

DESIGN CRITERIA:

- 1. DESIGN CODE AND STANDARD: 2012 INTERNATIONAL BUILDING CODE... COLLATERAL LOAD: ROOF - (ROOFING, CEILING, LIGHTS, MEP, ETC) 10 PSF... LIVE LOAD: ROOF LIVE LOAD: 20 PSF (REDUCIBLE)... SNOW LOAD: GROUND SNOW LOAD, Pg (ASCE 7 VALUE) 30 PSF... WIND LOAD: ULTIMATE WIND SPEED (3-SEC GUST) 169 MPH...

COMPONENT AND CLADDING WIND PRESSURES:

WIDTH OF PRESSURE COEFFICIENT ZONE, a 3 FT

Table with columns: ROOF, SURFACE PRESSURES (PSF) 10 SF, 50 SF, >100 SF. Rows include Negative Zone 1, 2, 3, Positive All Zones, Overhang Zone 1 & 2, Overhang Zone 3.

Table with columns: WALL, SURFACE PRESSURES (PSF) 10 SF, 50 SF, >100 SF. Rows include Negative Zone 4, Negative Zone 5, Positive Zone 4 & 5.

NOTES:

- A. PLUS AND MINUS SIGNS SIGNIFY PRESSURES ACTING TOWARD AND AWAY FROM BUILDING SURFACES, RESPECTIVELY. B. COMPONENT AND CLADDING LOADS MAY BE INTERPOLATED BETWEEN THE WIND AREAS. C. REFER TO FIGURES 6-11A THROUGH 6-17 IN ASCE 7 FOR COMPONENT AND CLADDING WIND LOAD DIAGRAMS AND DEFINITIONS OF WIND ZONES 1 THROUGH 5.

- 7. SEISMIC LOAD: IMPORTANCE FACTOR, I 1.25... SPECTRAL RESPONSE ACCELERATIONS: Ss 1.553... SEISMIC DESIGN CATEGORY E... ANALYSIS PROCEDURE EQUIVALENT LATERAL FORCE PROCEDURE

EAST-WEST DIRECTION:

SEISMIC FORCE RESISTING SYSTEM STEEL ORDINARY MOMENT FRAME... RESPONSE MODIFICATION FACTOR, R 3.5... SEISMIC RESPONSE COEFFICIENT, Cs 0.357

NORTH-SOUTH DIRECTION:

SEISMIC FORCE RESISTING SYSTEM STEEL ORDINARY CONCENTRICALLY BRACED FRAMES... RESPONSE MODIFICATION FACTOR, R 3.25... SEISMIC RESPONSE COEFFICIENT, Cs 0.385

- 9. SOIL DESIGN PARAMETERS: SOIL UNIT WEIGHT 135 PCF... FROST DEPTH 36 INCHES... ALLOWABLE SOIL BEARING PRESSURES 4,000 PSF

GENERAL CONSTRUCTION:

- 1. STRUCTURAL DRAWINGS SHALL NOT BE SCALED. REFERENCE SCALES INDICATED ON THE DRAWINGS ARE INTENDED FOR INFORMATION USE ONLY... 2. PRIOR TO FABRICATION AND CONSTRUCTION, THE CONTRACTOR SHALL VERIFY EXISTING ELEVATIONS AND DIMENSIONS ASSOCIATED WITH THE WORK... 10. NO BLASTING ALLOWED ON SITE.

FOUNDATIONS:

- 1. FOUNDATION DESIGN IS BASED UPON THE FINDINGS OF THE TEST HOLES DUG ON JULY 24, 2019 BY JACOBS ENGINEERING AND CHAPTER 18 OF THE 2012 EDITION OF THE IBC... 2. SUBGRADE PREPARATION FOR GROUND SUPPORTED SLABS AND FOUNDATIONS SHALL BE IN ACCORDANCE WITH THE DETAILS ON THE CIVIL C-SERIES DRAWINGS... 10. f'c = 4,500 PSI @ 28 DAYS

CONCRETE:

- 1. ALL CONCRETE WORK SHALL CONFORM TO THE REQUIREMENTS OF THE FOLLOWING, UNLESS OTHERWISE SPECIFIED: ACI 301-10; SPECIFICATIONS FOR STRUCTURAL CONCRETE... 2. COMPRESSIVE STRENGTH (28-DAY): (4,500 PSI) / 2... 10. f'c = 4,500 PSI @ 28 DAYS

REINFORCING STEEL:

- 1. ALL REINFORCING STEEL SHALL BE DETAILED, FABRICATED, AND PLACED IN ACCORDANCE WITH THE FOLLOWING, UNLESS OTHERWISE SPECIFIED: ACI SP-66; ACI DETAILING MANUAL - 2004... 10. f'c = 4,500 PSI @ 28 DAYS

Table with columns: CONCRETE STRENGTH PSI, BAR SIZE (#3-#11), OTHER BARS (Ld, Ls), TOP BARS, ANY REBAR WITH MORE THAN 12" OF CONCRETE BELOW (Ld, Ls).

NOTES:

- A. TOP BARS ARE HORIZONTAL BARS WITH MORE THAN 12 INCHES OF CONCRETE CAST BELOW. B. REINFORCING BAR LENGTHS ARE BASED ON NORMAL-WEIGHT CONCRETE. C. WHEN REINFORCING BAR SPACING IS LESS THAN 2 db FOR BEAMS AND COLUMNS OR 3 db FOR ALL OTHER CONCRETE ELEMENTS, LENGTHS SHALL BE MULTIPLIED BY A FACTOR OF 1.5. (db = REINFORCING BAR DIAMETER)

PRE-ENGINEERED METAL BUILDINGS

- 1. METAL BUILDING SYSTEMS SHALL BE DESIGNED, DETAILED, FABRICATED, AND ERECTED IN ACCORDANCE WITH THE FOLLOWING, UNLESS OTHERWISE SPECIFIED: MBMA; METAL BUILDING SYSTEMS MANUAL, 2012... 11. A FOUNDATION REACTIONS SUBMITTAL SHALL BE SUBMITTED BEFORE FOUNDATION REINFORCING SHOP DRAWINGS ARE SUBMITTED AND SHALL INCLUDE MAGNITUDES AND DIRECTIONS OF REACTIONS TO ALLOW FOR VERIFICATION OF FOUNDATION DESIGNS.

JACOBS logo, STRUCTURAL, KODIAK LANDFILL AERATION TANK, KODIAK ISLAND BOROUGH, KODIAK, ALASKA, GENERAL STRUCTURAL NOTES, VERIFY SCALE, BAR IS ONE INCH ON ORIGINAL DRAWING, DATE NOVEMBER 2021, PROJ D3434201, DWG S-001, SHEET 12