STRUCTURAL INDEX & NOTES SHEET

EXISTING CONDITIONS

1. THE EXISTING CONSTRUCTION SHOWN ON THESE DRAWINGS IS PROVIDED FOR REFERENCE ONLY. EXISTING CONSTRUCTION, DIMENSIONS, LOCATIONS, ELEVATIONS, ETC. SHALL BE VERIFIED IN THE FIELD PRIOR TO REMOVAL OR MODIFICATION OF ANY EXISTING STRUCTURAL MEMBER AND/OR SHOP DRAWING PREPARATION, ORDERING MATERIALS, FABRICATION, AND CONSTRUCTION OF NEW WORK.

2. SHOULD EXISTING CONDITIONS DIFFER FROM THAT SHOWN ON THE CONTRACT DOCUMENTS, NOTIFY THE DESIGN PROFESSIONAL PRIOR TO CONTINUATION OF WORK.

3. EXISTING STRUCTURAL MEMBERS SHALL NOT BE CUT OR MODIFIED UNLESS SPECIFICALLY SHOWN HEREIN OR UNLESS APPROVED IN WRITING BY THE DESIGN PROFESSIONAL.

4. THE CONTRACTOR SHALL TAKE NECESSARY PRECAUTIONS TO PROTECT THE EXISTING STRUCTURE AND ADJACENT STRUCTURES FROM DAMAGE DURING EXCAVATION, DEMOLITION, AND CONSTRUCTION OF NEW WORK.

5. EXISTING STRUCTURAL DOCUMENTS ARE NOT AVAILABLE FROM THE OWNER. VERIFY IN FIELD EXISTING CONDITIONS, STRUCTURAL MEMBER SIZES, AND LOCATIONS.

SAFETY AND COORDINATION

1. THE CONTRACTOR SHALL ATTEND A PRE-CONSTRUCTION SAFETY AND COORDINATION MEETING WITH THE SITE PROJECT MANAGER OR DESIGNATED REPRESENTATIVE.

2. THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH THE SITE PROJECT MANAGER OR DESIGNATED REPRESENTATIVE, AND MISCELLANEOUS TRADES.

3. THE CONTRACTOR SHALL REFER TO SITE STANDARDS AND GUIDELINES FOR ADDITIONAL INFORMATION.

4. THE CONTRACTOR SHALL PERFORM WORK IN STRICT ACCORDANCE WITH OSHA REGULATIONS AND SITE SAFETY GUIDELINES.

MEANS AND METHODS

1. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING MEANS, METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES FOR THE CONSTRUCTION OF THE PROJECT.

2. THE CONTRACTOR SHALL ENGAGE A PROFESSIONAL ENGINEER FOR MEANS AND METHODS OF CONSTRUCTION, INCLUDING BUT NOT LIMITED TO SCAFFOLDING, SHORING, UNDERPINNING, TEMPORARY BRACING, HOISTING, AND STORING OF MATERIALS OR EQUIPMENT ON THE EXISTING OR NEW STRUCTURE, ETC.

3. THE CONTRACTOR AND CONTRACTOR'S ENGINEER SHALL INSPECT, ASSESS, AND VERIFY THE EXISTING CONDITIONS AND EXTENT OF WORK PRIOR TO COMMENCING CONSTRUCTION OF NEW WORK.

4. THE CONTRACTORS ENGINEER SHALL REFER TO SITE STANDARDS AND GUIDELINES FOR ADDITIONAL REQUIREMENTS.

5. THE CONTRACTOR SHALL PROVIDE NECESSARY EQUIPMENT AND OTHER PERTINENT MATERIAL, INCLUDING BUT NOT LIMITED TO LADDERS, LIFTS, AND OTHER CONSTRUCTION EQUIPMENT FOR THE COMPLETION OF THE WORK INDICATED ON THE CONTRACT DOCUMENTS.

6. THE CONTRACTOR SHALL REPAIR AND/OR REPLACE ANY DAMAGED STRUCTURAL MEMBER NOTED TO REMAIN.

7. CONSTRUCTION SHALL BE PERFORMED IN STRICT COMPLIANCE WITH FEDERAL, STATE, AND LOCAL RULES, REGULATIONS, CODES, AND LAWS.

8. THE CONTRACTOR SHALL PROVIDE SAFETY AND FALL PROTECTION IN ACCORDANCE WITH OSHA REGULATIONS AND SITE SAFETY GUIDELINES.

EXCAVATION AND BACKFILL

1. PERFORM SITE PREPARATION AND EXCAVATION WORK IN STRICT ACCORDANCE WITH OSHA REGULATIONS AND SITE STANDARDS AND GUIDELINES.

2. THE CONTRACTOR SHALL ENGAGE THE SERVICES OF AN UNDERGROUND UTILITY LOCATOR COMPANY TO SURVEY THE AREAS AND IDENTIFY LOCATIONS OF UNDERGROUND UTILITIES PRIOR TO EXCAVATION. THE UTILITY LOCATOR COMPANY SHALL UTILIZE APPROPRIATE METHODS SUCH AS GROUND PENETRATING RADAR, VACUUM EXCAVATION, AND ELECTRO-MAGNETIC SCANNING.

3. EXCAVATE SITE TO THE DEPTH AND EXTENT INDICATED ON THE CONTRACT DOCUMENTS.

4. HAND EXCAVATE AREAS WHERE CONGESTED UNDERGROUND UTILITIES ARE INDICATED ON SITE UNDERGROUND UTILITY DRAWINGS, SHOWN ON THE CONTRACT DRAWINGS, AND/OR INDICATED BY THE UTILITY LOCATOR COMPANY.

5. THE CONTRACTOR SHALL REMOVE AND REPLACE MATERIAL THAT CANNOT BE COMPACTED AND MATERIAL THAT CANNOT SUPPORT THE REQUIRED THICKNESS OF CONTROLLED COMPACTED FILL AND/OR FOUNDATION LOADS WITHOUT DETRIMENTAL SETTLEMENT. SUBGRADES AND LOAD BEARING FILLS SHALL BE COMPACTED TO 95 PERCENT OF MAXIMUM DRY DENSITY PER ASTM D1557.

6. THE CONTRACTOR SHALL PROVIDE NECESSARY PROTECTION TO PREVENT ANY FROST, SNOW, OR ICE FROM COVERING OR PENETRATING SUBGRADES BEFORE AND AFTER CONCRETE PLACEMENT. PROTECTIONS SHALL REMAIN UNTIL SUBGRADES ARE PROTECTED BY PERMANENT STRUCTURES OR BACKFILL.

7. FOUNDATIONS OR SLABS SHALL NOT BE PLACED INTO OR AGAINST ANY SUBGRADE CONTAINING FREE WATER, SNOW, FROST, OR ICE. IF WATER, SNOW, FROST, OR ICE ENTERS A FOUNDATION EXCAVATION AFTER SUBGRADE APPROVAL, THE SUBGRADE SHALL BE RE-INSPECTED BY THE TESTING AND INSPECTION AGENCY AFTER REMOVAL OF DELETERIOUS MATERIAL IS COMPLETE.

8. DESIGN, FURNISH, AND INSTALL ALL NECESSARY TEMPORARY SHEETING AND SHORING REQUIRED TO PERFORM AND MAINTAIN THE EXCAVATION AND PROTECT SURROUNDING UTILITIES AND STRUCTURES.

9. EXCAVATION BRACING SHALL BE DESIGNED BY A PROFESSIONAL ENGINEER RETAINED BY THE CONTRACTOR AND REGISTERED IN THE STATE IN WHICH THE BRACING WILL BE INSTALLED.

FOUNDATIONS

1. EXCAVATE LOCALLY TO THE DEPTH AND EXTENT INDICATED ON THE CONTRACT DOCUMENTS. SEE EXCAVATION AND BACKFILL NOTES FOR ADDITIONAL INFORMATION.

