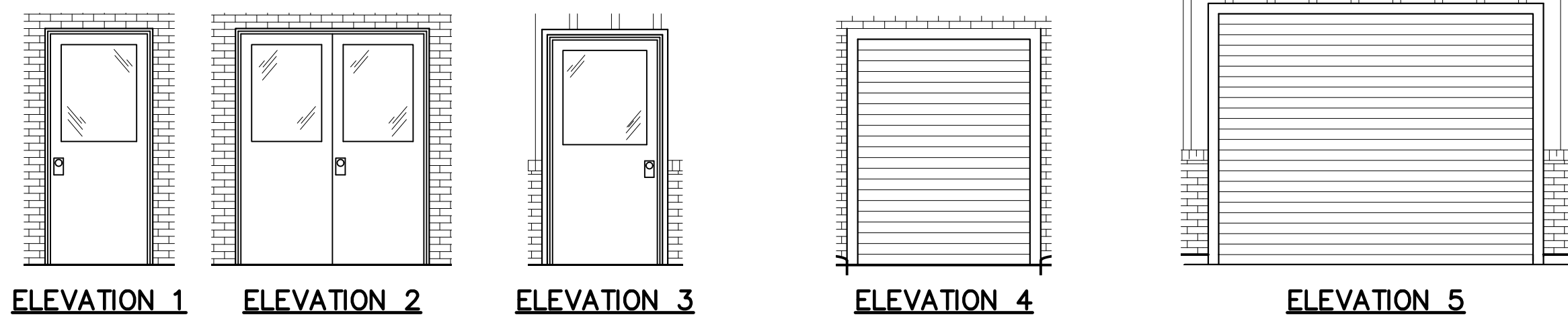
CITY OF WARSAW, INDIANA

TYPICAL ARCHITECTURAL WALL SECTIONS

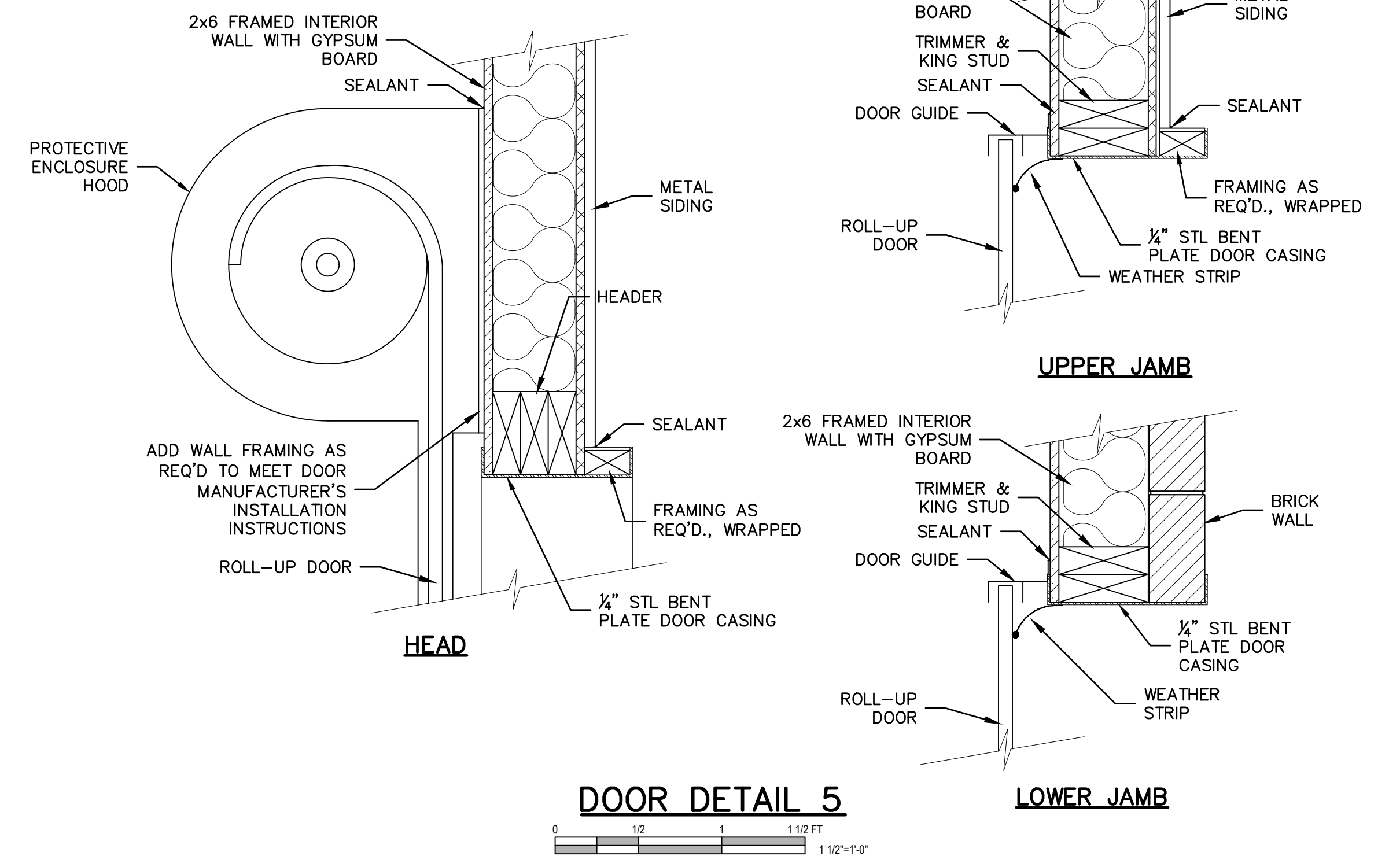
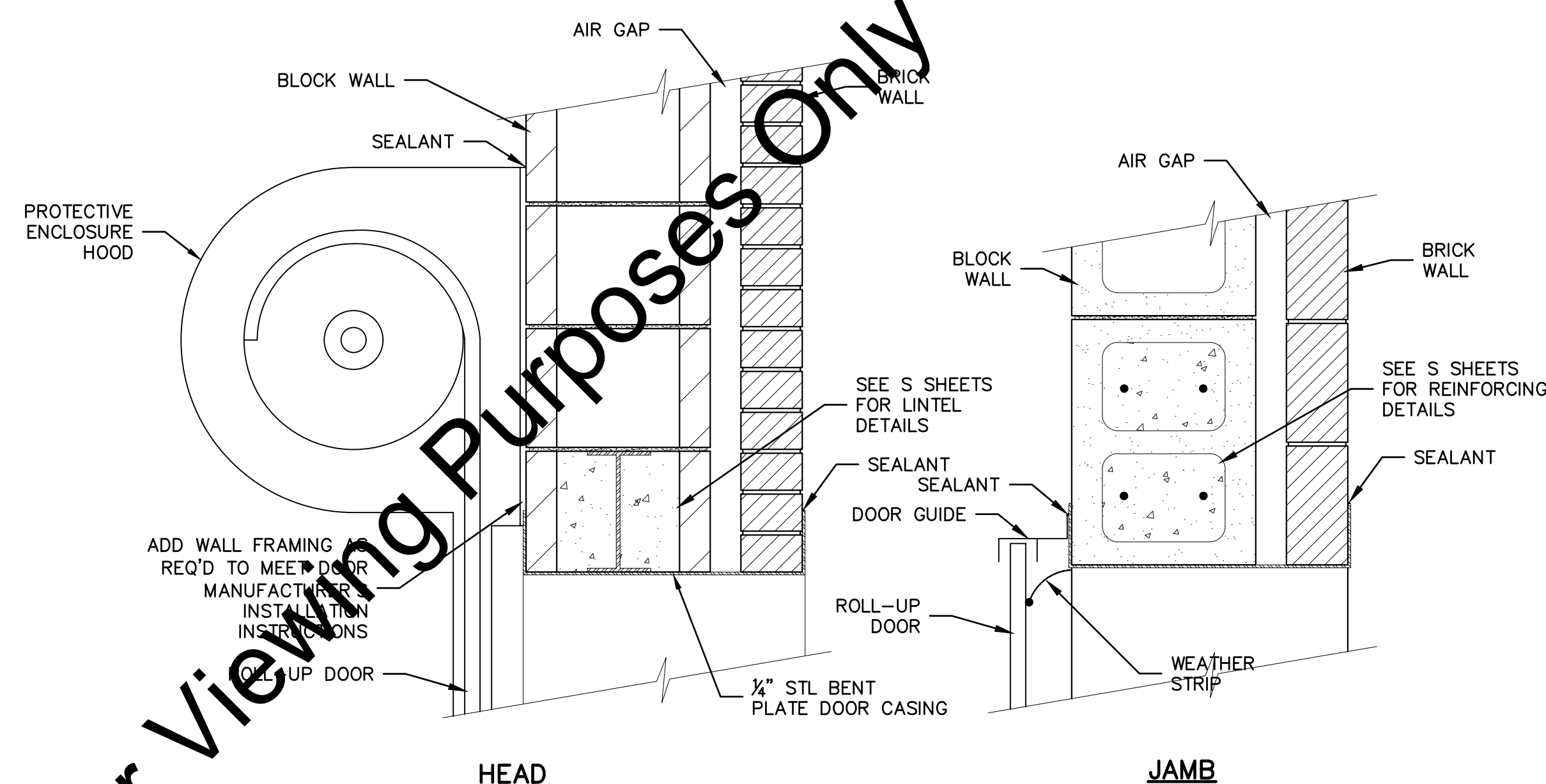
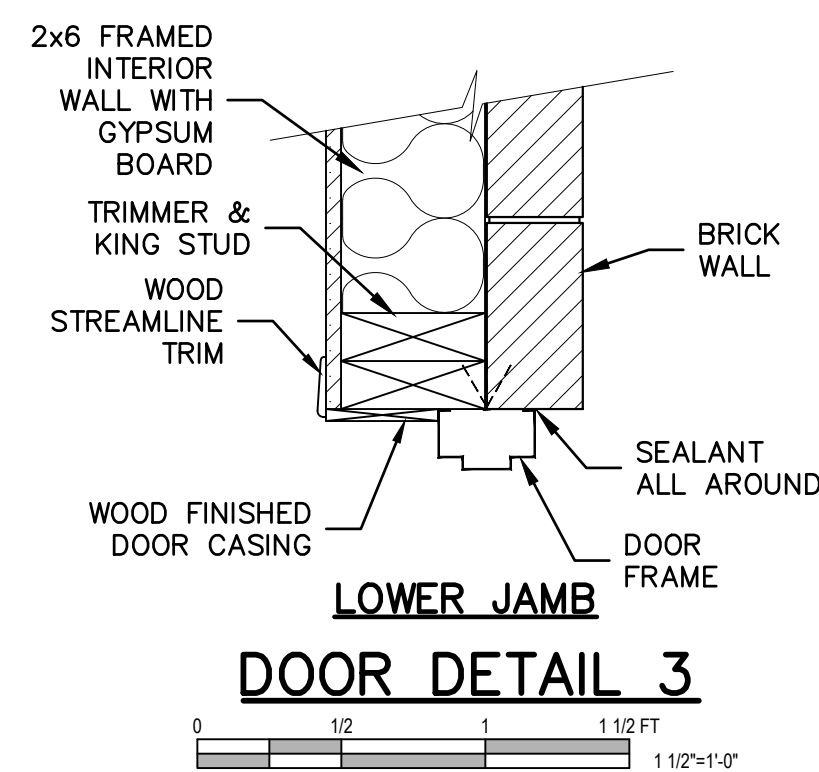
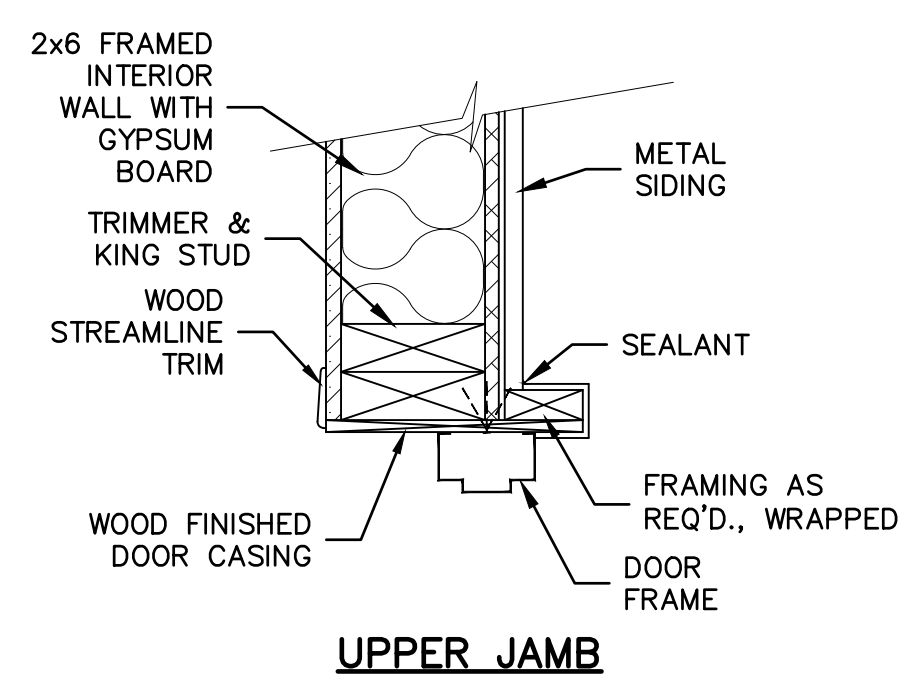
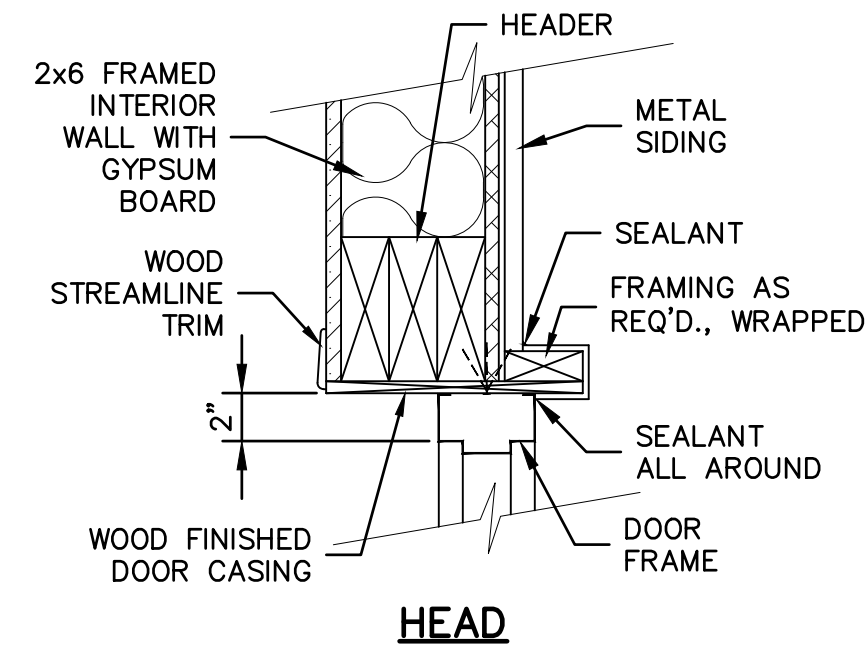
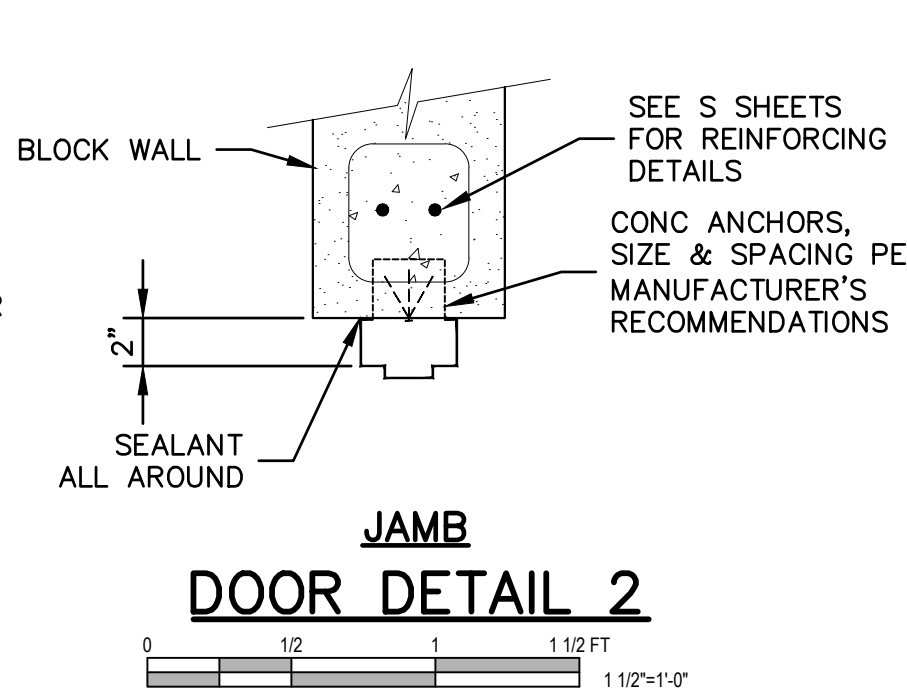
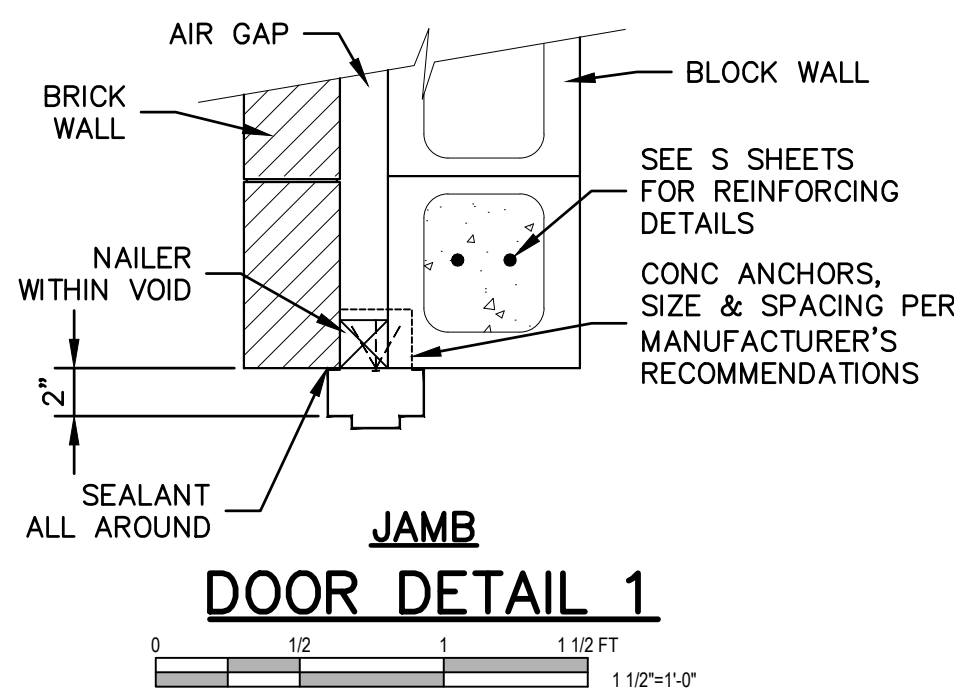
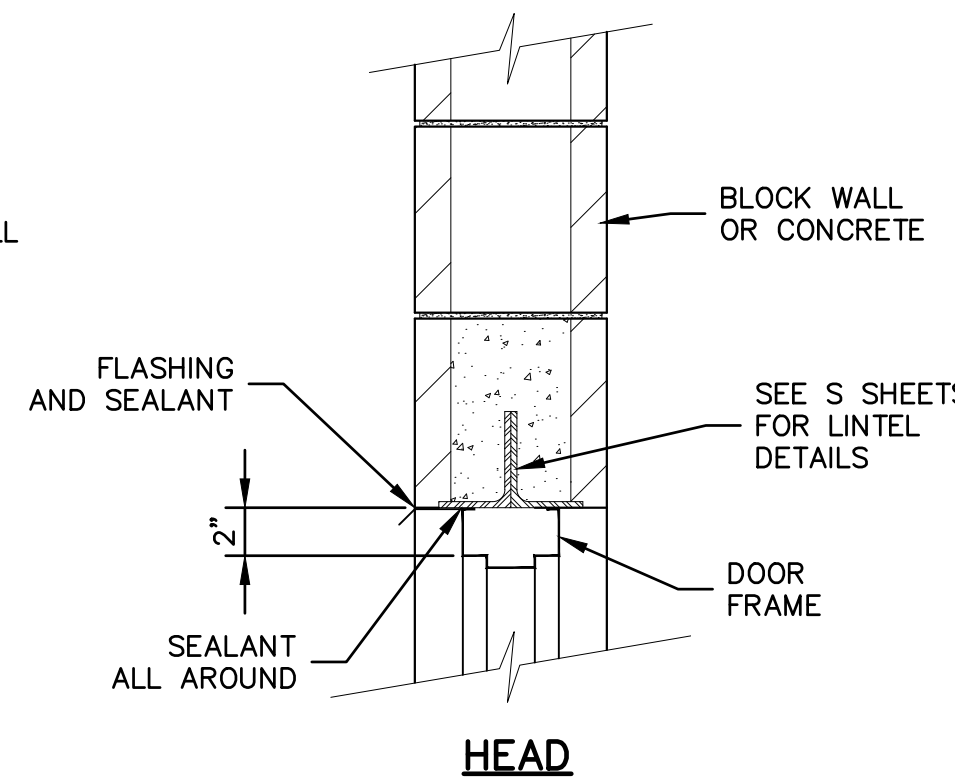
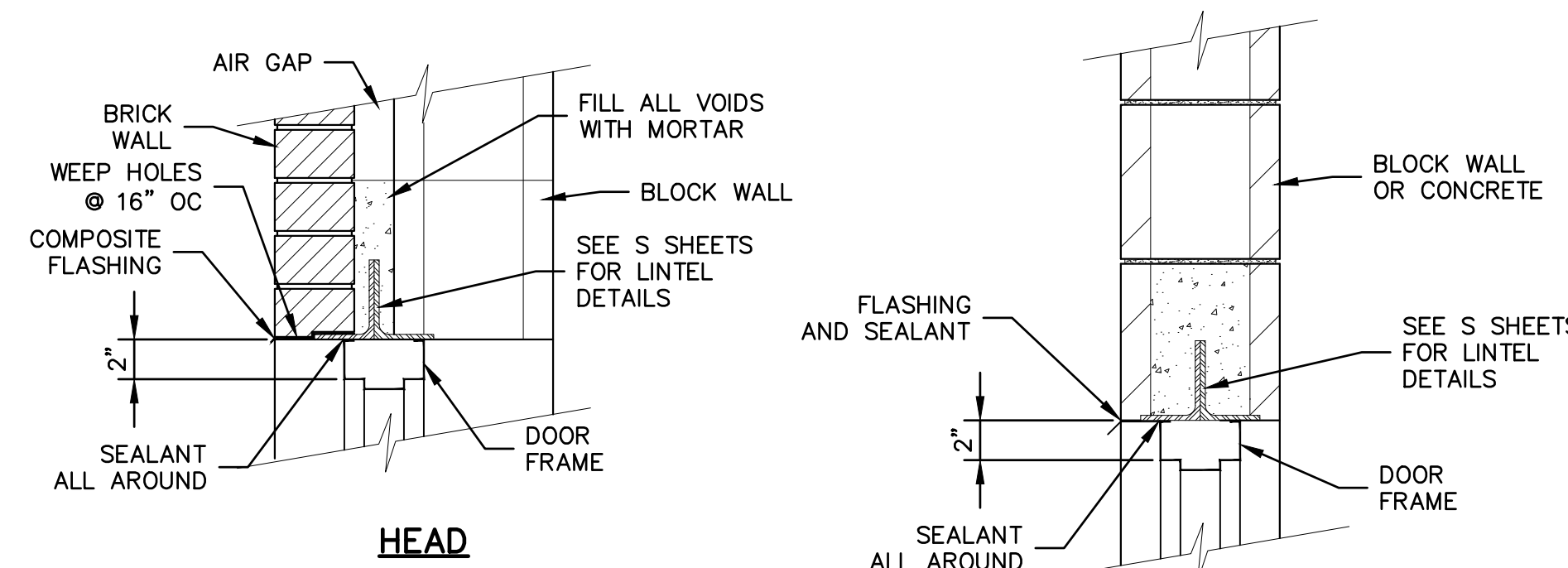
SHEET NO.
MA02

PAGE NO.
247

Drawing: J:\Warsaw\Projects\162813-Warsaw-WWTP-Expansion\CAD-04-001\DWG\Shells\MA02-162813-DWG-Arch.dwg | Layout: MA02 | Plotter: 09/04/18 @ 11:29:06 | LastSavedBy: MikeN



ELEVATION 1 ELEVATION 2 ELEVATION 3 ELEVATION 4
DOOR ELEVATIONS
NO SCALE



| DOOR SCHEDULE | | | | | | | | | | |
|---------------|-------------------------|---------------|----------------|---------|---------------------------|----------------|-------------|----------------|----------------------|--------------------|
| MARK | SIZE | DOOR MATERIAL | FRAME MATERIAL | GLAZING | LOCATION | DOOR ELEVATION | DOOR DETAIL | COLOR | HARDWARE | REMARKS |
| D1 | (2) 2'-10"x7'-2"x1 3/4" | ALUM. | ALUM. | 26"x36" | NEW PRIMARY BUILDING | 2 | 1 | DARK BRONZE | 1,2,3,5,8,9,10,14,15 | FUNCTION 05 |
| D2 | 3'-0"x7'-2"x1 3/4" | ALUM. | ALUM. | 28"x36" | NEW PRIMARY BUILDING | 1 | 1 | DARK BRONZE | 1,2,3,5,8,9,10,14 | FUNCTION 05 |
| D3 | 6'-0"x7'-4" (MO) | ALUM. | ALUM. | - | NEW PRIMARY BUILDING | 4 | 4 | DARK BRONZE | 9,10 | SPEC SECTION 08362 |
| D4 | 3'-0"x7'-2"x1 3/4" | ALUM. | ALUM. | 28"x36" | NEW PRIMARY BUILDING | 1 | 1 | DARK BRONZE | 1,2,3,5,8,9,10,14 | FUNCTION 05 |
| F1 | (2) 3'-0"x7'-2"x1 3/4" | ALUM. | ALUM. | 28"x36" | NEW SLUDGE PUMP STA NO. 2 | 2 | 2 | DARK BRONZE | 1,2,3,5,8,9,10,14,15 | FUNCTION 05 |
| F2 | 3'-0"x7'-2"x1 3/4" | ALUM. | ALUM. | 28"x36" | NEW SLUDGE PUMP STA NO. 2 | 1 | 1 | DARK BRONZE | 1,2,3,5,8,9,10,14 | FUNCTION 05 |
| H1 | (2) 3'-0"x7'-2"x1 3/4" | ALUM. | ALUM. | 28"x36" | NEW DIGESTER CONTROL BDG | 2 | 1 | DARK BRONZE | 1,2,3,5,8,9,10,14,15 | FUNCTION 05 |
| H2 | 12'-0"x9'-4" (MO) | ALUM. | ALUM. | - | NEW DIGESTER CONTROL BDG | 4 | 4 | DARK BRONZE | 9,10 | SPEC SECTION 08362 |
| H3 | (2) 3'-0"x7'-2"x1 3/4" | ALUM. | ALUM. | 28"x36" | NEW DIGESTER CONTROL BDG | 2 | 1 | DARK BRONZE | 1,2,3,5,8,9,10,14,15 | FUNCTION 05 |
| H4 | (2) 3'-0"x7'-2"x1 3/4" | ALUM. | ALUM. | 28"x36" | NEW DIGESTER CONTROL BDG | 2 | 2 | DARK BRONZE | 1,2,3,5,8,9,10,14,15 | FUNCTION 05 |
| H5 | (2) 3'-0"x7'-2"x1 3/4" | ALUM. | ALUM. | 28"x36" | NEW DIGESTER CONTROL BDG | 2 | 2 | DARK BRONZE | 1,2,3,5,8,9,10,14,15 | FUNCTION 05 |
| H6 | 3'-0"x7'-2"x1 3/4" | ALUM. | ALUM. | 28"x36" | NEW DIGESTER CONTROL BDG | 1 | 2 | CLEAR ANODIZED | 1,2,3,5,8 | FUNCTION 05 |
| H7 | (2) 2'-10"x7'-2"x1 3/4" | ALUM. | ALUM. | 26"x36" | NEW DIGESTER CONTROL BDG | 2 | 2 | CLEAR ANODIZED | 1,2,3,5,8 | FUNCTION 05 |
| K1 | (2) 2'-10"x7'-2"x1 3/4" | ALUM. | ALUM. | 22"x36" | NEW CHEMICAL FEED BDG | 2 | 1 | DARK BRONZE | 1,2,3,5,8,9,10,14,15 | FUNCTION 05 |
| K2 | (2) 2'-10"x7'-2"x1 3/4" | ALUM. | ALUM. | 26"x36" | NEW CHEMICAL FEED BDG | 2 | 1 | DARK BRONZE | 1,2,3,5,8,9,10,14,15 | FUNCTION 05 |
| K3 | 3'-0"x7'-2"x1 3/4" | ALUM. | ALUM. | 28"x36" | NEW CHEMICAL FEED BDG | 1 | 1 | DARK BRONZE | 1,2,3,5,8,9,10,14 | FUNCTION 05 |
| L1 | 3'-0"x7'-2"x1 3/4" | ALUM. | ALUM. | 28"x36" | NEW GARAGE | 3 | 3 | DARK BRONZE | 1,2,3,5,8,9,10,14 | FUNCTION 05 |
| L2 | 10'-0"x8'-0" (RO) | ALUM. | ALUM. | - | NEW GARAGE | 5 | 5 | DARK BRONZE | 9,10 | SPEC SECTION 08362 |
| L3 | 10'-0"x8'-0" (RO) | ALUM. | ALUM. | - | NEW GARAGE | 5 | 5 | DARK BRONZE | 9,10 | SPEC SECTION 08362 |
| L6 | 14'-0"x12'-0" (RO) | ALUM. | ALUM. | - | NEW GARAGE | 5 | 5 | DARK BRONZE | 9,10 | SPEC SECTION 08362 |
| L6 | 10'-0"x8'-0" (RO) | ALUM. | ALUM. | - | NEW GARAGE | 5 | 5 | DARK BRONZE | 9,10 | SPEC SECTION 08362 |
| L6 | 10'-0"x8'-0" (RO) | ALUM. | ALUM. | - | NEW GARAGE | 5 | 5 | DARK BRONZE | 9,10 | SPEC SECTION 08362 |
| L7 | 3'-0"x7'-2"x1 3/4" | ALUM. | ALUM. | 28"x36" | NEW GARAGE | 3 | 3 | DARK BRONZE | 1,2,3,5,8,9,10,14 | FUNCTION 05 |

- DOOR SCHEDULE NOTES:**
- BUILDING REFERENCE CODE:
D = NEW PRIMARY CONTROL BUILDING
F = NEW SLUDGE PUMP STATION NO. 2
H = NEW ANAEROBIC DIGESTER CONTROL BUILDING
B = NEW CHEMICAL FEED BUILDING
C = NEW GARAGE
 - ALL DOORS ARE TO BE KEYED ALIKE. COORDINATE WITH ENGINEER TO MATCH OWNER'S EXISTING KEY SYSTEM.
 - THE FINISHED COLOR OF ALL NEW DOOR AND FRAMES SHALL MATCH THE FINISHED COLOR OF THE EXISTING DOORS AND WINDOWS ON THE PROJECT BUILDINGS ON THIS SITE.
 - THE VERTICAL ROUGH OPENING FOR THE FIVE NEW GARAGE ROLL UP DOORS SHALL BE MEASURED FROM THE FINISHED FLOOR DIRECTLY TO THE WALL OPENING FOR EACH DOOR.

FINISH HARDWARE REFERENCE NUMBERS:

- | | |
|-------------------------------|---------------------------|
| 1 (3) MORTISE HINGES PER DOOR | 9 SEAL BOTTOM SWEEP |
| 2 ALUM. KICKPLATE(S) | 10 WEATHERSTRIPPING |
| 3 1 CLOSER | 11 DOOR STOP |
| 4 OPERATING LEVER | 12 NOT USED |
| 5 PANIC DEVICE/LEVER | 13 LATCH BOLT |
| 6 FLUSH BOLTS | 14 THRESHOLD/DOOR SEAL |
| 7 MORTISE LOCK SET | 15 ASTRAGAL |
| 8 KICK DOWN FOOT | 16 PUSH PLATE/PULL HANDLE |
| DOOR HOLDER | 17 GASKETED |

"For Viewing Purposes Only - Visit www.wesslerengineering.com to Purchase"

| | | | | | |
|--------------------|-------------------|-----|------|----------|-----------------------|
| SCALE VERIFICATION | DRAWN BY | NO. | DATE | INITIALS | REVISION DESCRIPTIONS |
| | WBJ | | | | |
| | CHECKED BY | | | | |
| | ALT | | | | |
| | APPROVED BY | | | | |
| | GLR | | | | |
| | ISSUE DATE | | | | |
| | SEPTEMBER 4, 2018 | | | | |
| | PROJECT NUMBER | | | | |
| | 162813-04-003 | | | | |



WASTEWATER TREATMENT PLANT EXPANSION - 2017

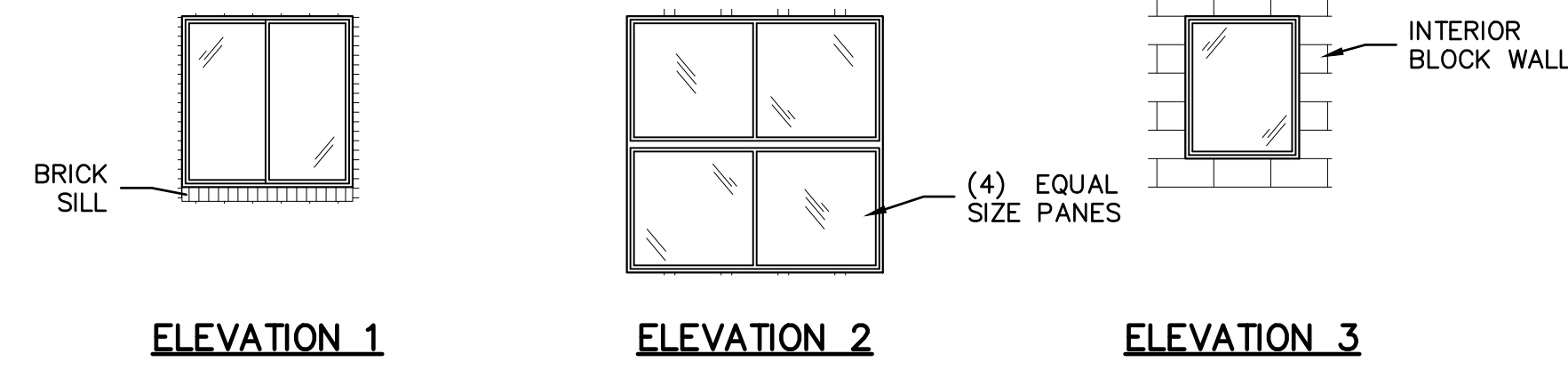
CITY OF WARSAW, INDIANA

DOOR SCHEDULE AND DETAILS

SHEET NO.
MA03

PAGE NO.
248

Drawing: W:\Warshaw\Projects\162813-Warshaw WWTTP Expansion\CAD\04-001\DWG\Shells\MA02 162813-Door-Arch.dwg | Layout: MA03 | Plotter: 09/04/18 @ 11:29:37 | LastSavedBy: MikeN



