

THE WHITTIER - PHASE 1

BOOMTOWN DEVELOPMENT COMPANY

68 NORTH LEWIS TULSA, OK 74110

PROJECT NO: P05093.0100

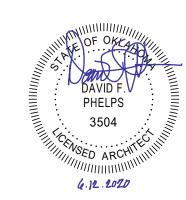
FOR PERMIT 06/12/2020

SHEET ISSUE MATRIX ISSUED ISSUED FOR REFERENCE ONLY NO SHEET TITLE GENERAL G-001 COVER SHEET GENERAL NOTES AND SYMBOLS LEGEND CODE COMPLIANCE PLANS CD101 DEMOLITION PLAN CE101 EROSION CONTROL PLAN CE501 EROSION CONTROL DETAILS CS101 SITE PLAN CS501 SITE DETAILS SITE DETAILS CS502 UTILITY PLAN UTILITY DETAILS CG101 GRADING PLAN CG102 STOOP GRADING DETAILS STRUCTURAL S-001 NOTES, SCHEDULES AND TYPICAL DETAILS NOTES AND SCHEDULES TYPICAL DETAILS BUILDING TYPE KEY PLAN BLDG #1 - BLDG TYPE A4 FOUNDATION PLANS BLDG #2 - BLDG TYPE A4 FOUNDATION PLANS BLDG #4 - BLDG TYPE A4 - FOUNDATION PLAN BLDG #7 - BLDG TYPE A4 FOUNDATION PLANS BLDG #8 - BLDG TYPE A4 - FOUNDATION PLAN BLDG #1,#2, #4, #7 AND #8 - BLDG TYPE A4 TYPICAL SECOND FLOOR FRAMING PLAN BLDG #1,#2, #4, #7 AND #8 - BLDG TYPE A4 - TYPICAL ROOF FRAMING PLAN BLDG #6 - BLDG TYPE A3 - FOUNDATION PLAN BLDG #6 - BLDG TYPE A3 - SECOND FLOOR FRAMING PLAN BLDG #6 - BLDG TYPE A3 - ROOF FRAMING PLAN S-501 FOUNDATION DETAILS S-502 FRAMING DETAILS ARCHITECTURAL AS101 SITE PLAN AS102 SITE DETAILS BLDG A4 - FIRST FLOOR PLAN A-102 BLDG A4 - SECOND FLOOR PLAN A-103 BLDG A4 - ROOF PLAN A-104 BLDG A4 - FIRST FLOOR REFLECTED CEILING PLAN A-105 BLDG A4 - SECOND FLOOR REFLECTED CEILING PLAN A-111 BLDG A3 - FIRST FLOOR PLAN BLDG A3 - SECOND FLOOR PLAN BLDG A3 - ROOF PLAN A-114 BLDG A3 - FIRST FLOOR REFLECTED CEILING PLAN A-115 BLDG A3 - SECOND FLOOR REFLECTED CEILING PLAN A-201 BLDG A4 - EXTERIOR ELEVATIONS A-202 BLDG A3 - EXTERIOR ELEVATIONS BUILDING SECTIONS WALL SECTIONS WALL SECTIONS WALL SECTION DETAILS CANOPY ELEVATION SECTIONS AND DETAILS BLDG A4 FRONT | • | CANOPY ELEVATION SECTIONS AND DETAILS BLDG A4 REAR • CANOPY ELEVATION SECTIONS AND DETAILS BLDG A3 FRONT CANOPY ELEVATION SECTIONS AND DETAILS BLDG A3 REAR ENLARGED UNIT A1 FIRST FLOOR PLANS A-402 ENLARGED UNIT A1 SECOND FLOOR PLANS A-403 STAIR PLAN AND SECTIONS A-501 INTERIOR DETAILS AND SCHEDULES A-502 MILLWORK DETAILS FX001 FIRE SUPPRESSION NOTES AND DETAILS FX101 FIRE SUPPRESSION SITE PLAN FX401 ENLARGED UNIT A-1 FIRE SUPPRESSION PLANS FX402 ENLARGED UNIT A-1.1 FIRE SUPPRESSION PLANS P-001 PLUMBING NOTES, LEGENDS, AND ABBREVIATIONS P-101 PLUMBING SITE PLAN P-102 BUILDING A3 SANITARY PLAN P-103 BUILDING A3 SANITARY PLAN P-401 ENLARGED A UNITS DOMESTIC WATER & GAS PLANS PLUMBING DETAILS PLUMBING DETAILS PLUMBING SCHEDULES

	SHEET ISSUE MATR	IX
	O D FOR REFERENCE ONLY	PERMIT SET - PHASE 1
SHEET NO	SHEET TITLE	06/12/2020
MECHAN	IICAI	
M-001	MECHANICAL LEGENDS AND ABBREVIATIONS	•
M-002	MECHANICAL NOTES	•
M-101	MECHANICAL SITE PLAN	•
M-401	ENLARGED UNIT A-1 HVAC PLANS	•
M-402	ENLARGED UNIT A-1.1 HVAC PLANS	•
M-501	MECHANICAL DETAILS	•
M-601	MECHANICAL SCHEDULES	•
ELECTRI	CAL	
E-001	NOTES, LEGENDS, AND ABBREVIATIONS	•
ES101	ELECTRICAL SITE PLAN	•
E-401	ENLARGED UNIT A-1 ELECTRICAL PLANS	•
E-402	ENLARGED UNIT A-1.1 ELECTRICAL PLANS	•
E-501	ONE-LINE DIAGRAM	•
E-601	RESIDENTIAL LOAD CALCULATIONS	•



810 SOUTH CINCINNATI SECOND FLOOR TULSA, OK 74119 918.877.6000 www.cyntergy.com



DAVID F. PHELPS, AIA ARCHITECT OF RECORD

STIPULATION FOR REUSE

THIS DRAWING WAS PREPARED FOR USE ON A SPECIFIC SITE IN TULSA, OK, CONTEMPORANEOUSLY WITH ITS ISSUE DATE ON 06/12/2020 AND IT IS NOT SUITABLE FOR USE ON A DIFFERENT PROJECT SITE OR AT A LATER TIME. USE OF THIS DRAWING FOR REFERENCE OR EXAMPLE ON ANOTHER PROJECT REQUIRES THE SERVICES OF PROPERLY LICENSED ARCHITECTS AND ENGINEERS. REPRODUCTION OF THIS DRAWING FOR REUSE ON ANOTHER PROJECT IS NOT AUTHORIZED AND MAY BE CONTRARY TO THE LAW.

BOOMTOWN DEVELOPMENT 6235 E 13th STREET

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FIRE PROTECTION ENGINEER JAMES ROY SPRADLING, PE CYNTERGY 810 S CINCINNATI SECOND FLOOR TULSA, OK 74119 918.877.6000

MECHANICAL ENGINEER W. TODD LESTER, PE CYNTERGY 810 S CINCINNATI SECOND FLOOR TULSA, OK 74119 918.877.6000

ELECTRICAL ENGINEER
CHRISTOPHER A. HARWELL, PE CYNTERGY 810 S CINCINNAT SECOND FLOOR TULSA, OK 74119 918.877.6000

GENERAL NOTES

GENERAL DESCRIPTION OF THE PROJECT:

THE PROJECT IS LOCATED AT KENDALL-WHITTIER DISTRICT BETWEEN NORTH GILLETTE AVE AND NORTH LEWIS AVE AND EAST ADMIRAL PLACE IN TULSA, OKLAHOMA. THE NEW SINGLE-FAMILY DEVELOPMENT PROJECT CONSISTS OF (23) TWO-STORY UNITS. THE TWO-STORY RESIDENTIAL UNIT AREA IS APPROXIMATE 1,920 SF EACH FOR A TOTAL GROSS AREA OF 44,160 SF APPROXIMATELY. PHASE 1 CONSISTS OF (8) TWO-STORY UNITS. PHASE 2 CONSISTS OF (15) TWO-STORY UNITS. REFER TO SITE PLAN AS101.

THE SITE WILL BE COMPRISED OF (8) BUILDINGS WITH 10' SEPARATION BETWEEN THEM, THE BUILDINGS ARE AS FOLLOW:

· (5) BUILDINGS WITH (4) TWO-STORY RESIDENTIAL UNITS. ((2) BUILDINGS BUILT IN PHASE 1, (3) BUILDINGS BUILT IN PHASE 2. REFER TO SITE PLAN AS101.)

- (1) BUILDING WITH (3) TWO-STORY RESIDENTIAL UNITS (PHASE 2). (1) BUILDING WITH (4) ONE-STORY ACCESSIBLE RESIDENTIAL UNITS (BY OTHERS).
- · (1) BUILDING WITH (2) ONE-STORY ACCESSIBLE RESIDENTIAL UNITS (BY OTHERS).

THE SITE WILL HAVE AN INTERNAL STREET WITH ACCESS FROM NORTH GILLETTE AVENUE AND NORTH LEWIS AVENUE TO THE GARAGE FOR EACH TWO-STORY UNITS AND ACCESSIBLE PARKING FOR ONE-STORY UNITS.

REFER TO CIVIL DRAWINGS FOR EXTENDS OF SITE WORK INCLUDED IN PHASE 1, AND PHASE 2.

GENERAL NOTES:

- 1. HORIZONTAL PLANE DIMENSIONS ARE GIVEN TO FACE OF STUD UNLESS NOTED OTHERWISE. DIMENSIONS GIVEN TO FACE OF FINISH MATERIAL ARE NOTED "CLEAR".
- 2. LARGE SCALE DETAILS AND PLANS TAKE PRECEDENCE OVER SMALL SCALE DRAWINGS.
- 3. COORDINATE AND VERIFY ALL DIMENSIONS, OPENINGS AND CONDITIONS WITH CIVIL, STRUCTURAL, MECHANICAL, ELECTRICAL AND ALL OTHER PERTINENT DRAWINGS AND TRADES PRIOR TO CONSTRUCTION. NOTIFY ARCHITECT OF DISCREPANCIES AS SOON AS POSSIBLE.
- 4. DO NOT SCALE DRAWINGS.
- 5. FOR ALL DETAILS THAT ARE TYPICAL, INCORPORATE INTO PROJECT AT APPROPRIATE LOCATIONS WHETHER SPECIFICALLY INDICATED OR NOT.
- 6. ALL DOORS ARE LOCATED 4" FROM ADJACENT WALL UNLESS NOTED OTHERWISE ON PLANS.
- 7. REFER TO SHEET A-601 FOR PARTITION AND ASSEMBLY TYPES.
- 8. THE DRAWINGS AND SPECIFICATIONS ARE COMPLIMENTARY DOCUMENTS. CONFLICTS IN SPECIFICATIONS AND DRAWINGS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION.
- 9. THIS SET OF DRAWINGS INDICATES GENERAL SCOPE OF THE PROJECT. THE DRAWINGS DO NOT NECESSARILY INDICATE OR DESCRIBE ALL WORK REQUIRED FOR FULL PERFORMANCE AND COMPLETION OF THE REQUIREMENTS OF THE CONTRACT. ON BASIS OF SCOPE INDICATED OR DESCRIBED, CONTRACTOR SHALL FURNISH ALL LABOR, MATERIAL AND EQUIPMENT REQUIRED FOR PROPER EXECUTION AND COMPLETION OF THE WORK.
- 10. ALL CONSTRUCTION SHALL COMPLY WITH THE REQUIREMENTS OF APPLICABLE LOCAL, STATE AND FEDERAL CODES OR REGULATIONS.
- 11. THE CONTRACTOR SHALL VERIFY THE LOCATION OF EXISTING UNDERGROUND UTILITIES BEFORE PROCEEDING WITH EXCAVATION, TRENCHING OR SIMILAR WORK. THESE DRAWINGS DO NOT CERTIFY THE EXISTENCE OF UTILITIES WHICH MAY BE PRESENT BUT UNRECORDED OR UNDETECTED.
- 12. PROVIDE LINTELS OR HEADERS AS REQUIRED OR INDICATED OVER OPENINGS PENETRATED BY MECHANICAL EQUIPMENT.
- 13. PROVIDE MIN. 2X6 TREATED WOOD OR STEEL PLATE BLOCKING BETWEEN STUDS AT MOUNTING LOCATIONS FOR TOILET ACCESSORIES, HANDRAILS, GUARDRAILS, MILLWORK AND OTHER WALL MOUNTED ITEMS IN COMPLIANCE WITH CODE REQUIREMENTS.
- 14. BUILDING IS TO BE FULLY SPRINKLED IN ACCORDANCE WITH NFPA 13R.
- 15. PROVIDE SECURE AND PERMANENT ANCHORAGE FOR CEILING FURRING AND OTHER CEILING MOUNTED ITEMS.
- 16. PROTECT TREES TO REMAIN FROM DAMAGE DURING CONSTRUCTION.
- 17. PROVIDE FIRE STOPPING AND SMOKE SEALANT AT ALL PENETRATIONS OF WALLS AND FLOORS AS INDICATED IN PROJECT SPECIFICATIONS.
- 18. ALL SUBSTITUTIONS OF MATERIALS AND ASSEMBLIES MUST BE APPROVED BY ARCHITECT IN ACCORDANCE WITH CONTRACT DOCUMENTS.
- 19. CONTRACTOR IS REQUIRED TO PROVIDE CONTROL AND EXPANSION JOINTS IN ALL ASSEMBLIES PER SPECIFICATIONS. VERIFY WITH ARCHITECT ALL LOCATIONS PRIOR TO CONSTRUCTION.
- 20. ALL PIPING, DUCTWORK AND CONDUIT IS TO BE CONCEALED UNLESS NOTED OTHERWISE.
- 21. CONTRACTOR SHALL MAINTAIN SITE DRAINAGE DURING CONSTRUCTION
- 22. CONTRACTOR SHALL MAINTAIN A CLEAN AND SECURE SITE AS REQUIRED BY CONTRACT DOCUMENTS AND OWNER DIRECTIVES. TEMPORARY WALKWAYS ON EXISTING SIDEWALKS MUST BE MAINTAINED FOR PASSAGE.
- 23. SPRINKLER HEADS ARE NOT SHOWN ON REFLECTED CEILING PLANS, HOWEVER, ALL AREAS SHALL BE SPRINKLED AS REQUIRED BY NFPA 13R. CONTRACTOR SHALL SUBMIT BRANCH DISTRIBUTION AND HEAD LOCATIONS TO ARCHITECT FOR REVIEW. PRIOR TO INSTALLATION.
- 24. VERIFY THE FOLLOWING WITH THE RESPECTIVE TRADES:
- A. SIZES AND LOCATIONS FOR BACKING/BLOCKING REQUIRED FOR MOUNTING MECH, ELECT. EQUIPMENT, AND ALL OTHER SUBS REQUIRING BACKING/BLOCKING.
- B. SIZES AND LOCATIONS OF MECH. AND/OR ELECTRICAL PENETRATIONS. C. CUTTING AND PATCHING FOR WORK REQUIRED BY MECH. AND/OR ELEC
- 25. HOT WATER LINES AND DRAIN LINES UNDERNEATH ACCESSIBLE SINKS SHALL BE PROTECTED PER CODE REQUIREMENTS.
- 26. EXPOSED ENDS OF ALL PROJECTING ELEMENTS SUCH AS SILLS, LEDGES & SIMILAR COMPONENTS FABRICATED IN METAL, STONE & OTHER MATERIALS SHALL BE
- 27. PROVIDE ACCESS PANEL PLAN FOR APPROVAL BY ARCHITECT AND MECHANICAL ENGINEER PRIOR TO INSTALLATION.

SYMBOLS LEGEND GRID INDICATOR A-501 CALLOUT INDICATOR KEYNOTE INDICATOR SEE X/X-XXX MATCH LINE MATCH LINE INDICATOR FIRST FLOOR ELEVATION IDENTIFIER NORTH-— CAN INDICATE PLAN OR TRUE NORTH EXTERIOR ELEVATION INDICATOR (A-201 NORTH INDICATOR INTERIOR ELEVATION INDICATOR A-201) REVISION INDICATOR ROOM NAME ROOM IDENTIFIER 101

GENERAL NOTES - CIVIL

GENERAL NOTES

A. THE CONTRACTOR SHALL CONTACT "OKIE" AT 811 OF 800-522-6543, THREE (3) WORKING DAYS BEFORE BEGINNING ANY WORK, SO EXISTING UNDERGROUND UTILITIES MAY BE LOCATED AND MARKED.

- B. IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, THE CONTRACTOR SHALL BE SOLELY AND COMPLETELY RESPONSIBLE FOR CONDITIONS OF THE JOB SITE, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY DURING PERFORMANCE OF THE WORK. THIS REQUIREMENT WILL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS. ANY CONSTRUCTION OBSERVATION BY THE ENGINEER OF THE CONTRACTOR'S PERFORMANCE IS NOT INTENDED TO INCLUDE REVIEW OF THE ADEQUACY OF THE CONTRACTOR'S SAFETY MEASURES, IN, ON OR NEAR THE CONSTRUCTION SITE.
- C. CONTRACTOR SHALL BE RESPONSIBLE FOR RAZING AND REMOVAL OF THE EXISTING STRUCTURES, RELATED UTILITIES, PAVING, AND ANY OTHER EXISTING IMPROVEMENTS AS NOTED.
- D. CONTRACTOR IS TO REMOVE AND DISPOSE OF ALL DEBRIS, RUBBISH AND OTHER MATERIALS RESULTING FROM PREVIOUS AND CURRENT DEMOLITION OPERATIONS. DISPOSAL WILL BE IN ACCORDANCE WITH ALL LOCAL, STATE AND/OR FEDERAL REGULATIONS GOVERNING SUCH OPERATIONS.
- E. THE GENERAL CONTRACTOR WILL BE HELD SOLELY RESPONSIBLE FOR AND SHALL TAKE ALL PRECAUTIONS NECESSARY TO AVOID PROPERTY DAMAGE TO ADJACENT PROPERTIES DURING THE CONSTRUCTION PHASES OF THIS PROJECT.
- . ALL CONSTRUCTION IN STATE HIGHWAY DEPARTMENT RIGHT-OF-WAY SHALL BE COORDINATED WITH THE HIGHWAY DEPARTMENT RESIDENT MAINTENANCE ENGINEER. THE MOST CURRENT AND UP-TO-DATE SPECIFICATIONS AND DETAILS, ADOPTED BY GOVERNING DEPARTMENT OF TRANSPORTATION SHALL GOVERN ON THIS PROJECT.
- G. ALL SITE WORK FOR THIS PROJECT SHALL MEET OR EXCEED THE SPECIFICATIONS OF THE RELEVANT UTILITY COMPANY OR REGULATORY AUTHORITY. AND THE SPECIFICATIONS FOR THE CONSTRUCTION OF THE EXISTING IMPROVEMENTS, WHICH ARE BEING ALTERED OR REPLACED. THE CONTRACTOR SHALL CONTACT, IF DEEMED NECESSARY, THE ENGINEER FOR ADDITIONAL LANDSCAPING AND/OR IRRIGATION INFORMATION AND DETAILS REQUIRED TO COMPLETE THE WORK DETAILED IN THESE

ANY DEVELOPMENT, EXCAVATION, CONSTRUCTION, OR FILLING IN A U.S. CORPS OF ENGINEERS DESIGNATED WETLAND IS SUBJECT TO LOCAL, STATE AND FEDERAL APPROVALS. THE CONTRACTOR SHALL COMPLY WITH ALL PERMIT REQUIREMENTS AND/OR RESTRICTIONS AND ANY VIOLATION WILL BE SUBJECT TO FEDERAL PENALTY. THE CONTRACTOR SHALL HOLD THE OWNER/ DEVELOPER, THE ENGINEER AND THE LOCAL GOVERNING AGENCIES HARMLESS AGAINST SUCH VIOLATION.

WARRANTY/DISCLAIMER

THE DESIGNS REPRESENTED IN THESE PLANS ARE IN ACCORDANCE WITH ESTABLISHED PRACTICES OF CIVIL ENGINEERING FOR THE DESIGN FUNCTIONS AND USES INTENDED BY THE OWNER AT THIS TIME. HOWEVER, NEITHER THE ENGINEER NOR ITS PERSONNEL CAN OR DO WARRANT THESE DESIGNS OR PLANS AS CONSTRUCTED EXCEPT IN THE SPECIFIC CASES WHERE THE ENGINEER INSPECTS AND CONTROLS THE PHYSICAL CONSTRUCTION ON A CONTEMPORARY BASIS AT THE SITE.

FLOOD CERTIFICATION

THIS PROPERTY LIES IN ZONE "X", "AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN", ACCORDING TO GRAPHICAL PLOTTING ON FLOOD INSURANCE RATE MAP, COMMUNITY PANEL NUMBER 20045C0159D, EFFECTIVE DATE AUGUST 5, 2010.

CHISELED BOX ON CONCRETE CURB, NORTH WEST QUADRANT OF EAST ARCHER AND N. GILLETTE AVE, HORIZONTAL = N 429556.302, E 2570769.087, ELEVATION = 761.59.

LEGAL DESCRIPTION

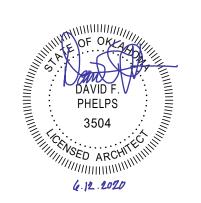
PART OF LOTS 1-20 AND 31-50, BLOCK 4, EASTLAND ADDITION IN SECTION SIX (6), TOWNSHIP NINETEEN (19) NORTH, RANGE THIRTEEN (13) EAST, TULSA COUNTY, STATE OF OKLAHOMA.

UTILITY COORDINATION

ENGINEERING SERVICES DEPARTMENT	918-596-9649
WASTEWATER DESIGN	918-596-2568
OKLAHOMA NATURAL GAS	918-831-8223
AT&T TELEPHONE	918-596-4237
AEP.PSO	918-250-6257
MCI	888-624-5622
WINDSTREAM	918-451-3406
COX COMMUNICATIONS	918-286-4716
EASYTEL COMMUNICATIONS	918-523-8025
COX COMMUNICATIONS	918-286-4716



SECOND FLOOR TULSA, OK 74119 918.877.6000 www.cyntergy.com



DAVID F. PHELPS, AIA

ARCHITECT OF RECORD

STIPULATION FOR REUSE

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06/12/2020	PERMIT SET - PHASE

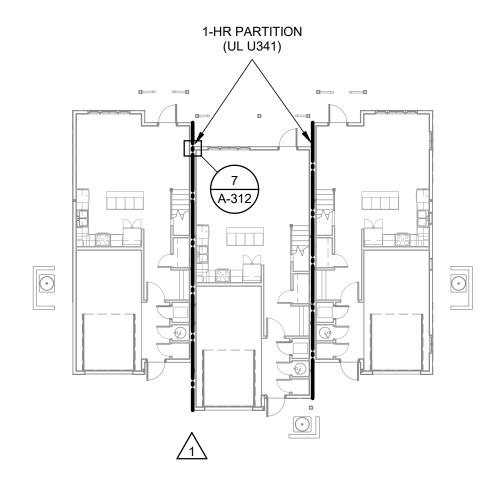
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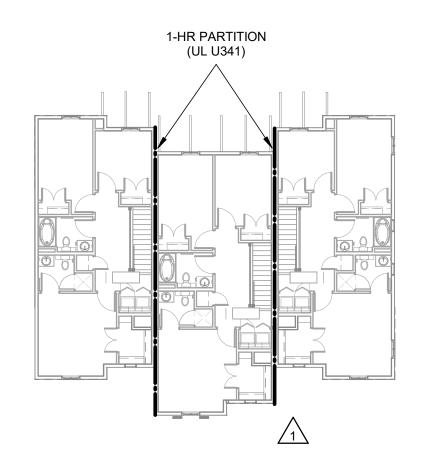
DRAWN BY: JGF

CHECKED BY: LFG

GENERAL NOTES AND SYMBOLS LEGEND

SHEET NUMBER

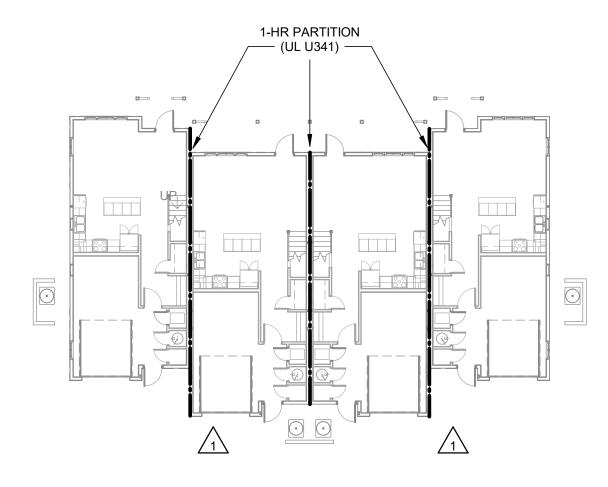


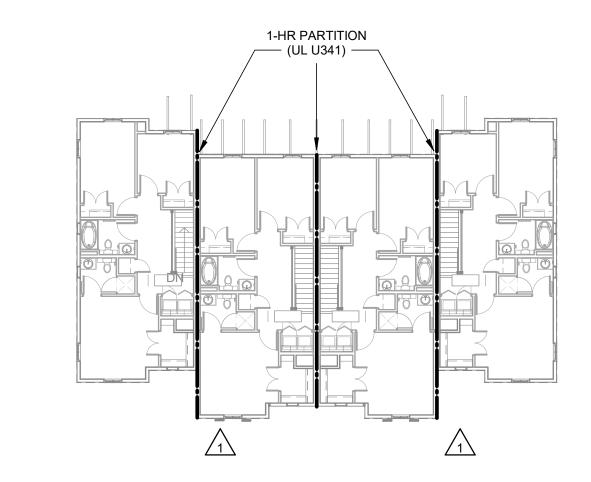


1 BLDG A3 - FIRST FLOOR PLAN - CODE PHASE 2

BLDG A3 - SECOND FLOOR PLAN - CODE PHASE 2

1/16" = 1'-0"

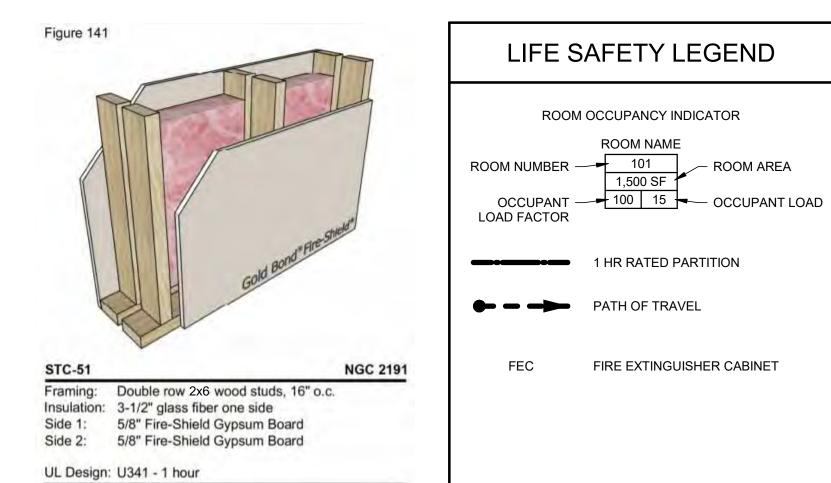


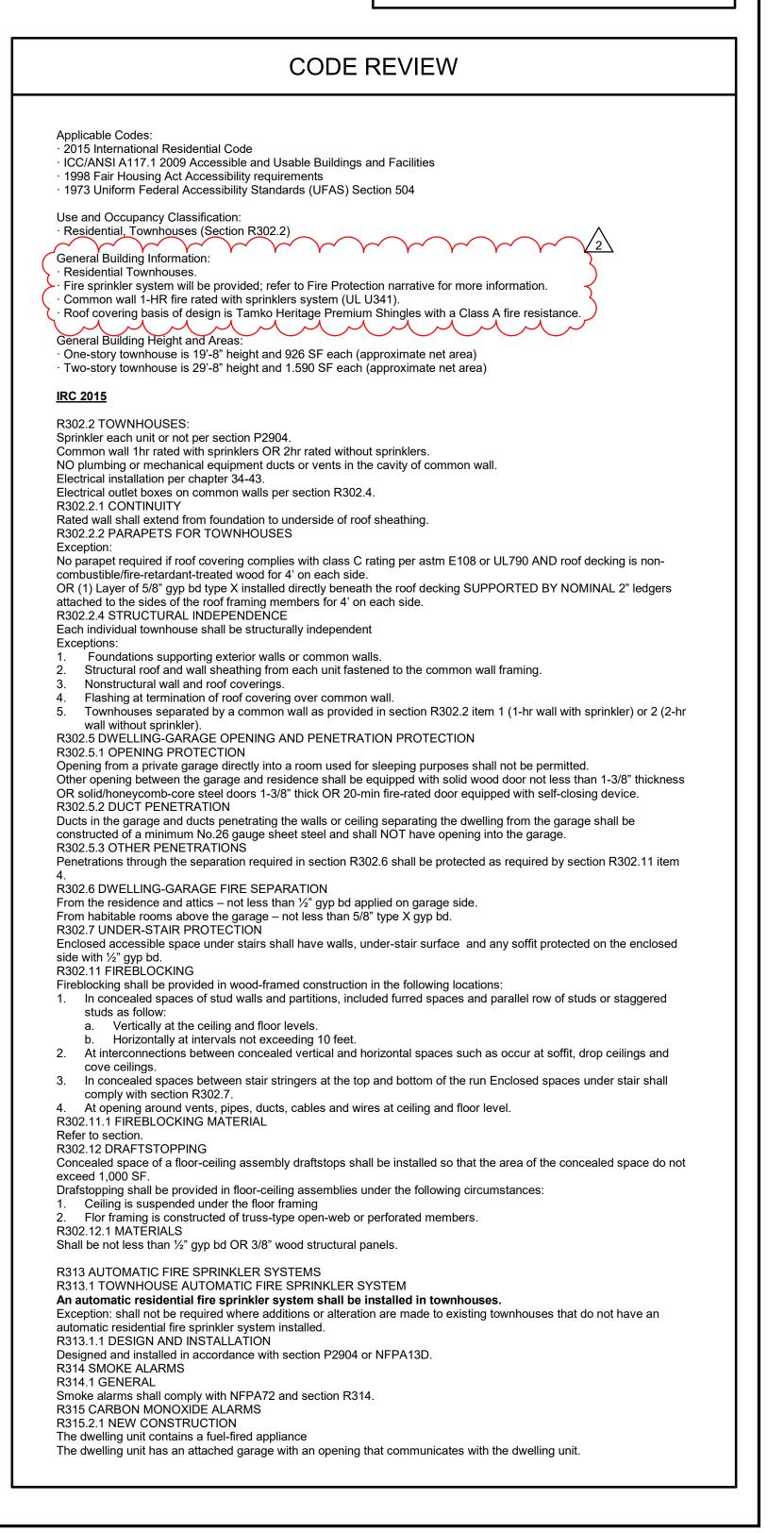


BLDG A4 - FIRST FLOOR PLAN - CODE PHASE 1 AND PHASE 2

1/16" = 1'-0"

BLDG A4 - SECOND FLOOR PLAN - CODE PHASE 1 AND PHASE 2







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E WHITTIER - PHASE MITOWN DEVELOPMENT COMPANY

ISSUES	/ REVISIONS	
	06/12/2020	PERMIT SET - PHASE 1
1	09/09/2020	PERMIT COMMENTS
2	09/29/2020	PERMIT COMMENTS

ISSUE DATE: 06/12/2020 PROJECT NO: P05093.0100

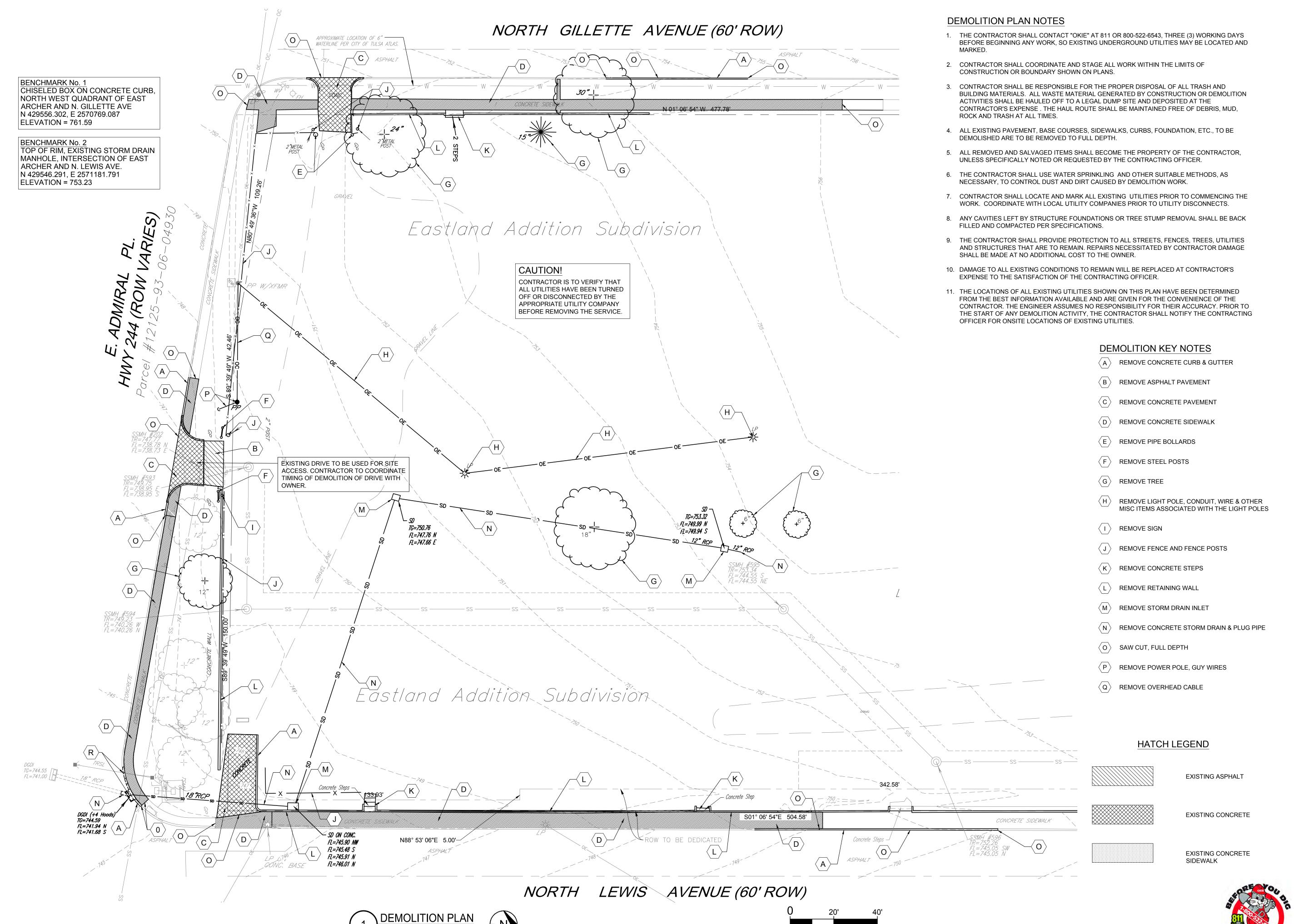
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SHEET NAME

CODE COMPLIANCE PLANS

SHEET NI IMBEI

G-101



SCALE: 1" = 20'-0"



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ROBERT L. DAY, P.E. ENGINEER OF RECORD

THE WHITTIER - PHASI
BOOMTOWN DEVELOPMENT COMPAN

SSUES	/ REVISIONS	
	06/12/2020	PERMIT SET - PHASE 1

ISSUE DATE: 06/12/2020 PROJECT NO: P05093.0100

PROJECT NO: P05093.0

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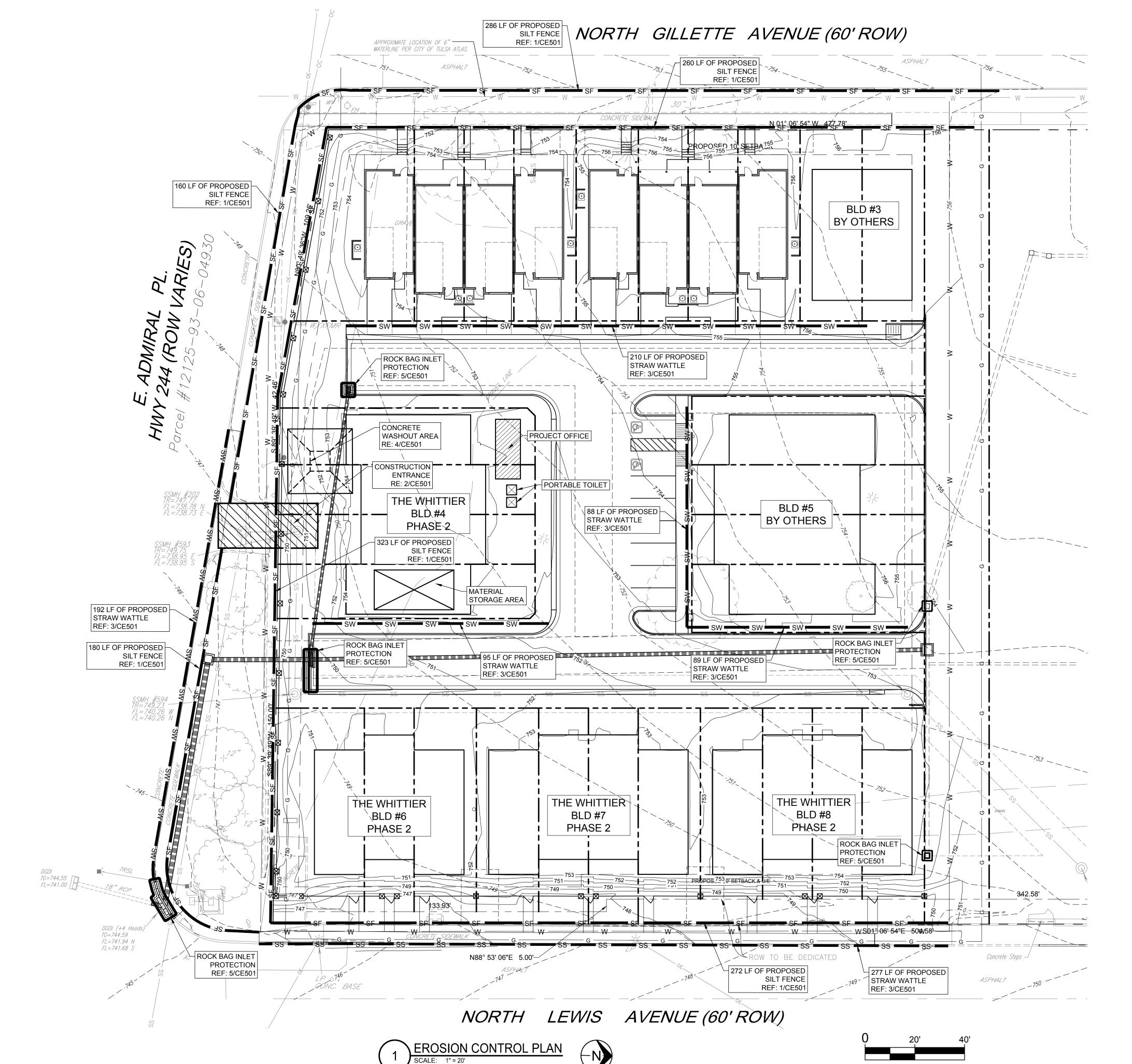
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T NAME

DEMOLITION PLAN

SHEET NUMBER

CD101

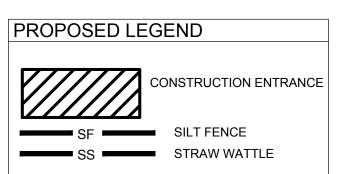


NORTH



- THE CONTRACTOR SHALL CONTACT "OKIE" AT 811 OR 800-522-6543, THREE (3) WORKING DAYS BEFORE BEGINNING ANY WORK, SO EXISTING UNDERGROUND UTILITIES MAY BE LOCATED AND MARKED.
- 2. THE EROSION CONTROL PLAN WILL INCORPORATE EROSION CONTROL MEASURES AND TECHNIQUES TO PREVENT SEDIMENT AND ERODED SOIL FROM LEAVING THE SITE EITHER IN THE EXISTING STORM DRAIN SYSTEM OR ONTO ADJACENT PRIVATE AND PUBLIC PROPERTY. CONSTRUCT TEMPORARY EROSION CONTROL SYSTEMS AS SHOWN ON THE PLANS TO PROTECT ADJACENT PROPERTIES AND WATER RESOURCES FROM EROSION AND SEDIMENTATION. CONTRACTOR SHALL NOTIFY THE CIVIL ENGINEER AT ONCE IF SITE CONDITIONS WARRANT ADDITIONAL EROSION CONTROL MEASURES. CONTRACTOR IS RESPONSIBLE FOR TAKING IMMEDIATE ACTION TO REMEDY EROSION CONTROL MEASURES WHILE ENGINEER IS PREPARING RESPONSE.
- 3. ALL PERIMETER EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED PRIOR TO THE COMMENCEMENT OF ANY GROUND DISTURBING ACTIVITIES.
- 4. THE APPROPRIATE EROSION CONTROL DEVICE(S) SHALL BE INSTALLED PRIOR TO ANY LAND DISTURBING ACTIVITY AND SHALL BE PROPERLY MAINTAINED AND/OR OPERATED DURING THE TIME SUCH SPECIAL CONDITIONS EXIST. SILT FENCE SHOWN ON PLANS IS A SUGGESTED LAYOUT. IF CONDITIONS WARRANT, THE CONTRACTOR MAY SUBMIT AN ALTERNATE EROSION CONTROL PLAN TO THE CONSULTING ENGINEER FOR APPROVAL.
- 5. SEDIMENT COLLECTED BEHIND THE SILT FENCES OR SEDIMENT BARRIER SHALL BE REMOVED WHEN SEDIMENT REACHES ONE THIRD THE HEIGHT OF THE
- 6. SEDIMENT FILTERS AND SILT FENCES SHALL BE INSPECTED AND MAINTAINED NO LESS THAN WEEKLY AND/OR WITHIN 24 HOURS OF A RAINFALL EVENT OF 0.5 INCHES OR MORE. MAINTENANCE SHALL INCLUDE BUT IS NOT LIMITED TO SEDIMENT REMOVAL, BARRIER REPAIR AND/OR REPLACEMENT.
- 7. THE CONTRACTOR SHALL, AT HIS OWN EXPENSE, PERIODICALLY WATER THE SITE TO CONTROL DUST.
- 8. SEDIMENTATION AND EROSION CONTROL MEASURES SHALL BE REMOVED FOLLOWING CONSTRUCTION OR UPON PERMANENT STABILIZATION OF THE DISTURBED AND GRADED AREAS, WHICHEVER OCCURS LAST.
- 9. ALL DISTURBED GRASS AREAS WITHIN THE CONSTRUCTION AREA SHALL BE REPAIRED OR REPLACED AND SHALL MEET OR EXCEED PRE DEVELOPMENT CONDITIONS.
- 10. THE SILT FENCE SHALL REMAIN IN PLACE UNTIL ALL CONSTRUCTION AND DEBRIS REMOVAL HAS BEEN COMPLETED AND PERMANENT EROSION CONTROL MEASURES ARE IN PLACE.
- 11. ACTIONS MUST BE TAKEN TO MINIMIZE THE TRACKING OF MUD AND SOIL FROM CONSTRUCTION AREAS ONTO PUBLIC ROADWAYS. SOIL TRACKED ONTO THE ROADWAYS SHALL BE REMOVED IMMEDIATELY.
- 12. SOIL STOCKPILES SHALL BE LOCATED AWAY FROM STREAMS, PONDS, SWALES AND CATCH BASINS. STOCKPILES SHALL BE ADEQUATELY CONTAINED THROUGH THE USE OF SEEDING, MULCH OR SILT FENCE.
- 13. WHERE CONSTRUCTION OR LAND DISTURBING ACTIVITY WILL OR HAS TEMPORARILY CEASED ON ANY PORTION OF A SITE, TEMPORARY SITE STABILIZATION MEASURES SHALL BE REQUIRED AS SOON AS PRACTICABLE, BUT NO LATER THAN 14 CALENDAR DAYS AFTER THE ACTIVITY HAS CEASED.
- 14. SEDIMENT-LADEN GROUNDWATER ENCOUNTERED DURING TRENCHING, BORING OR OTHER EXCAVATION ACTIVITIES SHALL BE PUMPED TO A SEDIMENT TRAPPING DEVICE PRIOR TO BEING DISCHARGED INTO A STREAM, POND, SWALE OR CATCH BASIN
- 15. PERMANENT EROSION CONTROL MEASURES SUCH AS SEEDING AND/OR SODDING SHALL TAKE PLACE AS SOON AS POSSIBLE AFTER FINAL GRADING OPERATIONS HAVE BEEN COMPLETED.

EXISTING LEGEND	
TUG	UNDERGROUND TELEPHONE
OHE	OVERHEAD ELECTRICAL
———UGE ———	UNDERGROUND ELECTRICAL
GAS	NATURAL GAS
	WATER LINE
SS	SANITARY SEWER
CATV	CABLE TELEVISION



TOTAL DISTURBED AREA 2.21 ACRES 96,598 S.F.

SCALE: 1" = 20'-0"





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ROBERT L. DAY, P.E.

THE WHITTIER - PHASE 1
BOOMTOWN DEVELOPMENT COMPANY

ISSUES / REVISIONS

| 06/12/2020 | PERMIT SET - PHASE 1

ISSUE DATE: 06/12/2020 PROJECT NO: P05093.0100

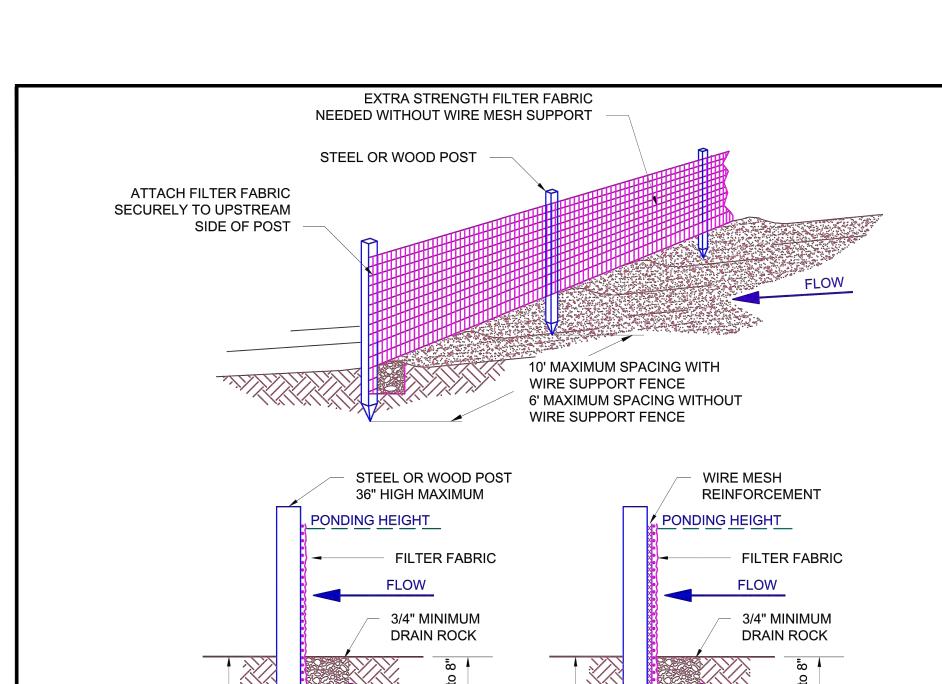
CHECKED BY: SAT DRAWN BY: CDC

SHEET NAME

EROSION CONTROL PLAN

SHEET NUMBER

CE101



NOTES:

TRENCH DETAIL

1. MUST BE INSTALLED PROPERLY TO AVOID NOTICE OF VIOLATION.

6" X 8" TRENCH WITH

WIRE BACK SILT FENCE

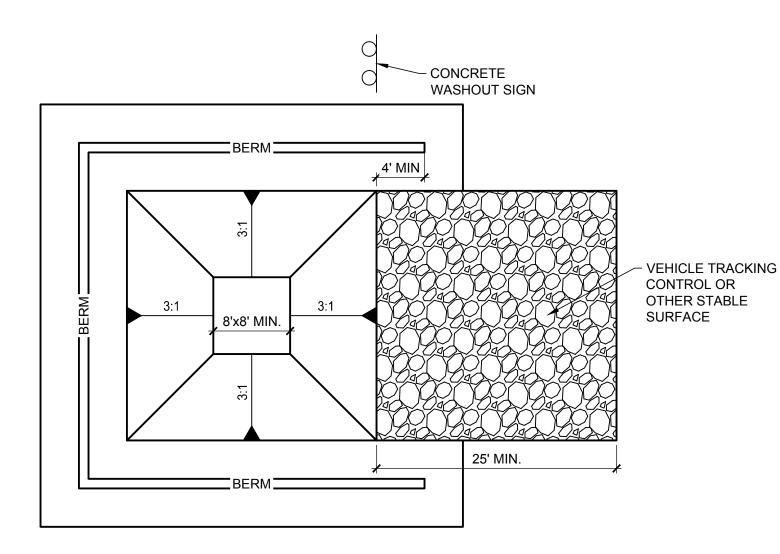
COMPACTED BACKFILL

6" X 8" TRENCH WITH

COMPACTED BACKFILL

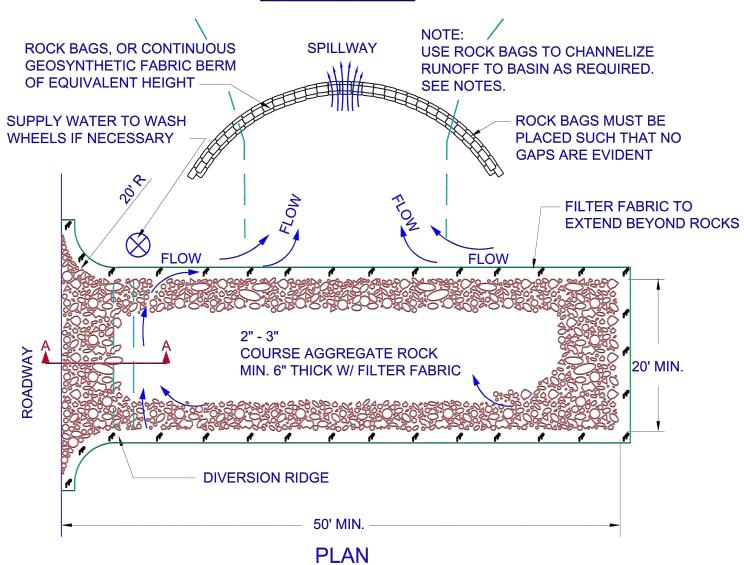
- 2. SILT FENCE SHALL BE PLACED ON SLOPE CONTOURS TO MAXIMIZE POUNDING EFFICIENCY.
- 3. INSPECT AND REPAIR FENCE AFTER EACH STORM EVENT AND REMOVE SEDIMENT WHEN NECESSARY. ACCUMULATED SEDIMENT SHOULD BE REMOVED FROM THE FENCE BASE WHEN THE SEDIMENT REACHES ONE-THIRD TO ONE-HALF THE FENCE HEIGHT.
- 4. REMOVED SEDIMENT SHALL BE DEPOSITED TO AN AREA THAT WILL NOT CONTRIBUTE TO SEDIMENT OFF-SITE AND CAN BE PERMANENTLY STABILIZED.





4 CONCRETE WASH-OUT AREA DETAIL
SCALE: N/A

ROADWAY ROADWAY ROADWAY FILTER FABRIC SECTION A -- A



OTES:

- 1. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAYS. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.
- 2. WHEN NECESSARY, WHEELS SHALL BE CLEANED PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY.
- 3. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN.
- 4. BAGS OF WOVEN GEOTEXTILE FABRIC, FILLED WITH GRAVEL MUST BE LAYERED SUCH THAT NO GAPS ARE EVIDENT.

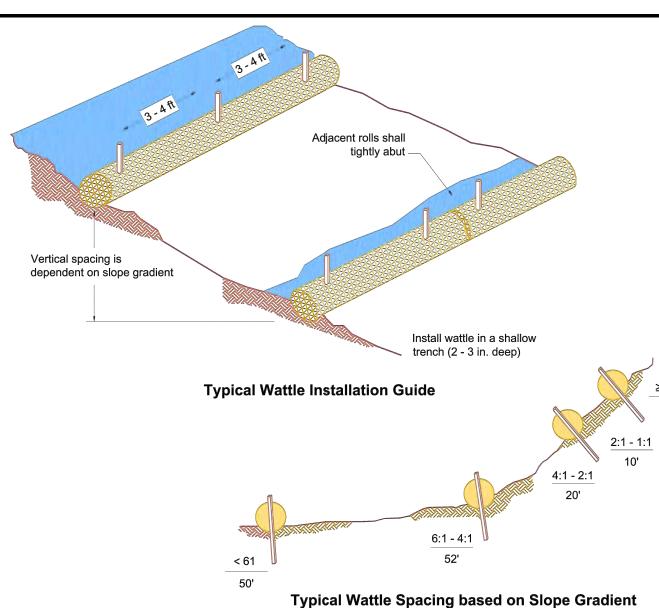


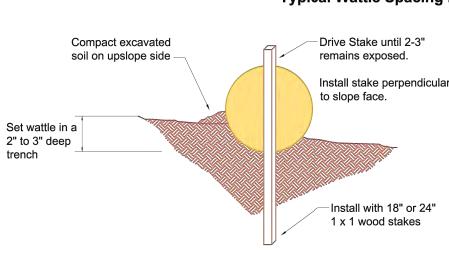
CONCRETE WASH-OUT AREA INSTALLATION NOTES:

- 1. DO NOT LOCATE THE CONCRETE WASH-OUT AREA WITHIN 400 FEET OF ANY NATURAL DRAINAGE PATHWAY OR WATERBODY, OR WITHIN 1000 FEET OF ANY WELLS OR DRINKING WATER SOURCES.
- 2. THE CONCRETE WASH-OUT AREA SHALL BE INSTALLED PRIOR TO CONCRETE PLACEMENT ON SITE.
- 3. CONCRETE WASH-OUT AREA SHALL INCLUDE A FLAT SUBSURFACE PIT THAT IS AT LEAST 8' BY 8' BOTTOM, SLOPES LEADING OUT OF THE PIT SHALL BE 3:1 OR FLATTER. THE PIT SHALL BE AT LEAST 3' DEEP
- 4. THE CONCRETE WASH-OUT PIT SHALL BE LINED WITH A EITHER A COMPACTED CLAY LINER, 20 MIL THICK SYNTHETIC LINERS, OR SIMILAR EQUIVALENT LINERS TO MAKE THE PIT LEAK PROOF.
- 5. BERM ALONG THE SIDES AND BACK OF THE CONCRETE WASH-OUT AREA SHALL HAVE A MINIMUM HEIGHT OF 1'.
- 6. VEHICLE TRACKING PAD SHALL BE SLOPED 2% TOWARDS THE CONCRETE WASH-OUT AREA.
- 7. SIGNS SHALL BE PLACED AT THE CONSTRUCTION ENTRANCE, AT THE CONCRETE WASH-OUT AREA, AND ELSEWHERE AS NECESSARY TO CLEARLY INDICATE THE LOCATION OF THE CONCRETE WASH-OUT AREA TO OPERATORS OF CONCRETE TRUCKS AND PUMP RIGS.
- 8. USE EXCAVATED MATERIAL FOR PERIMETER BERM CONSTRUCTION.
- 9. STORAGE ALTERNATIVES USING PREFABRICATED CONCRETE WASH-OUT DEVICES OR A LINED, ABOVE GROUND STORAGE AREA ARE ACCEPTABLE.

CONCRETE WASH-OUT AREA MAINTENANCE NOTES:

- 1. THE CONCRETE WASH-OUT AREA SHALL BE REPAIRED, CLEANED, OR ENLARGED AS NECESSARY TO MAINTAIN CAPACITY FOR CONCRETE WASTE. CONCRETE MATERIALS, ACCUMULATED IN PIT, SHALL BE REMOVED ONCE THE MATERIALS HAVE REACHED A DEPTH OF 2 FEET.
- 2. CONCRETE WASH-OUT WATER, WASTER PIECES OF CONCRETE, AND ALL OTHER DEBRIS IN THE CONCRETE WASH-OUT PIT SHALL BE TRANSPORTED FROM THE JOB SITE IN A WATER-TIGHT CONTAINER AND DISPOSED OF PROPERLY.
- 3. THE CONCRETE WASH-OUT AREA SHALL REMAIN IN PLACE UNTIL ALL CONCRETE FOR THE PROJECT IS PLACED.
- 4. WHEN THE CONCRETE WASH-OUT AREA IS REMOVED, COVER THE DISTURBED AREA WITH TOPSOIL, SEED, AND MULCH OR OTHERWISE STABILIZED IN AN APPROVED MANNER.



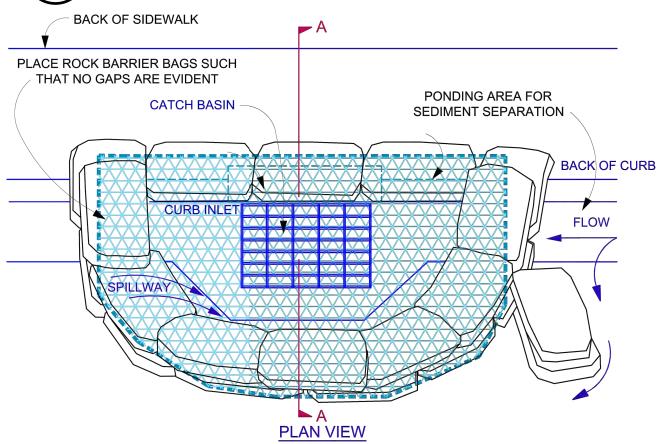


NOTES:

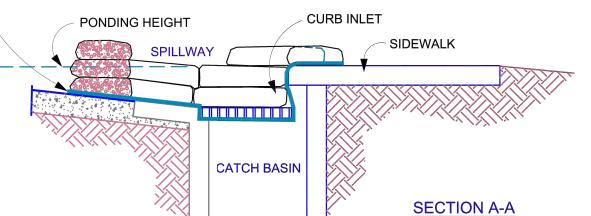
Begin at the location where the wattle is to be installed by excavating a 2 - 3" deep x 9" wide trench along the contour of the slope. Excavated soil should be placed up-slope from the anchor trench.
 Place the wattle in the trench so that it contours to the soil surface. Compact the soil from the excavated trench against the wattle on the uphill side. Adjacent wattles should tightly abut.
 Secure the wattle with 18 - 24" stakes every 3 - 4' With a stake on each end. Stakes should be driven through the middle of the wattles leaving at least e - 3" of stake extending above, the wattle stakes should be driven perpendicular to slope face.