2. FOUNDATIONS SHALL BE FOUNDED UPON UNDISTURBED VIRGIN SOIL WITH A MINIMUM ALLOWABLE BEARING CAPACITY OF 1500 PSF.

3. EXTERIOR FOOTINGS SHALL BE A MINIMUM 1'-0" BELOW EXTERIOR FINISHED GRADE. VERIFY AND COORDINATE WITH SITE GRADING PLAN.

4. BOTTOM OF NEW FOOTINGS ADJACENT TO EXISTING FOOTINGS SHALL BE AT THE SAME ELEVATION AS THE EXISTING FOOTING UNLESS A 1.5 : 1 MAXIMUM SLOPE (HORIZONTAL : VERTICAL) IS MAINTAINED BETWEEN BOTTOM OF FOOTINGS.

CONCRETE COVER SCHEDULE FOR REINFORCING STEEL

CONCRETE EXPOSURE	MEMBER	REINFORCEMENT	COVER
CAST AGAINST AND PERMANENTLY IN CONTACT WITH SOIL/GROUND	ALL	ALL	3"
EXPOSED TO WEATHER OR IN CONTACT WITH SOIL/GROUND	ALL	#5 AND SMALLER	1 1/2"
		#6 AND LARGER	2"
NOT EXPOSED TO WEATHER OR IN CONTACT WITH SOIL/GROUND	SLABS, JOISTS, & WALLS	#11 AND SMALLER	3/4"
		#14 AND #18	1 1/2"
	BEAMS, COLUMNS, & PIERS	PRIMARY REINF, STIRRUPS & TIES	1 1/2"

CAST-IN-PLACE CONCRETE

1. CONCRETE WORK SHALL COMPLY WITH THE REQUIREMENTS OF THE ACI BUILDING CODE (ACI 318), THE ACI DETAILING MANUAL (ACI 315), AND THE SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS (ACI 301).

2. CONCRETE SHALL BE READY MIX IN COMPLIANCE WITH ASTM C94 WITH SCHEDULED MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS UNLESS OTHERWISE NOTED. MANUFACTURER SHALL BE CERTIFIED ACCORDING TO THE NATIONAL READY MIXED CONCRETE ASSOCIATION'S CERTIFICATION.

3. CONCRETE CONTRACTOR SHALL FOLLOW ACI RECOMMENDATIONS FOR PLACEMENT OF CONCRETE IN COLD WEATHER PER ACI 306.1 AND/OR HOT WEATHER PER ACI 305R.

4. CONCRETE MIX MATERIALS SHALL MEET THE FOLLOWING:
CEMENT: PORTLAND TYPE I/II ASTM C150
BLENDED HYDRAULIC CEMENT PER ASTM C595 IS PROHIBITED.
FLY ASH: ASTM C618 CLASS C OR F (25% MAX)
SLAG CEMENT: ASTM C989 GRADE 100 OR 120 (40% MAX)
NORMAL WEIGHT AGGREGATE: 3/4 INCH ASTM C33 (UNIFORMLY GRADED) CLASS 3S
WATER: POTABLE COMPLYING WITH ASTM C94
ADMIXTURES:
AIR ENTRAINING: ASTM C260
WATER REDUCING: ASTM C494 TYPE A
HIGH RANGE WATER REDUCING: ASTM C494 TYPE F
WATER REDUCING AND ACCELERATING: ASTM C494 TYPE E
WATER REDUCING AND RETARDING: ASTM C494 TYPE D
CORROSION-INHIBITING: ASTM C494 TYPE C (WHERE INDICATED)

5. SEE CONCRETE MATERIAL SCHEDULE FOR ADDITIONAL INFORMATION.

6. SEE "STRUCTURAL SUBMITTALS" SECTION FOR REQUIRED SUBMITTALS.

7. REINFORCING STEEL SHALL BE MANUFACTURED FROM HIGH STRENGTH BILLET STEEL CONFORMING TO ASTM A615, GRADE 60. EPOXY-COATED REINFORCING (WHERE INDICATED) SHALL CONFORM TO ASTM A775. WELDED WIRE FABRIC (FLAT SHEETS) SHALL COMPLY WITH ASTM A1064 (FORMER ASTM A185).

8. LAP BARS PER SCHEDULE. LAP WELDED WIRE FABRIC A MINIMUM OF 6 INCHES.

9. REINFORCING STEEL SHALL BE PLACED WITHIN TOLERANCES IN ACCORDANCE WITH ACI 117 AND SHALL HAVE CLEAR COVER PER ACI 318 (SEE SCHEDULE).

10. THE CONTRACTOR SHALL COORDINATE WITH ARCHITECTURAL, ELECTRICAL, MECHANICAL, AND PLUMBING DRAWINGS AND MISCELLANEOUS TRADES FOR OPENINGS, INSERTS, EMBEDMENTS, SLEEVES, ETC. REQUIRED TO BE CAST-IN-PLACE.

11. CONCRETE SHALL BE MOIST CURED FOR SEVEN DAYS. PROVIDE MOISTURE RETAINING COVERS WITH EDGES LAPPED 12 INCHES AND SEALED WITH WATERPROOF TAPE OR ADHESIVE. CONCRETE CONTRACTOR SHALL COORDINATE CONCRETE FINISHES WITH ARCHITECTURAL DRAWINGS AND FINISH SCHEDULE.

12. BONDING AGENT SHALL BE EPOXY ADHESIVE PER ASTM C881, TYPE V, GRADE 2.

13. GROUT SHALL BE NON-METALLIC, NON-SHRINK, 5000 PSI GROUT CONFORMING TO ASTM C1107.

14. JOINT SEALANT SHALL BE URETHANE SINGLE-COMPONENT, NONSAG, +/- 25% MOVEMENT, NONTRAFFIC USE PER ASTM C920, TYPE S, GRADE NS, USE NT.

ADHESIVE

1. ADHESIVE FOR DOWELS OR ANCHORS SHALL BE INSTALLED WITH HILTI HIT-HY 200 ADHESIVE AS MANUFACTURED BY HILTI, INC OR APPROVED EQUAL.

2. ADHESIVE SHALL BE INSTALLED IN STRICT ACCORDANCE WITH THE MANUFACTURER'S INSTALLATION INSTRUCTIONS.

3. THE CONTRACTOR INSTALLING THE DOWELS OR ANCHORS SHALL BE TRAINED IN THE USE OF THE ADHESIVE MATERIAL FOR THE SPECIFIC INSTALLATION APPLICATION.

CONCRETE MATERIAL SCHEDULE

USAGE	UNIT WEIGHT	f'c (PSI)	MAX W/C	AIR CONTENT	EXPOSURE CLASS
EXTERIOR SITE WORK	145 PCF	4500	0.45	6%	F2
INTERIOR HOUSEKEEPING PAD	145 PCF	4000	0.50	3%	F0

NOTES:
1. TOLERANCE FOR UNIT WEIGHT IS ±3 PCF
2. TOLERANCE FOR AIR CONTENT IS ±1.5% (ASTM C567) WHERE A RANGE IS NOT PROVIDED

TENSION DEVELOPMENT AND LAP SPLICE LENGTHS FOR GRADE 60 UNCOATED REBAR IN 4,000 PSI NORMAL WEIGHT CONCRETE

BAR SIZE	DEVELOPMENT LENGTH (IN)		CLASS B LAP SPLICE LENGTH (IN)		STANDARD 90° HOOK (IN)		
	TOP BAR	OTHER BAR	TOP BAR	OTHER BAR	EMBED	MIN LEG LENGTH	BEND DIAMETER
#3	19	15	24	19	7	6	2 1/4
#4	25	19	32	25	10	8	3
#5	31	24	40	31	12	10	3 3/4
#6	37	29	48	37	15	12	4 1/2
#7	54	42	70	54	17	14	5 1/4
#8	62	48	80	62	19	16	6
#9	70	54	91	70	22	19	9 1/2
#10	79	61	102	79	24	22	10 3/4
#11	87	67	113	87	27	24	12

NOTES:
1. STRAIGHT DEVELOPMENT AND CLASS B SPLICE LENGTHS SHOWN ABOVE ARE VALID FOR BARS WITH CENTER-TO-CENTER SPACING ≥ 3 BAR DIAMETERS WITHOUT TIES OR STIRRUPS OR ≥ 2 BAR DIAMETERS WITH TIES OR STIRRUPS, AND BAR CLEAR COVER ≥ 1 BAR DIAMETER.
2. TOP BARS ARE HORIZONTAL BARS PLACED SUCH THAT MORE THAN 12" OF FRESH CONCRETE IS CAST BELOW THE BAR.

