



BUFFALO DIVISION
PLANS FOR
VEHICLE WASH BAY INSTALLATION
AT THE
HENRIETTA AND BATAVIA MAINTENANCE SITES
AT INTERCHANGES 46 AND 48
MILEPOSTS 362.4 AND 390.1
IN
MONROE AND GENESEE COUNTIES

TAB 16-34A D214509
30 SHEETS

TYPE OF CONSTRUCTION:

ARCHITECTURAL AND MECHANICAL PROJECT REQUIRING LABOR AND MATERIALS FOR WASH BAY INSTALLATIONS AT 2 FACILITIES: **existing building M4439 at Henrietta Mtce**
existing building M4540 at Batavia Mtce

CODE COMPLIANCE:

ALL WORK DESCRIBED AND TO BE PERFORMED UNDER THIS CONTRACT, SHALL CONFORM TO THE PROVISIONS OUTLINED BY 19 NYCRR, THE NEW YORK STATE UNIFORM FIRE PREVENTION AND BUILDING CODE AND ITS REFERENCE STANDARDS.

BUILDING CLASSIFICATIONS: **existing buildings M4439 and M4540**

OCCUPANCY CLASSIFICATION: S-1
CONSTRUCTION CLASSIFICATION: VB

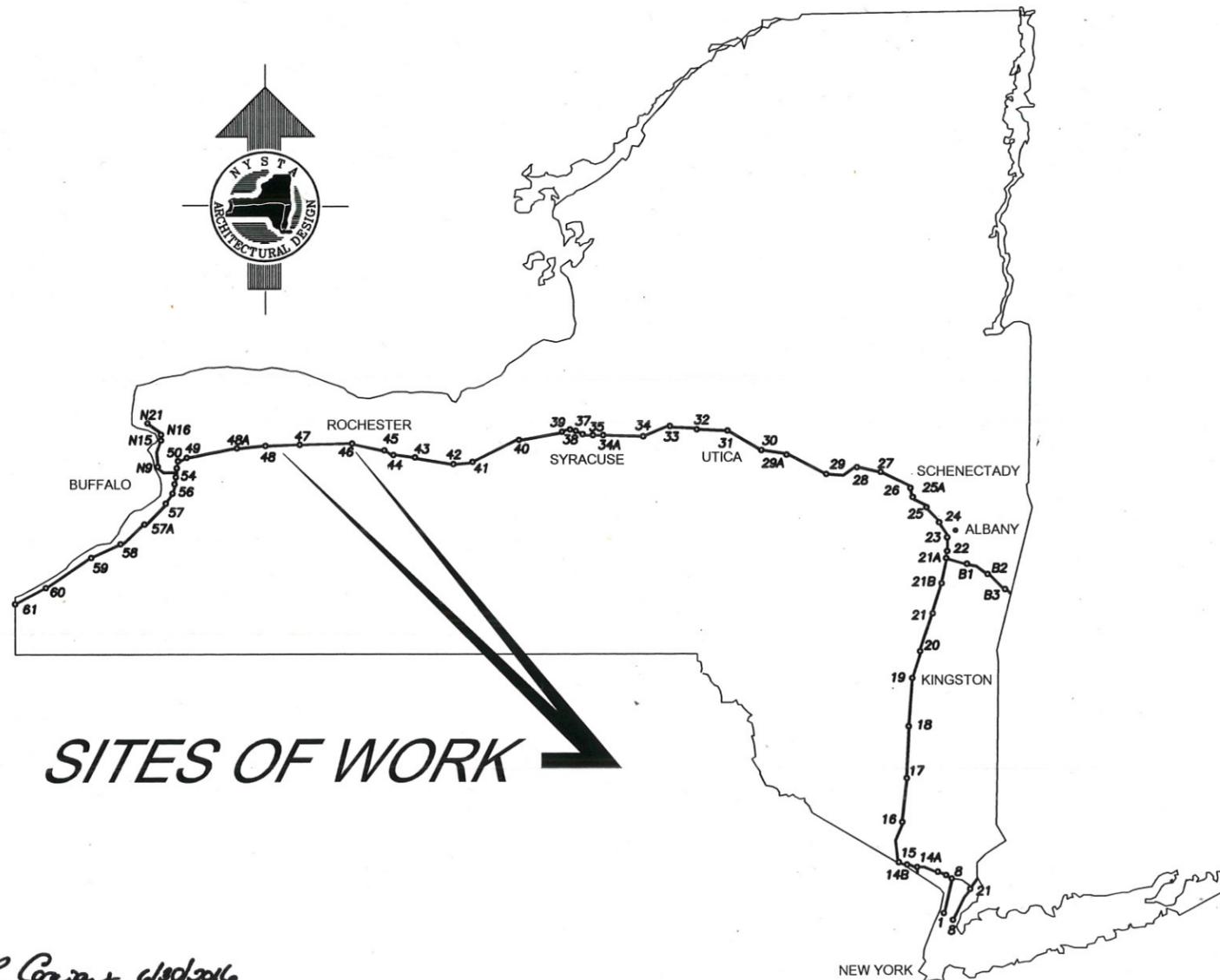
NOTES:

ALL WORK CONTEMPLATED UNDER THIS CONTRACT IS TO BE GOVERNED BY AND IN CONFORMANCE WITH THE NEW YORK STATE DEPARTMENT OF TRANSPORTATION'S "STANDARD SPECIFICATIONS - CONSTRUCTION AND MATERIALS U.S. CUSTOMARY UNITS" ADOPTED MAY 1, 2016 EXCEPT AS MODIFIED IN THESE PLANS AND BY THE PROPOSAL.

STANDARD SHEETS:

THE LATEST REVISIONS OF THE STANDARD SHEETS MAINTAINED BY NYSOT, WHICH ARE CURRENT ON THE DATE OF ADVERTISEMENT FOR BIDS SHALL BE CONSIDERED TO BE IN EFFECT. ALL PAY ITEMS AND WORK CONTAINED IN THE CONTRACT AND ANY ADDITIONAL PAY ITEMS AND WORK ENCOUNTERED DURING THE COURSE OF THE CONTRACT SHALL BE SUBJECT TO THE APPLICABLE STANDARD SHEET(S) UNLESS OTHERWISE SPECIFIED IN THE CONTRACT DOCUMENTS.

DIG SAFELY NEW YORK
UNDERGROUND FACILITIES PROTECTION ORGANIZATION
CALL 811



SITES OF WORK

CONTRACTOR'S NAME:	
AWARD DATE:	
COMPLETION DATE:	
FINAL ACCEPTANCE DATE:	
INSPECTION FIRM'S NAME:	
RESIDENT ENGL./EIC:	
FINAL COST TOTAL:	
FISCAL SHARE	COST(S)

RECOMMENDED BY: *Timothy R. Conway* 6/29/2016
DIRECTOR, OFFICE OF DESIGN DATE

RECOMMENDED BY: *Supriya Ghosh* 7-5-16 DATE
DIVISION DIRECTOR DATE

RECOMMENDED BY: *Robt. Aug* 7/8/16 DATE
TRAFFIC ENGINEER DATE

RECOMMENDED BY: *[Signature]* 7/11/16 DATE
DIRECTOR, OFFICE OF CONSTRUCTION MANAGEMENT DATE

RECOMMENDED BY: *[Signature]* 7/11/16 DATE
DIRECTOR OF MAINTENANCE AND OPERATIONS DATE

APPROVED BY: *[Signature]* 7/11/16 DATE
CHIEF ENGINEER DATE

PREPARED AND RECOMMENDED BY: *[Signature]* DATE 06/24/16
WATTS ARCHITECTURE & ENGINEERING
CONSULTANT MANAGER: JOHN C. HONAN, P.E. PROJECT MANAGER
LICENSE NUMBER: 077871

REVIEWED BY: *[Signature]*
PROJECT MANAGER: *[Signature]*
BUREAU DIRECTOR: *[Signature]*

INTENT

THE INTENT OF THIS PROJECT IS TO PROVIDE AND INSTALL A FULLY FUNCTIONAL VEHICLE WASH BAY SYSTEM WITH DRAIN, HIGH PRESSURE MANUAL WASH, OVERHEAD CATWALKS WITH STAIRS, HYDRONIC RADIANT FLOOR HEAT, OVERHEAD GAS FIRED UNIT HEATERS, CONCRETE FLOOR, INCLUDING A MECHANICAL ROOM EQUIPPED WITH BOILER, GAS HEATER PRESSURE WASHER, ABOVE GROUND OIL WATER SEPARATOR (AT SOME SITES), AND WATER SUPPLY TANK ALL WITHIN THE CONFINES OF THE ALREADY ERECTED VEHICLE STORAGE BUILDINGS AT TWO (2) SECTION MAINTENANCE YARDS: IN THE BUFFALO OF THE NEW YORK STATE THRUWAY AUTHORITY. ALL WORK SHALL BE DONE IN ACCORDANCE WITH SPECIFICATIONS AND PLANS INCLUDED AS WELL AS THE NEW YORK STATE UNIFORM FIRE PREVENTION AND BUILDING CODE AND ITS REFERENCE STANDARDS.

THE PROJECT SITES AND EXISTING CONDITIONS

AS SHOWN ON THE COVER SHEET MAP, THE WASH BAY INSTALLATIONS ARE REQUIRED AT 2 SITES AS LISTED IN THE TABLE ON THIS DRAWING

AT EACH OF THESE SITES, A NEW VEHICLE STORAGE BUILDING (VSB) WAS RECENTLY CONSTRUCTED. WITHIN EACH BUILDING, A 40' X 50' PARTITION IS IN PLACE THAT, THROUGH THIS PROJECT, WILL BE COMPLETED TO FUNCTION AS A WASH BAY WITH ASSOCIATED MECHANICAL ROOM. THE CONSTRUCTION OF THE EXISTING BUILDINGS ARE VERY SIMILAR, ALLOWING FOR THE PROPOSED WORK FOR ALL SITES TO BE DEPICTED ON ONE SET OF DRAWINGS. SOME SITE-SPECIFIC VARIATIONS IN THE EXISTING CONDITIONS ARE PRESENT, AND DESIGN ACCOMMODATIONS FOR THESE VARIATIONS ARE NOTED IN THE DRAWINGS AND IN THE TABLE ON THIS DRAWING.

AT EACH OF THE SITES, A FLOOR SLAB IS REQUIRED. THE PRE-CONSTRUCTION CONDITION OF THE FLOOR WILL BE AN UNFINISHED SURFACE THAT IS GRADED WITHIN ONE FOOT OF THE PROPOSED FINISHED FLOOR ELEVATION (FFE). EXCAVATION AND SUBBASE STONE ARE REQUIRED TO CONSTRUCT THE FLOOR SLAB TO THE SPECIFIED ELEVATION.

WORK PERFORMED BY NYSTA FORCES

1. NYSTA FORCES WILL BE PROVIDING UTILITY SERVICE TO THE BUILDING'S MECHANICAL ROOM FOR NATURAL GAS (ALL SITES EXCEPT SITE 1), PROPANE (SITE 1), WATER, AND ELECTRIC
2. WASTEWATER CONNECTION TO THE SITE WILL BE PROVIDED BY NYSTA FORCES TO WITHIN 5' OF THE BUILDING FACE
3. NYSTA FORCES WILL PROVIDE LIGHTING IN THE WASH BAYS AND MECHANICAL ROOMS, AS WELL AS EXIT SIGNS AND EMERGENCY LIGHTING.
4. CONDUIT FROM EXISTING ELECTRIC PANEL (MDP) TO NEW PANEL TO BE INSTALLED BY NYSTA.
5. NYSTA WILL PROVIDE FIRE EXTINGUISHERS WHERE REQUIRED.

ESTIMATE OF QUANTITIES TABLE:

ITEM	DESCRIPTION	UNIT	ESTIMATE
627.0001--25	GENERAL REQUIREMENTS	LS	1
627.0002--25	EXISTING CONDITIONS	LS	1
627.0003--25	CONCRETE	LS	1
627.0004--25	MASONRY	LS	1
627.0005--25	METALS	LS	1
627.0006--25	WOOD, PLASTICS, AND COMPOSITES	LS	1
627.0007--25	THERMAL AND MOISTURE PROTECTION	LS	1
627.0008--25	OPENINGS	LS	1
627.0009--25	FINISHES	LS	1
627.0022--25	PLUMBING	LS	1
627.0023--25	HVAC	LS	1
627.0026--25	ELECTRICAL	LS	1
627.0031--25	EARTHWORK	LS	1
697.0203--25	FIELD CHANGE ORDER	D-C	50,000
699.04----25	MOBILIZATION	LS	1

MATERIALS

1. ALL MATERIALS, EQUIPMENT AND ARTICLES USED PERMANENTLY IN THE WORK WHICH BECOME THE PROPERTY OF THE AUTHORITY SHALL BE NEW, UNLESS SPECIFICALLY STATED OTHERWISE.
2. WHENEVER ANY PRODUCT IS SPECIFIED BY THE NAME, TRADE NAME, MAKE, CATALOG NUMBER, OR ANY MANUFACTURER OR SUPPLIER, THE INTENT IS NOT TO LIMIT COMPETITION BUT TO ESTABLISH A STANDARD OF QUALITY WHICH THE AUTHORITY HAS DETERMINED IS NECESSARY. THE WORDS "OR EQUAL" SHALL BE DEEMED INSERTED IN EACH INSTANCE. THE CONTRACTOR MAY USE ANY PRODUCT EQUAL TO THAT NAMED IN THE CONTRACT DOCUMENTS WHICH IS APPROVED BY THE AUTHORITY AND WHICH MEETS THE REQUIREMENTS OF THE CONTRACT DOCUMENTS PROVIDING THE CONTRACTOR GIVES TIMELY NOTICE OF HIS INTENT IN ACCORDANCE WITH THE SUBMITTAL AND SCHEDULING REQUIREMENTS OF NYSOT'S STANDARD SPECIFICATIONS OF MAY 1, 2016, SECTION 100, AND THE AUTHORITY'S ADDENDUM DATED 05/16.
3. THE CONTRACTOR SHALL HAVE THE BURDEN OF PROVING, AT HIS OWN COST AND EXPENSE, TO THE SATISFACTION OF THE AUTHORITY THAT THE PROPOSED PRODUCT IS EQUAL TO THE NAMED PRODUCT. THE AUTHORITY MAY ESTABLISH CRITERIA FOR PRODUCT APPROVAL. THE AUTHORITY SHALL DETERMINE IN ITS ABSOLUTE DISCRETION WHETHER A PROPOSED PRODUCT IS TO BE APPROVED.
4. IF THE CONTRACTOR FAILS TO COMPLY WITH THESE PROVISIONS, OR IF THE AUTHORITY DETERMINES THAT THE PROPOSED PRODUCT IS NOT EQUAL TO THAT NAMED, THE CONTRACTOR SHALL SUPPLY THE PRODUCT NAMED.
5. THE CONTRACTOR SHALL HAVE AND MAKE NO CLAIM FOR THE EXTENSION OF TIME OR FOR DAMAGES BECAUSE THE AUTHORITY REQUIRES A REASONABLE PERIOD OF TIME TO CONSIDER A PRODUCT PROPOSED BY THE CONTRACTOR OR BECAUSE THE AUTHORITY DISAPPROVES SUCH A PRODUCT.
6. WHERE OPTIONAL MATERIALS OR METHODS ARE SPECIFIED, OR WHERE "OR EQUAL" SUBMISSIONS ARE APPROVED, THE CONTRACTOR SHALL MAKE ALL ADJUSTMENTS TO CONTINGENT WORK THAT IS REQUIRED TO ACCOMMODATE THE OPTION HE SELECTS.
7. ROYALTIES AND PATENTS: THE CONTRACTOR SHALL PAY ALL ROYALTIES AND LICENSE FEES. HE SHALL DEFEND ALL SUITS OR CLAIMS FOR INFRINGEMENT OF ANY PATENT RIGHTS AND SHALL SAVE THE AUTHORITY HARMLESS FROM LOSS ON ACCOUNT THEREOF.
8. CONTRACTOR SHALL PROVIDE MANUFACTURER'S WARRANTIES ON NEW MECHANICAL, ELECTRICAL, PLUMBING, AND ARCHITECTURAL COMPONENTS.
9. ALL MATERIALS AND EQUIPMENT SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.

EXCAVATION

1. CALL DIG SAFELY NEW YORK AT 811 TO LOCATE EXISTING UNDERGROUND FACILITIES PRIOR TO BEGINNING ANY EXCAVATION WORK.

SCALING NOTE:

1. WHEN A DRAWING SCALE IS SPECIFIED, THE PAPER SCALE MEASUREMENT SHALL BE TAKEN FROM A PRINTOUT ON A FULL-SIZE (22"x34") SHEET OF PAPER.

DRAWING INDEX

DRAWING SERIES	DRAWING NUMBER	SHEET NUMBER
COVER	COVER	1
GENERAL NOTES	G-100	2
STRUCTURAL	S-001 TO S-503	3-7
ARCHITECTURAL PLANS	A-100 TO A-103	8-11
MECHANICAL	M-100 TO M-108	12-20
ELECTRICAL	E-100 TO E-103	21-24
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ABBREVIATIONS & ACRONYMS

NOTE: ADDITIONAL APPLICABLE ABBREVIATIONS ARE SHOWN ON DRAWINGS M-100, E-100, AND P-100.

- @ - AT
- ACI - AMERICAN CONCRETE INSTITUTE
- ARCH - ARCHITECTURAL
- ASCE - AMERICAN SOCIETY OF CIVIL ENGINEERS
- ASTM - AMERICAN SOCIETY FOR TESTING AND MATERIALS
- BLDG - BUILDING
- CONC. - CONCRETE
- CMU - CONCRETE MASONRY UNIT
- CVR - COVER
- DWG - DRAWING
- EA. - EACH
- ELEV - ELEVATION
- EQ - EQUAL
- E.W. - EACH WAY
- FE - FIRE EXTINGUISHER
- FT - FEET
- FRP - FIBER REINFORCED POLYMER
- HORZ. - HORIZONTAL
- HR - HOUR
- MIN. - MINIMUM
- M.O. - MASONRY OPENING
- MP - MILE POST
- NIC - NOT IN CONTRACT
- NOM - NOMINAL
- N.T.S. - NOT TO SCALE
- NYSDOT - NEW YORK STATE DEPARTMENT OF TRANSPORTATION
- NYSTA - NEW YORK STATE THRUWAY AUTHORITY
- O.C. - ON CENTER
- PSI - POUNDS PER SQUARE INCH
- P.T. - PRESSURE TREATED
- REINF. - REINFORCEMENT
- R.O. - ROUGH OPENING
- SEI - STRUCTURAL ENGINEERING INSTITUTE
- SF - SQUARE FOOT
- SPEC - SPECIFICATION
- SQFT - SQUARE FEET
- TA - THRUWAY ADDENDUM
- TYP - TYPICAL
- T&G - TONGUE AND GROOVE
- VERT. - VERTICAL
- W/ - WITH
- WWF - WELDED WIRE FABRIC

FACILITY LOCATION SCHEDULE WITH SITE SPECIFIC REQUIREMENTS

SITE NUMBER	FACILITY LOCATION	SITE DESCRIPTION AND BUILDING NUMBER	COUNTY	NYSTA DIVISION	REQUIRES OIL/WATER SEPARATOR	REQUIRES FRONT APRON	REQUIRES REAR APRON	NUMBER OF OVERHEAD DOORS IN WASH BAY	NATURAL GAS OR PROPANE	REVERSED LAYOUT *
1	EXIT 16, MP 45.2	HARRIMAN MAINTENANCE SECTION, BLDG M1736	ORANGE	NEW YORK	NO	YES	YES	2	PROPANE	NO
2	EXIT 30, MP 219.7	HERKIMER MAINTENANCE SECTION, BLDG M3437	HERKIMER	SYRACUSE	NO	YES	YES	2	NATURAL GAS	YES
3	EXIT 40, MP 304.2	WEEDSPORT MAINTENANCE SECTION, BLDG M3737	CAYUGA	SYRACUSE	YES	YES	NO	1	NATURAL GAS	NO
4	EXIT 43, MP 340.2	MANCHESTER MAINTENANCE SECTION, BLDG M3841	ONTARIO	SYRACUSE	YES	YES	NO	1	NATURAL GAS	NO
5	EXIT 46, MP 362.4	HENRIETTA MAINTENANCE SECTION, BLDG M4439	MONROE	BUFFALO	NO	NO	NO	2	NATURAL GAS	NO
6	EXIT 48, MP 390.1	BATAVIA MAINTENANCE SECTION, BLDG M4540	GENESEE	BUFFALO	YES	NO	NO	2	NATURAL GAS	YES
7	EXIT 45 ON I-190, MP N13.0	NIAGARA MAINTENANCE SECTION, BLDG M4940	ERIE	BUFFALO	YES	YES	YES	2	NATURAL GAS	NO
8	EXIT 58, MP 455.5	SILVER CREEK MAINTENANCE SECTION, BLDG M4739	CHAUTAUQUA	BUFFALO	NO	YES	YES	2	NATURAL GAS	YES
9	EXIT 60, MP 485.0	WESTFIELD MAINTENANCE SECTION, BLDG M4834	CHAUTAUQUA	BUFFALO	YES	NO	NO	1	NATURAL GAS	YES

* SEE NOTE 5 ON DWG. NO. S-101

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

ALTERED ON:

SIGNATURE:
STAMP:

AFFIXED ON:

SIGNATURE:
STAMP:



DATE DESCRIPTION BY SYM.

REVISIONS

NEW YORK STATE THRUWAY AUTHORITY
DEPARTMENT OF ENGINEERING
200 SOUTHERN BLVD., ALBANY, N.Y. 12209

TITLE OF PROJECT
VEHICLE WASH BAYS

LOCATION OF PROJECT
VARIOUS LOCATIONS: (MP 382.4 & MP 390.1)

TITLE OF DRAWING

GENERAL NOTES



CONTRACT NUMBER:

TAB 16-34A

DATE:

JULY 2016

DRAWING NUMBER:

G-100

STRUCTURAL NOTES
GENERAL NOTES

- ALL STRUCTURAL WORK WILL BE COORDINATED WITH ARCHITECTURAL, ELECTRICAL, MECHANICAL, AND ALL OTHER TRADE DRAWINGS AND SHALL CONFORM TO THE PROJECT SPECIFICATIONS INCLUDING THE BUILDING CODE OF NEW YORK STATE, LATEST EDITION.
- THE CONTRACTOR SHALL PROVIDE TEMPORARY SHORING, BRACING, AND MAKE SAFE ALL FLOORS, ROOFS, WALLS, AND ADJACENT PROPERTY AS PROJECT CONDITIONS REQUIRE. SHORING SHALL BE DESIGNED BY A STATE OF NEW YORK LICENSED PROFESSIONAL ENGINEER EMPLOYED BY THE CONTRACTOR, WHO SHALL SUBMIT SHOP DRAWINGS AND CALCULATIONS FOR THE ENGINEER TO REVIEW AND APPROVE.
- CHECK ALL DIMENSIONS AGAINST THE REQUIREMENTS OF OTHER CONTRACT DOCUMENTS. RESOLVE APPARENT INCONSISTENCIES IN THE CONTRACT DOCUMENTS WITH THE ARCHITECT/ENGINEER OF RECORD BEFORE PROCEEDING WITH WORK.
- PROMPTLY NOTIFY THE OWNER'S REPRESENTATIVE, ARCHITECT, AND ENGINEER-OF-RECORD OF ANY STRUCTURAL MEMBER CALLED OUT ON THE ARCHITECTURAL, MECHANICAL, PLUMBING OR ELECTRICAL DRAWINGS THAT IS NOT IDENTIFIED ON THE STRUCTURAL DRAWINGS. DESIGN OF THESE MEMBERS WILL BE PROVIDED AS NECESSARY BY THE STRUCTURAL ENGINEER UPON NOTIFICATION.
- NO MODIFICATIONS, ALTERATION OR REPAIR SHALL BE MADE WITHOUT PRIOR REVIEW BY STRUCTURAL ENGINEER.
- WHERE INCIDENTAL WORK IS REQUIRED TO ACCOMPLISH WORK SHOWN ON THE DRAWINGS, THIS WORK IS IMPLIED AND SHALL BE INCLUDED AS PART OF THE BASE BID.
- ALL COSTS OF INVESTIGATION AND/OR REDESIGN, DUE TO CONTRACTOR MISLOCATION OF STRUCTURAL ELEMENTS OR OTHER LACK OF CONFORMANCE WITH THE CONTRACT DOCUMENTS, SHALL BE AT THE CONTRACTOR'S EXPENSE.
- THE CONTRACTOR SHALL SAW CUT (STRAIGHT LINE CUTS) AND REMOVE EXISTING ASPHALT CONCRETE PAVEMENT AND CONCRETE WHERE REQUIRED FOR THE INSTALLATION OF NEW WORK. PAVEMENT AND CONCRETE SHALL BE REPLACED IN KIND UNLESS OTHERWISE NOTED. RE-CUT EDGES DAMAGED BY CONSTRUCTION OPERATIONS.

EXCAVATION NOTES

- OWNER'S REPRESENTATIVE SHALL INSPECT ALL EXCAVATIONS AND BEARING SUBGRADE PRIOR TO PLACEMENT OF CONCRETE.
- THE CONTRACTOR WILL BE HELD RESPONSIBLE FOR ALL DAMAGE TO THE EXISTING FACILITIES CAUSED BY HIS OPERATIONS. ALL DAMAGE TO THE EXISTING FACILITIES WHICH IS NOT PART OF THE INTENDED WORK SHALL BE REPAIRED BY THE CONTRACTOR TO THE SATISFACTION OF THE AUTHORITY WITHOUT COST TO THE AUTHORITY.
- DO NOT PLACE CONCRETE IN EXCAVATIONS CONTAINING FREE WATER, FROST, ICE OR FROZEN GROUND.
- PROVIDE POSITIVE PROTECTION FOR ALL EXCAVATION SLOPES AGAINST INSTABILITY AND DETERIORATION DUE TO GROUNDWATER, RAIN, WIND, SNOW OR ICE.
- EXPOSED SUBGRADE SOILS MAY BE SENSITIVE TO DISTURBANCE, CONTROL SURFACE AND GROUND WATER BY SITE GRADING, CUTOFF TRENCHES, SUMP AND PUMP METHODS OF DEWATERING. DO NOT POND WATER ON THE SUBGRADES.

INSPECTION

- ALL CONCRETE WORK SHALL CONFORM TO THE AMERICAN CONCRETE INSTITUTE (ACI) "BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE" (ACI 318), LATEST EDITION.
- OWNER SHALL PROVIDE AN OUTSIDE TESTING AGENCY TO PERFORM THE FOLLOWING INSPECTIONS IN ACCORDANCE WITH NYS BUILDING CODE SPECIAL INSPECTIONS:
 - EARTHWORK
 - QUALITY CONTROL OF CONCRETE MATERIALS, BATCHING, STRENGTH, SLUMP, AIR CONTENT, UNIT WEIGHT, TEMPERATURE, FORMS, SIZE AND PLACEMENT OF REINFORCEMENT.
 - MASONRY CONSTRUCTION
- THE TESTING AGENCY FOR THE INSPECTIONS WILL FILE ALL APPROPRIATE FORMS WITH THE CODE ENFORCEMENT OFFICIAL, ARCHITECT AND ENGINEER-OF-RECORD.
- CONTRACTOR SHALL COORDINATE WITH THE TESTING AGENCY, AND PROVIDE A MINIMUM OF FORTY-EIGHT HOURS ADVANCE NOTIFICATION.

MASONRY NOTES

- ALL CONCRETE UNIT MASONRY MATERIALS AND WORKMANSHIP SHALL CONFORM TO THE "NATIONAL CONCRETE MASONRY ASSOCIATION SPECIFICATIONS", AMERICAN CONCRETE INSTITUTE "BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES", (ACI 530), AND SPECIFICATIONS FOR MASONRY STRUCTURES" (ACI 530.1), LATEST EDITIONS.
- CONCRETE BLOCK SHALL BE NORMAL WEIGHT AGGREGATE AND CONFORM TO THE FOLLOWING STANDARDS:
 - SOLID/HOLLOW BLOCK UNITS: ASTM C90, GRADE B, MINIMUM F_m=3050 PSI
 - COORDINATE BLOCK TYPE WITH STRUCTURAL AND ARCHITECTURAL DRAWINGS
- ALL MORTAR SHALL BE ASTM C270, TYPE S
- PROVIDE REINFORCING BARS CONFORMING TO GALVANIZED ASTM A615, GRADE 60. PROVIDE CONTINUOUS GALVANIZED 9 GAGE TRUSS TYPE HORIZONTAL JOINT REINFORCEMENT AT 8" VERTICAL SPACING.
- ALL STEEL REINFORCING BARS SHALL BE GALVANIZED AND FABRICATED IN ACCORDANCE WITH ASTM A767, AND SHALL MEET THE REQUIREMENTS OF NYSDOT SPECIFICATION SUBSECTIONS 709-11 GALVANIZED BAR REINFORCEMENT AND 709-01 BAR REINFORCEMENT, GRADE 60, OR 709-14 BAR REINFORCEMENT, GRADE 75.
- WELDED WIRE FABRIC (WWF) REINFORCEMENT SHALL BE GALVANIZED AND FABRICATED IN ACCORDANCE WITH ASTM A123 AND ASTM A767, AND SHALL MEET THE REQUIREMENTS OF NYSDOT SPECIFICATION SUBSECTIONS 709-02 WIRE FABRIC FOR CONCRETE REINFORCEMENT AND 719-01 GALVANIZED COATINGS AND REPAIR METHODS, TYPE I.
- ALL BLOCK DIMENSIONS SHOWN ON STRUCTURAL PLANS ARE NOMINAL DIMENSIONS.
- PROTECT CONCRETE MASONRY UNITS FROM ABSORBING MOISTURE AND WATER WHILE AT THE PLANT, DURING SHIPMENT, AND AT THE SITE DURING CONSTRUCTION. GROUT SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3000PSI @28 DAYS.
- ALIGN VERTICAL CORES TO BE FILLED WITH GROUT TO PROVIDE A CONTINUOUS, CLEAR OPENING OF THE DIMENSIONS SHOWN ON THE DRAWINGS. PROVIDE A MINIMUM CLEAR OPENING AS SPECIFIED IN ALL CELLS THAT CONTAIN REINFORCEMENT. USE CLEAN OUT HOLES WHERE NECESSARY TO OBTAIN UNOBSTRUCTED VERTICAL CORES.
- GROUT SOLID ALL CORES CONTAINING REINFORCING BARS. CONSOLIDATE GROUT IN PLACE BY VIBRATION TO ENSURE COMPLETE FILLING OF THE CORES.
- MIXING AND PLACEMENT OF MORTAR AND GROUT IN EITHER HOT OR COLD WEATHER SHALL FOLLOW ACI "MASONRY STRUCTURE BUILDING CODE AND COMMENTARY."
- USE MASONRY SAWS TO CUT AND FILL ALL MASONRY, INCLUDING THAT PORTION REQUIRED TO ACCOMMODATE THE WORK OF OTHER TRADES.
- INSTALL ANCHORS, WALL PLUGS, ACCESSORIES AND OTHER ITEMS THAT ARE REQUIRED TO BE BUILT INTO THE WORK AS THE MASONRY WORK PROGRESSES. REFER TO ARCHITECTURAL DRAWINGS FOR ADDITIONAL DETAILS.
- PROVIDE ADEQUATE TEMPORARY BRACING DURING CONSTRUCTION TO WITHSTAND ALL LATERAL LOADS AND THE PRESSURES OF THE FLUID GROUT.
- SUPPORT PORTIONS OF WALLS REMAINING ABOVE NEW OPENINGS UNTIL PERMANENT SUPPORT SYSTEMS ARE INSTALLED.

STRUCTURAL DESIGN CRITERIA	
BASIS OF DESIGN FOR SEISMIC:	
SEISMIC DESIGN DATA	
SITE CLASSIFICATIONS	D
OCCUPANCY CATEGORY	II
SPECTRAL RESPONSE ACCELERATIONS	
S _s	0.205
S ₁	0.062
DESIGN SPECTRAL RESPONSE ACCELERATIONS	
SDS	0.219
SD1	0.099
SEISMIC DESIGN CATEGORY	B

CONCRETE

- ALL CONCRETE WORK SHALL CONFORM TO THE AMERICAN CONCRETE INSTITUTE (ACI) "BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE" (ACI 318), LATEST EDITION.
- DO NOT USE CALCIUM CHLORIDE IN ANY CONCRETE.
- ALL CONCRETE SHALL BE NORMAL WEIGHT CONCRETE CONFORMING TO NYSDOT SPECIFICATIONS FOR CLASS "HP" CONCRETE
- REINFORCING STEEL SHALL BE GALVANIZED DEFORMED BARS CONFORMING TO ASTM A615, GRADE 60 WITH ULTIMATE TENSILE STRENGTH OF 90,000 PSI REINFORCING STEEL SHALL BE DETAILED ACCORDING TO THE ACI "DETAILS AND DETAILING OF REINFORCEMENT", (ACI 315), LATEST EDITION.
- ALL STEEL REINFORCING BARS SHALL BE GALVANIZED AND FABRICATED IN ACCORDANCE WITH ASTM A767, AND SHALL MEET THE REQUIREMENTS OF NYSDOT SPECIFICATION SUBSECTIONS 709-11 GALVANIZED BAR REINFORCEMENT AND 709-01 BAR REINFORCEMENT, GRADE 60, OR 709-14 BAR REINFORCEMENT, GRADE 75.
- WELDED WIRE FABRIC (WWF) REINFORCEMENT SHALL BE GALVANIZED AND FABRICATED IN ACCORDANCE WITH ASTM A123 AND ASTM A767, AND SHALL MEET THE REQUIREMENTS OF NYSDOT SPECIFICATION SUBSECTIONS 709-02 WIRE FABRIC FOR CONCRETE REINFORCEMENT AND 719-01 GALVANIZED COATINGS AND REPAIR METHODS, TYPE I.
- THE CONTRACTOR SHALL FURNISH AND INSTALL ALL THE NECESSARY CHAIRS, REBAR, TIES, SPACERS, ETC., TO SECURE AND SUPPORT THE REINFORCEMENT WHILE PLACING THE CONCRETE.
- MINIMUM CONCRETE COVER REQUIREMENTS FOUND IN ACI 318, CHAPTER 7 SHALL BE REQUIRED UNLESS NOTED OTHERWISE.
- REINFORCEMENT SHALL BE CONTINUOUS THROUGH CONSTRUCTION JOINTS.
- CONSTRUCTION JOINTS SHOWN ON DRAWINGS OR REFERENCED IN SPECIFICATIONS ARE MANDATORY. ADDITIONS OR CHANGES SHALL NOT BE MADE EXCEPT WITH THE SUBMISSION OF A WRITTEN REQUEST TOGETHER WITH DRAWINGS OF PROPOSED JOINT LOCATIONS FOR APPROVAL OF THE ENGINEER AND ARCHITECT.
- ALL GROUT FOR DOWELS AND EMBEDMENTS SHALL BE NON-SHRINK WITH A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI.
- WHERE REINFORCEMENT IS CALLED TO BE CONTINUOUS AROUND CORNERS AND LAPPED AT NECESSARY SPLICES OR HOOKED AT DISCONTINUOUS ENDS. LAPS SHALL BE CLASS B TENSION SPLICES, UNLESS NOTED OTHERWISE.
- ALL SPLICES SHALL BE LAPPED IN ACCORDANCE WITH ACI 318. THE LOCATIONS SHALL BE INDICATED ON THE SHOP DRAWINGS AND APPROVED BY THE ENGINEER. SPLICES SHALL BE STAGGERED AND LOCATED AWAY FROM THE SECTION OF MAXIMUM TENSILE STRESS. ALL REINFORCEMENT SHALL BE ACCURATELY PLACED AND SECURELY WIRED TO PREVENT DISLOCATION FROM PROPER POSITION. PROVIDE CHAIRS FOR SUPPORT OF ALL REINFORCEMENTS. LIFTING OF BARS OR MESH DURING PLACEMENT OF CONCRETE IS NOT PERMITTED.
- SHOP DRAWINGS OF REINFORCING STEEL SHALL BE SUBMITTED TO THE STRUCTURAL ENGINEER FOR REVIEW AND APPROVAL. NO CONCRETE WORK SHALL COMMENCE WITHOUT APPROVED SHOP DRAWINGS.
- COORDINATE THE SIZE AND LOCATION OF ALL OPENINGS AND PIPE SLEEVES WITH ARCHITECTURAL AND MECHANICAL DRAWINGS. THE MINIMUM CLEAR DISTANCE OF CONCRETE BETWEEN SLEEVES SHALL BE 6 INCHES.
- MINIMUM OF 72 HOURS SHALL PASS BETWEEN ADJACENT CONCRETE PLACEMENTS.
- REFER TO ACI 305 FOR PLACING CONCRETE IN HOT WEATHER AND ACI 306 FOR REQUIREMENTS FOR PLACING CONCRETE IN COLD WEATHER.

