BLOOMFIELD PUBLIC LIBRARY
MCMAHON WINTONBURY LIBRARY

SCHEMATIC DESIGN REPORT
March 30, 2022

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ARCHITECTURAL NARRATIVE

The McMahon Library project is a renovation /addition project expanding the existing library toward Blue Hills Avenue. The primary structure and masonry cladding of the existing library will remain in place with select exterior finishes, all interior wall configurations, all interior finishes and fixtures to be reconfigured/replaced with new. New window openings will be created and existing windows will be replaced with new. A new rear entrance canopy will be added. The existing roof will be replaced up to the structural deck. All wall and roof assemblies will be made to meet current energy code. A large portion of the new addition will be constructed of floor to ceiling curtain wall on the main elevation facing Blue Hills with clerestory windows on all other elevations. Along this main elevation is an interior/exterior bench. Roof overhangs and fritted ICU on the upper portion of the curtain wall will provide shade and minimize heat gain in the new addition. This portion of the new addition will house an entry vestibule, dedicated adult reading area with electric fireplace, and small café. Additionally, a smaller masonry addition will be constructed to house a new community room to be used both during and after library hours. There will be some exterior site modifications, including updates in the parking lot at the rear of the building, landscaping updates including a outdoor reading room directly adjacent from the children's area.

SCOPE OF WORK - OUTLINE SPECIFICATIONS

Division 2 – Existing Conditions

1. Selective Demolition: Demolition of select areas of buildings on the site, refer to drawings
2. Site Demolition: Remove utilities where indicated on the drawings, pavement and other site improvements.
3. Hazardous materials: Refer to Hazardous Building Materials Inspection Reports prepared by SLR.

Division 3 – Concrete

1. Structural Concrete: See structural narrative.

Division 4 – Masonry

1. Typical Exterior Wall Construction: 4" exterior face brick (match existing brick), air space, 3" rigid insulation, fluid applied membrane air and vapor barrier, 8" metal studs and 5/8" gypsum wall board.
2. 2" Blue stone slabs, (Thermal finish) at adult room bench (interior and exterior), surround of electric fireplace, refer to drawings

Division 5 – Metals

1. Structural Steel Framing and Metal Decking: See Structural Narrative.
2. Cold formed Metal Framing: 18-gauge steel studs at exterior wall assembly; stud framing for interior partitions in sizes as indicated on the drawings.
3. Metal Fabrications: Loose lintels, roof access ladders, rear entrance exterior canopy, Lintels of exterior window and door openings.
4. Metal Soffit panels: Powder coated flush face low profile aluminum metal panel with conceal fasteners Exterior overhang of new addition and over existing roof structure as noted in drawings.

Division 6 – Wood and Plastics

1. Rough Carpentry: Blocking, curbs, backing panels.
2. Interior Finish Carpentry: Rapidly renewable wood products at window sills.
3. Interior Architectural Woodwork: Clear finish bamboo AWI custom grade wood veneer on wheat board with w/solid surface tops. Certified sustainable hardwood trim and veneer.

Division 7 – Thermal and Moisture Protection\

1. Thermal Insulation:
    a. Perimeter Slab and Foundation Wall: 2" – R10 extruded polystyrene board.
    b. Cavity Wall: 3" – R15 or 4" – R20 extruded polystyrene board.
    c. Roof: 5" minimum – R20 extruded polystyrene.
    d. Acoustical Batt: Mineral wool.
2. Modified Bituminous Sheet Air Barrier: In cavity wall.
3. EPDM roofing: White with min SRI 78: At low slope roof areas not visible from grade, metal fascia along roof edge.
4. Roof Drains: Within roof area, connected to internal storm water piping, plus overflow outlets.
5. Roof Hatches: 1 unit for access to roof with ladder access, refer to drawings
6. Penetration Firestop Systems: At rated assemblies, UL listed systems where required by code.
7. Joint Sealants: Interior and exterior horizontal and vertical applications.

Division 8 – Doors and Windows

1. Metal Doors and Frames:
    a. Exterior Doors: Insulated, 14-gauge.
    b. Interior Doors: 18-gauge.
    c. Exterior Frames: Insulated, 12-gauge.
    d. Interior Frames: 16-gauge.
2. Flush Wood Doors: 1 3/4" solid core maple, certified sustainable.
3. Aluminum Framed Entrances and Storefront: Thermally broken EFCO or equal.
4. Aluminum Curtain Wall: Thermally broken EFCO, 8" Deep +/-, with integrated steel to minimize profile depth or equal.
5. Sliding Glass Doors: Interior/Exterior use, automatic, at Vestibule.

6. Aluminum Windows: Thermally broken, EFCO or equal.
7. Hardware: Heavy commercial grade.
8. Automatic Door Operators: At designated HC entrances.
9. Custom sliding closure perforated powder coated metal on metal subframe door at café, no header track using commercial grade hardware. Recessed floor track
10. Card Readers: at all exterior doors
11. Glazing:
    a. Insulated Glass: 1" thick Low-E, high performance. U-0.375 (COG U-0.25), SHGC 0.39. Exterior glazing up to 60" above floor to be tempered/laminated glass.
    b. Fritted Insulated Glass: 1" thick Low-E, high performance. U-0.375 (COG U-0.25), SHGC 0.39. Exterior glazing up to 60" above floor to be tempered/laminated glass.
    c. Tempered Glass: ¼" at interior applications.
12. Access Doors and Frames: Painted steel, where required at ceilings to access mechanical equipment.

Division 9 – Finishes (see also Finish Schedule below)

1. Drywall: 5/8" typical.
2. Flooring:
    a. Sealed Concrete Floor at Lower Level.
    b. Carpet Tile.
    c. Ceramic Tile: 2x2 on floors, base and walls (toilet rooms).
    d. Epoxy painted floors.
3. Ceilings (refer also to reflected ceiling plans):
    a. Acoustical Tile: 2'x2' ¾" USG Mars ClimaPlus or equal (NRC not less than 0.65).
    b. Grid: Face, Capped, Double-web steel suspension system.
    c. Wood Slat Ceiling: where indicated on ceiling plans, above Community room, Childrens' area and service desk . Linea solid wood continuous plank system with Linea PET backer or equally acoustically rated wood slat ceiling, access panels as noted in drawings will utilize caddy clip system with stagger joints
    d. Wood Ceiling Panels: Front vestibule Library, hardwood veneer plywood, concealed fasteners, dim (tbd)
    e. Painted Gypsum Wall Board: Toilet Rooms.
4. Painting: Low VOC Paints:
    a. Walls: Latex Eggshell.
    b. HM Doors and Frames: Oil Semi-Gloss.
    c. Drywall Ceilings: Latex Flat.
    d. Toilet Room Ceilings: Epoxy paint.
5. Acoustic panels: Linea solid wood continuous grill system with Linea PET backer or equal. Located in Adult area as indicated on drawings
6. Wood Wall Panels: Front vestibule Library, hardwood veneer plywood concealed fasteners, dim (tbd)

Division 10 – Specialties

1. Visual Display Surfaces:
    a. Tack boards: Made of waste cork and linoleum with backboards of certified formaldehyde-free plywood.
    b. White Boards: TBD.
2. Display Cases: TBD.
3. Electronic Display: TBD.
4. Signage:
    a. Exterior, Building Identification: Raised 3-dimensional metal lettering with concealed fasteners, dimension, tbd. Located on both sides of building, see exterior elevations.
    b. Interior, ADA-compliant room identification.
    c. Interior, commemorative plaque and area designations.
5. Toilet Partitions: Phenolic resin, floor mounted and overhead braced.
6. Toilet and Bath Accessories:
    a. Electric hand dryers.
    b. Dual type toilet paper dispensers, soap dispensers, sanitary napkin disposal units, grab bars, mirrors, utility hooks.
    c. Baby changing stations.
7. Fire Extinguishers, Cabinets, and Accessories: no ozone depleting substances.
8. Manufactured Electric Fireplace: European Home E1560, 2 sided left handed glass corner
9. Flag Pole: Wall mounted, final location TBD.
10. Recessed Art hanging rail as noted in drawing, Taikya or equal.
11. Metal Lockers: In Staff Area.

Division 11 – Equipment

1. Library Book Return: One Thru-wall type, Kingsley or similar, One free standing exterior type
2. Projection Screen: 12 ft w. ceiling recessed, electric screen in Community Room.
3. Residential Appliances: Countertop microwave and under counter refrigerator.

Division 12 – Furnishings

1. Window Shades: Roller Shades, motorized, single roll units typical. Double shade with black out roller shade in Community Room.
2. Entrance Floor Mats and Frames: Recessed, roll-up vinyl-acrylic tread rail, hinged mat with aluminum frame, in vestibules.

Division 13 – Special Construction – Not Used.

Division 14 – Conveying Systems – Not Used.

Division 32 – Exterior Improvements

1. Prefabricated exterior canopy. Painted galvanized steel structure at rear entry.
2. Reclad with new metal panel, exterior roof structure.

FINISH SCHEDULE

First Floor

Vestibule Front

Floor:	Recessed walk-off mat with porcelain tile base.(stone source gray or eq)
Walls:	Wood panel, all elevations, refer to drawings
Ceiling:	Wood panel
Lighting:	Recessed round down fixtures

Vestibule Rear

Floor:	Recessed walk-off mat with porcelain tile base (stone source gray or eq)
Walls:	Existing brick (to be cleaned)
Ceiling:	Painted gypsum wall board.
Lighting:	Recessed round down fixtures

Staff Offices and Work Areas

Floor:	Carpet Tile.
Walls:	Painted gypsum wall board.
Ceiling:	2x2 acoustic tiles in suspended grid.

Service Desk Areas

Floor:	Bolon woven flooring (elements silk)
Walls:	Painted gypsum wall board, Existing brick (to be cleaned, refer to drawings
Ceiling:	Linea solid wood continuous plank system with Linea PET backer or equal
Specialties:	Custom free-standing millwork entry desk.
Lighting:	Frosted linear fixture compatible with wood slat ceiling system

Community Room

Floor:	Linoleum with rubber base.
Walls:	Painted gypsum wall board.
Ceiling:	Linea solid wood continuous plank system with Linea PET backer or equal
Specialties:	Acoustic panels at ceiling, Projection Screens.
Lighting:	Frosted linear fixture compatible with wood slat ceiling system

Café

Floor: Linoleum with rubber base.
Walls: Painted gypsum wall board.
Ceiling: Painted gypsum wall board.
Lighting: Day-o-lite round series, ADL-RO4-DI

Custodial and Storage Rooms

Floor: Epoxy floor and base.
Walls: Epoxy paint on gypsum wall board.
Ceiling: 2x2 acoustic tiles in suspended grid.
Specialties: Mop rack and shelf.

Adult Area

Floor: Bolon woven flooring (elements silk)
Walls: Painted gypsum wall board/ Linea solid wood continuous grill system with Linea PET backer or equal, existing brick (to be cleaned), New brick, refer to the drawings.
Ceiling: As shown on reflected ceiling plans.
Specialties: Acoustic wood panels over brick walls as noted in drawings, custom millwork shelving, masonry bluestone lintel for fireplace
Lighting: Day-o-lite round series, ADL-RO4-DI

Teen Center/Children's Areas

Floor: Carpet Tile.
Walls: Painted gypsum wall board on all walls (including existing ptd CMU wall), existing brick (to be cleaned)
Ceiling: As shown on reflected ceiling plans, (Painted gypsum wall board, Linea solid wood continuous plank system with Linea PET backer or equal
Specialties: Full wall graphic mural as noted in drawings.
Lighting: Speclume Giant Globe pendant – GPRF1200GV – varied diameters, refer to drawings.
Frosted linear fixture compatible with wood slat ceiling system, refer to drawings.

Toilet Rooms

Floor: Ceramic tile floor and base.
Walls: Ceramic tile.
Ceiling: Painted gypsum wall board.
Specialties: Toilet partitions and accessories.
Lighting: Recessed round down fixtures

SITE / LANDSCAPE ARCHITECTURAL NARRATIVE

SCOPE OF WORK- - OUTLINE SPECIFICATIONS

The following outlines the scope of work for the new construction:

Roadways and Vehicular Circulation

- Bituminous concrete pavement shall consist of 2-inch thick bituminous concrete wearing course over a 2-inch thick binder course installed on 6 inch depth compacted processed aggregate base material (CT DOT Form 818, Section M.05.01).
- Site curbing shall be precast concrete curbs, 6 inches wide by 18 inches high, on 6 inch depth compacted processed gravel base and composed of 3500 psi air-entrained concrete.
- Pavement sections are subject to modification based on any additional information or revisions that may be provided by the Geotechnical Engineer.

Sidewalks and Pedestrian Circulation

- Concrete pavement (pedestrian) shall consist of 5 inch thick 4500 psi air-entrained concrete reinforced with epoxy coated welded wire fabric on 8 inch depth compacted processed aggregate base (CT DOT Form 818, Section M.05.01).
- Finish: broom finish.
- Expansion joints (16' o.c. max.) and control joints (4' o.c. max.) shall be provided in all concrete paving. All expansion joints shall be doweled and sealed. Control joints shall be tooled joints.
- Detectable warning pavers shall be cast-in-place cast iron (dipped finish) at all curb ramps.
- Pavers shall be 2 ½ inches thick 5000 psi concrete pavers. Pavers shall be set on sand setting bed over concrete pavement base with holes drilled for drainage and polymeric sand swept joints. Aluminum edge restraint shall be installed where pavers meet lawn or plant bed conditions.
- Heavy duty pavers shall be 3 inches thick 5000 psi concrete pavers. Pavers shall be set on sand setting bed over concrete pavement base with holes drilled for drainage and polymeric sand swept joints. Aluminum edge restraint shall be installed where pavers meet lawn or plant bed conditions.
- Pavement sections are subject to modification based on any additional information or revisions that may be provided by the Geotechnical Engineer.

Site Furnishings

- Benches shall be placed at various locations on the library site (entrances and reading garden). Bench design will be complementary to the building architecture/features. There shall be two types of material: 1. Aluminum frame with wood seat and back, permanently anchored and 2. Precast concrete organic form, permanently anchored. Provide an allowance for: (5) five aluminum/wood benches. Length: 6 feet. Provide an allowance for: (17) precast concrete seat pods, (5) organic form precast concrete benches (form of benches shown on plans within children's reading garden).

Landscape Amenities and Equipment

- Maintenance Strip: 900 sf with a 2" depth of flexible porous pavement system and 4" of 3/4" process aggregate base shall be placed where shown on plans. Maintenance strip shall be bordered by flush concrete curbing where abutting lawn or plant bed conditions.

Landscaping

- Shade trees, ornamental trees and shrubs, perennials and groundcovers are incorporated throughout the library site, as shown on the Site Plan.
    - Shade Trees:
        - Size: 4 – 4 1/2" caliper.
        - Qty: 25.
    - Multi-stem River Birch:
        - Size: 10-12' height.
        - Qty: 3.
    - Ornamental Trees:
        - Size: 4" – 4 1/2" caliper.
        - Qty: 9.
    - Emerald Green Arborvitae:
        - Size: 7-8' height.
        - Qty: 14.
    - Shrubs:
        - Size: 24"-30" height.
        - Qty: 206 deciduous shrubs, 206 evergreen shrubs.
    - Perennials/Groundcover:
        - Size: #1 container.
        - Qty: 902.
- Plant bed mix: 18 inch depth, mix of screened topsoil and compost.
- All lawn areas shall be provided with 6 inch depth of screened and amended topsoil.
- Landscape edgings shall be used where plant beds abut lawn areas. Material: aluminum, mill finish.
- Mulch: 3 inch depth for trees and shrubs, 2 inch depth for perennial and groundcover beds. Material: double shredded hardwood bark, natural color, un-dyed.

CIVIL NARRATIVE

General

The new systems will be designed in accordance with the requirements of the following codes and standards:

- State of Connecticut Department of Transportation Standard Specifications for Roads, Bridges and Incidental Construction Form 818
- 2002 Connecticut Guidelines for Soil Erosion and Sediment Control, Dep Bulletin 34.
- Town of Bloomfield, Connecticut

Available Utilities

The available utilities are as follows: Electric (Eversource), telephone (Frontier Communications and Comcast), Water (The Metropolitan District), Gas (Connecticut Natural Gas), and Sanitary Sewer (The Metropolitan District).

Schematic Storm Water Management Approach

Currently, storm runoff from the site passes overland across the existing parking lot to Rockwell Avenue which is then picked up by a series of catch basins, the front courtyard area along Blue Hills Avenue flows to a yard drain which is then conveyed to the storm drainage system within the road. The existing building drainage is shown on a compiled map to have a discharge to a swale located to the southeast of the property just south of the parking.

Storm runoff from the improved areas and proposed building addition will be collected by a series of yard drains, catch basins and roof drainage systems. The proposed improvements are currently determined to have an increase in the amount of impervious surface and therefore a storm water detention system will be required to mitigate peak flows. To accommodate the need for detention, an above ground detention basin is proposed on the eastern side of the site prior to discharge into the drain system within Rockwell Avenue. Additionally, underground detention will be provided to mitigate the peak flow increase along Blue Hills Avenue with a subsequent discharge to the drainage system within Blue Hills Ave. Water quality measures will also be provided, a water quality unit will be installed prior to the above ground detention basin to provide greater water quality than exists on-site today. The detention basin will also provide retention storage of the first 1” storm (“first flush”) of runoff and therefore also cover the required CT DEEP groundwater recharge volume.

Best Management Practices will be adhered to for treatment of storm water for pollutant removal. The BMP’s may include catch basin hoods/deep sumps, vegetated swales, hydrodynamic separators, etc.

Additional measures and storm water routing will be developed as the design progresses.

Schematic Utility Services

Water mapping indicates that the library is served by an existing water main that is located along Blue Hills Avenue. New fire protection and domestic services are proposed to connect into this main along with a new meter pit to be coordinated with the Metropolitan District.

Gas mapping indicates that the gas meters are located at the southeastern corner of the building, due to the proposed addition, the gas meter will require relocation and it is assumed that this will also require a new service be brought in from the main within Blue Hills Avenue. The gas service and meter shall be coordinated for relocation and redistribution with Connecticut Natural Gas (CNG).

The existing 8" PVC sanitary sewer trunk line runs west to east along Rockwell Avenue culminating at the intersection with Blue Hills Avenue. The existing 6" PVC sanitary line serving the existing building is assumed to be replaced in its entirety as the building addition is proposed directly on top of it. Modifications to the existing manhole where the service discharges are not anticipated at this time.

Materials:

Domestic Water and Fire Protection Piping	Push-on-Joint, Ductile-Iron Pipe: AWWA C151, with push-on-joint bell and plain spigot end, AWWA C110, ductile- or gray-iron standard pattern, thickness class 54. Shall meet The Metropolitan District standards. All joints shall be restrained with mechanical retainer glands and tie rods with Mega-Lug type clamps, or approved equivalent. Gaskets: AWWA C111, rubber. Detectable warning tape shall be installed over the piping.
Sanitary Piping	PVC Pipe and Fittings: ASTM D3034, SDR 35, PVC Type PSM, ASTM F789 Type PS-46, sewer pipe with bell-and-spigot ends for gasketed joints. Shall meet The Metropolitan District standards. Gaskets: ASTM F477, elastomeric seals
Sanitary Manholes	Precast Manhole: ASTM C 913; designed according to ASTM C 890 for A-16 (ASSHTO HS20-44), heavy-traffic, structural loading; of depth, shape, and dimensions indicated, with provision for sealant joints. Minimum diameter of 4 feet. Shall meet The Metropolitan District standards. Joint Sealant: ASTM C 990, bitumen or butyl rubber. Resilient Pipe Connectors: ASTM C 923, cast or fitted into manhole walls, for each pipe connection. Frame and Cover: 24-inch ID by 7- to 9-inch riser, with 4-inch-minimum-width flange and 26-inch- diameter cover. Include indented top design with lettering cast into cover, using wording equivalent to

	"SANITARY SEWER". Material: ASTM A 48/A 48M, Class 35 gray iron unless otherwise indicate
Storm Piping	Corrugated PE drainage pipe and fittings: NPS 3 to NPS 10: AASHTO M 252M, Type S, with smooth waterway for coupling joints. Soiltight Couplings: AASHTO M 252M, corrugated, matching tube and fittings. NPS 12 to NPS 60: AASHTO M 294M, Type S, with smooth waterway for coupling joints. Soiltight Couplings: AASHTO M 294M, corrugated, matching pipe and fittings.
Storm Manholes	Precast Manhole: ASTM C 913; designed according to ASTM C 890 for A-16 (ASSHTO HS20-44), heavy-traffic, structural loading; of depth, shape, and dimensions indicated, with provision for sealant joints. Minimum diameter of 4 feet. Joint Sealant: ASTM C 990, bitumen or butyl rubber. Resilient Pipe Connectors: ASTM C 923, cast or fitted into manhole walls, for each pipe connection. Frame and Cover: 24-inch ID by 7- to 9-inch riser, with 4-inch-minimum-width flange and 26-inch- diameter cover. Include indented top design with lettering cast into cover, using wording equivalent to "STORM". Material: ASTM A 48/A 48M, Class 35 gray iron unless otherwise indicate
Catch Basins	Precast Concrete Catch Basins: ASTM C 913, precast, reinforced concrete; designed according to ASTM C 890 for A-16 (ASSHTO HS20-44), heavy-traffic, structural loading; of depth, shape, and dimensions indicated, with provision for joint sealants.
Yard Drains	Cast-Iron Area Drains: ASME A112.6.3 gray-iron square body with anchor flange and square grate. Top-Loading Classification: Heavy Duty.

STRUCTURAL NARRATIVE

SCOPE OF WORK- - OUTLINE SPECIFICATIONS

The following outlines the scope of work for the new construction:

GENERAL

All structures will be designed in accordance with the 2015 International Building Code/2018 Connecticut Supplement. The minimum design criteria as provided by the code, includes dead, live, and gravity loads, and wind and seismic loads. Dead loads consist of the weight of architectural, structural, mechanical and electrical systems. Live, wind and seismic loads are outlined in the "Design Criteria" following this narrative. The proposed structure shall be designed in accordance with the International Building Code (IBC) and Connecticut State Building Codes to withstand the applicable wind loads and roof loading from drifting of snow.

DESIGN BASIS

Soils Conditions: A geotechnical report provided by Welti Geotechnical P.C., dated March 3, 2022, specifying the excavation and backfilling requirements for foundations and retaining walls. The report recommends an Allowable Bearing Pressure of 4,000 psf. The foundations shall consist of continuous footings at the perimeter and spread footings at column locations.

Typical foundation walls (excluding retaining walls) are assumed to consist of 12" reinforced concrete walls on continuous 3'-0" wide x 1'-0" thick spread wall footings. Walls and footings shall be constructed using 4,500 psi concrete. All footings exposed to frost, shall be placed a minimum of 3'-6" below finished grade. The wall reinforcing is assumed to consist of #5@16"o.c. vertical with matching footing dowels and #4@12"o.c. horizontal with (2)-#5 continuous horizontal bars top and bottom. The longitudinal footing reinforcing shall be (3)-#5 continuous. All wall reinforcing shall have Class "B" laps at splices and corner bars. New exterior columns will be supported on reinforced concrete piers supported on reinforced concrete spread footings. Interior columns will be supported on isolated reinforced concrete piers and isolated reinforced concrete spread footings. Any building retaining walls shall be designed during the subsequent design phases.

Typical Floor Slabs on Grade: The typical floor slabs on grade are assumed to be 5" thick normal weight concrete slab (3,500 psi) reinforced with 6x6-W2.9xW2x.9 welded wire fabric supported on continuous steel wire chairs. All Pre-K and Kindergarten Classroom, slabs on grade shall have radiant heat. Assume a double layer of welded wire fabric in spaces with radiant heat. Provide thickened slabs under all masonry partitions 6" or greater in thickness. All interior slabs shall be placed over a 15 mil vapor retarder on a compacted processed aggregate base material. All concrete for the slabs on grade shall have a moisture vapor reducing admixture to control the transmission of moisture vapors thru the slab. Floor depressions, as well as any areas of specialized floor finishes shall be located and specified by the Architect.

Library Store Slab Construction: Due to shallow headroom, the elevated slab above the Library Store shall consist of an 8" formed cast-in-place concrete one way slab with a double reinforcement matt of #5 at 12" on center.

Roof Construction (Steel Framing): The typical roof construction, shall consist of 20 gage, 1.5 inch galvanized metal roof deck on steel beams and/or joists, supported by steel girders, supported by steel columns. Selected roof areas will be designed with adequate load capacity to support future photo voltaic panels.

Structural Steel: Shall be fabricated and erected in accordance with the current AISC Specification for the Design, Fabrication, and Erection of Structural Steel for Buildings. During this early design phase, we would estimate the steel tonnage for the structure to be approximately 14 lbs. per square foot.

Lateral Load Resisting System: Based on the current architectural design, laterally stability shall be achieved utilizing either concentric steel braced frames or moment frames. The braced frames are assumed to consist of structural steel rectangular HSS sections spanning between steel columns at strategic locations to be coordinated during the design development and construction document phases.

END OF SECTION

DESIGN CRITERIA

1. 2015 International Building Code/2018 Connecticut Supplement.

2. Design Live Loads: Town of Brookfield

Minimum Live Loads:

Assembly:	100 psf
Offices	50 psf
Classrooms	40 psf
Corridors (First floor)	100 psf
Lobbies	100 psf
Partitions	15 psf
P.V. Panels	8 psf

Snow Loads:

Roof, Flat Snow Load,

Pf = 0.7 Ce Ct I Pg = 27 psf= 30 psf min.

(Pg= 35 psf, Ce= 1.0, Ct = 1.0, I = 1.1

Snow Drift Load:

In accordance with Section 1608.7

3. Wind Load Criteria: Refer to ASCE 7-10, "Minimum Design Loads for Buildings and Other Structures"

P = q GCp – qi (G Cpi)

Basic Wind Speed, V*ult*:	130 mph
V*asd*:	101 mph
Exposure Category:	B
Risk Category:	II
Mean Roof Height, h	TBD

4. Earthquake Load Criteria: Refer to Chapter 9 of ASCE 7-10, "Minimum Design Loads for Buildings and Other Structures"

Seismic framing system – Ordinary Composite Braced Frames or Steel Moment Frames

S_s = 0.180

S_1 = 0.064

S_{ds} = 0.192

S_{d1} = 0.102

Risk Category III
Seismic Design Category = TBD
Importance Factor, Is (Category III) = 1.25
Soil Site Class = D
Response Modification Factor, R=3.0
Deflection Amplification Factor, C_d = 3.0

Division 03 30 00 – Cast-In-Place Concrete:

All cast-in-place concrete shall conform to ACI 301 "Specifications for Structural Concrete for Buildings", and ACI 318 "Building Code Requirements for Reinforced Concrete".

1. Reinforcing bars: ASTM A615, Grade 60
2. Welded wire fabric: ASTM A185
3. Portland cement: ASTM C150, Type I.
4. Aggregates: ASTM C33
5. Water: clean, free from deleterious amounts of acid, alkalis and organic materials.
6. Admixtures:
   - Air-entraining admixture: ASTM C260
   - Water reducing, accelerating, high range water reducing admixtures: ASTM C494
7. Concrete:
   - Slabs on grade: 3500 psi (no air entrainment) at 28 days. Water-cement ratio shall not exceed 0.50 by weight. Air content 6 percent by volume. Include moisture vapor reducing admixture in design mix.
   - Foundations: 4500 psi at 28 days, with air-entraining admixture. Concrete subject to de-icers shall have water-cement ratio not exceeding 0.40.

Division 05 12 00 – Structural Steel:

1. Structural steel: in accordance with the current AISC Specification for the Design, Fabrication, and Erection of Structural Steel for Buildings.
2. Fabricator Qualifications: A qualified fabricator that participates in the AISC Quality Certification Program and is designated an AISC-Certified Plant, Category BU, or is accredited by the IAS.
3. Installer Qualifications: A qualified Installer who participates in the AISC Quality Certification Program, is designated an AISC-Certified Erector.
4. All welding: by welders holding active welding certificates only.
5. Structural steel: ASTM A36
6. Welding electrodes: E70XX
7. High strength bolts: ASTM A325
8. Shop welding, field welding, and high strength bolting: laboratory controlled.

Division 05 12 13 – Architecturally Exposed Structural Steel:

1. Fabricator Qualifications: A qualified fabricator that participates in the AISC Quality Certification Program and is designated an AISC-Certified Plant, Category BU, or is accredited by the IAS. Fabricator Inspection Program for Structural Steel (AC 172) and is experienced in fabricating AESS similar to that indicated on this Project.
2. Installer Qualifications: A qualified Installer who participates in the AISC Quality Certification Program, is designated an AISC-Certified Erector and is experienced in erecting AESS similar to that indicated on this Project.