TENSION DEVELOPMENT AND LAP SPLICE LENGTHS FOR GRADE 60 UNCOATED REBAR IN 4,500 PSI NORMAL WEIGHT CONCRETE

BAR SIZE	DEVELOPMENT LENGTH (IN)		CLASS B LAP SPLICE LENGTH (IN)		STANDARD 90° HOOK (IN)		
	TOP BAR	OTHER BAR	TOP BAR	OTHER BAR	EMBED	MIN LEG LENGTH	BEND DIAMETER
#3	18	14	24	19	7	6	2 1/4
#4	24	18	32	24	9	8	3
#5	30	23	39	30	12	10	3 3/4
#6	35	27	46	36	14	12	4 1/2
#7	51	40	67	52	16	14	5 1/4
#8	59	45	77	59	18	16	6
#9	66	51	86	67	21	19	9 1/2
#10	74	57	97	75	23	22	10 3/4
#11	82	64	107	84	26	24	12

NOTES:
1. STRAIGHT DEVELOPMENT AND CLASS B SPLICE LENGTHS SHOWN ABOVE ARE VALID FOR BARS WITH CENTER-TO-CENTER SPACING ≥ 3 BAR DIAMETERS WITHOUT TIES OR STIRRUPS OR ≥ 2 BAR DIAMETERS WITH TIES OR STIRRUPS, AND BAR CLEAR COVER ≥ 1 BAR DIAMETER.
2. TOP BARS ARE HORIZONTAL BARS PLACED SUCH THAT MORE THAN 12" OF FRESH CONCRETE IS CAST BELOW THE BAR.

TESTING AND INSPECTIONS

1. THE OWNER OR OWNER'S REPRESENTATIVE SHALL ENGAGE A QUALIFIED INDEPENDENT TESTING AND INSPECTION AGENCY TO SAMPLE MATERIALS, PERFORM TESTS, INSPECT WORK, AND SUBMIT REPORTS TO ASCERTAIN CONFORMANCE WITH THE CONTRACT DOCUMENTS AND DESIGN PROFESSIONAL REVIEWED SUBMITTALS.

2. THE INDEPENDENT TESTING AND INSPECTION AGENCY SHALL PREPARE AND SUBMIT REPORTS OF INSPECTIONS AND TESTING WHICH INCLUDE, BUT ARE NOT LIMITED TO, PROJECT IDENTIFICATION NAME, PROJECT NUMBER, DATE OF REPORT, DATE OF INSPECTION OR TEST, NAME OF AGENCY, NAME OF PERSONNEL WHO PERFORMED THE TEST OR INSPECTION, SPECIFIC LOCATION OF TEST OR INSPECTION, STATEMENT OF COMPLIANCE OR NONCOMPLIANCE DEFICIENCY, AND ANY OTHER PERTINENT INFORMATION. "NONCOMPLIANCE" REPORTS SHALL BE RECTIFIED AND SUPERSEDED BY A "COMPLIANCE" REPORT.

3. THE INDEPENDENT TESTING AND INSPECTION AGENCY/CONSTRUCTION MANAGER/GENERAL CONTRACTOR SHALL MAINTAIN A NONCOMPLIANT DEFICIENCIES LOG FOR INSPECTION AND TESTING RESULTS THAT REQUIRE REMEDIATION AND RE-INSPECTION. NOTIFY THE ENGINEER OF RECORD DAILY OF NONCOMPLIANCE DEFICIENCIES LOGGED.

4. CONTRACTORS SHALL COOPERATE AND FACILITATE THE WORK OF THE INDEPENDENT INSPECTION AND TESTING AGENCY.

EARTHWORK AND FOUNDATIONS

THE INDEPENDENT TESTING AND INSPECTION AGENCY SHALL PERFORM INSPECTIONS AND TESTING OF EARTHWORK AND FOUNDATION BEARING CAPACITIES PER THE FOLLOWING MINIMUM REQUIREMENTS:

1. INSPECTION AND TESTING SHALL BE PERFORMED BY A GRADUATE ENGINEER, EDUCATED IN THE FIELD OF GEOTECHNICAL ENGINEERING AND UNDER THE DIRECT SUPERVISION OF A LICENSED PROFESSIONAL ENGINEER SUBMITTING CERTIFICATION.

2. TEST FOUNDATION SUBGRADE BEARING CAPACITIES.

3. TEST EARTHWORK COMPACTION.

CAST-IN-PLACE CONCRETE

THE INDEPENDENT TESTING AND INSPECTION AGENCY SHALL PERFORM INSPECTIONS AND TESTING OF CONCRETE AND CONCRETE REBAR IN ACCORDANCE WITH ACI 301 AND PER THE FOLLOWING MINIMUM REQUIREMENTS:

1. TEST COMPOSITE SAMPLES OF FRESH CONCRETE ACCORDING TO ASTM C172. OBTAIN ONE COMPOSITE SAMPLE FOR EACH DAY'S POUR OF EACH CONCRETE MIX EXCEEDING 5 CUBIC YARDS BUT LESS THAN 25 CUBIC YARDS. OBTAIN AN ADDITIONAL SET FOR EACH ADDITIONAL 50 CUBIC YARDS OR FRACTION THEREOF.

2. PERFORM SLUMP TESTS, ACCORDING TO ASTM C143, AT POINT OF PLACEMENT FOR EACH COMPOSITE SAMPLE, BUT NOT LESS THAN ONE TEST FOR EACH DAY'S POUR OF EACH CONCRETE MIX. PERFORM ADDITIONAL TESTS WHEN CONCRETE CONSISTENCY APPEARS TO CHANGE.

3. PERFORM AIR CONTENT TESTS, PER ASTM C231, FOR NORMAL WEIGHT CONCRETE. PERFORM ONE TEST FOR EACH COMPOSITE SAMPLE, BUT NOT LESS THAN ONE TEST FOR EACH DAY'S POUR OF EACH CONCRETE MIX.

4. PERFORM ONE CONCRETE TEMPERATURE TEST, PER ASTM C1064, FOR EACH COMPOSITE SAMPLE. PERFORM SAME TEST HOURLY WHEN AIR TEMPERATURE IS 40°F AND BELOW OR 80°F AND ABOVE.

5. CAST AND LABORATORY CURE, PER ASTM C31, ONE SET OF FOUR STANDARD CYLINDER SPECIMENS FOR EACH COMPOSITE SAMPLE. PERFORM COMPRESSIVE STRENGTH TESTS, PER ASTM C39, FOR TWO (2) LABORATORY-CURED SPECIMENS AT 7 DAYS AND TWO (2) AT 28 DAYS.