Enrichment Detail

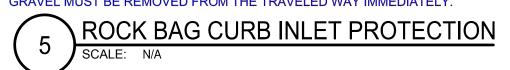


PLACE FILTER FABRIC UNDER GRATE AND ON BACK OF GRATE TO BE HELD WITH ROCK BARRIER BAGS SUCH THAT NO GAPS ARE EVIDENT



NOTES:

- 1. PLACE CURB TYPE ROCK BAG BARRIER ON GENTLY SLOPING STREET, WHERE WATER CAN POND AND ALLOW SEDIMENT TO SEPARATE FROM RUNOFF.
- 2. BAGS OF WOVEN GEOTEXTILE FABRIC, FILLED WITH GRAVEL MUST BE LAYERED SUCH THAT NO GAPS ARE EVIDENT.
- 3. LEAVE ONE SANDBAG GAP IN THE TOP ROW ON THE SIDE AWAY FROM FLOW, TO PROVIDE A SPILLWAY; OR IN THE CENTER IF PONDING IS NEEDED ON BOTH SIDES.
- 4. INSPECT BARRIERS AND REMOVE SEDIMENT AFTER EACH STORM EVENT, SEDIMENT AND

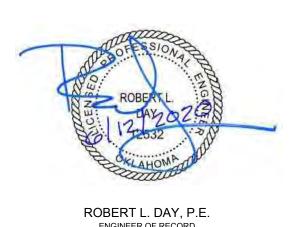






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E WHITTIER - PHASE 1
MTOWN DEVELOPMENT COMPANY

ISSUES / REVISIONS

| 06/12/2020 | PERMIT SET - PHASE 1

ISSUE DATE: 06/12/2020 PROJECT NO: P05093.0100

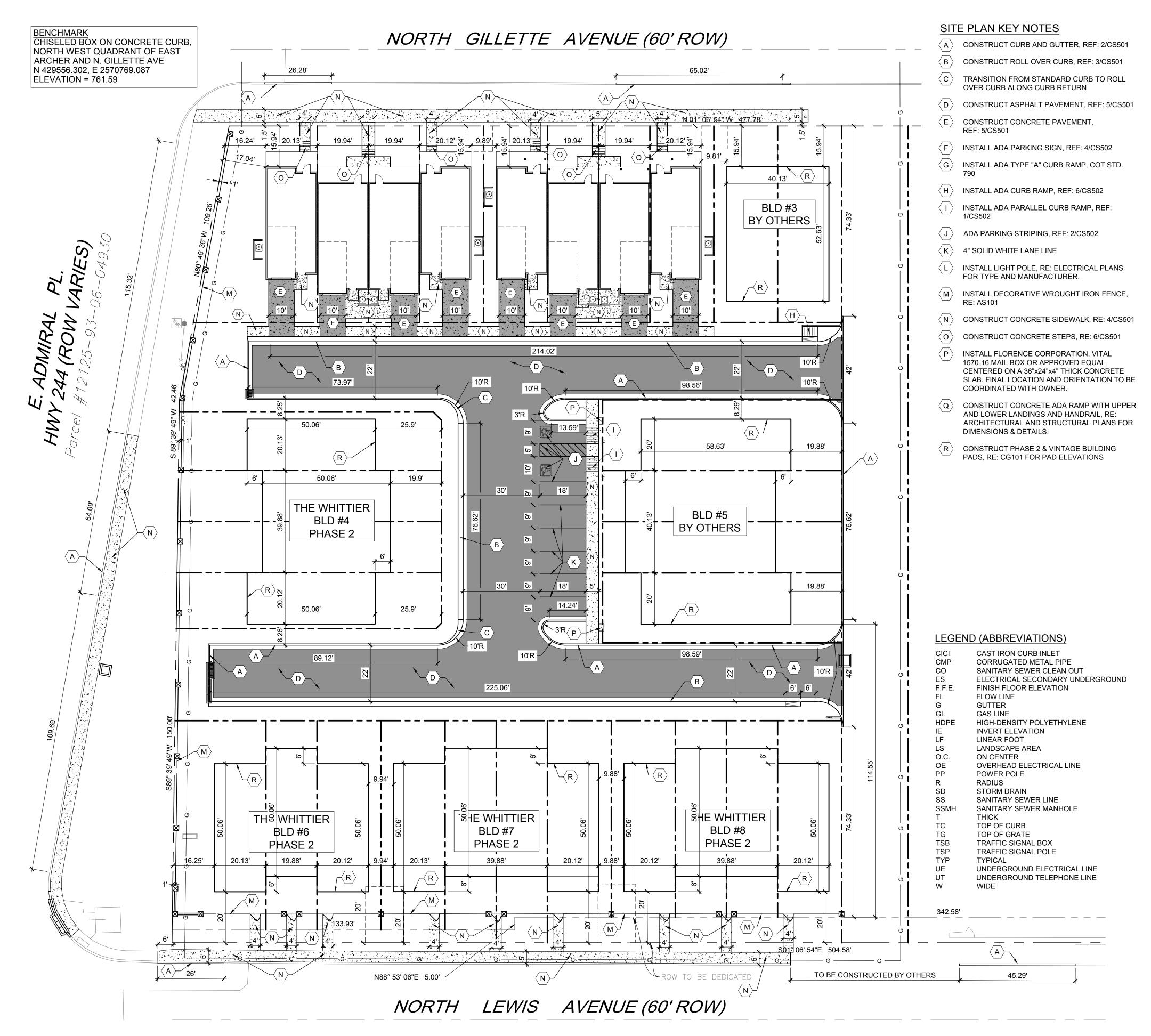
CHECKED BY: SAT

DRAWN BY: CDC

EROSION CONTROL DETAILS

SHEET NUMBER

CE501



SCALE: 1" = 20'-0"

SITE PLAN NOTES

- 1. THE CONTRACTOR SHALL CONTACT "OKIE" AT 811 OR 800-522-6543, THREE (3) WORKING DAYS BEFORE BEGINNING AY WORK, SO EXISTING UNDERGROUND UTILITIES CAN BE LOCATED AND
- 2. EQUIPMENT AND MATERIALS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS AND SPECIFICATIONS.
- 3. SIDEWALK EXPANSION JOINTS SHALL BE PLACED IN ACCORDANCE WITH DETAIL 2/CS101.
- 5. THIS PROPERTY IS LOCATED IN ZONE "X", "FLOOD HAZARD AREA DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN", PER FEMA F.I.R.M. COMMUNITY PANEL NO. 40143C0240L, EFFECTIVE DATE: OCTOBER 16, 2012.
- 6. EARTHWORK FOR ALL BUILDING FOUNDATIONS AND SLABS SHALL BE IN ACCORDANCE WITH STRUCTURAL BUILDING PLANS AND SPECIFICATIONS AND THE GEOTECHNICAL REPORT FOR THIS PROJECT. REPORT PREPARED BY: AIMRIGHT TESTING & ENGINEERING, PROJECT NO. 5960119, DATED JANUARY 25, 2019.
- 7. ALL CONSTRUCTION AND METHODS TO BE IN STRICT ACCORDANCE WITH CURRENT CITY OF TULSA STANDARD DRAWINGS AND SPECIFICATIONS.
- 8. THE CONTRACTOR SHALL BE SOLELY AND COMPLETELY RESPONSIBLE FOR CONDITIONS OF THE JOB SITE, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY DURING PERFORMANCE OF THE WORK. THIS REQUIREMENT WILL APPLY CONTINUOUSLY AND WILL NOT BE LIMITED TO NORMAL WORKING HOURS. MAINTAIN ALL BARRICADES, WARNING SIGNS, FLASHING LIGHTS AND TRAFFIC CONTROL DEVICES DURING CONSTRUCTION. CONTRACTOR SHALL COMPLY WITH ALL O.S.H.A. REGULATIONS AND SAFETY REQUIREMENTS.
- 9. THIS SET OF CONSTRUCTION DOCUMENTS SHALL BE CONSIDERED AS A WHOLE IN THAT THE GENERAL CONTRACTOR AND ALL SUB-CONTRACTORS ARE RESPONSIBLE FOR INFORMATION PRESENTED ON ALL SHEETS OF THIS SET OF DRAWINGS.
- 10. CONTRACTOR IS TO BE RESPONSIBLE FOR OBTAINING ANY REQUIRED STATE OR LOCAL PERMITS. CONSTRUCTION MEANS AND METHODS SHALL COMPLY WITH ALL APPLICABLE GOVERNING CODES AND BE CONSTRUCTED TO SAME.
- 11. IF ANY EXISTING STRUCTURES TO REMAIN ARE DAMAGED DURING CONSTRUCTION, IT IS THE CONTRACTOR'S RESPONSIBILITY TO REPAIR AND/OR REPLACE THE EXISTING STRUCTURE, AS NECESSARY, TO RETURN IT TO THE EXISTING CONDITION OR BETTER. CONTRACTOR SHALL REPAIR AND RESTORE ANY AREAS DAMAGED DURING CONSTRUCTION AT HIS OWN EXPENSE.
- 12. CONTRACTOR SHALL PROVIDE AND MAINTAIN EROSION CONTROL MEASURES PER THE EROSION CONTROL PLAN (CE101).
- 13. THE CONTRACTOR SHALL PERFORM THE WORK ACCORDING TO ALL CITY, COUNTY, STATE AND FEDERAL SAFETY AND HEALTH REGULATIONS. IN PARTICULAR THE "TRENCHING" AND "OPEN EXCAVATION" OPERATIONS SHALL COMPLY WITH ALL CURRENT O.S.H.A. REGULATORY REQUIREMENTS.
- 14. ALL PAVEMENT MARKING OF STRIPES TO BE 4" WIDE, WHITE AND APPLIED IN TWO COATS, UNLESS OTHERWISE NOTED, RE: SPECIFICATIONS.
- 15. PARKING LOT STRIPING AND REQUIRED ADA ACCESSIBLE AISLES SHOWN ON PLAN SHALL BE MARKED IN ACCORDANCE WITH CURRENT ADA GUIDELINES.
- 16. ALL NEW SIDEWALKS, IF ANY, NOT ADJACENT TO THE BUILDING, SHALL BE 4" THICK AND A MINIMUM OF FOUR (4) FEET WIDE. SIDEWALKS SHALL HAVE A LIGHT BROOM FINISH WITH A MAXIMUM CROSS SLOPE OF TWO PERCENT. TRANSVERSE CONTRACTION JOINTS SHALL MAINTAIN AN EQUAL SPACING WITH THE SIDEWALK WIDTH. SIDEWALK EXPANSION JOINTS SHALL NOT EXCEED 40 FOOT SPACING UNLESS OTHERWISE NOTED.

ADA NOTES

- 1. ANY REQUEST BY THE GOVERNING AUTHORITY OR INSPECTOR TO ALTER ADA COMPLIANCE DETAILS OR REQUIREMENTS DEPICTED ON AND IN THESE PLANS AND SPECIFICATIONS MUST BE DIRECTED TO THE OWNER'S CONSTRUCTION MANAGER FOR AUTHORIZATION. ANY CHANGES MADE WITHOUT PROPER AUTHORIZATION AND LATER FOUND TO BE NON-COMPLIANT WITH THE DETAILS AS SHOWN ON AND IN THESE PLANS AND SPECIFICATIONS WILL BE REMOVED AND REPLACED TO BE MADE FULLY COMPLIANT, REGARDLESS OF MAGNITUDE, AT THE CONTRACTOR AND/OR SUB-CONTRACTOR'S EXPENSE. THE CONTRACTOR MUST FOLLOW THE "REQUEST FOR INFORMATION" (RFI) PROCESS IN ACQUIRING THE APPROVAL OF CHANGES TO ADA RELATED ITEMS.
- 2. RE: GRADING PLAN SHEET (CG101) FOR FINAL GRADES.
- 3. ALL NEW SIDEWALKS (INCLUDING SIDEWALKS TO BE REMOVED & REPLACED) SHALL NOT EXCEED 2% CROSS SLOPE & 5% RUNNING SLOPE. FOR SIDEWALKS CONTAINED WITHIN THE PUBLIC R/W AND WHEN ADJACENT STREET GRADES EXCEED 5%. THEN SIDEWALK RUNNING SLOPES MAY MATCH STREET GRADES.
- 4. 1/8" MAXIMUM DEPTH TO TOP OF SEALANT AND 1/8" MAXIMUM PROTRUSION TO TOP OF SEALANT ALONG ADA ACCESS ROUTES.
- 5. PRIVATE PROPERTY RAMPS SHALL HAVE THE FACE OF THE CURB TRANSITIONS PAINTED YELLOW (RE: 5/CS501)

PAVING NOTES

- 1. ALL CONCRETE SHALL BE 4,500 PSI, AND ALL REINFORCING STEEL SHALL BE GRADE 60 UNLESS OTHERWISE NOTED.
- 2. TRAFFIC CONTROL MEASURES SHALL BE IN-ACCORDANCE WITH CITY OF TULSA AND THE LATEST VERSION OF THE MUTCD.
- 3. PROVIDE A SMOOTH TRANSITION BETWEEN EXISTING PAVEMENT AND ANY NEW PAVEMENT.
- 4. CONTRACTOR SHALL PROVIDE AND INSTALL 4 INCH PVC SLEEVES FOR FUTURE UTILITY CROSSINGS UNDER NEW PAVEMENT. THE LOCATION AND NUMBER OF CONDUITS SHALL APPEAR ON THE SITE UTILITY PLAN. VERIFY CONDUIT LOCATIONS WITH ALL UTILITY COMPANIES. AGENCIES OR ENGINEER SUPPLYING FUTURE SERVICES.
- 5. ALL TRENCH BACKFILL FOR OPEN CUT PAVEMENT AREAS SHALL BE BACKFILLED FULL DEPTH WITH AGGREGATE BASE MATERIAL AND COMPACTED IN 9 INCH LIFTS TO 95% STANDARD PROCTOR DENSITY TO THE BOTTOM OF SURFACE PAVEMENT.

HORIZONTAL CONTROL NOTES

- 1. COORDINATES SHOWN ARE NAD 83 OKLAHOMA STATE PLANE, NORTH ZONE. VERTICAL CONTROL IS NAVD 88.
- 2. ALL DIMENSIONS ARE TO THE CENTERLINE OF ROAD, CENTERLINE OF PAINT STRIPES AND TO FACE OF CURB. DIMENSIONS TO BUILDINGS OR OF BUILDINGS ARE TO THE OUTSIDE FACE OF WALL, UNLESS OTHERWISE NOTED.
- 3. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS. ANY DISCREPANCY FOUND SHALL BE DISCUSSED WITH THE ENGINEER OF RECORD PRIOR TO ANY CONSTRUCTION WORK.







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ROBERT L. DAY, P.E. ENGINEER OF RECORD

06/12/2020	PERMIT SET - PHASE

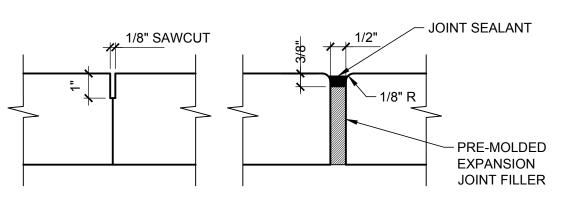
ISSUE DATE: 06/12/2020 PROJECT NO: P05093.0100

CHECKED BY: SAT DRAWN BY: CDC

SITE PLAN

SHEET NUMBER

CS101

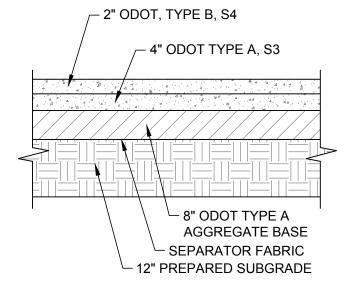


CONTRACTION JOINT EXPANSION JOINT

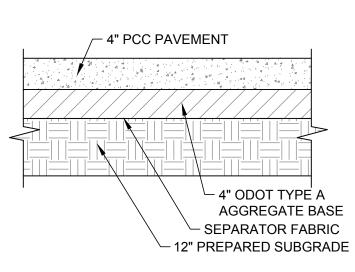
1. CONTRACTION JOINTS SHALL BE PLACED

EVERY 6' UNLESS OTHERWISE NOTED. 2. EXPANSION JOINTS SHALL BE PLACED EVERY 54' UNLESS OTHERWISE NOTED.









COMPACTED

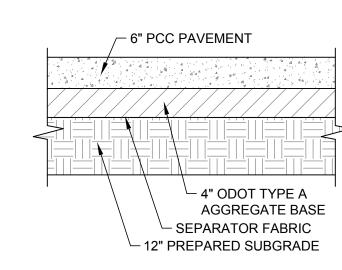
- RE-COMPACTED

SUBGRADE

EARTH

BACKFILL

PORTLAND CEMENT CONCRETE (DRIVEWAYS)



FOC AND LAYOUT DIMENSION LINE

FOR AGGREGATE BASE

PAVING SECTION

THICKNESS, RE: 5,CS501 FOR

18" GUTTER

TYP

CURB AND GUTTER DETAIL

COT DETAIL NO. 762

S=1/4"/FT

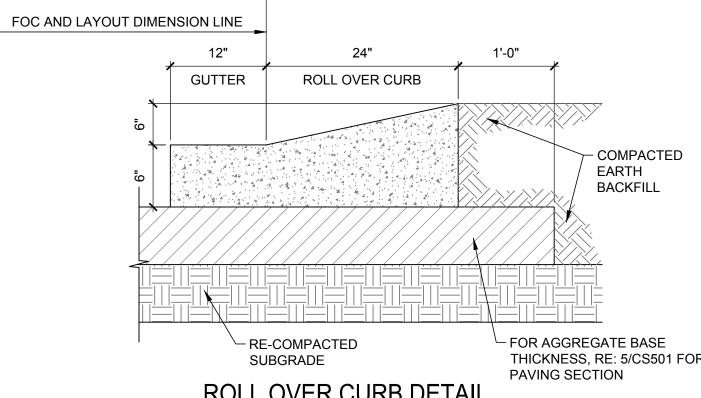
PORTLAND CEMENT CONCRETE (ADMIRAL ENTRANCE)

DETAIL NOTE:

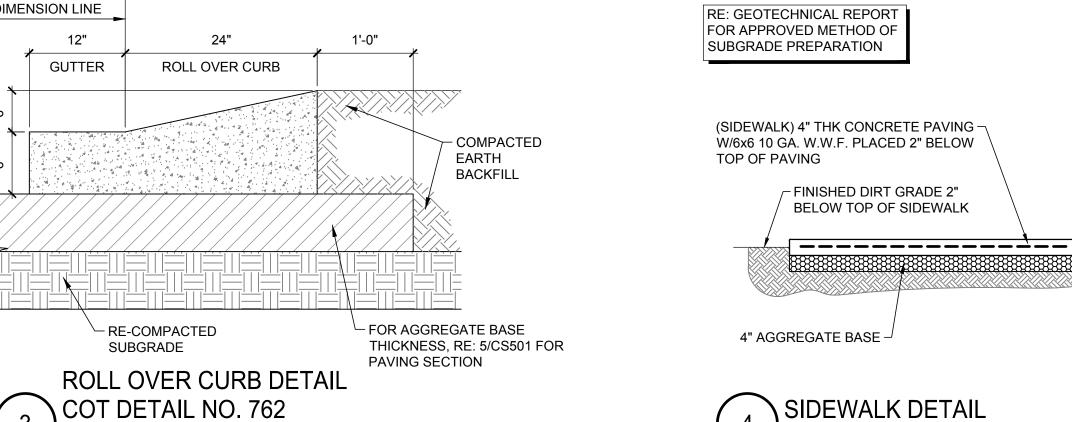
REFER TO AIMRIGHT TESTING & ENGINEERING, PROJECT NO. 5960119, DATED: JANUARY 25, 2019 FOR EARTHWORK, SITE PREPARATION, PAVEMENTS AND SUBGRADE, PRIOR TO PLACING PAVEMENT SECTION OR BUILDING PAD.

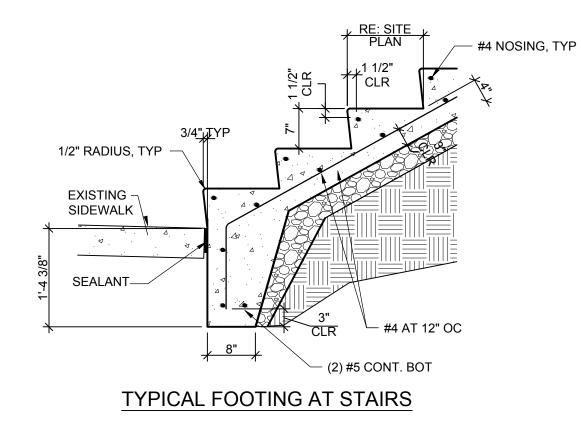
CONTRACTOR TO CONSTRUCT A FIVE (5) FOOT PAVEMENT TRANSITION BETWEEN ASPHALT AND CONCRETE PAVEMENT. THICKEN THE ASPHALT SECTION TO MATCH THE CONCRETE PAVEMENT DEPTH AND CREATE A THICKENED EDGE PAVEMENT

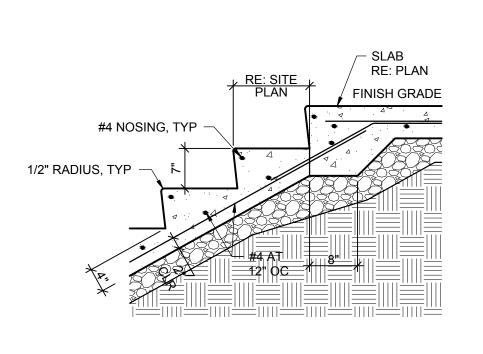












UPPER STAIR CONNECTION





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ROBERT L. DAY, P.E. ENGINEER OF RECORD

06/12/2020	PERMIT SET - PHASE

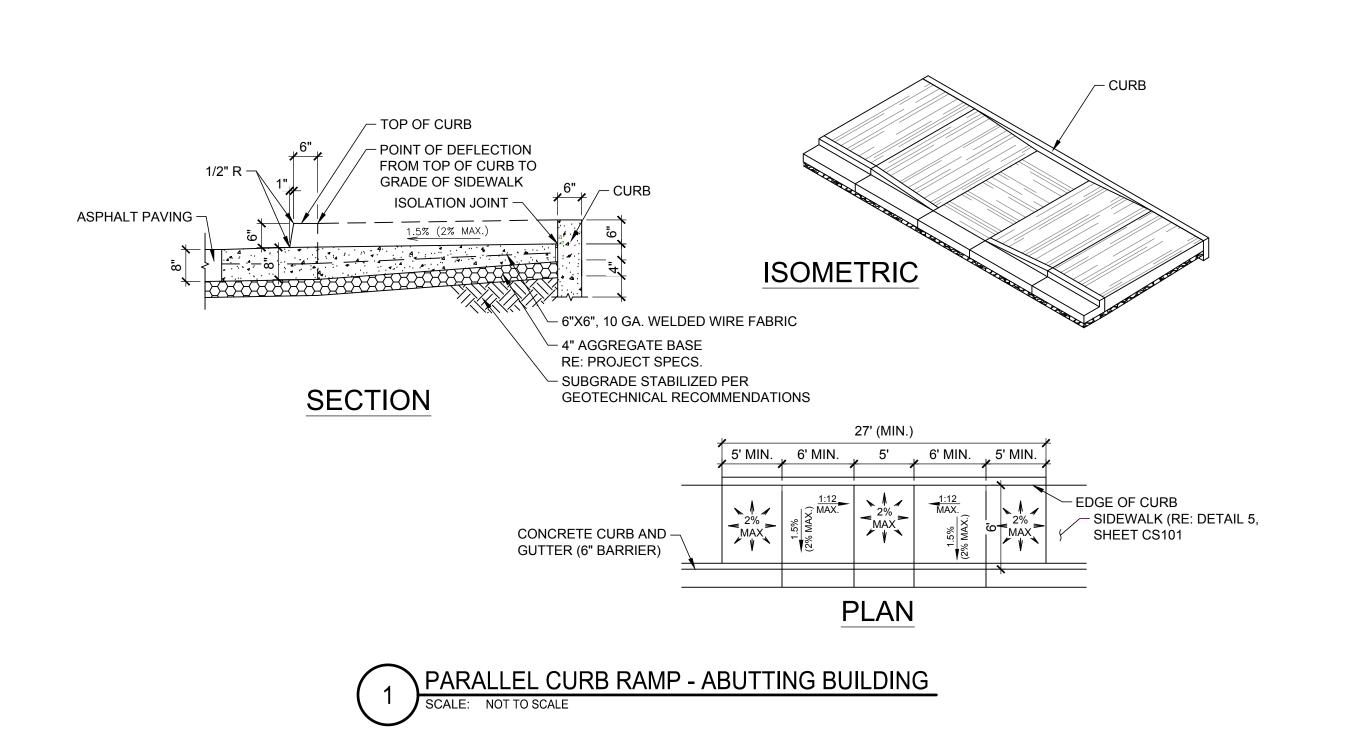
ISSUE DATE: 06/12/2020 PROJECT NO: P05093.0100

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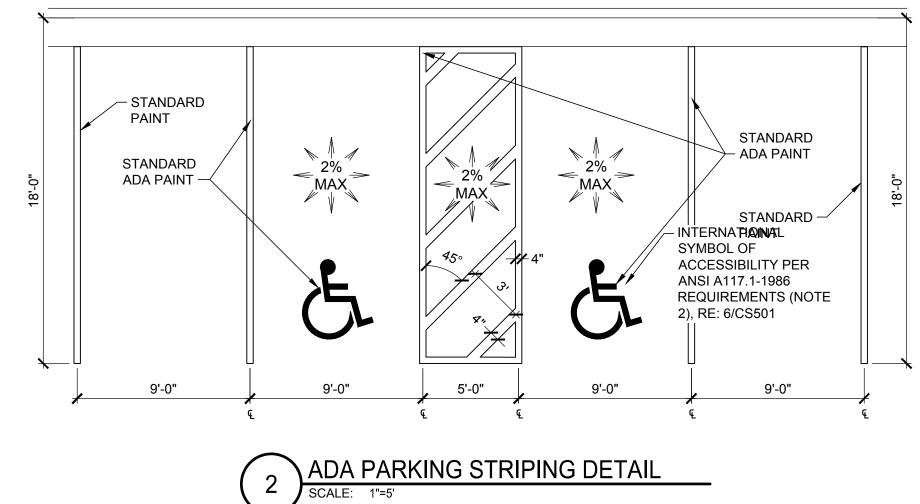
DETAILS (1 OF 2)

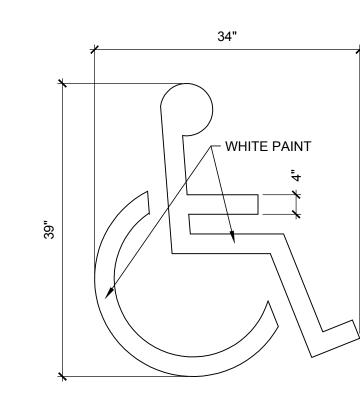
SHEET NUMBER

CS501

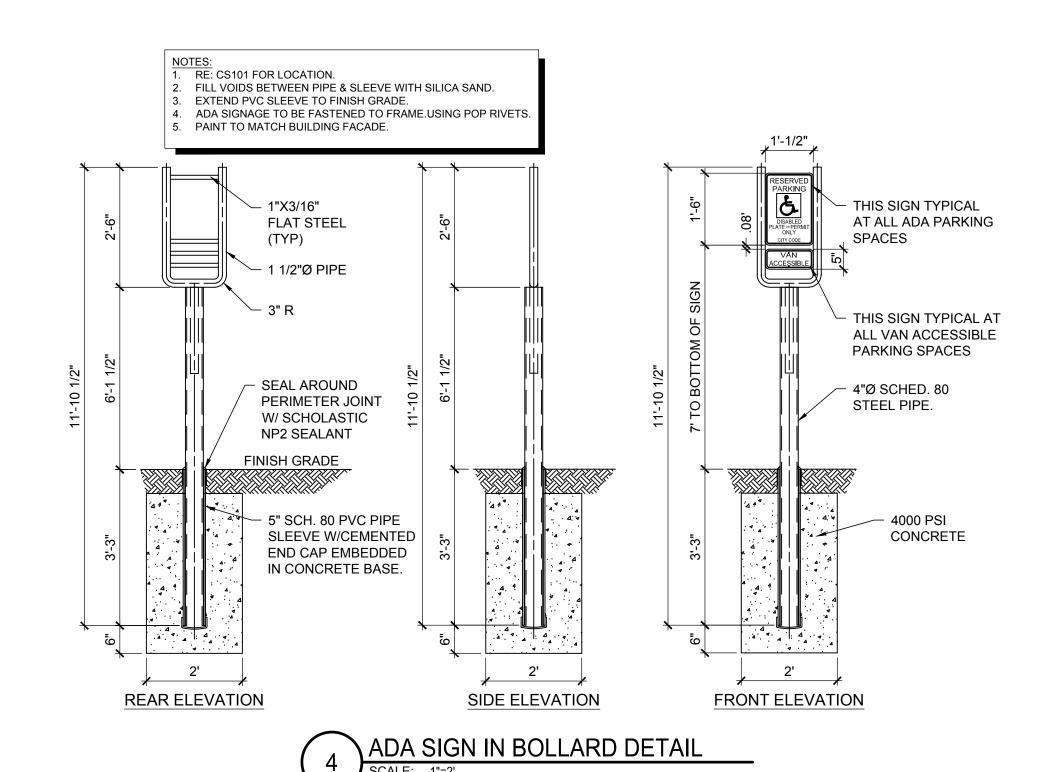


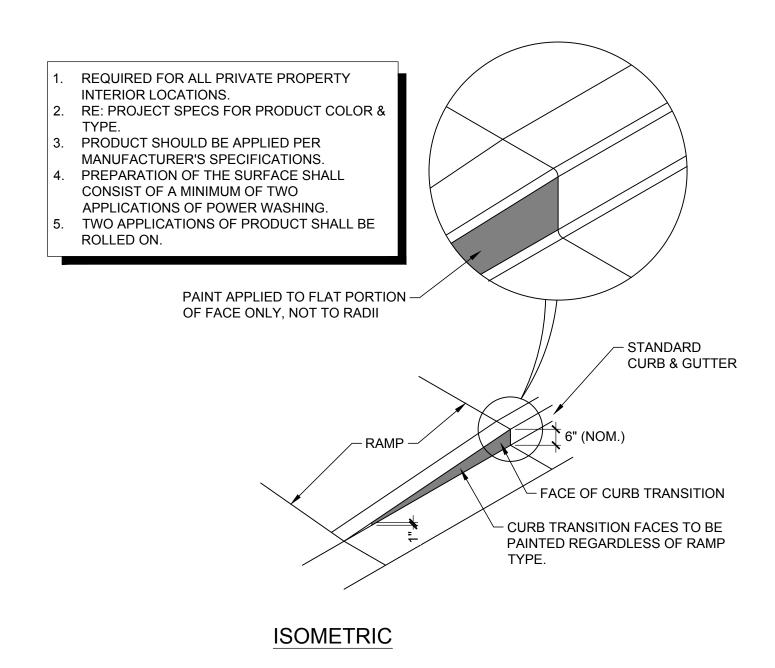
1. RE: SITE PLAN FOR LOCATION OF ADA PARKING SPACES AND ACCESS AISLE IN RELATIONSHIP TO THE DOOR LOCATION. (THIS DETAIL IS FOR STRIPING LAYOUT ONLY) 2. PARKING STRIPES AND THE ADA INTERNATIONAL HANDICAP SYMBOL ARE TO BE PAINTED PER THE MANUFACTURER'S RECOMMENDATIONS.



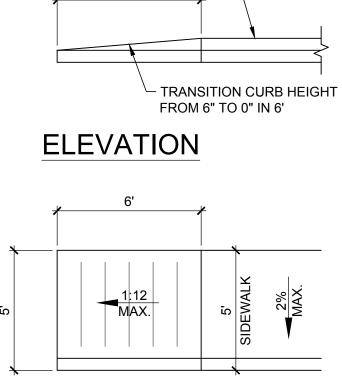




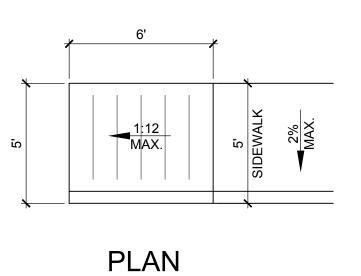




RAMP CURB TRANSITION DETAIL



CONCRETE CURB AND -GUTTER (6" BARRIER)

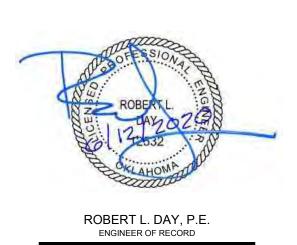








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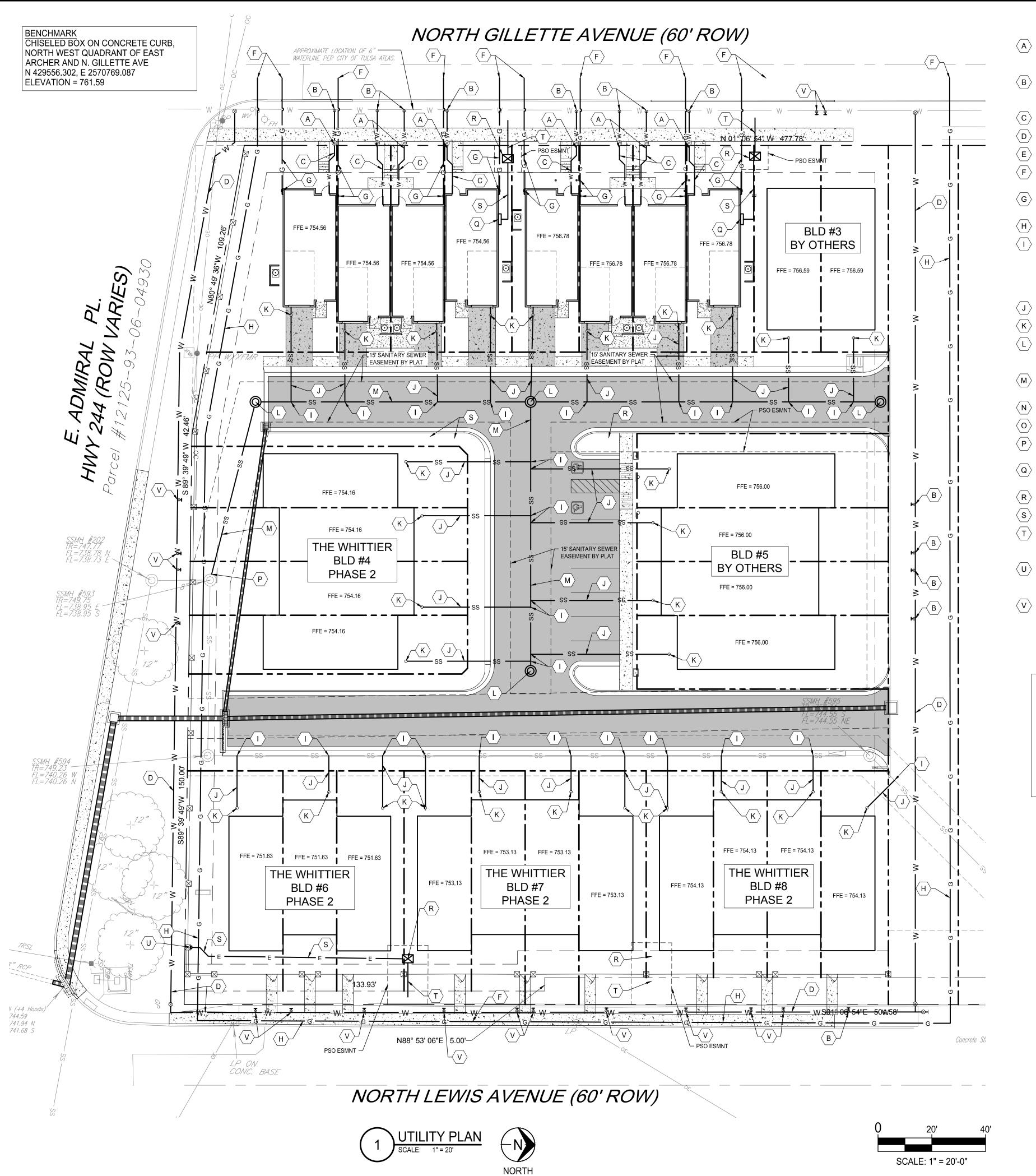
ISSUE DATE: 06/12/2020 PROJECT NO: P05093.0100 CHECKED BY: SAT

DRAWN BY: CDC SHEET NAME

DETAILS (2 OF 2)

SHEET NUMBER

CS502



UTILITY KEY NOTES

- PROPOSED DOMESTIC 1-1/2" WATER METER SETTING (INSTALLED BY CITY). CONTRACTOR RESPONSIBLE FOR TAP & EQUITY FEES.
- B PROPOSED WATER SERVICE LINE TAP. CONNECT PER CITY OF TULSA PUBLIC WORKS DEPARTMENT REQUIREMENTS.
- C INSTALL 2" TYPE K COPPER DOMESTIC WATER SERVICE
- D INSTALL 6" WATER LINE (PER IDP 44145-2019)
- (E) NOT USED
- F PROPOSED POINT OF CONNECTION FOR GAS SERVICE/MAIN
- G GAS METER AND GAS LINE FROM METER TO GAS MAIN INSTALLED BY OTHERS.
- H GAS MAIN LINE (BY OTHERS)
- PROPOSED POINT OF CONNECTION FOR SANITARY
 SEWER SERVICE. VERIFY FLOW LINE, IF NECESSARY
 ADJUST SLOPE AND FLOW LINES TO ACCOMMODATE
 ACTUAL TIE IN ELEVATION. TIE IN THE PROPOSED
 SERVICE PER CITY TULSA STANDARD SPECIFICATIONS
 AND DETAILS.
- INSTALL 4" PVC SANITARY SEWER SERVICE LINE.
- K PROPOSED 4" CLEANOUT. RE: 4/CU501
- L INSTALL 4' DIA. SANITARY SEWER MANHOLE PER CITY OF TULSA STANDARD SPECIFICATIONS AND DETAILS. (PER IDP 44145-2019)
- M INSTALL 8" PVC SANITARY SEWER LINE (PER IDP 44145-2019)
- NOT USED
- O NOT USED
- POINT OF CONNECTION FOR 8" PVC SANITARY SEWER
- Q ELECTRIC METER BANKS, RE: EL3ECTRICAL PLANS, BY OTHERS

EXTENSION. CONNECT TO EXISTING MANHOLE.

- R ELECTRIC TRANSFORMER AND PAD BY OTHERS
- S SECONDARY ELECTRIC SERVICE LINE/CONDUIT
- T PRIMARY ELECTRIC LINE CONDUIT (4"). CONTRACTOR TO COORDINATE WITH PSO LOCATION AND CONNECTION POINT.
- U HOUSE ELECTRICAL PANEL, RE: ELECTRICAL PLANS FOR DETAILS
- PROPOSED WATER SERVICE LINE TAP AND CAP FOR FUTURE USE. CONNECT PER CITY OF TULSA PUBLIC WORKS DEPARTMENT REQUIREMENTS.

CAUTION EXISTING UTILITIES !!!

EXISTING UTILITIES AND UNDERGROUND FACILITIES INDICATED ON THESE PLANS HAVE BEEN LOCATED FROM REFERENCE INFORMATION. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY BOTH HORIZONTALLY AND VERTICALLY THE LOCATION OF ALL EXISTING UTILITIES AND UNDERGROUND FACILITIES PRIOR TO CONSTRUCTION, TO TAKE THE NECESSARY PRECAUTIONS IN ORDER TO PROTECT ALL FACILITIES ENCOUNTERED. THE CONTRACTOR SHALL PRESERVE AND PROTECT ALL EXISTING UTILITIES FROM DAMAGE DURING CONSTRUCTION.

LEGEND (ABBREVIATIONS)

F.F.E. FINISH FLOOR ELEVATION
FL FLOW LINE
G GUTTER
GL GAS LINE

CAST IRON CURB INLET

CORRUGATED METAL PIPE

SANITARY SEWER CLEAN OUT

HIGH-DENSITY POLYETHYLENE

OVERHEAD ELECTRICAL LINE

SANITARY SEWER MANHOLE

UNDERGROUND ELECTRICAL LINE UNDERGROUND TELEPHONE LINE

INVERT ELEVATION

LINEAR FOOT LANDSCAPE AREA ON CENTER

POWER POLE

STORM DRAIN

TOP OF CURB
TOP OF GRATE

SANITARY SEWER LINE

TRAFFIC SIGNAL BOX
TRAFFIC SIGNAL POLE

RADIUS

ELECTRICAL SECONDARY UNDERGROUND

CICI

CMP

SSMH

CO

UTILITY NOTES

- 1. THE CONTRACTOR SHALL CONTACT "OKIE" AT 811 OR 800-522-6543, THREE (3) WORKING DAYS BEFORE BEGINNING ANY WORK, SO EXISTING UNDERGROUND UTILITIES MAY BE LOCATED AND MARKED.
- 2. UTILITY TRENCHING AND BACKFILLING SHALL BE IN ACCORDANCE WITH THE CITY OF TULSA REQUIREMENTS, AND SHALL COMPLY WITH ALL LOCAL, STATE, AND NATIONAL SAFETY STANDARDS.
- UTILITY CONSTRUCTION SHALL CONFORM TO CITY OF TULSA STANDARDS.
- MANHOLE LIDS AND SLEEVES IN PAVED AREAS SHALL BE HS-25 TRAFFIC RATED.
- 5. WATER LINES SHALL BE INSTALLED WITH AT LEAST 36" COVER.
- 6. MAINTAIN MINIMUM 10 FEET HORIZONTAL CLEARANCE BETWEEN WATER PIPE AND SANITARY SEWER PIPE. RE: 3/CU501 FOR MINIMUM VERTICAL CLEARANCE REQUIREMENTS.
- 7. PROVIDE PIPE BOLLARDS AT LOCATIONS SHOWN AND AT LOCATIONS SPECIFIED BY THE OWNER, REGULATORY AGENCIES AND UTILITY COMPANIES. COORDINATE BOLLARD INSTALLATION WITH FINISHED PAVING GRADE.
- B. EQUIPMENT AND MATERIALS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS AND SPECIFICATIONS.
- PRIOR TO BEGINNING ANY CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF ALL DIMENSIONS, MEASUREMENTS AND LOCATIONS OF EXISTING FACILITIES, UTILITIES, EQUIPMENT AND OTHER EXISTING ITEMS WHICH MAY EFFECT CONSTRUCTION SCHEDULES AND NEW UTILITY DESIGN.
- 10. EXISTING UTILITY LOCATIONS ARE SHOWN APPROXIMATELY AND FOR GENERAL INFORMATION PURPOSES ONLY. THE CONTRACTOR IS TO VERIFY THE LOCATION, DEPTH AND INVERT OF ALL EXISTING UTILITIES AND FACILITIES PRIOR TO THE START OF CONSTRUCTION.
- 11. DURING CONSTRUCTION TEMPORARY PLUGS SHALL BE INSTALLED AT ALL OPENINGS WHENEVER ANY PIPELINE IS LEFT UNATTENDED.
- 12. CONTRACTOR IS RESPONSIBLE FOR KEEPING A MINIMUM OF ONE LANE OF A ROADWAY OPEN DURING CONSTRUCTION. TEMPORARY ROADWAY OR BY-PASS PAVEMENT MUST BE MAINTAINED BY THE CONTRACTOR DURING CONSTRUCTION UNTIL PERMANENT PAVEMENT REPLACEMENT IS INSTALLED.
- 3. ADEQUATE EMERGENCY VEHICLE AND PEDESTRIAN ACCESS SHALL BE MAINTAINED AT ALL TIMES TO ROADWAYS, DRIVEWAYS AND BUILDING ENTRANCES.
- 14. ALL SANITARY SEWER LINES SHALL BE PVC SDR-35 PIPE. PIPE SHALL BE LAID UPSTREAM WITH THE SPIGOT ENDS POINTING DOWNSTREAM. ALL PIPES SHALL BE PLACED TRUE TO LINE AND GRADE WITH ENDS ABUTTING, CAREFULLY CENTERED, AND WITH A SMOOTH INVERT AT THE JOINTS.
- 15. CONTRACTOR IS TO REFER TO MECHANICAL, ELECTRICAL AND PLUMBING PLANS FOR EXACT LOCATIONS OF UTILITY PENETRATIONS AND ELEVATIONS.
- 16. THE AIR CONDITIONING CONDENSING UNIT LOCATIONS ARE APPROXIMATE. THE CONTRACTOR IS TO COORDINATE THEIR BEST AND FINAL LOCATION WITH THE OWNER AND HVAC CONTRACTOR.

UTILITY INSTALLATION CONSIDERATIONS

- 1. PRIOR TO THE CONSTRUCTION OF, OR CONNECTION TO ANY STORM DRAIN, SANITARY SEWER, OR ANY OTHER ELEVATION SENSITIVE UTILITY, THE CONTRACTOR SHALL EXCAVATE, VERIFY AND CALCULATE ALL POINTS OF CONNECTIONS AND ALL UTILITY CROSSINGS. THE CONTRACTOR SHALL INFORM THE ENGINEER AND THE OWNER OF ANY CONFLICT OR REQUIRED DEVIATIONS FROM THE PLAN. THE ENGINEER AND OWNER WILL BE HELD HARMLESS IN THE EVENT THE ENGINEER AND OWNER ARE NOT NOTIFIED OF A DESIGN CONFLICT.
- 2. ALL PROPOSED UTILITIES, WHEN POSSIBLE, SHALL BE ROUTED THROUGH PERVIOUS AREAS SPECIFICALLY AVOIDING ON-SITE PAVED AREAS DESIGNATED FOR PARKING, ACCESS, AND VEHICULAR TRAFFIC FLOW.
- REFER TO DETAIL 1 AND 2, SHEET CU501, FOR TRENCHING, BACKFILL, AND PLACEMENT DETAILS.
- BACKFLOW PREVENTER TO BE PLACED INSIDE THE BUILDING, MOUNTED 12" TO 60" FROM THE FLOOR, BE ACCESSIBLE, INSTALLED BEFORE ANY OTHER CONNECTION IN THE BUILDING AND BE WITHIN 200' FROM THE CONNECTION TO THE WATER MAIN (RE: MEP).

——— TUG ———	EXISTING UNDERGROUND TELEPHONE
OHE	EXISTING OVERHEAD ELECTRICAL
UGE	EXISTING UNDERGROUND ELECTRICAL
——— GAS ———	EXISTING NATURAL GAS
	EXISTING WATER LINE
SS	EXISTING SANITARY SEWER
FOC	EXISTING FIBER OPTIC CABLE
CATV	EXISTING CABLE TELEVISION

LEGEND





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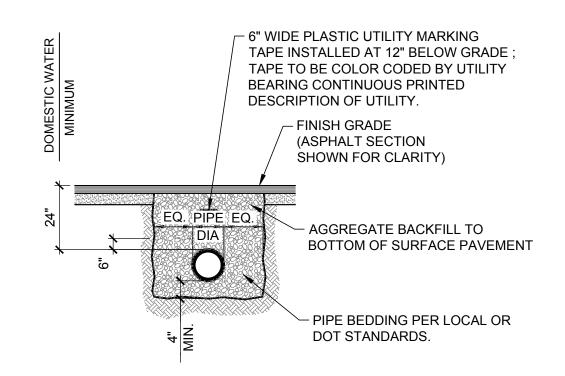
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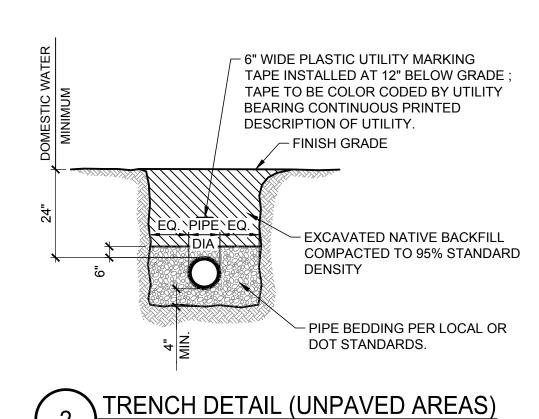
UTILITY PLAN

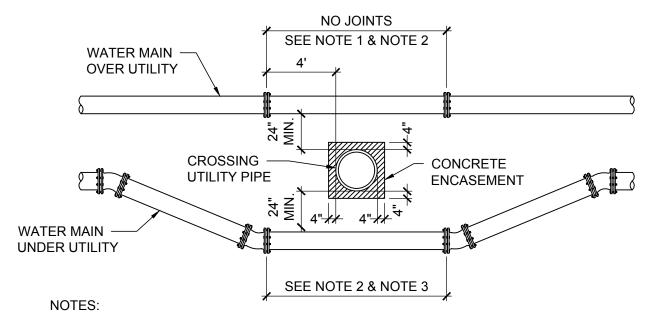
SHEET NUMBER

CU101



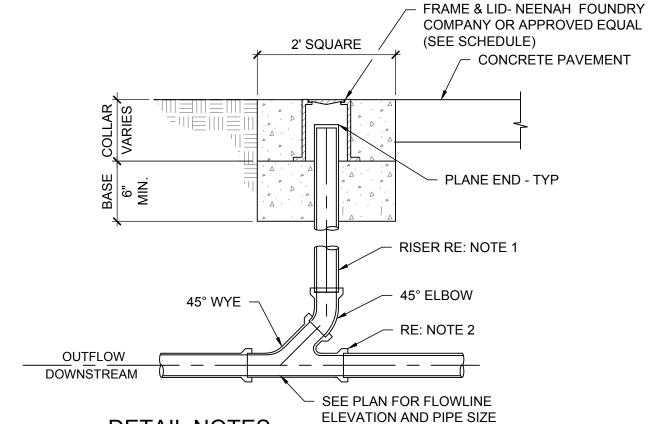
TRENCH DETAIL (PAVED AREAS)





- 1. WHEN THE UTILITY BEING CROSSED IS NOT A STORM DRAIN, SANITARY SEWER, OR A NON-POTABLE WATER LINE, THEN THE "NO JOINT" REQUIREMENT DOES NOT APPLY.
- 2. WHEN THE UTILITY BEING CROSSED IS A STORM DRAIN, SANITARY SEWER, OR A NON-POTABLE WATER LINE, EITHER ABOVE OR BELOW THE POTABLE WATERLINE, AND THE MINIMUM CLEARANCE IS 24", THEN THE TYPE OF PIPE MUST BE DUCTILE IRON PIPE OR AWWA C900 DR-14 PVC PIPE. IF THE CLEARANCE IS LESS THAT 24" THEN THE CROSSING UTILITY MUST ALSO BE ENCASED WITH 4 INCHES OF CONCRETE, MINIMUM FOR A DISTANCE 20', 10' ON EITHER SIDE OF THE WATERLINE.
- 3. NO JOINTS ALLOWED IF LESS THAN 18 FEET, OR LESS THAN 20 FEET IF THE UTILITY BEING CROSSED IS SEWER. ALL JOINTS BETWEEN FITTINGS MUST BE RESTRAINED.





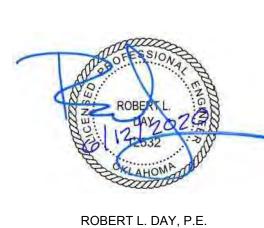
DETAIL NOTES

- 1. RISER DIAMETER TO MATCH DOWNSTREAM PIPE SIZE. MAXIMUM RISER DIAMETER IS 10 INCHES.
- 2. WHERE LINE DOES NOT EXTEND, INSTALL A PLUG OR SUBSTITUTE A LENGTH OF STRAIGHT PIPE AND ANOTHER 45° ELBOW FOR WYE.





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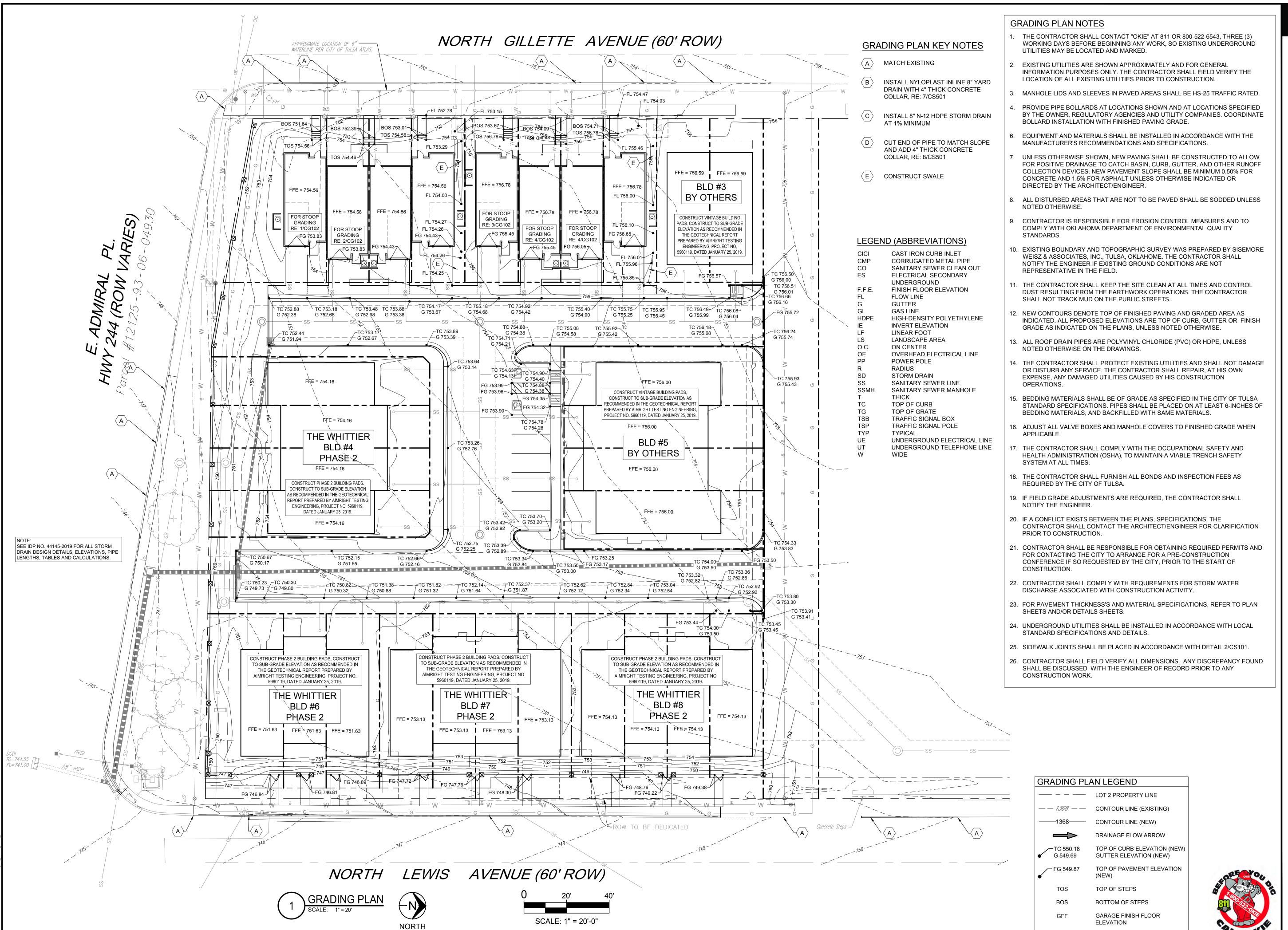
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UTILITY DETAILS

SHEET NUMBER

CU501







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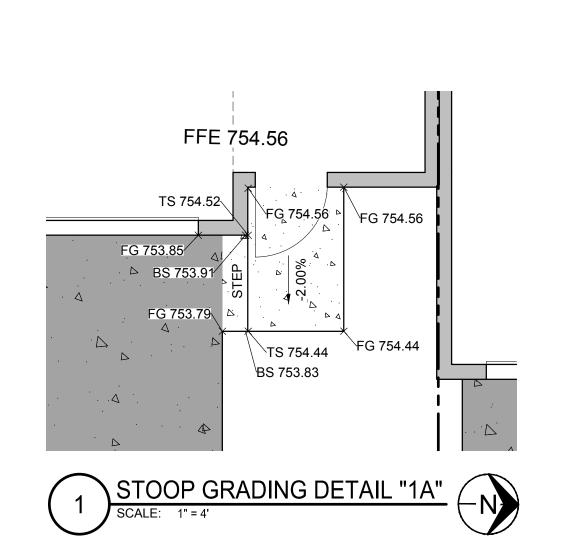
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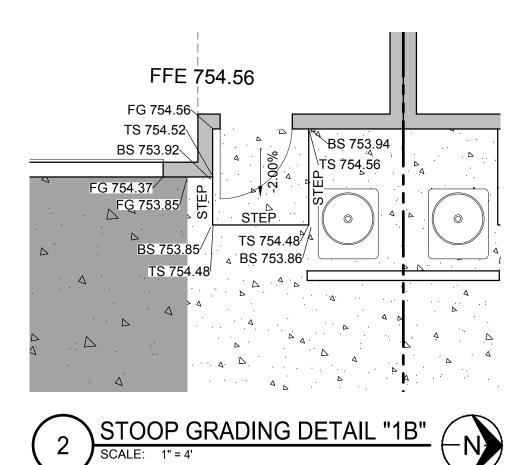
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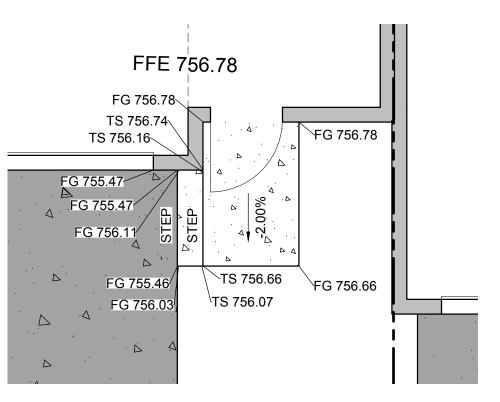
GRADING PLAN

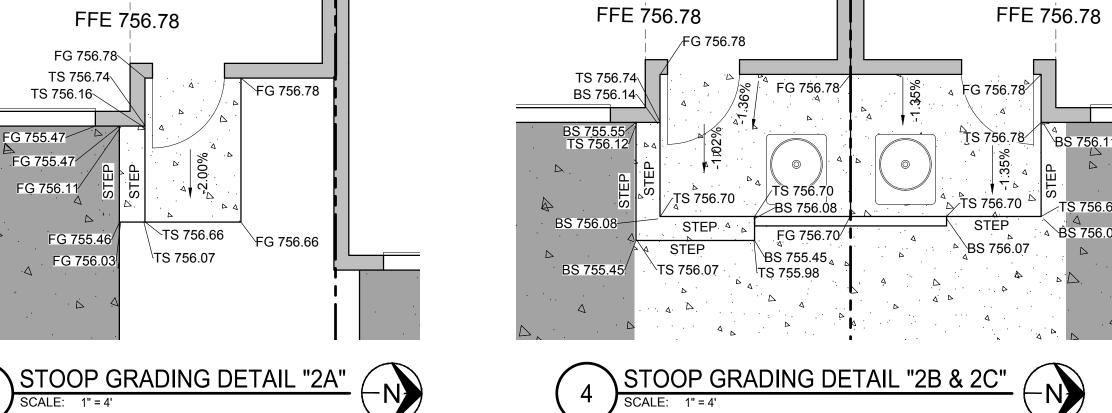
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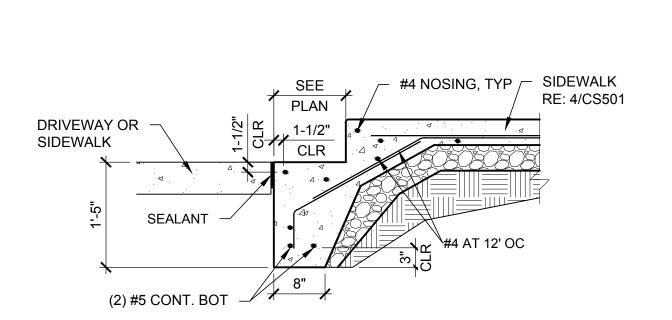


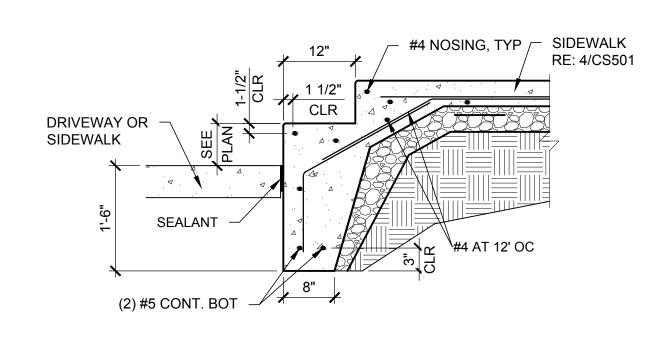






NORTH







6 TWO STEP TYPICAL SECTION
SCALE: NOT TO SCALE

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STOOP GRADING DETAILS

SHEET NUMBER

CG102

DESIGN CRITERIA

1. THE STRUCTURAL DESIGN IS BASED ON THE DESIGN REQUIREMENTS OF THE INTERNATIONAL RESIDENTIAL CODE, 2015 EDITION, WITH CITY OF TULSA AMENDMENTS.