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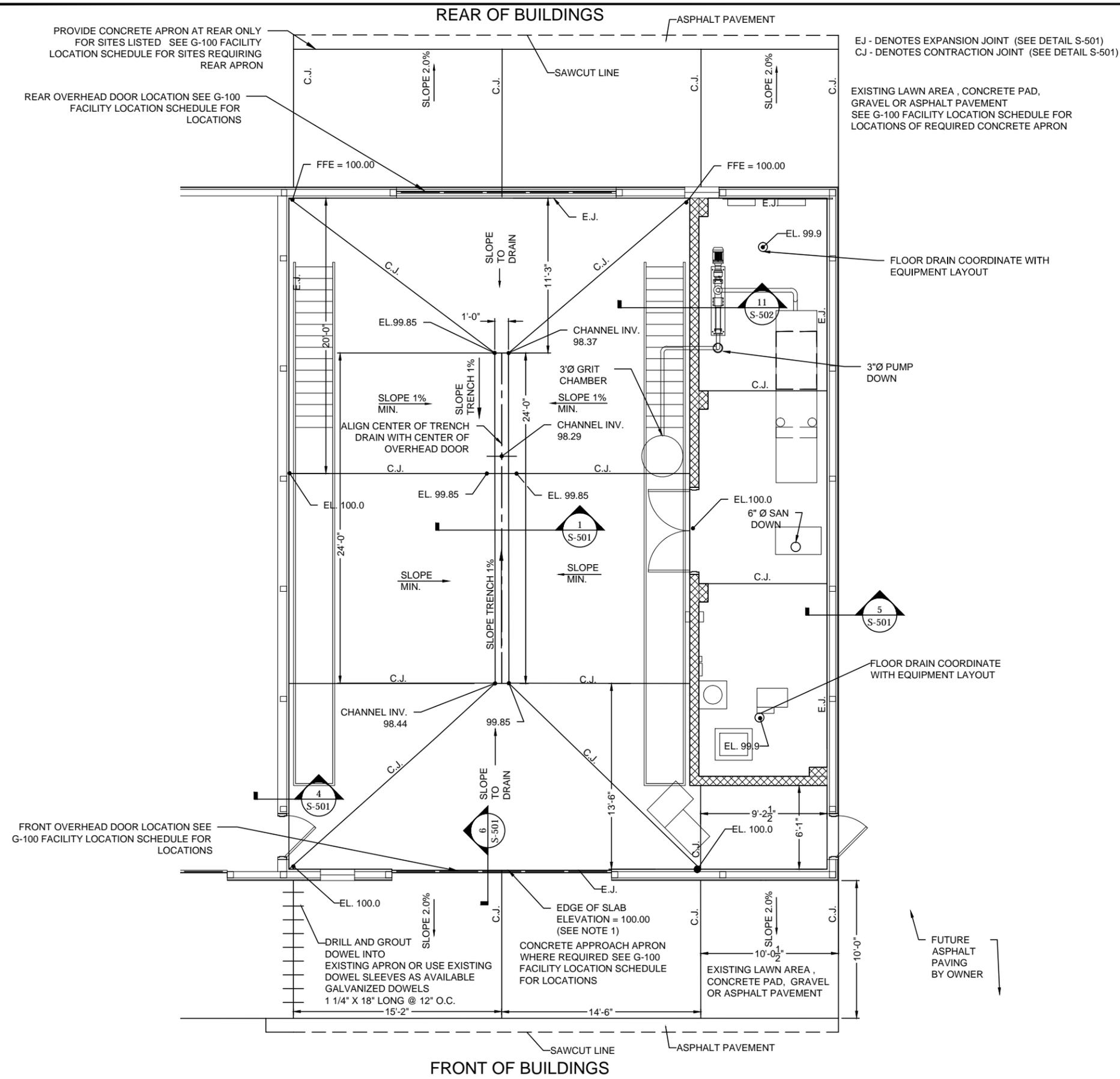
NEW YORK STATE THRUWAY AUTHORITY
DEPARTMENT OF ENGINEERING
200 SOUTHERN BLVD., ALBANY, N.Y. 12209

TITLE OF PROJECT
VEHICLE WASH BAYS

LOCATION OF PROJECT
VARIOUS LOCATIONS: (MP 362.4 & MP 390.1)

TITLE OF DRAWING
STRUCTURAL NOTES

	CONTRACT NUMBER: TAB 16-34A
	DATE: JULY 2016
	DRAWING NUMBER: S-001



- NOTES:**
- ELEVATION OF 100.00 IS SET AT AT TOP OF EXISTING SLAB AT EXISTING STORAGE BUILDING GARAGE DOORS.
 - REFER TO MECHANICAL DOCUMENTS FOR RADIANT FLOOR HEATING INFORMATION.
 - GENERAL CONTRACTOR SHALL COORDINATE OPENINGS IN SLAB FOR UTILITY PENETRATIONS. REFER TO PLUMBING DRAWINGS FOR INFORMATION.
 - SEE ARCHITECTURAL DRAWINGS FOR BUILDING LAYOUTS AND SLAB DIMENSIONS.
 - AT SITES #2, 6, 8, AND 9 THE LAYOUT IS REVERSED, I.E., THE MECHANICAL ROOM IS LOCATED ON THE LEFT OF THE WASH BAY, AS YOU DRIVE IN FROM THE FRONT OF THE BUILDING. SEE G-100 FACILITY LOCATION SCHEDULE FOR LOCATIONS.

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TITLE OF PROJECT
VEHICLE WASH BAYS

LOCATION OF PROJECT
VARIOUS LOCATIONS: (MP 362.4 & MP 390.1)

TITLE OF DRAWING
STRUCTURAL FLOOR PLAN

STRUCTURAL FLOOR PLAN

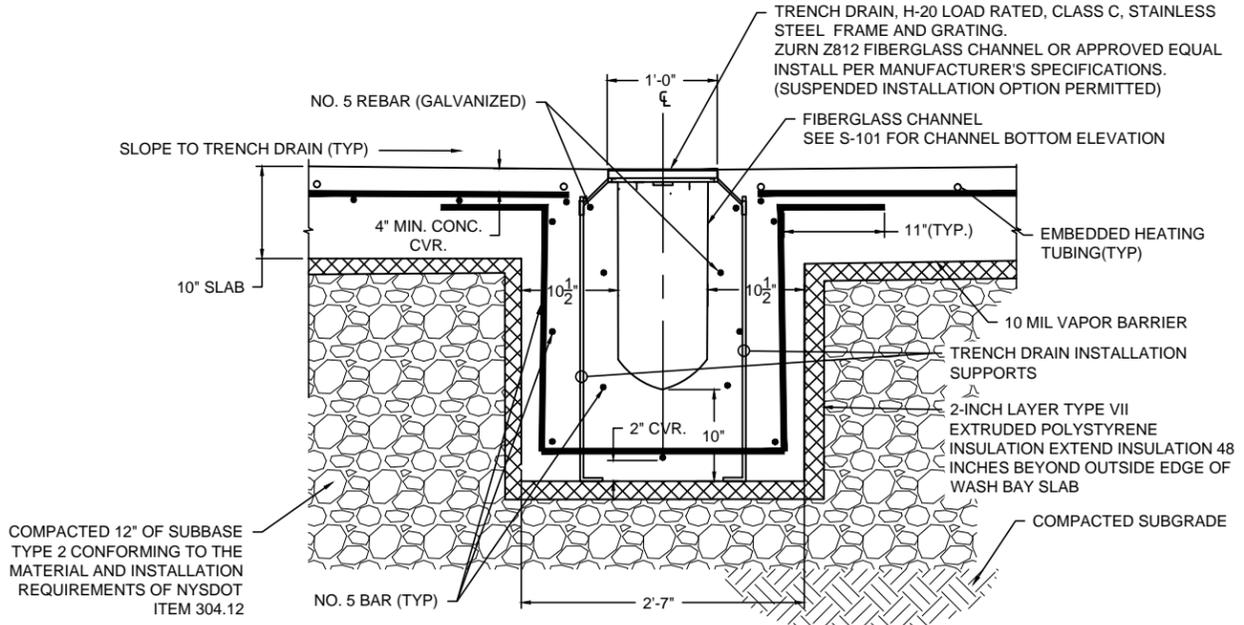
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DATE:
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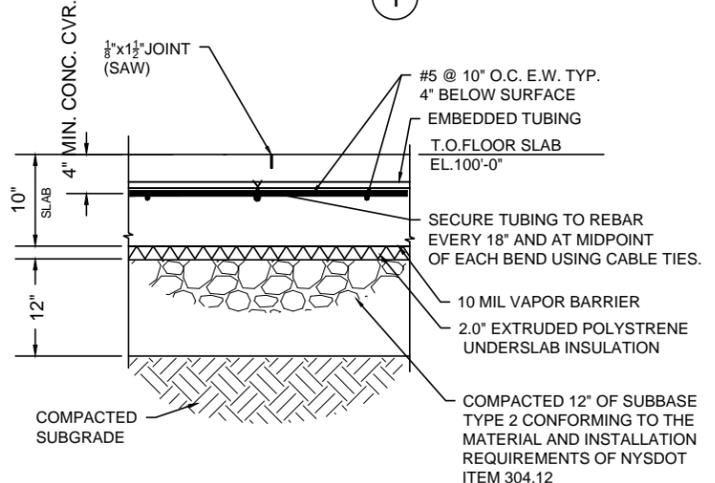
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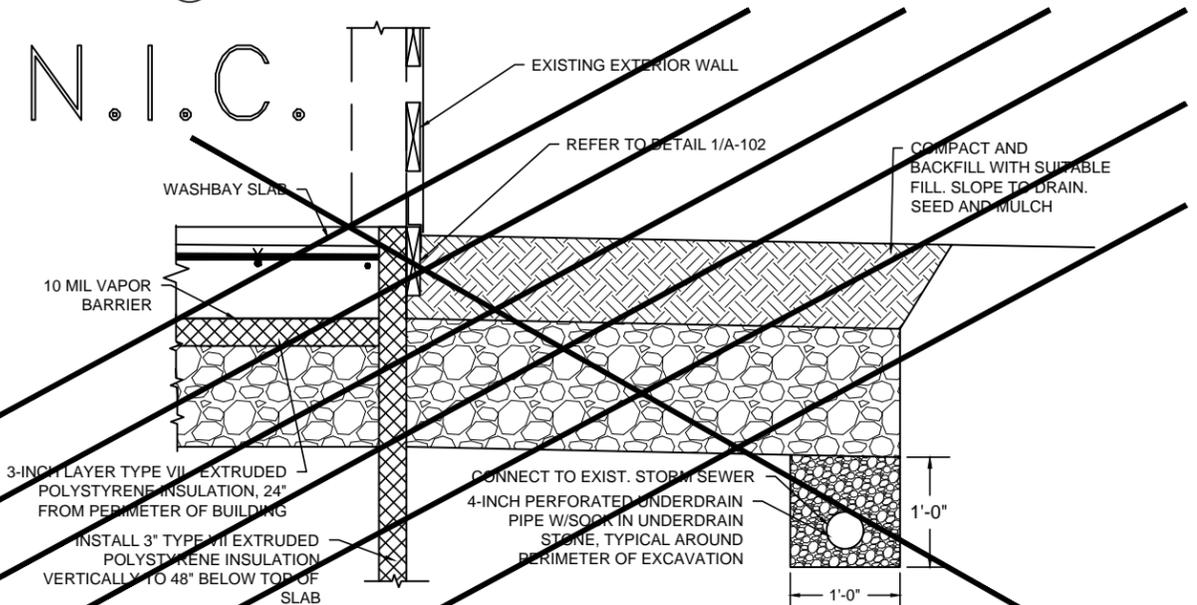
1 STRUCTURAL SLAB PLAN - TYPICAL WASH BAY
SCALE: 1/4" = 1'-0"



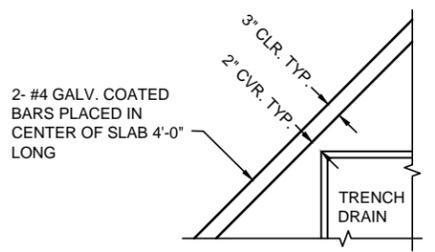
1 SECTION THROUGH TRENCH DRAIN
Scale: N.T.S.



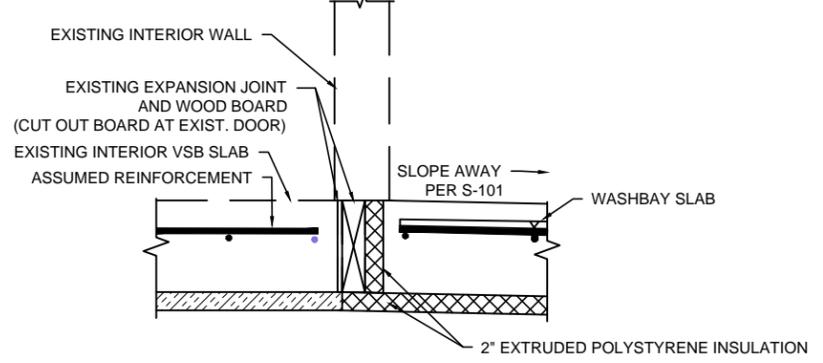
3 TYPICAL FLOOR SLAB DETAIL
Scale: N.T.S.



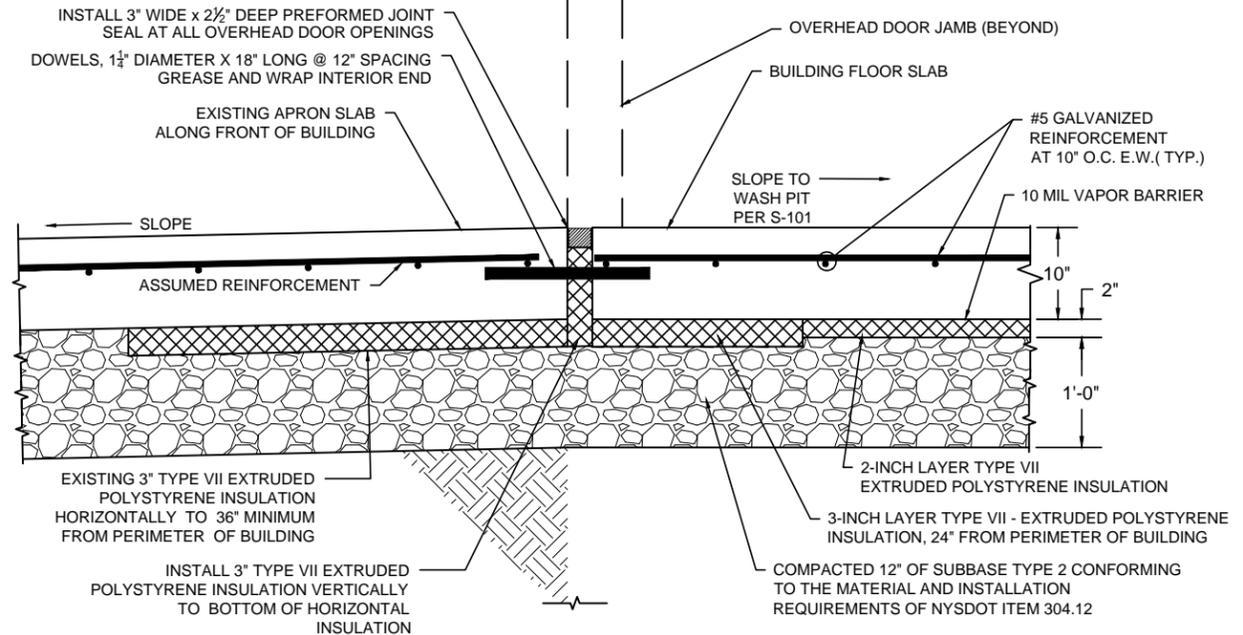
5 TYPICAL SECTION - AT EXISTING EXTERIOR WALL - GRASS AREA
Scale: N.T.S.



2 SLAB OPENING REINFORCEMENT DETAIL
Scale: N.T.S.



4 TYPICAL SECTION - AT EXISTING INTERIOR WALL
Scale: N.T.S.



6 SECTION AT OVERHEAD DOOR
Scale: N.T.S.

FLOOR SLAB RADIANT HEATING NOTES:

- REFER TO MECHANICAL DRAWINGS FOR RADIANT TUBING INSTALLATION AND DETAILS.
- FILL AND PRESSURIZE TUBING WITH WATER PRIOR TO CONCRETE PLACEMENT.
- COORDINATE WITH SPECIFICATION SECTION 23 83 16.

REINFORCING & CONCRETE NOTES:

- ALL BARS GALVANIZED EXCEPT AS NOTED.
- SLAB REINFORCEMENT : #5 BARS @ 10" C-C BOTH DIRECTIONS AT 4" BELOW TOP SURFACE OF SLAB.
- CONTINUE INSULATION UNDER APRON SLAB TO 50" INCHES BEYOND DISTANT EDGE OF SLAB.
- DOWELS TO BE GALVANIZED.
- SEAL WASH BAY FLOOR WITH PENETRATING SEALER AS SPECIFIED.

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TITLE OF PROJECT
VEHICLE WASH BAYS

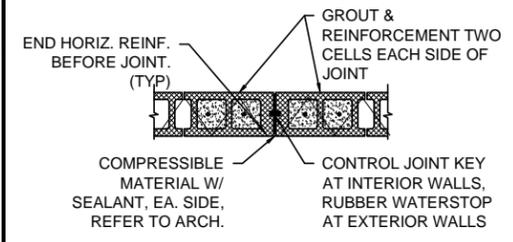
LOCATION OF PROJECT
VARIOUS LOCATIONS: (MP 382.4 & MP 390.1)

TITLE OF DRAWING
STRUCTURAL DETAILS AND SECTIONS

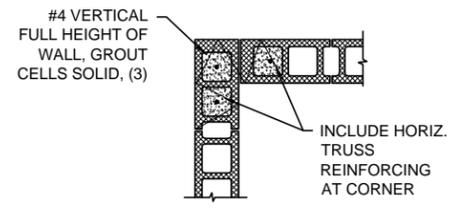
CONTRACT NUMBER:
TAB 16-34A

DATE:
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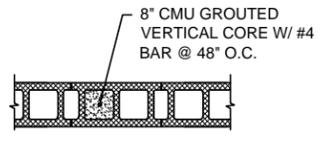
DRAWING NUMBER:
S-501



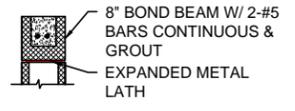
5 TYPICAL MASONRY CONTROL JOINT
Scale: 3/4" = 1'-0"



6 TYPICAL WALL CORNER GROUTED VERTICAL CORES
Scale: 3/4" = 1'-0"

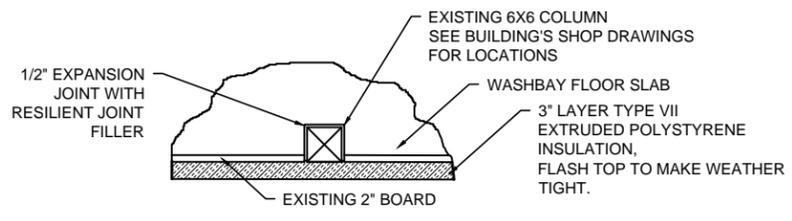


7 TYPICAL GROUTED VERTICAL CORE
Scale: 3/4" = 1'-0"

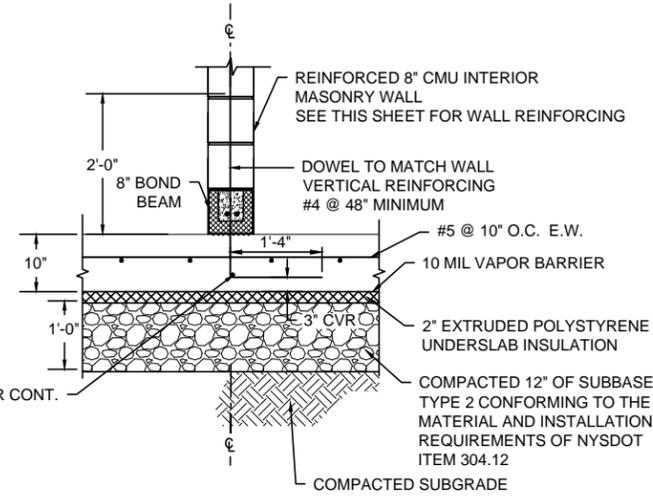


8 TYPICAL BOND BEAM
Scale: 3/4" = 1'-0"

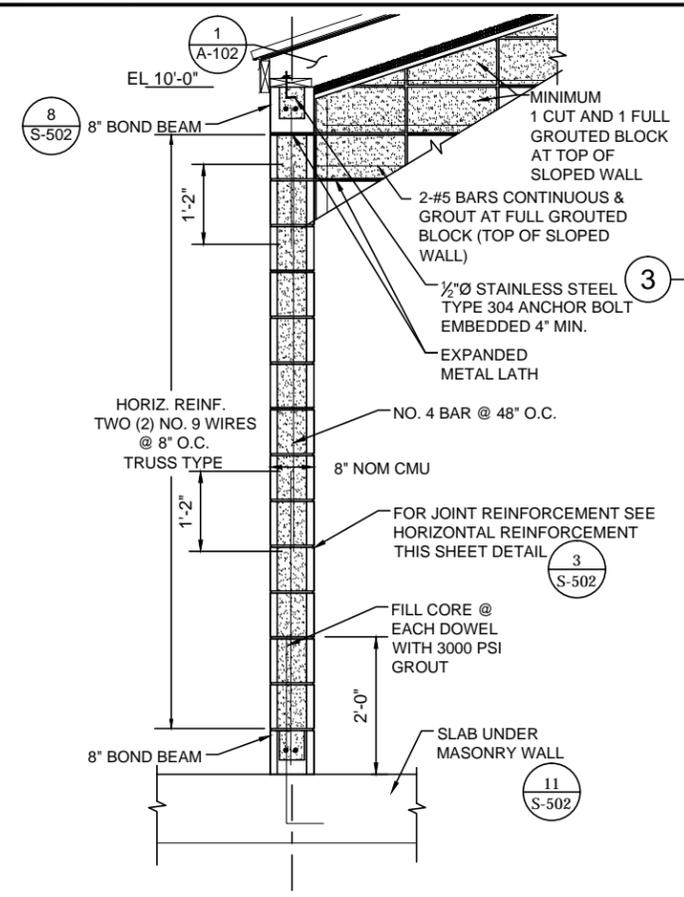
NOTE:
1. BOND BEAMS TO BE LOCATED AT FLOOR AND ROOF LEVELS WITH REINFORCING CONTINUOUS THROUGH CONTROL JOINTS.



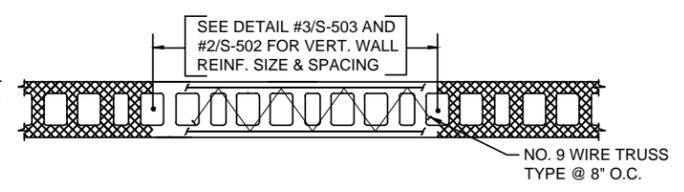
10 DETAIL AT COLUMN (TYP)
Scale: N.T.S.



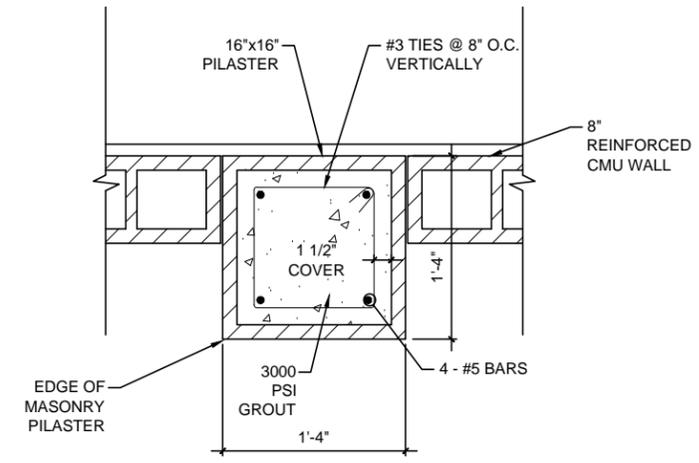
11 TYPICAL SLAB UNDER MASONRY WALL
Scale: N.T.S.



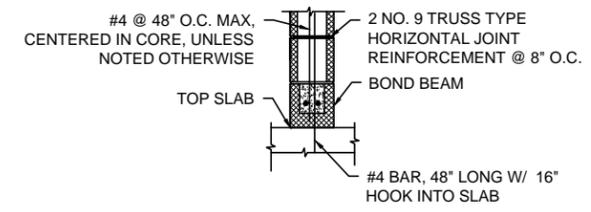
2 MASONRY WALL SECTION
Scale: 1 1/2" = 1'-0"



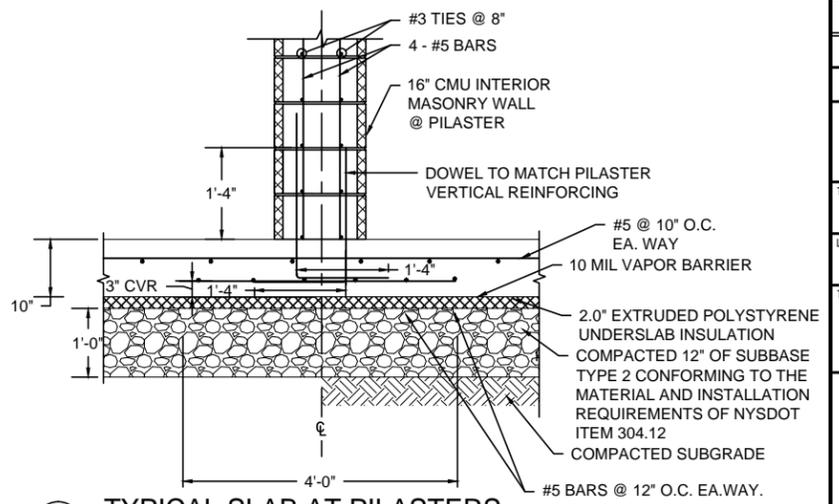
3 MASONRY WALL HORIZONTAL REINFORCING DETAIL
Scale: N.T.S.



4 TYPICAL PILASTER DETAIL
Scale: 1 1/2" = 1'-0"



9 LOWER BOND BEAM AT FLOOR
Scale: 3/4" = 1'-0"



12 TYPICAL SLAB AT PILASTERS
Scale: N.T.S.

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DEPARTMENT OF ENGINEERING
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TITLE OF PROJECT
VEHICLE WASH BAYS

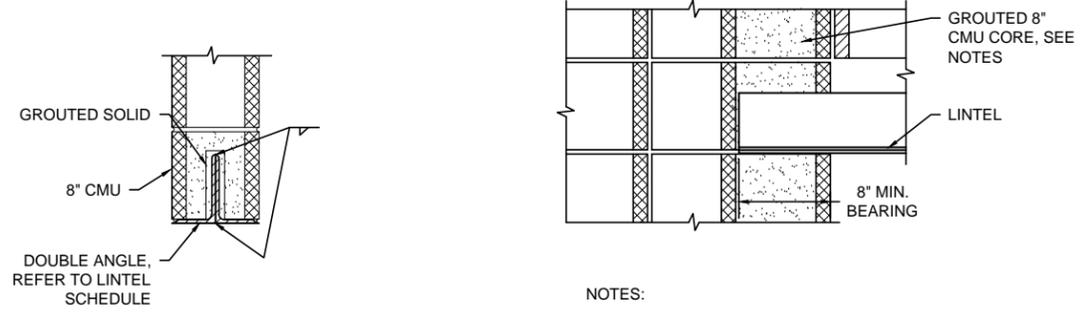
LOCATION OF PROJECT
VARIOUS LOCATIONS: (MP 382.4 & MP 390.1)

TITLE OF DRAWING
CONCRETE AND MASONRY DETAILS

CONTRACT NUMBER:
TAB 16-34A

DATE:
JULY 2016

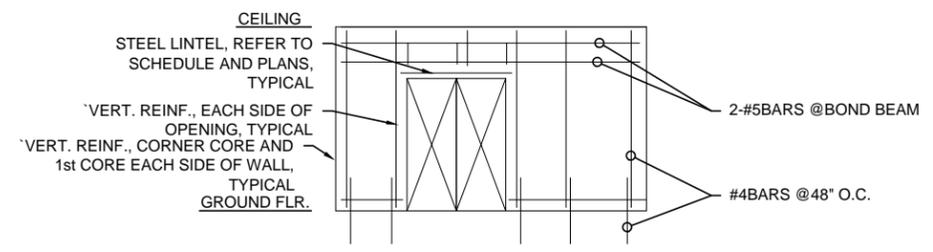
DRAWING NUMBER:
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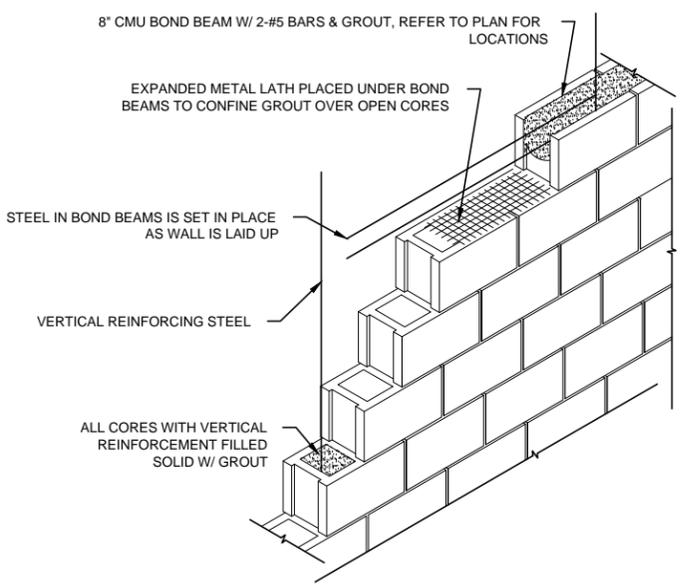
1 DOUBLE ANGLE LINTEL
Scale: 1 1/2" = 1'-0"

- NOTES:
1. INTERIOR LINTELS TO BE PAINTED TO MATCH ARCH.
 2. MINIMUM BEARING TO BE 8" UNLESS OTHERWISE NOTED.

2 LINTEL END BEARING
Scale: 1 1/2" = 1'-0"



3 MINIMUM MASONRY WALL REINFORCEMENT
Scale: 1/2" = 1'-0"



4 LOW-LIFT GROUTING OF REINFORCED MASONRY WALL
Scale: 3/4" = 1'-0"

LOOSE STEEL LINTEL SCHEDULE		
WALL TYPE	MASONRY OPENING	LINTEL
8" CMU	6'-4"	(2) L6x3 1/2"x 1/8" (L.L.V.) GALVANIZED

- NOTES:
1. MINIMUM BEARING FOR ALL LINTELS SHALL BE 8" AT EACH END.
 2. CMU WALLS SHALL BE GROUTED SOLID FULL HEIGHT BELOW THE LINTEL BEARING POINTS FOR WIDTH OF THE CMU CORES WHERE LINTELS ARE PARALLEL TO THE WALL. PROVIDE VERTICAL WALL REINFORCEMENT DOWELED INTO THE FOUNDATION BELOW THE LINTEL BEARING.
 3. SEE ARCHITECTURAL DRAWINGS FOR SIZE AND LOCATION OF WALL OPENINGS.

