PROJECT NARRATIVE

For a New

MULTIUSE BUILDING

66 Industrial Drive, Augusta, Maine

Owner:

State of Maine
Bureau of Real Estate Management
77 State House Station
Augusta, ME 04333-0077

Contact: John Blais
Phone: (207) 624-7318
Email: John.A.Blais@Maine.gov

Prepared by:

WBRC ARCHITECTS • ENGINEERS

44 Central Street, Bangor, ME 04401
Contact: Steve Pedersen, AIA, LEED^{AP}, Project Manager
Phone: (207) 947-4511
Email: steve.pedersen@wbrcae.com

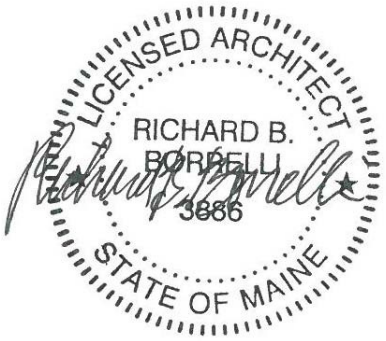
WBRC Project No. 4035.20

January 18, 2019

MAINE LICENSED PROFESSIONALS SEALS PAGE

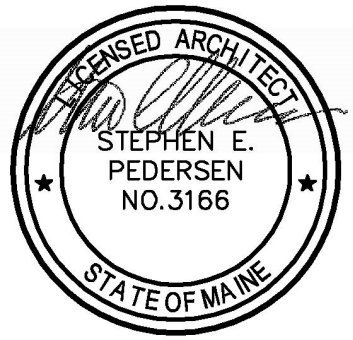
The recommendations presented in the following report were prepared by, or under the direct supervision of, the following Maine licensed professionals:

ARCHITECT



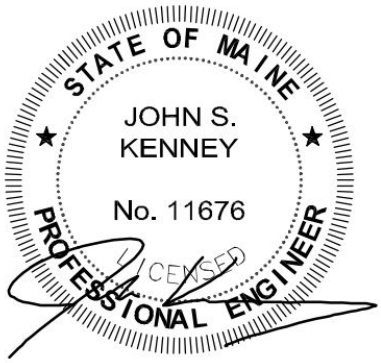
Richard Borrelli, AIA, LEED AP

ARCHITECT



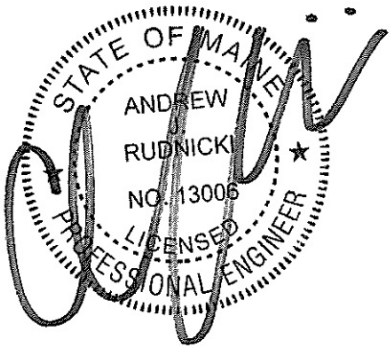
Stephen E. Pedersen, AIA, LEED AP

CIVIL ENGINEER



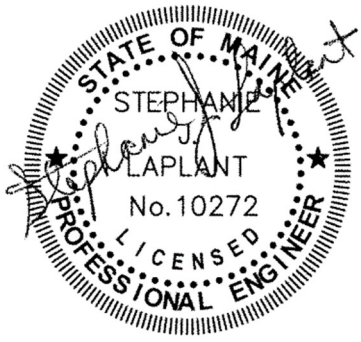
John S. Kenney, P.E.

MECHANICAL ENGINEER



Andrew J. Rudnicki, P.E.

ELECTRICAL ENGINEER



Stephanie J. Laplant, P.E.

TABLE OF CONTENTS

EXECUTIVE SUMMARY

The proposed building is approximately 38,000 gross square feet to house four state agencies now housed in both leased and state-owned buildings where other departments are vying for additional area. These agencies are: OIT Radio, OIT Print, Postal and Surplus. By joining them, a variety of advantages will be gained. OIT Print and Postal are linked by a need for security and the requirement of Print being able to seamlessly mail items statewide. Surplus needs to be near other vehicle-related state agencies adjacent to this site to consolidate and efficiently process, auction and liquidate surplus vehicles and equipment. OIT Radio is essentially the only outlier with no required connection to the others. They are vacating their existing space to the advantage of the co-located Maine DOT garage.

WBRC was asked to provide Bridging Documents for this project. As such, this submission is schematic design level with narrative and outline specifications allowing a design/builder to bid on the construction of the facility. Permitting preparation outlines the steps for permitting without submitting for such officially.

GENERAL DESCRIPTION

Project Site

1. Parking

The site is to accommodate employee parking for the four agencies housed, along with State Police and other State vehicles in the process of being equipped with technology such as computers and sophisticated communication systems. Along with these vehicles, a considerable parking area for approximately 300+/- cars is required for staging of surplus vehicles and construction equipment being liquidated periodically by Surplus. Some degree of parking available for members of the public attending the periodic auctions is to be accommodated, but, since this number can vary widely, it is not the defining factor. Adjacent state lots are used during these auctions as are neighboring roadsides.

2. Security

Security is required for both pedestrian and vehicular circulation on site. Given the housing of Postal and Print within the building, the restriction of outside visitor access is required. The inclusion of State Police vehicles onsite also requires they be within a fenced, gated perimeter with controlled access. The varying inventory of vehicles destined for auction is also a reason for the fenced perimeter. The entire facility requires security camera surveillance to prevent theft and / or vandalism onsite.

Proposed Building System

To accommodate the desired minimum 25’ height clearance within most of the building, a pre-engineered metal building system is preferred. This would include a low-slope, rigid-insulated, standing seam metal roof (with a corrugated, painted interior steel surface) draining to an outboard gutter system with rainwater conducted to adjacent storm water management ponds.

Walls are to be premanufactured, panelized, with factory-installed rigid insulation board in 3” thickness. Panels are to have fluted, corrugated and flat exterior steel panel surfaces along with a flat, interior, painted metal surface. Fasteners are to be hidden and the finish is to be a Kynar or similar system.

Insulated, sectional, overhead doors with windows as shown, are to be provided for truck docks, at-grade entrances and inter-departmental forklift access. These shall have pneumatic door operators integrated with building security systems to address access issues at the building perimeter.

The proposed building has a single slope roof, taking advantage of the need for high-bay space on one side, lower office space on the other. This simplifies construction by having two column bays, one long span, the other short. Bay sizes along the length of the building are an industry-standard 20’. This profile allows clerestory glazing at the high-bay area allowing natural light to enter the work areas.

Two pedestrian entrances, one employee and one public, are to have cable-hung, near-flat roof canopies protecting those entering from the elements but avoiding costly outboard columns. The Postal Dock is to have a linear, column-supported canopy also, shielding four box trucks from the elements at their rear loading doors.

The preferred building shell is a manufacturer’s standard pre-engineered metal building, including:

Roof:	Standing seam metal roof atop rigid insulation with a pre-finished metal finish at ceiling
Wall:	3” thick, rigid-insulated, fluted, corrugated and flat wall panel system in standard colors with prefinished interior surface
Structural:	Long span, pre-engineered system, providing for column-free interior in high bay spaces.

Special Features

To provide for specific needs of agencies occupying the building, several unique features are included.

1. Recessed Truck Dock

For the purposes of off-loading delivery trucks at bed height, a recessed dock at 48" depth shall be included at Surplus. Equipped with dock leveler, dock seal and bumpers, this will allow semi-trucks to be loaded and unloaded with a forklift without concern for weather impact.

Design standard for this equipment is Rite Hite, Inc. www.ritehite.com
Dock Seal: Classic with High Performance Header
Dock Leveler: Hydraulic or Air Powered

2. Pneumatic Overhead Doors

All overhead doors are to be sectional, insulated and have rapid response pneumatic openers, restricting the amount of conditioned air that would normally escape. This, to take advantage of the large scale, on-site air compressor that services the facility.

3. Drive Through Capacity

At both ends of the building for both OIT Radio and Surplus, there will be alignment of overhead doors at grade allowing drive-through capability. OIT Radio will be driving newly purchased SUV's in one end, completed state police cruisers out the other once equipment is installed. Surplus will be conducting periodic auctions, allowing available vehicles to enter at one end, the auction to be conducted and purchased vehicles exiting the opposite end.

4. Portable Bleachers

To accommodate the over 200 auction-goers who participate in the Surplus auction events up to six times per year, it was recommended to install portable bleachers, providing easier, more organized seating for patrons. The best option allowing flexibility, is the portable, three-row model providing ease of transport by staff. No power is required, and the units can be stored elsewhere as they are able to pass through a 34" clear door. Design standard is MAXAM1 Portable Bleacher Seating by Hussey www.husseyseating.com

5. Floor Drains

In all areas where vehicles will be stored or entering/exiting, floor drains are necessary. Trench drains are to be located centered, beneath vehicles to keep any standing water away from personnel walking areas.

6. Storage Mezzanines

To reduce the building footprint and save site impact, the use of storage mezzanines is recommended. This would be for storage of palletized, bulk materials and supplies along with inventory not often accessed. These are anticipated at the following locations:

- Compressor / Record Storage over top of the employee entrance, mail room and staff toilets providing a space for these functions central to the building. This to have one stair accessed from the Common Corridor.
- OIT Radio for storage of electronic components on storage racks. This to have stairs from the OIT Radio space directly.
- Surplus will have a large mezzanine to store items on dunnage racks. This to have stairs from the Surplus space directly.

- An option for Surplus is to use tall dunnage racks in lieu of a mezzanine. The use of a side-loading forklift would be required, but a single forklift could be used directly from the main floor.

Pre-fabricated, prefinished steel tube columns and c-section beams make up the typical mezzanine system required. A 12'-0" deck height with 10'-6" clearance beneath allows for stairs without intermediate landings which consume real estate. Typical bay dimensions are 20'x 20'. A corrugated metal deck with white painted underside to reflect light is to be topped by plywood with a wear finish of a resin-impregnated surface. This is the most economical for the use anticipated. Loading of these mezzanines is to be calculated by a structural engineer to assure appropriate application of the system.

Design standard for storage mezzanines is Steele Solutions, Inc., www.steelesolutions.com
Freestanding Mezzanine preferred.

7. Air Compressor

An existing air compressor, now installed in leased space to be vacated, is to be relocated, supplying compressed air to all agencies. This is anticipated to be located on a mezzanine above the employee entrance, mail room and staff toilet rooms. This would be centrally located for shorter piping runs. Access to this mezzanine is to be from the Common Corridor

8. Generator

A natural gas-powered generator is required for continuous building operation. It is to be 200 Kw, 3-phase, 208 volt to provide for power loss in the area. A location onsite needs to be determined.

PERMITTING

1. Maine State Fire Marshal

Building Permit and Barrier Free Permits will be required from the Maine State Fire Marshal.

2. Maine Department of Environmental Protection (MDEP)

On January 29, 2014, the Maine Department of Environmental Protection issued a Site Location of Development Act General Permit and a Natural Resources Protection Act Freshwater Wetlands Water Quality Certification to the Maine Department of Transportation to develop an additional 8-9 acres of a 50-acre parcel to include a total of 201 parking spaces, a small fueling station, a 250' x 350' auction yard area, a 50' x 125' area for cold storage, a 50' x 165' fleet operations building, a 75' x 165' heated coatings building, a 150' x 150' central services building, equipment laydown area, a 16,000 SF delivery and maneuvering area and two wet ponds for stormwater control, resulting in a cumulative 13.2 acres of impervious area. On December 10, 2013, the US Army Corps of Engineers issued a permit to fill 57,172 SF of wetland for this project. To date, the fleet operations building, delivery and maneuvering areas and one wet pond have been constructed.

On December 18, 2017, the Maine Department of Environmental Protection issued a Site Location of Development Act General Permit Minor Amendment to the Maine Department of Transportation to construct an additional 10' x 475' long entrance drive with 42 parking spaces, resulting in a cumulative 13.8 acres of developed area and 13.68 acres of impervious area.

The proposed project is to construct a new central services building, provide parking for staff, visitors, state vehicles and surplus equipment, and complete the new entrance drive. Because the proposed new central services building will be larger and will be in a different location on the site than the building permitted in 2014, the Design/Build contractor will be required to obtain a minor amendment to the existing Site Location of Development Act permit documenting the change in location for the new building. Because all the proposed work will be located on previously permitted impervious area, no modifications to the approved stormwater management system will be required. Because permitted wetland impact will not be affected by this project, a revision to the Natural Resource Protection Act permit will not be required.

3. City of Augusta

The Design/Build contractor shall obtain a site plan permit and building permits from the City of Augusta. The proposed project is in the Planned Development zoning district. Major site plan approval will be required by the Augusta Planning Board. Applications must be submitted to the City at least 30 days in advance of regularly scheduled Planning Board meetings, which are scheduled on the 2nd Tuesdays on the month.

4. Other Permitting

No other site permitting is anticipated.

CIVIL / SITE NARRATIVE

Existing Conditions

Selective Demolition: Remove existing temporary fencing. Sawcut and remove existing asphalt pavement in entrance drive as needed for new utility construction.

Earthwork

A site specific subsurface investigation and geotechnical report with pavement design recommendations will be needed to confirm final pavement system design.

1. Paved Areas: For paved areas, provide and install a 6" thick layer of compacted MDOT 703.06 Type A aggregate for base and Sub-base over an 18" thick layer of compacted MDOT 703.06 Type D aggregate for base and Sub-base over geotextile fabric.

2. Unpaved Areas: For unpaved areas, provide and install a 3" to 4" thick layer of compacted modified MDOT 703.06 Type A aggregate for base and Sub-base with a maximum stone size of 2" and 7-12% passing the 200 sieve over a 15" thick layer of compacted MDOT 703.06 Type D aggregate for base and Sub-base over geotextile fabric.

3. Utility Trenching: Excavate and backfill trenches for new water, wastewater, stormwater, electrical and natural gas services.

Exterior Improvements

1. Asphalt Paving: A site specific subsurface investigation and geotechnical report with pavement design recommendations will be needed to develop the pavement system design. For this phase, we assume that the asphalt pavement section will consist of a 1½" layer of compacted 12.5mm Superpave hot mix asphalt over a 2½" layer of compacted 19.0mm Superpave hot mix asphalt.