1.0

2.	ROOF DESIGN LOADS

ROOF DESIGN LOADS	
LIVE LOAD	20 PSF
DEAD LOADS TOP CHORD SHINGLES & ROOFING SHEATHING TRUSSSES AND BRIDGING INSULATION MEP MISC BOTTOM CHORD	3 PSF 3 PSF 2 PSF 1 PSF 1 PSF 1 PSF
MEP TRUSSES AND BRIDGING CEILING MISC TOTAL DEAD LOAD	2 PSF 3 PSF 3 PSF 1 PSF 20 PSF
SNOW LOADS AND COEFFICIENTS SNOW EXPOSURE FACTOR GROUND SNOW ROOF SNOW	1.0 10 PSF 10 PSF

3. FLOOR DESIGN LOADS:

IMPORTANCE FACTOR

THERMAL FACTOR

LIVE LOAD	40 PSF
DEAD LOADS SHEATHING FLOORING JOISTS AND BRIDGING MECHANICAL, ELECTRICAL AND PLUMBING SUSPENDED CEILING MISC TOTAL DEAD LOAD NON-MOVEABLE PARTITION WALLS	3 PSF 5 PSF 4 PSF 3 PSF 4 PSF 1 PSF 20 PSF 10 PSF

4. LATERAL LOADS

WIND LOADS AND COEFFICIENTS ULTIMATE DESIGN WIND VELOCITY EXPOSURE	115 MPH C
SEISMIC DESIGN IMPORTANCE FACTOR S/S S/1 SITE CLASS S/DS S/D1 SEISMIC DESIGN CATEGORY	1.0 0.131 0.069 C 0.104 0.078 B

BASIC SEISMIC FORCE RESISTING SYSTEM:
LIGHT FRAMED WALLS SHEATHED WITH OTHER MATERIALS
ANALYSIS PROCEDURE:
EQUIVALENT LATERAL FORCE PROCEDURE

GENERAL NOTES

- 1. CONTRACTOR IS RESPONSIBLE FOR PROVIDING ADEQUATE TEMPORARY SUPPORT AND STABILITY OF EXISTING STRUCTURE DURING ALL PHASES OF CONSTRUCTION.
- 2. COORDINATE ALL DIMENSIONS WITH FLOOR PLAN; NOTIFY THE ARCHITECT/ENGINEER OF ANY CONFLICTS PRIOR TO CONSTRUCTION.
- COORDINATE THE EXACT SIZE AND LOCATION OF ALL SLEEVES AND OPENINGS THROUGH CONCRETE, MASONRY, OR STUD WALLS AND CONCRETE FLOORS WITH ARCHITECTURAL, MECHANICAL, PLUMBING AND ELECTRICAL DRAWINGS.
- 4. SHOP DRAWINGS MUST INDICATE CHANGES TO CONSTRUCTION DOCUMENTS; THE CHANGES MUST BE CLEARLY IDENTIFIED. THE ARCHITECT/ENGINEER SHALL NOT BE RESPONSIBLE FOR CHANGES ON SHOP DRAWINGS. THE CONTRACTOR IS RESPONSIBLE FOR ANY AND ALL CHANGES TO THE DESIGN PROVIDED ON THE SHOP DRAWINGS. THE ARCHITECT/ENGINEER SHALL NOT BEAR THE COSTS OF SUCH REVIEWS OR REDESIGN.
- PROJECT SPECIFICATIONS ARE PART OF THE CONSTRUCTION DOCUMENTS AND ARE TO BE USED IN CONJUNCTION WITH THE DRAWINGS.
- 6. VERIFY ALL CONDITIONS, EXISTING AND NEW, SHOWN ON THE CONSTRUCTION DOCUMENTS PRIOR TO PROCEEDING WITH WORK. DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT OR ENGINEER IN WRITTEN FORM. THE ARCHITECT/ENGINEER SHALL NOT BE RESPONSIBLE FOR WORK DONE IN THESE AREAS WITHOUT CLARIFICATION IN WRITING FROM THE ARCHITECT/ENGINEER.
- 7. ALL PHASES OF CONSTRUCTION SHALL CONFORM TO THE MINIMUM STANDARDS OF THE CODES(S) NOTED IN 'DESIGN CRITERIA'.
- 8. DIMENSIONS SHOWN ON CONSTRUCTION DOCUMENTS TAKE PRIORITY OVER SCALED DIMENSIONS. IN SOME CASES PLANS AND DETAILS MAY NOT BE DRAWN TO SCALE FOR CLARITY
- 9. DETAILS LABELED 'TYPICAL' ON THESE DRAWINGS APPLY TO SITUATIONS OCCURRING ON THE PROJECT THAT ARE THE SAME OR SIMILAR TO THOSE SPECIFICALLY DETAILED. SUCH DETAILS APPLY WHETHER OR NOT DETAILS ARE REFERENCED AT EACH LOCATION. NOTIFY ENGINEER OF ANY CONDITIONS NOT APPLICABLE TO THESE 'TYPICAL' DETAILS.
- 10. DO NOT LOAD THE CONCRETE SLAB ON GRADE WITH ERECTION EQUIPMENT. THE SLABS HAVE NOT BEEN DESIGNED FOR ERECTION EQUIPMENT LOADS. SHOULD THE CONTRACTOR REQUIRE ERECTION EQUIPMENT TO BE PLACED ON SLAB ON GRADE, THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN OF THE SLAB IN THE AFFECTED AREAS.
- 11. DO NOT STACK CONSTRUCTION MATERIALS ON FLOORS OR ROOFS DURING CONSTRUCTION IN EXCESS OF 80 PERCENT OF THE DESIGN LIVE LOAD NOTED ON THESE PLANS.
- 12. THESE STRUCTURAL CONSTRUCTION DOCUMENTS ARE TO BE USED IN CONJUNCTION WITH ANY ARCHITECTURAL, MECHANICAL, PLUMBING, ELECTRICAL, FIRE PROTECTION, LANDSCAPE AND CIVIL CONSTRUCTION DOCUMENTS FOR THIS PROJECT. CONTRACTOR IS RESPONSIBLE FOR IMPLEMENTING THE INFORMATION SHOWN ON ALL REFERENCED PLANS. THE ARCHITECT/ENGINEER SHALL BE NOTIFIED IN WRITING SHOULD DISCREPANCIES IN THE CONSTRUCTION DOCUMENTS BE FOUND PRIOR TO COMMENCING WITH WORK IN THE AREA WHERE THE DISCREPANCY OCCURS. THE ARCHITECT/ENGINEER SHALL NOT BE RESPONSIBLE FOR WORK DONE IN THESE AREAS WITHOUT CLARIFICATION IN WRITING FROM THE ARCHITECT/ENGINEER.
- 13. SUBSTITUTION REQUESTS: APPROVAL FROM THE ARCHITECT/ENGINEER IS REQUIRED PRIOR TO SUBSTITUTING COMPARABLE MATERIALS OR MANUFACTURED OR PRE-ENGINEERED PRODUCTS THAT ARE INDICATED IN THE CONSTRUCTION DOCUMENTS. ALL REQUESTS SHALL BE SUBMITTED TO THE OWNER'S REPRESENTATIVE. ALL NECESSARY INFORMATION REQUIRED TO DETERMINE THE EQUIVALENCY OF THE SUBSTITUTED PRODUCT SUCH AS ICC EVALUATION REPORTS AND TESTING REPORTS SHALL BE PROVIDED. COMPARABLE PRODUCTS SUBMITTED MUST INCLUDE A DETAILED LINE-BY-LINE COMPARISON OF HOW THE SUBMITTED PRODUCT MEETS OR EXCEEDS THE GENERAL DESIGN, PERFORMANCE, AND QUALITY INDICATED IN THE CONSTRUCTION DOCUMENTS. THE MANUFACTURER OR CATALOG NUMBERS SHOWN IN THE CONSTRUCTION DOCUMENTS ESTABLISH A STANDARD FOR THE GENERAL DESIGN, PERFORMANCE, AND QUALITY OF THE PRODUCT REQUIRED. WHERE "OR APPROVED EQUAL" IS INDICATED, OTHER PRODUCTS SIMILAR TO DESIGN AND OF EQUAL QUALITY AND PERFORMANCE, AND COMPLYING WITH THE PLANS AND SPECIFICATIONS MAY BE APPROVED IF FOUND ACCEPTABLE BY THE ARCHITECT/ENGINEER. ALL SUBSTITUTION REQUESTS, INCLUDING "ENGINEER APPROVED EQUALS", FOR EQUIPMENT AND MATERIALS SHALL BE SUBMITTED FOR REVIEW AFTER AWARD IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. UNLESS NOTED OTHERWISE SUBSTITUTION REQUESTS SHALL BE SUBMITTED WITHIN 14 DAYS AFTER AWARD. THE CONTRACTOR SHALL BEAR THE COSTS FOR REVIEW AND APPROVAL OF ALL REQUESTED
- 14. CONTRACTOR IS RESPONSIBLE FOR MEANS AND METHODS OF CONSTRUCTION, AS WELL AS SEQUENCE OF CONSTRUCTION THAT DOES NOT IMPACT THE FINAL DESIGN AS SHOWN ON CONSTRUCTION DOCUMENTS.
- 15. MECHANICAL UNITS AND OTHER SYSTEMS SHOWN ON THE STRUCTURAL PLANS INDICATE A SPECIFIC WEIGHT AND LOCATION. SHOULD THE CONTRACTOR INSTALL UNITS WITH DIFFERENT WEIGHTS OR LOCATIONS AS SHOWN THEY SHALL PROVIDE THIS INFORMATION TO ARCHITECT/ENGINEER FOR APPROVAL PRIOR TO INSTALLATION. THE ARCHITECT/ENGINEER SHALL NOT BEAR THE COSTS OF SUCH REVIEWS OR REDESIGN.

SHALLOW FOUNDATIONS

1. THE FOUNDATION DESIGN IS BASED UPON THE GEOTECHNICAL REPORT BY: AIMRIGHT TESTING AND ENGINEERING REPORT 5960119 DATED 01/25/19 WITH THE FOLLOWING RECOMMENDATIONS:

BEARING CAPACITY (TOTAL LOAD) = 2000 PSF REQUIRED FOOTING WIDTH = 18 INCHES CONTINUOUS, 30 INCHES ISOLATED REQUIRED BOTTOM OF EXTERIOR FOOTING DEPTH (FROST) = 24 INCHES

- 2. REFER TO CONSTRUCTION DOCUMENTS FOR TOP OF FOOTING ELEVATION AND THICKNESS OF FOOTING TO ESTABLISH BEARING ELEVATIONS.
- 3. CONTRACTOR SHALL PROVIDE TEMPORARY SHORING FOR FOUNDATION WALLS RETAINING BACKFILL UNTIL CONCRETE SLAB ON GRADE IS IN PLACE AND THE CONCRETE HAS REACHED ITS FULL 28 DAY STRENGTH.
- 4. CONTRACTOR SHALL INSTALL ALL UNDERSLAB PIPING AND ELECTRICAL WORK AND RECOMPACT ANY DISTURBED STRUCTURAL FILL BEFORE INSTALLATION OF SLAB.
- 5. PIPES OR CONDUITS THAT PENETRATE FOOTINGS, GRADE BEAMS, WALLS, OR SLABS SHALL BE WRAPPED WITH A MINIMUM OF 1/2 INCH OF COMPRESSIVE MATERIAL EXCEPT FLOOR DRAINS SHALL NOT BE WRAPPED WITH COMPRESSIBLE MATERIAL. CONTRACTOR SHALL COORDINATE PIPING AND CONDUIT ELEVATIONS THAT ARE PERPENDICULAR TO FOOTINGS OR GRADE BEAMS SO THAT PIPES ARE ABOVE FOOTINGS OR THROUGH THE MIDDLE THIRD OF THE GRADE BEAM DEPTH. AT CONTRACTORS OPTION, PIPES MAY RUN UNDER FOOTINGS. PIPES LESS THAN 2'-0" BELOW BOTTOM OF FOOTING SHALL BE ENCASED IN A CONCRETE SLURRY. WHEN PIPE IS MORE THAN 2'-0" BELOW BOTTOM OF FOOTING, SUBGRADE ABOVE PIPE MUST BE PROPERLY COMPACTED, CONCRETE SLURRY IS NOT NECESSARY.
- 3. ALL FOOTINGS MAY BE EARTH FORMED, POURED IN NEAT EXCAVATIONS IF SOIL CONDITIONS AND GEOTECHNICAL REPORT PERMIT.
- 7. DO NOT PLACE CONCRETE UNLESS FOOTING EXCAVATIONS ARE FREE OF ALL WATER, FROST, ICE AND LOOSE SOIL. CONCRETE SHALL BE PLACED AS SOON AS POSSIBLE AFTER EXCAVATION SO THAT EXCESSIVE DRYING OF BEARING MATERIALS DOES NOT OCCUR. BEARING MATERIAL SHALL BE INSPECTED BY A QUALIFIED INDEPENDENT TESTING LAB PRIOR TO PLACEMENT OF CONCRETE.
- 8. CONTRACTOR SHALL BE RESPONSIBLE FOR IMPLEMENTING INFORMATION CONTAINED IN THE REFERENCED GEOTECHNICAL REPORT FOR ALL SITE WORK, FOOTING EXCAVATIONS, GRADING, SITE PREPARATION, FILL, COMPACTION, AND ALL FOUNDATION WORK.

REINFORCING STEEL

- ALL REINFORCING STEEL AND SUPPORTS SHALL BE DESIGNED, DETAILED, FABRICATED AND PLACED IN ACCORDANCE WITH ACI 318 AND ACI 315.
- 2. ALL REINFORCING BARS SHALL BE IN ACCORDANCE WITH ASTM A615 GRADE 60 OR ASTM A706 GRADE 60 FOR WELDED BARS.
- 3. WELDED WIRE REINFORCEMENT SHALL BE NEW BILLET STEEL, COLD DRAWN CONFORMING TO THE ASTM SPECIFICATION A185 AND A82. LAP WELDED WIRE REINFORCEMENT A MINIMUM
- 4. ALL CONCRETE SLAB ON GRADE, RAISED CONCRETE SLAB, AND MAT REINFORCING SHALL BE SUPPORTED ON BOLSTERS OR BRICK SPACED NO FURTHER THAN 4 FEET ON CENTER.
- 5. ALL REINFORCING SHALL BE COLD BENT.
- 6. PROVIDE CLASS B SPLICES IN REINFORCING FOR CONTINUOUS REINFORCING. PROVIDE STANDARD 90 DEGREE HOOKS IN ACCORDANCE WITH ACI 318 UNLESS SPECIFICALLY DETAILED. REFER TO CONSTRUCTION DOCUMENTS FOR REQUIRED LAP LENGTHS. PROVIDE CONTINUOUS HORIZONTAL WALL AND CONTINUOUS FOOTING REINFORCEMENT WITH 90 DEGREE BENDS AT CORNERS AND INTERSECTIONS AS SHOWN ON CONSTRUCTION DOCUMENTS.
- 7. MAINTAIN THE FOLLOWING REINFORCEMENT COVERAGE FOR REINFORCING STEEL UNLESS NOTED OTHERWISE:CONCRETE CAST AGAINST SOIL:

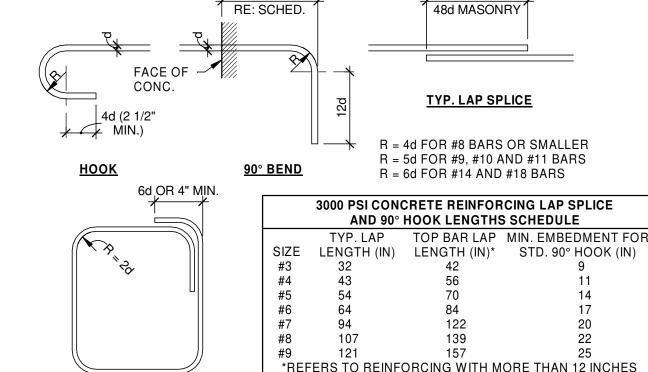
CONCRETE CAST AGAINST SOIL: 3 INCHES

CONCRETE EXPOSED TO WEATHER, NO. 6 AND LARGER:

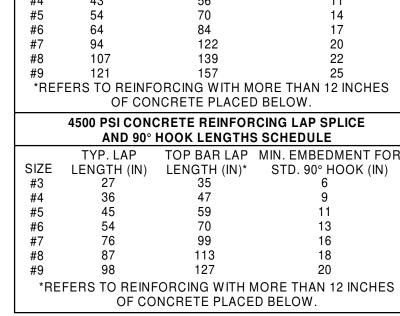
NO. 6 AND LARGER: 2 INCHES NO. 5 AND SMALLER: 1 1/2 INCHES

CONCRETE NOT EXPOSED TO WEATHER OR IN CONTACT WITH SOIL, NO. 11 AND SMALLER: 1 INCH WALL, 1 1/2 INCH SLAB

EMBED

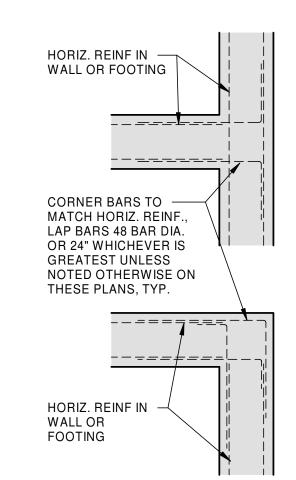


STIRRUP OR TIE



GONC. RE: SCHEE

REINF. LAP/BEND DIAGRAM





CONCRETE

1. CONCRETE SHALL HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH IN ACCORDANCE WITH THE FOLLOWING:

ALL INTERIOR BUILDING CONCRETE
ALL EXTERIOR BUILDING CONCRETE

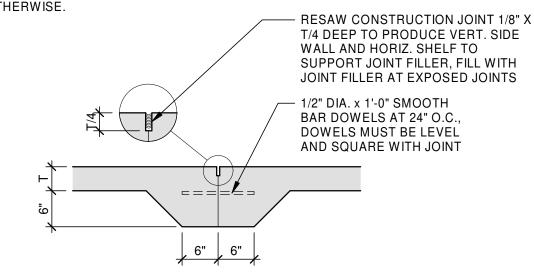
ALL EXTERIOR BUILDING CONCRETE 4500 PSI

2. CALCIUM CHLORIDE IS NOT TO BE USED AS AN ADMIXTURE. ALL ADMIXTURES SHALL BE FREE

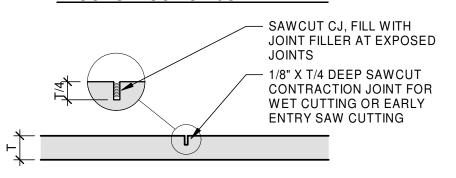
3000 PSI

- PROVIDE CONCRETE MIX DESIGN MEETING ACI 318 FOR REVIEW PRIOR TO IMPLEMENTATION FOR EACH DIFFERENT MIX.
- 4. CONCRETE MIX DESIGN FOR CONCRETE SLABS ON GRADE SHALL CONTAIN A WATER
- REDUCING AND DENSIFYING ADMIXTURE TO REDUCE THE PERMEABILITY OF THE CONCRETE.

 PORTLAND CEMENT SHALL CONFORM TO ASTM C150 TYPE I OR II LOW ALKALI UNLESS NOTED
- OTHERWISE. AGGREGATE FOR REGULAR WEIGHT CONCRETE SHALL CONFORM TO ASTM C33.
- 6. REINFORCING BARS, ANCHOR BOLTS, AND OTHER CONCRETE INSERTS SHALL BE WELL SECURED IN POSITION PRIOR TO PLACEMENT OF CONCRETE. STABBING OF REINFORCING BARS, ANCHOR BOLTS, AND OTHER CONCRETE INSERTS IS NOT ALLOWED.
- 7. COORDINATE WITH OTHER TRADES TO ENSURE THE PROPER PLACEMENT OF OPENINGS, SLEEVES, CURBS, INSERTS, DEPRESSIONS, ETC. AS SHOWN ON CONSTRUCTION DOCUMENTS.
- 8. CONCRETE EXPOSED TO WEATHER IN AREAS SUBJECT TO FROST SHALL BE AIR-ENTRAINED WITH AN AIR CONTENT BETWEEN 4 AND 6 PERCENT.
- 9. FOR PLACEMENT OF CONCRETE IN EITHER HOT OR COLD WEATHER CONDITIONS FOLLOW ACI STANDARD PROCEDURES.
- 10. ANCHOR BOLTS SHALL CONFORM TO ASTM F1554 (Fy = 36 KSI).
- 11. 'C.J.' INDICATES SAWCUT CONTROL JOINT. 'CONST. JOINT' INDICATES PREFERRED LOCATIONS FOR CONSTRUCTION JOINTS. IF A CONSTRUCTION JOINT IS NOT REQUIRED BY THE CONTRACTOR, A SAWCUT CONTROL JOINT BY BE SUBSTITUTED AT THOSE LOCATIONS.
- 12. EPOXY GROUT OR ADHESIVE SHALL BE HILTI HIT HY-200 ADHESIVE OR EQUIVALENT, UNLESS NOTED OTHERWISE.



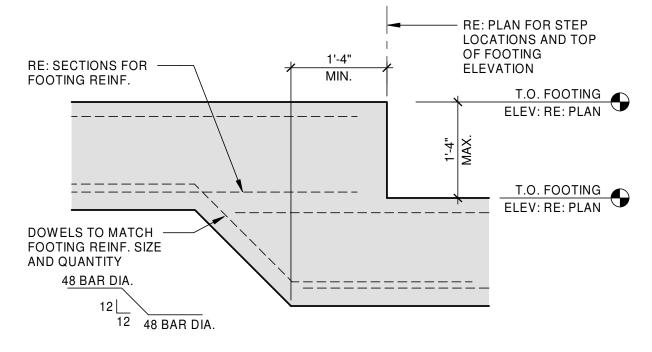
B. CONSTRUCTION JOINT DETAIL

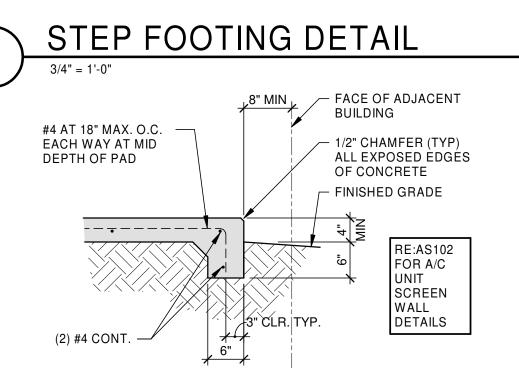


A. CONTROL JOINT DETAIL (C.J.)

2 TYP. CONTROL JOINT

3/4" = 1'-0"









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CYNTERGY ENGINEERING, PLLC CA # 3537 EXPIRES 6/30/2020 LARRY L. VORBA, PE ENGINEER OF RECORD

E WHITTIER - PHASE 1
MTOWN DEVELOPMENT COMPANY

ISSUES / REVISIONS

| 06/12/2020 | PERMIT SET - PHASE 1

ISSUE DATE: 06/12/2020 PROJECT NO: P05093.0100 CHECKED BY: KJW DRAWN BY: RLR/EAE

EET NAME

NOTES, SCHEDULES AND TYPICAL DETAILS

SHEET NUMBER

PRE-FABRICATED WOOD (WOOD PANEL WEB I-JOISTS)

- ALL PRE-FABRICATED WOOD I-JOISTS SHALL BE MANUFACTURED BY WEYERHAEUSER OF THE SIZE AND TYPE SPECIFIED ON THE CONSTRUCTION DOCUMENTS.
- 2. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR REVIEW.
- WOOD I-JOISTS SHALL BE BE SUPPORTED LATERALLY IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
- REFER TO NOTES UNDER GENERAL CONDITIONS FOR SUBSTITUTION OF ANY PRE-ENGINEERED PRODUCTS.

WOOD

- ALL LUMBER SHALL BE SOUTHERN YELLOW PINE WITH A MAXIMUM MOISTURE CONTENT OF 19%, AND SHALL CONFORM TO THE GRADING RULES AS PUBLISHED BY THE SPIB FOR SOUTHERN YELLOW PINE. THE GRADES NOTED BELOW SHALL BE USED UNLESS OTHERWISE NOTED.
 - SOUTHERN YELLOW PINE #2 GRADE, 2X6 BENDING, Fb > 1000 PSI TENSION PARALLEL TO GRAIN, Ft≥ 600 PSI SHEAR PARALLEL TO GRAIN, F_v > 175 PSI COMPRESSION PERPENDICULAR TO GRAIN, F_{c, perp} ≥ 565 PSI COMPRESSION PARALLEL TO GRAIN, F_c ≥ 1400 PSI

MODULUS OF ELASTICITY, E > 1,400,000 PSI

- EXTERIOR FRAMING FOR CANOPIES SHALL BE WESTERN CEDAR, #2 BEAMS BENDING, $F_b \ge 625 PSI$ TENSION PARALLEL TO GRAIN, Ft≥ 325 PSI
- SHEAR PARALLEL TO GRAIN, F_v>140 PSI COMPRESSION PERPENDICULAR TO GRAIN, F_{c, perp} ≥ 425 PSI COMPRESSION PARALLEL TO GRAIN, F_c ≥ 475 PSI MODULUS OF ELASTICITY, E > 800,000 PSI
- EXTERIOR FRAMING FOR CANOPIES SHALL BE WESTERN CEDAR, #2 POSTS AND TIMBERS BENDING, F_b 550 PSI
- TENSION PARALLEL TO GRAIN, Ft > 350 PSI SHEAR PARALLEL TO GRAIN, F_v≥140 PSI COMPRESSION PERPENDICULAR TO GRAIN, F_{c, perp} ≥ 425 PSI COMPRESSION PARALLEL TO GRAIN, F_c > 550 PSI MODULUS OF ELASTICITY, E ≥ 800,000 PSI
- ALL METAL CONNECTORS SHALL BE MANUFACTURED BY SIMPSON STRONG TIE. ALL NAIL HOLES ARE TO BE FILLED WITH THE PROPER SIZE NAILS UNLESS SPECIFICALLY NOTED OTHERWISE. SUBSTITUTIONS ARE NOT ALLOWED UNLESS EQUIVALENCY OF THE SUBSTITUTED PRODUCTS IS PROVIDED (INCLUDING CAPACITIES OF EACH CONNECTOR) FOR REVIEW OF THE ENGINEER PRIOR TO INSTALLATION. SEE NOTES UNDER 'GENERAL CONDITIONS'.
- ALL ANCHORS AND FASTENERS IN CONTACT WITH PRESSURE TREATED LUMBER SHALL BE STAINLESS STEEL OR GALVANIZED. ALL PRESSURE TREATED LUMBER SHALL BE TREATED WITH MCQ. SIMPSON CONNECTORS TO HAVE ZMAX COATING.
- 4. ALL BOLTS BEARING ON LUMBER SHALL HAVE STANDARD CUT WASHERS UNDER THE BOLT HEAD AND NUT, UNLESS OTHERWISE NOTED.
- 5. LUMBER MAY NOT BE CUT OR NOTCHED FOR PIPES, CONDUIT, ETC. EXCEPT AS SHOWN ON THESE PLANS.
- 6. ALL HORIZONTAL WOOD FRAMING MEMBERS SHALL BE PLACED WITH THE CROWN UP.
- ALL NAILS USED OR CALLED OUT IN THESE CONSTRUCTION DOCUMENTS ARE TO BE COMMON NAILS UNLESS SPECIFICALLY SHOWN OTHERWISE. NO OTHER NAILS SUCH AS SINKERS, RING SHANK, OR BOX NAILS ARE ALLOWED UNLESS SPECIFICALLY INDICATED Item Description of Building Elements ON THE CONSTRUCTION DOCUMENTS. SCREWS ARE NOT AN ACCEPTABLE SUBSTITUTION FOR NAILS.
- THE USE OF POWER-DRIVEN FASTENERS MAY BE ACCEPTABLE PROVIDED THAT A SUBMITTAL WITH THE REQUESTED SUBSTITUTION COMPLYING WITH NER-272 TO THE ENGINEER PRIOR TO USE. THE CONTRACTOR SHALL CLEARLY INDICATE ON THE SUBMITTAL THE SIZE, QUANTITY, AND LOCATION (AT EACH CONDITION) WHERE THE SUBSTITUTIONS ARE REQUESTED.
- THE NAILS OF PLYWOOD SHEAR WALLS AND ROOF OR CEILING/DIAPHRAGM SHALL NOT RUPTURE THE PLYWOOD VENEER. CONTRACTOR SHALL REPLACE ANY PLYWOOD WHERE THE NAILING HAS RUPTURED THE VENEER.
- 10. ALL STRUCTURAL WOOD PANELS SHALL BE APA RATED PANELS. ALL WALL, ROOF AND FLOOR SHEATHED WITH WOOD STRUCTURAL PANELS SHALL BE ENGINEERED GRADES WITH APA GRADE STAMP INDICATING APPROPRIATE MAXIMUM SPACING OF SUPPORTS.
- 11. PROVIDE CONTINUOUS WALL STUDS AT EACH SIDE OF ALL WALL OPENINGS. THE NUMBER OF CONTINUOUS STUDS AT EACH SIDE OF ANY OPENING SHALL BE EQUAL TO ONE-HALF THE NUMBER OF STUDS INTERRUPTED BY THE OPENING, UNLESS NOTED
- 12. ALL POSTS SHALL BE CONTINUOUS TO THE FOUNDATION OR SUPPORTING BEAM.

METAL PLATE CONNECTED WOOD TRUSSES

- ALL PRE-FABRICATED WOOD TRUSS DESIGN, DETAILING AND INSTALLATION SHALL CONFORM TO THE FOLLOWING REQUIREMENTS:
- A. ANSI/TPI 'NATIONAL DESIGN STANDARD FOR METAL PLATE CONNECTED WOOD TRUSS CONSTRUCTION'
- B. TPI HIP 'COMMENTARY AND RECOMMENDATIONS FOR HANDLING INSTALLING AND BRACING OF METAL PLATE CONNECTED TRUSSES'
- C. TPI DSB 'RECOMMENDED DESIGN SPECIFICATION FOR TEMPORARY BRACING OF METAL PLATE CONNECTED WOOD TRUSSES'

TRUSS MANUFACTURER SHALL PROVIDE A COMPLETE SET OF SHOP DRAWINGS INDICATING THE TRUSS MANUFACTURER, PLATE SUPPLIER, VERIFICATION OF

- 2. TRUSS DESIGNER SHALL DESIGN AND PROVIDE ALL TEMPORARY BRACING.
- TRUSS DESIGNER SHALL DESIGN AND PROVIDE ALL PERMANENT BRACING IN ACCORDANCE WITH THE TPI RECOMMENDATIONS.
- PARTICIPATION IN THE TPI INSPECTION PROGRAM, AND STRUCTURAL CALCULATIONS SIGNED AND SEALED BY A LICENSED ENGINEER IN OKLAHOMA, PRIOR TO FABRICATION. SUBMIT A COMPLETE SET OF ERECTION DRAWINGS WITH SIZE AND LOCATION OF TEMPORARY AND PERMANENT BRACING, INCLUDING ANY PROVISIONS FOR FIELD
- ASSEMBLY OF SPECIAL INDIVIDUAL TRUSSES. ERECTION DRAWING SHALL BE PREPARED SPECIFICALLY FOR THIS PROJECT. REFERENCE TO COMMENTARY AND RECOMMENDATIONS NOTED ABOVE IS NOT ACCEPTABLE AS A SUBSTITUTION FOR THIS
- ANY FIELD CHANGES TO THE METAL PLATE CONNECTED TRUSSES IS NOT ALLOWED UNLESS DOCUMENTATION IS PROVIDED BY THE TRUSS ENGINEER SIGNED AND SEALED, PRIOR TO THESE CHANGES.
- INSTALL ROOF SHEATHING PRIOR TO ANY OVERFRAMING.
- 8. TRUSS TO TRUSS CONNECTIONS ARE THE RESPONSIBILITY OF THE TRUSS DESIGNER.

TEST AND INSPECTIONS

Blocking between ceiling joists or rafters

[Ceiling joist not attached to parallel rafter.

R802.3.2 and Table R802.5. I(9))

laps over partitions (see Sections R802.3.1,

(see Sections R802.3. 1 and R802.3.2 and

Collar tie to rafter, face nail or 1 1/4" x 20 ga

Roof rafters to ridge valley or hip rafters;

or roof rafter to min 2-inch ridge beam

Stud to stud (not at braced wall

Stud to stud and abutting studs at

Built-up header (2 " to 2 " header)

Continuous header to stud

. Top plate to top plate

intersecting wall corners (at braced wall

Double top plate splice for SDCs A-D₂ with

Double top plate splice SDCs D_0 , D_1 or D_2 ;

seismic braced wall line spacing < 25'

and braced wall line spacing > 25'

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Ceiling joist attached to parallel rafter (heel joint) Table R802.5.1(9)

to top plate

Ceiling joists to top plate

Table R802.5.1(9))

ridge strap to rafter

Rafter or roof truss to plate

- SPECIAL TESTS AND INSPECTIONS: ENGAGE A QUALIFIED TESTING AGENCY AND SPECIAL INSPECTOR TO CONDUCT SPECIAL TESTS AND INSPECTIONS REQUIRED BY AUTHORITIES HAVING JURISDICTION, AS INDICATED ON CONTRACT DOCUMENTS.
- 2. SPECIAL TESTS AND INSPECTIONS: CONDUCTED BY A QUALIFIED TESTING AGENCY AND SPECIAL INSPECTOR AS REQUIRED BY AUTHORITIES HAVING JURISDICTION AND AS FOLLOWS:
 - 2.1. VERIFYING THAT MANUFACTURER MAINTAINS DETAILED FABRICATION AND QUALITY-CONTROL PROCEDURES AND REVIEWING THE COMPLETENESS AND ADEQUACY OF THOSE PROCEDURES TO PERFORM THE WORK.
 - 2.2. NOTIFYING ENGINEER AND CONTRACTOR PROMPTLY OF IRREGULARITIES AND DEFICIENCIES OBSERVED IN THE WORK DURING THE PERFORMANCE OF ITS
 - 2.3. SUBMITTING A CERTIFIED WRITTEN REPORT OF EACH TEST, INSPECTION AND SIMILAR QUALITY-CONTROL SERVICE TO ENGINEER WITH COPY TO CONTRACTOR AND TO AUTHORITIES HAVING JURISDICTION.
 - 2.4. SUBMITTING A FINAL REPORT OF SPECIAL TESTS AND INSPECTIONS AT SUBSTANTIAL COMPLETION, WHICH INCLUDES A LIST OF UNRESOLVED
 - 2.5. INTERPRETING TESTS AND INSPECTIONS AND STATING IN EACH REPORT WHETHER TESTED AND INSPECTED WORK COMPLIES WITH OR DEVIATES FROM THE CONTRACT DOCUMENTS.
 - 2.6. RE-TESTING AND RE-INSPECTING CORRECTED WORK.
- 3. ALL MATERIALS FOR CONCRETE (CEMENT, AGGREGATE, REBAR, ETC.) SHALL BE TESTED FROM STOCK. COPIES OR CERTIFICATIONS TO MEET SPECIFICATION REQUIREMENTS SHALL BE SUPPLIED UPON REQUEST BY THE CONTRACTING OFFICER'S REPRESENTATIVE.
- REFER TO SPECIFICATIONS FOR INSPECTION AND TESTING REQUIREMENTS FOR EACH MATERIAL (MASONRY, CONCRETE, STEEL, ETC.). ALL TESTS SHALL BE PER ASTM STANDARDS.
- 5. SPECIAL INSPECTIONS ARE REQUIRED FOR BUILDING CODE(S) NOTED IN "DESIGN CRITERIA". REFER TO "SPECIAL INSPECTIONS REQUIRED" TABLE PROVIDED ON THIS SHEET.
- COMPACTION FOR FILL BENEATH SLABS SHALL BE TESTED AT EACH LIFT WITH MINIMUM THREE TESTS PER 2,000 SQUARE FEET.
- 7. THE CONTRACTOR SHALL NOTIFY THE SPECIAL INSPECTOR WHEN WORK IS READY FOR I NSPECTION AND SHALL PROVIDE ACCESS FOR INSPECTIONS AND TESTING

TABLE R602.3(1)

3-3" x 0. 131" nails

3-3" x 0. 131" nails

4-3" x 0. 131" nails

FASTENING SCHEDULE

4-8d Box (2 1/2" x 0.113") or

3-10d box (3" x 0. 128"); or

3-10d box (3" x 0. 128"); or

4- I0d box (3" x 0. 125"); or

4-10d box (3 " x 0. 128"); or

4-10d box (3 " x 0.128"); or

4-16d (3 1/2" x 0. 135"); or

4-10d box (3" x 0. 128"); or

3-10d box (3" x 0.125"); or

16d common (31/2" × 0.162")

16d box $(3 1/2" \times 0.162")$; or

16d box (3 $1/2" \times 0.135"$); or

10d box (3" × 0.128"); or

12-16d (3 1/2" x 0.135")

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(continued)

16d common (3 1/2" × 0.162"); or

3-3" 14 gage staples, 7/16" crown 16d common (3 $1/2" \times 0.162"$); or

4-8d common (2 1/2" × 0.131"); or 4-10d box (3" × 0.128")

16d common (3 $1/2" \times 0.162"$); or

' 14 gage staples, 7/16" crown

-16d common (3 1/2" x 0. 162"); or

box (3" x 0.128"); or 12-3" x 0. 131"

12-16d box (3 1/2" x 0.135"); or 12-10d | Face nail on each side of

3-16d box (3 1/2" x 0. 135"); or

4-3" x 0.131 " nails

4-3" x 0. 131" nails

3-3" x 0. 131" nails

3" × 0.13`1" nails

3" × 0.131" nails; or

Wall

10d box $(3" \times 0.128")$; or

3-10d common (3" x 0. 145"); or

3- I6d box nails (3"1/2 " x 0.135 "); oi

3-10d common nails (3" x 0.148"); or

3-10d common (31/2" x 0. 148"); or

2-16d common (3 1/2" x 0. 162"); or

3-8d common (2 1/2" x 0. 131"); or

3-8d common (2 1/2" x 0. 131"); or

3-16d common (3 1/2" x 0. 162"); or

NUMBER AND TYPE OF FASTENER SPACING AND LOCATION

Toe nail

Face nail

Face nail

Face nail

rafter or truss

Toe nail

End nail

24 " o.c. face nail

16 " o.c. face nail

16 " o.c. face nail

12 " o.c. face nail

16 " o.c. face nail

12 " o.c. face nail

end joint)

end joint (minimum 24" lap

splice length each side of

16 " o.c. each edge, face nail

12 " o.c. each edge, face nail

2 toe nails on one side and 1

toe nail on opposite side of each

Each joist, toe nail

	SPECIAL INSPECTION	NS REQUIRED
	PERIODIC SPECIAL INSPECTIONS	
C	CONCRETE	CONCRETE
1	. INSPECTION OF REINFORCING STEEL, INCLUDING PLACEMENT.	1. INSPECT BOLT

- . INSPECT BOLTS TO BE INSTALLED IN CONCRETE PRIOR TO AND DURING PLACEMENT OF CONCRETE WHERE ALLOWABLE LOADS HAVE BEEN INCREASED.
- 3. VERIFYING USE OF REQUIRED MIX DESIGNS.
- INSPECTION FOR MAINTENANCE OF SPECIFIED CURING TEMPERATURE AND TECHNIQUES.
- VERIFICATION OF IN-SITU CONCRETE STRENGTH, PRIOR TO REMOVAL OF SHORES AND FORMS FROM BEAMS AND STRUCTURAL SLABS.
- 6. INSPECT FORMWORK FOR SHAPE, LOCATION AND DIMENSIONS OF THE CONCRETE MEMBER BEING FORMED.

- NAILING, BOLTING, ANCHORING AND OTHER FASTENING OF COMPONENTS WITHIN THE LATERAL FORCE RESISTING SYSTEM, INCLUDING:
 - WOOD SHEAR WALLS WOOD DIAPHRAGMS
 - DRAG STRUTS
 - BRACES HOLD-DOWNS
- 2. ATTACHMENT OF ROOF AND EXTERIOR WALL CLADDING AND VERIFICATION OF GRADE
- INSTALLATION OF TEMPORARY AND PERMANENT TRUSS BRACING IN ACCORDANCE WITH TPI RECOMMENDATIONS.

SOILS

- . VERIFY MATERIALS BELOW FOOTINGS ARE ADEQUATE TO ACHIEVE THE DESIGN BEARING CAPACITY.
- 2. VERIFY EXCAVATIONS ARE EXTENDED TO PROPER DEPTH AND HAVE REACHED PROPER MATERIAL.
- 3. PERFORM CLASSIFICATION AND TESTING OF CONTROLLED FILL MATERIALS.
- PRIOR TO PLACEMENT OF CONTROLLED FILL, OBSERVE SUBGRADE AND VERIFY THAT SITE HAS BEEN PREPARED PROPERLY.

VERIFY SPECIFIED LUMBER SIZE AND GRADE	Χ	
VERIFY SILL PLATE CONTINUITY, CONNECTOR TYPE, AND SPACING	Х	
VERIFY WALL FRAMING SPACING AND SPECIFIED QUANTITY OF JACK AND KING STUDS AT EACH OPENING	Χ	
VERIFY ALL WALL AND ROOF FRAMING BLOCKING IS INSTALLED AND SHEATHING NAILED TO BLOCKING AS SPECIFIED	Χ	
VERIFY ADDITIONAL BLOCKING AT ROOF FRAMING TO WALL, CANOPY TO WALL, ETC. FOR SHEAR TRANSFER IS INSTALLED PER PLANS AND DETAILS	Х	
VERIFY DRAG STRUTS AS SPECIFIED PER DETAIL	Χ	
VERIFY RTU SUPPORT FRAMING AND BLOCKING	Х	
VERIFY TYPE, MANUFACTURER, AND SPACING OF ALL SPECIFIED HOLDOWNS, SHEAR CONNECTORS, HURRICANE CLIPS, ETC. AND NUMBER AND SIZE OF CONNECTORS ARE INSTALLED INCLUDING SPECIFIED ANCHORS - SEE POST-INSTALLED ANCHORS	X	
INSPECT WALL (EACH SHEAR WALL) AND ROOF SHEATHING FOR THICKNESS AND CONNECTOR SPACING INCLUDING ANY SHEAR TRANSFER STRAPS		Х
*OONTRACTOR CHALL CENT BUILDTO VERIEIGATION OF WOOR		

CONTINUOUS SPECIAL INSPECTIONS

A. INSPECTION OF CONCRETE PLACEMENT FOR PROPER APPLICATION TECHNIQUES.

WOOD FRAMING CONSTRUCTION

(PHOTO VERIFICATION REQUIRED)

INSPECT BOLTS TO BE INSTALLED IN CONCRETE PRIOR TO AND DURING PLACEMENT OF CONCRETE.

SAMPLE FRESH CONCRETE FOR STRENGTH TESTS AND PERFORM SLUMP AND AIR CONTENT TESTS.

DETERMINE THE TEMPERATURE OF FRESH CONCRETE AT THE TIME SPECIMENS ARE MADE FOR

VERIFY USE OF PROPER MATERIALS, DENSITIES AND LIFT THICKNESSES DURING PLACEMENT

*SHEATHING

INSTALLATION

PRE POST

SOILS

AND COMPACTION OF CONTROLLED FILL

*CONTRACTOR SHALL SEND PHOTO VERIFICATION OF WOOD FRAMING CONSTRUCTION TO STRUCTURAL ENGINEER OF RECORD PRIOR TO (PRE) OR FOLLOWING (POST) SHEATHING INSTALLATION AS INDICATED ABOVE.

TABLE R602.3(1) —continued **FASTENING SCHEDULE**

ltem		STENING SCHEDULE		
	DESCRIPTION OF BUILDING ELEMENTS	NUMBER AND TYPE OF FASTENER Floor	SPACING AND L	OCATION
24.	2 " subfloor to joist or girder	3-16d box (3 1/2" x 0. 135"); or	blind and face n	ail
25.	, ,	2-16d common (3 1/2" x 0. 162") 3-16d box (3 1/2" x 0. 135"); or		
20.	2 " planks (plank & beam - floor & roof)	2-16d common (3 1/2" x 0. 162")	Each bearing, face nail	
26.	Band or rim joist to joist	3-16d common (3 1/2" x 0. 162") 4-10 box (3" x 0. 128"), or 4-3" x 0. 131" nails; or 4-3" x 14 ga. staples, 7/16" crown	End nail	
		20d common (4" × 0.192")	Nail each layer at top and botto	
27.		10d box (3" × 0.128"); or 3" × 0.131" nails	24 " o.c. face na tom staggered o	il at top and
		And: 2-20d common (4" × 0.192"); or 3-10d box (3" × 0.128"); or 3-3" × 0.131" nails	Face nail at ends and at each splice	
28.	Ledger strip supporting joists or rafters	4-16d box (3 1/2" x 0. 135"); or 3-16d common (3 1/2" x 0. 162"); or 4-10d box (3" x 0.128"); or 4-3" x 0.131" nails	Each joist or raf	ter, face nail
29.	Bridging to joist	2-10d (3 " x 0.125")	Each end, toe n	ail
Item			SPACING OF FA	
цепп	DESCRIPTION OF BUILDING ELEMENTS	NUMBER AND TYPE OF FASTENER	Edges (inches)	Intermedia supports (inches)
	Wood structural panels, subfloor, roof and interior (see Table R602.3(3) for wood str	wall sheathing to framing and particleboard wall uctural panel <i>exterior</i> wall sheathing to wall fran	sheathing to framing	g
30.	3/8" - 1/2"	6d common (2" x 0. 113") nail (subfloor, wall) ⁱ 8d common (2 1/2" x 0. 131") nail (roof)	6	12 ^f
31	19/32" - 1"	8d common nail (2 1/2" x 0.131 ")	6	12 ^f
32	1 1/8" - 1 1/4"	10d common (3" x 0. 148") nail; or 8d (2 1/2" x 0. 131") deformed nail	6	12
32	1 1/8" - 1 1/4"		6	12
32	1 1/8" - 1 1/4" 1/2" structural cellulosic fiberboard sheathing	(2 1/2" x 0. 131") deformed nail	3	12
		(2 1/2" x 0. 131") deformed nail Other wall sheathing ^g 1 1/2" galvanized roofing nail, '7/16" head diameter, or 1" crown staple 16		
33	1/2" structural cellulosic fiberboard sheathing	(2 1/2" x 0. 131") deformed nail Other wall sheathing ⁹ 1 1/2" galvanized roofing nail, '7/16" head diameter, or 1" crown staple 16 ga., 1 1/4" long 1 3/4" galvanized roofing nail, '7/16" head diameter, or 1" crown staple 16	3	6
33	1/2" structural cellulosic fiberboard sheathing 25/32" structural cellulosic fiberboard sheathing	(2 1/2" x 0. 131") deformed nail Other wall sheathing9 1 1/2" galvanized roofing nail, '7/16" head diameter, or 1" crown staple 16 ga., 1 1/4" long 1 3/4" galvanized roofing nail, '7/16" head diameter, or 1" crown staple 16 ga., 1 1/4" long 1 1/2" galvanized roofing nail; staple galvanized, 1 1/4" long; 1 5/8" screws,	3	6
33 34 35	1/2" structural cellulosic fiberboard sheathing 25/32" structural cellulosic fiberboard sheathing 1/2" gypsum sheathing 5/8" gypsum sheathing	Other wall sheathing ⁹ 1 1/2" galvanized roofing nail, '7/16" head diameter, or 1" crown staple 16 ga., 1 1/4" long 1 3/4" galvanized roofing nail, '7/16" head diameter, or 1" crown staple 16 ga., 1 1/4" long 1 3/4" galvanized roofing nail, '7/16" head diameter, or 1" crown staple 16 ga., 1 1/4" long 1 1/2" galvanized roofing nail; staple galvanized, 1 1/4" long; 1 5/8" screws, Type W or S 1 3/4" galvanized roofing nail; staple galvanized, 1 5/8" long; 1 5/8" screws,	3 3 7	6 6
33 34 35	1/2" structural cellulosic fiberboard sheathing 25/32" structural cellulosic fiberboard sheathing 1/2" gypsum sheathing 5/8" gypsum sheathing	Other wall sheathing ⁹ 1 1/2" galvanized roofing nail, '7/16" head diameter, or 1" crown staple 16 ga., 1 1/4" long 1 3/4" galvanized roofing nail, '7/16" head diameter, or 1" crown staple 16 ga., 1 1/4" long 1 1/2" galvanized roofing nail; '7/16" head diameter, or 1" crown staple 16 ga., 1 1/4" long 1 1/2" galvanized roofing nail; staple galvanized, 1 1/4" long; 1 5/8" screws, Type W or S 1 3/4" galvanized roofing nail; staple galvanized, 1 5/8" long; 1 5/8" screws, Type W or S	3 3 7	6 6
33 34 35 36	1/2" structural cellulosic fiberboard sheathing 25/32" structural cellulosic fiberboard sheathing 1/2" gypsum sheathing 5/8" gypsum sheathing	Other wall sheathing ⁹ 1 1/2" galvanized roofing nail, '7/16" head diameter, or 1" crown staple 16 ga., 1 1/4" long 1 3/4" galvanized roofing nail, '7/16" head diameter, or 1" crown staple 16 ga., 1 1/4" long 1 3/4" galvanized roofing nail, '7/16" head diameter, or 1" crown staple 16 ga., 1 1/4" long 1 1/2" galvanized roofing nail; staple galvanized, 1 1/4" long; 1 5/8" screws, Type W or S 1 3/4" galvanized roofing nail; staple galvanized, 1 5/8" long; 1 5/8" screws, Type W or S ombination subfloor underlayment to framing 6d deformed (2" x 0.120") nail; or 8d	3 3 7	6 7 7

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TABLE R602.3(1) —continued FASTENING SCHEDULE

Item	DESCRIPTION OF BUILDING ELEMENTS	NUMBER AND TYPE OF FASTENER	SPACING AND LOCATION
14.	Bottom plate to joist, rim joist, band joist or	16d common (3 1/2" × 0.162"); or	16 " o.c. face nail
	blocking (not at braced wall panels)	16d box (3 1/2" × 0.135"); or 3" × 0.131" nails	12 " o.c. face nail
15.	Bottom plate to joist, rim joist, band joist or blocking at braced wall panels	3-16d box (3 1/2" x 0.135"); or 2-16d common (3 1/2" >: 0.162"); or 4-3 " x 0.131 " nails	3 each 16" o.c. face nail 2 each 16" o.c. face nail 4 each 16" o.c. face nail
16.	Top or bottom plate to stud	4-8d box (2 1/2 " x 0.113"); or 3-16d box (3 1/2" x 0.135"); or 4-8d common (2 1/2" x 0. 131"); or 4-10d box (3" x 0.128"); or 4-3" x 0.131" nails	Toenail
,		3-16d box (3 1/2" x 0.135"); or 2-16d common (31/2" x 0.162"); or 3-10d box (3" x 0.128"); or 3-3" x 0.131" nails	End nail
17.	Top plates, laps at corners and intersections	3-10d box (3" x 0.128"); or 2-16d common (3 1/2" x 0.162"); or 3-3" x 0.131" nails	Face nail
18.	1" brace to each stud and plate	3-8d box (2 1/2" x 0.113"); or 2-8d common (2 1/2" x 0. 131"); or 2-10d box (3" x 0. 128"); or 2 staples 1 3/4"	Face nail
19.	1" × 6" sheathing to each bearing	3-8d box (2 1/2" x 0.113"); or 2-8d common (2 1/2" x 0.131"); or 2-10d box (3" x 0.128"); or 2 staples, 1" crown, 16 ga., 1 3/4" long	Face nail
20.	1 " × 8" and wider sheathing to each bearing	3-8d box (2 1/2" x 0. 113"); or 3-8d common (2 1/2" x 0. 131"); or 3-10d box (3" x 0. 128"); or 3 staples, 1" crown, 16 ga., 1 3/4" long Wider than 1" x 5" 4-8d box (2 1/2" x 0. 113"); or 3-8d common (2 1/2" x 0. 131"); or 3-10d box (3" x 0. 128"); or 4 staples, 1" crown, 16 ga., 1 3/4" long	Face nail
		Floor	
21.	Joist to sill, top plate, or girder	4-8d box (2 1/2" x 0.113"); or 3-8d common (2 1/2" x 0. 131"); or 3-10d box (3" x 0. 128"); or 3-3" x 0.131" nails	Toe nail
	 	8d box (2 1/2" x 0. 113")	4" o.c., toenail
22.	Rim joist, band joist, or blocking to top plate, sill or other framing below	8d common (2 1/2" x 0.131 "); or 10d box (3" x 0.128"); or 3" x 0.131 " nails	6" o.c., toenail
23.	1" x 6" subfloor or less to each joist	3-8d box (2 1/2" x 0.113"); or 2-8d common (2 1/2" × 0.131"); or 3-10d box (3" x 0.128"); or 2 staples, 1" crown, 16 ga., I 3/4" long	Face nail
_		(continued)	

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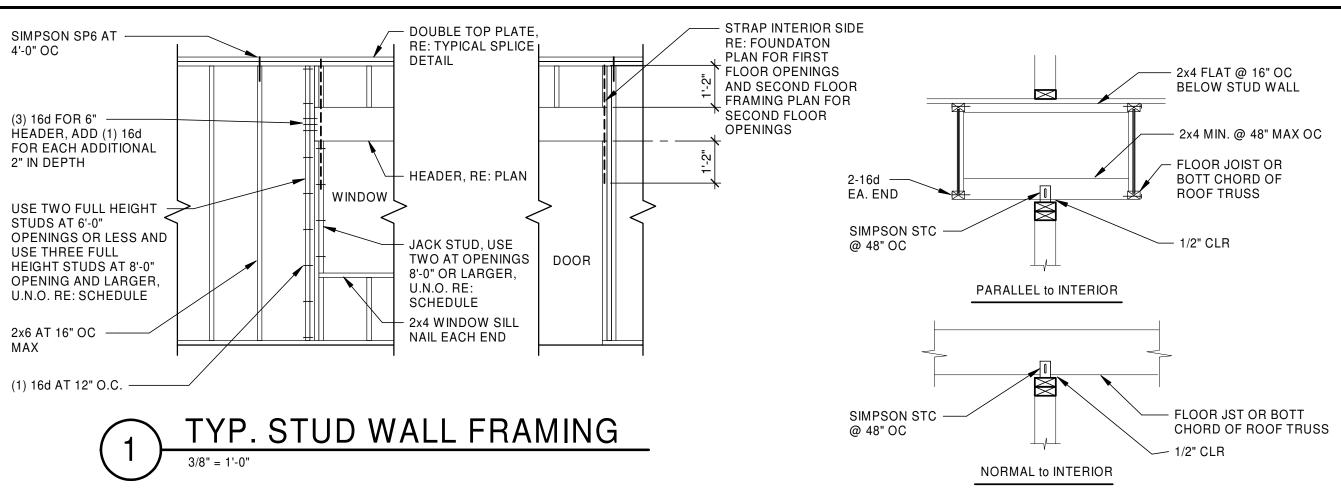
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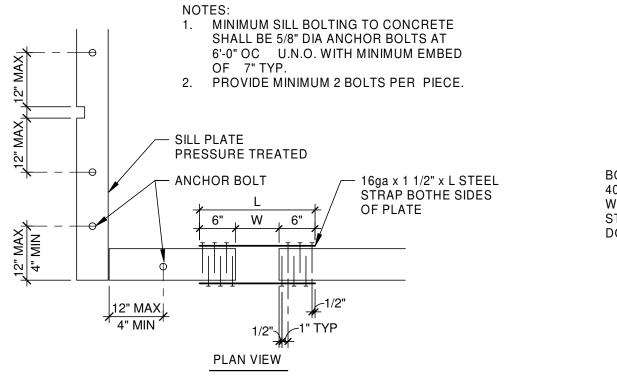
ISSUES / REVISIONS

06/12/2020 PERMIT SET - PHASE 1

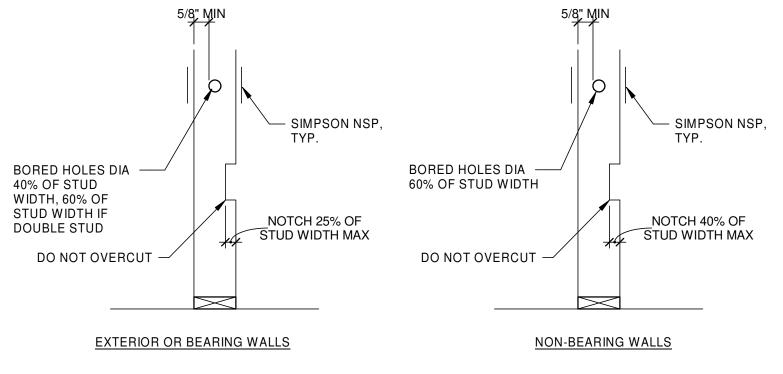
ISSUE DATE: 06/12/2020 PROJECT NO: P05093.0100 CHECKED BY: KJW DRAWN BY: RLR/EAE

NOTES AND SCHEDULES





TYPICAL SILL PLATE BOLTING



NO MORE THAN (3) HOLES OR NOTCHES PER STUD, A MINIMUM OF 18" APART. HOLES SHALL NOT OCCUR ON THE SAME SIDE AS A

TYPICAL STUD NOTCHES AND HOLES

WALL SHEATHING NOT SHOWN

- SILL, MATCH HEADER

SILL BOLT

RE: SCHEDULE

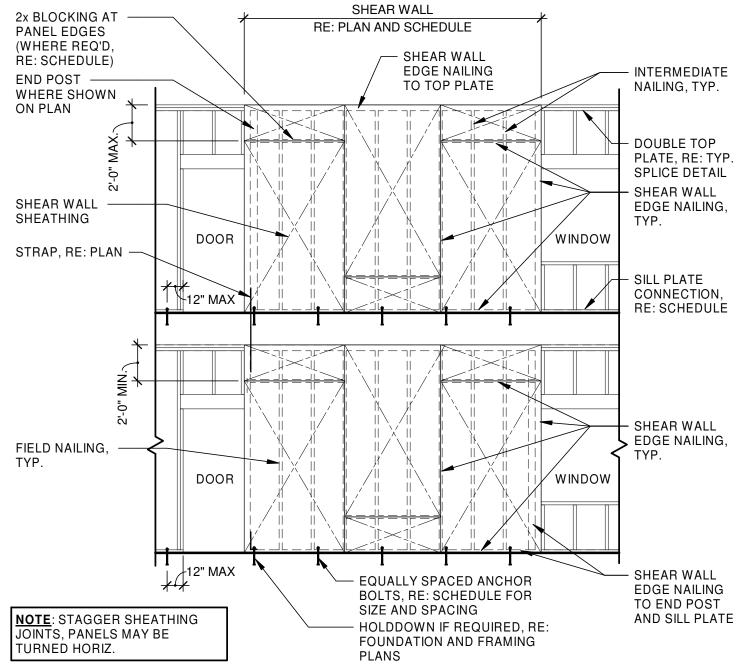
- FASTEN SHEATHING TO HEADER

WITH 8d NAILS ON 3" GRID, TYPICAL

DOOR AND WINDOW FRAMING SCHEDULE			
OPENING TYPE	HEADER	JACK STUD	FULL HEIGHT STUD
GARAGE DOOR	* 5 1/4x11 1/4 LVL	(2) 2x6	(2) 2x6
3 BAY EXTERIOR	* 5 1/4x9 1/2 LVL	(2) 2x6	(2) 2x6
EXTERIOR UP TO 3'-4"	(3) 2x8 W/ (2) 1/2" PLY SPACERS	(1) 2x6	(1) 2x6
INTERIOR PARTITION	(2) 2x4 W/ (1) 1/2" PLY SPACER	(1) 2x4	(1) 2x4

REFER TO FASENTING SCHEDULE FOR BUILT-UP HEADER NAILING, HEADER TO JAMB NAILING AND BUILT-UP JAMB NAILING IN THE IRC

* FULL LENGTH OF WALL RE: ELEVATIONS 6/S-003 AND 9/S-003



SHEAR WALL SCHEDULE				
	MARK	BLOCKED/UNBLOCKED	ATTACHMENT	SILL
	А	BLOCKED	8d AT 3" OC AT PANEL EDGES AND IN FIELD	5/8" DIA AB WITH 7" EMBED WITH 3X3X1/4 PLATE WASHERS MIN (2) PER SEGMENT, 6" FROM END OF SEGMENT BAL AT 2'-0" OC
	В	BLOCKED	8d AT 6" OC AT PANEL EDGES AND AT 12" IN FIELD	5/8" DIA AB WITH 7" EMBED WITH 3X3X1/4 PLATE WASHERS MIN (2) PER SEGMENT, 6" FROM END OF SEGMENT BAL AT 2'-0" OC
	С	BLOCKED	#6 x 1 5/8 TYPE W SCREWS AT 7" OC,AT PANEL EDGES AND IN FIELD	5/8" DIA AB WITH 7" EMBED WITH 3X3X1/4 PLATE WASHERS MIN (2) PER SEGMENT, 6" FROM END OF SEGMENT BAL AT 2'-0" OC

1. ALL EXTERIOR WALLS AND SHEAR WALLS A AND B SHALL BE SHEATHED WITH 7/16" RATED OSB OR RATED PLYWOOD. SHEAR WALL C SHALL BE SHEATHED WITH 5/8" GYPSUM BOARD. WHERE SHEAR WALL IS NOT DESIGNATED PROVIDE 8d AT 6" OC AT PANEL EDGES AND AT 12" OC IN FIELD ON EXTERIOR WALL. FOR INTERIOR WALLS, #6x1 5/8" TYPE W SCREWS AT 7" OC AT PANEL EDGES AND IN

— JOIST OR TRUSS FRAMING, FOR SIZE AND SPACING RE:

— 3/8" MIN. EDGE DISTANCE

— LONG DIM. OF PLYWOOD TO RUN PERPENDICULAR TO

JOIST OR RAFTER FRAMING

MIN. SHEATHING SIZE TO BE 2'-0"

WOOD STRUCTURAL PANEL,

NOTE: SHEATHING TO BE INSPECTED PRIOR TO COVERING

PLANS

TYPICAL

— EDGE NAILING (E.N.)