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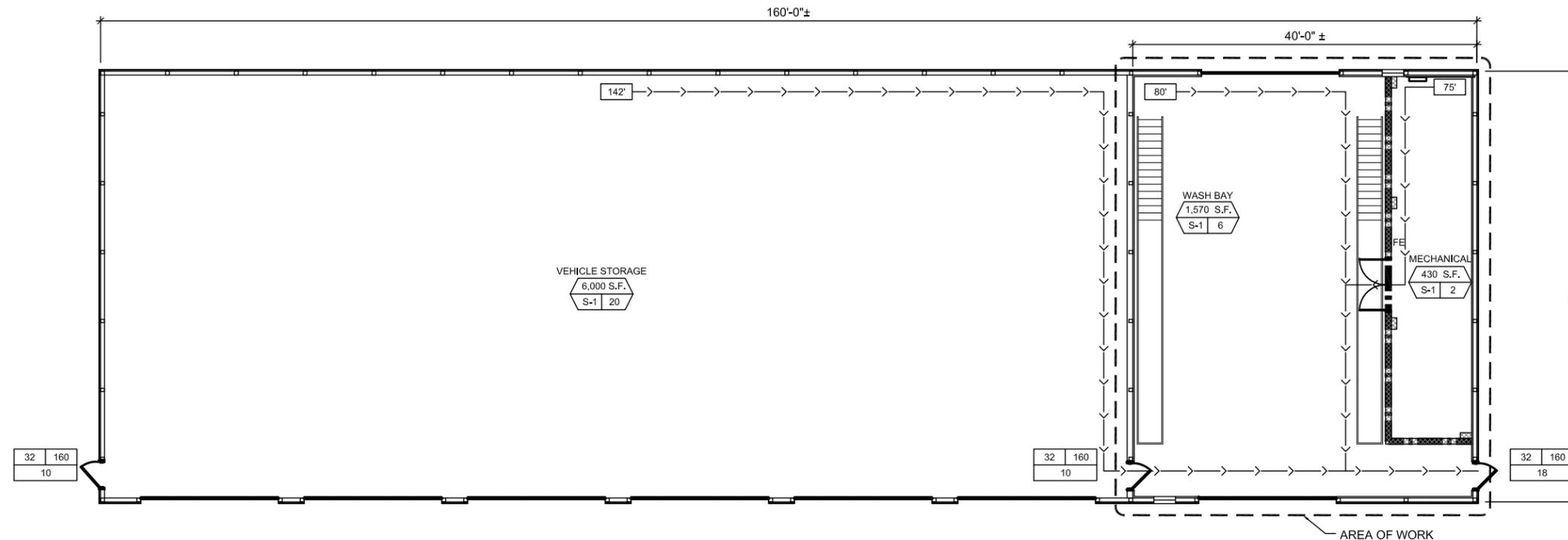
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TITLE OF PROJECT
VEHICLE WASH BAYS

LOCATION OF PROJECT
VARIOUS LOCATIONS: (MP 382.4 & MP 390.1)

TITLE OF DRAWING
MASONRY DETAILS

	CONTRACT NUMBER: TAB 16-34A
	DATE: JULY 2016
	DRAWING NUMBER: S-503



1 CODE COMPLIANCE PLAN
1/8" = 1'-0"

CODE COMPLIANCE

1. OCCUPANCY:	S-1
2. CONSTRUCTION (EXISTING):	VB
3. NUMBER OF STORIES:	ONE STORY, 27'-10"
4. BUILDING AREA:	8,000 SF
5. SPRINKLER:	NOT PROVIDED
6. ALTERATION LEVEL:	ALTERATION LEVEL 2 - WORK AREA COMPLIANCE METHOD
7. BUILDING CONSTRUCTION TYPE VB FIRE - RATINGS:	TABLE 601
STRUCTURAL FRAME - COLUMNS, GIRDERS, TRUSSES	FR/HR
PRIMARY MEMBERS	0
NON-BEARING WALLS & PARTITIONS (UON)	0
FLOOR CONSTRUCTION	0
ROOF CONSTRUCTION	0
8. FIRE-RATING OF EXTERIOR WALLS	TABLE 602
≥ 30 FT	0
9. OCCUPANT LOAD	28
10. MAXIMUM TRAVEL DISTANCE	200 FT
11. REQUIRED EGRESS	
REQUIRED WIDTH	5.6"
ACTUAL WIDTH (TWO EXITS)	64"

CODE ANALYSIS SYMBOLS & LEGEND

SYMBOL	MEANING
	FLOOR AREA
	DESIGN OCCUPANT LOAD
	OCCUPANCY TYPE
	EXIT WIDTH EXIT CAPACITY
	APPORTIONED OCCUPANT LOAD
	2 HR FIRE RESISTANCE RATED CONSTRUCTION - SEE SHEET A-102 FOR ADDITIONAL INFORMATION
	PATH OF TRAVEL
	EXIT TRAVEL DISTANCE
	FIRE EXTINGUISHER - PROVIDED BY NYSTA

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TITLE OF PROJECT
VEHICLE WASH BAYS

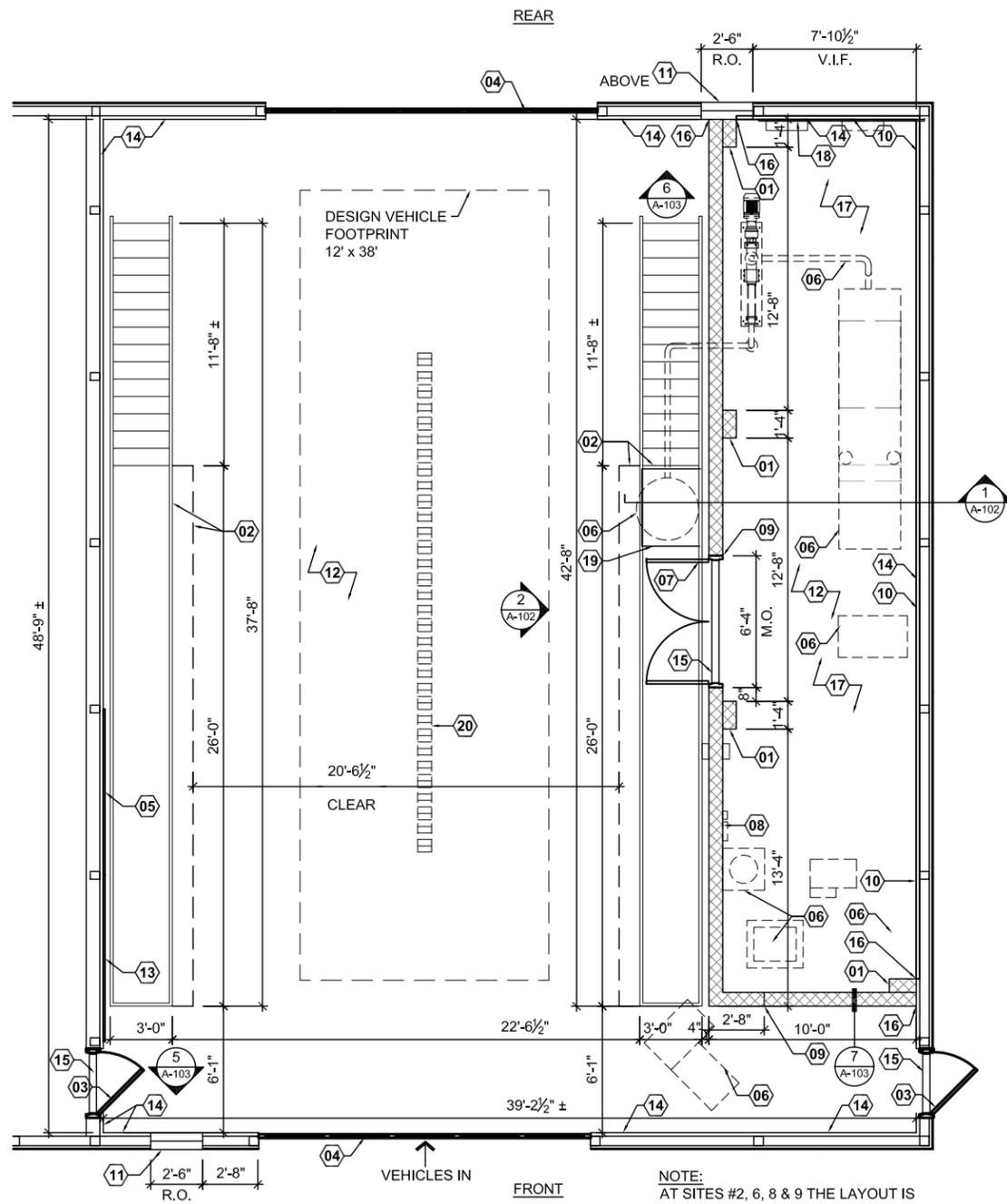
LOCATION OF PROJECT
VARIOUS LOCATIONS: (MP 362.4 & MP 390.1)

TITLE OF DRAWING
CODE COMPLIANCE PLAN

CONTRACT NUMBER:
TAB 16-34A

DATE:
JULY 2016

DRAWING NUMBER:
A-100



1 WASH BAY PLAN
1/4" = 1'-0"

NOTE:
AT SITES #2, 6, 8 & 9 THE LAYOUT IS REVERSED. SEE G-100 FOR ADDITIONAL INFORMATION

KEYED NOTES

- 01 PILASTER - REFER TO STRUCTURAL DRAWINGS
- 02 FIBERGLASS CATWALK SYSTEM DESIGNED BY ULTRA FIBERGLASS INC. OR EQUAL - SEE DETAIL 2/A-102 - FINAL EXACT POSITION TO BE DETERMINED IN THE FIELD - FINAL DETAILS TO BE DETERMINED BY CATWALK MANUFACTURER IN ACCORDANCE WITH CODE REQUIREMENTS
- 03 EXISTING FRP MAN DOOR TO REMAIN
- 04 EXISTING OVERHEAD DOOR TO REMAIN
- 05 4'x8' PRESSURE TREATED 1" THICK PLYWOOD MOUNTED BETWEEN EXISTING BUILDING POSTS @ 11'-0" ABOVE FINISH FLOOR TO BOTTOM EDGE
- 06 EQUIPMENT - REFER TO MECHANICAL, ELECTRICAL AND PLUMBING DRAWINGS
- 07 90-MIN RATED FRP DOUBLE DOORS - SEE DETAIL 1/A-103
- 08 1-HR RATED CMU PARTITION, PAINTED W/ HIGH PERFORMANCE EPOXY COATING BOTH SIDES - REFER TO SPEC SECTION 099600
- 09 MASONRY CONTROL JOINT
- 10 REMOVE EXISTING FIBERGLASS LINER PANEL IN MECHANICAL ROOM WALLS AT EDGE OF ROOF AND BELOW. PROVIDE GYPSUM SHEATHING BOARD, PAINTED WITH HIGH PERFORMANCE EPOXY COATING WITH VAPOR BARRIER SEALED TO EXISTING VAPOR BARRIER IN THIS AREA
- 11 LOUVER - COORDINATE SIZE AND LOCATION WITH MECHANICAL DRAWINGS - SEE DETAIL 4, 5 & 6/A-103
- 12 HEAVY DUTY PENETRATING CONCRETE SEALER THROUGHOUT WASH BAY AND MECHANICAL ROOM AREAS
- 13 4'x8' PRESSURE TREATED 1" THICK PLYWOOD MOUNTED BETWEEN EXISTING BUILDING POSTS @ 2'-0" ABOVE FINISH FLOOR TO BOTTOM EDGE
- 14 SEALANT @ SLAB TO INSIDE FACE OF WALL, TYPICAL ENTIRE PERIMETER
- 15 THRESHOLD
- 16 BACKER ROD AND SEALANT AT END WALL
- 17 PAINTED GYPSUM BOARD CEILING WITH CORRUGATED METAL OUTER LAYER ABOVE MECHANICAL ROOM
- 18 4'x8' PRESSURE TREATED 1" THICK PLYWOOD ON 1X2 P.T. WOOD BACKERS 24" O.C., RUNNING VERTICALLY, MOUNTED BETWEEN EXISTING BUILDING POSTS @ 3'-0" ABOVE FINISH FLOOR TO BOTTOM EDGE
- 19 2" POLYETHYLENE YELLOW PLASTIC CHAIN TRADE SIZE 8 ON THREE SIDES AROUND GRIT CHAMBER - COORDINATE PLACEMENT WITH CATWALK SUPPORTS
- 20 DRAIN - COORDINATE WITH STRUCTURAL DRAWINGS

GENERAL CONSTRUCTION NOTES

- A. ADHERE TO ALL UL STANDARDS OF FIRE RATED CONSTRUCTION FOR MASONRY PARTITIONS AND FIRE-RATED CEILING.
- B. FIELD VERIFY EXISTING DIMENSIONS AND NOTIFY OWNER IF DISCREPANCIES EXIST.
- C. IF EXISTING VAPOR BARRIER IN WALLS IS DAMAGED, CONTRACTOR TO REPAIR OR REPLACE AS REQUIRED.
- D. SEAL ALL PENETRATIONS.
- E. VERIFY PROPER INSTALLATION AND FASTENING OF EXISTING BATT INSULATION INSIDE EXISTING WALLS PRIOR TO POURING CONCRETE. NOTIFY THE NYSTA SITE PERSONNEL OF ANY ISSUES.

SYMBOLS LEGEND

- DETAIL NUMBER ELEVATION INDICATOR
- SHEET NUMBER
- DETAIL NUMBER SECTION INDICATOR
- SHEET NUMBER
- DETAIL NUMBER DETAIL CALLOUT INDICATOR
- SHEET NUMBER
- EXISTING DOOR TO REMAIN
- DOUBLE DOOR
- CMU PARTITION

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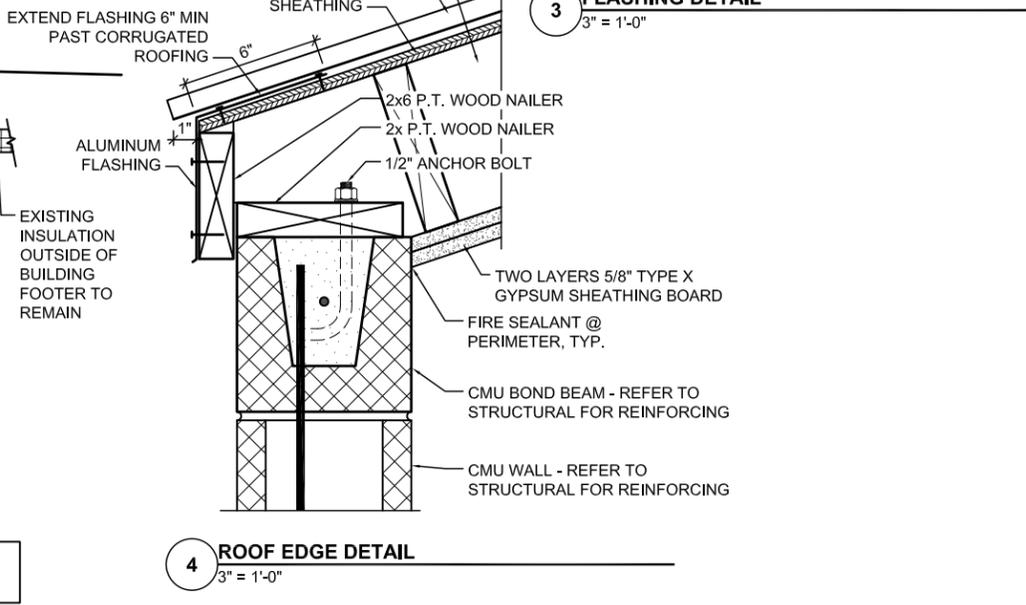
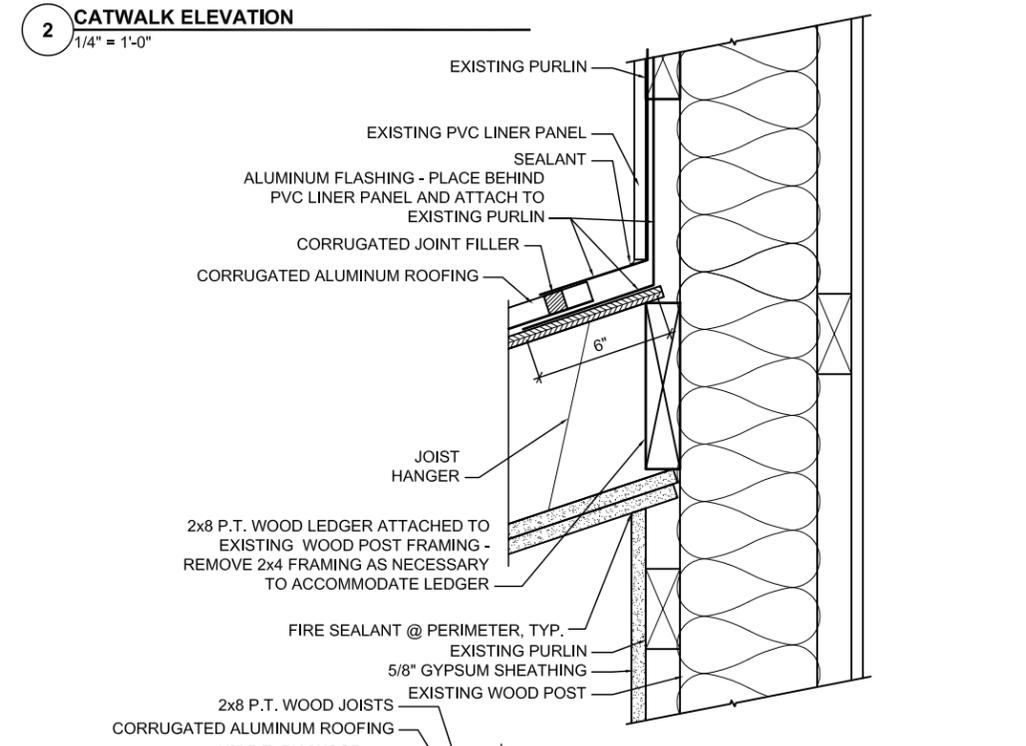
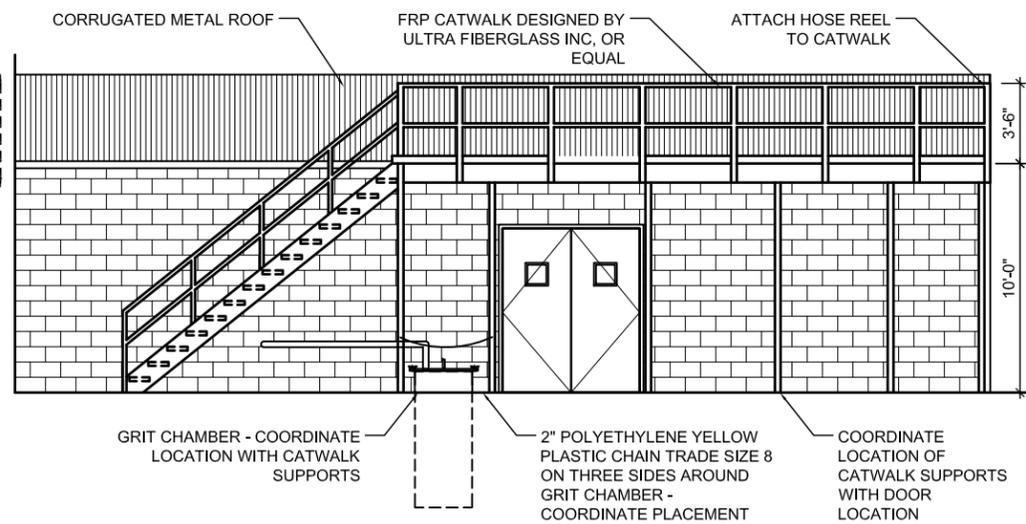
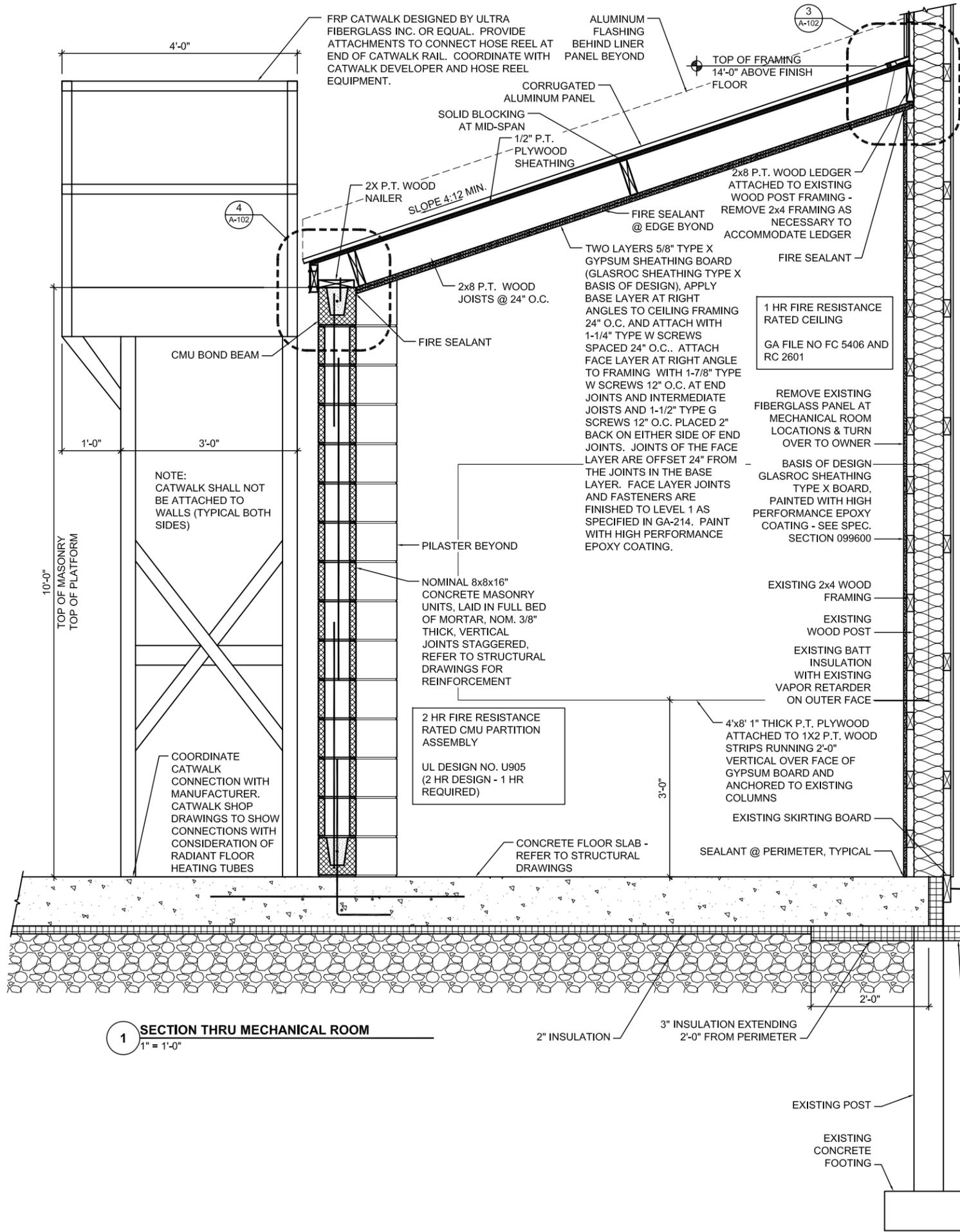
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TITLE OF PROJECT
VEHICLE WASH BAYS

LOCATION OF PROJECT
VARIOUS LOCATIONS: (MP 362.4 & MP 390.1)

TITLE OF DRAWING
FLOOR PLANS

	CONTRACT NUMBER: TAB 16-34A
	DATE: JULY 2016
	DRAWING NUMBER: A-101



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LOCATION OF PROJECT
VARIOUS LOCATIONS: (MP 362.4 & MP 390.1)

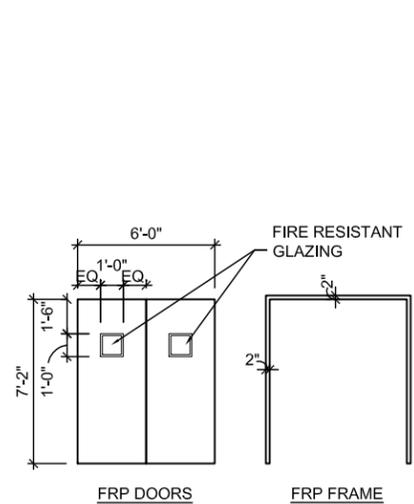
TITLE OF DRAWING
ARCHITECTURAL DETAILS

CONTRACT NUMBER:
TAB 16-34A

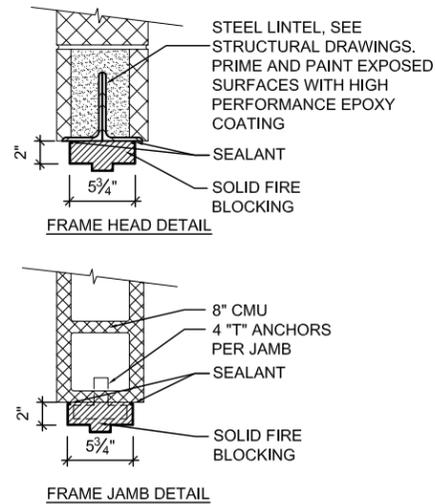
DATE:
JULY 2016

DRAWING NUMBER:
A-102

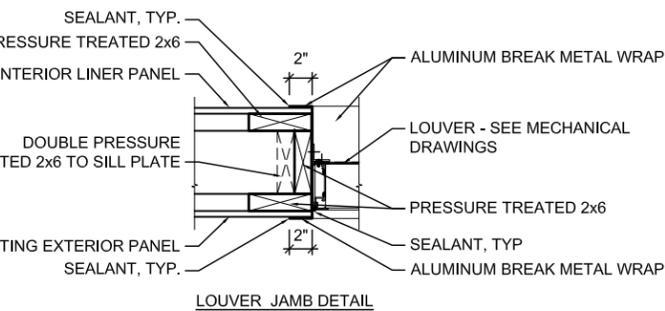
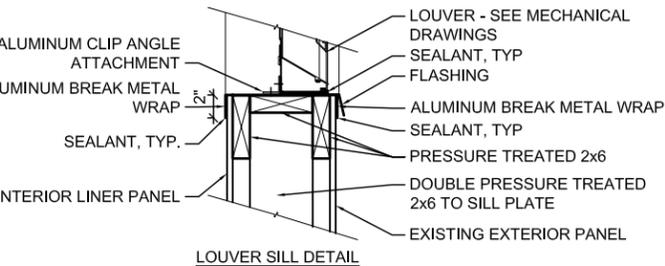
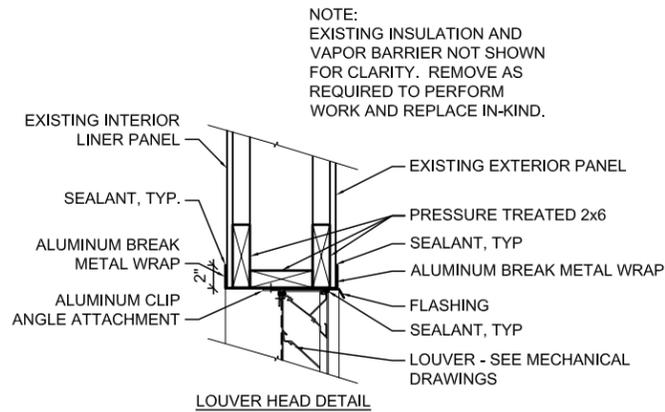




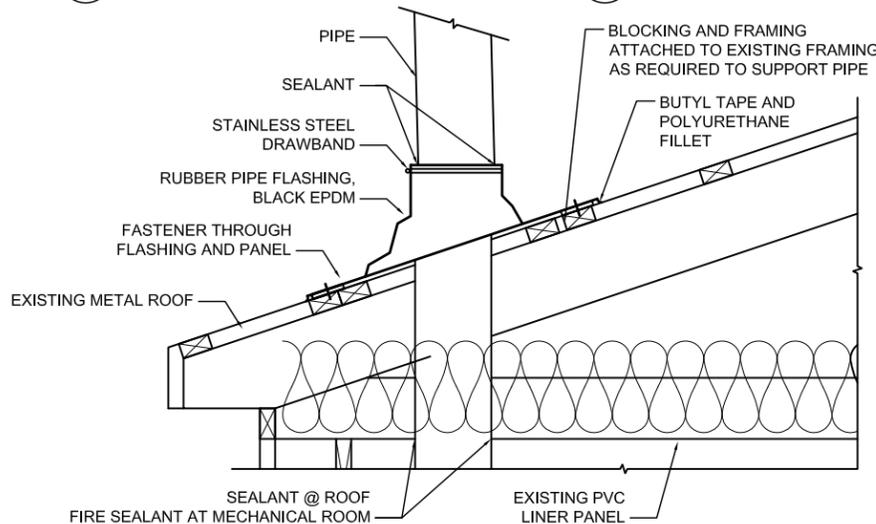
1 DOOR AND FRAME
1/4" = 1'-0"



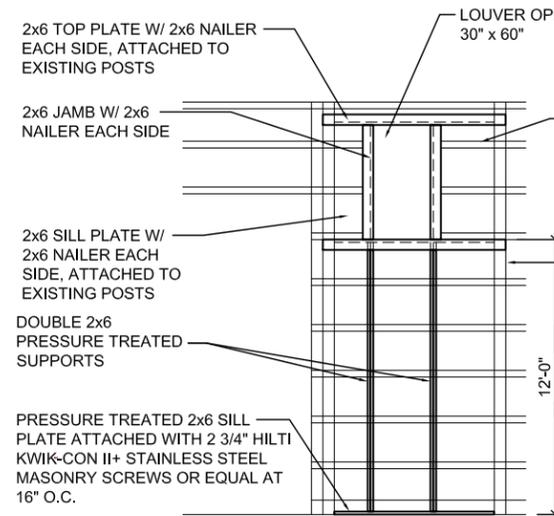
2 FRAME DETAILS
1 1/2" = 1'-0"



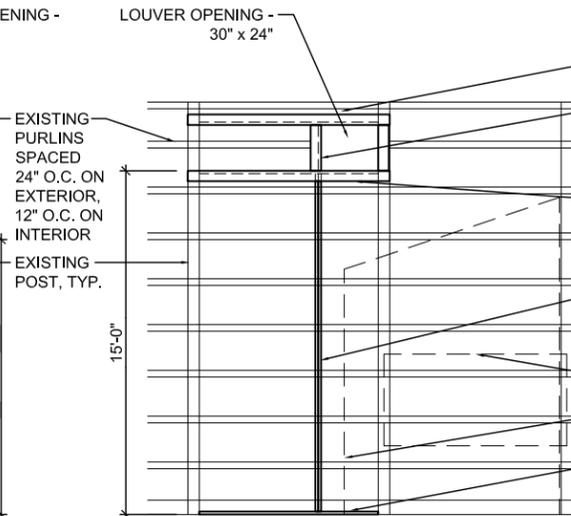
4 LOUVER DETAILS
1 1/2" = 1'-0"



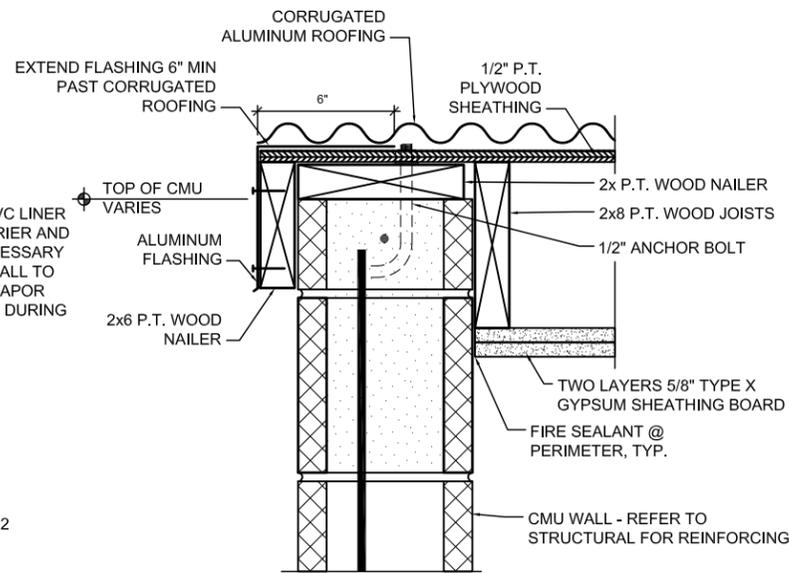
3 TYPICAL ROOF PENETRATION
1" = 1'-0"



5 LOUVER FRAMING ELEVATION
1/4" = 1'-0"



6 LOUVER FRAMING ELEVATION
1/4" = 1'-0"



7 ROOF EDGE DETAIL
3" = 1'-0"

NOTE:
EXISTING INSULATION AND VAPOR BARRIER NOT SHOWN FOR CLARITY. REMOVE AS REQUIRED TO PERFORM WORK AND REPLACE IN-KIND.

NOTE:
REMOVE EXTERIOR PANEL, PVC LINER PANEL, PURLINS, VAPOR BARRIER AND INSULATION TO EXTENTS NECESSARY TO PERFORM WORK. RE-INSTALL TO MATCH EXISTING. REPLACE VAPOR BARRIER IN-KIND IF DAMAGED DURING REMOVAL.

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DATE	DESCRIPTION	BY	SYM.