3. Comply with requirements of ANSI/AISC 303, Sections 1 through 9 and as modified in Section 10, "Architecturally Exposed Structural Steel."
4. Build mockups of AESS to set quality standards for fabrication and installation.
5. Comply with requirements of ANSI/AISC 303, Sections 1 through 9 and as modified in Section 10, "Architecturally Exposed Structural Steel."

Division 05 30 00 – Metal Deck:

1. Metal roof deck: 1 1/2" deep, 20 gage, galvanized steel roof deck with nesting side seams.
2. Manufacture and install in accordance with Steel Deck Institute Design Specifications and Code of Recommended Standard Practice. Manufacturer: Member of SDI.
3. Form metal from hot dipped galvanizing sheet conforming to ASTM A446-76, Grade A, with zinc coating conforming to ASTM A525-76, Coating Designation G-60.
4. Installation and fastening: Conform to SDI Tentative Recommendations for Design of Steel Deck Diaphragms.
5. Shear connectors: stud type conforming to ASTM A 108, Grade 1015 or 1020. Dimensions and tolerances in accordance with figure 4.22.1 of the AWS "Structural Welding Code - Steel".
    - An arc shield (ferrule) of heat resistant ceramic or other suitable material shall be furnished with each shear connector.
    - A suitable deoxidizing and arc stabilizing flux for welding shall be furnished with each shear connector.

Division 05 51 00 – Cold Formed Metal Framing:

1. Structural Performance: Provide cold-formed metal framing capable of withstanding design loads within limits and under conditions indicated.
    - Design Loads: Wind Loads: per ASCE-07-10
    - Cold-Formed Steel Framing, General: Design according to AISI's "Standard for Cold-Formed Steel Framing - General Provisions.
2. Recycled Content of Steel Products: Provide products with an average recycled content of steel products so post-consumer recycled content plus one-half of pre-consumer recycled content is not less than 25 percent.
    - Steel Sheet: ASTM A 1003/A 1003M, Structural Grade, Type H, metallic coated, of grade and coating weight as follows.
        a. Grade: As required by structural performance
        b. Coating: G60.
3. Exterior Non-Load-Bearing Wall Framing
    - Steel Studs: Manufacturer's standard C-shaped steel studs, of web depths indicated, punched, with stiffened flanges, and as follows:
        a. Minimum Base-Metal Thickness: 0.0428 inch.
        b. Flange Width: 1-5/8 inches.

Mechanical, Electrical & Plumbing Narrative

I. EXECUTIVE SUMMARY

RZ Design Associates has been retained by TSKP Studios to provide a design for the mechanical, electrical and plumbing for the addition and renovation to the McMahon Library in Bloomfield, CT. The existing building is located at 1015 Blue Hills Ave. The addition and renovation will be approximately 9,200 ft^2. This study includes recommendations for Heating, Ventilation and Cooling, Plumbing, and Electrical Systems.

II. APPLICABLE CODES AND STANDARDS

The mechanical, electrical, plumbing, and fire protection systems will be provided in conformance with the requirements of the following codes and regulations and all applicable local authority requirements.

A. 2018 Connecticut State Building Code

B. 2018 Connecticut State Fire Safety Code

C. 2015 International Mechanical Code

D. 2015 International Plumbing Code

E. 2015 International Energy Conservation Code

F. NFPA, All applicable code sections, Latest Version

G. ASHRAE 90.1-2010

H. ASHRAE 62.1

I. 2017 National Electric Code

III. PLUMBING SYSTEMS

1. Existing incoming water service and all branch piping to be removed. A new 2-inch domestic water service shall be provided to serve the domestic water demands of the facility. The new domestic water service shall be supplied from the existing water main in the street. The new water service equipment shall include water meter, isolation valves, pressure reducing valve, reduced pressure backflow preventer, strainer and bypass and shall meet all current code requirements and the requirements of the MDC. This new water meter assembly shall meter all water use for the entire library.

2. All existing domestic water system and piping to be removed. New domestic hot water, cold water and re-circulating hot water piping shall be provided to serve the plumbing fixtures and equipment throughout the building. All domestic piping shall be Type L copper conforming to ASTM B 88 with sweat fittings using 95/5 solder. All domestic water piping shall be insulated with rigid molded, noncombustible glass fiber insulation conforming to ASTM C335. All domestic water piping throughout the building shall be installed above ceilings and concealed within wall cavities.

3. A high efficiency electric heat pump style hot water heater shall be provided for the domestic hot water.

4. All above-slab sanitary, waste and vent piping in the existing building will be replaced throughout. It is recommended that the existing sanitary sewer piping below floor be investigated to determine its condition and if replacement is warranted. New sanitary, waste, and vent piping for all new plumbing fixtures. Sanitary, waste and vent piping shall be plain

end cast iron with stainless steel clamp and shield assemblies conforming to ASTM B 42 for above ground piping. Buried piping shall be ASTM D2665 PVC with solvent cement joints conforming to ASTM D2855 with ASTM D2564 solvent cement. All sanitary waste and vent piping shall be concealed within chases and walls where ever possible. Waste services shall exit the building below slab at multiple locations to be coordinated with the civil engineer. All sanitary waste shall be piped to the municipal waste water systems. Vent piping shall exit the building through the roof with a 4" diameter pipe and shall extend a minimum of 12" above the finished roofline.

5. All existing roof drains on the existing building will be replaced. New roof drains and interior storm drainage piping will be provided on the new additions and connected to the site storm water system via new storm sewer piping. Overflow will be handled by scuppers where possible, otherwise overflow drains will be provided and shall terminate at a location visible to the building's maintenance staff. Backwater valves shall be provided on all storm mains as they exit the building..

6. Existing gas service and all associated gas piping to building shall be removed. Provide a new natural gas meter and pressure regulator sized to provide the new total connected load and pressure requirements for the library equipment. New piping within the building shall be installed to supply gas to the new hot water heating boilers, and new mechanical equipment. Natural gas piping shall be Schedule 40, ASTM A53 black steel with ASME B16.3 or ASTM A234 fitting with threaded joints for piping 2" and smaller and welded joints for piping 2-1/2" and larger. Installation of the natural gas system shall conform to the requirements of the Connecticut Gas and Equipment Code and NFPA 54.

7. Building will be LEED certified. All fixtures will be low flow. Additional metering will be provided for the domestic hot water system.

8. All plumbing fixtures required to be accessible shall be in accordance with the Americans with Disabilities Act (ADA), 504 and UFAS standards.

   a) Water closets shall be wall hung, vitreous china, low consumption (high efficiency 1.28 gallon per flush water closets), by American Standard or approved equal. Flush valves shall be sensor operated, by Sloan or approved equal.

   b) Lavatories shall be wall hung type, vitreous china, by American Standard or approved equal. Faucets shall be low consumption 0.5 gpm, battery operated, by Symmons or approved equal.

   c) ADA sinks in shall be countertop mounted, stainless steel with offset drain fittings as manufactured by Elkay or approved equal. ADA compliant faucet with extra long single lever handle and swing spout shall be provided and shall be as manufactured by Symmons or approved equal.

   d) Wall hangers for water closets and lavatories shall be heavy duty adjustable height type installed within chase spaces provided behind fixtures, by J.R. Smith or approved equal.

   e) Water coolers shall be stainless steel, two-tier, ADA style, vandal resistant manufactured by Elkay or approved equal.

   f) Mop basins shall be floor mounted, 24"x24", molded stone, with wall mounted faucet & trim, by Fiat or approved equal.

   g) Cast iron floor drains shall be installed at all group toilet rooms. Heavy-duty cast iron floor drains shall be installed in all mechanical rooms. Floor drains shall be by J.R. Smith or approved equal. Trap guards shall be provided for floor drains.

   h) All roof areas shall have primary/secondary roof drains by J.R. Smith, cast iron, with dome

strainer or approved equal.

i) Lockable hose bibs with vacuum breakers shall be installed in all group toilet rooms, by Woodford or approved equal.

j) Lockable wall hydrants with vacuum breakers shall be installed on exterior walls every 100 feet. Wall hydrants shall be non-freeze type by Woodford or approved equal.

IV. MECHANICAL SYSTEMS:

Demolition

1. The existing HVAC rooftop unit and curb to be removed. Penetration in roof shall be patched and sealed to accommodate new equipment and orientation. All associated ductwork, diffusers, grilles, supports and accessories to be removed.

2. Toilet exhaust fan and curb to be removed. Penetration in roof shall be patched and sealed to accommodate new equipment. All associated ductwork, grilles, supports and controls to be removed.
3. Existing electric baseboard radiation and cabinet heaters to be removed. All associated controls, supports and accessories shall be removed.

General Mechanical

1. Heating, air conditioning and ventilation will be provided for the entire facility. The system will be designed to provide 75 °F during cooling and 70 °F during heating. Ventilation and exhaust will be provided in accordance with the current Connecticut State Building Code (2015 International Mechanical Code) and ASHRAE Standard 62.1, Ventilation for Acceptable Indoor Air Quality. Ductwork will be sized in accordance with the acoustic consultant's recommendations with a maximum of 0.8" pressure drop per 100 feet of ductwork; piping will be sized for a maximum head loss of 4 ft per 100 feet of piping.

2. This will be a LEED credited project and measures will be taken to achieve this including energy metering, demand control ventilation, MERV 13 filtration, refrigeration management, acoustic considerations and enhanced thermal comfort.

3. The Variable Refrigerant Flow (VRF) system will be provided with dedicated system controls that shall provide temperature control for the terminal units. The VRF controls system shall be integrated with the BMS system for monitoring and temperature override control.

4. A Building Management System (BMS) will be provided to control and monitor mechanical and electrical systems.
    a) The BMS system shall include a dedicated computer with custom graphics display, color printer, modem and be capable of controlling from a remote location.
    b) The BMS shall provide temperature control for all HVAC systems with exception to the VRF terminal units and condensers. The BMS shall monitor the VRF system and have temperature setpoint capabilities.
    c) The system shall be programmed for occupied/unoccupied control for the dedicated outdoor air handling equipment, as well as an override feature for spaces that would be used when the system is typically inactive.
    d) The BMS shall be available from any Web browser, given that proper authorization

is achieved.

V. Cooling Plant

Variable Refrigerant Volume and Dedicated Outdoor Air Handling Unit

1. The cooling for the building will be done with a Variable Refrigerant Flow (VRF) system. The system should include a 2,400 CFM dedicated outdoor air system (DOAS), Valent model VXE-112 or equivalent, with a DX cooling coil and a hot glycol heating coil. The condenser for the DX coil will be remote mounted on the roof. The DOAS unit will be ducted directly into the VRF terminal units, and provide ventilation air to the spaces. The DOAS will exhaust from the toilet rooms as well as general exhaust in the space, and have an enthalpy wheel to recover the energy from the space. Duct smoke dampers and smoke detectors will be located at each shaft penetration, and communicate with the fire alarm system.

2. Mounted on the roof will be approximately 28 Tons of air cooled roof mounted VRF heat recovery condensing units Mitsubishi model PURY or equivalent. There will be a total of 1 VRF condensing unit, and 1 condensing unit for the DOAS dx coil. These VRF condenser will be piped to heat recover boxes located inside the building, which are then piped to the indoor terminal units. The heat recovery boxes will have a dedicated condensate drain and connect to the nearest sanitary drain.

3. The indoor spaces will be served by a combination of concealed ducted, cassette type and wall concealed indoor terminal units, Mitusbishi model PEFY, PLFY, PFFY or equivalent. The indoor units will be capable of both heating and cooling. The units shall be supported from adequate structure and proper access provided for service and maintenance. A temperature sensor shall be provided for each indoor unit to maintain individual control. The indoor units will each have a condensate drain line and connect to the nearest sanitary drain.

VI. Heating Plant

Condensing Gas Boilers

1. The heating plant will consist of two wall mounted gas fired boilers, Lochinvar model WHB085N or equivalent. The boilers will be arranged in a primary, secondary loop configuration and the fluid will be hot water with 40% propylene glycol. The primary pumps with be a factory provided 10 GPM constant speed circulating pump, model UPML-110 or equivalent and the secondary pumps will be fully redundant 12 GPM in line pumps, Bell and Gossett ECO XL 36-45 or equivalent, that each have a dedicated VFD. The pumps will distribute hot glycol to perimeter radiators, cabinet unit heaters and the DOAS heating coil. The boiler will operate on an outdoor air reset schedule, reducing the boiler temperature as the outdoor temperature rises. The boilers will each have exhaust and intake pipes and be vented out the side of the building.

2. The perimeter spaces with large window areas will be served with pedestal fin tube radiators to offset the heating loss. Vestibules will be served with cabinet unit heaters and perimeter mechanical spaces will be served with unit heaters.

3. Primary heat in the spaces will be done with the VRF terminal units. When additional heat is required, the baseboard radiators will supplement the VRF system.

VII. Materials and Methods:

1. General:
    e) The mechanical contractor shall furnish and install all temperature control wiring, interlock wiring and equipment control wiring for the equipment furnished under this division.
    f) All work shall be carried out in conjunction with other trades and full cooperation shall be given in order that all work may proceed with a minimum of delay and interference.
    g) After completion of the work, but before substantial completion, test, adjust and balance all air and water systems in accordance with either AABC, NEBB, or TABB standards.
    h) Provide a complete set of as-built drawings reflecting as installed conditions. As-built drawings shall indicate all installed conditions of systems within this discipline. Drawings shall be of similar scale as the construction documents and include details as necessary to clearly reflect the installed condition.
    i) Firestopping shall be provided around mechanical penetrations in accordance with fire stopping requirements. System shall be capable of maintaining against flame and gases, shall be UL listed and comply with ASTM E814.
    j) Building will be designed to meet the minimum ventilation requirements of the current ASHRAE 62.1 using the Ventilation Rate Procedure for mechanical systems.

2. Ductwork:
    a) Ductwork shall be fabricated from hot-dipped galvanized steel sheet conforming to ASTM a653, with g60 coating. Exhaust ductwork serving toilet/shower spaces shall be aluminum sheet alloy 3003-h14, ASTM b 209, aluminum connectors and bar stock: alloy 6061-t6 or of equivalent strength.
    b) Fabricate, support, install and seal in accordance with SMACNA HVAC duct construction standards - metal and flexible, and as indicated. Provide duct material, gauges, reinforcing and sealing for operating pressures indicated.
    c) Access doors shall be provided under this section as required to provide access to fire and smoke dampers, controls, humidifiers, coils alves, etc., which are located in ducts.
    d) Faced fiberglass duct wrap shall be applied externally to all concealed ducts in accordance with manufacturers instructions. Duct wrap to be 1.5 pcf density with k value of 0.27 at 75 deg f, equal to Owens Corning type 100 or equivalent.
    e) Apply 1" acoustical duct liner and liner board to the inside of ducts and plenums as specified and as called for on drawings. Acoustical liner shall be 2.0 pcf density with k value of 0.26 at 75 deg f, equal to Manville permacote linacoustic-hp or equivalent.

3. Hot Glycol Piping
    a) Schedule 40 black steel pipe conforming to ASTM a53, with welded, threaded or grooved joints.
    b) Fittings: ASTM a234 wrought steel welding type fittings, ASTM b16.3 malleable iron threaded fittings, or grooved fittings and mechanical couplings

c) Fittings 2" and under shall be threaded, fittings 2-1/2" and over shall be welded or grooved.

d) Piping 2" and smaller may be ASTM b88 type k drawn copper with soldered fittings or copper press fittings.

e) Provide rigid molded, noncombustible fiberglass pipe insulation with white kraft paper vapor barrier jacket and self-sealing lap joint and butt strips. Insulation shall be 1.5 pcf density with k value of 0.24 at 75 deg f. Insulation shall be rated for operating temperatures from 0 deg f to 850 deg f and be equivalent to Owens Corning ASJ-SSL II or equivalent.

f) Fittings shall be covered with flexible fiberglass insulation and zeston pvc fitting covers. Insulation thickness shall be in conformance with the international energy code.

g) All insulation materials, including jackets and adhesives, shall meet the requirements of NFPA 90a, according to ASTM test e-84, NFPA 255 and ul 723, having a flame-spread rating of not over 25, a smoke-developed rating of not over 50 and a fuel-contributed rating of not over 50.

4. Refrigerant Piping

a) Drawn (rigid) copper tube shall be type ACR, r410 rated, ASTM b280, h58 temper, clean, dry and capped. Fittings shall be ASME b16.22 wrought copper. Joints shall be brazed with AWS a5.8 bcup silver / phosphorus / copper alloy.

b) Annealed (soft) copper tube shall be type acr, r410 rated, ASTM b280, o60 temper, clean, dry and capped. Fittings shall be ASME 16.22 wrought copper. Joints shall be flared or brazed with AWS a5.8 bcup silver / phosphorus / copper alloy.

c) Insulation shall be flexible elastomeric. Insulation thickness shall be in conformance with the international energy code.

5. Low Pressure Condensate:

a) Pipe: schedule 80 black steel pipe conforming to ASTM a53, with welded or threaded joints.

b) Fittings: ASTM a234 wrought steel welding type fittings or ASTM b16.3 malleable iron threaded fittings.

c) Fittings 2" and under shall be threaded, fittings 2-1/2" and over shall be welded.

6. Pipe Hangers and Supports

a) All hanger, support and anchor types or model numbers specified herein are based on Grinnell or acceptable equivalent. Supports shall conform to mss-sp-69 and ANSI b31.1. Wire and/or strap hangers will not be acceptable.

b) Hangers for pipe sizes two (2") inches and smaller shall be light-duty, clevis-type hangers, #65. For copper pipes two (2") inches and smaller, use ct-69 copper band hangers or ct-65 copper plated clevis.

VIII. ELECTRICAL SYSTEMS

Demolition scope:

1. All the existing electrical work within the building shall be demolished in its entirety. Electrical demolition work includes but not limited to panelboards, disconnects, power outlets, light fixtures, low voltage data & telephone devices, fire alarm devices, backboxes, conduits, any associated line voltage wiring & low voltage control wiring etc.
2. The existing facility also had roof mounted solar panels generating solar power & meter

associated with it is located next to the utility meter on the building exterior. All the electrical work associated with this system shall be demolished completely.

XIII. Electrical Service:

1. Existing electrical utility service (600Amp, 208Y/120V, 3phase, 4 wire) shall be reused to serve the renovation & additions to this facility.

2. This facility shall be approximately 9,000 square foot in size after renovations & additions with an anticipated load density to be a minimum of 15 watts/square foot.

3. The new electric service equipment shall feature a service entrance rated, surface mounted 600Amp fused Disconnect switch, 600Amp surface mounted Main distribution panel.
   a) Underground service entrance conduits are existing to remain. New feeders shall be provided.

   b) Grounding & Bonding shall be provided as required per NEC

   c) All new conductors shall be copper.

4. The building shall have solar panels mounted on roof (design by others). Provide (2) -4" Conduits from roof to Main electrical room for interconnection between solar system & breaker assigned for it in the main distribution panel.

XIV. Electrical Distribution

1. The building shall be provided with panelboards and feeders arranged to efficiently distribute power to key areas of the building and its equipment. This shall include but not be limited to:
   HVAC, Plumbing equipment, lighting, receptacles, data telecommunications network equipment, security equipment, fire alarm equipment, AV, sound system and technology equipment, etc.

2. Branch circuits shall be installed in EMT conduit. EMT conduit shall be used to the first device in a branch circuit and shall be used in all masonry or CMU partitions. Type MC cable shall be allowed but limited to concealed spaces above finished ceilings or in drywall type partitions after EMT connection has been provided to the first device. The following provisions shall be included:

   a) Electrical Outlets shall be provided as required based on furniture layout & programming requirements. Refer to electrical SD plans for preliminary Layout of electrical fixtures.

   b) Circuits for all HVAC equipment as required. 120 volt wiring to control panels, control transformers, etc shall be provided by the electrician while low voltage control wire shall be provided under Division 23.

   c) Circuits for all plumbing equipment.

   d) Circuits for the Fire Alarm, Access Control, Surveillance, Data Network, Audio/Sound and Security equipment shall be provided as required.

   e) Circuits for office equipment as required.

   f) Circuits for electric water coolers as required.

g) Duplex tamper resistant receptacles every 20'-0" in corridors for housekeeping.

h) Maintenance GFCI and weatherproof outlets located on the roof within 25ft of HVAC rooftop equipment.

i) Exterior wall mounted outlets where directed by the owner.

j) Boiler emergency shutdown buttons will be located at the door(s) to the boiler room.

XV. Lighting Systems

1. Typical design illumination levels for ambient lighting shall include:

   a) 15fc average - Corridors, toilet rooms & storage rooms

   b) 35 - 50fc average – Community Room, Adult Area, Teen Center, Learning Lab, Children's Area, offices and utility rooms.

   c) 30fc average – All other areas not listed above

2. The following fixtures will be provided:

   a) 5' long pendant mounted direct/indirect decorative linear LED fixtures with extruded aluminum housings to be installed in areas without ceilings having exposed structure. Quantities of fixtures shall be designed to provide the requisite footcandle levels. Fixtures will be arranged parallel and perpendicular to building lines and normally parallel to the largest area of vertical fenestration to promote daylight harvesting design.

   b) Decorative style round pendants will be designed in open areas in renovation space with high ceilings.

   c) Direct/indirect volumetric style acrylic lensed 2' x 2' recessed mounted LED fixtures will be designed in office/work areas, and other select areas with acoustical tile suspended ceilings.

   d) 2' x 4' recessed LED fixtures on 8x8 centers in large rooms with acoustical tile suspended ceiling.

   e) 2' x 2' recessed LED fixtures on 12'-0" centers in corridors.

   f) Perimeter mounted recessed linear LED light fixtures in all bathrooms.

   g) 4-foot industrial LED fixtures with wire guards in all electric rooms, mechanical spaces and unfinished areas without suspended ceilings.

   h) Accent, exterior building mounted, and feature lighting that has aesthetic appeal to directly compliment the architecture will be provided as selected by the Architect, in areas such as corridors, main lobby, exterior facade, etc.

3. Daylight sensors and dimming control shall be provided in all open areas with sufficient daylight contribution to promote daylight harvesting as required by the applicable energy conservation code requirements. Any rooms that have applicable vertical fenestration that exceeds 30% of the total wall area shall be considered daylight zones. Fixtures within 15'-0" of the fenestration shall be dimmed via a daylight sensor. The remaining rows of lights

will have the ability to be manually step-dimmed to 50% light output by the occupants via a momentary pushbutton switch. There will be one master on/off toggle switch for all the lighting in select rooms. This will allow turning off the lights and overriding the sensors. Multi-zone controls for the scenario outlined above will be facilitated by the design of a local stand-alone lighting control module.

4. Occupancy sensors shall be provided in all lit areas except in utility rooms and other rooms or areas exempted by code. Controls shall be either auto-on (occupancy mode) or manual-on (vacancy mode) depending upon the room application. Lighting will initially operate up to 50% of total brightness and the occupant will be required to manipulate controls for full brightness, if desired.

5. Corridor lighting shall remain on during occupied hours, but will be controlled by occupancy sensors during unoccupied times. This will require communication with the building management system.

6. All lighting fixtures specified shall be those recognized and listed with the Design Lights Consortium (DLC), wherever possible.

7. All egress doors shall have emergency egress illumination for the area of exit discharge as determined by the egress code analysis plan. Exterior lighting will be provided at each egress door. Typical fixture shall be LED with remote mounted battery ballast.

8. Emergency lighting shall be accomplished using emergency inverters/batteries installed integral to selected lighting fixtures to promote minimum .1 footcandles illumination along all paths of egress. Where integral emergency batteries are not practical for the lighting fixtures in a certain area, self-contained emergency twin lamp style fixtures or an external inverter providing AC power to the light fixtures, will be provided.

9. Exit signs will be self-contained, universal mounted, LED illuminated, edge-lit, low energy usage fixtures with integral emergency batteries.

10. Illuminated exit signs with the International Symbol of Accessibility shall be provided where required by code.

XVI. Low Voltage Systems

1. There is an existing underground conduit routed to existing electrical room for Telephone, Fiber Optic and Cable Television services. Coordinate with Technology Consultant and provide any new conduits if required.

2. Raceway, power and grounding provisions will be provided throughout the building in conformance with all requirements of the owner furnished low voltage communication and monitoring systems. The systems shall include: data network, fiber optic distribution, copper telephone distribution, coax video or cable TV distribution, audio-visual systems, access control/card reader systems, surveillance camera systems, security/intrusion detection systems. We are anticipating that the owner will make available progress drawings of each specific low voltage system noted above that identifies major components and point of use for coordination by the engineer.

3. Single stall toilets will be provided with local emergency call for aid system that includes pull cord and buzzer/light mounted above the door to the toilet.

XVII. Fire Alarm System

1. The building will be provided with a new intelligent addressable type fire alarm system in compliance with code requirements and ADA regulations. Horn/strobe style annunciation will promote evacuation throughout the building. The system shall be provided with a fire alarm control panel to contact the preferred Central Station monitoring company through a digital dialer. Manual pull stations shall be installed in the egress paths at exterior doors. Audible and visual signaling devices shall be installed in all habitable rooms, corridors, toilets, etc. Visual-only signaling devices shall be installed in all conference rooms, work rooms, etc. The system shall include the following equipment:

2. Remote annunciator mounted at main entry doors or at the preferred location of the local Fire Prevention Bureau.

3. Horn/strobe indicating appliances will provide occupant notification in conformance with NFPA 72 with approximately one device per room.

4. Smoke detection shall be provided in all storage rooms and any rooms that are infrequently used. Heat detection will be provided in the boiler room via 190 degree detectors.

5. Manual pull stations at ends of corridors, egress doors, and no further apart than 200 feet.

6. (2) Duct smoke detectors for each air-handling unit (Capacity >=2,000 cfm), (1) in the supply, and (1) in the return duct.

7. Signal to BMS system for fan shut-down, and damper actuation on alarm condition.

8. (2) dedicated phone lines for fire alarm panel central station communication extended from the telephone demarcation board.

9. All fire alarm system wiring will be fire alarm MC cable. EMT conduit with type THHN wire shall be provided where exposed. Metal clad cable shall be allowed where concealed.

10. Carbon Monoxide detectors in rooms or just outside rooms where fossil fuels are being burned such as the boiler room.

XVIII. Materials and Methods

1. Include the following basic materials and methods of construction:

    a) Wiring will be THHN/THWN copper, installed in EMT conduit to first device or exposed and MC cable for and remainder of circuit, and concealed work.

    b) Receptacles shall be specification grade, NEMA 5-20R etc.

    c) Disconnect switches will be fusible heavy-duty type. NEMA 1 or 3R as required for the installation location.

    d) Circuit breakers will be fixed element, thermal magnetic type (Size <225Amp Rating).

    e) Circuit breakers >225Amps shall have Adjustable electronic trip settings.

    f) Panelboards will contain copper bussing, with hinged door-in-door trim.

g) Branch circuit breakers shall be bolt-on type.

h) All conduits, circuits and devices will be labeled.

i) Conduits below slabs will be schedule 40 PVC, with rigid steel conduit sweeps.