6. COMPRESSIVE-STRENGTH TEST REPORTS SHALL INCLUDE THE FOLLOWING IN ADDITION TO THE STANDARD REPORT INFORMATION NOTE PREVIOUSLY: DATE OF CONCRETE PLACEMENT, CONCRETE MIX PROPORTIONS AND MATERIALS, CONCRETE TRUCK BATCH TICKET NUMBER, SPECIFIC LOCATION OF CONCRETE BATCH IN WORK, DESIGN COMPRESSIVE STRENGTH AT 28 DAYS, COMPRESSIVE BREAKING STRENGTH, TYPE OF BREAK FOR 7 AND 28 DAY TESTS, AND STATEMENT OF COMPLIANCE OR NONCOMPLIANCE DEFICIENCY AND ANY OTHER PERTINENT INFORMATION.

7. INSPECTION AGENCY SHALL INSPECT PLACEMENT OF CONCRETE REBAR FOR COMPLIANCE WITH THE CONTRACT DOCUMENTS AND ENGINEER OF RECORD REVIEWED SHOP DRAWINGS.

STRUCTURAL SUBMITTALS

1. PREPARE AND SUBMIT A SCHEDULE OF STRUCTURAL SUBMITTALS. SUBMITTALS SHALL BE LISTED IN CHRONOLOGICAL ORDER BY DATES REQUIRED FOR CONSTRUCTION. ESTABLISH REVIEW DATES BASED ON TIME REQUIRED FOR REVIEW, ORDERING, FABRICATION, AND DELIVERY OF MATERIALS. SCHEDULE SHALL INCLUDE ADDITIONAL TIME FOR ADDITIONAL REVIEWS OF SUBMITTALS WHEN CORRECTIONS OR REVISIONS ARE NEEDED. SUBMITTAL REVIEW PERIODS MAY NOT OVERLAP BY MORE THAN ONE WEEK. ENGINEER IS NOT RESPONSIBLE FOR DELAYS RESULTING FROM SUBMISSION OF OVERLAPPING SUBMITTAL PACKAGES.

2. PREPARE SUBMITTALS INTO PDF PACKAGES, INCORPORATING COMPLETE INFORMATION INTO EACH PDF FILE. SUBMITTAL FILE NAMES SHALL BE A REASONABLE LENGTH. RED-LINED REVIEW PDF FILES WILL BE RETURNED.

3. USE OF THE CONTRACT DOCUMENTS AS SHOP DRAWINGS IS PROHIBITED. THE FABRICATOR/DETAILER/SUPPLIER SHALL PREPARE THEIR OWN SHOP DRAWINGS.

4. ALLOW A MINIMUM OF 10 BUSINESS DAYS FOR REVIEW OF EACH SUBMITTAL & RE-SUBMITTAL. ALLOW ADDITIONAL TIME, 15 BUSINESS DAYS MINIMUM, WHERE A SEQUENTIAL REVIEW IS REQUIRED BY TWO OR MORE DESIGN PROFESSIONALS.

5. THE CONTRACTOR SHALL COORDINATE SUBMITTALS THAT REQUIRE SEQUENTIAL REVIEW. ENGINEER RESERVES THE RIGHT TO WITHHOLD ACTION ON A SUBMITTAL REQUIRING COORDINATION WITH OTHER SUBMITTALS UNTIL RELATED SUBMITTALS ARE RECEIVED.

6. SHOP DRAWING SUBMITTALS SHALL BE PROPORTIONED INTO REASONABLY SIZED PACKAGES, CONTAINING NOT MORE THAN 100 SHEETS PER SUBMITTAL, UNLESS APPROVED BY ENGINEER PRIOR TO SUBMISSION.

7. SEE MATERIAL SPECIFICATIONS FOR POSSIBLE ADDITIONAL SUBMITTAL REQUIREMENTS.

8. SUBSTITUTION REQUESTS MAY BE CONSIDERED BY THE OWNER/OWNER REPRESENTATIVE AND THE ENGINEERING DESIGN PROFESSIONAL IF SUBMITTED A MINIMUM OF 21 CALENDAR DAYS PRIOR TO THE REQUIRED PURCHASE DATE AND/OR INSTALLATION DATE. THE SUBSTITUTION SUBMISSION SHALL PROVIDE THE FOLLOWING MINIMUM INFORMATION FOR REVIEW BY THE OWNER/OWNER REPRESENTATIVE AND THE ENGINEERING DESIGN PROFESSIONAL:
CONTRACTOR STATEMENT INDICATING WHY SUBSTITUTION IS BEING REQUESTED.
CONTRACTOR DETAILED COMPARISON OF THE SUBSTITUTION AND CONTRACT DOCUMENT REQUIREMENTS FOR COMPATIBILITY INCLUDING COST SAVINGS TO THE OWNER AND CONSTRUCTION/DELIVERY TIME REDUCTION TO THE PROJECT SCHEDULE.
CONTRACTOR TO INDICATE THAT THE SUBSTITUTION HAS BEEN COORDINATED WITH OTHER CONTRACTOR WORK, IF APPLICABLE.
CONTRACTOR TO PROVIDE SIMILAR SUBMITTAL SUBMISSION AS REQUIRED BY THE CONTRACT DOCUMENTS.
OWNER/OWNER REPRESENTATIVE REVIEW AND ACCEPTANCE OF THE PROPOSED SUBSTITUTION BASED ON COST AND OR TIME SAVINGS.
SUBSTITUTION SUBMISSION REVIEW TIME FRAME SHALL BE AS PER THE CONTRACT DOCUMENT SUBMITTAL REVIEW TIME FRAME.
SUBMISSION OF SUBSTITUTIONS AS RFI'S WILL BE NOT BE REVIEWED.

CAST-IN-PLACE CONCRETE

1. CONCRETE MIX DESIGNS AND ASSOCIATED PRODUCT DATA, IN ACCORDANCE WITH ACI 301, ACI 211.1, AND ACI 211.2, SHALL BE SUBMITTED FOR REVIEW PRIOR TO PLACEMENT. SUBMITTAL SHALL INCLUDE COMPRESSIVE STRENGTH TEST RESULTS, MIX PROPORTIONS, AND PRODUCT DATA. PRODUCT DATA SHALL INCLUDE CEMENT MILL TEST CERTIFICATE, AGGREGATE GRADATION RESULTS, AND ADMIXTURE MANUFACTURER DATA SHEETS AND COMPATIBILITY LETTER. ADMIXTURES SHALL BE FROM A SINGLE SOURCE MANUFACTURER.

2. REINFORCING SHOP DRAWINGS, IN CONFORMANCE WITH ACI 315 AND ACI SP-66, INCLUDING BAR AND WELDED WIRE FABRIC REINFORCING, SHALL BE SUBMITTED FOR REVIEW PRIOR TO PLACEMENT.