ELEVATION 1

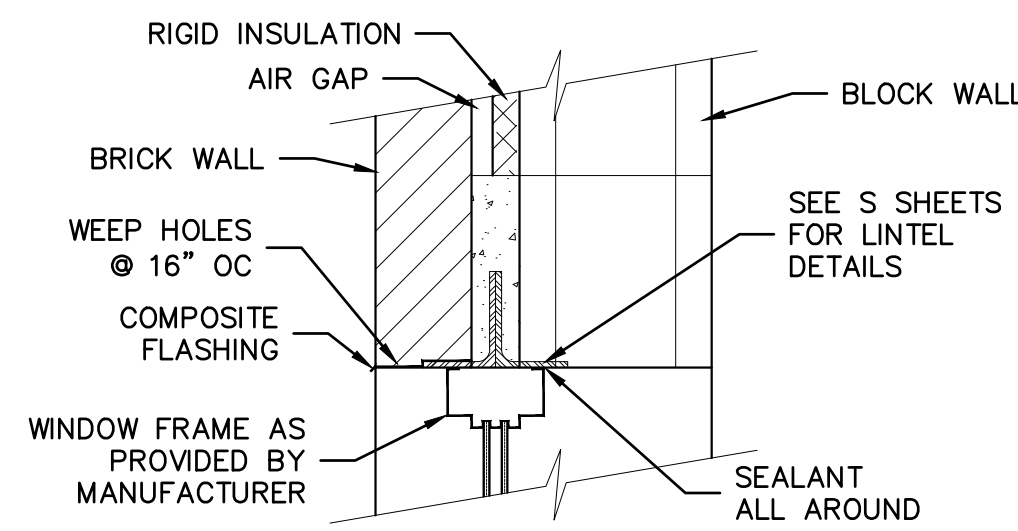
ELEVATION 2

ELEVATION 3

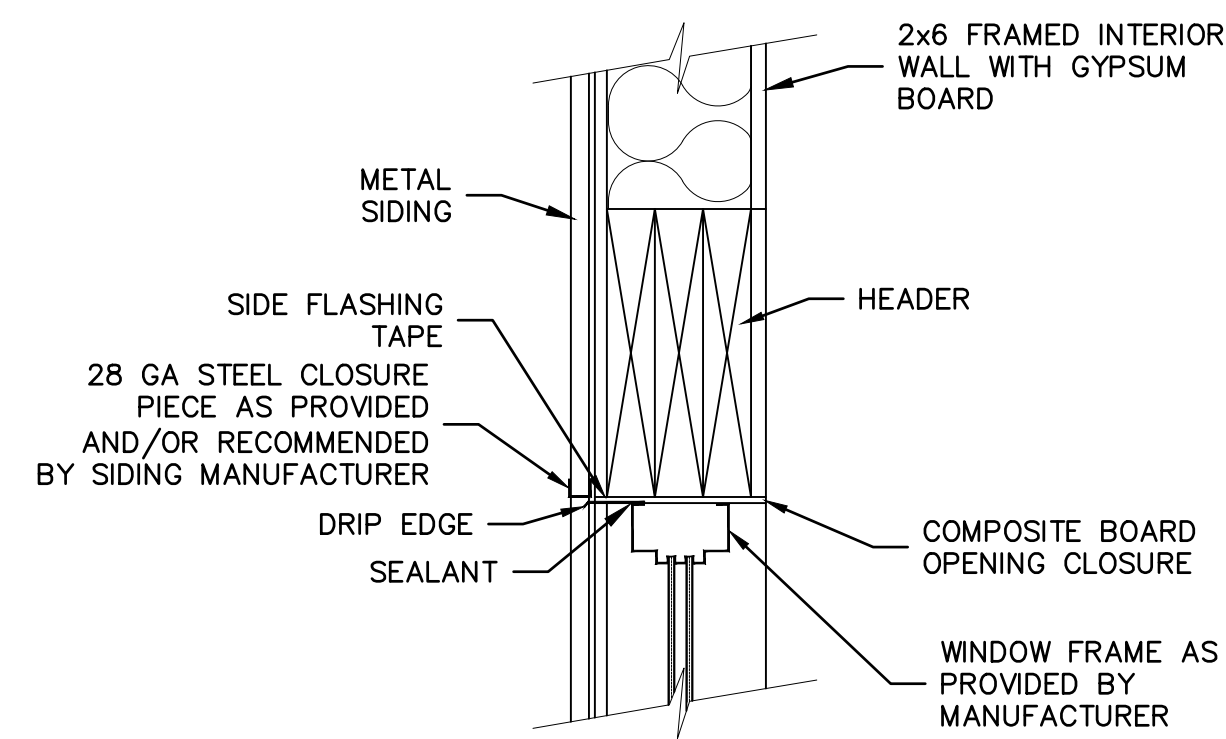
WINDOW ELEVATIONS
NO SCALE

| WINDOW SCHEDULE | | | | | | | | | | |
|-----------------|---------------------|----------------|----------------|----------|-------------------------|--------|------------------|---------------|----------------------------|--|
| MARK | R.O. SIZE WIDTHxHT. | FRAME MATERIAL | FRAME COLOR | QUANTITY | LOCATION | STYLE | WINDOW ELEVATION | WINDOW DETAIL | REMARKS | |
| C1 | 4'-0"x4'-0" | ALUM. | DARK BRONZE | 1 | NEW GRIT ROOM ADDITION | SLIDER | 1 | 1 | SEE WINDOW SCHEDULE NOTE 1 | |
| D1 | 4'-0"x4'-0" | ALUM. | DARK BRONZE | 3 | NEW PRIMARY CONTROL BDG | SLIDER | 1 | 1 | SEE WINDOW SCHEDULE NOTE 1 | |
| D2 | 2'-8"x3'-4" | ALUM. | CLEAR ANODIZED | 1 | NEW PRIMARY CONTROL BDG | FIXED | 3 | 3 | | |
| K1 | 4'-0"x4'-0" | ALUM. | DARK BRONZE | 4 | NEW CHEMICAL FEED BDG | SLIDER | 1 | 1 | SEE WINDOW SCHEDULE NOTE 1 | |
| L1 | 6'-0"x6'-0" | ALUM. | DARK BRONZE | 2 | NEW GARAGE | FIXED | 2 | 2 | | |

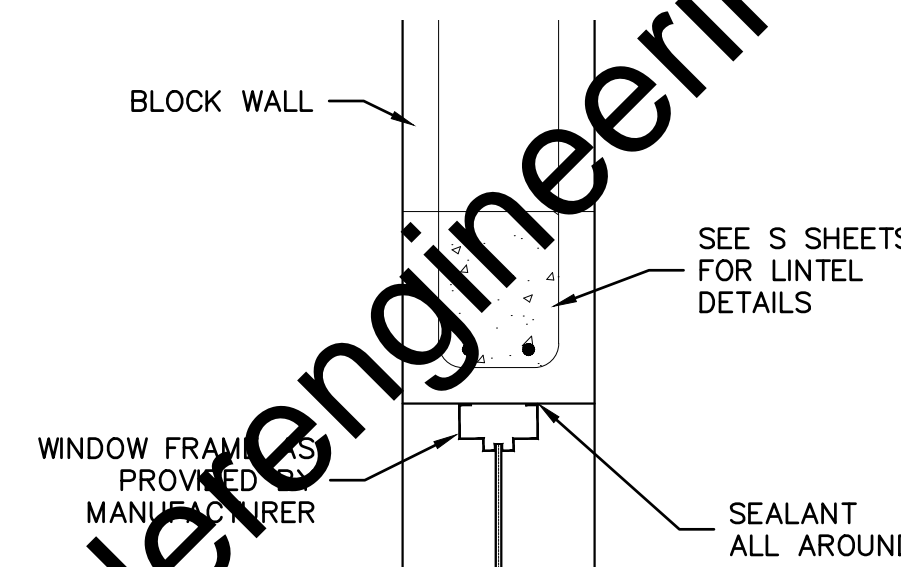
- WINDOW SCHEDULE NOTES:**
- VERTICAL MASONRY OPENING SHOWN IS AS REQUIRED TO INSTALL COMPLETE WINDOW FRAME. ADD TO THE OPENING AS REQUIRED FOR INSTALLATION OF BRICK SILL.
 - THE FINISHED COLOR OF ALL NEW WINDOW FRAMES SHALL MATCH THE FINISHED COLOR OF THE FRAMES OF THE EXISTING WINDOWS ON THE PROCESS BUILDINGS ON THIS SITE.
 - EXTERIOR WINDOWS GLASS SHALL BE DOUBLE PANE.
 - SEE ALUMINUM WINDOW SPECIFICATION 08520.



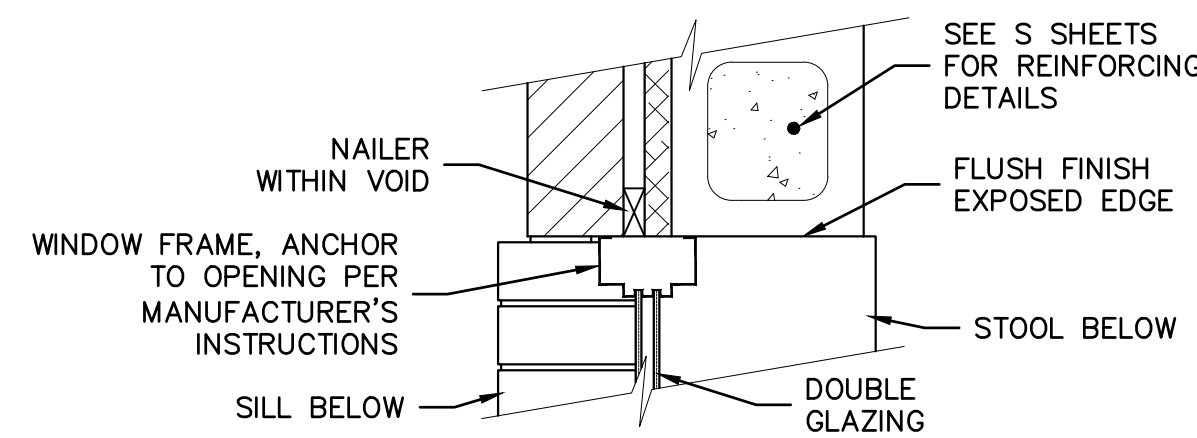
HEAD



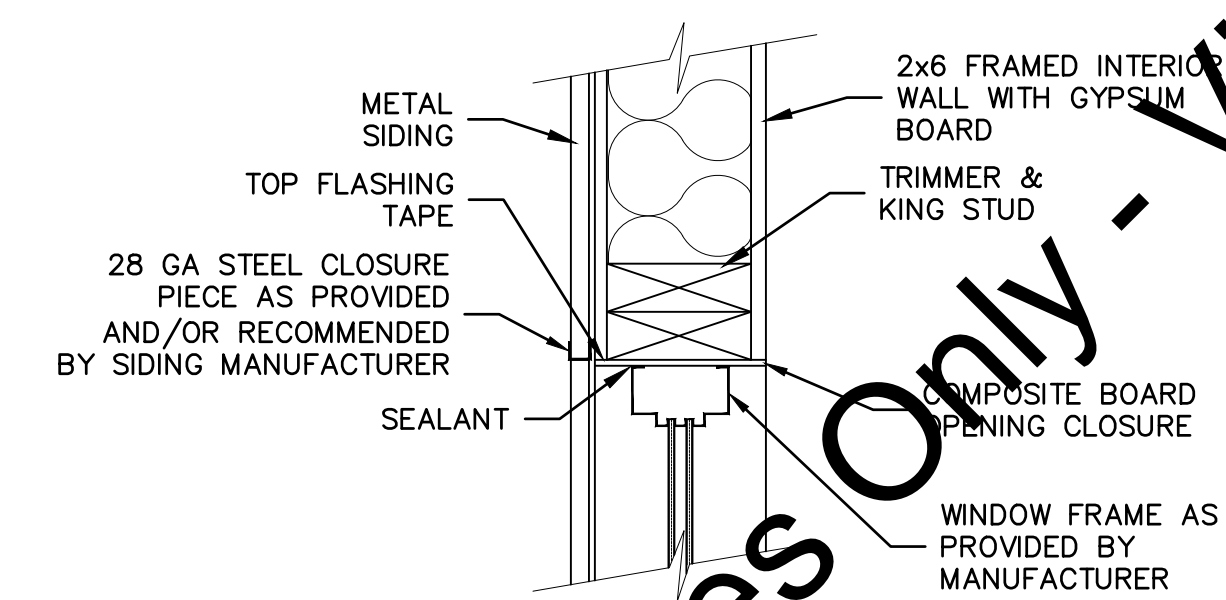
HEAD



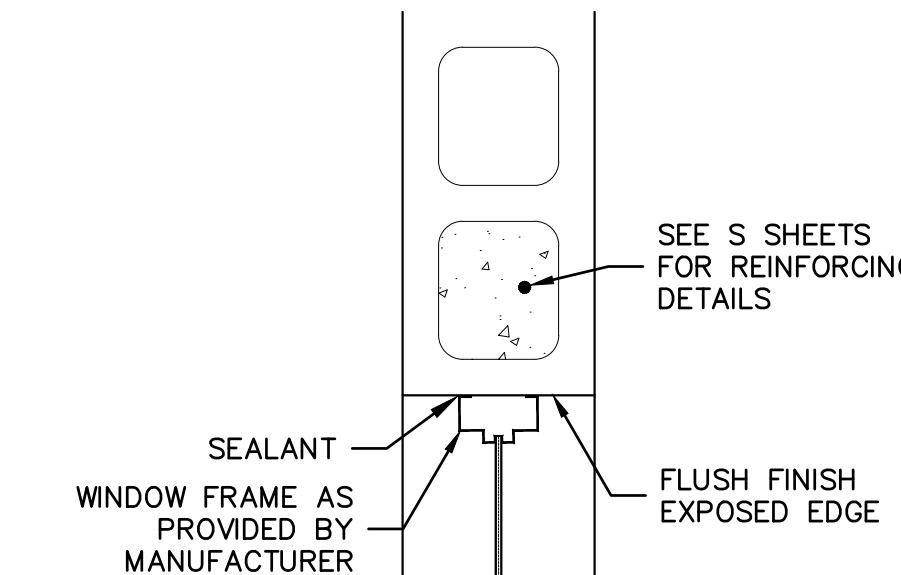
HEAD



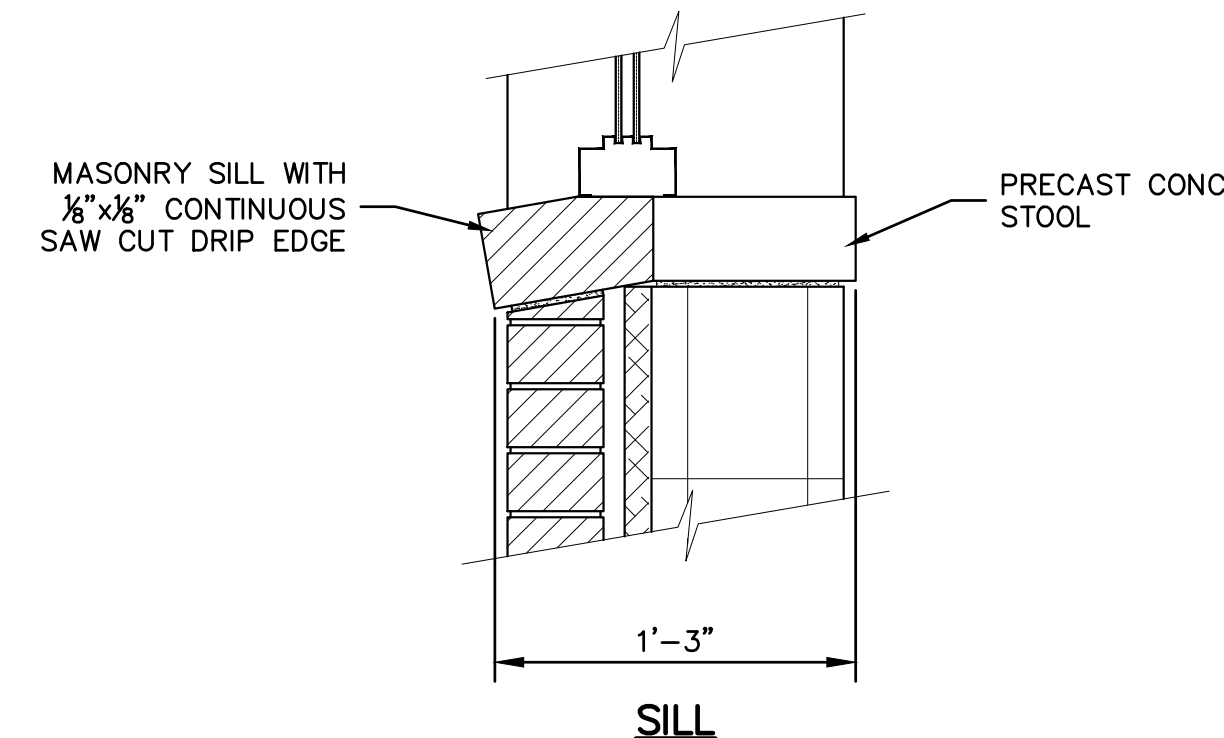
JAMB



JAMB

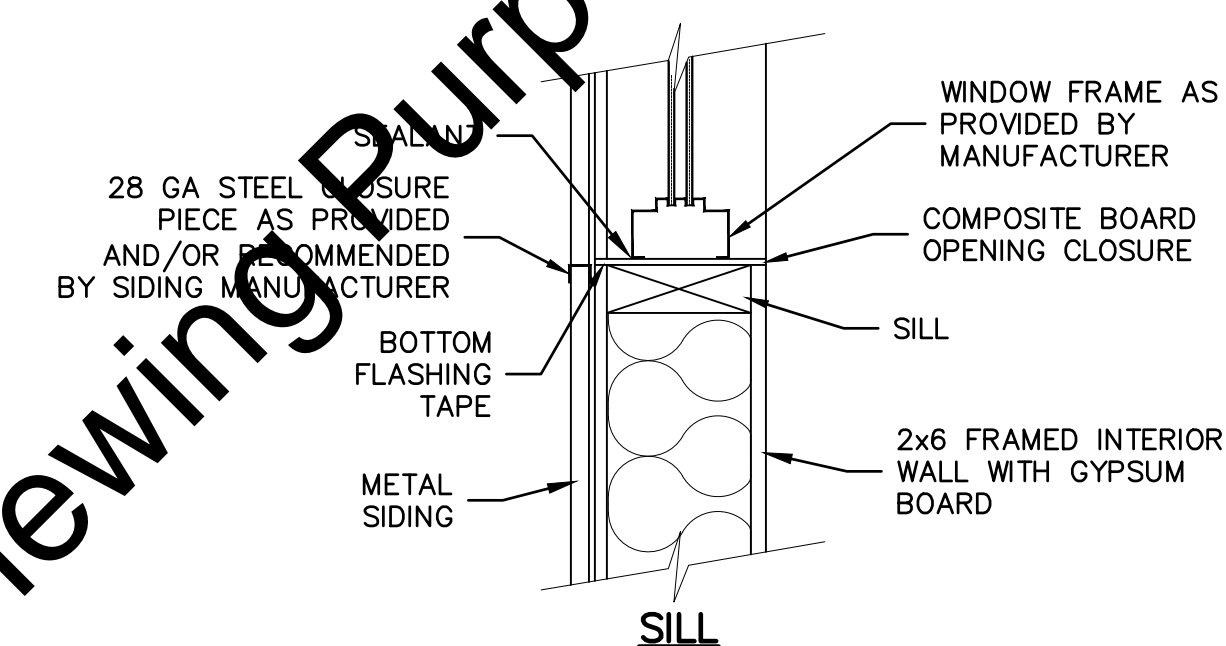


JAMB



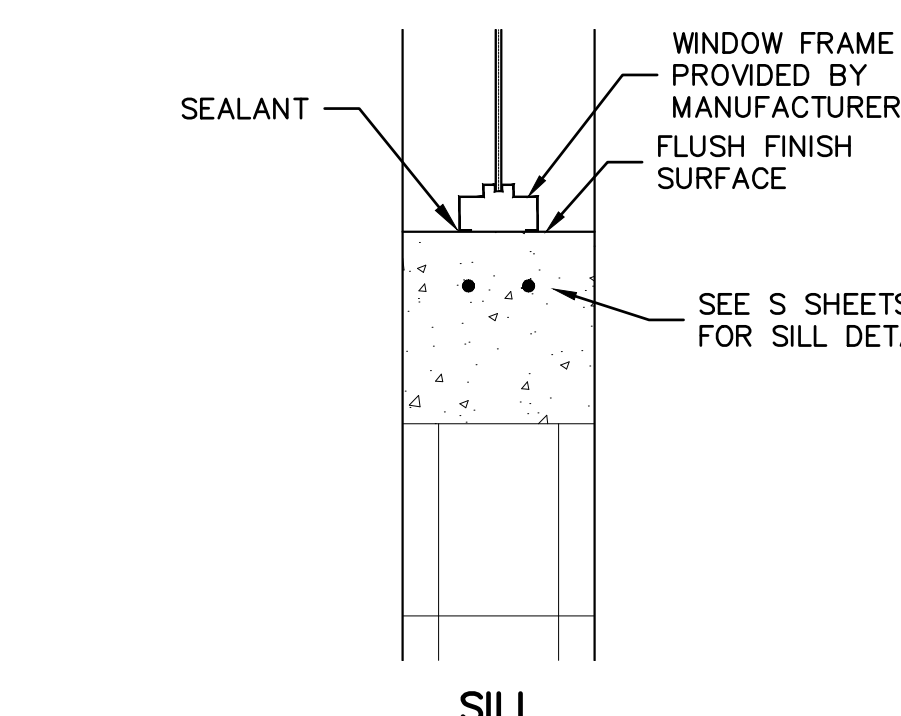
SILL

WINDOW DETAIL 1
1"=3"



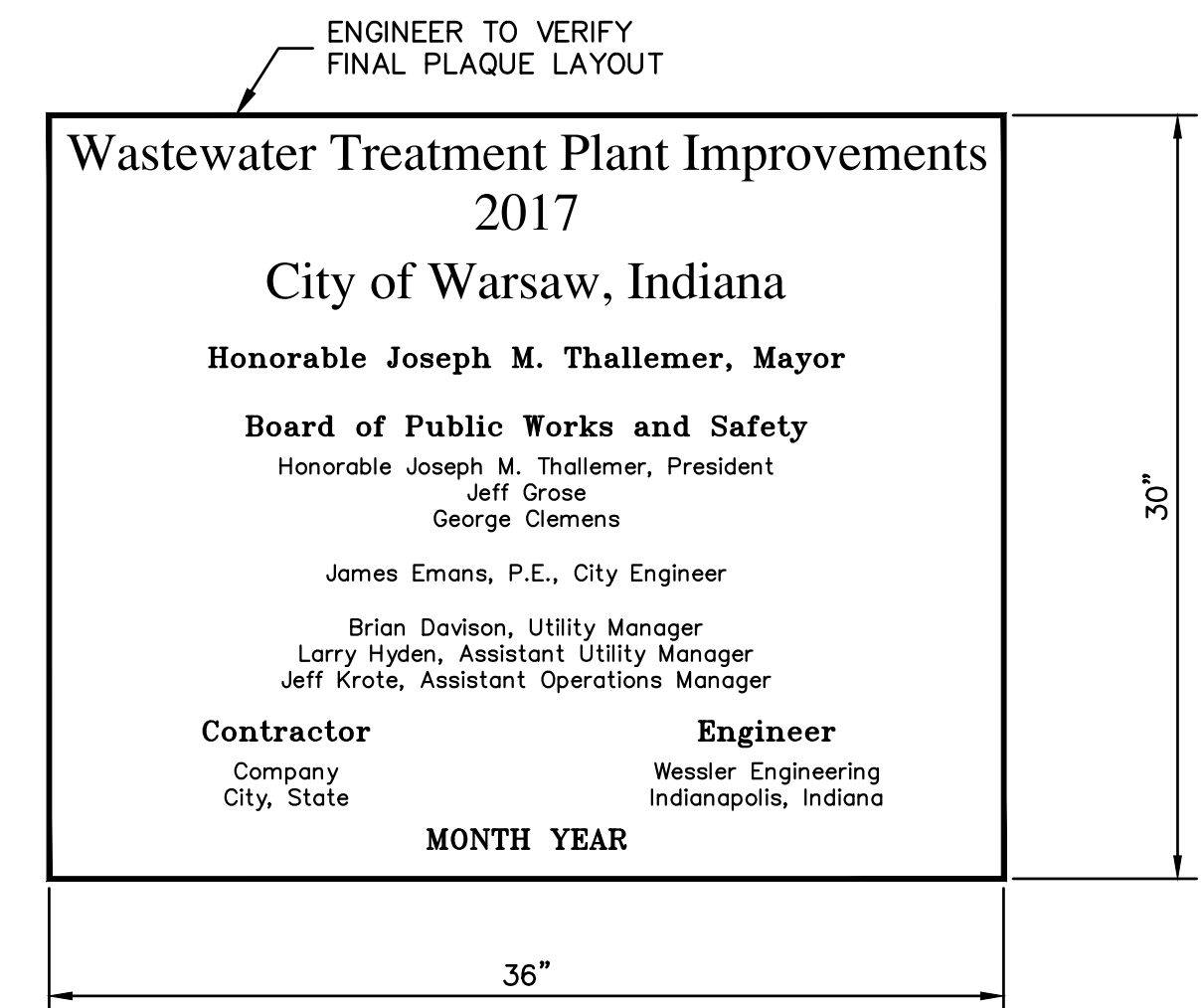
SILL

WINDOW DETAIL 2
1"=3"



SILL

WINDOW DETAIL 3
1"=3"



DEDICATION PLAQUE DETAILS
NO SCALE

"For Viewing Purposes Only - Visit wesslerengineering.com to Purchase"

| SCALE VERIFICATION | DRAWN BY | NO. | DATE | INITIALS | REVISION DESCRIPTIONS |
|--|-------------------|-----|------|----------|-----------------------|
| BAR IS ONE INCH LONG ON ORIGINAL DRAWING | CHECKED BY | WBJ | | | |
| | APPROVED BY | ALT | | | |
| | ISSUE DATE | GLR | | | |
| | PROJECT NUMBER | | | | |
| | SEPTEMBER 4, 2018 | | | | |
| | 162813-04-003 | | | | |

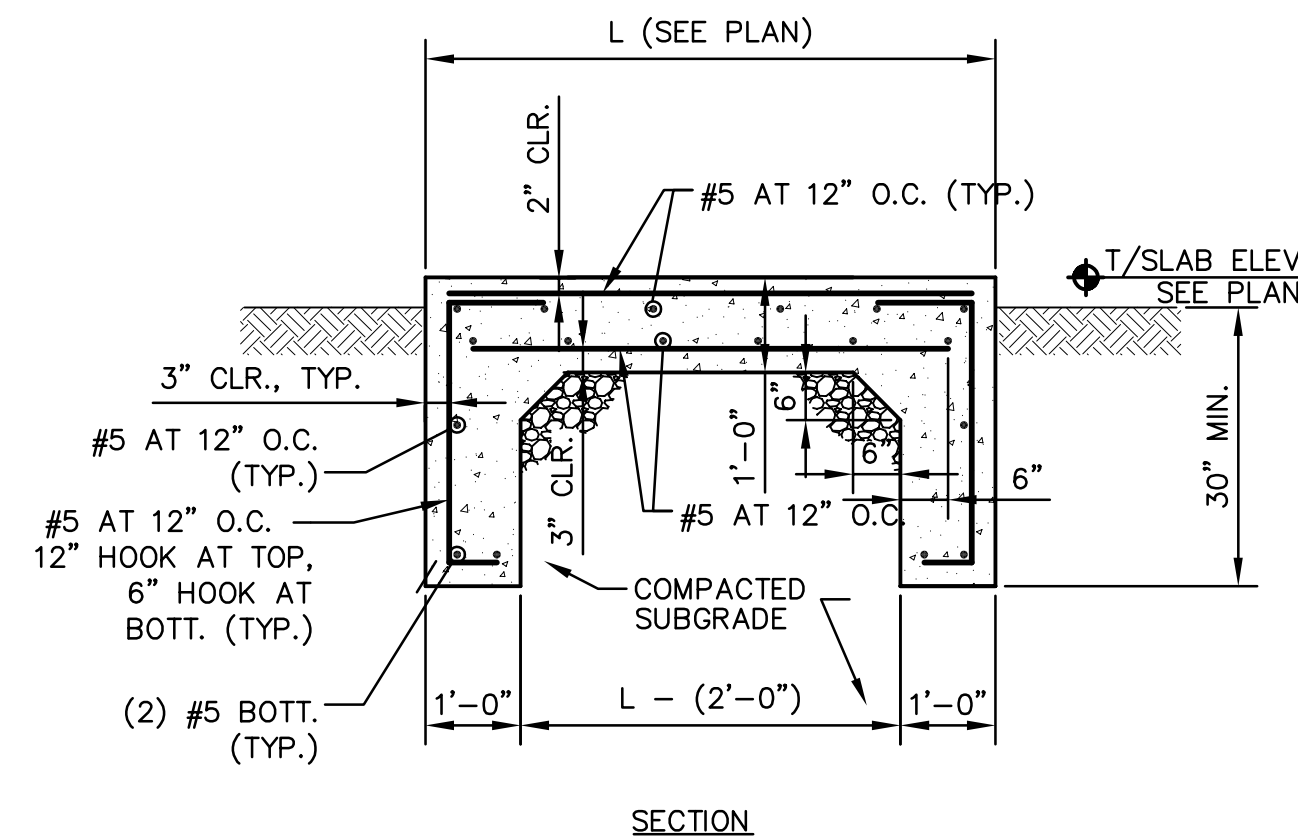


WASTEWATER TREATMENT PLANT EXPANSION - 2017
CITY OF WARSAW, INDIANA

WINDOW SCHEDULE AND DETAILS
AND MISCELLANEOUS ARCHITECTURAL DETAILS

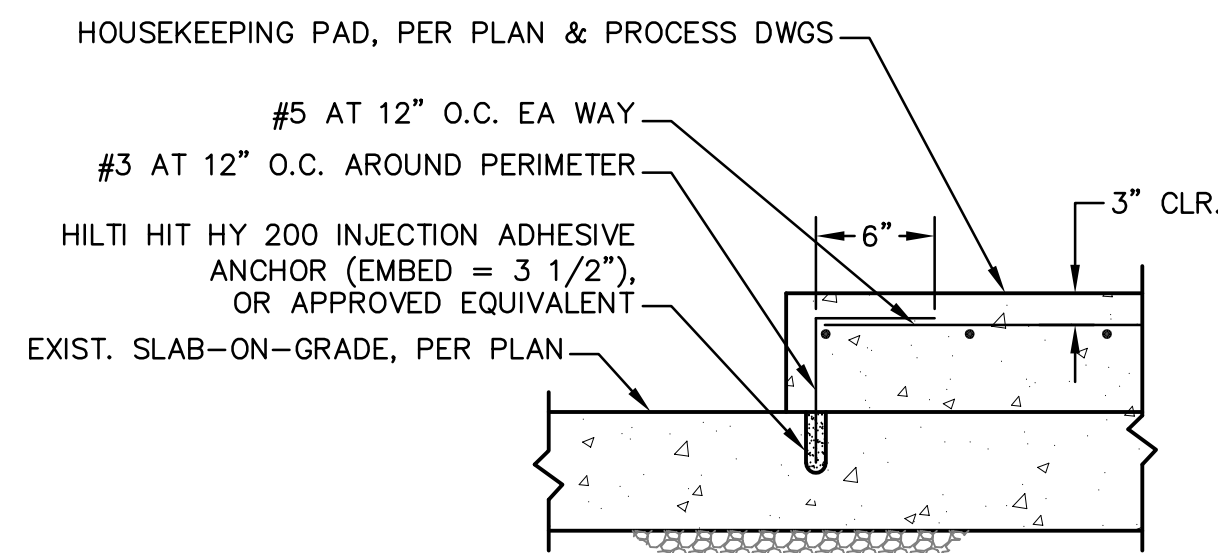
| | |
|-----------|-------------|
| SHEET NO. | MA04 |
| PAGE NO. | 249 |

Drawing: J:\Warsaw\Projects\162813-Warsaw WWTTP Expansion\CAD\04-001\DWG\Shells\MA02 162813-Detail-Arch.dwg | Layout: MA04 | Plotted: 09/04/18 @ 11:29:59 | LastSavedBy: MikeN



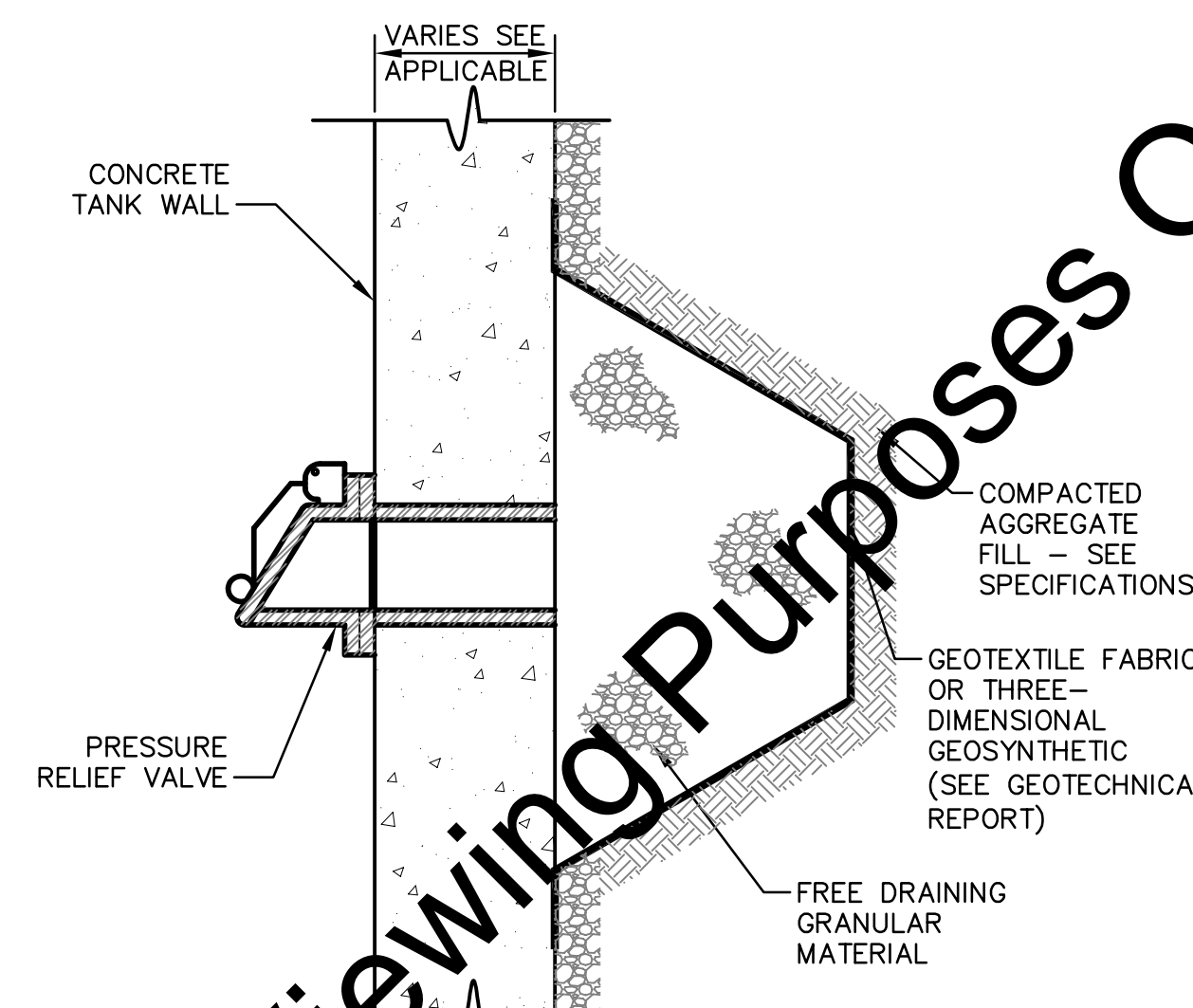
- NOTES:**
- SEE SITE DRAWINGS FOR EQUIPMENT PAD LOCATION
 - TOP OF EQUIPMENT PAD SHALL BE FLAT AND LEVEL.
 - COORDINATE EQUIPMENT PADS WITH THE SELECTED MECHANICAL/ELECTRICAL CONTRACTORS

TYPICAL EXTERIOR EQUIP PAD (9) MS01
SCALE: 1/2" = 1'-0"

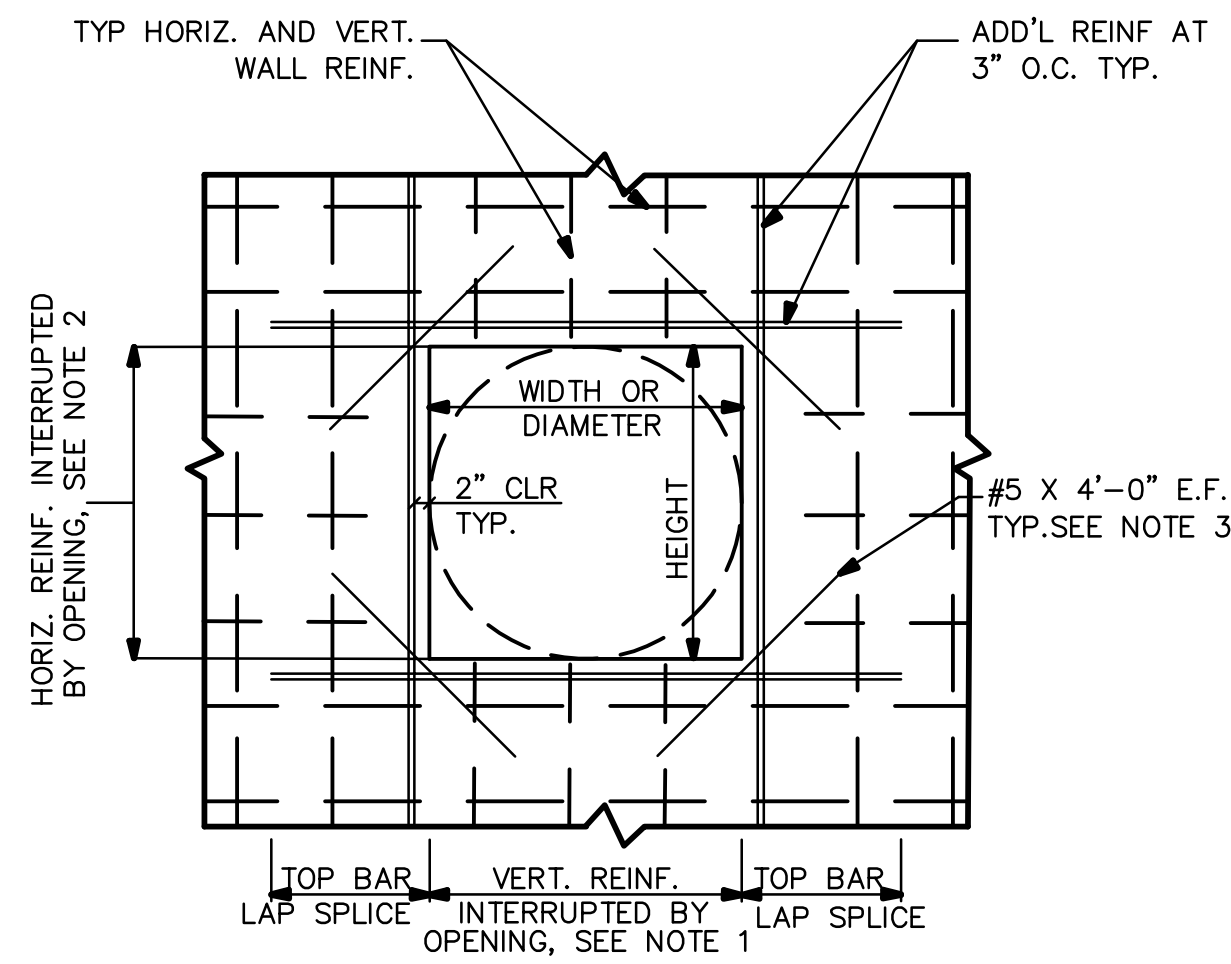


- NOTES:**
- CONTRACTOR - VERIFY LOCATION OF THE HOUSEKEEPING PADS WITH PROCESS DRAWINGS PRIOR TO POURING CONCRETE.
 - CONTRACTOR - VERIFY REQUIRED SIZE AND HEIGHT OF THE HOUSEKEEPING PADS WITH THE SELECTED EQUIPMENT MANUFACTURER PRIOR TO POURING CONCRETE.