BLOOMFIELD PUBLIC LIBRARY

MCMAHON WINTONBURY LIBRARY
1015 BLUE HILLS AVENUE, BLOOMFIELD, CT 06002

MARCH 30, 2022
SCHEMATIC DESIGN

ARCHITECT
TSKP STUDIO
TSKP STUDIO, LLC
146 WYLLYS STREET, BUILDING 1, SUITE 203
HARTFORD, CT 06106

CIVIL ENGINEER
SLR
99 REALTY DRIVE
CHESHIRE, CT 06410

STRUCTURAL
MICHAEL HORTON ASSOCIATES, INC.
151 MEADOW STREET
BRANFORD, CT 06405

MEP
RZ DESIGN ASSOCIATES, INC.
750 OLD MAIN STREET
ROCKY HILL, CT 06067

LANDSCAPE
RICHTER & CEGAN, INC.
AVON PARK NORTH P.O. BOX 567
8B CANAL COURT
AVON, CT 06405

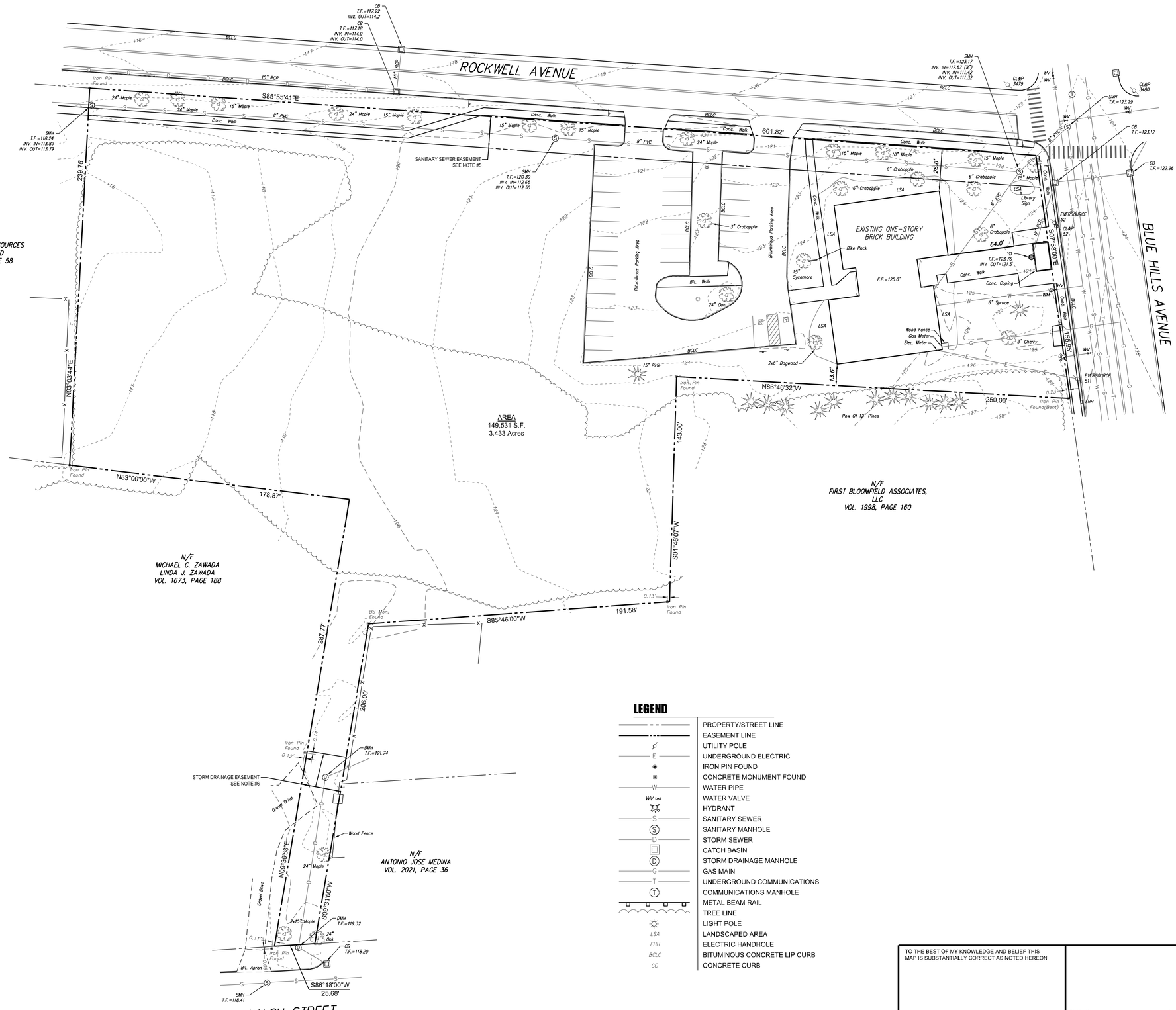
DRAWING LIST

LOCATION PLAN

APPROVALS

PUBLIC WORKS DATE

AGENCY DATE



SURVEY NOTES:

1. THIS SURVEY AND MAP WERE PREPARED IN ACCORDANCE WITH THE REGULATIONS OF CONNECTICUT STATE AGENCIES SECTIONS 20-300b-1 THRU 20-300b-20 AND THE "STANDARDS FOR SURVEYS AND MAPS IN THE STATE OF CONNECTICUT" AS ADOPTED BY THE CONNECTICUT ASSOCIATION OF LAND SURVEYORS, INC. ON SEPTEMBER 26, 1996. IT IS A PROPERTY AND TOPOGRAPHIC MAP CONFORMING TO HORIZONTAL ACCURACY CLASS A-2 AND TOPOGRAPHIC ACCURACY CLASS T-2. IT IS INTENDED TO DEPICT THE DEED LINES, LINES OF OCCUPATION, EASEMENTS AND ENCROACHMENTS AFFECTING THE PROPERTY. THE PROPERTY/BOUNDARY DETERMINATION OPINION PRESENTED HEREON IS BASED ON A RESURVEY.
2. REFERENCE IS HEREBY MADE TO THE FOLLOWING MAPS ENTITLED:
A. "MAP OF LAND MRS. KATE MCCROSSEN, BLOOMFIELD, CONN." PREPARED BY ERWIN M. PECK, SCALE 1"=50' AND DATED DEC. 1924. BLOOMFIELD LAND RECORDS MAP #50.
B. "RIGHT OF WAY MAP TOWN OF BLOOMFIELD BLUE HILLS AVE. FROM HARTFORD CITY LINE NORTHERLY TO PARK AVE. ROUTE NO. 311" PREPARED BY CONNECTICUT HIGHWAY DEPARTMENT, SCALE 1"=40', DATED MARCH 31, 1928 AND REVISED JULY 1983.
C. "EASEMENT MAP SHOWING EASEMENT TO BE ACQUIRED FROM TOWN OF BLOOMFIELD #997-#1011 BLUE HILLS AVENUE BLOOMFIELD, CONNECTICUT" PREPARED BY BARAKOS-LANDINO DESIGN GROUP, SCALE 1"=30' AND DATED FEBRUARY 12, 1998. B.L.R. MAP #3636.
D. "THE SUBDIVISION OF WINTONBURY LIBRARY & ROBERT WATKINS CENTER PREPARED FOR TOWN OF BLOOMFIELD 1015 BLUE HILLS AVENUE & 73 ROCKWELL AVENUE BLOOMFIELD, CONNECTICUT" PREPARED BY ED LALLY, SCALE 1"=40', DATED DECEMBER 5, 2012 AND REVISED ON 12-19-12. B.L.R. MAP #71-54.
3. THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION AND EXISTING DRAWINGS. THE SURVEYOR MAKES NO GUARANTEES THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN-SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH THE SURVEYOR DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES.
4. BEARINGS ARE BASED ON NAD83. ELEVATIONS ARE BASED ON NAVD88.
5. THIS PARCEL IS SUBJECT TO A SANITARY SEWER EASEMENT IN FAVOR OF THE METROPOLITAN DISTRICT COMMISSION AS RECORDED IN VOLUME 72, PAGE 289 OF THE BLOOMFIELD LAND RECORDS.
6. THIS PARCEL IS SUBJECT TO A DRAINAGE EASEMENT IN FAVOR OF READCO BLOOMFIELD, LLC AS RECORDED IN VOLUME 842, PAGE 246 OF THE BLOOMFIELD LAND RECORDS.
7. THIS PARCEL IS ZONED GWB. SETBACKS ARE GENERALLY FRONT 25', SIDE 10' AND REAR 20'.

LEGEND

	PROPERTY/STREET LINE
	EASEMENT LINE
	UTILITY POLE
E	UNDERGROUND ELECTRIC
	IRON PIN FOUND
	CONCRETE MONUMENT FOUND
W	WATER PIPE
WV	WATER VALVE
	HYDRANT
S	SANITARY SEWER
S	SANITARY MANHOLE
D	STORM SEWER
	CATCH BASIN
D	STORM DRAINAGE MANHOLE
G	GAS MAIN
T	UNDERGROUND COMMUNICATIONS
T	COMMUNICATIONS MANHOLE
	METAL BEAM RAIL
	TREE LINE
	LIGHT POLE
LSA	LANDSCAPED AREA
EHH	ELECTRIC HANDHOLE
BCLC	BITUMINOUS CONCRETE LIP CURB
CC	CONCRETE CURB

PROPERTY AND TOPOGRAPHIC SURVEY

LAND NOW OR FORMERLY OF

TOWN OF BLOOMFIELD

VOLUME 25, PAGE 455

#1015 BLUE HILLS AVENUE

BLOOMFIELD, CONNECTICUT

TO THE BEST OF MY KNOWLEDGE AND BELIEF THIS MAP IS SUBSTANTIALLY CORRECT AS NOTED HEREON

JONATHAN TARBOX L.S. #70075

03/24/22 STORM INV'S

REVISIONS:

Delta
SURVEYING SERVICES, LLC
(860) 944-4678
75 ELLINGTON AVE., ELLINGTON, CT.

JOB No.:	21-071
SCALE:	1"=30'
DATE:	FEBRUARY 25, 2022
DWG. NO.:	1
SHEET:	1 OF 1

GENERAL NOTES

1. BOUNDARY AND TOPOGRAPHIC INFORMATION IS BASED UPON A MAP ENTITLED: "PROPERTY & TOPOGRAPHIC SURVEY, LAND NOW OR FORMERLY OF TOWN OF BLOOMFIELD, VOLUME 25, PAGE 455, #1015 BLUE HILLS AVENUE, BLOOMFIELD, CONNECTICUT", DATED: FEBRUARY 25, 2022, SCALE: 1"=30' AND PREPARED BY DELTA SURVEYING SERVICES, LLC
2. THIS PLAN IS A SCHEMATIC REPRESENTATION OF POTENTIAL UTILITIES, THEIR CONFIGURATIONS, AND THEIR CONNECTIONS AND SHOULD BE CONSIDERED APPROXIMATE IN NATURE.
3. INFORMATION REGARDING THE LOCATION OF EXISTING UTILITIES HAS BEEN BASED UPON AVAILABLE INFORMATION AND MAY BE INCOMPLETE, AND WHERE SHOWN SHOULD BE CONSIDERED APPROXIMATE. THE LOCATION OF ALL EXISTING UTILITIES SHOULD BE CONFIRMED PRIOR TO BEGINNING CONSTRUCTION. CALL "CALL BEFORE YOU DIG", 1-800-922-4455. ALL UTILITY LOCATIONS THAT DO NOT MATCH THE VERTICAL OR HORIZONTAL CONTROL SHOWN ON THE PLANS SHALL IMMEDIATELY BE BROUGHT TO THE ATTENTION OF THE ENGINEER FOR RESOLUTION.
4. SLR INTERNATIONAL CORPORATION ACCEPTS NO RESPONSIBILITY FOR THE ACCURACY OF MAPS AND DATA WHICH HAVE BEEN SUPPLIED BY OTHERS.
5. ALL DIMENSIONS AND ELEVATIONS SHALL BE VERIFIED IN THE FIELD PRIOR TO CONSTRUCTION. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER.
6. SEDIMENT AND EROSION CONTROL MEASURES AS DEPICTED ON THESE PLANS AND DESCRIBED WITHIN THE SEDIMENT AND EROSION CONTROL NARRATIVE SHALL BE IMPLEMENTED AND MAINTAINED UNTIL PERMANENT COVER AND STABILIZATION IS ESTABLISHED. ALL SEDIMENT AND EROSION CONTROL MEASURES SHALL CONFORM TO THE "GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL, CONNECTICUT - 2002, AND IN ALL CASES BEST MANAGEMENT PRACTICES SHALL PREVAIL.
7. ALL STORM DRAIN PIPE SHALL BE HIGH DENSITY POLYETHYLENE PIPE (HDPE) UNLESS OTHERWISE INDICATED.
8. ALL GRAVITY SANITARY SEWER PIPE SHALL BE POLYVINYL CHLORIDE (PVC) UNLESS OTHERWISE INDICATED.
9. ALL CONSTRUCTION MATERIALS AND METHODS SHALL CONFORM TO THE TOWN OF FARMINGTON REQUIREMENTS AND TO THE APPLICABLE SECTIONS OF THE STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROADS, BRIDGES, AND INCIDENTAL CONSTRUCTION, FORM 818 AND ADDENDUMS.
10. THE PLANS REQUIRE A CONTRACTOR'S WORKING KNOWLEDGE OF LOCAL, MUNICIPAL, WATER AUTHORITY, AND STATE CODES FOR UTILITY SYSTEMS. ANY CONFLICTS BETWEEN MATERIALS AND LOCATIONS SHOWN, AND LOCAL REQUIREMENTS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO THE EXECUTION OF WORK. THE ENGINEER WILL NOT BE HELD LIABLE FOR COSTS INCURRED TO IMPLEMENT OR CORRECT WORK WHICH DOES NOT CONFORM TO LOCAL CODE.
11. ALL FUEL, OIL, PAINT, OR OTHER HAZARDOUS MATERIALS USED DURING CONSTRUCTION SHOULD BE STORED IN A SECONDARY CONTAINER AND REMOVED TO A LOCKED INDOOR AREA WITH AN IMPERVIOUS FLOOR DURING NON-WORK HOURS.
12. SYMBOL DELINEATED TEST PITS TO BE PERFORMED BY THE CONTRACTOR TO VERIFY LOCATION OF EXISTING UTILITIES AND NOTIFY ENGINEER OF UTILITIES.

EROSION CONTROL NOTES CONTRACTOR RESPONSIBILITIES

1. SEDIMENT AND EROSION CONTROLS SHALL BE INSPECTED AT LEAST ONCE A WEEK AND WITHIN 24 HOURS OF THE END OF A STORM WITH A RAINFALL AMOUNT OF 0.5 INCH OR GREATER. A LOG OF SUCH INSPECTIONS SHALL BE MAINTAINED AT THE SITE.
2. THE SEDIMENT AND EROSION CONTROL PLAN SHALL BE MODIFIED BY THE CONTRACTOR AT THE DIRECTION OF THE ENGINEER AND THE TOWN'S DESIGNATED REPRESENTATIVE AS NECESSITATED BY CHANGING SITE CONDITIONS
3. INSPECTION OF THE SITE FOR EROSION SHALL CONTINUE FOR A PERIOD OF THREE MONTHS AFTER COMPLETION WHEN RAINFALLS OF ONE INCH OR MORE OCCUR.
4. ALL DEWATERING WASTE WATERS SHALL BE DISCHARGED IN A MANNER WHICH MINIMIZES THE DISCOLORATION OF THE RECEIVING WATERS.
5. THE SITE SHOULD BE KEPT CLEAN OF LOOSE DEBRIS, LITTER, AND BUILDING MATERIALS SUCH THAT NONE OF THE ABOVE ENTER WATERS OR WETLANDS.
6. A COPY OF ALL PLANS AND REVISIONS, AND THE SEDIMENT AND EROSION CONTROL PLAN SHALL BE MAINTAINED ON-SITE AT ALL TIMES DURING CONSTRUCTION.
7. ALL CATCH BASIN SUMPS SHOULD BE INSPECTED AFTER CONSTRUCTION COMPLETION AND SEDIMENT REMOVED. THE SEDIMENT SHALL BE DISPOSED OF IN AN APPROVED LOCATION.

LEGEND

EXISTING		PROPOSED
	STREET LINE	
	PROPERTY LINE	
	SETBACK LINE	
70	MAJOR CONTOUR	100
68	MINOR CONTOUR	98
× 70.5	SPOT GRADE	+ 70.5
	TREE LINE	
	TREE/ SHRUB	TG
	STONEWALL	
	SITE LIGHT	
	HYDRANT	
WV	WATER VALVE	WV
GV	GAS VALVE	GV
	CATCH BASIN	
	MANHOLE/YARD DRAIN	
	SANITARY SEWER W/MANHOLE	SAN
	STORM DRAIN	
	WATER MAIN	W
G	GAS MAIN	G
E	ELECTRIC LINE	E
ETC	ELECTRIC, TELEPHONE, CABLE	ETC
	UTILITY POLE	
	TRAFFIC SIGN	
	IRON PIPE	
	MONUMENT	
	EDGE OF PAVEMENT W/CURB	
	GUARD RAIL	
	CHAIN LINK FENCE	
	WATERCOURSE	
	WETLAND	

REMOVALS LEGEND

X STRUCTURE TO BE REMOVED

▬ ▬ ▬ UTILITY TO BE DISCONNECTED AND REMOVED

REMOVAL NOTES

1. THE INTENT OF THIS DRAWING IS TO IDENTIFY SPECIFIC UTILITY DEMOLITIONS. HOWEVER, THE GRAPHIC LEGEND MAY NOT BE A COMPREHENSIVE LIST OF ALL SITE REMOVALS.
2. CONTRACTOR RESPONSIBLE FOR HAULING ALL REMOVED MATERIAL OFFSITE AND DISPOSING OF MATERIAL PROPERLY AND LEGALLY.
3. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ANY AND ALL PERMITS FOR UTILITY REMOVAL AS WELL AS SCHEDULING ANY ASSOCIATED INSPECTIONS.
4. THE CONTRACTOR IS RESPONSIBLE FOR THE PROTECTION, ADJUSTMENT AND/OR RELOCATION OF ALL UTILITIES ABOVE AND BELOW GRADE AS NEEDED.
5. BACKFILL AND COMPACT ALL AREAS OF REMOVED SUB-SURFACE UTILITIES WITH STRUCTURAL FILL.
6. ALL UTILITIES NOT SHOWN TO BE REMOVED SHALL HAVE SERVICE MAINTAINED AND SHALL BE PROTECTED DURING CONSTRUCTION.
7. SEE PLANS PROVIDED BY RICHTER AND CEGAN, INC. FOR SITE REMOVALS.
8. SEE PLANS PROVIDED BY MEP FOR ALL ELECTRICAL AND TELECOMMUNICATIONS REMOVALS.

PROGRESS

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BLOOMFIELD, CT 06002

PROJECT

SCHEMATIC DESIGN

KEY PLAN

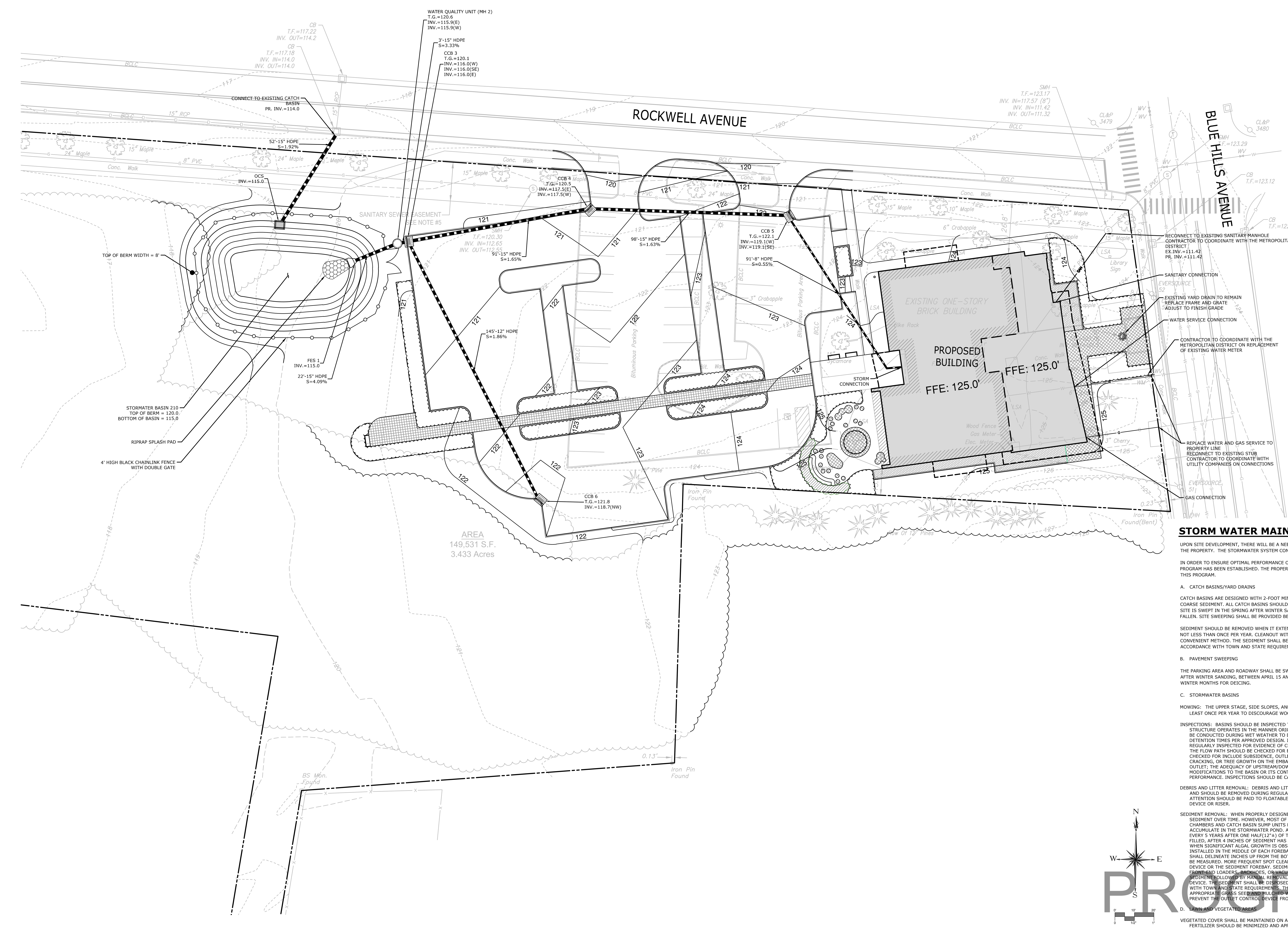
DRAWING TITLE
UTILITY DEMOLITION PLAN

STATE PROJ NO.	
PROJECT NO.	220103
SCALE	1"=30'
DATE:	03/30/2022
DRAWN BY:	RYE
CHECKED BY:	TD

ISSUE DATES

NO.	DATE	PURPOSE

C1.0



STORM WATER MAINTENANCE PROGRAM

UPON SITE DEVELOPMENT, THERE WILL BE A NEED TO PERIODICALLY MAINTAIN STORMWATER SYSTEMS ON THE PROPERTY. THE STORMWATER SYSTEM CONSISTS OF PIPING AND CATCH BASINS.

IN ORDER TO ENSURE OPTIMAL PERFORMANCE OF THE SYSTEM, THE FOLLOWING STORMWATER MAINTENANCE PROGRAM HAS BEEN ESTABLISHED. THE PROPERTY OWNER WILL BE RESPONSIBLE FOR IMPLEMENTATION OF THIS PROGRAM.

A. CATCH BASINS/YARD DRAINS

CATCH BASINS ARE DESIGNED WITH 2-FOOT MINIMUM DEPTH SUMPS FOR THE PURPOSE OF COLLECTING COARSE SEDIMENT. ALL CATCH BASINS SHOULD BE INSPECTED TWO TIMES PER YEAR, TYPICALLY WHEN THE SITE IS SWEPT IN THE SPRING AFTER WINTER SANDING AND IN THE FALL AFTER ALL THE LEAVES HAVE FALLEN. SITE SWEEPING SHALL BE PROVIDED BETWEEN APRIL 15 AND MAY 15 EACH SPRING.

SEDIMENT SHOULD BE REMOVED WHEN IT EXTENDS TO WITHIN 6 INCHES OF THE OUTLET PIPE INVERT OR NOT LESS THAN ONCE PER YEAR. CLEANOUT WITH A VACUUM TRUCK IS GENERALLY THE BEST AND MOST CONVENIENT METHOD. THE SEDIMENT SHALL BE DISPOSED OF IN AN APPROVED OFF-SITE LOCATION IN ACCORDANCE WITH TOWN AND STATE REQUIREMENTS.

B. PAVEMENT SWEEPING

THE PARKING AREA AND ROADWAY SHALL BE SWEPT ANNUALLY. SWEEPING SHOULD OCCUR IN THE SPRING AFTER WINTER SANDING, BETWEEN APRIL 15 AND MAY 15. SALT ALTERNATIVES SHALL BE USED DURING WINTER MONTHS FOR DEICING.

C. STORMWATER BASINS

MOWING: THE UPPER STAGE, SIDE SLOPES, AND EMBANKMENT OF STORMWATER PONDS MUST BE MOWED AT LEAST ONCE PER YEAR TO DISCOURAGE WOODY GROWTH AND CONTROL WEEDS.

INSPECTIONS: BASINS SHOULD BE INSPECTED TWICE PER YEAR(SPRING AND FALL) TO ENSURE THAT THE STRUCTURE OPERATES IN THE MANNER ORIGINALLY INTENDED. WHEN POSSIBLE, INSPECTIONS SHOULD BE CONDUCTED DURING WET WEATHER TO DETERMINE IF THE BASIN IS MEETING THE TARGETED DETENTION TIMES PER APPROVED DESIGN. IN PARTICULAR, THE OUTLET CONTROL DEVICE SHOULD BE REGULARLY INSPECTED FOR EVIDENCE OF CLOGGING OR, CONVERSELY, FOR TOO RAPID A RELEASE, AND THE FLOW PATH SHOULD BE CHECKED FOR EROSION PROBLEMS. OTHER PROBLEMS THAT SHOULD BE CHECKED FOR INCLUDE SUBSIDENCE, OUTLET WATER TURBIDITY, BANK/BED/OUTLET EROSION, CRACKING, OR TREE GROWTH ON THE EMBANKMENT; THE ACCUMULATION OF SEDIMENT AROUND THE OUTLET; THE ADEQUACY OF UPSTREAM/DOWNSTREAM CHANNEL EROSION CONTROL MEASURES; AND MODIFICATIONS TO THE BASIN OR ITS CONTRIBUTING WATERSHED THAT MAY INFLUENCE BASIN PERFORMANCE. INSPECTIONS SHOULD BE CARRIED OUT WITH DESIGN PLANS IN HAND.

DEBRIS AND LITTER REMOVAL: DEBRIS AND LITTER WILL ACCUMULATE NEAR THE OUTLET CONTROL DEVICE AND SHOULD BE REMOVED DURING REGULAR INSPECTION AND/OR MOWING OPERATIONS. PARTICULAR ATTENTION SHOULD BE PAID TO FLOATABLE DEBRIS THAT COULD EVENTUALLY CLOG THE CONTROL DEVICE OR RISER.

SEDIMENT REMOVAL: WHEN PROPERLY DESIGNED, DETENTION/WATER QUALITY BASINS WILL ACCUMULATE SEDIMENT OVER TIME. HOWEVER, MOST OF THE SEDIMENT WILL BE TRAPPED IN THE SEDIMENT CHAMBERS AND CATCH BASIN SUMP UNITS BEFORE REACHING THE BASIN. THE REMAINDER WILL ACCUMULATE IN THE STORMWATER POND. ACCUMULATED SEDIMENT MUST BE REMOVED FROM THE BASIN EVERY 5 YEARS AFTER ONE HALF(12"±) OF THE SEDIMENT STORAGE CAPACITY IN THE FOREBAY HAS BEEN FILLED, AFTER 4 INCHES OF SEDIMENT HAS ACCUMULATED IN THE MAIN PORTION OF THE BASIN, OR WHEN SIGNIFICANT ALGAL GROWTH IS OBSERVED. A PERMANENT MEASURING DEVICE SHALL BE INSTALLED IN THE MIDDLE OF EACH FOREBAY AND IN THE MAIN PORTION OF THE BASIN. THE MARKER SHALL DELINEATE INCHES UP FROM THE BOTTOM OF THE BASIN SO THE DEPTH OF SEDIMENT CAN EASILY BE MEASURED. MORE FREQUENT SPOT CLEANOUTS MAY BE NEEDED AROUND THE OUTLET CONTROL DEVICE OR THE SEDIMENT FOREBAY. SEDIMENT REMOVAL OPERATIONS ARE RELATIVELY SIMPLE. FRONT-END LOADERS, BACKHOES, OR VACUUM TRUCKS CAN BE USED TO REMOVE THE ACCUMULATED SEDIMENT FOLLOWED BY MANUAL REMOVAL OF SEDIMENT DEPOSITED AROUND THE OUTLET CONTROL DEVICE. THE SEDIMENT SHALL BE DISPOSED OF IN AN APPROVED OFF-SITE LOCATION IN ACCORDANCE WITH TOWN AND STATE REQUIREMENTS. THE DISTURBED AREA SHOULD BE IMMEDIATELY SEEDED WITH APPROPRIATE GRASS SEED AND MULCHED WITH HAY AFTER REMOVAL OPERATIONS ARE COMPLETED TO PREVENT THE OUTLET CONTROL DEVICE FROM CLOGGING.

D. LAWN AND VEGETATED AREAS

VEGETATED COVER SHALL BE MAINTAINED ON ALL EARTH SURFACES TO MINIMIZE SOIL EROSION. USE IF FERTILIZER SHOULD BE MINIMIZED AND APPLIED USING PRUDENT APPLICATION PROCESSES.

