

INDEX OF DRAWINGS

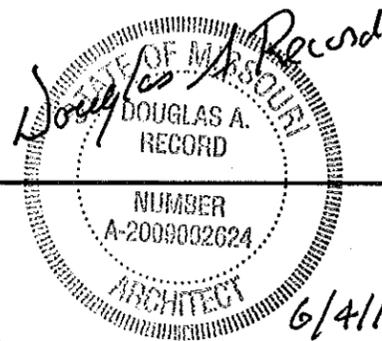
- 1 - 19 COVER SHEET
- 2 - 19 SITE PLAN
- 3 - 19 FOUNDATION PLAN
- 4 - 19 FOUNDATION DETAILS
- 5 - 19 FOUNDATION DETAILS
- 6 - 19 FOUNDATION DETAILS
- 7 - 19 FLOOR PLAN
- 8 - 19 BUILDING SECTION
- 9 - 19 BUILDING SECTION
- 10 - 19 BUILDING SECTION
- 11 - 19 DETAILS
- 12 - 19 SCHEDULES
- 13 - 19 EAST & WEST ELEVATIONS
- 14 - 19 NORTH & SOUTH ELEVATIONS
- 15 - 19 JAMB DETAILS
- 16 - 19 PLUMBING PLAN
- 17 - 19 HVAC PLAN
- 18 - 19 ELECTRICAL PLAN
- 19 - 19 ELECTRICAL PANEL & SCHEDULES

MISSOURI DEPARTMENT OF TRANSPORTATION

TRUCK WASH ADDITION
NORTHEAST DISTRICT
WAYLAND, MISSOURI
Route 27, 0.6 Miles South of Route 136
Clark County

CODE REQUIREMENTS

BUILDING CODE -- CURRENT IBC
PLUMBING CODE -- CURRENT IBC
MECHANICAL CODE -- CURRENT IBC
ELECTRICAL CODE -- CURRENT NEC

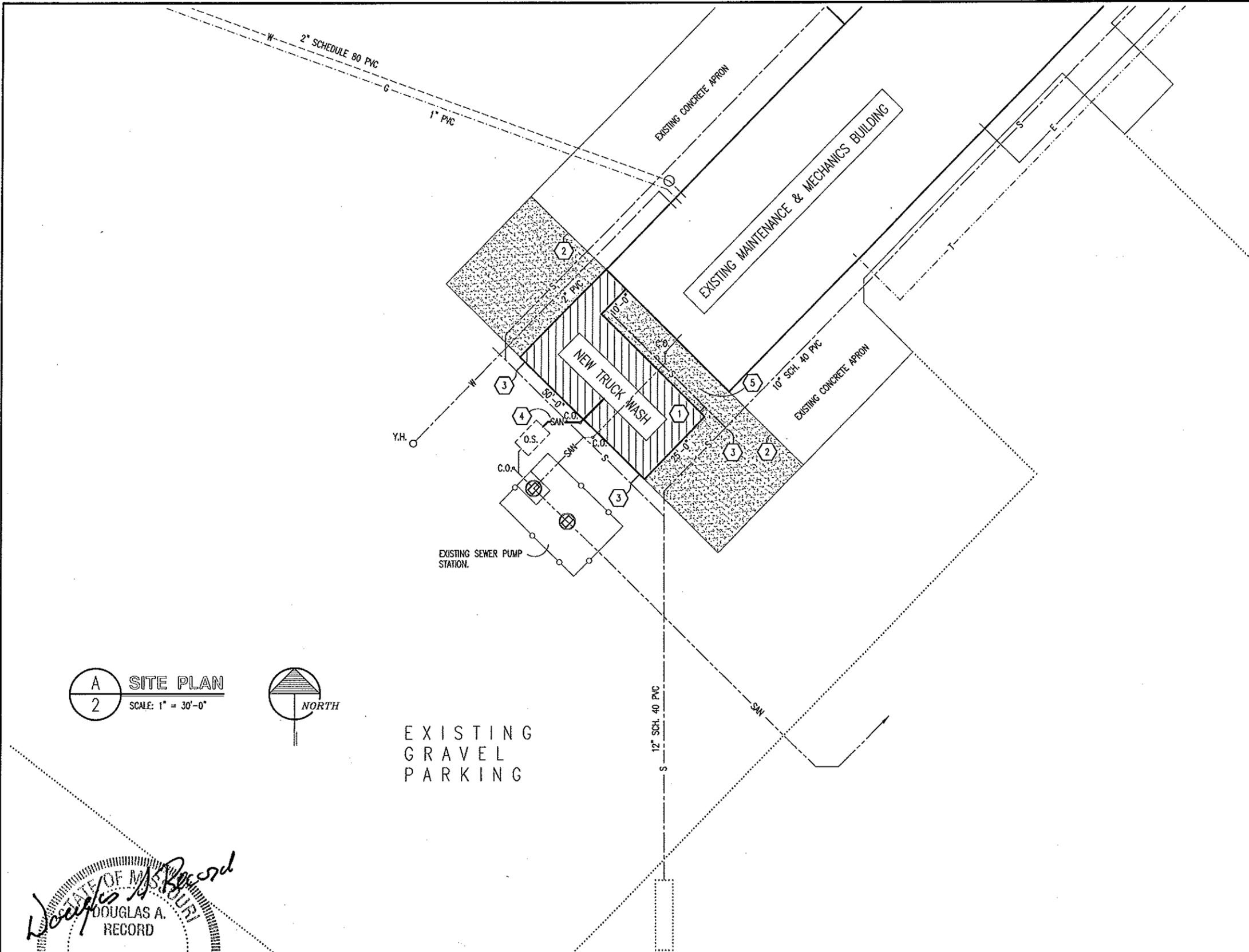


COVER SHEET

MISSOURI DEPARTMENT
OF TRANSPORTATION
DIVISION OF GENERAL SERVICES
FACILITIES MANAGEMENT

WAYLAND TRUCK WASH ADDITION
NORTHEAST DISTRICT - WAYLAND, MISSOURI

DESIGN BY: LARRY CARVER
DRAWN BY: LARRY CARVER
DATE: 5-25-12
Sheet
1 of 19



LEGEND (EXISTING)

- 4" NATURAL GAS ----- G -----
- 4" WATER ----- W -----
- TELEPHONE ----- T -----
- ELECTRIC SINGLE PHASE ----- E -----
- STORM SEWER ----- S -----
- SANITARY SEWER ----- SAN -----

- Y.H. - EXISTING YARD HYDRANT
- C.O. - EXISTING CLEAN-OUT
- O.S. - EXISTING OIL SEPARATOR

LEGEND (NEW)

- STORM SEWER ----- S -----
- SANITARY SEWER ----- SAN -----

GRADING NOTES

CONTRACTOR WILL BE RESPONSIBLE FOR:

- EXCAVATION OF THE SUBGRADE.
- EXCAVATING OF FOOTINGS.
- ALL BACKFILL MATERIAL INSIDE AND OUTSIDE NEW BUILDING
- CRUSHED ROCK BASE UNDER BUILDING, APPROACH SLAB, SIDEWALKS AND STOOPS ETC.
- ALL FILL AND BACKFILL MATERIAL AS REQUIRED.
- ALL GRAVEL MATERIAL TO MATCH EXISTING THAT IS DISTURBED DURING CONSTRUCTION.
- PROVIDE GRASS SEED, MULCH, STRAW AND TOP SOIL TO ALL LAWN AREAS THAT ARE DISTURBED DURING CONSTRUCTION.

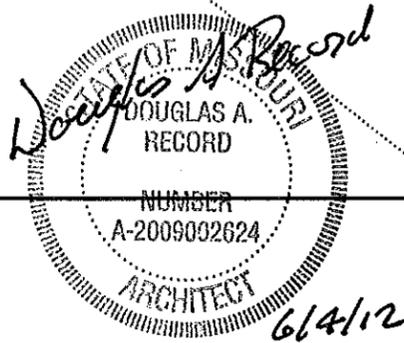
SITE NOTES

- ① CONTRACTOR TO REMOVE EXISTING EXTERIOR CONCRETE WASH SLAB AND FOOTINGS WHERE NEW BUILDING IS TO BE BUILT. DISCARD ALL DEBRIS OFF-SITE. REINSTALL 360' WASH BOOK AND WALL MOUNTED BRUSH & WALL BRACKET IN NEW BUILDING FOR A FUNCTIONAL SERVICE. RETURN VERTICAL POST TO OWNER.
- ② CONTRACTOR TO SAWCUT AND REMOVE CONCRETE SLAB ON WEST SIDE OF NEW BUILDING. DOWEL INTO EXISTING SLABS WITH #4's x 24" AND 12" INTO ONE SIDE WITH GREASE @ 24" O.C.
- ③ NEW STORM DRAIN CONNECTION TO EXISTING STORM SEWER AS REQUIRED.
- ④ CONTRACTOR TO CONNECT NEW 4" PVC SANITARY SEWER TO EXISTING OIL SEPARATOR (OS) AS REQUIRED FOR A FUNCTIONAL SYSTEM.
- ⑤ NEW CONCRETE SLAB ALLEY WAY: 6" THICK CONCRETE SLAB WITH 6 x 6 - W2.1 x W2.1 WWF ON 4" CRUSHED TYPE 5 ROCK COMPACTED BASE.

A SITE PLAN
2 SCALE: 1" = 30'-0"



EXISTING GRAVEL PARKING

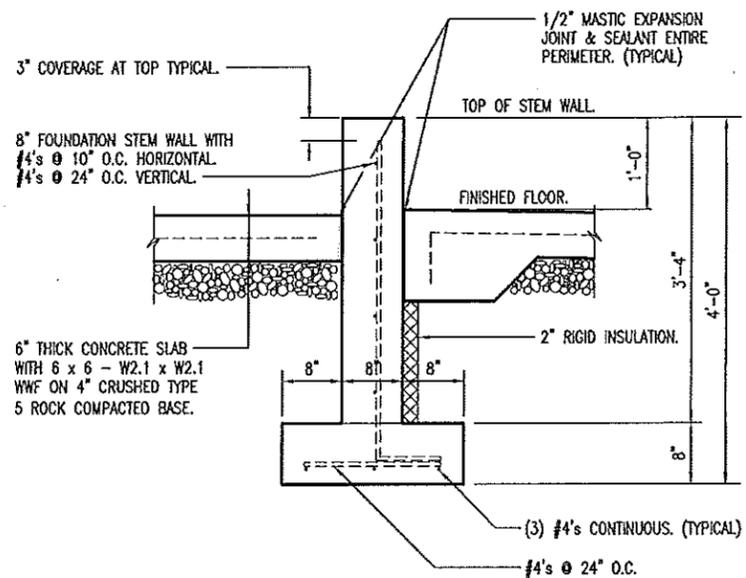


SITE PLAN

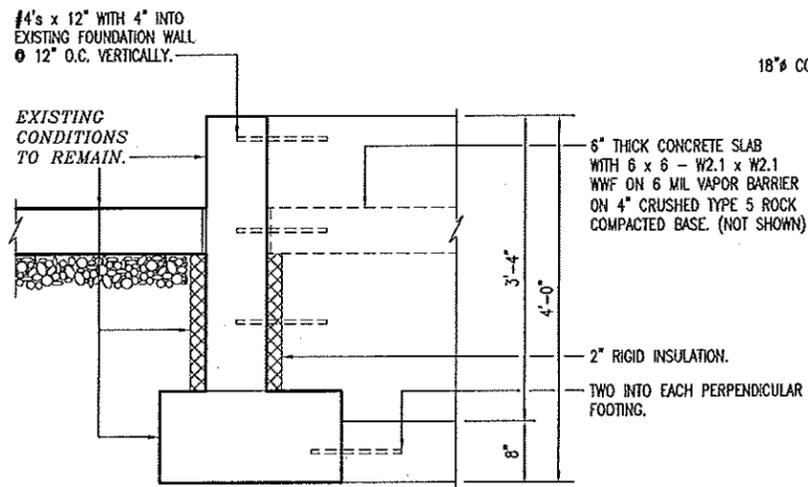
MISSOURI DEPARTMENT OF TRANSPORTATION
DIVISION OF GENERAL SERVICES FACILITIES MANAGEMENT

WAYLAND TRUCK WASH ADDITION
NORTHEAST DISTRICT - WAYLAND, MISSOURI

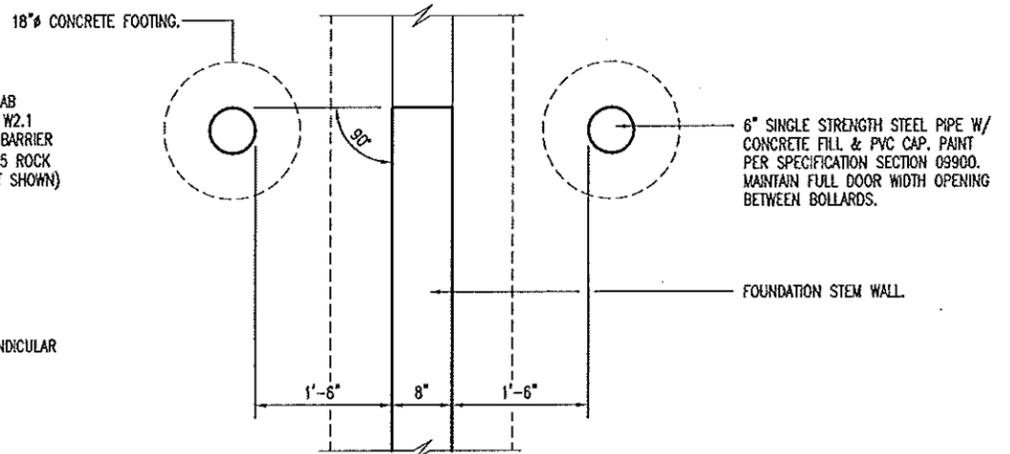
DESIGN BY: LARRY CARVER
DRAWN BY: LARRY CARVER
DATE: 5-25-12
Sheet 2 of 19



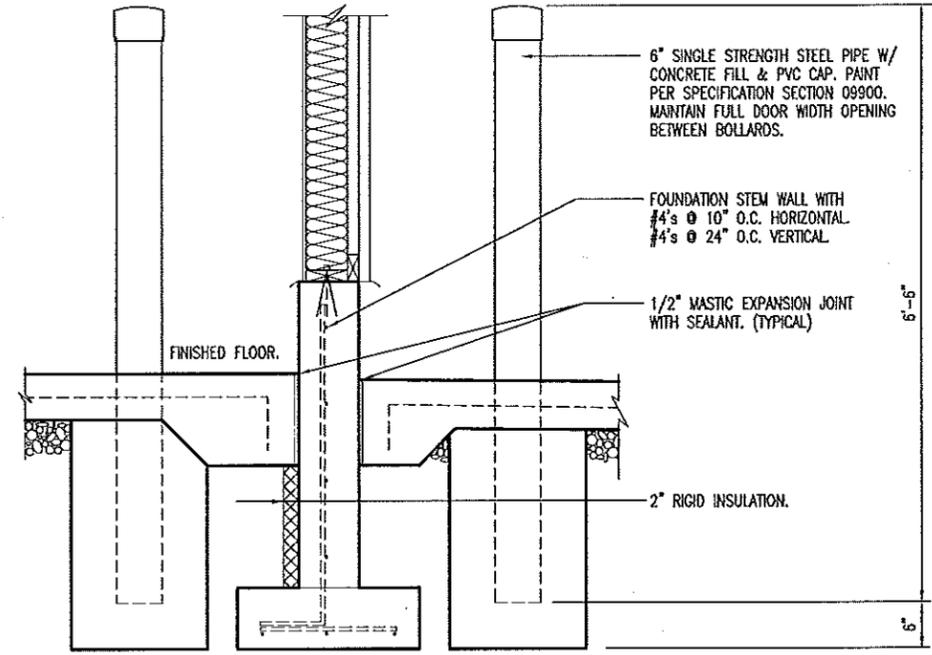
D EXTERIOR STEM WALL
4 SCALE: 1/2" = 1'-0"