REVISIONS

NEW YORK STATE THRUWAY AUTHORITY
DEPARTMENT OF ENGINEERING
200 SOUTHERN BLVD., ALBANY, N.Y. 12209

TITLE OF PROJECT
VEHICLE WASH BAYS

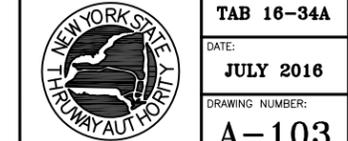
LOCATION OF PROJECT
VARIOUS LOCATIONS: (MP 362.4 & MP 390.1)

TITLE OF DRAWING
ARCHITECTURAL DETAILS

CONTRACT NUMBER:
TAB 16-34A

DATE:
JULY 2016

DRAWING NUMBER:
A-103



HVAC GENERAL NOTES LIST

- A. CONTRACTOR IS RESPONSIBLE FOR PROPER FIELD FITTING AND QUANTITY OF WORK. CONTRACTOR SHALL TAKE FIELD MEASUREMENTS AS REQUIRED AND BE RESPONSIBLE FOR FITTING NEW CONSTRUCTION TO EXISTING CONSTRUCTION. CONTRACTOR SHALL BE RESPONSIBLE TO REPAIR ANY EXISTING CONDITIONS DISTURBED OR DAMAGED DURING CONSTRUCTION (TO MATCH EXISTING).
- B. CONTRACTOR IS RESPONSIBLE FOR SITE INVESTIGATION PRIOR TO START OF WORK TO REVEAL EXISTING CONDITIONS.
- C. IT IS THE CONTRACTOR'S RESPONSIBILITY TO EXAMINE ALL DRAWINGS AND SPECIFICATIONS AND COORDINATE WORK WITH ALL OTHER TRADES.
- D. PROVIDE ALL CUTTING, PATCHING AND FIRE STOPPING REQUIRED TO ACCOMPLISH WORK SHOWN. PATCH AND SEAL OPENINGS TO MATCH ADJACENT EXISTING WALLS, FLOORS, CEILINGS, ETC. UNLESS OTHERWISE INDICATED. CONCEAL ALL WORK IN FINISHED AREAS UNLESS OTHERWISE INDICATED OR DIRECTED BY THE OWNERS REPRESENTATIVE.
- E. CONTRACTOR SHALL FIELD VERIFY ALL LOCATIONS, DIMENSIONS AND EXISTING CONDITIONS (PIPING, DUCTWORK, EQUIPMENT, STRUCTURAL ELEMENTS, ETC.) PRIOR TO STARTING WORK. CONTRACTOR SHALL COORDINATE INSTALLATION OF EQUIPMENT, PIPING, AND DUCTWORK WITH EXISTING CONDITIONS AND OTHER TRADES. PROVIDE FITTINGS, TRANSITIONS, OFFSETS, ELEVATION CHANGES, ETC. TO MINIMIZE CONFLICTS WITH EXISTING CONDITIONS.
- F. CONTRACTOR SHALL COORDINATE CONNECTIONS TO ALL MECHANICAL EQUIPMENT.
- G. DRAWINGS ARE SCHEMATIC, AND SERVE TO INDICATE THE TYPE AND LOCATION OF MAJOR PIECES OF EQUIPMENT. CONTRACTOR SHALL PROVIDE AND INSTALL ALL MATERIALS, EQUIPMENT, AND LABOR NECESSARY FOR A COMPLETE AND FIRST CLASS INSTALLATION. ADJUST THE LOCATION OF ALL DUCTWORK, PIPING, WIRING, EQUIPMENT, AND CONNECTIONS TO ACCOMMODATE ACTUAL CONSTRUCTION CONDITIONS ENCOUNTERED; OBTAIN APPROVAL FROM THE OWNERS REPRESENTATIVE FOR ALL BUT MINOR CHANGES. IN ALL CASES EQUIPMENT AND DEVICES SHALL BE FULLY ACCESSIBLE AND MAINTAINABLE.
- H. INSTALL ALL EQUIPMENT AND SYSTEMS IN COMPLETE COMPLIANCE WITH GOVERNING CODES, MANUFACTURER'S INSTALLATION INSTRUCTIONS, AND SPECIFICATIONS.
- I. ALL PHYSICAL ATTRIBUTES OF EQUIPMENT AND DEVICES ARE BASED ON THOSE MANUFACTURERS LISTED IN THE SPECIFICATIONS AND/OR THE EQUIPMENT SCHEDULES. THE RESPECTIVE CONTRACTORS ARE RESPONSIBLE FOR ALL CHANGES AND ASSOCIATED COSTS BROUGHT ABOUT BY THE USE OF ITEMS BY OTHER MANUFACTURERS. THE OWNERS REPRESENTATIVE HAS RESERVED THE RIGHT TO REJECT ITEMS BY OTHER MANUFACTURERS FOR REASONS INCLUDING, BUT NOT LIMITED TO, THOSE ITEMS NOT MATCHING THE PHYSICAL ATTRIBUTES OF THE MANUFACTURERS LISTED.
- J. COORDINATE PIPE & DUCT INSTALLATION WITH ELECTRICAL DEVICES. DO NOT INSTALL PIPING OR DUCTWORK IN PROHIBITED LOCATIONS SUCH AS ABOVE ELECTRICAL PANELS. COMPLY WITH NEC REQUIREMENTS.
- K. REFER TO ARCHITECTURAL DRAWINGS FOR DIFFUSER AND REGISTER LOCATIONS WITH RESPECT TO OTHER ELEMENTS.

HVAC PIPING TYPE ABBREVIATIONS LIST

BBD	BOILER BLOW DOWN	MU	MAKE-UP WATER
BFW	BOILER FEED WATER	OF	OVERFLOW
CFW	CHEMICAL FEED WATER	P	PROPANE
CW	DOMESTIC COLD WATER	PD	PUMPED DISCHARGE
D	DRAIN	R	RELIEF PIPING
G	NATURAL GAS	V	VENT
GV	GAS VENT		
HWR	HOT WATER RETURN		
HWS	HOT WATER SUPPLY		

HVAC REFERENCE SYMBOL LIST

	CONNECT NEW TO EXISTING
	SECTION. TOP CHARACTER INDICATES SECTION NUMBER, BOTTOM CHARACTER INDICATES DRAWING ON WHICH SECTION APPEARS
	KEYED NOTE
	REVISION KEYED NOTE

HVAC ABBREVIATIONS LIST

A	AMPERE(S)	HD	HEAD
AD	ACCESS DOOR	HP	HORSEPOWER
ADA	AMERICANS WITH DISABILITIES ACT	HR	HOUR
ADJ	ADJUSTABLE	HVAC	HEATING, VENTILATING, AIR CONDITIONING
AFF	ABOVE FINISH FLOOR	HWP	HOT WATER PUMP
AFUE	ANNUAL FUEL UTILIZATION EFFICIENCY	HZ	HERTZ
APD	AIR PRESSURE DROP		
AS	AIR SEPARATOR	IN.	INCH
AWT	AVERAGE WATER TEMPERATURE	LAT	LEAVING AIR TEMPERATURE
B	BOILER	LBS	POUNDS
BDD	BACK DRAFT DAMPER	LV	LOUVER
BHP	BRAKE HORSE POWER	LWT	LEAVING WATER TEMPERATURE
BLDG	BUILDING		
BMS	BUILDING MANAGEMENT SYSTEM	MAX	MAXIMUM
BP	BOILER PUMP	MBH	THOUSAND BRITISH THERMAL UNITS
BTU	BRITISH THERMAL UNIT	MCA	MINIMUM CIRCUIT AMPS
BV	BALANCING VALVE	MD	MOTORIZED DAMPER
C	CLOSED	MFR	MANUFACTURER
CF	CHEMICAL SHOT FEEDER	MIN	MINIMUM
CFM	CUBIC FEET PER MINUTE	MOC	MAXIMUM OVER CURRENT PROTECTION
CO	CLEAN OUT	NC	NORMALLY CLOSED
CP	CIRCULATING PUMP	NO	NORMALLY OPEN
CS	CENTRIFUGAL SEPARATOR	OC	ON CENTER
CV	CONTROL VALVE	OED	OPEN ENDED DUCT
DDC	DIRECT DIGITAL CONTROL	PD	PRESSURE DROP
DIA	DIAMETER	PH	PHASE
DM	DAMPER MOTOR	PRV	PRESSURE REDUCING VALVE
DN	DOWN	PSI	POUNDS PER SQUARE INCH
DWG	DRAWING	PSIG	POUNDS PER SQUARE INCH GAGE
EAT	ENTERING AIR TEMPERATURE	QTY	QUANTITY
EF	EXHAUST FAN	RCP	REFLECTED CEILING PLAN
EFF	EFFICIENCY	RPM	REVOLUTIONS PER MINUTE
EJ	EXPANSION JOINT	RPZ	REDUCED PRESSURE BACKFLOW PREVENTER
EL	EXPANSION LOOP		
ESP	EXTERNAL STATIC PRESSURE	TC	TEMPERATURE CONTROL
ET	EXPANSION TANK	TYP	TYPICAL
EW	ENTERING WATER TEMPERATURE	UH	UNIT HEATER
EX	EXISTING	V	VOLT
EXT	EXTERNAL	VD	VOLUME DAMPER
F	FAHRENHEIT	VFD	VARIABLE FREQUENCY DRIVE
FA	FREE AREA	W	WATTS
FDC	FLEXIBLE DUCT CONNECTOR	WC	WATER COLUMN
FLA	FULL LOAD AMPS	WG	WATER GAGE
FLR	FLOOR	WPD	WATER PRESSURE DROP
FPM	FEET PER MINUTE		
FT	FEET		
G	GAS		
GA	GAGE, GAUGE		
GAL	GALLONS		
GP	GLYCOL PUMP		
GPM	GALLONS PER MINUTE		

HVAC CONTROL SYMBOL LIST

<p align="center"><<REFER TO PIPING SYMBOL LIST FOR VALVES, GAUGES, & THERMOMETERS>></p>	
	AQUASTAT
	INTEGRAL THERMOSTAT
	THERMOSTAT WITH GUARD
	CARBON MONOXIDE SENSOR
	NITROGEN DIOXIDE SENSOR
	TEMPERATURE SENSOR
	THERMOSTAT
	DIFFERENTIAL PRESSURE SENSOR
	FAN STATUS SWITCH
	MOTORIZED DAMPER ACTUATOR
	MOTOR STARTER
	PUMP STATUS SWITCH
	FIELD RELAY
	CURRENT SENSING RELAY

HVAC DUCTWORK SYMBOL LIST

	DUCTWORK
	EQUIPMENT
	DUCT TYPE, SIZE, & FLOW DIRECTION - FIRST FIGURE IS SIDE SHOWN
	TRANSITION, CONCENTRIC
	DUCT SECTION, POSITIVE PRESSURE
	DUCT SECTION, NEGATIVE PRESSURE
	STANDARD BRANCH CONNECTION, NO SPLITTER
	MITERED ELBOW WITH TURNING VANES
	AIR INLET/OUTLET, SIDE WALL, SQUARE OR RECTANGULAR (TYPE AS SPECIFIED / SCHEDULED)
	FLEXIBLE DUCT CONNECTION
	POSITIVE PRESSURE DUCT DOWN
	NEGATIVE PRESSURE DUCT DOWN
	MOTORIZED AIR DAMPER, ELECTRIC OR PNEUMATIC
	MANUAL VOLUME DAMPER
	RETURN/EXHAUST, GRILLE OR REGISTER IDENTIFICATION

HVAC PIPING SYMBOL LIST

	PIPING, NEW WORK - TYPE AS INDICATED
	DIRECTION OF FLOW
	BALL VALVE
	TRIPLE DUTY VALVE
	PLUG VALVE
	PRESSURE REDUCING VALVE
	TWO-WAY CONTROL VALVE
	THREE-WAY CONTROL VALVE
	CHECK VALVE
	STRAINER
	STRAINER WITH BLOWN DOWN VALVE AND CAP
	DRAIN VALVE WITH CAP
	FLOW BALANCER
	RELIEF (R) OR SAFETY (S) VALVE
	PIPE CAP
	CONNECTION, BOTTOM (GENERIC)
	CONNECTION, TOP (GENERIC)
	ELBOW UP (GENERIC)
	ELBOW DOWN (GENERIC)
	TEE (GENERIC)
	REDUCER, CONCENTRIC
	UNION
	PRESSURE-TEMPERATURE PORT
	MANUAL AIR VENT
	AUTOMATIC AIR VENT
	THERMOMETER
	PRESSURE GAUGE
	FLEXIBLE CONNECTOR
	PIPE BREAK

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DATE	DESCRIPTION	BY	SYM.
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REVISIONS

NEW YORK STATE THRUWAY AUTHORITY
DEPARTMENT OF ENGINEERING
200 SOUTHERN BLVD., ALBANY, N.Y. 12209

TITLE OF PROJECT
VEHICLE WASH BAYS

LOCATION OF PROJECT
VARIOUS LOCATIONS: (MP 382.4 & MP 390.1)

TITLE OF DRAWING
MECHANICAL NOTES, ABBREVIATIONS, & SYMBOLS



CONTRACT NUMBER:
TAB 16-34A

DATE:
JULY 2016

DRAWING NUMBER:
M-100

GENERAL NOTES:

- A. HORIZONTAL EXHAUST DUCTWORK SHALL MAINTAIN CENTERLINE OF ASSOCIATED EXHAUST FAN UNLESS OTHERWISE NOTED.
- B. DUCTWORK SHALL BE CONSTRUCTED OF FULLY WELDED, 22 GAGE G90 GALVANIZED STEEL.
- C. ROUTE EXHAUST DUCTWORK ABOVE GARAGE DOOR AS SHOWN AT WASH BAYS WITH TWO GARAGE DOORS.
- D. LAYOUT REVERSED AT FOUR (4) SITES. SEE G-100.
- E. ALL INSULATION SHALL COMPLY WITH THE NYS ENERGY AND MECHANICAL CODE.

KEYED NOTES:

- 1. PROVIDE INLINE EXHAUST FAN ALONG WITH ASSOCIATED ACCESSORIES AND SUPPORTS. MOUNT BOTTOM OF FAN AT 15'-0" AFF. ABOVE MECHANICAL ROOM. EXHAUST FAN TO ENERGIZE ON WHEN SIGNAL RECEIVED FROM CARBON MONOXIDE AND/OR NITROGEN DIOXIDE SENSOR. EXHAUST FAN MOTORIZED DAMPER AT LOUVER TO OPEN WHEN EXHAUST FAN IS ENERGIZED.
- 2. PROVIDE BOILER ALONG WITH ASSOCIATED ACCESSORIES, PIPING, AND EQUIPMENT PADS. REFER TO DETAIL 1 ON DWG M-103 FOR PIPING SCHEMATIC.
- 3. PROVIDE GAS FIRED UNIT HEATER WITH ASSOCIATED ACCESSORIES AND SUPPORTS. MOUNT TOP OF UNIT HEATER 6" FROM CEILING SPACE AND FOLLOW MANUFACTURER'S INSTALLATION REQUIREMENTS AND CLEARANCES.
- 4. PROVIDE INTAKE LOUVER AND MOTORIZED AIR DAMPER ALONG WITH WIRING. AIR DAMPER TO OPEN WHEN GAS DETECTION SYSTEM ENGAGES. EXHAUST FAN IS ENERGIZED FROM DAMPER END SWITCH. MOUNT TOP OF INTAKE LOUVER AT 12" FROM CEILING SPACE.
- 5. PROVIDE CARBON MONOXIDE SENSOR AT LOCATION INDICATED. MOUNT CARBON MONOXIDE SENSOR 5'-0" A.F.F. ROUTE CONTROL WIRING TO EF-1.
- 6. PROVIDE INLINE EXHAUST FAN ALONG WITH ASSOCIATED SUPPORTS. MOUNT BOTTOM OF EXHAUST FAN AT 8'-0" AND MAINTAIN HORIZONTAL CENTERLINE OF DUCTWORK WITH FAN. PROVIDE HOODED WALL CAP AT EXTERIOR WALL AND SEAL WATERTIGHT.
- 7. PROVIDE 10"Ø VERTICAL B VENT FROM WAND WASH HEATER TO 3'-0" ABOVE ROOF WITH RAINCAP. SEAL ROOF PENETRATION WATERTIGHT. SEE DETAIL 3 ON ARCHITECTURAL DRAWING A-103.
- 8. PROVIDE IN-FLOOR RADIANT HEATING PIPING IN WASH BAY AREA ONLY.
- 9. PROVIDE NITROGEN DIOXIDE SENSOR AT LOCATION INDICATED. ROUTE CONTROL WIRING TO EF-1. MOUNT SENSOR 3'-0" ABOVE FLOOR.
- 10. PROVIDE MANUFACTURER SUPPLIED HORIZONTAL VENT/COMBUSTION AIR TERMINAL KIT WITH CONCENTRIC ADAPTER BOX. MAINTAIN CENTERLINE OF AIR TERMINAL KIT WITH ASSOCIATED UNIT HEATER AND FOLLOW MANUFACTURER'S INSTALLATION INSTRUCTIONS EXPLICITLY.
- 11. PROVIDE OUTDOOR AIR TEMPERATURE SENSOR TO TIE IN TO THE CONTROL OF BOILER B-1.

CONTROL SEQUENCES:

BOILER CONTROL SEQUENCE:

CONTROL BURNER FIRING RATE TO RESET SUPPLY-WATER TEMPERATURE INVERSELY WITH OUTSIDE-AIR TEMPERATURE. AT 0 DEG F OUTSIDE-AIR TEMPERATURE, SET SUPPLY-WATER TEMPERATURE AT 124 DEG F; AT 65 DEG F OUTSIDE-AIR TEMPERATURE, SET SUPPLY-WATER TEMPERATURE AT 100 DEG F. THE BOILER CONTROL SHALL HAVE THE CAPABILITY FOR SEQUENCING CONTROL THE CONTROL SHALL INCLUDE AN ADJUSTABLE OUTDOOR RESET SCHEDULE, MULTIPLE SETBACK SCHEDULES, AND A DIGITAL DISPLAY. THE CONTROL SHALL BE SUPPLIED BY THE BOILER SUPPLIER, IN ORDER TO ENSURE PROPER INTEGRATION WITH THE BOILER CONTROLS.

IN-SLAB RADIANT HEATING(WASH BAY):

SEQUENCE OF OPERATION: ZONE PUMPS SHALL BE ENABLED TO OPERATE WHEN THE OUTDOOR AIR TEMPERATURE IS BELOW 50°F (OPERATOR ADJUSTABLE). OPERATE PUMPS IF ROOM TEMPERATURE FALLS BELOW THE THERMOSTAT SETTING, AND STOP PUMPS WHEN ROOM TEMPERATURE RISES ABOVE THE THERMOSTAT SETTING. REFER TO SCHEDULE ON DRAWINGS FOR REQUIRED TEMPERATURE. SHUT DOWN PUMPS AND ALARM IF FLOOR SLAB TEMPERATURE RISES ABOVE 95° F (ADJUSTABLE).

SYSTEM SHALL MODULATE TO MAINTAIN SPACE TEMPERATURE SET POINTS:

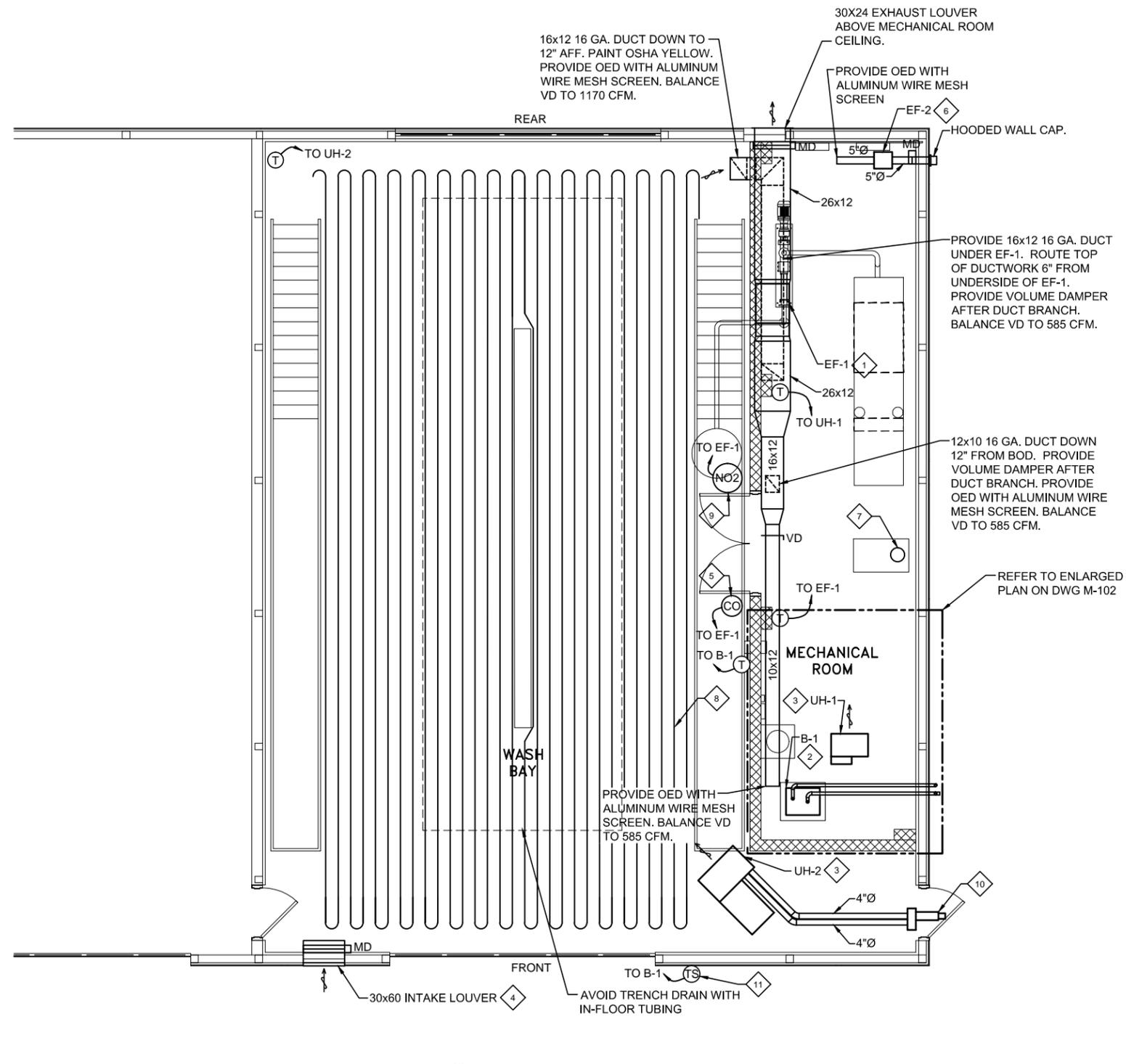
- OCCUPIED HEATING TEMPERATURE: 55 DEG F.
- UNOCCUPIED HEATING TEMPERATURE: 50 DEG F.

UNIT HEATER CONTROL SEQUENCE:

CYCLE FAN TO MAINTAIN ADJUSTABLE HEATING SPACE TEMPERATURE SET POINT VIA UNIT MOUNTED THERMOSTAT OR SPACE MOUNTED THERMOSTAT AS INDICATED ON DRAWINGS, AS FOLLOWS:
 WASH BAY: 55° F
 MECHANICAL ROOM: 60° F

WASH BAY VENTILATION:

FAN SHALL OPERATE UPON DETECTION OF LEVELS EXCEEDING 25 PPM / 0.7 PPM OF CARBON MONOXIDE (CO) OR NITROGEN DIOXIDE (NO2) RESPECTIVELY. FAN SHALL OPERATE UNTIL LEVELS FALL BELOW THE AFOREMENTIONED THRESHOLD. THE INTAKE LOUVERS SHALL BE OPEN WHEN THE WASH BAY EXHAUST FAN IS ON. THE FAN WILL NOT ENERGIZE UNTIL THE END SWITCHES ON THE INTAKE DAMPERS COMPLETES THE CIRCUIT. THE FAN AND LOUVERS CAN ALSO BE ACTIVATED BY MEANS OF A TIMED MANUAL SWITCH IN THE WASH BAY MECHANICAL ROOM.



1 MECHANICAL WASH BAY PLAN
 1/4" = 1'-0"

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TITLE OF PROJECT
VEHICLE WASH BAYS

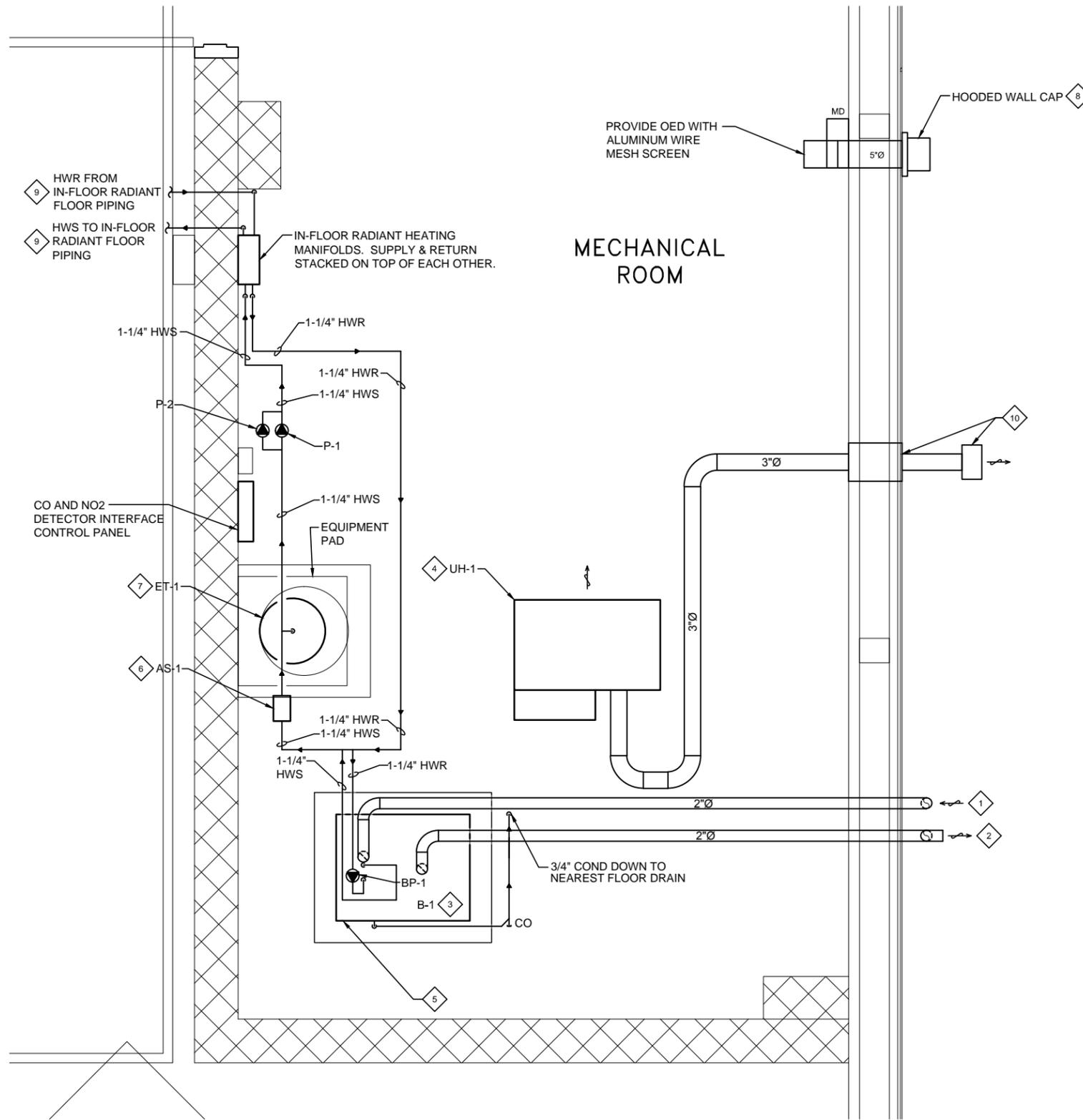
LOCATION OF PROJECT
 VARIOUS LOCATIONS: (MP 382.4 & MP 390.1)

TITLE OF DRAWING
MECHANICAL PLANS

CONTRACT NUMBER:
TAB 16-34A

DATE:
JULY 2016

DRAWING NUMBER:
M-101



GENERAL NOTES:

- A. EXACT PUMP AND PIPING LAYOUT NOT SHOWN FOR CLARITY. IN-LINE PUMPS SHALL BE VERTICALLY STACKED ALONG WALL.
- B. COORDINATE ELECTRICAL CONDUIT REQUIREMENTS WITH ELECTRICAL CONTRACT SPECIFICATIONS.

KEYED NOTES:

1. PROVIDE 2"Ø COMBUSTION AIR DUCT FROM EXTERIOR WALL TO BOILER. ROUTE DUCT TIGHT TO CEILING SPACE. PROVIDE PVC COUPLING, 90° ELBOW, AND BIRD SCREEN AT EXTERIOR WALL PENETRATION. COMBUSTION AIR OPENING SHALL BE 12" MIN FROM GRADE. REFER TO BOILER MANUFACTURER'S INSTALLATION INSTRUCTIONS FOR PROPER SIDEWALL TERMINATION. EXTERIOR WALL PENETRATIONS SHALL BE SEALED WATERTIGHT.
2. PROVIDE 2"Ø BOILER EXHAUST FROM BOILER TO EXTERIOR WALL PENETRATION. ROUTE DUCT TIGHT TO CEILING SPACE. PROVIDE PVC COUPLING, 90° ELBOWS, AND BIRD SCREEN AT EXTERIOR WALL PENETRATION. EXHAUST OPENING SHALL BE 12" MINIMUM FROM GRADE AND 12" MINIMUM ABOVE COMBUSTION AIR OPENING. REFER TO BOILER MANUFACTURER'S INSTALLATION INSTRUCTIONS FOR PROPER SIDEWALL TERMINATION. EXTERIOR WALL PENETRATIONS SHALL BE SEALED WATERTIGHT.
3. PROVIDE BOILER ALONG WITH ASSOCIATED PIPING AND EQUIPMENT PAD. FOLLOW MANUFACTURER INSTALLATION INSTRUCTIONS EXPLICITLY. REFER TO PLUMBING DRAWINGS FOR GAS PIPING.
4. PROVIDE GAS FIRED POWER VENTED UNIT HEATER ALONG WITH ASSOCIATED ACCESSORIES AND SUPPORTS. REFER TO PLUMBING DRAWINGS FOR GAS PIPING. ROUTE ASSOCIATED VENT PIPING 1/4" PER 1'-0" UP TOWARDS TERMINATION. PROVIDE DRIP LEG WITH CLEAN OUT NEAR UNIT HEATER ON VENT PIPING.
5. PROVIDE NEUTRALIZER KIT FOR BOILER CONDENSATE. PROVIDE 3/4" CONDENSATE PIPE OVER TO NEAREST FLOOR DRAIN/FLOOR OPENING. MAINTAIN 1/8" PER FOOT SLOPE TO DRAIN.
6. PROVIDE BELL & GOSSETT ENHANCED AIR SEPARATOR MODEL EASB-1-1/4S JR OR ENGINEER APPROVED EQUAL ALONG WITH ASSOCIATED AIR VENT. REFER TO MANUFACTURER FOR PIPE SIZES.
7. PROVIDE BELL & GOSSETT SERIES "D" DIAPHRAGM EXPANSION TANK D-15V OR ENGINEER APPROVED EQUAL ALONG WITH ALL ASSOCIATED ACCESSORIES. PROVIDE THREADED PIPE END FOR FUTURE DRAIN CONNECTION. REFER TO MANUFACTURER FOR PIPE SIZES.
8. PROVIDE INTAKE AIR OPENING WITH HOODED WALL CAP 10'-0" FROM BOILER VENT PIPING. SEAL EXTERIOR WALL OPENING WATERTIGHT.
9. IN-FLOOR RADIANT PIPING SHALL BE ROUTED WITHIN CONCRETE PAD OUT TO WASH BAY AREA.
10. PROVIDE MANUFACTURER SUPPLIED HORIZONTAL VENT TERMINATION. FOLLOW MANUFACTURER'S INSTALLATION INSTRUCTIONS EXPLICITLY FOR EXTERIOR WALL PENETRATION AND SUPPORT.

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DEPARTMENT OF ENGINEERING
200 SOUTHERN BLVD., ALBANY, N.Y. 12209

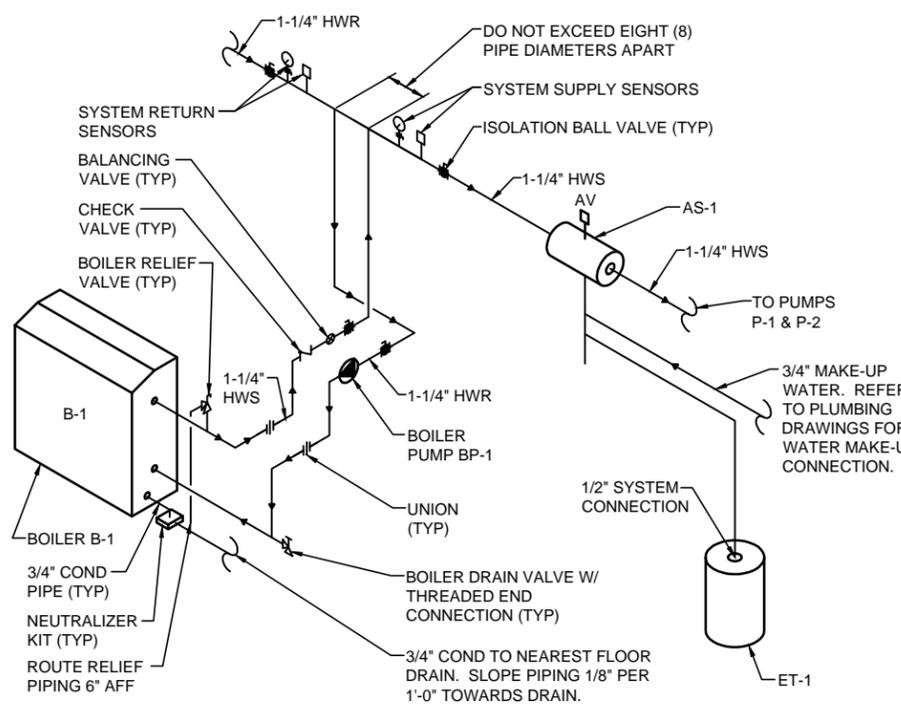
TITLE OF PROJECT
VEHICLE WASH BAYS

LOCATION OF PROJECT
VARIOUS LOCATIONS: (MP 382.4 & MP 390.1)

TITLE OF DRAWING
ENLARGED MECHANICAL ROOM PLAN

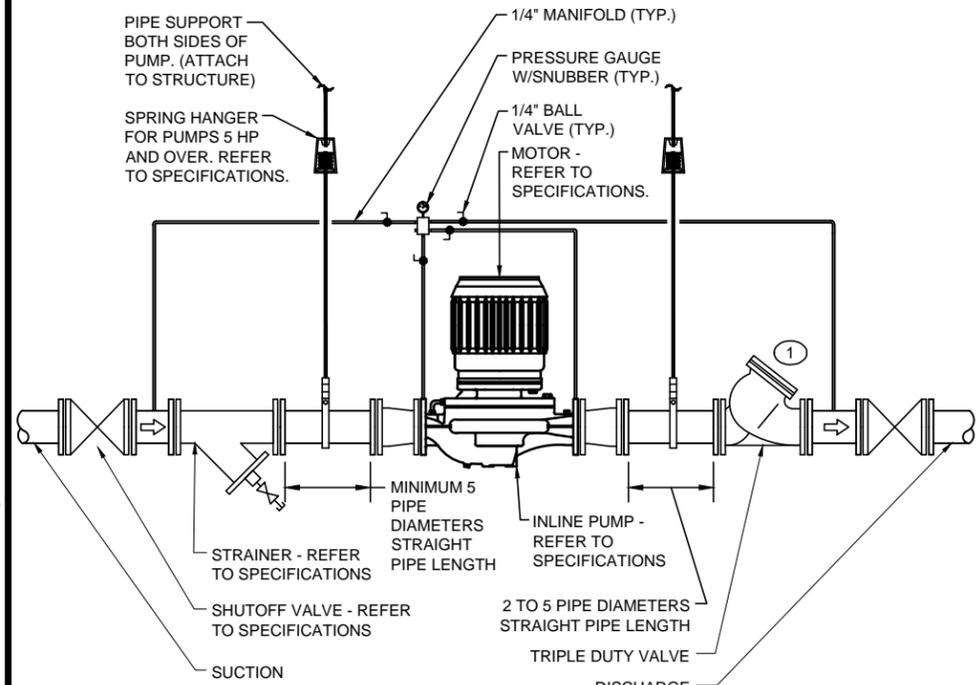
	CONTRACT NUMBER: TAB 16-34A
	DATE: JULY 2016
	DRAWING NUMBER: M-102

1 MECHANICAL ENLARGED MECH. ROOM PLAN
1" = 1'-0"



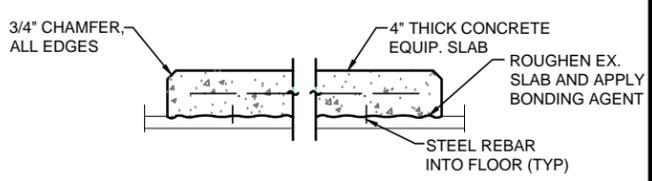
- NOTES:**
1. ALL PIPING SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
2. FOLLOW MANUFACTURERS EQUIPMENT INSTALLATION INSTRUCTIONS EXPLICITLY.