2. Concrete: Provide and install new exterior concrete with a minimum compressive strength of 4500 psi, slump limit of 5 inches, plus or minus 1 inch, and an air content of 6% plus or minus 1.5%. All horizonal concrete surfaces shall be sealed with a concrete water repellent agent to protect concrete from moisture intrusions and chemical attack of chloride salts. Provide and install new precast concrete transformer pad per Central Maine Power specifications and sized for proposed transformer. Provide and install new precast concrete light pole bases.

3. Chain Link Fence and Gates: Provide and install new vinyl-coated 6' high chain link fence and gates.

4. Site Furnishings: 8" diameter painted galvanized steel bollards will be provided at building corners and 6" diameter painted galvanized steel bollards will be provided at each side of overhead door entrances.

5. Turf and Grasses: All disturbed areas shall be revegetated with a 6" thick layer (min.) of loam and hydroseed. Provide and install erosion control mesh on all slopes 3:1 and greater.

6. Plants: Provide and install plantings as permitted along entrance drive.

Utilities

1. Facility Water Distribution Piping: Provide separate domestic and fire protection services from the existing water main in the Industrial Drive right-of-way to the new building. Domestic water service shall be polyethylene service line tubing (Copper Tube Size - CTS) that meets or exceeds the latest revision of AWWA Standard C-900. Fire protection service shall be polyvinyl chloride (PVC) pressure pipe that meets all the requirements of AWWA Standard C900-07 and C905-97 (or latest revisions) and have a Dimension Ratio (DR) of 18 and a Pressure Rating (PR) of 235 psi and be provided with an outside diameter the equivalent of cast iron pipe. Construct new water services according to the Greater Augusta Utility District Water and Sewer Construction Specifications and Procedures document (latest edition). Coordinate all work with the Greater Augusta Utility District.

2. Facility Sanitary Sewers: Provide new polyethylene force main from the new sanitary pump station to the existing force main in the Industrial Drive right-of-way. Polyethylene pipe shall be made from high density, extra high molecular weight compound equaling a PE 3408 designation and shall conform to ASTM-1248 and ASTM-3350; with a cell classification of 34543C. Minimum SDR of 9.0. Construct new sanitary service according to the Greater Augusta Utility District Water and Sewer Construction Specifications and Procedures document (latest edition). Coordinate all work with the Greater Augusta Utility District.

3. Sanitary Waste Interceptors: Provide new oil/water separator to treat wastewater from floor drains prior to discharge to the sanitary pump station.

4. Facility Packaged Sewage Pumping Stations: Provide and install new sanitary pump station according to the Greater Augusta Utility District Water and Sewer Construction Specifications and Procedures document (latest edition). Coordinate all work with the Greater Augusta Utility District.

5. Stormwater: Complete construction of stormwater detention pond as permitted by the Maine Department of Environmental Protection in 2014. Provide and install new 4' diameter pre-cast concrete catch basins with cast iron frames and grates rated for H-20 loading. Stormwater pipe shall be double-walled high density polyethylene with corrugated exterior and smooth interior.

6. Subdrainage: Provide and install new 4" diameter perforated PVC foundation drainage and tie into new stormwater management system.

STRUCTURAL NARRATIVE

Foundation System

A site specific subsurface investigation and geotechnical report with foundation design recommendations will be needed to develop the foundation system design. For this phase, it is assumed the existing soil sub grade is suitable for traditional spread footing foundations, and that deep foundations or other special soil improvements will not be necessary.

Contingent on the results of the geotechnical findings, the building structure is anticipated to be supported on reinforced concrete piers and spread footings cast monolithically with the perimeter foundation frost walls with strip footings. Horizontal frame forces are anticipated to be resisted by cantilevered foundations in lieu of under slab steel tie rods.

All foundations will extend below grade to have a minimum 5'-0" soil cover for frost protection.

Foundation drainage to be provided by continuous, perforated under-drain pipe, wrapped in a 6" layer of crushed stone and geotextile fabric around the entire perimeter exterior of the foundation with positive gravity outlets.

Column Spread Footings:

Size and reinforcement varies based on column frame loads and allowable soil bearing pressure.
Ranging from 4'-0" to 12'-0" in plan dimension and 1'-0" to 2'-6" thick.

Continuous perimeter strip footings:

Typically 2'-0" wide by 1'-0" deep along building exterior perimeter.
Reinforce with (4) #4 bars continuous.

Exterior Foundation Frost Walls:

Typically 10" thick, 7'-0" tall above top of footing, 3'-0" above slab on grade.
Vertical wall reinforcement: #4@12" each face doweled into wall footing
Horizontal wall reinforcement: #4@12" each face.

Column Piers:

1'-6" square concrete column piers at end walls.
1'-6" x 3'-0" at column frames.
Reinforce piers with (8) bars vertical doweled to spread footing and box and hairpin ties.

Floor Slabs:

6" thick cast-in-place concrete slab-on-grade that is pitched to interior trench drains.
Reinforce slab with #4 bars spaced at 18" centers each direction. Provide saw cut control joints spaced on a 12'-0" grid.

Pre-engineered Metal Building System

A pre-engineered rigid frame metal building has been selected by the design team. Given that a pre-engineered metal building is a proprietary system, the structural design of the building will be performed by the selected metal building supplier to the performance requirements and design criteria indicated below.

Structural Performance:

The metal building systems shall withstand the effects of gravity loads and the following loads and stresses within limits and under conditions indicated according to procedures in MBMA's "Metal Building Systems Manual" and in accordance with the 2015 International Building Code and ASCE 7-10 “Minimum Design Loads for Buildings and Other Structures.”

- Design Loads:
  - Dead Load: Self-weight of all structural materials plus an additional 10 psf superimposed (collateral) load.
  - Roof Snow Load Design Data:
    - Ground Snow Load, Pg: 80 PSF
    - Flat Roof Snow Load, Pf: 62 PSF
    - Snow Exposure Factor, Ce: 1.0
    - Snow Load Importance Factor, Is: 1.0 (Category II)
    - Thermal Factor, Ct: 1.1 (Insulated R>=38)
  - Auxiliary Loads:
    - Suspended HVAC equipment.
    - Operable Garage Doors
  - Wind Design Data:
    - Basic Wind Speed (3-second gust): 115 MPH
    - Wind Load Risk Category: II
    - Wind Exposure Category: B
    - Internal Pressure Coefficient: +/-0.18
  - Earthquake Design Data:
    - Seismic Importance Factor, Is: 1.0 (Category II)
    - Mapped Spectral Response Accelerations, Ss and S1: 0.232g and 0.079g respectively
    - Site Class: D assumed, to be confirmed by Geotechnical Engineer
    - Spectral Response Coefficients, Sds and Sd1: 0.247g and 0.127g respectively
    - Seismic Design Category: B
    - Response Modification Factor: 3
    - Analysis Procedure to be Used: Equivalent Lateral Force

- Deflection Limits: Design metal building system assemblies to withstand design loads with deflections no greater than the following:
  - Roof Rafters and Roof Purlins: Vertical deflection of 1/180 of the span under Live, Snow, Wind, 1/120 under Total Gravity Load.
  - End Wall Columns, 1/200 under Wind
  - Wall Girts: Horizontal deflection of 1/90 of the span.
  - Metal Roof Panels: Vertical deflection of 1/60 of the span.
  - Metal Wall Panels: Horizontal deflection of 1/60 of the span.
  - Design secondary-framing system to accommodate deflection of primary framing and construction tolerances, and to maintain clearances at openings.

- Drift Limits: Building structure to withstand design loads with drift limits no greater than the following:
  - Lateral Drift: Maximum of 1/200 of the building height for Wind loads, 1/120 for Seismic loads.

Metal Building Construction:

Primary Structural Frames

Two-span rigid frames with off center interior column line. Frames spaced at approximately 20'-0" centers.

- I-shaped sections fabricated from shop-welded, built-up steel plates or structural-steel shapes. Interior columns are not permitted.

End-Wall and Corner Columns:

- I-shaped sections fabricated from structural-steel shapes; shop-welded, built-up steel plates; or C-shaped, cold-formed, structural-steel sheet.

End-Wall Rafters:

- C-shaped, cold-formed, structural-steel sheet; or I-shaped sections fabricated from shop-welded, built-up steel plates or structural-steel shapes.

Lateral Force Resisting System:

- Rigid frames in the transverse direction.
- Rigid frame bracing or rod X-bracing in the longitudinal direction normal to the rigid frames.

Secondary Framing:

Manufacturer's standard secondary framing, including purlins, girts, eave struts, flange bracing, base members, gable angles, clips, headers, jambs, and other miscellaneous structural members.

Manufacturer's standard insulated metal wall siding and roofing panels.

ARCHITECTURAL NARRATIVE

Building Code Analysis

1. Code References

International Building Code (IBC) 2015 Edition
International Existing Building Code (IEBC) 2015 Edition
Fire and Life Safety Code, NFPA 101, 2018 Edition
2010 ADA Standards for Accessible Design
2015 Uniform Plumbing Code

2. Project Area (sf)

Ground Floor: 33,600
Mezzanine: 4,000
Total Project Area: 37,600

3. Occupancy Type

IBC: ..... Business
NFPA: ..... New Business

4. Occupant Load (IBC Sec. 1004)

Ground Floor (33,600/100) 336
Mezzanine (Exempt) 0
Total Occupants in Project Area: 336

5. Type of Construction

IBC: (602.2) ..... Type IIB
NFPA ..... Type II (000) non-combustible

6. Fire Sprinklers

Business Occupancy: ..... Sprinklers not required
Assembly Occupancy (worst case): ..... Sprinklers required

7. Allowable Building Area

In accordance with IBC Table 506.2, the gross area of the building subject to code analysis includes the first floor only (32,000 s.f.). The area of mezzanines is excluded per IBC Par. 505.2.

IBC 506.2.3 The allowable area of a single-occupancy building with more than one story above grade plane shall be determined in accordance with Equation 5-2:

$A_a = A_1 + (NS \times I_f)$
where:
A_a = Allowable area (square feet).
A_t = Tabular allowable area factor (NS, S13R or SM value, as applicable) in accordance with Table 506.2.
NS = Tabular allowable area factor in accordance with Table 506.2 for a non-sprinklered building (regardless of whether the building is sprinklered).
I_f = Area factor increase due to frontage (percent) as calculated in accordance with Section 506.3.

The area factor increase based on frontage shall be determined in accordance with Equation 5-5:

I_f = (F/P - 0.25) W/30
where:
I_f = Area factor increase due to frontage.
F = Building perimeter that fronts on a public way or open space having minimum distance of 20 feet (6096 mm).
P = Perimeter of entire building (feet).
W = Width of public way or open space (feet) in accordance with Section 506.3.2.

Proposed Building Area Calculation (Case 1 - Business Occupancy, non-sprinklered):
$A_a = A_1 + ((NS \times (F/P - 0.25)\ W/30))$
$A_a = 23{,}000 + ((23{,}000 \times (768/768 - 0.25)30/30)$
A_a = 40,250 s.f. maximum allowable area for the proposed non-sprinklered building

Proposed Building Area Calculation (Case 2 - Assembly Occupancy A-3, sprinklered):
$A_a = A_1 + ((NS \times (F/P - 0.25)\ W/30))$
$A_a = 38{,}000 + ((9{,}500 \times (768/768 - 0.25)30/30)$
A_a = 45,125 s.f. maximum allowable area for the proposed sprinklered building

8. Allowable Building Height

Per IBC Section 504, the proposed building does not exceed the maximum allowable height of 55 feet nor the maximum number of stories of 3 for a non-sprinklered building, as measured from the existing basement floor to the peak of the roof. Per IBC Par. 505.2, mezzanines shall not be considered as a portion of the floor below.

9. Occupancy Separation

The proposed building shall be considered as a single occupancy. No separation is required.

10. Incidental Use Separation

Per IBC Table 509, incidental uses shall be separated from the remainder of the building or equipped with an automatic sprinkler system, or both, in accordance with the following relevant provisions of that table:

Furnace room where any piece of equipment is over 400,000 Btu per hour input	1 hour or provide automatic sprinkler system
Rooms with boilers where the largest piece of equipment is over 15psi and 10 horsepower	1 hour or provide automatic sprinkler system
Refrigerant machinery room	1 hour or provide automatic sprinkler system

Egress

1. Number of Exits

Spaces with an occupant load of 50 or greater shall have (2) exits.

2. Common Path of Travel

Maximum travel distance (feet)
Business Occupancy (not sprinklered):.....75
Assembly Occupancy (sprinklered): 75

ADA Accessibility

All work shall meet the requirements of the ADA Standards for Accessible Design.

Plumbing Fixture Analysis

The minimum number of required toilet fixtures is determined from Table 422.1 of the 2015 Uniform Plumbing Code, currently adopted as the State of Maine State Plumbing Code. Assume 160 male and 160 female occupants, based on a total calculated occupant load of 320.

Code Requirements (422.1):	WCs(M)	Urinals	WCs(F)	Lavs(M)	Lavs(F)	D/Fs
Assembly Occupancy (A-3)	2	2	4	1	2	1
Business Occupancy (B)	3	2	8	3	4	4

Because the actual number of employees working in the building is expected to be substantially less than the code generated occupant load, the minimum fixture requirement is based on assembly occupancy minimums:

Minimum required:	WCs(M)	Urinals	WCs(F)	Lavs(M)	Lavs(F)	D/Fs
Assembly Occupancy (A-3)	2	2	4	1	2	1

Architectural Systems

1. Interior Wall Systems

Interior partitions:
6” 20-gauge metal studs at 16" o.c.
Typical finish: Standard grade 5/8” gypsum board.
Finish at secure areas: 5/8” impact resistant gypsum board or standard gypsum board over plywood backing.
Finish at wet areas: 5/8” moisture resistant gypsum board.

2. Doors & Hardware

Interior
All interior doors to be solid core wood in painted, hollow metal frames. Closers, kickplates, handles, hinges, locksets and miscellaneous hardware to be standard for State of Maine projects.