FOR NAILS

ALL SILL PLATE BOLTS TO FOUNDATION SHALL HAVE 3"X3"X1/4" PLATE WASHERS
 AT ALL NON-SHEAR WALLS, PROVIDE 5/8" DIA AB WITH 7" EMBED AT 6'-0" OC MAX

TYPICAL NON-BEARING,

NON-SHEAR WALL

PLANS	
P. SHEAR WALL ELEVATION	
1'-0"	
PLATE SPLICE — LOCATIONS 4'-0" MIN. 4'-0" MIN.	
16d NAILS AT 3" — 6" MIN. 3" MIN. 3" MIN.	

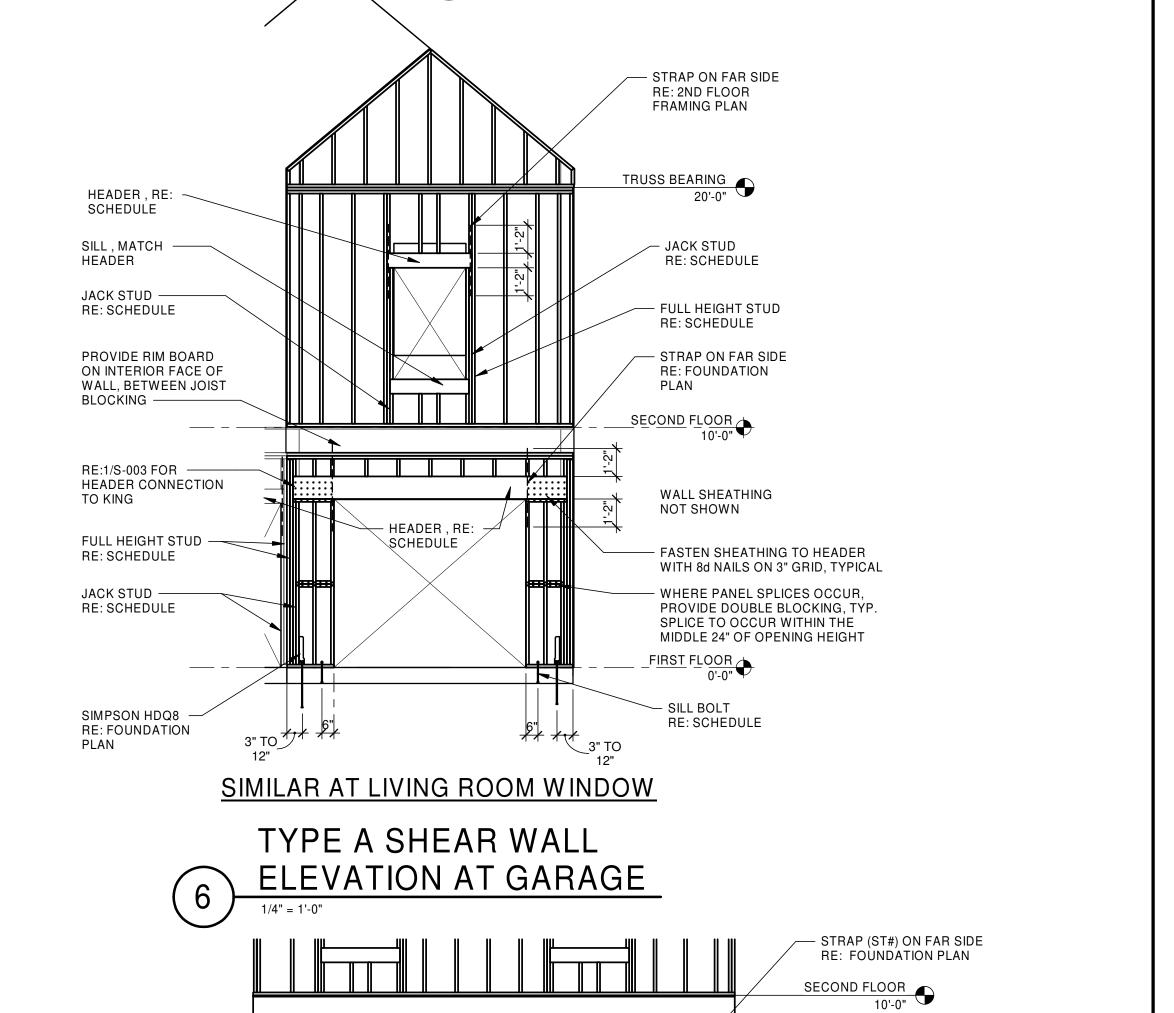
NOTE: FOR BOLTED SPLICE

STANDARD CUT WASHERS,

CONNECTION USE

2" DIA x 5/32"

	UNBLOCKED SHEATHING LAYOUT
$\left(\circ \right)$	3/16" = 1'-0"



VE.

ISSUES / REVISIONS 06/12/2020 PERMIT SET - PHASE 1

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SECOND FLOOR

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SHEET NAME TYPICAL DETAILS

SHEET NUMBER

TYP. TOP PLATE SPLICE

NO. OF NAILS OF BOLTS

(2) 3/4" DIA. A307 M.B.

ALTERNATE: (16) 16d

EACH SIDE

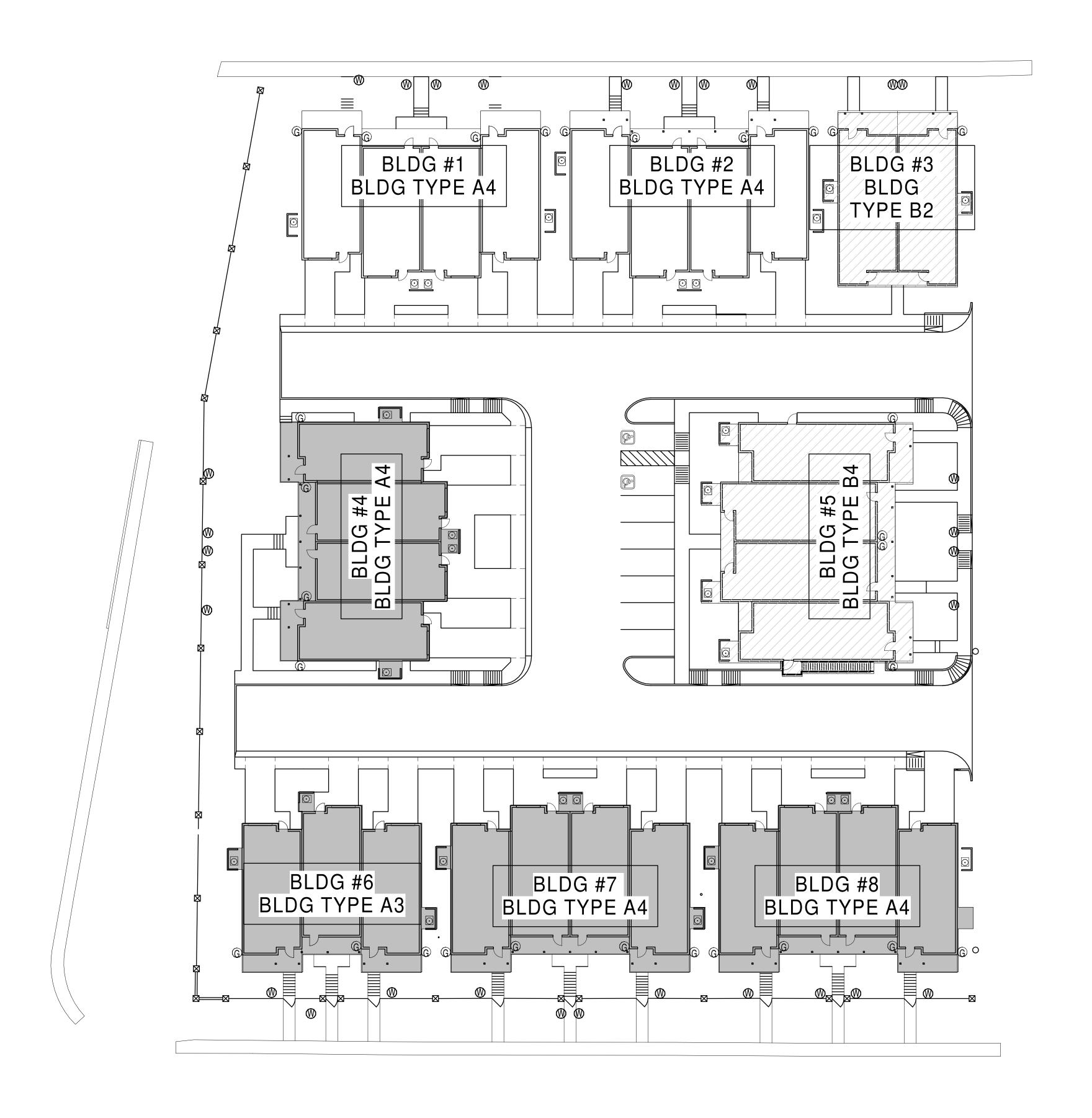
— BOUNDARY NAILING (B.N.) FULL HEIGHT STUD RE: SCHEDULE STAGGER SHEATHING JOINTS JACK STUD —— RE: SCHEDULE

SIMPSON HDQ8 **RE: FOUNDATION**

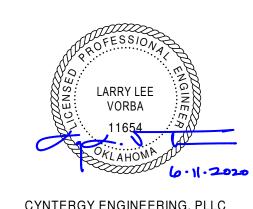
HEADER CONNECTION

TO KING

LARGE WINDOW AND DOOR HEADER







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HE WHILLER - PHASE 1

BOOMTOWN DEVELOPMENT COMPANY
68 NORTH LEWIS

ISSUES / REVISIONS

| 06/12/2020 | PERMIT SET - PHASE 1

ISSUE DATE: 06/12/2020 PROJECT NO: P05093.0100 CHECKED BY: KJW DRAWN BY: RLR/EAE

SHEET NAME

PHASING LEGEND

PHASE 1

PHASE 2

FUTURE - BY OTHERS

BUILDING TYPE KEY PLAN

SHEET NUMBER

S-100

REFER TO CIVIL DRAWINGS FOR EXTENT OF SITE WORK FOR PHASE 1 AND PHASE 2









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THE WHITTIER - PHASE 1
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ISSUES / REVISIONS

| 06/12/2020 | PERMIT SET - PHASE 1

ISSUE DATE: 06/12/2020 PROJECT NO: P05093.0100 CHECKED BY: KJW DRAWN BY: RLR/EAE

SHEET NAME

BLDG #1 - BLDG TYPE A4 FOUNDATION PLANS

SHEET NUMBER

S-101





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SHEET NAME

BLDG #2 - BLDG TYPE A4 FOUNDATION PLANS

SHEET NUMBER

PHASE 1

S-102

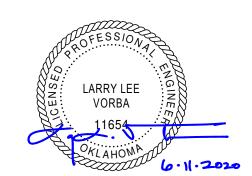
NOTE: NORTH VARIES RE: 1/S-100

BLDG TYPE A4 - TYPICAL SECOND FLOOR

FRAMING PLAN

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THE WHITTIER - PHASE 1

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ı	T
06/12/2020	PERMIT SET - PHASE

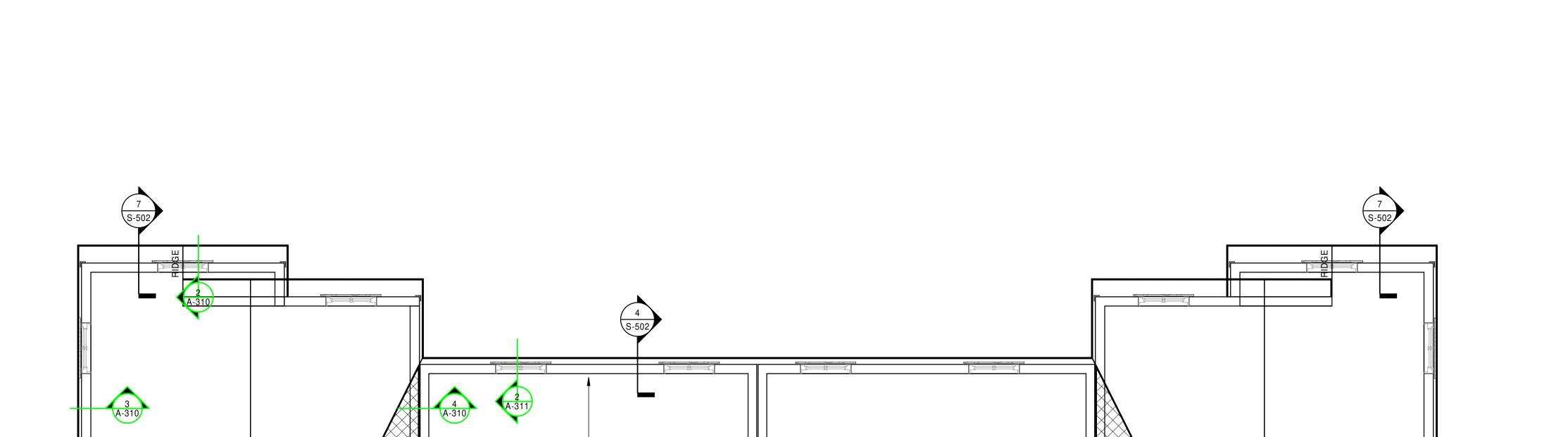
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BLDG #1,#2, #4, #7 AND #8 -BLDG TYPE A4 TYPICAL SECOND FLOOR FRAMING PLAN

SHEET NIIMBED

S-106

PHASE 1 BLDG #1 AND #2
PHASE 2 BLDG #4, #7 AND #8



ROOF FRAMING PLAN NOTES

- 1. 15/32" EXPOSURE 1 24/16 RATED WOOD SHEATHING WITH 8D NAILS AT 6" OC AT SUPPORTED PANEL EDGES AND ROOF PERIMETERS AND 12" OC IN FIELD, ROOF SHEATHING IS CONTINUOUS
- SHEATHING IS CONTINUOUS.

 2. SHOP FABRICATED WOOD TRUSS ROOF FRAMING AT 2'-0" OC BY TRUSS MFR.
- 3. PERIMETER UNIT WALLS SHOWN ARE LOAD BEARING WALL. INTERIOR UNIT WALLS SHOWN ARE SHEAR WALLS. DO NOT USE INTERIOR UNIT WALLS AS LOAD BEARING WALLS. GIRDER TRUSSES MAY BE REQUIRED FOR TRANSITION IN TRUSS BEARING AND SHALL BE LOCATED AT NON LOAD BEARING INTERIOR WALLS RE: ARCH
- 4. HATCHED AREAS INDICATE ROOF TRUSS AND FRAMING OVERBUILD AS REQUIRED BY ROOF TRUSS DESIGN. AT OVERBUILD FRAMING, PROVIDE SIMPSON MSTA30 AT 4'-0" OC ACROSS RIDGE, CENTERED OVER RIDGE

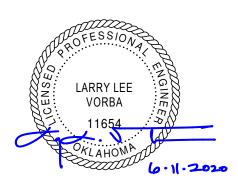
5. PATIO CANOPY DECKING: 2x6 TONGUE AND GROOVE PERPENDICULAR TO FRAMING.

ATTACH TO FRAMING WITH (3) 16d NAILS PER BOARD, PER SUPPORT.

REFER TO ARCHITECTURE FOR BUILDINGS AT ALLEYS THAT DO NOT HAVE 2x2 WINDOWS



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THE WHITTIER - PHASE 1 BOOMTOWN DEVELOPMENT COMPANY

ISSUES / REVISIONS

| 06/12/2020 | PERMIT SET - PHASE 1

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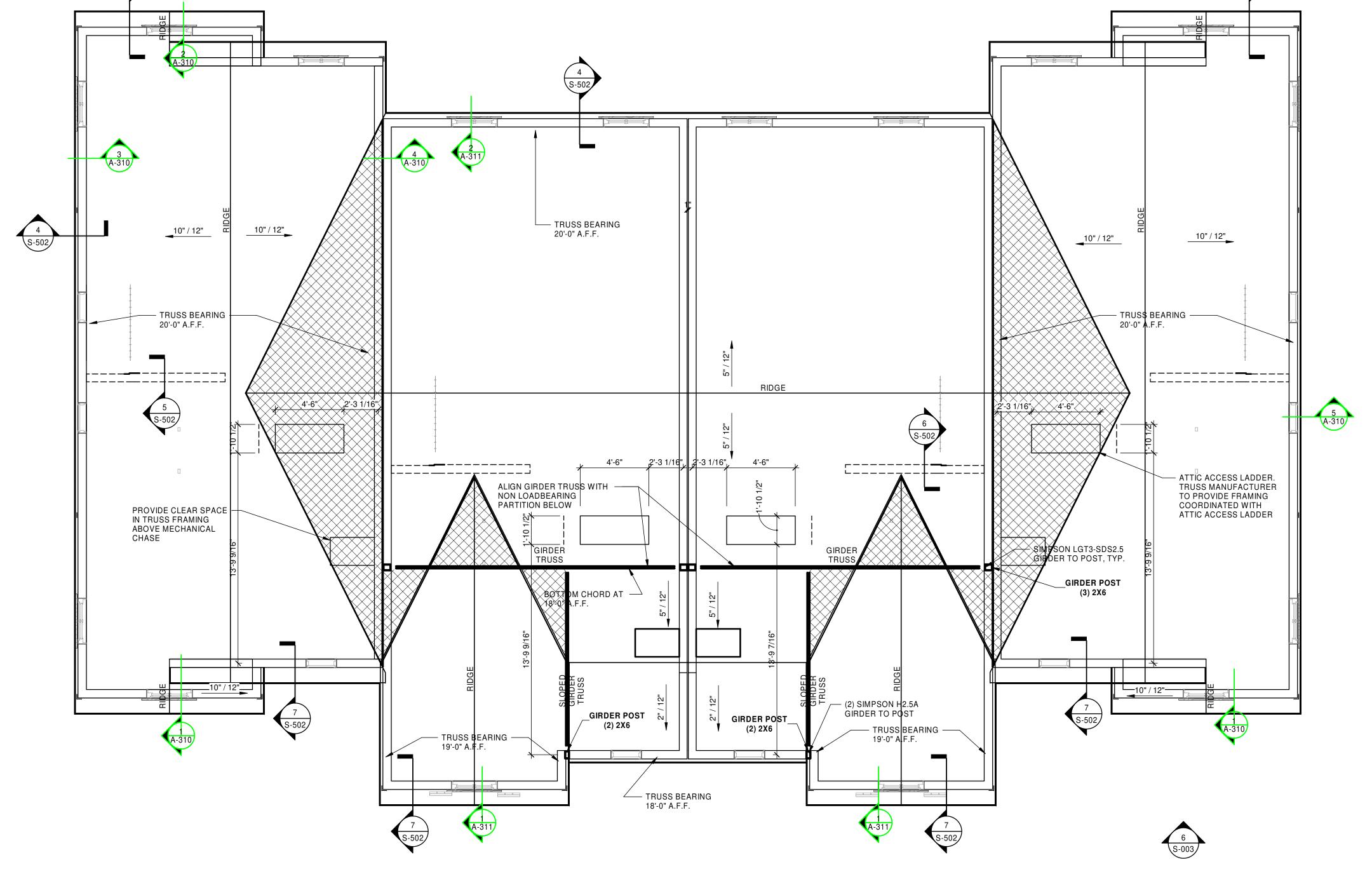
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IEET NAME

BLDG #1,#2, #4, #7 AND #8 -BLDG TYPE A4 - TYPICAL ROOF FRAMING PLAN

SHEET NUMBER

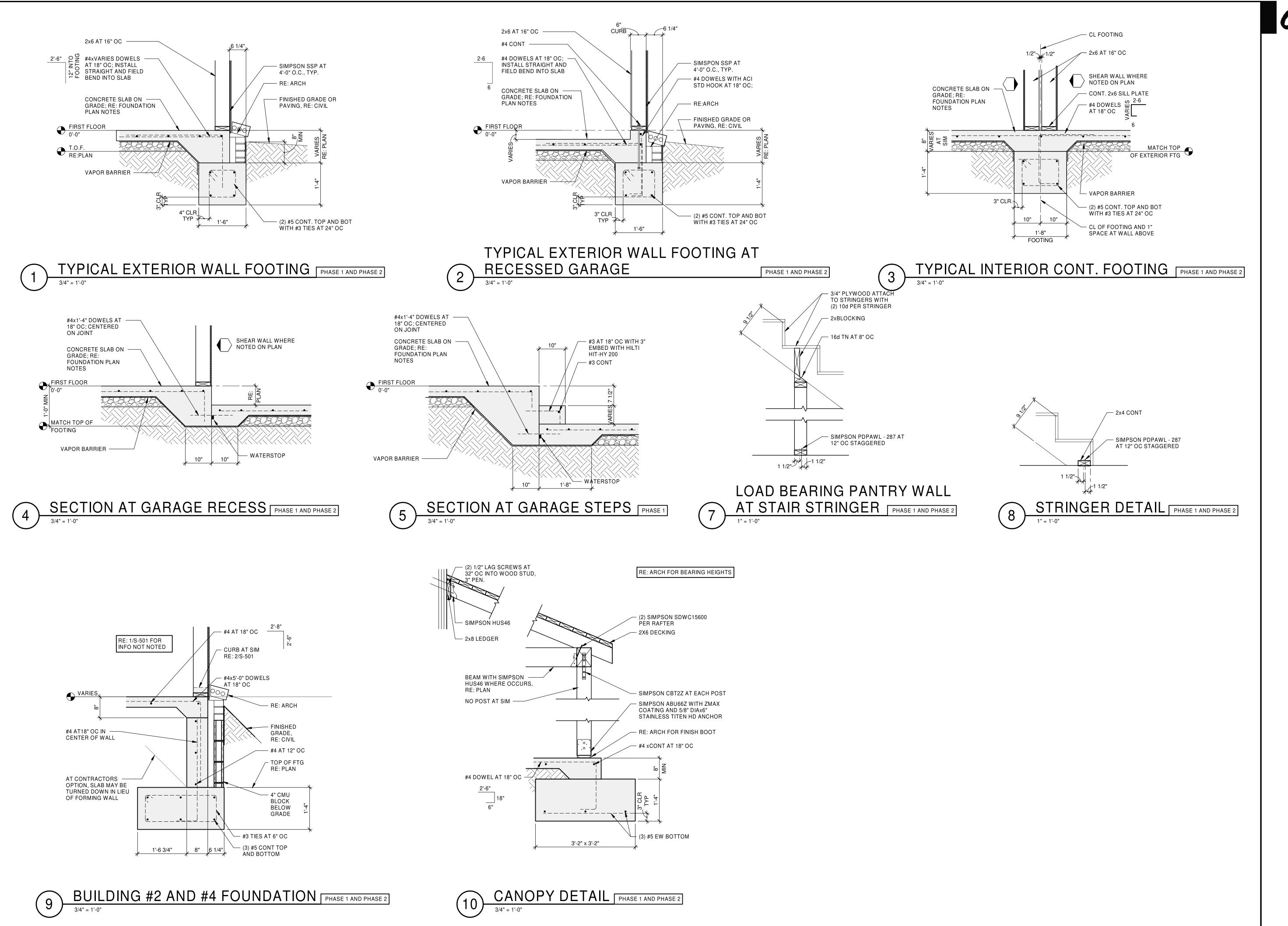
S-107



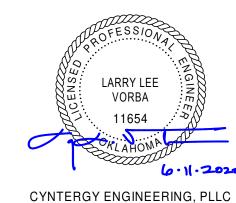
NOTE: NORTH VARIES RE: 1/S-100

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PHASE 1 - BLDG #1 AND #2
PHASE 2 - BLDG #4, #7 AND #8







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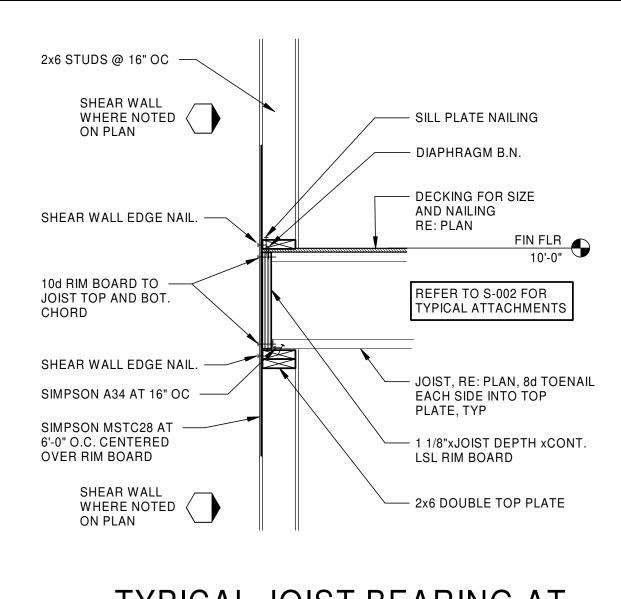
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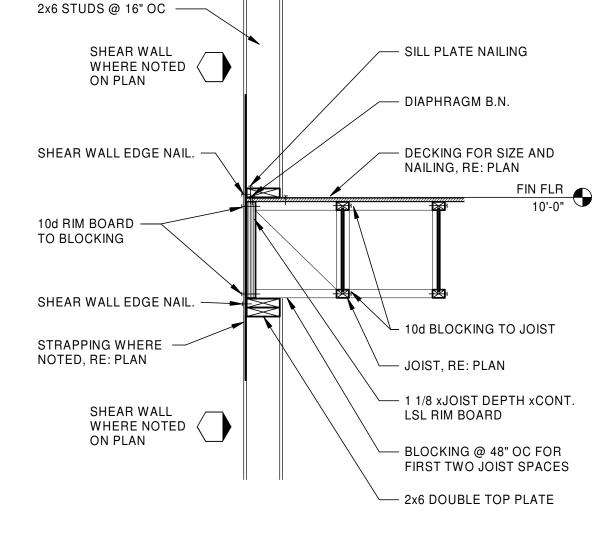
SHEET NAME
FOUNDATION DETAILS

SHEET NUMBER

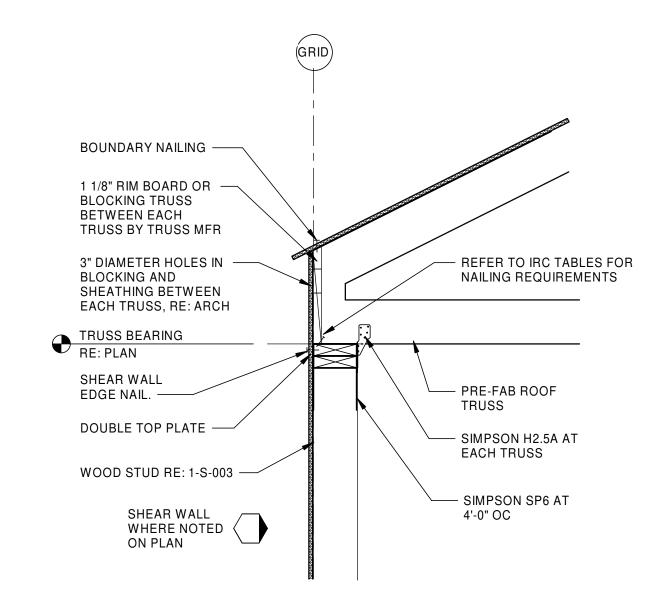
S-501







TYPICAL JOIST PARALLEL TO EXTERIOR WALL PHASE 1 AND PHASE 2



TYPICAL ROOF FRAMING

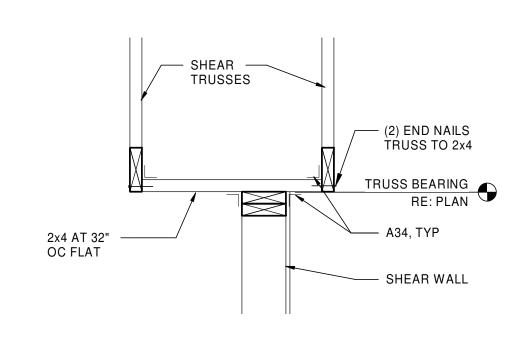
3" 6"

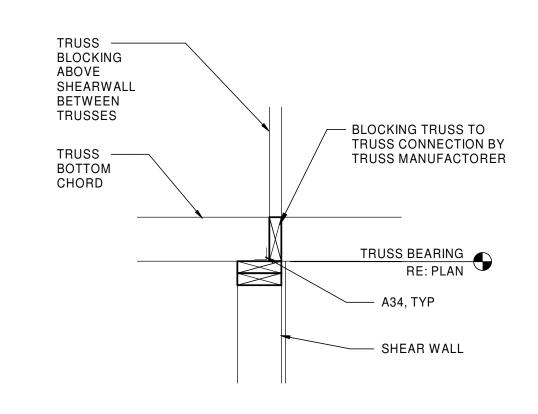
- CENTERLINE BETWEEN POSTS

PATIO BEAM SPLICE DETAIL PHASE 1 AND PHASE 2

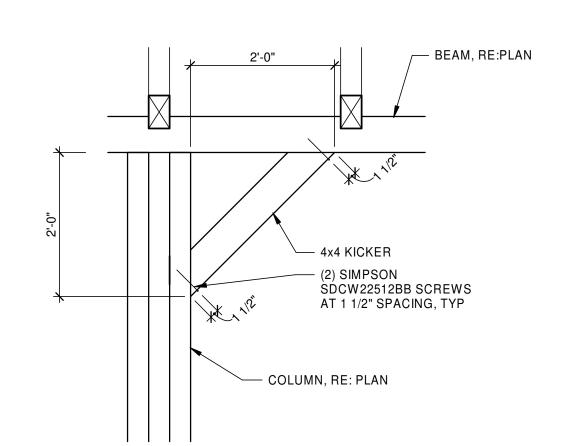
WITH ST N22-R8

DETAIL PHASE 1 AND PHASE 2

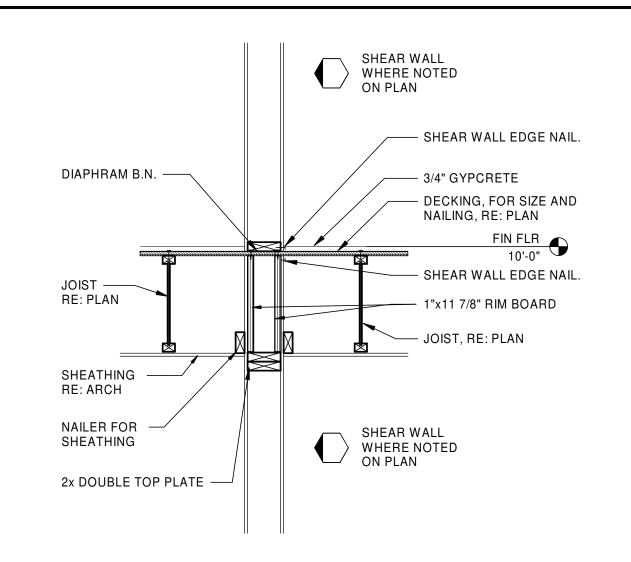




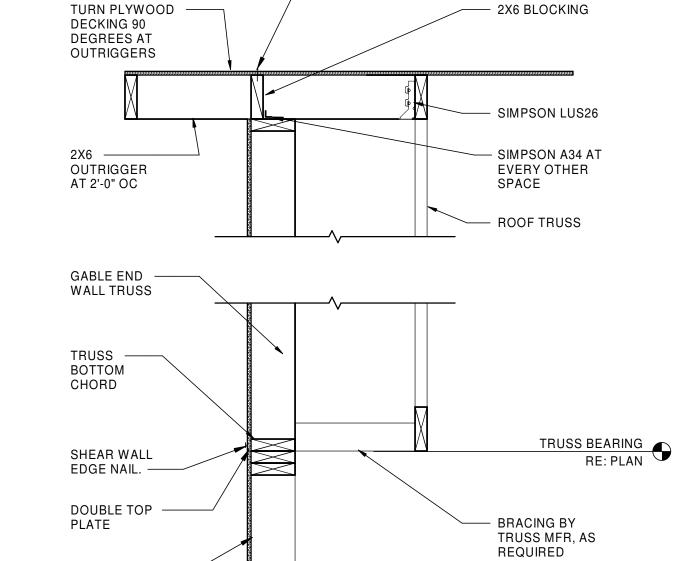












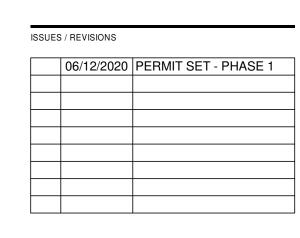
– DIAPHRAGM B.N.



WOOD STUD RE: 1-S-003

SHEAR WALL WHERE NOTED





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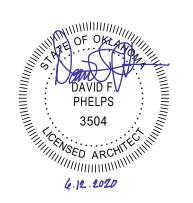
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FRAMING DETAILS

S-502

KICKER DETAIL PHASE 1 AND PHASE 2





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BOOMTOWN DEVELOPMENT COMPANY

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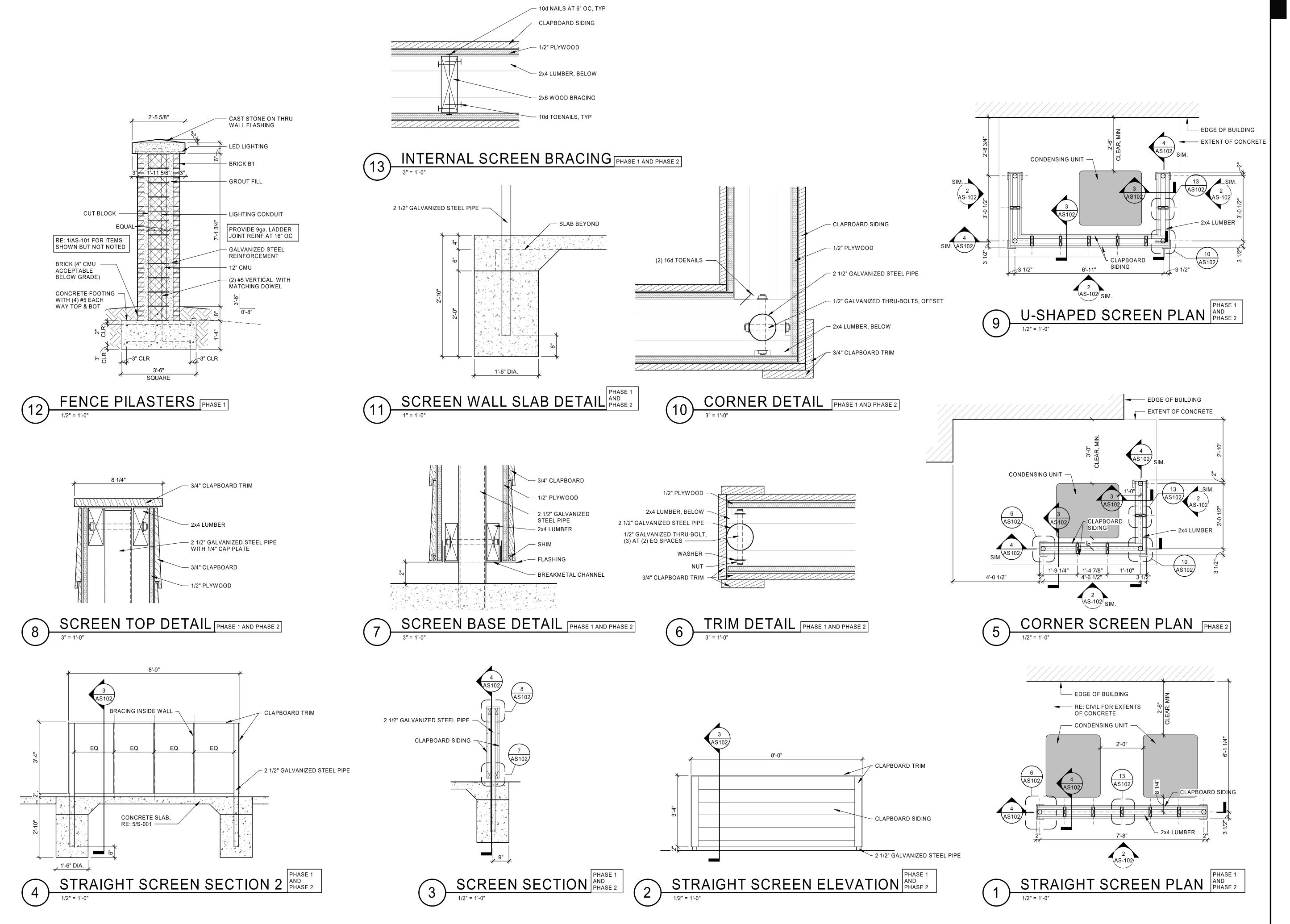
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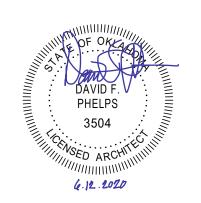
SITE PLAN

SHEET NUMBER

AS 101







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HE WHITTIER - PHASE 1

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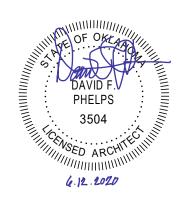
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SHEET NAME
SITE DETAILS

SHEET NUMBER

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ISSUE DATE: 06/12/2020 PROJECT NO: P05093.0100

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SHEET NAME

BLDG A4 - FIRST FLOOR PLAN

SHEET NUMBER

PHASE 1 AND PHASE 2





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SHEET NAME

BLDG A4 - SECOND FLOOR PLAN

SHEET NUMBER

PHASE 1 AND PHASE 2

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SHEET NAME

BLDG A4 - ROOF PLAN

SHEET NUMBER

PHASE 1 AND PHASE 2

REFLECTED CEILING PLAN LEGEND

NEW GYPSUM CEILING

ACT1 MATERIAL 8'-0" AFF CEILING INDICATOR
HEIGHT

ROOM NAME ROOM IDENTIFIER

RECESSED CAN LIGHTS; RE: ELEC

PENDANT LIGHTS; RE: ELEC

SURFACE MOUNT LIGHT; RE: ELEC

CEILING FAN; RE: ELEC

DIFFUSER; RE: MECH

RESTROOM VENT; RE: ELEC & MECH

VANITY LIGHT; RE: ELEC

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BLDG A4 - FIRST FLOOR REFLECTED CEILING PLAN

SHEET NUMBER

A-104

BLDG A4 - FIRST FLOOR REFLECTED CEILING PLAN

REFLECTED CEILING PLAN LEGEND

NEW GYPSUM CEILING

ACT1 — MATERIAL 8'-0" AFF CEILING INDICATOR
HEIGHT

ROOM NAME ROOM IDENTIFIER

RECESSED CAN LIGHTS; RE: ELEC

PENDANT LIGHTS; RE: ELEC

SURFACE MOUNT LIGHT; RE: ELEC

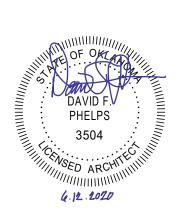
CEILING FAN; RE: ELEC

DIFFUSER; RE: MECH

RESTROOM VENT; RE: ELEC & MECH

VANITY LIGHT; RE: ELEC

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BLDG A4 - SECOND FLOOR REFLECTED CEILING PLAN

SHEET NUMBER

A-105

BLDG A4 - SECOND FLOOR REFLECTED CEILING PLAN





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THE WHITTIER - PHASE 1
BOOMTOWN DEVELOPMENT COMPANY

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06/12/2020	PERMIT SET - PHASE 1

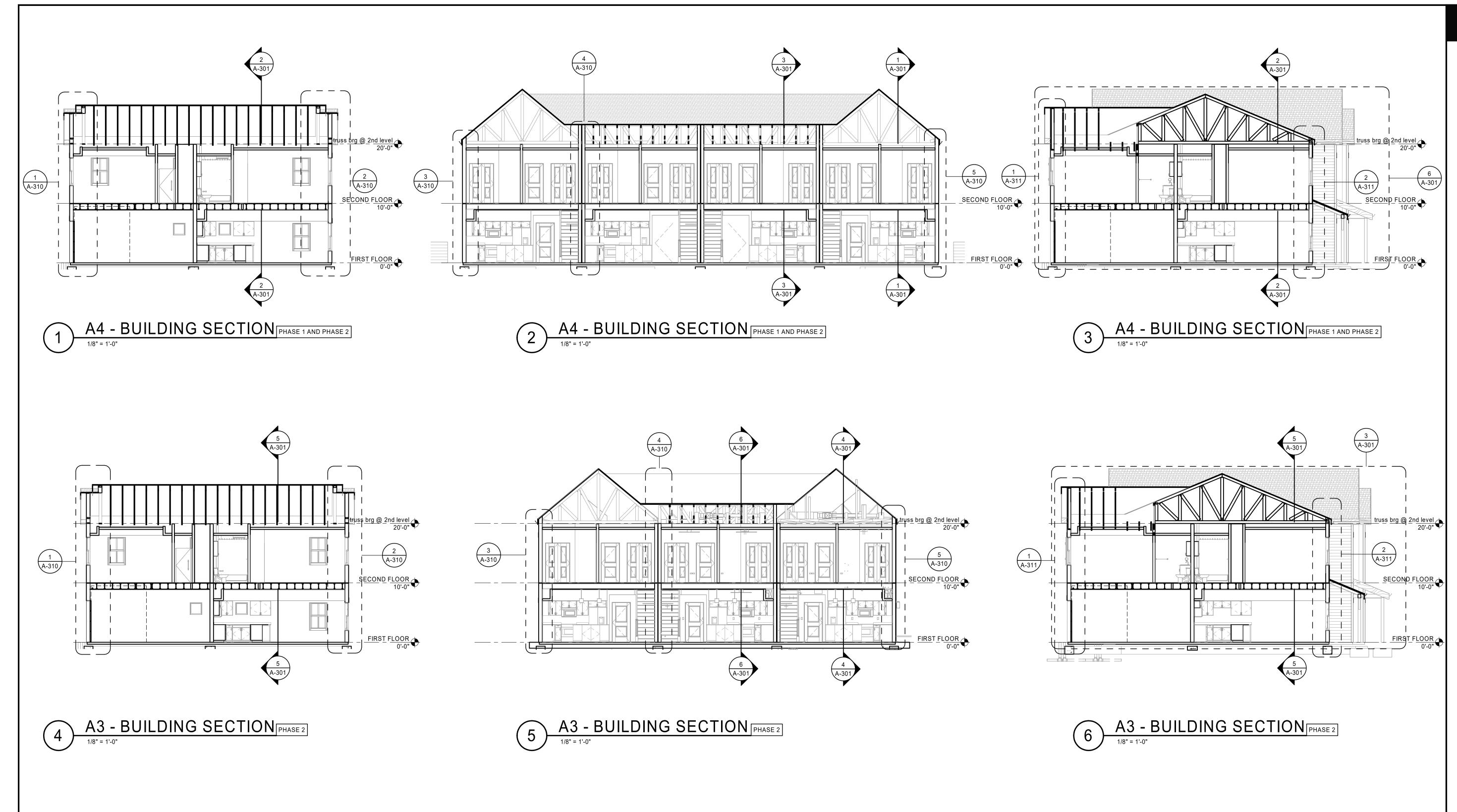
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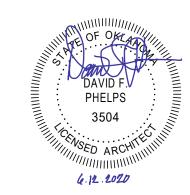
HEET NAME

BLDG A4 - EXTERIOR ELEVATIONS

SHEET NUMBER







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STIPULATION FOR REUSE

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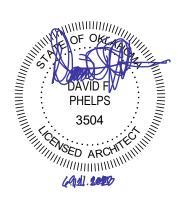
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BUILDING SECTIONS

SHEET NUMBER





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WALL SECTIONS

SHEET NUMBER

PHASE 1 AND PHASE 2

CONCRETE —

VAPOR BARRIER -

CLEAN CRUSHED ROCK -



CONCRETE

VAPOR BARRIER

CLEAN CRUSHED ROCK

CONCRETE DRIVEWAY —





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BOOMTOWN DEVELOPMENT COMPANY

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	06/12/2020	PERMIT SET - PHASE

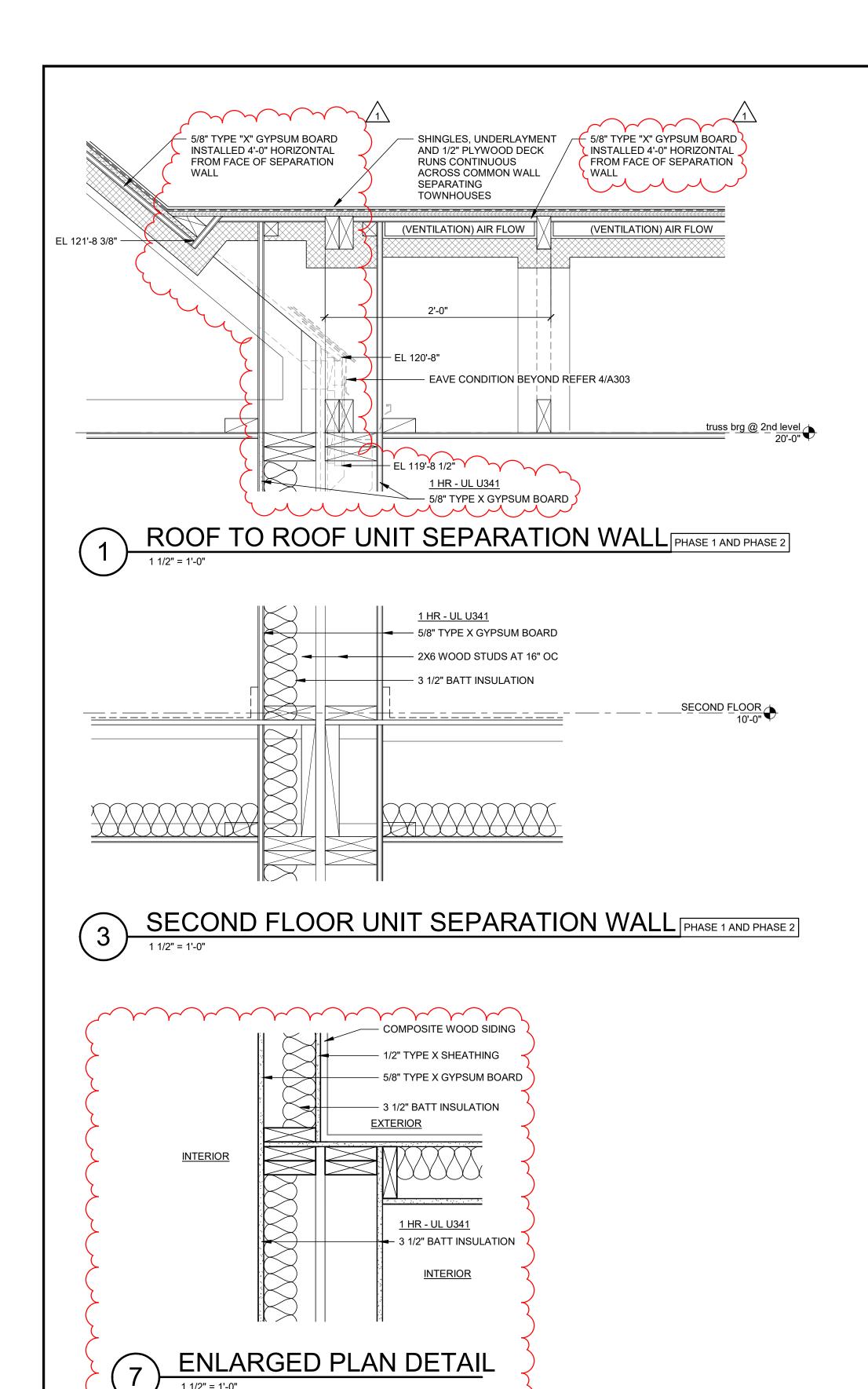
ISSUE DATE: 06/12/2020 PROJECT NO: P05093.0100

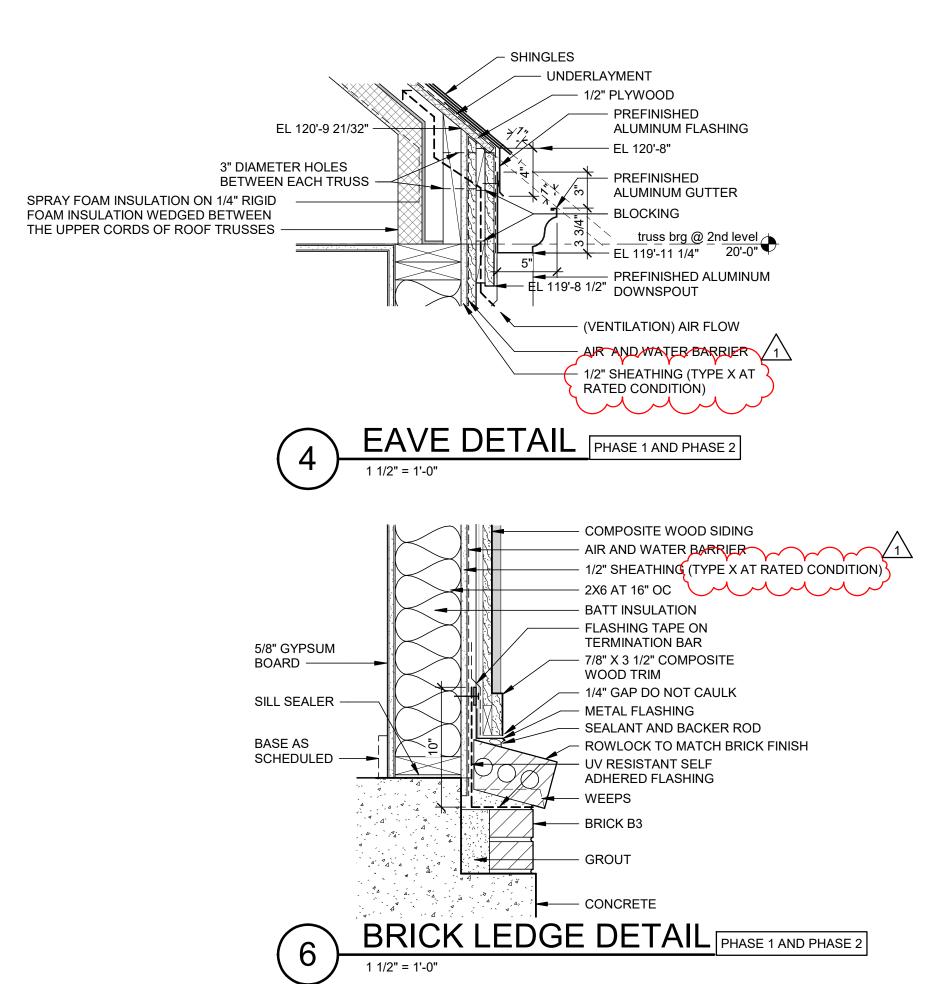
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SHEET NAME

WALL SECTIONS

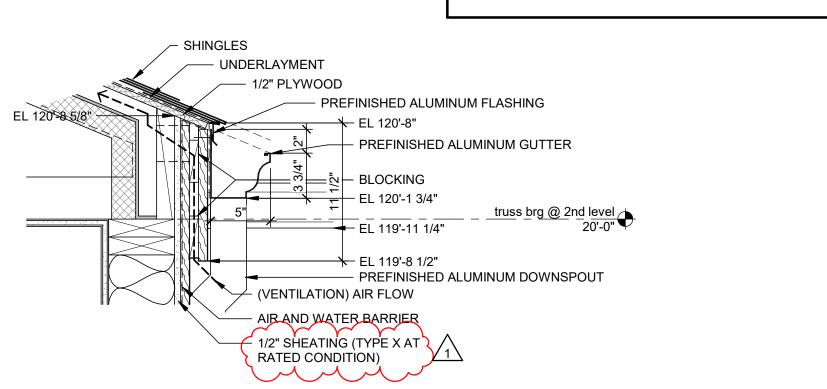
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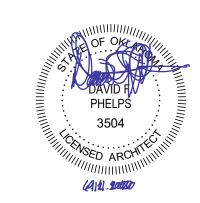
- B1 ACME MODULAR SIZE, 160 VELOUR, STEELE GRAY 106391.
- B2 ACME MODULAR SIZE, 166 VELOUR, MARBLE GRAY 106745.
- B3 ACME MODULAR SIZE, 166 SMOOTH, MARBLE GRAY 106753.
- NOTE: PROVIDE MORTAR TYPE S FOR ALL BRICK TYPES



LOW SLOPE EAVE DETAIL PHASE 1 AND PHASE 2



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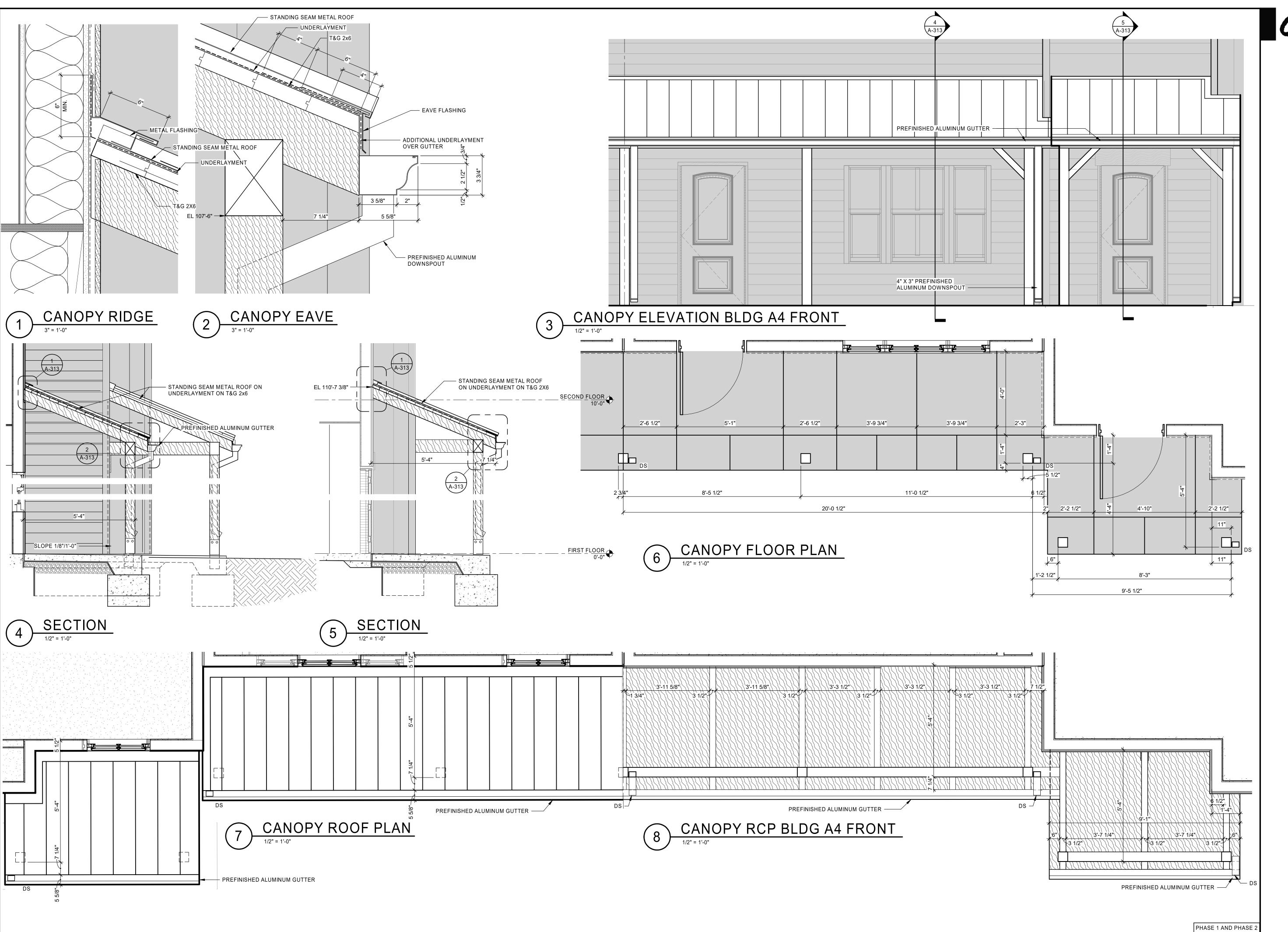
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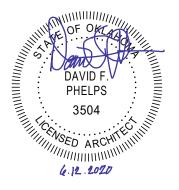
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WALL SECTION DETAILS