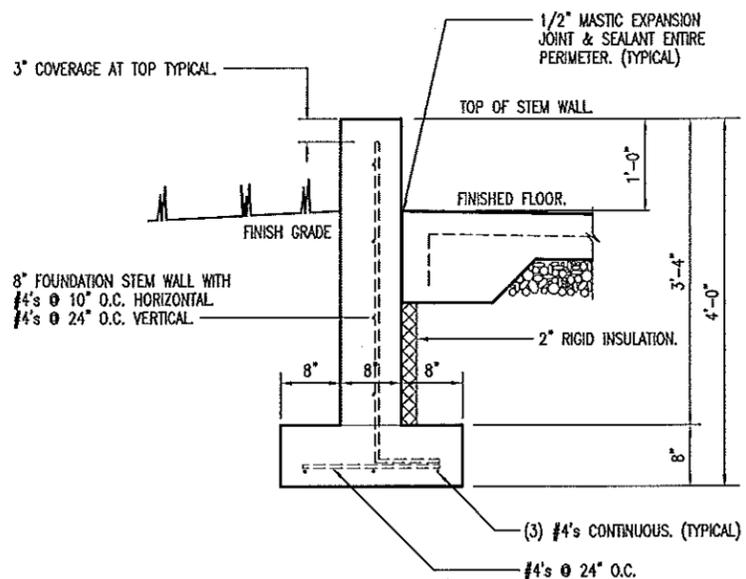
E NEW FOUNDATION TIE TO EXISTING (TYPICAL) FOUNDATION WALL
4 SCALE: 1/2" = 1'-0"



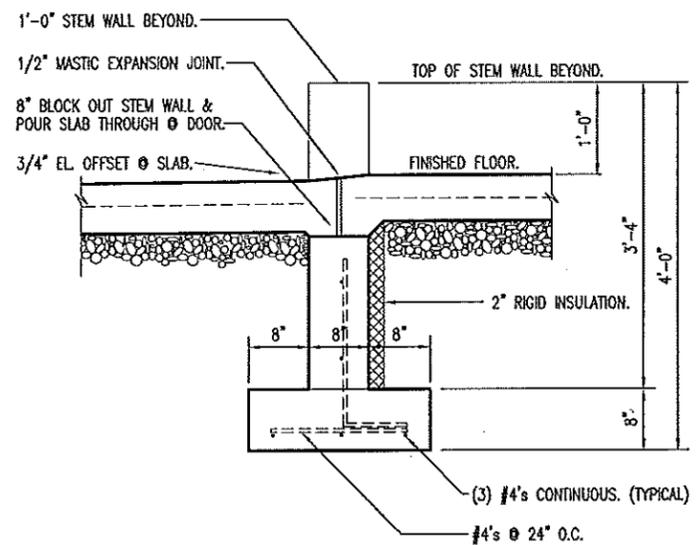
PLAN VIEW



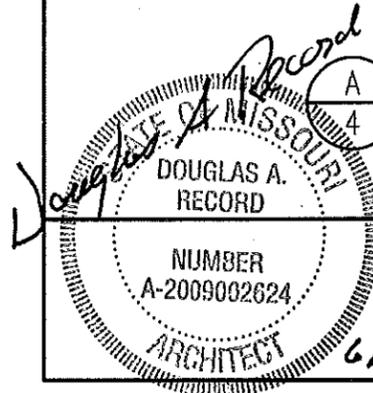
ELEVATION



A EXTERIOR STEM WALL
4 SCALE: 1/2" = 1'-0"



B EXTERIOR STEM WALL @ DOOR
4 SCALE: 1/2" = 1'-0"

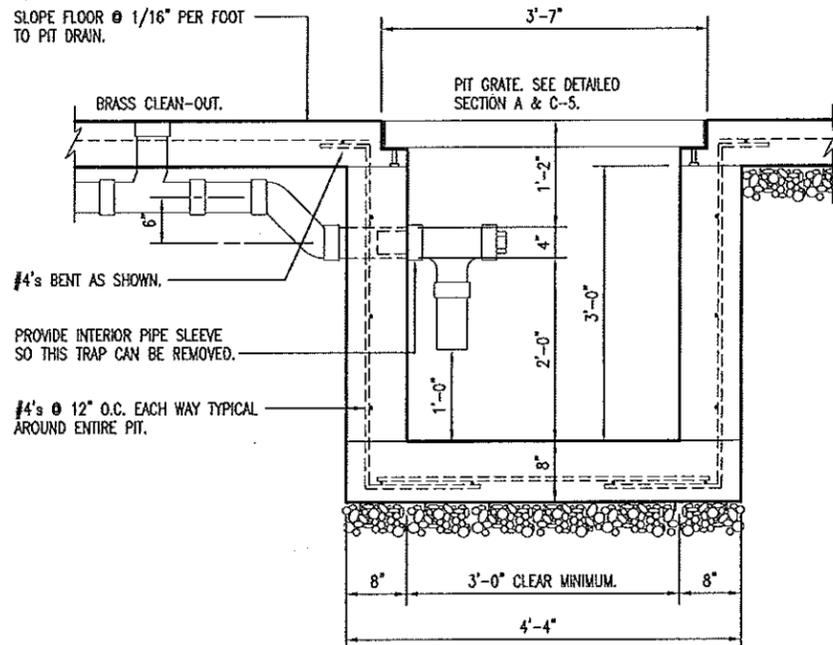


FOUNDATION DETAILS

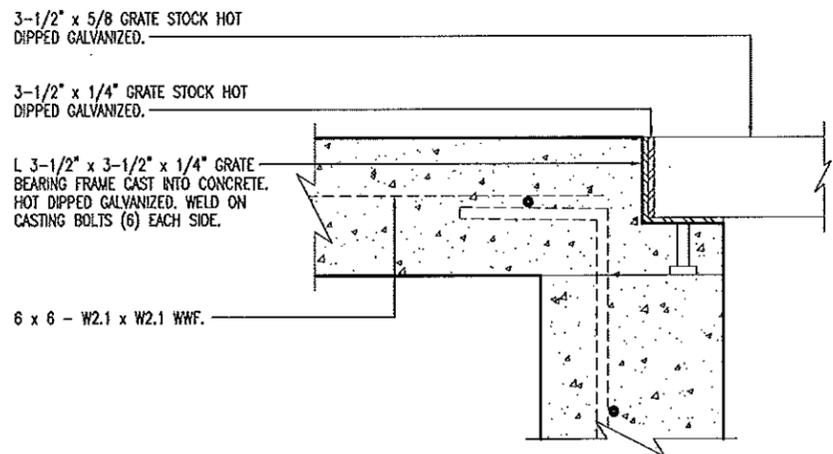
MISSOURI DEPARTMENT OF TRANSPORTATION
DIVISION OF GENERAL SERVICES
FACILITIES MANAGEMENT

WAYLAND TRUCK WASH ADDITION
NORTHEAST DISTRICT - WAYLAND, MISSOURI

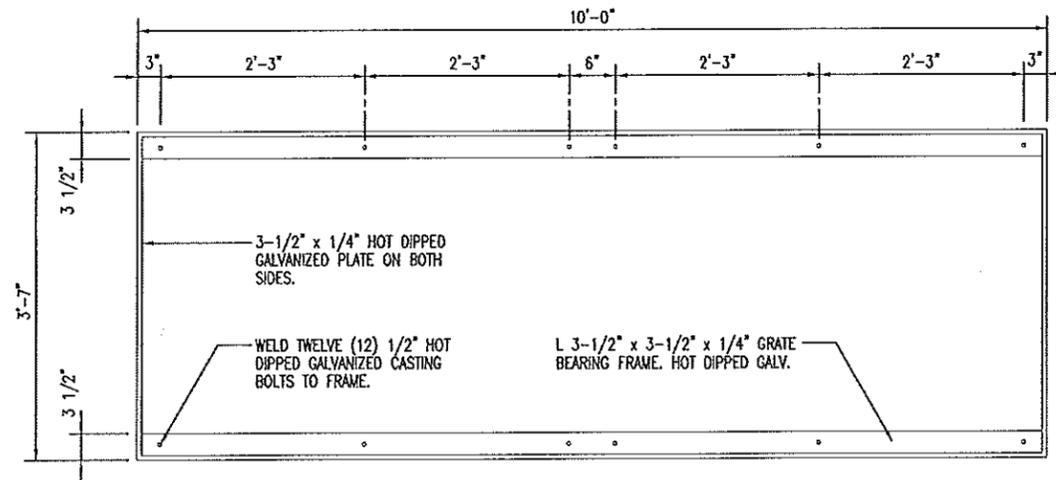
DESIGN BY: LARRY CARVER
DRAWN BY: LARRY CARVER
DATE: 5-18-12
Sheet 4 of 19



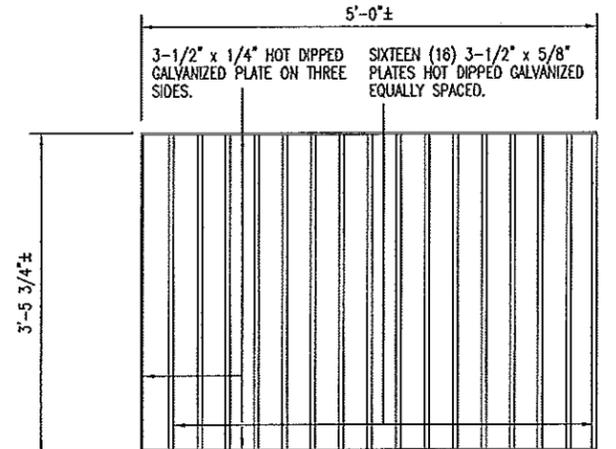
B
5
PIT DRAIN
SCALE: 1/2" = 1'-0"



A
5
GRATE SECTION
SCALE: 1-1/2" = 1'-0"



BEARING FRAME PLAN

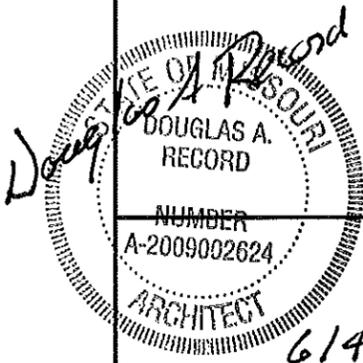


PROVIDE TWO (2) GRATE PLAN

C
5
GRATE AND FRAME DETAIL
SCALE: 3/4" = 1'-0"

CONCRETE NOTES

1. CONCRETE WORK SHALL BE EXECUTED IN STRICT COMPLIANCE WITH THE LATEST EDITION OF THE AMERICAN CONCRETE INSTITUTE (A.C.I.) MANUAL OF CONCRETE PRACTICE.
2. FOUNDATION DESIGN IS BASED UPON AN ASSUMED SOIL BEARING CAPACITY OF 2000 PSF. IF WET OR UNUSUAL SOIL CONDITIONS ARE ENCOUNTERED, NOTIFY THE DESIGNER AND CONSTRUCTION INSPECTOR BEFORE PROCEEDING WITH THE WORK.
3. IF CONDITIONS REQUIRING ROCK EXCAVATION ARE ENCOUNTERED, NOTIFY THE DESIGNER AND CONSTRUCTION INSPECTOR BEFORE PROCEEDING WITH THE WORK.
4. ALL CONCRETE SHALL BE TYPE 1 CEMENT WITH A COMPRESSIVE STRENGTH OF 4,000 PSI @ 28 DAYS WITH 4" SLUMP.
5. CONCRETE EXPOSED TO THE EXTERIOR SHALL RECEIVE AIR ENTRAINMENT 6% +/- 2%.
6. FOOTINGS SHALL BEAR A MINIMUM OF 12 INCHES INTO UNDISTURBED SOIL AND 36" MINIMUM BELOW FINISH GRADE.
7. DEFORMED STEEL REINFORCING BARS SHALL BE: #4 AND LARGER, ASTM A615 GRADE 60.
8. PROVIDE CORNER REINFORCING BARS WITH 12" MINIMUM LAP EQUAL IN SIZE AND GRADE TO CONNECTING BARS.
9. EXTERIOR CONCRETE FLATWORK SHALL HAVE A LIGHT BROOM FINISH.
10. COORDINATE WORK OF OTHER TRADES REQUIRED TO BE INSTALLED IN, UNDER, OR THROUGH CONCRETE PRIOR TO PLACEMENT OF CONCRETE. INSTALL ALL ANCHORAGES AND SLEEVES REQUIRED FOR THE INSTALLATION OF WORK BY OTHER TRADES.
11. ENTIRE PERIMETER OF BUILDING TO RECEIVE 2" POLYISOCYANURATE RIGID INSULATION BOARD.
12. SAWED CONTROL JOINTS SHALL BE CLEANED FREE OF ALL DEBRIS AND FILLED WITH SEALANT. SEE SECTION 07900.
13. ALL EXPOSED INTERIOR CONCRETE FLOORS SHALL RECEIVE A CURING/SEALING FINISH PER SPECIFICATION SECTION 03346.
14. COPPER PIPING RUN THROUGH CONCRETE WORK SHALL BE RUN THROUGH PVC SLEEVES.