HOUSEKEEPING PAD (10) MS01
SCALE: 1" = 1'-0"

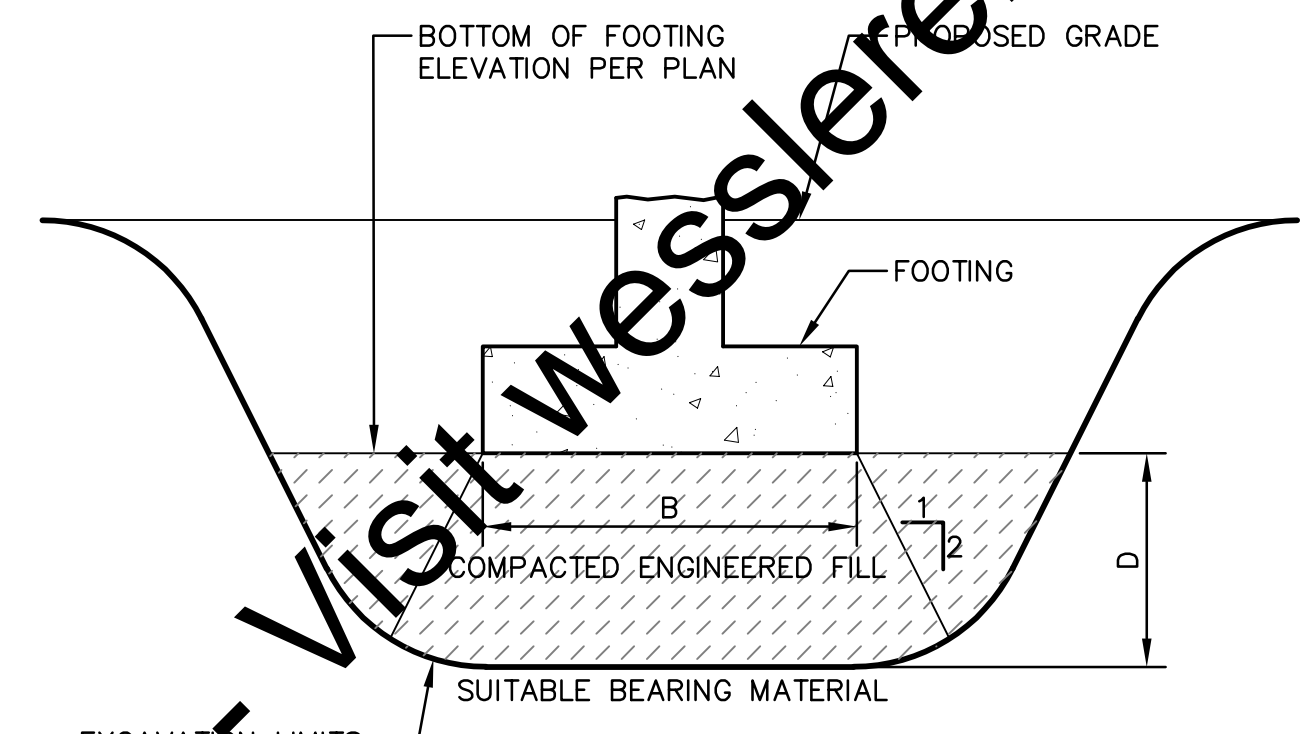


TYPICAL WALL MOUNTED PRV (11) MS01
SCALE: 1" = 1'-0"



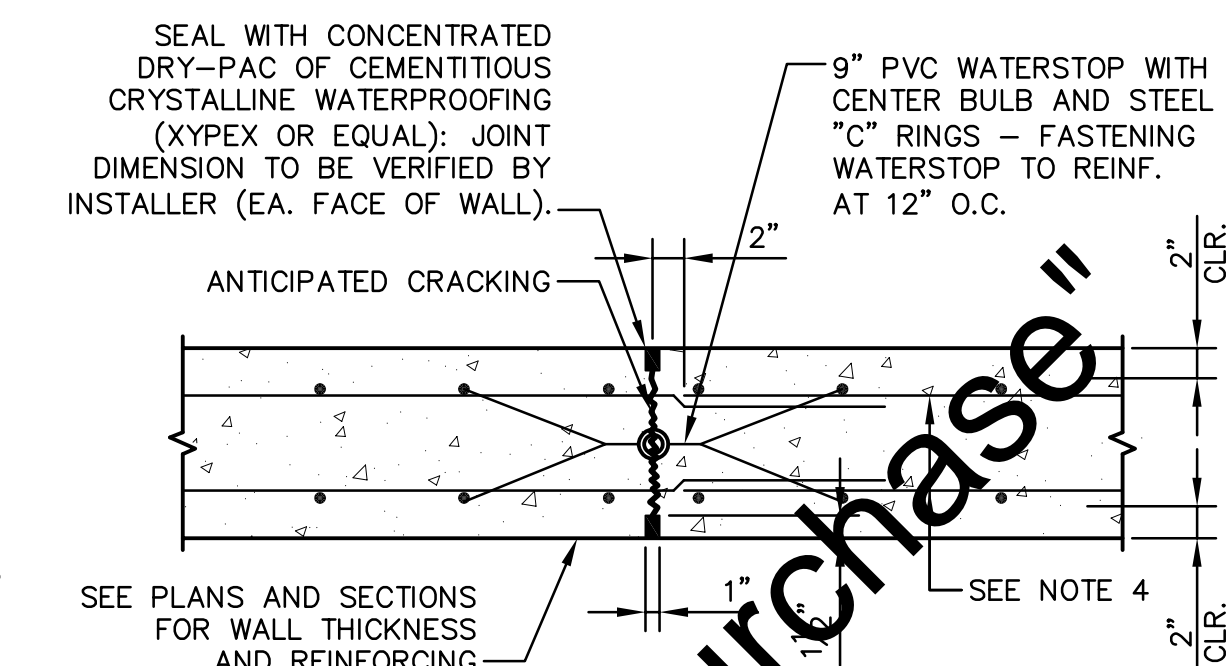
- NOTES:**
- PROVIDE HALF THE VERTICAL REINF. INTERRUPTED BY OPENING ON EA. SIDE OF OPENING. DOWEL TO FOUNDATION AND EXTEND TO TOP OF WALL. (TYP. FOR E.F.)
 - PROVIDE HALF THE HORIZONTAL REINF. INTERRUPTED BY OPENING ON TOP AND BOTTOM OF OPENING (TYP. FOR E.F.)
 - FOR CIRCULAR OPENINGS, DIAGONAL BARS ARE TO BE LOCATED 2" CLEAR OF OPENING.

TYP. OPENING IN CONCRETE WALL (MS01)
N.T.S.



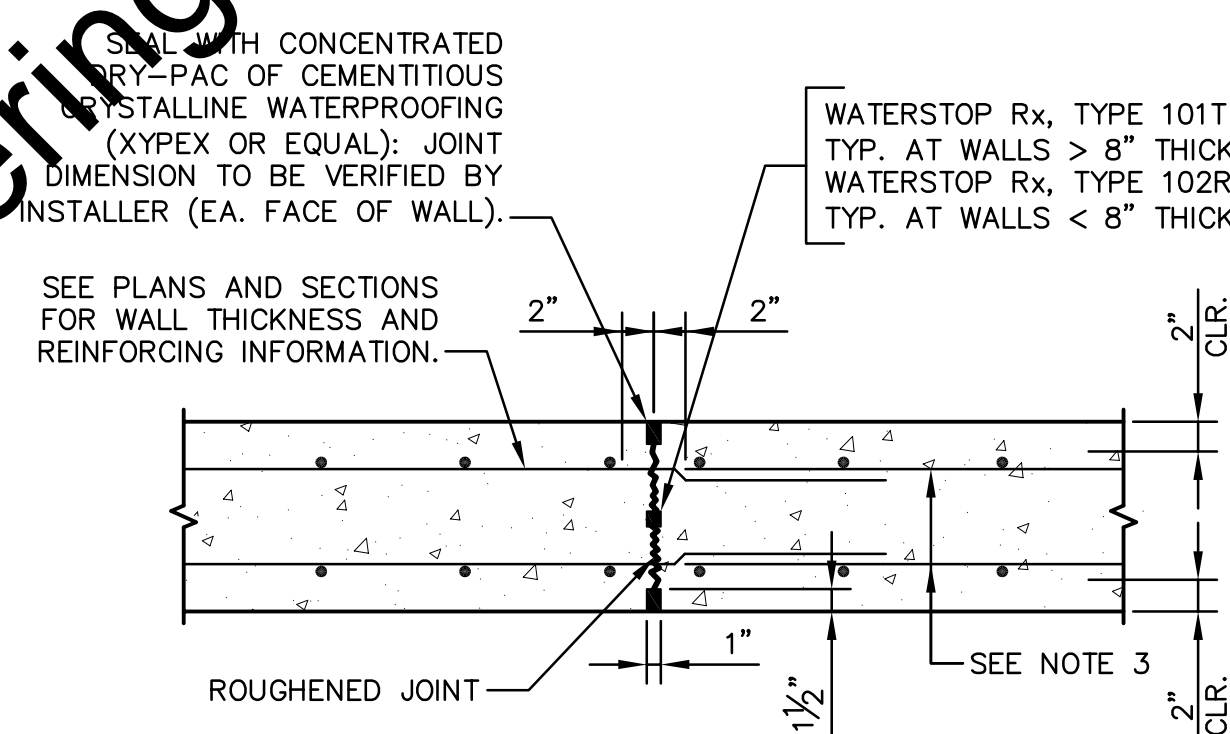
- NOTES:**
- DEWATER EXCAVATION AS REQUIRED.
 - WIDTH OF EXCAVATION SHALL EQUAL WIDTH OF FOOTING PLUS DEPTH OF UNDERCUT (W=B+D).

TYP. FOOTING IN UNDERCUT AREA (8) MS01
SCALE: 1" = 1'-0"



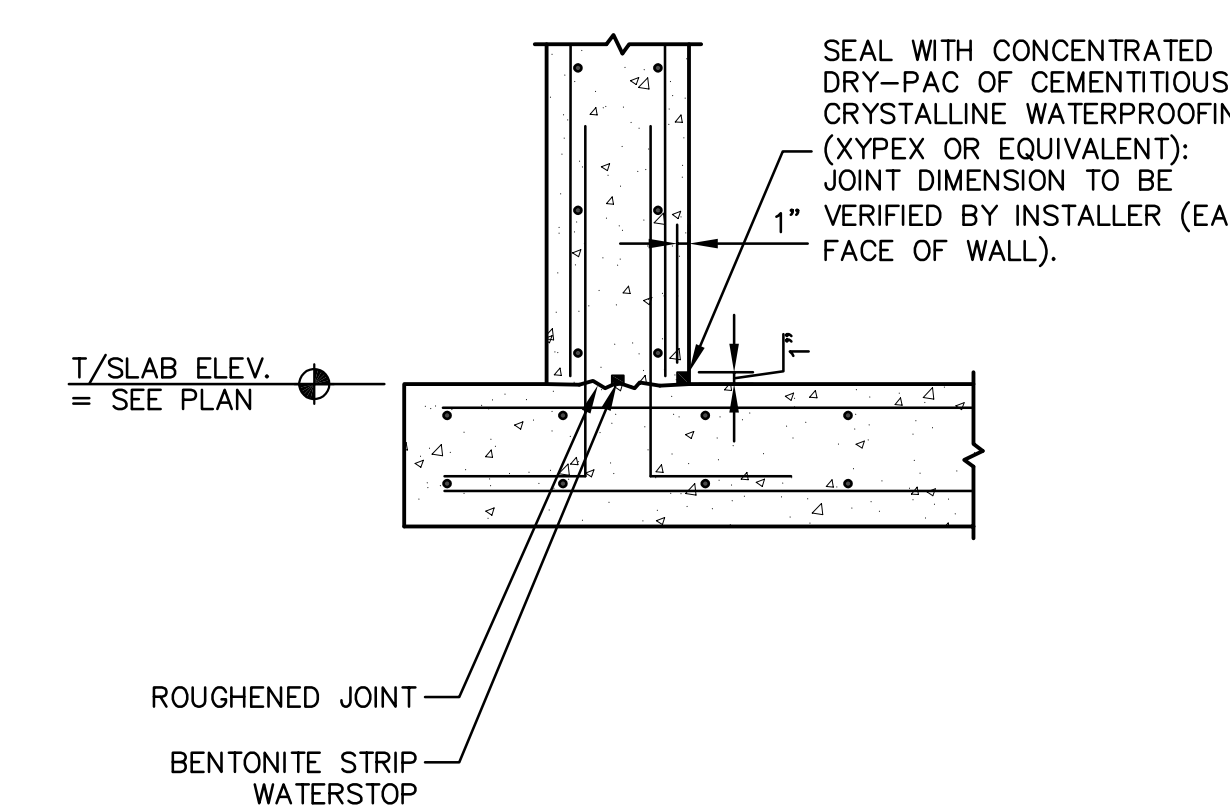
- NOTES:**
- CONTRACTION JOINTS SHALL BE LOCATED AT JOINTS MARKED CT.
 - WATERSTOP REQUIRED AT WATER RETAINING WALLS ONLY.
 - UNLESS NOTED OTHERWISE, CONTRACTION JOINT SPACING NOT TO EXCEED 25 FEET.
 - UNLESS NOTED OTHERWISE, 50% OF THE HORIZ. REINF. STEEL SHALL BE CONTINUOUS THROUGH JOINT. HORIZONTAL BARS THAT STOP SHORT OF JOINT SHALL BE FABRICATED ACCORDINGLY AND SHALL NOT BE FIELD CUT. CONTINUOUS AND DISCONTINUOUS HORIZ. BARS SHALL BE ALTERNATED ALONG WALL HEIGHT.
 - CONTRACTION JOINTS SHALL NOT OCCUR WITHIN 5'-0" OF A CORNER.
 - SEE GENERAL STRUCTURAL NOTES FOR LAP SPICE REQUIREMENTS.

TYP. WALL CONSTRUCTION JT. (4) MS01
SCALE: 1" = 1'-0"

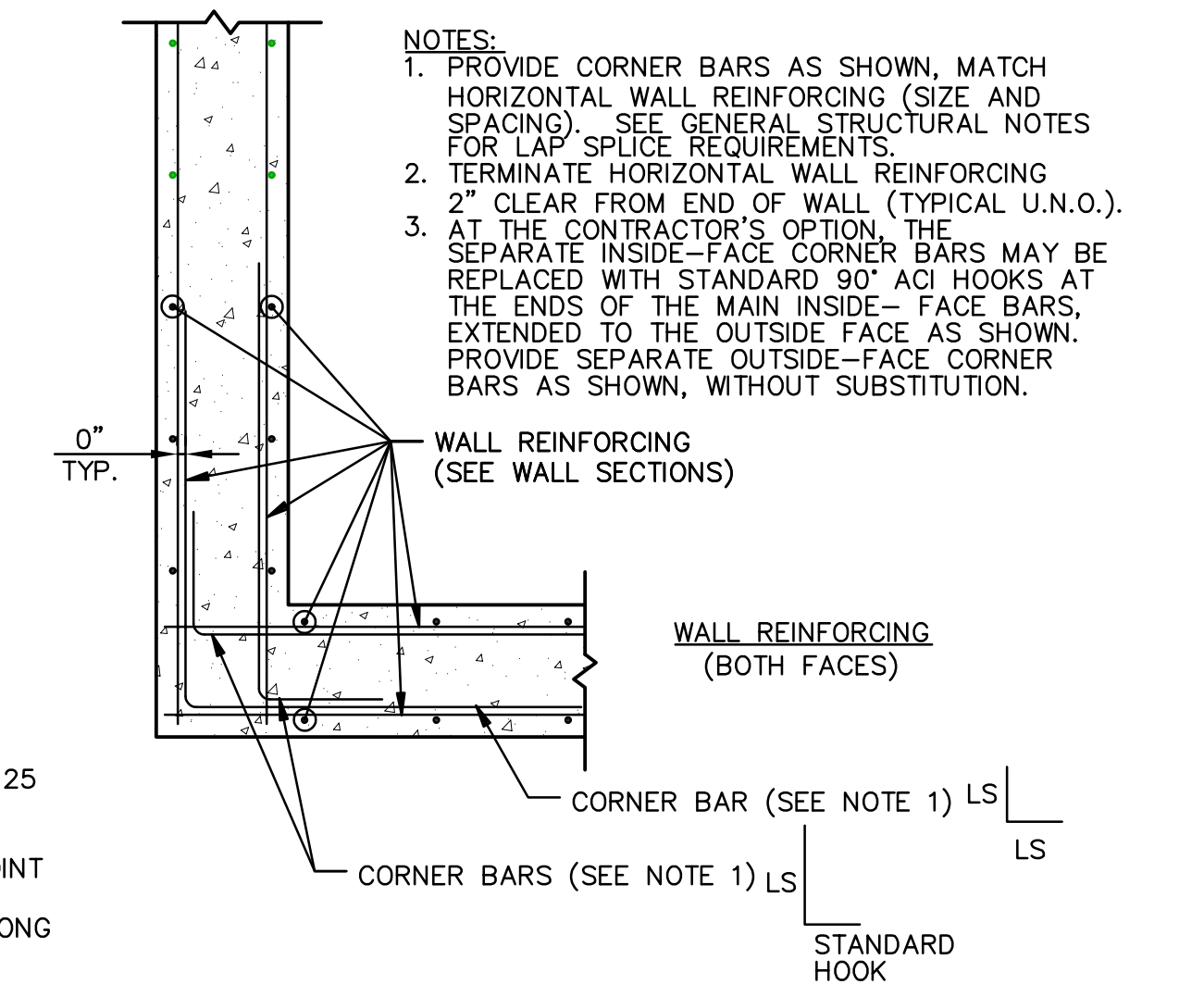


- NOTES:**
- WATERSTOP REQUIRED AT WATER RETAINING WALLS ONLY.
 - UNLESS NOTED OTHERWISE, CONTRACTION JOINT SPACING NOT TO EXCEED 75 FEET.
 - UNLESS NOTED OTHERWISE, 50% OF THE HORIZ. REINF. STEEL SHALL BE CONTINUOUS THROUGH JOINT. HORIZONTAL BARS THAT STOP SHORT OF JOINT SHALL BE FABRICATED ACCORDINGLY AND SHALL NOT BE FIELD CUT. CONTINUOUS AND DISCONTINUOUS HORIZ. BARS SHALL BE ALTERNATED ALONG WALL HEIGHT.
 - CONSTRUCTION JOINTS SHALL NOT OCCUR WITHIN 5'-0" OF A CORNER.
 - SEE GENERAL STRUCTURAL NOTES FOR LAP SPICE REQUIREMENTS.

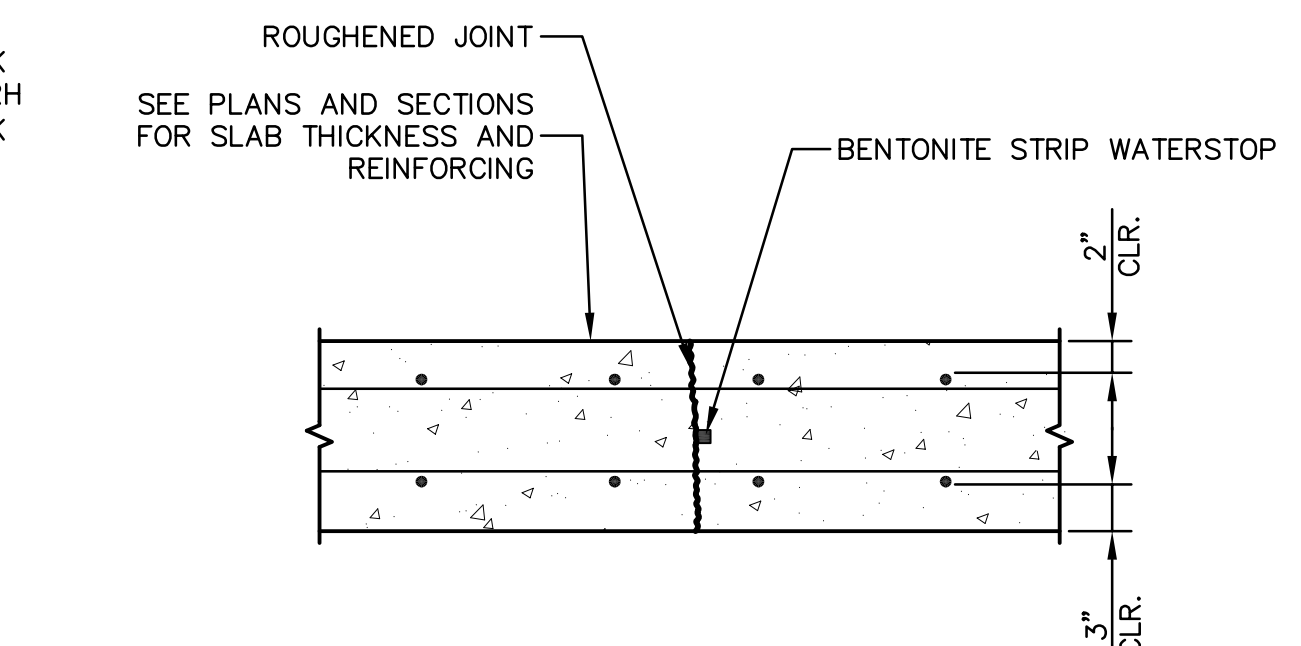
TYP. WALL CONSTRUCTION JT. (5) MS01
SCALE: 1" = 1'-0"



TYP. WALL TO BASE DETAIL (6) MS01
SCALE: 3/4" = 1'-0"

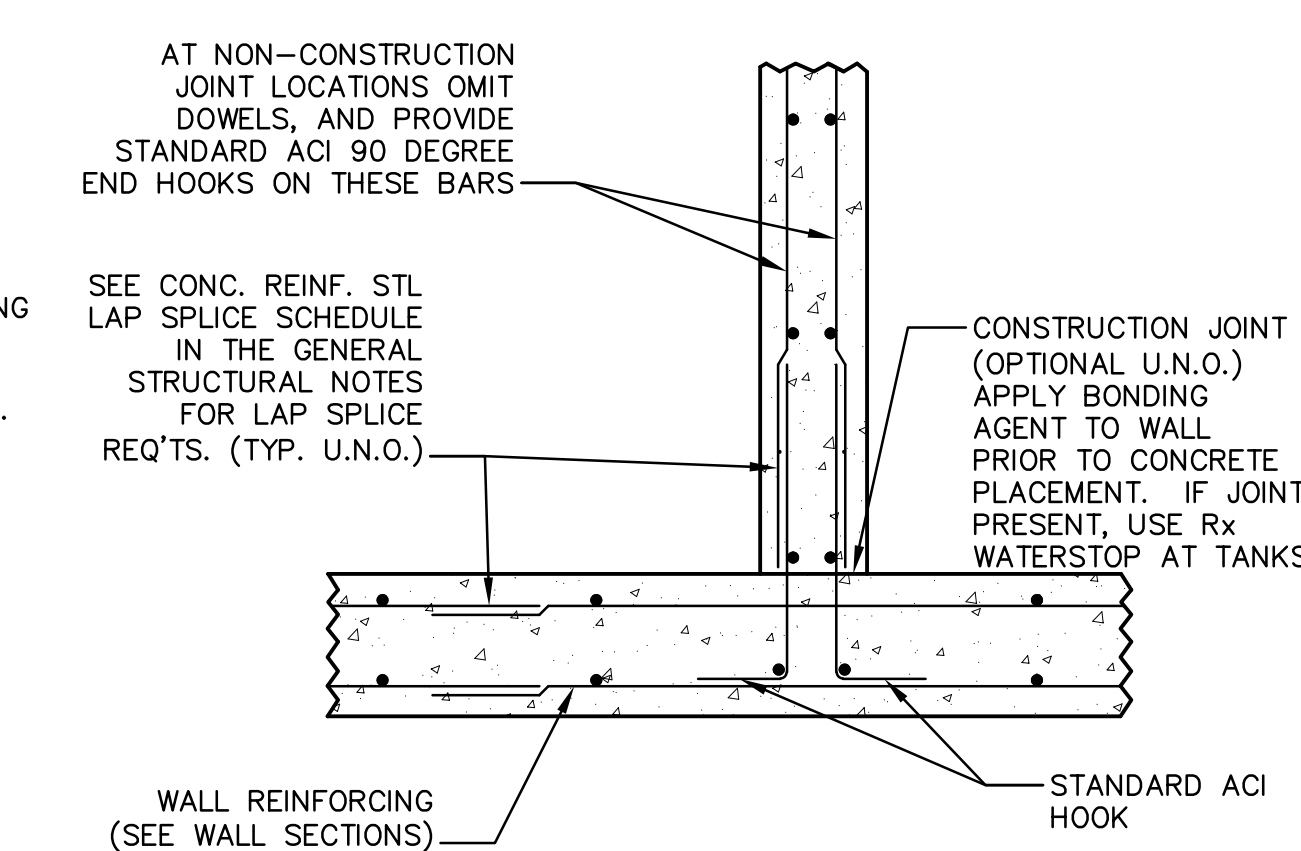


TYPICAL CONCRETE WALL CORNER REINFORCEMENT - PLAN VIEW (1) MS01
SCALE: 1/8" = 1'-0"



- NOTES:**
- ALL REINFORCING TO BE CONTINUOUS THROUGH JOINT.
 - CONSTRUCTION JOINT SPACING NOT TO EXCEED 75'-0".
 - SEE SOIL REPORT FOR UNDERSLAB PREPARATION AND COMPACTION.
 - SEE GENERAL STRUCTURAL NOTES FOR LAP SPICE REQUIREMENTS.

TYP. BASE SLAB CONSTRUCTION JT. (2) MS01
SCALE: 1" = 1'-0"



- NOTES:**
- SEE WALL SECTIONS FOR TYPICAL WALL REINFORCING (SIZE AND SPACINGS).
 - SEE GENERAL NOTES AND/OR SECTIONS FOR REINFORCING STEEL CLEARANCES.

TYP. CONC. WALL INTERSECTION REINFORCEMENT - PLAN VIEW (3) MS01
SCALE: 1/8" = 1'-0"

Drawing: S:\projects\files\17-176\Anarobic\Drawings\Structural\Old Building\MS01 - Typical Foundation Details.dwg | Layout: Typical Foundation Details.dwg | Plotter: 08031718 @ 01:19:34 | LaidOutBy: rmeas

10 Shoshone Drive
Carmel, IN 46032
317.818.1912
cesolutionsinc.com

| SCALE VERIFICATION | DRAWN BY | MAS | NO. | DATE | INITIALS | REVISION DESCRIPTIONS |
|--|----------------|-------------------|-----|------|----------|-----------------------|
| BAR IS ONE INCH LONG ON ORIGINAL DRAWING | CHECKED BY | CEB | | | | |
| | APPROVED BY | CEB | | | | |
| | ISSUE DATE | SEPTEMBER 4, 2018 | | | | |
| | PROJECT NUMBER | 162813-04-003 | | | | |

More than a Project™

WASTEWATER TREATMENT PLANT EXPANSION - 2017

CITY OF WARSAW, INDIANA

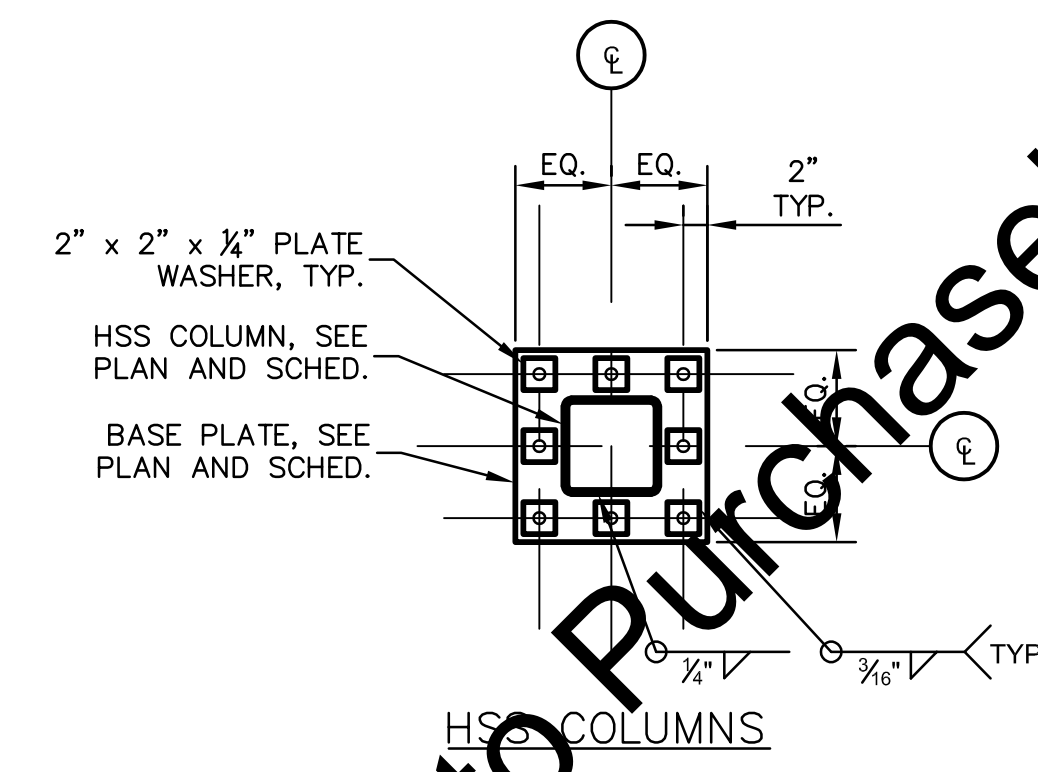
TYPICAL FOUNDATION DETAILS

SHEET NO. **MS01**

PAGE NO. 250

Drawing: S:\project files\17-776 Amersbach Digesters and Control Building - Wmsaw WWTP Improvements\ProjectDrawings\Structural\Old Building Files\MS02 - Typical Foundation Details 2.dwg | Layout: Typical Foundation Details 2 | Plotter: 08/31/18 @ 01:19:55 | LastSavedBy: rmeas

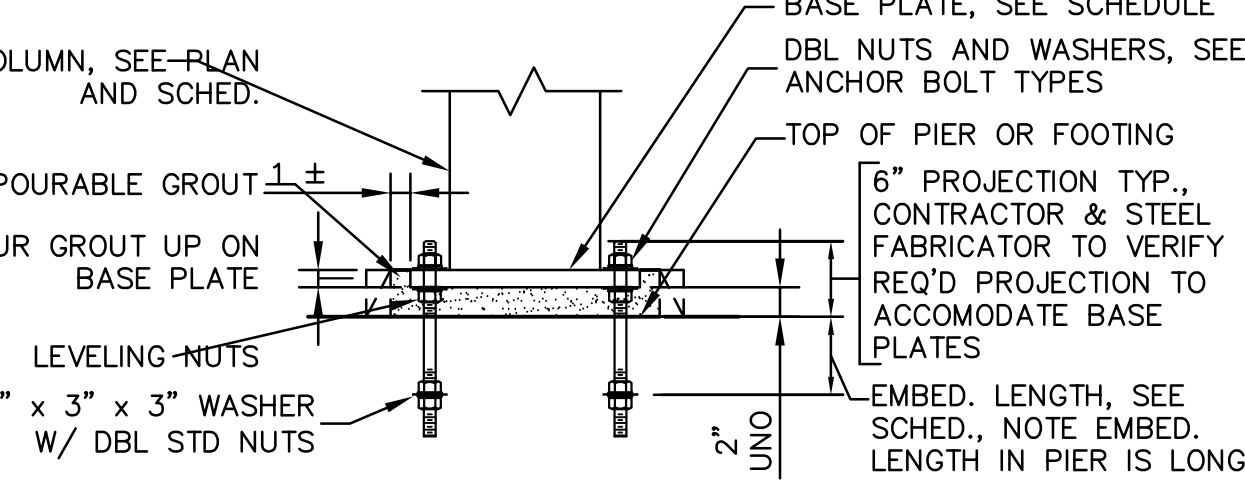
"For Viewing Purposes Only - Visit wesslerengineering.com to Purchase"



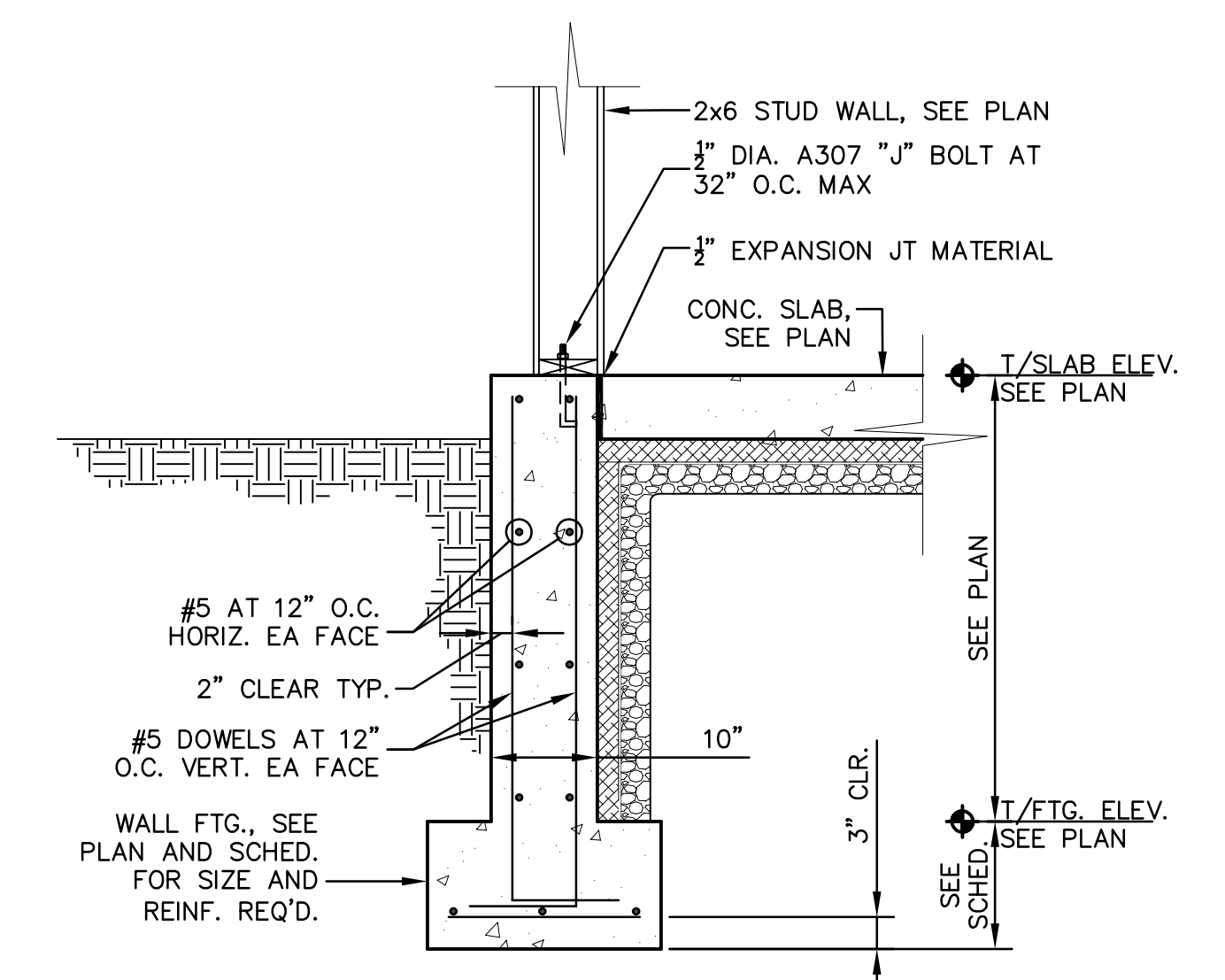
BASE PLATE DETAIL
SCALE: 1" = 1'-0"

| ANCHOR BOLT SCHEDULE | | |
|----------------------|----------------------------|-------------------------|
| DIAMETER (D) | MIN. FOOTING EMBEDMENT (E) | MIN. PIER EMBEDMENT (E) |
| 1/2" | 8" | 22" |
| 5/8" | 8" | 22" |
| 3/4" | 10" | 22" |
| 7/8" | 12" | 22" |
| 1" | 14" | 24" |
| 1 1/8" | 16" | 26" |
| 1 1/4" | 18" | 28" |

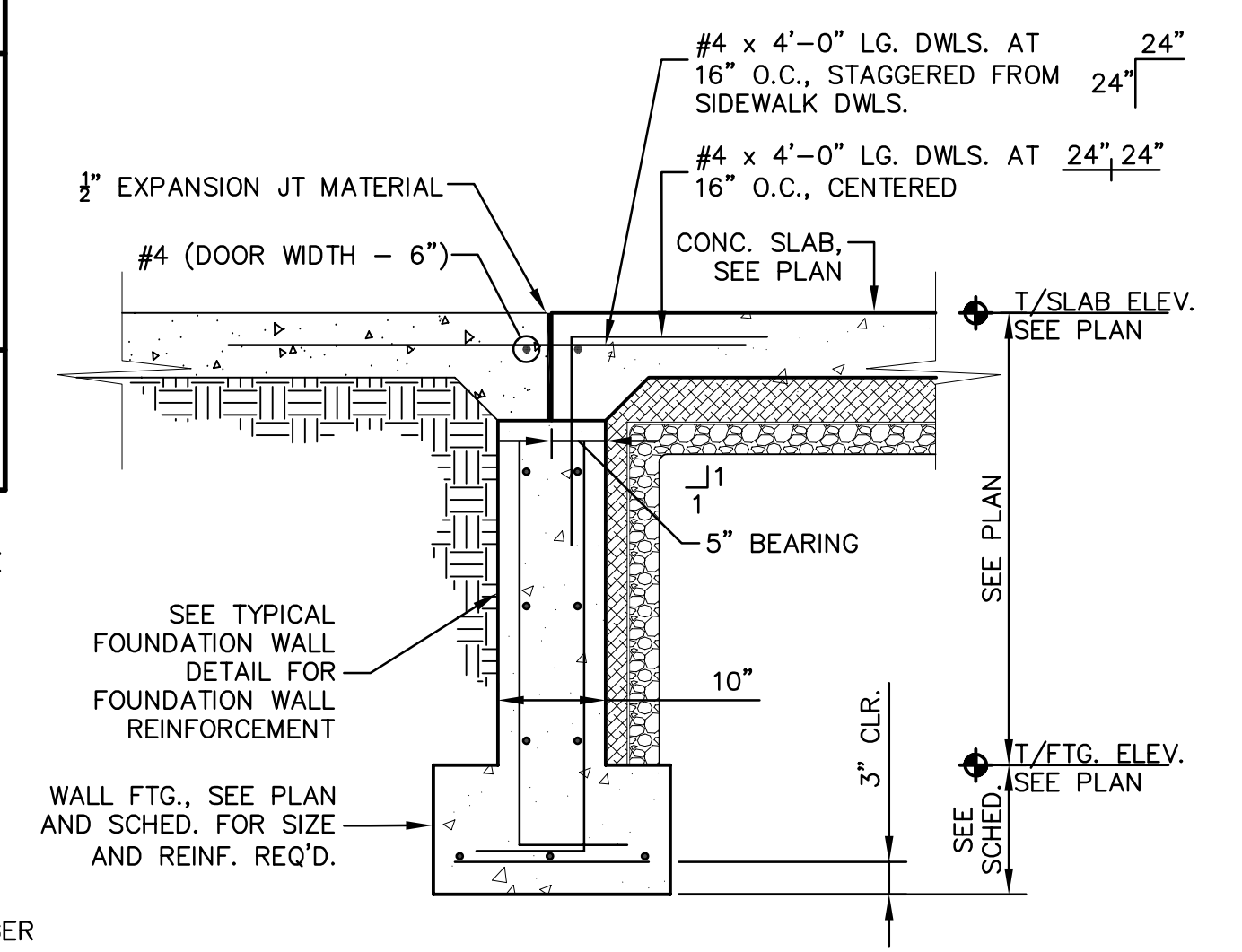
1 1/2" T/ CONC.
 E (AS REQ'D)
 ASTM F1554 GR 55
 3000 PSI CONC.