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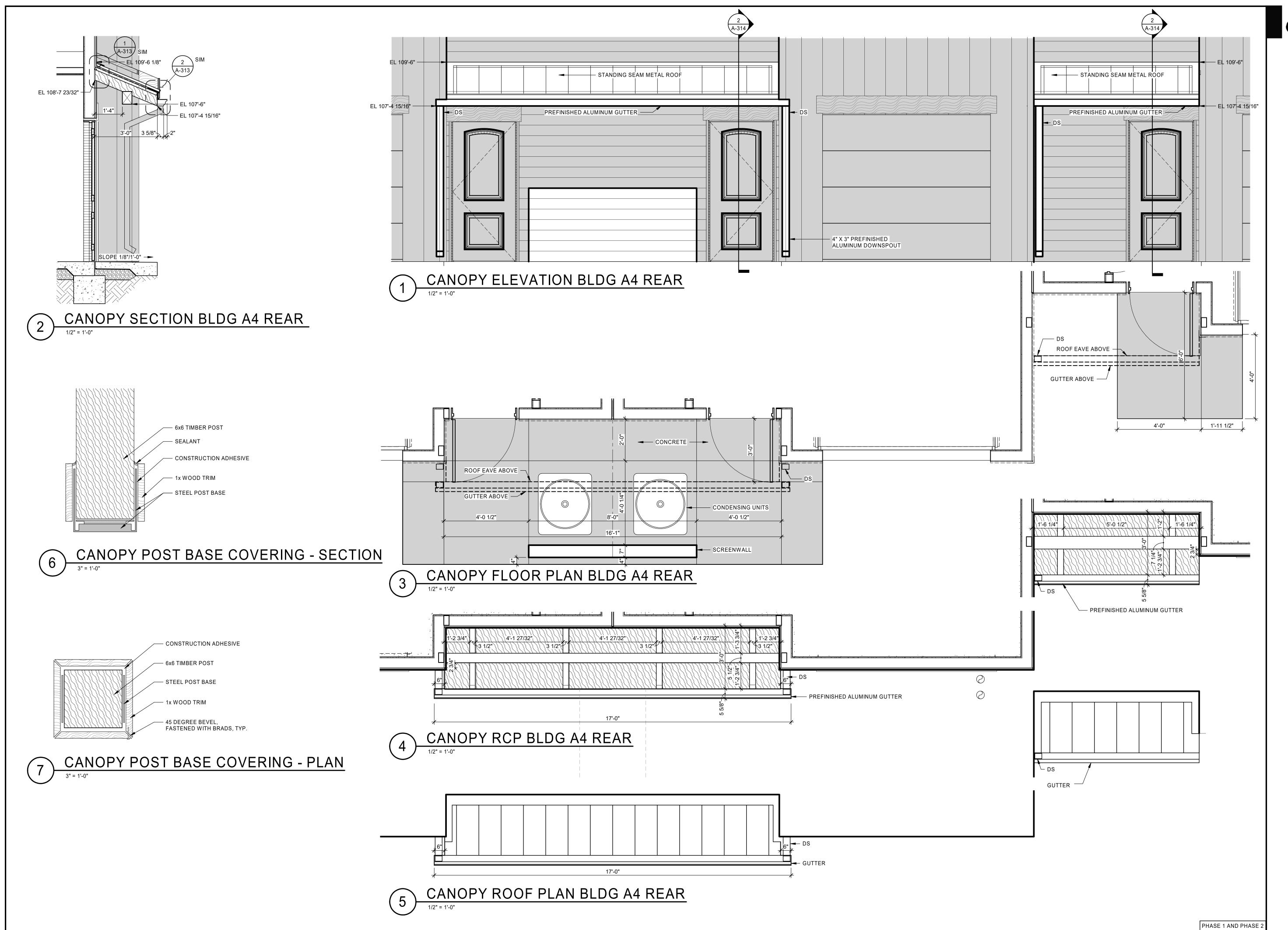
THE WHITTIER - PHAS BOOMTOWN DEVELOPMENT COMPA 68 NORTH LEWIS TULSA, OK 74110

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	06/12/2020	PERMIT SET - PHASE 1			

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CANOPY ELEVATION SECTIONS AND DETAILS BLDG A4 FRONT

SHEET NUMBER



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THE WHITTIER - PHASE 1
BOOMTOWN DEVELOPMENT COMPANY

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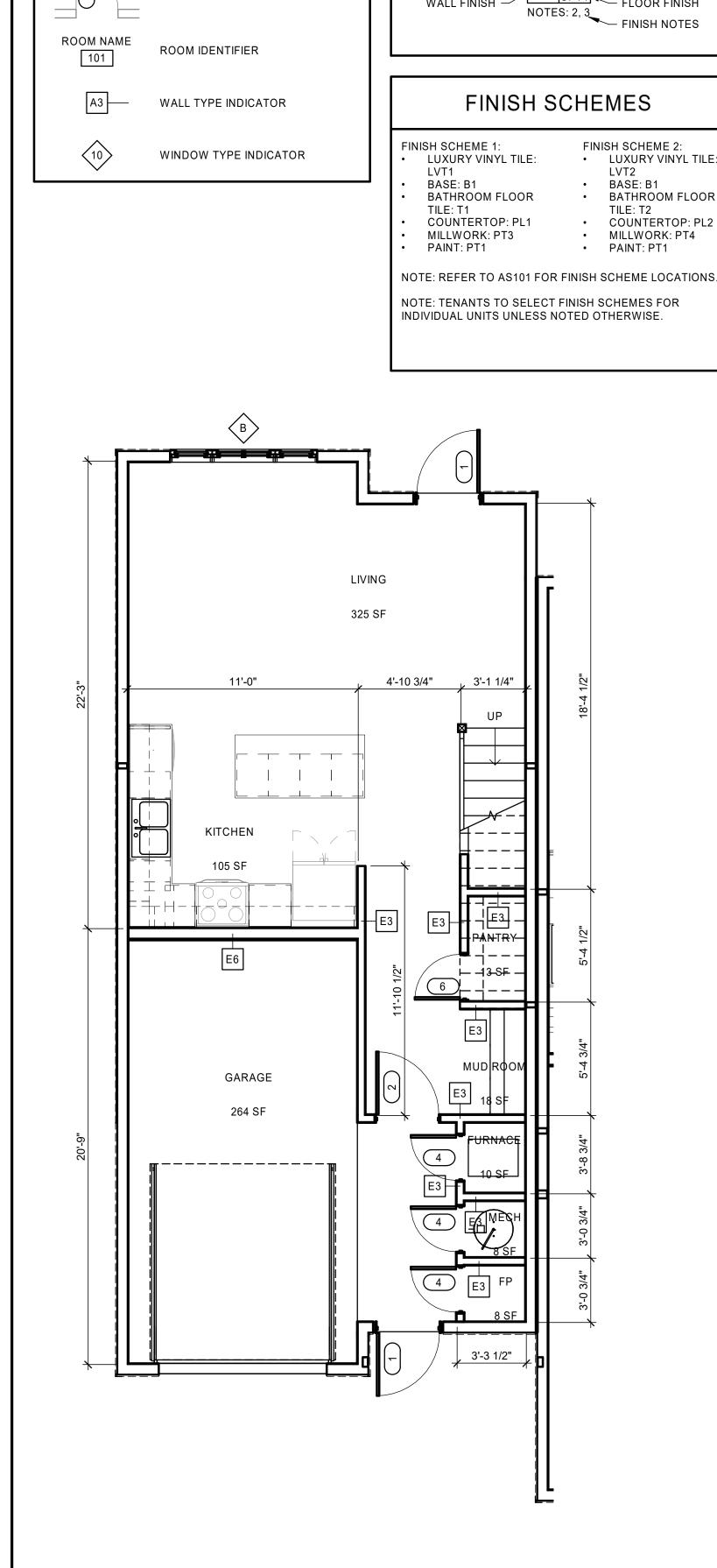
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SHEET NAME

CANOPY ELEVATION SECTIONS AND DETAILS BLDG A4 REAR

SHEET NIIMBED



UNIT A1 - FIRST FLOOR PLAN

FLOOR PLAN LEGEND

EXTERIOR WALLS

— FACE OF EXTERIOR FINISH

DOOR TYPE INDICATOR

ROOM FINISH LEGEND

ROOM IDENTIFIER AND FINISH INDICATOR

ROOM NAME

BASE FINISH

AT 6'-4" AFF

INFORMATION.

REFER TO FINISH SCHEMES FOR FINISH SCHEME

REFER TO SPECIALTY SCHEDULE ON A-501.

REFER TO BUILDING PLANS FOR EXTERIOR

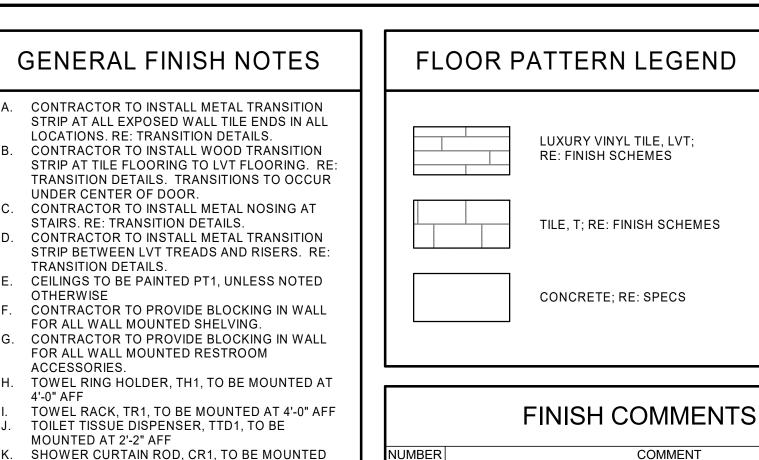
DOOR LOCATIONS AND TAGS.

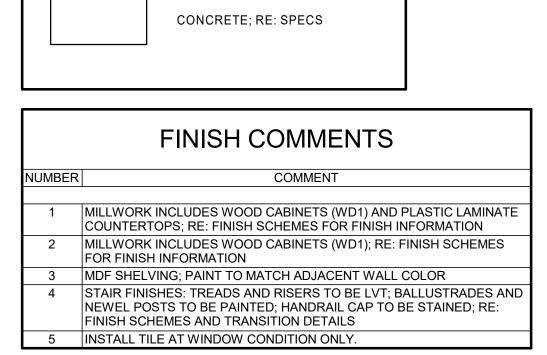
O. REFER TO ENLARGED UNIT PLANS FOR

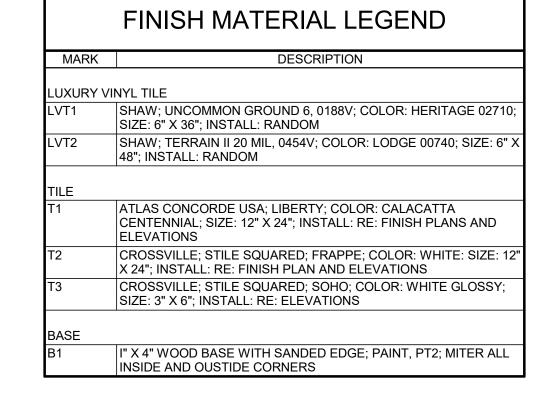
INTERIOR DOOR LOCATIONS AND TAGS.

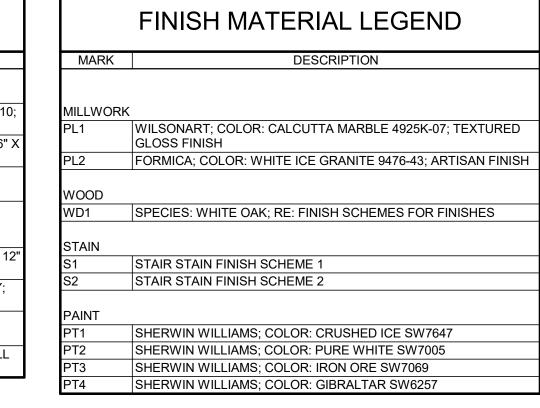
Q. EXTERIOR DOORS TO BE PAINTED SHERWIN

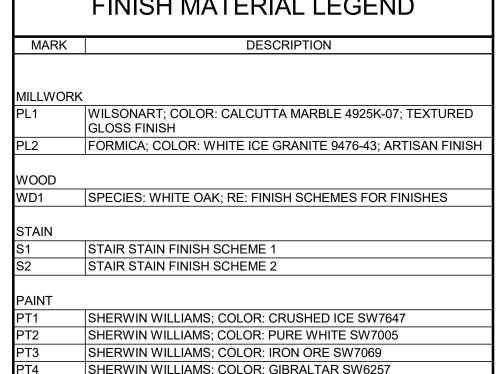
INTERIOR DOOR AND FRAMES TO BE PAINTED

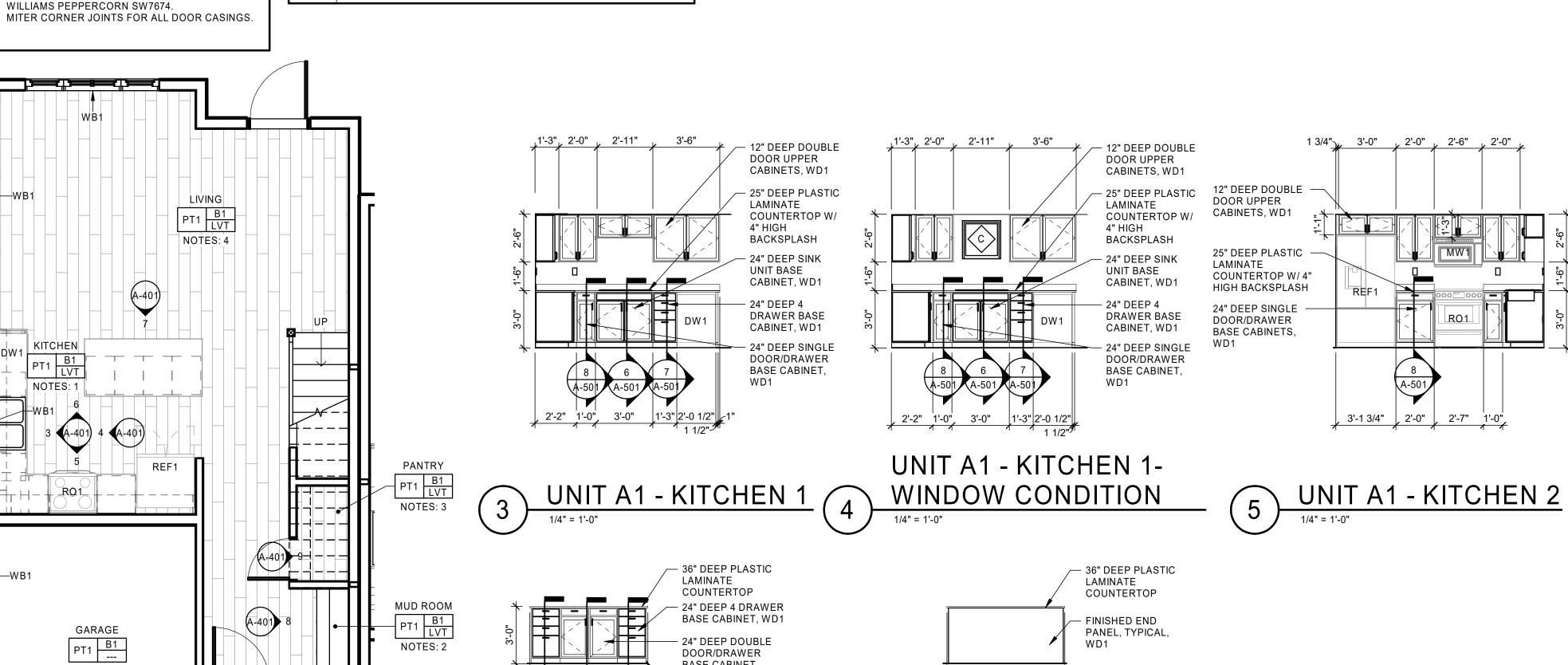


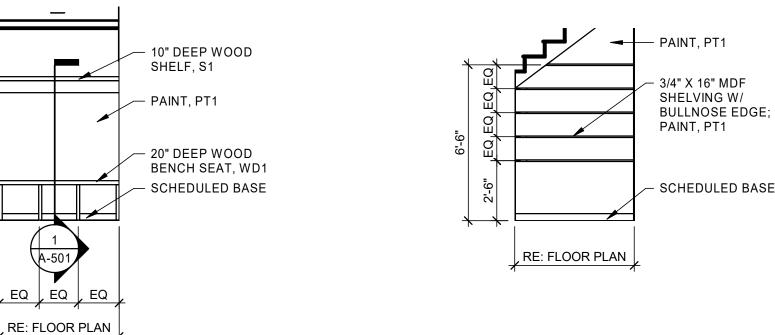












UNIT A1 - FIRST FLOOR FINISH PLAN

UNIT A1 - MUD ROM

UNIT A1 - PANTRY

6'-0"

UNIT A1 - ISLAND 2

HITTIER

VN DEVELOPME ISSUES / REVISIONS 06/12/2020 PERMIT SET - PHASE 1

810 SOUTH CINCINNATI

6.12.2020

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ENLARGED UNIT A1 FIRST FLOOR PLANS

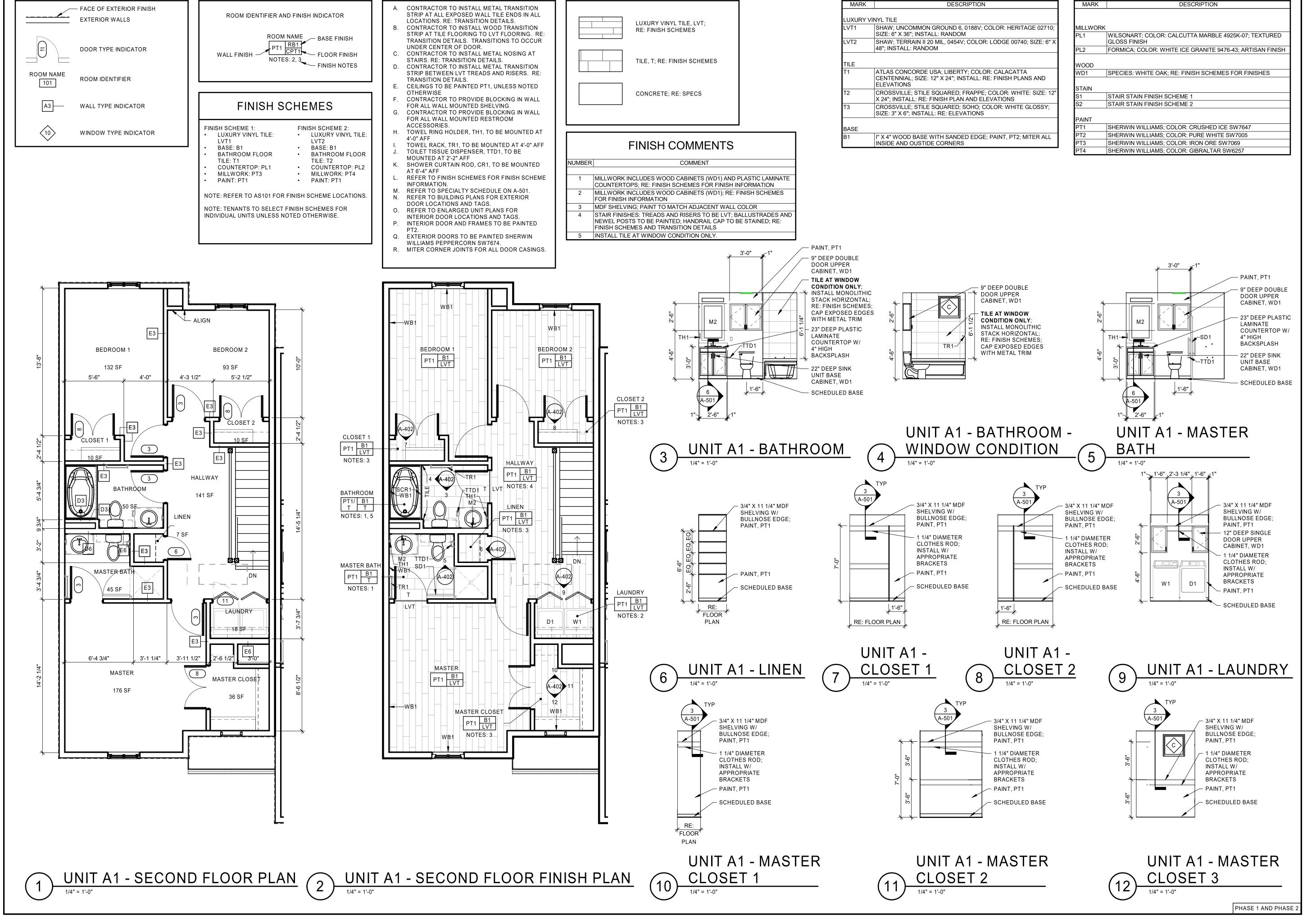
SHEET NUMBER A-401

PHASE 1 AND PHASE 2

DOOR/DRAWER BASE CABINET,

PANEL, TYPICAL,

UNIT A1 - ISLAND 1



FLOOR PATTERN LEGEND

FLOOR PLAN LEGEND

ROOM FINISH LEGEND

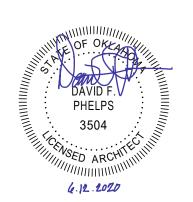
GENERAL FINISH NOTES

FINISH MATERIAL LEGEND

CYNTERGY

FINISH MATERIAL LEGEND

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THE WHITTIER - PHASE
BOOMTOWN DEVELOPMENT COMPANY
68 NORTH LEWIS
TULSA, OK 74110

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ENLARGED UNIT A1 SECOND FLOOR PLANS

SHEET NUMBER



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WHITTIER - PHASE 1
TOWN DEVELOPMENT COMPANY

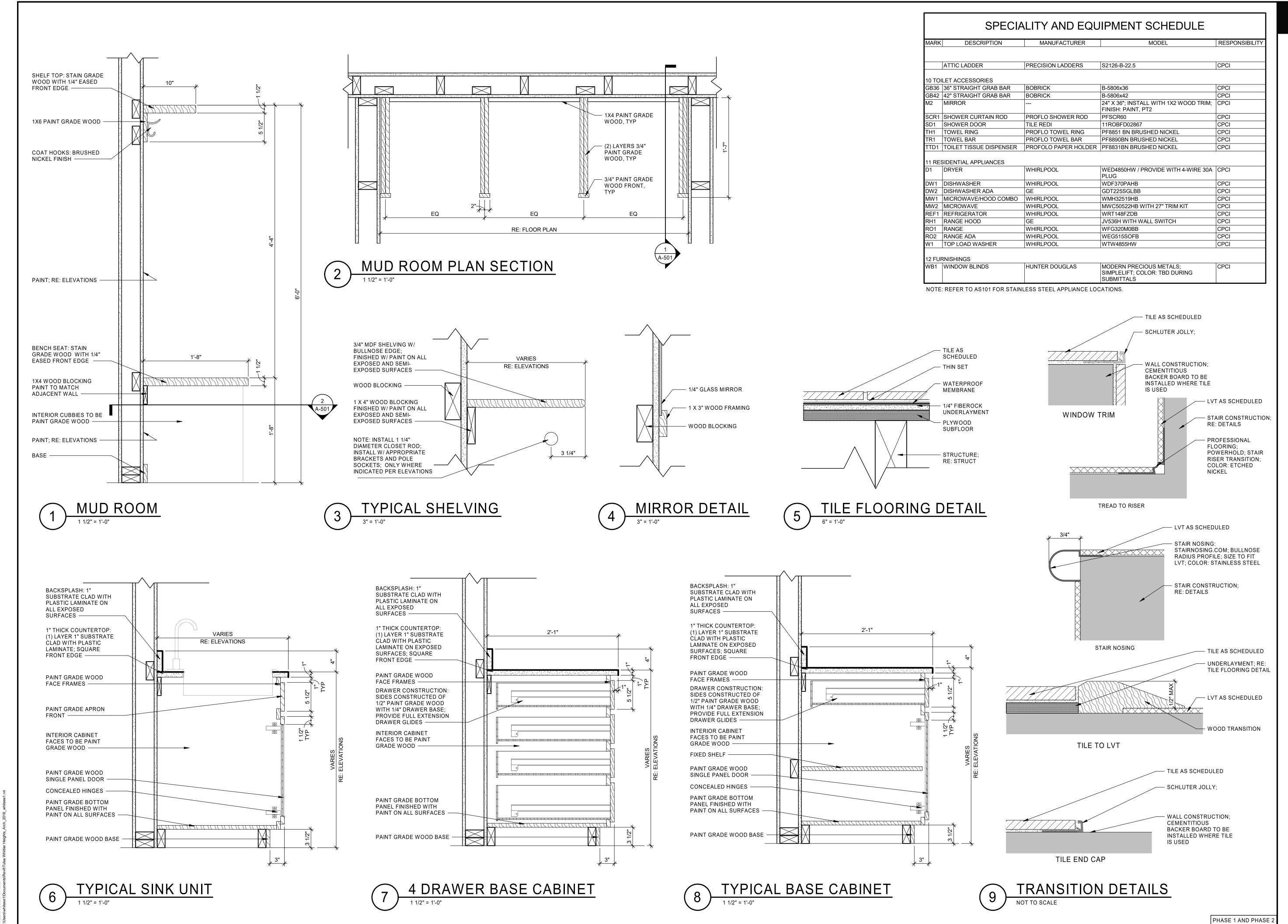
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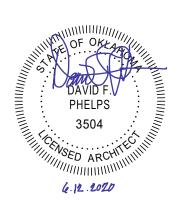
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STAIR PLAN AND SECTIONS



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68 NORTH LEWIS
TULSA, OK 74110

ISSUES / REVISIONS

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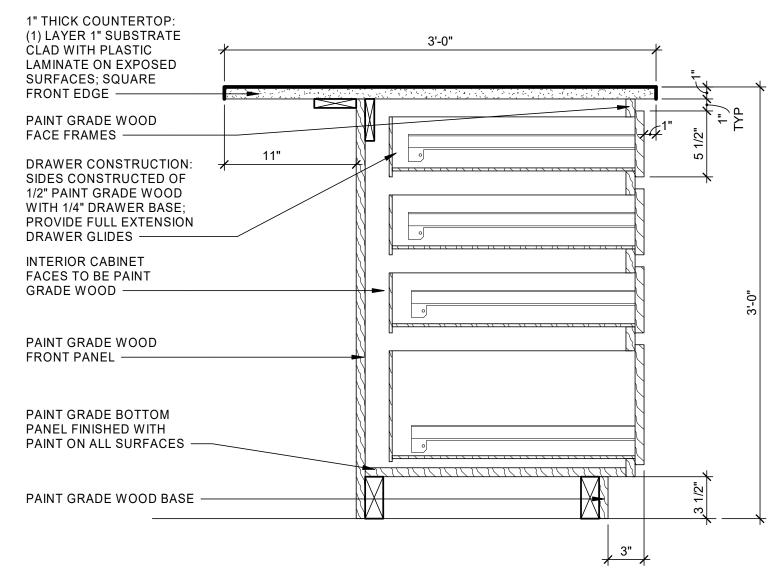
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DRAWN BY: EEW

INTERIOR DETAILS AND SCHEDULES

SHEET NUMBER



1" THICK COUNTERTOP: (1) LAYER 1" SUBSTRATE 3'-0" CLAD WITH PLASTIC LAMINATE ON EXPOSED SURFACES; SQUARE FRONT EDGE — PAINT GRADE WOOD FACE FRAMES — 1'-6 1/4" RECEPTACLE; RE: ELECTRICAL DRAWER CONSTRUCTION: SIDES CONSTRUCTED OF 1/2" PAINT GRADE WOOD WITH 1/4" DRAWER BASE; PROVIDE FULL EXTENSION DRAWER GLIDES -INTERIOR CABINET FACES TO BE PAINT GRADE WOOD — PAINT GRADE WOOD FRONT PANEL — PAINT GRADE BOTTOM PANEL FINISHED WITH PAINT ON ALL SURFACES -PAINT GRADE WOOD BASE -

ISLAND 4 DRAWER BASE 2

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06/12/2020	PERMIT SET - PHASE 1

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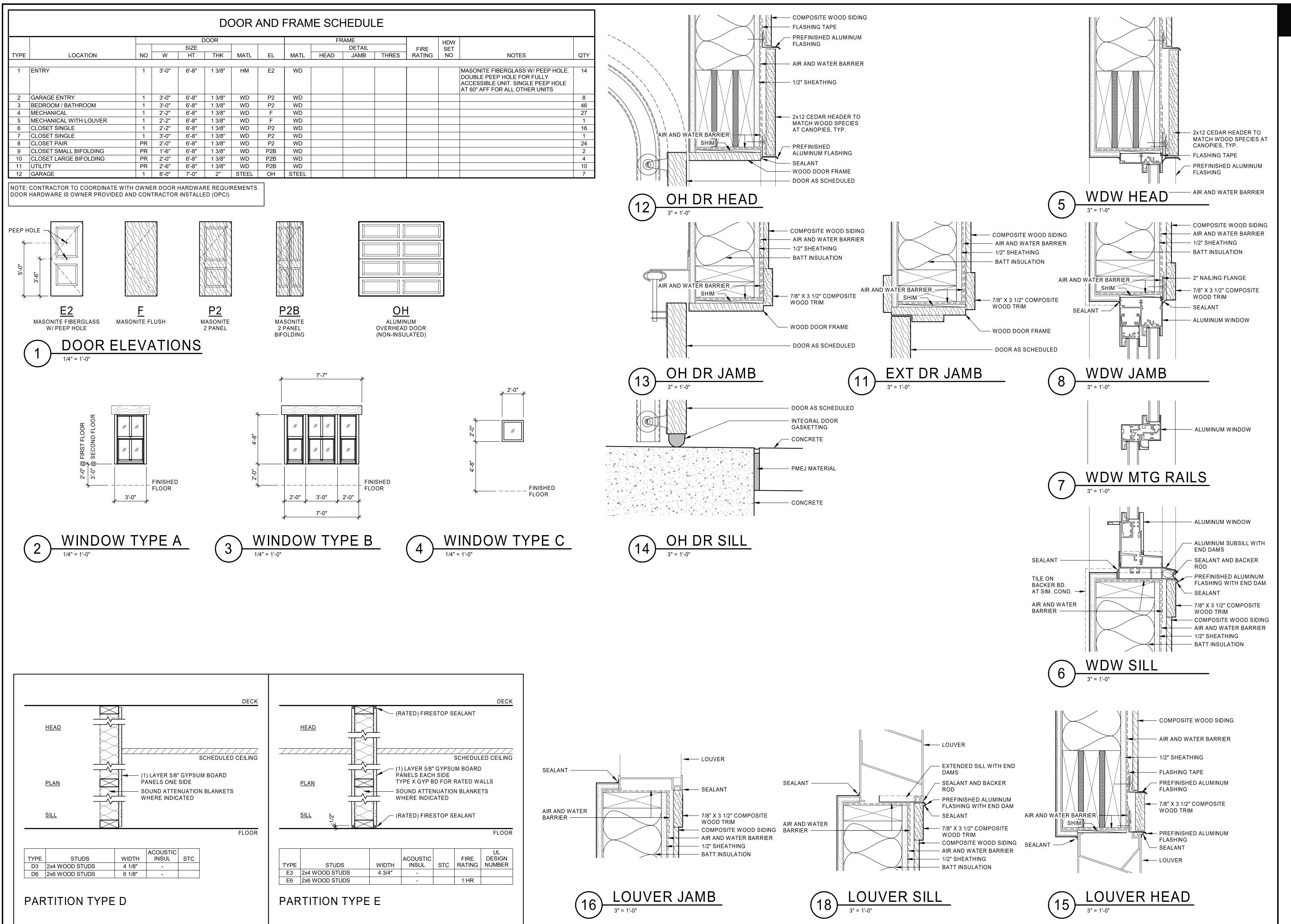
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SHEET NUMBER

A-502



ISLAND 4 DRAWER BASE 1



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THE WHITTIER - PHASE 1
BOOMTOWN DEVELOPMENT COMPANY
68 NORTH LEWIS
TULSA, OK 74110

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ISSUE DATE: 06/12/2020 PROJECT NO: P05093.0100

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SHEET NAME

DOOR AND FRAME SCHEDULE WINDOW TYPES, PARTITION TYPES

SHEET NUMBER

PHASE 1 AND PHASE 2

CONTACT INFORMATION

DOCUMENTS INCLUDE JURISDICTIONAL REQUIREMENTS PROVIDED BY THE FOLLOWING CONTACTS:

FIRE SPRINKLER REVIEWING AUTHORITY: CITY OF TULSA MR. RICK BRUDER 918-576-5584

APPLICABLE CODES

NFPA STANDARDS
NFPA 13D W/ TULSA AMENDMENTS
IRC W/ TULSA AMENDMENTS

EDITION 2013

2015

I. SMOKE AND HEAT DETECTORS SHALL BE INSTALLED IN ACCORDANCE WITH NFPA 13R.

FIRE ALARM NOTES

2. IN HEARING IMPAIRED UNIT (TYPE B-2) SHOWN ON FX101, CONTRACTOR SHALL PROVIDE SMOKE AND CARBON MONOXIDE DETECTION WITH STROBE. CONTRACTOR SHALL COORDINATE A FIRE ALARM ACTIVATED 120 V POWER OUTLET FOR USE/ACTIVATION OF TACTILE DEVICE SUCH AS BED SHAKER. REFER TO ELECTRICAL POWER SHEETS FOR LOCATIONS.

WATER SUPPLY INFORMATION

TEST STATIC AT SRC: 58.0 PSI TEST RESIDUAL AT SRC: 56.0 PSI AT 919 GPM

INFORMATION DERIVED FROM A WATER REPORT SUPPLIED BY CYNTERGY DURING A FLOW TEST VISIT ON 12/10/2018. THE TEST WAS CONDUCTED AT 1:45 PM.

THE WATER SUPPLY IS MODIFIED BY THE FOLLOWING:

- 5.0 PSI DUE TO LOW CITY PRESSURE
 STATIC AND RESIDUAL PRESSURE LOSS DUE TO
 AN ASSUMED DOUBLE CHECK BACKFLOW
 PREVENTER

 SPECIFICATIONS. SHOP DI
 INCLUDE ELEVATIONS, HA
 LENGTHS, DIMENSIONS, FA
 MATERIAL DATA SUBMITTA
 INFORMATION NECESSAR'
- 6.4 PSI DUE TO UNDERGROUND PIPE FRICTION
 LOSS FROM TEST TO FINISH FLOOR STUB-UP
 FLANGE

ADDITIONAL SAFETY FACTORS ARE NOT INCLUDED.

*AN ADDITIONAL 5-PSI SAFETY FACTOR IS NOT INCLUDED IN THE ABOVE NUMBERS, BUT WILL BE INCLUDED IN THE FIRE SPRINKLER HYDRAULIC CALCULATIONS.

PIPE DIMENSION TABLE

PRODUCT	NOMINAL PIPE SIZE	INSIDE DIAMETER					
SCHEDULE 40	1"	1.049					
CPVC	1"	1.101					
SCHEDULE 40	1 <u>1</u> "	1.380					
CPVC	1 1 "	1.394					
SCHEDULE 40	1 1 "	1.610					
CPVC	1 <u>1</u> "	1.598					
SCHEDULE 40	2"	2.067					
CPVC	2"	2.003					
SCHEDULE 10	2 <u>1</u> "	2.635					
CPVC	2 <u>1</u> "	2.423					
SCHEDULE 10	3"	3.260					
CPVC	3"	2.950					
SCHEDULE 10	4"	4.260					
SCHEDULE 10	6"	6.357					
PVC	6"	6.357					
SCHEDULE 10	8"	8.249					
PIPE SIZES SHOWN ARE FOR HYDRAULIC CALCULATIONS							

GENERAL NOTES

- THE DESIGN SHOWN ON THESE CONTRACT DOCUMENTS IS TO PROVIDE GUIDANCE FOR BIDDING AND TO OBTAIN APPROVAL FROM THE AUTHORITY HAVING JURISDICTION. SPRINKLER CONTRACTOR SHALL SUBMIT COMPLETE FIRE SPRINKLER SHOP DRAWINGS AS REQUIRED BY CONTRACT DOCUMENTS TO THE OWNERS DESIGNATED REVIEWER. BASE DESIGN UPON THESE DRAWINGS AND AS REQUIRED BY THE SPECIFICATIONS. SHOP DRAWINGS SHALL INCLUDE ELEVATIONS, HANGER LOCATIONS, PIPE LENGTHS, DIMENSIONS, FABRICATIONS METHODS MATERIAL DATA SUBMITTALS, AND ADDITIONAL INFORMATION NECESSARY TO CLARIFY THE INTENT OF INSTALLATION. CONTRACTOR SHALL PROVIDE PIPE SIZE, SPRINKLER SPACING, AND SYSTEM CONFIGURATION AS SHOWN. ALTERNATES MUST BE APPROVED IN WRITING VIA THE RFI PROCESS BY THE FIRE PROTECTION ENGINEER OF RECORD DOCUMENTS PRIOR TO BID.
- COORDINATE LOCATIONS OF FIRE PROTECTION COMPONENTS, INCLUDING SPRINKLERS, PIPING, HANGER ASSEMBLIES, ALARMS, DRAINS, TEST POINTS, ETC. WITH ARCHITECTURAL, STRUCTURAL, MECHANICAL, AND ELECTRICAL COMPONENTS. OBSTRUCTIONS TO SPRINKLER DISCHARGE MUST BE CONSIDERED DURING SHOP DRAWING PRODUCTION AND INSTALLATION; ADDITIONAL SPRINKLERS OR DIFFERENT PIPE ROUTING MAY BE REQUIRED AT NO ADDITIONAL COST TO OWNER. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
- 3. THE SPRINKLER CONTRACTOR MUST DETERMINE THE FULL EXTENT OF THE FIRE PROTECTION WORK AND EXISTING CONDITIONS, BECOME TOTALLY FAMILIAR WITH CONDITIONS IN THE PROPOSAL FOR THIS PROJECT. NO EXTRA COMPENSATION WILL BE PAID FOR LACK OF SUCH DETERMINATION, FAMILIARIZATION, AND/OR ALLOWANCE.
- SUBMIT A REQUEST FOR INFORMATION FOR ANY QUESTIONS REGARDING THE FIRE PROTECTION DOCUMENTS TO THE ARCHITECT AND ENGINEER OF RECORD.
- 5. PENETRATIONS OF "RATED ASSEMBLIES" SHALL BE FIRE STOPPED WITH AN APPROVED MATERIAL PER METHODS REQUIRED ALLOWED BY THE FIRE PROTECTION ENGINEER OF RECORD AND THE AUTHORITY HAVING JURISDICTION.
- 6. THE FIRE PROTECTION ENGINEER OF RECORD SHALL NOT BE RESPONSIBLE FOR THE CONTRACTOR'S FAILURE TO CARRY OUT THE CONSTRUCTION WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS, NOR SHALL THEY BE REQUIRED TO SUPERVISE THE CONDUCT OF THE WORK, THE CONSTRUCTION PROCEDURES FOLLOWED BY THE CONTRACTOR, SUBCONTRACTORS, THEIR RESPECTIVE EMPLOYEES OR ANY OTHER PERSON AT THE JOB SITE OTHER THAN THAT OF THE ENGINEERING FIRM'S EMPLOYEES.
- 7. THE SPRINKLER CONTRACTOR MUST REVIEW ALL CONSTRUCTION DOCUMENTS PRIOR TO BID. SHOULD MODIFICATIONS TO THESE PLANS BECOME NECESSARY TO PROPERLY COORDINATE THE SYSTEM WITH ALL OTHER TRADES, IT WILL BE THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN APPROVAL OF THE CHANGES FROM BOTH THE AUTHORITY HAVING JURISDICTION AND THE FIRE PROTECTION ENGINEER OF RECORD IN ADDITION TO OBTAINING THE NECESSARY APPROVALS, THE SPRINKLER CONTRACTOR MUST MAKE NOTE OF ANY FIELD OR COORDINATION CHANGES ON THE INSTALLATION DRAWINGS, AND THEN MUST PROVIDE A SET OF "RED-LINED" AS-BUILT DRAWINGS TO THE FIRE PROTECTION ENGINEER OF RECORD ONCE COMPLETE.
- DROP DOWN LOCATIONS AT EXTERIOR WALLS WITH THE GENERAL CONTRACTOR PRIOR TO INSTALLATION.
- 10. ALL PIPING MUST BE COORDINATED AROUND FRAMING MEMBERS AND PROPERLY INSTALLED ABOVE THE BOTTOM CHORD OF THE BAR JOIST.

GENERAL NOTES CONT.

- 11. THE SPRINKLER CONTRACTOR SHALL ROUTE PIPING AROUND ALL OBSTRUCTIONS AND PROVIDE SPRINKLER PROTECTION UNDER OBSTRUCTIONS, AS DETAILED IN THE AHJ APPROVED EDITION OF NFPA 13R AS PART OF THE FIELD COORDINATION AT NO ADDITIONAL COST TO OWNER. REFER TO ALL FIRE PROTECTION DETAILS AND CONSTRUCTION DOCUMENTS FOR ALL INFORMATION.
- 12. ALL SPRINKLER DEFLECTOR DISTANCE REQUIREMENTS SHALL BE IN ACCORDANCE AS DETAILED IN THE AHJ APPROVED EDITION OF NFPA 13R.
- 13. ALL PIPING PASSING THROUGH WALLS SHALL BE INSTALLED WITH ONE INCH CLEARANCE ON ALL SIDES. (CORE DIAMETER EQUAL TO PIPE +2"). ALL CORES SHALL BE COORDINATED WITH STRUCTURAL REINFORCING. THE SPRINKLER CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL CORING WITH PROPER CLEARANCE AT ALL WALLS. GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING A TWO INCH CLEARANCE AROUND ALL PIPING PASSING THROUGH CONCRETE SLABS. THE SPRINKLER CONTRACTOR SHALL FILL ALL CLEARANCES WITH APPROVED MASTIC.
- 14. PROVIDE FLUSHING CONNECTIONS IN ACCORDANCE WITH THE STANDARDS OUTLINED IN NFPA 13R.
- 15. PROVIDE ALL NECESSARY OFFSETS, RISE OR DROPS IN PIPING AND AUXILIARY DRAINS AS REQUIRED BY BUILDING CONDITIONS.
- 16. EXAMINE THE JOB CONDITIONS AND VERIFY ALL MEASUREMENTS, DISTANCES, ELEVATIONS, CLEARANCES, ETC.
- 17. ARCHITECTURAL AND ELECTRICAL BACKGROUND INFORMATION IS SHOWN FOR COORDINATION PURPOSES ONLY. REFER TO THE CONTRACT DOCUMENTS FOR LOCATIONS, SIZES AND QUANTITIES OF OTHER TRADE WORK.
- 18. ALL SPRINKLER SPACING SHALL ADHERE TO THE CONTRACT DOCUMENTS AS WELL AS THE ADOPTED EDITION OF NFPA 13R.
- 19. INTERFACE SPRINKLER SYSTEM WITH FIRE PROTECTION SUPERVISORY SYSTEM.
- 20. ALL MATERIALS SHALL BE UL LISTED OR FM APPROVED. SPRINKLER PIPE SHALL BE MANUFACTURED TO STANDARDS RECOGNIZED BY NFPA 13R., THREADED SCH 40 PIPE SHALL HAVE A CORROSION RESISTANCE RATING OF 1.0 OR GREATER. CRIMP-TYPE COUPLINGS SHALL NOT BE USED.
- 21. ALL SPRINKLER SYSTEMS SHALL BE HYDROSTATICALLY TESTED PER NFPA 13R AFTER COMPLETION OF WORK.
- 22. DO NOT HANG OR SUPPORT ANY LOADS OR MAKE ANY ATTACHMENTS TO THE METAL ROOF DECK OR JOIST BRIDGING.
- 23. PROVIDE RETAINING STRAPS ON HANGERS WHERE REQUIRED.
- 24. HANG ALL NEW SPRINKLER BRANCH LINE PIPING IN ACCORDANCE WITH THE ADOPTED EDITION OF NFPA 13R.
- 25. ALL SPRINKLER PIPING, FITTINGS, AND HANGER ASSEMBLIES THAT ARE INSTALLED IN VIEW OF THE PUBLIC SHALL BE REQUIRED TO BE PAINTED, EITHER BY THE SPRINKLER CONTRACTOR OR THE GENERAL CONTRACTOR.
- 26. SPRINKLER PIPING CAN BE CPVC OR STEEL.
- 27. A BACKFLOW PREVENTER IS REQUIRED INSIDE OF THE BUILDING ON THE SHARED WATER LINE AND WILL BE SUPPLIED BY THE PLUMBING CONTRACTOR.
- 28. A KNOX BOX IS REQUIRED ON EACH BUILDING.
- 29. ALL SPRINKLER VALVES NEED TO BE CHAINED AND LOCKED AS WELL AS ELECTRONICALLY MONITORED.
- 30. GARAGE AND NON HEATED AREAS SHALL BE PROTECTED USING HORIZONTAL SIDEWALL SPRINKLERS.

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CA # 3537
EXPIRES 6/30/2022

JAMES ROY SPRADLING, PE
ENGINEER OF RECORD

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06/12/2020 PERMIT SET - PHASE 1

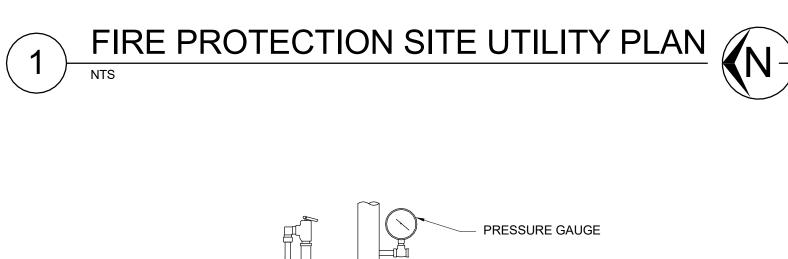
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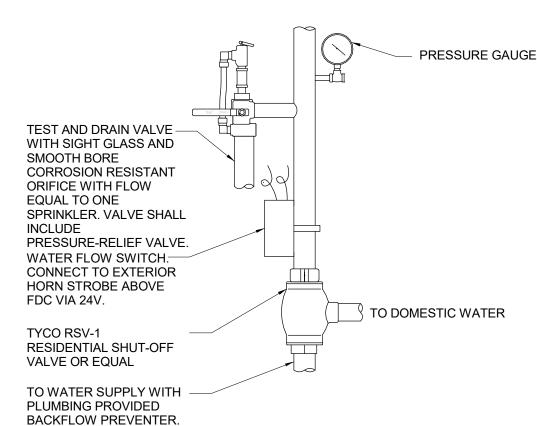
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FIRE SUPPRESSION NOTES AND DETAILS

FX001





LEAD IN IS SHARED WITH

DOMESTIC WATER.

EXTERIOR CMU BLOCK WALL TYCO RUBBER SEAL BOOT MODEL DSB-2 PROPERLY GROUT AND SEAL WALL PENETRATION BEFORE INSTALLING SPRINKLER ESCUTCHEON. SPRINKLER ESCUTCHEON SUPPLY FROM WET-PIPE SPRINKLER SYSTEM TEE WITH PLUG HORIZONTAL DRY SIDEWALL SPRINKLER. EQUIP WITH APPROVED HEAD GUARD.

FIRE SPRINKLER RISER

INSTALL PER MANUFACTURERS CUT SHEETS AND NFPA 13 REQUIREMENTS.

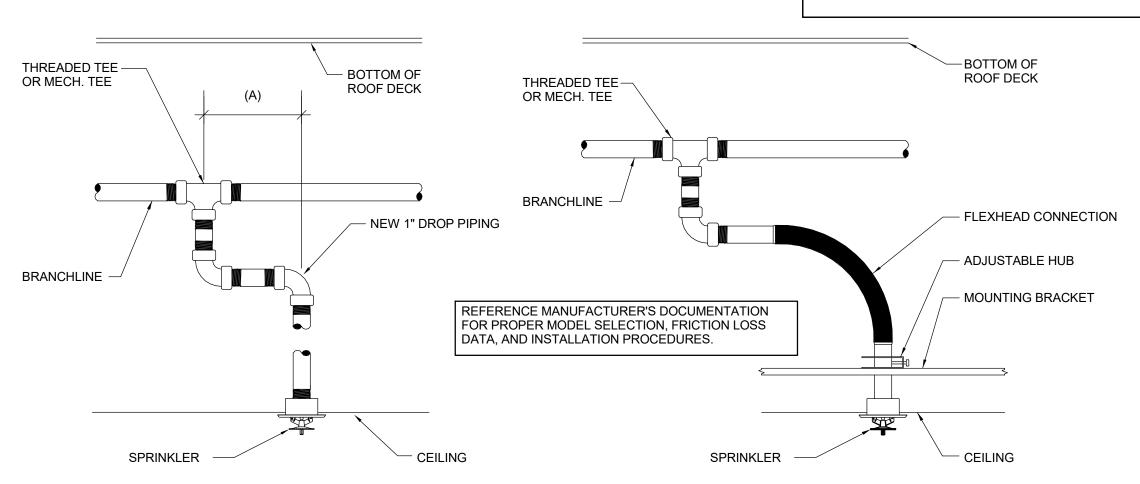
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DRY HORIZONTAL SIDEWALL SPRINKLER

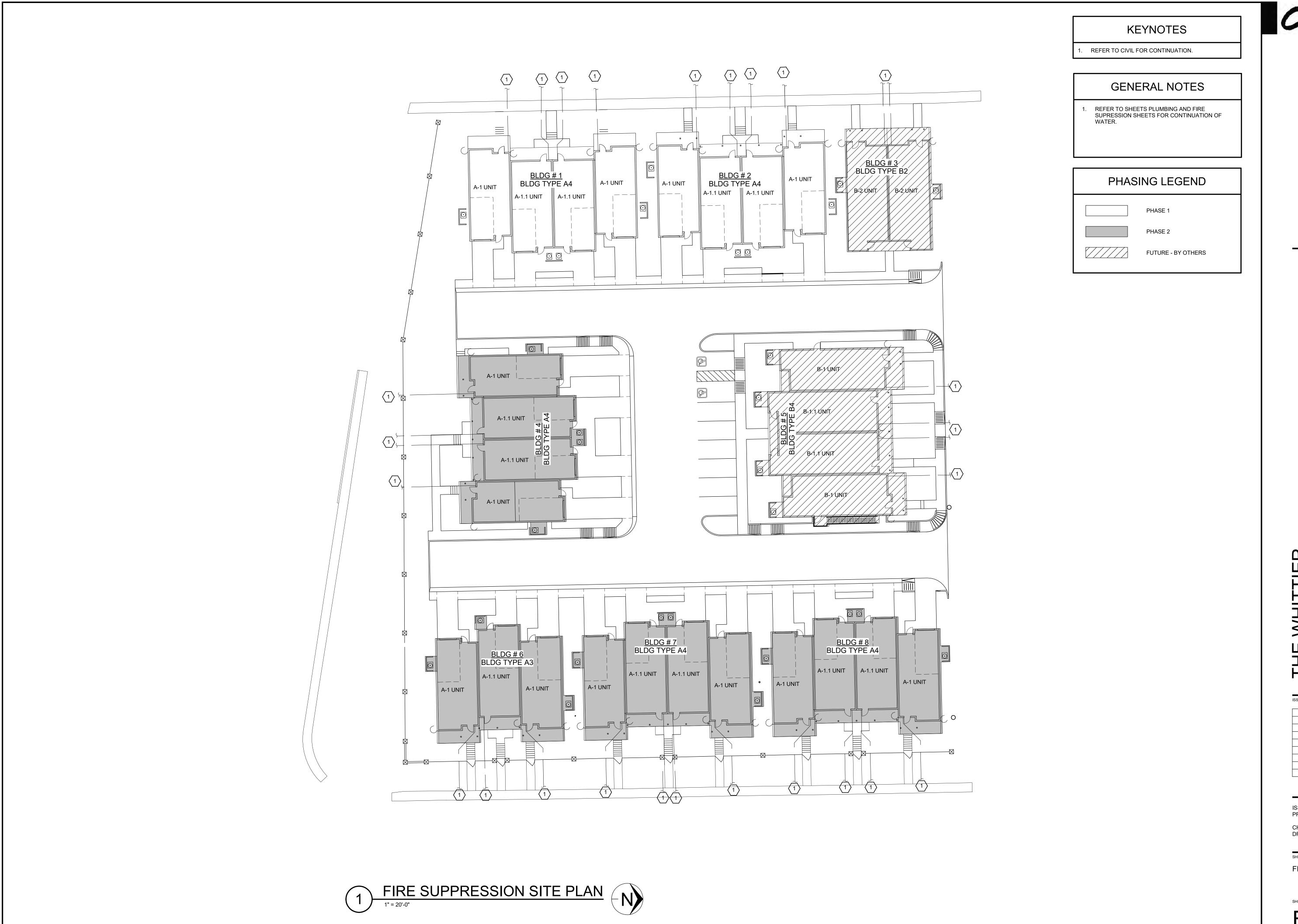


PURPOSES.

PRESSURE LESS THAN 100 PSI @ SPRINKLER, DIMENSION (A) SHALL NOT EXCEED 24 INCHES WITHOUT BEING SUPPORTED BY HANGER.