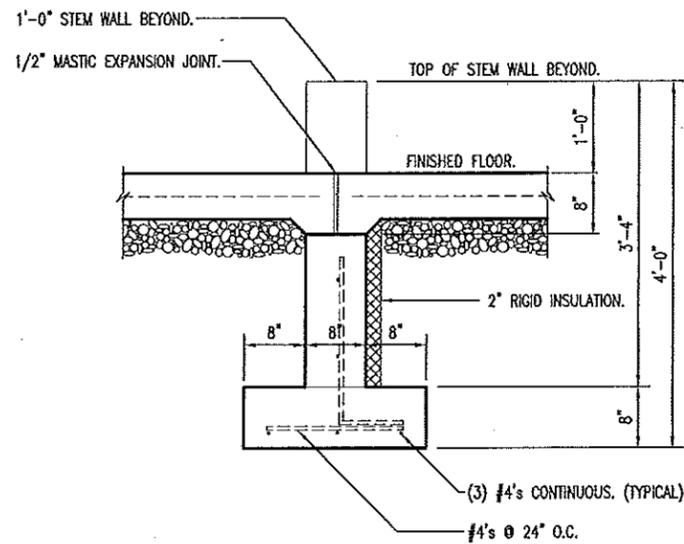
FOUNDATION DETAILS

MISSOURI DEPARTMENT
OF TRANSPORTATION
DIVISION OF GENERAL SERVICES
FACILITIES MANAGEMENT

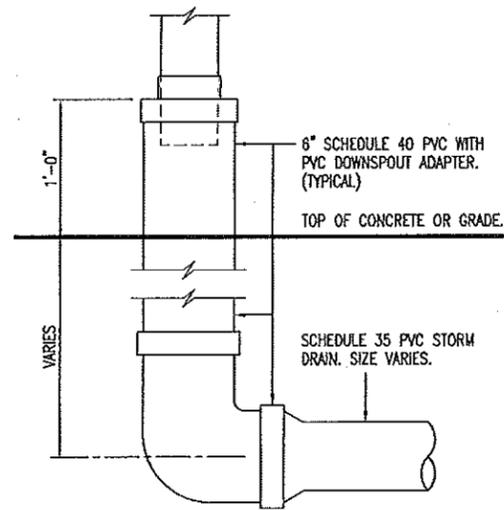
WAYLAND TRUCK WASH ADDITION
NORTHEAST DISTRICT - WAYLAND, MISSOURI

DESIGN BY: LARRY CARVER
DRAWN BY: LARRY CARVER
DATE: 5-18-12

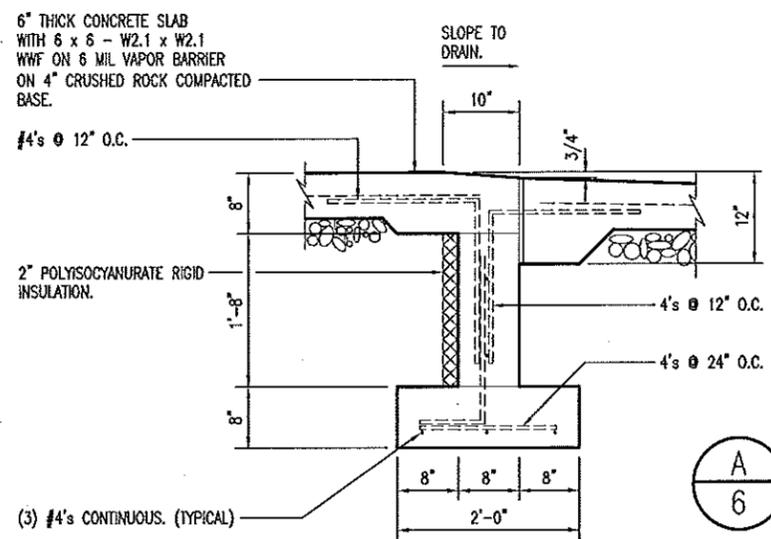
Sheet
5 of 19



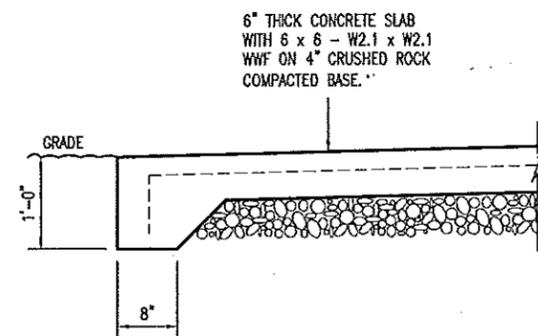
B
6
PASSAGE DOOR
FOUNDATION WALL
SCALE: 1/2" = 1'-0"



D
6
DOWNSPOUT ADAPTER
SCALE: 3/4" = 1'-0"



A
6
GARAGE DOOR THRESHOLD
SCALE: 1/2" = 1'-0"



C
6
CONCRETE
APRON EDGE
SCALE: 1/2" = 1'-0"

STATE OF MISSOURI
RECORD
DOUGLAS A.
ARCHITECT
NUMBER
A-2009002624
6/4/12

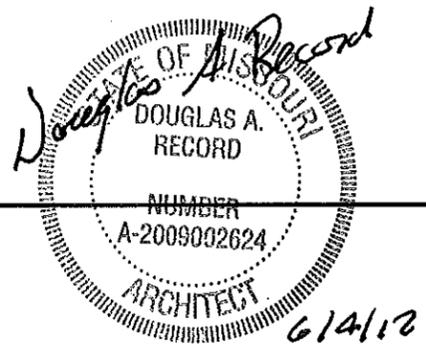
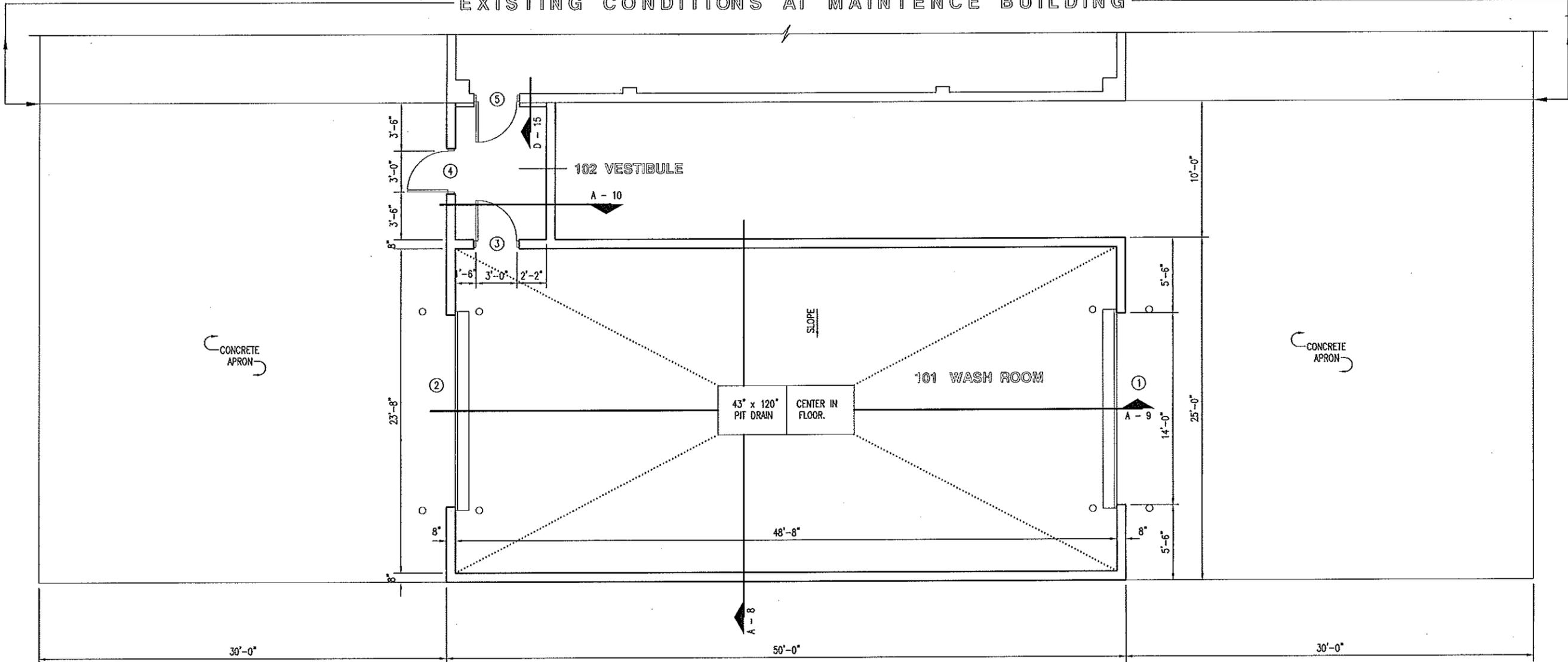
FOUNDATION DETAILS

MISSOURI DEPARTMENT
OF TRANSPORTATION
DIVISION OF GENERAL SERVICES
FACILITIES MANAGEMENT

WAYLAND TRUCK WASH ADDITION
NORTHEAST DISTRICT - WAYLAND, MISSOURI

DESIGN BY: LARRY CARVER
DRAWN BY: LARRY CARVER
DATE: 5-10-12
Sheet
6 of 19

EXISTING CONDITIONS AT MAINTENANCE BUILDING



A
7
FLOOR PLAN
SCALE: 1/8" = 1'-0"



FLOOR PLAN

MISSOURI DEPARTMENT
OF TRANSPORTATION
DIVISION OF GENERAL SERVICES
FACILITIES MANAGEMENT

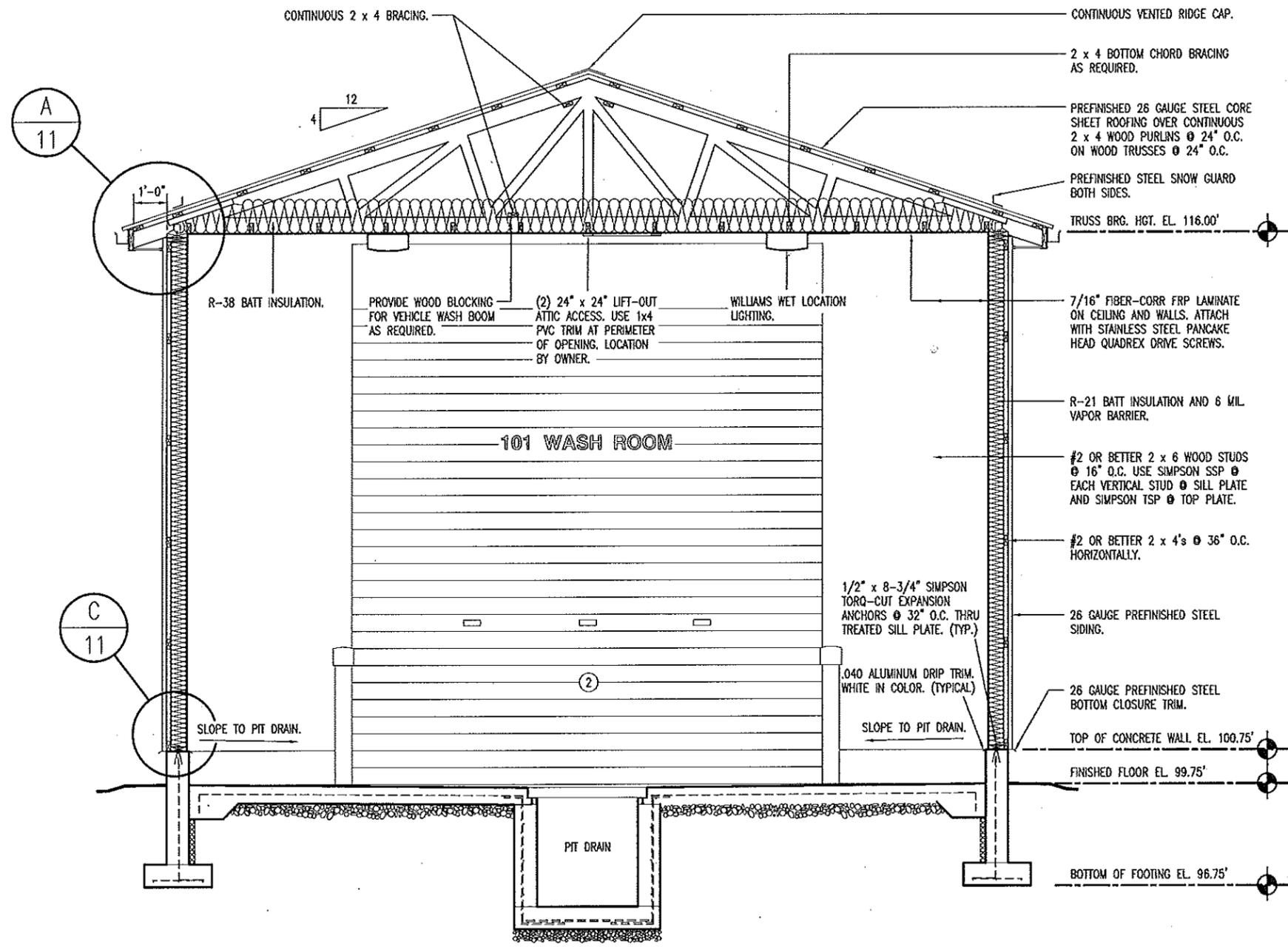
WAYLAND TRUCK WASH ADDITION
NORTHEAST DISTRICT - WAYLAND, MISSOURI

DESIGN BY: LARRY CARVER
DRAWN BY: LARRY CARVER
DATE: 5-18-12
Sheet
7 of 19

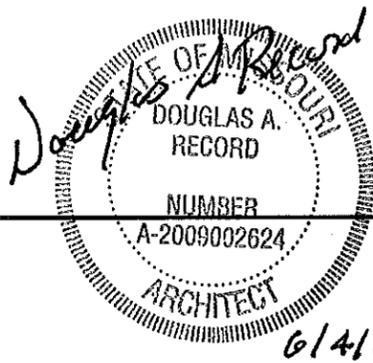
ENGINEERING DESIGN AND SHOP DRAWINGS:

1. PROFESSIONAL ENGINEER: ALL TRUSS DESIGNS SHALL BEAR THE NAME, SEAL, AND REGISTRATION NUMBER OF A LICENSED PROFESSIONAL ENGINEER.
2. TRUSS DESIGNS SHALL CONTAIN THE FOLLOWING DATA:
 - A. LOADING (UNIFORM)
 1. TOP CHORD
 - LIVE LOAD 20 PSF
 - DEAD LOAD 10 PSF
 - SNOW DRIFT - PER 2003 IBC
 2. BOTTOM CHORD
 - DEAD LOAD 5 PSF
 - TOTAL LOAD 35 PSF
 - B. METAL CONNECTORS - NOTE GAUGE SIZES OF CONNECTORS, NAME OF MANUFACTURER, AND CAPACITY OF EACH CONNECTION.
 - C. LUMBER SPECIFICATIONS
 - D. PITCH, SPAN, AND SPACING OF TRUSSES
 - E. DESIGN LOADINGS AND ALLOWABLE UNIT STRESS INCREASE, IF ANY
 - F. FORCE ANALYSIS OF BAR FORCES IN EACH MEMBER
 - G. SIZE AND LOCATION OF ALL CONNECTOR PLATES
 - H. TRUSS SUPPORTS
 - I. CAMBER, IF ANY
 - J. PERMANENT BRACING
 - K. HANDLING AND ERECTION INSTRUCTIONS
3. FIVE COPIES OF EACH TRUSS DESIGN AND/OR SHOP DRAWINGS SHALL BE SUBMITTED TO THE ARCHITECT FOR REVIEW PRIOR TO THE FABRICATION OF ANY COMPONENTS.
4. STRUCTURAL ENGINEERS REVIEW OF DRAWINGS PREPARED BY THE CONTRACTORS, SUPPLIERS, ETC., ARE ONLY FOR CONFORMANCE WITH DESIGN CONCEPT. CONSTRUCTION SHALL NOT START WITHOUT SAID REVIEW.