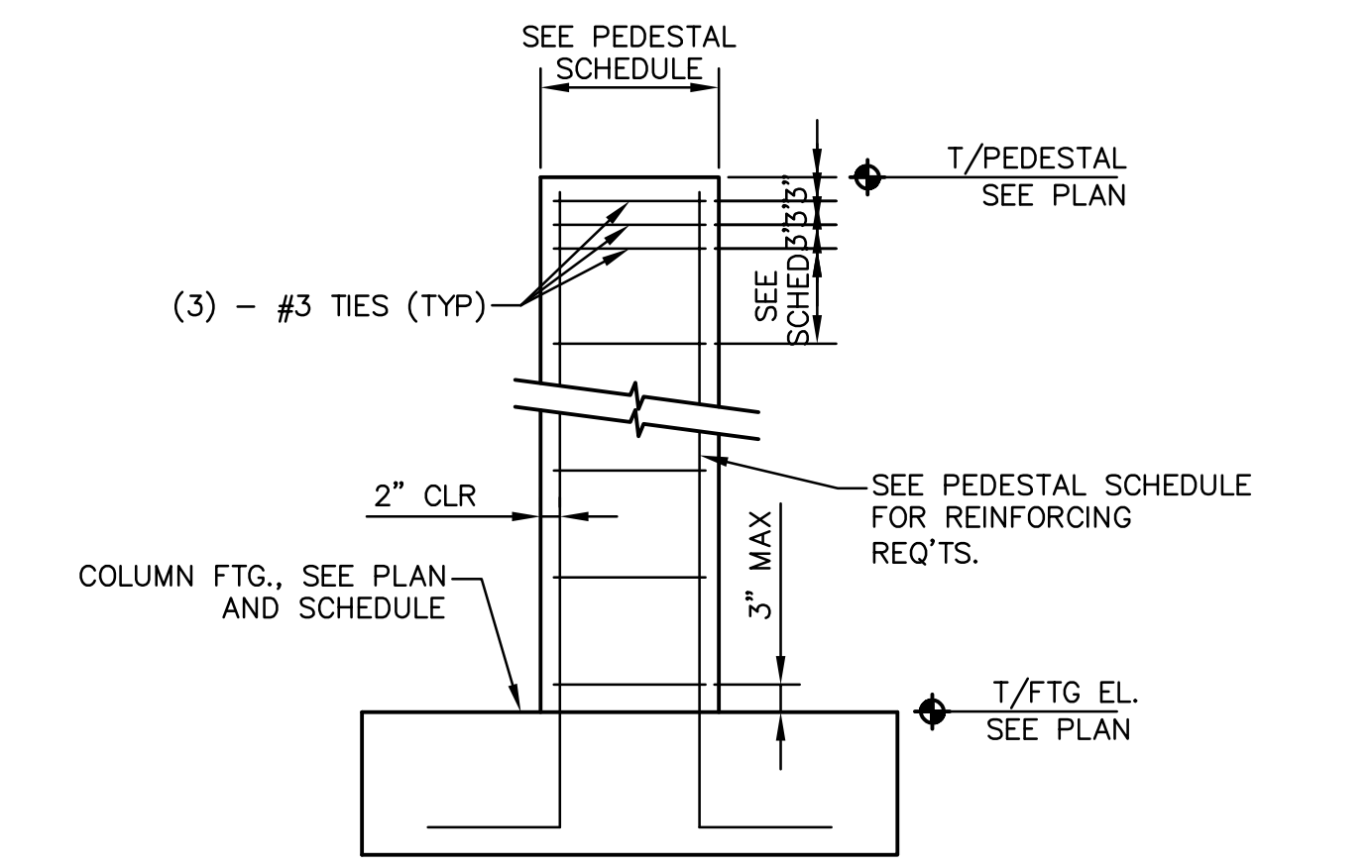
TYPICAL GROUTING AND ANCHOR ROD REQUIREMENTS
SCALE: 1" = 1'-0"



TYP. FOUNDATION WALL DETAIL
SCALE: 3/4" = 1'-0"



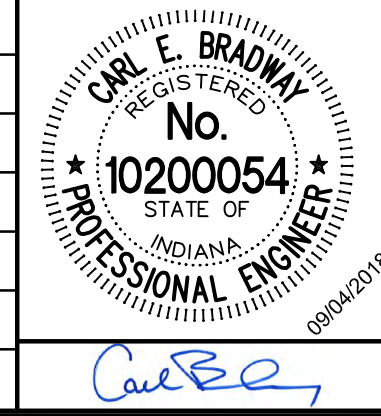
TYP. FOUNDATION WALL AT OPENING DETAIL
SCALE: 3/4" = 1'-0"



TYPICAL PEDESTAL DETAIL
SCALE: 1/2" = 1'-0"

CE Solutions
structural engineers
10 Shoshone Drive Carmel, IN 46032 | 317.818.1912 | cesolutionsinc.com

| | | | | | | |
|--|----------------|-------------------|-----|------|----------|-----------------------|
| SCALE VERIFICATION | DRAWN BY | MAS | NO. | DATE | INITIALS | REVISION DESCRIPTIONS |
| BAR IS ONE INCH LONG ON ORIGINAL DRAWING | CHECKED BY | CEB | | | | |
| | APPROVED BY | CEB | | | | |
| | ISSUE DATE | SEPTEMBER 4, 2018 | | | | |
| | PROJECT NUMBER | 162813-04-003 | | | | |

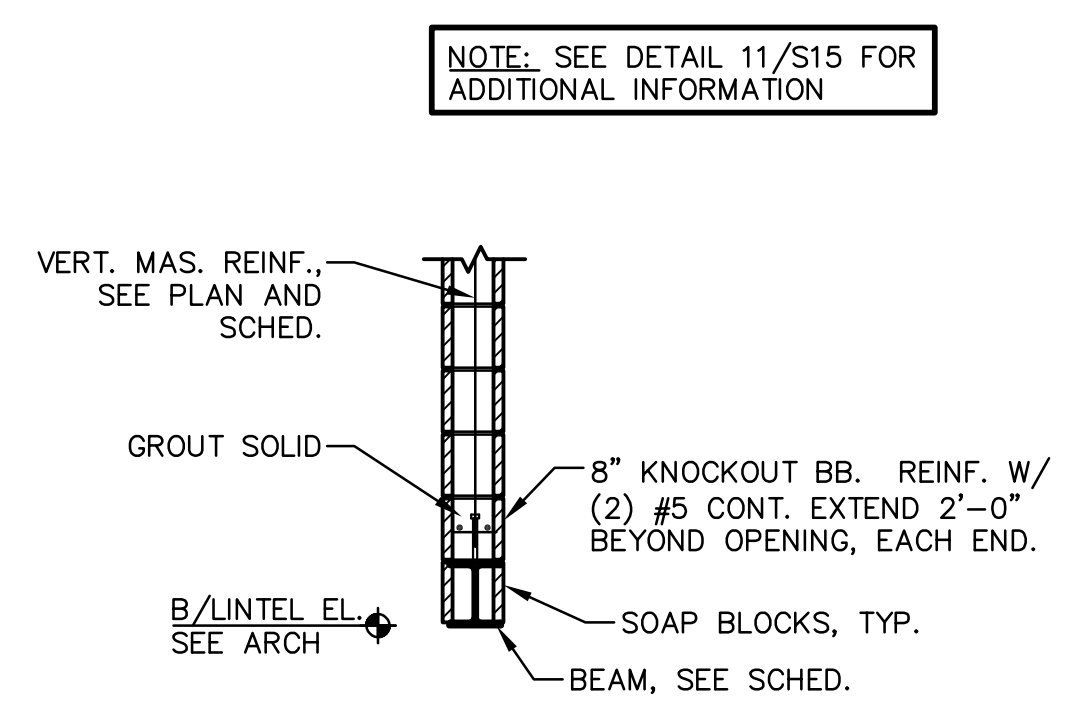


WESSLER ENGINEERING
More than a Project™

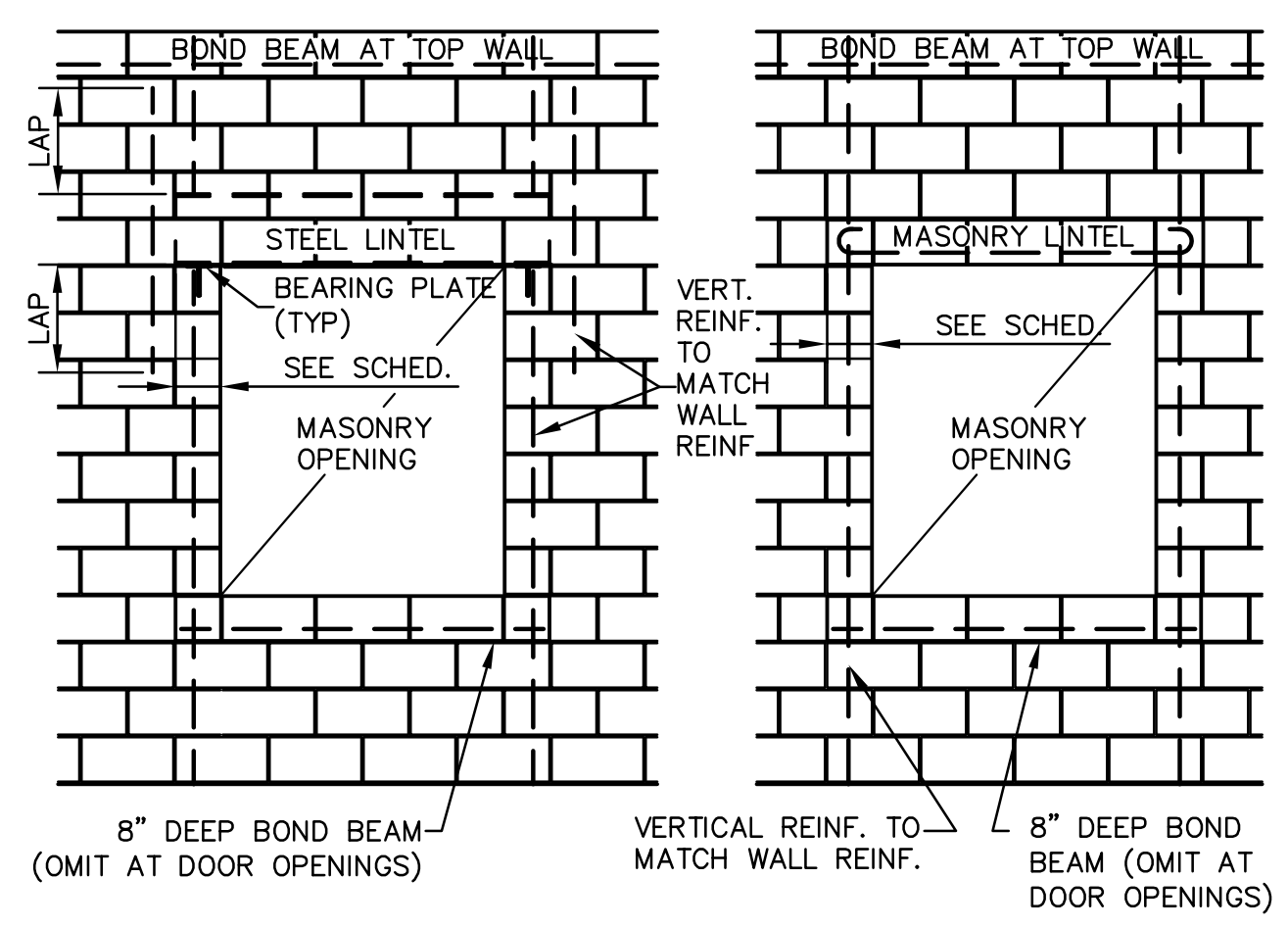
WASTEWATER TREATMENT PLANT EXPANSION - 2017
CITY OF WARSAW, INDIANA
TYPICAL FOUNDATION DETAILS 2

SHEET NO.
MS02
PAGE NO.
251

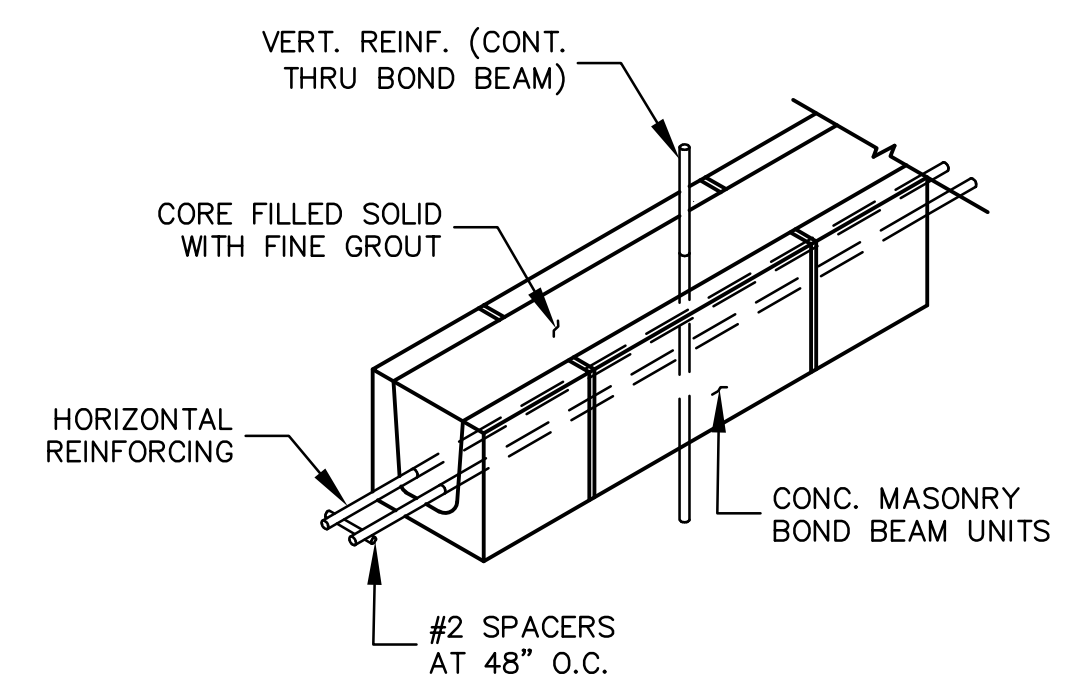
Drawing: S:\project files\17-76 Amersbach\Drawings\Structural\Old Building Files\MS03 - Typical Masonry Details.dwg | Plotter: 09/21/18 @ 01:18:01 | LastSavedBy: rsmears



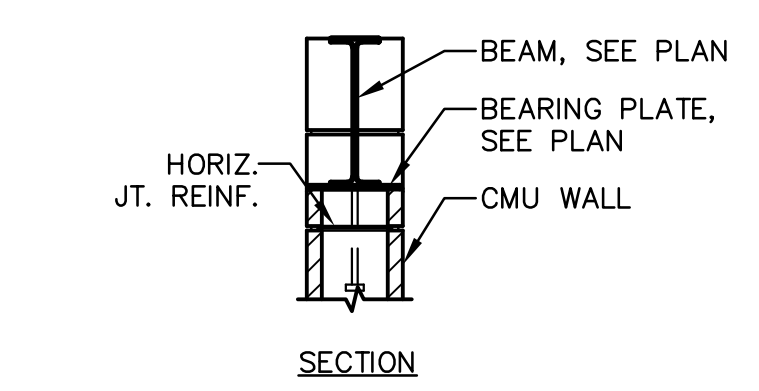
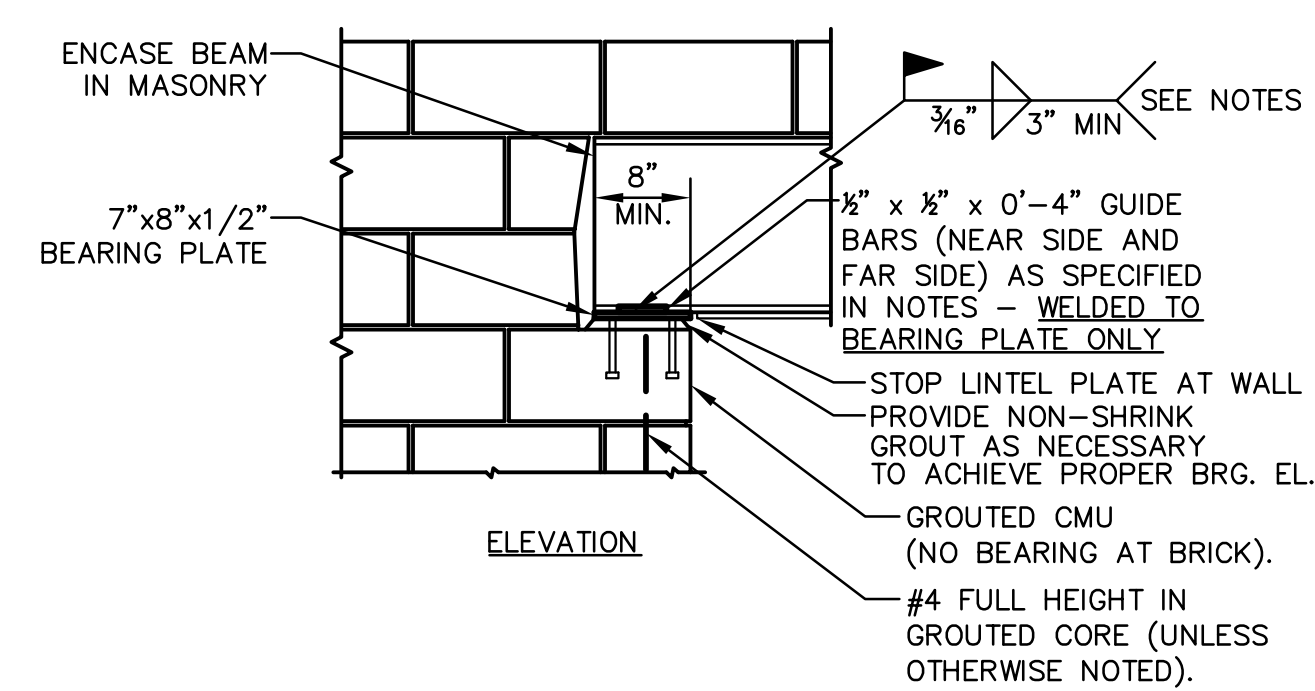
LINTEL DETAIL
SCALE: 1/2" = 1'-0"
MS03



TYP. WALL OPNG. REINFORCING
SCALE: 3/8" = 1'-0"
MS03

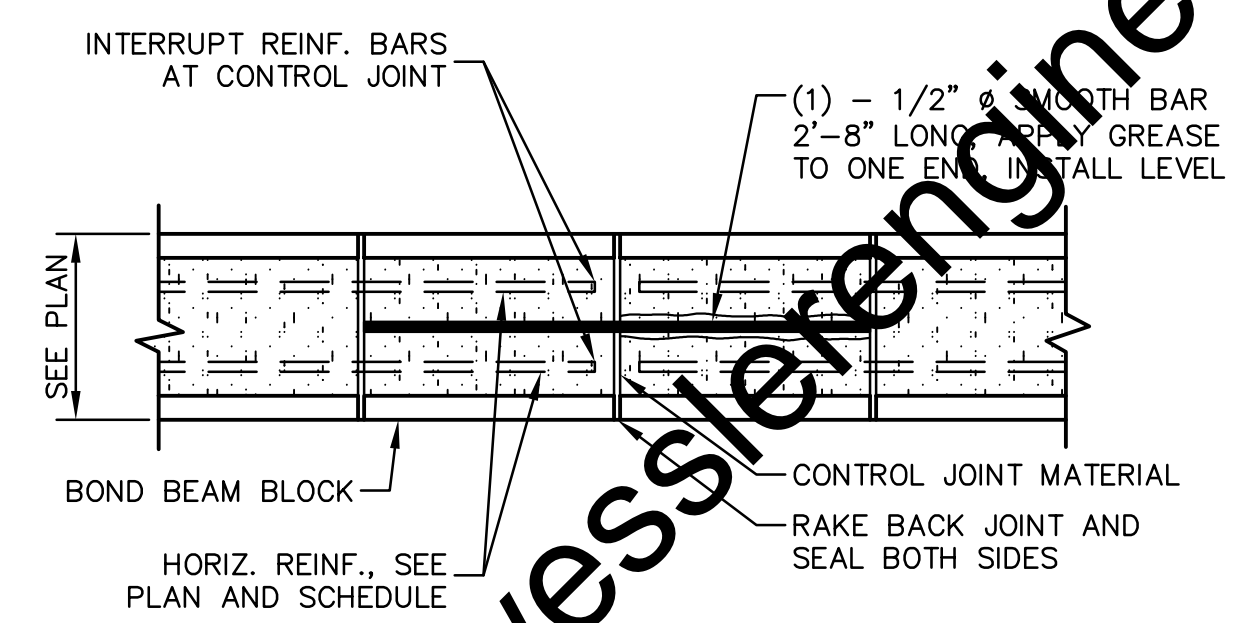


TYPICAL MASONRY BOND BEAM
SCALE: 1 1/2" = 1'-0"
MS03

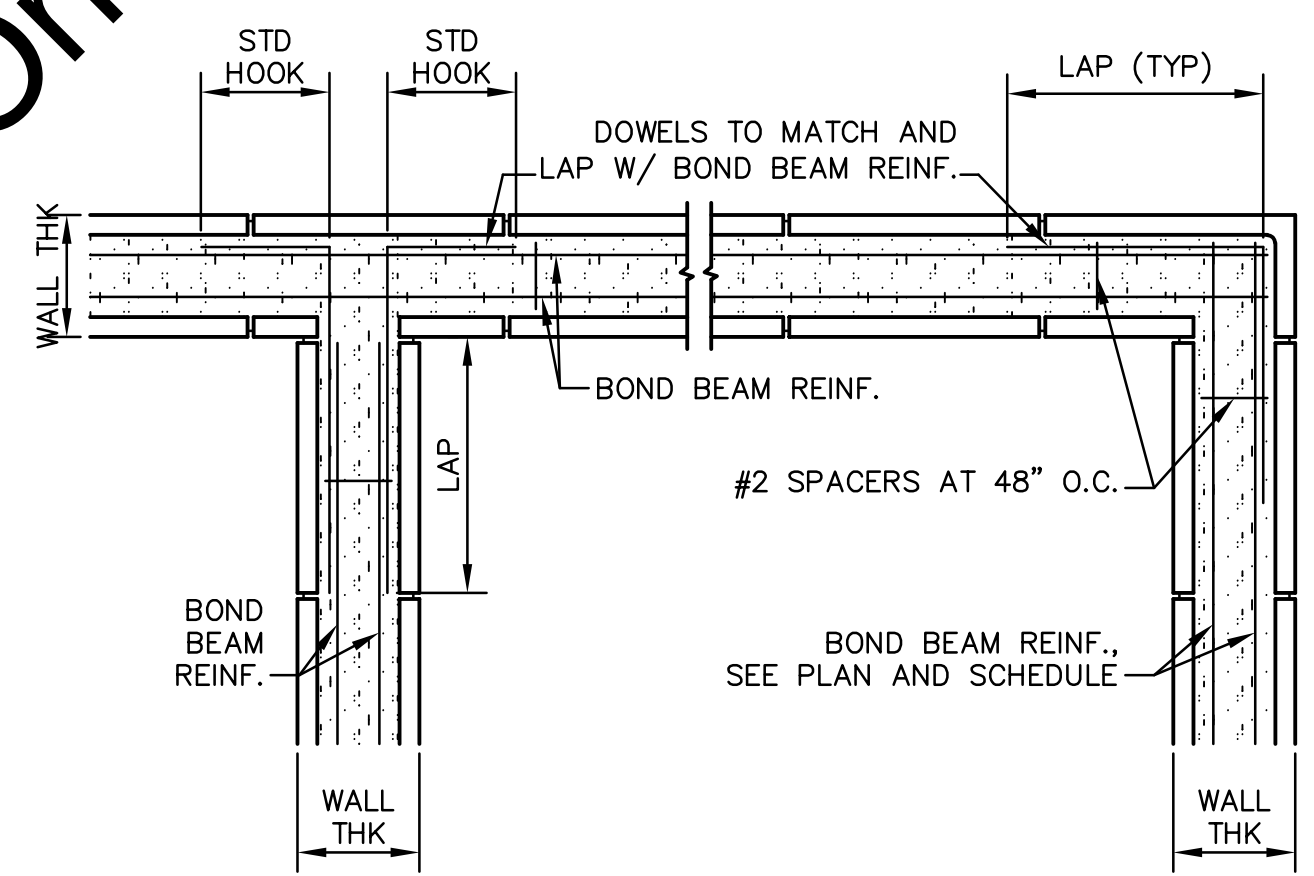


BEAM PARALLEL TO MASONRY WALL
SCALE: 3/4" = 1'-0"
MS03

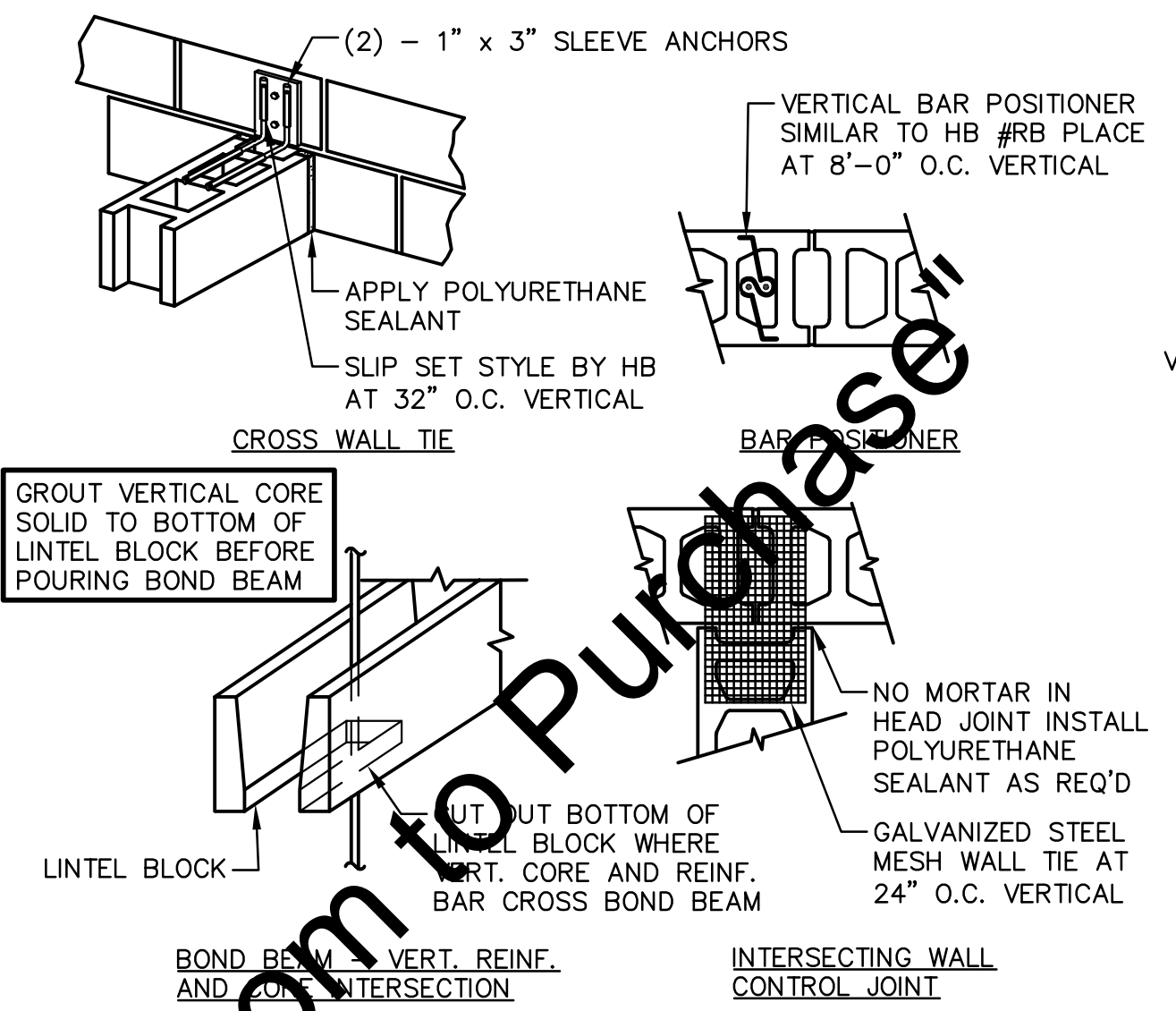
NOTES:
1. BEAMS 10'-0" OR LESS SHALL HAVE 'GUIDE BARS' AT BEARING PLATES AT ONLY ONE END OF BEAMS.
2. BEAMS GREATER THAN 10'-0" SHALL HAVE 'GUIDE BARS' AT BEARING PLATES AT BOTH ENDS OF BEAM.
3. DO NOT WELD BEAM TO BEARING PLATE WHERE 'GUIDE BARS' CONNECTIONS OCCUR.
4. FILL ALL CORES WITH GROUT FULL HEIGHT BELOW BEARING.