PROGRESS

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BLOOMFIELD, CT 06002

PROJECT

SCHEMATIC DESIGN

KEY PLAN

DRAWING TITLE

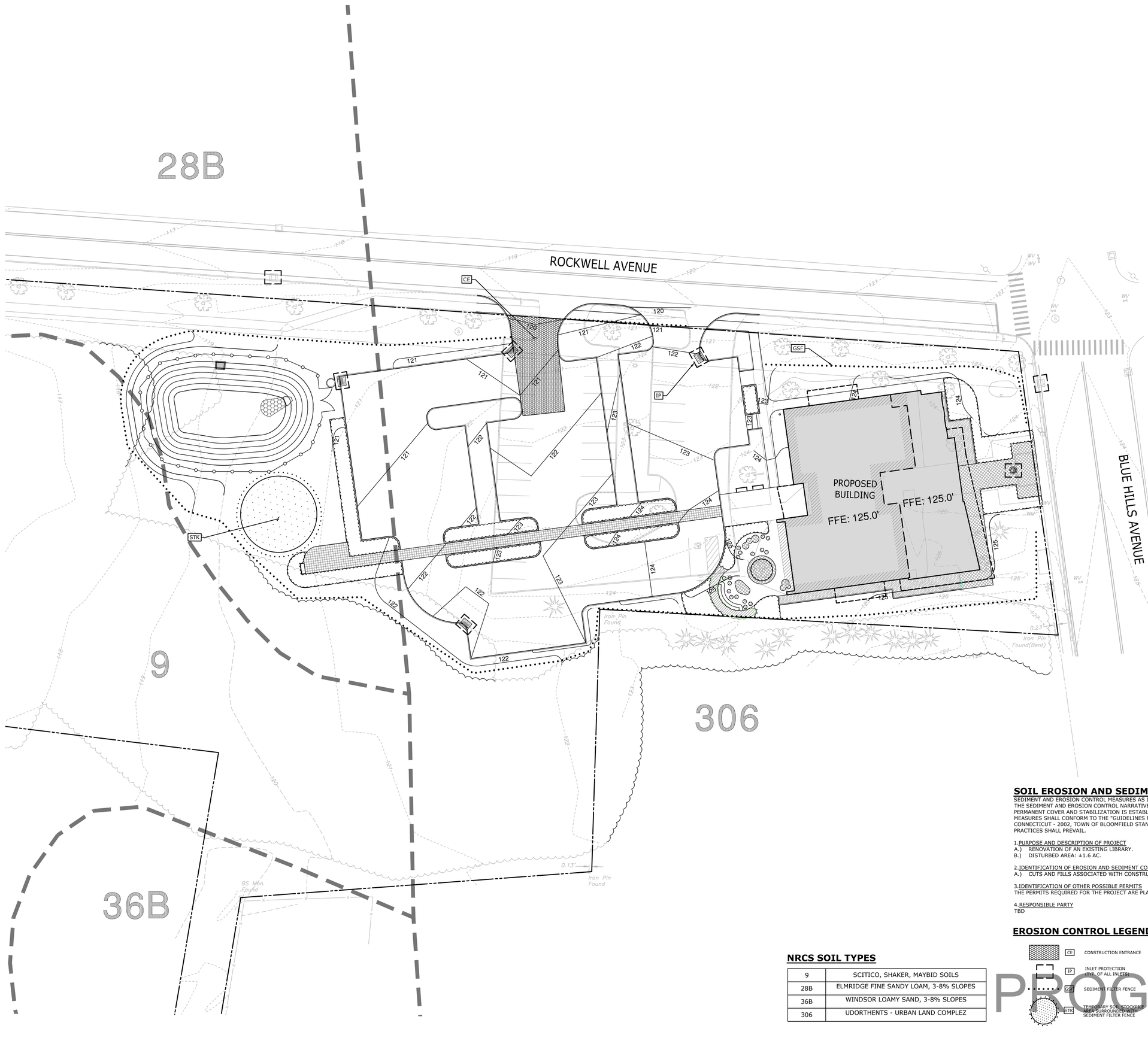
SITE PLAN - UTILITIES

STATE PROJ NO.	
PROJECT NO.	220103
SCALE	1"=20'
DATE:	03/30/2022
DRAWN BY:	RYE
CHECKED BY:	TD

ISSUE DATES

NO.	DATE	PURPOSE

C2.0



NRCS SOIL TYPES

9	SCITICO, SHAKER, MAYBID SOILS
28B	ELMRIDGE FINE SANDY LOAM, 3-8% SLOPES
36B	WINDSOR LOAMY SAND, 3-8% SLOPES
306	UDORTHENTS - URBAN LAND COMPLEZ

SOIL EROSION AND SEDIMENT CONTROL NARRATIVE

SEDIMENT AND EROSION CONTROL MEASURES AS DEPICTED ON THESE PLANS AND DESCRIBED WITHIN THE SEDIMENT AND EROSION CONTROL NARRATIVE SHALL BE IMPLEMENTED AND MAINTAINED UNTIL PERMANENT COVER AND STABILIZATION IS ESTABLISHED. ALL SEDIMENT AND EROSION CONTROL MEASURES SHALL CONFORM TO THE "GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL, CONNECTICUT - 2002, TOWN OF BLOOMFIELD STANDARDS, AND IN ALL CASES BEST MANAGEMENT PRACTICES SHALL PREVAIL.

1.PURPOSE AND DESCRIPTION OF PROJECT
A.) RENOVATION OF AN EXISTING LIBRARY.
B.) DISTURBED AREA: ±1.6 AC.

2.IDENTIFICATION OF EROSION AND SEDIMENT CONTROL CONCERNS
A.) CUTS AND FILLS ASSOCIATED WITH CONSTRUCTION.

3.IDENTIFICATION OF OTHER POSSIBLE PERMITS
THE PERMITS REQUIRED FOR THE PROJECT ARE PLANNING AND ZONING PERMITS

4.RESPONSIBLE PARTY
TBD

EROSION CONTROL LEGEND

- CE — CONSTRUCTION ENTRANCE
- IP — INLET PROTECTION (TYP. OF ALL INLETS)
- SSF — SEDIMENT FILTER FENCE
- STK — TEMPORARY SOIL STOCKPILE AREA SURROUNDED WITH SEDIMENT FILTER FENCE

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PROJECT

SCHEMATIC DESIGN

KEY PLAN

DRAWING TITLE
SEDIMENT AND EROSION CONTROL PLAN

STATE PROJ NO.	
PROJECT NO.	220103
SCALE	1"=20'
DATE:	03/30/2022
DRAWN BY:	RYE
CHECKED BY:	TD

ISSUE DATES

NO.	DATE	PURPOSE

C3.0

SEDIMENT AND EROSION CONTROL SPECIFICATIONS

GENERAL:

THESE GUIDELINES SHALL APPLY TO ALL WORK CONSISTING OF ANY AND ALL TEMPORARY AND/OR PERMANENT MEASURES TO CONTROL WATER POLLUTION AND SOIL EROSION, AS MAY BE REQUIRED, DURING THE CONSTRUCTION OF THE PROJECT. IN GENERAL, ALL CONSTRUCTION ACTIVITIES SHALL PROCEED IN SUCH A MANNER SO AS NOT TO POLLUTE ANY WETLANDS, WATERCOURSE, WATERBODY, AND CONDUIT CARRYING WATER, ETC. THE CONTRACTOR SHALL LIMIT, INSOFAR AS POSSIBLE, THE SURFACE AREA OF EARTH MATERIALS EXPOSED BY CONSTRUCTION METHODS AND IMMEDIATELY PROVIDE PERMANENT AND TEMPORARY POLLUTION CONTROL MEASURES TO PREVENT CONTAMINATION OF ADJACENT WETLANDS, WATERCOURSES, AND WATERBODIES, AND TO PREVENT, INSOFAR AS POSSIBLE, EROSION ON THE SITE.

LAND GRADING

GENERAL:

1. THE RESHAPING OF THE GROUND SURFACE BY EXCAVATION AND FILLING OR A COMBINATION OF BOTH, TO OBTAIN PLANNED GRADES, SHALL PROCEED IN ACCORDANCE WITH THE FOLLOWING CRITERIA:
   a. THE CUT FACE OF EARTH EXCAVATION SHALL NOT BE STEEPER THAN TWO HORIZONTAL TO ONE VERTICAL (2:1).
   b. THE PERMANENT EXPOSED FACES OF FILLS SHALL NOT BE STEEPER THAN TWO HORIZONTAL TO ONE VERTICAL (2:1).
   c. THE CUT FACE OF ROCK EXCAVATION SHALL NOT BE STEEPER THAN ONE HORIZONTAL TO FOUR VERTICAL (1:4).
   d. PROVISION SHOULD BE MADE TO CONDUCT SURFACE WATER SAFELY TO STORM DRAINS TO PREVENT SURFACE RUNOFF FROM DAMAGING CUT FACES AND FILL SLOPES.
   e. EXCAVATIONS SHOULD NOT BE MADE SO CLOSE TO PROPERTY LINES AS TO ENDANGER ADJOINING PROPERTY WITHOUT PROTECTING SUCH PROPERTY FROM EROSION, SLIDING, SETTLING, OR CRACKING.
   f. NO FILL SHOULD BE PLACED WHERE IT WILL SLIDE OR WASH UPON THE PREMISES OF ANOTHER OWNER OR UPON ADJACENT WETLANDS, WATERCOURSES, OR WATERBODIES.
   g. PRIOR TO ANY REGRADING, A STABILIZED CONSTRUCTION ENTRANCE SHALL BE PLACED AT THE ENTRANCE TO THE WORK AREA IN ORDER TO REDUCE MUD AND OTHER SEDIMENTS FROM LEAVING THE SITE.

TOPSOILING

GENERAL:

1. TOPSOIL SHALL BE SPREAD OVER ALL EXPOSED AREAS IN ORDER TO PROVIDE A SOIL MEDIUM HAVING FAVORABLE CHARACTERISTICS FOR THE ESTABLISHMENT, GROWTH, AND MAINTENANCE OF VEGETATION.
2. UPON ATTAINING FINAL SUBGRADES, SCARIFY SURFACE TO PROVIDE A GOOD BOND WITH TOPSOIL.
3. REMOVE ALL LARGE STONES, TREE LIMBS, ROOTS AND CONSTRUCTION DEBRIS.
4. APPLY SOIL AMENDMENTS AS FOLLOWS:
   LIME: ACCORDING TO SOIL TEST OR AT THE RATE OF 2 TONS PER ACRE.

MATERIAL:

1. TOPSOIL SHOULD HAVE PHYSICAL, CHEMICAL, AND BIOLOGICAL CHARACTERISTICS FAVORABLE TO THE GROWTH OF PLANTS.
2. TOPSOIL SHOULD HAVE A SANDY OR LOAMY TEXTURE.
3. TOPSOIL SHOULD BE RELATIVELY FREE OF SUBSOIL MATERIAL AND MUST BE FREE OF LARGE STONES , LUMPS OF SOIL, ROOTS, TREE LIMBS, TRASH, OR CONSTRUCTION DEBRIS. IT SHOULD BE FREE OF ROOTS OR RHIZOMES SUCH AS THISTLE, NUTGRASS, AND QUACKGRASS.
4. AN ORGANIC MATTER CONTENT OF SIX PERCENT (6%) IS REQUIRED. AVOID LIGHT COLORED SUBSOIL MATERIAL.
5. SOLUBLE SALT CONTENT OF LESS THAN 400 PPM IS REQUIRED.
6. THE TOPSOIL SHALL BE WARRANTED BY SELLER TO BE FREE OF DETECTABLE RESIDUES OF CHEMICAL PESTICIDES, HERBICIDES, PETROLEUM PRODUCTS, OR OTHER UNSUITABLE TOXINS.

APPLICATION:

1. AVOID SPREADING WHEN TOPSOIL IS WET OR FROZEN.
2. SPREAD TOPSOIL UNIFORMLY TO A DEPTH OF AT LEAST FOUR INCHES (4"), OR TO THE DEPTH SHOWN ON THE LANDSCAPING PLANS.

TEMPORARY VEGETATIVE COVER

TEMPORARY VEGETATIVE COVER SHALL BE ESTABLISHED ON ALL UNPROTECTED AREAS THAT PRODUCE SEDIMENT, AREAS WHERE FINAL GRADING HAS BEEN COMPLETED, AND AREAS WHERE THE ESTIMATED PERIOD OF BARE SOIL EXPOSURE IS LESS THAN 12 MONTHS. TEMPORARY VEGETATIVE COVER SHALL BE APPLIED IF AREAS WILL NOT BE PERMANENTLY SEEDED BY SEPTEMBER 1.

GENERAL:

1. INSTALL REQUIRED SURFACE WATER CONTROL MEASURES.
2. REMOVE LOOSE ROCK, STONE, AND CONSTRUCTION DEBRIS FROM AREA.
3. APPLY SOIL AMENDMENTS AS FOLLOWS:
   LIME: ACCORDING TO SOIL TEST OR AT THE RATE OF 1 TONS PER ACRE.
   ROCK DUST: ACCORDING TO SOIL TEST OR AT THE RATE OF 1 TONS PER ACRE
4. UNLESS HYDROSEEDED, WORK IN LIME TO A DEPTH OF 4 INCHES WITH A DISK OR ANY SUITABLE EQUIPMENT. DO NOT WORK FINISHED COMPOST INTO THE SOIL - APPLY IT EVENLY TO SOIL SURFACE AS A SEED BED.
5. TILLAGE SHOULD ACHIEVE A REASONABLY UNIFORM LOOSE SEEDBED. WORK ON CONTOUR IF SITE IS SLOPING.

SITE PREPARATION:

1. SELECT APPROPRIATE SPECIES FOR THE SITUATION. NOTE RATES AND SEEDING DATES (SEE VEGETATIVE COVER SELECTION & MULCHING)
2. APPLY SEED UNIFORMLY ACCORDING TO THE RATE INDICATED BY BROADCASTING, DRILLING, OR HYDRAULIC APPLICATION.
3. UNLESS HYDROSEEDED, COVER RYEGRASS SEEDS WITH NOT MORE THAN 1/4 INCH OF SOIL USING SUITABLE EQUIPMENT.
4. MULCH IMMEDIATELY AFTER SEEDING IF REQUIRED. (SEE VEGETATIVE COVER SELECTION & MULCHING SPECIFICATION BELOW.) APPLY STRAW AND ANCHOR TO SLOPES GREATER THAN 3%%% OR WHERE NEEDED.

PERMANENT VEGETATIVE COVER

GENERAL:

PERMANENT VEGETATIVE COVER SHALL BE ESTABLISHED AS VARIOUS SECTIONS OF THE PROJECT ARE COMPLETED IN ORDER TO STABILIZE THE SOIL, REDUCE DOWNSTREAM DAMAGE FROM SEDIMENT AND RUNOFF, AND TO ENHANCE THE AESTHETIC NATURE OF THE SITE. IT WILL BE APPLIED TO ALL CONSTRUCTION AREAS SUBJECT TO EROSION WHERE FINAL GRADING HAS BEEN COMPLETED AND A PERMANENT COVER IS NEEDED.

SITE PREPARATION:

1. INSTALL REQUIRED SURFACE WATER CONTROL MEASURES.
2. REMOVE LOOSE ROCK, STONE, AND CONSTRUCTION DEBRIS FROM AREA.
3. PERFORM ALL PLANTING OPERATIONS PARALLEL TO THE CONTOURS OF THE SLOPE.
4. APPLY TOPSOIL AS INDICATED ELSEWHERE HEREIN.
5. APPLY SOIL AMENDMENTS AS FOLLOWS:
   LIME: ACCORDING TO SOIL TEST OR AT THE RATE OF 1 TONS PER ACRE.
   ROCK DUST: ACCORDING TO SOIL TEST OR AT THE RATE OF 1 TONS PER ACRE
6. UNLESS HYDROSEEDED, WORK IN LIME TO A DEPTH OF 4 INCHES WITH A DISK OR ANY SUITABLE EQUIPMENT. DO NOT WORK FINISHED COMPOST

VEGETATED COVER SELECTION AND MULCHING

TEMPORARY VEGETATIVE COVER:

PERENNIAL RYEGRASS 5 LBS./1,000 SQ.FT. (LOLIUM PERENNE)
DUTCH WHITE CLOVER (TRIFOLIUM REPENS) 1/4 LBS PER 1000 SF. OR 6LBS/AC.

* PERMANENT VEGETATIVE COVER:

DUTCH WHITE CLOVER 30%
BARON KENTUCKY BLUEGRASS 30%
JAMESTOWN II CHEWINGS FESCUE 20%
PALMER PERENNIAL RYEGRASS 20%

* LOFTS - "TRIPLEX GENERAL" MIX OR APPROVED EQUAL. RECOMMENDED RATE/TIME SEEDING.
SPRING SEEDING: 4/1 to 5/31
FALL SEEDING: 8/16 to 10/15

TEMPORARY MULCHING:

STRAY 70-90 LBS./1,000 SQ.FT. (TEMPORARY VEGETATIVE AREAS) WOOD FIBER IN HYDROMULCH SLURRY 25-50 LBS./1,000 SQ. FT.

ESTABLISHMENT:
1. SMOOTH AND FIRM SEEDBED WITH CULTIPACKER OR OTHER SIMILAR EQUIPMENT PRIOR TO SEEDING (EXCEPT WHEN HYDROSEEDING).
2. SELECT ADAPTED SEED MIXTURE FOR THE SPECIFIC SITUATION. NOTE RATES AND THE SEEDING DATES (SEE VEGETATIVE COVER SELECTION & MULCHING SPEC. BELOW).
3. APPLY SEED UNIFORMLY ACCORDING TO RATE INDICATED, BY BROADCASTING, DRILLING, OR HYDRAULIC APPLICATION.
4. COVER GRASS AND LEGUME SEED WITH NOT MORE THAN 1/4 INCH OF SOIL WITH SUITABLE EQUIPMENT (EXCEPT WHEN HYDROSEEDING).
5. MULCH IMMEDIATELY AFTER SEEDING, IF REQUIRED, ACCORDING TO TEMPORARY MULCHING SPECIFICATIONS. (SEE VEGETATIVE COVER SELECTION & MULCHING SPECIFICATION BELOW).
6. USE PROPER INOCULAT ON ALL LEGUME SEEDLINGS, USE FOUR (4) TIMES NORMAL RATES WHEN HYDROSEEDING.
7. USE SOD WHERE THERE IS A HEAVY CONCENTRATION OF WATER AND IN CRITICAL AREAS WHERE IT IS IMPORTANT TO GET A QUICK VEGETATIVE COVER TO PREVENT EROSION.

MAINTENANCE:

1. TEST FOR SOIL ACIDITY EVERY THREE (3) YEARS AND LIME AS REQUIRED.

EROSION CHECKS

GENERAL:

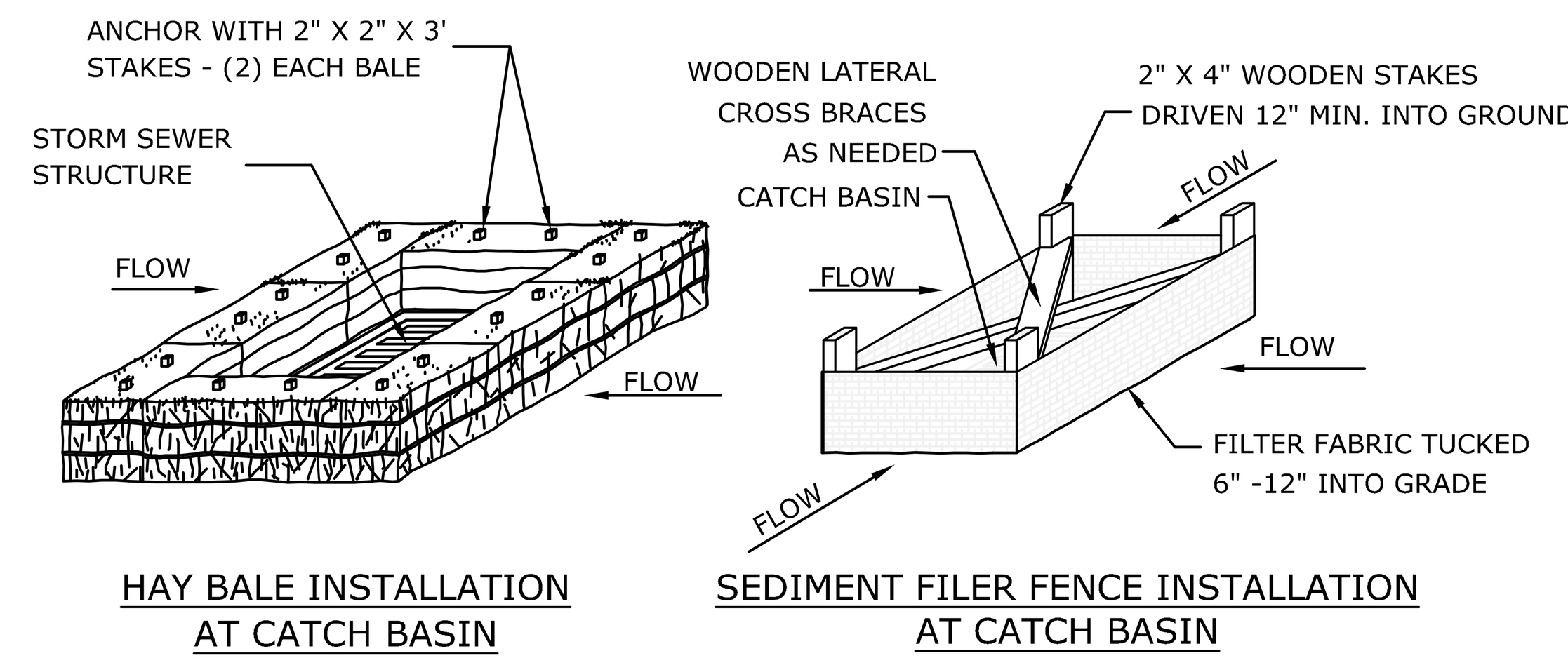
1. TEMPORARY PERVIOUS BARRIERS USING BALES OF HAY OR STRAW, HELD IN PLACE WITH STAKES DRIVEN THROUGH THE BALES AND INTO THE GROUND OR GEOTEXTILE FABRIC FASTENED TO A FENCE POST AND BURIED INTO THE GROUND, SHALL BE INSTALLED AND MAINTAINED AS REQUIRED TO CHECK EROSION AND REDUCE SEDIMENTATION.

CONSTRUCTION:

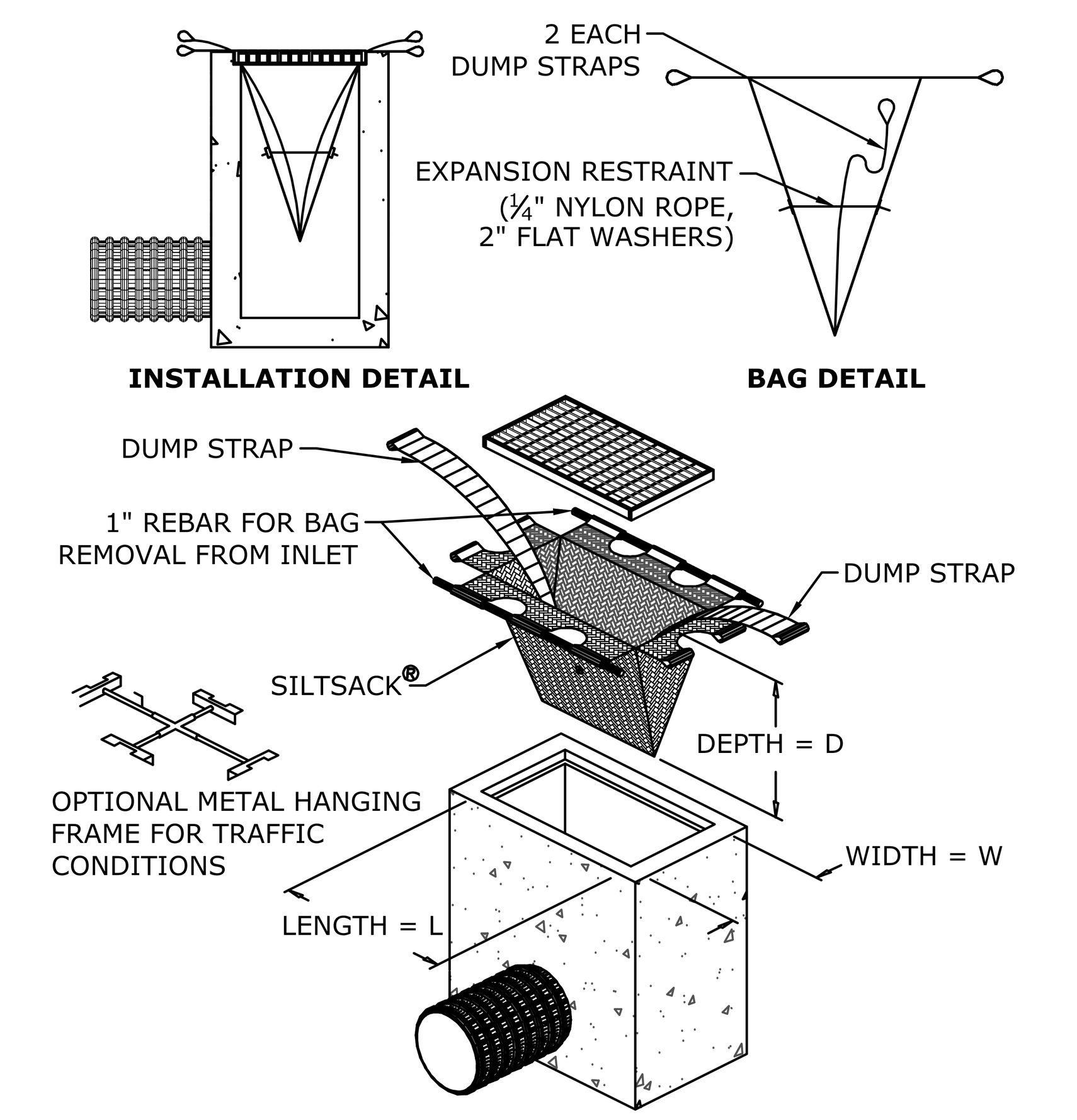
1. BALES SHOULD BE PLACED IN A ROW WITH ENDS TIGHTLY ABUTTING THE ADJACENT BALES.
2. EACH BALE SHALL BE EMBEDDED INTO THE SOIL A MINIMUM OF FOUR (4") INCHES.
3. BALES SHALL BE SECURELY ANCHORED IN PLACE BY WOOD STAKES OR REINFORCEMENT BARS DRIVEN THROUGH THE BALES AND INTO THE GROUND. THE FIRST STAKE IN EACH BALE SHALL BE ANGLED TOWARD THE PREVIOUSLY LAID BALE TO FORCE BALES TOGETHER.
4. GEOTEXTILE FABRIC SHALL BE SECURELY ANCHORED AT THE TOP OF A THREE FOOT (3') HIGH FENCE AND BURIED A MINIMUM OF FOUR INCHES (4") TO THE SOIL. SEAMS BETWEEN SECTIONS OF FILTER FABRIC SHALL OVERLAP A MINIMUM OF TWO FEET (2').

INSTALLATION AND MAINTENANCE:

1. BALED HAY EROSION BARRIERS SHALL BE INSTALLED AT ALL STORM SEWER INLETS.
2. BALED HAY EROSION BARRIERS AND GEOTEXTILE FENCE SHALL BE INSTALLED AT THE LOCATION INDICATED ON THE PLAN AND IN ADDITIONAL AREAS AS MAY BE DEEMED APPROPRIATE DURING CONSTRUCTION.
3. ALL EROSION CHECKS SHALL BE MAINTAINED UNTIL ADJACENT AREAS ARE STABILIZED.
4. INSPECTION SHALL BE FREQUENT (AT MINIMUM MONTHLY AND BEFORE AND AFTER HEAVY RAIN) AND REPAIR OR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED.
5. EROSION CHECKS SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFULNESS SO AS NOT TO BLOCK OR IMPEDE STORMWATER FLOW OR DRAINAGE.