1 BOILER PIPING SCHEMATIC
SCALE: NONE



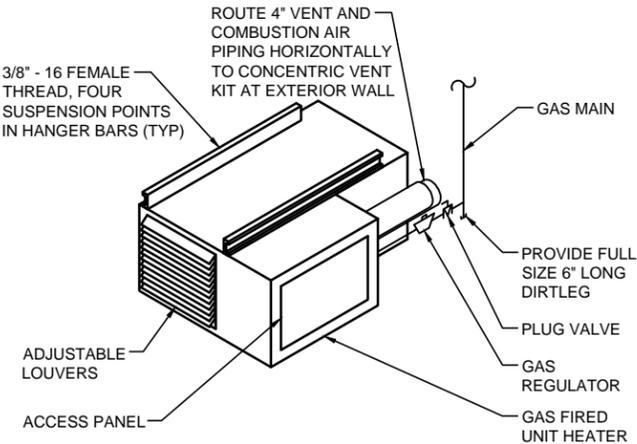
- KEYED NOTES:**
1. FOR PUMPS EQUIPPED WITH VFDS, ADJUST TRIPLE DUTY VALVE TO FULL OPEN POSITION AND BALANCE SYSTEM USING VFD. USE TRIPLE DUTY VALVE TO MEASURE FLOW.
- GENERAL NOTES:**
A. COORDINATE WITH SPECIFICATIONS.
B. PROVIDE PIPE SUPPORTS SIZED AND RATED FOR WEIGHT OF PIPING, FITTINGS, AND PUMP.
C. REFER TO PLANS FOR PIPE SIZES AND CONTINUATION.
D. FOLLOW MANUFACTURERS INSTALLATION INSTRUCTIONS EXPLICITLY.

2 HORIZONTAL INLINE PUMP DETAIL
SCALE: NONE



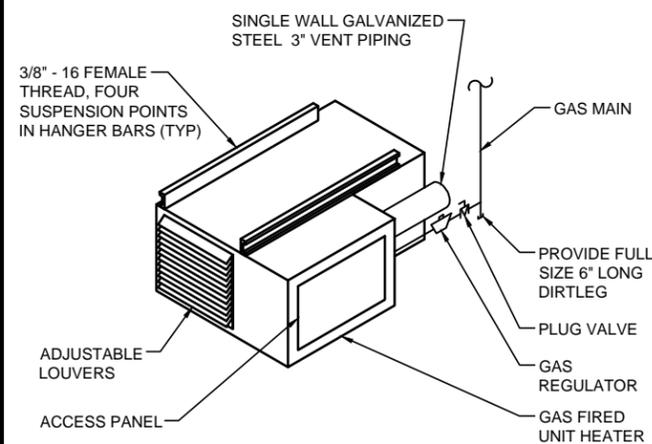
- NOTES:**
A. CONCRETE STRENGTH FC' = 4,000 PSI.
B. WELDED WIRE FABRIC FY = 75,000 PSI.
C. WELDED WIRE FABRIC FOR THE CONCRETE PADS SHALL BE PLACED IN THE CENTER OF THE SLAB AND WITH 2 INCHES OF COVER AROUND THE EDGE OF THE PAD.
D. CLEAN EXISTING CONCRETE FLOOR OF ALL DEBRIS, DIRT, GREASE, AND ROUGHEN EXISTING SURFACE PRIOR TO PLACING CONCRETE PAD.
E. OVERALL DIMENSIONS OF EQUIPMENT PADS SHALL BE VERIFIED BY CONTRACTOR AFTER EQUIPMENT UNITS HAVE BEEN SELECTED BY CONTRACTOR. EQUIPMENT PAD SHALL BE 6" LARGER THAN EQUIPMENT FOOTPRINT.
F. SEE DRAWING M-108 FOR LOCATION TABLE.

3 EQUIPMENT PAD DETAIL
SCALE: NONE



- GENERAL NOTES:**
A. UNIT MUST HAVE 6" MINIMUM CLEARANCE FROM CEILING. REFER TO MANUFACTURER'S INSTALLATION INSTRUCTIONS.
B. REFER TO PLANS FOR VENT AND COMBUSTION AIR ROUTING.

4 SEPARATE COMBUSTION GAS FIRED UNIT HEATER DETAIL (UH-2)
SCALE: NONE



- GENERAL NOTES:**
A. UNIT MUST HAVE 1" MINIMUM CLEARANCE FROM CEILING. REFER TO MANUFACTURER'S INSTALLATION INSTRUCTIONS.
B. REFER TO PLANS FOR VENT PIPE ROUTING.
C. ROUTE VENT PIPING 1/4" PER 1'-0" UP TOWARDS TERMINATION. PROVIDE DRIP LEG WITH CLEAN OUT NEAR THE UNIT HEATER.

5 POWER VENTED GAS FIRED UNIT HEATER DETAIL (UH-1)
SCALE: NONE

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REVISIONS

NEW YORK STATE THRUWAY AUTHORITY
DEPARTMENT OF ENGINEERING
200 SOUTHERN BLVD., ALBANY, N.Y. 12209

TITLE OF PROJECT
VEHICLE WASH BAYS

LOCATION OF PROJECT
VARIOUS LOCATIONS: (MP 382.4 & MP 390.1)

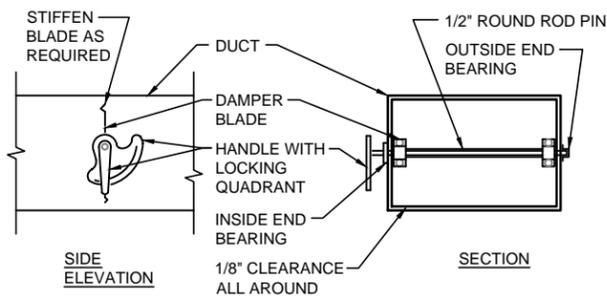
TITLE OF DRAWING
MECHANICAL DETAILS SHEET 1

CONTRACT NUMBER:
TAB 16-34A

DATE:
JULY 2016

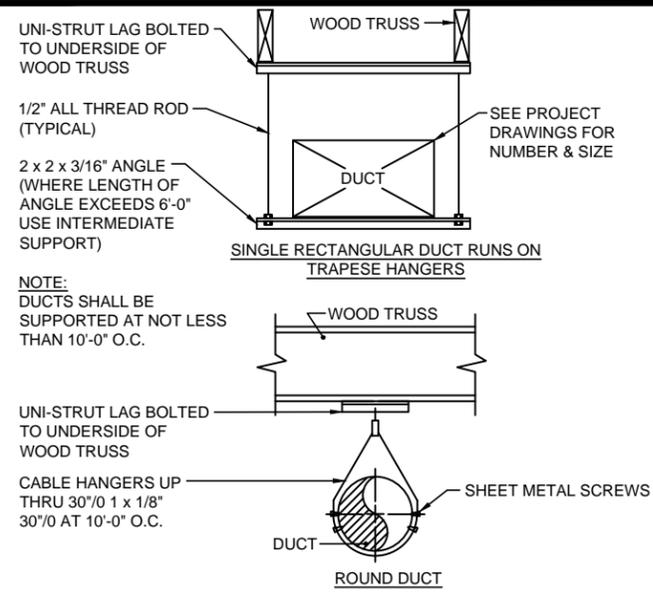
DRAWING NUMBER:
M-103





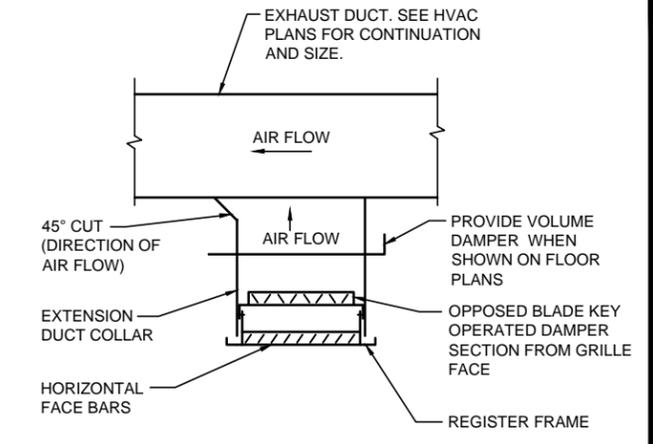
NOTE:
1. DELETE INSULATION STAND-OFF ON DUCTWORK WITHOUT EXTERIOR INSULATION.
2. DETAIL SHOWS SINGLE BLADE DAMPER. DAMPER INSTALLATION SHALL BE SIMILAR FOR MULTI-BLADE DAMPERS & ROUND DAMPERS.

1 VOLUME DAMPER DETAIL
SCALE: NONE



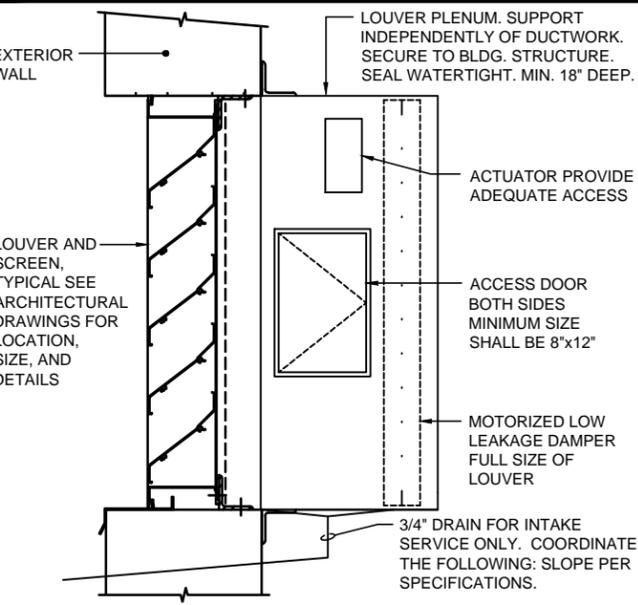
NOTE:
DUCTS SHALL BE SUPPORTED AT NOT LESS THAN 10'-0" O.C.

2 TYPICAL DUCT SUPPORT DETAILS
SCALE: NONE

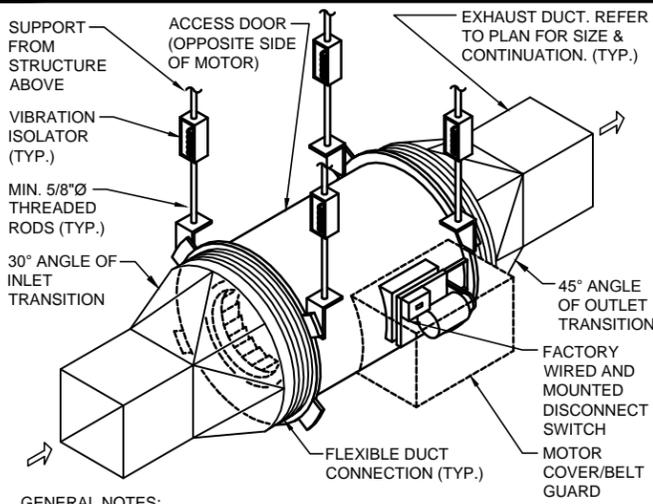


INSTALLATION NOTES:
1. FASTEN EXTENSION DUCT COLLAR TO DUCTWORK WITH SHEET METAL SCREWS.
2. EXTENSION DUCT COLLAR SHALL BE SHORT AS POSSIBLE.
3. INSTALL REMOVABLE CORE DAMPER ASSEMBLY

3 EXHAUST GRILLE DETAIL
SCALE: NONE

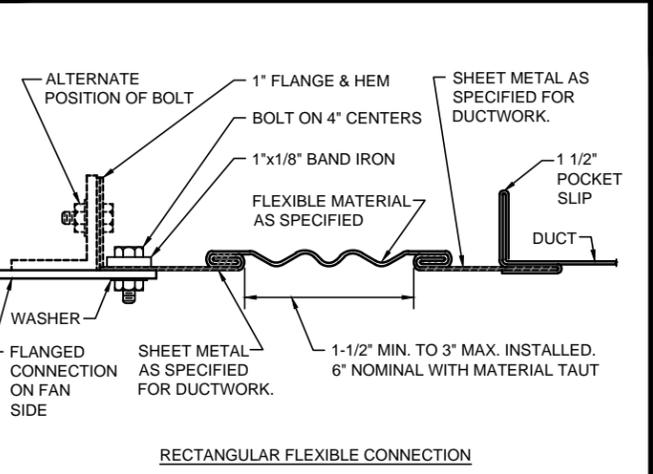


4 TYPICAL LOUVER CONNECTION DETAIL
SCALE: NONE

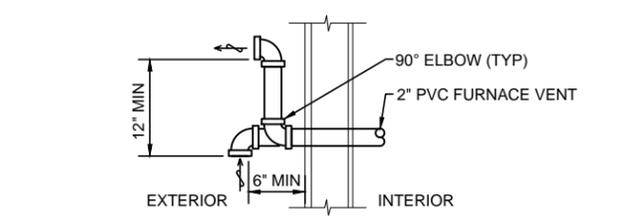


GENERAL NOTES:
A. VIBRATION ISOLATORS SHALL BE PROVIDED AS SPECIFIED AND IN ACCORDANCE WITH THE FAN MANUFACTURER'S RECOMMENDATIONS.
B. FOLLOW MANUFACTURERS INSTALLATION INSTRUCTIONS EXPLICITLY.
C. ORIENT UNIT SUCH THAT ACCESS TO MOTOR IS NOT OBSTRUCTED.

5 CENTRIFUGAL INLINE EXHAUST FAN DETAIL
SCALE: NONE

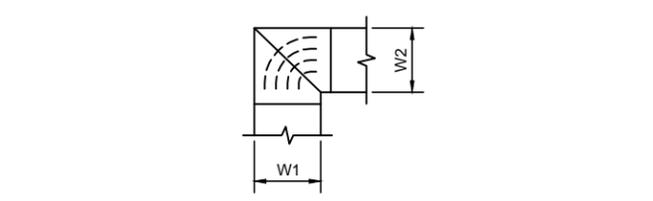


6 RECTANGULAR FLEX DUCT CONNECTIONS
SCALE: NONE



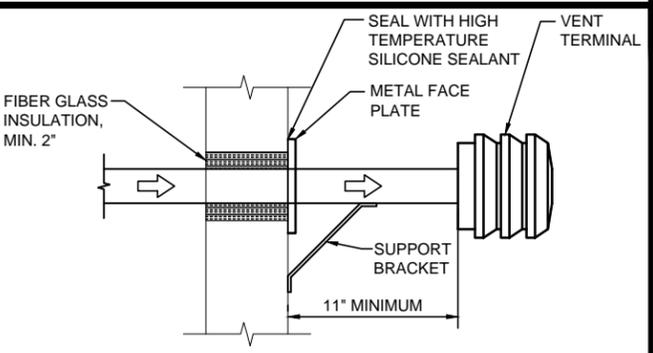
GENERAL NOTES:
A. PROVIDE INLET INSECT SCREEN AT EXTERIOR ELBOW AIR INTAKE. REFER TO MANUFACTURERS INSTALLATION INSTRUCTIONS.
B. LOCATE INLET A MINIMUM OF 8'-0" ABOVE FINISHED GRADE.
C. SEE GENERAL NOTES FOR SEPARATION DISTANCE OF VENT EXHAUST FROM AIR OPENINGS BASED ON INPUT BTU OF APPLIANCE.

7 BOILER DIRECT VENT DETAIL
SCALE: NONE



NOTES:
1. ALL VANED ELBOWS SHALL BE CONSTRUCTED AND INSTALLED AS DETAILED BY SMACNA.
2. WHEN W1 DOES NOT EQUAL W2, VANE SHALL BE SINGLE VANE TYPE REGARDLESS OF W DIMENSION.
3. ALL SINGLE VANES SHALL HAVE A 2" RADIUS, 1 1/2" MAXIMUM SPACE BETWEEN VANES AND A 3/4" TRAILING EDGE.
4. WHEN W EQUALS W2, AND W1 IS GREATER THAN 20", VANES SHALL BE DOUBLE VANE TYPE.

8 DUCTWORK SQUARE VANED ELBOW DETAIL
SCALE: NONE



NOTES:
A. REFER TO MANUFACTURER'S INSTALLATION INSTRUCTIONS FOR EXHAUST VENT CONSTRUCTION THROUGH COMBUSTIBLE WALLS AND SUPPORT BRACKET.

9 POWER VENTED VENT TERMINAL DETAIL
SCALE: NONE

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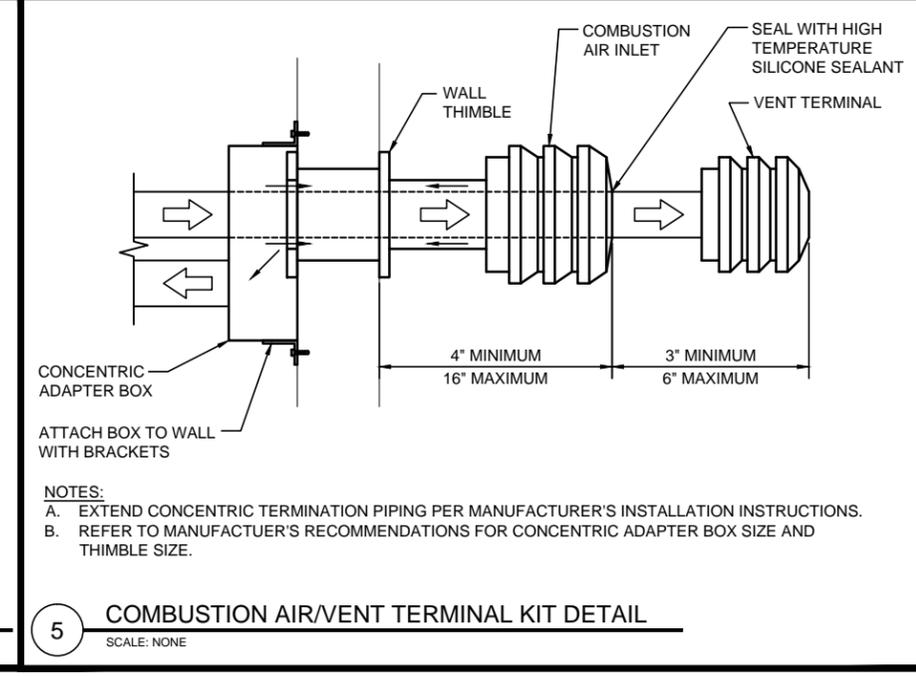
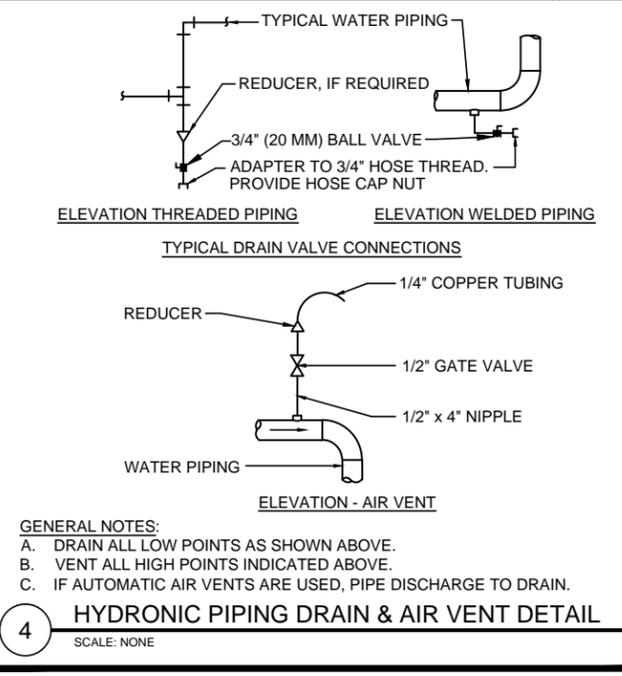
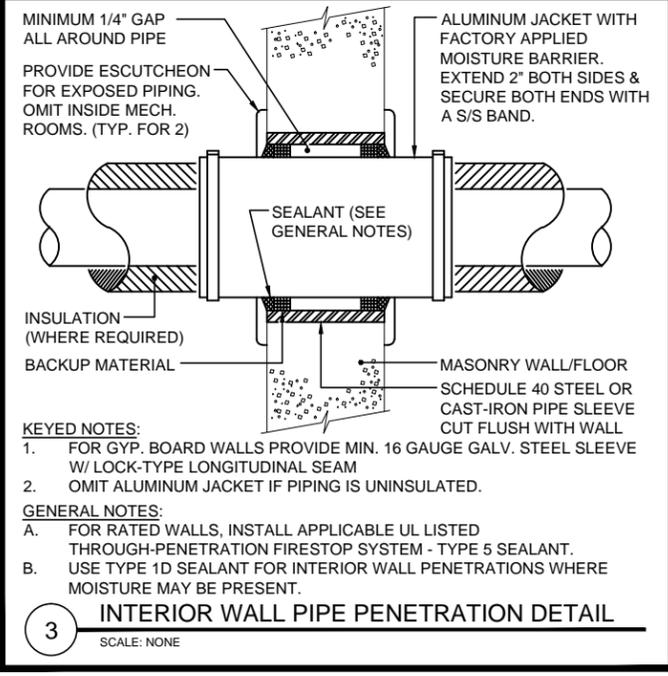
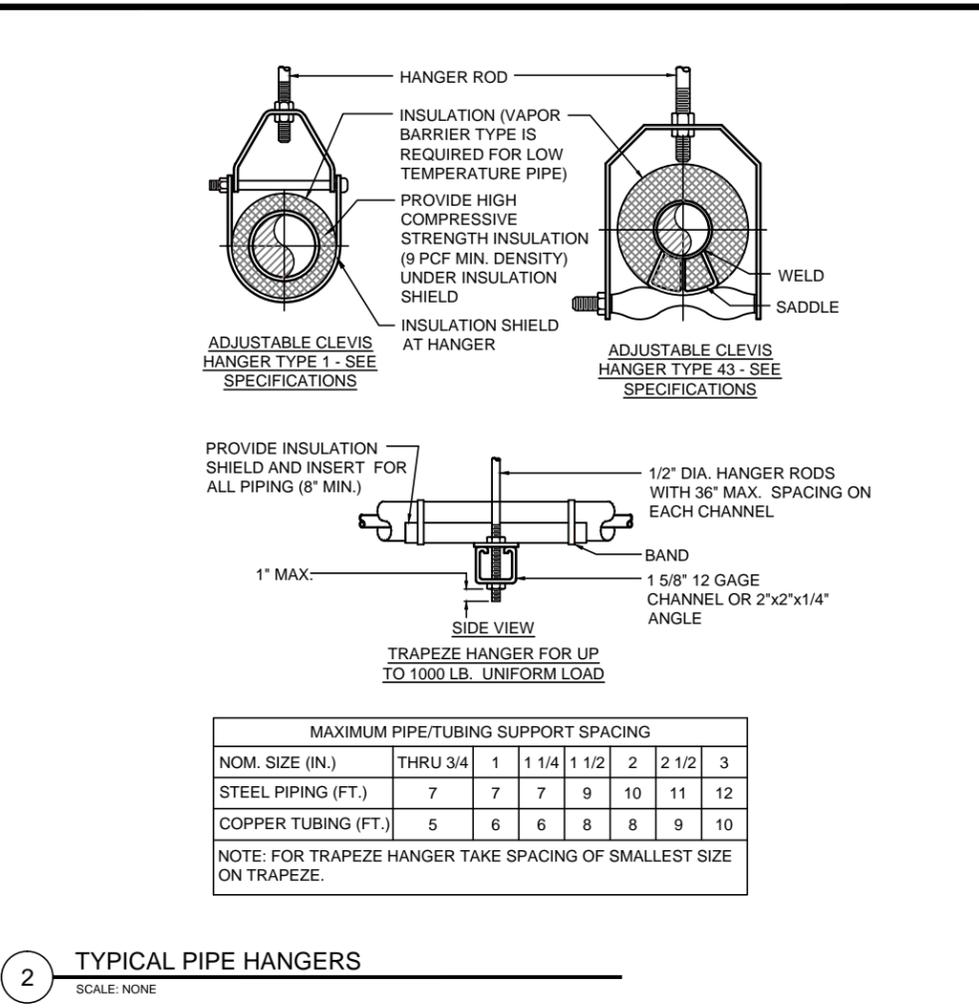
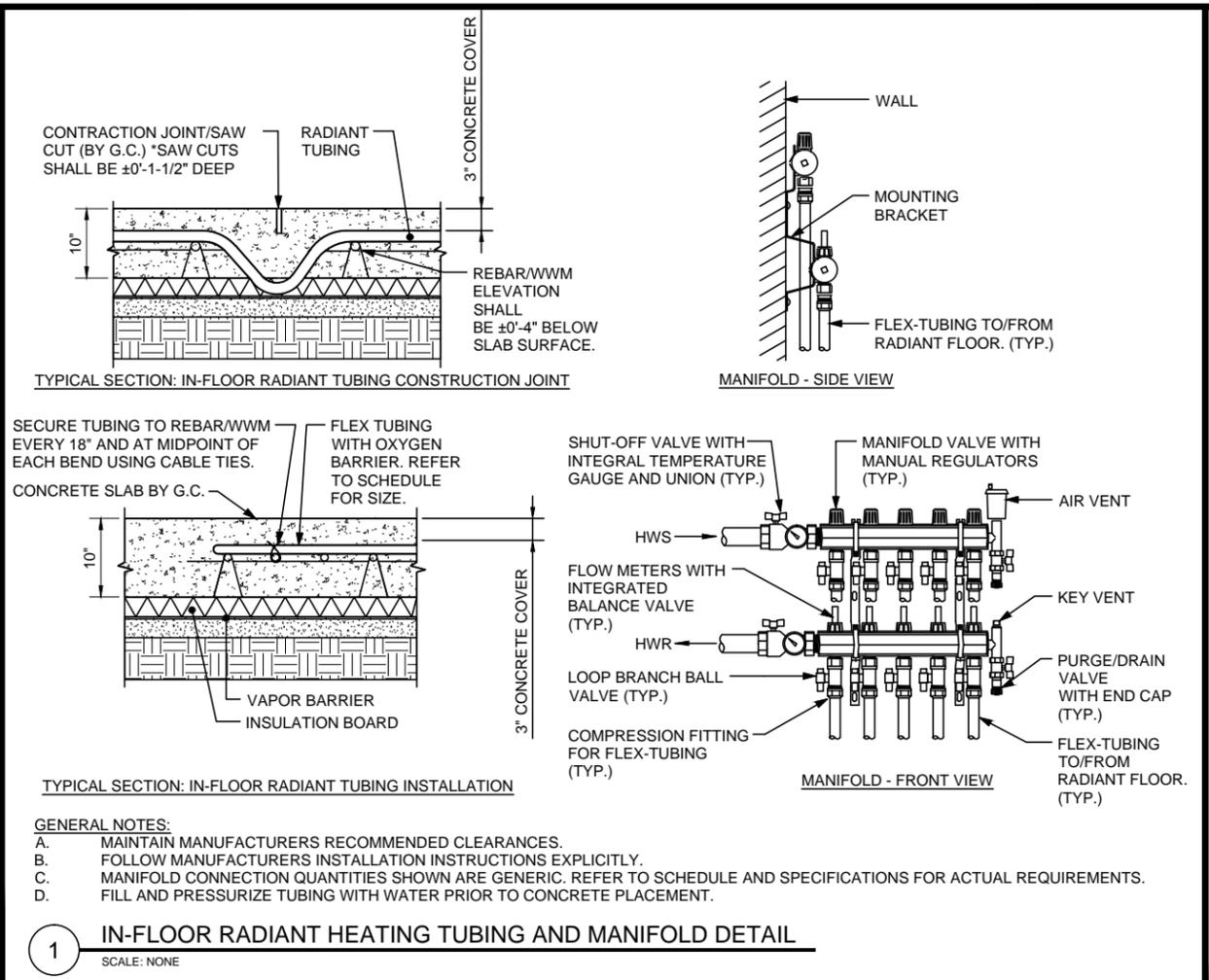
NEW YORK STATE THRUWAY AUTHORITY
DEPARTMENT OF ENGINEERING
200 SOUTHERN BLVD., ALBANY, N.Y. 12209

TITLE OF PROJECT
VEHICLE WASH BAYS

LOCATION OF PROJECT
VARIOUS LOCATIONS: (MP 382.4 & MP 390.1)

TITLE OF DRAWING
MECHANICAL DETAILS
SHEET 2

CONTRACT NUMBER:
TAB 16-34A
DATE:
JULY 2016
DRAWING NUMBER:
M-104



IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

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TITLE OF PROJECT
VEHICLE WASH BAYS

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VARIOUS LOCATIONS: (MP 362.4 & MP 390.1)

TITLE OF DRAWING
MECHANICAL DETAILS SHEET 3

CONTRACT NUMBER:
TAB 16-34A

DATE:
JULY 2016

DRAWING NUMBER:
M-105

1 BOILER SCHEDULE																		
UNIT NO.	LOCATION	TYPE	INPUT CAPACITY (MBH)	OUTPUT CAPACITY (MBH)	FUEL TYPE	GAS PRESS. MIN/MAX (IN WC)	GPM	EWT (°F)	LWT (°F)	PRESS. DROP (FT HD)	VENT & INTAKE SIZE	ELECTRICAL			WEIGHT (LBS)	STARTER/DISCONN.	BASIS OF DESIGN	NOTES
												FLA	MOC	V PH				
B-1	MECHANICAL ROOM	GAS FIRED, MODULATING, HOT WATER, HIGH EFF., DIRECT VENT, CONDENSING	80.0	76.0	NAT. GAS SEE NOTE A	4 / 13	5.1	114	124	7.1	2"Ø EA.	2	15	120 1	160	SUPPLIED	LAARS NEOTHERM NT 080	1 THRU 4

NOTES:
 1. FOLLOW MANUFACTURER'S INSTALLATION INSTRUCTIONS EXPLICITLY
 2. PROVIDE CONDENSATE NEUTRALIZER KIT.
 3. PROVIDE BOILER CONTROL OUTSIDE AIR RESET CONTROLLER.
 4. PROVIDE WATER FLOW SWITCH AND LOW WATER CUTOFF.

GENERAL NOTES:
 A. SITE 1 BOILER B-1 SHALL HAVE FUEL TYPE OF PROPANE.

2 PUMP SCHEDULE												
PUMP NO.	SERVICE	LOCATION	TYPE	GPM	HEAD (FT)	FLUID TYPE	MOTOR				BASIS OF DESIGN	NOTES
							RPM	HP	V PH	STARTER		
BP-1	BOILER CIRCULATOR PUMP	MECHANICAL ROOM	IN-LINE	6	10	HOT WATER	2,650	92 WATTS	115 1	REQUIRED	B&G NRF-22	--
P-1	IN-FLOOR RADIANT HEATING PUMP	MECHANICAL ROOM	IN-LINE	10	15	HOT WATER	3,500	1/12	115 1	INTEGRAL VFD	B&G ECOCIRC XL 20-35	--
P-2	IN-FLOOR RADIANT HEATING PUMP	MECHANICAL ROOM	IN-LINE	10	15	HOT WATER	3,500	1/12	115 1	INTEGRAL VFD	B&G ECOCIRC XL 20-35	--

GENERAL NOTES:
 A. ALL PUMPS SHALL BE CONTROLLED BY THE ASSOCIATED BOILER.

3 UNIT HEATER SCHEDULE - NATURAL GAS (PROPANE AT HARRIMAN SITE)																	
UNIT NO.	LOCATION	TYPE	ENTERING AIRFLOW CFM	GAS HEATER					FAN MOTOR		FLA	MOC	STARTER/DISCONN.	VENT SIZE (IN.)	WEIGHT (LBS)	BASIS OF DESIGN	NOTES
				EAT (°F)	LAT (°F)	INPUT MBH	OUTPUT MBH	GAS PRESSURE (WC)	HP(W)	V PH							
UH-1	MECHANICAL ROOM	POWER VENTED	505	50	94	30	24	3.5	1/15	115 1	3.7	15A	REQUIRED	3	55	MODINE HD-30	1 THRU 3
UH-2	WASH BAY	SEPARATED COMBUSTION	2,778 - 1,587	50	105	150	120	3.5	1/4	115 1	3.7	15A	REQUIRED	4	220	MODINE PTS-150	1 THRU 4

NOTES:
 1. PROVIDE WATERPROOF REMOTE WALL MOUNTED THERMOSTAT WITH MANUAL ON/OFF OVERRIDE. "FARMTEK DUROSTAT" OR APPROVED EQUAL.
 2. HORIZONTAL UNIT HEATERS TO BE CEILING SUSPENDED.
 3. PROVIDE MANUFACTURER SUPPLIED VENT TERMINAL.
 4. PROVIDE MANUFACTURER SUPPLIED HORIZONTAL VENT/COMBUSTION AIR KIT MODEL CC6.

GENERAL NOTES:
 A. ENTERING AIR TEMPERATURE: 50°F.
 B. PROVIDE PROPANE CONVERSION KIT FOR SITE 1.

ENERGY CODE COMPLIANCE INFORMATION
 THE SYSTEM DESIGN AND HVAC EQUIPMENT SCHEDULED ARE IN COMPLIANCE WITH THE NYSECC THROUGH ASHRAE 90.1 2010 PATH AS OUTLINED IN THE CODE. CERTIFICATION OF THE SYSTEM SHALL BE DOCUMENTED AFTER START-UP OF THE EQUIPMENT. A START-UP REPORT SHALL BE PROVIDED TO THE CODE ENFORCEMENT OFFICIAL.