Exterior: Staff & Visitor Entrances
Wide stile, aluminum frame, insulated glass units within storefront sidelight framing assembly. Hardware to be ADA-compliant aluminum handles.

Exterior: Service
Insulated, painted hollow metal in hollow metal framing. No windows. Hardware to be determined by location and use. Some locations to omit exterior hardware due to access limitations.

Overhead
Prefinished, painted, insulated steel sectional doors with one (1) panel to have window units at head height. Pneumatic operators included to provide rapid operation to reduce heat / cooling loss during door operation.

Security Hardware
Secure entrances to be equipped with card reader stations restricting access to employees and designated others. All entrances to have security camera coverage with video feed to a designated location onsite or offsite to be determined. Parking areas to have security camera coverage providing coverage from both building-mounted and light pole-mounted locations.

3. Windows

All windows to be fixed, aluminum frame, insulated glass storefront units typically in strips of four (4) units long. Exceptions are at Staff and Visitor entrances and in both Conference and Break Rooms where storefront glazing from typical head height to floor level is to be used.

Finishes

1. High Bay Spaces

OIT Radio / Postal / OIT Print / Surplus

Ceiling:	Painted, exposed structure and deck
Lighting:	Chain-hung, LED service fixtures
Walls:	Painted metal panel / painted gypsum board
Base:	Rubber at gypsum board / none at metal panel
Floor:	Sealed concrete

2. Mezzanines

Ceiling:	Painted, exposed structure and deck
Lighting:	Chain-hung, LED service fixtures
Walls:	Painted metal panel / painted gypsum board
Base:	Painted steel
Floor:	Resin Deck plywood
Railing:	Painted steel tube
Exit Stairs:	Painted steel stringers, treads & railing

3. Office Spaces

Enclosed Offices

Ceiling:	2 x 2 ACT in standard grid
Lighting:	2 x 2 LED
Walls:	Painted gypsum board
Base:	Rubber
Floor:	Carpet Tile

Open Office / Cubicle Areas

Ceiling:	2 x 2 ACT in standard grid
Lighting:	2 x 2 LED
Walls:	Painted gypsum board
Base:	Rubber
Floor:	Carpet Tile

4. Support Spaces

Corridors

Ceiling:	2 x 2 ACT in standard grid
Lighting:	2 x 2 LED
Walls:	Painted gypsum board
Base:	Rubber
Floor:	Carpet Tile

Copy & Mail Rooms

Ceiling:	2 x 2 ACT in standard grid
Lighting:	2 x 2 LED
Walls:	Painted gypsum board
Base:	Rubber
Floor:	LVT

File Storage Rooms

Ceiling:	Painted, exposed structure and deck
Lighting:	Chain-hung, LED service fixtures
Walls:	Painted gypsum board

Base:	Rubber
Floor:	Resin Deck plywood

Break Room

Ceiling:	2 x 2 ACT in standard grid
Lighting:	2 x 2 LED
Walls:	Painted gypsum board
Base:	Rubber
Floor:	LVT

Conference Room

Ceiling:	2 x 2 ACT in standard grid
Lighting:	2 x 2 LED
Walls:	Painted gypsum board
Base:	Rubber
Floor:	Carpet Tile

Toilet Rooms

Ceiling:	2 x 2 ACT in standard grid
Lighting:	2 x 2 LED
Walls:	Epoxy-painted gypsum board / CT at fixture wall
Base:	Rubber
Floor:	VCT

Janitor Closet

Ceiling:	2 x 2 ACT in standard grid
Lighting:	2 x 2 LED
Walls:	Painted gypsum board
Base:	Rubber
Floor:	Sealed concrete

MECHANICAL NARRATIVE

Fire Protection

1. Sprinkler System:

Building shall be fully equipped with a sprinkler system to provide full fire suppression coverage throughout the facility, in accordance with The City of Augusta, State of Maine Fire Marshal Office, NFPA 13 Standard for the Installation of Sprinkler Systems, 2016 Edition.

A. Sprinkler systems to be designed, furnished, and installed by the Contractor, in accordance with aforementioned requirements.

B. A wet pipe fire suppression sprinkler system, in accordance with NFPA 13, shall be provided throughout building in areas not susceptible to freezing.

C. Dry pendant sprinkler heads shall be provided, in accordance with NFPA 13, in areas susceptible to freezing. Overhangs and awnings shall be protected with through wall dry pendant sidewall heads. Barrel length shall be sized to prevent freeze up.

D. Sprinkler water service shall be provided with new connection to existing municipal water distribution system. Hydrant flow data shall be obtained from the Augusta Water District and utilized for system calculations.

2. Sprinklers:

A. In occupied areas with finished ceilings, sprinklers shall be concealed, recessed, semi-recessed, or sidewall, with matching escutcheon plates, and concealed piping. Sprinklers to be extended coverage demand heads.

B. In occupied areas with exposed structure, sprinklers shall be exposed, brass upright on exposed piping. Sprinkler heads shall be centered on pipe. Sprinklers to be extended coverage demand heads.

C. In unoccupied spaces sprinklers heads and piping shall be exposed. Sprinklers to be extended coverage demand heads.

3. Piping Systems:

A. All wet pipe sprinkler system piping 1” NPT and smaller shall be standard weight, black steel pipe with threaded ends, uncoated, gray iron steel threaded fittings and joints.

B. All wet sprinkler piping 1¼” NPT and larger, at contractor’s option, shall be one of the following:
   1. Standard-weight, black-steel pipe with threaded ends; uncoated, gray-iron threaded fittings; and threaded joints.
   2. Standard-weight, black-steel pipe with cut- or roll-grooved ends; uncoated, grooved-end fittings for steel piping; grooved-end-pipe couplings for steel piping; and grooved joints.
   3. Standard-weight, black-steel pipe with plain ends; steel welding fittings; and welded joints.
   4. Thinwall black-steel pipe with roll-grooved ends; uncoated, grooved-end fittings for steel piping; grooved-end-pipe couplings for steel piping; and grooved joints.

C. All valves to be UL and FM approved.

D. Sprinkler system shall be interconnected with Fire Alarm System to indicate alarm and trouble conditions.

4. Specialty Systems:

A. IT/TelCom Room - Special Suppression Requirements: Review with Owner whether a clean agent fire suppression system (FM200, Inergen, Encaro, or similar) and/or a wet pipe system equipped with double interlock pre-action fire suppression system is required for protection of server rooms.

B. Double interlock piping shall be pitched to drain for moisture removal.

Plumbing

1. General:

Plumbing systems shall be designed and installed to conform with ASHRAE 90.1, 2015 Uniform Plumbing Code and the State of Maine Plumbing Code.

2. Domestic Water Service:

Water service entrance into building shall be provided with shutoff valves, backflow prevention device, pressure reducing valve and meter at building entrance. Water service entrance shall be provided with a water meter provided by the local water district with remote read capability.

3. Domestic Water Distribution:

Interior domestic water piping shall be Type L copper with lead free soldered fittings or mechanical joints approved for domestic water applications. Piping systems to be provided with required hanging and anchoring devices to support and allow for expansion and contraction movement. Branches and individual fixtures shall be provided with 2-piece, full port isolation ball valves for maintenance and service.

4. Domestic Hot Water:

Facility shall be served by a central 58-gallon heat pump water heater equal to Stiebel Eltron Accelera 220E, located on the mechanical mezzanine over the toilet rooms. Water shall be stored at 120 degrees. A hot water recirculation loop shall be operated by aquastat in the recirculation piping to operate pump at temperatures below 115 degrees. Recirculation pump shall operate on an occupied/unoccupied schedule.

5. Sanitary Sewer:

Facility shall be connected to municipal sewer system and pitched at no less than ¼"/ft slope (gravity drainage) to public system. Sanitary drainage, waste, and vent (DWV) piping systems shall be schedule 40 PVC with low VOC primer/solvent welded joints.

An independent sanitary sewer system shall be installed to serve the garage bays. Garage bays shall have pre-sloped continuous trench drains with Class E cast iron grates equal to Zurn Z886-HD. Locations shown on architectural floor plans. Trench drains shall gravity drain to an exterior oil/water separator. See civil section for description of separator.

6. Natural Gas:

A new natural gas service shall be installed from the street to the facility. A new meter and regulator shall be sized for entire building load. Gas shall be run tight to the roof structure to serve mechanical heating equipment. Additional loads shall be reviewed with the Owner. Piping shall be black iron with threaded or welded black iron fittings. Piping shall be painted with epoxy paint after testing.

7. Condensate Drainage:

Condensate drains shall be provided for all mechanical equipment with cooling coils. Condensate drainage system shall be independently vented, terminate and discharge into the sanitary drainage system within the building via an indirect waste air-gap fitting. Condensate drain pumps shall be provided in locations where gravity drainage is not feasible. Condensate drainage piping system shall be schedule 40 PVC with solvent welded fittings.

8. Compressed Air Systems:

A compressed air system shall be installed to serve overhead door operators, tools, and equipment. Compressor shall have duplex compressors mounted to an 80-gallon tank equal to Ingersoll Rand 2-2475E5-P located in the mechanical mezzanine. Compressor accessories include an aftercooler, automatic tank drain valve, pre- and final filters and low oil level switch. A refrigerated, thermal mass air dryer shall be installed at the outlet of the compressor equal to Ingersoll Rand D41EC. Compressed air stations shall have drain valves, pressure regulators and female quick connect fittings. Terminals shall be located for each vehicle work station per Owner requirements as well as for postal equipment as needed. Requirements shall be coordinated with the Owner. All compressed air piping shall be Type L copper with lead free soldered fittings.

9. Plumbing Systems Insulation:

Piping systems shall be insulated with materials and thickness in accordance with and exceeding minimum ASHRAE 90.1-2010 requirements.
All new interior domestic cold-water piping shall be insulated for condensate control.
All new domestic hot water piping shall be insulated with fiberglass pipe insulation with all service jacket, to reduce thermal losses.

10. Plumbing Fixtures:

All fixtures shall have water conserving valves and controls. All faucets, valves and accessories shall be cast brass construction. All plumbing fixtures shall be ADA compliant where handicap accessibility is required. Plumbing fixture counts shall be reviewed for new occupant loads.

Fixture considerations below to be reviewed with facilities personnel based on requirements specific areas served.

- Water Closets: Vitreous china, floor mounted, tank-type, high efficiency toilet, 1.28 GPF ultra low volume, siphon jet action, with elongated bowl, open front seat, no cover.
- Urinals: Wall hung, vitreous china, 1/8 GPF ultra low volume flushometer type.
- Lavatories: Vitreous china, drop-in bowl for mounting in countertop (by architecture) with manual faucet with 0.5 GPM flow restrictors and wrist blade handles.
- Sinks: Drop-in, double bowl, stainless steel sink with gooseneck faucet with 1.5 gpm aerator and wrist blade handles.
- Mop Sinks: Floor mounted, composite material with wall mounted hot and cold faucet with pail-hook, vacuum breaker, hose and mop hangers. Check valves shall be provided on hot and cold-water supply to fixture.
- Water Coolers: Single-level, ADA, with bottle filling station, electric water cooler with recessed air-cooled chiller.

- Wall Hydrants: Exterior, frost proof, self-draining type wall hydrants, with vacuum breaker, removable key control, shall be provided at each building exterior exposure for maintenance use.
- Hose Bibbs: Interior hose bibs shall be provided in service and mechanical spaces.
- Floor drains: Cast iron body with bronze strainer. Floor drains shall be provided in public toilet rooms with 2 or more fixtures and adjacent to equipment in mechanical mezzanine. Round strainers shall be used in sheet flooring or finished concrete. Square strainers shall be used in tile floors. Floor drains shall be protected by automatic trap primers.
- Emergency Stations: Emergency eye wash stations shall be provided in janitor closets and Radio garage. Other location requirements to be reviewed and defined by Owner. Mixing valve shall be provided at each station for tempered water temperature control.

Heating, Ventilating & Air Conditioning

1. General:

Facility shall comply with ASHRAE 62.1 Standard for Indoor Air Quality. All occupied spaces shall be heated and mechanically ventilated. Indoor units shall be located to minimize noise and allow for ease of maintenance.
Occupied spaces shall be designed for 70°F heating, and 74°F cooling setpoints.
Systems and zoning shall be reviewed with facilities personnel and owner.

2. OIT Radio Office HVAC System:

A variable volume indoor furnace with 97% AFUE modulating gas-fired heating section, split DX heat pump coil, MERV 8 filter rack and direct drive supply fan shall serve Radio office suite. Furnace shall be equal to Trane XC95m with Trane XV18 heat pump. Air handler shall be either installed in a closet in OIT Radio space or on mechanical mezzanine. An exterior wall louver shall provide ventilation air to be mixed with return air prior to entering the unit. Exterior, grade mounted split heat pump unit shall be mounted on concrete pad to allow limited capacity for heating prior to gas heat being energized.

Ceiling mounted supply diffusers and return air grilles shall be installed in acoustic tile ceilings. All ductwork shall be concealed above ceilings.

3. Common and Surplus Offices HVAC System:

A variable volume indoor furnace with 97% AFUE modulating gas-fired heating section, split DX heat pump coil, MERV 8 filter rack and direct drive supply fan shall serve offices. Furnace shall be equal to Trane XC95m with Trane XV18 heat pump. Changeover/bypass terminal units shall provide individual zone control of offices, common spaces and conference rooms. Air handler shall be located on mechanical mezzanine above. An exterior wall louver shall provide ventilation air to be mixed with return air prior to entering the unit. Exterior, grade mounted split heat pump unit shall be mounted on concrete pad to allow limited capacity for heating prior to gas heat being energized.

Ceiling mounted supply diffusers and return air grilles shall be installed in acoustic tile ceilings. All ductwork shall be concealed above ceilings.