INLET PROTECTION
NOT TO SCALE



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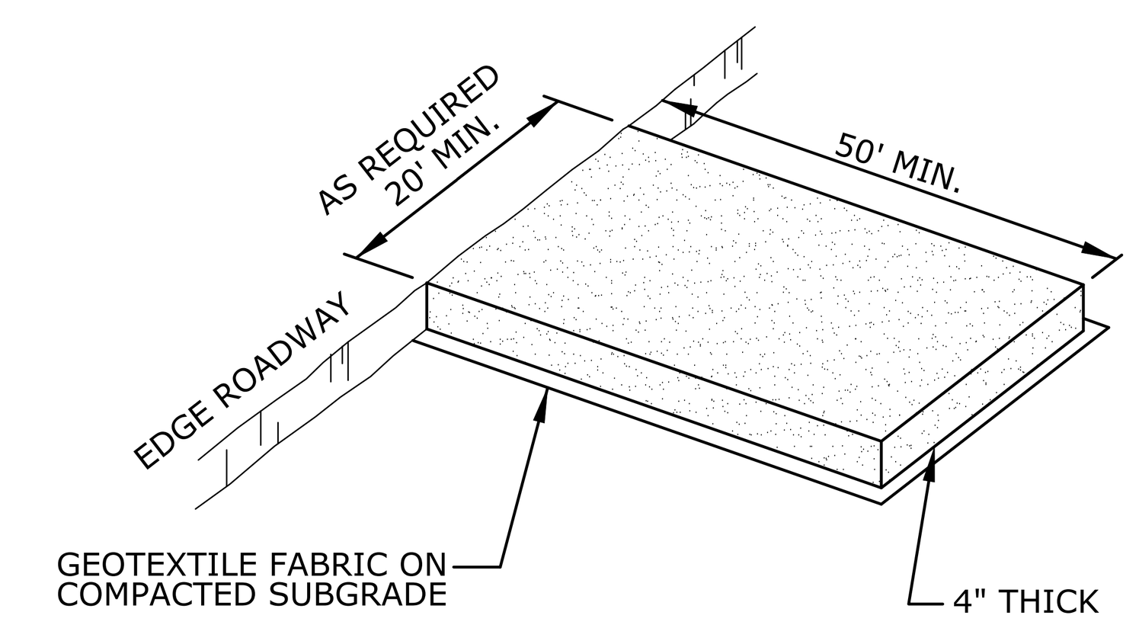
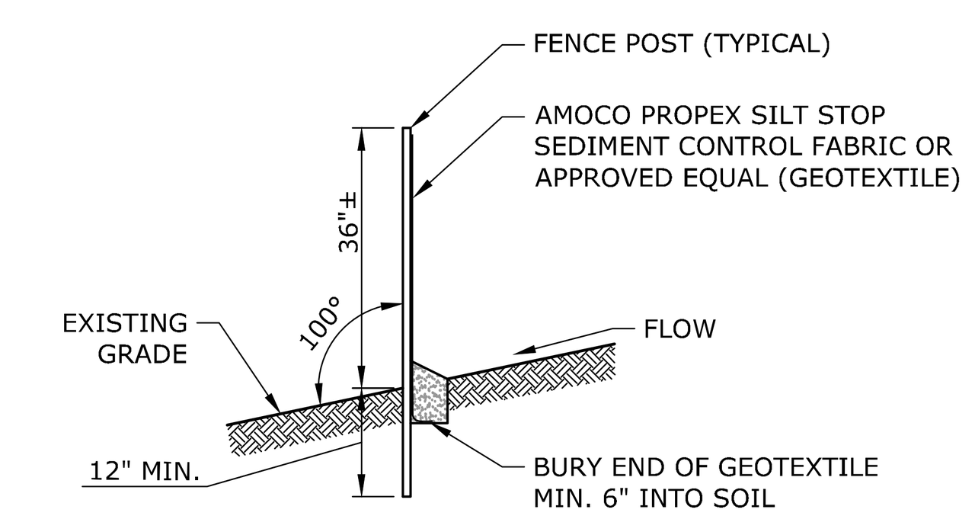
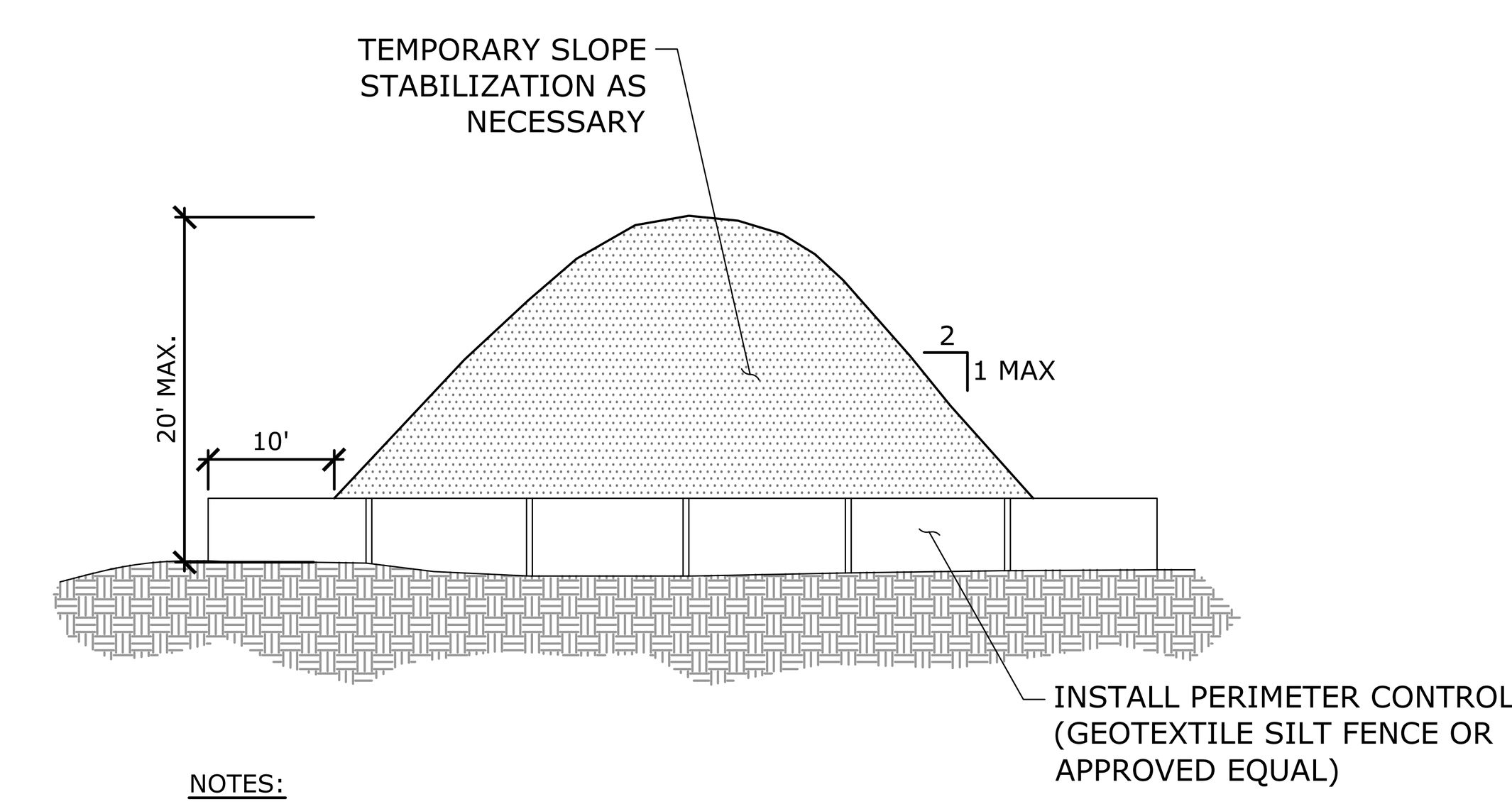


NOTE:
1. CONSTRUCTION ENTRANCE PAD SHALL BE INSTALLED AND MAINTAINED DURING OPERATIONS WHICH PROMOTE VEHICULAR TRACKING OF MUD

CONSTRUCTION ENTRANCE PAD
NOT TO SCALE



SEDIMENT FILTER FENCE
NOT TO SCALE



NOTES:
1. INSTALL A GEOTEXTILE SILT FENCE AND/OR HAY BALE BARRIER AROUND THE STOCKPILE AREA APPROXIMATELY 10 FEET FROM THE PROPOSED TOE OF SLOPE.

2. SIDE SLOPES SHALL NOT EXCEED A SLOPE OF 2:1. STOCKPILES THAT REMAIN INACTIVE FOR MORE THAN 30 DAYS SHALL BE SEEDED AND MULCHED IMMEDIATELY AFTER FORMATION

3. DISTANCE FROM WETLANDS, WATERCOURSES, DRAINAGE WAYS AND STEEP SLOPES SHALL BE MAXIMIZED. RUNOFF SHALL BE DIVERTED AWAY FROM STOCKPILE AREA

TEMPORARY SOIL STOCKPILE
NOT TO SCALE

EROSION CONTROL MAINTENANCE INTERVALS

EROSION CONTROL MEASURE	CONTROL OBJECTIVE	INSPECTION/MAINTENANCE	FAILURE INDICATORS	REMOVAL
SILT FENCE (SF) (RELATED: IP, STK)	- INTERCEPT, AND REDIRECT/DETAIN SMALL AMOUNTS OF SEDIMENT FROM SMALL DISTURBED AREAS. - DECREASE VELOCITY OF SHEET FLOW. - PROTECT SENSITIVE SLOPES OR SOILS FROM EXCESSIVE WATER FLOW.	INSPECT AT LEAST ONCE A WEEK AND WITHIN 24 HOURS OF THE END OF A STORM WITH A RAINFALL OF 0.5 INCHES OR MORE. ACCUMULATED SEDIMENT MUST BE REMOVED ONCE ITS DEPTH IS EQUAL TO ½ THE TRENCH HEIGHT. INSPECT FREQUENTLY DURING PUMPING OPERATIONS IF USED FOR DEWATERING OPERATIONS.	- PHYSICAL DAMAGE OR DECOMPOSITION - EVIDENCE OF OVERTOPPED OR UNDERCUT FENCE - EVIDENCE OF SIGNIFICANT FLOWS EVADING CAPTURE - REPETITIVE FAILURE	SILT FENCE MAY BE REMOVED AFTER UPHILL AND SENSITIVE AREAS HAVE BEEN PERMANENTLY STABILIZED.
CONSTRUCTION ENTRANCE (CE)	- REDUCE THE TRACKING OF SEDIMENT OFF-SITE ONTO PAVED SURFACES.	INSPECT AT THE END OF EACH WORK DAY AND IMMEDIATELY REPAIR DAMAGES. PERIODIC ADDITION OF STONE, OR LENGTHENING OF ENTRANCE MAY BE REQUIRED AS CONDITIONS DEMAND. ALL SEDIMENT SPILLED, DROPPED, WASHED, OR TRACKED ONTO PAVED SURFACES AS A RESULT OF INEFFICIENCY OF CONSTRUCTION ENTRANCE SHALL BE IMMEDIATELY REMOVED.	- SEDIMENT IN ROADWAY ADJACENT TO SITE	CONSTRUCTION ENTRANCE MAY BE REMOVED ONCE THE SITE HAS BEEN PERMANENTLY STABILIZED, AND ALL OTHER SECTIONS OF ROADWAY HAVE BEEN PERMANENTLY PAVED.
INLET PROTECTION (IP)	- PROHIBIT SILT IN CONSTRUCTION-RELATED RUNOFF FROM ENTERING STORM DRAINAGE SYSTEM.	INSPECT AFTER ANY RAIN EVENT. IF FILTER BAG INSIDE CATCH BASIN CONTAINS MORE THAN 6" OF SEDIMENT, REMOVE SEDIMENT FROM BAG. CHECK SURROUNDING SILT FENCE AND HAY BALES PER NOTED ABOVE.	- RIPPED BAG - FAILED HAY BALES / SILT FENCE - SIGNIFICANT SILT PRESENCE IN STORM DRAINAGE SYSTEM OUTFLOW.	INLET PROTECTION MAY BE REMOVED ONCE THE SITE HAS BEEN PERMANENTLY STABILIZED, AND ALL SECTIONS OF ROADWAY HAVE BEEN PERMANENTLY PAVED.
STOCKPILE PROTECTION (STK)	- RETAIN SOIL STOCKPILE IN LOCATIONS SPECIFIED, AND REDUCE WATER-TRANSPORT.	INSPECT SILT FENCE AT THE END OF EACH WORK DAY AND IMMEDIATELY REPAIR DAMAGES. PERIODIC REINFORCEMENT OF SILT FENCE, OR ADDITION OF HAY BALES MAY BE NECESSARY.	- EVIDENCE OF STOCK PILE DIMINISHING DUE TO RAIN EVENTS - FAILURE OF SILT FENCE	STOCKPILE PROTECTION MAY BE REMOVED ONCE THE STOCKPILE IS USED OR REMOVED.

PROGRESS

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PROJECT

SCHEMATIC DESIGN

KEY PLAN

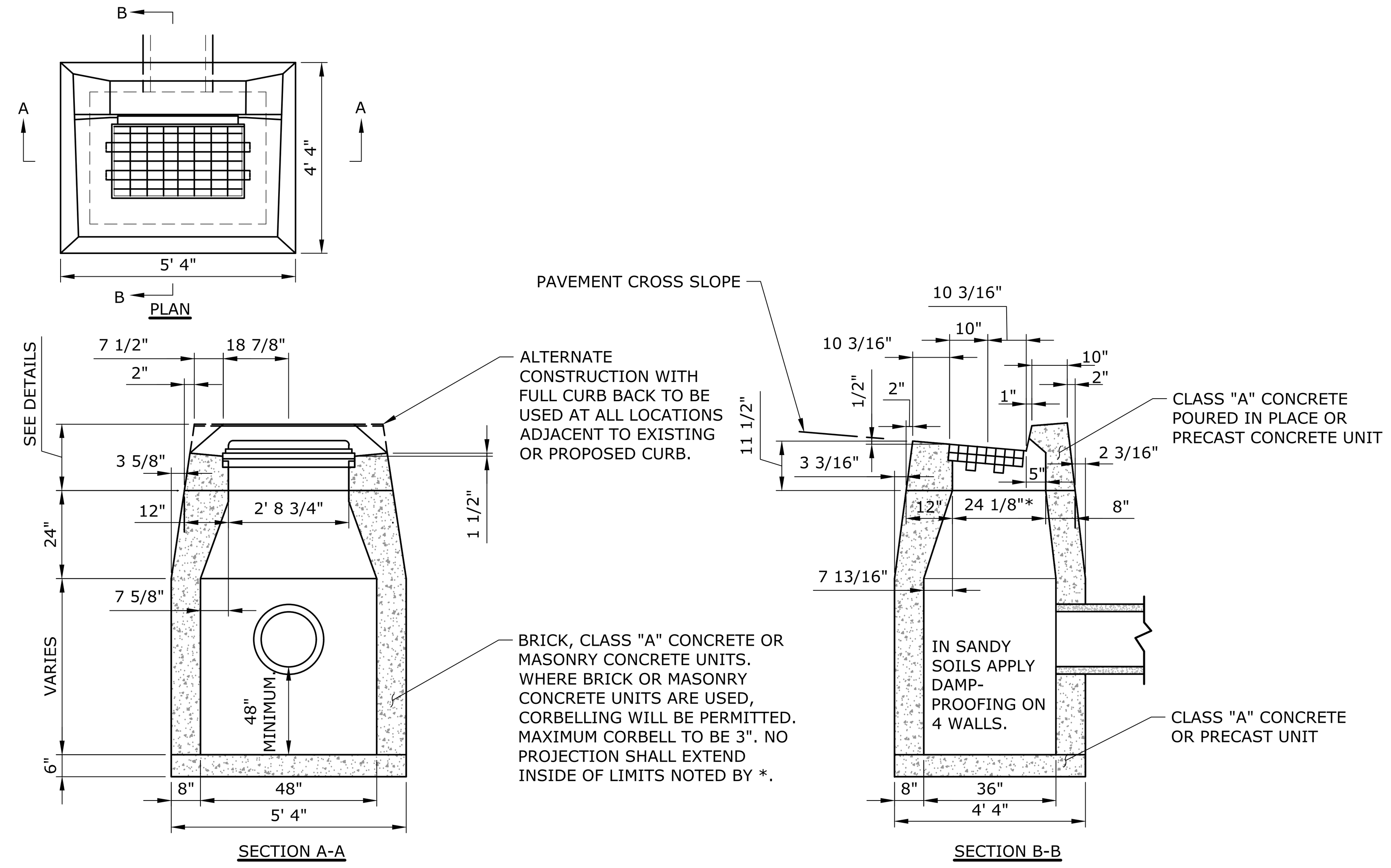
DRAWING TITLE
SEDIMENT AND EROSION CONTROL DETAILS AND SPECIFICATIONS

STATE PROJ NO.	
PROJECT NO.	220103
SCALE	AS NOTED
DATE:	03/30/2022
DRAWN BY:	RYE
CHECKED BY:	TD

ISSUE DATES

NO.	DATE	PURPOSE

C3.1

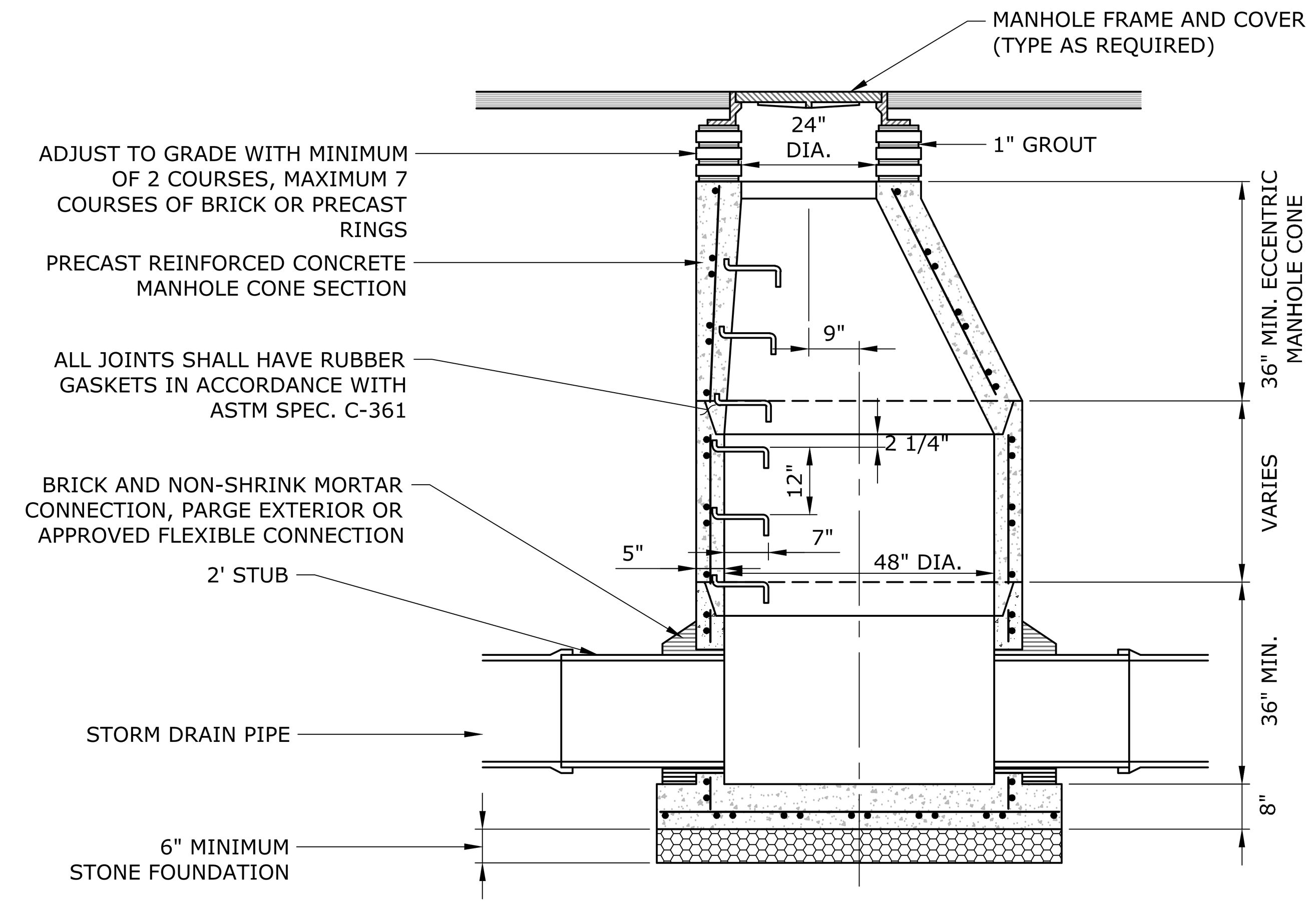


NOTES:

1. WHEN CATCH BASIN IS SET IN CONCRETE PAVEMENT. THE 1/2" SLOPE ON THE TOP SURFACE SHALL BE CHANGED TO MATCH ADJOINING PAVEMENT.
2. WHERE PRECAST CONCRETE UNIT IS USED FOR SUMP, THE TOP OF THE UNIT SHALL BE AT LEAST 6" BELOW THE BOTTOM OF THE PIPE OUTLET FROM THE CATCH BASIN.

TYPE "C" CATCH BASIN

NOT TO SCALE

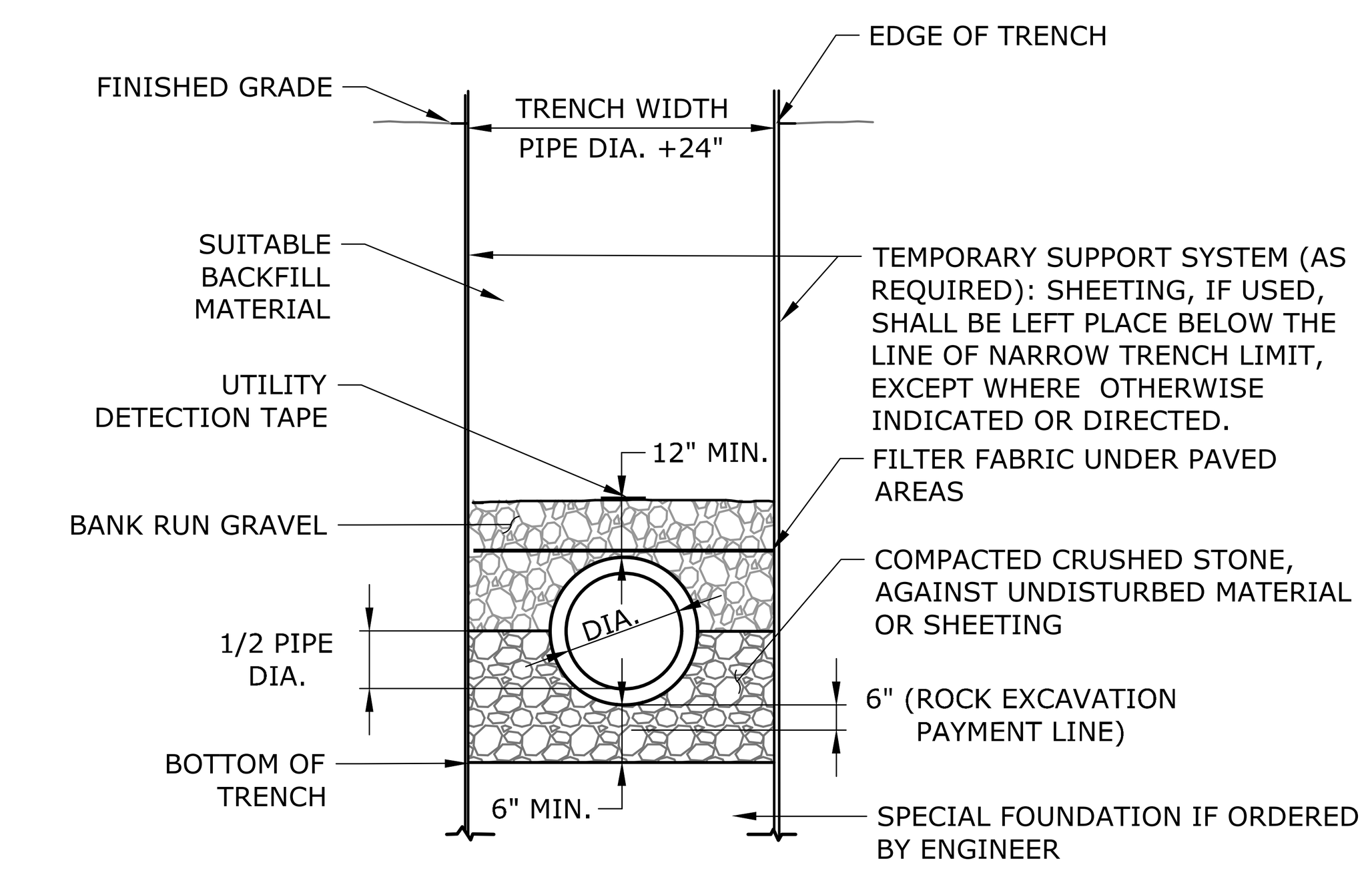


NOTES:

1. 5' OR 6' DIAMETER PRECAST BASES MAY BE REQUIRED DUE TO SIZE OR NUMBER OF PIPES AT THE MANHOLE. PRECAST REDUCERS WILL BE PLACED ABOVE THE 5' OR 6' BASES AS DIRECTED BY THE ENGINEER. WALL THICKNESS TO INCREASE BY 1" FOR EACH 1'-0" OF INSIDE DIAMETER.