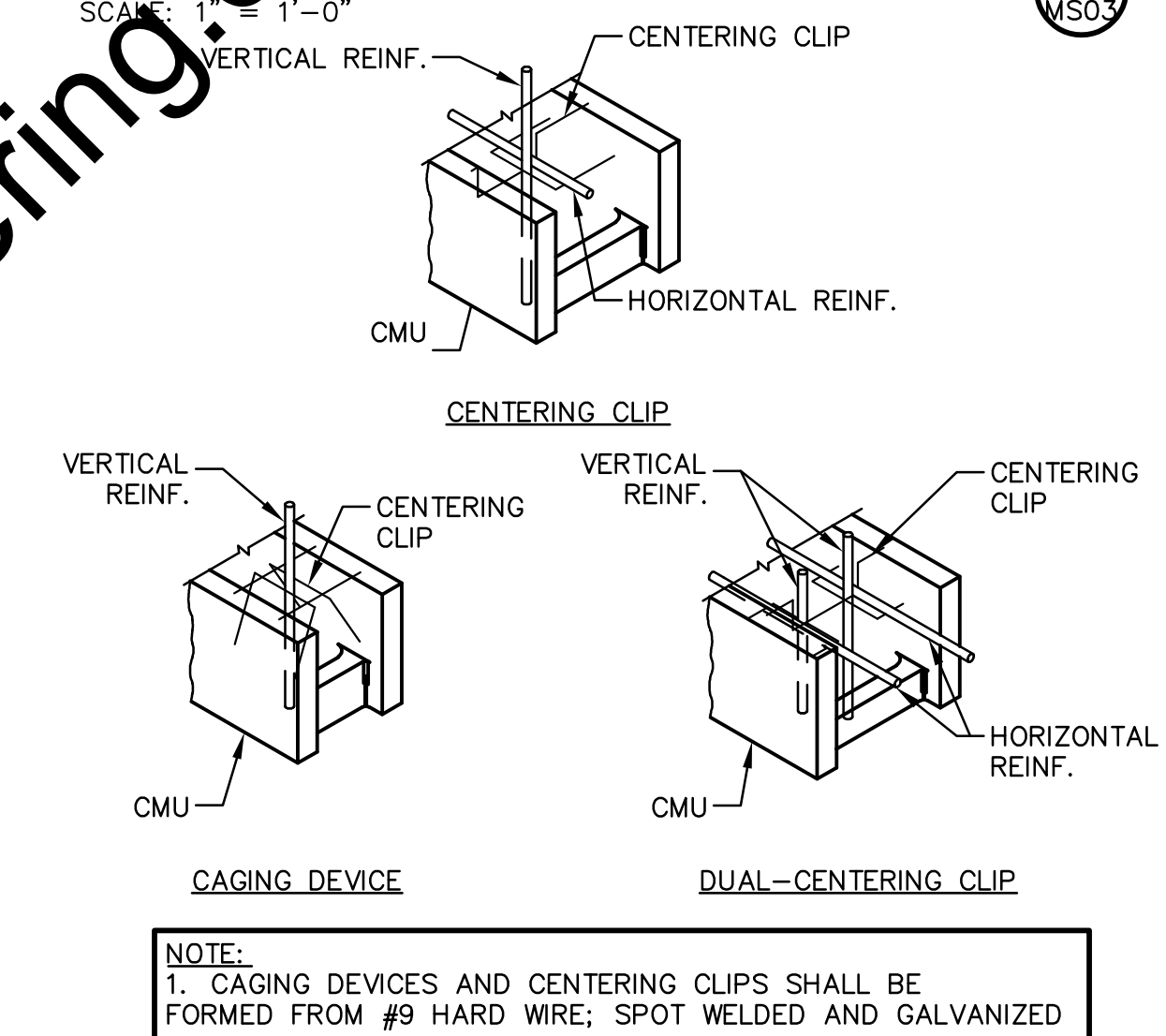
BOND BEAM DETAIL
SCALE: 1" = 1'-0"
MS03



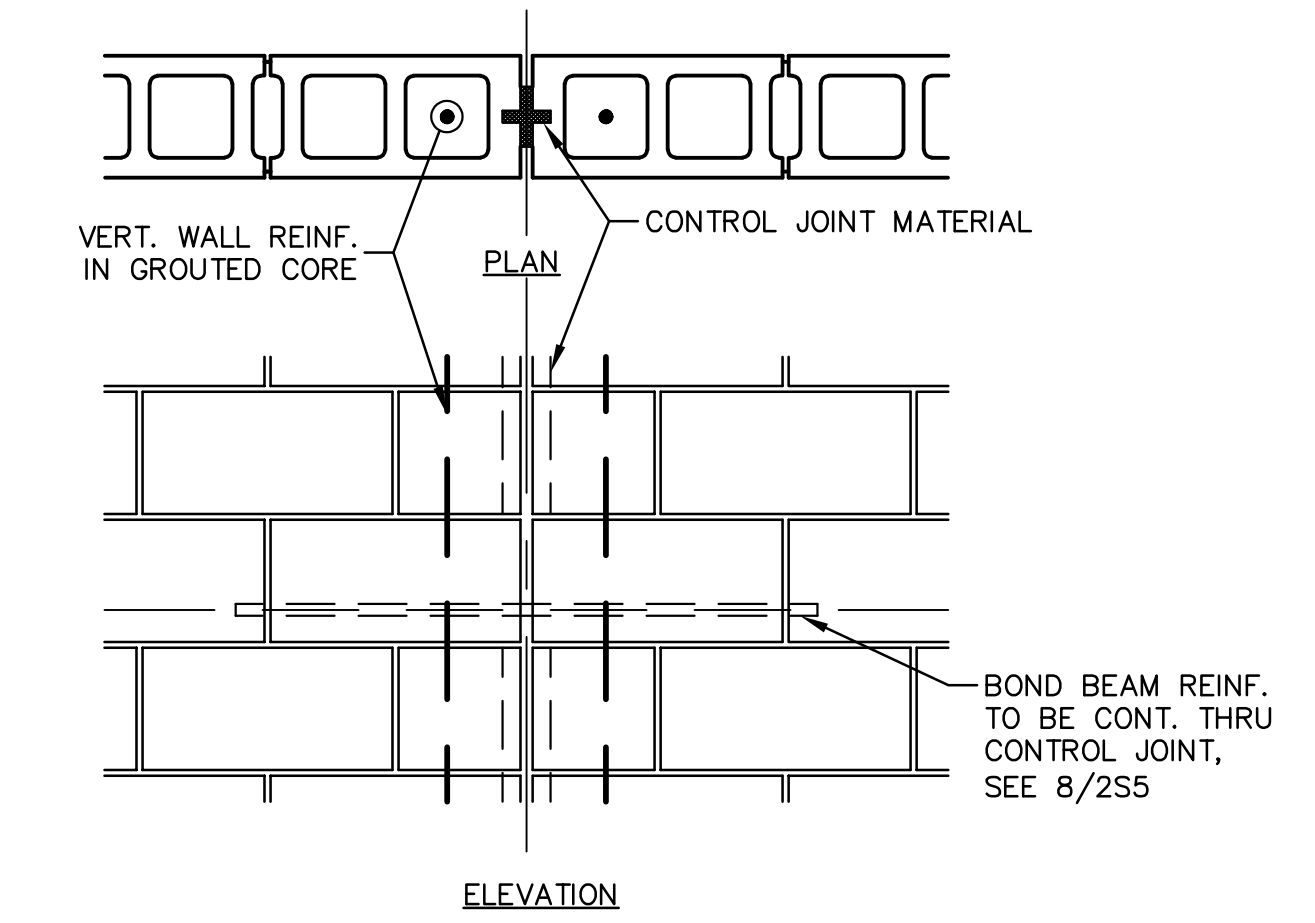
TYP. BOND BEAM REINFORCEMENT
SCALE: 1" = 1'-0"
MS03



MASONRY DETAILS
SCALE: 1" = 1'-0"
MS03

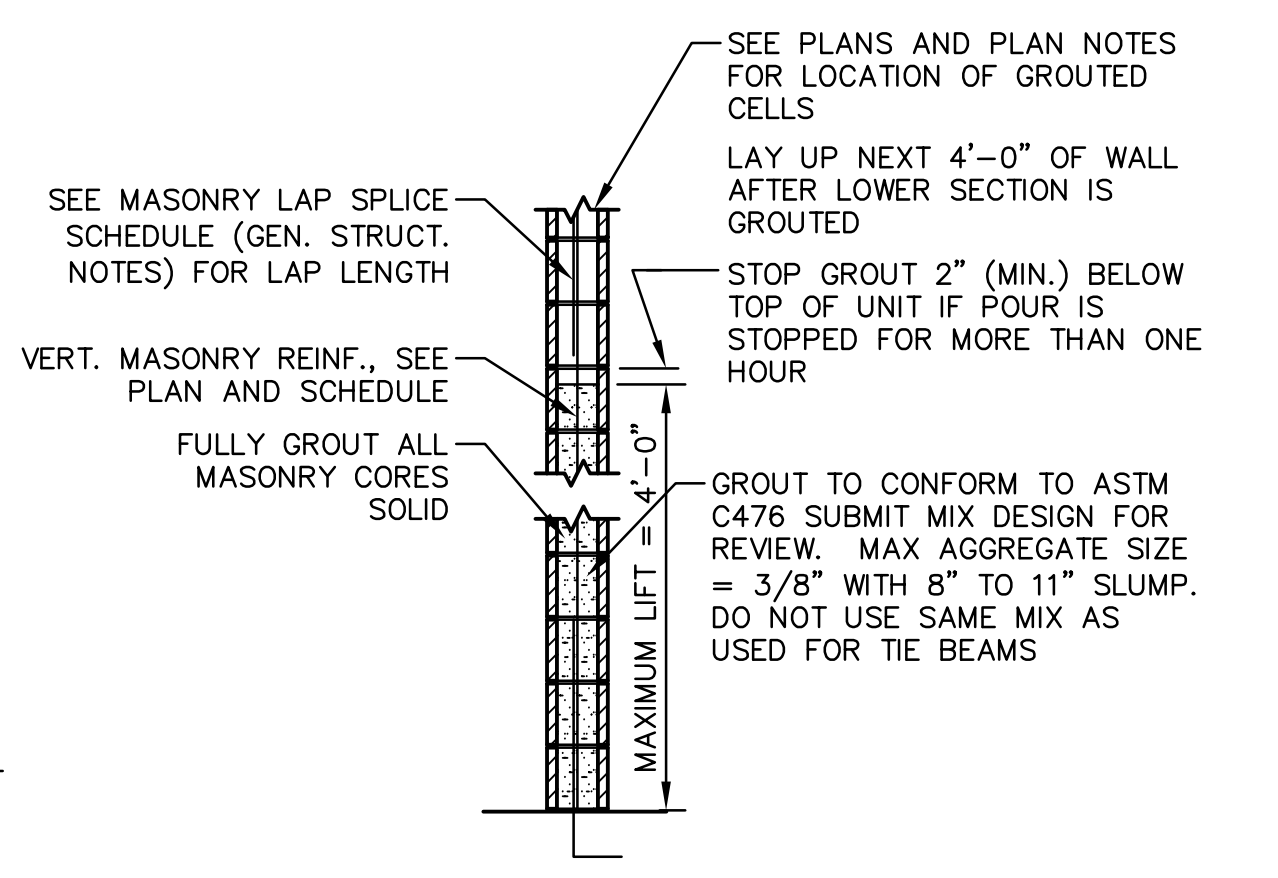


TYP. MASONRY REINF. CLIPS
SCALE: 1" = 1'-0"
MS03



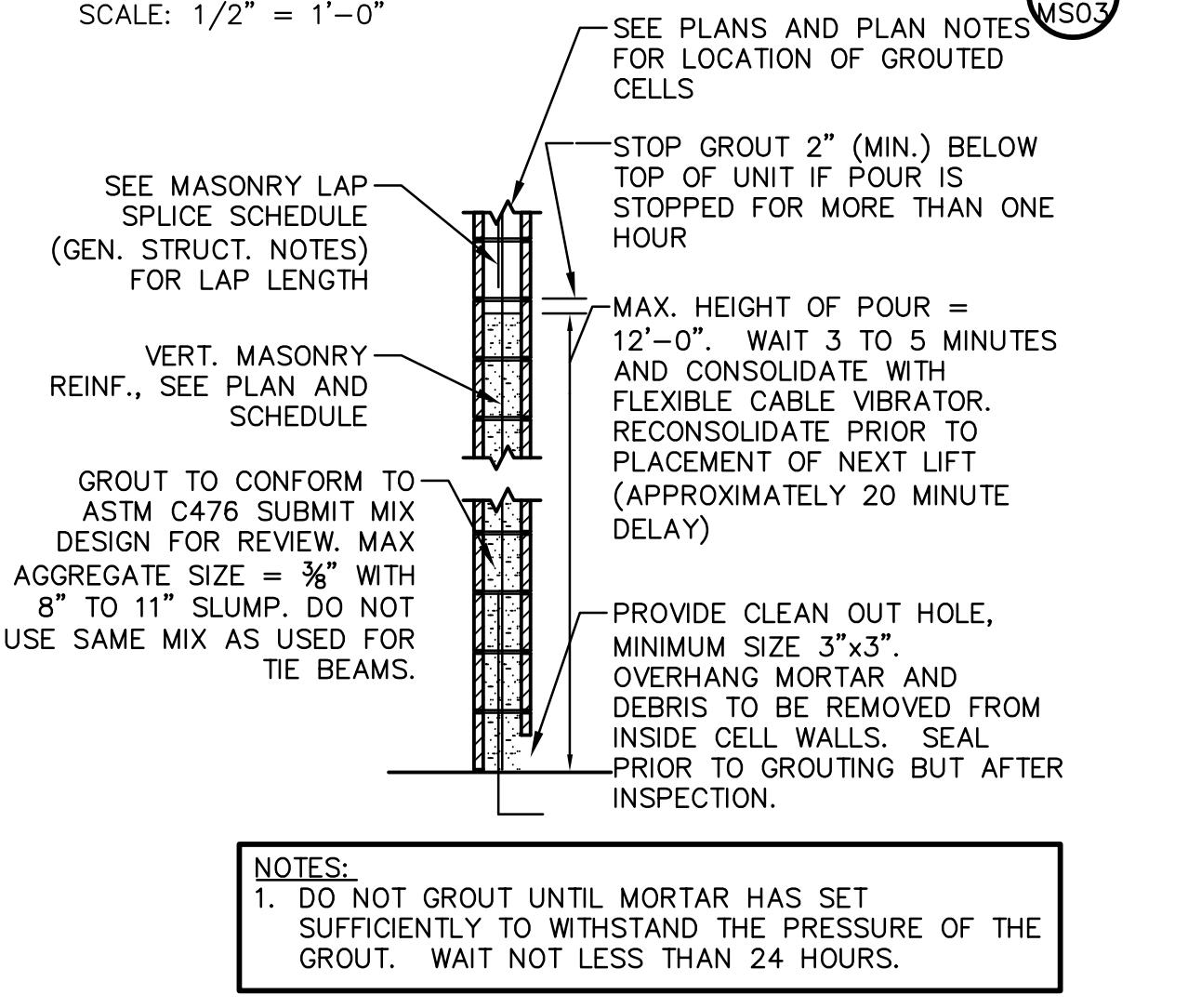
TYP. MASONRY CONTROL JOINT
SCALE: 1" = 1'-0"
MS03

NOTES:
1. BOND BEAM REINF. SHALL NOT BE LAPPED WITHIN 8'-0" OF CONTROL JOINT.
2. HORIZONTAL JOINT REINF. SHALL BE DISCONTINUOUS AT CONTROL JOINTS.
3. SEE DRAWINGS FOR LOCATION OF CONTROL JOINTS.



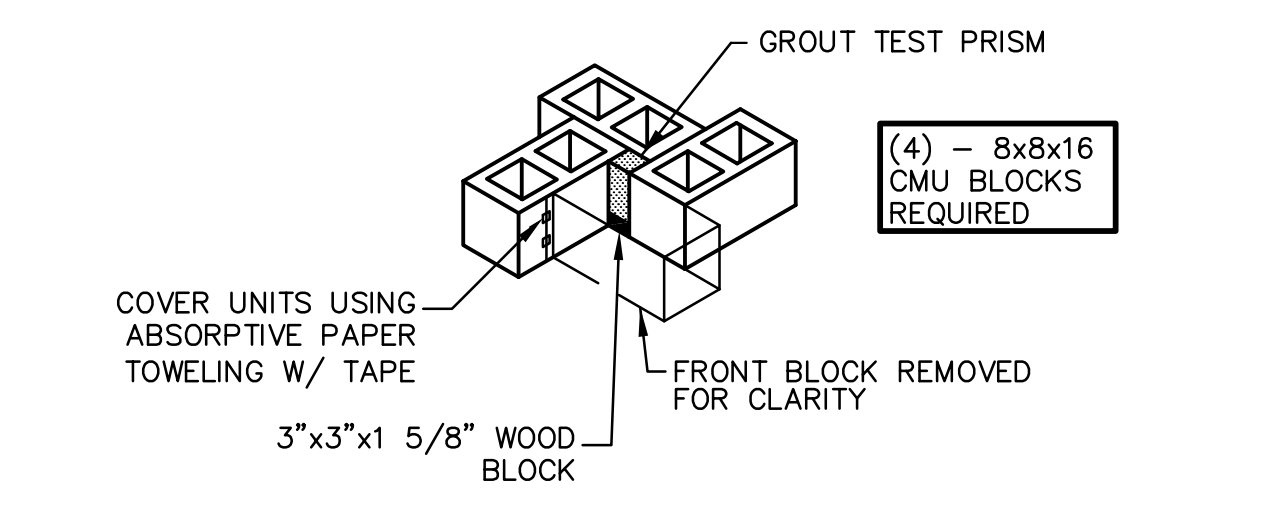
LOW LIFT GROUTING DETAIL
SCALE: 1/2" = 1'-0"
MS03

NOTES:
1. DO NOT GROUT UNTIL MORTAR HAS SET SUFFICIENTLY TO WITHSTAND THE PRESSURE OF THE GROUT. WAIT NOT LESS THAN 24 HOURS.



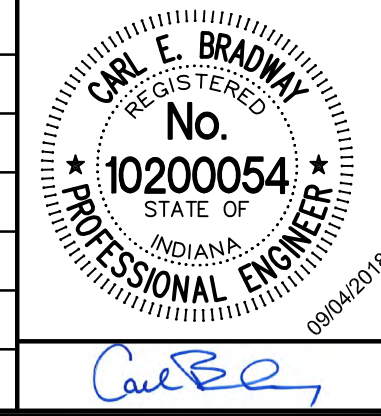
HIGH LIFT GROUTING DETAIL
SCALE: 1/2" = 1'-0"
MS03

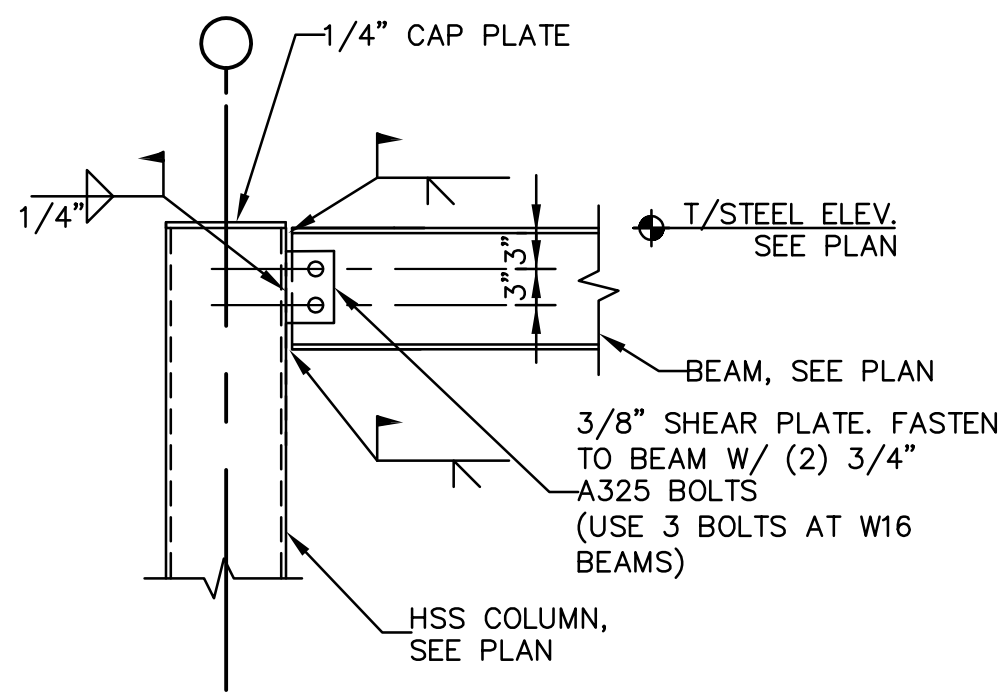
NOTES:
1. DO NOT GROUT UNTIL MORTAR HAS SET SUFFICIENTLY TO WITHSTAND THE PRESSURE OF THE GROUT. WAIT NOT LESS THAN 24 HOURS.



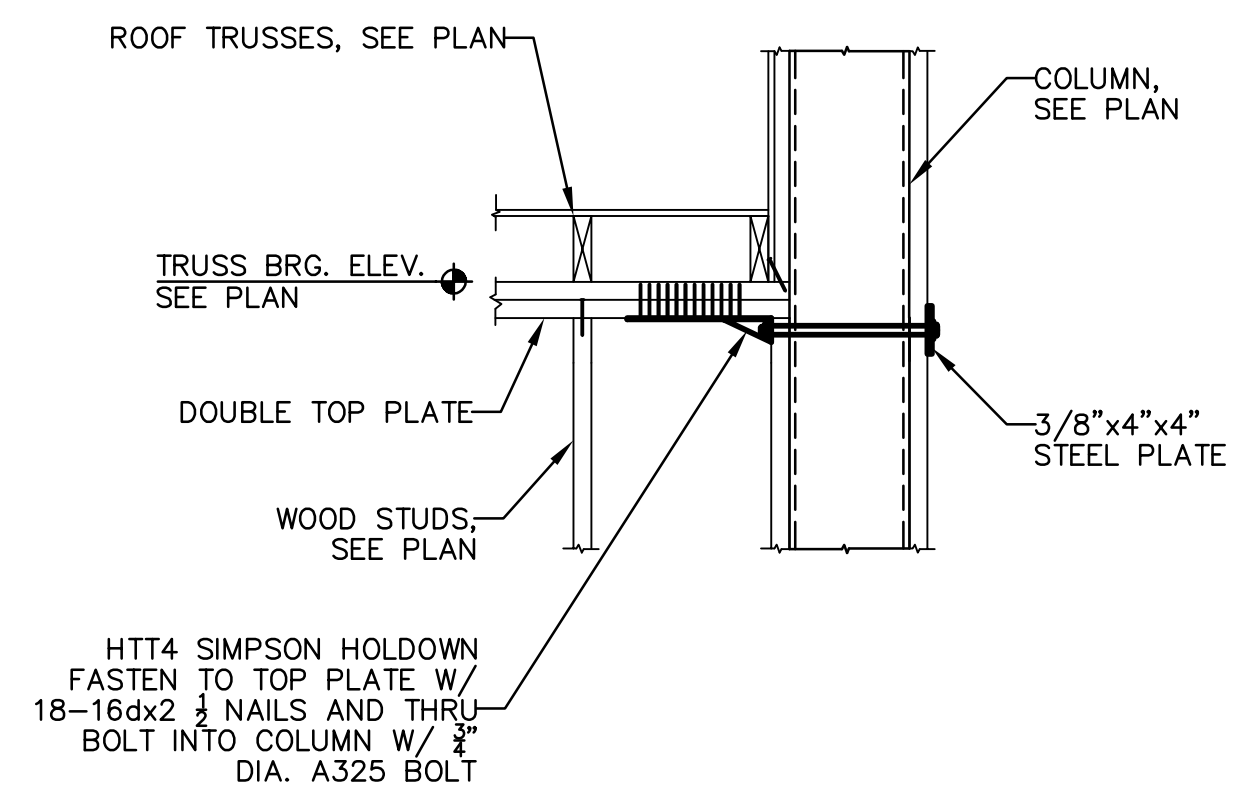
MASONRY GROUT TEST MOLD (ASTM C-1019)
SCALE: 1/2" = 1'-0"
MS03

| SCALE VERIFICATION | DRAWN BY | MAS | NO. | DATE | INITIALS | REVISION DESCRIPTIONS |
|--|----------------|-------------------|-----|------|----------|-----------------------|
| BAR IS ONE INCH LONG ON ORIGINAL DRAWING | CHECKED BY | CEB | | | | |
| | APPROVED BY | CEB | | | | |
| | ISSUE DATE | SEPTEMBER 4, 2018 | | | | |
| | PROJECT NUMBER | 162813-04-003 | | | | |

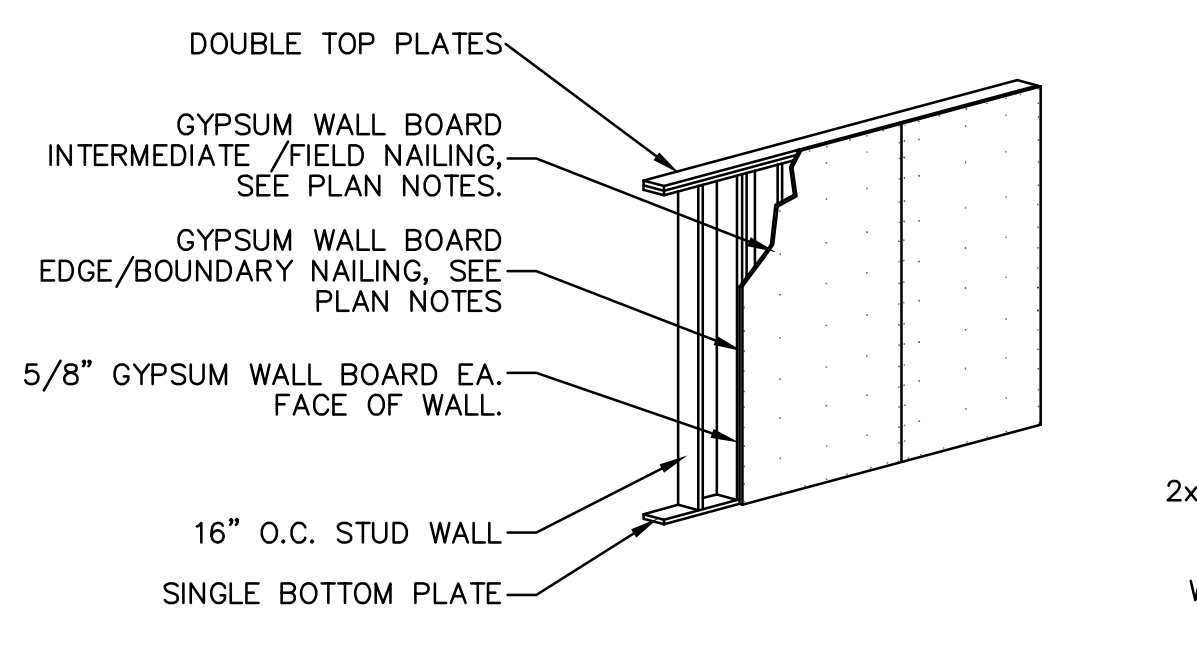




MOMENT CONNECTION
SCALE: 3/4" = 1'-0"



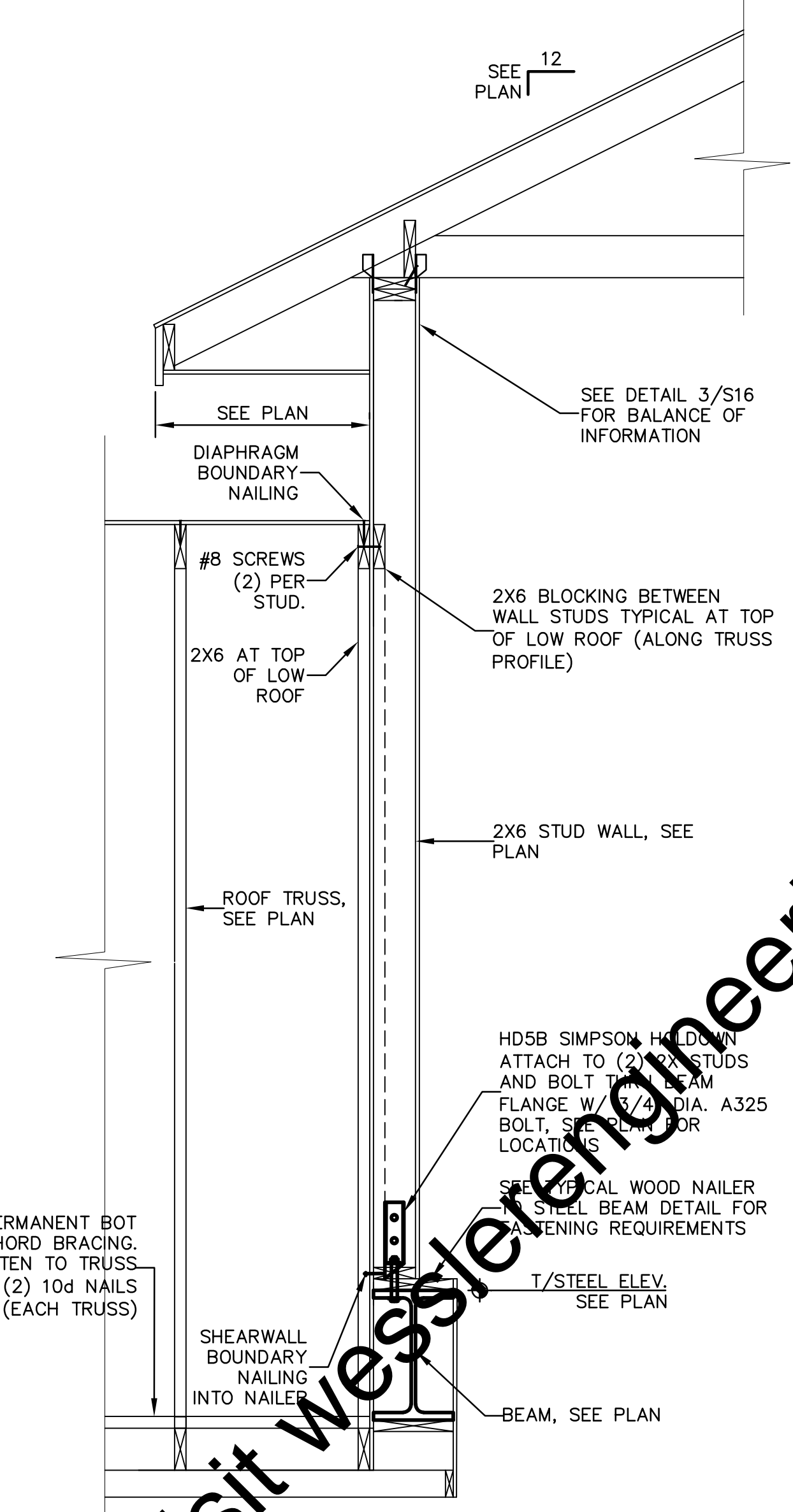
TYPICAL TOP PLATE CONNECTION TO COLUMN
SCALE: N.T.S.



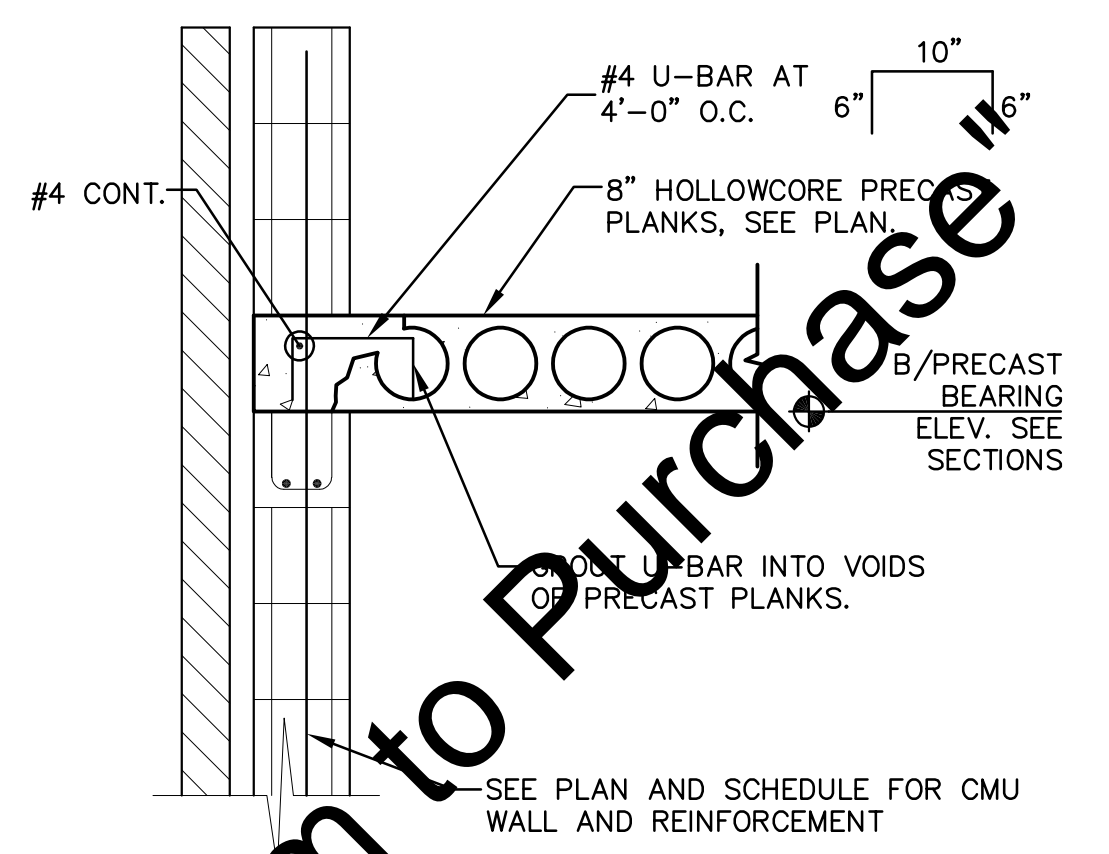
TYPICAL SHEAR WALL LAYOUT
SCALE: N.T.S.

| NAIL TYPES | | | |
|------------|-----------|----------|---------------|
| SIZE | TYPE | DIAMETER | HEAD DIAMETER |
| 6d | COOLER | .092 | 19/64 |
| 6d | WALLBOARD | .092 | 1/4 |
| 8d | COOLER | .113 | 9/32 |
| 8d | WALLBOARD | .113 | 3/8 |

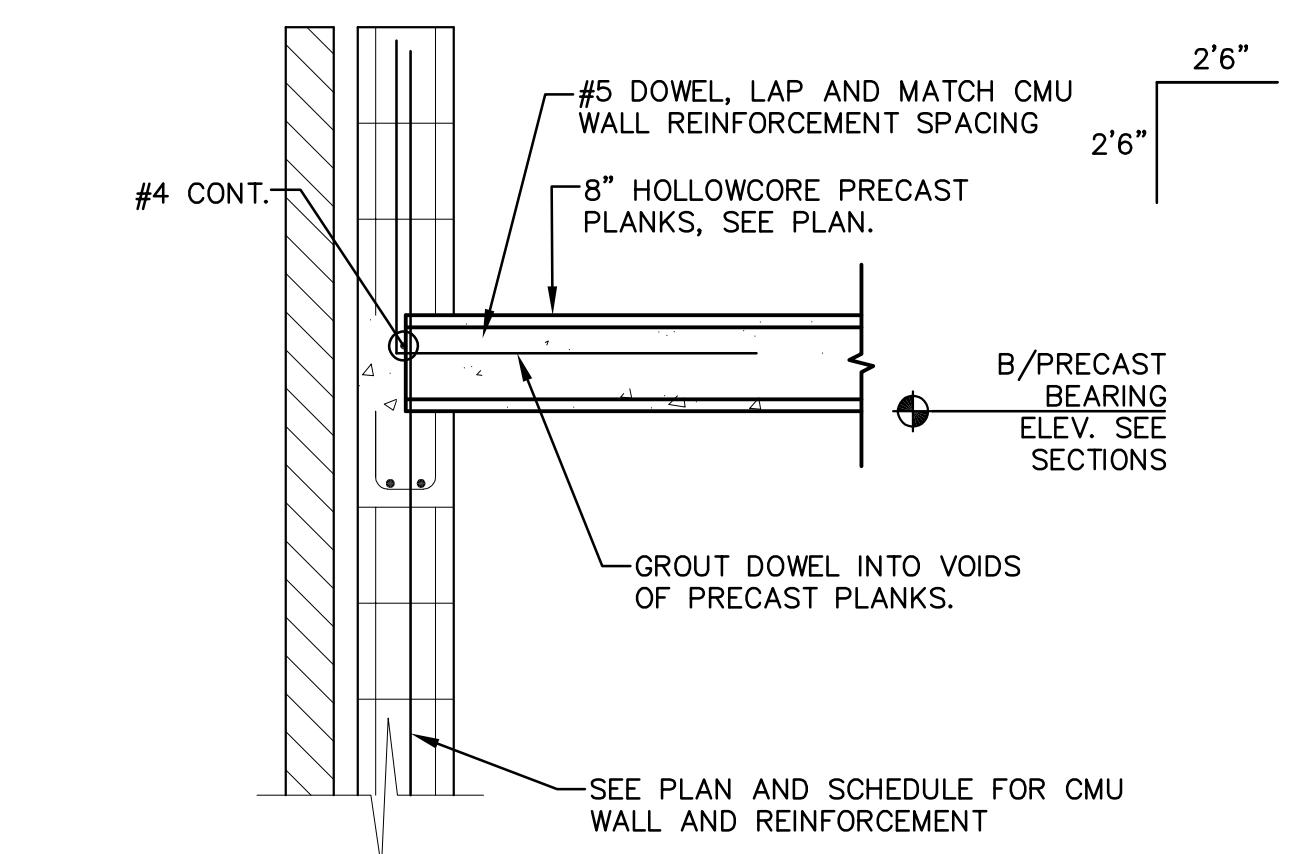
NOTE: IF WALLBOARD IS INSTALLED LONG AXIS HORIZONTAL PROVIDE 2x4 BLOCKING AT HORIZONTAL JOINT LINE, FASTEN BOTH SHEETS TO BLOCKING WITH 4" SPACING PATTERN.