4. Warehouse Spaces HVAC System:

Each large warehouse space (OIT Radio, Postal, OIT Print & Surplus) shall be served by a variable volume indoor furnace with 97% AFUE modulating gas-fired heating section, split DX heat pump coil, MERV 8 filter rack and direct drive supply fan suspended in the high peak of the structure. Return air grille shall be located low in the space, at floor level where possible to prevent short cycling, high temp trips, and provide better air distribution. An exterior wall louver shall provide ventilation air to be mixed with return air prior to entering the unit. Exterior, grade mounted split heat pump unit shall be mounted on

concrete pad to allow limited capacity for heating prior to gas heat being energized. In larger spaces, where capacity is required, two furnace systems shall be installed.

Ductwork distribution shall be round spiral duct running the length of the space with supply grilles mounted at 45 degrees below horizontal. High volume, adjustable core, drum diffusers shall be used.

The OIT Print space requires tighter humidity control and shall have a 2-stage electric resistance coil in a reheat position to allow dehumidification operation. DX cooling section shall have additional capacity to sub cool air prior to reheat and delivery to space.

5. Other HVAC Systems:

All toilet rooms and janitor's closet shall be served by a centrally located inline exhaust fan with exterior wall cap.

OIT Print room shall be provided with an inline exhaust fan sized to provide local exhaust adjacent to large volume print equipment.

All exhaust terminations shall be located a minimum of 15 feet from building ventilation louvers.

Destratification fans shall be provided in the high bay spaces to circulate warm air from the ceiling down to the floor. Basis of design shall be equal to Big Ass Fans Essence 12' fans. Quantity of fans depends on space floor area.

Sprinkler/Water room shall be served by an electric unit heater to maintain 55 deg F.

6. Air Distribution:

Ductwork shall be galvanized steel construction and be fabricated and installed per SMACNA standards. Ductwork layout shall be revised for new locker room layout. Layout shall be as direct as possible, coordinated chases to minimize length, pressure drop restrictions, elbows and offsets.

Each register, diffuser or grille shall be provided with a volume damper for balancing purposes.

7. Refrigerant Piping Systems:

Refrigerant piping shall be ACR copper tubing. Tubing shall be shipped and stored with temporary caps to prevent contamination.

8. Systems Insulation:

All new ductwork and piping systems shall be insulated with materials and thickness in accordance with ASHRAE 90.1 requirements.

9. Testing, Adjusting & Balancing:

All air systems shall be tested, adjusted, and balanced at project completion. TAB work shall be performed by an independent contractor within the contract.

ELECTRICAL NARRATIVE

Electrical

1. General:

Electrical systems and installation shall be designed to comply with the latest edition of NFPA 70 (National Electric Code), NFPA 101 (Life Safety Code), NFPA 72 (National Fire Alarm and Signal Code) and ASHRAE 90.1, Energy Standards for Building Except Low-Rise Residential Building.

1. Electrical Service:

The underground primary electrical service shall be brought from existing utility riser pole to a pad mounted utility transformer. A location onsite needs to be determined.

The underground secondary electrical service shall be brought to the building from the pad mounted transformer. There will be a single meter at the transformer. The service characteristics shall be 208/120 volt, 3-phase, 4-wire. The service ampacity shall be sized to include a minimum of 25 percent spare capacity and to support the future use.

2. Emergency power:

A 200 Kw, 208/120 volt, 3-phase gas-fired generator shall be required to provide backup power for continuous building operation.

The generator shall be located exterior to the building and mounted on a concrete pad in a weather-proof sound attenuated enclosure.

3. Grounding and Bonding:

A complete grounding electrode system for the service entrance shall be provided per NFPA 70 requirements. The grounding system will include a concrete-engaged electrode. The grounding systems shall also include the bonding of building metal, all metal piping and ductwork to the main ground bus located in the electrical room.

Grounding electrodes shall be copper-clad steel, ¾ inch diameter, and 10 feet long. Grounding conductors shall be stranded copper, sized to meet NFPA 70 requirements. Separate insulated equipment grounding conductors within each feeder and branch circuit raceway shall be provided, with each end terminated on a suitable lug, bus or bushing. All structural steel will be grounded to ensure there will be no grounding potential issues.

4. Lighting Controls:

A simple, but energy-efficient lighting control system shall be provided for the lighting systems. All offices and conference rooms shall be provided with dimming, wall mounted vacancy sensors to allow users to adjust lighting levels. Toilets, storage rooms and other support spaces shall utilize dual-technology occupancy sensors. All occupancy sensors will be provided with adjustable time delays for automatically turning lights off when areas are unoccupied. Lighting in shop and warehouse areas shall be controlled by manual wall switches.

5. Electrical Distribution:

Building service and panelboard sizes shall be based on estimated maximum demand plus known or reasonably anticipated future loads.

Power shall be distributed at 208/120 volt, 3-phase to additional local panelboards within Surplus, OIT Print, Postal, OIT Radio and Common spaces.

All distribution and electrical panels shall be panelboard construction grade and provided with door-in-door fronts. Branch circuit breakers shall be bolt-on type. Panelboards shall contain a minimum of 20% spare circuit breakers.

All feeders to local panels and mechanical equipment shall be installed in metallic conduit systems. Branch circuiting conductors shall be in metallic conduit where exposed. Metal-clad (NEC type MC) cabling where concealed in walls or above accessible ceilings will be allowed. All conductors shall be copper.

6. Electrical Power Systems:

All equipment connections shall be coordinated to provide method of power disconnects as required by Code. Electrical devices for convenience outlets shall be coordinated with Owner for power requirements, configuration and locations. Motors shall be provided with starters and disconnects. Power connections, disconnects, overcurrent protection, etc. shall be coordinated with equipment provided (i.e. HVAC, owner's equipment, etc.)

Ground fault protected receptacles will be provided in bathroom areas, along the perimeter walls and columns in shop areas.

OIT work benches: Receptacles and outlets shall be mounted in metal plug molds above work bench.

OIT Print and Postal areas: All machines, printers and equipment located as an island shall be fed from above via cord drops.

Fifty percent of receptacles in offices and elsewhere as required by ASHRAE 90.1-2013 shall be plug- load controlled type.

7. Interior Lighting:

All interior lighting shall be designed in accordance with current IESNA standards recommended for specific space usage and task. Lighting fixtures shall be recessed 2x2 and 2x4 LED type in common spaces and offices. OIT Radio, Postal, OIT Print Surplus areas shall utilize suspended linear high bay LED fixtures. Wall mounted linear LED shall be provided above work benches.

8. Emergency Lighting and Exit Signage:

New emergency lighting shall be achieved via centrally located battery packs with remote heads as required by NFPA 101. Exit signs shall be provided with LED lamps and self-contained battery units.

Communications

1. Telecommunications Service:

Service entrance conduit shall be brought to the building and will run parallel with the electrical service from the same utility pole and terminated in Main distribution frame (MDF) room. This room shall be provided with telecommunication racks, patch panels and wire management, grounding equipment, cable tray, conduit sleeves and backboards.

Devices and jacks shall be provided. Cables in exposed and non-accessible areas shall run in conduit. Those above accessible ceilings shall be installed in cable tray.

Electronic Safety and Security

1. Fire Alarm System:

An addressable type fire alarm system shall be provided for the facility. System shall include manual & automatic detection consisting of smoke and heat detectors, duct mounted smoke detectors, and manual pull stations. Notification to occupants shall be comprised of horn/strobe devices normally occupied areas except for private offices. Fire alarm system shall be in accordance with NFPA 72, 101 and the State Fire Marshal's office.

APPENDIX A - Program

66 Industrial Drive							7/19/2018
						WBRC revisions	10/25/2018
Units	**AGENCY JOB TITLES**	**# STAFF**	**SQ. FT.**	**TOTAL SF**	**ROOM/AREA**	**FLOORING**	**LIGHTING**
Unit 1 (#) (number of personnel) Postal	Division Director	1	96	96	Office	Carpet	LED
	Managers	2	80	160	Open	Carpet	LED
	Hotel Staff	3	24	72	Open	Carpet	LED
	Clerical	3	48	144	Open	Carpet	LED
	Total	**9**		**472**			
	33% Circulation			156			
	Total Agency Space	(not shared)		**628**	**Space/person**	**69.75**	
Unit 2 (#) Surplus (number of personnel)	Director		150	0	Office	Carpet	LED
	Division Directors	1	96	96	Office	Carpet	LED
	Managers	2	80	160	Open	Carpet	LED
	Tech Staff	1	64	64	Open	Carpet	LED
	Clerical	3	48	144	Open	Carpet	LED
	1 add'l visitor space requested	1	-	-			
	Total	**8**		**464**			
	33% Circulation			153			
	Total Agency Space	(not shared)		**617**	**Space/person**	**77.14**	
Unit 3 (#) OIT Radio	Director	1	150	150	Office	Carpet	LED
	Division Directors/Vet	2	96	192	Office	Carpet	LED
	Managers	3	80	240	Open	Carpet	LED
	Tech Staff	8	64	512	Open	Carpet	LED
	Clerical	1	48	48	Open	Carpet	LED
	Total	**15**		**1,142**			
	33% Circulation			377			
	Total Agency Space	(not shared)		**1,519**	**Space/person**	**101.26**	
Unit 4 (#) OIT Print	Director		150	0	Office	Carpet	LED
	Division Directors/Vet		96	0	Office	Carpet	LED
	Managers	1	80	80	Open	Carpet	LED
	Tech Staff	3	64	192	Open	Carpet	LED
	Clerical	0	48	0	Open	Carpet	LED
	Total	**4**		**272**			
	33% Circulation			90			
	Total Agency Space	(not shared)		**362**	**Space/person**	**90.44**	
Total Staff Area SF				3,126			

Support Areas	DESCRIPTION	# OF AREAS	SQ. FT.	SQ FT	RM/AREA	FLOORING	LIGHTING
Entry/Waiting area	5 person waiting area	0	150	0		Tile/VCT/Finished Concrete	LED
Receptionist Area	2 person	1	160	160	Stick-built	Carpet	LED
Restrooms							
****Public (men/women	2 stalls in each per code	1	96	96	Stick-built	Tile/VCT/Finished Concrete	LED
****Employee (men)	8 @ 48 or per code with show	1	192	192	Stick-built	Tile/VCT/Finished Concrete	LED
****Employee (women)	8 @ 48 or per code with show	1	192	192	Stick-built	Tile/VCT/Finished Concrete	LED
Mail Room		1	140	140	Stick-built	Tile/VCT/Finished Concrete	LED
Employee Lounge(s)		1	260	260	Stick-built	Tile/VCT/Finished Concrete	LED
Avanti Market			225	0	Stick-built	Tile/VCT/Finished Concrete	LED
Telco Room		1	160	160	Stick-built	Tile/VCT/Finished Concrete	LED
Janitorial Room		1	80	80	Stick-built	Tile/VCT/Finished Concrete	LED
Recyclable Room		1	80	80	Stick-built	Tile/VCT/Finished Concrete	LED
Copiers/Fax/Printers		2	80	160	Open	Tile/VCT/Finished Concrete	LED
Records/Storage		2	250	500	Stick-built	Tile/VCT/Finished Concrete	LED
Central FleetManagement Storage	Storage Area	1	400	400	open/Butler	Tile/VCT/Finished Concrete	LED
Postal Operations	Mailer area	1	5,300	5,000	open/Butler	concrete	LED
Surplus	Retail Area	1	7,300	7,000	open/Butler	concrete	LED
Surplus	Storage Area	1	4,800	4,500	open/Butler	concrete	LED
OIT Print	Print Area	1	1,800	1,800	open/Butler	concrete	LED
OIT Radio	Radio Work Area	1	5,700	5,500	open/Butler	concrete	LED
Subtotal Support Areas				**26,220**			
Circulation **33%**				**8,653**			
Total Support Area				**34,873**			
				TOTAL			
MEETING AREAS	**DESCRIPTION**	**# OF AREAS**	**SQ. FT.**	**SQ FT**	**RM/AREA**	**FLOORING**	**FURNITURE**
Large Conference Roon	30 ppl-20 at table 10 perimiter	1	450	450	Stick-built	Carpet	
Small Conference Room	10 ppl- at table	0	200	0	Stick-built	Carpet	
Total Meeting Area				**450**			
Circulation 33%				**149**			
				599			
TOTALS		TOTAL STAFF AREA			**3,126**		
		TOTAL SUPPORT AREAS			**34,873**		
		TOTAL MEETING AREAS			**599**		
		Buildable Area:			**38,597**	$180	$ 100.00
Bureau of Real Estate Management (207) 624-7318				**Estimated Cost**			**FORM 2C**

Staff Area	$	562,590.00
Meeting Area	$	107,730.00
Butler Building	$	3,487,260.00
Subtotal	$	4,157,580.00
Site/Civil Work	$	1,290,000.00
Bridging Docume	$	25,000.00
Contigency	$	100,000.00
Grand Total	**$**	**5,572,580.00**

APPENDIX B - Meeting Minutes

WBRC ARCHITECTS • ENGINEERS
BANGOR PORTLAND SARASOTA

Design Meeting 01 Minutes

Project: **4035.20 66 Industrial**
Meeting Date: **10/24/18, 2:30pm**
Meeting Location: **66 Industrial Drive Rm 212, Augusta, ME**

ATTENDEES	Initials	Company / Affiliation	Email
Richard Borrelli	RBB	WBRC, Principal in Charge	richard.borrelli@wbrcae.com
Steve Pedersen	SEP	WBRC, Architect, Project Manager	steve.pedersen@wbrcae.com
John Kenney	JSK	WBRC, Civil Engineer	john.kenney@wbrcae.com
John Blais	JB	BREM, Project Manager	John.A.Blais@maine.gov
Dwain McKenney	DM	Central Fleet Management, MaineDOT, Division Director	Dwain.E.Mckenney@maine.gov
Andrew Giroux	AG	Central Services (Surplus & Postal), Division Director	Andrew.J.Giroux@maine.gov
John Richards	JR	OIT Radio, Manager	John.E.Richards@maine.gov
Jamie Andrews	JA	MaineDOT, PE Region Manager	Jamie.Andrews@maine.gov
Nicholas Marquis	NM	OIT, Client Technology	Nicholas.Marquis@maine.gov
Sandra Saunders	SS	OIT Radio, Director	Sandra.P.Saunders@maine.gov
David Morris	DM	Bureau of Business Management, Deputy	David.Morris@maine.gov
Danielle Brooks	DB	MaineDOT, Financial Analyst	Danielle.Brooks@maine.gov
Chip Kelley	CK	MaineDot, Traffic	Chip.Kelley@maine.gov

DISTRIBUTION	Initials	Company / Affiliation	Email
Attendees			
Stephen Landry	SL	MaineDOT, PE	Stephen.Landry@maine.gov
Donald Hutchins	DH	MaineDOT	Donald.Hutchins@maine.gov
Gilbert Bilodeau	GB	BREM, Chief Facilities Officer	Gilbert.M.Bilodeau@maine.gov
Jaime Schorr	JS	Bureau of Business Management, Chief	Jaime.C.Schorr@maine.gov
Timothy Firnkes	TF	OIT, Client Technology	Timothy.Firnkes@maine.gov
Mark Bailey	MG	Central Fleet	Mark.R.Bailey@maine.gov
File Folder		4035.20 BGS 66 Industrial Drive	

MEETING AGENDA – Design Kickoff Meeting

#	ITEM	ACTION
1	**WELCOME AND INTRODUCTIONS**	
1.1	• Owner team - State of Maine. Primary point of contact will be John Blais. • Design team - WBRC. Primary point of contact will be Steve Pedersen. • Communication protocol. Generally, communication between owner and WBRC should be between JB and SEP. Direct communication between individual team member is OK so long as JB and SEP are copied.	