4 FAN SCHEDULE														
UNIT NO.	TYPE	LOCATION	AREA SERVED	CFM	ESP (IN. W.G.)	FAN RPM	DRIVE	MOTOR			CONTROL	OPER. WEIGHT (LBS)	DESIGN EQUIPMENT	NOTES
								HP	VOLTS	PHASE				
EF-1	TUBULAR INLINE CENTRIFUGAL	WASHBAY CEILING	WASH BAY	2,340	0.70	1,199	BELT	3/4	208	1	CO & NO2 SENSOR	183	GREENHECK TCB-1-16	1 THRU 3
EF-2	CENTRIFUGAL INLINE	MECHANICAL ROOM	MECHANICAL ROOM	50	0.25	1,550	DIRECT	1/40	120	1	LIGHT SWITCH	26	GREENHECK SQ 60	1 THRU 2

NOTES:
 1. PROVIDE MOTORIZED STAINLESS STEEL DAMPERS.
 2. PROVIDE MANUFACTURER SUPPLIED VIBRATION ISOLATORS PER SPEC.
 3. ALUMINUM CONSTRUCTION.

5 IN-FLOOR RADIANT HEATING SYSTEM SCHEDULE																									
ZONE NO.	AREA SERVED	SPACE DATA					CONCRETE SLAB DATA					RADIANT ZONE DESIGN DATA													BASIS OF DESIGN
		FLOOR AREA (FT²)	AVG CEILING HEIGHT (FT)	EXPOSED PERIMETER (FT)	OUTDOOR TEMP. (°F)	ROOM TEMP. (°F)	SLAB DEPTH (IN.)	FINISH FLOOR	UNDER SLAB INSULATION	SLAB EDGE INSULATION	MAX. SURFACE TEMP. (°F)	QTY OF CIRCUITS	NUMBER OF MANIFOLDS	AVG. LOOP LENGTH (FT)	TUBE DIA. (IN)	TUBE SPACING (IN)	FLUID TYPE	MAX. WATER TEMP. (°F)	WATER ΔT (°F)	TOTAL ZONE FLOW RATE (GPM)	CIRCUIT FLOW RATE (GPM)	ZONE/CIRCUIT P.D. ft (H2O)	TOTAL ZONE OUTPUT (BTUH)	HEAT INTENSITY (BTUH/S.F.)	
RH-Z1	WASH BAY	1,485	20	176	6.6	70	10	0.5 Rv	10 Rv	10 Rv	85	7	1-SUPPLY 1-RETURN	299	3/4	9	WATER	124	10	10.09	1.5	5.2	50,299	33.9	Mr. PEX

GENERAL NOTES:
 A. RH: RADIANT HEATING.
 B. Rv: R-VALUE

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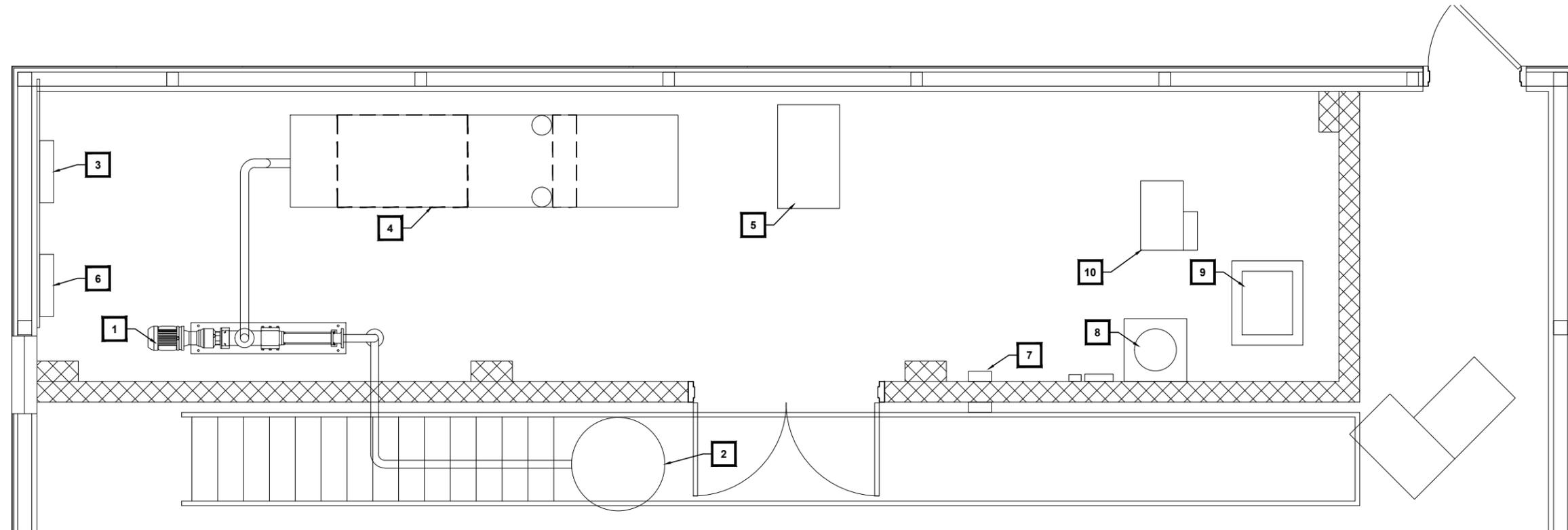
TITLE OF DRAWING

MECHANICAL SCHEDULES

CONTRACT NUMBER:
TAB 16-34A

DATE:
JULY 2016

DRAWING NUMBER:
M-106



1 MECHANICAL ROOM EQUIPMENT LAYOUT PLAN

SCALE: 1/2" = 1'-0" DRAWING ROTATED FOR CLARITY

NOTE: ONLY SITES 3, 4, 6, 7 AND 9 REQUIRE A NEW OWS.
SEE PLUMBING DRAWINGS FOR GAS AND WATER ENTRY POINTS.

EQUIPMENT SCHEDULE - OWS SITES SHOWN - SITES 3, 4, 6, 7 AND 9 ONLY

NO.	EQUIPMENT NAME	BASIS OF DESIGN	CONCRETE PAD REQUIRED (YES / NO)
1	INFLUENT PUMP	INFLUENT PUMP NETZSCH NM045BY	YES
2	GRIT CHAMBER	HIGHLAND TANK GRIT CHAMBER	NO
3	CONTROL & ALARM PANEL OWS	PANEL "E" MODIFIED 208V, 60HZ, 3PH, STD	NO
4	600 GALLON TANK OIL WATER SEPARATOR (OWS)	HIGHLAND TANK 600 GALLON TANK OWS	YES
5	PRESSURE WASHER	RAMTEQ BV NG/LP UPGRADE	YES
6	PANELBOARD PP-2	208Y/120V 100A 42 SPACE NEMA 4	NO
7	IN-FLOOR RADIANT HEATING MANIFOLD	Mr. PEX	NO
8	EXPANSION TANK ET-1	BELL & GOSSETT SERIES "D" D-40V	YES
9	BOILER B-1	LAARS NEOTHERM NT 080	YES
10	UNIT HEATER UH-1 (CEILING MOUNTED)	MODINE HD-30	NO

NOTE: PRIOR TO EQUIPMENT ORDERING, CONTRACTOR TO PROVIDE LAYOUT SKETCH (TO SCALE) OF ALL PROPOSED EQUIPMENT, WITH REQUIRED CLEARANCES SHOWN PER MANUFACTURERS INSTRUCTIONS. THE CONTRACTOR WILL CONFIRM ADEQUATE SPACE FOR EQUIPMENT PLACEMENT IN THE MECHANICAL ROOM PRIOR TO ORDERING.

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TITLE OF DRAWING
EQUIPMENT LAYOUT PLAN



CONTRACT NUMBER:
TAB 16-34A

DATE:
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DRAWING NUMBER:
M-108

ELECTRICAL SYMBOL LIST

GENERAL	
	EXISTING WIRING OR EQUIPMENT (LIGHT SOLID).
	NEW WIRING OR EQUIPMENT, THIS PROJECT (HEAVY SOLID).
	EXISTING WIRING OR EQUIPMENT TO BE REMOVED, THIS PROJECT (DASHED)
	REMOVAL KEYED DRAWING NOTE.
	NEW CONSTRUCTION KEYED DRAWING NOTE.
	AREA LIMIT LINE.
	DETAIL CALL OUT. "X" INDICATES DETAIL NUMBER WITHIN IDENTIFIED SHEET, "Y" INDICATES SHEET NUMBER.

BRANCH WIRING	
	BRANCH CIRCUIT TO PANELBOARD, WHEN SHOWN, LETTERING INDICATES PANELBOARD DESIGNATIONS. QUANTITY OF ARROWHEADS INDICATE QUANTITY OF BRANCH CIRCUITS. PROTECT EACH BRANCH CIRCUIT WITH A 20 AMPERE, 1-POLE OVERCURRENT DEVICE UNLESS OTHER SIZE INDICATED. TYPICAL DESIGNATION, (2#12,1#12G-3/4"C,20A-1P.)
	RACEWAY OR CABLES IN WALLS, ABOVE CEILINGS, WITH CONDUCTORS AS NOTED
	ON BRANCH CIRCUITRY WHERE ONLY THE CIRCUIT NUMBER IS SHOWN, CIRCUIT RECEPTACLES WITH THE SAME NUMBER TO THE CIRCUIT INDICATED WITH A HOMERUN TO EACH NUMBERED GROUP. CONNECT TO A 20A-1P CIRCUIT BREAKER, OR AS NOTED
	RACEWAY ROUTED UP, SOME NOT SHOWN.
	RACEWAY ROUTED DOWN, SOME NOT SHOWN.
	EMPTY RACEWAY, PROVIDE FISHLINE, SOME NOT SHOWN.
	SURFACE MOUNTED RACEWAY
	CABLE TRAY.
	GROUNDING ELECTRODE CONDUCTOR
	JUNCTION BOX, SIZED PER NEC OR AS INDICATED.

NOTE: ABBREVIATIONS AND SYMBOLS ON THIS DRAWING ARE FOR REFERENCE ONLY, AND MAY NOT BE USED IN THE FOLLOWING DOCUMENTS.

DISTRIBUTION AND MOTOR EQUIPMENT	
	NEW BRANCH CIRCUIT PANELBOARD. REFER TO PANEL BOARD SCHEDULE.
	EXISTING BRANCH CIRCUIT PANELBOARD. REFER TO PANEL BOARD SCHEDULE.
	ELECTRICAL MOTOR
	DISCONNECT SWITCH, 3R INDICATES WEATHERPROOF (NEMA 3R) 30 — INDICATES SWITCH AMPERE RATING 20 — INDICATES FUSE SIZE - INDICATES NON FUSED
	MAGNETIC MOTOR STARTER. VOLTAGE AMPERE RATING AND NEMA SIZE TO MATCH MOTOR SERVED. OVERCURRENT RATING IF INDICATED. NEMA 1 UNLESS OTHERWISE NOTED.
	COMBINATION MAGNETIC MOTOR STARTER WITH INTEGRAL DISCONNECT. 3R INDICATES WEATHER PROOF (NEMA 3R) 30 — INDICATES OVERCURRENT RATING 00 — INDICATES STARTER NEMA SIZE
	VARIABLE FREQUENCY DRIVE. REFER TO EQUIPMENT CONNECTION SCHEDULE FOR ADDITIONAL INFORMATION.
	EMERGENCY POWER OFF STATION.
	MOTOR SWITCH "MT" INDICATES WITH THERMAL OVERLOADS "M" INDICATES WITHOUT THERMAL OVERLOADS.
	PUSH BUTTON STATION.
	ELECTRICAL CONNECTION. CONTRACTOR SHALL PROVIDE A COMPLETE CONNECTION INCLUDING ALL REQUIRED FITTINGS AND ACCESSORIES.
	ELECTRICAL CONNECTION IDENTIFICATION TAG ASSOCIATED WITH ELECTRICAL CONNECTION SYMBOL. REFER TO ASSOCIATED ITEM NUMBER WITHIN THE EQUIPMENT CONNECTION SCHEDULE FOR ADDITIONAL INFORMATION REGARDING ELECTRICAL CONNECTION.
	EQUIPMENT IDENTIFICATION TAG ASSOCIATED WITH ELECTRICAL CONNECTION SYMBOL. REFER TO EQUIPMENT CONNECTION SCHEDULE.

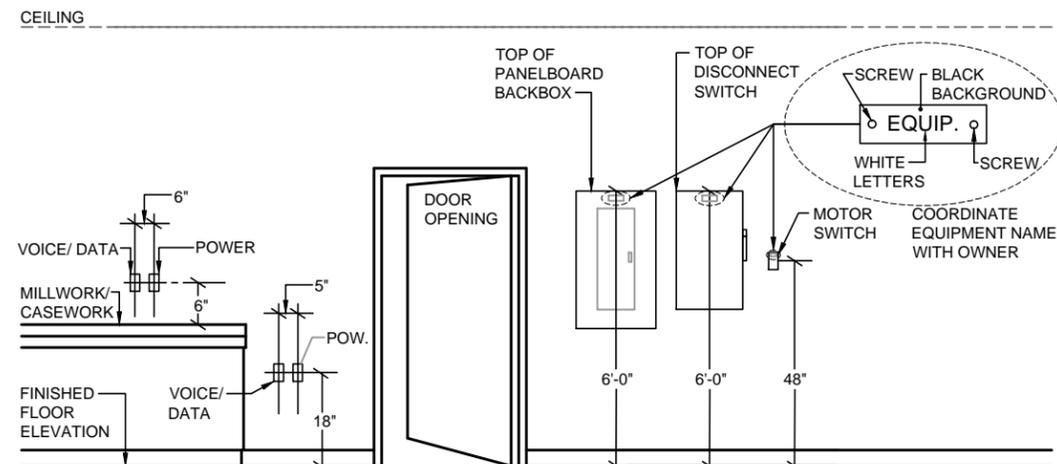
DEVICES	
	DUPLEX RECEPTACLE, GFCI TYPE - UPPER CASE LETTERS INDICATE TYPE AS FOLLOWS: IG - ISOLATED GROUND AF - ARC FAULT SM - SURFACE MOUNTED OC - ABOVE COUNTER WP - WEATHER PROOF BOX TVSS - TRANSIENT VOLTAGE SURGE SUPPRESSION
	CARBON MONOXIDE DETECTOR (120VAC, 60HZ, 9V BATTERY BACK-UP, ELECTROMECHANICAL SENSOR, 85dB AUDIO ALARM AT 10', 40-100°F, 5-95% RH) INTERCONNECTED TO CO STROBE LIGHT
	CARBON MONOXIDE STROBE LIGHT (120VAC, 60HZ, 32-120°F, 177 CANDELA, CO ALARM: INTERMITTENT 1 FLASH PER SECOND)

ABBREVIATIONS

AF	ABOVE FLOOR	OC	OVER COUNTER
AFF	ABOVE FINISHED FLOOR	OS	OCCUPANCY SENSOR
AG	ABOVE GRADE	PP	POWER PANEL
A/V	AUDIOVISUAL	PVC	POLYVINYL CHLORIDE CONDUIT
BKR	BREAKER	QTY	QUANTITY
BLDG	BUILDING	REC	RECESSED
C	CONDUIT	RGC	RIGID GALVANIZED CONDUIT
DISC	DISCONNECT	RH	RELATIVE HUMIDITY
DN	DOWN	SM	SURFACE MOUNTED
EF	EXHAUST FAN	THD	TOTAL HARMONIC DISTORTION
EMT	ELECTRICAL METAL TUBING	TVSS	TRANSIENT VOLTAGE SURGE SUPPRESSION
ETR	EXISTING TO REMAIN	UC	UNDER COUNTER
EQ	EQUAL	UF	UNDER FLOOR
FA	FIRE ALARM	UG	UNDERGROUND
GFI	GROUND FAULT INTERRUPTER	UL	UNDERWRITERS LABORATORY
HD	HAND DRYER (ELECTRIC)	VIF	VERIFY IN FIELD
IG	ISOLATED GROUND	WC	WATER COOLER (ELECTRIC)
MC	MOMENTARY CONTACT	WG	WIRE GUARD
MCB	MAIN CIRCUIT BREAKER	WP	WEATHERPROOF (OR)
MDP	MAIN DISTRIBUTION PANEL	WT	WALL TIMER (ROTARY AND MECHANICAL)
MTD	MOUNTED		
NL	NIGHT LIGHT		

GENERAL NOTES:

- PROVIDE PROPER FIELD FITTING AND QUALITY OF WORK. TAKE FIELD MEASUREMENTS AS REQUIRED AND BE RESPONSIBLE FOR FITTING NEW CONSTRUCTION TO EXISTING CONSTRUCTION.
- REPAIR ANY EXISTING CONDITIONS DISTURBED OR DAMAGED DURING CONSTRUCTION (TO MATCH EXISTING).
- EXAMINE THE SITE PRIOR TO START OF WORK TO REVEAL EXISTING CONDITIONS.
- PERFORM ALL CUTTING, PATCHING AND REPAIRING OF MATERIALS AND FINISHES THAT ARE DISTURBED BY THEIR RESPECTIVE TRADES.
- FIELD VERIFY ALL EXISTING CONDITIONS BEFORE STARTING REMOVALS AND INSTALLATION.
- PROVIDE APPROVED FIRE STOPPING AT ALL FLOOR AND WALL PENETRATIONS WHERE FIRE STOPPING IS SPECIFIED.
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO EXAMINE ALL DRAWINGS AND SPECIFICATIONS AND COORDINATE WORK WITH ALL OTHER CONTRACTORS.
- CONTRACTOR SHALL COORDINATE POWER CONNECTIONS TO ALL MECHANICAL EQUIPMENT.
- ALL ELECTRICAL WORK SHALL AND THE ASSOCIATED WORKSPACE SHALL BE IN ACCORDANCE WITH NFPA 70.
- ALL ELECTRICAL WORK SHALL BE INSPECTED BY AN APPROVED THIRD PARTY ELECTRICAL INSPECTION AGENCY.
- PROVIDE WARNING SIGNS, INCLUDING BUT NOT LIMITED TO:
 - WORKSPACE CLEARANCE WARNING
 - ARC FLASH HAZARD WARNING
 - MULTIPLE POWER SOURCES, IF APPLICABLE



TYPICAL ROUGH IN HEIGHTS FOR ELECTRIC WORK

1 NTS

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

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DATE	DESCRIPTION	BY	SYM.
REVISIONS			

NEW YORK STATE THRUWAY AUTHORITY
DEPARTMENT OF ENGINEERING
200 SOUTHERN BLVD., ALBANY, N.Y. 12209

TITLE OF PROJECT
VEHICLE WASH BAYS

LOCATION OF PROJECT
VARIOUS LOCATIONS: (MP 362.4 & MP 390.1)

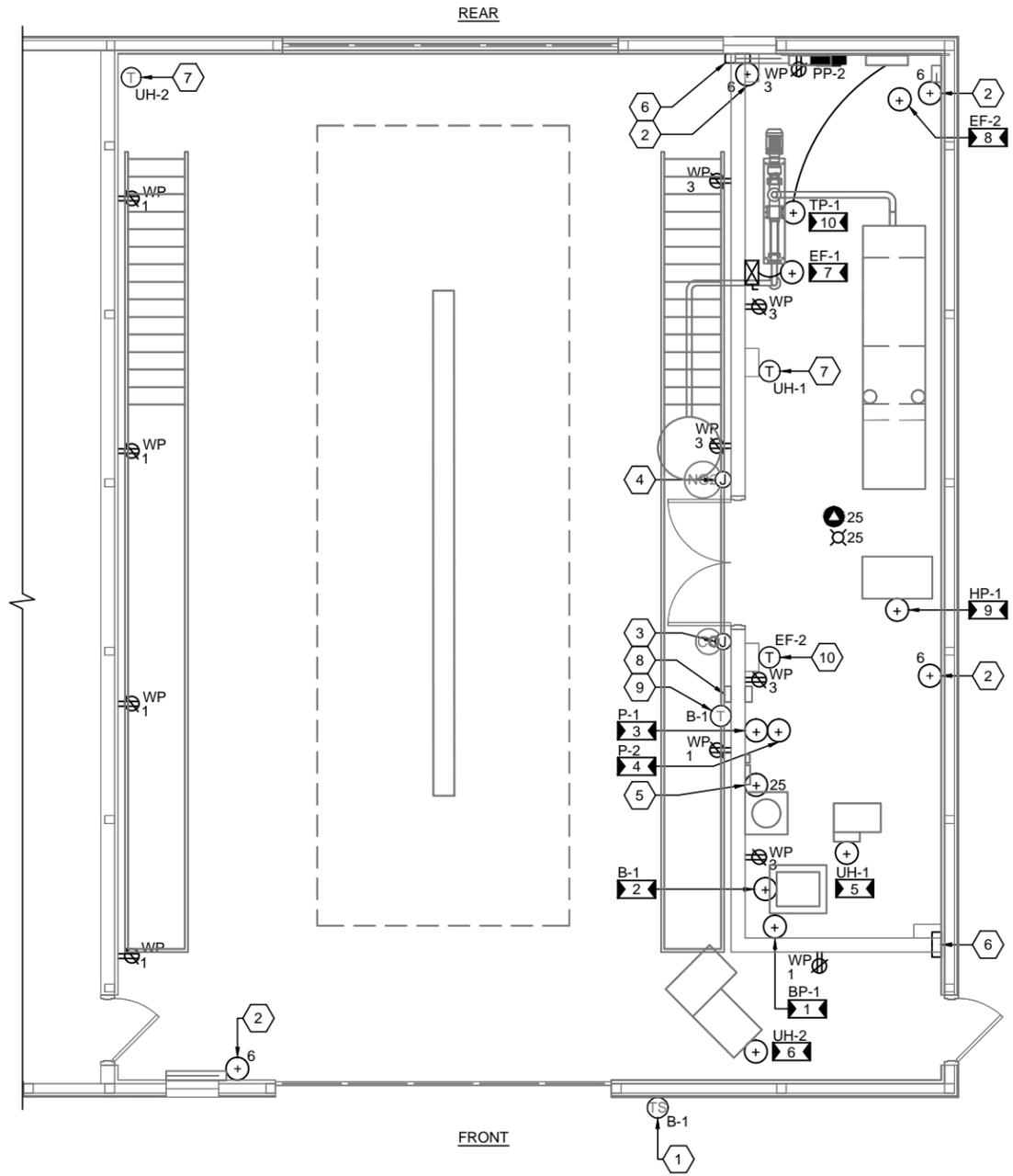
TITLE OF DRAWING
ELECTRICAL SYMBOLS, ABBREVIATIONS, AND NOTES



CONTRACT NUMBER:
TAB 16-34A

DATE:
JULY 2016

DRAWING NUMBER:
E-100



GENERAL NOTES:

- A. ALL 120V CIRCUITS SHALL BE TERMINATED AT PANEL PP-2 UNLESS OTHERWISE NOTED.
- B. LIGHTING FIXTURES, SWITCHES, AND ASSOCIATED BRANCH CIRCUITING SHALL BE PROVIDED BY THE NYSTA. ALL TEMPORARY LIGHTING NECESSARY FOR CONSTRUCTION SHALL BE PROVIDED BY THE CONTRACTOR.
- C. CONDUIT TO PANELBOARD PP-2 SHALL BE FURNISHED AND INSTALLED BY THE NYSTA PRIOR TO CONTRACTOR'S WORK.
- D. PROVIDE FIRE STOPPING AT ALL WALL AND FLOOR PENETRATIONS.
- E. COORDINATE ALL CONTRACTOR LOCATIONS OF EQUIPMENT WITH NYSTA TO ALLOW FOR PROPER CODE REQUIRED CLEARANCES AND MAINTENANCE REQUIREMENTS.
- F. EXISTING PANELBOARDS AND CONDUITS INSIDE WASH BAY SHALL BE REMOVED BY THE CONTRACTOR PRIOR TO BEGINNING OF WORK AND RETURNED TO NYSTA. COORDINATE REMOVALS WITH NYSTA SITE PERSONNEL PRIOR TO CONSTRUCTION. EXISTING LOADS SHALL BE RE-CIRCUITED TO NEW WASH BAY PANEL AND PROVIDED WITH ALL NECESSARY WEATHERPROOFING MATERIALS AND ENCLOSURES. PROVIDE CIRCUIT BREAKERS, WIRING, AND CONDUIT TO EXTEND TO NEW PANELBOARD LOCATION PER SITE:
 SITE _____ (QTY) CIRCUIT BREAKER SIZE
 HENRIETTA (2) 20A/1P
 BATAVIA (2) 20A/1P, (1) 50A/3P
- G. LAYOUT IS REVERSED AT BATAVIA SITE. REFER TO PLAN G-100.

KEYED DRAWING NOTES: #

- 1. PROVIDE CONDUIT INTERCONNECTION BETWEEN BOILER (B-1) TO TEMPERATURE SENSOR. REFER TO MECHANICAL DRAWINGS FOR COORDINATION.
- 2. CONNECTION TO DAMPER MOTOR. CIRCUIT AS INDICATED. REFER TO MECHANICAL DRAWINGS FOR COORDINATION.
- 3. PROVIDE CONDUIT INTERCONNECTION BETWEEN CO/NO2 DETECTOR CONTROL PANEL AND CO DETECTOR. REFER TO MECHANICAL DRAWINGS FOR COORDINATION.
- 4. PROVIDE CONDUIT INTERCONNECTION BETWEEN CO/NO2 DETECTOR CONTROL PANEL AND NO2 DETECTOR. REFER TO MECHANICAL DRAWINGS FOR COORDINATION.
- 5. CONNECTION TO CO/NO2 DETECTOR CONTROL PANEL. CIRCUIT AS INDICATED. REFER TO MECHANICAL DRAWINGS FOR COORDINATION.
- 6. CONDUIT PENETRATIONS ROUTED INTO THE MECHANICAL ROOM SHALL BE AGAINST THE WALL AND LIMITED TO THIS AREA.
- 7. PROVIDE CONDUIT INTERCONNECTION BETWEEN UNIT HEATER AND THERMOSTAT. REFER TO MECHANICAL DRAWINGS FOR COORDINATION.
- 8. PROVIDE CONDUIT INTERCONNECTION BETWEEN HIGH PRESSURE MANUAL WASH PUMP (HP-1) AND UNIT REMOTE CONTROL BOX.
- 9. PROVIDE CONDUIT INTERCONNECTION BETWEEN BOILER (B-1) AND THERMOSTAT. REFER TO MECHANICAL DRAWINGS FOR COORDINATION.
- 10. PROVIDE CONDUIT INTERCONNECTION BETWEEN EXHAUST FAN (EF-2) AND THERMOSTAT. REFER TO MECHANICAL DRAWINGS FOR COORDINATION.

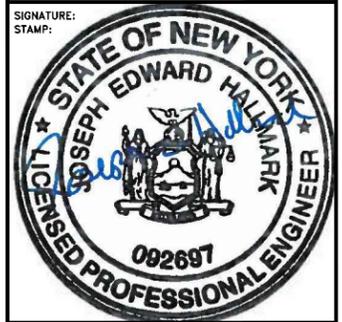
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NEW YORK STATE THRUWAY AUTHORITY
 DEPARTMENT OF ENGINEERING
 200 SOUTHERN BLVD., ALBANY, N.Y. 12209

TITLE OF PROJECT
VEHICLE WASH BAYS

LOCATION OF PROJECT
 VARIOUS LOCATIONS: (MP 382.4 & MP 390.1)

TITLE OF DRAWING

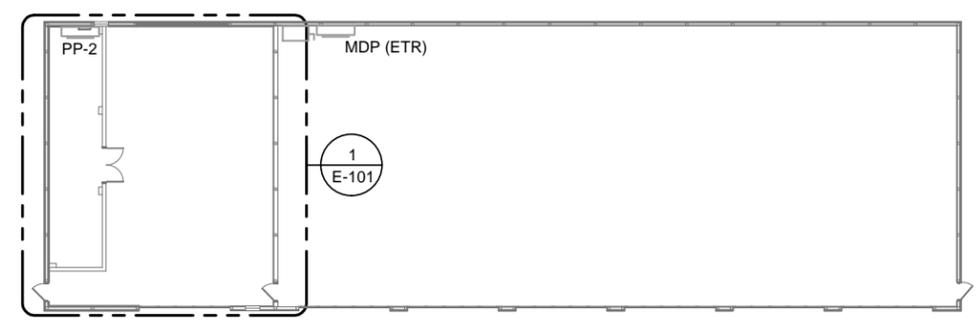
ELECTRICAL PLANS

CONTRACT NUMBER:
TAB 16-34A

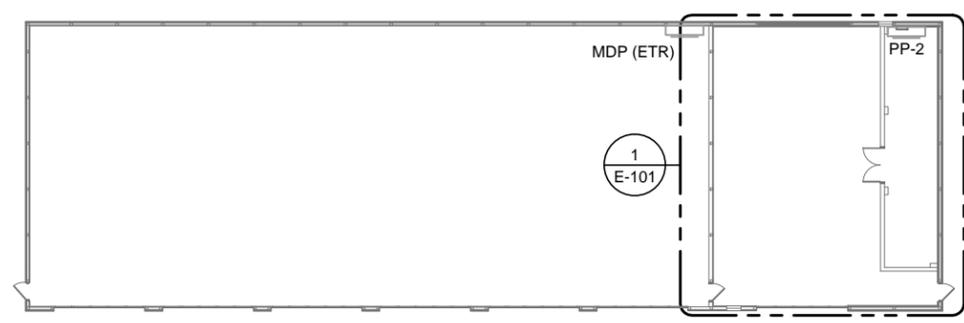
DATE:
JULY 2016

DRAWING NUMBER:
E-101

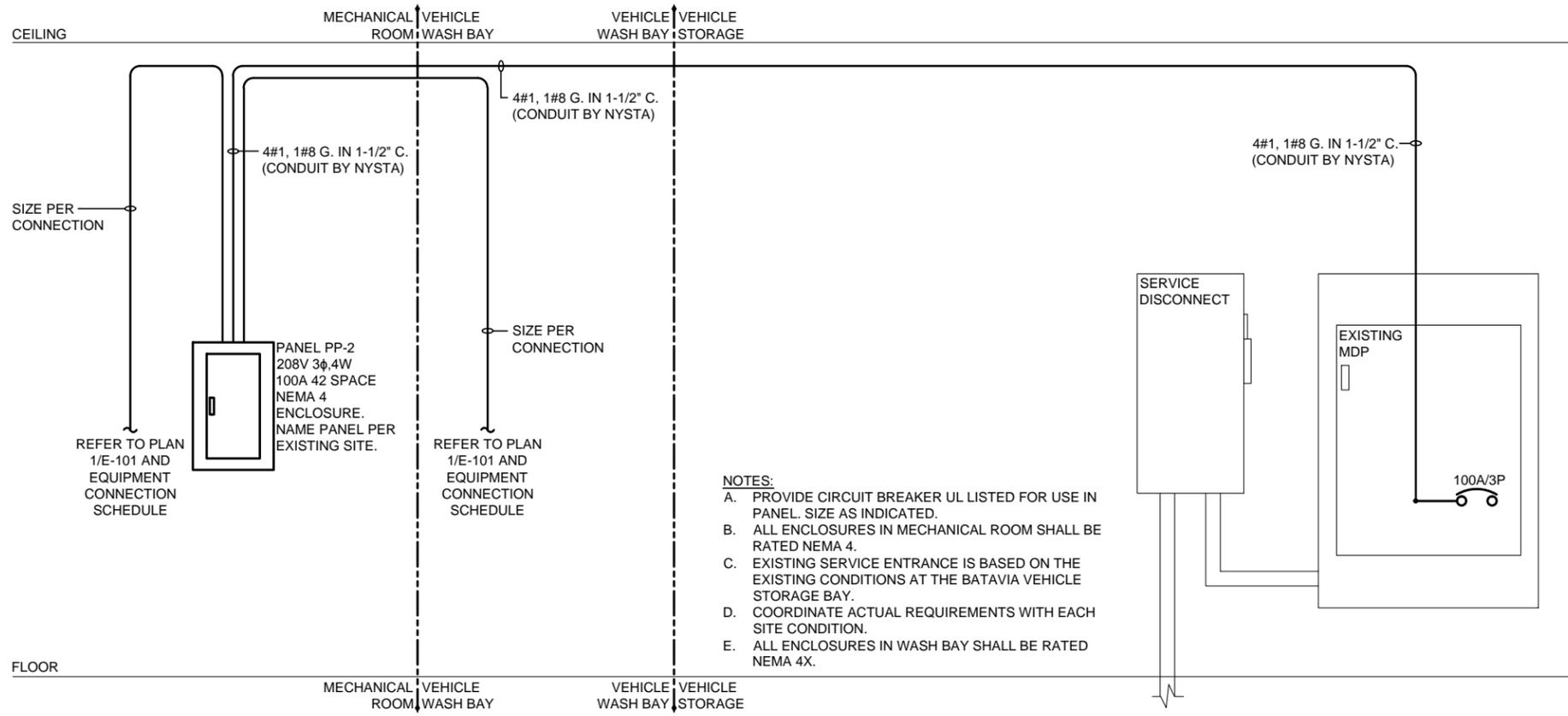
1 ELECTRICAL WASH BAY PLAN
 1/4" = 1'-0"



2 EXISTING ELECTRICAL WASH BAY PLAN - BATAVIA
 1/16" = 1'-0"



3 EXISTING ELECTRICAL WASH BAY PLAN - HENRIETTA
 1/16" = 1'-0"



- NOTES:**
- A. PROVIDE CIRCUIT BREAKER UL LISTED FOR USE IN PANEL. SIZE AS INDICATED.
 - B. ALL ENCLOSURES IN MECHANICAL ROOM SHALL BE RATED NEMA 4.
 - C. EXISTING SERVICE ENTRANCE IS BASED ON THE EXISTING CONDITIONS AT THE BATAVIA VEHICLE STORAGE BAY.
 - D. COORDINATE ACTUAL REQUIREMENTS WITH EACH SITE CONDITION.
 - E. ALL ENCLOSURES IN WASH BAY SHALL BE RATED NEMA 4X.