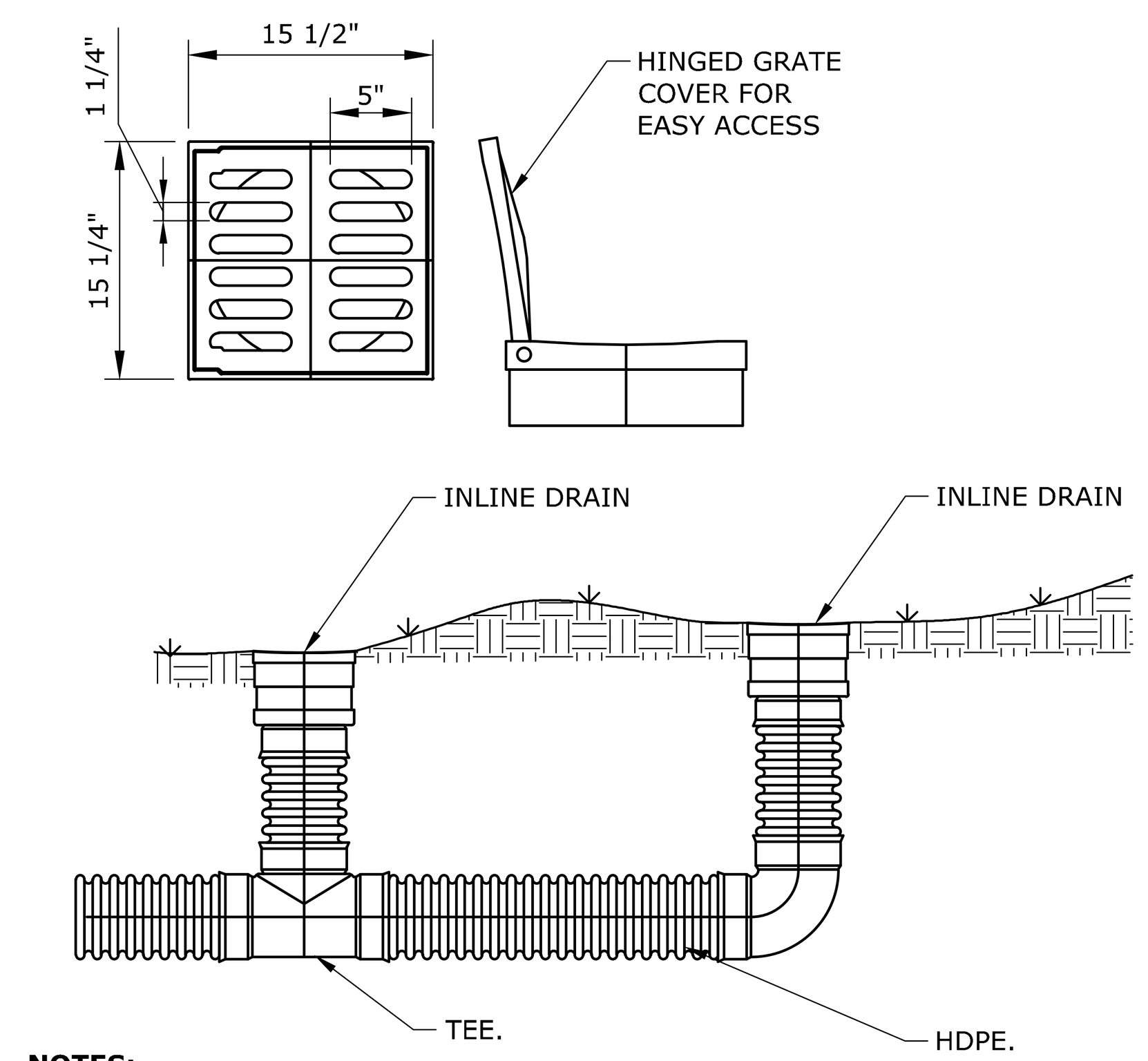
PRECAST CONCRETE STORM DRAINAGE MANHOLE

NOT TO SCALE



TYPICAL TRENCH SECTION STORM DRAIN AND CULVERTS

NOT TO SCALE

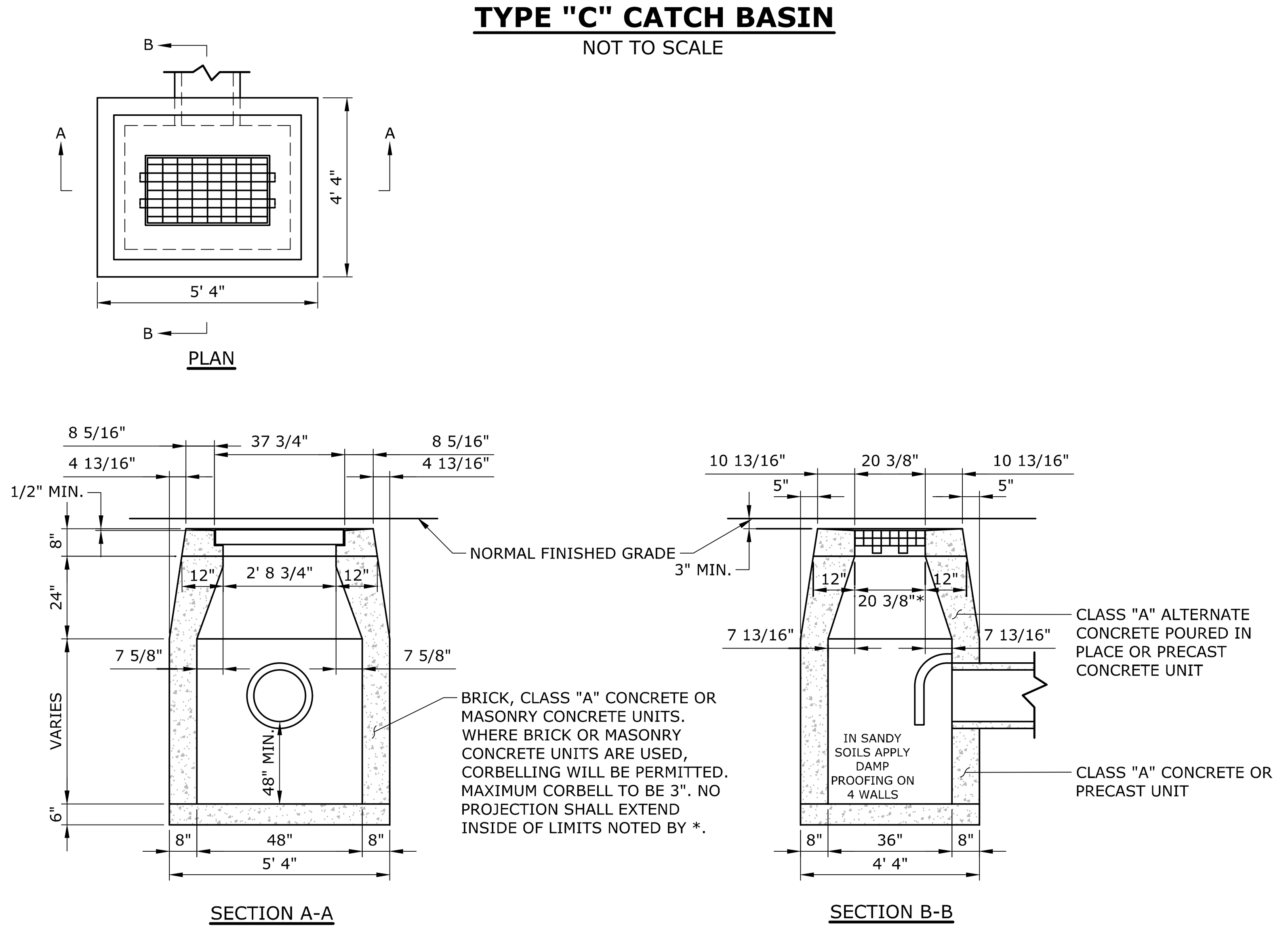


NOTES:

1. ALL AREA DRAIN GRATES SHALL BE AS FOLLOWS UNLESS OTHERWISE NOTED ON PLANS.
   1.1. 15" CAST IRON GRATE DRAIN AREA = 92.5SQ. INCH GRATE HAS H-20 (HEAVY TRAFFIC) DOT RATING .
   1.2. MATERIAL SHALL CONFORM TO ASTM A48 - CLASS 30B.
   1.3. CASTINGS ARE FURNISHED WITH A BLACK PAINT.
   1.4. INLINE DRAIN TO BE NYLOPLAST INC OR APPROVED EQUAL.

AREA DRAIN AND GRATE

NOT TO SCALE

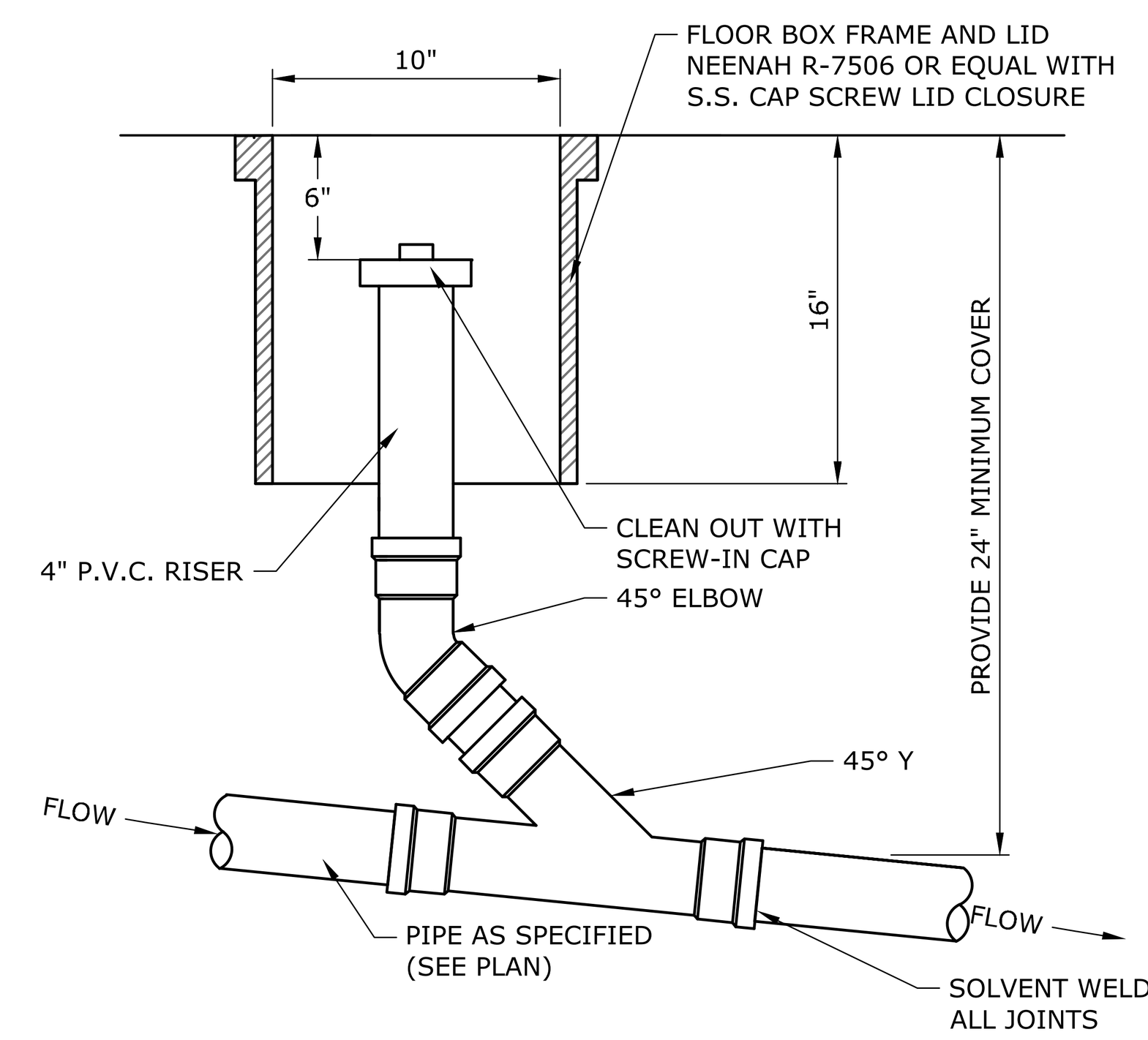


NOTES:

1. WHERE PRECAST CONCRETE UNIT IS USED FOR SUMP, THE TOP OF THE UNIT SHALL BE AT LEAST 6" BELOW THE BOTTOM OF THE PIPE OUTLETTING FROM THE CATCH BASIN.

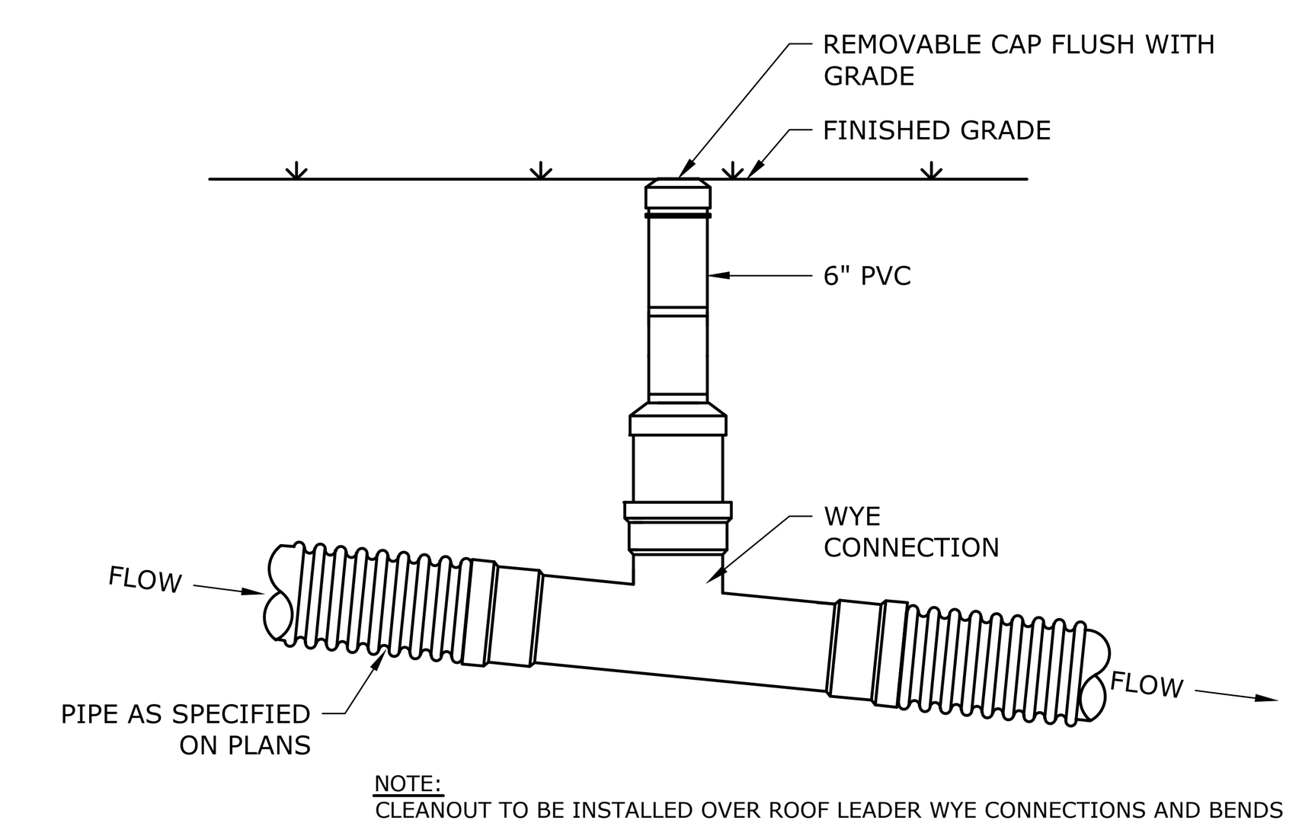
TYPE "C-L" CATCH BASIN

NOT TO SCALE



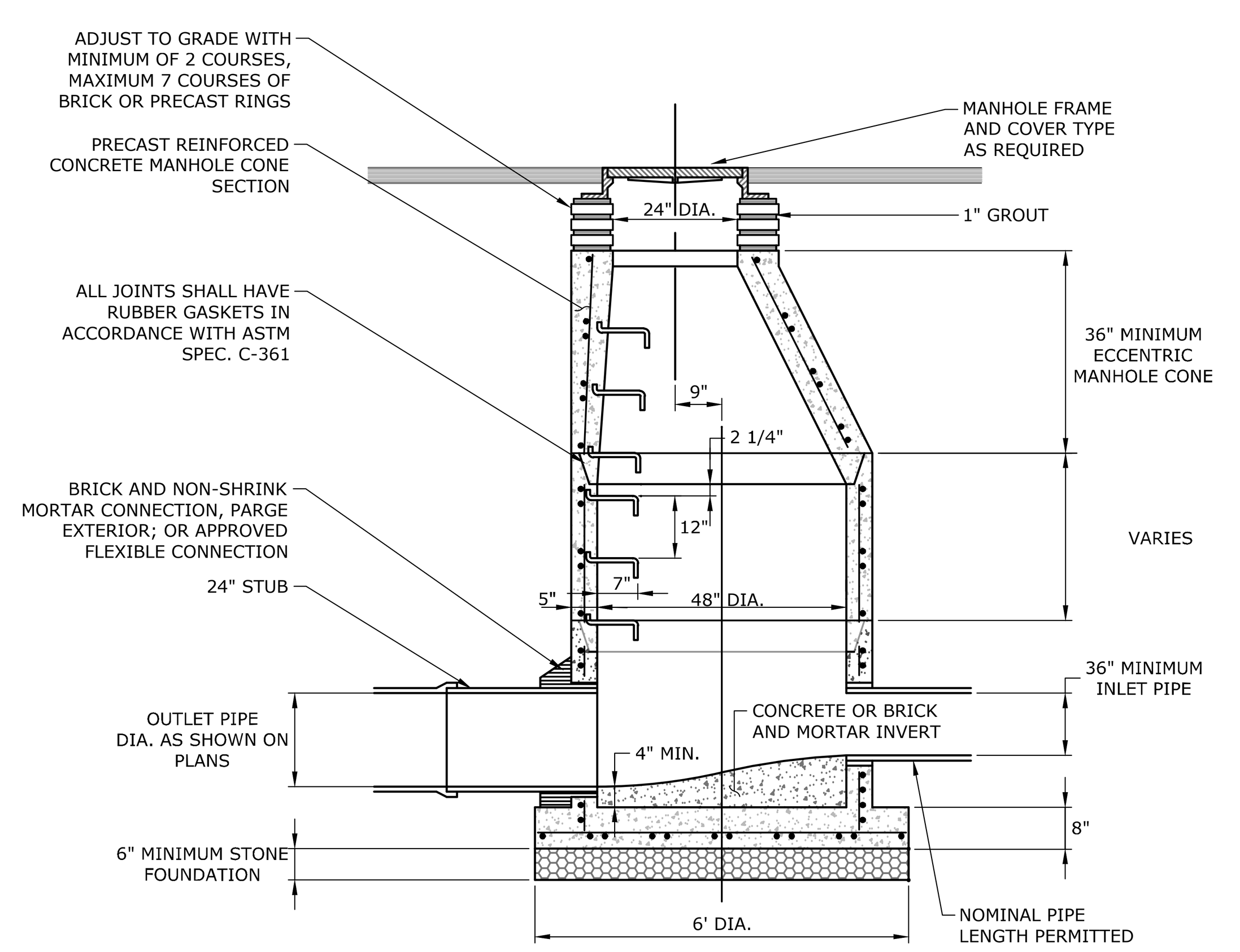
ROOF LEADER CLEAN OUT FOR PAVED SURFACES

NOT TO SCALE



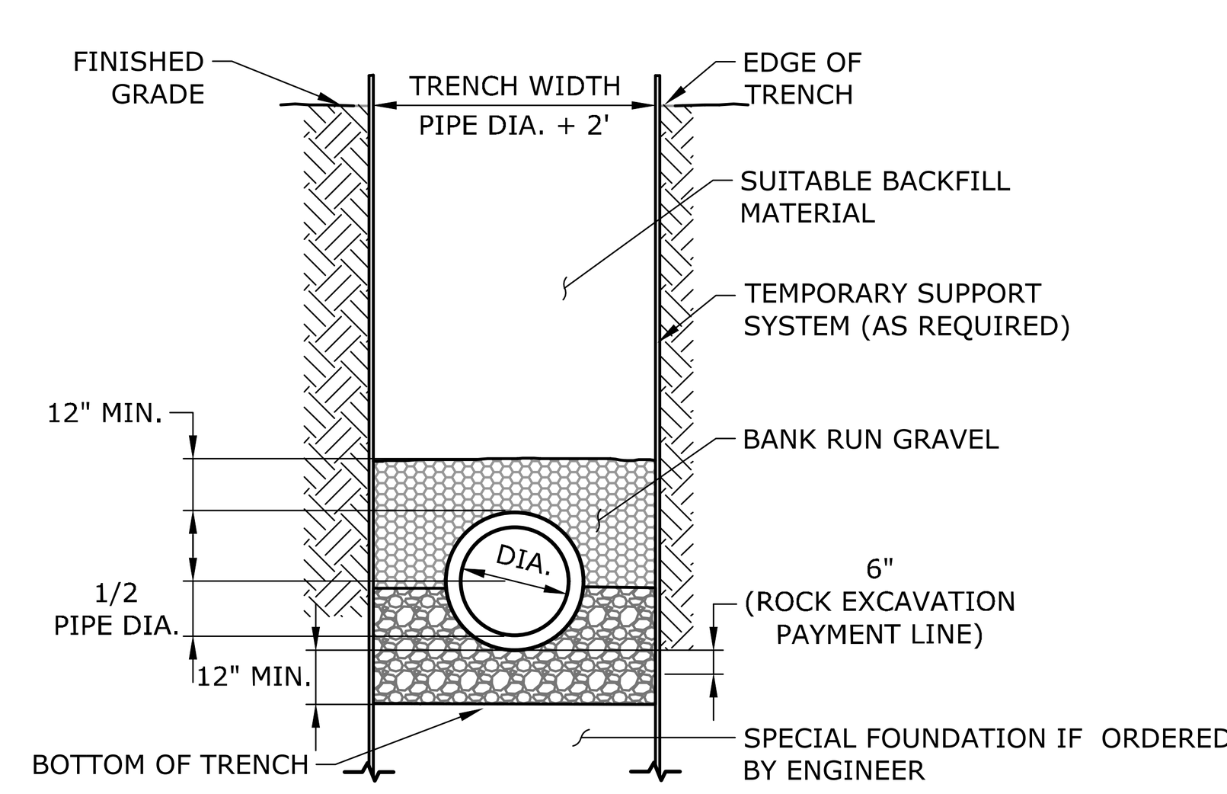
ROOF LEADER CLEAN OUT FOR UNPAVED SURFACES

NOT TO SCALE



PRECAST CONCRETE SANITARY MANHOLE

NOT TO SCALE



SANITARY SEWER TRENCH

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SCHEMATIC DESIGN

KEY PLAN

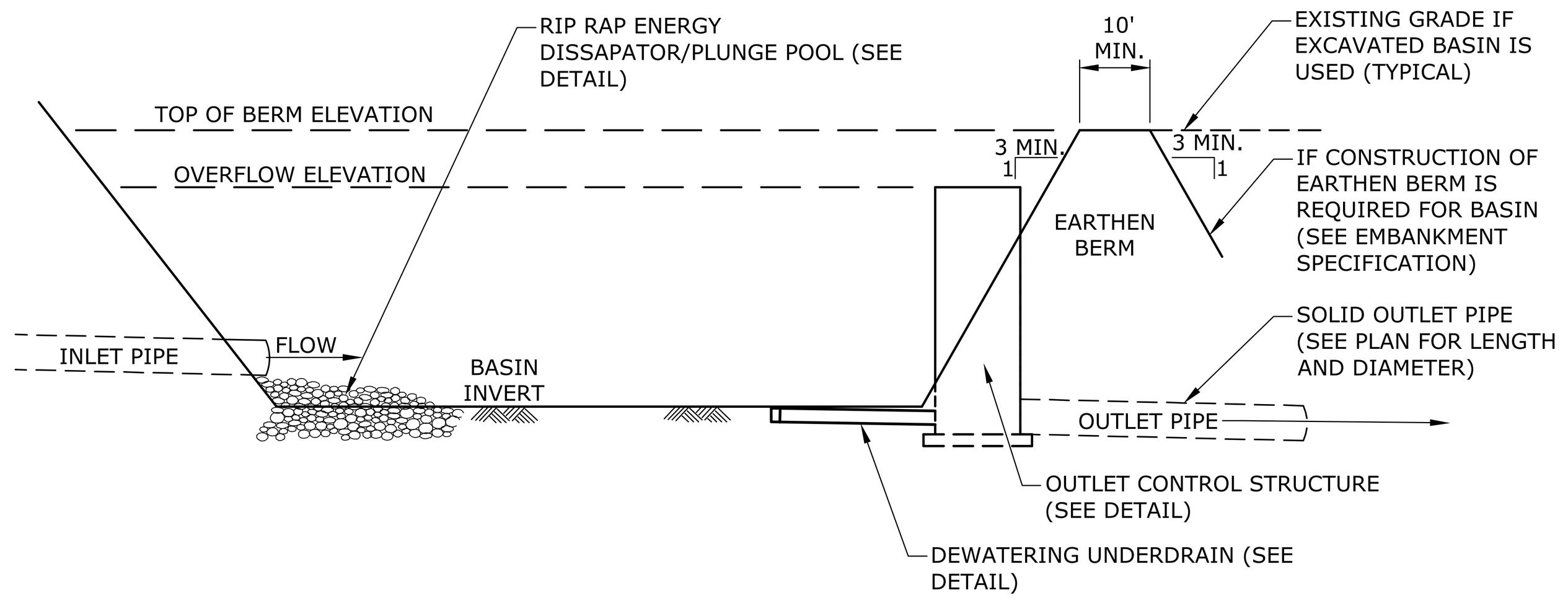
DRAWING TITLE
SITE DETAILS

STATE PROJ NO.	
PROJECT NO.	220103
SCALE	AS NOTED
DATE:	03/30/2022
DRAWN BY:	RYE
CHECKED BY:	TD

ISSUE DATES

NO.	DATE	PURPOSE

C3.2



NOTES:

1. WHERE LEDGE IS ENCOUNTERED, OVER EXCAVATE BY 2 FEET AND REPLACE WITH 18" OF SOIL AND 6" OF TOPSOIL. TOPSOIL IN THE BOTTOM OF ALL BASINS IS TO BE 6" DEEP AND 6% MINIMUM ORGANIC CONTENT.

TYPICAL DETENTION BASIN

NOT TO SCALE

FORMATION OF EMBANKMENTS FOR STORMWATER BASINS

1. MATERIALS

ALL FILL MATERIALS SHALL BE OBTAINED FROM REQUIRED EXCAVATIONS OR DESIGNATED BORROW AREAS. FILL MATERIAL SHALL CONTAIN NO FROZEN MATERIAL, SOD, BRUSH, ROOTS, OR OTHER ORGANIC MATERIAL. EARTH EMBANKMENTS SHALL CONTAIN NO STONES OR ROCK PARTICLES OVER THREE INCHES IN DIAMETER.

THE MATERIAL USED IN THE CENTER PORTION OF THE EMBANKMENT SHALL BE THE MOST IMPERVIOUS MATERIAL OBTAINED FROM THE BORROW AREAS IF REQUIRED. THE MORE PERVIOUS MATERIALS SHALL BE USED IN THE OUTER PORTION OF THE EMBANKMENT AS SHOWN ON THE PLANS.

A. IMPERVIOUS FILL MATERIALS

IMPERVIOUS FILL SHALL BE A GLACIAL TILL, AND TO BE PROVIDED FROM AN OFFSITE SOURCE IN THE QUANTITIES REQUIRED FOR COMPLETION. FILL TO BE APPROVED BY THE ENGINEER. GLACIAL TILL SHALL CONSIST OF HARD AND DURABLE PARTICLES OR FRAGMENTS AND SHALL BE FREE FROM ORGANIC MATTER AND OTHER OBJECTIONABLE MATERIALS. GLACIAL TILL SHALL GENERALLY CONFORM TO THE FOLLOWING GRADATION LIMITS:

U.S. STANDARD SIEVE SIZE	PERCENTAGE PASSING BY WEIGHT
3 INCH	100
NO. 4	60-95
NO. 10	50-95
NO. 40	30-75
NO. 100	20-65
NO. 200	10-40

2. EMBANKMENT FOUNDATION PREPARATION

AREAS WHERE EMBANKMENTS ARE TO BE FORMED SHALL BE CLEARED AND GRUBBED OF ALL TOPSOIL AND OTHER ORGANIC MATERIALS TO A DEPTH OF AT LEAST 24 INCHES. UNLESS OTHERWISE SPECIFIED ON THE DRAWINGS, FOUNDATION AREAS SHALL BE SCARIFIED TO A DEPTH OF THREE INCHES PRIOR TO PLACEMENT OF FILL MATERIAL.

3. PLACEMENT

NO FILL SHALL BE PLACED UNTIL THE FOUNDATION PREPARATION AND EXCAVATIONS IN THE FOUNDATION HAVE BEEN COMPLETED. NO FILL SHALL BE PLACED ON A FROZEN SURFACE NOR SHALL FROZEN MATERIAL BE INCORPORATED.

A. EMBANKMENT

MATERIAL SHALL BE PLACED IN HORIZONTAL LAYERS. THE THICKNESS OF LAYERS SHALL BE SIX INCHES. DURING CONSTRUCTION, THE SURFACE OF THE FILL SHALL HAVE A CROWN OR CROSS-SLOPE OF NOT LESS THAN TWO PERCENT. EACH LAYER OR LIFT SHALL EXTEND OVER THE ENTIRE AREA OF THE FILL.

THE FILL SHALL BE FREE FROM LENSES, POCKETS, STREAKS, OR LAYERS OF MATERIAL DIFFERING SUBSTANTIALLY IN TEXTURE OR GRADATION FROM THE SURROUNDING MATERIAL. THE MORE PERVIOUS MATERIAL SHALL BE PLACED IN THE OUTSIDE PORTION OF THE EMBANKMENT OR AS INDICATED ON THE DRAWINGS. THE FINISHED FILL SHALL BE SHAPED AND GRADED TO THE LINES AND GRADE SHOWN ON THE DRAWINGS.

B. BACKFILL AT THE PIPE OUTLET

BACKFILL SHALL BE PLACED IN HORIZONTAL LAYERS NOT TO EXCEED THREE INCHES IN THICKNESS AND SHALL BE BROUGHT UP UNIFORMLY AROUND THE OUTLET PIPE AND FLARED END SECTION

4. MOISTURE CONTROL

THE MOISTURE CONTENT OF MATERIALS IN THE EMBANKMENT SHALL BE CONTROLLED TO MEET THE REQUIREMENTS OF SECTION 5, "COMPACTION OF EMBANKMENT." WHEN NECESSARY, MOISTURE SHALL BE ADDED BY USE OF APPROVED SPRINKLING EQUIPMENT. WATER SHALL BE ADDED UNIFORMLY AND EACH LAYER SHALL BE THOROUGHLY DISKED OR HARROWED TO PROVIDE ROPER MIXING. ANY LAYER FOUND TOO WET FOR PROPER COMPACTION SHALL BE ALLOWED TO DRY BEFORE ROLLING. PLACING OR ROLLING OF MATERIAL ON EARTH FILLS WILL NOT BE PERMITTED DURING OR IMMEDIATELY AFTER RAINFALLS WHICH INCREASE THE MOISTURE CONTENT BEYOND THE LIMIT OF SATISFACTORY COMPACTION. THE EARTH FILL SHALL BE BROUGHT UP UNIFORMLY AND ITS TOP SHALL BE KEPT GRADED AND SLOPED SO THAT A MINIMUM OF RAINWATER WILL BE RETAINED THEREON. COMPACTED EARTH FILL DAMAGED BY WASHING SHALL BE ACCEPTABLY REPLACED BY THE CONTRACTOR.