2	**OVERVIEW OF PROJECT SCOPE**	
2.1	• Site development program • Preliminary architectural program • Owner's original program updated by WBRC on 10/25/2018 is attached for reference.	
3	**SITE**	
3.1	WBRC will provide summary of required site permit requirements.	
3.2	Provide security fencing, 8'-high chain link without barbed wire, with security gate.	
3.3	Provide fencing or Jersey barriers to separate auction yard from rest of gravel vehicle storage.	
3.4	Provide site lighting and security cameras.	
3.5	Provide paved entrance way and paved parking for staff and visitors.	
3.6	Provide storage/staging area for Surplus.	
3.7	Provide emergency generator backup (source of funding to be determined).	
3.8	Tie into existing utilities. Complete stormwater treatment as previously permitted.	
3.9	See sections below for required parking counts.	
4	**CENTRAL FLEET**	
4.1 *(rev 12/10/18)*	Currently, Central Fleet is using about ***75%*** of land not developed.	
4.2	Central Fleet wants to be sure they do not have to stop taking vehicles.	
4.3	Need parking capacity for up to 300 vehicles.	
4.4 *(rev 12/10/18)*	***Hot top preferred but not required. Gravel may be OK for storage parking.***	
4.5	CFM (Central Fleet Management) has a staff of 15. (Note, this does not apply to space planning for this project).	
4.6 *(rev 12/10/18)*	CFM needs ***800*** sf of unheated storage which could be part of the new building or added onto another existing building.	
4.7	CFM space needs one overhead exterior door.	
4.8 *(rev 12/10/18)*	Typical overhead door is 12' wide x 14' high. ***A smaller door can be used, to give more storage space.***	
4.9	Central Fleet building space could be part of a separate design--not on the new building under consideration.	
5	**POSTAL**	
5.1	Postal is responsible for state postal processing.	
5.2	Needs to be secured from the public.	
5.3	(1) Central Services Division Director. This position doubles as Postal Director. Provide private office.	
5.4	(1) Central Services Manager with private office.	
5.5	(2) Postal managers to have individual cubicles in the secure open office area.	

5.6	(3) Postal clerical staff to have workstations in the open office area. These could be individual or open to room.	
5.7	Postal operations to have a 5,300 sf work area within the secure area.	
5.8	Open work area should have 25' of open height for high-lift storage access by fork lift.	
5.9	Postal needs (1) overhead door adjoining at mid-height loading dock with capacity for (4) box truck size vehicles. Can be outdoor covered platform.	
5.10	Postal should be adjacent to the "Central Services Entrance" outside of the secure area. This entrance can provide the following functions: • Reception for visitors and vendors outside of the secure areas. • Toilets for use by staff and public • Break room for use by staff. • Access to a large, ±400 sf conference room for use by staff and public, with an operable partition dividing the room into two smaller conference rooms. • Conference room could also be used for public auction. • Mechanical/electrical support spaces.	
5.11	Postal needs adjacency to OIT Print.	
5.12	Postal needs (3) or possibly (4) hotel workstations. These will be used by visitors and should not be within secure area, and could adjoin the Central Services Entrance.	
5.13	The Central Services Entrance should be shared between Postal/Surplus/OIT Print.	
5.14	Provide (25) parking spaces, which includes (6) for postal vehicles, (2) of which are box trucks.	
6	**SURPLUS**	
6.1	Responsible for storage and distribution of a wide range of surplus state equipment.	
6.2	Needs to be in a secure area.	
6.3	Surplus Director position is same as Postal Director.	
6.4	(1) Surplus Division Director to have private office adjacent to the secure open office area.	
6.5	(2) Surplus managers to have individual cubicles in the secure open office area.	
6.6	(1) Surplus tech to have cubicle in the open office area.	
6.7	(3) Surplus clerical staff to have workstations in the open office area. These could be individual cubicles or open to room.	
6.8	Surplus retail to have a 7,300 sf open area within the secure area.	
6.9	Open work area should have 25' of open height for high-lift storage access by fork lift.	
6.10	Surplus storage to have 4,800 sf open area within the secure area.	

6.11	Surplus storage could be located on a mezzanine level accessed by fork lift for supplies and an open stair for personnel. Mezzanine would not be design for permanent occupancy.	
6.12	Surplus needs (3) overhead doors, (2) at grade level for driving inside and through to outside, and (1) adjacent 4' high loading dock.	
6.13	Surplus can utilize a common loading dock	
6.14	Surplus to have access to the Central Services Entrance.	
6.15	Provide parking for (10) visitors (several ADA), (7) employees, (1) 26' box truck, (2) service vehicles.	
6.16	Provide 3-phase electrical power.	
7	**OIT RADIO**	
7.1	Responsible for installing radio communication for state vehicles.	
7.2	Need to be in a secure area, separate from other departments.	
7.3	(1) Director to have a private office.	
7.4	(2) Division Directors in private offices.	
7.5	(3) managers in individual cubicles in open office area.	
7.6	(8) tech staff in open area.	
7.7	(1) clerical in open area.	
7.8	Need access to (1) or (2) hotel spaces.	
7.9	Need access for employees and vendors with (1) exterior door.	
7.10	Should have access to Central Services Entrance to access common toilets, break facilities, and conference.	
7.11	(2) to (3) overhead doors at grade level to facilitate vehicle flow.	
7.12	Need 5,700 sf of open work area to accommodate (7) pickup truck size vehicles with doors open.	
7.13	Need storage space for both secured and open storage.	
7.14	Need (35) parking spaces for vehicles to be serviced including employees and vendors.	
8	**OIT PRINT**	
8.1	Responsible for printing state documents including checks and other secure documents.	
8.2	Need to be in a secure area, separate from other departments, with direct access via secure door to Postal.	
8.3	(1) manager in individual cubicle in open office area.	
8.4	(3) tech staff in in open office area.	
8.5	Needs (1) interior, secure double door to Postal.	
8.6	Needs (1) interior overhead door adjacent to shared 4' high loading dock.	
8.7	Should have access to Central Services Entrance to access common toilets, break facilities, and conference room.	
8.8	Need (5) parking spaces.	

9	**PROJECT TIMELINE** • 10/24/18 Kickoff meeting • 12/31/18 Permitting review complete • 12/31/18 Schematic drawings complete	
10	**NEXT STEPS** • Begin permitting review • Topographic survey by owner (contact at MaineDOT established) • Visit existing departments to better understand operations and workflow • Develop 1st draft site plan • Develop 1st draft architectural building plan • Schedule next meeting	

Respectfully submitted by:

Steve Pedersen, AIA, LEED AP
Project Manager
Maine Licensed Architect
WBRC ARCHITECTS · ENGINEERS

WBRC ARCHITECTS • ENGINEERS
BANGOR PORTLAND SARASOTA

Design Meeting 02 Minutes

Project: **4035.20 66 Industrial**
Meeting Date: **11/07/18, 2:30pm**
Meeting Location: **85 Leighton Rd./66 Industrial Dr., Augusta, ME**

ATTENDEES	Initials	Company / Affiliation	Email
Richard Borrelli	RBB	WBRC, Principal in Charge	richard.borrelli@wbrcae.com
Steve Pedersen	SEP	WBRC, Architect, Project Manager	steve.pedersen@wbrcae.com
John Blais	JB	BREM, Project Manager	John.A.Blais@maine.gov
Andrew Giroux	AG	Central Services (Surplus & Postal), Div. Dir.	Andrew.J.Giroux@maine.gov
Jamie Andrews	JA	MaineDOT, PE Region Manager	Jamie.Andrews@maine.gov
Harold "Chip" Jones	HJ	Central Services (Surplus)	Harold.Jones@maine.gov
Sandra Saunders	SS	OIT Radio, Manager	Sandra.P.Saunders@maine.gov

DISTRIBUTION	Initials	Company / Affiliation	Email
Attendees			
John Kenney	JSK	WBRC, Civil Engineer	john.kenney@wbrcae.com
Dwain McKenney	DM	Central Fleet Mgmt, MaineDOT, Div. Dir.	Dwain.E.Mckenney@maine.gov
John Richards	JR	OIT Radio, Director	John.E.Richards@maine.gov
Nicholas Marquis	NM	OIT, Client Technology	Nicholas.Marquis@maine.gov
David Morris	DM	Bureau of Business Management, Deputy	David.Morris@maine.gov
Danielle Brooks	DB	MaineDOT, Financial Analyst	Danielle.Brooks@maine.gov
Chip Kelley	CK	MaineDot, Traffic	Chip.Kelley@maine.gov
Stephen Landry	SL	MaineDOT, PE	Stephen.Landry@maine.gov
Donald Hutchins	DH	MaineDOT	Donald.Hutchins@maine.gov
Gilbert Bilodeau	GB	BREM, Chief Facilities Officer	Gilbert.M.Bilodeau@maine.gov
Jaime Schorr	JS	Bureau of Business Management, Chief	Jaime.C.Schorr@maine.gov
Timothy Firnkes	TF	OIT, Client Technology	Timothy.Firnkes@maine.gov
Mark Bailey	MG	Central Fleet	Mark.R.Bailey@maine.gov
File Folder		4035.20 BGS 66 Industrial Drive	

MEETING AGENDA – Site Review of Existing Facilities

#	ITEM	ACTION
1	**GENERAL**	
1.1	The purpose of the meeting was to attend on-site visits of the existing facilities: • Surplus/Supply • OIT Print • Postal • OIT Radio	

2	**SURPLUS/SUPPLY**	
2.1	Provide space for public access in the warehouse to view supplies being put up for auction.	
2.2	Consider gym style bleachers for public seating for 200 during auctions. These could be collapsed against wall when not in use.	
2.3	Provide direct access to auction yard. See Site comments below.	
2.4	Provide space for processing, no public access, with (2) exterior loading doors. Currently, doors are sized as follows: • (1) 8'w x 8'h with 38" high dock. • (1) 8'w x 10'h with 44" high dock.	
2.5	Provide dock seals at all exterior loading doors.	
2.6	Loading doors should be fast acting. Consider pneumatic type.	
2.7	New facility should provide storage racks for approximately 300 pallet spaces on modular shelf racks. Shelf modules are modular 8'w x 4'd x 8'h, stacked 3-high, fitting two pallets, side by side, in each 8' bay module. Total number of modular storage racks is (50).	
2.8	Allow for 8' aisle between storage racks.	
2.9	Currently, there are two fork lifts in supply warehouse.	
2.10	Currently, there is a secure 7'w x 8'h overhead door to OIT Print.	
2.11	Provide for 3-phase rotary air compressor.	
3	**OIT PRINT**	
3.1	Must be secure area. State checks and other sensitive material are printed here.	
3.2	Provide (1) locking cabinet for IRS forms.	
3.3	Provide for (3) modular pallet racks.	
3.4	Provide dedicated temperature and humidity control.	
4	**POSTAL**	
4.1	Work room should be approximately square shaped for best and most flexible work flow.	
4.2	Allow for (10) 8'w x 4'd x 8'h rack storage modules, stacked 3 high.	
4.3	Owner to provide equipment list for all necessary floor-mounted postal equipment, including floor load weights.	**AG**
4.4	Provide 3-phase power.	
5	**OIT RADIO**	
5.1	Work area loading doors should be fast acting. Consider pneumatic type.	
5.2	Owner to provide linear feet of work bench space needed.	**SS**
5.3	Hand-lifted bins are provided under and alongside work benches.	
5.4	Need good lighting over work benches.	

5.5	Secure storage area needed for sensitive equipment. Could be located on mezzanine level.	
5.6	Proper ventilation need in vehicle work area.	
5.7	Compressor needed for work area.	
5.8	Connection to antenna system needed.	
6	**SITE**	
6.1	Preferred building orientation is parallel to entry drive with the public side facing the new fleet building on the adjacent lot.	
6.2	Employee parking will be to the north	
6.3	Auction storage and public lot will be to the south, with rows oriented north-south. Jersey barriers will be used to separate storage and public access areas on a rotating basis.	
6.4	Visitor parking will be parallel to the public-side long building axis. Include buffer between building and sidewalk for snowfall off roof and canopies at entrances.	
6.5	Add perpendicular parking along the easterly property limit, which will provide parking for police cars and similar vehicles waiting for OIT Radio.	
6.6	OK to infringe beyond limit line shown on owner's permitting site plan. (*Note: changing permitted impervious area will require stormwater treatment redesign and amendment to site permit.)*	
	NEXT STEPS	
7.1	• Prepare preliminary bridging plans for first review by owner.	