4 LOW CEILING SPRINKLER





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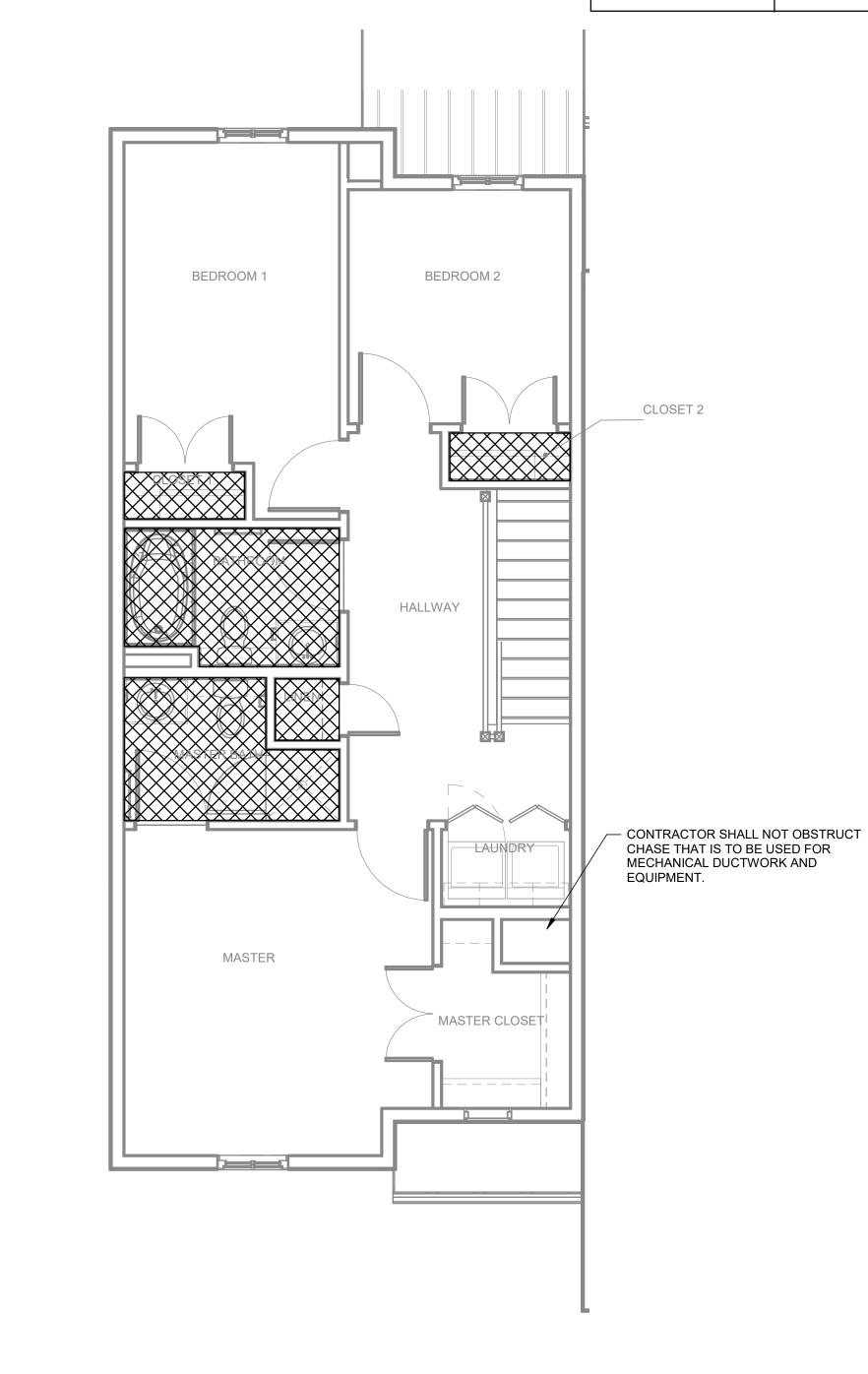
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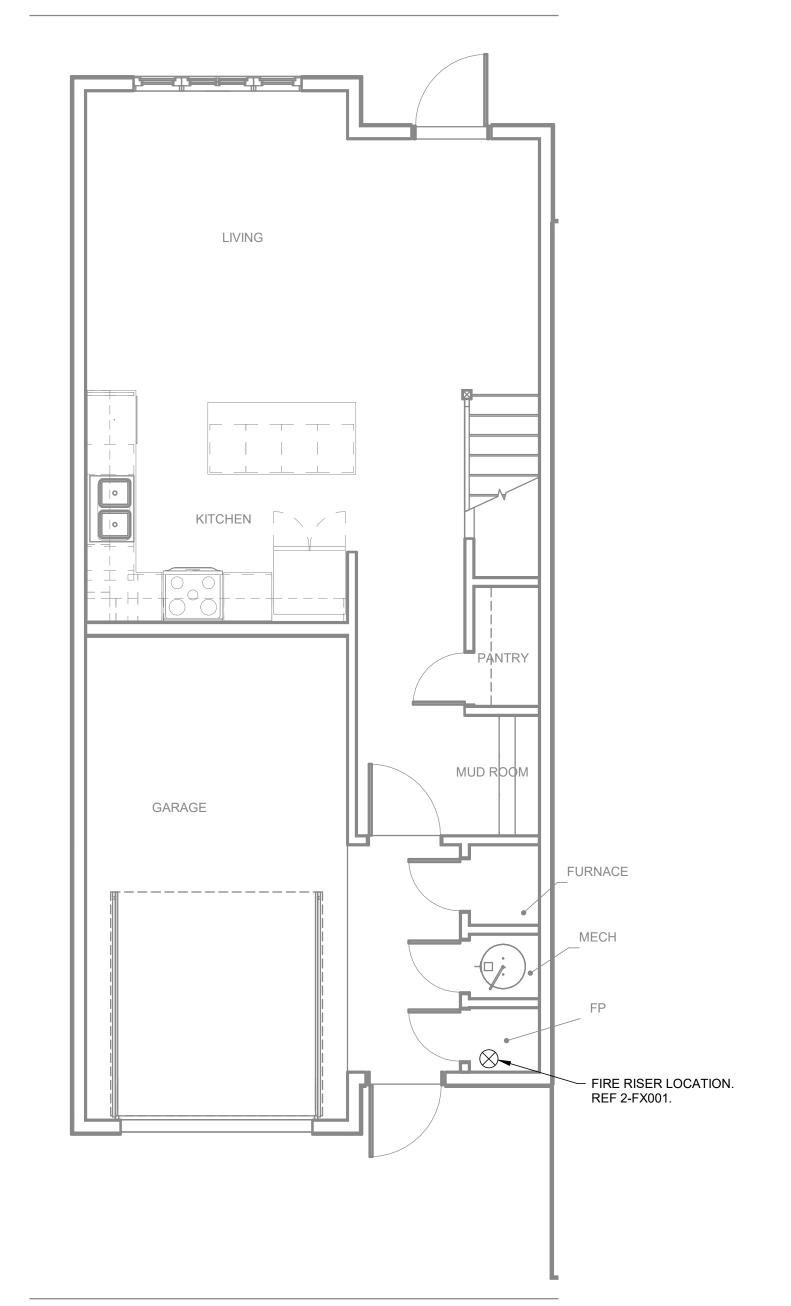
FIRE SUPPRESSION SITE PLAN

SHEET NUMBER

FX101

PROTECTION CRITERIA BASED ON 2013 NFPA 13R NO SPRINKLER PROTECTION REQUIRED CLASSIFICATION RESIDENTIAL MARK BEDROOMS/ HALLWAYS/ OCCUPANCY AREA SERVED RESTROOMS/ CLOSETS/ GARAGE 0.05 GPM/SQUARE FOOT PER COMPARTMENT OR 4 MOST SPRINKLER DENSITY DEMANDING SPRINKLERS SPRINKLER TEMPERATURE 155° SPRINKLER RESPONSE QUICK MAXIMUM SPRINKLER 400 SQ. FT. SPACING (SQ. FT.) NO SPRINKLER PROTECTION REQUIRED; NFPA 13R (2013) SECTION 6; IRC (2015) Section 2904.1.1 **DESIGN BASIS** NFPA 13R SECTION 7.1





1) ENLARGED UNIT A-1 FIRST FLOOR PLAN

2 ENLARGED UNIT A-1 SECOND FLOOR PLAN

1/4" = 1'-0"

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SHEET NAME

ENLARGED UNIT A-1 FIRE SUPPRESSION PLANS

SHEET NUMBER

FX401

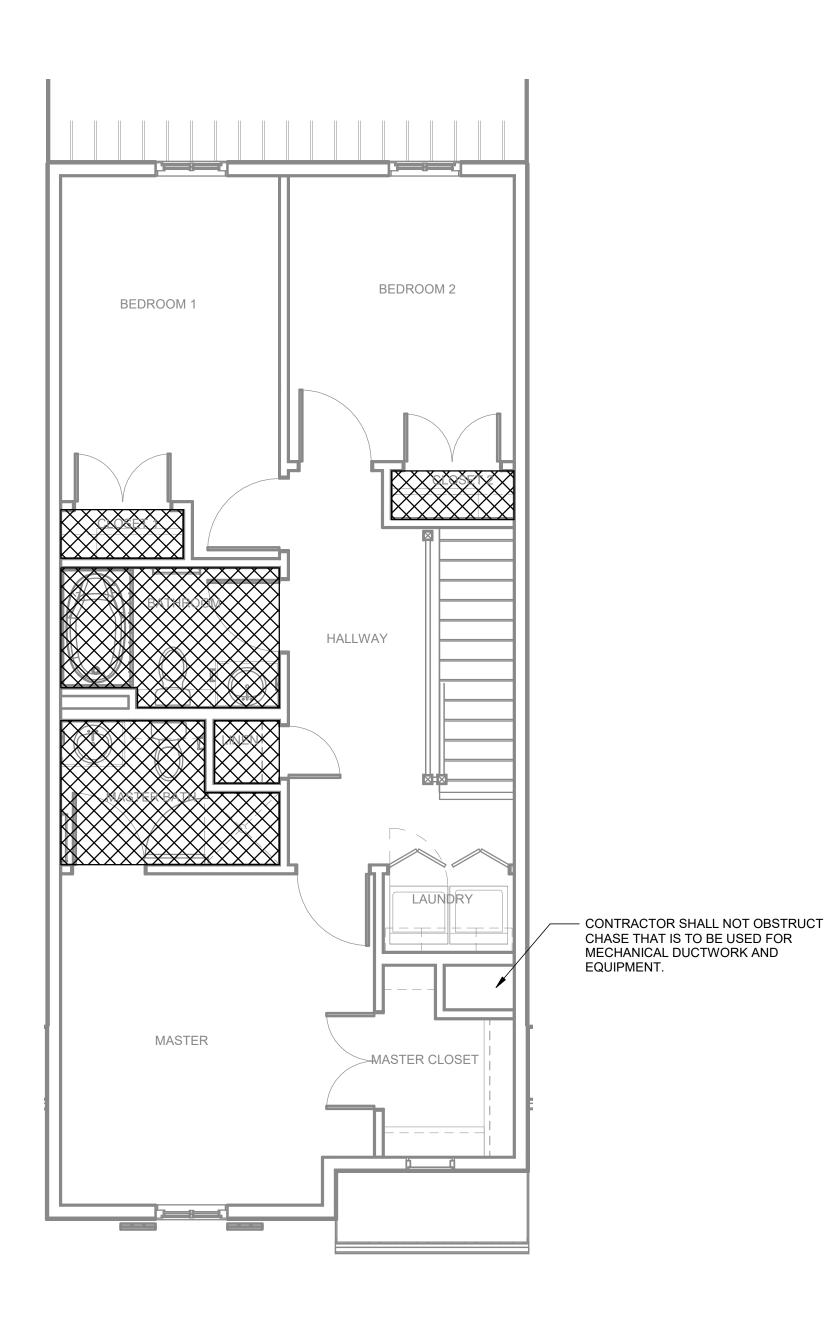


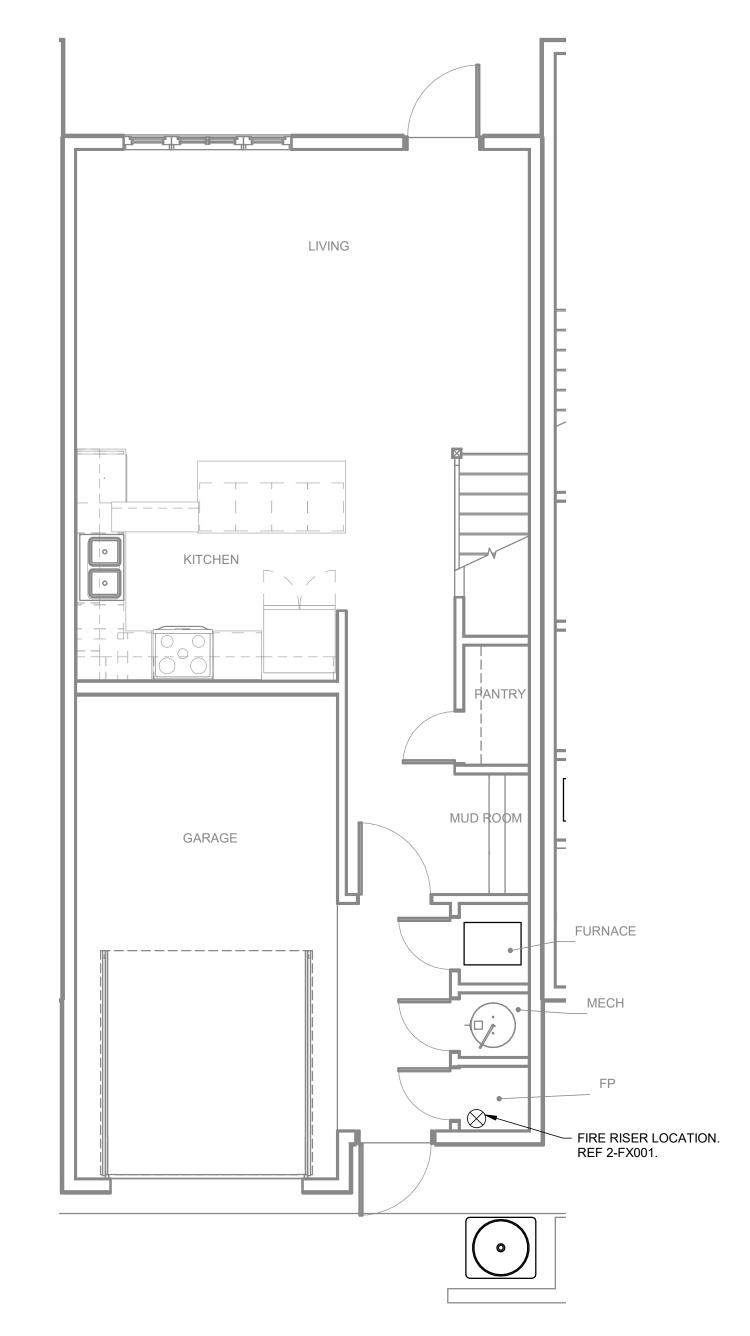
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JAMES ROY SPRADLING, PE ENGINEER OF RECORD





ENLARGED UNIT A-1.1 FIRST FLOOR PLAN

1/4" = 1'-0"

ENLARGED UNIT A-1.1 SECOND FLOOR PLAN

1/4" = 1'-0"

ISSUES / REVISIONS

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ENLARGED UNIT A-1.1 FIRE SUPPRESSION PLANS

SHEET NUMBER

FX402

GENERAL NOTES

- THE CONTRACTOR IS RESPONSIBLE TO COMPLY WITH CURRENT APPLICABLE LOCAL, STATE, FEDERAL, FIRE, AND HEALTH CODES AND ORDINANCES AND IS RESPONSIBLE TO COMPLY WITH ALL REGULATIONS OF REGULATORY AGENCIES HAVING JURISDICTION. THE CONTRACTOR SHALL ALSO CONFORM TO THE REQUIREMENTS OF THE OWNER'S INSURANCE CARRIER. NOTIFY THE ARCHITECT AND ENGINEER OF ANY CONFLICTS PRIOR TO INSTALLATION. CODES, ORDINANCES AND REGULATIONS SHALL HAVE PRECEDENCE OVER SPECIFICATIONS AND DRAWINGS WHERE THERE IS A CONFLICT. OBTAIN CURRENT COPIES OF ALL ADOPTED CODES AND ORDINANCES PRIOR TO BID AND INCLUDE ALL COSTS TO COMPLY WITH CODES AND ORDINANCES IN BID.
- 2. PAY ALL LAWFUL FEES, PERMITS OR LICENSES REQUIRED TO ACCOMPLISH WORK. OBTAIN AND PAY FOR ALL NECESSARY CERTIFICATES OF APPROVAL.
- 3. THE CONTRACTOR IS RESPONSIBLE TO PROVIDE ALL LABOR, MATERIALS, EQUIPMENT, SERVICE AND ANYTHING REASONABLY INCIDENTAL TO COMPLETE ALL WORK INDICATED ON THE DRAWINGS AND AS SPECIFIED IN ACCORDANCE WITH THE INTENT OF THE CONSTRUCTION DOCUMENTS.
- 4. THE CONTRACTOR IS RESPONSIBLE TO VISIT AND EXAMINE THE JOB SITE AND BECOME FAMILIAR WITH ALL EXISTING CONDITIONS PERTINENT TO THE WORK TO BE PERFORMED.
- INCORPORATE ALL CODE AND ORDINANCE REQUIREMENTS INTO THE BID AND INSTALLATION OF WORK. NO ADDITIONAL FUNDS WILL BE ALLOCATED FOR WORK REQUIRED TO CONFORM TO REGULATIONS AND REQUIREMENT AND/OR TO OBTAIN APPROVAL OF WORK.
- 6. THE DRAWINGS ARE DIAGRAMMATIC AND ARE ONLY INTENDED TO DEFINE THE BASIC FUNCTIONS REQUIRED. THE DRAWINGS SHALL BE FOLLOWED AS CLOSELY AS ACTUAL CONSTRUCTION CONDITIONS AND COORDINATION WITH OTHER TRADES WILL ALLOW. MINOR DEVIATIONS FROM THE DESIGN LAYOUT ARE ANTICIPATED AND ARE A PART OF THE WORK INCLUDED; HOWEVER, CHANGES THAT ALTER THE CHARACTER OF THE WORK ARE NOT PERMITTED. APPROVAL OF ARCHITECT AND ENGINEER SHALL BE OBTAINED BEFORE DEVIATIONS FROM THESE PLANS ARE MADE.
- PLUMBING AND MECHANICAL SYSTEMS ARE NOT DIMENSIONED. DO NOT SCALE FROM DRAWING(S). THE CONTRACTOR SHALL COORDINATE WITH OTHER TRADES AND ENSURE THERE IS AVAILABLE SPACE FOR INSTALLATION BEFORE ORDERING EQUIPMENT AND FABRICATING PIPING AND/OR DUCTWORK.
- 8. THE CONTRACTOR SHALL STUDY THE ARCHITECTURAL, STRUCTURAL, MECHANICAL, AND ELECTRICAL PLANS TO ENSURE ALL MECHANICAL SYSTEMS WILL FIT WITH SUFFICIENT CLEARANCES FOR INSTALLATION, SERVICING AND MAINTENANCE. NOTIFY THE ARCHITECT AND ENGINEER OF ANY CONFLICTS PRIOR TO INSTALLATION.
- 9. THE CONTRACTOR SHALL COMPLY WITH SPECIFICATIONS AND INDUSTRY STANDARDS FOR ALL INSTALLATIONS.
- 10. PROVIDE ALL DOMESTIC POTABLE WATER EQUIPMENT AS "LEAD FREE" PER THE "REDUCTION OF LEAD IN DRINKING WATER ACT". NOTIFY ENGINEER OF ANY CONFLICTS PRIOR TO SUBMITTAL.
- 11. REFER TO MECHANICAL DRAWINGS FOR ALL MECHANICAL EQUIPMENT LOCATIONS. REFER TO PLUMBING DRAWINGS FOR ALL PLUMBING EQUIPMENT.
- 12. SEAL ALL PENETRATIONS WATER TIGHT. SEAL AROUND ALL WALL PENETRATIONS, PROVIDE ESCUTCHEONS ON ALL PIPING ON EXTERIOR AND EXPOSED LOCATIONS. CAULK WITH REQUIRED THICKNESS 3M BRAND FIRE BARRIER CAULK CP-25 (OR OTHER APPROVED METHOD) TO MAINTAIN FIRE RESISTANCE RATING OF FIRE RATED ASSEMBLIES.
- 13. ALL CUTTING AND PATCHING OF STRUCTURE SHALL BE APPROVED BY THE STRUCTURAL ENGINEER PRIOR TO PERFORMING WORK.
- 14. THE CONTRACTOR SHALL COORDINATE ALL ROUTING AND MOUNTING OF EQUIPMENT, DUCTWORK, PIPING, ETC (ALL WORK) WITH ALL OTHER TRADES.
- 15. PROVIDE ACCESS PANELS WHERE INDICATED ON DRAWINGS AND AS REQUIRED TO PROPERLY OPERATE, ADJUST AND MAINTAIN ALL EQUIPMENT. VALVES, DAMPERS AND OTHER ACCESSORIES, VERIFY EXACT LOCATION WITH ARCHITECT PRIOR TO INSTALLATION. COORDINATE INSTALLATION WITH ALL OTHER TRADES. ACCESS PANEL TO BE SPECIFIED BY ARCHITECT
- 16. ROUTE DUCTWORK AND PIPING AS HIGH AS POSSIBLE ABOVE FINISHED CEILING TO AVOID CONFLICT WITH LIGHTS.
- 17. INSTALL ALL PIPING PARALLEL AND PERPENDICULAR TO BUILDING WALLS AND PARTITIONS UNLESS DISTINCTLY SHOWN OR NOTED OTHERWISE. ROUTE PIPING LOCATED NEAR EACH OTHER PARALLEL IN ALL PLANES AND WITH SUFFICIENT CLEARANCE.
- 18. ALL PIPING SHALL BE INSTALLED SO THAT IT MAY EXPAND AND CONTRACT FREELY WITHOUT DAMAGES TO EQUIPMENT, OTHER WORK, OR INJURY TO PIPING SYSTEM, ALL NECESSARY SWING JOINTS, EXPANSION JOINTS, OR OFFSETS TO PROTECT PIPING, ETC. SHALL BE INSTALLED WHETHER INDICATED OR NOT.
- 19. PROPERLY SUPPORT ALL PIPING. PROVIDE ALL REQUIRED ANCHORS, GUIDES AND EXPANSION DEVICES.
- 20. PAINT ALL EXTERIOR AND EXPOSED PIPING. CONFIRM FINAL COLOR WITH ARCHITECT.

- 21. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT ALL MATERIAL, EQUIPMENT, APPARATUS AND WORK FROM DAMAGE. FAILURE TO DO SO TO THE SATISFACTION OF THE OWNER OR OWNER'S REPRESENTATIVE WILL BE SUFFICIENT CAUSE FOR THE REJECTION OF THE MATERIAL, EQUIPMENT, APPARATUS AND WORK IN
- 22. THE CONTRACTOR SHALL GUARANTEE ALL EQUIPMENT, MATERIALS AND WORKMANSHIP FOR A PERIOD OF 1 YEAR FOLLOWING THE DATE OF ACCEPTANCE. THE CONTRACTOR'S GUARANTEE INCLUDES EQUIPMENT CAPACITY, PERFORMANCE RATINGS AND NOISE RATINGS. ANY DEFICIENCIES SHALL BE PROMPTLY CORRECTED. ROUTINE MAINTENANCE SHALL NOT BE INCLUDED.
- 23. THE CONTRACTOR SHALL CLEAN ALL FIXTURES, PIPES, EQUIPMENT AND EXPOSED WORK AFTER COMPLETION OF FINAL TESTING AND BEFORE
- 24. ALL PLATED AND OTHER FINISHED PRODUCTS SHALL BE THOROUGHLY CLEANED AND POLISHED.
- 25. THE MANUFACTURER MODEL OR CATALOG NUMBERS INDICATED IN THE CONSTRUCTION DOCUMENTS ESTABLISH A STANDARD FOR THE GENERAL DESIGN, PERFORMANCE, AND QUALITY OF THE PRODUCT REQUIRED.
- 26. ALTERNATE MANUFACTURERS LISTED IN THE SCHEDULE OR SPECIFICATIONS ARE APPROVED TO BID: HOWEVER, THE SUBMITTED PRODUCT MUST MEET THE GENERAL DESIGN, PERFORMANCE, DIMENSIONS, WEIGHT, AND QUALITY OF THE SCHEDULED PRODUCT. EACH MANUFACTURER WILL HAVE DIFFERENCES IN INSTALLATION REQUIREMENTS. IF THE CONTRACTOR ELECTS TO GO WITH A NON-BASIS OF DESIGN MANUFACTURER, ENGINEERING TIME MAY BE REQUIRED TO ADJUST THE DESIGN TO THOSE DIFFERENCES. THE CONTRACTOR SHALL BE RESPONSIBLE TO INCLUDE COST FOR ENGINEERING TIME IN THEIR BID, AS REQUIRED, IF THE BASIS OF DESIGN IS NOT BID. THE CONTRACTOR WILL BE RESPONSIBLE TO IDENTIFY THE DIFFERENCES IN THE INSTALLATION REQUIREMENTS BETWEEN THE BASIS OF DESIGN AND THE SUBMITTED MANUFACTURER DURING THE SUBMITTAL PHASE.
- 27. WHERE "OR APPROVED EQUAL" IS INDICATED, OTHER PRODUCTS SIMILAR IN DESIGN AND OF EQUAL QUALITY AND PERFORMANCE, AND COMPLYING WITH THE PLANS AND SPECIFICATIONS MAY BE APPROVED IF FOUND ACCEPTABLE BY THE ARCHITECT/ENGINEER. THE CONTRACTOR MUST SUBMIT TO THE ARCHITECT/ENGINEER A LINE-BY-LINE COMPARISON BETWEEN SCHEDULED MANUFACTURER AND "OR APPROVED EQUAL" MANUFACTURER. REFER TO DIVISION 0 SPECIFICATIONS FOR PRE-APPROVAL TIME PERIOD.
- 28. ALL MATERIALS, EQUIPMENT, ETC., INSTALLED UNDER THIS CONTRACT SHALL CONFORM TO ALL RULES, CODES, ETC., AS RECOMMENDED OR ADAPTED BY THE NATIONAL ASSOCIATION GOVERNING THE MANUFACTURER, RATING AND TESTING OF SUCH MATERIALS, EQUIPMENT, ETC., ALL ELECTRICALLY OPERATED EQUIPMENT SHALL BE U.L. APPROVED FOR THE USE INTENDED.
- 29. ALL FIRED AND UNFIRED PRESSURE VESSELS SHALL CONFORM TO THE RULES OF THE A.S.M.E. AND NATIONAL BOARD CODES AND SHALL BE SO LABELED. FURNISH A.S.M.E. AND NATIONAL BOARD CERTIFICATES.
- 30. MOTORS SHALL CONFORM TO THE RULES OF THE N.E.M.A. FOR THE SERVICE INTENDED AND TO THEIR STANDARDIZED FORM SIZES.
- 31. SHOP DRAWINGS, CATALOG CUTSHEETS AND PERFORMANCE DATA PERTAINING TO ALL MATERIALS AND EQUIPMENT PROPOSED FOR USE SHALL BE SUBMITTED.
- 32. JOINTS BETWEEN DISSIMILAR METALS SHALL BE MADE WITH DIELECTRIC NIPPLES DOWNSTREAM OF A VALVE.
- 33. ALL MATERIALS EXPOSED IN A RETURN AIR PLENUM SHALL COMPLY WITH NFPA 90A FLAME SPREAD UNDER 25 AND SMOKE DEVELOPED AND FUEL CONTRIBUTED UNDER 50.
- 34. THE DISCHARGE OF SAFETY VALVES, BLOWOFF PIPES AND OTHER OUTLETS SHALL BE LOCATED AND SUPPORTED SO AS TO PREVENT INJURY
- 35. EQUIPMENT SHOWN ON THE PLANS HAVE A SPECIFIC WEIGHT AND LOCATION. SHOULD THE CONTRACTOR INSTALL EQUIPMENT WITH DIFFERENT WEIGHTS OR LOCATIONS AS SHOWN, CONTRACTOR SHALL PROVIDE THIS INFORMATION TO THE STRUCTURAL ENGINEER FOR APPROVAL, PRIOR TO PURCHASING, CLEARLY INDICATING THE DIFFERENCES IN SIZE, WEIGHT AND LOCATION. THE ARCHITECT/ENGINEER SHALL NOT BEAR THE COSTS OF SUCH REVIEWS OR REDESIGNS.
- 36. DO NOT ROUTE PIPING OVER ELECTRICAL OR COMMUNICATIONS EQUIPMENT. THIS INCLUDES HYDRONICS, STEAM, DOMESTIC WATER, SANITARY SEWER AND VENTS, CONDENSATE, ROOF DRAINS, ETC.
- 37. CONNECTION TO MARKED PROTECTION ZONES ON STEEL BRACES IS PROHIBITED. THIS INCLUDES (BUT NOT LIMITED TO): HOLES, WELDS, TACK WELDS, ERECTION AIDS, AIR-ARC GOUGING, THERMAL CUTTING, BOLTS, SCREWS, AND SHOT-PINS.

PLUMBING SYMBOLS LEGEND

SYMBOL	DESCRIPTION	SYMBOL	<u>DESCRIPTION</u>
	BACKFLOW PREVENTER, SEE SPECS	— DS —	DISTILLED WATER
I ———	BLIND FLANGE	— DI —	
l	CAP	— DCW —	
	CHECK VALVE	— DHW —	DOMESTIC HOT WATER
	CHECK VALVE, SILENT	— DHWR —	DOMESTIC HOT WATER RETURN
— 	CIRCUIT SETTER	— 110°F —	DOMESTIC HOT WATER (110°F)
	FLEXIBLE CONNECTOR	— 140°F —	DOMESTIC HOT WATER (140°F)
	GENERAL VALVE, SEE SPECS	— IW —	IRRIGATION WATER
	PRESSURE AND TEMPERATURE RELIEF	— W — G—	
	PRESSURE REDUCING VALVE	G MG	NATURAL GAS, LOW PRESS
***	RELIEF VALVE, ASME	——MG—— ——HG——	NATURAL GAS, MED PRESS
4	NELIEI VALVE, ASIVIE		NATURAL GAS, HIGH PRESS
│ ₽_	SOLENOID VALVE	— PRD — — RD —	
	STRAINER		
	TRIPLE DUTY VALVE	— SRD —	
	UNION	—— SD ——	
		V	
	RISER DOWN (ELBOW)	— AV —	
	RISER UP (ELBOW)	— GV —	•
	RISE OR DROP	— VAC —	
	TEE DOWN	——AW——	,
	TEE UP	——GW——	
	TOP CONNECTION	—— SS ——	WASTE, SANITARY SEWER
	BOTTOM CONNECTION	DEFINITION OF	LINEWEIGHTS AND LINETYPES:
	SIDE CONNECTION	DEFINITION OF	
	FLOW IN DIRECTION OF ARROW		DEMOLITION
	PIPE SLOPE IN DIRECTION OF ARROW		EXISTING TO REMAIN
•	REMOVE EXISTING TO THIS POINT		NEW CONSTRUCTION
	TIE-IN TO EXISTING AT THIS POINT		DOMESTIC COLD WATER
	PUMP		DOMESTIC HOT WATER
	EQUIPMENT TAG		DOMESTIC HOT WATER RETURN
<u> </u>	EQUIPMENT NUMBER		SANITARY SEWER, ABOVE CEILING
			SANITARY SEWER, BELOW GRADE
——————————————————————————————————————	CLEANOUT PLUG		SANITARY VENT
● <u>FCO</u>	CLEANOUT, FLOOR		STORM SEWER
c⊣l <u>wco</u>	CLEANOUT, WALL		OUTLINE OF NEW EQUIPMENT INSTALLED
G-I∙ <u>HB</u>	HOSE BIBB		ABOVE THE FLOOR SHOWN (I.E., ROOF)
G⊣∙ <u>FPWH</u>	FREEZE PROOF WALL HYDRANT		
───	GAS REGULATOR		

FLOOR DRAIN

FLOOR SINK

SHOWER DRAIN

PRIMARY ROOF DRAIN

SECONDARY ROOF DRAIN

PLUMBING ABBREVIATIONS

Α		L	
AAV	AIR ADMITTANCE VALVE	LB	POUND, POUNDS
AD ADD	AREA DRAIN ADDENDUM	М	
ADJ	ADJUSTABLE	IVI	
AFF	ABOVE FINISHED FLOOR	M	THOUSAND
AV AVTR	ACID VENT ACID VENT THRU THE ROOF	MBH	THOUSAND BTUH
AW	ACID WASTE	MFG MPG	MANUFACTURER NATURAL GAS, MEDIUM PRESSURE
		MIN	MINIMUM
В		MISC	MISCELLANEOUS
BFPD	BACK FLOW PREVENTION DEVICE	MSB	MOP SERVICE BASIN
0		N	
С		NC	NORMALLY CLOSED
CD	CONDENSATE DRAIN	NIC	NOT IN CONTRACT
CL	CENTER LINE	NG	NATURAL GAS
CO CONT	CLEANOUT CONTINUATION	NO NOM	NORMALLY OPEN or NUMBER
CP	PUMPED CONDENSATE	NOM NTS	NOMINAL NOT TO SCALE
D		Р	
DCW	DOMESTIC COLD WATER	-	DU 05
DEW	DRINKING FOUNTAIN	PH PRV	PHASE PRESSURE REDUCING VALVE
DHW	DOMESTIC HOT WATER	PRV PRD	PRIMARY ROOF DRAIN
DHWR		PSI	POUNDS PER SQUARE INCH
DI DF	DEIONIZED WATER DRINKING FOUNTAIN	PSIA	
DN	DOWN	PSIG	POUNDS PER SQUARE INCH GAGE
DS DWG	DISTILLED WATER DRAWING	R	
DWV	DRAIN WASTE AND VENT	RD	ROOF DRAIN
_		RE	REFER TO
E		REQD	REQUIRED
EEW	EMERGENCY EYE WASH	RM DDM	ROOM
ENGR	ENGINEER	RPM RPS	REVOLUTIONS PER MINUTE REVOLUTIONS PER SECOND
EQUIP	EQUIPMENT	RV	RELIEF VALVE
EWC	EXPANSION TANK		ROUND, DIAMETER
EWC EWH	ELECTRIC WATER COOLER ELECTRIC WATER HEATER	0	
EWT		S	
F		SD	STORM DRAIN
1		SS SQIN	SANITARY SEWER or STAINLESS ST SQUARE INCH/INCHES
F	FAHRENHEIT	SQIN SQFT	
FCO	FLOOR CLEANOUT	SRD	
FD FLR	FLOOR DRAIN FLOOR	-	
FPWH	FREEZE PROOF WALL HYDRANT	Т	
FPM	FEET PER MINUTE	TEMP	TEMPERATURE
FT	FOOT, FEET	THRU	_
FS	FLOOR SINK	TMV	THERMOSTATIC MIXING VALVE
G		TYP	TYPICAL
G	NATURAL GAS, LOW PRESSURE	U	
GAL	GALLON, GALLONS		LINDEDWINTEDIOLABORATORIES
GPF	GALLONS PER FLUSH	UL UNO	UNDERWRITER'S LABORATORIES UNLESS NOTED OTHERWISE
GPH	GALLONS PER MUNITE	UR	URINAL
GPM GCO	GALLONS PER MINUTE GRADE CLEAN OUT		
GW	GREASE WASTE	V	
GWH	GAS WATER HEATER	V	VENT or VOLT
		V VAC	VENT or VOLT VACUUM
Н		VFD	VARIABLE FREQUENCY DRIVE
НВ	HOSE BIBB	VTR	VENT THRU THE ROOF
HD	HEAD	VTW	VENT THRU THE WALL
HP	HORSEPOWER	W	
HPG	NATURAL GAS, HIGH PRESSURE		
I		WAG W	WATER AND GAS WATT
IN	INCH, INCHES	WB	WASHER BOX
IN INV	INCH, INCHES INVERT	WC	WATER CLOSET
INWC	INCHES OF WATER COLUMN	WHA	WATER HAMMER ARRESTOR
IW	IRRIGATION WATER	Υ	
V		-	YARD HYDRANT
K		YH	TAKU TYUKANI
1011	KILOWATT		
KW	RILOWATT		



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W. TODD LESTER, PE ENGINEER OF RECORD

ISSUES / REVISIONS 06/12/2020 PERMIT SET - PHASE 1

ISSUE DATE: 06/12/2020 PROJECT NO: P05093.0100

CHECKED BY: WTL DRAWN BY: RAS

PLUMBING NOTES, LEGENDS, AND ABBREVIATIONS

SHEET NUMBER

KEYNOTES

REFER TO CIVIL FOR CONTINUATION.

GENERAL NOTES

REFER TO SHEETS P-102 AND P-104 FOR CONTINUATION OF SANITARY INTO BUILDINGS.

- REFER TO SHEETS P-401 AND P-402 FOR CONTINUATION OF DOMESTIC WATER AND NATURAL GAS INTO BUILDINGS.
- CONTRACTOR TO VERIFY EACH FIXTURE IS OPERABLE AT DOWN TO 9" WC.

CONTRACTOR SHALL COORDINATE ALL DETAILS OF THE GAS PIPING SYSTEM WITH THE LOCAL GAS COMPANY. THIS SHALL INCLUDE GAS METER, GAS REGULATOR AND GAS PRESSURE REQUIREMENTS. GAS METER AND SERVICE REGULATOR TO BE PROVIDED AND INSTALLED BY UTILITY COMPANY. VERIFY CORRECT GAS PRESSURE DOWNSTREAM OF SERVICE REGULATOR AFTER GAS UTILITY COMPLETES INSTALLATION. THE NATURAL GAS DEMAND SHOWN IN MBH IS BASED ON A HEATING VALUE OF 1000 BTU (1 MBH) PER CUBIC FOOT, A SPECIFIC GRAVITY OF 0.6, AND ON PRIMARY
EQUIPMENT INDICATED ON PLANS. GAS PIPING SIZES
SHALL BE AS NOTED ON PLANS.

GAS COMPANY CONTACT: OKLAHOMA NATURAL GAS BRANDON RAINBOLT (918) 831-8365

> PHASING LEGEND PHASE 1 PHASE 2

> > FUTURE - BY OTHERS



OKLAHOMA ONE-CALL SYSTEM, INC. 1-800-552-6543 OR DIAL 811

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W. TODD LESTER, PE ENGINEER OF RECORD

THE WHITTIER

BOOMTOWN DEVELOPMENT C
68 NORTH LEWIS
TULSA, OK 74110

ISSUES / REVISIONS 06/12/2020 PERMIT SET - PHASE 1

ISSUE DATE: 06/12/2020 PROJECT NO: P05093.0100 CHECKED BY: WTL DRAWN BY: RAS

PLUMBING SITE PLAN

SHEET NUMBER P-101

KEYNOTES

- 4" SS, RE: CIVIL FOR CONTINUATION.
- 2. 4" SS DOWN FROM SECOND FLOOR.
- 3. 2" VENT UP TO SECOND FLOOR.
- 4. 2" SS DOWN FROM <u>WB-2</u> ON SECOND FLOOR.
- DISHWASHER, CONNECT DRAIN TO TAILPIECE OF SINK WITH SYPHONIC LOOP IN DISHWASHER
- ROUTE VENT ABOVE DUCT IN SOFFIT.
- 3" SS DOWN FROM SECOND FLOOR.

GENERAL NOTES

- PLUMBING DESIGN SHOWN IS TYPICAL FOR ALL 'A' UNITS.
- FURNACE CLOSET IS AN ENVIRONMENTAL AIR PLENUM. INSTALL PLENUM-RATED MATERIALS ONLY IN CLOSET.

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ISSUE DATE: 06/12/2020 PROJECT NO: P05093.0100 CHECKED BY: WTL DRAWN BY: RAS

BUILDING A3 SANITARY PLAN

P-102

1 BLDG A3 - DWV FIRST FLOOR PLAN

1/4" = 1'-0"



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ET NAME

BUILDING A3 SANITARY PLAN

SHEET NUMBER

P-103

GENERAL NOTES

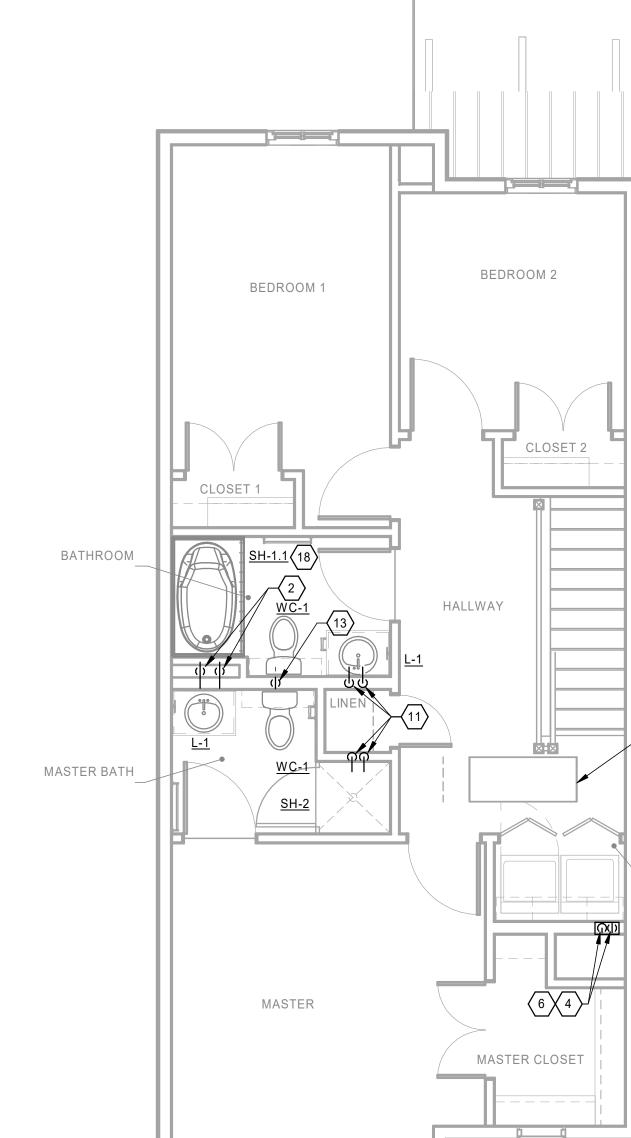
- REFER TO SHEET P-101 FOR BUILDING ORIENTATIONS ON SITE.
- FURNACE CLOSET IS AN ENVIRONMENTAL AIR PLENUM. INSTALL PLENUM-RATED MATERIALS ONLY IN CLOSET.

KEYNOTES

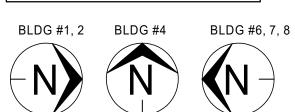
- 1. 3/4" DCW, 3/4" DHW UP TO SECOND FLOOR.
- 3/4" DCW, 3/4" DHW UP FROM FIRST FLOOR.
- 3/4" DCW, 3/4" DHW UP TO WB-2 ON SECOND
- 3/4" DCW, 3/4" DHW UP FROM FIRST FLOOR.
- WATER ENTRY, REFER TO DETAIL 7/P-501. PROVIDE SHUTOFF BALL VALVE FOR DOMESTIC WATER SERVICE. SHUTOFF VALVE TO BE ACCESSIBLE FROM DOORWAY.
- WASHER BOX, REFER TO DETAIL 10/P-501.
- DISHWASHER, CONNECT 3/8" DHW FROM SINK SUPPLY.
- PIPES DOWN IN WALL. ROUTE TO <u>S-1</u> AND HOLD TIGHT TO BACK OF CABINET.
- 9. ICE MAKER BOX, REFER TO DETAIL 9/P-501.
- 10. 1/2" DCW, 1/2" DHW UP TO SECOND FLOOR.
- 11. 1/2" DCW, 1/2" DHW UP FROM FIRST FLOOR.
- 13. 3/4" DCW UP FROM FIRST FLOOR.

12. 3/4" DCW UP TO SECOND FLOOR.

- 14. PROVIDE 4" PVC SLEEVE FOR DOMESTIC WATER ENTRY. DOMESTIC WATER SERVICE UNDER SLAB SHALL BE ROLLED COPPER OR PEX-A PIPING IN A PVC SLEEVE WITH NO FITTINGS UNDER SLAB. RE:
- 15. 2" DCW, RE: CIVIL FOR CONTINUATION.
- 16. NATURAL GAS, RE: CIVIL FOR CONTINUATION. TYPICAL OF 12 'A-1' UNITS.
- 17. 2" DCW BELOW SLAB. DOMESTIC WATER SERVICE UNDER SLAB SHALL BE ROLLED COPPER OR PEX-A PIPING IN A PVC SLEEVE WITH NO FITTINGS UNDER SLAB. RE: 8/P-502.
- 18. <u>SH-1.1</u> SHOWERS ARE AT ALL BATHROOMS WITHOUT WINDOWS, TYPICAL OF 17 'A' UNITS; SH-1 SHOWERS ARE ONLY IN BATHROOMS WITH WINDOWS, TYPICAL OF 6 'A' UNITS.
- . FPWH-1 IN CORNER OF WALL, TYPICAL OF 12 'A-1' UNITS (ALL EXTERIOR 'A' UNITS, RE: 1/P-101); REFER TO DETAIL 4/S-003. INSTALL ON INTERIOR SIDE OF INSULATION. PROVIDE SHUTOFF VALVE BEHIND ACCESS PANEL.
- 20. ALL DOMESTIC WATER PIPING EXPOSED IN UNCONDITIONED GARAGE TO BE INSULATED WITH HT-1. COORDINATE REQUIRED LENGTH OF HEAT TRACE WITH AS-INSTALLED PIPING.
- FPWH-1 IN CORNER OF WALL, TYPICAL OF 11 'A-1.1' UNITS (ALL INTERIOR 'A' UNITS, RE: 1/P-101); REFER TO DETAIL 4/S-003. INSTALL ON INTERIOR SIDE OF INSULATION. CONTINUE TO DOMESTIC WATER MAIN. PROVIDE SHUTOFF VALVE BEHIND INTERIOR 12x12 ACCESS PANEL; ACCESS PANEL TO BE MOUNTED 18" AFF, RE: ARCH FOR FINISHES.
- . NATURAL GAS, RE: CIVIL FOR CONTINUATION. TYPICAL OF 11 'A-1.1' UNITS. CONTINUE TO NATURAL GAS MAIN.
- 23. <u>FPWH-1</u> IN CORNER OF WALL; REFER TO DETAIL 4/S-003. INSTALL ON INTERIOR SIDE OF INSULATION. PROVIDE SHUTOFF VALVE IN ACCESS LOCATION IN MECHANICAL CLOSET.
- GAS PIPING DOWN IN WALL TO RANGE. PROVIDE STUB OUT IN WALL WITH SHUTOFF VALVE. VALVE SHALL BE INSTALLED PARALLEL WITH WALL TO ALLOW MAXIMUM DEPTH POSSIBLE TO INSTALL



REFER TO P-101 FOR PHASING PLAN











ENLARGED A UNITS DOMESTIC

ISSUES / REVISIONS

06/12/2020 PERMIT SET - PHASE 1

WATER & GAS PLANS

ISSUE DATE: 06/12/2020 PROJECT NO: P05093.0100

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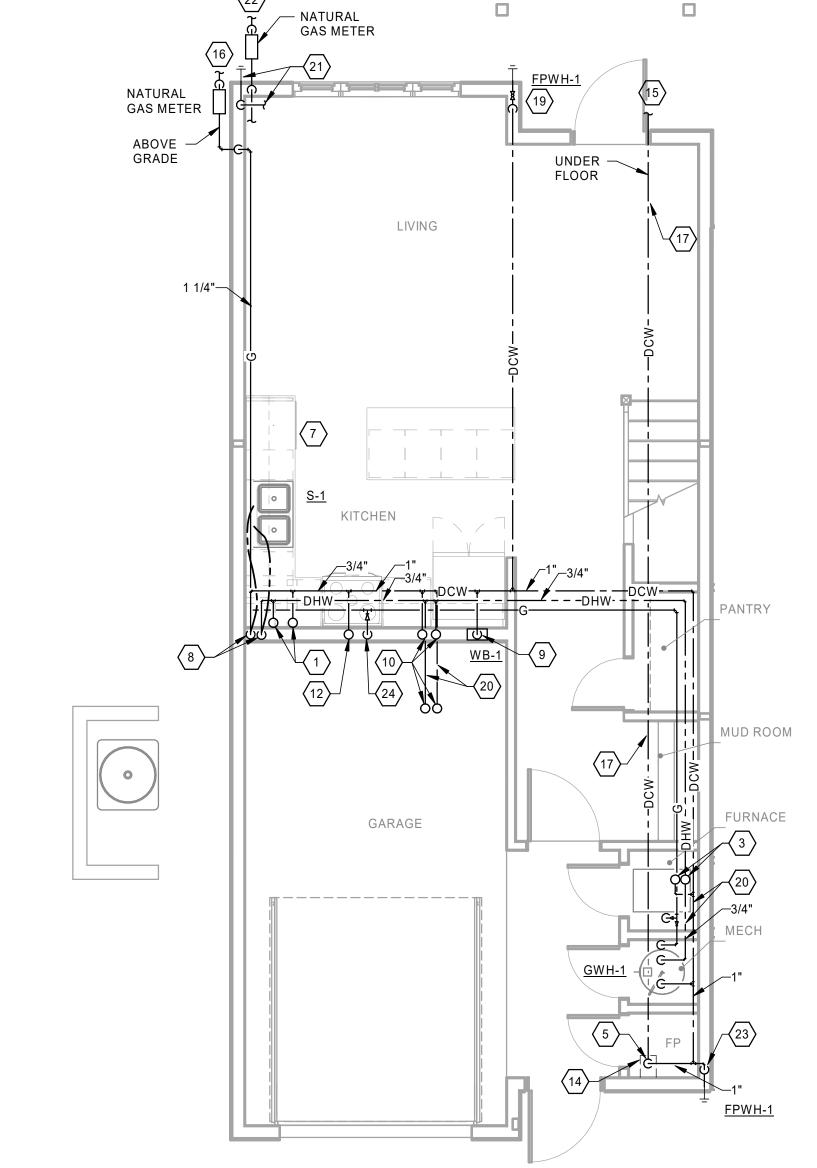
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SECOND FLOOR

TULSA, OK 74119 918.877.6000

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SHEET NUMBER P-401



ENLARGED A UNITS FIRST FLOOR WATER & GAS PLAN

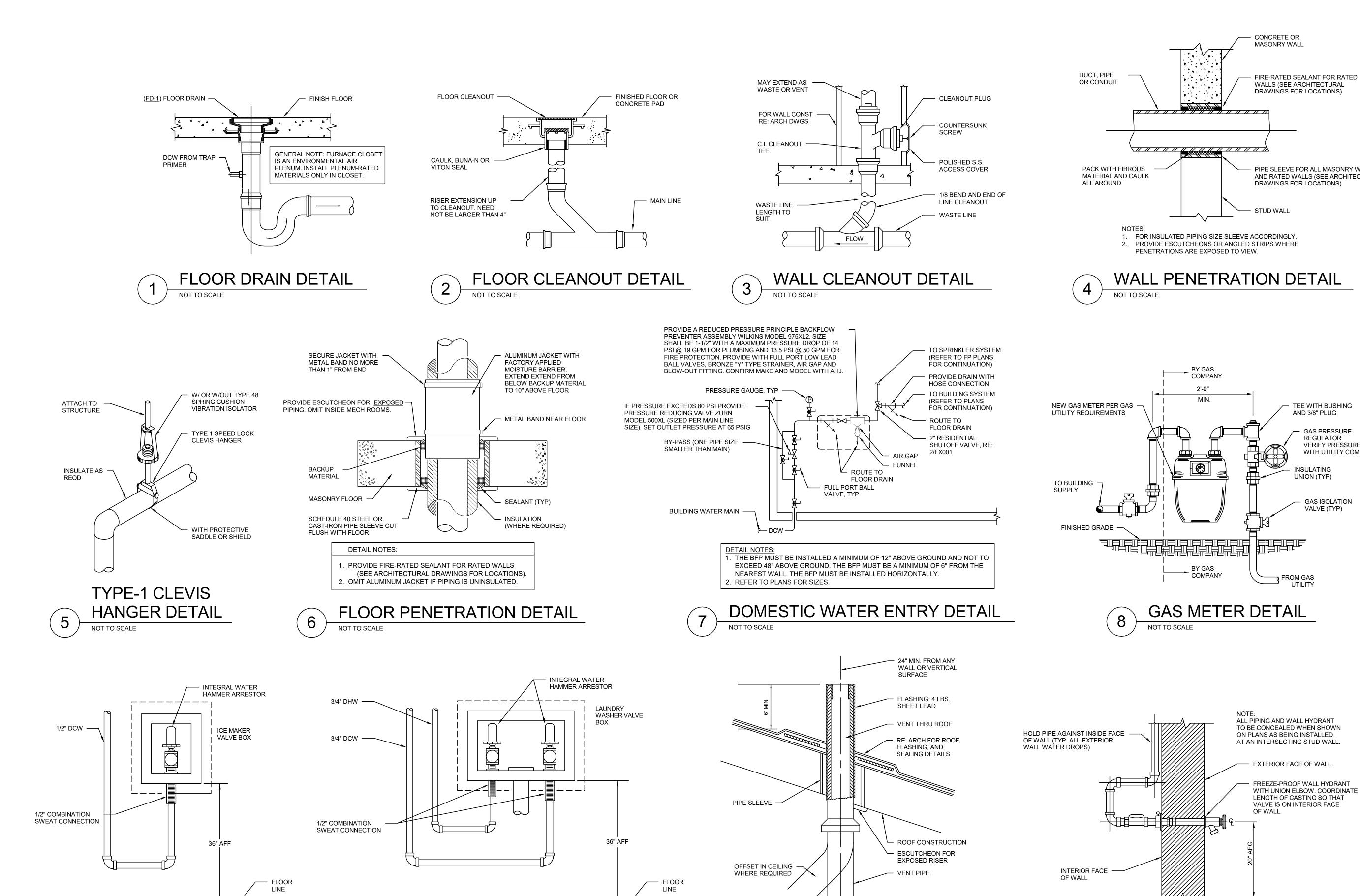
1/4" = 1'-0"

PLAN 1/4" = 1'-0"

ACCESS

LAUNDRY

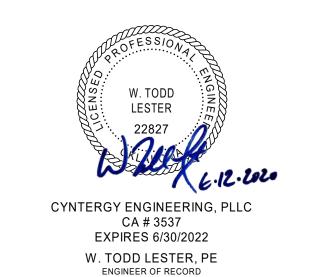
REFER TO P-101 FOR PHASING PLAN



LAUNDRY UTILITY BOX DETAIL

ICE MAKER UTILITY BOX DETAIL

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MASONRY WALL

FIRE-RATED SEALANT FOR RATED

PIPE SLEEVE FOR ALL MASONRY WALLS

AND RATED WALLS (SEE ARCHITECTURA

- TEE WITH BUSHING

- GAS PRESSURE

VERIFY PRESSURE

WITH UTILITY COMPANY

REGULATOR

— GAS ISOLATION VALVE (TYP)

AND 3/8" PLUG

INSULATING

UNION (TYP)

→ FROM GAS

VALVE IS ON INTERIOR FACE

FREEZE PROOF WALL

HYDRANT DETAIL

VENT THROUGH ROOF DETAIL

DRAWINGS FOR LOCATIONS)

STUD WALL

WALLS (SEE ARCHITECTURAL

DRAWINGS FOR LOCATIONS)

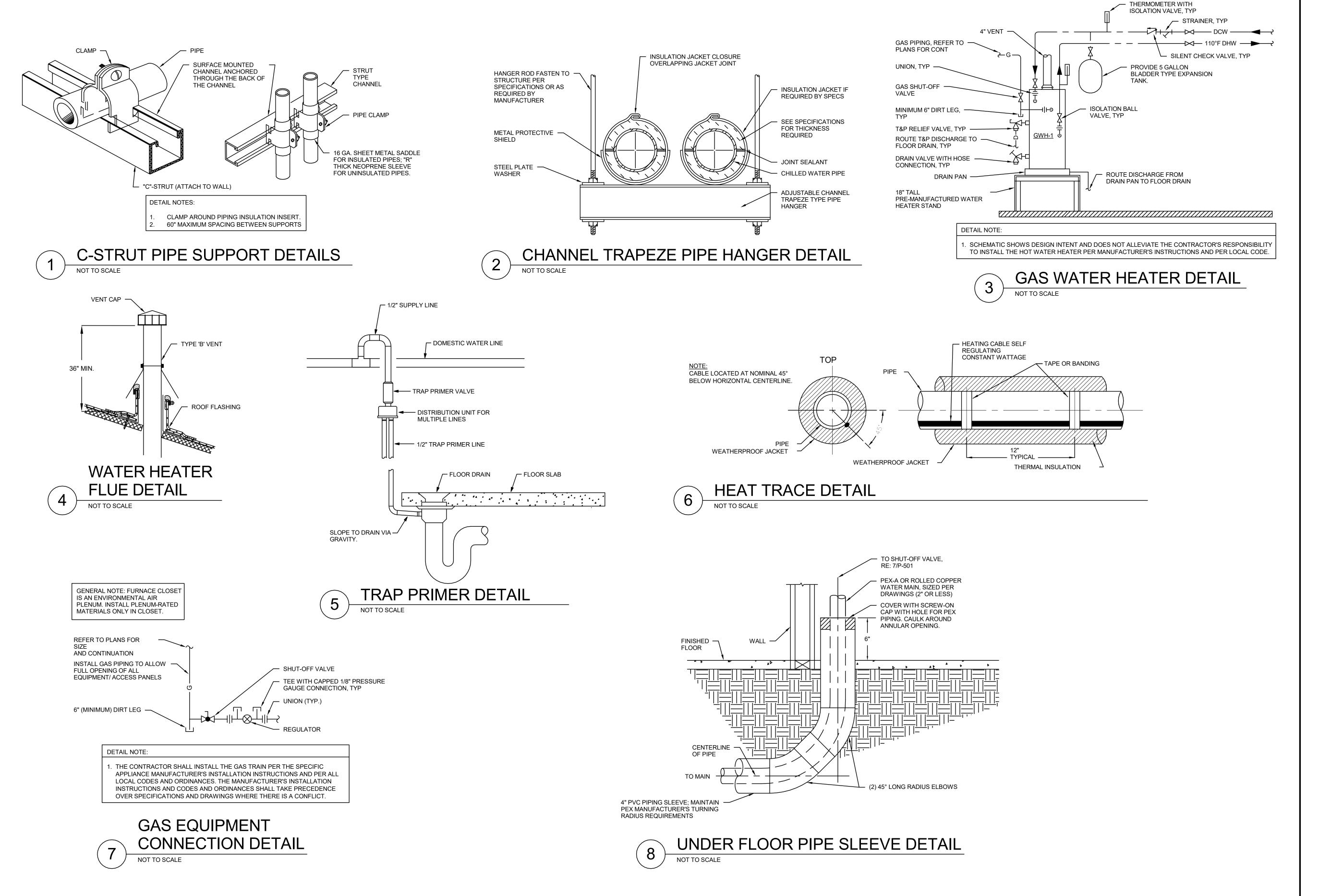
ISSUES / REVISIONS 06/12/2020 PERMIT SET - PHASE 1

ISSUE DATE: 06/12/2020 PROJECT NO: P05093.0100 CHECKED BY: WTL DRAWN BY: RAS

PLUMBING DETAILS

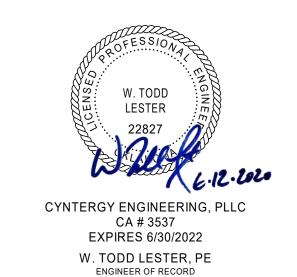
SHEET NUMBER

P-501



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ISSUE DATE: 06/12/2020 PROJECT NO: P05093.0100 CHECKED BY: WTL

06/12/2020 PERMIT SET - PHASE 1

SHEET NAME
PLUMBING DETAILS

DRAWN BY: RAS

HEET NUMBER

P-502

FLOOR DRAIN SCHEDULE										
MARK	FIXTURE	MANUFACTURER / MODEL NUMBER	TRIM	CONNECTIONS				REMARKS		
				WASTE	VENT	DCW	DHW			
FD-1	SQUARE FLOOR DRAIN	ZURN ZN-Z415S-P-VP	6"x6" SQUARE ADJUSTABLE POLISHED NICKEL-BRONZE STRAINER, TRAP PRIMER CONNECTION, VANDAL-PROOF SECURED TOP	3"	2"	1/2"		1,2,3		
FD-2	CONDENSATE FLOOR DRAIN	ZURN ZN-Z415I-P-VP	5-7/16" DIAMETER ROUND ADJUSTABLE POLISHED NICKEL-BRONZE STRAINER WITH RAISED FLANGE, TRAP PRIMER CONNECTION, VANDAL-PROOF SECURED TOP	3"	2"	1/2"		1,2,3		

REMARKS:

- REFER TO ARCHITECTURAL FOR FLOOR DRAIN LOCATIONS, COORDINATE WITH FLOOR FINISH AND INSTALL PER MANUFACTURER'S
- RECOMMENDATIONS. DURA-COATED CAST IRON BODY WITH BOTTOM OUTLET, COMBINATION INVERTIBLE MEMBRANE CLAMP AND ADJUSTABLE COLLAR WITH SEEPAGE
- SLOTS, POLISHED NICKEL BRONZE STRAINER, SQUARE HEEL-PROOF, LIGHT DUTY STRAINER. PROVIDE TRAP PRIMER CONNECTION AND PRESSURE DROP ACTIVATED TRAP PRIMER - MIFAB MODEL (M-500). FIELD COORDINATE LOCATION OF TRAP PRIMER IN AN ACCESSIBLE, CONCEALED LOCATION.

GAS \	NATER HEAT	ER SCHEDULE
.		

-								
	MARK	MANUFACTURER MODEL	AREA SERVED	STORAGE CAPACITY (GALLONS)	RECOVERY (GPH) 90° RISE	GAS INPUT (MBH)	LISTING	REMARKS
	GWH-1	A.O. SMITH GCR-40	LIVING UNIT	38	42	40	AGA, UL	ALL

REMARKS:

- . COORDINATE ELECTRICAL REQUIREMENTS WITH ELECTRICAL CONTRACTOR
- 2. WATER HEATER FURNISHED AND INSTALLED BY CONTRACTOR. 3. WATER HEATER STAND FURNISHED AND INSTALLED BY CONTRACTOR.
- 4. THERMAL EXPANSION TANK FURNISHED AND INSTALLED BY CONTRACTOR.
- 5. SET DISCHARGE TEMPERATURE OF WATER HEATER TO OPERATE AT 110°F.
- 6. FIELD VERIFY SITE GAS PRESSURE AND PROVIDE UNIT WITH COMPATIBLE GAS TRAIN. PROVIDE VENT FROM PRESSURE REDUCING VALVE (IF REQUIRED) TO
- 7. TEMPERATURE AND PRESSURE RELIEF VALVE FURNISHED AND INSTALLED BY CONTRACTOR.
- 3. REFER TO 3/P-502 FOR ADDITIONAL COMPONENTS AND CONFIGURATION.