1 ELECTRICAL ONE-LINE DIAGRAM
NTS

PP-2													
VOLTAGE:		120 /208		MAINS RATING: 100A		A.I.C.RATING: 10K		LOCATION: MECHANICAL ROOM					
PHASE: 3		M.C.B.:		BKR SPACE: 42		POWER SOURCE: MDP							
WIRE: 4		M.L.O.: X		MOUNTING: SURFACE		FEEDER CIRCUIT: REFER TO ONE-LINE							
NO.	F	USE, LOCATION	CIRCUIT AMPS			BKR	BKR	CIRCUIT AMPS			USE, LOCATION	F	NO.
			φA	φB	φC			φA	φB	φC			
1		WASH BAY RECEPTACLES	9.0			20/1	20/1					C	2
3		WASH BAY RECEPTACLES		9.0		20/1	20/1						4
5		SPARE				20/1	20/1		5.0				6
7		SPARE				20/1	20/1						8
9		SPARE				20/1	20/1						10
11		SPARE				20/1	20/1						12
13		SPARE				20/1	20/1						14
15		SPARE				20/1	20/1						16
17		SPARE				20/1	40/1						18
19		SPARE				20/1	20/1						20
21		SPARE				20/1	20/1						22
23		SPARE				20/1	20/1		7.4				24
25		CO DETECTORS/ CO/NO2 CONTROL PANEL	2.0			20/1	20/1	0.8					26
27		RADIANT HEATING PUMP (P-1)		1.3		20/1	20/1		5.8				28
29		RADIANT HEATING PUMP (P-2)			1.3	20/1	20/1			3.7			30
31		SPARE				20/1	20/1						32
33		EXHAUST FAN (EF-1)		6.9		20/1	20/1						34
35					6.9		20/2	20/1					36
37		INFLUENT PUMP (TP-1)	17.5			40/3	40/3	17.5					38
39					17.5				17.5				40
41						17.5				17.5			42
PANEL LOAD SUMMARY:			φA	φB	φC	NOTES:							
TOTAL CONTINUOUS LOADS AMPERES/PHASE			0.0	0.0	0.0	1 PROVIDE NEMA 4 ENCLOSURE.							
TOTAL NON-CONTINUOUS LOADS AMPERES/PHASE			46.8	58.0	54.3								
TOTAL CONNECTED AMPERES/PHASE			46.8	58.0	54.3								
TOTAL CONNECTED KVA/PHASE			5.6	7.0	6.5								
D/DF AMPERES/PHASE													
TOTAL D/DF LOAD				19.1		KVA		F COLUMN -C INDICATES CONTINUOUS LOAD, TOTALS WILL BE AT 125%					

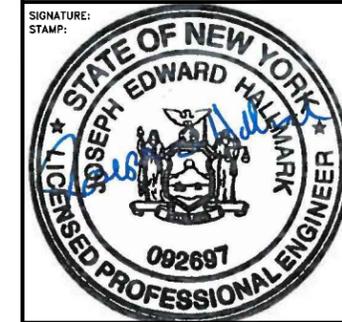
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200 SOUTHERN BLVD., ALBANY, N.Y. 12209

TITLE OF PROJECT
VEHICLE WASH BAYS

LOCATION OF PROJECT
VARIOUS LOCATIONS: (MP 382.4 & MP 390.1)

TITLE OF DRAWING
ELECTRICAL ONE LINE DIAGRAM AND SCHEDULE

	CONTRACT NUMBER: TAB 16-34A
	DATE: JULY 2016
	DRAWING NUMBER: E-102

EQUIPMENT CONNECTION SCHEDULE

KEY	DISCONNECT TYPE				NEMA TYPE						STARTER TYPE				CONTROLS			FURNISHED BY		
	A	-	NON-FUSED SAFETY SWITCH	12	-	NEMA 12 (INDOOR, OIL TIGHT)	MAG	-	MAGNETIC	1	-	START/STOP PUSH BUTTON W/ PILOT LIGHT IN COVER	GC	-	GENERAL CONTRACTOR					
B	-	FUSED SAFETY SWITCH	3R	-	NEMA 3R (RAIN PROOF)	COMB	-	COMBINATION	2	-	H-O-A SWITCH W/ PILOT LIGHT IN COVER	MECH	-	DIVISION 23						
C	-	MOTOR SWITCH	7	-	NEMA 7 (EXPLOSION PROOF)	MAN	-	MANUAL	3	-	AUXILIARY CONTACTS	PLUMB	-	DIVISION 22						
D	-	MOTOR SWITCH W/ THERMAL OVERLOAD	4	-	NEMA 4 (WATERTIGHT)	RED	-	REDUCED VOLTAGE				ELEC	-	DIVISION 26						
E	-	CORD AND PLUG	4X	-	NEMA 4X (CORROSION/WATERTIGHT)	VFD	-	VARIABLE FREQUENCY DRIVE				OWN	-	OWNER						
			1	-	NEMA 1 (INDOOR, DUST TIGHT)	OTH	-	OTHER (SEE NOTES)				OTH	-	OTHER (SEE NOTES)						
						VSC	-	VARIABLE SPEED CONTROL												
						SS	-	REDUCED VOLTAGE SOLID STATE												

ITEM NO	DESIGNATION	DESCRIPTION	LOCATION	HP	KW	AMPS	VOLTS	PH	PANEL	CIRCUIT	BREAKER SIZE	WIRE	GND	CONDUIT SIZE	DISCONNECT			STARTER			NOTES		
															TYPE	NEMA TYPE	FURNISHED BY	TYPE	NEMA SIZE	NEMA TYPE		FURNISHED BY	
1	BP-1	BOILER CIRCULATOR PUMP	MECHANICAL ROOM			0.8	120	1	PP-2	26	20/1	2#12	#12	3/4"	C	4	ELEC	-	-	-	-		
2	B-1	BOILER	MECHANICAL ROOM			2.0	120	1	PP-2	24	20/1	2#12	#12	3/4"	C	4	ELEC	-	-	-	-		
3	P-1	IN FLOOR RADIANT HEATING PUMP	MECHANICAL ROOM	1/12			120	1	PP-2	27	20/1	2#12	#12	3/4"	C	4	ELEC	-	-	-	-		
4	P-2	IN FLOOR RADIANT HEATING PUMP	MECHANICAL ROOM	1/12			120	1	PP-2	29	20/1	2#12	#12	3/4"	C	4	ELEC	-	-	-	-		
5	UH-1	UNIT HEATER	MECHANICAL ROOM	1/15			120	1	PP-2	28	20/1	2#12	#12	3/4"	C	4	ELEC	-	-	-	-		
6	UH-2	UNIT HEATER	WASH BAY	1/4			120	1	PP-2	30	20/1	2#12	#12	3/4"	C	4X	ELEC	-	-	-	-		
7	EF-1	EXHAUST FAN	WASH BAY	3/4			208	1	PP-2	33,35	20/2	2#12	#12	3/4"	-	-	-	COMB	0	4X	ELEC	3	
8	EF-2	EXHAUST FAN	MECHANICAL ROOM	1/40			120	1	-	-	-	2#12	#12	3/4"	-	-	-	-	-	-	-	2	
9	HP-1	HIGH PRESSURE MANUAL WASH PUMP	MECHANICAL ROOM	5			208	3	PP-2	38,40,42	40/3	3#8	#10	3/4"	-	-	-	-	-	-	-	W/ UNIT	
10	TP-1	INFLUENT PUMP	MECHANICAL ROOM	5			208	3	PP-2	37,39,41	40/3	3#8	#10	3/4"	-	-	-	-	-	-	-	W/ UNIT	1

NOTES:

- 1) PROVIDE CONNECTION THROUGH WALL MOUNTED CONTROL PANEL.
- 2) EXTEND ROOM LIGHTING CIRCUIT TO SERVE EXHAUST FAN. PROVIDE CONDUIT AND WIRING AS REQUIRED TO ALLOW EXHAUST FAN TO OPERATE FROM ROOM LIGHT SWITCH AND/OR THERMOSTAT FURNISHED BY MECHANICAL CONTRACTOR.
- 3) PROVIDE CONDUIT AND CONTROL WIRING FROM CO/NO2 DETECTOR CONTROL PANEL TO OPERATE FAN.

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REVISIONS

NEW YORK STATE THRUWAY AUTHORITY
DEPARTMENT OF ENGINEERING
200 SOUTHERN BLVD., ALBANY, N.Y. 12209

TITLE OF PROJECT
VEHICLE WASH BAYS

LOCATION OF PROJECT
VARIOUS LOCATIONS: (MP 382.4 & MP 390.1)

TITLE OF DRAWING
ELECTRICAL SCHEDULES

	CONTRACT NUMBER: TAB 16-34A
	DATE: JULY 2016
	DRAWING NUMBER: E-103

PLUMBING GENERAL NOTES LIST

- A. PROVIDE FOR THE PROPER FIELD FITTING OF WORK. THE CONTRACTOR SHALL PROVIDE FOR FIELD MEASUREMENTS AS REQUIRED AND SHALL BE RESPONSIBLE FOR FITTING NEW CONSTRUCTION TO EXISTING CONSTRUCTION CONDITIONS. REPAIR ANY EXISTING CONDITIONS DISTURBED OR DAMAGED DURING CONSTRUCTION.
- B. INVESTIGATE ALL EXISTING BUILDING CONDITIONS PRIOR TO BIDDING AND COMMENCEMENT OF WORK.
- C. REVIEW THE CONTRACT DRAWINGS AND SPECIFICATIONS TO COORDINATE THE PLACEMENT OF PLUMBING WORK WITH THE WORK OF OTHER TRADES.
- D. PROVIDE FOR ALL CUTTING, PATCHING AND FIRE STOPPING REQUIRED TO ACCOMPLISH WORK SHOWN. PATCH AND SEAL OPENINGS TO MATCH EXISTING WALLS, FLOORS, CEILINGS, ETC. UNLESS OTHERWISE INDICATED. ALL WORK IN FINISHED AREAS SHALL BE CONCEALED UNLESS OTHERWISE INDICATED OR DIRECTED BY THE OWNER'S REPRESENTATIVE.
- E. FIELD VERIFY THE LOCATIONS OF DIMENSIONS AND EXISTING CONDITIONS INCLUDING (PIPING, EQUIPMENT, STRUCTURAL ELEMENTS, ETC.) PRIOR TO COMMENCING WITH WORK. PROVIDE FITTINGS, TRANSITIONS, OFFSETS, ELEVATION CHANGES, ETC. TO MINIMIZE CONFLICTS WITH EXISTING CONDITIONS.
- F. PROVIDE ALL GAS, WATER, DRAINS, INDIRECT WASTE, ETC. CONNECTIONS TO PUMPING AND MECHANICAL EQUIPMENT AS INDICATED ON THE PLANS. COORDINATE WITH OTHER TRADES FOR FINAL CONNECTION POINTS.
- G. PROVIDE ALL SUBMITTED EQUIPMENT AND SYSTEMS IN COMPLIANCE WITH THE MANUFACTURERS INSTALLATION INSTRUCTIONS AND SPECIFICATIONS.
- H. ALL PHYSICAL ATTRIBUTES OF WASH BAY SYSTEMS, EQUIPMENT AND DEVICES ARE BASED ON THOSE MANUFACTURERS LISTED IN THE SPECIFICATIONS AND/OR THE EQUIPMENT SCHEDULES. PROVIDE FOR ALL CHANGES BROUGHT ABOUT BY THE USE OF ITEMS SUBMITTED AND BY OTHER MANUFACTURERS AT NO COST TO OWNER. THE OWNER HAS RESERVED THE RIGHT TO REJECT ITEMS BY OTHER MANUFACTURERS. PROVIDE FOR PIPING FOR ACTUAL PURCHASED EQUIPMENT IN COMPLIANCE WITH MANUFACTURERS WRITTEN INSTALLATION INSTRUCTIONS.
- I. PROVIDE FOR ALL NECESSARY TEMPORARY WATER, GAS AND SEWER SERVICES TO THE BUILDING DURING ALL PHASES OF CONSTRUCTION. SCHEDULE DURING SYSTEMS SHUTDOWNS WITH OWNER, SYSTEM SHUTDOWNS SHALL NOT INTERFERE WITH BUILDING OPERATIONS.
- J. PROVIDE FOR THE PROPER OFF-SITE DISPOSAL OF ALL CONSTRUCTION DEBRIS AND/OR EXCAVATED MATERIALS ASSOCIATED WITH WORK IN THIS TRADE IN COMPLIANCE WITH LOCAL, NEW YORK STATE AND FEDERAL LAWS AND REQUIREMENTS.
- K. PERFORM MECHANICAL CLEANING AND WATER JET FLUSHING OF ALL SANITARY SEWERS ASSOCIATED WITH THE SCOPE OF WORK UPON COMPLETION OF THE PROJECT. ALL NEW FLOOR DRAINS AND TRAPS SHALL BE CLEANED. CLEAN AND FLUSH BUILDING MAIN SANITARY SEWER BRANCH FROM THE BUILDING EXIT POINT TO THE EXTERIOR MANHOLE UPON COMPLETION OF THE PROJECT WITH WATER UNDER PRESSURE.
- L. PROVIDE ALL MATERIALS, EQUIPMENT, LABOR, ETC. AS REQUIRED TO PERFORM THE CONTRACT WORK. ALL SYSTEMS AND EQUIPMENT SHALL BE COMPLETE AND OPERATIONAL.
- M. PERFORM ALL WORK IN COMPLIANCE WITH ALL NEW YORK STATE THRUWAY AUTHORITY, LOCAL, STATE, AND FEDERAL CODES AND ORDINANCES, AS WELL AS ALL APPLICABLE NFPA STANDARDS, AND OTHER REFERENCED STANDARDS.
- N. LOCATE PIPING TO PREVENT FREEZING. DO NOT INSTALL WATER PIPING IN EXTERIOR WALLS .
- O. THE DRAWINGS ARE SCHEMATIC IN INTENT. PROVIDE ALL MATERIALS, EQUIPMENT, AND LABOR NECESSARY FOR A COMPLETE INSTALLATION. ADJUST THE LOCATION OF ALL PIPING, STACKS, EQUIPMENT, AND CONNECTIONS TO ACCOMMODATE ACTUAL CONSTRUCTION CONDITIONS ENCOUNTERED; OBTAIN APPROVAL FROM THE ENGINEER OR OWNER'S REPRESENTATIVE FOR ALL BUT MINOR CHANGES. ALL EQUIPMENT SHALL BE INSTALLED TO BE FULLY ACCESSIBLE FOR OPERATION AND MAINTENANCE IN ACCORDANCE WITH MANUFACTURER'S INSTALLATION REQUIREMENTS.
- P. PROVIDE ALL EQUIPMENT IN COMPLETE COMPLIANCE WITH MANUFACTURERS INSTALLATION INSTRUCTIONS, AND THE PROJECT SPECIFICATIONS.
- Q. ALL GAS FIRED EQUIPMENT SHALL BE AGA APPROVED AND U.L. LISTED, AND INSTALLED IN COMPLETE CONFORMANCE TO AGA, U.L., NFPA REQUIREMENTS. ALL EQUIPMENT, VENTS, FLUES, AND MATERIALS SHALL CONFORM TO APPLICABLE ANSI, ASTM, AGA AND U.L. STANDARDS. MAINTAIN REQUIRED CLEARANCES FROM COMBUSTIBLES AS REQUIRED BY THE U.L. LISTING FOR EACH ITEM OF EQUIPMENT, VENT, FLUE, CHIMNEY, AND/OR MATERIAL. ENCLOSE ALL FLUES AND VENTS WITHIN THE BUILDING BY TWO HOUR RATED NON-COMBUSTIBLE CONSTRUCTION.
- R. PROVIDE CLEANOUTS AT THE BASE OF EACH VENT OR SANITARY STACK, AND CHANGES IN DIRECTION AS REQUIRED BY CODE. WALL CLEANOUTS IN FINISHED SPACES SHALL BE CONCEALED BY CHROME OR APPROVED CLEANOUT COVER. FLOOR CLEANOUT LOCATIONS SHALL BE ACCESSIBLE AND TWO (2) FEET AWAY FROM WALL AND OBSTRUCTIONS.
- S. PROVIDE A PRODUCT SUBMITTAL FOR PRODUCTS NOT IDENTIFIED IN THE PROJECT MANUAL OR ON THE DRAWINGS.
- T. TEST ALL EQUIPMENT AND SYSTEMS FOR PROPER OPERATION. PROVIDE FOR TESTING OF ALL PIPING AND EQUIPMENT IN COMPLIANCE WITH THE PLUMBING CODE OF NEW YORK STATE AND IN ACCORDANCE WITH MANUFACTURERS REQUIREMENTS.
- U. PROVIDE FOR ALL ACCESSORIES, INCLUDING HANGERS, SUPPORTS, CONTROLS, INSULATION, VALVES, AS REQUIRED FOR A COMPLETE INSTALLATION.
- V. INSULATE ALL NEW WATER PIPING IN COMPLIANCE WITH THE ENERGY CONSERVATION CONSTRUCTION CODE OF NEW YORK STATE AND THE SPECIFICATIONS. REPLACE INSULATION REMOVED OR DAMAGED DURING CONSTRUCTION.
- W. ALL DOMESTIC WATER PIPING UNDER A CONCRETE SLAB AND RISING THROUGH THE SLAB SHALL BE MADE OF TYPE K COPPER.

PLUMBING SYMBOLS LIST

- ===== UNDERGROUND TRENCH DRAIN PIPING
- WW —— UNDERGROUND WASH WATER
- W —— ABOVEGROUND WASH WATER
- U/G W —— UNDERGROUND WATER SUPPLY PIPING
- W —— ABOVEGROUND WATER SUPPLY PIPING
- V ----- VENT PIPING
- HPW —— ABOVEGROUND HIGH PRESSURE WATER PIPING
- UG-SA —— UNDERGROUND SANITARY PIPING
- U/G G —— UNDERGROUND GAS PIPING
- G —— ABOVEGROUND GAS PIPING
- PD —— PUMP DISCHARGE
- ⊗ FD FLOOR DRAIN
- ⊙ FCO FLOOR CLEANOUT
- FLOW DIRECTION
- ⊞ BALL VALVE
- ⊞⊞ DOUBLE CHECK VALVE ASSEMBLY
- ⊞ WHA WATER HAMMER ARRESTOR
- ⊞ LUBRICATED PLUG VALVE
- ⊞ CHECK VALVE

PLUMBING ABBREVIATIONS LIST

- B BOILER
- CO CLEANOUT
- DCV DOUBLE CHECK VALVE
- DN DOWN
- FCO FLOOR CLEANOUT
- FD FLOOR DRAIN
- G GAS
- HB HOSE BIBB
- HPW HIGH PRESSURE WATER
- PD PUMP DISCHARGE
- TD TRENCH DRAIN
- UH UNIT HEATER
- W WATER
- WHA WATER HAMMER ARRESTOR
- WW WASH WATER

GAS LOAD SCHEDULE				
PLAN DESIGNATION	UNIT TYPE	LOCATION	INPUT RATING (MBH)	NOTES
UH-1	UNIT HEATER	MECHANICAL ROOM	30	
UH-2	UNIT HEATER	WASH BAY	150	
B-1	BOILER	MECHANICAL ROOM	80	
HP-1	WASHER UNIT HEATER	MECHANICAL ROOM	440	

PUMP SCHEDULE									
PLAN DESIGNATION	TYPE	MANUFACTURER MODEL NO.	LOCATION	FLOW RATE (GPM)	HEAD (FT.)	ELECTRICAL DATA			NOTES
						H.P.	RPM	VOLTS/PH	
TP-1	INFLUENT PUMP	NETZSCH - NM045BY	MECHANICAL ROOM	50	-	5	1750	208/3/60	-
HP-1	HIGH PRESSURE WASH PUMP	RAMTEQ - BVNG SERIES	MECHANICAL ROOM	4	-	5	-	208/3/60	2000 PSI

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SIGNATURE:
STAMP:

AFFIXED ON:

SIGNATURE:
STAMP:



DATE	DESCRIPTION	BY	SYM.

REVISIONS

NEW YORK STATE THRUWAY AUTHORITY
DEPARTMENT OF ENGINEERING
200 SOUTHERN BLVD., ALBANY, N.Y. 12209

TITLE OF PROJECT
VEHICLE WASH BAYS

LOCATION OF PROJECT
VARIOUS LOCATIONS: (MP 382.4 & MP 390.1)

TITLE OF DRAWING
**PLUMBING NOTES,
ABBREVIATIONS, & SYMBOLS**



CONTRACT NUMBER:
TAB 16-34A

DATE:
JULY 2016

DRAWING NUMBER:
P-100

KEYED NOTES:

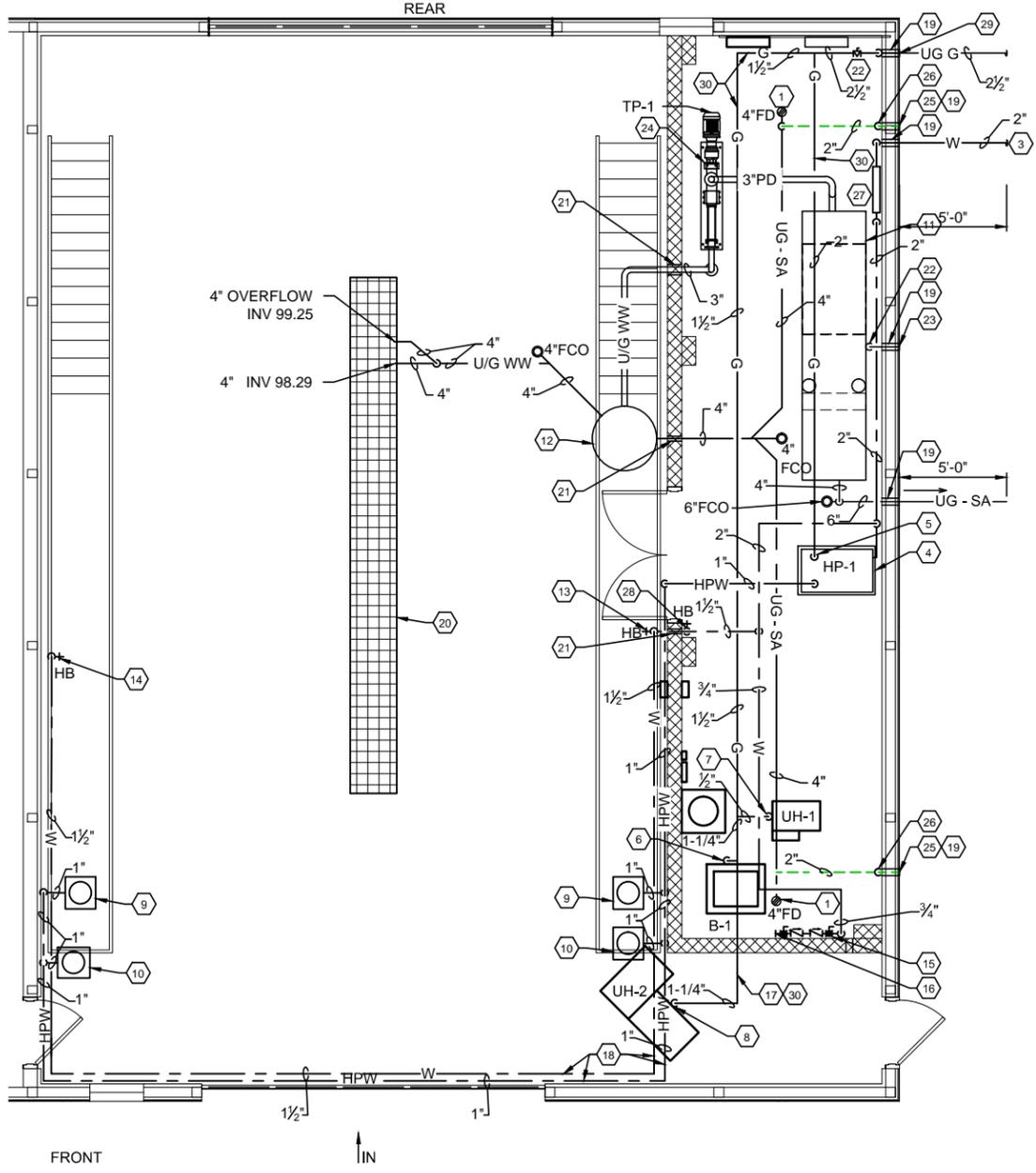
1. PROVIDE FLOOR DRAIN, 2" V., 4" SAN PIPING WITH DEEP SEAL TRAP.
2. PROVIDE 3" DISCHARGE PIPING TO 5'-0" OUTSIDE OF BUILDING. NYSTA PERSONNEL TO CONNECT TO EXISTING OWS AND LIFT STATION.
3. PROVIDE 2" WATER PIPING TO EXISTING WATER SUPPLY.
4. PROVIDE 4" EQUIPMENT PAD. REFER TO 3/M-103
5. PROVIDE GAS VALVE, UNION, DIRT LEG & 2" G. PIPING DOWN TO HP-1 (440 MBH).
6. PROVIDE GAS VALVE, UNION, DIRT LEG & 3/4" G. PIPING DOWN TO B-1 (80 MBH)
7. PROVIDE GAS VALVE, UNION, DIRT LEG & 1/2" G. PIPING TO UH-1 (30 MBH).
8. PROVIDE GAS VALVE, UNION, DIRT LEG & 1/4" G. PIPING TO UH-2 (150 MBH).
9. PROVIDE 1" WATER PIPING TO HOSE REEL ON GROUND LEVEL MOUNTED TO WALL.
10. PROVIDE 1" W. PIPING TO HOSE REEL ON CAT WALK.
11. PROVIDE 600 GALLON OIL WATER SEPARATOR, 4" SAN. AND 2" V. PIPING. (HIGHLAND TANK OR EQUAL 12'-6" FT X 3'-0") AT SITES 3,4,6,7, & 9. REFER TO 1/P-301.
12. PROVIDE GRIT CHAMBER.

13. PROVIDE HOSE BIBB WITH HOSE END DRAIN VALVE & 1 1/2" W. PIPING DOWN. PROVIDE 36" ABOVE FINISHED FLOOR.
14. PROVIDE HOSE BIBB WITH HOSE END DRAIN VALVE & 1 1/2" W. PIPING DOWN. PROVIDE 36" ABOVE CATWALK DECK.
15. PROVIDE 3/4" MAKE-UP WATER TO BOILER. LOCATE PIPING TIGHT TO WALL. REFER TO 5/P-501.
16. FINAL CONNECTION TO EQUIPMENT MAKE-UP WATER BY MECHANICAL CONTRACTOR.
17. ROUTE GAS ALONG CEILING (TYP) NOTE: ONE SITE (HARRIMAN) HAS PROPANE
18. ROUTE W. PIPING AS TIGHT AS POSSIBLE TO CEILING AND WALLS.
19. CORE DRILL EXTERIOR FOUNDATION WALL FOR PIPE PENETRATIONS. SEAL EXTERIOR WALL PIPE PENETRATIONS WITH MECHANICAL SEAL DEVICE.
20. REFER TO S-101 FOR TRENCH DRAIN.
21. PROVIDE PIPE SLEEVE AND FIRE STOPPING SYSTEM FOR PIPE PENETRATION THROUGH WALL. REFER TO 3/M-105.
22. PROVIDE 3" V. PIPING DOWN.
23. PROVIDE 3" HORIZONTAL PIPING THROUGH WALL EXTERIOR WALL. PROVIDE ZURN Z1472 AIR INLET OR APPROVED EQUAL. SECURE WATER TIGHT TO BUILDING WALL. LOCATE HIGH ON WALL.

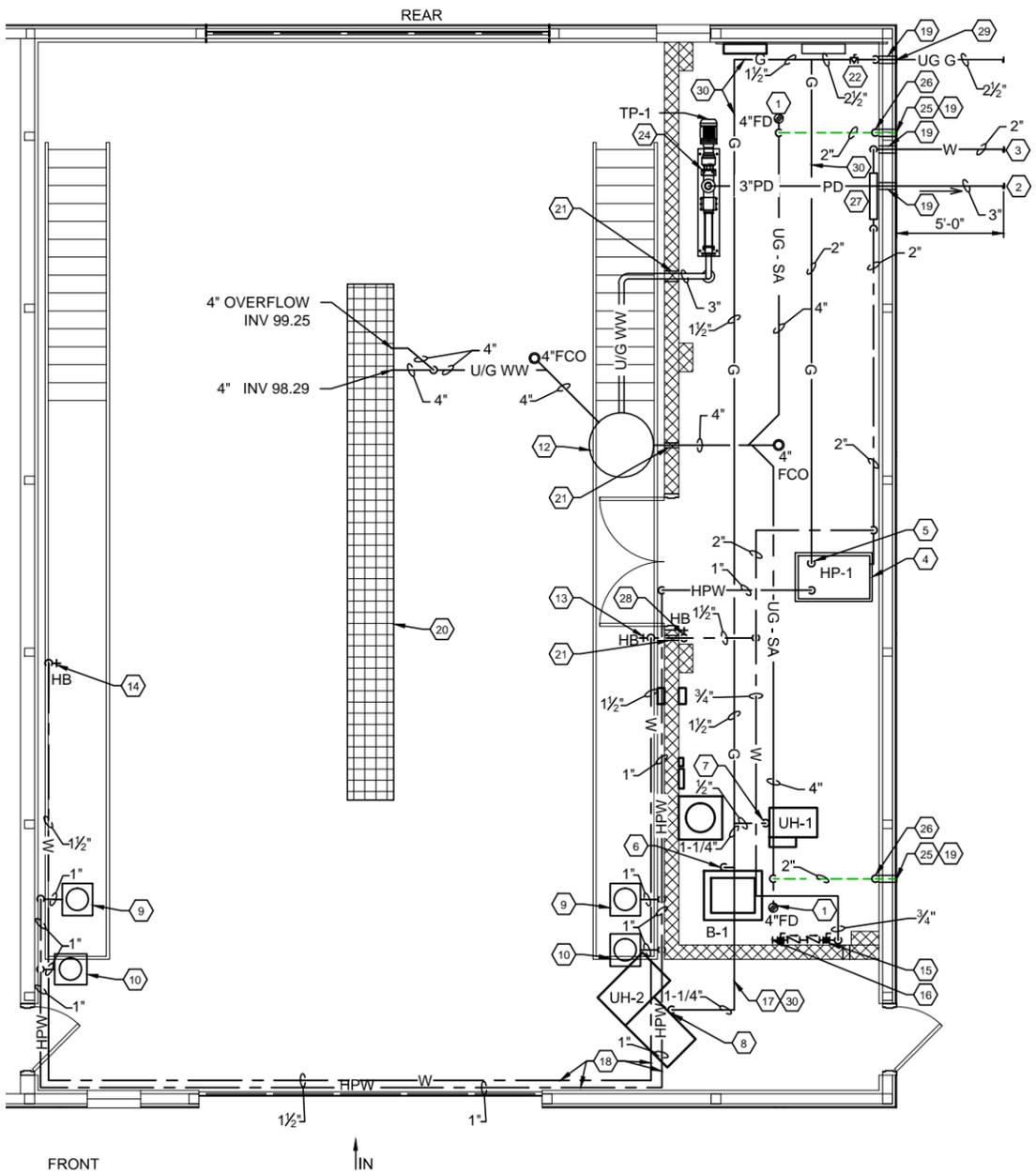
24. PROVIDE INFLUENT PUMP, 3" SAN. & 3" PUMP DISCHARGE PIPING.
25. PROVIDE 2" HORIZONTAL PIPING THROUGH WALL EXTERIOR WALL. PROVIDE ZURN Z1472 AIR INLET OR APPROVED EQUAL. SECURE WATER TIGHT TO BUILDING WALL.
26. PROVIDE 2" V. PIPING DOWN.
27. PROVIDE 2" DOUBLE CHECK VALVE ASSEMBLY(DCV).
28. PROVIDE HOSE BIBB WITH HOSE END DRAIN VALVE & 1/2" W. PIPING DOWN. PROVIDE 36" ABOVE FINISHED FLOOR.
29. PROVIDE 2 1/2" POLYETHYLENE GAS PIPING UNDERGROUND AND TRANSITION TO 3" STEEL WELD GAS PIPING THROUGH WALL INTO MECHANICAL ROOM.
30. PAINT ALL GAS STEEL PIPING (1) ONE COAT PRIMER (2) TWO COATS FINISH COAT. FINISH COLOR BY OWNER'S REPRESENTATIVE.

NOTES:

- A. SEE DWG. NO. G-100 FOR TABLE OF LOCATIONS AND SITE SPECIFIC REQUIREMENTS.
- B. PROVIDE SCHEDULE 80 PIPING AND FITTINGS FROM THE WASHER UNIT HEATER TO THE HOSE REELS.
- C. THE LAYOUT IS REVERSED AT 4 SITES. REFER TO G-100.