- DESIGN CRITERIA:**
1. BUILDING CODE: CURRENT IBC
 2. SEISMIC AV = 0.125; AA = 0.13
 3. BASIC WIND SPEED 90 MPH, EXPOSURE C
 4. PITCH 4:12



A
8 BUILDING SECTION
SCALE: 1/4" = 1'-0"

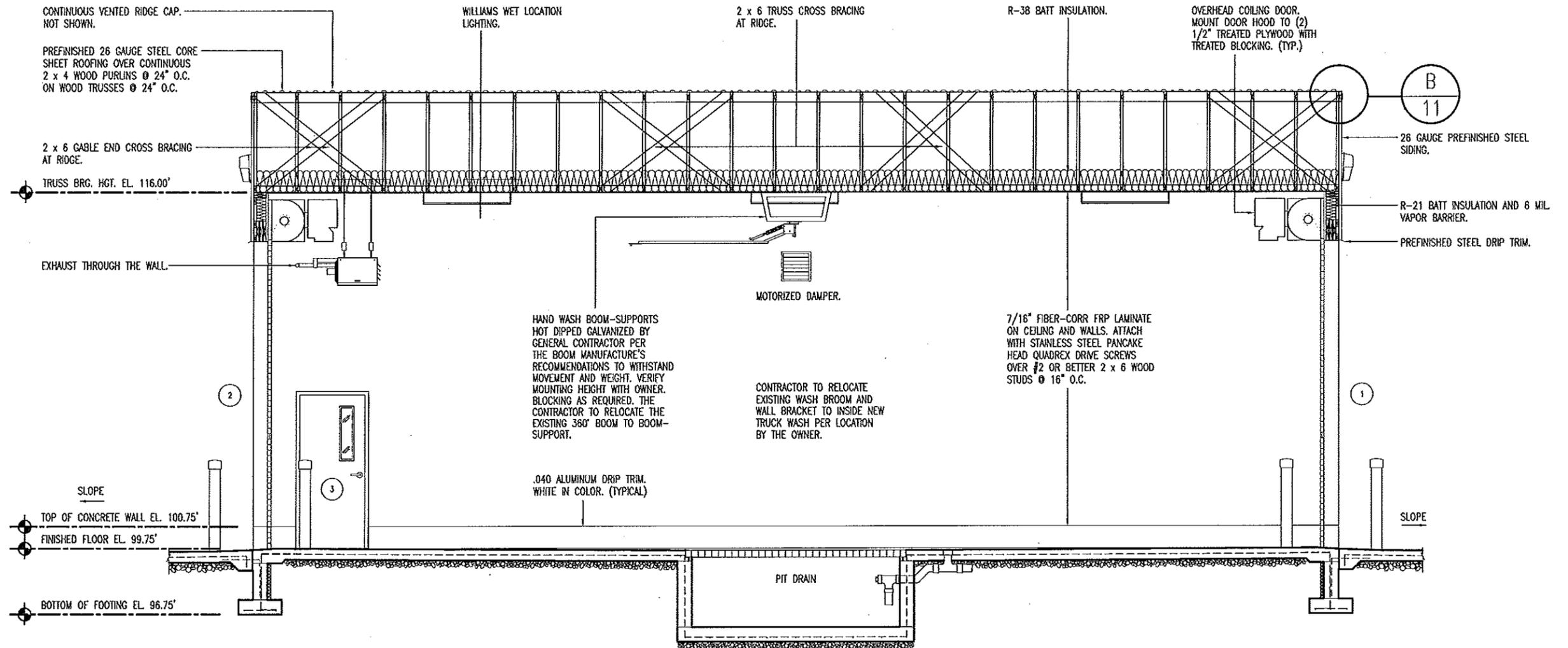


BUILDING SECTION

MISSOURI DEPARTMENT
OF TRANSPORTATION
DIVISION OF GENERAL SERVICES
FACILITIES MANAGEMENT

WAYLAND TRUCK WASH ADDITION
NORTHEAST DISTRICT - WAYLAND, MISSOURI

| |
|-------------------------|
| DESIGN BY: LARRY CARVER |
| DRAWN BY: LARRY CARVER |
| DATE: 5-18-12 |
| Sheet 8 of 19 |



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

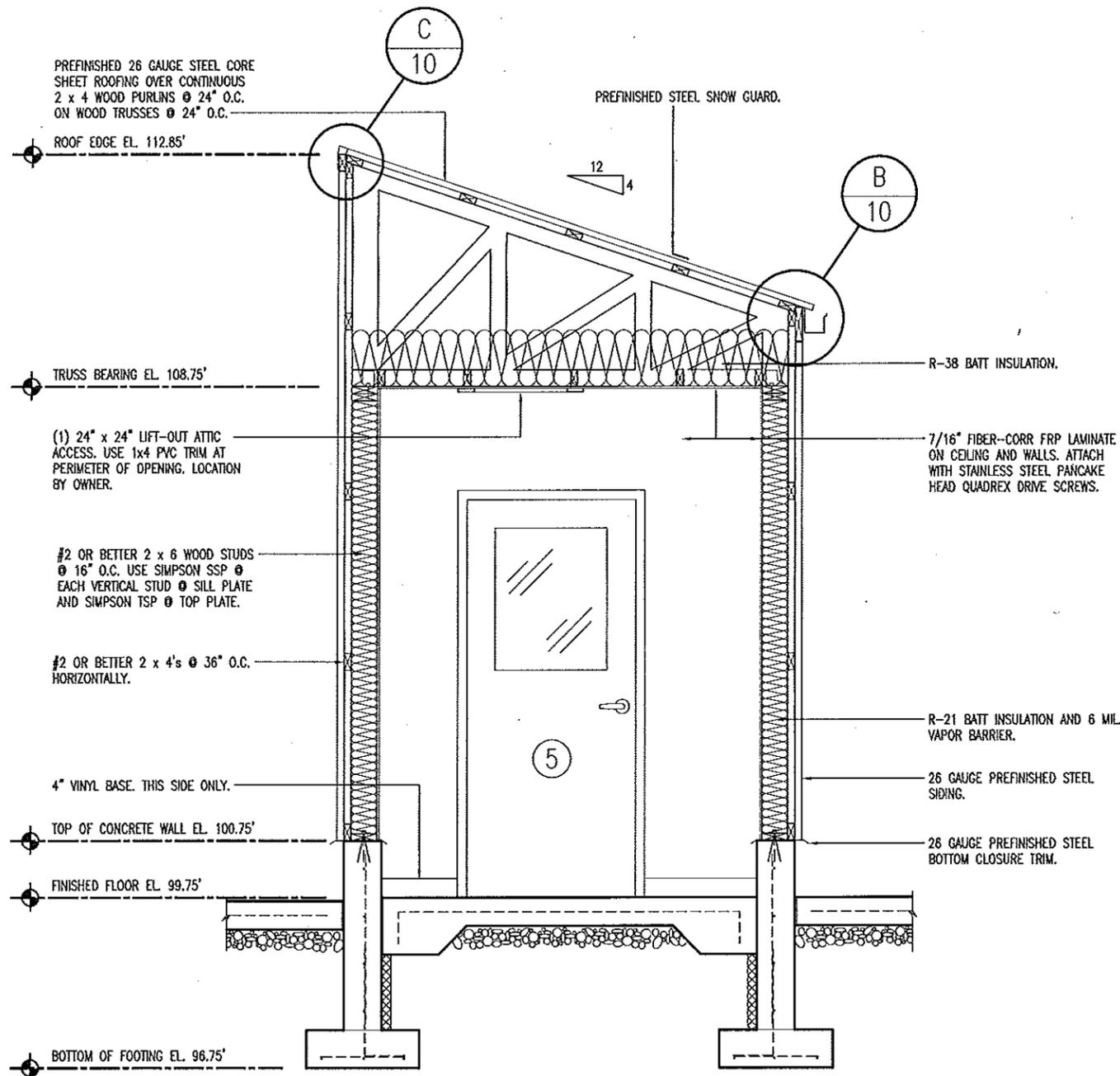
STATE OF MISSOURI
Joseph A. Record
 DOUGLAS A. RECORD
 ARCHITECT
 NUMBER
 A-2009002624
 6/4/12

BUILDING SECTION

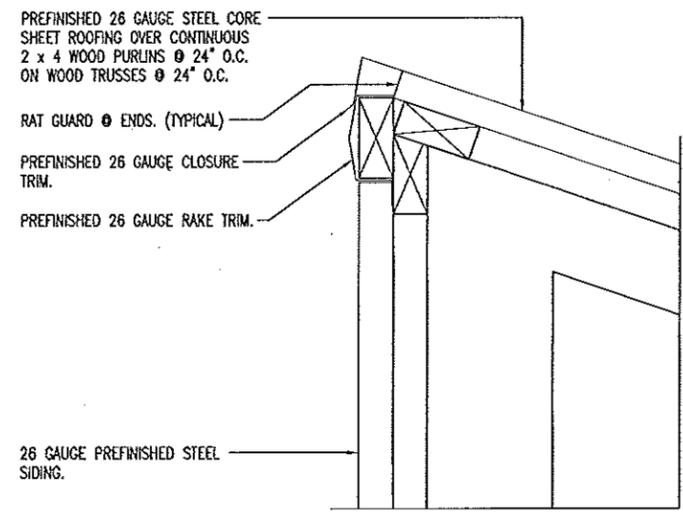
MISSOURI DEPARTMENT
 OF TRANSPORTATION
 DIVISION OF GENERAL SERVICES
 FACILITIES MANAGEMENT

WAYLAND TRUCK WASH ADDITION
 NORTHEAST DISTRICT - WAYLAND, MISSOURI

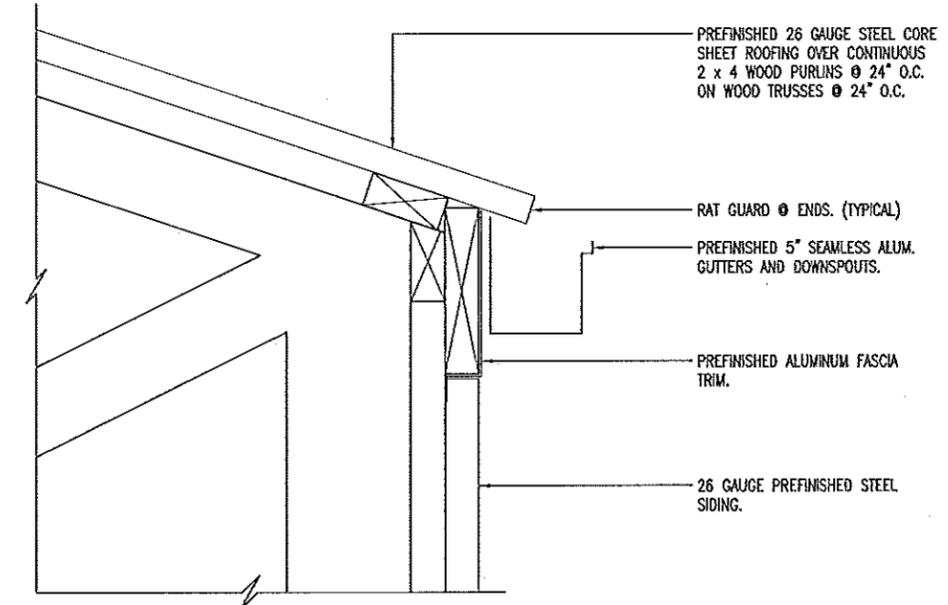
DESIGN BY: LARRY CARVER
 DRAWN BY: LARRY CARVER
 DATE: 5-18-12
 Sheet
 9 of 19



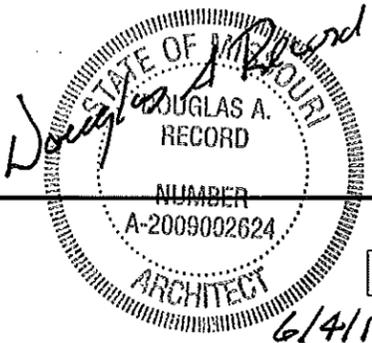
A
10 BUILDING SECTION
SCALE: 3/8" = 1'-0"



C
10 ROOF DETAIL
SCALE: 1-1/2" = 1'-0"



B
10 ROOF DETAIL
SCALE: 1-1/2" = 1'-0"

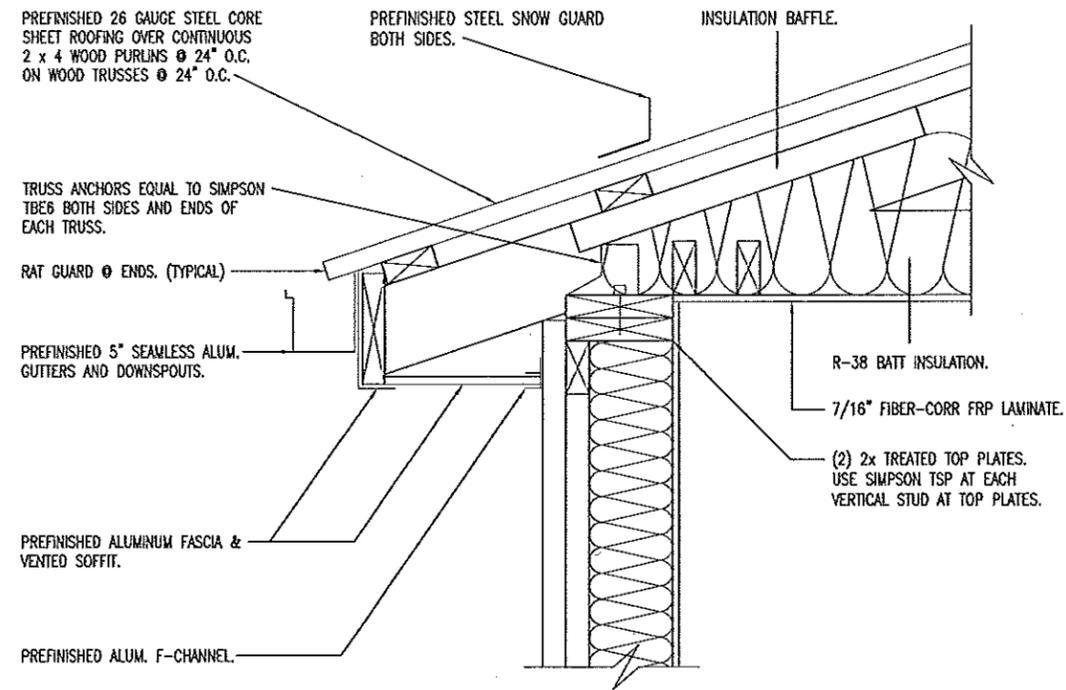


BUILDING SECTION

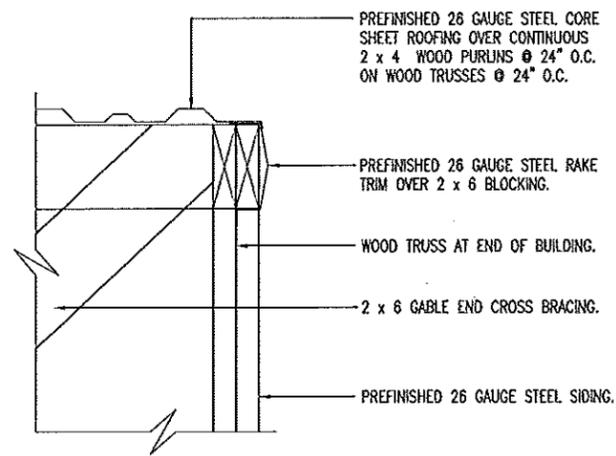
MISSOURI DEPARTMENT
 OF TRANSPORTATION
 DIVISION OF GENERAL SERVICES
 FACILITIES MANAGEMENT