ABBREVIATIONS

&	AND
@	AT
℄	CENTER LINE
Ø	DIAMETER
±	PLUS OR MINUS
AB	ANCHOR BOLT
ADDNL	ADDITIONAL
AFF	ABOVE FINISHED FLOOR
ALT	ALTERNATE
ARCH	ARCHITECTURAL
B/	BOTTOM OF
BAL	BALANCE
BB	BACK TO BACK
BFF	BELOW FINISH FLOOR
BLDG	BUILDING
BM	BEAM
BOT	BOTTOM
BASE PL	BASE PLATE
BRG	BEARING
BS	BOTH SIDES
CANT	CANTILEVER
CFMF	COLD-FORMED METAL FRAMING
CIP	CAST IN PLACE
CJ	CONTROL JOINT
CLG	CEILING
CLR	CLEAR
CM	CONSTRUCTION MANAGER
CMU	CONCRETE MASONRY UNIT
COL	COLUMN
CONC	CONCRETE
CONN	CONNECTION
CONST	CONSTRUCTION
CONT	CONTINUOUS
COORD	COORDINATE
CR	CRIPPLED
CTRD	CENTERED
D	DEMOLISHED
DBE	DECK BEARING ELEVATION
DBL	DOUBLE
DET	DETAIL
DIAG	DIAGONAL
DIM	DIMENSION
DN	DOWN
DWG	DRAWING
DWL	DOWEL
E	EXISTING
EA	EACH
EF	EACH FACE
EJ	EXPANSION JOINT
EL	ELEVATION
ELEC	ELECTRICAL
ELEV	ELEVATOR
EMBED	EMBEDMENT
EOD	EDGE OF DECK
EOR	ENGINEER OF RECORD
EOS	EDGE OF SLAB
EQ	EQUAL
EQUIP	EQUIPMENT
EW	EACH WAY
EWB	EACH WAY BOTTOM
EWEF	EACH WAY EACH FACE
EWT	EACH WAY TOP
EXP	EXPANSION
EXT	EXTERIOR
F	FUTURE
FD	FLOOR DRAIN
FDN	FOUNDATION
FIN	FINISH
FLR	FLOOR
FRP	FIBERGLASS REINFORCED PLASTIC
FS	FAR SIDE
FT	FEET
FTG	FOOTING
GA	GAGE
GALV	GALVANIZED
GB	GRADE BEAM
GC	GENERAL CONTRACTOR
HEF	HORIZONTAL EACH FACE
HGR	HANGER
HI	HIGH
HOR	HORIZONTAL
HP	HIGH POINT
HSC	HORIZONTAL SLOTTED CONNECTION
ID	INSIDE DIAMETER
IE	INVERT ELEVATION
IF	INSIDE FACE
IJ	ISOLATION JOINT
IN	INCHES
INFO	INFORMATION
JT	JOINT
K	KIPS (1000 LBS)
KB	KNEE BRACE
L	ANGLE
LB(S)	POUND(S)
LG	LONG
LLBB	LONG LEG BACK TO BACK
LLH	LONG LEG HORIZONTAL
LLV	LONG LEG VERTICAL
LO	LOW
LOC	LOCATION
LP	LOW POINT
LW	LIGHT WEIGHT
LWB	LONG WAY BOTTOM
LWT	LONG WAY TOP
M	MODIFIED
MATL	MATERIAL
MAX	MAXIMUM
MCJ	MASONRY CONTROL JOINT
MECH	MECHANICAL
MEP	MECH/ELEC/PLUMB
MEZZ	MEZZANINE
MFR	MANUFACTURER
MIN	MINIMUM
MISC	MISCELLANEOUS
MO	MASONRY OPENING
MTL	METAL
N	NEW
NA	NOT APPLICABLE
NIC	NOT IN CONTRACT
NOM	NOMINAL
NS	NEAR SIDE
NTS	NOT TO SCALE
NW	NORMAL WEIGHT
OC	ON CENTER
OD	OUTSIDE DIAMETER
OF	OUTSIDE FACE
OH	OVERHEAD
OPNG	OPENING
OPP	OPPOSITE
PC	PIECE
PEMB	PRE-ENGINEERED METAL BUILDING
PERIM	PERIMETER
PL	PLATE
PLF	POUNDS PER LINEAR FOOT
PLUMB	PLUMBING
PREFAB	PREFABRICATED
PSF	POUNDS PER SQUARE FOOT
R	REINFORCED
RD	ROOF DRAIN
REF	REFERENCE
REINF	REINFORCEMENT
REQ	REQUIRE
REQD	REQUIRED
RO	ROUGH OPENING
RQMT	REQUIREMENT
S	SLOPED
SCHED	SCHEDULE
SECT	SECTION
SIM	SIMILAR
SLBB	SHORT LEG BACK TO BACK
SOG	SLAB ON GRADE
SPEC	SPECIFICATION
SQ	SQUARE
SS	STAINLESS STEEL
STIFF	STIFFENER
STL	STEEL
STR	STRUCTURAL
SWB	SHORT WAY BOTTOM
SWT	SHORT WAY TOP
T/	TOP OF
T&B	TOP AND BOTTOM
THK	THICK
THRU	THROUGH
TYP	TYPICAL
UON	UNLESS OTHERWISE NOTED
VEF	VERTICAL EACH FACE
VERT	VERTICAL
VIF	VERIFY IN FIELD
VSC	VERTICAL SLOTTED CONNECTION
W/	WITH
WC	WIND COLUMN
WD	WOOD
WF	WIDE FLANGE
WP	WORK POINT
WWF	WELDED WIRE FABRIC

DESIGN CRITERIA

2018 NORTH CAROLINA BUILDING CODE - REFERENCES 2015 INTERNATIONAL BUILDING CODE

WIND DESIGN DATA

ULTIMATE WIND SPEED (3-SECOND GUST)	115 MPH
NOMINAL WIND SPEED (3-SECOND GUST)	89 MPH
RISK CATEGORY	II
EXPOSURE CATEGORY	C
WIND DIRECTION	ALL
INTERNAL PRESSURE COEFFICIENT	+/- 0.18
COMPONENTS AND CLADDING ROOF PRESSURES	NA - EQUIPMENT PAD
COMPONENTS AND CLADDING WALL PRESSURES	NA - EQUIPMENT PAD

SEISMIC DESIGN DATA

SEISMIC IMPORTANCE FACTOR, I_e	1.0
RISK CATEGORY	II
MAPPED SPECTRAL RESPONSE ACCELERATIONS:	
FOR SHORT PERIODS	$S_S = 0.150 \times g$
FOR 1-SECOND PERIODS	$S_1 = 0.075 \times g$
SPECTRAL RESPONSE PARAMETERS:	
FOR SHORT PERIODS	$S_{DS} = 0.160 \times g$
FOR 1-SECOND PERIODS	$S_{D1} = 0.120 \times g$
SEISMIC DESIGN CATEGORY	B
SITE CLASS	TYPE D (UNKNOWN)
SEISMIC RESPONSE COEFFICIENT, C_s	NA - EQUIPMENT PAD
RESPONSE MODIFICATION FACTOR	NA - EQUIPMENT PAD
DESIGN BASE SHEAR	NA - EQUIPMENT PAD
BASIC SEISMIC-FORCE-RESISTING SYSTEM	NA - EQUIPMENT PAD
ANALYSIS PROCEDURE	NA - EQUIPMENT PAD

SNOW DESIGN DATA

GROUND SNOW LOAD, P_g	15.0 PSF
FLAT ROOF SNOW LOAD, P_f	10.5 PSF
MINIMUM LOW-SLOPE ROOF SNOW LOAD, P_m	15.0 PSF
SNOW EXPOSURE FACTOR, C_e	1.0
SNOW LOAD IMPORTANCE FACTOR, I_s	1.0
THERMAL FACTOR, C_t	1.0
SNOW DRIFT LOADING	NA - EQUIPMENT PAD