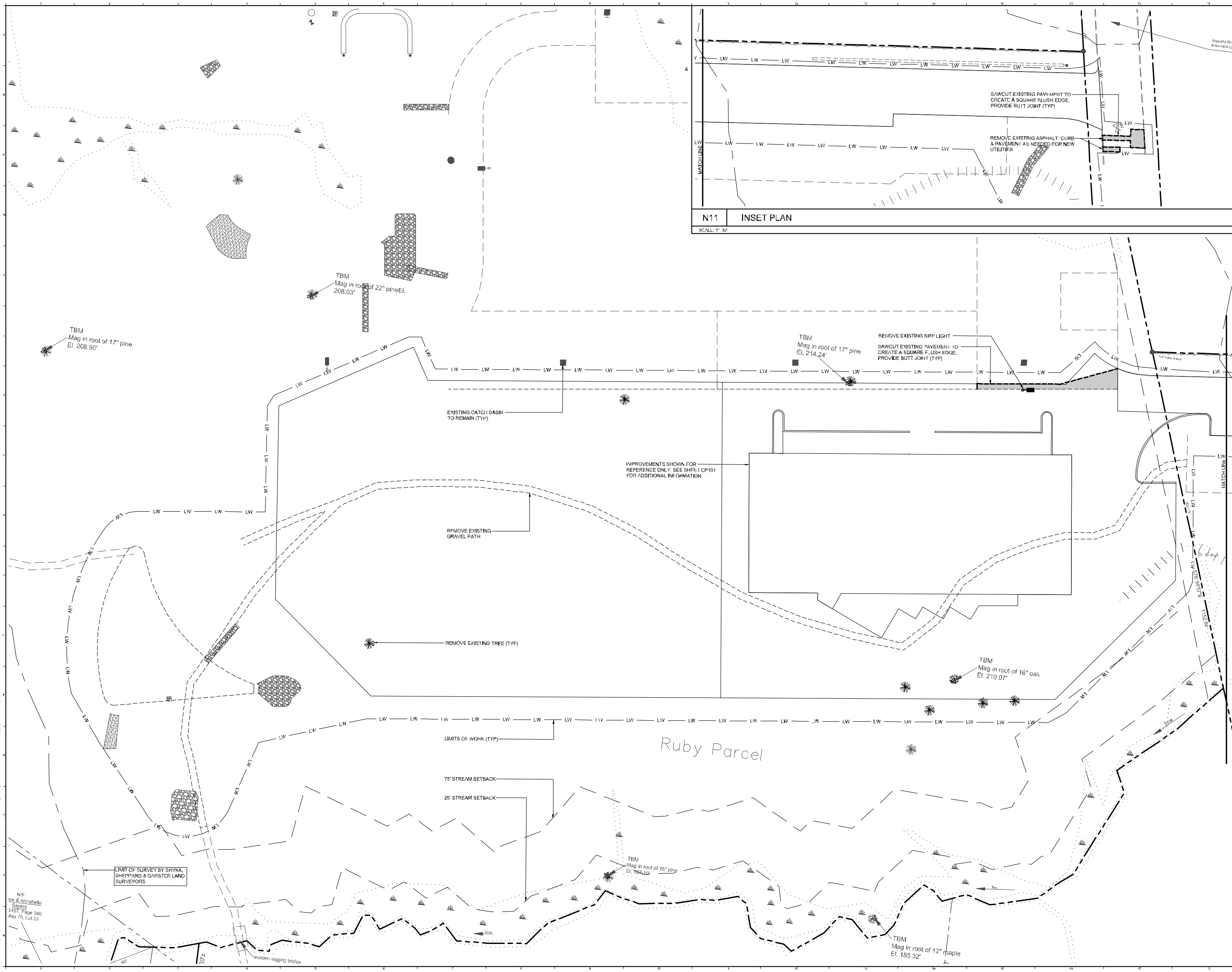
Respectfully submitted by:

Steve Pedersen, AIA, LEED AP
Project Manager
Maine Licensed Architect
WBRC ARCHITECTS · ENGINEERS

APPENDIX C - Concept Drawings

- CD101 SITE REMOVALS PLAN
- CP101 SITE LAYOUT PLAN
- CG101 SITE GRADING PLAN
- CU101 SITE UTILITY PLAN

- AE101 FIRST FLOOR PLAN
- AE102 SECOND FLOOR PLAN
- AE201 BUILDNG ELEVATIONS
- AE202 BUILDING ELEVATIONS



REMOVALS NOTES:

1. CLEARING LIMITS SHALL EXTEND ONLY TO SUCH A POINT NECESSARY TO COMPLETE EARTHWORK ACTIVITIES.

2. THE UTILITY INFORMATION SHOWN ON THIS PLAN IS APPROXIMATE AND IS BASED ON A SURVEY COMPLETED BY SHYKA, SHEPPARD & GARSTER LAND SURVEYORS (13-106, APRIL 25, 2013) & GIS INFORMATION PROVIDED BY THE GREATER AUGUSTA UTILITY DISTRICT. THE SITE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING UTILITIES PRIOR TO BEGINNING ANY SITE CLEARING, GRUBBING AND EARTHWORK ACTIVITIES.

3. ALL SOIL AND EROSION CONTROL MEASURES SHALL BE IN PLACE PRIOR TO THE COMMENCEMENT OF ANY WORK. SEE CG101 FOR MORE INFORMATION. THE SITE CONTRACTOR IS RESPONSIBLE FOR INSPECTING AND MAINTAINING ALL SOIL AND EROSION CONTROL MEASURES.

4. SOME TREE TRIMMING NOT SHOWN ON THIS PLAN MAY BE NECESSARY FOR CONSTRUCTION PURPOSES. THE SITE CONTRACTOR SHOULD EVALUATE AND SCHEDULE ACCORDINGLY.

LEGEND

EXISTING | PROPOSED

PAVEMENT REMOVALS
LIMITS OF CONSTRUCTION
PROPERTY SETBACK
PROPERTY LINE
ABUTTING PROPERTY LINE
TREE LINE

REV.	DESCRIPTION	DATE
1	PROGRESS PRINT	01.14.19
0	FIRST DRAFT	12.07.18

NORTH

NOT FOR CONSTRUCTION

WBRC ARCHITECTS • ENGINEERS
WWW.WBRCAE.COM
BANGOR, MAINE 207-947-4511
PORTLAND, MAINE 207-828-4511
SARASOTA, FLORIDA 941-373-1333

BGS 66 INDUSTRIAL

PROJECT: 66 INDUSTRIAL DRIVE, AUGUSTA, ME

SITE REMOVALS PLAN

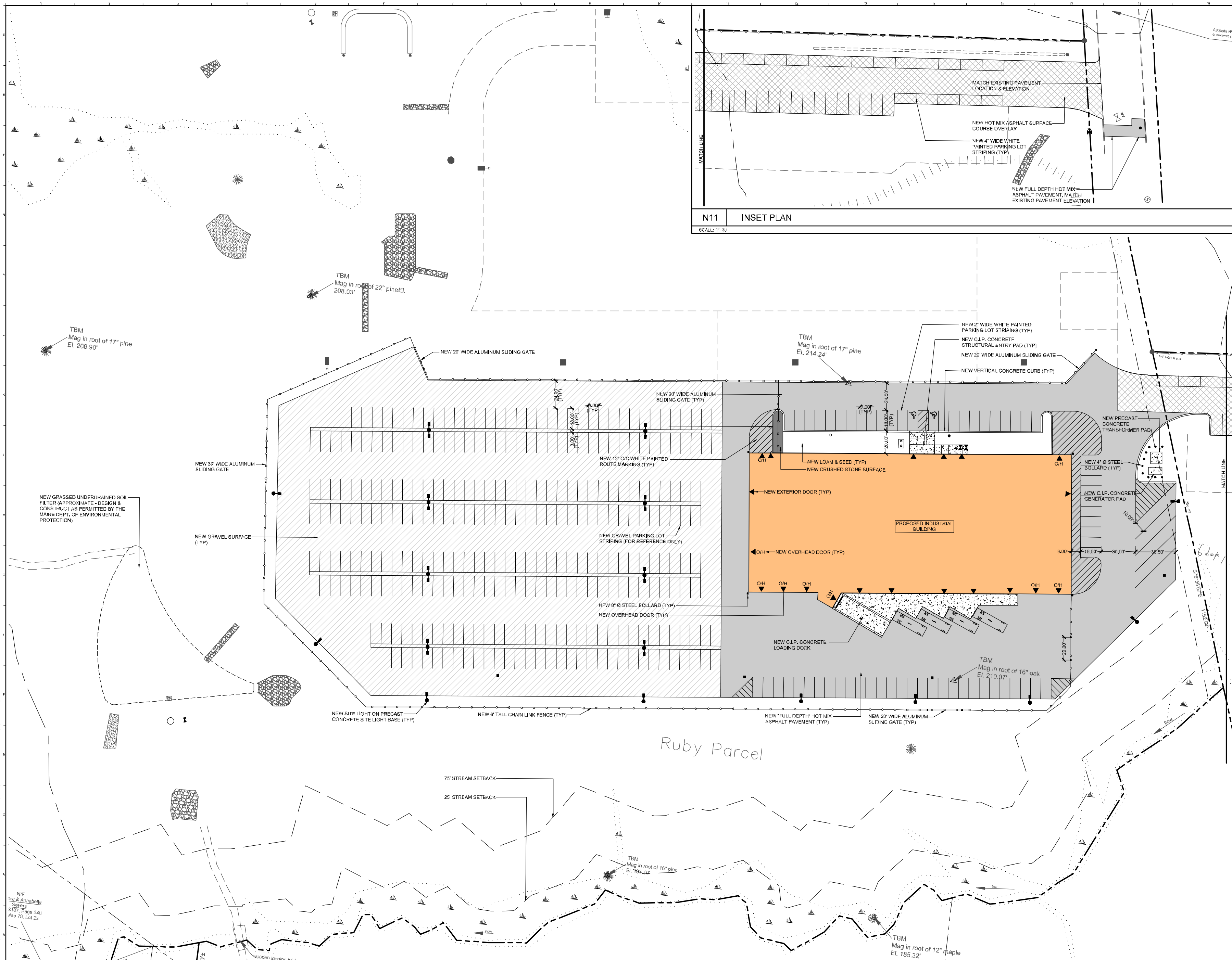
SHEET TITLE:

WBRC CAD FILE: 403520-SP101.DWG

PROJECT No.	4035.20
SCALE	1"=30'
PROJECT MANAGER	SEP
DRAWN BY:	TDP
CHECKED BY:	JSK

GRAPHIC SCALE 0" 1"

SHEET No. CD101



LAYOUT NOTES:

1. ALL CURB RADII SHALL BE 5' UNLESS OTHERWISE NOTED.

2. COORDINATE ALL SIDEWALK LOCATIONS WITH ARCH. AND STRUCTURAL DRAWINGS TO VERIFY NEW EXTERIOR DOOR LOCATIONS. FIELD ADJUST AS REQUIRED.

3. REFER TO STRUCTURAL SHEETS FOR NEW FOUNDATION LAYOUT. COORDINATE LAYOUT WITH FOUNDATION CONTRACTOR.

4. SEE SHEET CU101 FOR ADDITIONAL INFORMATION RELATED TO THE LAYOUT OF SITE LIGHTS AND UTILITY POLES AND THEIR RESPECTIVE CONDUIT AND WIRING.

LEGEND

EXISTING / PROPOSED

- LIMITS OF WETLAND
- UTILITY POLE
- STREET LIGHTING
- BUILDING LIGHTING
- WATER SHUTOFF / GATE VALVE
- TRANSFORMER PAD
- DUMPSTER
- MANHOLE
- SEWER MANHOLE
- CATCH BASIN
- FIRE HYDRANT
- SIGN
- FENCING
- P.T. GUARD RAIL
- PAVEMENT
- SIDEWALK
- VERT. SLIPFORM CONC. CURB
- GRANITE CURB
- PRECAST CONC. WHEEL STOP
- SEG BLOCK RETAINING WALL
- CIP CONCRETE RETAINING WALL
- WOOD CHIP PLAY AREA
- COARSE AGGREGATE
- CENTER LINE
- CONTROL PT.
- PROPERTY SETBACK
- PROPERTY LINE
- ABUTTING PROPERTY LINE
- TREE LINE