WAYLAND TRUCK WASH ADDITION
 NORTHEAST DISTRICT - WAYLAND, MISSOURI

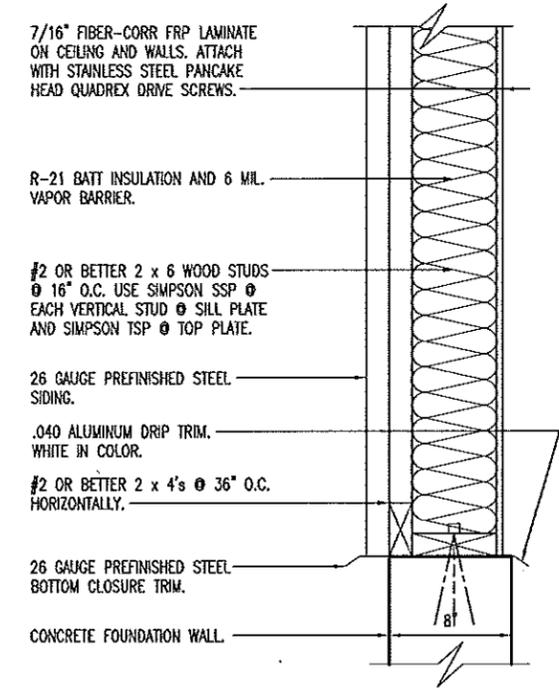
| |
|-------------------------|
| DESIGN BY: LARRY CARVER |
| DRAWN BY: LARRY CARVER |
| DATE: 5-18-12 |
| Sheet |
| 10 of 19 |



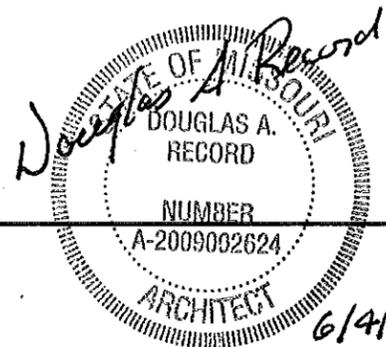
A SOFFIT
11 SCALE: 1" = 1'-0"



B RAKE DETAIL
11 SCALE: 1" = 1'-0"



C EXTERIOR WALL SECTION
11 SCALE: 1" = 1'-0"



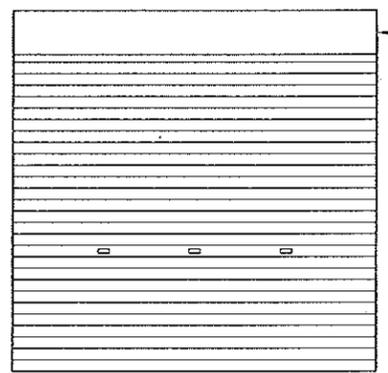
DETAILS

MISSOURI DEPARTMENT
OF TRANSPORTATION
DIVISION OF GENERAL SERVICES
FACILITIES MANAGEMENT

WAYLAND TRUCK WASH ADDITION
NORTHEAST DISTRICT - WAYLAND, MISSOURI

DESIGN BY: LARRY CARVER
DRAWN BY: LARRY CARVER
DATE: 5-18-12
Sheet

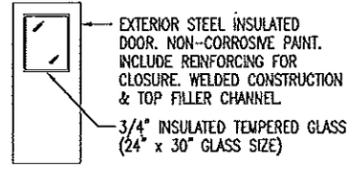
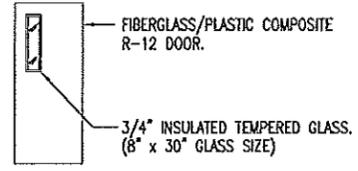
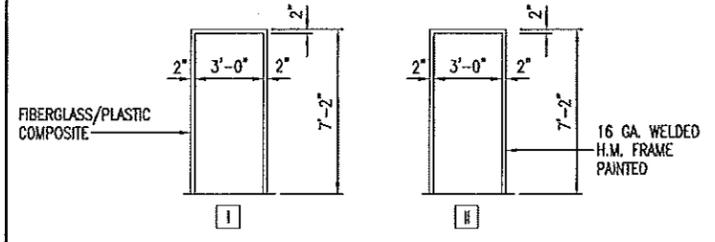
| DOOR SCHEDULE | | | | | | | |
|---------------|------------------------|-------|----------|-----------|--------|------------|------------|
| NO. | SIZE | SWING | DR. TYPE | FRM. TYPE | DETAIL | FRM. DEPTH | HWDR. GRP. |
| 1 | 14'-0" X 14'-0" | --- | A | --- | B-15 | --- | --- |
| 2 | 14'-0" X 14'-0" | --- | A | --- | B-15 | --- | --- |
| 3 | 3'-0" X 7'-0" X 1-3/4" | RHR | B | I | C-15 | 5-1/2" | 2 |
| 4 | 3'-0" X 7'-0" X 1-3/4" | LHR | C | II | A-15 | 5-1/2" | 1 |
| 5 | EXISTING TO REMAIN | --- | --- | --- | D-15 | --- | --- |



COILING DOOR HOOD, MOTORIZED OPERATOR WITH A CHAIN HOIST. (PROVIDE CAR MODIFICATION KIT) PROVIDE GALVANIZED TRACK AND BIRD BRUSH.

14'-0" x 14'-0" x 2" PREFINISHED INSULATED COILING GARAGE DOOR WITH (3) VIEW WINDOWS WHITE BAKED ON POLYESTER TOP COAT PAINT BOTH SIDES. (TYPICAL)

(A)

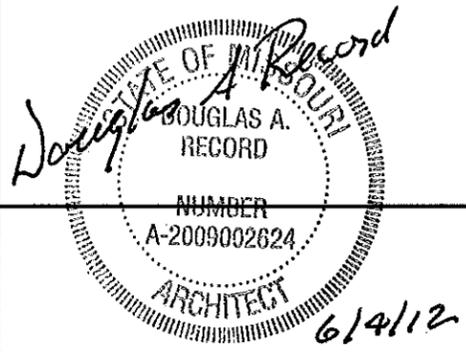


(B)

(C)

| HVAC SCHEDULE | | | | | | |
|---------------|--|--------------------------------------|------------|-------------|---------|--|
| SYM. | UNIT | MANUFACTURER | BTU OUTPUT | FUEL | VOLTAGE | REMARKS |
| (A) | GAS FIRED UNIT HEATER | REZNOR MODEL UDAS 60 OR EQUAL | 49,800 | NATURAL GAS | 115 | 409 STAINLESS STEEL HEAT EXCHANGERS, TOTALLY ENCLOSED FAN MOTOR, HORIZONTAL COMBUSTION AIR/VENT KIT INCLUDING CONCENTRIC ADAPTER. |
| (B) | 16" DIA. CORROSION RESISTANT SHUTTER FAN | DAYTON 1BLJ1 OSHA GUARD OR EQUAL | 2,005 CFM | ELECTRIC | 115 | FIBERGLASS SHUTTER & BLADES. 2.1 AMPS. |
| (C) | MOTORIZED DAMPER WITH WEATHERHOOD | DAYTON MODEL 4C560 OR EQUAL 60 HERTZ | --- | ELECTRIC | 115 | 16" CENTER-PIVOTING, MOTORIZED, GALV. STEEL DAMPER. WIRE TO OPEN WHEN THE EXHAUST FAN IS TURNED ON. HOOD EQUAL TO NATIONAL FAN CO. Ph: 1-877-389-3131 16" GALVANIZED WEATHER HOOD. MODEL# NFC-GH-XF16. |
| (D) | ELECTRIC UNIT HEATER | QUARK MODEL CHW1101DS OR EQUAL | 3,414 | ELECTRIC | 120 | INCLUDE LOUVER GRILLE, WITH BUILT-IN THERMOSTAT, CHWS1 1" SEMI-RECESSED MOUNTING FRAME. 8.4 AMPS. |
| (T) | THERMOSTAT | AS REQUIRED. | --- | --- | --- | AS RECOMMENDED BY THE GAS FIRED UNIT HEATER MANUFACTURER. |

| FINISH SCHEDULE | | | | |
|-----------------|-----------|----------------------------|---|---|
| NO. | ROOM | FLOOR | WALLS | CEILING |
| | | CURE AND SEAL ON CONCRETE. | 7/16" FIBER-CORR FIBERGLASS PANELS ON 2 x 6 WOOD STUDS. | 7/16" FIBER-CORR FIBERGLASS PANELS ON WOOD TRUSSES. |
| 101 | WASH ROOM | • | • | • |
| 102 | VESTIBLE | • | • | • |



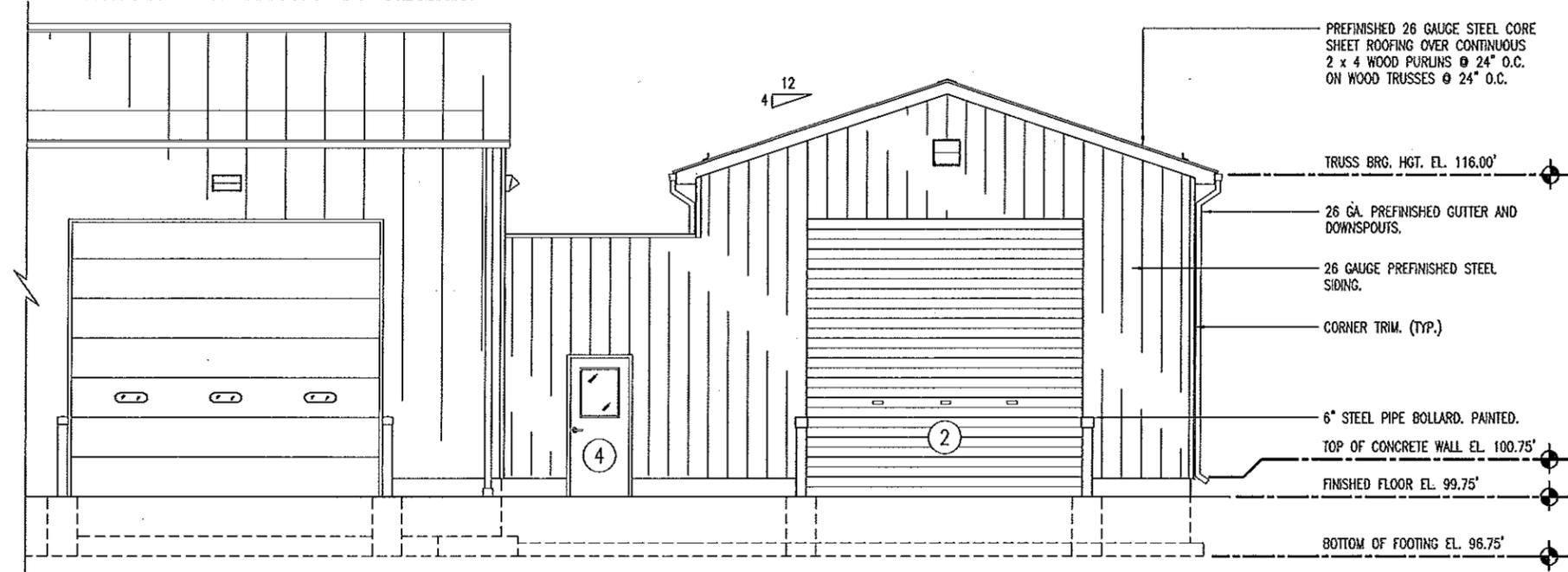
SCHEDULES

MISSOURI DEPARTMENT OF TRANSPORTATION
DIVISION OF GENERAL SERVICES FACILITIES MANAGEMENT

WAYLAND TRUCK WASH ADDITION
NORTHEAST DISTRICT - WAYLAND, MISSOURI

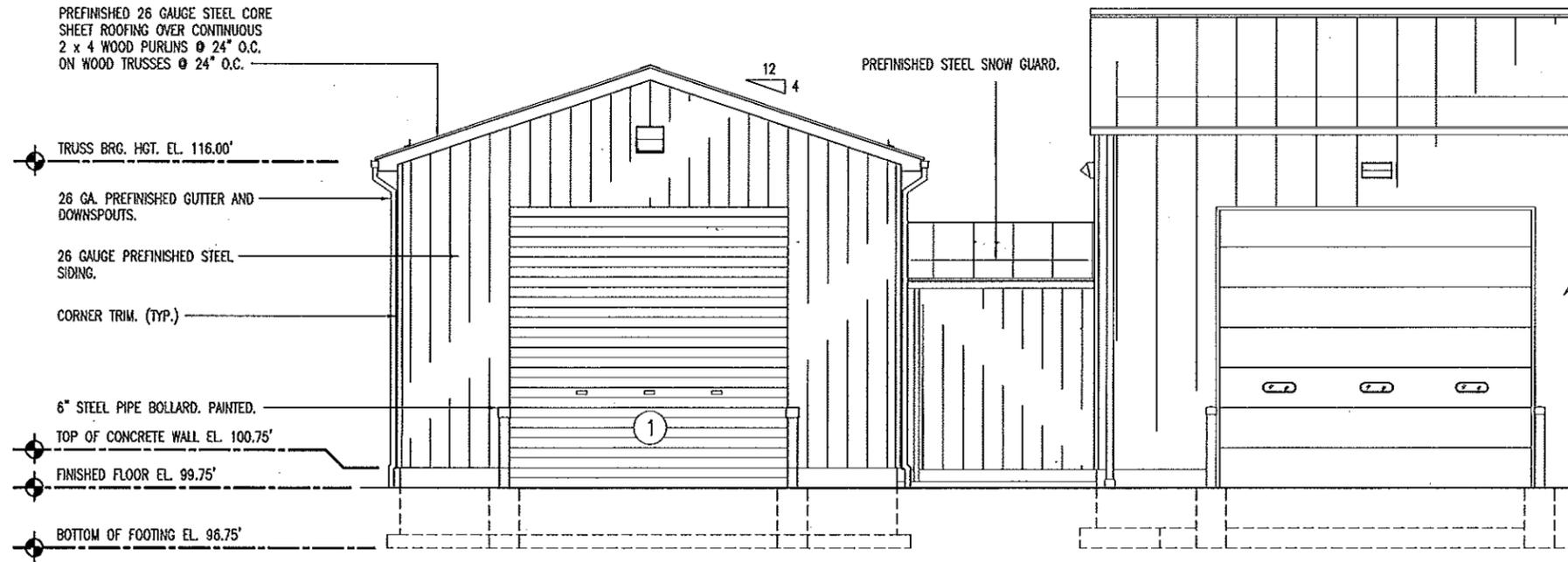
DESIGN BY: LARRY CARVER
DRAWN BY: LARRY CARVER
DATE: 5-25-12
Sheet 12 of 19

EXIST. CONDITIONS TO REMAIN



B WEST ELEVATION
 13 SCALE: 1/8" = 1'-0"

EXIST. CONDITIONS TO REMAIN



A EAST ELEVATION
 13 SCALE: 1/8" = 1'-0"