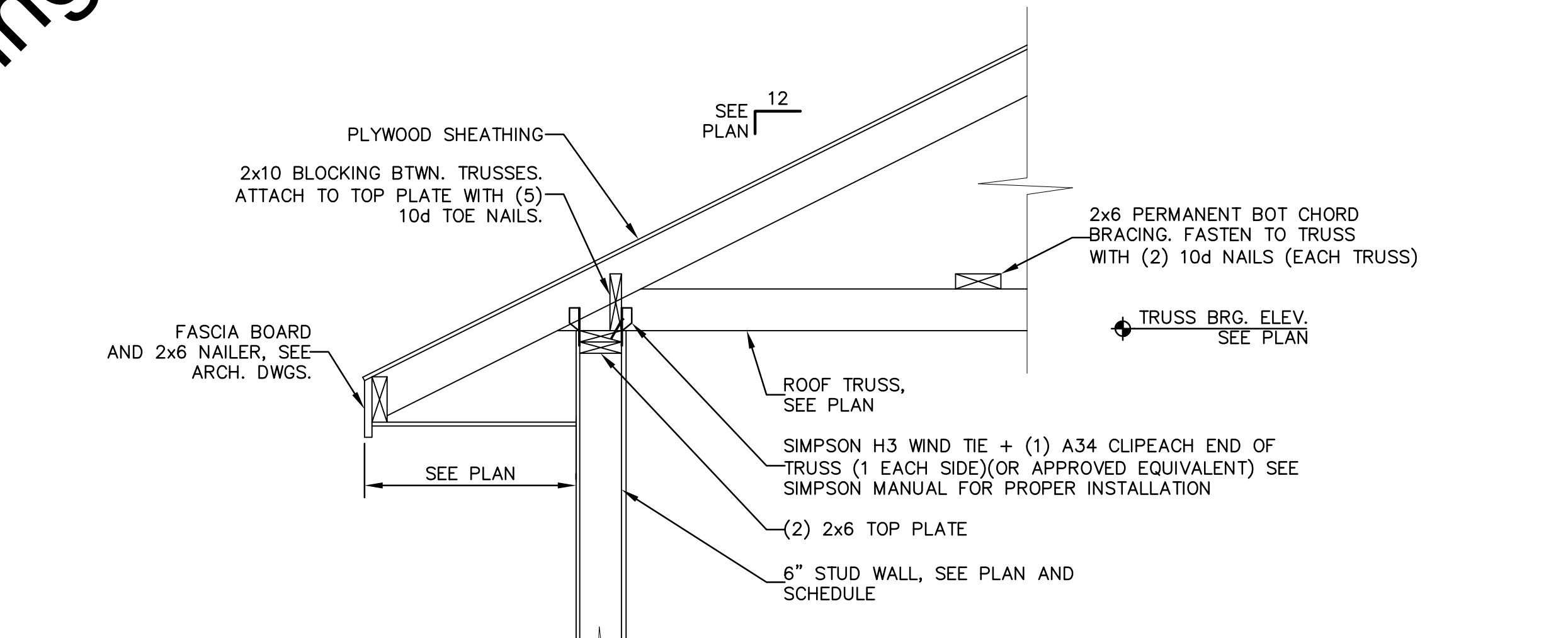
WALL SECTION
SCALE: 3/4" = 1'-0"



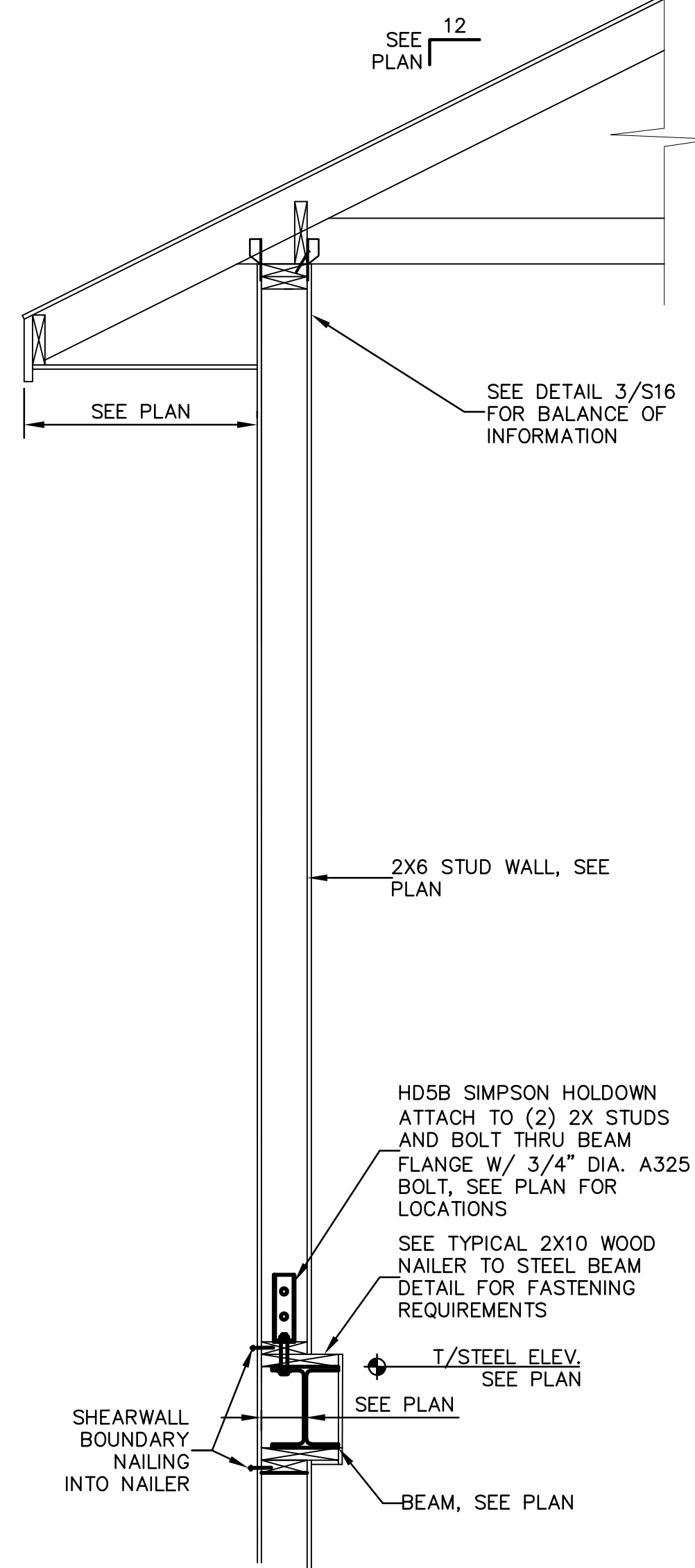
WALL SECTION
SCALE: 3/4" = 1'-0"



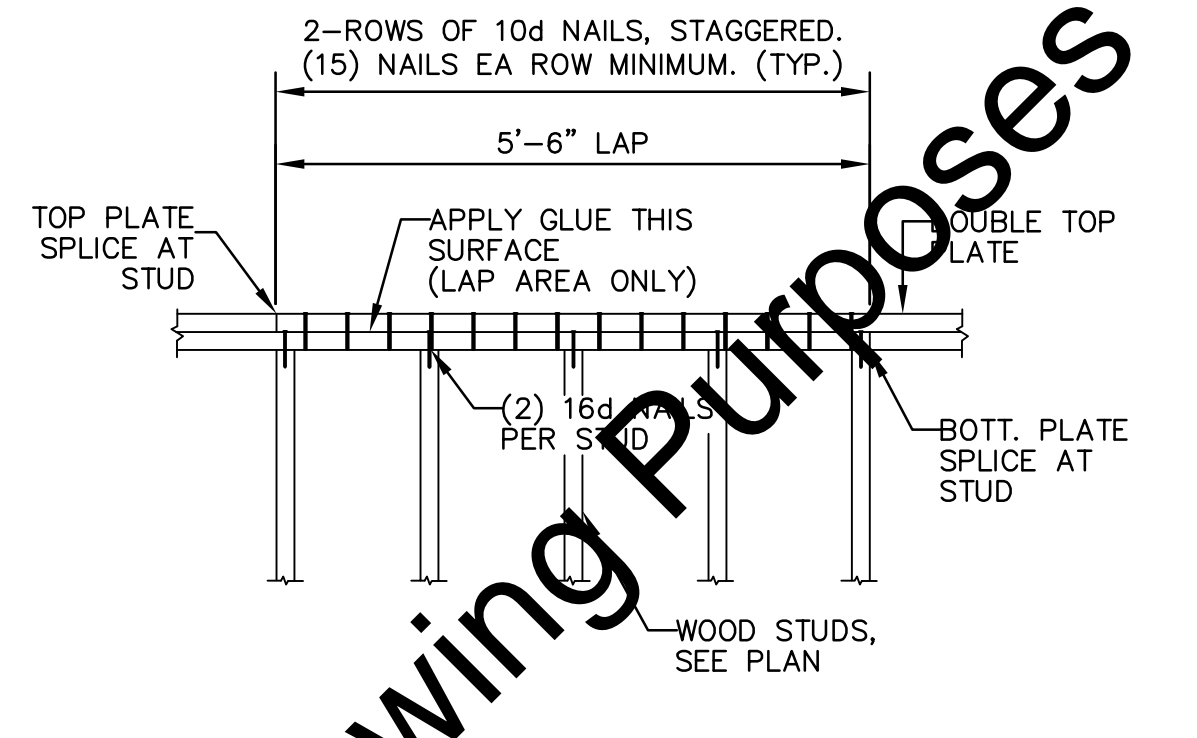
WALL SECTION
SCALE: 3/4" = 1'-0"



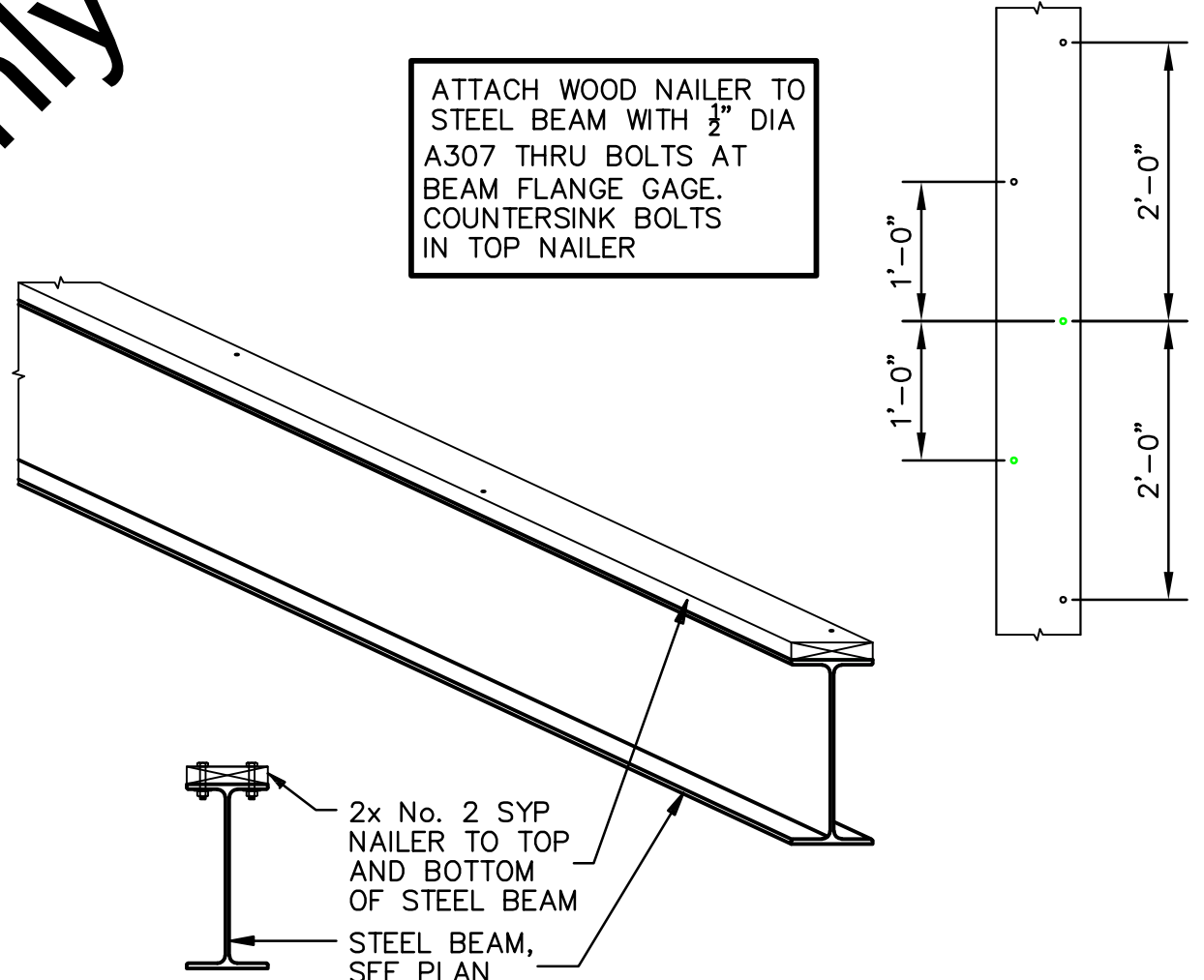
WALL SECTION
SCALE: 3/4" = 1'-0"



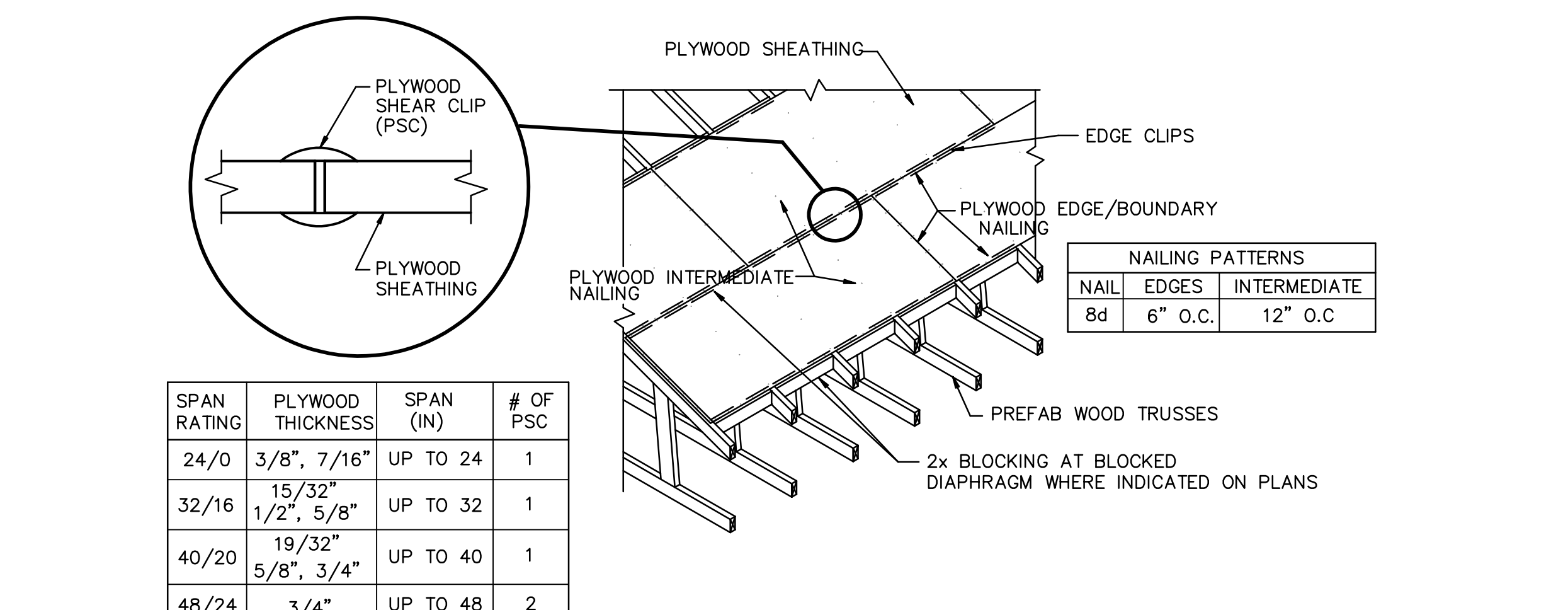
WALL SECTION
SCALE: 3/4" = 1'-0"



TYPICAL DOUBLE TOP PLATE SPLICE
SCALE: N.T.S.



TYPICAL WOOD NAILER TO STEEL BEAM
SCALE: 3/4" = 1'-0"



TYPICAL ROOF SHEATHING DETAIL
SCALE: 1/2" = 1'-0"

| SPAN RATING | PLYWOOD THICKNESS | SPAN (IN) | # OF PSC |
|-------------|--------------------|-----------|----------|
| 24/0 | 3/8", 7/16" | UP TO 24 | 1 |
| 32/16 | 15/32", 1/2", 5/8" | UP TO 32 | 1 |
| 40/20 | 19/32", 5/8", 3/4" | UP TO 40 | 1 |
| 48/24 | 3/4" | UP TO 48 | 2 |

| NAILING PATTERNS | | |
|------------------|---------|--------------|
| NAIL | EDGES | INTERMEDIATE |
| 8d | 6" O.C. | 12" O.C. |

Drawing: S:\project files\17-176 Anaeobic Digesters and Control Building - Warsaw WWTP Improvements Project\drawing\structural\Old Building Files\MS04 - Typical Framing Details.dwg | Layout: Typical Framing Details | Plotter: 08/01/18 @ 01:18:12 | LastSavedBy: msars

CE Solutions
structural engineers
10 Shoshone Drive Carmel, IN 46032 317.818.1912 cesolutionsinc.com

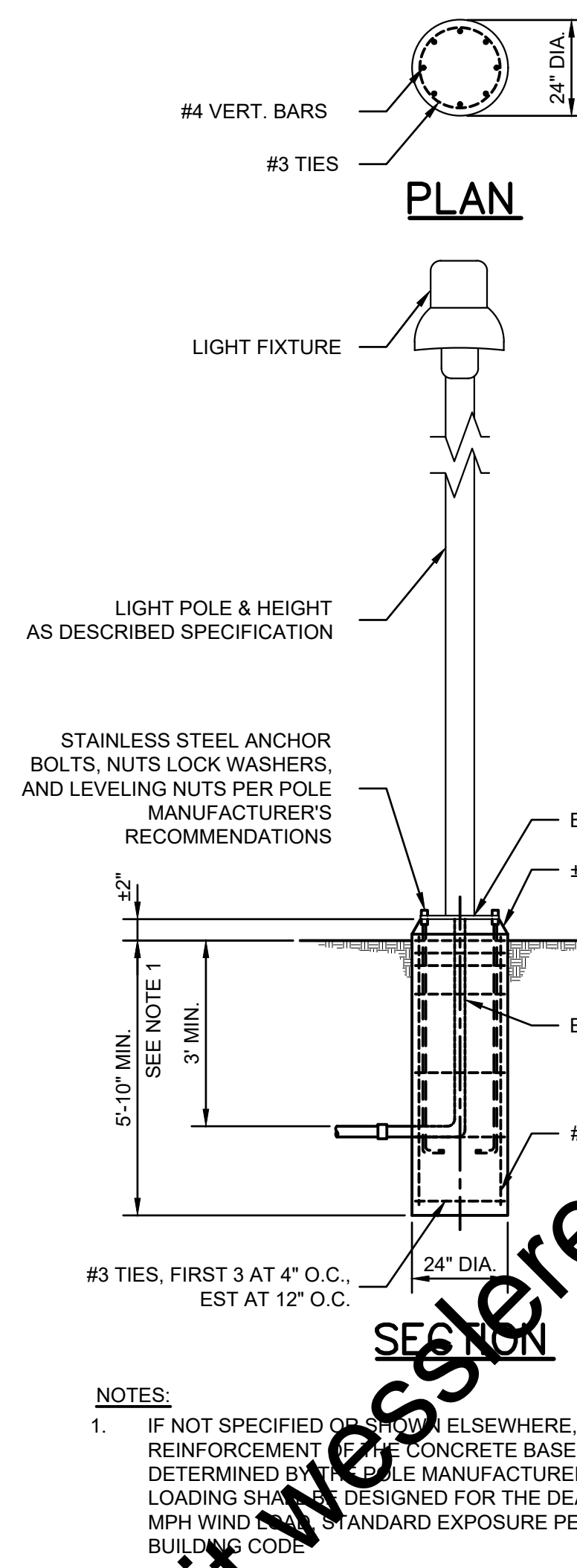
| SCALE VERIFICATION | DRAWN BY | MAS | NO. | DATE | INITIALS | REVISION DESCRIPTIONS |
|--|----------------|-------------------|-----|------|----------|-----------------------|
| BAR IS ONE INCH LONG ON ORIGINAL DRAWING | CHECKED BY | CEB | | | | |
| | APPROVED BY | CEB | | | | |
| | ISSUE DATE | SEPTEMBER 4, 2018 | | | | |
| | PROJECT NUMBER | 162813-04-003 | | | | |

WESSLER ENGINEERING
More than a Project™

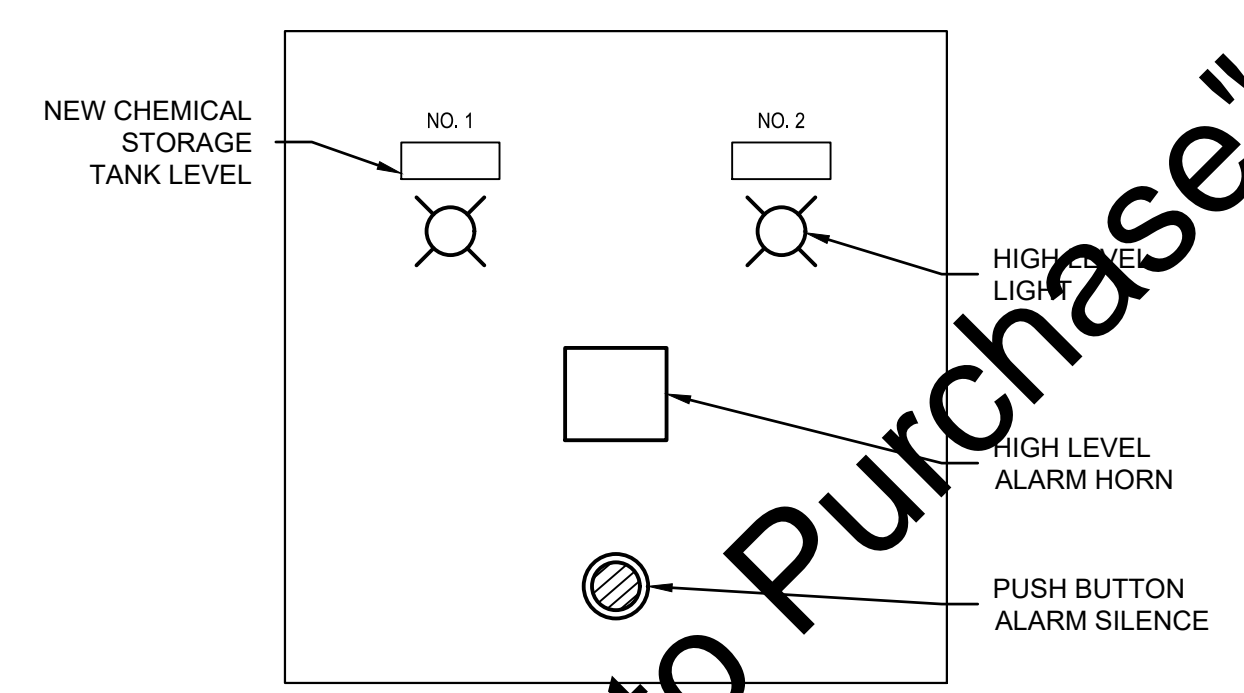
WASTEWATER TREATMENT PLANT EXPANSION - 2017
CITY OF WARSAW, INDIANA
TYPICAL FRAMING DETAILS

SHEET NO. **MS04**
PAGE NO. 253

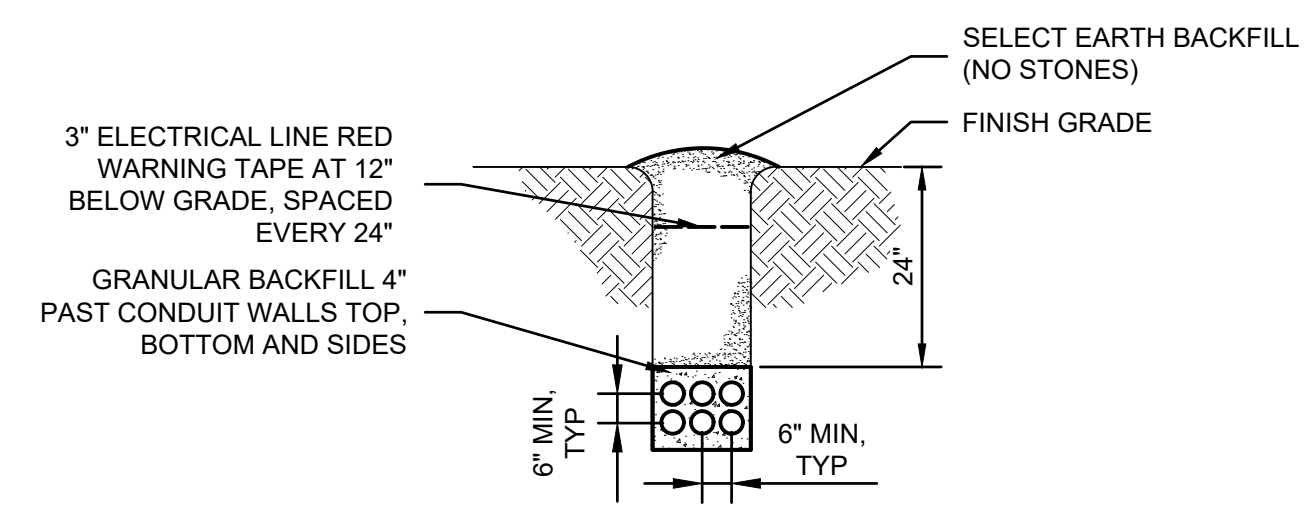
| CONDUIT NUMBER | EQUIPMENT NAME | FROM | TO | FULL LOAD AMPS (FLA) | PHASE CONDUCTOR (#) | NEUTRAL CONDUCTOR (#) (IF APPLICABLE) | GROUNDING CONDUCTOR (#) | CONDUIT (IN.) |
|----------------|--|---------|--|----------------------|---------------------|---------------------------------------|-------------------------|---------------|
| 100 | VENTILATOR NO. 1 | MCC-SH | Vent 1 | 7 | 12 | 12 | 12 | 3/4 |
| 101 | VENTILATOR 2 | MCC-SH | Vent 2 | 7 | 12 | 12 | 12 | 3/4 |
| 102 | PP SH | MCC-SH | PP SH | 139 | 1/0 | 1/0 | 6 | 3 |
| 103 | MIXING TANK MIXER | MCC-SH | Mixing Tank Mixer | 7 | 12 | 12 | 12 | 3/4 |
| 104 | LP CHEM TRANSFORMER PRIMARY | MCC-SP1 | LP CHEM TRANSFORMER PRIMARY | 63 | 6 | 6 | 8 | 2 |
| 105 | LP CHEM TRANSFORMER SECONDARY | MCC-SP1 | LP CHEM TRANSFORMER SECONDARY | 139 | 1/0 | 1/0 | 6 | 3 |
| 106 | PP-SP 1 | MCC-SP1 | PP-SP 1 | 244 | 250 | 250 | 4 | 3 |
| 107 | PP-SP 2 | PP-SP1 | PP-SP 2 | 244 | 250 | 250 | 4 | 3 |
| 108 | SCUM MIXER | MCC-SP1 | SCUM MIXER | 2 | 12 | 12 | 12 | 3/4 |
| 109 | GRIT CLASSIFIER | MCC-SC | GRIT CLASSIFIER | 3 | 12 | 12 | 12 | 3/4 |
| 110 | DIGESTER 1 DRAIN LINE ACUTATOR | PP-SH | DIGESTER 1 DRAIN LINE ACUTATOR | 7 | 12 | 12 | 12 | 3/4 |
| 111 | DIGESTER 2 DRAIN LINE ACUTATOR | PP-SH | DIGESTER 2 DRAIN LINE ACUTATOR | 7 | 12 | 12 | 12 | 3/4 |
| 112 | DIGESTER 3 DRAIN LINE ACUTATOR | PP-SH | DIGESTER 3 DRAIN LINE ACUTATOR | 7 | 12 | 12 | 12 | 3/4 |
| 113 | THICKENED SLUDGE FEED VALVE DIG 1 | PP-SH | THICKENED SLUDGE FEED VALVE DIG 1 | 7 | 12 | 12 | 12 | 3/4 |
| 114 | THICKENED SLUDGE FEED VALVE DIG 2 | PP-SH | THICKENED SLUDGE FEED VALVE DIG 2 | 7 | 12 | 12 | 12 | 3/4 |
| 115 | THICKENED SLUDGE FEED VALVE DIG 3 | PP-SH | THICKENED SLUDGE FEED VALVE DIG 3 | 7 | 12 | 12 | 12 | 3/4 |
| 116 | DRAIN VALVE | PP-SH | DRAIN VALVE | 7 | 12 | 12 | 12 | 3/4 |
| 117 | CROSSOVER VALVE | PP-SH | CROSSOVER VALVE | 7 | 12 | 12 | 12 | 3/4 |
| 118 | BFT | PP-SH | BFT | 7 | 12 | 12 | 12 | 3/4 |
| 119 | GBT | PP-SH | GBT | 7 | 12 | 12 | 12 | 3/4 |
| 120 | BYPASS VALVE | PP-SH | BYPASS VALVE | 7 | 12 | 12 | 12 | 3/4 |
| 121 | SURGE PROTECTOR | PP-SH | SURGE PROTECTOR | 7 | 12 | 12 | 12 | 3/4 |
| 122 | RAS VALVE 1 ACTUATOR | PP-SP2 | RAS VALVE 1 ACTUATOR | 7 | 12 | 12 | 12 | 3/4 |
| 123 | RAS VALVE 2 ACTUATOR | PP-SP2 | RAS VALVE 2 ACTUATOR | 7 | 12 | 12 | 12 | 3/4 |
| 124 | WAS VALVE 1 ACT. | PP-SP2 | WAS VALVE 1 ACT. | 7 | 12 | 12 | 12 | 3/4 |
| 125 | SURGE PROTECTOR | PP-SP2 | SURGE PROTECTOR | 7 | 12 | 12 | 12 | 3/4 |
| 126 | CARROUSEL 1 FEED ACT. | PP-SP1 | CARROUSEL 1 FEED ACT. | 7 | 12 | 12 | 12 | 3/4 |
| 127 | CARROUSEL 2 FEED ACT. | PP-SP1 | CARROUSEL 2 FEED ACT. | 7 | 12 | 12 | 12 | 3/4 |
| 128 | CARROUSEL 1 EFFLUENT ACTUATOR | PP-SP1 | CARROUSEL 1 EFFLUENT ACTUATOR | 7 | 12 | 12 | 12 | 3/4 |
| 129 | CARROUSEL 2 EFFLUENT ACTUATOR | PP-SP1 | CARROUSEL 2 EFFLUENT ACTUATOR | 7 | 12 | 12 | 12 | 3/4 |
| 130 | GATE CHAMBER 2 CLARIFIER 1 FEED ACT. | PP-SP1 | GATE CHAMBER 2 CLARIFIER 1 FEED ACT. | 7 | 12 | 12 | 12 | 3/4 |
| 131 | GATE CHAMBER 2 CLARIFIER 1 BYPASS ACT. | PP-SP1 | GATE CHAMBER 2 CLARIFIER 1 BYPASS ACT. | 7 | 12 | 12 | 12 | 3/4 |
| 132 | GATE CHAMBER 3 CLARIFIER 2 FEED ACT | PP-SP1 | GATE CHAMBER 3 CLARIFIER 2 FEED ACT | 7 | 12 | 12 | 12 | 3/4 |
| 133 | GATE CHAMBER 3 CLARIFIER 2 BYPASS ACT. | PP-SP1 | GATE CHAMBER 3 CLARIFIER 2 BYPASS ACT. | 7 | 12 | 12 | 12 | 3/4 |
| 134 | UV CHANNEL 1 ACT. | PP-SP1 | UV CHANNEL 1 ACT. | 7 | 12 | 12 | 12 | 3/4 |
| 135 | UV CHANNEL 2 ACT. | PP-SP1 | UV CHANNEL 2 ACT. | 7 | 12 | 12 | 12 | 3/4 |
| 136 | AERATION CHAMBER 1 ACT. | PP-SP1 | AERATION CHAMBER 1 ACT. | 7 | 12 | 12 | 12 | 3/4 |
| 137 | AERATION CHAMBER 2 ACT. | PP-SP1 | AERATION CHAMBER 2 ACT. | 7 | 12 | 12 | 12 | 3/4 |
| 138 | PP-SP2 | PP-SP1 | PP-SP2 | 7 | 12 | 12 | 12 | 3/4 |
| 139 | SURGE PROTECTOR | PP-SP1 | SURGE PROTECTOR | 7 | 12 | 12 | 12 | 3/4 |
| 140 | GENERATOR | GEN | MAIN SWITCH BOARD | 1569 | 4 sets (3-600) | 600 | 4/0 | 4-4 |
| 141 | GENERATOR BLOCK HEATER | GEN | LP-SB | 15 | 12 | 12 | 12 | 3/4 |
| 142 | GENERATOR BATTERY CHARGER | GEN | LP-SB | 9 | 12 | 12 | 12 | 3/4 |
| 143 | 0 | | | | | | | |