REV.	DESCRIPTION	DATE
1	PROGRESS PRINT	01.14.19
0	FIRST DRAFT	12.07.18

NOT FOR CONSTRUCTION

WBRC
ARCHITECTS • ENGINEERS
WWW.WBRCAE.COM

BGS 66 INDUSTRIAL

PROJECT: 66 INDUSTRIAL DRIVE, AUGUSTA, ME

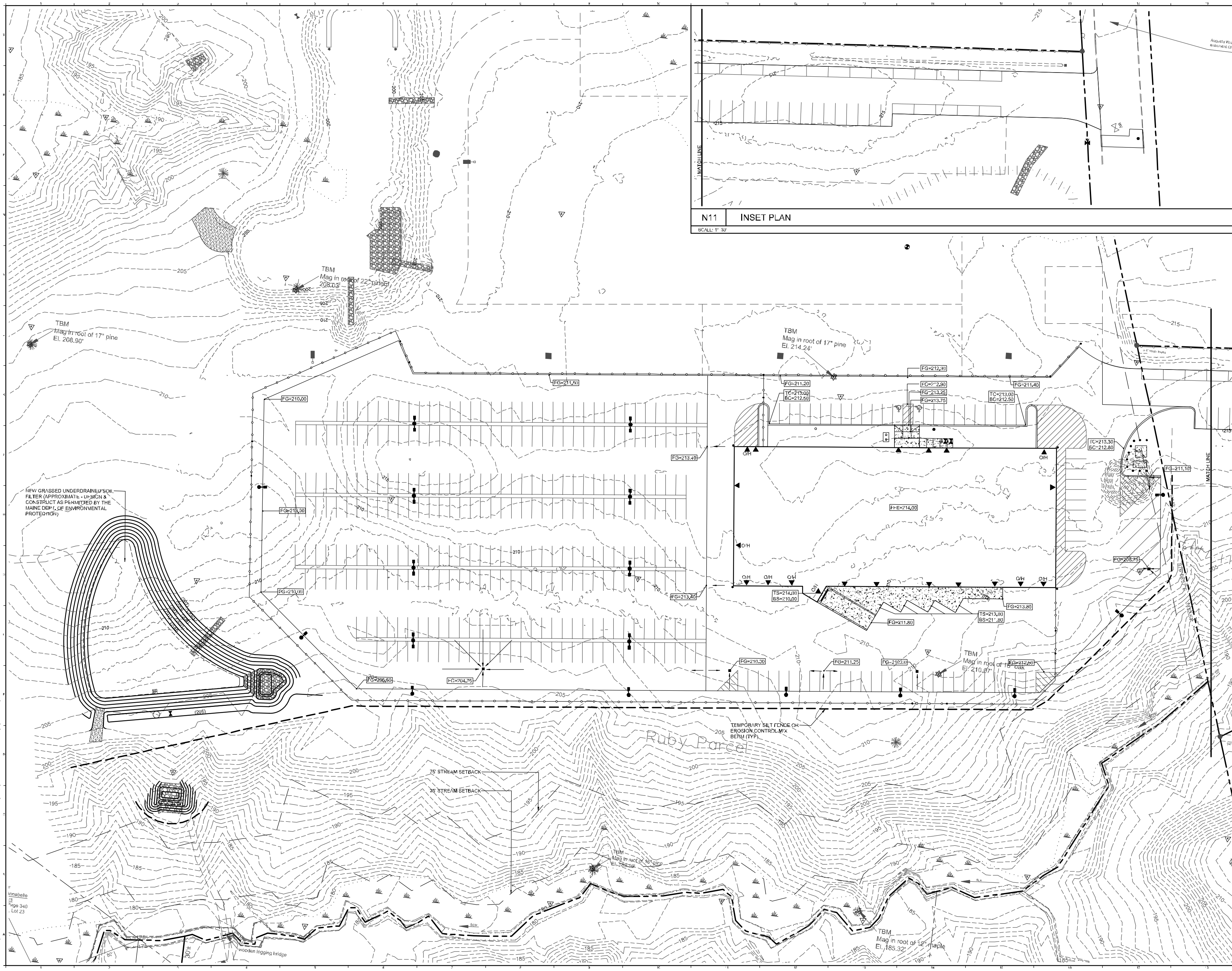
SHEET TITLE: SITE LAYOUT PLAN

WBRC CAD FILE: 403520-SP101.DWG

PROJECT No.	4035.20
SCALE:	1"=30'
PROJECT MANAGER:	SEP
DRAWN BY:	TDP
CHECKED BY:	JSK

GRAPHIC SCALE

SHEET No. CP101



GRADING NOTES:

1. ALL DISTURBED AREAS NOT RECEIVING PAVEMENT SHALL BE PROVIDED WITH LOAM AND SEED PER THE CONTRACT DOCUMENTS.

2. PROPOSED GRADING SHOWN ON THIS PLAN IS BASED ON A TOPOGRAPHIC SURVEY PREPARED SHYKA, SHEPPARD & GARSTER LAND SURVEYORS (13-06, APRIL 25, 2013) AND TOPOGRAPHIC INFORMATION PROVIDED BY THE MAINE DEPARTMENT OF TRANSPORTATION (2018). TOPOGRAPHIC SURVEY SHOULD BE UPDATED TO CONFIRM EXISTING CONDITIONS.

LEGEND

EXISTING / PROPOSED

- LIMITS OF WETLAND
- UTILITY POLE
- STREET LIGHTING
- BUILDING LIGHTING
- WATER SHUTOFF / GATE VALVE
- TRANSFORMER PAD
- DUMPSTER
- MANHOLE
- SEWER MANHOLE
- CATCH BASIN
- FIRE HYDRANT
- SIGN
- FENCING
- P.T. GUARD RAIL
- PAVEMENT
- SIDEWALK
- VERT. SLIPFORM CONC. CURB
- GRANITE CURB
- PRECAST CONC. WHEEL STOP
- SEG BLOCK RETAINING WALL
- CIP CONCRETE RETAINING WALL
- WOOD CHIP PLAY AREA
- COARSE AGGREGATE
- CONTOURS
- SEDIMENTATION CONTROL FENCE
- FLOW PATH
- TEMP. SILT INLET PROTECTION
- BANK STABILIZATION MESH
- PROPERTY SETBACK
- PROPERTY LINE
- ABUTTING PROPERTY LINE
- TREE LINE

REV.	DESCRIPTION	DATE
1	PROGRESS PRINT	01.14.19
0	FIRST DRAFT	12.07.18

NOT FOR CONSTRUCTION

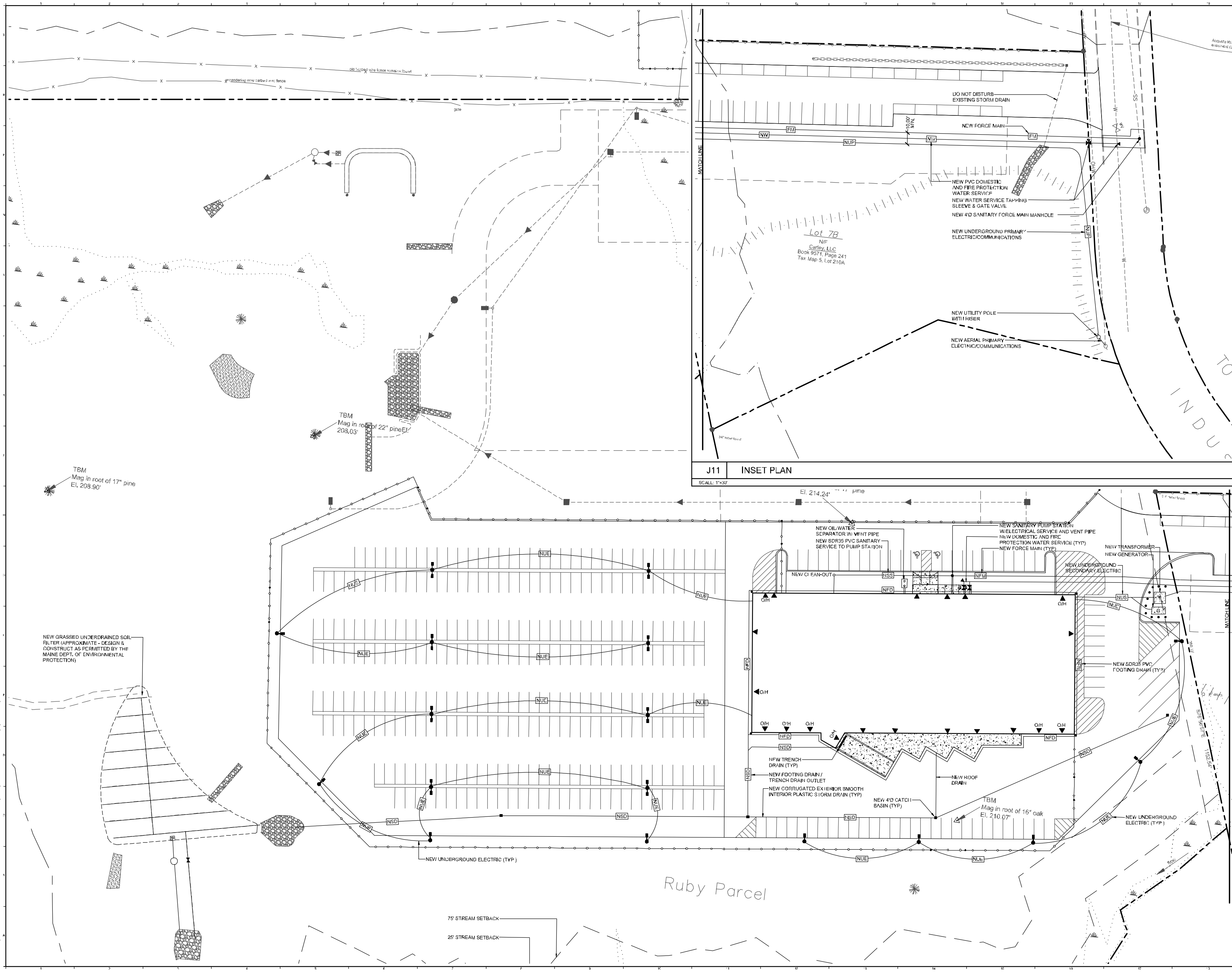
WBRC ARCHITECTS • ENGINEERS
WWW.WBRCAE.COM
BANGOR, MAINE 207-947-4511
PORTLAND, MAINE 207-828-4511
SARASOTA, FLORIDA 941-373-1388

PROJECT: BGS 66 INDUSTRIAL
66 INDUSTRIAL DRIVE, AUGUSTA, ME

SHEET TITLE: SITE GRADING PLAN

WBRC CAD FILE:	403520-SP101.DWG
PROJECT No.:	4035.20
SCALE:	1"=30'
PROJECT MANAGER:	SEP
DRAWN BY:	TDP
CHECKED BY:	JSK
SHEET No.:	CG101

Jan 15, 2019 - 8:45am
T:\02 Projects - Maine\4001-4100\403520 BGS 66 Industrial DV2 Design\Dwgs\Site\403520-SP101.dwg



LEGEND

EXISTING		PROPOSED
	LIMITS OF WETLAND	
	UTILITY POLE	
	STREET LIGHTING	
	BUILDING LIGHTING	
	FIRE HYDRANT/GATE VALVE	
	TRANSFORMER PAD	
	DUMPSTER	
	MANHOLE	
	SEWER MANHOLE	
	CATCH BASIN	
	SIGN	
	FENCING	
	BOLLARD RAIL	
	PAVEMENT	
	SIDEWALK	
	VERT. SLIPFORM CONC. CURB	
	GRANITE CURB	
	PRECAST CONC. WHEEL STOP	
	SEGMENTAL BLOCK RETAINING WALL	
	CIP CONCRETE RETAINING WALL	
	WOOD CHIP PLAY AREA	
	CONCRETE ACCESS PAD	
—G—	GAS SERVICE / MAIN	
—W—	WATER SERVICE / MAIN	NW
—SD—	STORM DRAIN	NSD
	UNDERDRAIN	
	FOOTING DRAIN	NFD
	CLEANOUT	
—SS—	SANITARY SEWER	NSS
—UE—	UNDERGROUND ELECTRIC	NUE
	UNDERGROUND SECONDARY	
	UNDERGROUND PRIMARY	NUP
—OE—	AERIAL ELECTRIC PRIMARY	
	PROPERTY LINE	
	PROPERTY LINE	
	ABUTTING PROPERTY LINE	
	TREE LINE	

REV.	DESCRIPTION	DATE
1	PROGRESS PRINT	01.14.19
0	FIRST DRAFT	12.07.18

NOT FOR CONSTRUCTION

WBRC ARCHITECTS • ENGINEERS
WWW.WBRCAE.COM
BANGOR, MAINE 207-947-4511
PORTLAND, MAINE 207-828-4511
SARASOTA, FLORIDA 941-373-0083

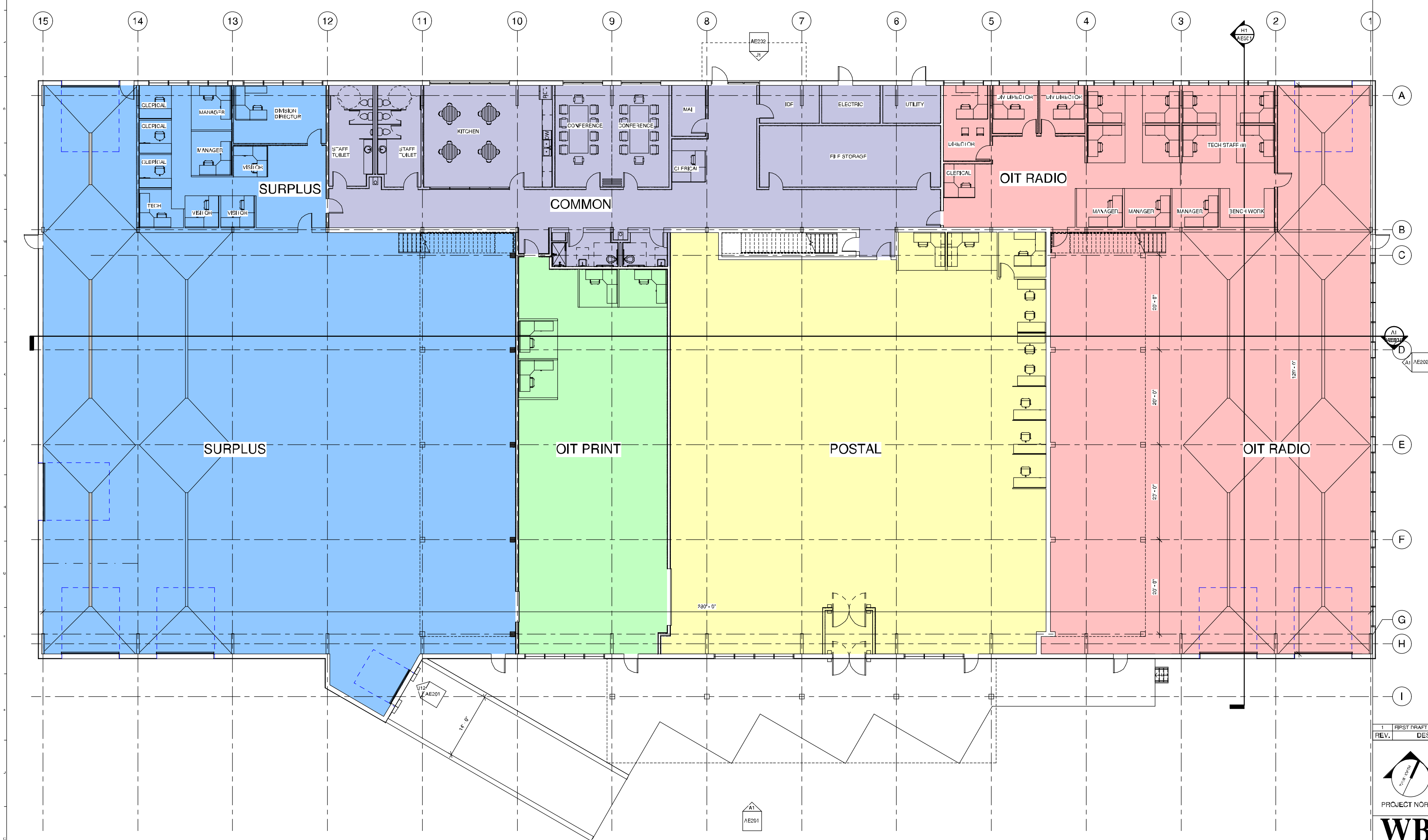
BGS 66 INDUSTRIAL
PROJECT: 66 INDUSTRIAL DRIVE, AUGUSTA, ME

SITE UTILITY PLAN

PROJECT NO.	4035.20
SCALE	1"=30'
PROJECT MANAGER	SEP
DRAWN BY	TDP
CHECKED BY	JSK
CAD FILE	403520-SP101.DWG

SHEET NO. CU101

Jan 15, 2019 - 8:46am
T:\02 Projects - Maine\4001-4100\4035\20 BGS 66 Industrial Dr\2 Design\Dwgs\Site\403520-SP101.dwg john.kenney