5. COMPACTION

A. EMBANKMENT

EMBANKMENT MATERIAL SHALL BE COMPACTED TO 95% OF THE STANDARD PROCTOR DENSITY AT NEAR OPTIMUM MOISTURE CONTENT AND BY THE COMPACTION EQUIPMENT SPECIFIED HEREIN. THE COMPACTION EQUIPMENT SHALL TRAVERSE THE ENTIRE SURFACE OF EACH LAYER OF FILL MATERIAL.

APPROVED TAMPING ROLLERS SHALL BE USED FOR COMPACTING ALL PARTS OF THE EMBANKMENTS WHICH THEY CAN EFFECTIVELY REACH. THE CONTRACTOR SHALL DEMONSTRATE THE EFFECTIVENESS OF THE ROLLER BY ACTUAL SOIL COMPACTION RESULTS OF THE SOIL TO BE USED IN THE EMBANKMENT WITH LABORATORY WORK PERFORMED BY AN APPROVED SOIL TESTING LABORATORY.

B. BACKFILL AT OUTLET CONDUIT

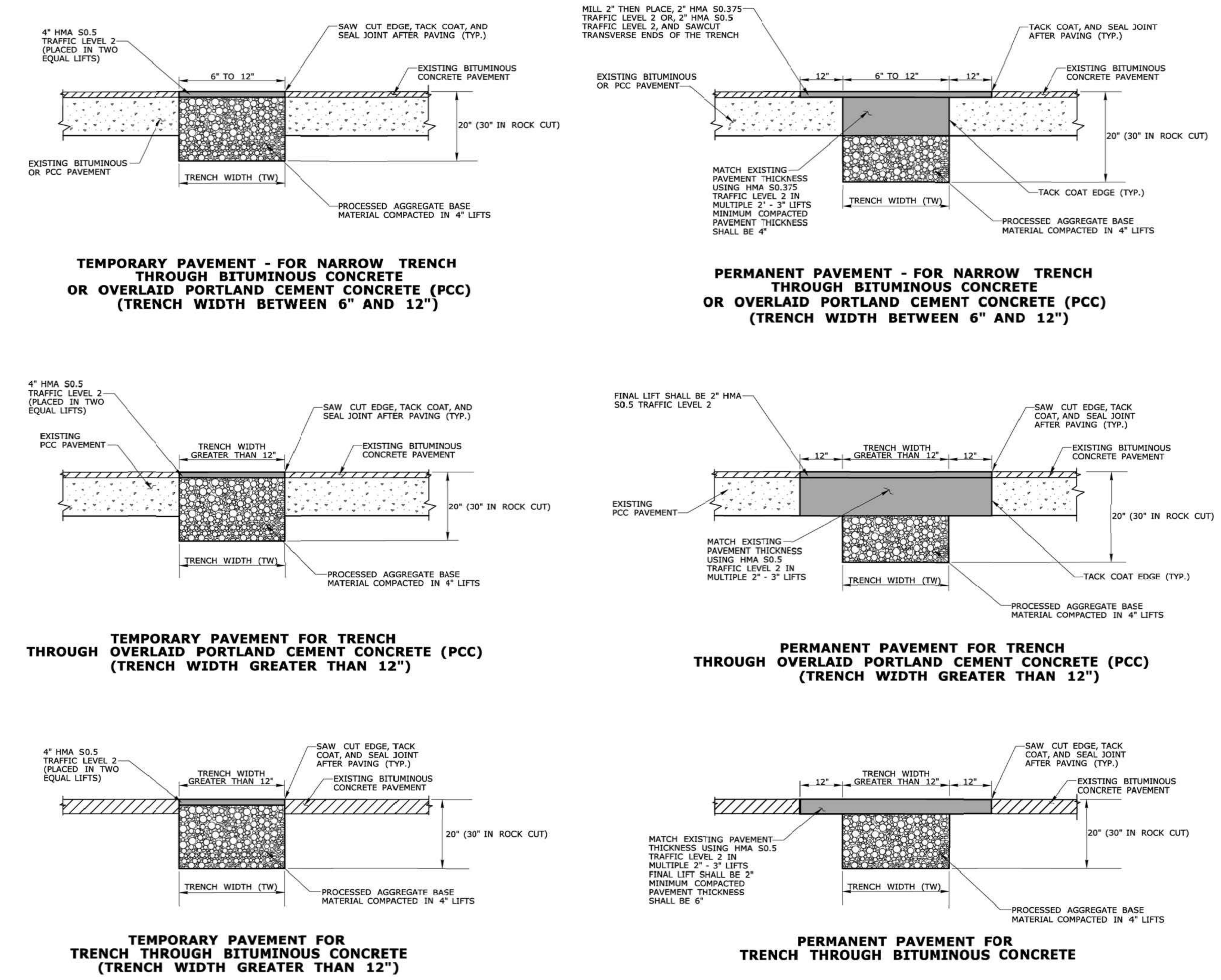
BACKFILL SHALL BE COMPACTED BY HAND TAMPING WITH MECHANICAL TAMPERS. HEAVY EQUIPMENT SHALL NOT BE OPERATED WITHIN TWO FEET OF ANY STRUCTURE. EQUIPMENT SHALL NOT BE ALLOWED TO OPERATE OVER THE OUTLET CONDUITS UNTIL THERE IS 24 INCHES OF FILL OVER THE PIPE CONDUITS.

6. FINISHING EMBANKMENTS

THE EMBANKMENTS SHALL BE CONSTRUCTED TO THE ELEVATIONS, LINES, GRADES AND CROSS-SECTIONS AS SHOWN ON THE DRAWINGS. THE EMBANKMENTS SHALL BE MAINTAINED IN A MANNER SATISFACTORY TO THE ENGINEER AND SURFACES SHALL BE COMPACT AND ACCURATELY GRADED BEFORE TOPSOIL IS PLACED ON THEM. THE CONTRACTOR SHALL CHECK THE EMBANKMENT SLOPES WITH STRING LINES TO INSURE THAT THEY CONFORM TO THE SLOPES GIVEN ON THE PLANS AND ARE UNIFORM FOR THE ENTIRE LENGTH OF THE SLOPE.

7. CONTROL OF WATER

THE PROJECT SITE IS SUBJECT TO HIGH WATER TABLE. THE CONTRACTOR SHALL USE TEMPORARY PIPES OR PUMPS TO ASSURE PLACEMENT OF SELECT FILL IN DRY CONDITIONS.



GENERAL NOTES:

1. LONGITUDINAL TRENCHING FOR JOINTED CONCRETE PAVEMENT:

A. IF THE LONGITUDINAL TRENCH FALLS BETWEEN THE SLAB CENTERLINE AND THE EDGE OF SLAB, REMOVE CONCRETE AND BITUMINOUS CONCRETE PAVEMENT FROM THE TRENCH EDGE TO THE EDGE OF ROAD. IF THE LONGITUDINAL TRENCH FALLS BETWEEN THE LONGITUDINAL JOINT AND THE SLAB CENTERLINE, REMOVE THE ENTIRE CONCRETE SLAB AND BITUMINOUS CONCRETE PAVEMENT TO THE EDGE OF ROAD. IN EITHER CASE REBUILD WITH THE FOLLOWING:

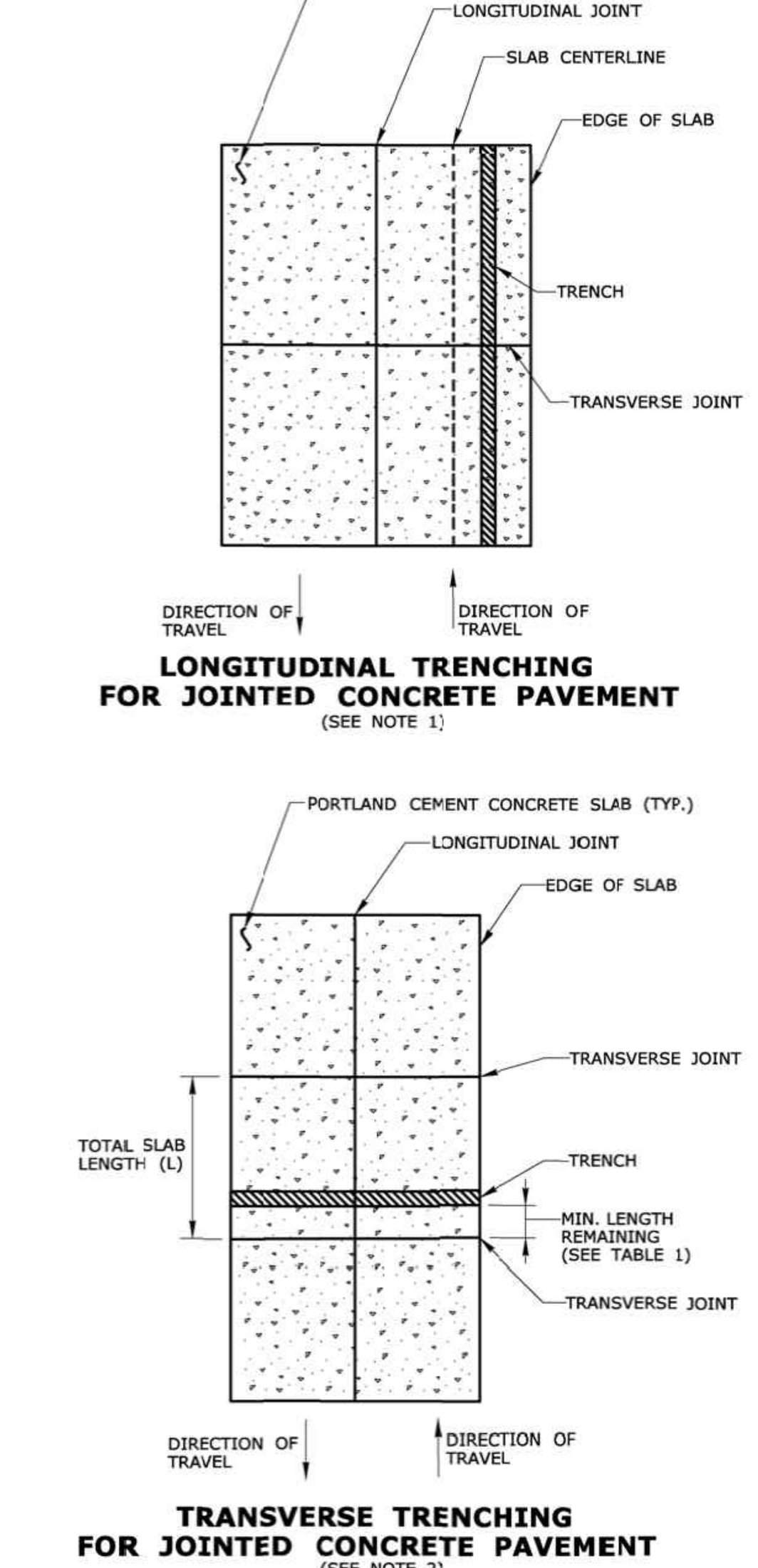
a. PLACE HMA S1.0 TRAFFIC LEVEL 2 IN TWO EQUAL 4" - 5" LIFTS TO MATCH EXISTING CONCRETE PAVEMENT THICKNESS
b. PLACE HMA S0.5 TRAFFIC LEVEL 2 IN 2" - 3" LIFTS TO MATCH EXISTING BITUMINOUS CONCRETE PAVEMENT THICKNESS, WITH THE FINAL LIFT BEING 2"

2. TRANSVERSE TRENCHING FOR JOINTED CONCRETE PAVEMENT:

TABLE 1	
TOTAL SLAB LENGTH (L)	MIN. LENGTH REMAINING
40' OR LONGER	1/4 L
15' - 40'	10'
15' OR SHORTER	REBUILD TO NEAREST JOINT

A. FOR TRANSVERSE TRENCHES, THE MINIMUM SLAB LENGTH AS SHOWN IN TABLE 1 SHALL BE LEFT IN PLACE TO THE NEAREST TRANSVERSE JOINT. IF THIS CRITERIA CANNOT BE MET, THE EXISTING SLAB AREA FROM THE TRENCH EDGE TO THE NEAREST TRANSVERSE JOINT SHALL BE REMOVED AND REBUILT AS FOLLOWS:

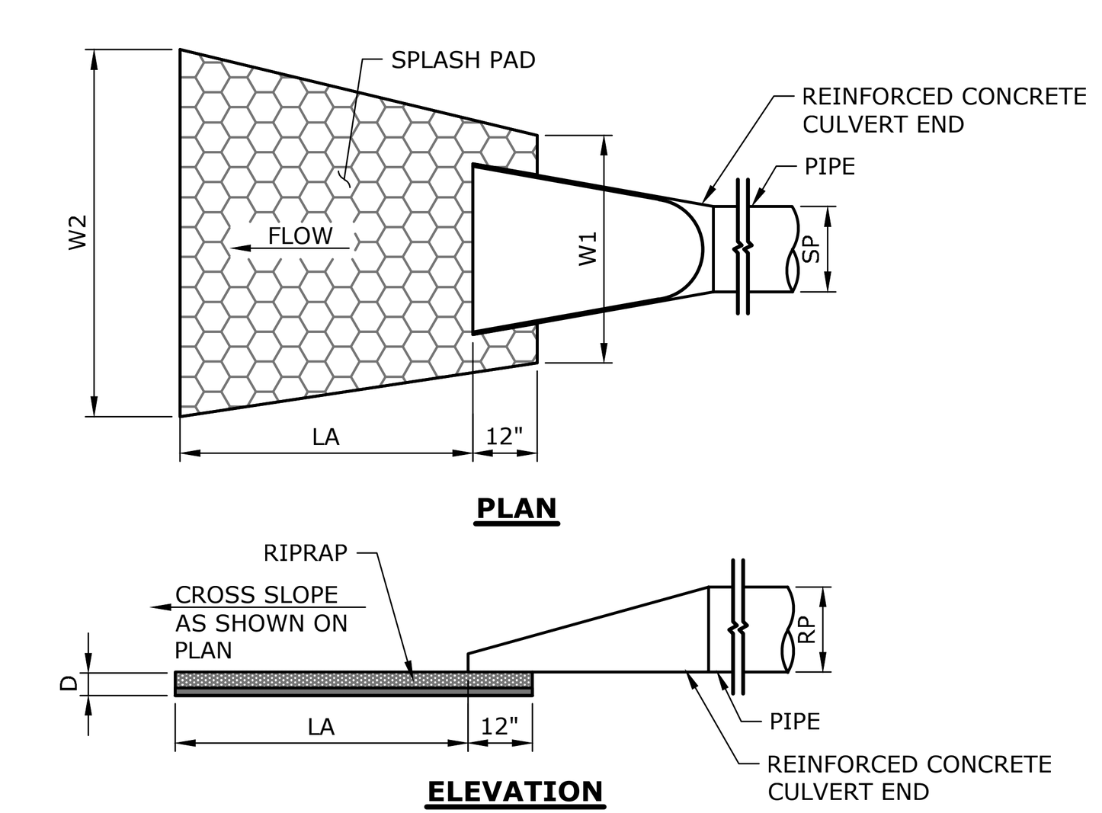
a. PLACE HMA S1.0 TRAFFIC LEVEL 2 IN TWO EQUAL 4" - 5" LIFTS TO MATCH EXISTING CONCRETE PAVEMENT THICKNESS
b. PLACE HMA S0.5 TRAFFIC LEVEL 2 IN 2" - 3" LIFTS TO MATCH EXISTING BITUMINOUS CONCRETE PAVEMENT THICKNESS, WITH THE FINAL LIFT BEING 2"



LONGITUDINAL TRENCHING FOR JOINTED CONCRETE PAVEMENT (SEE NOTE 1)

TRANSVERSE TRENCHING FOR JOINTED CONCRETE PAVEMENT (SEE NOTE 2)

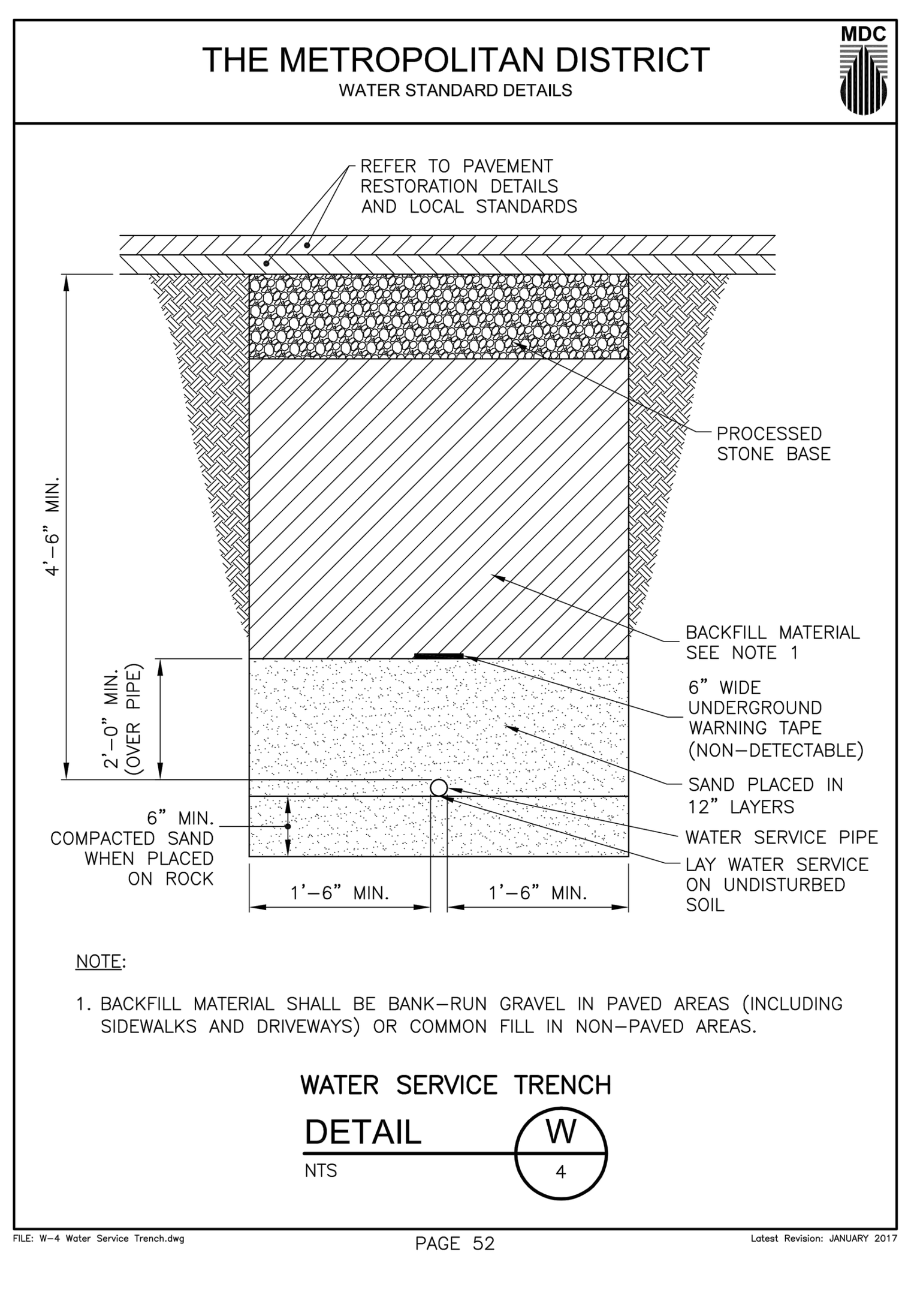
STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION — DRAWING TITLE: PAVEMENT REPAIR

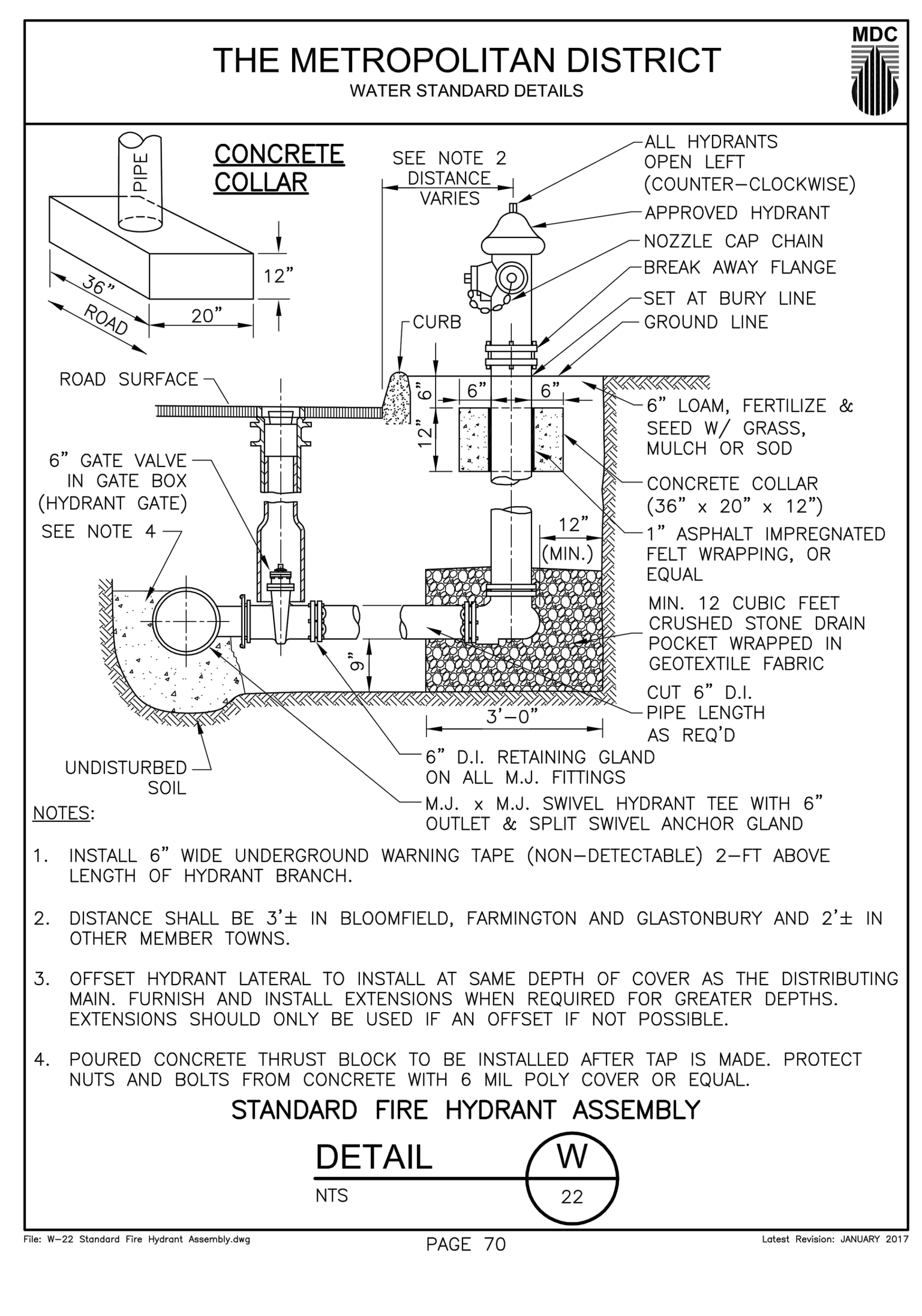


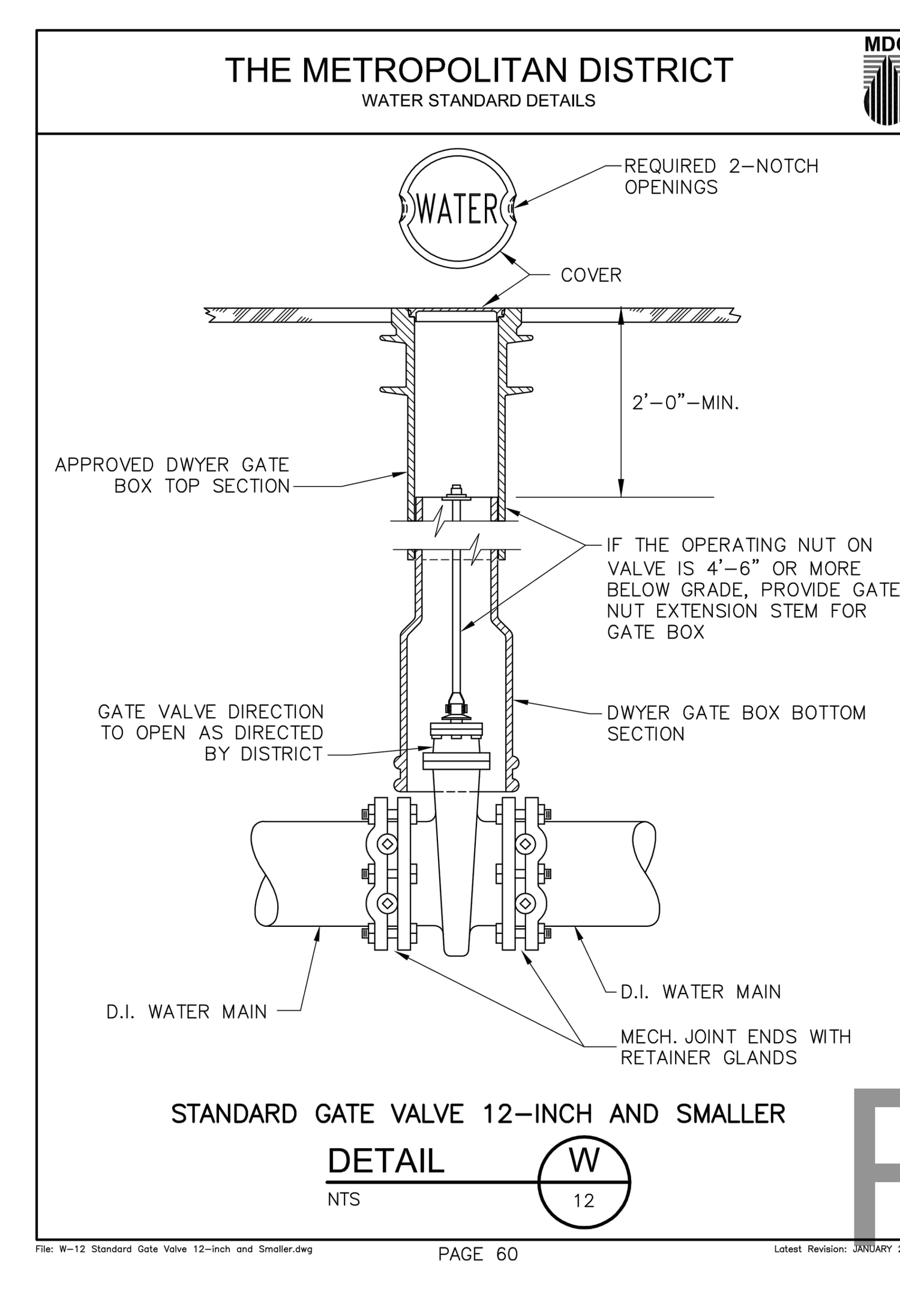
OUTLET PROTECTION ID	TYPE	SP (FT)	RP (FT)	LA (FT)	W1 (FT)	W2 (FT)	D (IN)
FES 12	MODIFIED TYPE B	1.0	1.0	10.0	3.0	7.0	12

FLARED END WITH RIP RAP SPLASH PAD

NOT TO SCALE







PROGRESS

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Hartford, CT 06106
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BLOOMFIELD PUBLIC LIBRARY
McMAHON WINTONBURY LIBRARY ADDITIONS & RENOVATIOS
1015 BLUE HILLS AVE.
BLOOMFIELD, CT 06002

SCHEMATIC DESIGN

KEY PLAN

DRAWING TITLE
SITE DETAILS

STATE PROJ NO.	
PROJECT NO.	220103
SCALE	AS NOTED
DATE:	03/30/2022
DRAWN BY:	RYE
CHECKED BY:	TD

ISSUE DATES

NO.	DATE	PURPOSE

C3.3

EXISTING DECIDUOUS TREE (TYP.)