1 PLUMBING PLAN - WASH BAY WITH OIL WATER SEPARATOR
Scale: 1/4" = 1'-0"



2 PLUMBING PLAN - WASH BAY WITHOUT OIL WATER SEPARATOR
Scale: 1/4" = 1'-0"

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REVISIONS			

NEW YORK STATE THRUWAY AUTHORITY
DEPARTMENT OF ENGINEERING
200 SOUTHERN BLVD., ALBANY, N.Y. 12209

TITLE OF PROJECT
VEHICLE WASH BAYS
LOCATION OF PROJECT
VARIOUS LOCATIONS: (MP 362.4 & MP 390.1)

TITLE OF DRAWING
PLUMBING FLOOR PLAN

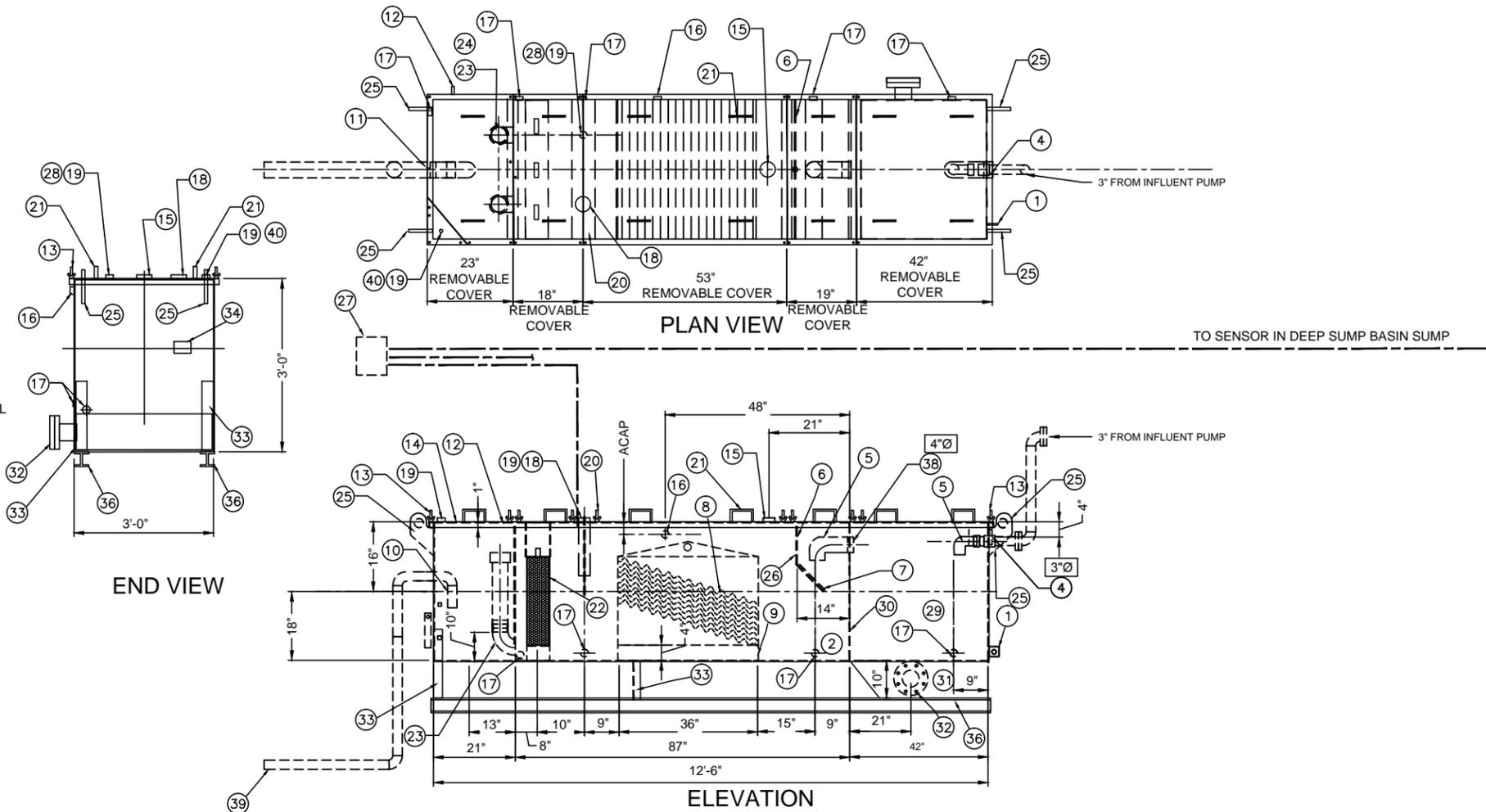


CONTRACT NUMBER:
TAB 16-34A
DATE:
JULY 2016
DRAWING NUMBER:
P-101

TA NUMBER/DWGS/DWG NUMBER
 CHECKED BY: JOHN ROMAN
 DRAFTED BY: KRIS WINKLER
 DESIGNED BY: KRIS WINKLER
 BUREAU DIRECTOR: JEFFREY MORRIS

OIL WATER SEPARATOR KEYED NOTES

1. 3"x3"x1/4" FLAT W/ 1/2"Ø HOLE DRILLED IN CENTER (GROUNDING LUG)
2. SEDIMENT CHAMBER
3. OIL WATER SEPARATOR CHAMBER
4. THREADED INLET
5. PVC INLET ELBOW PIPING
6. VELOCITY HEAD DIFFUSION BAFFLE - 10 GA.
7. WEAR PLATE - 1/4"
8. PARALLEL CORRUGATED PLATE COALESCER. CORELLA PVC PLATES (1" PLATE SPACING)
9. SLUDGE BAFFLE - 10 GA
10. 4" PVC OUTLET DOWNCOMER
11. NOT USED
12. (5) PIECE COVER - 10 GA.
13. NUTS & BOLTS W/ LARGE WITH LARGE WING NUTS - TYP. (CORROSION RESISTANT)
14. GASKET MATERIAL (FOR EACH REMOVABLE COVER)
15. 3"Ø NPT (CLEAN-OUT)
16. 2"Ø NPT (VENT)
17. 2"Ø NPT HALF COUPLING (DRAIN) W/STEEL PLUG
18. 3"Ø FULL COUPLING W/3"Ø INTERNAL PVC PIPE (OIL PUMP OUT)
19. 2"Ø HALF COUPLING (LEVEL SENSOR)
20. 7 GA. CROSSMEMBER 9" WIDE FOR OIL PUMP-OUT & LEVEL SENSOR FTG.
21. HANDLES PER H.T. (HIGHLAND TANK) STANDARD
22. 9" THICK PETROSCREEN COALESCER MATERIAL W/ALUMINUM EXPANDED METAL INSTALLED & PULL ROD SHIPPED LOOSE
23. 4"Ø STEEL ELBOW W/ HALF COUPLING WELDED TO TOP FOR PVC RISER PIPES
24. 4"Ø ADJUSTABLE FERNCO COUPLING
25. LIFTING LUGS
26. 1"Ø COUPLING W/ PLUG
27. CONTROL AND ALARM PANEL "E" MODIFIED 120V, 60HZ, 1PH, STANDARD
28. (2) FLOAT INTERFACE SENSOR W/ NEMA 4 CAP
29. SLUDGE CHAMBER
30. 7 GA. BULKHEAD
31. SLUDGE HOPPER
32. 4" DIA. 150# R.F.S.O. FLANGE FOR SLUDGE HOPPER CLEAN OUT DRAIN
33. 3" X 3" X 1/4" ANGLE LEGS
34. STANDARD OWS ID LABEL
35. (NOT APPLICABLE)
36. 4" BEAM SKID RUNNERS (2) REQ.
37. (NOT APPLICABLE)
38. PVC TRANSFER ELBOW PIPING
39. OUTLET PIPING TO SITE
40. (3) FLOAT PUMP CONTROL SENSOR W/NEMA 4 CAP



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GENERAL SPECIFICATIONS - OIL WATER SEPARATOR

NO. REQUIRED (1)
 CAPACITY: 600 GALLONS
 SPILL CAPACITY: 220 GALLONS
 TYPE: RECTANGULAR, HTC, ABOVEGROUND, SINGLE WALL, "G"
 MATERIAL: MILD CARBON STEEL
 FLOW RATE: 50 GPM GAUGE: 7 GA THROUGHOUT

SURFACE PREP:
 SSPC NO. 10 BLAST ALL INTERIOR SURFACES
 SSPC NO. 6 BLAST ALL EXTERIOR SURFACES
COATING:
 EXTERIOR-FINISH PAINT WHITE @ 3MILS
 INTERIOR - POLYURETHANE @ 15 MILS
CONSTRUCTION:
 BUTT FIT AND WELD ALL CORNERS IN & OUT

NOTE:
 1. ALL INTERNAL MATERIAL IS 10 GA.
 2. ALL FITTINGS MUST SHIP W/STEEL
 3. LIFTING LUGS DO NOT HAVE REINFORCING PLATES

GENERAL SPECIFICATIONS - GRIT CHAMBER

CAPACITY: 220 GALLONS
 OIL WATER SEPARATOR CHAMBER
 FLOW RATE: 50 GPM
 MATERIAL: MILD CARBON STEEL
 GAUGE OR THICKNESS:

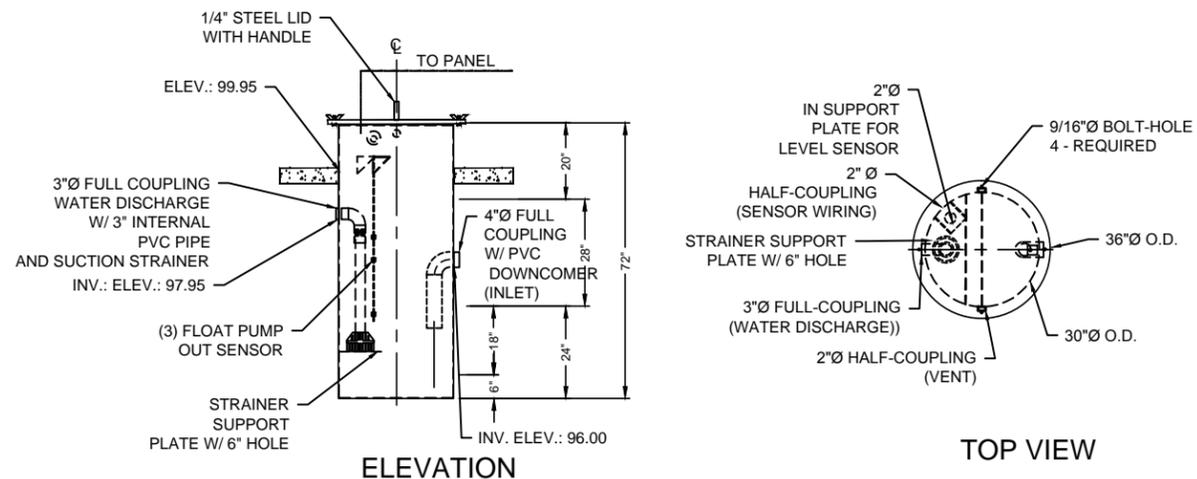
SHELL - 7 GA
 BOTTOM - 7 GA
 BAFFLE - 7 GA

SURFACE PREP:
 SSPC NO. 10 BLAST ALL INTERIOR SURFACES
 SSPC NO. 6 BLASS ALL EXTERIOR SURFACES

COATING:
 INTERIOR - POLYURETHANE - 15 MIL THICKNESS
 EXTERIOR - POLYURETHANE - 15 MIL THICKNESS

1 OIL WATER SEPARATOR
 SCALE: NOT TO SCALE

NOTE: PROVIDE ONLY AT SPECIFIC SITES AS INDICATED ON G-100.



2 GRIT CHAMBER ALL SITES
 SCALE: NOT TO SCALE

DATE	DESCRIPTION	BY	SYM.

REVISIONS

NEW YORK STATE THRUWAY AUTHORITY
 DEPARTMENT OF ENGINEERING
 200 SOUTHERN BLVD., ALBANY, N.Y. 12209

TITLE OF PROJECT
VEHICLE WASH BAYS

LOCATION OF PROJECT
 VARIOUS LOCATIONS: (MP 362.4 & MP 390.1)

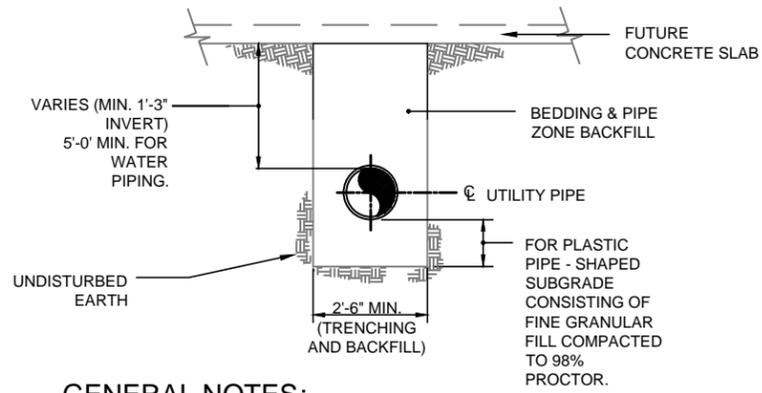
TITLE OF DRAWING
OWS AND GRIT CHAMBER DETAILS



CONTRACT NUMBER:
TAB 16-34A

DATE:
JULY 2016

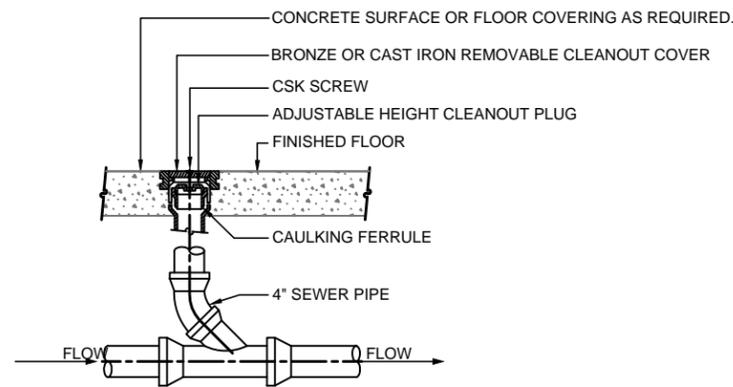
DRAWING NUMBER:
P-301



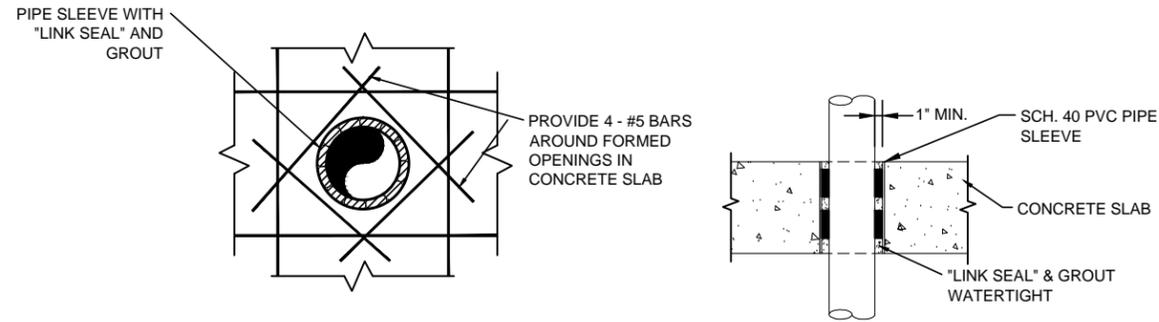
GENERAL NOTES:

- A. ALL EXCAVATION AND TRENCHING SHALL CONFORM WITH OSHA REQUIREMENTS AND ALL STATE AND LOCAL REGULATIONS. INCLUDING UTILITY INDICATOR TAPES OR TRACE WIRES PER THE ASSOCIATED UTILITY PER 811 / DIG SAFELY (APWA UNIFORM COLOR CODE) REQUIREMENTS.
- B. COMPACTION TESTING REQUIRED FOR TRENCH BACKFILL. REFER TO SPECIFICATIONS FOR REQUIREMENTS

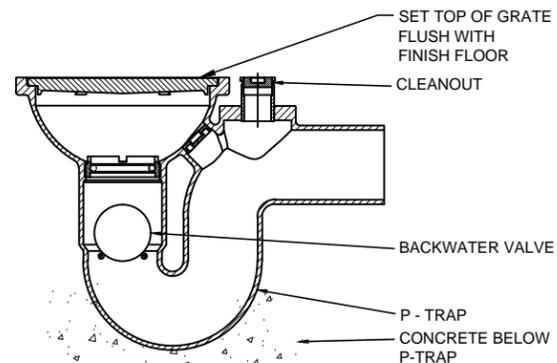
1 TYPICAL PIPE TRENCH
SCALE: NONE



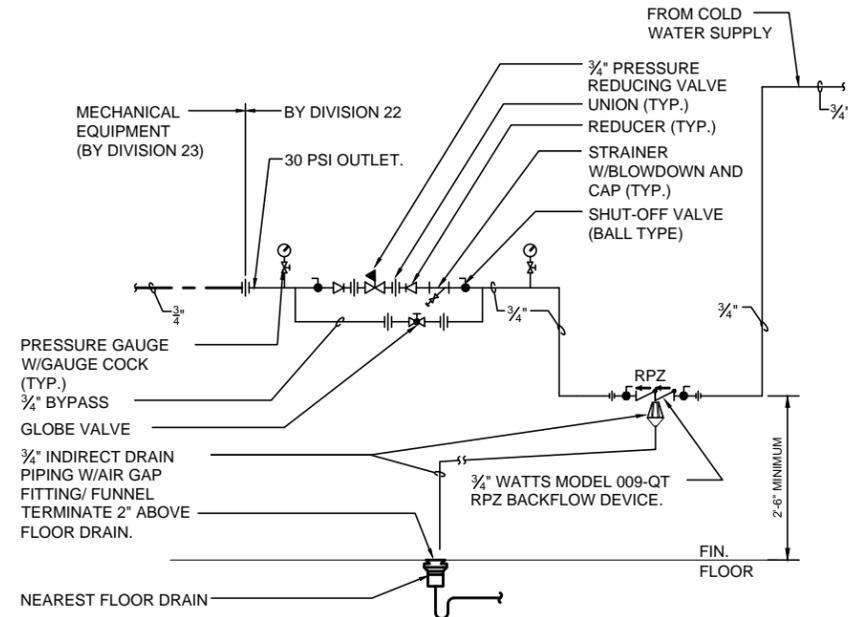
3 FLOOR CLEANOUT PIPING
SCALE: NONE



2 TYPICAL DETAILS - PIPE OPENING IN CONCRETE SLABS
SCALE: NONE



4 FLOOR DRAIN
SCALE: NONE



5 MECHANICAL MAKE-UP WATER BACKFLOW PREVENTION DEVICE
SCALE: NTS

- NOTES:**
LOCATE RPZ BACKFLOW PREVENTION DEVICE AS FOLLOWS:
A. A MINIMUM OF 30" TO A MAXIMUM OF 60" ABOVE FIN. FLOOR.
B. 8" TO 12" AWAY FROM SUPPORTING WALL.
C. PROVIDE 30" OF CLEARANCE IN FRONT OF DEVICE.
D. PROVIDE 12" OF CLEARANCE ABOVE DEVICE.

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TITLE OF PROJECT
VEHICLE WASH BAYS

LOCATION OF PROJECT
VARIOUS LOCATIONS: (MP 382.4 & MP 390.1)

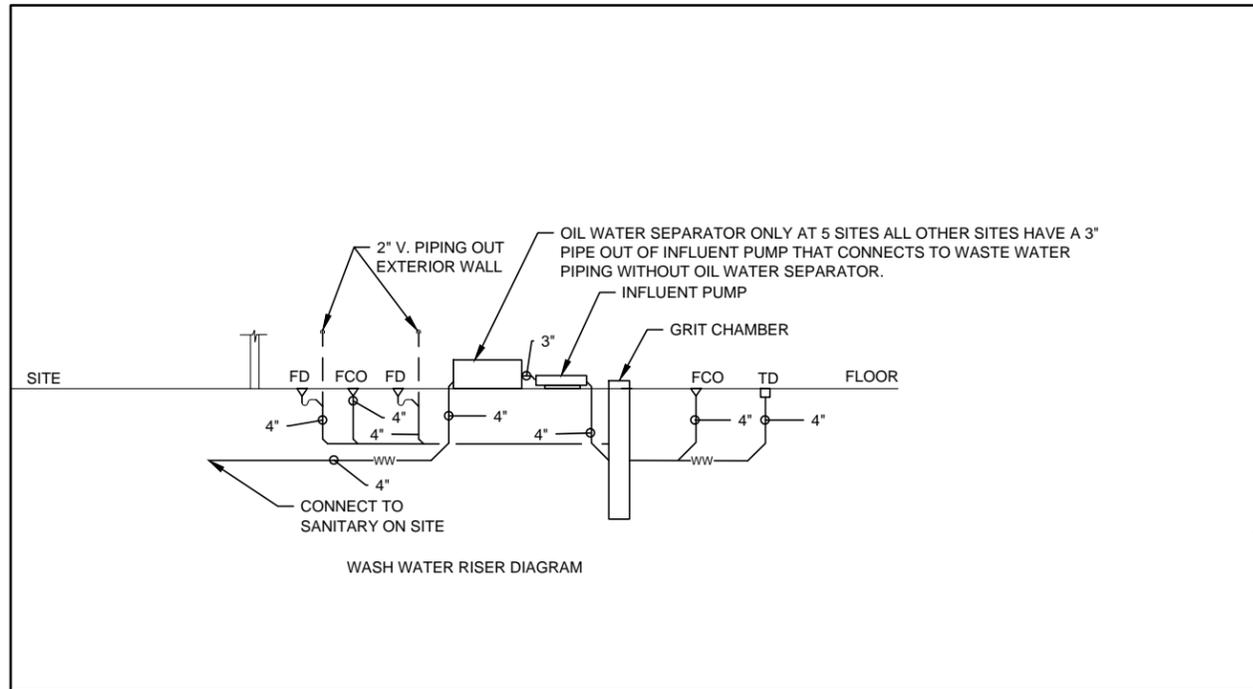
TITLE OF DRAWING
MISCELLANEOUS PLUMBING DETAILS



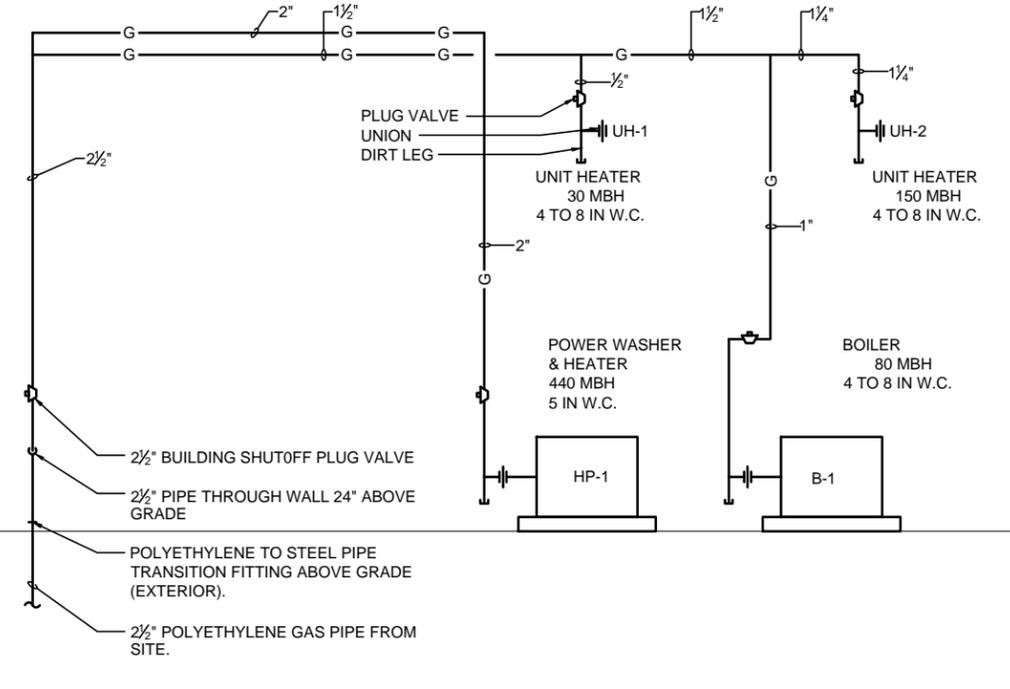
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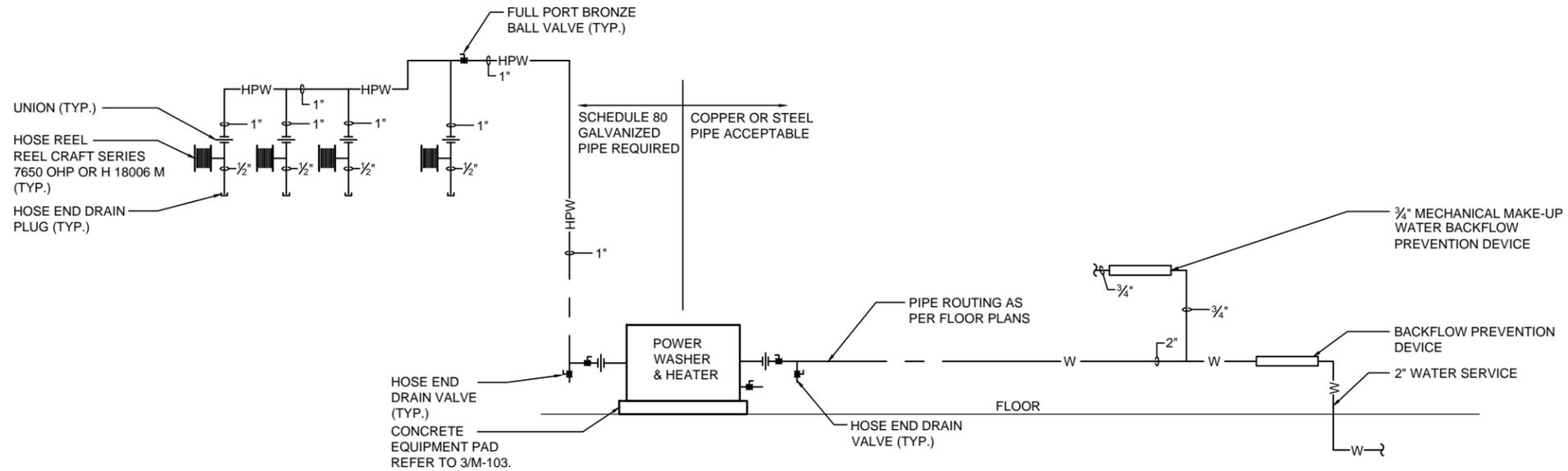
DRAWING NUMBER:
P-501



1 WASH WATER RISER DIAGRAM
SCALE: NONE



2 GAS PIPING SCHEMATIC
SCALE: NONE



2 WATER SYSTEM SCHEMATIC - PARTIAL
SCALE: NONE

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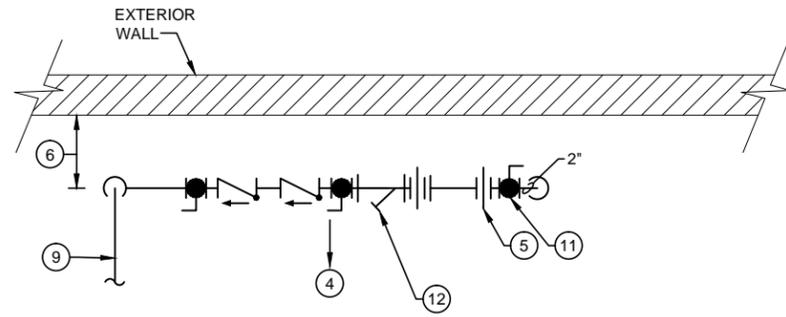
TITLE OF DRAWING
PLUMBING DETAILS

CONTRACT NUMBER:
TAB 16-34A
DATE:
JULY 2016
DRAWING NUMBER:
P-502

BURROU DIRECTOR: JEFFREY MORRIS
 DESIGNED BY:
 KRIS WINKLER
 CHECKED BY:
 JOHN HONAN
 DRAFTED BY:
 JEANETTE KOCH
 CHECKED BY:
 JOHN HONAN
 TA NUMBER/DWGS/DWG NUMBER

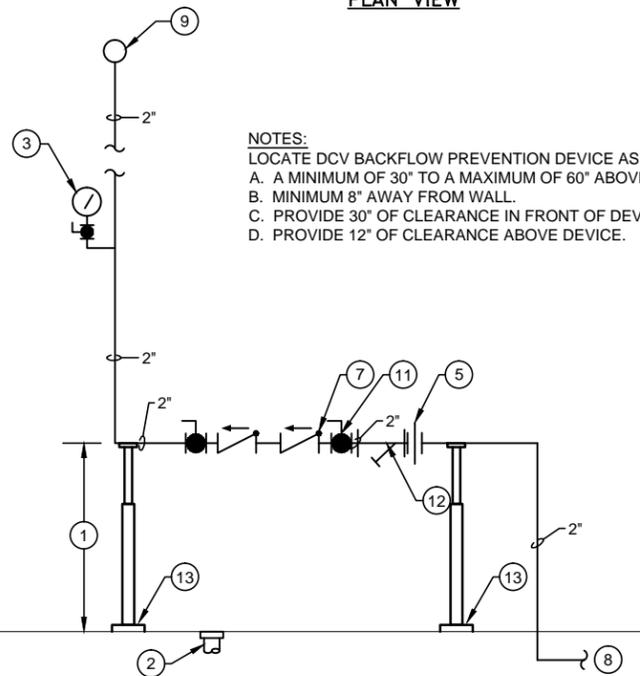
DETAIL NOTES: #

1. PIPE CENTERLINE 30" MIN. ABOVE FIN. FLOOR.
2. 4" FLOOR DRAIN.
3. PRESSURE GAUGE WITH SILLCOCK. 0-160 PSI.
4. PROVIDE 30" MIN. CLEARANCE IN FRONT OF BACKFLOW PREVENTION DEVICES.
5. DIELECTRIC UNION (TYPICAL).
6. PROVIDE 8" MIN. FROM CENTERLINE OF PIPE & DEVICES TO WALL.
7. DOUBLE CHECK VALVE BACKFLOW PREVENTION DEVICE.
8. PROVIDE 2" COPPER WATER SERVICE.
9. 2" COLD WATER PIPING TO BUILDING.
10. CORE DRILL MASONRY WALL & SEAL PIPE PENETRATION THRU WALL.
11. PROVIDE 2" BALL SHUT-OFF VALVE AS SERVICE SHUT-OFF.
12. 2" BRONZE LINE STRAINER WITH 1/2" BLOW-OFF AND BALL.
13. PROVIDE ADJUSTABLE STEEL STANCHION PIPE SUPPORTS BELOW METER & AT BASE OF RISER.



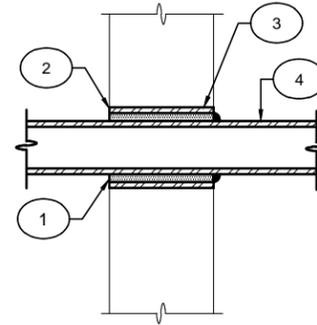
PLAN VIEW

- NOTES:**
 LOCATE DCV BACKFLOW PREVENTION DEVICE AS FOLLOWS:
 A. A MINIMUM OF 30" TO A MAXIMUM OF 60" ABOVE FIN. FLOOR.
 B. MINIMUM 8" AWAY FROM WALL.
 C. PROVIDE 30" OF CLEARANCE IN FRONT OF DEVICE.
 D. PROVIDE 12" OF CLEARANCE ABOVE DEVICE.



ELEVATION VIEW

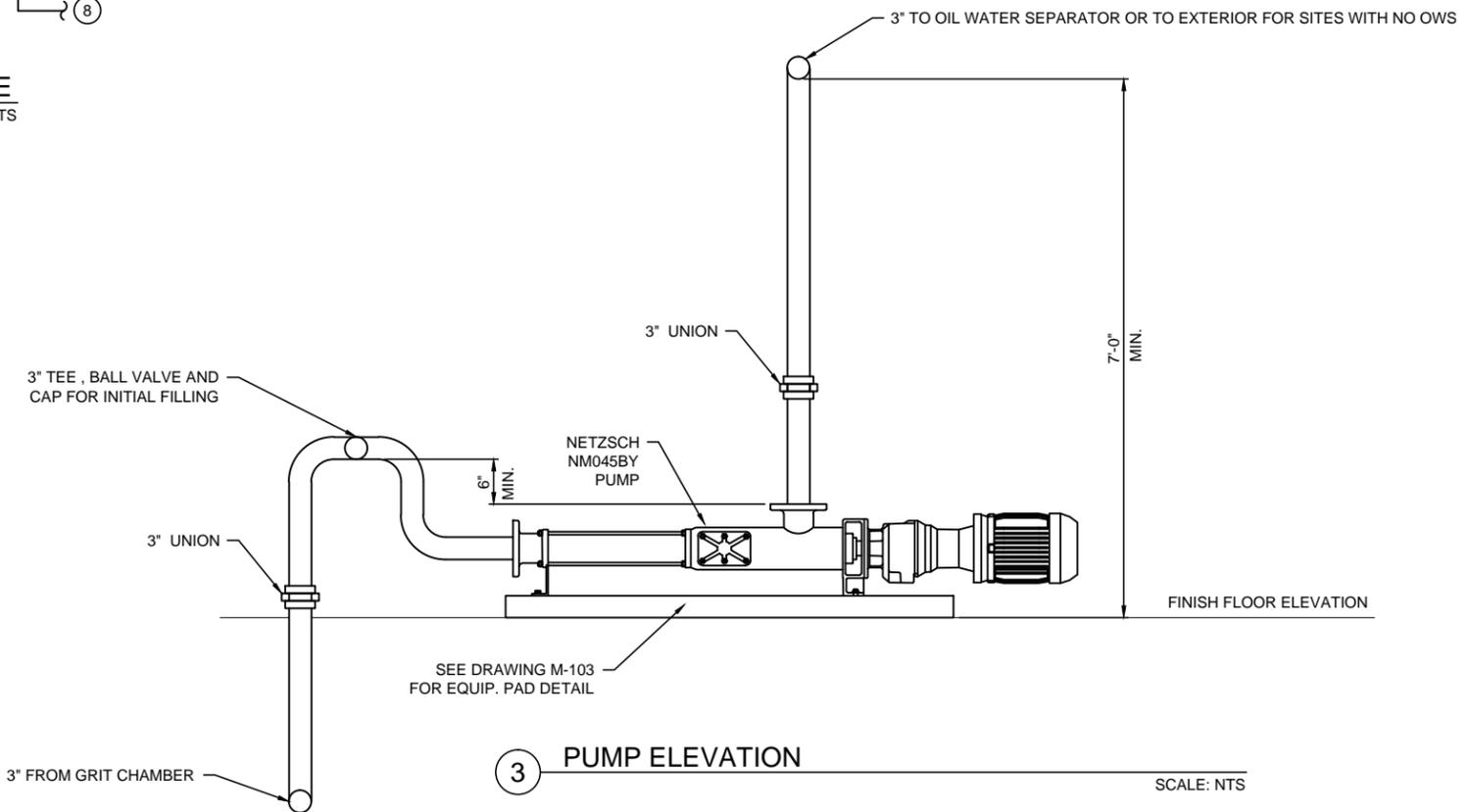
1 WATER SERVICE BACKFLOW PREVENTION DEVICE
SCALE: NTS



KEYED NOTES:

1. SEAL SLEEVE WITH LINK SEAL.
2. TERMINATE SLEEVE FLUSH WITH FINISHED WALL SURFACES.
3. PIPE SLEEVE AS REQUIRED BY MFR. FOR PROPER LINK SEAL INSTALLATION.
4. PIPE TO BE CENTERED IN SLEEVE - DO NOT SUPPORT PIPE FROM SLEEVE.

2 EXTERIOR WALL SLEEVE
SCALE: NTS



3 PUMP ELEVATION
SCALE: NTS

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

ALTERED ON:

SIGNATURE:
STAMP:

AFFIXED ON:

SIGNATURE:
STAMP:



DATE DESCRIPTION BY SYM.

REVISIONS

NEW YORK STATE THRUWAY AUTHORITY
 DEPARTMENT OF ENGINEERING
 200 SOUTHERN BLVD., ALBANY, N.Y. 12209

TITLE OF PROJECT
VEHICLE WASH BAYS

LOCATION OF PROJECT
 VARIOUS LOCATIONS: (MP 382.4 & MP 390.1)

TITLE OF DRAWING

PLUMBING DETAILS

	CONTRACT NUMBER: TAB 16-34A
	DATE: JULY 2016
	DRAWING NUMBER: P-503