GEOTECHNICAL DESIGN DATA

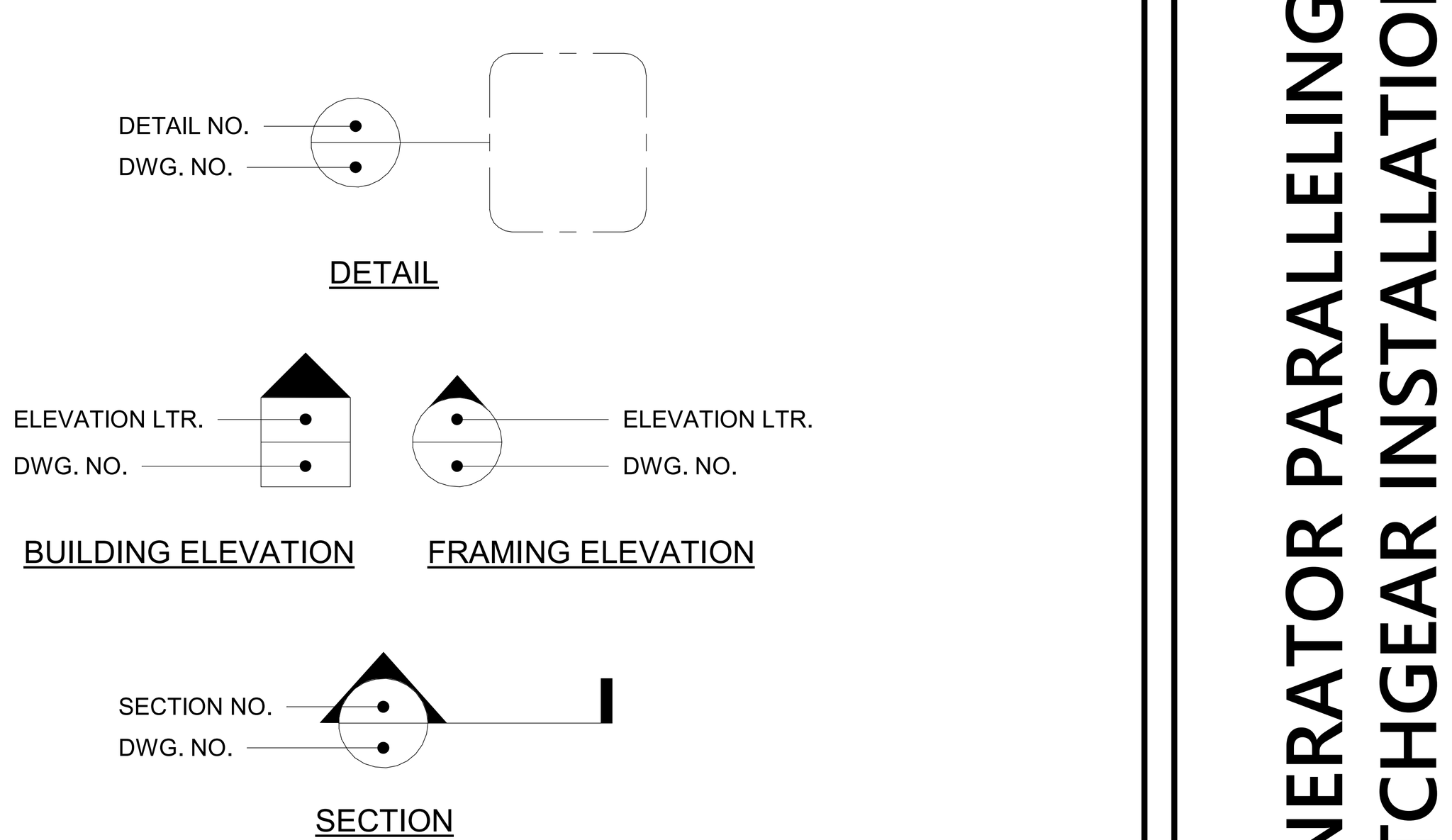
ALLOWABLE SOIL BEARING PRESSURE	1500 PSF

FLOOD DESIGN DATA

FLOOD DESIGN CLASS (PER ASCE 24)	2
LOWEST FLOOR ELEVATION	NA
DRY FLOODPROOF ELEVATION	NA
LOWEST HORIZ STRUCT MEMBER BOT ELEVATION	NA

SPECIAL INSPECTIONS FOR SEISMIC RESISTANCE

SYSTEMS	NA
COMPONENTS	NA



DRAWING SCHEDULE

DRAWING NUMBER NOMENCLATURE

S0.01
- DRAWING NUMBER IN SERIES
- DRAWING SERIES
- DISCIPLINE

DRAWING NUMBER	DRAWING TITLE	ISSUE DESCRIPTION: ISSUE FOR BID / ISSUE DATE: 21-JAN-2022	ISSUE FOR CONSTRUCTION / 20-APR-2022	BULLETIN #1 / 12-AUG-2022
S0.01	STRUCTURAL INDEX AND NOTES SHEET	X	X	X
S3.01	STRUCTURAL SLAB ON GRADE AND EXTERIOR EQUIPMENT YARD PLANS & DETAILS	X	X	X

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PROFESSIONAL ENGINEER
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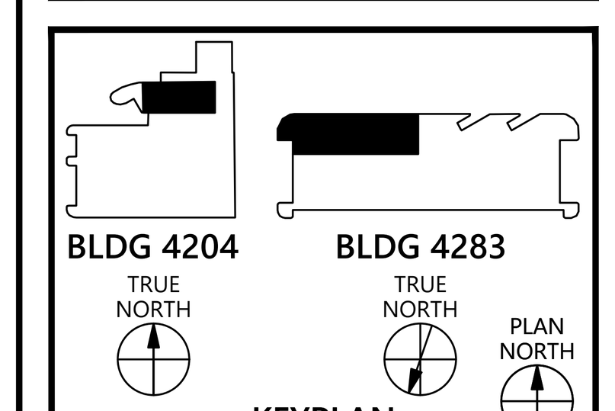


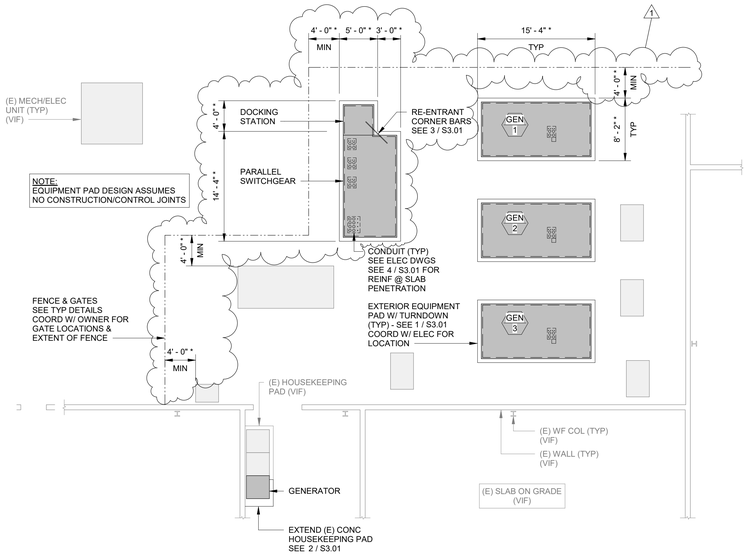
REV	DATE	DESCRIPTION
1	12-AUG-2022	BULLETIN #1
0	20-APR-2022	ISSUE FOR CONSTRUCTION
A	21-JAN-2022	ISSUE FOR BID

PRECIS PROJECT NO.: 21314

PROJECT MANAGER:	MAP
DISCIPLINE LEAD:	MAP
DESIGN LEAD:	NPD

SHEET TITLE:
STRUCTURAL INDEX AND NOTES SHEET

SHEET NUMBER:
S0.01



A S3.01 STRUCTURAL NEW WORK SLAB ON GRADE AND EXTERIOR EQUIPMENT YARD PLAN - BUILDING 4204

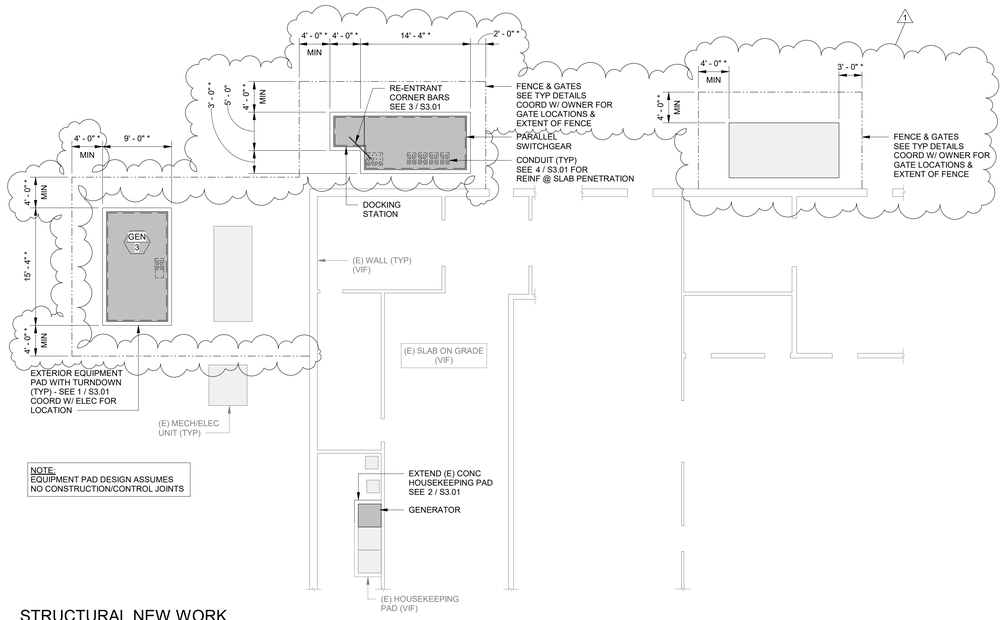
SCALE: 1/8" = 1'-0"