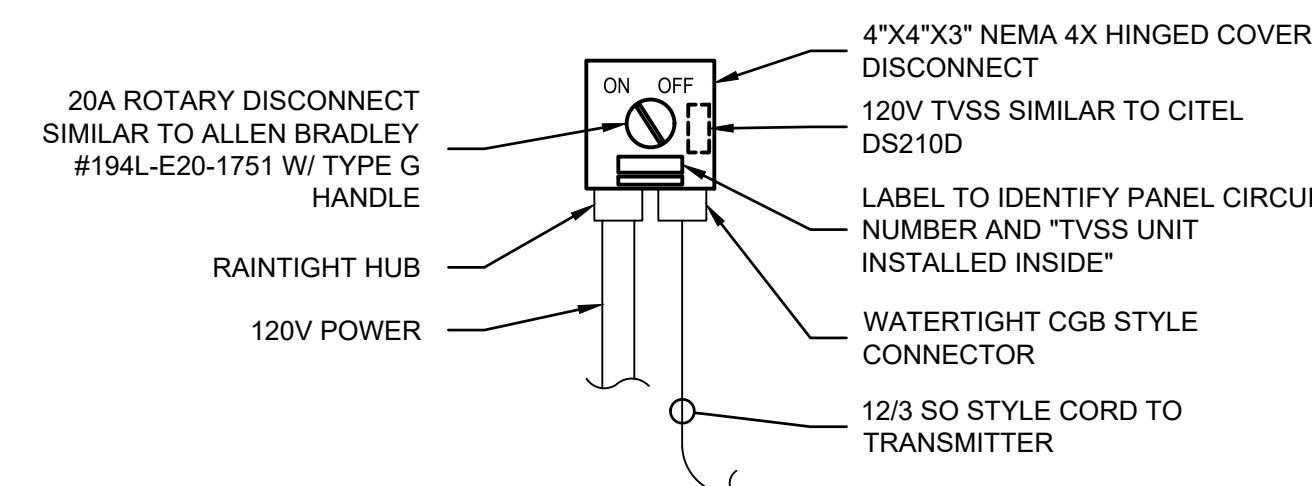
LIGHT & POLE DETAIL
SCALE: NONE



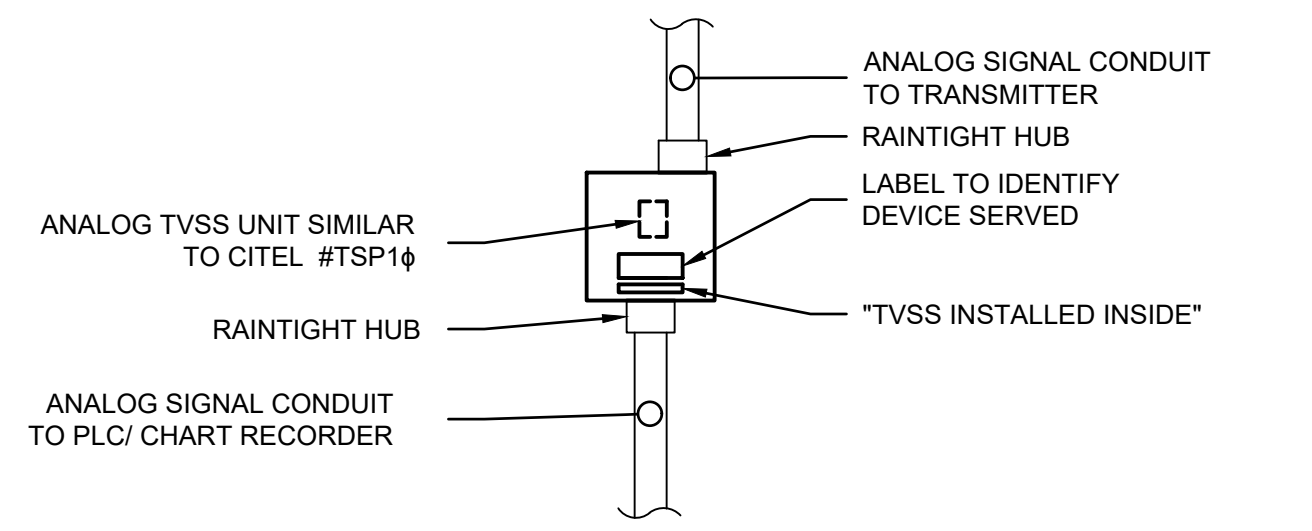
ELECTRICAL PANEL ELEVATION
SCALE: NONE



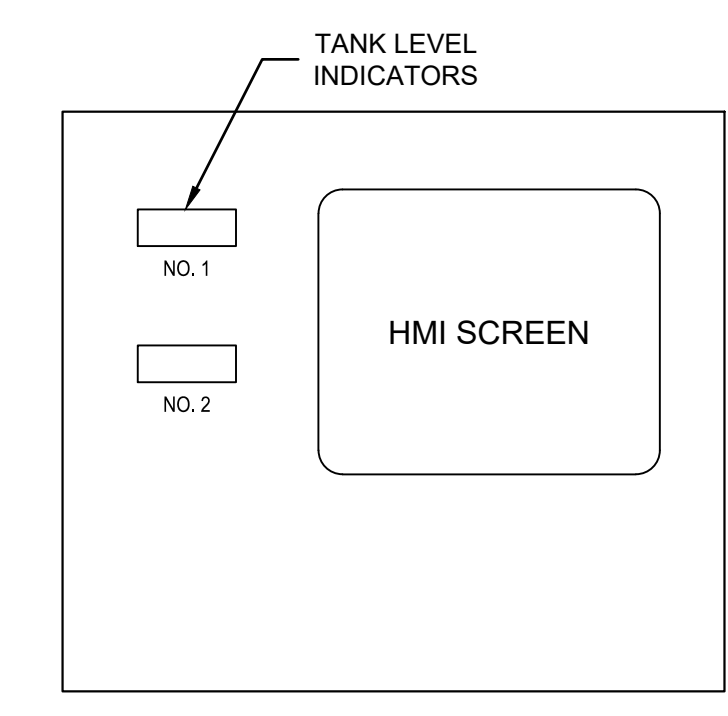
CONDUIT TRENCH DETAIL
SCALE: NONE



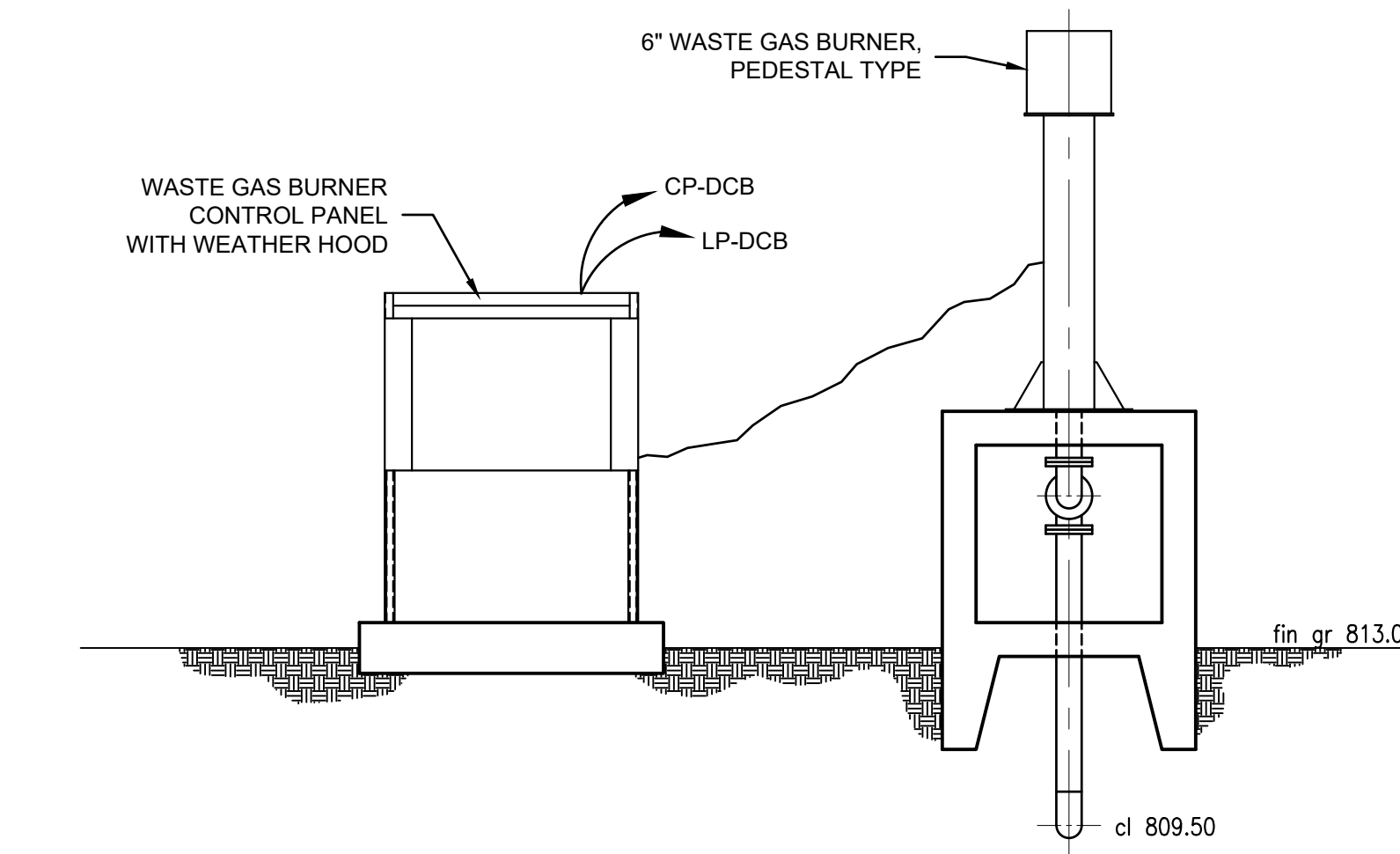
120V INSTRUMENTATION DISCONNECT AND LOCAL TVSS
SCALE: NONE



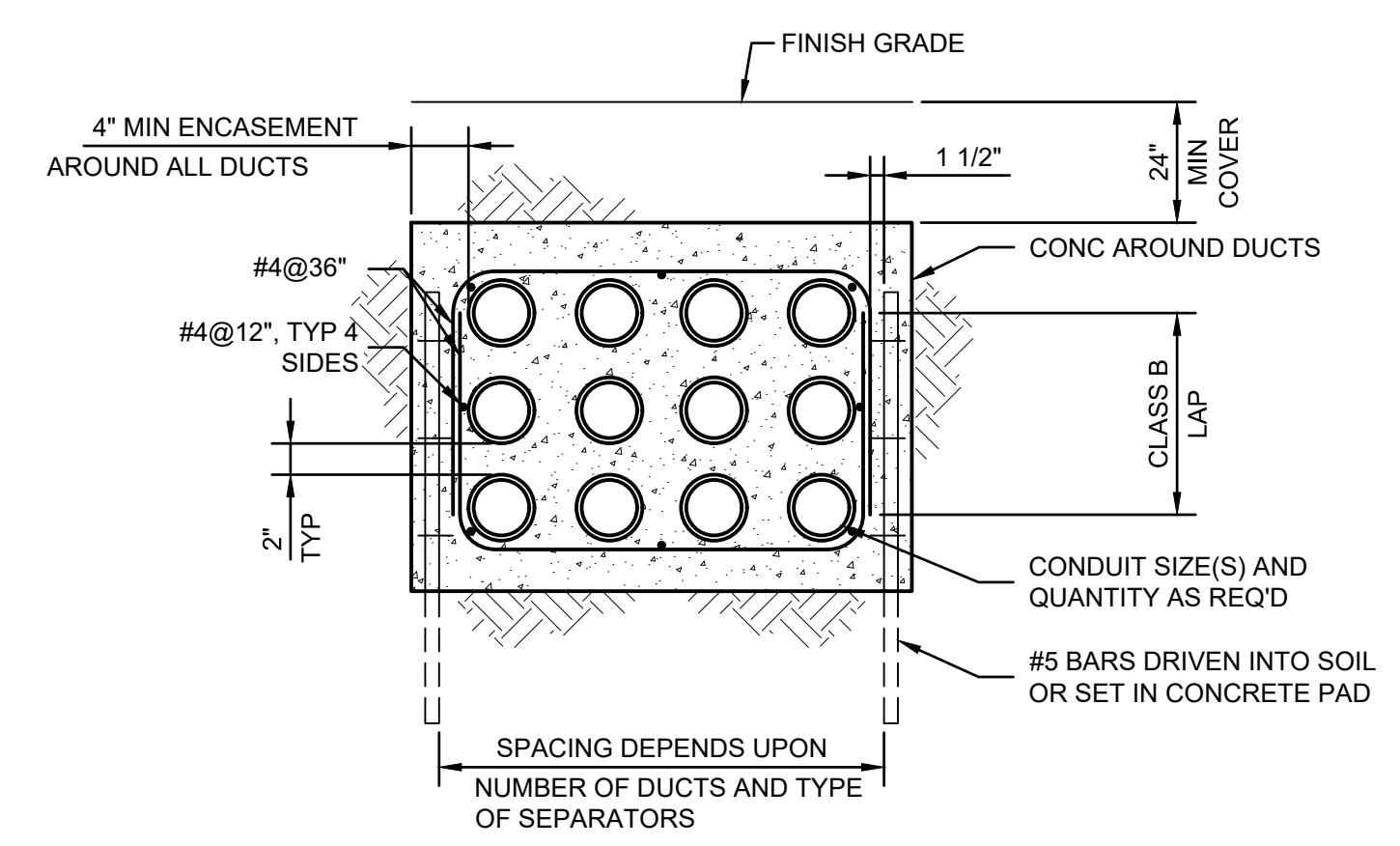
ANALOG INSTRUMENT TVSS
SCALE: NONE



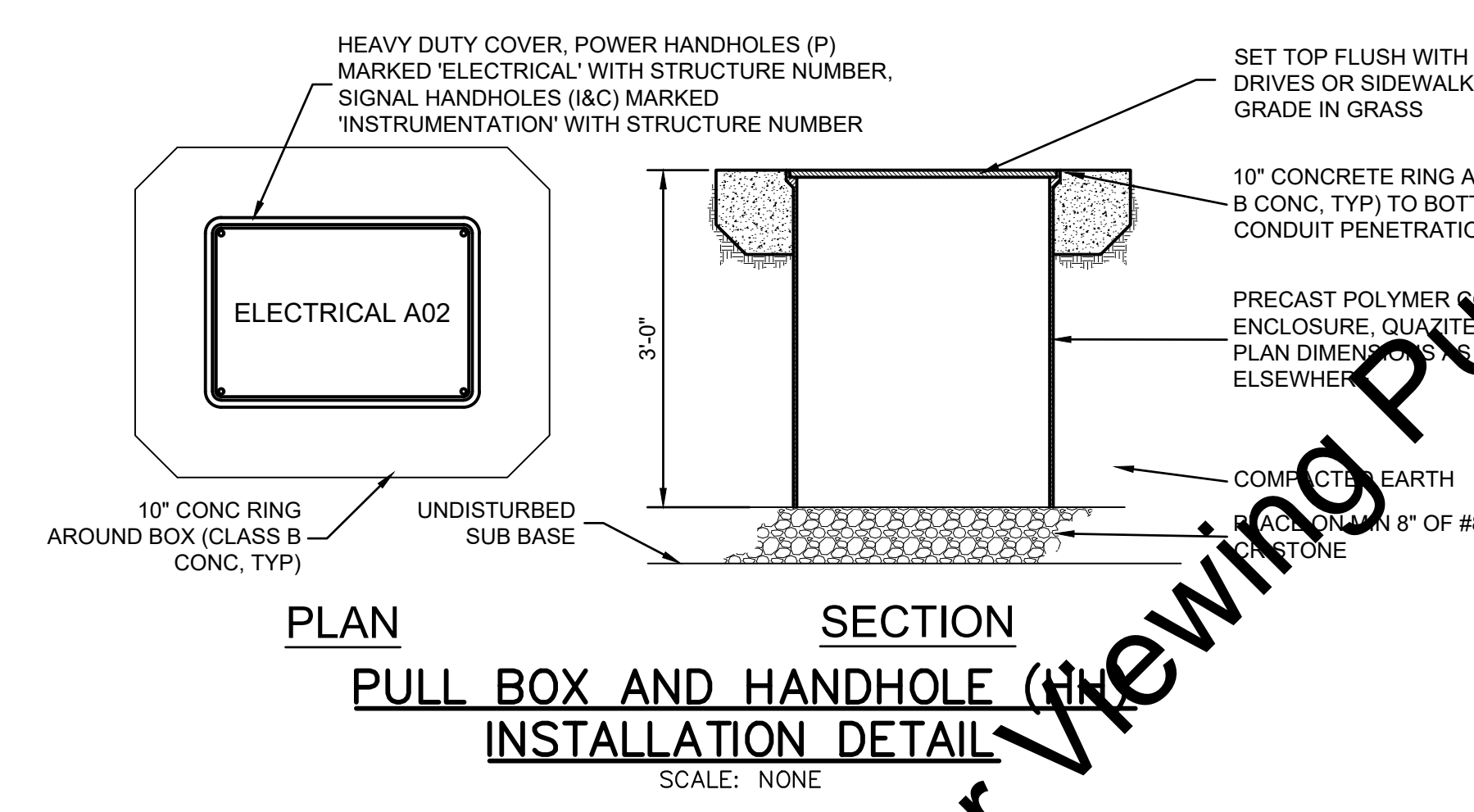
PLC ELEVATION
SCALE: NONE



WASTE GAS BURNER ELECTRICAL PLAN
SCALE: NONE



REINFORCED CONCRETE ENCASED DUCT BANKS DETAIL
SCALE: NONE

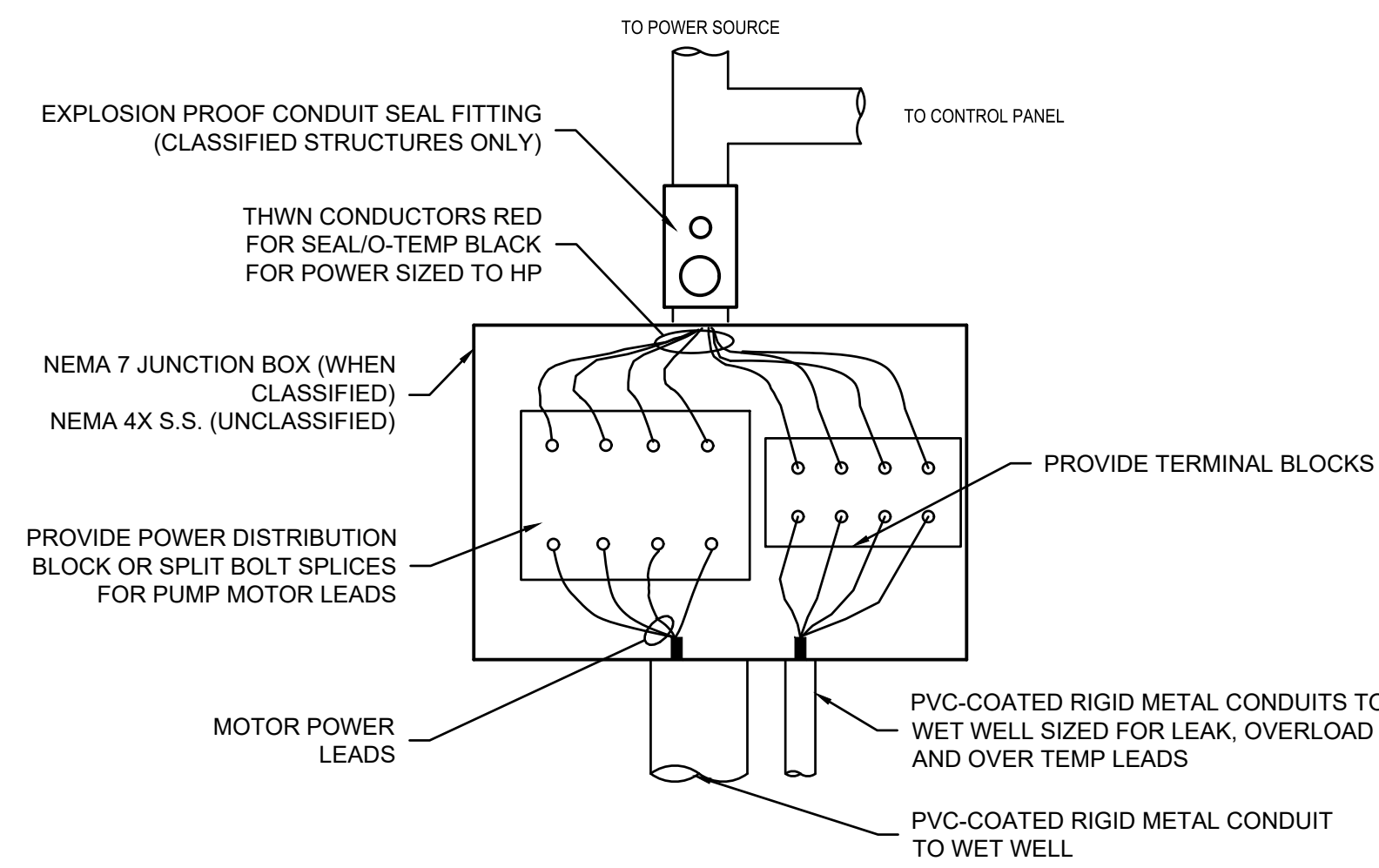


PULL BOX AND HANDHOLE INSTALLATION DETAIL
SCALE: NONE

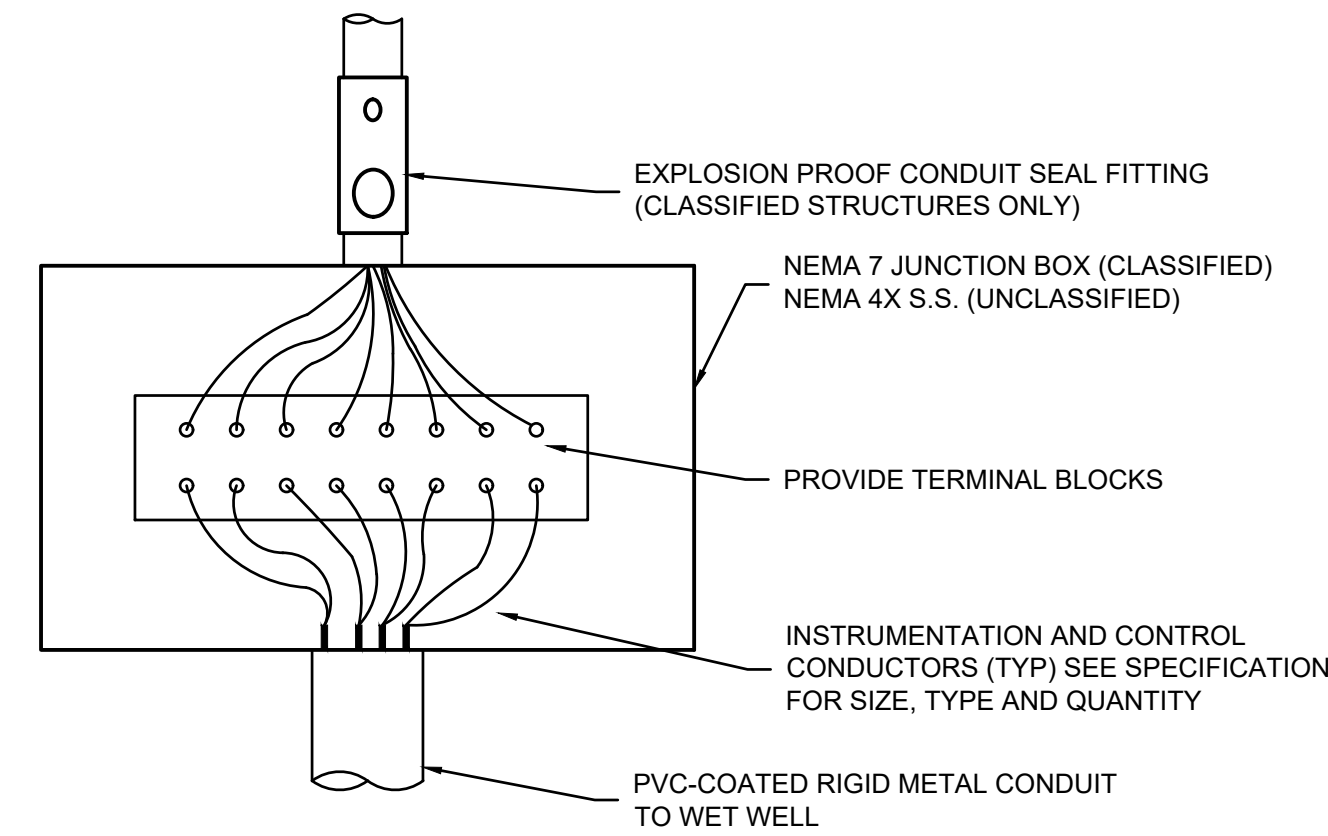
"For Viewing Purposes Only - Visit WesslerEngineering.com to Purchase"

| | | | | | | | | | | |
|--|----------------|-------------------|-----|------|----------|-----------------------|--|--|--|-------------|
| SCALE VERIFICATION BAR IS ONE INCH LONG ON ORIGINAL DRAWING | DRAWN BY | EAS | NO. | DATE | INITIALS | REVISION DESCRIPTIONS | | <p>WESSLER ENGINEERING More than a Project™</p> | WASTEWATER TREATMENT PLANT EXPANSION - 2017 | SHEET NO. |
| | CHECKED BY | BMS | | | | | | | CITY OF WARSAW, INDIANA | ME01 |
| | APPROVED BY | WCM | | | | | | | ELECTRICAL DETAILS | PAGE NO. |
| | ISSUE DATE | SEPTEMBER 4, 2018 | | | | | | | | 254 |
| | PROJECT NUMBER | 162813-04-003 | | | | | | | | |

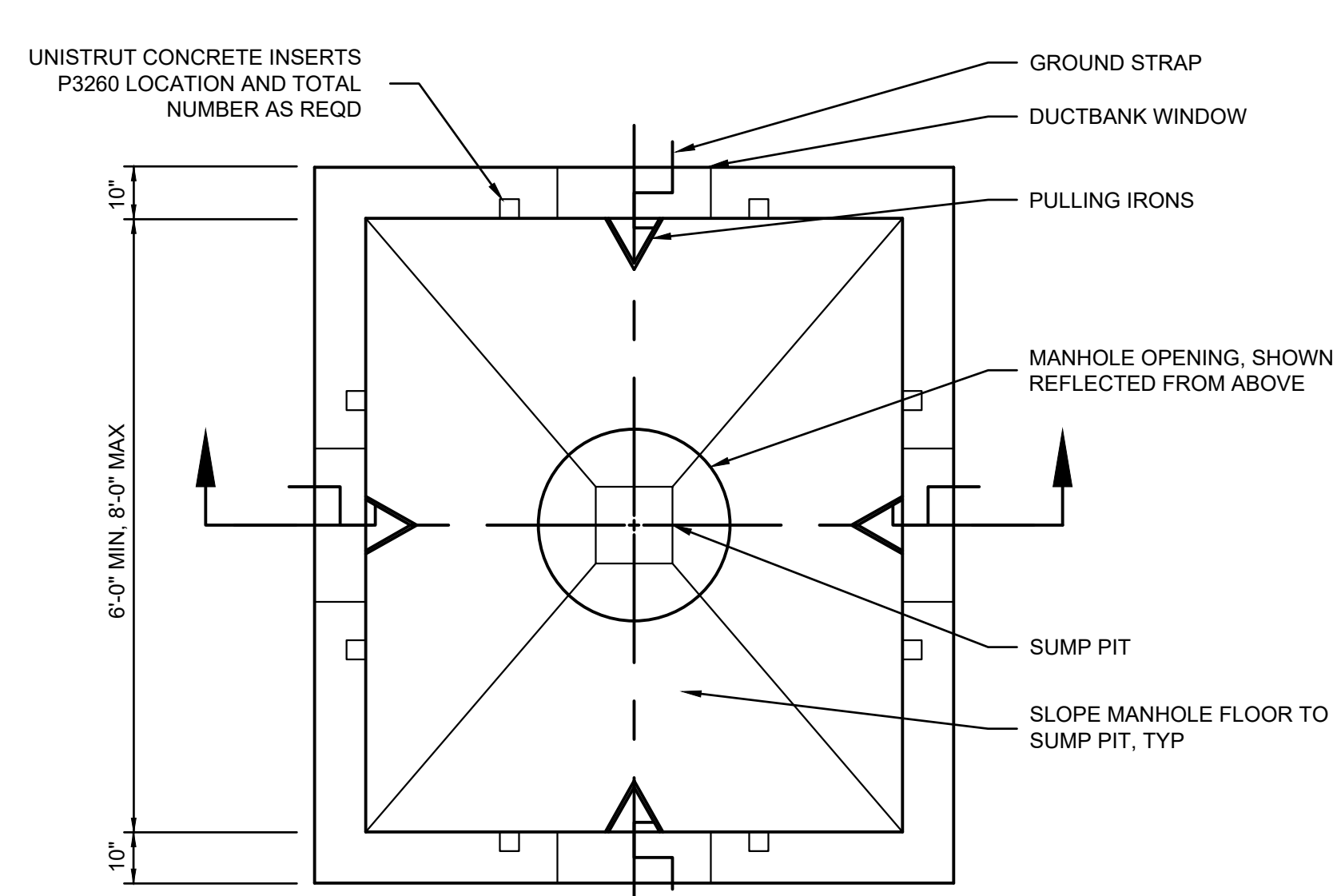
Drawing: J:\Warsaw\Projects\162813_Warsaw_WWTP_Expansion\CAD\04-001\DWG\Sheet\Electrical\DETAILS.dwg | Layout: ME01 | Plotted: 09/04/18 @ 10:50:18 | LantSavelly, DonT



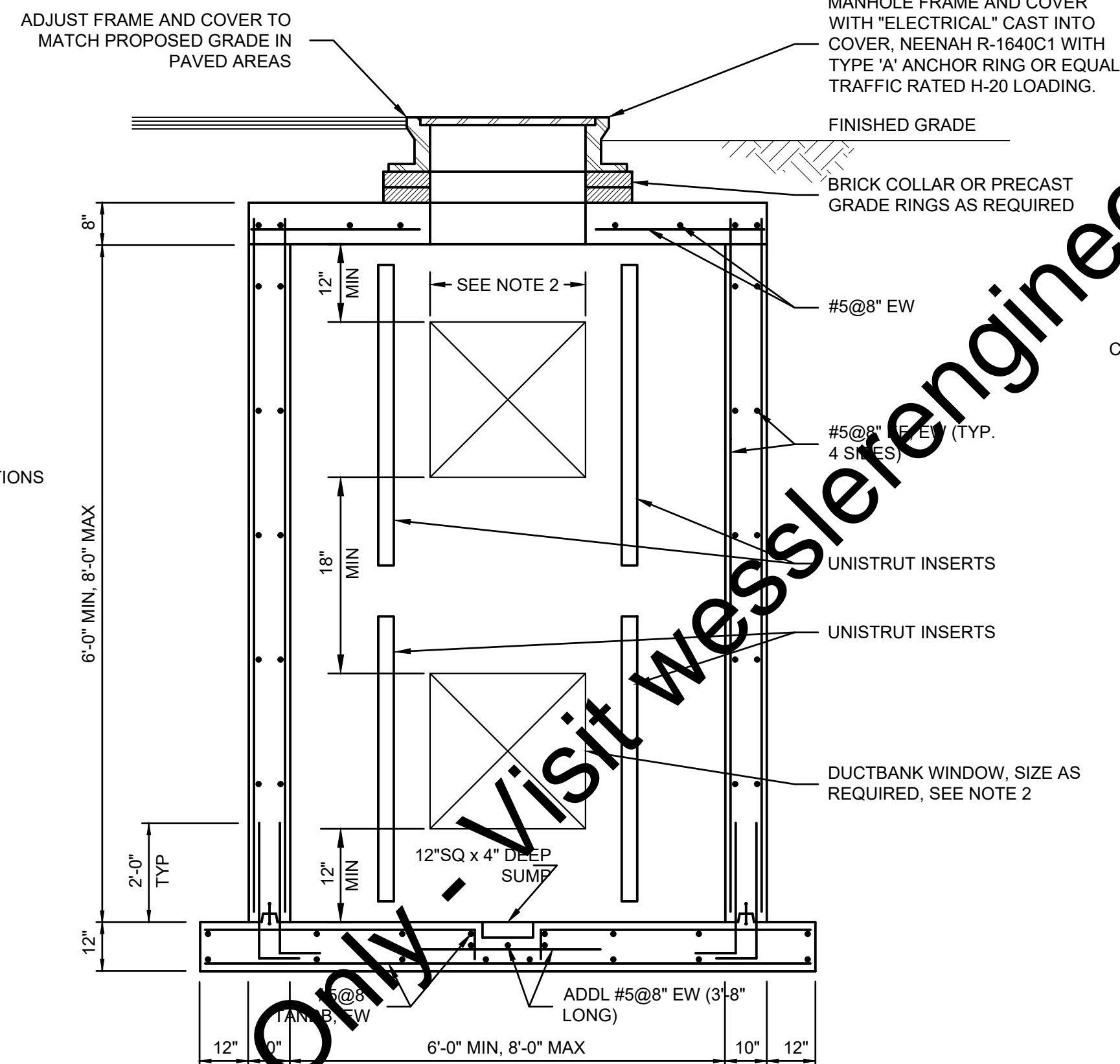
MOTOR LEAD JUNCTION BOX



LEVEL CONTROL JUNCTION BOX

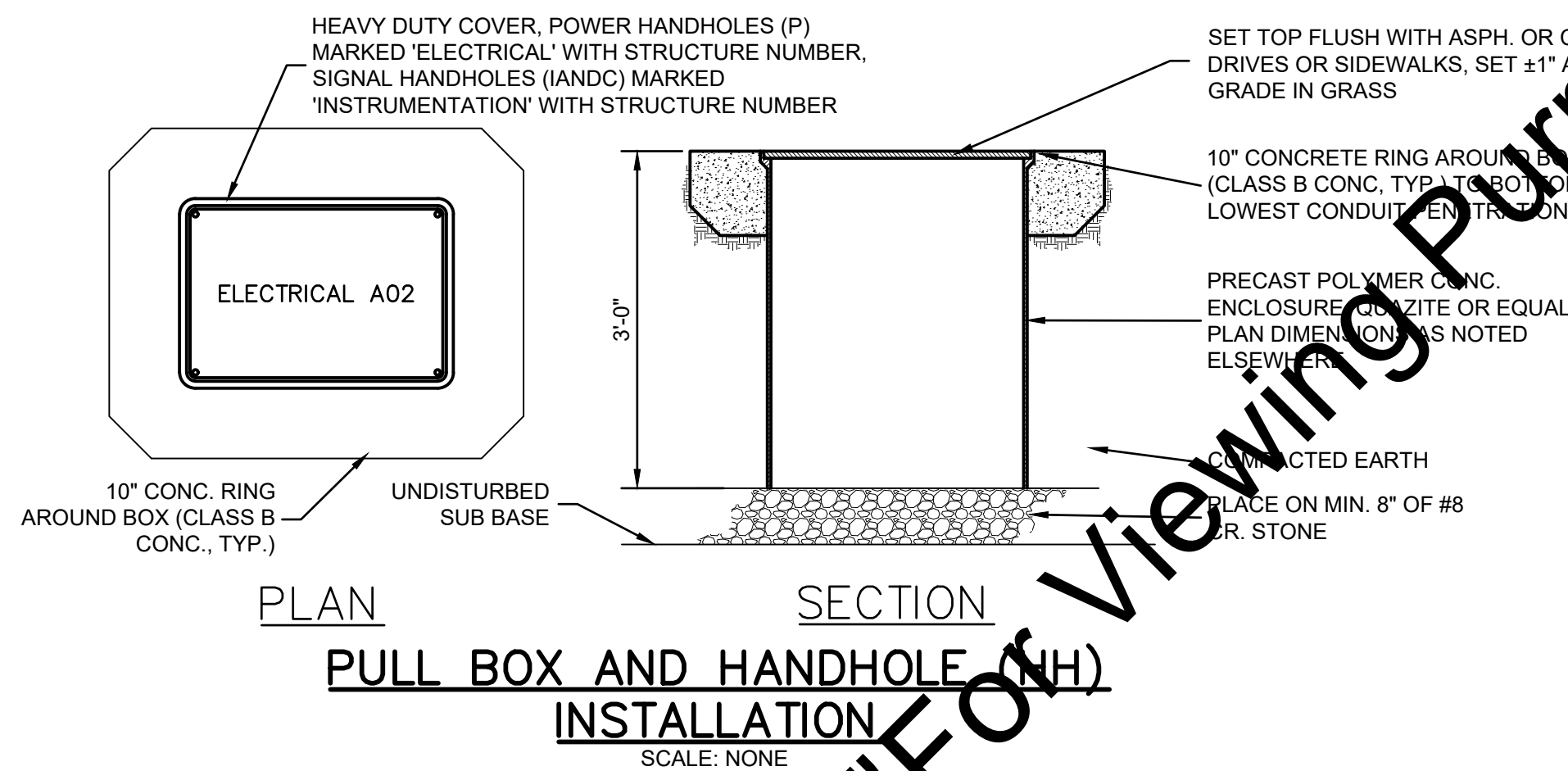


TYPICAL ELECTRICAL MANHOLE - SECTIONAL PLAN

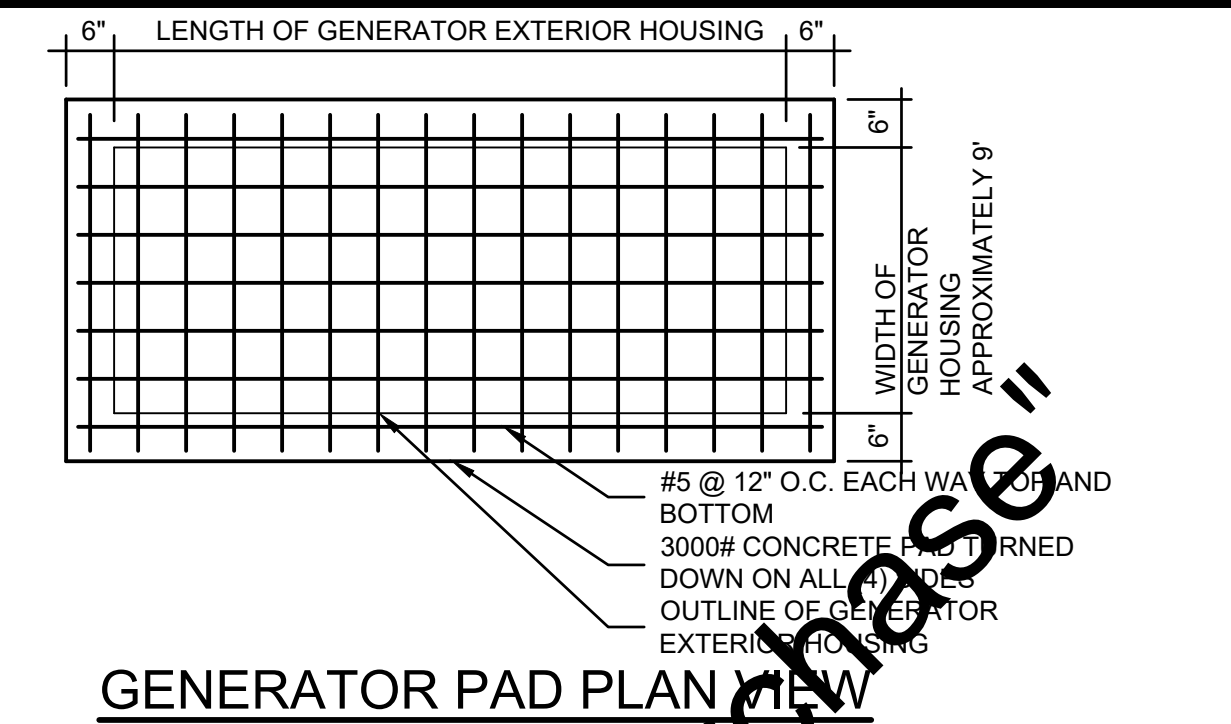


TYPICAL ELECTRICAL MANHOLE - SECTION

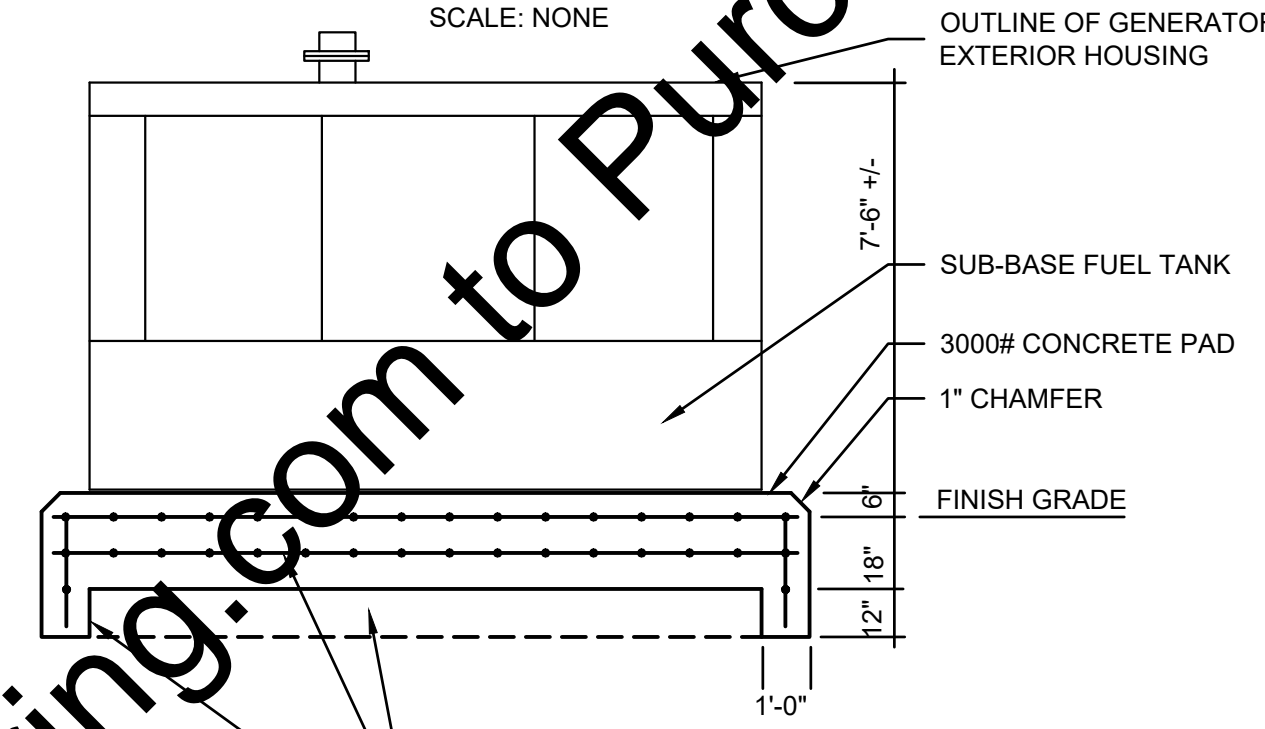
- ELECTRICAL MANHOLE NOTES:**
- EPOXY SET ALL INTERIOR SURFACES IN ACCORDANCE WITH PAINT SPECIFICATIONS IN DIVISION 9.
 - DUCTBANK WINDOW WIDTH SHALL BE LIMITED TO ONE-THIRD (1/3) OF THE WALL WIDTH, I.E. 2'-0" FOR A 6" WALL.
 - PRECAST MANHOLES MAY BE USED IN LIEU OF THE CAST-IN-PLACE CONCRETE MANHOLE SHOWN AT THE CONTRACTOR'S OPTION. PRECAST MANHOLES SHALL BE RATED FOR H-20 TRAFFIC LOADS. SEE SPECIFICATIONS FOR GENERAL REQUIREMENTS FOR PRECAST UTILITY STRUCTURES.