REV.	DESCRIPTION	DATE
1	FIRST DRAFT	12/7/18

NOT FOR CONSTRUCTION

PROJECT NORTH

WBRC ARCHITECTS • ENGINEERS

BGS 66 INDUSTRIAL

66 INDUSTRIAL DR, AUGUSTA, ME

FIRST FLOOR PLAN Option 1

FILE NAME - SHORT

4035.20

1/8" = 1'-0"

HBB

JRC

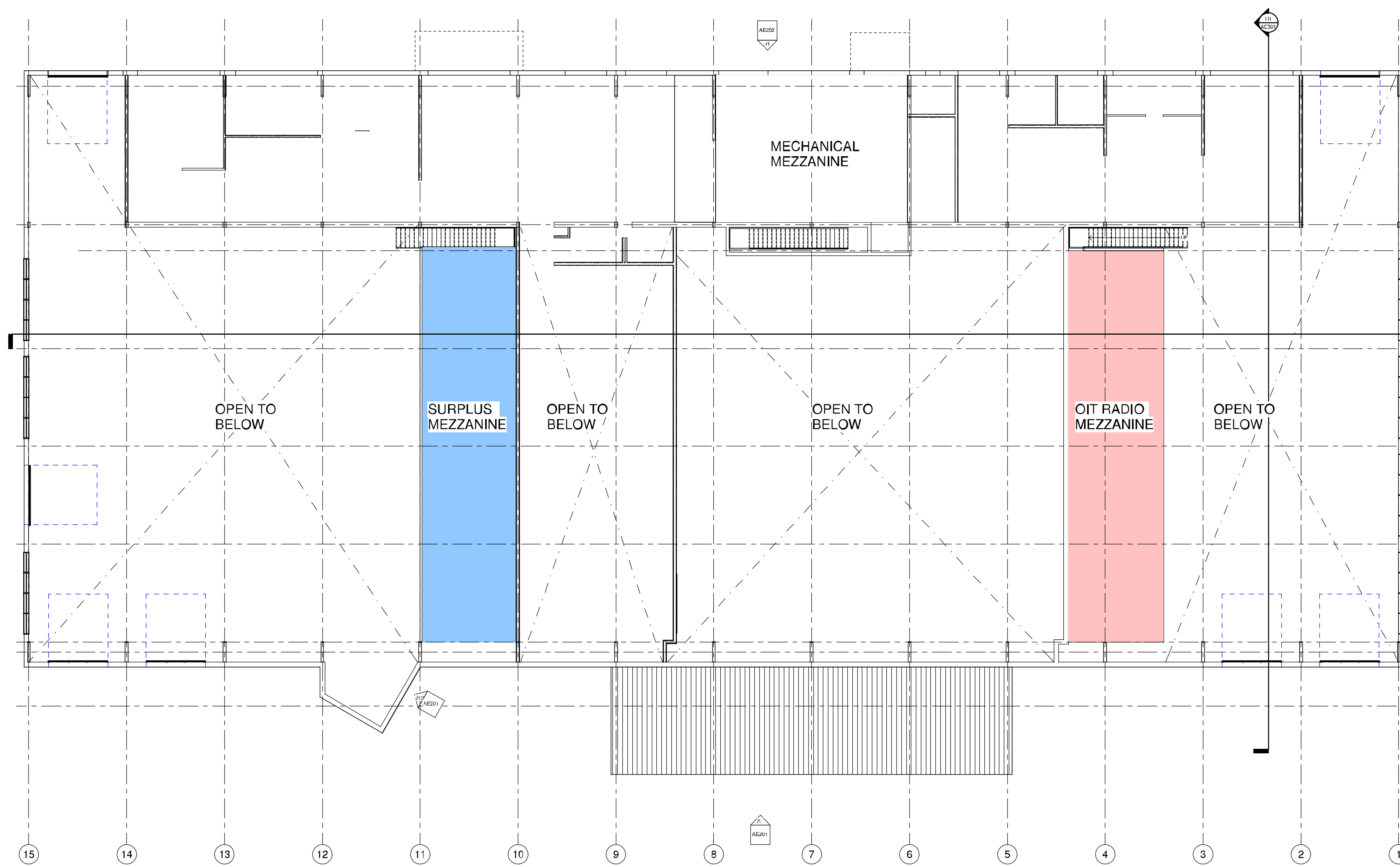
HBB

AE101

A1 FIRST FLOOR

1/8" = 1'-0"

AE201



A1 SECOND FLOOR

REV. | DESCRIPTION | DATE
1 | FIRST DRAFT |

PROJECT NORTH

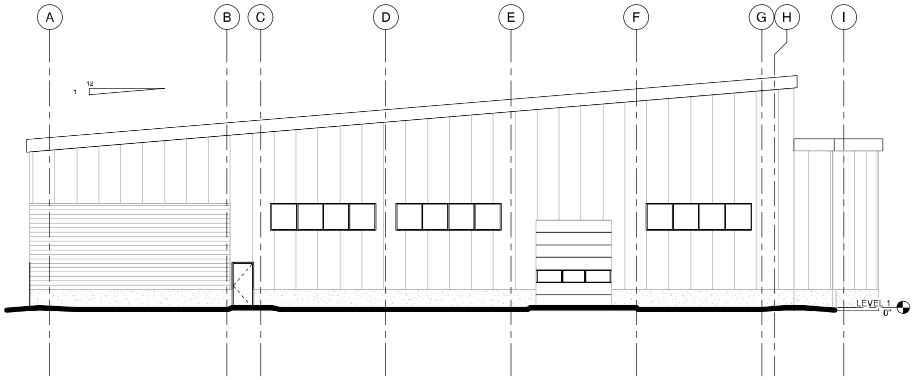
NOT FOR CONSTRUCTION

WBRC ARCHITECTS • ENGINEERS

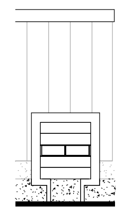
BGS 66 INDUSTRIAL

SECOND FLOOR PLAN Option 1

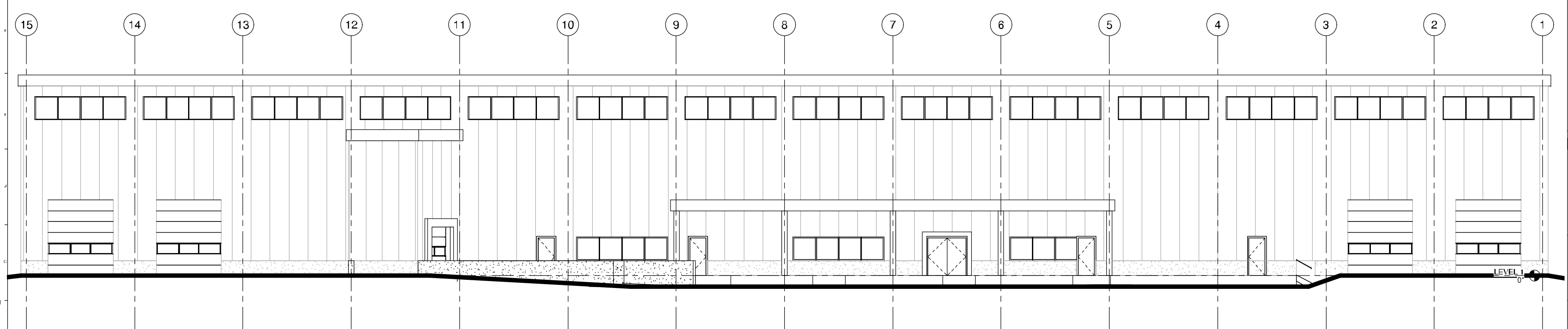
AE102



J1	NORTH ELEVATION
1/8" = 1'-0"	AE101.2



J12	DOCK ELEVATION
1/8" = 1'-0"	AE101



A1	WEST ELEVATION
1/8" = 1'-0"	AE101

REV.	DESCRIPTION	DATE
1	FIRST DRAFT	12.7.18

PROJECT NORTH

NOT FOR CONSTRUCTION

WBRC
ARCHITECTS • ENGINEERS
WWW.WBRCAE.COM
BANGOR, MAINE 207-947-4511
PORTLAND, MAINE 207-828-4511
SARASOTA, FLORIDA 941-556-0757

BGS 66 INDUSTRIAL

PROJECT: 66 INDUSTRIAL DR., AUGUSTA, ME

BUILDING ELEVATIONS

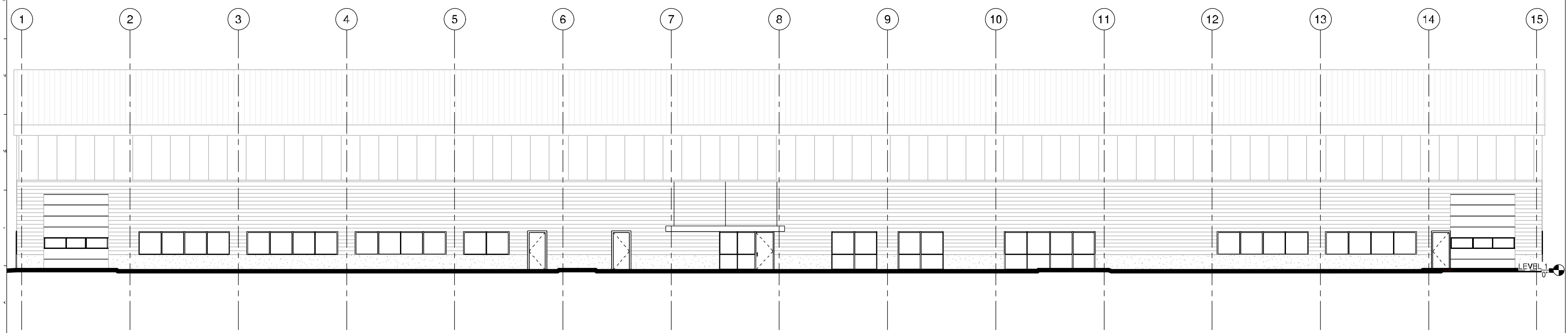
SHEET TITLE

WBRC CAD FILE: FILE NAME - SHORT

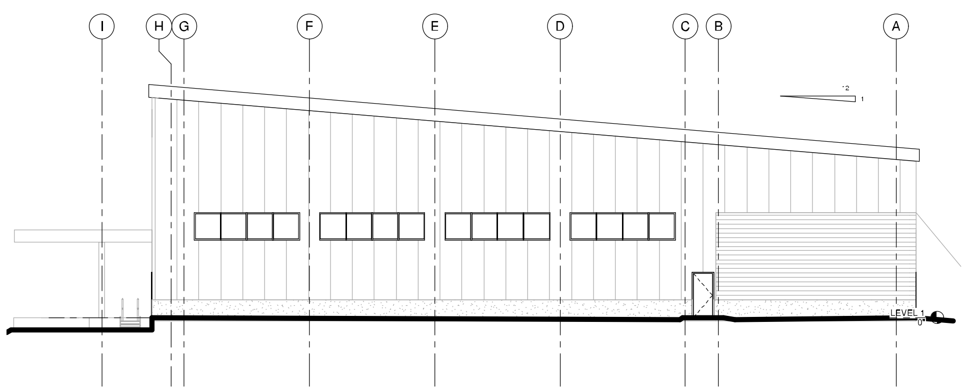
PROJECT No.	4035.20
SCALE	1/8" = 1'-0"
PROJECT MANAGER	RBB
DRAWN BY	JRC
CHECKED BY	RBB

GRAPHIC SCALE 0' 1'

SHEET No. AE201



J1 EAST ELEVATION
1/8" = 1'-0" AE101



A1 SOUTH ELEVATION
1/8" = 1'-0" AE101

REV.	DESCRIPTION	DATE
1	FIRST DRAFT	12.7.18

PROJECT NORTH

NOT FOR CONSTRUCTION

WBRC
ARCHITECTS • ENGINEERS
WWW.WBRCAE.COM
BANGOR, MAINE 207-94 -4511
PORTLAND, MAINE 207-828-4511
SARASOTA, FLORIDA 941-556-0757

BGS 66 INDUSTRIAL

PROJECT: 66 INDUSTRIAL DR., AUGUSTA, ME

BUILDING ELEVATIONS

SHEET TITLE

WBRC CAD FILE FILE NAME - SHORT

PROJECT No.	4035.20
SCALE	1/8" = 1'-0"
PROJECT MANAGER	RBB
DRAWN BY	JRC
CHECKED BY	RBB

GRAPHIC SCALE 0' 1'

SHEET No. AE202