EXPANSION TANK SCHEDULE									
MARK	MANUFACTURER MODEL	SERVICE	TANK VOLUME (GALLONS)	ACCEPTANCE VOLUME (GALLONS)	WEIGHT (LBS)	REMARKS			
ET-1	BELL & GOSSETT PT-12	DOMESTIC HOT WATER	5	3.2	9	1,2			

. INSTALL EQUIPMENT PER MANUFACTURER'S INSTALLATION INSTRUCTIONS AND REQUIREMENTS FOR WARRANTY. 2. REFER TO 3/P-502 FOR ADDITIONAL COMPONENTS AND CONFIGURATION.

UNIT A NATURAL GAS SUMMARY SCHEDULE									
APPLIANCE MARK	QUANTITY	GAS LOAD (MBH)	BRANCH PIPE SIZE (IN)	MAX DEVELOPED DISTANCE FROM REGULATOR (FT)	MAIN SIZE (IN)				
GWH-1	1*	40	1/2"						
F-A1	1	44	1/2"						
RANGE	1	61	3/4"						
BUILDING TOTAL		145		140	1-1/4"				
NOTES:				•					

I. SIZING BASED ON THE 150 FT COLUMN OF TABLE 402.4(1) OF THE 2015 INTERNATIONAL FUEL GAS CODE. 2. * DENOTES FURTHEST FIXTURE FROM NATURAL GAS REGULATOR.

B. BASED UPON LOW PRESSURE NATURAL GAS 14" WC. 4. CONTRACTOR TO VERIFY EACH FIXTURE IS OPERABLE AT DOWN TO 9" WC.

			PLUMBING FIXTURE SCHE	DULE				
MANUEACTURER				CONNEC	CTIONS			
MARK	FIXTURE	MANUFACTURER MODEL	TRIM	WASTE	VENT	DCW	DHW	REMARKS
WC-1	WATER CLOSET (FLOOR MOUNT, TANK TYPE, 2 PIECE)	PROFLO PFCT101HE	1.28 GPF; FLOOR-MOUNTED, STANDARD HEIGHT; SEAT: CLOSED FRONT WITH COVER, ELONGATED; FIXTURE COLOR: WHITE	4"	2"	1/2"		1,4
L-1	LAVATORY (COUNTERTOP, SELF-RIMMING, ADA)	PROFLO PF194RWH	FAUCET: PROFLO MODEL PFWSC2840BN 3-HOLE INSTALLATION, SINGLE-HANDLE LEVER, BRUSHED NICKEL; POP-UP DRAIN; FIXTURE COLOR: WHITE	2"	1 1/2"	1/2"	1/2"	1,4,5,6,7
S-1	SINK (DOUBLE COMPARTMENT, DROP-IN)	PROFLO PFCS100	CHROME POLISHED FAUCET, STAINLESS STEEL SINK, PROVIDE WITH CHROME SIDE SPRAYER.	2"	1 1/2"	1/2"	1/2"	1,4,5,7,8,9
SH-1	SHOWER (TUB W/ TILE SURROUND)	AQUARIUS BATHWARE G 6032 TO	FIXTURE COLOR: WHITE, SHOWER HEAD/VALVE: PROFLO MODEL PF2830BN (PRESS. BALANCE, PRESS. & TEMP. CONTROL), BRUSHED NICKEL. PROVIDE WITH MANUFACTURER'S DRAIN. CONTRACTOR TO VERIFY LEFT HAND VS. RIGHT HAND INSTALLATION PRIOR TO ORDERING.			1/2"	1/2"	1,7
SH-1.1	SHOWER (PRE-MANUFACTURED SHOWER/TUB INSERT)	AQUARIUS BATHWARE G 6063 TS	FIXTURE COLOR: WHITE, SHOWER HEAD/VALVE: PROFLO MODEL PF2830BN (PRESS. BALANCE, PRESS. & TEMP. CONTROL), BRUSHED NICKEL. PROVIDE WITH MANUFACTURER'S DRAIN. CONTRACTOR TO VERIFY LEFT HAND VS. RIGHT HAND INSTALLATION PRIOR TO ORDERING.			1/2"	1/2"	1,7
SH-2	SHOWER (PRE-MANUFACTURED SHOWER INSERT)	AQUARIUS BATHWARE CHG 3636 SH	FIXTURE COLOR: WHITE, SHOWER HEAD/VALVE: PROFLO MODEL PF2820BN (PRESS. BALANCE, TEMP. CONTROL), BRUSHED NICKEL. PROVIDE WITH MANUFACTURER'S DRAIN.			1/2"	1/2"	1,7
FPWH-1	FREEZE PROOF WALL HYDRANT	WOODFORD 19	AUTOMATIC DRAINING; ANTI-SIPHON VACUUM BREAKER, POLISHED NICKEL BRONZE FINISH; 3/4" HOSE THREAD			3/4"		1
WB-1	WATER SUPPLY WALL BOX	GUY GRAY MIB1HAAB	SINGLE SWEAT CONNECTION, 1/4 TURN VALVE, WALL FRAME, WITH WATER HAMMER ARRESTER.			1/2"		1
WB-2	WASHER SUPPLY BOX	GUY GRAY MWB19	WASHING MACHINE WALL BOX WITH 2" DRAIN, 1/4 TURN BRASS BALL VALVES WITH WATER HAMMER ARRESTERS.	2"	1-1/4"	3/4"	3/4"	1
WHA-1	WATER HAMMER ARRESTOR	ZURN-WILKINS 1250XL SERIES	COPPER CHAMBER WITH O-RING PISTON					11
FCO-1	FLOOR CLEANOUT	ZURN Z1400	ADJUSTABLE					2
WCO-1	WALL CLEANOUT	ZURN Z1441	ADJUSTABLE, STAINLESS STEEL WALL COVER					3
GCO-1	GRADE CLEANOUT (TWO-WAY)	ZURN Z1400-HD	ADJUSTABLE					10

1. PROVIDE SCHEDULED PLUMBING FIXTURE OR EQUAL.

REFER TO ARCHITECTURAL PLANS AND ELEVATIONS FOR FINAL FIXTURE LOCATION AND MOUNTING HEIGHTS, MOUNT PER ADA REQUIREMENTS WHERE INDICATED.

PROVIDE ROUND ACCESS COVER (DEPRESSED CENTER IN CARPETED AREA TO MARK LOCATION AND ACCOMMODATE FLOOR FINISH) WITH NICKEL-BRONZE SCORED FRAMES & PLATES. SIZE AS INDICATED ON DRAWINGS. ENSURE AMPLE CLEARANCE AT CLEANOUT FOR RODDING OF DRAINAGE SYSTEM.

PROVIDE CAULKED OR THREADED CLEANOUT, EXTEND ACCESS COVER TO FINISHED WALL SURFACE. ENSURE AMPLE CLEARANCE AT CLEANOUT FOR RODDING OF DRAINAGE SYSTEM. . PROVIDE CHROME PLATED, HEAVY DUTY, COMMERCIAL GRADE, ANGLE SUPPLY (HOT AND COLD, AS REQUIRED) WITH WHEEL HANDLE STOP(S), STAINLESS STEEL FLEXIBLE RISER HOSE(S),

AND CHROME PLATED WALL ESCUTCHEON(S). 5. PROVIDE 17 GAUGE CHROME PLATED P-TRAP WITH CLEANOUT AND WALL ESCUTCHEON. 6. PROVIDE TRUEBRO INC. HANDI LAV-GUARD OR EQUAL UNDERSINK PROTECTIVE PIPE COVERING MODEL 103, FOR WASTE, HOT, AND COLD PIPING, COLOR: WHITE. COVERS SHALL BE SECURED

WITH SNAP-CLIP FLUSH REUSABLE FASTENERS. PROVIDE ALL REQUIRED ACCESSORIES FOR A COMPLETE INSTALLATION MEETING CURRENT ADA STANDARDS WHERE REQUIRED. PROVIDE THERMOSTATIC MIXING VALVE ZURN MODEL ZW1070XL SET TO 110° F MAXIMUM.

. PROVIDE 8" DEEP DOUBLE COMPARTMENT, 16 GAUGE, TYPE 304 STAINLESS STEEL, SELF-RIMMING, UNDERCOATED, WITH MANUFACTURER'S STRAINER. 9. PROVIDE GARBAGE DISPOSAL LUXURY LINE MODEL LL600 . COORDINATE INSTALLATION WITH ELECTRICAL CONTRACTOR.

10. ADJUSTABLE GRADE CLEANOUT, DURA-COATED CAST IRON BODY WITH GAS AND WATERTIGHT ABS TAPERED THREAD PLUG AND ROUND SCORIATED SECURED HEAVY DUTY TOP,

ADJUSTABLE TO FINISHED GRADE. 11. WATER HAMMER ARRESTORS SHALL BE PROPERLY SIZED, PROPERLY LOCATED IN AN EFFECTIVE RANGE FROM EQUIPMENT, AND IN ACCORDANCE WITH PDI STANDARD WH201.

	HEAT TR	ACE SCI	HEDULI	E	
MARK	MANUFACTURER MODEL	SERVICE	V/PH/HZ	W/FT	REMARKS
HT-1	CHROMALOX SRL5-1C	SEE PLANS	120/1/60	5	1-8

REMARKS:

- . INSTALL PER MANUFACTURER'S REQUIREMENTS.
- 2. COORDINATE ELECTRICAL REQUIREMENTS WITH ELECTRICAL CONTRACTOR. 3. PROVIDE CHROMALOX U SERIES POWER CONNECTION SET KIT.
- 4. AFFIX TO PIPE USING FIBERGLASS TAPE.
- 5. HEAT TRACE TO MAINTAIN 40°F FLUID TEMPERATURE AT 0°F. . PROVIDE ONE MANUFACTURER'S LOCAL THERMOSTAT PER CIRCUIT. LOCATE THERMOSTAT IN
- MECHANICAL CLOSET IN ACCESSIBLE LOCATION. HEAT TRACE TO BE ENABLED AT 40°F AMBIENT. PROVIDE END SEGMENTS AND JUNCTION BOXES AS REQUIRED.
- 8. WRAP VALVES AND FITTINGS PER MANUFACTURER'S REQUIREMENTS, SO THAT VALVES AND FITTINGS CAN BE DISASSEMBLED AND REMOVED WITHOUT COMPLETELY REMOVING HEAT TRACE FROM EACH LINE.

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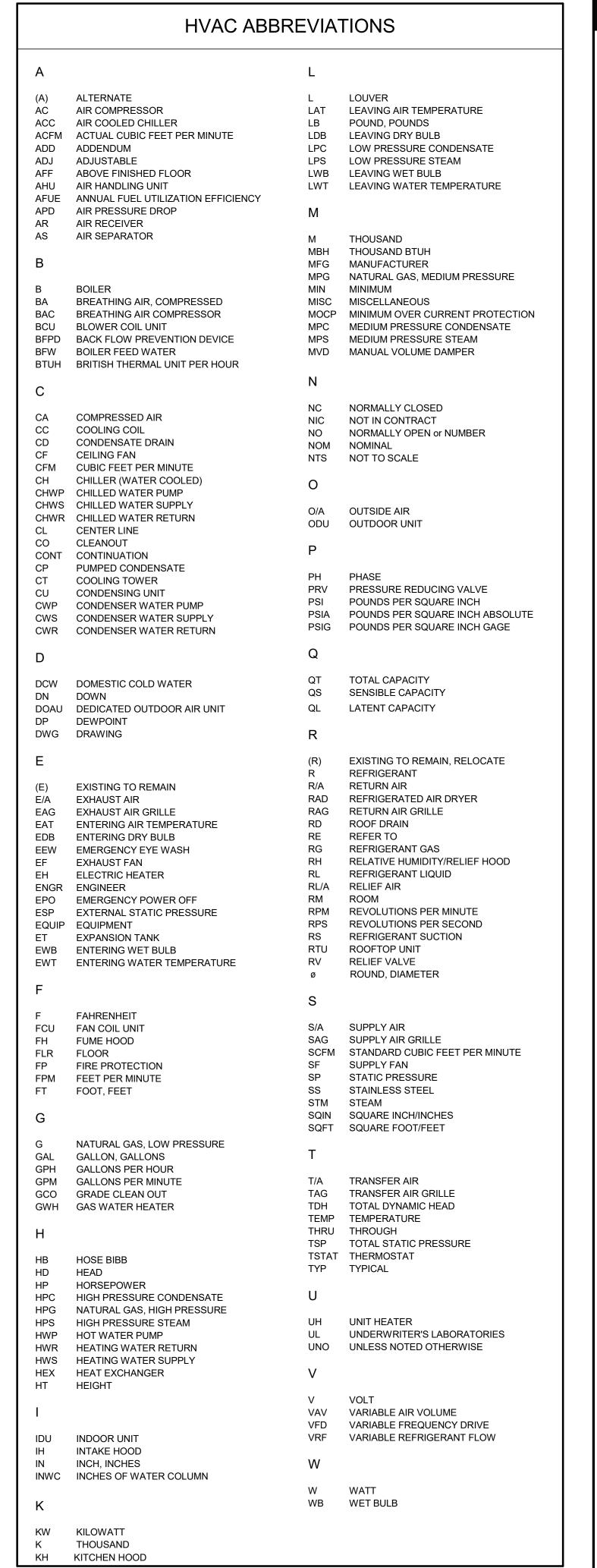
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PLUMBING SCHEDULES

HVAC SYMBOLS LEGEND





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EXPIRES 6/30/2022 W. TODD LESTER, PE ENGINEER OF RECORD

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ISSUES / REVISIONS 06/12/2020 PERMIT SET - PHASE 1

ISSUE DATE: 06/12/2020 PROJECT NO: P05093.0100 CHECKED BY: WTL

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MECHANICAL LEGENDS AND ABBREVIATIONS

SHEET NUMBER M-001

REFRIGERANT PIPING GENERAL NOTES

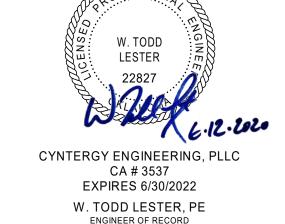
- 1. SLOPE HORIZONTAL SUCTION LINES APPROXIMATELY ONE INCH EVERY 20 FEET TOWARD THE OUTDOOR UNIT TO FACILITATE PROPER OIL RETURN.
- 2. USE LONG RADIUS ELBOWS WHENEVER POSSIBLE.
- 3. LIQUID LINE SHALL BE TAPED TO ASSOCIATED INSULATED VAPOR LINE. DO NOT ALLOW METAL TO METAL CONTACT.
- 4. ALL REFRIGERANT SUCTION LINES TO BE INSULATED PER SECTION 23 07 19. LIQUID LINES EXPOSED TO DIRECT SUNLIGHT SHALL ALSO BE INSULATED. PROVIDE JACKET ON ALL EXTERIOR REFRIGERANT LINES, REFER TO 23 07 19.
- 5. BRAZE ALL COPPER TO COPPER JOINTS WITH SILFOS-5 OR EQUIVALENT BRAZING MATERIAL. DO NOT USE SOFT SOLDER.
- 6. DURING BRAZING OPERATIONS, FLOW AN INERT GAS SUCH AS NITROGEN THROUGH THE SYSTEM TO PREVENT INTERNAL SCALING AND CONTAMINATION.
- 7. PACK FIBERGLASS INSULATION AND A SEALING MATERIAL SUCH AS PERMAGUM AROUND REFRIGERANT LINES WHERE THEY PENETRATE A WALL TO REDUCE VIBRATION AND TO RETAIN SOME FLEXIBILITY. IF MULTIPLE LINE SETS ARE ROUTED THROUGH A COMMON CONDUIT, THEN ALL LINES MUST BE INSULATED.
- 8. SUPPORT ALL REFRIGERANT LINES AT MINIMUM INTERVALS AS RECOMMENDED BY THE MANUFACTURER.
- 9. INSTALL REFRIGERANT LINES IN A MANNER THAT DOES NOT OBSTRUCT SERVICE ACCESS TO THE INDOOR COIL OR FILTER.
- 10. ROUTE REFRIGERANT PIPING FROM OUTDOOR UNIT TO INDOOR COIL IN MOST DIRECT MANNER POSSIBLE. PROVIDE LONG LINE KIT AS REQUIRED WHERE LINESET LENGTHS (INCLUDING ELBOWS) EXCEED MANUFACTURER'S STANDARD LENGTH RECOMMENDATIONS.
- 11. SIZE LIQUID AND VAPOR LINES PER MANUFACTURER'S RECOMMENDATIONS.
- 12. PLAN INDICATES GENERAL ROUTING OF REFRIGERATION LINES WITH A SINGLE LINE SHOWN INDICATING BOTH SUCTION AND LIQUID LINE ROUTING FOR EACH SYSTEM.
- 13. REFRIGERATION SYSTEM INSTALLATION SHALL BE IN COMPLETE CONFORMANCE WITH SPECIFICATIONS AND WITH ALL REQUIREMENTS OF REFRIGERATION EQUIPMENT MANUFACTURER.

GENERAL NOTES

- 1. THE CONTRACTOR IS RESPONSIBLE TO COMPLY WITH CURRENT APPLICABLE LOCAL, STATE, FEDERAL, FIRE, AND HEALTH CODES AND ORDINANCES AND IS RESPONSIBLE TO COMPLY WITH ALL REGULATIONS OF REGULATORY AGENCIES HAVING JURISDICTION. THE CONTRACTOR SHALL ALSO CONFORM TO THE REQUIREMENTS OF THE OWNER'S INSURANCE CARRIER. NOTIFY THE ARCHITECT AND ENGINEER OF ANY CONFLICTS PRIOR TO INSTALLATION. CODES, ORDINANCES AND REGULATIONS SHALL HAVE PRECEDENCE OVER SPECIFICATIONS AND DRAWINGS WHERE THERE IS A CONFLICT. OBTAIN CURRENT COPIES OF ALL ADOPTED CODES AND ORDINANCES PRIOR TO BID AND INCLUDE ALL COSTS TO COMPLY WITH CODES AND ORDINANCES IN BID.
- 2. PAY ALL LAWFUL FEES, PERMITS OR LICENSES REQUIRED TO ACCOMPLISH WORK. OBTAIN AND PAY FOR ALL NECESSARY CERTIFICATES OF APPROVAL.
- 3. THE CONTRACTOR IS RESPONSIBLE TO PROVIDE ALL LABOR, MATERIALS, EQUIPMENT, SERVICE AND ANYTHING REASONABLY INCIDENTAL TO COMPLETE ALL WORK INDICATED ON THE DRAWINGS AND AS SPECIFIED IN ACCORDANCE WITH THE INTENT OF THE CONSTRUCTION DOCUMENTS.
- 4. THE CONTRACTOR IS RESPONSIBLE TO VISIT AND EXAMINE THE JOB SITE AND BECOME FAMILIAR WITH ALL EXISTING CONDITIONS PERTINENT TO THE WORK TO BE PERFORMED.
- 5. INCORPORATE ALL CODE AND ORDINANCE REQUIREMENTS INTO THE BID AND INSTALLATION OF WORK. NO ADDITIONAL FUNDS WILL BE ALLOCATED FOR WORK REQUIRED TO CONFORM TO REGULATIONS AND REQUIREMENT AND/OR TO OBTAIN APPROVAL OF WORK.
- THE DRAWINGS ARE DIAGRAMMATIC AND ARE ONLY INTENDED TO DEFINE THE BASIC FUNCTIONS REQUIRED. THE DRAWINGS SHALL BE FOLLOWED AS CLOSELY AS ACTUAL CONSTRUCTION CONDITIONS AND COORDINATION WITH OTHER TRADES WILL ALLOW. MINOR DEVIATIONS FROM THE DESIGN LAYOUT ARE ANTICIPATED AND ARE A PART OF THE WORK INCLUDED; HOWEVER, CHANGES THAT ALTER THE CHARACTER OF THE WORK ARE NOT PERMITTED. APPROVAL OF ARCHITECT AND ENGINEER SHALL BE OBTAINED BEFORE DEVIATIONS FROM THESE PLANS ARE MADE.
- 7. PLUMBING AND MECHANICAL SYSTEMS ARE NOT DIMENSIONED. DO NOT SCALE FROM DRAWING(S). THE CONTRACTOR SHALL COORDINATE WITH OTHER TRADES AND ENSURE THERE IS AVAILABLE SPACE FOR INSTALLATION BEFORE ORDERING EQUIPMENT AND FABRICATING PIPING AND/OR DUCTWORK.
- 3. THE CONTRACTOR SHALL STUDY THE ARCHITECTURAL, STRUCTURAL, MECHANICAL, AND ELECTRICAL PLANS TO ENSURE ALL MECHANICAL SYSTEMS WILL FIT WITH SUFFICIENT CLEARANCES FOR INSTALLATION, SERVICING AND MAINTENANCE. NOTIFY THE ARCHITECT AND ENGINEER OF ANY CONFLICTS PRIOR TO INSTALLATION.
- 9. THE CONTRACTOR SHALL COMPLY WITH SPECIFICATIONS AND INDUSTRY STANDARDS FOR ALL INSTALLATIONS.
- 10. PROVIDE ALL DOMESTIC POTABLE WATER EQUIPMENT AND PIPING AS "LEAD FREE" PER THE "REDUCTION OF LEAD IN DRINKING WATER ACT". NOTIFY ENGINEER OF ANY CONFLICTS PRIOR TO SUBMITTAL.
- 11. REFER TO MECHANICAL DRAWINGS FOR ALL MECHANICAL EQUIPMENT LOCATIONS. REFER TO PLUMBING DRAWINGS FOR ALL PLUMBING EQUIPMENT.
- 12. SEAL ALL PENETRATIONS WATER TIGHT. SEAL AROUND ALL WALL PENETRATIONS. PROVIDE ESCUTCHEONS ON ALL PIPING ON EXTERIOR AND EXPOSED LOCATIONS. CAULK WITH REQUIRED THICKNESS 3M BRAND FIRE BARRIER CAULK CP-25 (OR OTHER APPROVED METHOD) TO MAINTAIN FIRE RESISTANCE RATING OF FIRE RATED ASSEMBLIES.
- 13. ALL CUTTING AND PATCHING OF STRUCTURE SHALL BE APPROVED BY THE STRUCTURAL ENGINEER PRIOR TO PERFORMING WORK.
- 14. THE CONTRACTOR SHALL COORDINATE ALL ROUTING AND MOUNTING OF EQUIPMENT, DUCTWORK, PIPING, ETC (ALL WORK) WITH ALL OTHER TRADES.
- 15. PROVIDE ACCESS PANELS WHERE INDICATED ON DRAWINGS AND AS REQUIRED TO PROPERLY OPERATE, ADJUST AND MAINTAIN ALL EQUIPMENT, VALVES, DAMPERS AND OTHER ACCESSORIES. VERIFY EXACT LOCATION WITH ARCHITECT PRIOR TO INSTALLATION. COORDINATE INSTALLATION WITH ALL OTHER TRADES. ACCESS PANEL TO BE MILCOR, MATHBROOK, OR APPROVED EQUAL, HINGED WITH SCREWDRIVER LOCK.
- 16. ROUTE DUCTWORK AND PIPING AS HIGH AS POSSIBLE ABOVE FINISHED CEILING TO AVOID CONFLICT WITH LIGHTS.
- 17. INSTALL ALL PIPING PARALLEL AND PERPENDICULAR TO BUILDING WALLS AND PARTITIONS UNLESS DISTINCTLY SHOWN OR NOTED OTHERWISE. ROUTE PIPING LOCATED NEAR EACH OTHER PARALLEL IN ALL PLANES AND WITH SUFFICIENT CLEARANCE.
- 18. ALL PIPING SHALL BE INSTALLED SO THAT IT MAY EXPAND AND CONTRACT FREELY WITHOUT DAMAGES TO EQUIPMENT, OTHER WORK, OR INJURY TO PIPING SYSTEM, ALL NECESSARY SWING JOINTS, EXPANSION JOINTS, OR OFFSETS TO PROTECT PIPING, ETC. SHALL BE INSTALLED WHETHER INDICATED OR NOT.
- 19. PROPERLY SUPPORT ALL PIPING. PROVIDE ALL REQUIRED ANCHORS, GUIDES AND EXPANSION DEVICES.
- 20. PAINT ALL EXTERIOR AND EXPOSED PIPING. REFER TO ARCHITECT FOR COLOR.
- 21. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT ALL MATERIAL, EQUIPMENT, APPARATUS AND WORK FROM DAMAGE. FAILURE TO DO SO TO THE SATISFACTION OF THE OWNER OR OWNER'S REPRESENTATIVE WILL BE SUFFICIENT CAUSE FOR THE REJECTION OF THE MATERIAL, EQUIPMENT, APPARATUS AND WORK IN QUESTION.
- 22. THE CONTRACTOR SHALL GUARANTEE ALL EQUIPMENT, MATERIALS AND WORKMANSHIP FOR A PERIOD OF 1 YEAR FOLLOWING THE DATE OF ACCEPTANCE. THE CONTRACTOR'S GUARANTEE INCLUDES EQUIPMENT CAPACITY, PERFORMANCE RATINGS AND NOISE RATINGS. ANY DEFICIENCIES SHALL BE PROMPTLY CORRECTED. ROUTINE MAINTENANCE SHALL NOT BE INCLUDED.
- 23. THE CONTRACTOR SHALL CLEAN ALL FIXTURES, PIPES, EQUIPMENT AND EXPOSED WORK AFTER COMPLETION OF FINAL TESTING AND BEFORE ACCEPTANCE.
- 24. ALL PLATED AND OTHER FINISHED PRODUCTS SHALL BE THOROUGHLY CLEANED AND POLISHED.
- 25. THE MANUFACTURER MODEL OR CATALOG NUMBERS INDICATED IN THE CONSTRUCTION DOCUMENTS ESTABLISH A STANDARD FOR THE GENERAL DESIGN, PERFORMANCE, AND QUALITY OF THE PRODUCT REQUIRED.
- 26. ALTERNATE MANUFACTURERS LISTED IN THE SCHEDULE OR SPECIFICATIONS ARE APPROVED TO BID; HOWEVER, THE SUBMITTED PRODUCT MUST MEET THE GENERAL DESIGN, PERFORMANCE, DIMENSIONS, WEIGHT, AND QUALITY OF THE SCHEDULED PRODUCT. EACH MANUFACTURER WILL HAVE DIFFERENCES IN INSTALLATION REQUIREMENTS. IF THE CONTRACTOR ELECTS TO GO WITH A NON-BASIS OF DESIGN MANUFACTURER, THE CONTRACTOR SHALL BE RESPONSIBLE TO INCLUDE THE COST FOR ENGINEERING TIME, AS REQUIRED, TO ADJUST THE DESIGN TO THOSE DIFFERENCES IN THEIR BID, IF THE BASIS OF DESIGN IS NOT BID. THE CONTRACTOR IS RESPONSIBLE TO IDENTIFY THE DIFFERENCES IN THE INSTALLATION REQUIREMENTS BETWEEN THE BASIS OF DESIGN AND THE SUBMITTED MANUFACTURER DURING THE SUBMITTAL PHASE.
- 27. WHERE "OR APPROVED EQUAL" IS INDICATED, OTHER PRODUCTS SIMILAR IN DESIGN AND OF EQUAL QUALITY AND PERFORMANCE, AND COMPLYING WITH THE PLANS AND SPECIFICATIONS MAY BE APPROVED IF FOUND ACCEPTABLE BY THE ARCHITECT/ENGINEER. THE CONTRACTOR MUST SUBMIT TO THE ARCHITECT/ENGINEER A LINE-BY-LINE COMPARISON BETWEEN SCHEDULED MANUFACTURER AND "OR APPROVED EQUAL" MANUFACTURER. REFER TO DIVISION 0 SPECIFICATIONS FOR PRE-APPROVAL TIME PERIOD.
- 28. ALL MATERIALS, EQUIPMENT, ETC., INSTALLED UNDER THIS CONTRACT SHALL CONFORM TO ALL RULES, CODES, ETC., AS RECOMMENDED OR ADAPTED BY THE NATIONAL ASSOCIATION GOVERNING THE MANUFACTURER, RATING AND TESTING OF SUCH MATERIALS, EQUIPMENT, ETC., ALL ELECTRICALLY OPERATED EQUIPMENT SHALL BE U.L. APPROVED FOR THE USE INTENDED.
- 29. ALL FIRED AND UNFIRED PRESSURE VESSELS SHALL CONFORM TO THE RULES OF THE A.S.M.E. AND NATIONAL BOARD CODES AND SHALL BE SO LABELED. FURNISH A.S.M.E. AND NATIONAL BOARD CERTIFICATES.
- 30. MOTORS SHALL CONFORM TO THE RULES OF THE N.E.M.A. FOR THE SERVICE INTENDED AND TO THEIR STANDARDIZED FORM SIZES.
- 31. SHOP DRAWINGS, CATALOG CUTSHEETS AND PERFORMANCE DATA PERTAINING TO ALL MATERIALS AND EQUIPMENT PROPOSED FOR USE SHALL BE SUBMITTED.
- 32. JOINTS BETWEEN DISSIMILAR METALS SHALL BE MADE WITH DIELECTRIC NIPPLES DOWNSTREAM OF A VALVE.
- 33. ALL MATERIALS EXPOSED IN A RETURN AIR PLENUM SHALL COMPLY WITH NFPA 90A FLAME SPREAD UNDER 25 AND SMOKE DEVELOPED AND FUEL CONTRIBUTED UNDER 50.
- 34. THE DISCHARGE OF SAFETY VALVES, BLOWOFF PIPES AND OTHER OUTLETS SHALL BE LOCATED AND SUPPORTED SO AS TO PREVENT INJURY TO PERSONNEL.
- 35. MECHANICAL EQUIPMENT SHOWN ON THE PLANS HAVE A SPECIFIC WEIGHT AND LOCATION. SHOULD THE CONTRACTOR INSTALL EQUIPMENT WITH DIFFERENT WEIGHTS OR LOCATIONS AS SHOWN, CONTRACTOR SHALL PROVIDE THIS INFORMATION TO THE STRUCTURAL ENGINEER FOR APPROVAL, PRIOR TO PURCHASING, CLEARLY INDICATING THE DIFFERENCES IN SIZE, WEIGHT AND LOCATION. THE ARCHITECT/ENGINEER SHALL NOT BEAR THE COSTS OF SUCH REVIEWS OR REDESIGNS.
- 36. DO NOT ROUTE PIPING OVER ELECTRICAL OR COMMUNICATIONS EQUIPMENT. THIS INCLUDES HYDRONICS, STEAM, DOMESTIC WATER, SANITARY SEWER AND VENTS, CONDENSATE, ROOF DRAINS, ETC.
- 37. ALL THERMOSTATS, SENSORS, ETC SHALL BE MOUNTED 60" AFF UNLESS NOTED OTHERWISE (UNO). IF ADJACENT TO LIGHT SWITCHES, HEIGHT TO MATCH, COORDINATE WITH ELECTRICAL.
- 38. PROVIDE RETURN AIR SMOKE DETECTOR IN EACH HVAC UNIT OVER 2,000 CFM AS REQUIRED BY THE LATEST ADOPTED INTERNATIONAL MECHANICAL CODE.
- 39. CONNECTION TO MARKED PROTECTION ZONES ON STEEL BRACES IS PROHIBITED. THIS INCLUDES (BUT NOT LIMITED TO): HOLES, WELDS, TACK WELDS, ERECTION AIDS, AIR-ARC GOUGING, THERMAL CUTTING, BOLTS, SCREWS, AND SHOT-PINS.

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THE WHITTIER

BOOMTOWN DEVELOPMENT COMP

88 NORTH LEWIS
TULSA, OK 74110

ISSUES	S / REVISIONS	
	06/12/2020	PERMIT SET - PHAS
	 	

ISSUE DATE: 06/12/2020 PROJECT NO: P05093.0100

DRAWN BY: RAS

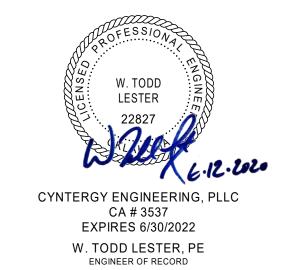
MECHANICAL NOTES

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HEET NUMBER



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THE WHITTIER

BOOMTOWN DEVELOPMENT COMP,
TULSA, OK 74110

ISSUES / REVISIONS 06/12/2020 PERMIT SET - PHASE 1

ISSUE DATE: 06/12/2020 PROJECT NO: P05093.0100 CHECKED BY: WTL DRAWN BY: RAS

MECHANICAL SITE PLAN

FUTURE - BY OTHERS

SHEET NUMBER M-101

GENERAL NOTES

CLOSET 2

HALLWAY

ATTIC ACCESS

S/A Q & Ø

MASTER CLOSET

LAUNDRY

(\$1) N 6"ø

10x6 120 <\$1> 8"ø

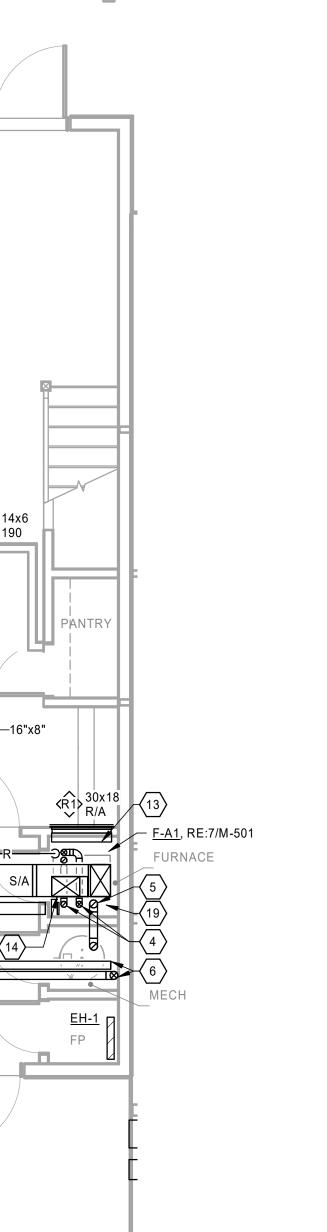
10x6 120 (S1) 8"ø

MASTER

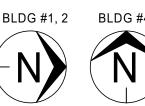
- REFER TO SHEET M-101 FOR BUILDING ORIENTATIONS ON SITE.
- FURNACE CLOSET IS AN ENVIRONMENTAL AIR PLENUM. INSTALL PLENUM-RATED MATERIALS ONLY IN CLOSET.

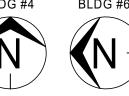
KEYNOTES

- 1. UNDERCUT DOOR 1" FOR RETURN AIR FLOW.
- 2. EXHAUST FAN WITH DUCT UP TO ROOF CAP.
- 3. 4"ø DRYER EXHAUST UP THROUGH ROOF, DRYER WALL BOX, RE: 4/M-501.
- 4. CPVC VENTS IN CLOSET UP INTO CHASE. TRANSITION TO PVC VENTS IN CHASE. PVC VENTS UP TO CONCENTRIC VENT AND THEN THROUGH ROOF, TYP. SIZE PER MANUFACTURER.
- 5. WATER HEATER FLUE VENTED UP TO ROOF THROUGH CHASE. FLUE MATERIAL AND SIZE PER MANUFACTURER.
- 6. (2) 4"ø DUCTS FOR COMBUSTION AIR; (1) TERMINATES WITHIN 12" OF CEILING AND (1) TERMINATES WITHIN 12" OF FLOOR.
- 7. RECIRCULATING EXHAUST HOOD OVER RANGE.
- 8. DUCTWORK ROUTED IN ATTIC SPACE.
- 9. O/A DUCT FROM INTAKE LOUVER OVER WINDOW TO ROOM, PROVIDE WITH ACCESSIBLE DAMPER IN FURNACE CLOSET. INSTALL BOTTOM OF LOUVER AT 8'0" AFF OR ABOVE
- 10. SPLIT SYSTEM CONTROL BY THERMOSTAT AND AVERAGING SENSOR.
- 11. INSTALL CONDENSING UNIT ON HOUSEKEEPING PAD, RE: 5/S-001. MAINTAIN MANUFACTURER'S CLEARANCES; COORDINATE LOCATION WITH SCREEN FENCES AND ALLEYS.
- 12. ROUTE REFRIGERANT FROM OUTDOOR UNIT TO INDOOR UNIT IN MOST DIRECT ROUTE POSSIBLE. SEAL EXTERIOR PENETRATION. SIZE PER MANUFACTURER'S RECOMMENDATIONS.
- 13. MOUNT RAG WITH BOTTOM OF GRILLE AT 6'3" AFF OR ABOVE. R/A DUCT OPEN TO CLOSET.
- 14. DUCTWORK UP TO ATTIC.
- 15. INTAKE LOUVER FOR COMBUSTION AIR; INSTALL BOTTOM OF LOUVER AT 8'9" AFF OR ABOVE. CONNECT BOTH 4"ø DUCTS TO FULL SIZE PLENUM ON BACK OF LOUVER.
- 16. ROUTE BETWEEN STRUCTURAL TJI.
- 17. DUCT ROUTED IN ARCHITECTURAL LOWERED SOFFIT. ROUTE DUCT AS CLOSE TO WALL AND AS FAR FROM SOFFIT FACE AS POSSIBLE.
- 18. ECCENTRIC DUCT TRANSITION.
- 19. ROUTE CONDENSATE DRAIN LINE FROM EACH FURNACE TO NEARBY FLOOR DRAIN.
- 20. INSTALL SIDEWALL DIFFUSER IN SIDE OF CEILING



REFER TO M-101 FOR PHASING PLAN









14x8 160 <\$1> 8"ø

BEDROOM 1









810 SOUTH CINCINNATI SECOND FLOOR

CYNTERGY ENGINEERING, PLLC

CA # 3537

EXPIRES 6/30/2022

W. TODD LESTER, PE

ENGINEER OF RECORD

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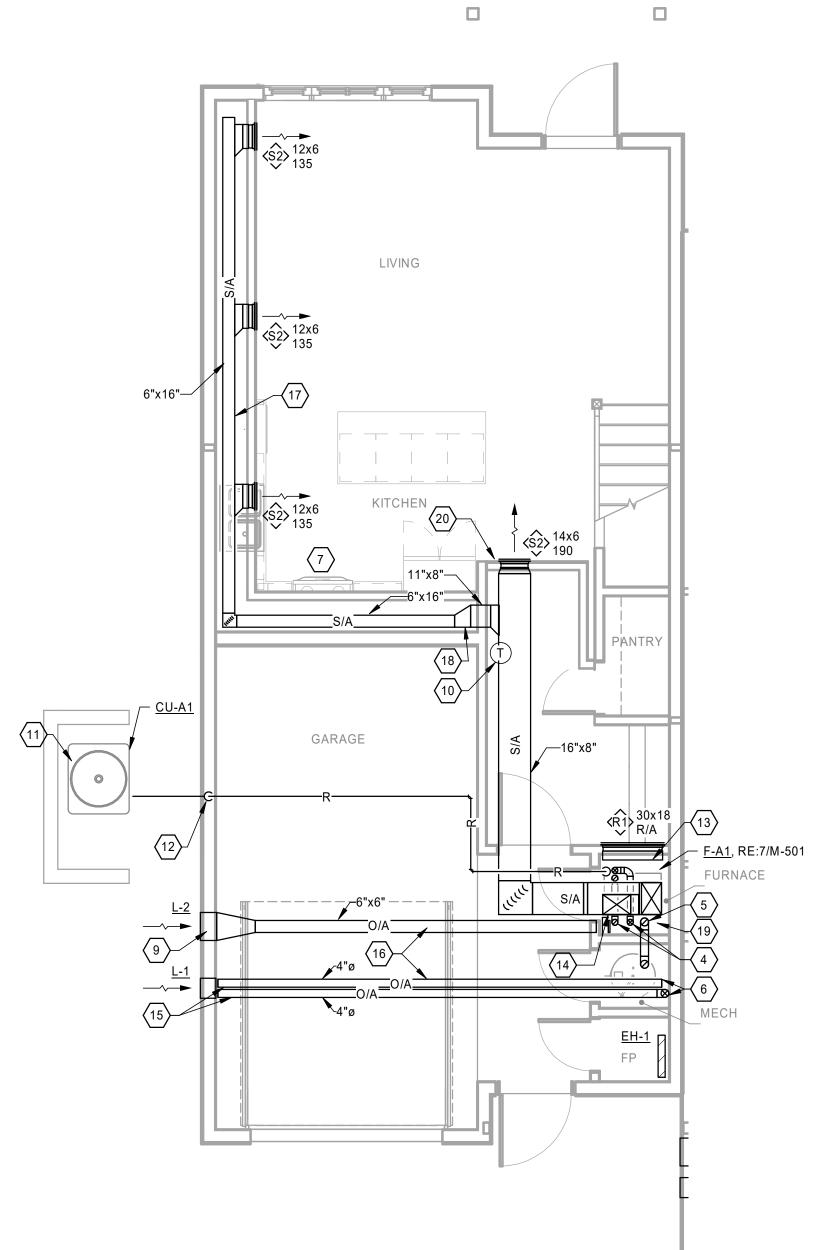
ISSUE DATE: 06/12/2020 PROJECT NO: P05093.0100

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ENLARGED UNIT A-1 HVAC PLANS

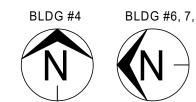
SHEET NUMBER

M-401



ENLARGED UNIT A-1 FIRST FLOOR PLAN

1/4" = 1'-0"



- REFER TO SHEET M-101 FOR BUILDING ORIENTATIONS ON SITE.
- FURNACE CLOSET IS AN ENVIRONMENTAL AIR PLENUM. INSTALL PLENUM-RATED MATERIALS ONLY IN CLOSET.

KEYNOTES

1. UNDERCUT DOOR 1" FOR RETURN AIR FLOW.

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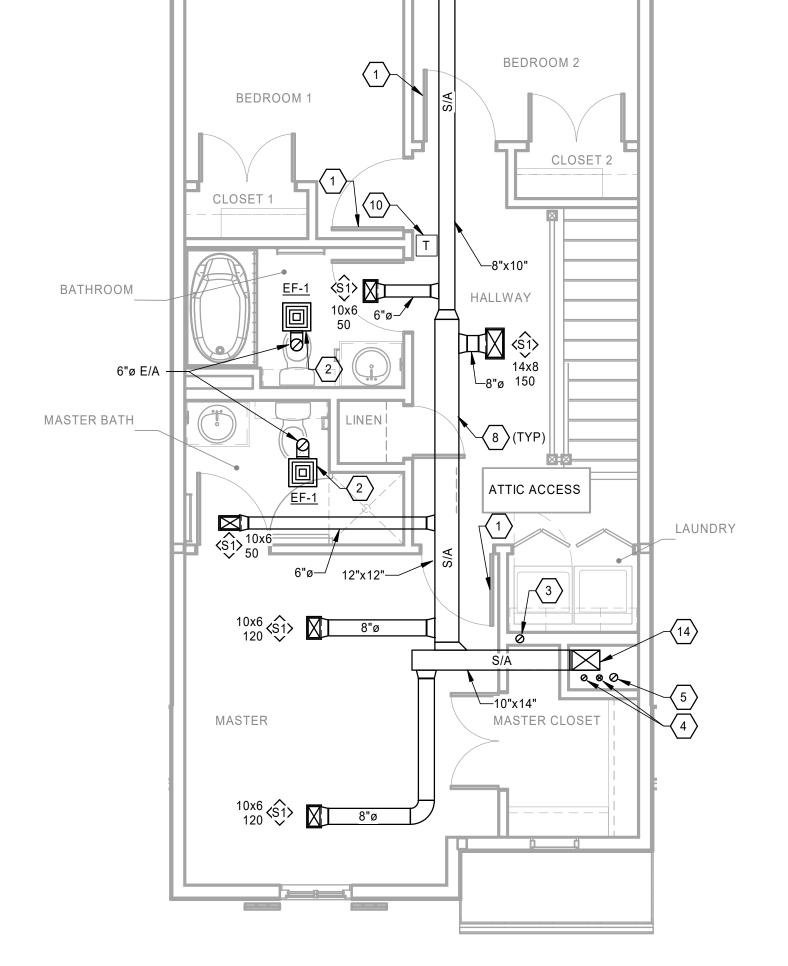
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- 2. EXHAUST FAN WITH DUCT UP TO ROOF CAP.
- 4"ø DRYER EXHAUST UP THROUGH ROOF, DRYER
- CPVC VENTS IN CLOSET UP INTO CHASE. TRANSITION TO PVC VENTS IN CHASE. PVC VENTS UP TO CONCENTRIC VENT AND THEN THROUGH ROOF, TYP. SIZE PER MANUFACTURER.

WALL BOX, RE: 4/M-501.

- WATER HEATER FLUE VENTED UP TO ROOF THROUGH CHASE. FLUE MATERIAL AND SIZE PER MANUFACTURER.
- 6. (2) 4"ø DUCTS FOR COMBUSTION AIR; (1) TERMINATES WITHIN 12" OF CEILING AND (1) TERMINATES WITHIN 12" OF FLOOR.
- 7. RECIRCULATING EXHAUST HOOD OVER RANGE.
- 8. DUCTWORK ROUTED IN ATTIC SPACE.
- 9. O/A DUCT FROM INTAKE LOUVER OVER WINDOW TO ROOM, PROVIDE WITH ACCESSIBLE DAMPER IN FURNACE CLOSET. INSTALL BOTTOM OF LOUVER AT 8'0" AFF OR ABOVE
- 10. SPLIT SYSTEM CONTROL BY THERMOSTAT AND AVERAGING SENSOR.
- 11. INSTALL CONDENSING UNIT ON HOUSEKEEPING PAD, RE: 5/S-001. MAINTAIN MANUFACTURER'S CLEARANCES; COORDINATE LOCATION WITH SCREEN FENCES AND ALLEYS.
- 12. ROUTE REFRIGERANT FROM OUTDOOR UNIT TO INDOOR UNIT IN MOST DIRECT ROUTE POSSIBLE. SEAL EXTERIOR PENETRATION. SIZE PER MANUFACTURER'S RECOMMENDATIONS.
- 13. MOUNT RAG WITH BOTTOM OF GRILLE AT 6'3" AFF OR ABOVE. R/A DUCT OPEN TO CLOSET.
- 14. DUCTWORK UP TO ATTIC.
- 15. INTAKE LOUVER FOR COMBUSTION AIR; INSTALL BOTTOM OF LOUVER AT 8'9" AFF OR ABOVE. CONNECT BOTH 4"ø DUCTS TO FULL SIZE PLENUM ON BACK OF LOUVER.
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- 18. ECCENTRIC DUCT TRANSITION.
- 19. ROUTE CONDENSATE DRAIN LINE FROM EACH FURNACE TO NEARBY FLOOR DRAIN.
- 20. INSTALL SIDEWALL DIFFUSER IN SIDE OF CEILING

LIVING ∕—16"x8" MUD ROOM



8"ø <\$1>14x8 125



REFER TO M-101 FOR PHASING PLAN

ENLARGED UNIT A-1.1 HVAC

SHEET NUMBER M-402

ISSUE DATE: 06/12/2020 PROJECT NO: P05093.0100

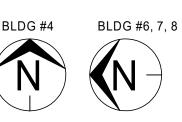
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ENLARGED UNIT A-1.1 FIRST FLOOR PLAN

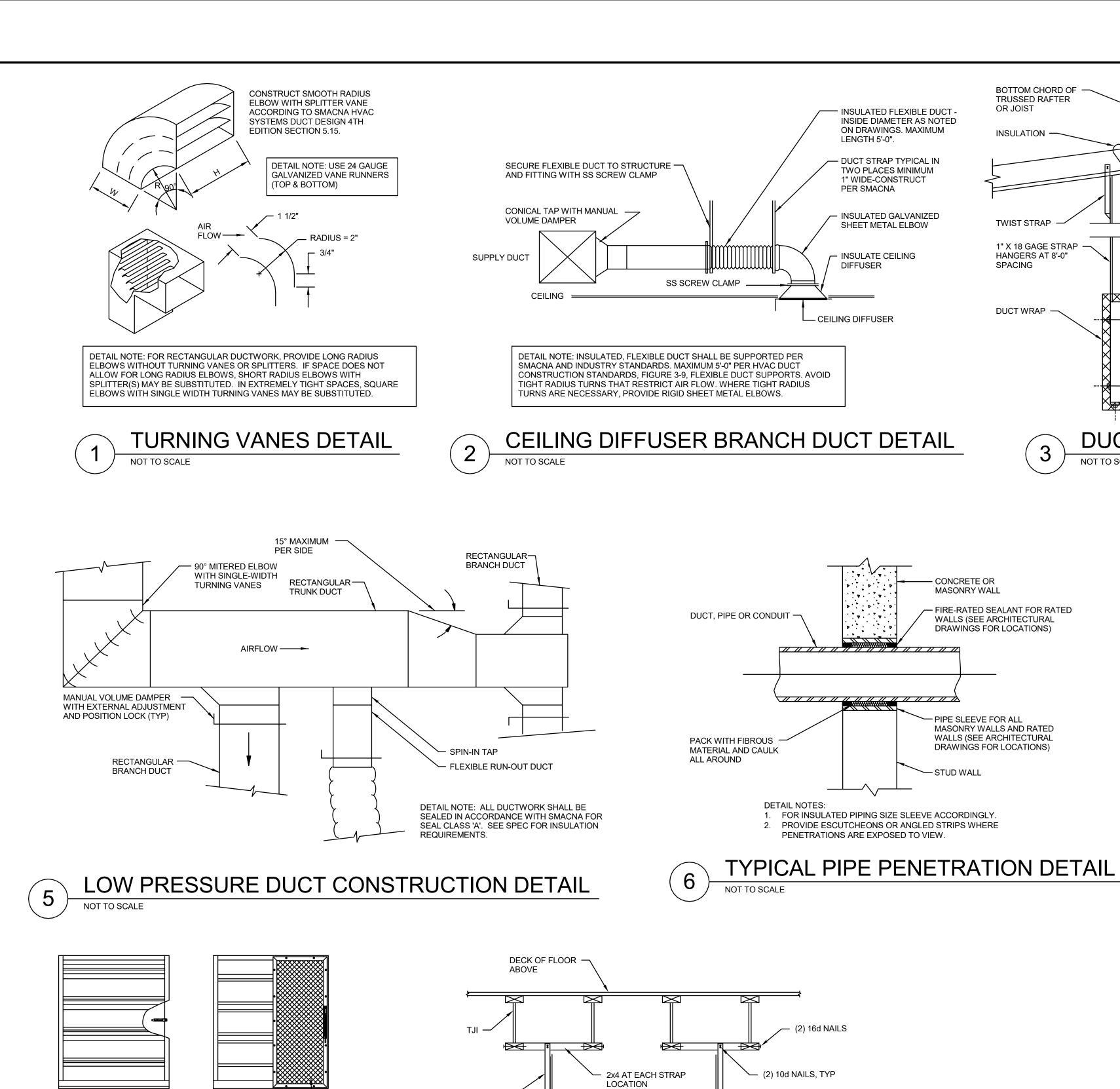
GARAGE



REFER TO M-101 FOR PHASING PLAN

2 ENLARGED UNIT A-1.1 SECOND FLOOR PLAN

1/4" = 1'-0"



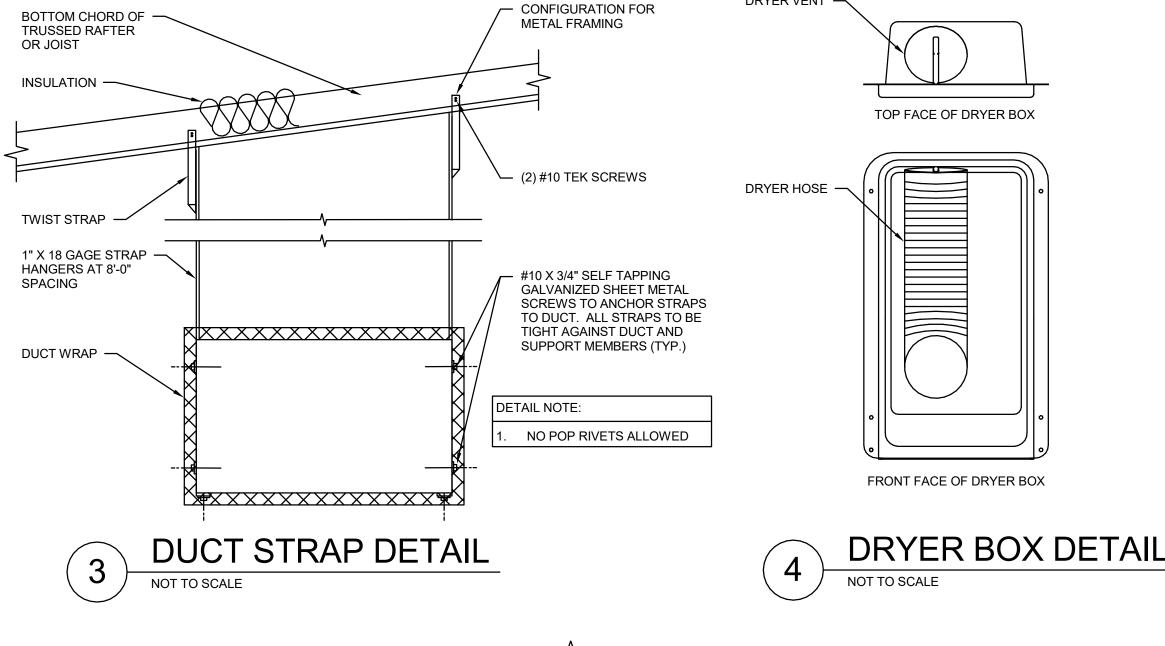
TWIST STRAP

SPACING

DUCT WRAP -

1" X 18 GAGE STRAP — HANGERS AT 8'-0"

DUCT STRAP DETAIL



· CONCRETE OR

MASONRY WALL

FIRE-RATED SEALANT FOR RATED

WALLS (SEE ARCHITECTURAL

DRAWINGS FOR LOCATIONS)

PIPE SLEEVE FOR ALL

STUD WALL

#10 X 3/4" SELF TAPPING

GALVANIZED SHEET METAL SCREWS TO ANCHOR STRAPS

TIGHT AGAINST DUCT AND

NO POP RIVETS ALLOWED

SUPPORT MEMBERS (TYP.)

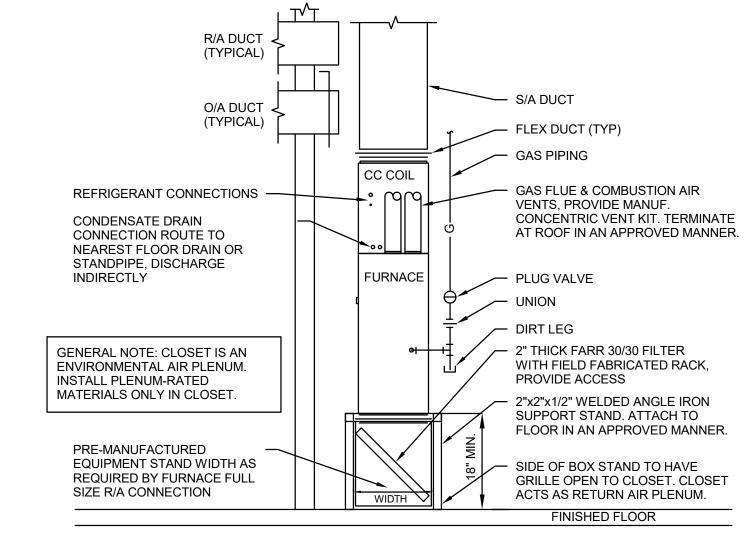
DETAIL NOTE:

TO DUCT. ALL STRAPS TO BE

MASONRY WALLS AND RATED

WALLS (SEE ARCHITECTURAL

DRAWINGS FOR LOCATIONS)





810 SOUTH CINCINNATI

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MECHANICAL DETAILS

SHEET NUMBER M-501

FRONT VIEW

SIDE VIEW

CAULKING

INSTALLER

BY

BACK VIEW

WALL INSTALLATION

(COORDINATE WITH WALL TYPE)

LOUVER DETAIL

INSECT

SCREEN

MASONRY,

WOOD OR

STEEL ANCHOR BY INSTALLER

DRYER VENT -

		LOUVE	R SCHE	DULE		
MARK	MANUFACTURER MODEL	WIDTH (IN)	HEIGHT (IN)	MINIMUM FREE AREA (SQFT)	MAX PD (INWC)	REMARKS
L-1	GREENHECK ESD-635	12	12	0.2	0.02	1-2
L-2	GREENHECK ESD-635	14	22	0.6	0.02	1-2

REMARKS:

. PROVIDE BIRD SCREEN.

COORDINATE INSTALLATION WITH WALL TYPE AND PROVIDE LOUVERS WITH FACTORY PRIME COAT. FINAL FINISH COLOR SHALL BE COORDINATED WITH ARCHITECT.

	ELECTRIC HEATER SCHEDULE								
MARK	MANUFACTURER MODEL	AREA SERVED	HEATING CAPACITY (WATTS)	AMPS	V/PH/HZ	WEIGHT (LBS)	REMARKS		
EH-1	QMARK WHT500	WATER RISER ROOM	500	4.2	120/1/60	6	1-3		

REMARKS:

1. PROVIDE SCHEDULED MANUFACTURER OR APPROVED EQUAL.

2. UNIT HEATER TO MAINTAIN 60°F SPACE TEMPERATURE (ADJUSTABLE). 3. PROVIDE UNIT MOUNTED THERMOSTAT.

		EXHA	UST F	AN SC	CHEDUL	E		
MARK	MANUFACTURER MODEL	LOCATION	CFM	ESP (INWC)	AMPS	V/PH/HZ	SOUND (SONES)	REMARKS
EF-1	BROAN 679	BATHROOMS	70	0.1	2.0	120/1/60	3.5	1-7
DEMARKS.								

COORDINATE ELECTRICAL REQUIREMENTS WITH ELECTRICAL CONTRACTOR

EXHAUST FAN COMES WITH LIGHT. EXHAUST FAN AND LIGHT SEPARATELY CONTROLLED BY SWITCH.

. PROVIDE BACKDRAFT DAMPER. . PROVIDE MOTOR DISCONNECT.

6. PROVIDE WITH 4" ROUND DUCT CONNECTOR.7. PROVIDE WITH MANUFACTURER'S ROOF CAP.

	EXHAUST FAN SCHEDULE									
FACTURER ODEL	LOCATION	CFM	ESP (INWC)	AMPS	V/PH/HZ	SOUND (SONES)	REMARKS			
ROAN 679	BATHROOMS	70	0.1	2.0	120/1/60	3.5	1-7			

			AIF	R DEVICE S	SCHEDULI	Ē	
	MARK	MFG MODEL	SERVICE	TYPE	MOUNTING	FACE SIZE	REMARKS
	S1	HART COOLEY 683	S/A	LOUVERED	SURFACE	SEE PLANS	1-5
	S2	HART COOLEY 683	S/A	LOUVERED	SURFACE	SEE PLANS	2,3,4,5
	R1	HART COOLEY RH45	R/A	LOUVERED	SURFACE	SEE PLANS	2,4
J	REMARKS:	-					

REFER TO ARCHITECTURAL REFLECTED CEILING PLAN FOR ACTUAL MOUNTING REQUIREMENTS.