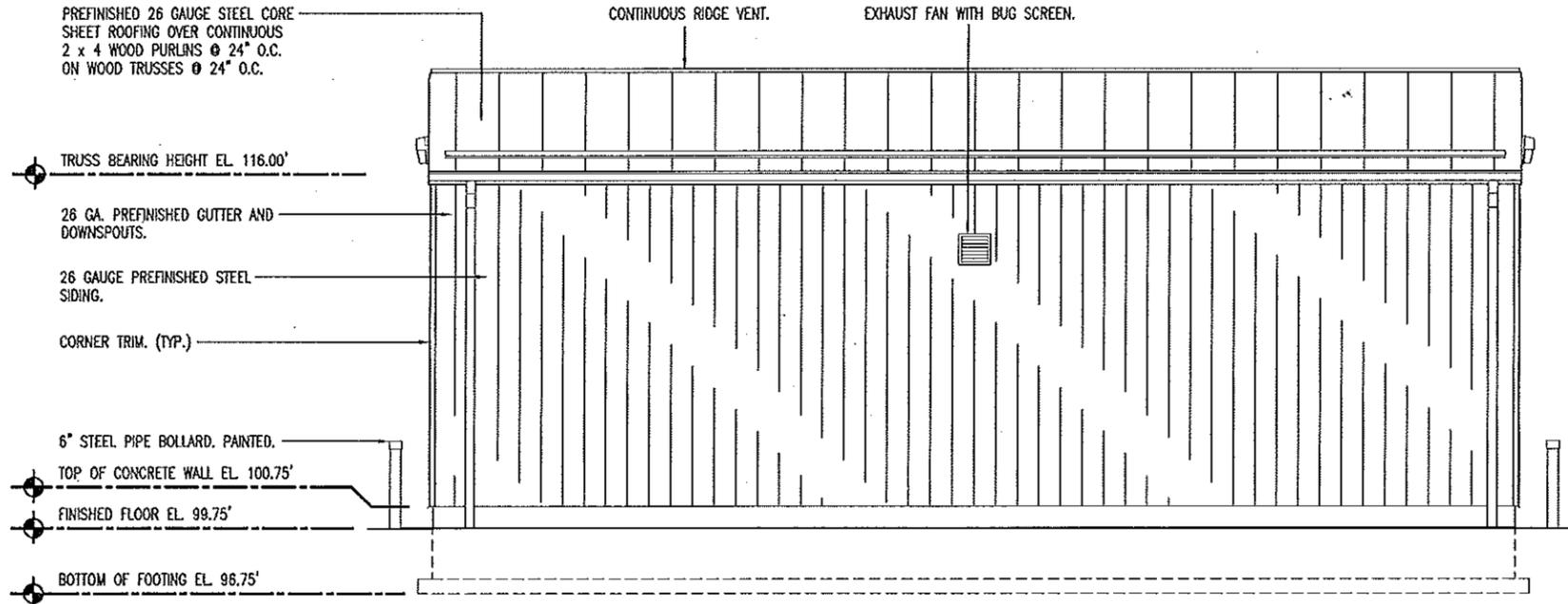
Joseph A. Wood
 ARCHITECT
 DOUGLAS A. RECORD
 NUMBER
 A2009002624
 6/4/12

EAST & WEST ELEVATIONS

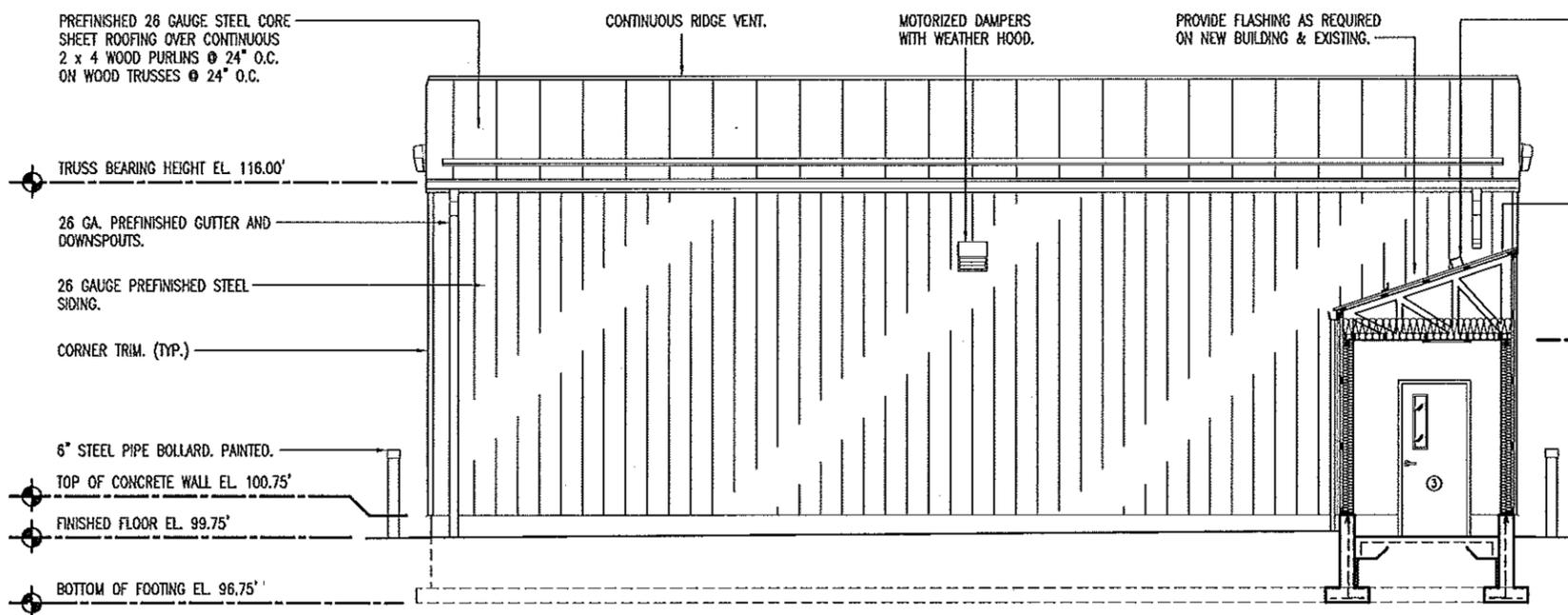
MISSOURI DEPARTMENT
 OF TRANSPORTATION
 DIVISION OF GENERAL SERVICES
 FACILITIES MANAGEMENT

WAYLAND TRUCK WASH ADDITION
 NORTHEAST DISTRICT - WAYLAND, MISSOURI

DESIGN BY: LARRY CARVER
 DRAWN BY: LARRY CARVER
 DATE: 5-18-12
 Sheet
 13 of 19



B SOUTH ELEVATION
14 SCALE: 1/8" = 1'-0"



A NORTH ELEVATION
14 SCALE: 1/8" = 1'-0"

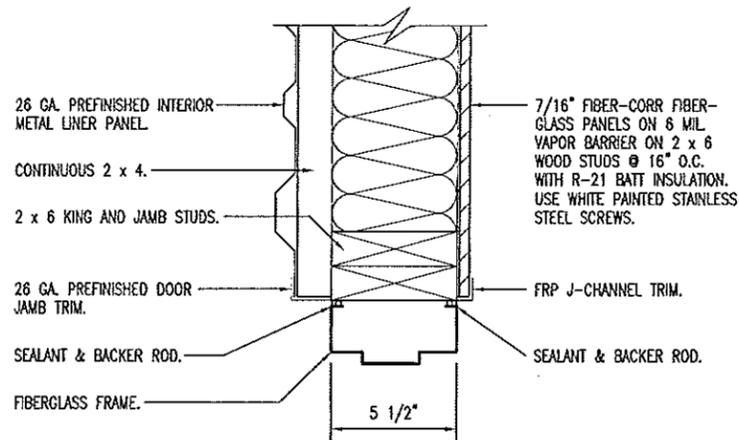
STATE OF MISSOURI
RECORD
DOUGLAS A.
NUMBER
A-2009002624
ARCHITECT
6/4/12

NORTH & SOUTH ELEVATIONS

MISSOURI DEPARTMENT
OF TRANSPORTATION
DIVISION OF GENERAL SERVICES
FACILITIES MANAGEMENT

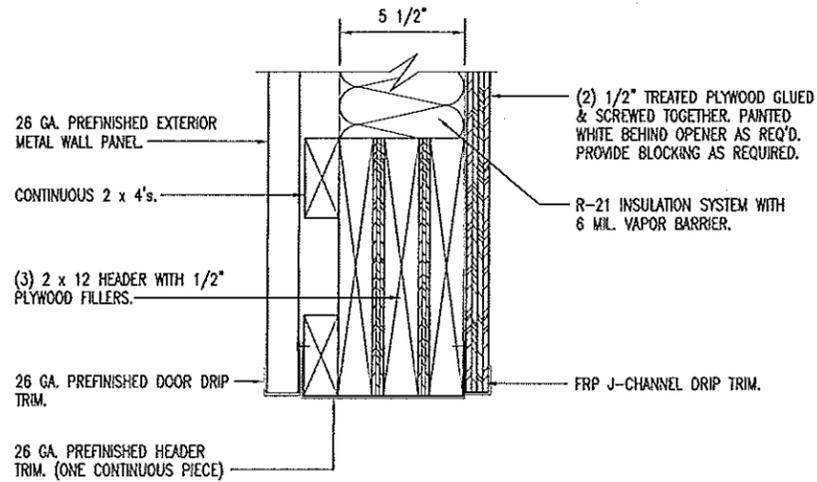
WAYLAND TRUCK WASH ADDITION
NORTHEAST DISTRICT - WAYLAND, MISSOURI

DESIGN BY: LARRY CARVER
DRAWN BY: LARRY CARVER
DATE: 5-18-12
Sheet
14 of 19



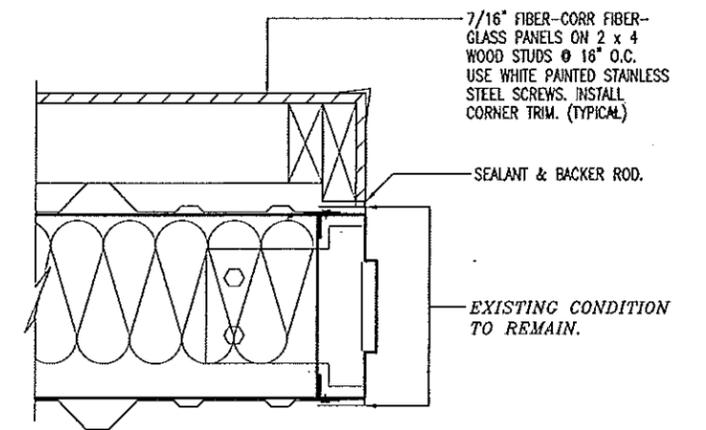
DOOR JAMB

SCALE: 1-1/2" = 1'-0"



GARAGE DOOR HEAD

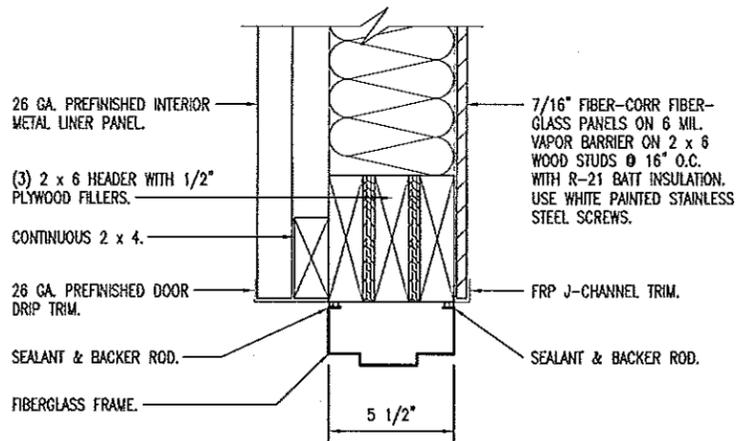
SCALE: 1-1/2" = 1'-0"



D
15
DOOR HEAD

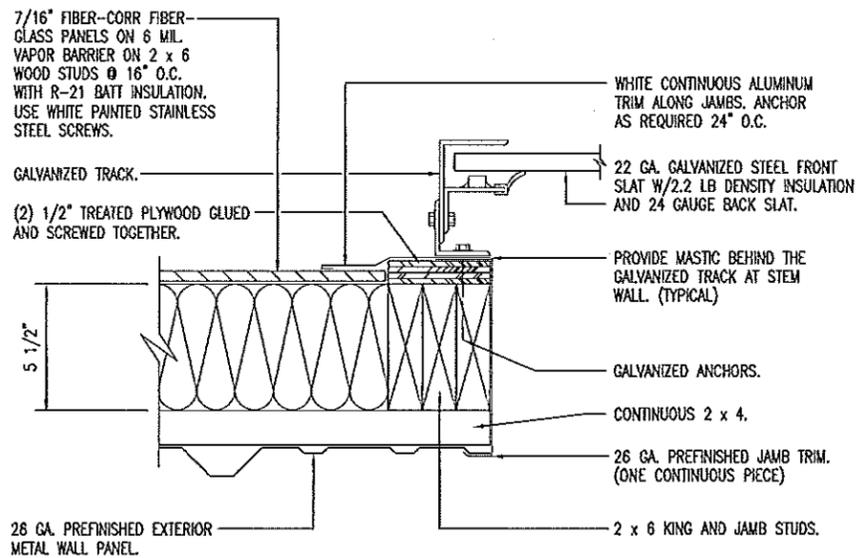
DETAIL @ EXISTING. JAMB SIMILAR.

SCALE: 1-1/2" = 1'-0"



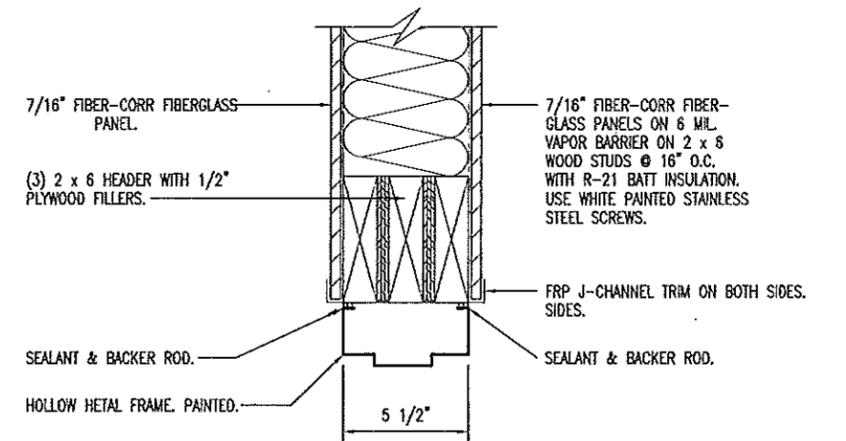
A
15
DOOR HEAD

SCALE: 1-1/2" = 1'-0"



B
15
GARAGE DOOR JAMB

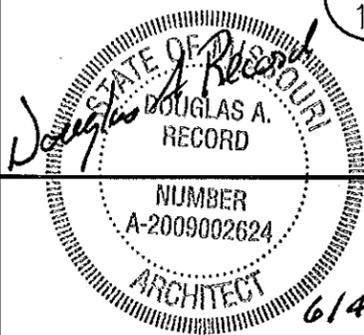
SCALE: 1-1/2" = 1'-0"



C
15
DOOR HEAD

JAMB SIMILAR.