SLAB ON GRADE PLAN NOTES:

1. TOP OF SLAB ON GRADE REFERENCE ELEVATION = 0'-0" (ACTUAL TOP OF SLAB ON GRADE ELEVATION = 356'-6"), UNLESS OTHERWISE NOTED.
2. SLABS, AND PADS INDICATED THUS (E) IN PLAN ARE EXISTING TO REMAIN. EXISTING FOUNDATIONS, PIERS, SLABS, AND PADS SHOWN ARE FOR REFERENCE ONLY.
3. THE GENERAL CONTRACTOR/CONSTRUCTION MANAGER SHALL COORDINATE SIZE AND LOCATION OF CONCRETE PADS SHOWN WITH THE EQUIPMENT TO BE INSTALLED, ARCHITECTURAL, MECHANICAL, ELECTRICAL, AND PLUMBING DRAWINGS AND TYPICAL DETAILS.
4. REFER TO TYPICAL DETAILS FOR INFORMATION NOT REFERENCED IN PLAN.
5. REFER TO GENERAL NOTES AND SCHEDULES FOR ADDITIONAL INFORMATION.

EQUIPMENT NOTES:

1. THE CONCRETE PADS SHOWN HAVE BEEN DESIGNED FOR THE FOLLOWING EQUIPMENT OPERATING WEIGHTS:
   - GEN-1, GEN-2, GEN-3: 16,000 LBS 156 PSF
   - PARALLEL SWITCHGEAR: 15,000 LBS 162 PSF
   - DOCKING STATION: 500 LBS 80 PSF
   - GENERATOR: 2,000 LBS 223 PSF
2. THE GENERAL CONTRACTOR/CONSTRUCTION MANAGER SHALL OBTAIN CERTIFIED MANUFACTURER'S DRAWINGS FOR EQUIPMENT TO BE INSTALLED.
3. THE GENERAL CONTRACTOR/CONSTRUCTION MANAGER SHALL NOTIFY THE ENGINEER IF THE ACTUAL OPERATING WEIGHTS OF THE EQUIPMENT TO BE INSTALLED EXCEED THOSE LISTED ABOVE.
4. THE GENERAL CONTRACTOR/CONSTRUCTION MANAGER SHALL VERIFY THE CONCRETE PAD DIMENSIONS FOR THE EQUIPMENT TO BE INSTALLED AGAINST CERTIFIED MANUFACTURER'S INSTALLATION DRAWINGS.
5. THE GENERAL CONTRACTOR/CONSTRUCTION MANAGER SHALL COORDINATE DIMENSIONS INDICATED THUS (*) WITH MECHANICAL CONTRACTOR FOR EQUIPMENT TO BE INSTALLED PRIOR TO CONCRETE POUR.



B S3.01 STRUCTURAL NEW WORK SLAB ON GRADE AND EXTERIOR EQUIPMENT YARD PLAN - BUILDING 4238

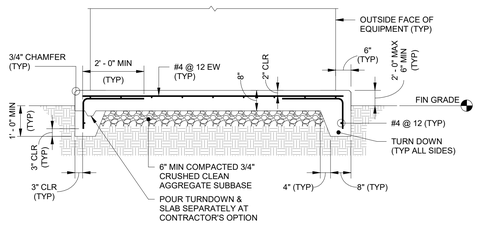
SCALE: 1/8" = 1'-0"

SLAB ON GRADE PLAN NOTES:

1. TOP OF SLAB ON GRADE REFERENCE ELEVATION = 0'-0" (ACTUAL TOP OF SLAB ON GRADE ELEVATION = 338'-0"), UNLESS OTHERWISE NOTED.
2. SLABS, AND PADS INDICATED THUS (E) IN PLAN ARE EXISTING TO REMAIN. EXISTING FOUNDATIONS, PIERS, SLABS, AND PADS SHOWN ARE FOR REFERENCE ONLY.
3. THE GENERAL CONTRACTOR/CONSTRUCTION MANAGER SHALL COORDINATE SIZE AND LOCATION OF CONCRETE PADS SHOWN WITH THE EQUIPMENT TO BE INSTALLED, ARCHITECTURAL, MECHANICAL, ELECTRICAL, AND PLUMBING DRAWINGS AND TYPICAL DETAILS.
4. REFER TO TYPICAL DETAILS FOR INFORMATION NOT REFERENCED IN PLAN.
5. REFER TO GENERAL NOTES AND SCHEDULES FOR ADDITIONAL INFORMATION.

EQUIPMENT NOTES:

1. THE CONCRETE PADS SHOWN HAVE BEEN DESIGNED FOR THE FOLLOWING EQUIPMENT OPERATING WEIGHTS:
   - GEN-3: 16,000 LBS 156 PSF
   - PARALLEL SWITCHGEAR: 15,000 LBS 132 PSF
   - DOCKING STATION: 500 LBS 80 PSF
   - GENERATOR: 2,000 LBS 223 PSF
2. THE GENERAL CONTRACTOR/CONSTRUCTION MANAGER SHALL OBTAIN CERTIFIED MANUFACTURER'S DRAWINGS FOR EQUIPMENT TO BE INSTALLED.
3. THE GENERAL CONTRACTOR/CONSTRUCTION MANAGER SHALL NOTIFY THE ENGINEER IF THE ACTUAL OPERATING WEIGHTS OF THE EQUIPMENT TO BE INSTALLED EXCEED THOSE LISTED ABOVE.
4. THE GENERAL CONTRACTOR/CONSTRUCTION MANAGER SHALL VERIFY THE CONCRETE PAD DIMENSIONS FOR THE EQUIPMENT TO BE INSTALLED AGAINST CERTIFIED MANUFACTURER'S INSTALLATION DRAWINGS.
5. THE GENERAL CONTRACTOR/CONSTRUCTION MANAGER SHALL COORDINATE DIMENSIONS INDICATED THUS (*) WITH MECHANICAL CONTRACTOR FOR EQUIPMENT TO BE INSTALLED PRIOR TO CONCRETE POUR.

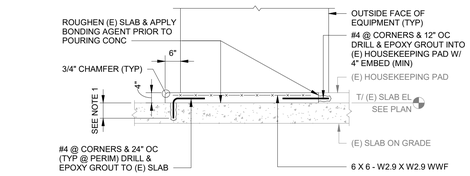


NOTES:

1. COORDINATE SIZE AND LOCATION OF EQUIPMENT PAD WITH RELATED TRADES.
2. COORDINATE ANCHORAGE DETAIL REQUIREMENTS WITH EQUIPMENT MANUFACTURER.
3. SUBSOIL BELOW PAD TO BE PREPARED AS REQUIRED TO SUSTAIN A MINIMUM ALLOWABLE BEARING PRESSURE OF 1500 PSF.