19.3/30

230/1/60

227

2. PROVIDE ENAMEL WHITE FINISH.

3. REFER TO PLANS FOR NECK SIZES.
4. PROVIDE ALUMINUM VERSION OF GRILLES IN SHOWER, RESTROOM, AND LAUNDRY AREAS.
5. WITH OPPOSED BLADE DAMPER AT FACE.

			SF	LIT-SYS	TEM SC	HEDL	JLE					
			NOMINAL	COOLING	HEATING		EVAP FAI	N	ELECTR	RICAL		
MARK	TYPE	MANUFACTURER MODEL	SIZE (TONS)	CAPACITY (MBH)	CAPACITY IN/OUT (MBH)	S/A	O/A	HP	MCA/MOCP-CU / MOCP-F (AMPS)	V/PH/HZ	WEIGHT (LBS)	REMARKS
F-A1	NATURAL GAS FURNACE	LENNOX EL196UH090XE48C	3.5	42	88/85	1230	200	3/4	15	120/1/60	158	1-12
CU-A1	CONDENSING UNIT	LENNOX EL16XC1-041	3.5					1/6	19.3/30	230/1/60	227	1-12
F-A1.1	NATURAL GAS FURNACE	LENNOX EL196UH090XE48C	3.5	42	88/85	1230	200	3/4	15	120/1/60	158	1-12
CU-A1.1	CONDENSING	LENNOX	3.5					1/6	19.3/30	230/1/60	227	1-12

3.5

REMARKS:

. COORDINATE ELECTRICAL REQUIREMENTS WITH ELECTRICAL CONTRACTOR.

. PROVIDE AFUE-96.0% OR GREATER.

CU-A1.1

3. PROVIDE MANUFACTURER'S CONCENTRIC VENT KIT (INSTALL PER MANUFACTURER'S RECOMMENDATIONS). 4. PROVIDE BOTTOM FILTER RACK AND STAND BOX.

EL16XC1-041

5. PROVIDE HONEYWELL RTH7500D 7-DAY PROGRAMMABLE THERMOSTAT WITH GUARD AND AVERAGING SENSOR.

6. PROVIDE CONDENSATE TRAP.

7. PROVIDE 20 YEAR HEAT EXCHANGER WARRANTY.8. PROVIDE COMPRESSOR START ASSIST - CAPACITOR AND RELAY.

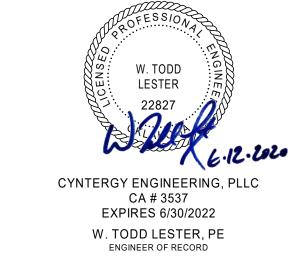
9. PROVIDE ANTI-SHORT CYCLE PROTECTOR.

10. PROVIDE FILTER DRIER (SUCTION LINE).

11. PROVIDE TXV OR PISTON BODY. 12. PROVIDE EVAPORATOR DEFROST CONTROL TO PROVIDE LOW AMBIENT COOLING.



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	06/12/2020	PERMIT SET - PHASE 1

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MECHANICAL SCHEDULES

SHEET NUMBER

M-601

	IGHTING SYMBOLS	DISTD	IBUTION SYMBOLS
	RECESSED FIXTURE, UPPERCASE LETTER		
42 A	DENOTES FIXTURE TYPE, LOWER CASE LETTER DENOTES SWITCH DESIGNATION,	0	JUNCTION BOX MOTOR RATED SWITCH WITH THERMAL OVERLOADS,
	NUMBER DENOTES CIRCUIT. (TYPICAL) RECESSED FIXTURE, NL DENOTES NIGHT	\$M	EXCLUDE OVERLOADS IF PROVIDED WITH MOTOR
NL	LIGHT FOR UNSWITCHED FIXTURE	<u> </u>	NON-FUSED DISCONNECT
	STRIP LIGHT	ď	FUSED DISCONNECT
0	DOWN LIGHT	⊠ ¹	COMBINATION STARTER/DISCONNECT
•	WALL WASH DOWN LIGHT	×	STARTER
۵	WALL SCONCE	M	METER
Q	WALL MOUNTED FIXTURE		TRANSFORMER
	SITE LIGHTING	0	MOTOR
	EXIT FIXTURE, BRACKET DENOTES WALL MOUNT, ARROW DENOTES DIRECTION,		PANEL, SURFACE MOUNTED
⊗ ∞ 124	SHADE DENOTES QUANTITY AND DIRECTION OF EXIT FACE.		PANEL, FLUSH MOUNTED
4	COMBINATION EMERGENCY FIXTURE/EXIT LIGHT	Ţ	EARTH GROUND
₩	EMERGENCY FIXTURE	***	TRANSFORMER
RE	CEPTACLE SYMBOLS	-60-	BREAKER IN ENCLOSURE
Ф 41	DUPLEX RECEPTACLE 18" AFF TO CENTER, UON. NUMBER DENOTES CIRCUIT (TYPICAL)	-60-	BREAKER
#	DOUBLE DUPLEX RECEPTACLE 18" AFF TO CENTER, UON	-	FUSED DISCONNECT SWITCH
ф	SIMPLEX RECEPTACLE 18" AFF TO CENTER, UON		NON FUSED DISCONNECT SWITCH
P	DUPLEX GROUND-FAULT CIRCUIT-INTERRUPTER RECEPTACLE 18" AFF TO CENTER, UON		
<u></u>	DOUBLE DUPLEX GROUND-FAULT CIRCUIT-INTERRUPTER RECEPTACLE 18" AFF TO CENTER, UON		
——————————————————————————————————————	ISOLATED GROUND DUPLEX RECEPTACLE 18" AFF TO CENTER, UON	LOW V	OLTAGE SYMBOLS
**	ISOLATED GROUND DOUBLE DUPLEX RECEPTACLE 18" AFF TO CENTER, UON		
<u>''</u>	CEILING MOUNT DUPLEX RECEPTACLE	▼ TELEPHONE OR DATA	MOUNT AT 18" AFF TO CENTER, UON. 4" SQUARE BOX WITH SINGLE GANG MUD RING, BLANK
φ	SPECIAL RECEPTACLE 18" AFF TO CENTER, UON	⊢ TV TELEVISION	FACEPLATE AND A 3/4" CONDUIT OR ENT TO ACCESSIBLE ATTIC SPACE OR DIRECTLY TO TELE/TV, COMM INTERFACE ENCLOSURE. COORDINATE INSTALLATION WITH LOW VOLTAGE CONTRACTOR.
	SWITCH SYMBOLS		
\$ a	SINGLE POLE SWITCH 46" AFF TO CENTER, UON LOWER CASE LETTER DENOTES SWITCH DESIGNATION		
\$ 2	DOUBLE POLE SWITCH 46" AFF TO CENTER, UON		
\$ 3	3-WAY SWITCH 46" AFF TO CENTER, UON		
\$ 4	4-WAY SWITCH 46" AFF TO CENTER, UON		
\$ D	DIMMER 46" AFF TO CENTER, UON		
\$ K	SINGLE POLE KEYED SWITCH 46" AFF TO CENTER, UON		
\$ R/a,b,c	TRIPLE ROCKER COMBINATION SWITCH 46" AFF TO CENTER, UON		
•		1	

	ELECTRICAL	. ADDKE	EVIATIONS
A		M	
AC	ALTERNATING CURRENT	MANUF	MANUFACTURER
AFC	ABOVE FINISHED COUNTER	MAX	MAXIMUM
AFF	ABOVE FINISHED FLOOR	MCB	MAIN CIRCUIT BREAKER
AFG	ABOVE FINISHED GRADE	MCC	MOTOR CONTROL CENTER
AHJ	AUTHORITY HAVING JURISDICTION	MDP	MAIN DISTRIBUTION PANELBOARD
AIC	AMPERE INTERRUPTING CAPACITY	MIN	MINIMUM
AMP	AMPERE	MLO	MAIN LUGS ONLY
AT	AMP TRIP	MTG	HGT MOUNTING HEIGHT
ATS	AUTOMATIC TRANSFER SWITCH	MTR	MOTOR
AWG	AMERICAN WIRE GAUGE	Ν	
С			NEUTDAI
_	CONDUIT	N N/A	NEUTRAL NOT APPLICABLE
C CATV	CONDUIT CABLE ANTENNA TELEVISION	N/A NC	NOT APPLICABLE NORMALLY CLOSED
CB, C/B	CIRCUIT BREAKER	NEC	NATIONAL ELECTRICAL CODE
CCTV	CLOSED CIRCUIT TELEVISION	NEMA	NATIONAL ELECTRICAL CODE NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION
CKT	CIRCUIT	NFD	NON-FUSED DISCONNECT
CLG	CEILING	NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
CONT	CONTINUATION	NIC	NOT IN CONTRACT
CT	CURRENT TRANSFORMER	NL	NIGHT LIGHT
_	· - · · · · · · · · · · · · · · · · · ·	NO	NORMALLY OPEN
D		_	
DC	DIRECT CURRENT	0	
DEG	DEGREE	OCPD	OVER CURRENT PROTECTION DEVICE
DISC	DISCONNECT	OPCI	OWNER PROVIDED, CONTRACTOR INSTALLED
E		OL	OVERLOAD
(E)	EXISTING TO REMAIN	OSHA	OCCUPATIONAL SAFETY AND HEALTH ACT
(ER)	EXISTING TO BE RELOCATED/REWORKED	Р	
EA	EACH	-	
EC	ELECTRICAL CONTRACTOR	P/PWR	POWER
EF	EXHAUST FAN	(PART)	PARTIAL PART OF CIRCUIT
EG	EQUIPMENT GROUND	PF	POWER FACTOR
ELEC	ELECTRICAL	PH	PHASE
EMERG	EMERGENCY	PNL	PANEL
EMT	ELECTRICAL METALLIC TUBING	R	
EPO	EMERGENCY POWER OFF	(R)	EXISTING TO BE REMOVED
F		RE	REFERENCE
F	FAHRENHEIT	RECEPTS	RECEPTACLE(S)
FA	FIRE ALARM	REQ'S	REQUIREMENTS
FAAP	FIRE ALARM ANNUNCIATOR PANEL	RMC	RIGID METAL CONDUIT
FACP	FIRE ALARM CONTROL PANEL	RM	ROOM
FLA	FULL LOAD AMPS	RMS	ROOT MEAN SQUARE
FT	FEET	S	
FU	FUSE	SE	SERVICE ENTRANCE
G		SP	SINGLE-POLE
G/GD/GND	GROUND	SPD	SURGE PROTECTION DEVICE
GFP	GROUND FAULT PROTECTED	SPEC	SPECIFICATION
GFPE	GROUND FAULT PROTECTION EQUIPMENT	SQ FT	SQUARE FOOT (FEET)
GFR	GROUND FAULT RELAY	ST	SHUNT TRIP DEVICE
GFS	GROUND FAULT SENSOR	STD	STANDARD
		SYM	SYMMETRICAL
Н		Т	
HACR	HEATING, AIR-CONDITIONING, REFRIGERATION	T	TIME
HP	HORSEPOWER	r TYP	TYPICAL
HZ	HERTZ (FREQUENCY)		
		U	
IG	ISOLATED GROUND	UG	UNDERGROUND
IN	INCHES	UL	UNDERWRITERS LABORATORIES
I		UON	UNLESS OTHERWISE NOTED
J	HINGTION POY	UPS	UNINTERRUPTIBLE POWER SUPPLY
JB	JUNCTION BOX	V	
K		V	VOLT
k	KILO	VA	VOLT AMPS
kcmil	1000 CIRCULAR MILS	VAC	VOLTS ALTERNATING CURRENT
kVA	KILOVOLT AMPS	VD	VOLTAGE DROP
kW	KILOWATT	W	
kWh	KILOWATT-HOUR	W	WIRE
1		vv W/	WIRE WITH
L LRA	LOCKED-ROTOR AMPACITY	WP	WEATHERPROOF WHILE IN USE
LTS	LIGHTS		
	- ··-	X	
		XFMR	TRANSFORMER

ELECTRICAL ABBREVIATIONS

GENERAL NOTES

- ELECTRICAL EQUIPMENT INSTALLED IN FIRE-RESISTANCE-RATED CONSTRUCTION SHALL BE INSTALLED IN ACCORDANCE WITH THE IBC, INCLUDING BUT NOT LIMITED TO SECTION 714.
- ALL MATERIAL SHALL FIT THE SPACE AVAILABLE. VERIFY DIMENSIONS AND CLEARANCES AT BUILDING PRIOR TO ORDERING. ALL WORKING CLEARANCES AT ELECTRICAL EQUIPMENT SHALL BE MAINTAINED IN ACCORDANCE WITH THE NEC. COORDINATE WITH OTHER TRADES AS REQUIRED.
- REFER TO MECHANICAL DRAWINGS FOR MECHANICAL EQUIPMENT REQUIRING ELECTRICAL CONNECTIONS. NOTIFY ENGINEER, IN WRITING, TEN DAYS PRIOR TO BID IF MECHANICAL DOCUMENTS REQUIRE ELECTRICAL CONNECTIONS THAT ARE NOT INDICATED ON ELECTRICAL DOCUMENTS.
- ELECTRICAL DISCONNECTS, STARTERS, DEVICES, OR RACEWAYS MOUNTED ON OR ADJACENT TO EQUIPMENT SHALL NOT IMPEDE ACCESS TO THAT EQUIPMENT. DISCONNECTS AND STARTERS SHALL BE INSTALLED IN A LOCATION TO MEET THE NEC WORKING SPACE REQUIREMENTS.
- LABEL ALL DISCONNECTS AND STARTERS WITH EQUIPMENT DESIGNATION, SERVING PANELBOARD DESIGNATION AND CIRCUIT NUMBER. INTERIOR EQUIPMENT MAY BE LABELED WITH SELF-ADHESIVE VINYL LABELS THAT ARE PREPRINTED, FLEXIBLE, LAMINATED WITH A CLEAR, WEATHER-AND CHEMICAL-RESISTANT COATING. EXTERIOR EQUIPMENT SHALL BE LABELED WITH SCREW RETAINED, UV STABILIZED PHENOLIC LABELS.
- COORDINATE WITH MECHANICAL FOR ELECTRICAL CONTROLS WORK NOT PART OF CONTROLS CONTRACTOR SCOPE OF
- 7. ALL BRANCH CIRCUITS LARGER THAN 20A SHALL BE INSTALLED IN DEDICATED CONDUITS.
- SLEEVE ALL WALL, FLOOR AND CEILING PENETRATIONS FOR CABLE INSTALLATIONS. SUPPORT SLEEVES ACCORDINGLY. FIRESTOP AROUND AND IN SLEEVES AS REQUIRED. FIRESTOP MATERIAL IN SLEEVE SHALL BE REMOVABLE FOR FUTURE INSTALLATION OF CABLES.
- CONTRACTOR SHALL REVIEW ALL SPECIFICATIONS/PROJECT MANUAL, CIVIL, ARCHITECTURAL, INTERIORS, STRUCTURAL, FIRE PROTECTION, AND MECHANICAL DOCUMENTS, PRIOR TO BID, INCLUDING, BUT NOT LIMITED TO, DOOR SCHEDULES, REFLECTED CEILING PLANS, ARCHITECTURAL DETAILS, MECHANICAL PLANS, AND MECHANICAL SCHEDULES. REQUIREMENTS AND INFORMATION NECESSARY FOR THE ELECTRICAL MAY BE FOUND IN OTHER DISCIPLINE'S DOCUMENTS. NOTIFY ENGINEER, IN WRITING, TEN DAYS PRIOR TO BID IF OTHER DISCIPLINE'S DOCUMENTS REQUIRE ELECTRICAL CONNECTIONS THAT ARE NOT INDICATED ON ELECTRICAL DOCUMENTS.
- 10. COORDINATE MOUNTING HEIGHTS/LOCATIONS OF ALL WALL MOUNTED DEVICES WITH ARCHITECTURAL DOCUMENTS.
- 11 COORDINATE MOUNTING HEIGHTS OF WALL MOUNTED DEVICES WITH MASONRY AND ARCHITECTURAL WALL FINISHES (I.E. TILE). NOTIFY ENGINEER AND OR ARCHITECT IF MOUNTING HEIGHTS SHOULD BE ADJUSTED.
- 12. ALL 15A AND 20A, 120V CIRCUITS WITH CIRCUIT LENGTH GREATER THAN 100' SHALL BE #10 AWG MINIMUM.
- 13. A SEPARATE GREEN INSULATED EQUIPMENT GROUNDING CONDUCTOR SHALL BE INSTALLED WITH THE CIRCUIT CONDUCTORS, WHETHER INDICATED ON THE DRAWINGS OR NOT. METAL RACEWAY, CABLE ARMOR OR SHEATH SHALL NOT BE USED AS THE PREFERRED EQUIPMENT GROUNDING CONDUCTOR. RACEWAY SYSTEMS SHALL BE MECHANICALLY AND ELECTRICALLY CONTINUOUS AND SHALL BE BONDED AT ALL POINTS TO THE INSULATED EQUIPMENT GROUNDING CONDUCTOR IN ACCORDANCE WITH THE APPLICABLE PROVISIONS OF NEC ARTICLE 250.
- 14. THE WORD "PROVIDE" AS USED IN THE CONTRACT DOCUMENTS SHALL MEAN TO FURNISH AND INSTALL, UNLESS OTHERWISE NOTED.
- 15. ANY CUTTING AND PATCHING OF STRUCTURE SHALL BE APPROVED BY THE STRUCTURAL ENGINEER PRIOR TO PERFORMING
- 16. PROVIDE PULL STRING IN ALL EMPTY CONDUITS.
- 17. PROVIDE ALL LIGHTING CONTROL DEVICES, AT ONE LOCATION, UNDER A COMMON COVER PLATE, UNLESS NOTED OTHERWISE.
- 18. ALL EQUIPMENT/DEVICES (INCLUDING LIGHTING ASSEMBLIES) SHALL BE UNDERWRITER LABORATORY (OR OTHER APPROVED NATIONALLY RECOGNIZED TESTING LABORATORY) LISTED AND LABELED FOR INSTALLATION AND INTENDED USE.
- 19. VERIFY EXACT POWER REQUIREMENTS AND NEMA CONFIGURATION OF OUTLET REQUIRED FOR OWNER FURNISHED EQUIPMENT BEFORE ROUGH-IN.
- 20. OUTLETS SHALL NOT BE MOUNTED BACK TO BACK.
- 21. PROVIDE DEDICATED NEUTRALS FOR GFCI CIRCUITS. GFCI OUTLETS ARE SHOWN FOR ALL OUTLETS REQUIRED TO BE PROTECTED, HOWEVER, ONLY ONE GFCI DEVICE ON EACH CIRCUIT MAY BE INSTALLED TO PROTECT THE GFCI OUTLETS SHOWN. LOCATE GFCI DEVICE IN CIRCUIT TO PROTECT ALL GFCI OUTLETS SHOWN. GFCI SHALL HAVE A 4-6 mA TRIP.
- 22. PROVIDE LISTED HANDLE-TIE OR MULTI-POLE CIRCUIT BREAKER FOR CIRCUITS SHARING A COMMON NEUTRAL. HANDLE-TIED OR MULTI-POLE CIRCUIT BREAKERS SHALL SIMULTANEOUSLY DISCONNECT ALL UNGROUNDED CONDUCTORS, THAT SHARE THE COMMON NEUTRAL.
- 23. CIRCUIT BREAKERS SERVING FIRE ALARM SYSTEM COMPONENTS SHALL HAVE RED IDENTIFICATION ON THE CIRCUIT BREAKER HANDLE.
- 29. REFER TO THE BRANCH CIRCUIT SCHEDULE FOR BRANCH CIRCUIT SIZES, UNLESS OTHERWISE NOTED.
- 30. PROVIDE PVC COATED GALVANIZED RIGID CONDUIT ELBOWS ON ALL UNDERGROUND CONDUITS AND USE PVC COATED GALVANIZED RIGID CONDUIT WHERE STUBBED UP THROUGH A SLAB. ALL METALLIC SURFACES, INCLUDING FITTINGS, SHALL BE PVC COATED. COATED SURFACES DAMAGED DURING INSTALLATION AND OR CONSTRUCTION SHALL HAVE THE DAMAGED SURFACE TOUCHED UP WITH MANUFACTURER APPROVED COMPOUND. ALL EXPOSED EXTERIOR CONDUIT SHALL BE GALVANIZED RIGID STEEL UNLESS NOTED OTHERWISE.
- 31. PROVIDE CEILING FAN RATED BOXES AND SUPPORT FOR CEILING FANS IN ACCORDANCE WITH CODE AND THE MANUFACTURER'S RECOMMENDATIONS.

	LIGHT FIXTURE SCHEDULE											
	CATALOG NUMBER OR ENGINEER APPROVED											
MARK	DESCRIPTION	MANUFACTURER	EQUAL	MOUNTING	LAMP TYPE	LOAD COMMENTS						
Α	6" RECESSED DOWNLIGHT	QUORUM	905-6-8	RECESSED	LED, 3000K	12 VA WET LOCATION LISTED						
В	LED WRAPAROUND	METALUX	4WPLD3130R9	SURFACE	LED, 3000K	36 VA						
С	CEILING FAN WITH LIGHT	QUORUM	70525-65	SURFACE	(2) SATCO 9.5A19/LED30K/ND120V	64 VA PROVIDE WITH LIGHT KIT						
D	VANITY LIGHT	QUORUM	5207-3-65	SURFACE	(3) SATCO 9.5A19/LED30K/ND120V	20 VA CENTER, 3" TO BOTTOM OF FIXTURE, ABOVE MIRROR						
E	DECORATIVE PENDANT	HOME DECORATORS COLLECTION	TNP05866	PENDANT	(1) SATCO 9.5A19/LED30K/ND120V	10 VA						
F	EXTERIOR WALL SCONCE	QUORUM	706-69	SURFACE	(1) SATCO 6.5A19/CL/LED/E26/30K/120V	7 VA MOUNT AT +7'-0" TO TOP OF FIXTURE						
G	7.5" RECESSED DOWNLIGHT	QUORUM	905-7-8	RECESSED	LED, 3000K	15 VA						
Н	2' UNDER CABINET LIGHTING	QUORUM	93324-6	SURFACE	LED, 3000K	9 VA						
J	SIGN LIGHTING	ACOLYTE	CHAR2 F 0 SWS268 3.0 30	RECESSED	LED, 3000K	15 VA LENGTHS AS REQUIRED, PROVIDE WITH OUTDOOR RATED DRIVER, RE: ARCHITECTURAL DETAILS						
K	2' LED STRIP	COMMERCIAL ELECTRIC	54263211	SURFACE	LED, 3000K	10 VA CENTER, 3" TO BOTTOM OF FIXTURE, ABOVE DOOR						

MEDIUM BASE LAMP FIXTURES SHALL HAVE A MINIMUM LAMP SOCKET RATING OF 60 WATTS. FIXTURES WITH A SOCKET RATING MORE THAN 60 WATTS SHALL HAVE A FACTORY APPLIED LABEL IN THE FIXTURE STATING THAT THE MAXIMUM SOCKET RATING IS 60 WATTS. MANUFACTURER SHALL CONFIRM THAT APPLICATION OF THIS LABEL WILL NOT VOID ANY NRTL LISTING/LABELING, MANUFACTURER'S WARRANTY, ETC. FIXTURE SHALL HAVE CERAMIC OR PORCELAIN SOCKET WITH NICKEL-PLATED BRASS OR NICKEL-PLATED COPPER ALLOY SCREW SHELL AND CONTACT.

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CYNTERGY ENGINEERING, PLLC CA # 3537 EXPIRES 6/30/2020 CHRISTOPHER A. HARWELL, PE ENGINEER OF RECORD

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NOTES, LEGENDS, AND **ABBREVIATIONS**



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CA # 3537
EXPIRES 6/30/2020
CHRISTOPHER A. HARWELL, PE
ENGINEER OF RECORD

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THE WHITTIER - PHAS
BOOMTOWN DEVELOPMENT COMPA
68 NORTH LEWIS
TULSA, OK 74110

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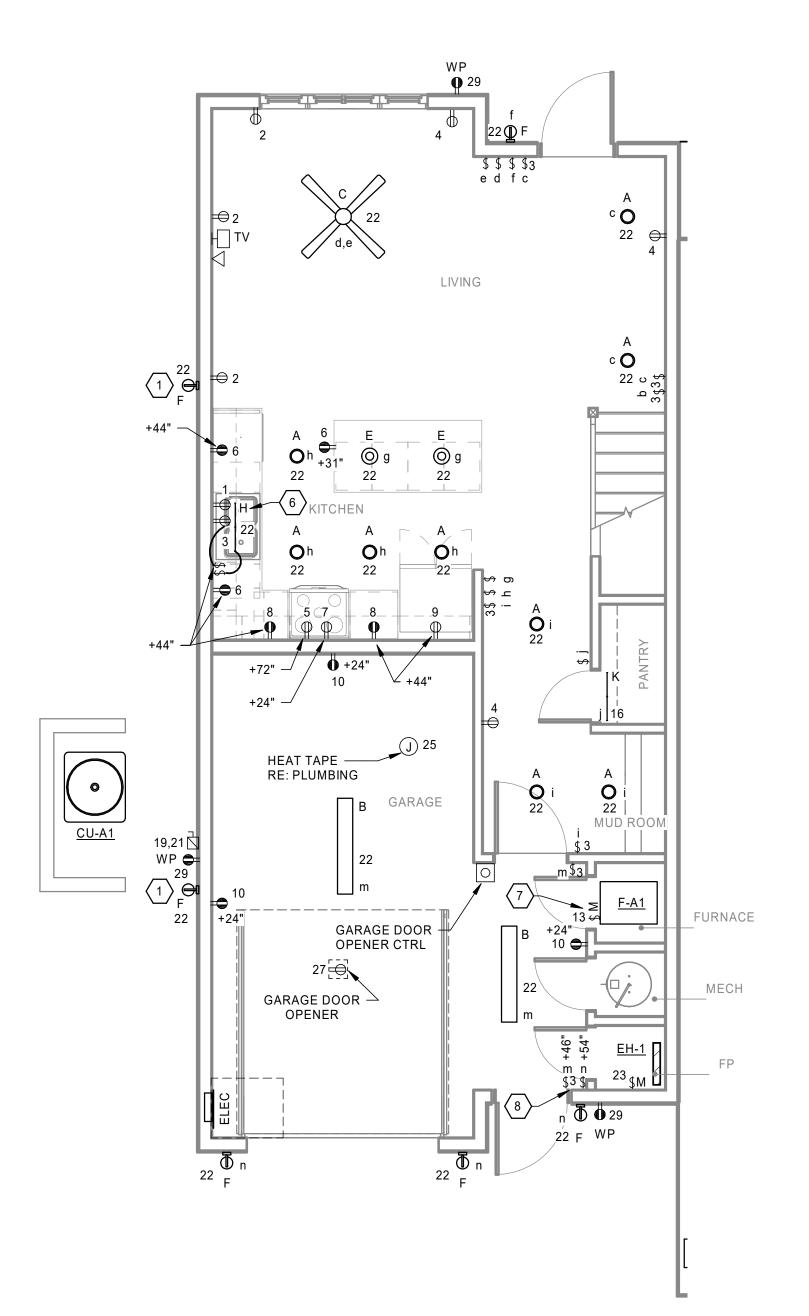
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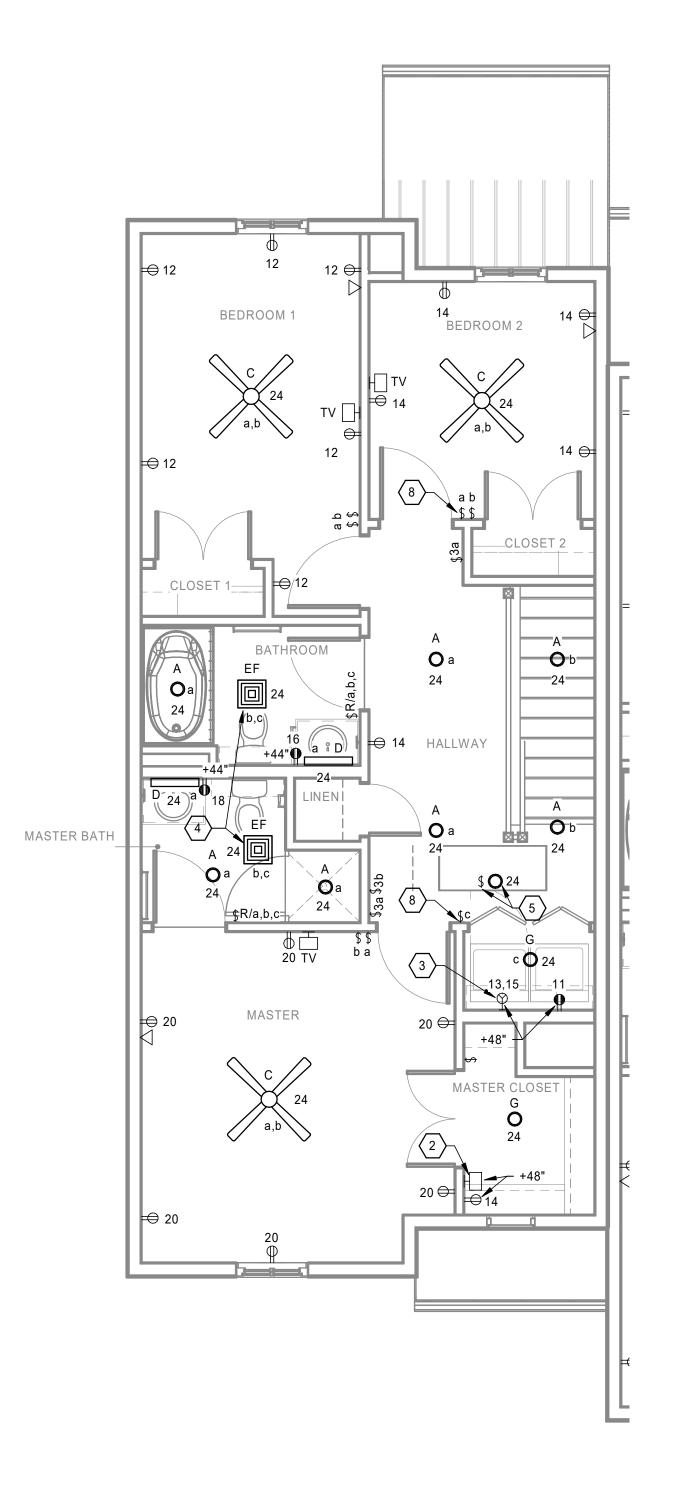
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SHEET NAME

ELECTRICAL SITE PLAN

ES101





ENLARGED UNIT A-1 FIRST FL ELEC PLAN

1/4" = 1'-0"

ENLARGED UNIT A-1 SECOND FL ELEC PLAN

KEYNOTES

- 1. FIXTURES LOCATED ON EXTERIOR SIDE WALL ARE TO BE PHOTOCELL ON/OFF CONTROLLED. LOCATE PHOTOCELL ON ROOF SOFFIT AND FACE NORTH. THESE FIXTURES ARE TO BE ON UNSWITCHED HOT LEG OF LIGHTING CIRCUIT.
- 2. ROUGH-IN FOR TELE/TV COMMUNICATIONS INTERFACE ENCLOSURE. PROVIDE ADJACENT TO DUPLEX OUTLET. PROVIDE THREE 3/4" CONDUITS OR ENT STUBBED UP INTO ACCESSIBLE ATTIC SPACE AND TWO 1" CONDUITS DOWN TO BELOW GRADE AND STUBBED UP ADJACENT TO ELECTRIC SERVICE. STUB CONDUITS 1/2" FROM EXTERIOR WALL 6" ABOVE GRADE. CONDUIT STUB UPS SHALL BE GALVANIZED RIGID STEEL, CAPPED AND LABELED WITH THE HOUSING UNIT NUMBER. COORDINATE WITH LOW VOLTAGE CONTRACTOR.
- 3. PROVIDE 30A 120/240V, 1PH, 4W RECEPTACLE FOR DRYER.
- 4. EXHAUST FAN/LIGHT PROVIDED BY MECHANICAL CONTRACTOR. PROVIDE SEPARATE SWITCH LEGS FOR FAN AND LIGHT.
- 5. PROVIDE KEYLESS PORCELAIN SOCKET LAMPHOLDER WITH LED LAMP, SATCO 9.5A19/LED30K/ND120V AND LIGHT SWITCH IN ATTIC. LOCATE SWITCH IN ATTIC ADJACENT TO ACCESS DOOR.
- 6. FOR UNITS THAT HAVE A WINDOW OVER THE SINK (NOT FACING INTO AN ALLEY) THIS FIXTURE SHALL BE TYPE 'A'. RE: ARCHITECTURAL PLANS.
- 7. LOCATE SWITCH TO HAVE 36" CLEAR IN FRONT AND 30" CLEAR IN WIDTH. CONTRACTOR SHALL VERIFY NEC REQUIRED WORKING CLEARANCES ARE PROVIDED AND ACCESS TO FURNACE IS NOT
- 8. COORDINATE INSTALLATION OF RECESSED BOX AND BRANCH CIRCUIT WITH FRAMING CONTRACTOR.



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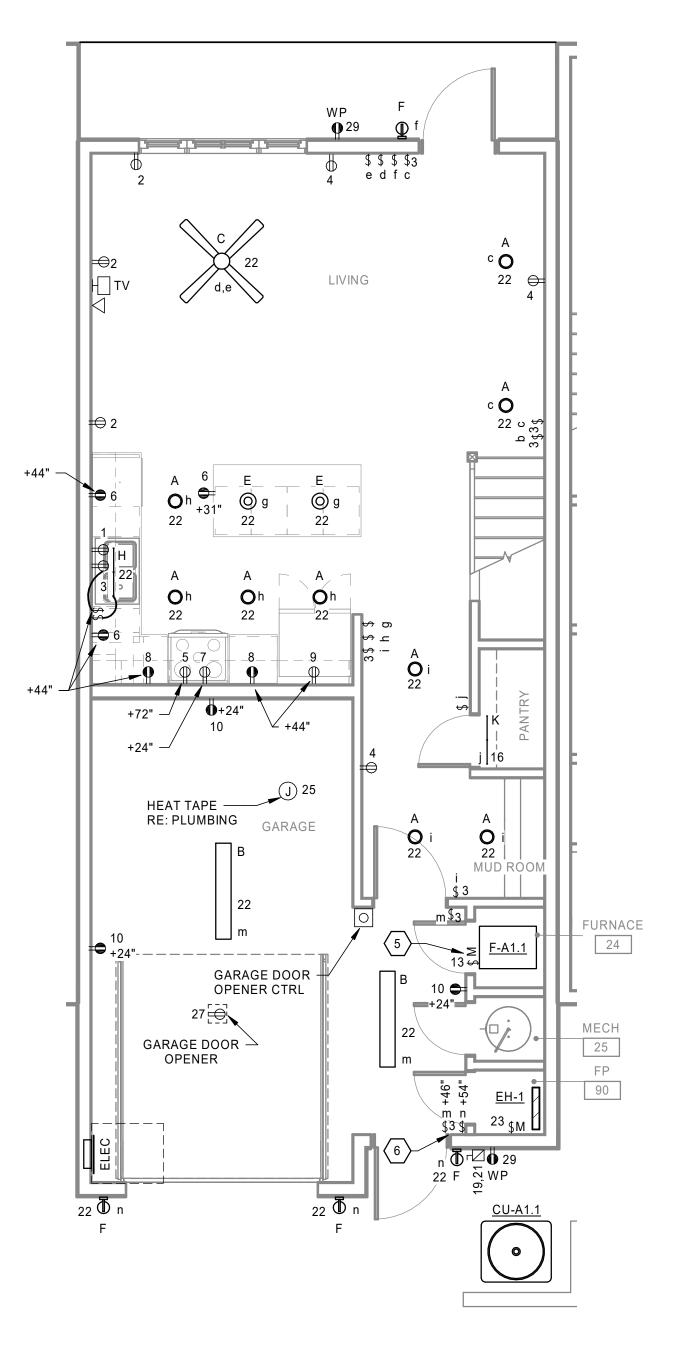
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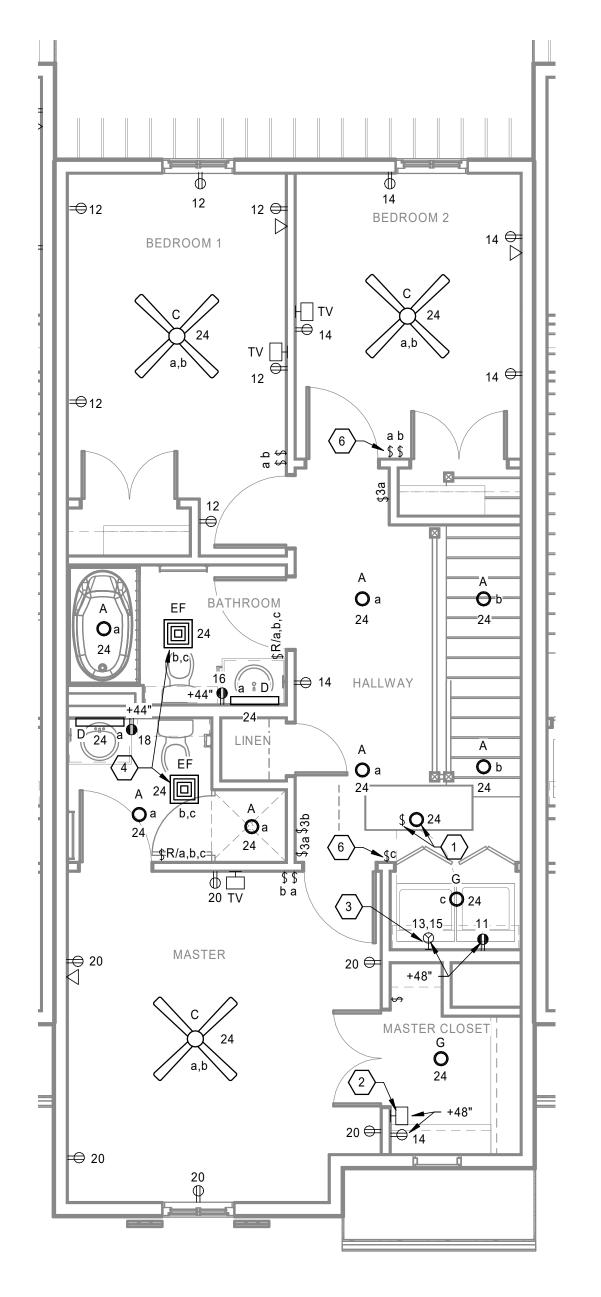
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ENLARGED UNIT A-1 ELECTRICAL PLANS





ENLARGED UNIT A-1.1 FIRST FL ELEC PLAN

1/4" = 1'-0"

2 ENLARGED UNIT A-1.1 SECOND FL ELEC PLAN

1/4" = 1'-0"

KEYNOTES

- 1. PROVIDE KEYLESS PORCELAIN SOCKET LAMPHOLDER WITH LED LAMP, SATCO 9.5A19/LED30K/ND120V AND LIGHT SWITCH IN ATTIC. LOCATE SWITCH IN ATTIC ADJACENT TO ACCESS DOOR.
- 2. ROUGH-IN FOR TELE/TV COMMUNICATIONS INTERFACE ENCLOSURE. PROVIDE ADJACENT TO DUPLEX OUTLET. PROVIDE THREE 3/4" CONDUITS OR ENT STUBBED UP INTO ACCESSIBLE ATTIC SPACE AND TWO 1" CONDUITS DOWN TO BELOW GRADE AND STUBBED UP ADJACENT TO ELECTRIC SERVICE. STUB CONDUITS 1/2" FROM EXTERIOR WALL 6" ABOVE GRADE. CONDUIT STUB UPS SHALL BE GALVANIZED RIGID STEEL, CAPPED AND LABELED WITH THE HOUSING UNIT NUMBER. COORDINATE WITH LOW VOLTAGE CONTRACTOR.
- 3. PROVIDE 30A 120/240V, 1PH, 4W RECEPTACLE FOR DRYER.
- 4. EXHAUST FAN/LIGHT PROVIDED BY MECHANICAL CONTRACTOR. PROVIDE SEPARATE SWITCH LEGS FOR FAN AND LIGHT.
- 5. LOCATE SWITCH TO HAVE 36" CLEAR IN FRONT AND 30" CLEAR IN WIDTH. CONTRACTOR SHALL VERIFY NEC REQUIRED WORKING CLEARANCES ARE PROVIDED AND ACCESS TO FURNACE IS NOT IMPEDED.
- 6. COORDINATE INSTALLATION OF RECESSED BOX AND BRANCH CIRCUIT WITH FRAMING CONTRACTOR.

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CA # 3537
EXPIRES 6/30/2020
CHRISTOPHER A. HARWELL, PE
ENGINEER OF RECORD

WHITTIER - PHASE WN DEVELOPMENT COMPAN

BOOM:

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SHEET NAME

ENLARGED UNIT A-1.1 ELECTRICAL PLANS

SHEET NIIMRED

	BRANCH CIRCUIT SCHEDULE										
OVERCURRENT DEVICE	1 POLE/1 PHASE	1 POLE/1 PHASE WITH IG	2 POLE/1 PHASE	3 POLE/3 PHASE OR 2 POLE/1 PHASE WITH NEUTRAL	3 POLE/3 PHASE WITH NEUTRAL						
20 AMP	2#12, 1#12G, 1/2"C	2#12, 1#12G, 1#12IG, 1/2"C	2#12, 1#12G, 1/2"C	3#12, 1#12G, 1/2"C	4#12, 1#12G, 1/2"C						
25 AMP	2#10, 1#10G, 1/2"C	2#10, 1#10G, 1#10IG, 1/2"C	2#10, 1#10G, 1/2"C	3#10, 1#10G, 1/2"C	4#10, 1#10G, 1/2"C						
30 AMP	2#10, 1#10G, 1/2"C	2#10, 1#10G, 1#10IG, 1/2"C	2#10, 1#10G, 1/2"C	3#10, 1#10G, 1/2"C	4#10, 1#10G, 1/2"C						
35 AMP	2#8, 1#10G, 1/2"C	2#8, 1#10G, 1#10IG, 1/2"C	2#8, 1#10G, 1/2"C	3#8, 1#10G, 3/4"C	4#8, 1#10G, 3/4"C						
40 AMP	2#8, 1#10G, 1/2"C	2#8, 1#10G, 1#10IG, 1/2"C	2#8, 1#10G, 1/2"C	3#8, 1#10G, 3/4"C	4#8, 1#10G, 3/4"C						
45 AMP	2#8, 1#10G, 1/2"C	2#8, 1#10G, 1#10IG, 1/2"C	2#8, 1#10G, 1/2"C	3#8, 1#10G, 3/4"C	4#8, 1#10G, 3/4"C						
50 AMP	2#8, 1#10G, 1/2"C	2#8, 1#10G, 1#10IG, 1/2"C	2#8, 1#10G, 1/2"C	3#8, 1#10G, 3/4"C	4#8, 1#10G, 3/4"C						
60 AMP	2#6, 1#10G, 3/4"C	2#6, 1#10G, 1#10IG, 3/4"C	2#6, 1#10G, 3/4"C	3#6, 1#10G, 3/4"C	4#6, 1#10G, 1"C						
70 AMP	2#4, 1#8G, 3/4"C	2#4, 1#8G, 1#8IG, 1"C	2#4, 1#8G, 3/4"C	3#4, 1#8G, 1"C	4#4, 1#8G, 1 1/4"C						
80 AMP	2#4, 1#8G, 3/4"C	2#4, 1#8G, 1#8IG, 1"C	2#4, 1#8G, 3/4"C	3#4, 1#8G, 1"C	4#4, 1#8G, 1 1/4"C						
90 AMP	2#3, 1#8G, 1"C	2#3, 1#8G, 1#8IG, 1"C	2#3, 1#8G, 1"C	3#3, 1#8G, 1"C	4#3, 1#8G, 1 1/4"C						
100 AMP	2#3, 1#8G, 1"C	2#3, 1#8G, 1#8IG, 1"C	2#3, 1#8G, 1"C	3#3, 1#8G, 1"C	4#3, 1#8G, 1 1/4"C						
NOTEC:			•	•	•						

NOTES:

A. CONDUIT SIZES ARE BASED ON 75°C, COPPER CONDUCTORS, AND EMT. CONTRACTOR SHALL PROVIDE LARGER CONDUITS AS REQUIRED.

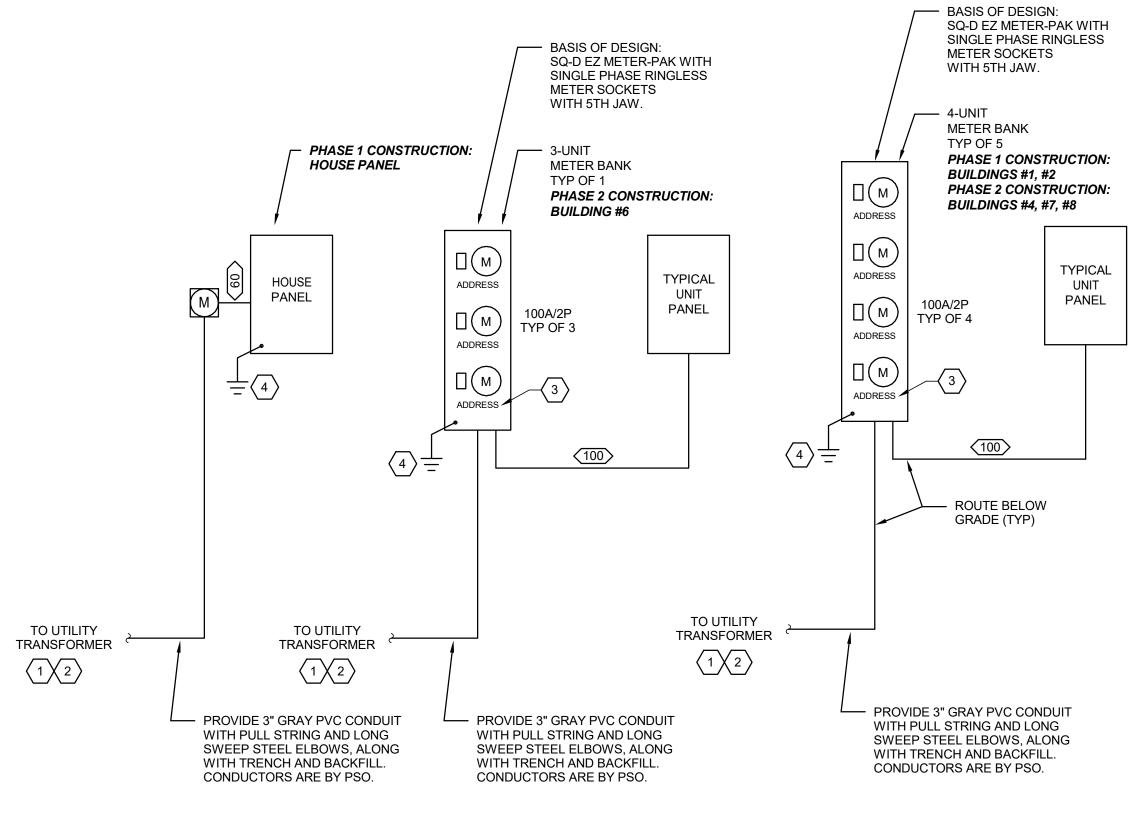
B. CONDUCTOR AND CONDUIT SIZES LISTED ARE THE MINIMUM REQUIRED FOR THE ASSOCIATED OVERCURRENT DEVICE SHOWN, CONTRACTOR MAY UPSIZE CONDUCTORS AND/OR CONDUIT.

C. ADJUST CONDUCTOR AND CONDUIT SIZES AS REQUIRED PER NEC IN ACCORDANCE WITH NFPA AND ENERGY CODES TO LIMIT VOLTAGE DROP.

				1	'HOI	USE	•					
LOAD CENTER SCHEDULE												
	SUPPLY FROM RE: ON	IE-LINE DIAGRA	AΜ	VO	LTAGE:	240/120	VC		A.I.C.	RATING: 10,000)	
MOUNTING: SURFACE					PHASE:	1			MA	IN TYPE: MCB		
ENCLOSURE: NEMA 3R			WIRE: 3 MAIN RATING: 60 A									
СКТ	DESCRIPTION	CB TRIP					В		CB TRIP RATING	DESCR	IPTION	СКТ
1	SIGN LIGHTING	20 A	1	210 VA	0 VA			1	20 A	SPA	RE	2
3	RECEPTACLE	20 A	1			180 VA	AV 0	1	20 A	SPA	RE	4
5	SPARE	20 A	1	0 VA	0 VA			1	20 A	SPA	RE	6
7	SPARE	20 A	1			0 VA	0 VA	1	20 A	SPA	RE	8
	CONNECTED	VA LOAD PER	PHASE:	210	VA	180	0 VA					
	CONNECTED AMPE				A		2 A					
	SSIFICATION	CONNEC	CTED	DEMAND FAC		CTOR ESTIMAT		ED		PANEL	TOTALS	
IGHTING L	.OAD	210 VA		125.0	125.00%		263 VA					
RECEPTAC	LE LOAD	180 VA		100.0	100.00%		180 VA		TOTAL C	TOTAL CONNECTED VA: 385 VA		
									TOTAL	L DEMAND VA	437 VA	
									TOTAL	CONNECTED	2 A	

UNIT A-1, A-1.1											
	SUPPLY FROM RE: ONE-LINE DIAG MOUNTING: RECESSED ENCLOSURE: TYPE 1					A.I.C. RATING: 10,000 MAIN TYPE: MLO MAIN RATING: 100 A					
СКТ	DESCRIPTION	CB TRIP RATING		POLES	CB TRIP RATING	DESCRIPTION	СКТ				
1	DISHWASHER	20 A	1	1	20 A	RECEPTACLES - LIVING	2				
3	GARBAGE DISPOSAL	20 A	1	1	20 A	RECEPTACLES - LIVING	4				
5	MICROWAVE (GFCI)	20 A	1	1	20 A	RECEPTACLES - KITCHEN	6				
7	RANGE (GFCI)	20 A	1	1	20 A	RECEPTACLES - KITCHEN	8				
9	REFRIGERATOR	20 A	1	1	20 A	RECEPTACLES - GARAGE	10				
11	WASHING MACHINE	20 A	1	1	20 A	RECEPTACLES - BEDROOM	12				
13	CLOTHES DRYER	30 A	2	1	20 A	RECEPTACLES - BEDROOM	14				
15				1	20 A	RECEPTACLES - BATHROOM	16				
17	F-A (FURNACE)	20 A	1	1	20 A	RECEPTACLES - MASTER BATHROOM	18				
19	CU-A (CONDENSING UNIT)	30 A	2	1	20 A	RECEPTACLES - MASTER BEDROOM	20				
21				1	20 A	LIGHTING - FIRST FLOOR	22				
23	ELECTRIC HEATER	20 A	1	1	20 A	LIGHTING - SECOND FLOOR	24				
25	HEAT TAPE (GFEP 30mA)	20 A	1	1	20 A	SPARE	26				
27	GARAGE DOOR OPENER (GFCI)	20 A	1	1	20 A	SPARE	28				
29	RECEPTACLES - EXTERIOR	20 A	1	1	20 A	FIRE ALARM DEVICES	30				

A. ALL 20A/1P CIRCUIT BREAKERS ARE TO BE ARC-FAULT CIRCUIT (AFCI) BREAKERS UNLESS NOTED OTHERWISE.
B. BREAKERS NOTED AS GFCI ARE TO BE COMBINATION AFCI/GFCI.
C. PROVIDE TWO SPARE 1/2" CONDUITS STUBBED UP INTO ACCESSIBLE ATTIC SPACE.



COPPER BRANCH CIRCUIT AND FEEDER SIZE NOTE: BASED ON COPPER 75° THWN AND EMT OR RIGID PVC (SCHEDULE 40)													
	1 PHASE, 3 WIRE												
240 VOLT													
ITEM #	CIRCUIT BREAKER	3 #	1 # GROUND	EMT CONDUIT	RIGID PVC CONDUIT								
20	20	12	12	1/2	1/2								
25	25	10	10	1/2	1/2								
30	30	10	10	1/2	1/2								
40	40	8	10	3/4	3/4								
45	45	8	10	3/4	3/4								
50	50	8	10	3/4	3/4								
60	60	6	10	1	1								
70	70	4	8	1	1								
80	80	4	8	1	1								
90	90	3	8	1	1								
100	100	3	8	1	1								

	(#) KEYNOTES
1	COORDINATE ALL ELECTRIC UTILITY COMPANY REQUIREMENTS PRIOR TO BID WITH PUBLIC SERVICE COMPANY OF OKLAHOMA (PSO), ATTN: ECHO HILLESAND 918-250-6252
2	REFER TO CIVIL DRAWINGS FOR LOCATIONS OF TRANSFORMERS AND ADDITIONAL INFORMATION.
3	PROVIDE LABEL FOR ALL RESIDENCE ADDRESSES.
4	PROVIDE GROUNDING ELECTRODE AND GROUNDING ELECTRODE CONDUCTORS AS REQUIRED BY NEC 250. PROVIDE WEATHERPROOF INTERSYSTEM BONDING EQUIPMENT ADJACENT TO SERVICE ENTRANCE EQUIPMENT PER NEC 250.94. PROVIDE LABEL FOR CONDUCTORS STATING "INTERSYSTEM BONDING JUMPER".





810 SOUTH CINCINNATI SECOND FLOOR TULSA, OK 74119 918.877.6000 www.cyntergy.com



CYNTERGY ENGINEERING, PLLC CA # 3537 EXPIRES 6/30/2020 CHRISTOPHER A. HARWELL, PE ENGINEER OF RECORD

ISSUES / REVISIONS 06/12/2020 PERMIT SET - PHASE 1

ISSUE DATE: 06/12/2020 PROJECT NO: P05093.0100

CHECKED BY: CAH DRAWN BY: JSL

ONE-LINE DIAGRAM

SHEET NUMBER

23,670 47 A-1 23,766 2 A-1.1 48 TOTAL CONNECTED RESIDENTIAL LOAD TOTAL DIVERSITY NEC TABLE 220.84 CONNECTED **FACTOR** DIVERSITY FACTOR LOAD 95 0.45 TOTAL DIVERSIFIED LOAD LOAD FOR RESIDENTIAL SERVICE AMPS AT 240V, 1PH, 3W 178 UNIT LOAD CALCULATION UNIT TYPE: SF/QTY A-1 TOTALS VA DWELLING UNIT LIGHTING, GENERAL-USE RECEPTS, BATHROOM RECEPT, AND OUTDOOR RECEPT (SF) 4,770 VA 1,590 OUTDOOR RECEPT (SF) 1,558 4,674 VA 3 SMALL APPLIANCE CIRCUIT SMALL APPLIANCE CIRCUIT #1 LOAD (RESIDENTIAL #1 LOAD (RESIDENTIAL UNIT) 1,500 1,500 1,500 1,500 VA SMALL APPLIANCE CIRCUIT SMALL APPLIANCE CIRCUIT #2 LOAD (RESIDENTIAL #2 LOAD (RESIDENTIAL 1,500 1,500 1,500 1,500 VA LAUNDRY CIRCUIT LOAD LAUNDRY CIRCUIT LOAD (RESIDENTIAL UNIT) 1,500 1,500 (RESIDENTIAL UNIT) 1,500 1,500 VA 1,008 1,008 1,008 1,008 GARBAGE DISPOSAL GARBAGE DISPOSAL VA 1,000 1,000 1,000 MICROWAVE 1,000 MICROWAVE VA DISHWASHER 740 740 DISHWASHER 740 740 1 VA CLOTHES DRYERS (NOT ON CLOTHES DRYERS (NOT ON THE LAUNDRY CIRCUIT) 5,000 THE LAUNDRY CIRCUIT) 5,000 5,000 5,000 17,018 VA TOTAL GENERAL LOAD 16,922 VA TOTAL GENERAL LOAD NEC 220.82 CALCULATION NEC 220.82 CALCULATION FIRST 10 KVA AT 100%, FIRST 10 kVA REMAINDER AT FIRST 10 KVA AT 100%, FIRST 10 kVA REMAINDER AT AT 100% REMAINDER AT 40% 40% REMAINDER AT 40% AT 100% 40% 2,769 12,769 VA 10,000 12,807 VA 10,000 2,807 4,608 100% OF CONDENSING UNIT 4,608 100% OF CONDENSING UNIT 4,608 1,440 1,440 1,440 1,440 100% OF FURNACE SECTION 100% OF FURNACE SECTION VA 100% ELEC HEATER 500 500 100% ELEC HEATER 500 500 100% ELEC HEAT TAPE 200 200 100% ELEC HEAT TAPE 200 200 VA TOTAL DIVERSIFIED LOAD 20 kVA TOTAL DIVERSIFIED LOAD kVA LOAD FOR UNIT SERVICE LOAD FOR UNIT SERVICE AMPS AT 240V/1PH, 3W AMPS AT 240V/1PH, 3W

TOTAL CONNECTED LOAD

24

kVA

RESIDENTIAL MULTI-FAMILY LOAD CALCULATION

BUILDINGS #1, #2, #4, #7, #8

UNIT TYPE:

TOTAL CONNECTED LOAD

QTY

CONNECTED VA

		RESIDENTIAL MULTI-FAMILY LOAD CALCULATION				
		BUILDING #6				
TOTAL	kVA	UNIT TYPE:	QTY	CONNECTED VA	TOTAL	kVA
47	kVA	A-1	2	23,670	47	kVA
48	kVA	A-1.1	1	23,766	24	kVA
95	kVA	TOTAL CONNECTED RESIDENTIAL LOAD	3		71	kVA
93	KVA	NEC TABLE 220.84 DIVERSITY FACTOR	TOTAL CONNECTED LOAD	DIVERSITY FACTOR		
			71	0.45		
43	kVA	TOTAL DIVERSIFIED LOAD			32	kVA
178	AMPS	LOAD FOR RESIDENTIAL SERVICE AMPS AT 240V, 1PH, 3W			133	AMPS
	AIVIFS					
		UNIT LOAD CALCULATION				
		UNIT TYPE:				
TOTALS		A-1.1	SF/QTY	VA	TOTALS	
		DWELLING UNIT LIGHTING, GENERAL-USE RECEPTS, BATHROOM RECEPT, AND				

HAS THE WHITTIER - PH BOOMTOWN DEVELOPMENT CO

kVA

24

810 SOUTH CINCINNATI

A. HARWELL

CYNTERGY ENGINEERING, PLLC CA # 3537

EXPIRES 6/30/2020

CHRISTOPHER A. HARWELL, PE

SECOND FLOOR TULSA, OK 74119

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ISSUES / REVISIONS 06/12/2020 PERMIT SET - PHASE 1

ISSUE DATE: 06/12/2020 PROJECT NO: P05093.0100

CHECKED BY: CAH DRAWN BY: JSL

RESIDENTIAL LOAD CALCULATIONS

SHEET NUMBER