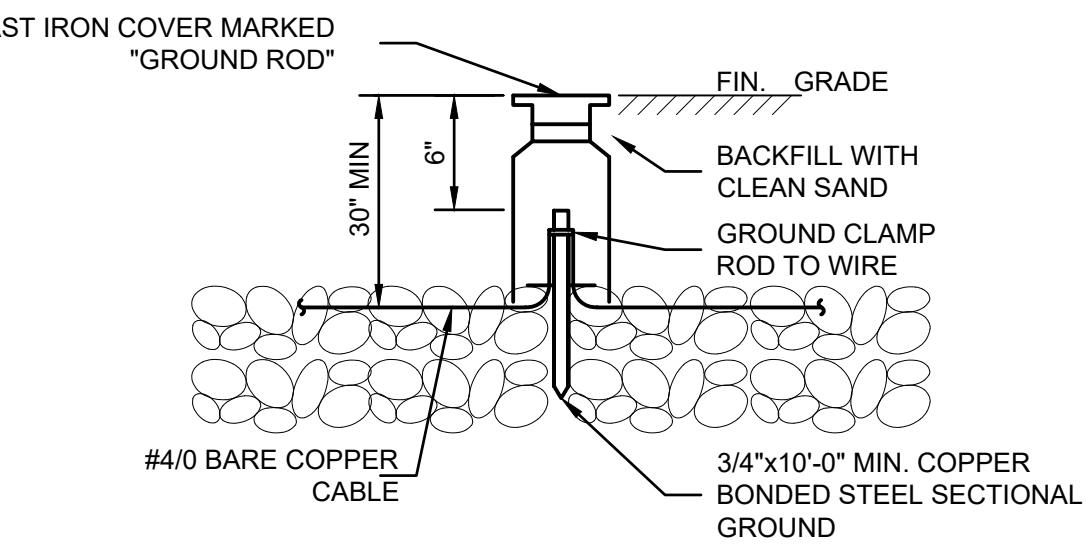
PULL BOX AND HANDHOLE (NH) INSTALLATION



GENERATOR PAD PLAN VIEW



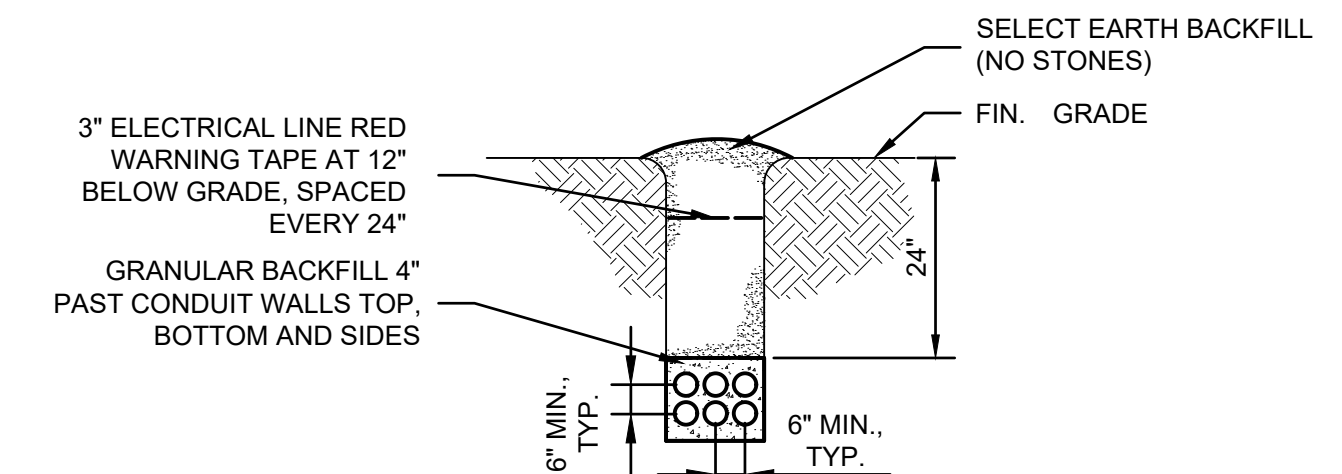
GENERATOR PAD SECTION VIEW



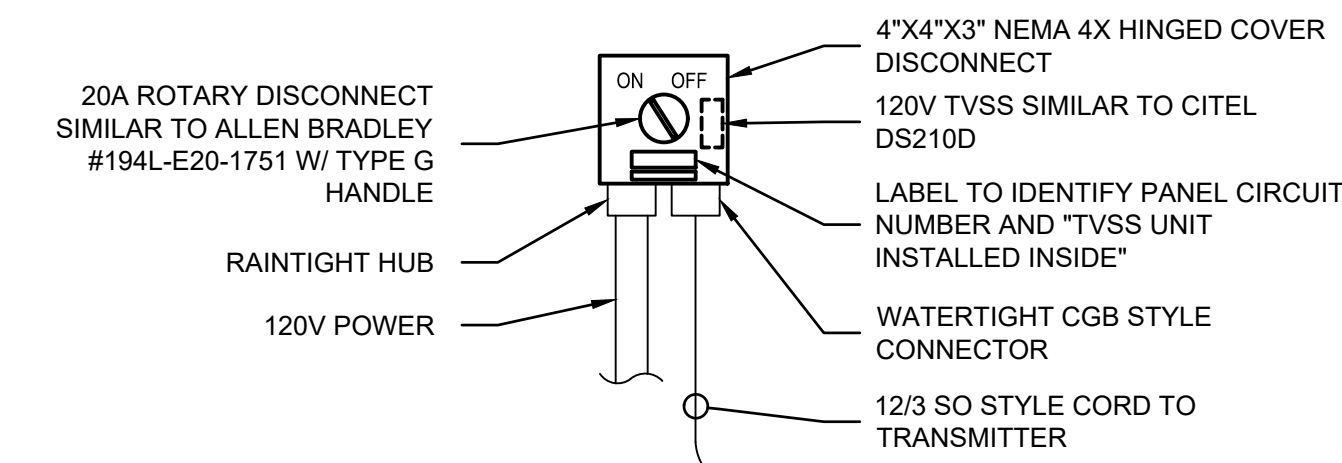
ELECTRICAL INSTALLATION GROUND ROD ASSEMBLY

- NOTES:**
- REFER TO JOB SPECIFICATION FOR MINIMUM SYSTEM RESISTANCE TO GROUND. IF THE RESISTANCE CANNOT BE MET WITH SINGLE 10'-0" RODS, ADD ADDITIONAL SECTIONS TO RODS OR ADD NEW RODS AS REQUIRED, SPACED 6'-0" TO 10'-0" FROM EXISTING RODS.
 - AMMETER SHALL DISPLAY ELECTRICAL CURRENT OF THE HEAT TRACE RECEPTACLE FOR THE DRAIN LINE.
 - LIGHTING CONTRACTOR SHALL CONTROL THE LOGO SPOT LIGHTS VIA PHOTOCELL AND/OR TIMER.
 - ALL CONDUIT AND WIRE SHALL BE #2 #12, 1 #12 GND, UNLESS OTHERWISE NOTED.

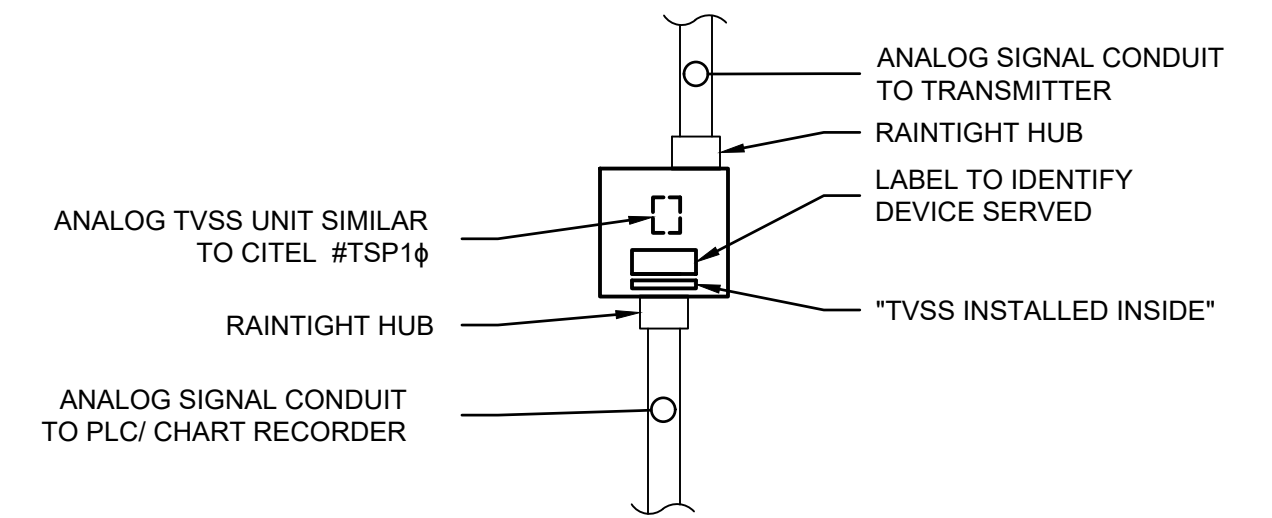
DO PROBE MOUNTING



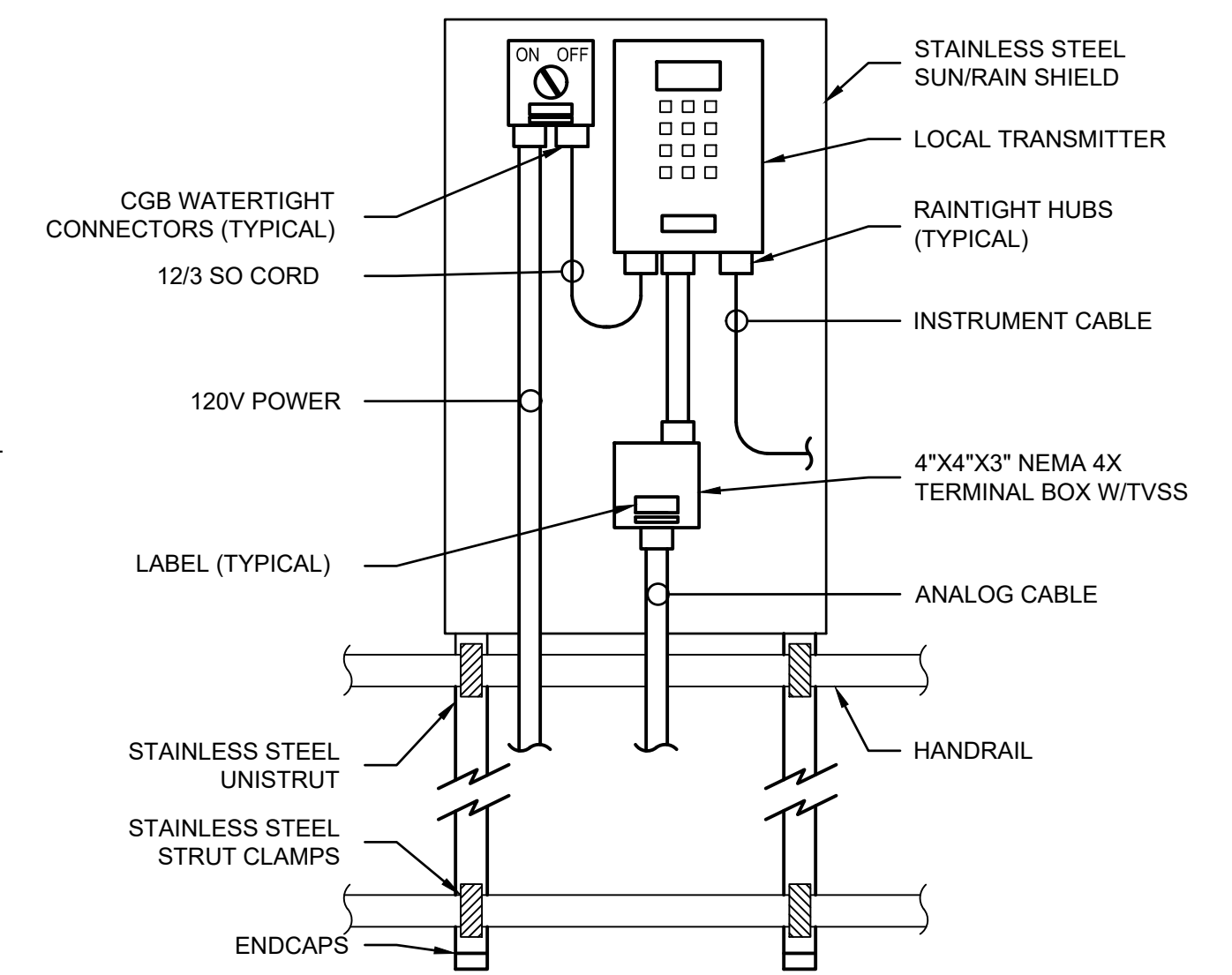
CONDUIT TRENCH



120V INSTRUMENTATION DISCONNECT AND LOCAL TVSS

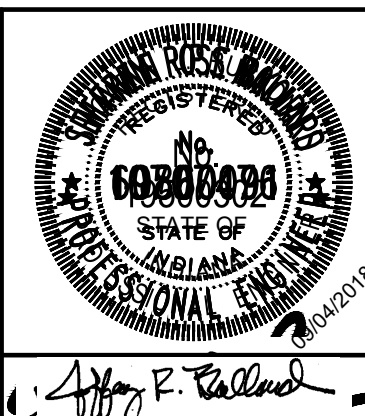


ANALOG INSTRUMENT TVSS



LOCAL TRANSMITTER MOUNTING

| SCALE VERIFICATION | DRAWN BY | EAS | NO. | DATE | INITIALS | REVISION DESCRIPTIONS |
|--|----------------|-------------------|-----|------|----------|-----------------------|
| BAR IS ONE INCH LONG ON ORIGINAL DRAWING | CHECKED BY | BMS | | | | |
| | APPROVED BY | WCM | | | | |
| | ISSUE DATE | SEPTEMBER 4, 2018 | | | | |
| | PROJECT NUMBER | 162813-04-003 | | | | |



WASTEWATER TREATMENT PLANT EXPANSION - 2017

CITY OF WARSAW, INDIANA

ELECTRICAL DETAILS

SHEET NO.

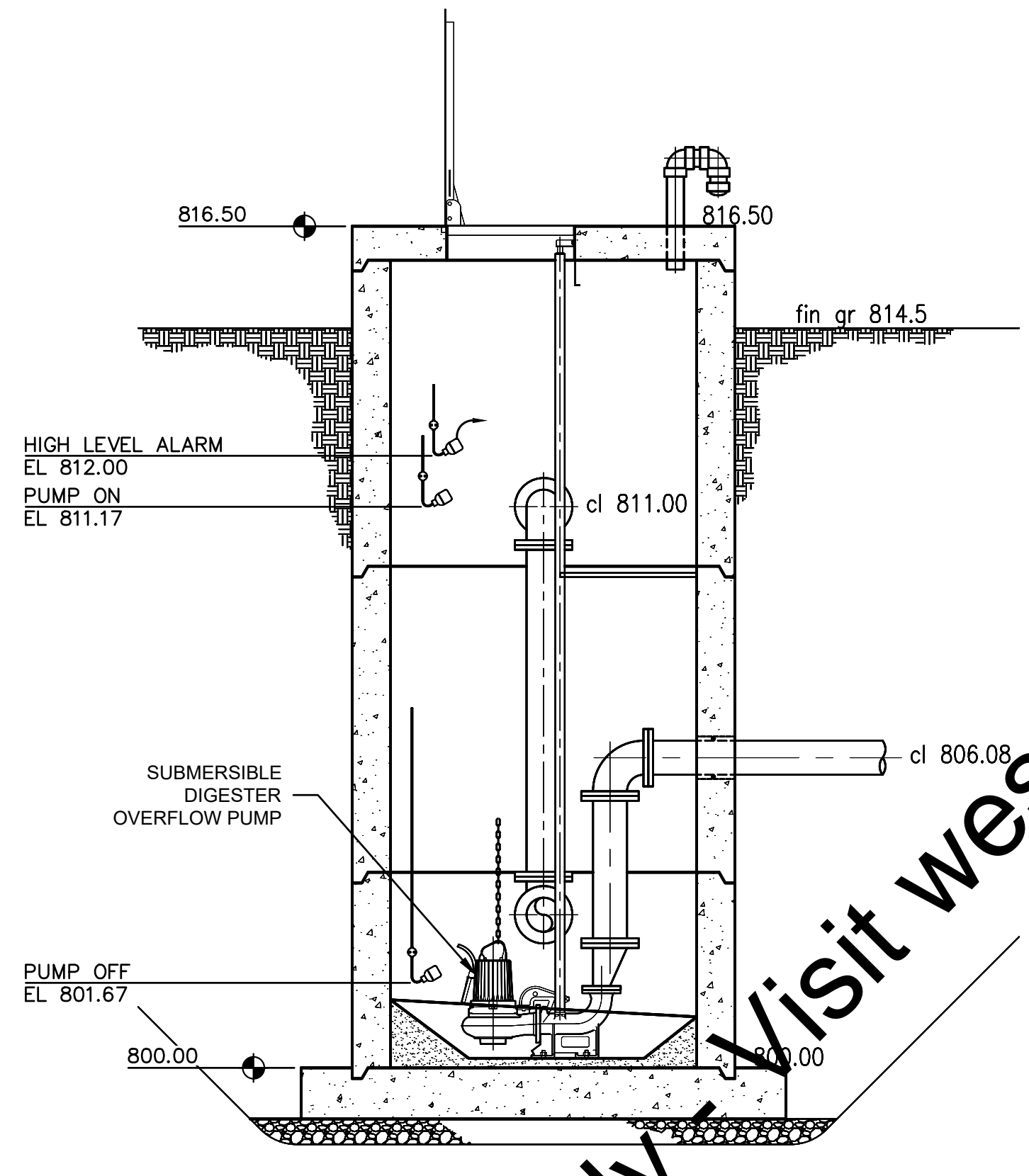
ME02

PAGE NO.

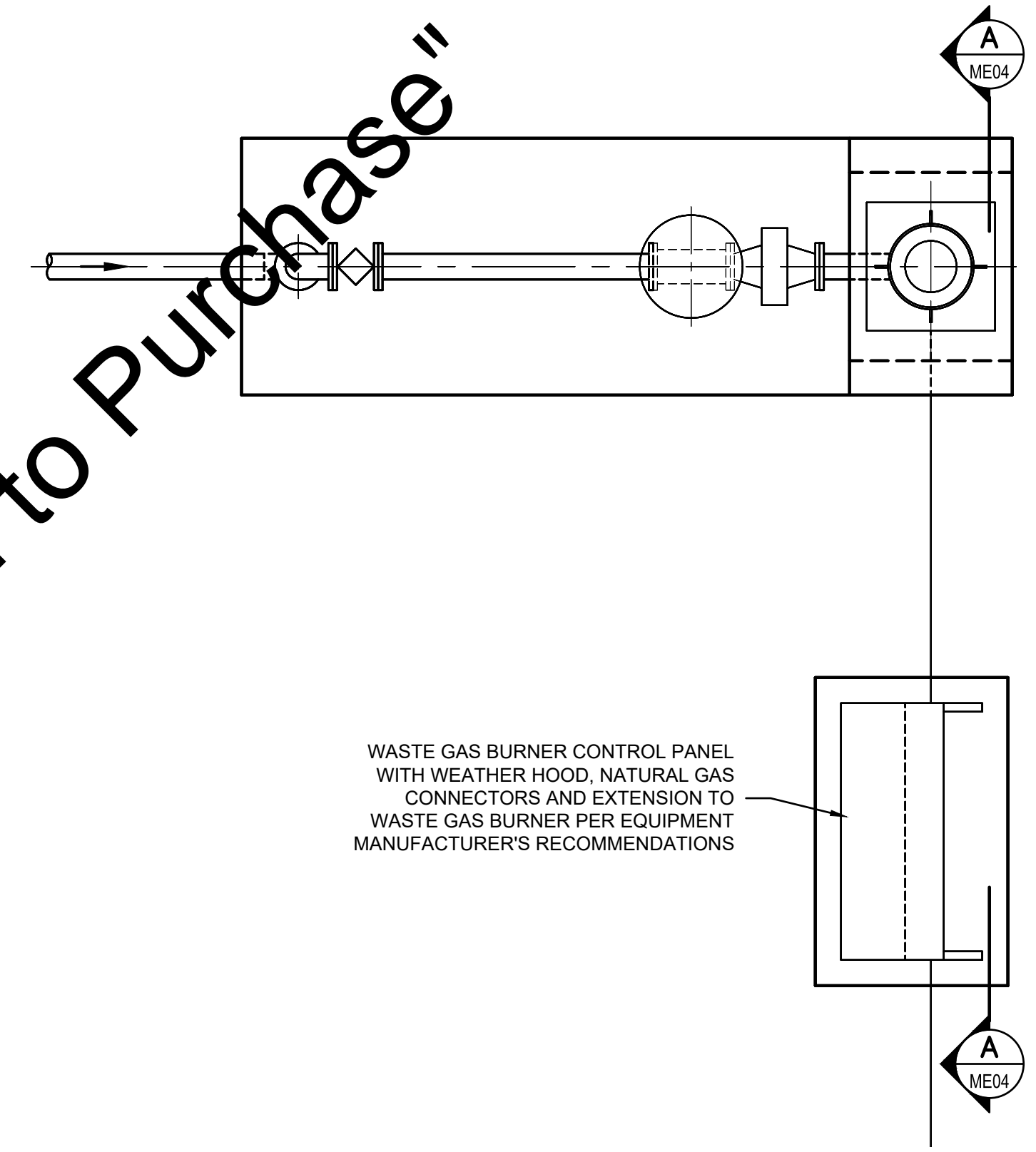
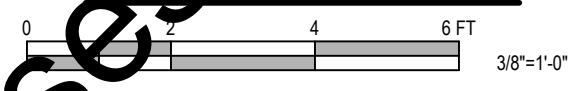
255

Drawing: J:\Warshaw\Projects\162813_Warshaw_WWTP_Expansion\CAD\04-001\DWG\Sheets\Electrical\STATION ELECTRICAL DETAILS.dwg | Layout: ME02 | Plotted: 09/04/18 @ 10:50:21 | LantSavelby, DonT

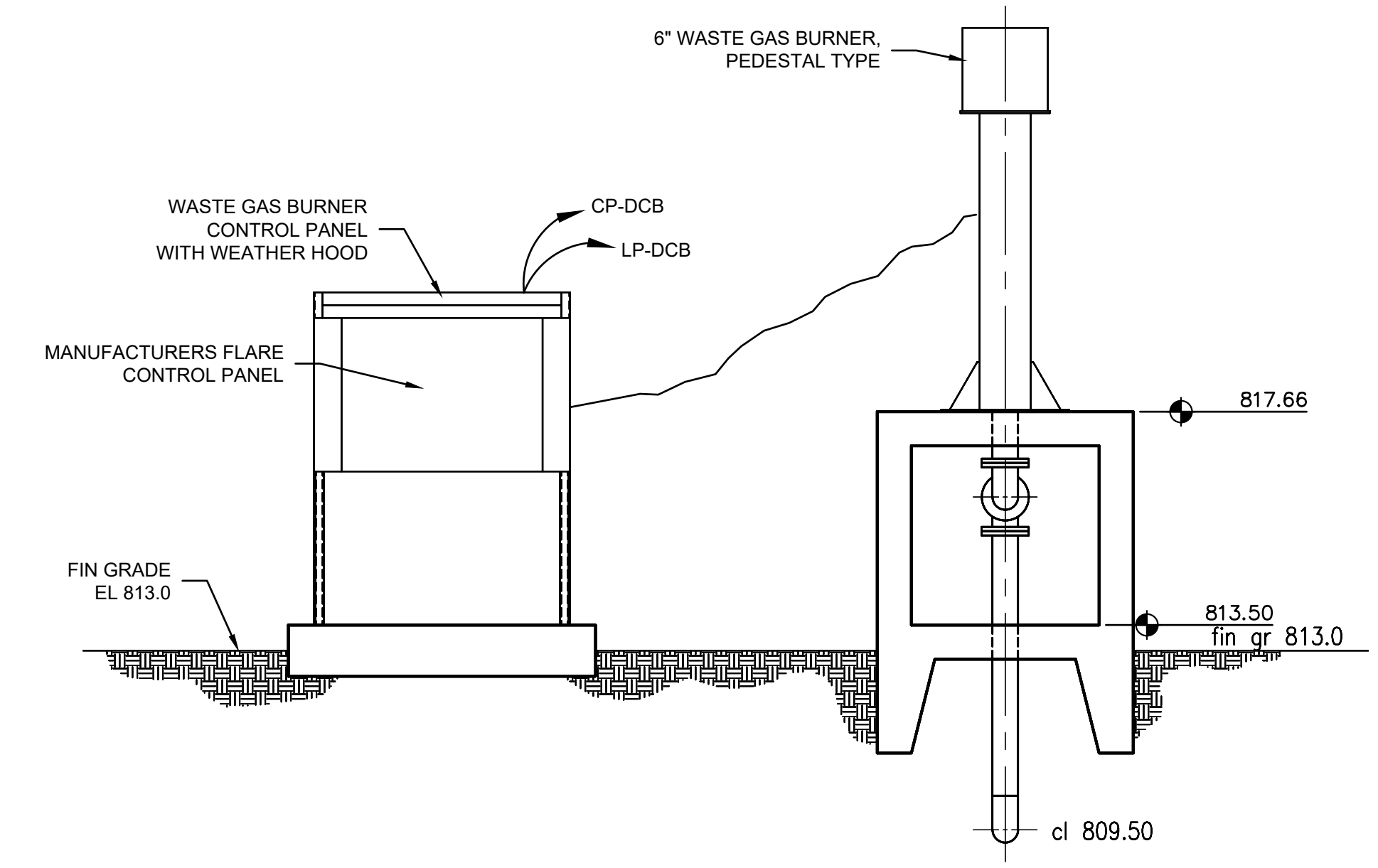
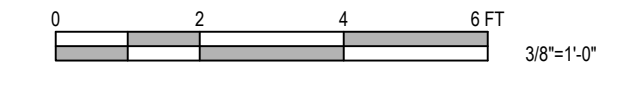
Drawing: J:\Warsaw\Projects\162813_Warsaw_WWTP_Expansion\CAD\04-001\DWG\Shells\Electrical\DETAILS.dwg | Layout: ME04 | Plotted: 09/04/18 @ 10:51:14 | LantSveiby, DonT



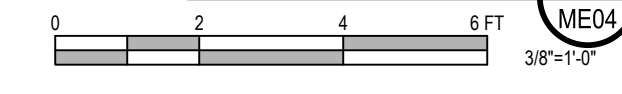
TYPICAL SECTION
NEW DIGESTER OVERFLOW
PUMP STATION



NEW WASTE GAS BURNER PLAN

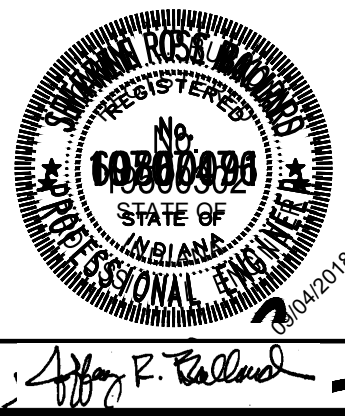


SECTION A



"For Viewing Purposes Only" Visit wesslerengineering.com to Purchase"

| SCALE VERIFICATION | DRAWN BY | EAS | NO. | DATE | INITIALS | REVISION DESCRIPTIONS |
|--|----------------|-----|-----|------|----------|-----------------------|
| BAR IS ONE INCH LONG ON ORIGINAL DRAWING | CHECKED BY | BMS | | | | |
| | APPROVED BY | WCM | | | | |
| | ISSUE DATE | | | | | |
| | PROJECT NUMBER | | | | | |
| | | | | | | 162813-04-003 |



WASTEWATER TREATMENT PLANT EXPANSION - 2017
CITY OF WARSAW, INDIANA

**GAS BURNER AND DIGESTER OVERFLOW PUMP STATION
ELECTRICAL DETAILS**

SHEET NO.
ME04

PAGE NO.
257

Drawing: J:\Warsaw\Projects\162813-WWTP-Expansion\CAD-04-001\DWG\Sheets\Elect\162813-EDUCT\BANK SHEET.dwg | Layout: ME05 | Plotter: 09/04/18 @ 11:07:23 | LastSavedBy: JohnH

| FROM | TO | DUCT BANKS | POWER CONDUIT | CONTROL CONDUIT | FROM | TO | DUCT BANKS | POWER CONDUIT | CONTROL CONDUIT | |
|-----------------------------|-------------------|-------------------------|---------------|-----------------|-------------------------------------|-------------|-------------|---------------|-----------------|--|
| GENERATOR | CP-SB | 09,08,06 | | 1" C | SG-31 | PP-SP2 | 23,24,25 | 2" C | | |
| | LP-SB | 07,06 | 2" C | | | CP-SP2 | 23,24,25 | | 2 - 3/4" C | |
| | ANNUNCIATOR PANEL | 09,08,06 | | 1" C | | T-GAR | MCC-DCB | 4,3,1 | 2" C | |
| | MDSG | 07,06 | 4 - 4" C | | | DSHTM-1 | MCC-SH | 45,44 | 2" C | |
| PP-CHEM1 | MCC-PCB | 34,32,31,30 | 2 - 4" C | | DSHTM-2 | CP-SH | 40,37,42,44 | | 3/4" C | |
| MCC-PCB | MDSG | 30,31,13,12,10,08,06 | 3 - 4" C | | | MCC-SH | 45,44 | 2" C | | |
| MCC-DCB | MDSG | 01,03,05,06 | 2 - 4" C | | | CP-SH | 40,37,42,44 | | 3/4" C | |
| PP-SH | MDSG | 44,42,36,13,12,10,08,06 | 2 - 4" C | | SHTM | MCC-SH | 43,44 | 2" C | | |
| MCC-PCB | MCC-SP2 | 28,27,26,25 | 2-4" C | | | CP-SH | 38,42,44 | | 3/4" C | |
| STM-1 | PP-CHEM1 | 33,34 | 2" C | | S-25 | CP-SH | 40,37,42,44 | | 2 - 3/4" C | |
| | CP-CHEM | 33,34 | | 3/4" C | | PP-SH | 43,44 | 2" C | | |
| STM-2 | PP-CHEM1 | 33,34 | 2" C | | S-26 | CP-SH | 38,42,44 | | 2 - 3/4" C | |
| | CP-CHEM | 33,34 | | 3/4" C | | CP-SH | 39,42,44 | | 2 - 3/4" C | |
| STM-3 | PP-CHEM1 | 33,34 | 2" C | | S-28 | CP-SH | 39,42,44 | | 2 - 3/4" C | |
| | CP-CHEM | 33,34 | | 3/4" C | S-47 | PP-SH | 43,44 | 2" C | | |
| SELECTOR TANK AIRFLOW METER | LP-CHEM | 33,34 | 3/4" C | | | CP-SH | 39,42,44 | 2" C | | |
| | MAN-BNRS-CP | 33,34 | | 3/4" C | MIXING EQUIPMENT FOR SEPTAGE MIXING | MCC-SH | 39,42,45 | | 2 - 3/4" C | |
| SG-08 | PP-CHEM1 | 33,34 | 2" C | | CP-SEP | CP-SC | 49 | | 1" C | |
| | CP-CHEM | 33,34 | | 3/4" C | ANCHORAGE PS FLOW TRANSMITTER | CP-SC | 50,51 | | 3/4" C | |
| SG-09 | CP-CHEM | 33,34 | | 3/4" C | DANEK FLOW METER TRANSMITTER | LP-SC | 50,51 | 3/4" C | | |
| SG-11 | PP-CHEM1 | 33,34 | 2" C | | | CP-SC | 50,51 | | 3/4" C | |
| | CP-CHEM | 33,34 | | 3/4" C | CENTER STREET PS TRANSMITTER | LP-SC | 50,51 | 3/4" C | | |
| SG-12 | PP-CHEM1 | 33,34 | 2" C | | | CP-SC | 51 | | 3/4" C | |
| | CP-CHEM | 33,34 | | 3/4" C | PCM-1 | LP-SC | 51 | 3/4" C | | |
| SG-13 | CP-CHEM | 33,34 | | 3/4" C | | MCC-PCB | 48 | 2" C | | |
| SG-14 | CP-CHEM | 33,34 | | 3/4" C | | CP-PCB | 48 | | 3/4" C | |
| SG-15 | CP-CHEM | 33,34 | | 3/4" C | | MCC-PCB | 48 | 2" C | | |
| SG-16 | CP-CHEM | 33,34 | | 3/4" C | | CP-PCB | 48 | | 3/4" C | |
| SG-17 | PP-CHEM1 | 33,34 | 2" C | | PCM2 LIGHT FIXTURE | LP-PCB-2 | 48 | | 3/4" C | |
| | CP-CHEM | 33,34 | | 3/4" C | PCM3 LIGHT FIXTURE | LP-PCB-4 | 48 | | 3/4" C | |
| SG-18 | CP-CHEM | 33,34 | | 3/4" C | SELECTOR TANK SITE LIGHT | LP-CHEM-15 | 33,34 | | 3/4" C | |
| SG-19 | CP-CHEM | 33,34 | | 3/4" C | PA-21 | CP-SP1 | 18,16 | | 3/4" C | |
| SG-20 | PP-CHEM1 | 33,34 | 2" C | | PA-22 | CP-SP1 | 18,16 | | 3/4" C | |
| | CP-CHEM | 33,34 | | 3/4" C | PA-11 | CP-SP1 | 18,16 | | 3/4" C | |
| SG-21 | CP-CHEM | 33,34 | | 3/4" C | PA-12 | CP-SP1 | 18,16 | | 3/4" C | |
| SG-22 | CP-CHEM | 33,34 | | 3/4" C | CP-DPS | MCC-SP1 | 15 | 2" C | | |
| A-19 | PP-CHEM2 | 35,34 | 2" C | | | CP-SP1 | 15 | | 3/4" C | |
| | MAN-BNRS-CP | 35,34 | | 3/4" C | DRAIN PUMP STATION LIGHT | LP-SP1-34 | 15 | 3/4" C | | |
| A-21 | PP-CHEM2 | 35,34 | 2" C | | EFFLUENT MIQ/JB | CP-SP1 | 18,16 | | 3/4" C | |
| | MAN-BNRS-CP | 35,34 | | 3/4" C | EFFLUENT SAMPLER | CP-SP1 | 18,16 | | 2 - 3/4" C | |
| A-26 | PP-CHEM2 | 35,34 | 2" C | | EFFLUENT FLOW METER | CP-SP1 | 18,16 | | 2 - 3/4" C | |
| | MAN-BNRS-CP | 35,34 | | 2 - 3/4" C | WASHT LEVEL TRANSMITTER | CP-SH | 41,37,42,44 | | 3/4" C | |
| CP-DPS | MCC-SP1 | 15 | 2" C | | | LP-SH | 45,44 | 3/4" C | | |
| | CP-SP1 | 15 | | 3/4" C | DSHT LEVEL TRANSMITTER | CP-SH | 40,37,42,44 | | 3/4" C | |
| FCM-1 | MCC-SP1 | 17,16 | | 3/4" C | SHT LEVEL TRANSMITTER | LP-SH | 45,44 | 3/4" C | | |
| | CP-SP1 | 17,16 | | 3/4" C | MT LEVEL TRANSMITTER | CP-SH | 38,42,44 | | 3/4" C | |
| FCM-1 LIGHT | LP-SP1-37 | 17,16 | 3/4" C | | | LP-SH | 43,44 | 3/4" C | | |
| FCM-2 | MCC-SP1 | 19,16 | 2" C | | SELECTOR TANK MIQ/JB | CP-SH | 39,42,44 | | 3/4" C | |
| | CP-SP1 | 19,16 | | 3/4" C | | LP-SH | 39,42,44 | 3/4" C | | |
| FCM-2 LIGHT | LP-SP1-39 | 17,16 | 3/4" C | | MAN-BNRS-CP | 33,34 | | 3/4" C | | |
| UV CH. 1 PDC-1 | PP-UV | 18,16 | 2" C | | LP-CHEM | 33,34 | 3/4" C | | | |
| UV CH. 1 PDC-2 | PP-UV | 18,16 | 2" C | | O2D1 MIQ/JB | MAN-BNRS-CP | 35,34 | | 3/4" C | |
| UV CH. 2 PDC-1 | PP-UV | 18,16 | 2" C | | O2D2 MIQ/JB | MAN-BNRS-CP | 35,34 | | 3/4" C | |
| UV CH. 2 PDC-2 | PP-UV | 18,16 | 2" C | | CP-O2D1 | MAN-BNRS-CP | 35,34 | | 3/4" C | |
| CP-UV | CP-SP1 | 18,16 | | 5 - 3/4" C | PP-CHEM1 | 35,34 | 2" C | | | |
| LP-UV | PP-UV | 18,16 | 2" C | | MAN-BNRS-CP | 35,34 | | 3/4" C | | |
| UV-WW-2 | PP-SP1 | 18,16 | 2" C | | PP-CHEM1 | 35,34 | 2" C | | | |
| UV-WW-4 | PP-SP1 | 18,16 | 2" C | | MAN-BNRS-CP | 35,34 | | 3/4" C | | |
| EX. UV LEVEL TRANSMITTER | PP-SP1 | 18,16 | | 3/4" C | O2D1 AIRFLOW TRANSMITTER | LP-CHEM | 35,34 | 2" C | | |
| | CP-SP1 | 17,16 | 2" C | | O2D2 AIRFLOW TRANSMITTER | MAN-BNRS-CP | 35,34 | | 3/4" C | |
| SG-29 | PP-SP1 | 17,16 | 2" C | | | LP-CHEM | 35,34 | 2" C | | |
| | CP-SP1 | 17,16 | | 3/4" C | O2D2 BNRS PRESSURE TRANSMITTER | MAN-BNRS-CP | 35,34 | | 3/4" C | |
| SG-30 | PP-SP1 | 17,16 | 2" C | | WASHT AND DSHT LIGHT | LP-CHEM | 35,34 | 3/4" C | | |
| | CP-SP1 | 17,16 | | 3/4" C | DSHT AND SHT LIGHT | LP-SH-4 | 41,37,42,44 | 3/4" C | | |
| FCM-3 | MCC-SP2 | 23,24,25 | 2" C | | OXIDATION DITCH NO. 1 & NO. 2 LIGHT | LP-SH-6 | 42,44 | 3/4" C | | |
| | CP-SP2 | 23,24,25 | | 3/4" C | SG-25 | LP-CHEM-16 | 35,34 | 3/4" C | | |
| FCM-3 LIGHT | LP-SP2-8 | 23,24,25 | 3/4" C | | FINAL INFLUENT SPLITTER BOX | PP-SP2 | 22,24,25 | 2" C | | |
| | | | | | | LP-SP2-7 | 22,24,25 | 3/4" C | | |

"For Viewing Purposes Only - Visit wesslerengineering.com to purchase"

| | | | | | | |
|------------------------|--|--|--|--|---|---|
| SCALE VERIFICATION | DRAWN BY: EAS CHECKED BY: BMS APPROVED BY: WCM ISSUE DATE: SEPTEMBER 4, 2018 PROJECT NUMBER: 162813-04-003 | NO. DATE INITIALS REVISION DESCRIPTIONS | | <p>WESSLER ENGINEERING More than a Project™</p> | WASTEWATER TREATMENT PLANT EXPANSION - 2017 CITY OF WARSAW, INDIANA ELECTRICAL DUCT BANK SCHEDULE | SHEET NO. ME05 PAGE NO. 258 |
|------------------------|--|--|--|--|---|---|