SCALE: 1-1/2" = 1'-0"



JAMB DETAILS

MISSOURI DEPARTMENT OF TRANSPORTATION
DIVISION OF GENERAL SERVICES FACILITIES MANAGEMENT

WAYLAND TRUCK WASH ADDITION
NORTHEAST DISTRICT - WAYLAND, MISSOURI

DESIGN BY: LARRY CARVER
DRAWN BY: LARRY CARVER
DATE: 5-18-12

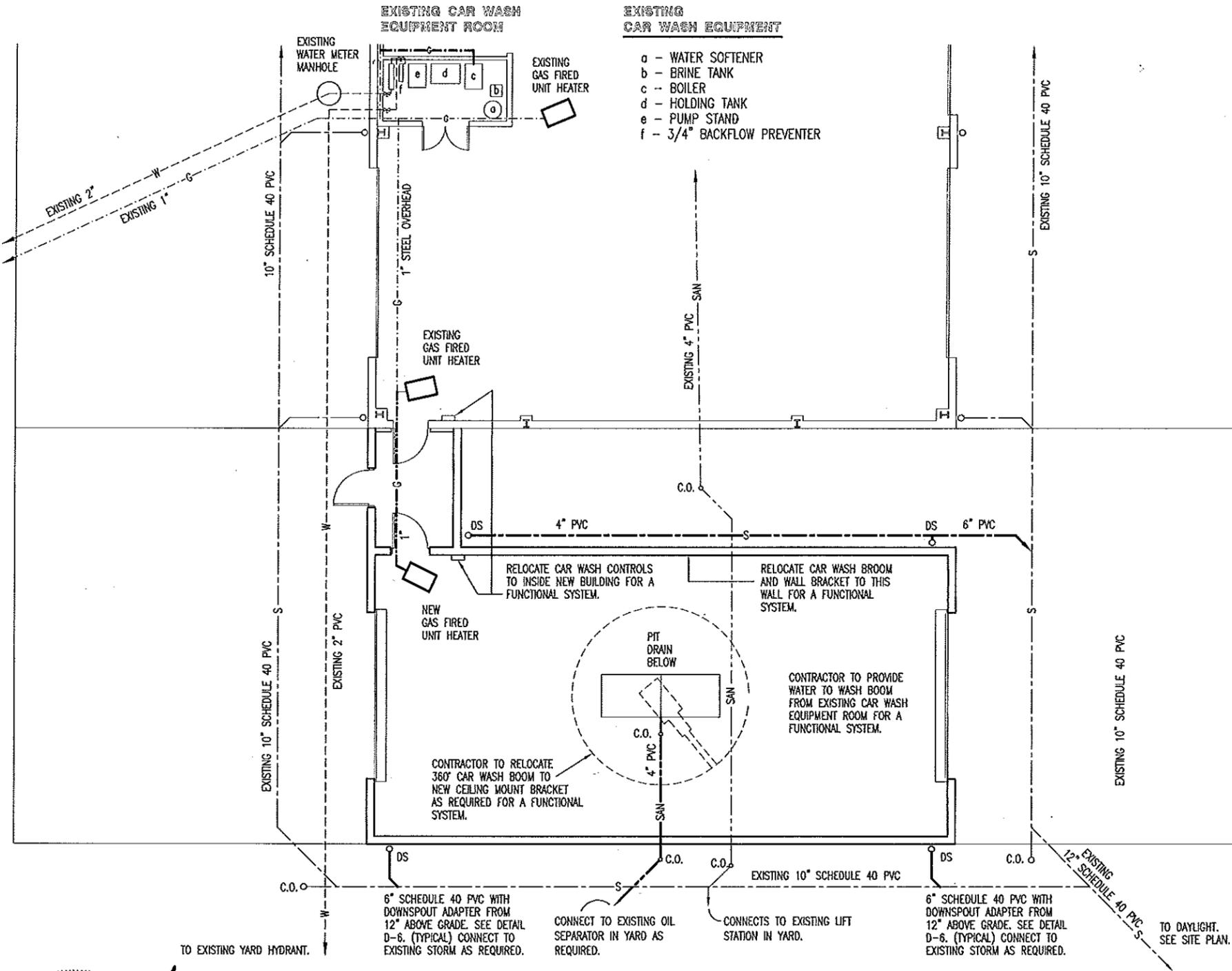
Sheet
15 of 19

PLUMBING NOTES

1. DRAWINGS AND DIAGRAMS ARE DIAGRAMMATIC AND SHALL NOT BE SCALED. REFER TO ARCHITECTURAL DRAWINGS FOR DIMENSIONS.
2. PLUMBING SHALL BE INSTALLED IN STRICT COMPLIANCE WITH THE LATEST EDITION OF THE NATIONAL PLUMBING CODE.
3. PLUMBING SHALL BE LOCATED AND PLACED UNDER THE SLAB PRIOR TO POURING OF CONCRETE. PIPING SHALL BE RUN IN SAND FILLED TRENCH UNDER THE BASE ROCK AND SLEEVED WITH PVC WHENEVER RUN THROUGH CONCRETE.
4. PROVIDE PLUMBING EQUIPMENT AND ACCESSORIES REQUIRED FOR COMPLETE AND OPERATIONAL PLUMBING SYSTEMS AS REQUIRED BY MANUFACTURER'S INSTRUCTIONS AND DIRECTIONS FOR SYSTEMS SPECIFIED.
5. VEHICLE WASH EQUIPMENT, PLUMBING AND NECESSARY APPURTENANCES SHALL BE AS RECOMMENDED BY THE EQUIPMENT MANUFACTURER WITH THE APPROVAL OF THE ARCHITECT FOR A COMPLETE AND FUNCTIONAL SYSTEM.
6. PROVIDE BLOCKING TO ALL FIXTURES AS REQUIRED FOR A SECURE APPLICATION.
7. CONTRACTOR TO PROVIDE AND DESIGN CONNECTION TO SANITARY SEWER AS REQUIRED. PROVIDE ALL APPURTENANCES FOR A FUNCTIONAL SYSTEM.

EXISTING MAINTENANCE BUILDING

EXISTING MAINTENANCE BUILDING



EXISTING CAR WASH EQUIPMENT

- a - WATER SOFTENER
- b - BRINE TANK
- c - BOILER
- d - HOLDING TANK
- e - PUMP STAND
- f - 3/4" BACKFLOW PREVENTER

A
16

PLUMBING PLAN

SCALE: 3/32" = 1'-0"



STATE OF MISSOURI
RECORD
DOUGLAS A. ARCHITECT
NUMBER A-2009002624
6/14/12

PLUMBING PLAN

MISSOURI DEPARTMENT OF TRANSPORTATION
DIVISION OF GENERAL SERVICES
FACILITIES MANAGEMENT

WAYLAND TRUCK WASH ADDITION
NORTHEAST DISTRICT - WAYLAND, MISSOURI

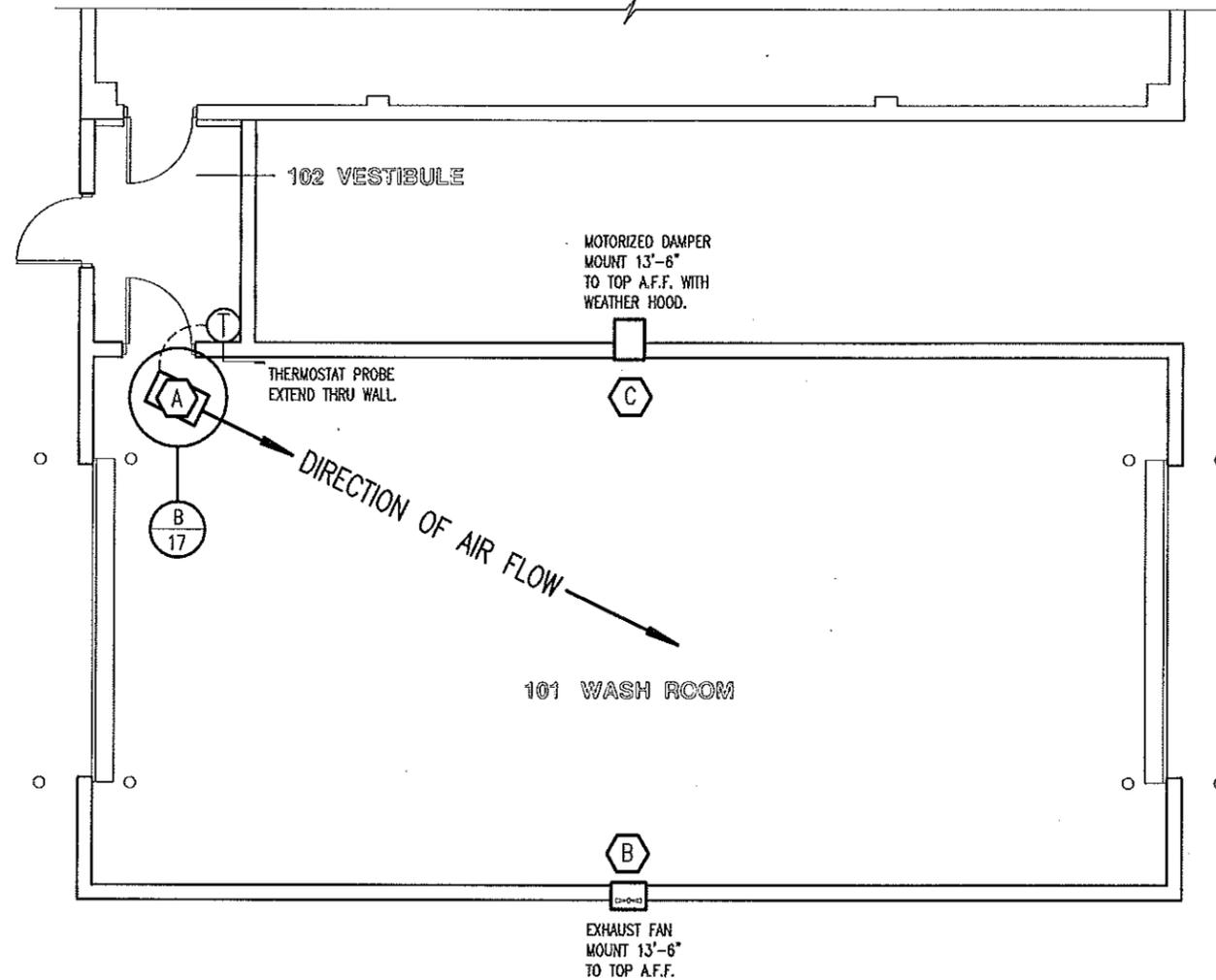
DESIGN BY: LARRY CARVER
DRAWN BY: LARRY CARVER
DATE: 5-25-12
Sheet 16 of 19

SEE HVAC SCHEDULE SHEET 12.

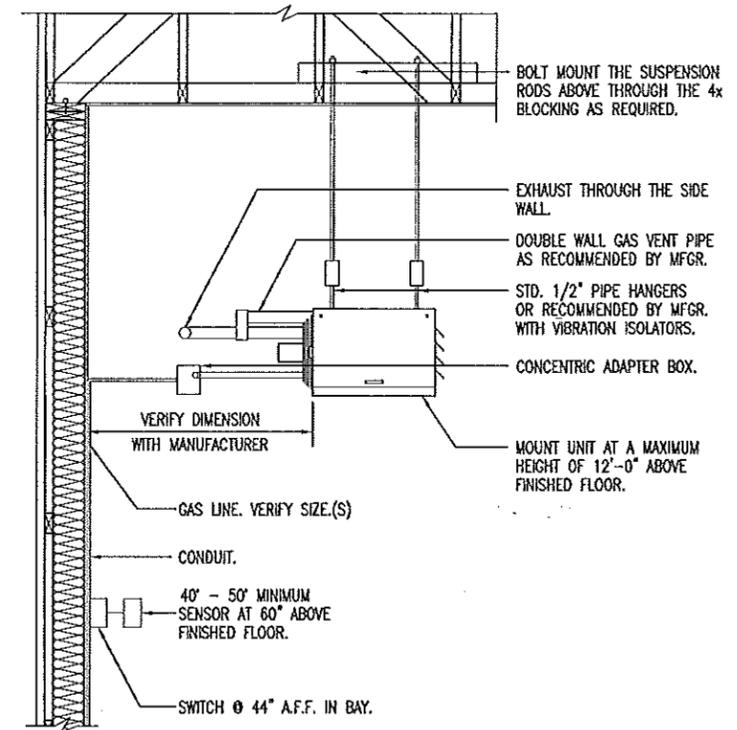
MECHANICAL NOTES

1. DRAWINGS AND DIAGRAMS ARE DIAGRAMMATIC AND SHALL NOT BE SCALED. REFER TO ARCHITECTURAL DRAWINGS FOR DIMENSIONS.
2. MECHANICAL WORK SHALL BE INSTALLED IN STRICT COMPLIANCE WITH THE LATEST EDITION OF THE IBC MECHANICAL CODE.
3. PROVIDE EQUIPMENT AND APPURTENANCES NOT NECESSARILY SHOWN OR SPECIFIED BUT NEEDED FOR COMPLETE AND PROPER INSTALLATION.
4. ALL EQUIPMENT AND MATERIALS, IN PARTICULAR VALVES, FILTERS, MOTORS, AND CONTROLS SHALL BE ARRANGED TO PROVIDE PROPER CLEARANCE FOR SERVICE, MAINTENANCE, AND INSPECTION.
5. MECHANICAL SUBCONTRACTOR SHALL FULLY COORDINATE ALL WORK WITH PLUMBING AND ELECTRICAL WORKERS PRIOR TO COMMENCING OF THE MECHANICAL INSTALLATION.
6. PROVIDE BLOCKING TO HVAC DEVICES AS REQUIRED FOR A SECURE APPLICATION.
7. THERMOSTAT CONTROL FOR 113 TRUCK WASH TO BE LOCATED IN 114 WASH EQUIPMENT ROOM WITH PROBE LOCATED AS SHOWN.