1 S3.01 TYPICAL DETAIL 8" EXTERIOR EQUIPMENT PAD WITH TURNDOWN

SCALE: NTS

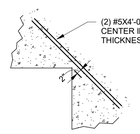


NOTES:

1. DEPTH OF EMBEDMENT SHALL BE 2 INCHES LESS THAN THE SLAB THICKNESS.
2. COORDINATE SIZE, LOCATION, AND QUANTITY OF PADS WITH RELATED TRADES.

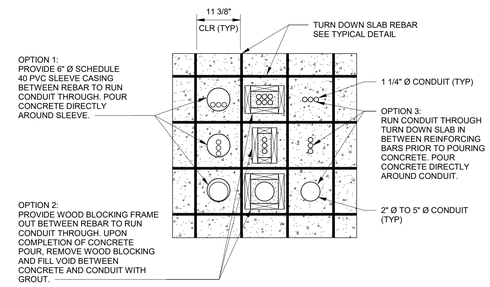
2 S3.01 TYPICAL DETAIL EXISTING HOUSEKEEPING PAD EXTENSION

SCALE: NTS



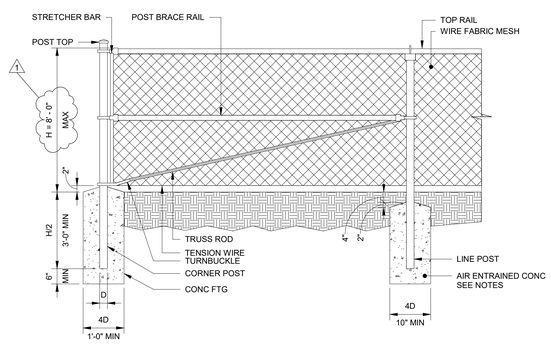
3 S3.01 TYPICAL DETAIL SLAB REINFORCMENT AT RE-ENTRANT CORNER

SCALE: NTS



4 S3.01 TYPICAL DETAIL SLAB PENETRATION OPTIONS

SCALE: NTS

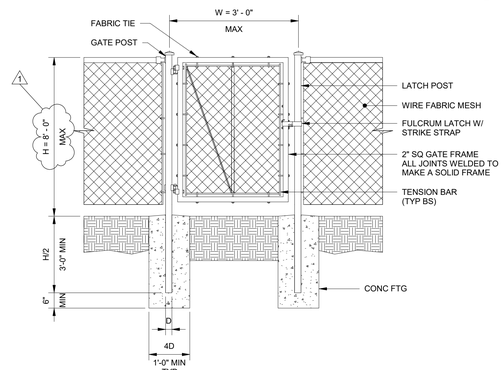


NOTES:

1. THIS DETAIL FOR WIRE FABRIC (CHAIN LINK) FENCE, 3'-0" TO 12'-0".
2. FENCE INSTALLATION SHALL BE PER ASTM F567.
3. ROUND STEEL PIPE: HEAVY INDUSTRIAL, STANDARD WEIGHT, SCHEDULE 40, GALVANIZED STEEL PIPE COMPLYING WITH ASTM F1083. ASTM F1043 MATERIAL DESIGN GROUP IC-L, ZINC COATING TYPE A.
4. PROVIDE BRACE RAIL AND TRUSS ROD ASSEMBLY FOR EACH GATE, END, AND PULL POST AS REQUIRED PER ASTM F567.
5. TENSION WIRE PER ASTM A824.
6. ZINC-COATED FABRIC MESH AND WIRE: MESH SIZE PER TABLE. WIRE SIZE AND COATING PER ASTM A392, ZINC COATING CLASS 1.
7. FABRIC SELVAGE: KNUCKLE TOP, TWIST BOTTOM.
8. FENCE FITTINGS SHALL BE PER ASTM F626. POSTS TOPS TO BE UNIFORM IN STYLE. MATCH EXISTING POST TOPS, WHERE APPLICABLE.
9. GATES AND BARBED WIRE, AS APPLICABLE AND PER DETAIL.

5 S3.01 TYPICAL DETAIL FENCE

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

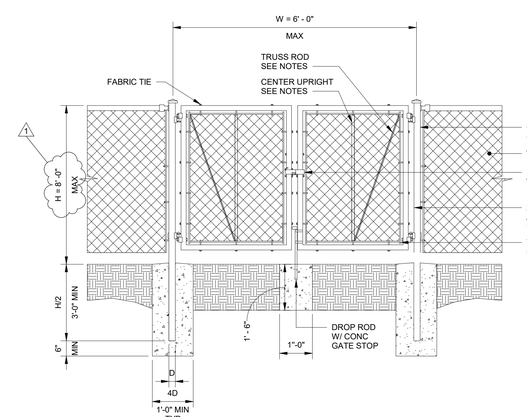


NOTES:

1. GATE HEIGHT, MATERIALS, COLOR, HARDWARE AND INSTALLATION SHALL BE PER THE WIRE FABRIC/CHAIN LINK FENCE DETAIL.
2. RESIDENTIAL GATES, MAX 6'H X 6'W, PER ASTM F654.
3. INDUSTRIAL/COMMERCIAL GATES PER ASTM F900.
4. CENTER UPRIGHTS ARE REQUIRED ON GATE LEAVES 8'-0" AND WIDER.
5. CENTER RAILS ARE REQUIRED ON GATE LEAVES 10'-0" AND HIGHER.
6. LATCHING MECHANISM AND LOCKS TO BE APPROVED BY OWNER.
7. GATES MAY BE ELECTRONICALLY OPERATED AT OWNER'S DISCRETION. HARDWARE AND INSTALLATION SHALL BE PER OWNER AND MANUFACTURER SPECIFICATIONS AND COMPLY WITH ASTM F2200.
8. BARBED WIRE, AS APPLICABLE, SHALL BE PER DETAIL AND INSTALLED ON ALL GATES IN ACCORDANCE WITH ASTM F900.

6 S3.01 TYPICAL DETAIL FENCE SINGLE DOOR OPENING

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



NOTES:

1. GATE HEIGHT, MATERIALS, COLOR, HARDWARE AND INSTALLATION SHALL BE PER THE WIRE FABRIC/CHAIN LINK FENCE DETAIL.
2. ALL GATES IN ACCORDANCE WITH ASTM F900.
3. ALL GATE LEAVES SHALL BE PROVIDED WITH GATE KEEPERS.
4. LOCKING DEVICES SHALL BE CONSTRUCTED SO THAT THE CENTER DROP ROD CANNOT BE RAISED WHEN THE GATE IS LOCKED.
5. CENTER UPRIGHTS AND TRUSS RODS ARE REQUIRED ON GATE LEAVES IN INTERVALS OF 8'-0".
6. CENTER RAILS ARE REQUIRED ON GATE LEAVES 10'-0" AND HIGHER.
7. LATCHING MECHANISM AND LOCKS TO BE APPROVED BY OWNER.
8. GATES MAY BE ELECTRONICALLY OPERATED AT OWNERS DISCRETION. HARDWARE AND INSTALLATION SHALL BE PER OWNER AND MANUFACTURER SPECIFICATIONS AND COMPLY WITH ASTM F2200.
9. BARBED WIRE, AS APPLICABLE, SHALL BE PER DETAIL AND INSTALLED ON ALL GATES IN ACCORDANCE WITH ASTM F900.

7 S3.01 TYPICAL DETAIL FENCE DOUBLE DOOR OPENING

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

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ALMAC Clinical Services

BLDG 4204 TRUE NORTH
BLDG 4283 TRUE NORTH
PLAN NORTH
KEYPLAN

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STRUCTURAL SLAB ON GRADE AND EXTERIOR EQUIPMENT YARD PLAN AND DETAILS

SHEET NUMBER:
S3.01