EXISTING CONDITIONS AT MAINTENANCE BUILDING



A
17
HVAC PLAN
SCALE: 1/8" = 1'-0"



B
17
UNIT HEATER INSTALLATION
NOT TO SCALE



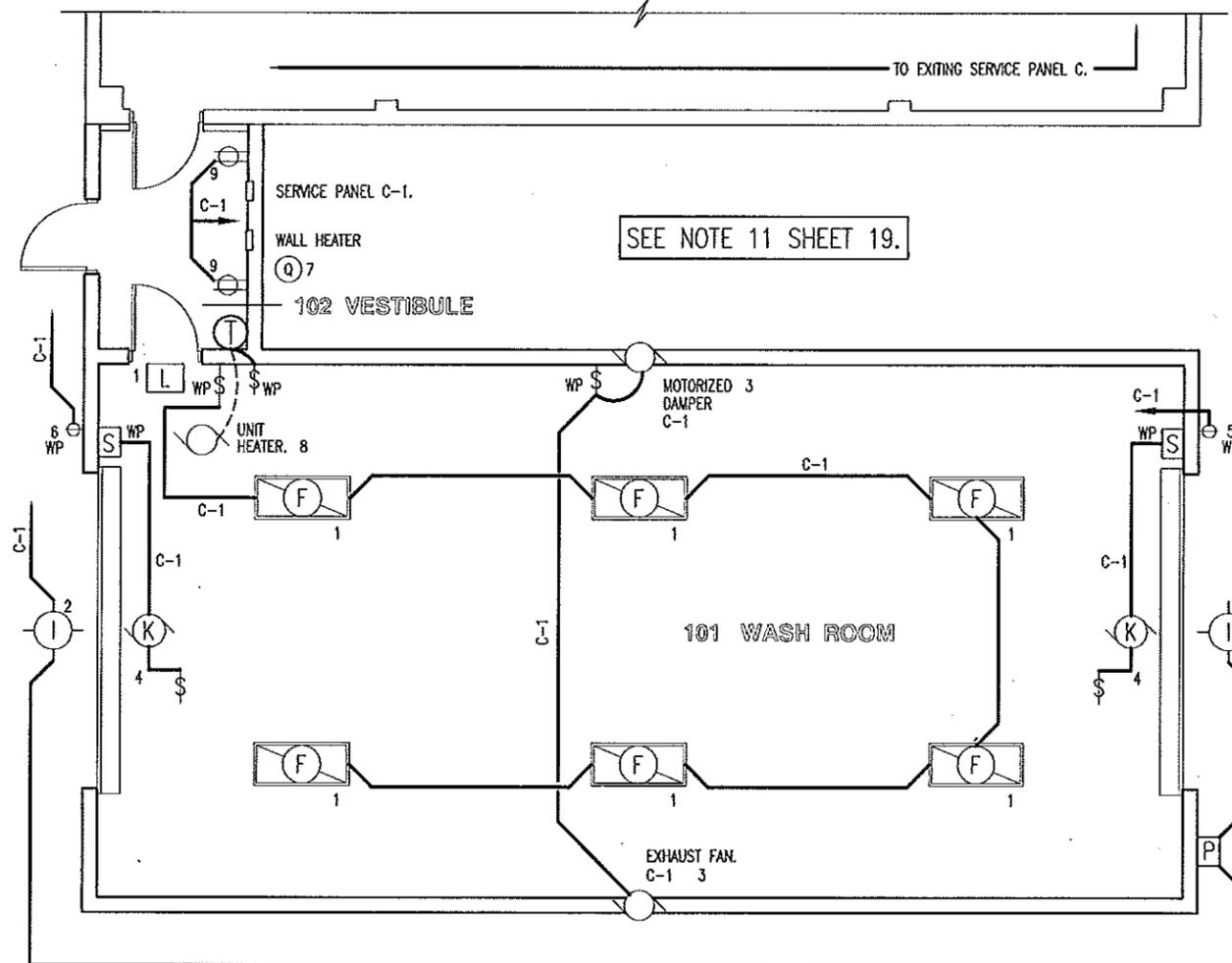
HVAC PLAN

**MISSOURI DEPARTMENT
OF TRANSPORTATION**
DIVISION OF GENERAL SERVICES
FACILITIES MANAGEMENT

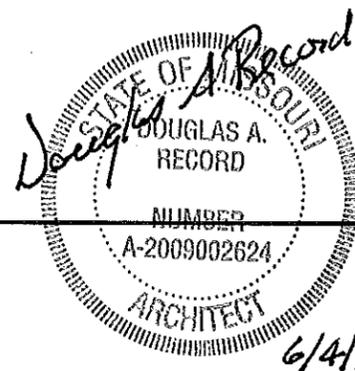
**WAYLAND TRUCK WASH ADDITION
NORTHEAST DISTRICT - WAYLAND, MISSOURI**

DESIGN BY: LARRY CARVER
DRAWN BY: LARRY CARVER
DATE: 5-25-12
Sheet
17 of 19

EXISTING CONDITIONS AT MAINTENANCE BUILDING



A
18 ELECTRICAL PLAN
SCALE: 1/8" = 1'-0"



ELECTRICAL PLAN

MISSOURI DEPARTMENT
OF TRANSPORTATION
DIVISION OF GENERAL SERVICES
FACILITIES MANAGEMENT

WAYLAND TRUCK WASH ADDITION
NORTHEAST DISTRICT - WAYLAND, MISSOURI

DESIGN BY: LARRY CARYER
DRAWN BY: LARRY CARYER
DATE: 5-25-12
Sheet
18 of 19

LOCATED IN 112 MECHANICS, MAINTENANCE BUILDING.

EXISTING SERVICE PANEL C

| MAIN BUS 225MLO COPPER VOLTAGE 120/240V 1PH 3W MOUNTING SURFACE CIRCUIT BREAKERS BOLT-IN 10000AIC SQ. 'D' NQOD OR EQUAL W/ NEUTRAL BUS & GROUNDING BUS. | | | | | | | |
|---|---------------------------------|------|-------|-----|---------------------------------|------|-------|
| CIR | SERVICE | VA | BKR. | CIR | SERVICE | VA | BKR. |
| 1 | HIGH BAY LIGHTS 112 MECHANICS ▲ | 1122 | 20A1P | 2 | HIGH BAY LIGHTS 112 MECHANICS ▲ | 984 | 20A1P |
| 3 | HIGH BAY LIGHTS 112 MECHANICS ▲ | 1122 | 20A1P | 4 | EXTERIOR & EMERGENCY LIGHTING | 1115 | 20A1P |
| 5 | LIGHTING 113 TOOLS & 115 PUMP | 483 | 20A1P | 6 | 112 MECHANICS CEILING FANS | 312 | 20A1P |
| 7 | CORD REEL ● | 180 | 20A1P | 8 | CORD REEL ● | 180 | 20A1P |
| 9 | UNIT HEATER | 672 | 20A1P | 10 | GARAGE DOOR OPENERS | 882 | 20A2P |
| 11 | SPARE | - | 20A1P | 12 | | 822 | |
| 13 | ELECTRIC UNIT HEATER | 2040 | 30A2P | 14 | CARWASH CAT PUMP | 2500 | 30A2P |
| 15 | | 2040 | | 16 | | 2500 | |
| 17 | CARWASH EQUIPMENT | 180 | 20A1P | 18 | CARWASH EQUIPMENT | 180 | 20A1P |
| 19 | CARWASH EQUIPMENT | 180 | 20A1P | 20 | RECEPTACLES 112 MECHANICS | 180 | 20A1P |
| 21 | WATER COOLER | 480 | 20A1P | 22 | RECEPTACLES 113 TOOLS | 540 | 20A1P |
| 23 | RECEPTACLES 112 MECHANICS | 720 | 20A1P | 24 | TRUCK HEATER RECEPTACLE WEST | 1500 | 20A1P |
| 25 | TRUCK HEATER RECEPTACLE WEST | 1500 | 20A1P | 26 | TRUCK HEATER RECEPTACLE WEST | 1500 | 20A1P |
| 27 | TRUCK HEATER RECEPTACLE WEST | 1500 | 20A1P | 28 | TRUCK HEATER RECEPTACLE EAST | 1500 | 20A1P |
| 29 | TRUCK HEATER RECEPTACLE EAST | 1500 | 20A1P | 30 | TRUCK HEATER RECEPTACLE EAST | 1500 | 20A1P |
| 31 | TRUCK HEATER RECEPTACLE EAST | 1500 | 20A1P | 32 | EXHAUST FAN | 672 | 20A1P |
| 33 | CARBON MONOXIDE EXHAUST FAN | 828 | 20A2P | 34 | WELDERS 112 MECHANICS | 3500 | 50A2P |
| 35 | | 828 | | 36 | | 3500 | |
| 37 | SPACE | | | 38 | 60 AMP SUB-PANEL (NEW) | 4378 | 40A2P |
| 39 | | | | 40 | | 4378 | |
| 41 | | | | 42 | SPACE | | |

▲ CIRCUIT BREAKER SHALL BE RATED FOR HID LIGHTING

● CIRCUIT BREAKER SHALL GFI RATED

(3)#8, #8 GROUND, 3/4" CONDUIT

LOCATED IN ADDITION ROOM, 102 VESTIBULE.

NEW SERVICE PANEL C-1

| MAIN BUS: 50A MLO VOLTS: 240/120, 1PH, 3-WIRE BUS MATERIAL: COPPER MOUNTING: RECESSED | | SQUARE "D" QO BRANCH BREAKERS QO112L125G RECESSED PANEL PK9GTA GROUND BAR PROVIDE COVER AS REQUIRED. | | CONNECTED LOAD A PHASE 4090 VA B PHASE 4667 VA TOTAL 8757 VA 36 A | | | | |
|--|------------------------|---|-------|---|-------|------|-----------------------|-----|
| CIR | SERVICE | VA | BKR | CIR | BKR | VA | SERVICE | CIR |
| 1 | 101 - LIGHTS | 1296 | 20A1P | A | 30A1P | 434 | EXTERIOR - LIGHTS | 2 |
| 3 | EXHAUST FAN AND DAMPER | 1221 | 20A1P | B | 30A1P | 2162 | OHD OPENER | 4 |
| 5 | EXTERIOR - RECEPTACLE | 1000 | 20A1P | A | 20A1P | 1000 | EXTERIOR - RECEPTACLE | 6 |
| 7 | WALL HEATER | 1008 | 20A1P | B | 20A1P | 276 | UNIT HEATER | 8 |
| 9 | 102 - RECEPTACLES | 360 | 20A1P | A | 20A1P | - | SPARE | 10 |
| 11 | SPACE | | | B | | | SPACE | 12 |

6/4/12

ELECTRIC SCHEDULE

| MANUF. | MODEL | # | LAMPS TYPE | W | MNT | REMARKS |
|----------|-----------------------------------|---|--------------|-----|------|---|
| WILLIAMS | GLS-4-454TH5-FCHA118-VBY3-EB4-UVV | 4 | FLUORESCENT | 54 | CLG | 15" x 48" DAMP LOCATION, CHAIN SUSPENDED FIXTURE, WITH ALUMINUM HOUSING, CLEAR ACRYLIC LENS AND ELECTRONIC BALLAST. |
| WILLIAMS | PGM-175H-128-2 | 1 | METAL HALIDE | 175 | WALL | EXTERIOR, SURFACE MOUNT LIGHT FIXTURE, WITH ALUMINUM HOUSING, & IMPACT RESISTANT ONE-PIECE, WRAPAROUND LENS. |
| | OVERHEAD DOOR OPERATOR | | | | WALL | 115V, 1-PH, HOOD MOUNT TYPE COMMERCIAL IN CARWASH & TROLLEY TYPE IN MAINTENANCE. SEE SPECIFICATION SECTION 08720. |
| HUBBELL | SERIES: PR8 | | | | CLG | PATHFINDER SERIES EXIT LIGHT WITH WHITE THERMOPLASTIC HOUSING & UNIVERSAL MOUNT. |
| | OVERHEAD DOOR CONTROL | | | | WALL | THREE BUTTON OVERHEAD DOOR CONTROL AS SUPPLIED BY OVERHEAD DOOR MANUF. SEE SPECIFICATION SECTION 08720. |
| TORK | 2001 | | | | WALL | 120V PHOTO ELECTRIC CONTROL OF EXTERIOR LIGHTS. |
| QMARK | CWH-1101DS | | | | WALL | ELECTRIC UNIT HEATER WITH CWH2S-2 ADAPTER FOR SEMI-RECESSED APPLICATION, LOUVER DIFFUSER AND BUILT-IN THERMOSTAT. |

ELECTRICAL FIXTURES AND EQUIPMENT ARE SCHEDULED BY MANUFACTURER AND MODEL NUMBER FOR DESIGN INTENT ONLY, APPROVED EQUALS MAY BE SUBSTITUTED.

LEGEND

- § WP SINGLE POLE SWITCH, MOUNT 48" A.F.F. IN FS BOX WITH HUBBELL HBL 7420 COVER.
- Φ WP SINGLE RECEPTACLE MOUNTED 36 A.F.F. IN FS BOX WITH HUBBELL HBL7423 COVER.
- Φ DUPLEX RECEPTACLE FLUSH MOUNTED IN FINISHED AREAS @ 18" A.F.F. TO BOTTOM OF OUTLET.

ELECTRICAL NOTES:

1. DRAWINGS AND DIAGRAMS ARE DIAGRAMMATIC AND SHALL NOT BE SCALED. REFER TO ARCHITECTURAL DRAWINGS FOR THE DIMENSIONS.
2. ELECTRICAL WORK SHALL BE INSTALLED IN STRICT COMPLIANCE WITH THE LATEST EDITION OF THE NATIONAL ELECTRICAL CODE (N.E.C.)
3. PROVIDE ELECTRICAL EQUIPMENT AND ACCESSORIES REQUIRED FOR A COMPLETE AND OPERATIONAL ELECTRICAL SYSTEM REQUIRED BY MANUFACTURER'S INSTRUCTIONS AND DIRECTIONS FOR SYSTEMS SPECIFIED.
4. SWITCHES AND RECEPTACLES SHALL BE EQUAL TO THE AMPERE SHOWN IN THE PANEL SCHEDULE. RECEPTACLES SHALL BE GROUND FAULT INTERRUPTION WHERE SHOWN OR AS REQUIRED BY CODE.
5. SEE HVAC SCHEDULE FOR EQUIPMENT SYMBOLS AND EQUIPMENT TO BE HARD WIRED.
6. CONTRACTOR SHALL PROVIDE SERVICE DISCONNECTS AS REQUIRED ON EXTERIOR OF NEW BUILDING.
7. PROVIDE BLOCKING FOR ELECTRICAL DEVICES AS REQUIRED FOR A SECURE APPLICATION.
8. SEE SPECIFICATION SECTION 16100 - ELECTRICAL FOR ADDITIONAL REQUIREMENTS.
9. COORDINATE WORK WITH OTHER TRADES PRIOR TO COMMENCING WITH ELECTRICAL WORK.
10. CONDUCTOR AND BREAKER SIZE MAY VARY PER MANUFACTURER SHOWN ON THE EQUIPMENT SPECIFIED. ELECTRICAL CONTRACTOR TO VERIFY SIZES WITH EXACT EQUIPMENT ORDERED PRIOR TO PURCHASING ELECTRICAL SUPPLIES.
11. ALL EXPOSED CONDUIT, BOXES, CONNECTORS, ETC. IN 101 WASH ROOM TO BE IN SCHEDULE 40 PVC. CONTRACTOR TO VERIFY THE DIAMETERS OD CONDUIT AS REQUIRED.
12. GROUP CIRCUITS IN CONDUIT WHERE FEASIBLE AS REQUIRED.
13. ALL DEDICATED 20 AMP EXTERIOR GFI SINGLE RECEPTACLE OUTLETS TO BE CLASS B.



ELECTRICAL PANELS & SCHEDULES

MISSOURI DEPARTMENT
OF TRANSPORTATION
DIVISION OF GENERAL SERVICES
FACILITIES MANAGEMENT

WAYLAND TRUCK WASH ADDITION
NORTHEAST DISTRICT - WAYLAND, MISSOURI

DESIGN BY: LARRY CARVER
DRAWN BY: LARRY CARVER
DATE: 5-25-12
Sheet
19 of 19