CONCRETE WALK (TYP.)

ROCKWELL AVENUE

CONCRETE WALK (TYP.)

SANITARY SEWER EASEMENT

25' FRONT YARD SETBACK

EXISTING VEGETATION

25' FRONT YARD

BASIN SEED MIX

10' SIDE YARD

MULTI-STEM RIVER BIRCH

ACTIVITY LAWN TERRACE

PARKING (51 SPACES)

NEW ENTRY PLAZA

CONCRETE WALK (TYP.)

PRESERVE 15" SYCAMORE

BENCH (6') (TYP.)

RENOVATED LIBRARY BUILDING

PROPOSED ADDITION

FLEXIBLE POROUS PAVEMENT MATERIAL

DECIDUOUS ORNAMENTAL TREE (TYP.)

PAVERS ON CONCRETE BASE (TYP.)

NEW ENTRY PLAZA AND ENTRY GARDEN

CONCRETE WALK (TYP.)

BENCH

DECIDUOUS SHADE TREE (TYP.)

ACCESSIBLE WALK TO/FROM PARKING AND ACTIVITY LAWN TERRACE

CHILDREN'S READING GARDEN

CONCRETE BENCHES AND POD SEATING

MEMORIAL DOGWOOD TREE

AREA
149,531 S.F.
3.433 Acres

10' SIDE YARD

25' FRONT YARD

EXISTING EVERGREEN TREE (TYP.)

EXISTING VEGETATION

10' SIDE YARD

BLUE HILLS AVENUE (ROUTE 187)

N/F
MICHAEL C. ZAWADA
LINDA J. ZAWADA
VOL. 1673, PAGE 188

N/F
FIRST BLOOMFIELD ASSOCIATES, LLC
VOL. 1998, PAGE 160

STORM DRAINAGE EASEMENT SEE NOTE #6

N/F
ANTONIO JOSE MEDINA
VOL. 2021, PAGE 36

NOTES:

1. ADDITIONAL TREE PRESERVATION MEASURES REQUIRED DURING DEMOLITION AND CONSTRUCTION AT AND AROUND EXISTING 15" SYCAMORE AND 6" MEMORIAL DOGWOOD.

SITE ILLUSTRATIVE LEGEND

- PAVERS ON CONCRETE BASE
- HEAVY DUTY PAVERS ON CONCRETE BASE
- CONCRETE WALK
- BITUMINOUS PAVEMENT
- FLEXIBLE POROUS PAVEMENT MATERIAL
- PAVEMENT SAWCUT
- SANITARY SEWER EASEMENT
- YARD SETBACK
- PROPERTY LINE

PROGRESS

0 10 20 40'
SCALE: 1" = 20' - 0"

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PROJECT

SCHEMATIC DESIGN

KEY PLAN

DRAWING TITLE

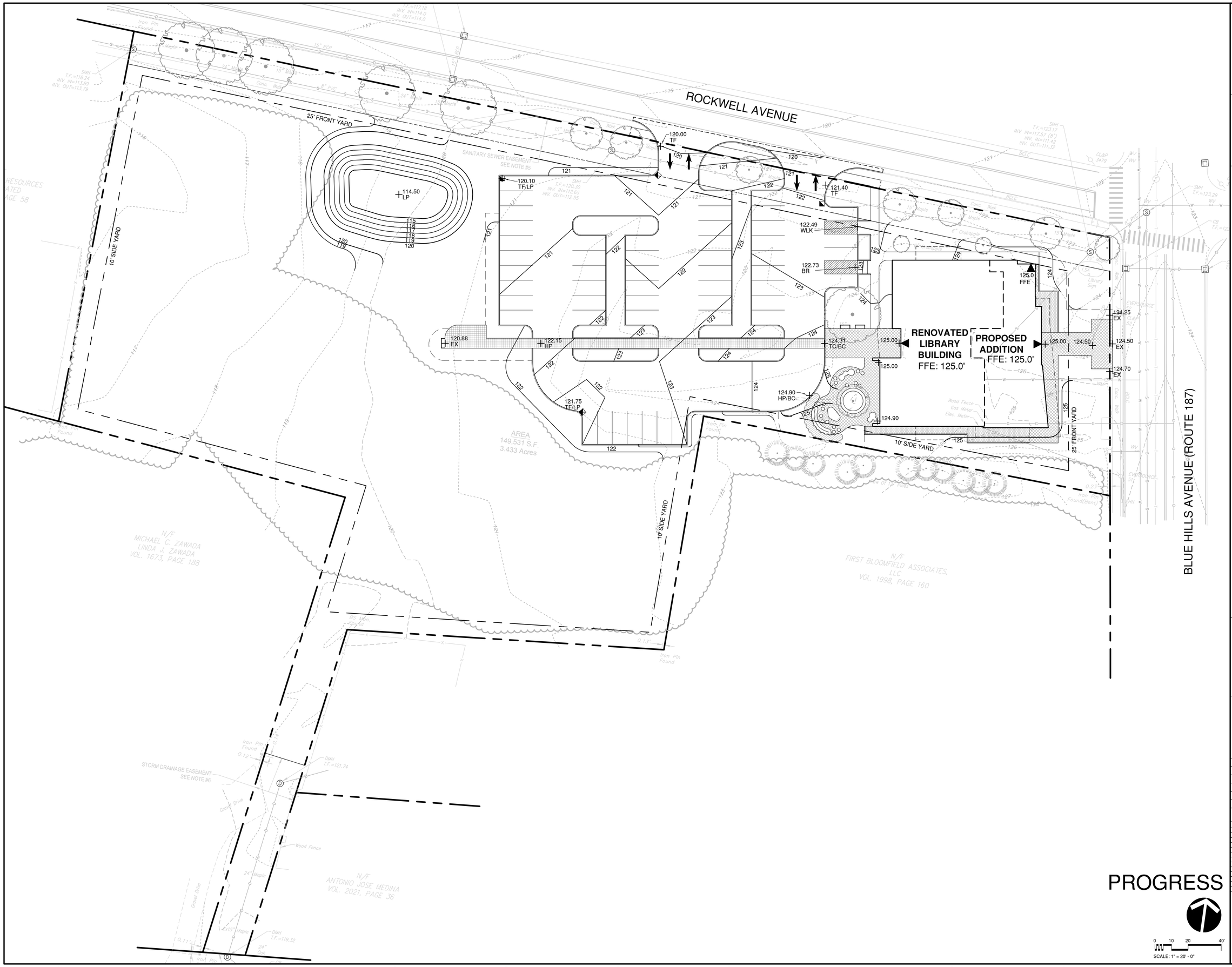
SCHEMATIC SITE ILLUSTRATIVE

STATE PROJ NO.	
PROJECT NO.	220103
SCALE	1"=20'
DATE:	03/30/2022
DRAWN BY:	JP
CHECKED BY:	MC

ISSUE DATES

NO.	DATE	PURPOSE

L-001



PROGRESS

0 10 20 40'
SCALE: 1" = 20' - 0"

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BLOOMFIELD, CT 06002

PROJECT

SCHEMATIC DESIGN

KEY PLAN

DRAWING TITLE

SCHEMATIC GRADING PLAN

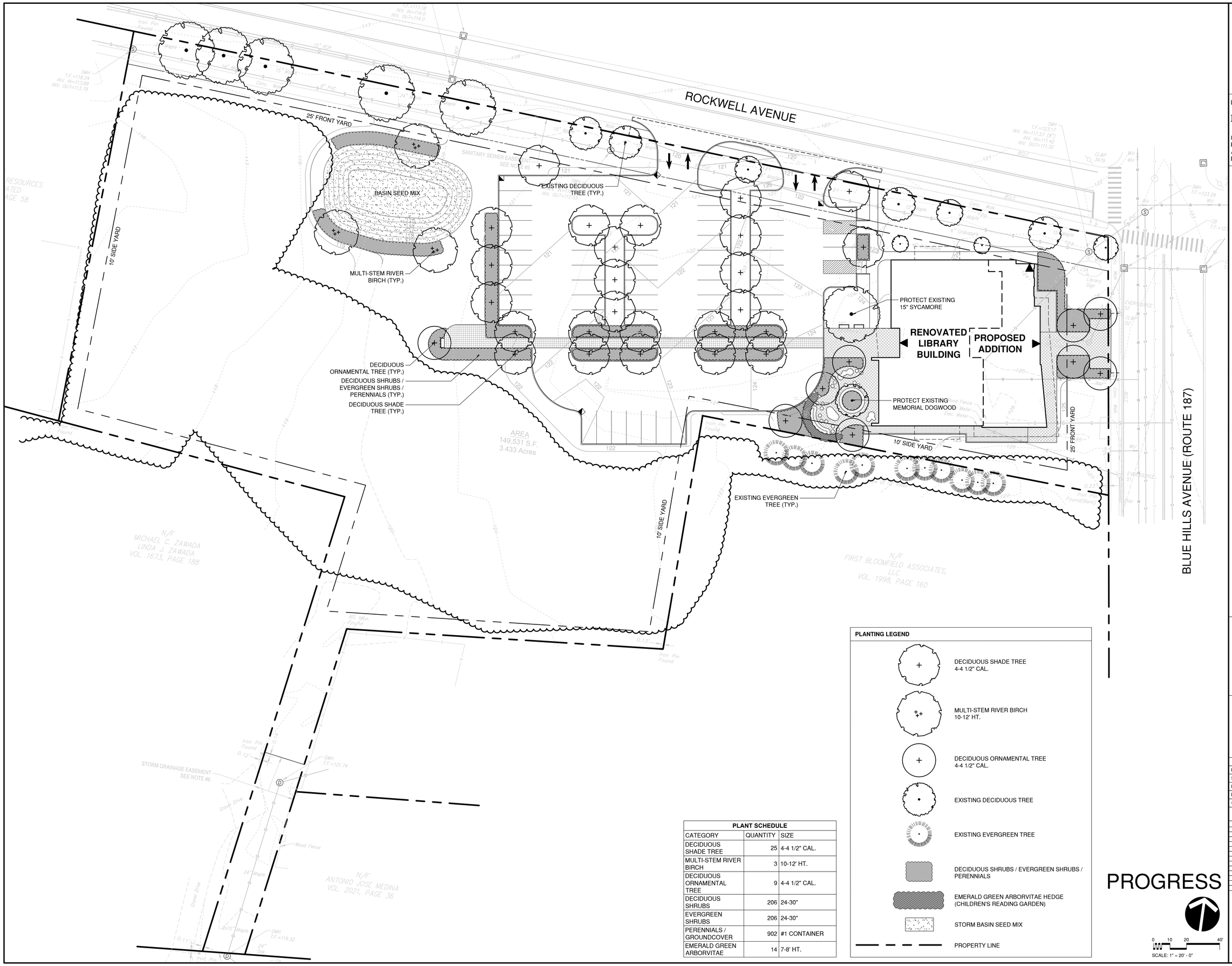
STATE PROJ NO.	
PROJECT NO.	220103
SCALE	1"=20'
DATE:	03/30/2022
DRAWN BY:	JP
CHECKED BY:	MC

ISSUE DATES

NO.	DATE	PURPOSE

L-002

Y:\2022\2022\25\CIVIL\Main\2022002L-002.dwg 03/26/2022 4:38:40 PM jperacchio



PLANT SCHEDULE		
CATEGORY	QUANTITY	SIZE
DECIDUOUS SHADE TREE	25	4-4 1/2" CAL.
MULTI-STEM RIVER BIRCH	3	10-12' HT.
DECIDUOUS ORNAMENTAL TREE	9	4-4 1/2" CAL.
DECIDUOUS SHRUBS	206	24-30"
EVERGREEN SHRUBS	206	24-30"
PERENNIALS / GROUNDCOVER	902	#1 CONTAINER
EMERALD GREEN ARBORVITAE	14	7-8' HT.

PLANTING LEGEND

- DECIDUOUS SHADE TREE 4-4 1/2" CAL.
- MULTI-STEM RIVER BIRCH 10-12' HT.
- DECIDUOUS ORNAMENTAL TREE 4-4 1/2" CAL.
- EXISTING DECIDUOUS TREE
- EXISTING EVERGREEN TREE
- DECIDUOUS SHRUBS / EVERGREEN SHRUBS / PERENNIALS
- EMERALD GREEN ARBORVITAE HEDGE (CHILDREN'S READING GARDEN)
- STORM BASIN SEED MIX
- PROPERTY LINE

PROGRESS

0 10 20 40'
SCALE: 1" = 20' - 0"

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PROJECT

SCHEMATIC DESIGN

KEY PLAN

DRAWING TITLE

SCHEMATIC PLANTING PLAN

STATE PROJ NO.	
PROJECT NO.	220103
SCALE	1"=20'
DATE:	03/30/2022
DRAWN BY:	JP
CHECKED BY:	MC

ISSUE DATES

NO.	DATE	PURPOSE

L-003

ANNOTATION LEGEND

SECTION NUMBER
SIM
1
A101
BUILDING SECTION CUT
SHEET NUMBER TO WHERE REFERENCED

DETAIL NUMBER
SIM
1
A101
DETAILS
SHEET NUMBER TO WHERE REFERENCED

INDIVIDUAL ELEVATION NUMBER
A
D
A601
B
C
INTERIOR ELEVATION
SHEET NUMBER TO WHERE REFERENCED

INDIVIDUAL ELEVATION NUMBER
A
A601
EXTERIOR ELEVATION
SHEET NUMBER TO WHERE REFERENCED

101
DOOR NUMBER

Room name
101
150 SF
ROOM TITLE & NUMBER

1
REVISION NUMBER

1t
WINDOW TYPE

M88
PARTITION TYPE

Name
Elevation
ELEVATION

0
0
COLUMN GRID CENTERLINE

1i
EQUIPMENT DESIGNATION

TYPICAL SIGNALS

TYPICAL IDENTIFICATION SIGN
SCALE: 1" = 3'-0"

THE SIGN DWG. ABOVE IS GENERIC IN NATURE. FOR DESCRIPTION PURPOSES ONLY. A NUMBERING SYSTEM WILL BE ESTABLISHED BY THE OWNER. THE ROOM NAMES ARE INDICATED ON DOOR SCHEDULE DWGS.
SIGNS SHALL BE SURFACE MOUNTED AND SHALL BE MOUNTED SUCH THAT THE BOTTOM OF SIGN IS 48" A.F.F.

NOTES:

1. LETTERS AND NUMBERS ON SIGNS SHALL HAVE A WIDTH TO HEIGHT RATIO BETWEEN 3:5 AND 1:1 AND A STROKE WIDTH TO HEIGHT RATIO BETWEEN 1:5 AND 1:10

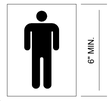
2. RAISED CHARACTERS OR SYMBOLS SHALL BE AT LEAST 5/8" HIGH BUT NO GREATER THAN 2".

3. FONT STYLE SHALL BE HELVETICA MEDIUM AND ALL UPPER CASE AND SHALL BE ACCOMPANIED WITH GRADE 2 BRAILLE.

4. SIGNS SHALL BE INSTALLED ADJACENT TO THE LATCH SIDE OF THE DOOR. WHERE THERE IS NO WALL SPACE TO THE LATCH SIDE OF THE DOOR, INCLUDING AT DOUBLE LEAF DOORS, SIGNS SHALL BE PLACED ON THE NEAREST ADJACENT WALL.

INTERNATIONAL SYMBOL

NOTE:
ACCESSIBLE FACILITIES AND
EXITS SHALL BE IDENTIFIED USING THE INTERNATIONAL SYMBOL OF ACCESSIBILITY



PICTOGRAM SYMBOLS

5. CHARACTERS AND THEIR BACKGROUNDS SHALL HAVE A NON-GLARE FINISH AND SHALL CONTRAST WITH EACH OTHER. LIGHTING ON DARK OR DARK ON LIGHTING.

6. BACKER PLATE FOR ROOM SIGNAGE @ GLASS MOUNTED LOCATION

7. SEE DOOR SCHEDULE FOR NUMBERING AND NAME IDENTIFICATION OF SIGN.

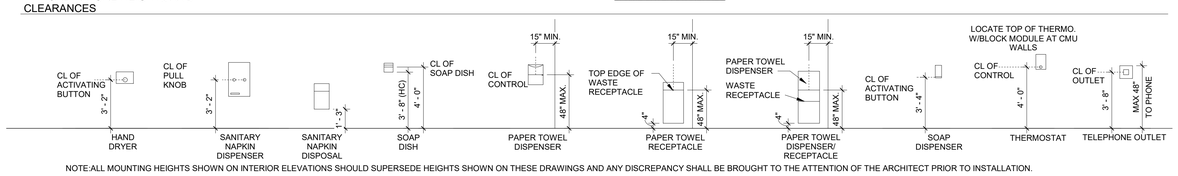
8. COORDINATE ROOM NUMBER WITH OWNER AS PART OF SIGNAGE SUBMITTAL PROCESS.

MATERIAL LEGEND

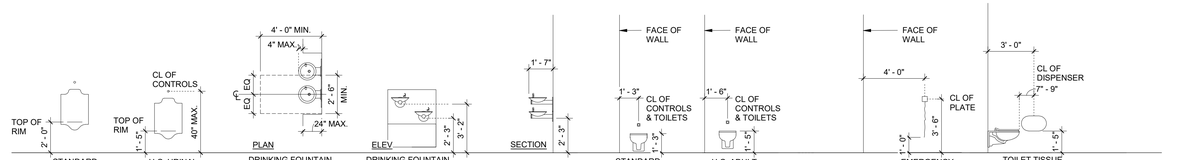
UNDISTURBED SOIL
COMPACTED GRAVEL
CONCRETE
CRUSHED STONE
BRICK
STONE
CONCRETE MASONRY UNIT
THIN SET TILE
FINISH WOOD
ROUGH WOOD CONTINUOUS
ROUGH WOOD NON-CONTINUOUS
NEW BRICK ELEVATION
NEW BRICK ELEVATION
RIGID INSULATION
GLASS FIBER INSULATON
GLASS - PLAN
METAL FERROUS
METAL NONFERROUS
GROUT / MORTAR
SPLIT FACED CONCRETE MASONRY
GYPSUM BOARD
PLYWOOD
PLYWOOD

FUTHER GRAPHIC REFERENCES:
1. GRAPHIC STANDARDS
2. TIME SAVER STANDARDS

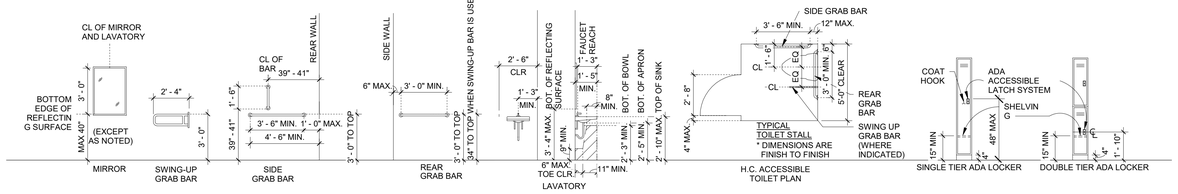
TYPICAL FIXTURE HEIGHTS AND CLEARANCES

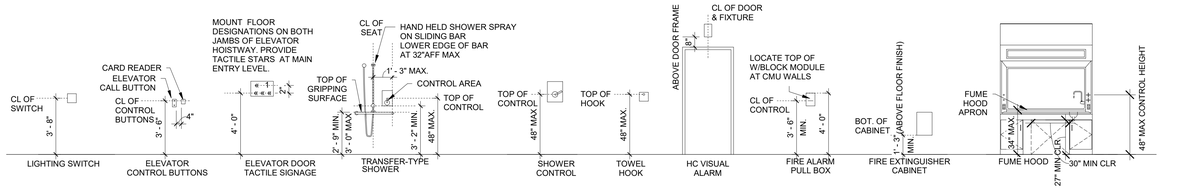


NOTE:ALL MOUNTING HEIGHTS SHOWN ON INTERIOR ELEVATIONS SHOULD SUPERSEDE HEIGHTS SHOWN ON THESE DRAWINGS AND ANY DISCREPANCY SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT PRIOR TO INSTALLATION.



▫ COORDINATE HEIGHT OF FLUSH VALVE WITH GRAB BARS

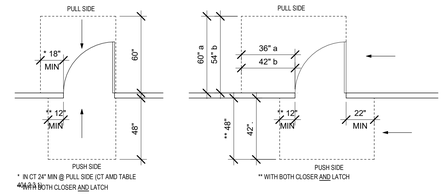


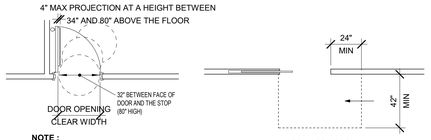


ABBREVIATIONS

@	- AT	F.A.	- FIRE ALARM	N	- NORTH	T&B	- TOP AND BOTTOM
&	- AND	F.A.I	- FRESH AIR INTAKE	N.A	- NOT APPLICABLE	T&G	- TONGUE AND GROOVE
AC.	- ACOUSTIC, ACOUSTICAL	F.D.	- FLOOR DRAIN	N.I.C	- NOT IN CONTRACT	T	- TREAD
ACT.	- ACOUSTIC TILE	FND.	- FOUNDATION	NO., #	- NUMBER	TAN.	- TANGENT
A.D.	- ACCESS DOOR, AREA DRAIN	F.E.	- FIRE EXTINGUISHER	NOM.	- NOMINAL	T.B	- TACK BOARD
ADD	- ADDENDUM	FEC	- FIRE EXTINGUISHER CABINET	NRC	- NOISE REDUCTION COEFFICIENT	TEC.	- TECTUM
ADH	- ADHASIVE	FEC-R	- FIRE EXTINGUISHER CABINET - RECESSED	N.T.S.	- NOT TO SCALE	TEL	- TELEPHONE OR TELECOM
ADJ	- ADJUSTABLE	FEC-SR	- FIRE EXTINGUISHER CABINET - SEMI RECESSED			TEMP.	- TEMPORARY
AFF	- ABOVE FINISHED FLOOR	FEC-S	- FIRE EXTINGUISHER CABINET - SURFACE MOUNTED	O.A.	- OVERALL	TER.	- TERRAZZO
ALT	- ALTERNATE			O.C	- ON CENTER	THK	- THICKNESS
ALUM	- ALUMINUM	FF	- FINISH FLOOR	O.D	- OUTSIDE DIAMETER / DIMENSION	THRES	- THRESHOLD
APPROX	- APPROXIMATE	FF&E	- FURNITURE, FINISHES & EQUIPMENT	OHD	- OVER HEAD	THRU	- THROUGH
ARCH	- ARCHITECTURAL	FHC	- FIRE HOSE CABINET	O.H.	- OPPOSITE HAND	TMPD	- TEMPERED
AWP	- ACOUSTICAL WALL PANEL	FIN.	- FINISH(ED)	OPNG	- OPENING	T.O.	- TOP OF (SEE OTHER WORD)
AUTO	- AUTOMATIC	FIXT.	- FIXTURE	OPP	- OPPOSITE	TV	- TELEVISION
AV	- AUDIO VISUAL	FL	- FLOOR	O.R.D.	- OVERFLOW ROOF DRAIN	TYP.	- TYPICAL
		FLG	- FLASHING	ORIG.	- ORIGINAL		
BD	- BOARD	FLUOR.	- FLUORESCENT	OVHD	- OVERHEAD	UNFIN.	- UNFINISHED
BLDG	- BUILDING	FRTW	- FIRE RETARDANT TREATED WOOD			U.O.N	- UNLESS OTHERWISE NOTED
BLK(G)	- BLOCK(ING)	F.S.P	- FIRE STAND PIPE	PART.	- PARTIAL	UR	- URINAL
BM	- BEAM	FT	- FEET, FOOT	PERP	- PERPENDICULAR	U.P.T	- UNGLAZED PORCELAIN TILE
BOT.	- BOTTOM	FTG	- FOOTING	PL. LAM.	- PLASTIC LAMINATE	UTIL.	- UTILITY
B.O	- BOTTOM OF	FURN	- FURNITURE	PLYWD.	- PLYWOOD		
BRK.	- BRICK	FURR.	- FURRED, FURRING	PRF	- POURED RESILIENT FLOORING	VAR.	- VARIES
BSMT	- BASEMENT	FUT	- FUTURE	PRL.	- PARALLEL	VAC	- VENTILATION AND AIR CONDITIONING
BTWN.	- BETWEEN	F.V.C	- FIRE VALVE CABINET			VCT	- VINYL COMPOSITION TILE
				PREFAB	- PREFABRICATED	VERT.	- VERTICAL
C	- CHANNEL, COURSE	GA.	- GAUGE / GAGE	PROJ	- PROJECT	VEST.	- VESTIBULE
CAB.	- CABINET	GALV.	- GALVANIZED	P.T	- PRESSURE TREATED	V.I.F	- VERIFY IN FIELD
CB	- CATCH BASIN	G.B.	- GLAZED BLOCK	PTD	- PAINTED	VT	- VINYL TILE
CCTV	- CLOSED CIRCUIT TV	G.C.	- GENERAL CONTRACT(OR)	PVG.	- PAVING	VWC	- VINYL WALL COVERING
CER	- CERAMIC	GEN	- GENERATOR	PVMT.	- PAVEMENT		
C.G.	- CORNER GUARD	G.F.C	- GROUND FACE CONC. BLOCK			W	- WEST
CHAM.	- CHAMFER	GL.	- GLASS, GLAZING	Q.T	- QUARRY TILE	W/	- WITH
CHCK	- CHECK	GL.BLK.	- GLASS BLOCK	QTY	- QUANTITY	W.C	- WATER CLOSET
CIRC.	- CIRCUMFERENCE	GRD	- GROUND			WD.	- WOOD
CJ	- CONTROL JOINT	GWB	- GYPSUM WALL BOARD	R	- RADIUS OR RISER	WDW	- WINDOW
CL	- CENTER LINE	GYP. BD.	- GYPSUM BOARD	R.A.	- RETURN AIR	W/O	- WITHOUT
CLO	- CLOSET			RAD.	- RADIUS	WTPFG	- WATERPROOFING
CLG.	- CEILING	H.C.	- HANDICAP(PED)	RCP	- REFLECTED CEILING PLAN	WWF	- WELD WIRE FABRIC
CLK(G)	- CAULK(ING)	HDWR.	- HARDWARE	R.D.	- ROOF DRAIN	WT	- WEIGHT
CLR	- CLEAR	HEX	- HEXAGON	RECOM	- RECOMMENDED		
C.M.U	- CONCRETE MASONRY UNIT	H.M.	- HOLLOW METAL	RECPT	- RECEPTACLE		
COL	- COLUMN	HORZ.	- HORIZONTAL	REC.	- RECESSED		
COMP.	- COMPRESSIBLE	HR	- HOUR	REF.	- REFERENCE		
CONC.	- CONCRETE	HT	- HEIGHT	REFL.	- REFLECTED / REFLECTIVE / REFLECT		
CONF.	- CONFERENCE	HTG.	- HEATING	REFR.	- REFRIGERATOR		
CONST.	- CONSTRUCTION	H.V.A.C.	- HEATING, VENTILATION & AIR CON.	REG.	- REGISTER		
CONT	- CONTINUATION,CONTINUOUS			REINF.	- REINFORCED / REINFORCING		
COORD	- COORDINATE	I.D.	- INSIDE DIAMETER	REQ.	- REQUIRE / REQUIRED		
CORR	- CORRIDOR	IN	- INCH(ES)	RESIL.	- RESILIENT		
CPT.	- CARPET	INCL.	- INCLUDED, INCLUDING	REV.	- REVISION, REVISED		
C.S.	- CAST STONE	INFO	- INFORMATION	RET.	- RETURN		
CT	- CERAMIC TILE	INSUL.	- INSULATION	R.H.	- RIGHT HAND		
CUH	- CABINET UNIT HEATER	INTR.	- INTERIOR	RM.	- ROOM		
CUH-S	- CABINET UNIT HEATER - SURFACE MOUNTED	INTERM	- INTERMEDIATE	R.O.	- ROUGH OPENING		
		INV.	- INVERT	RTD	- RATED		
CUH-R	- CABINET UNIT HEATER - RECESSED	ISO	- ISOLATION	RTG	- RATING		
				R.W.L	- RAIN WATER LEADER		
CUH-SR	- CABINET UNIT HEATER - RECESSED	JAN	- JANITOR				
SEMI-		J.C.	- JANITOR'S CLOSET	S	- SOUTH		
		JT.	- JOINT	SAN.	- SANITARY		
DEMO	- DEMOLISH, DEMOLITION			SBB	- SANDBLASTED BLOCK		
DET.	- DETAIL	KD	- KNOCK DOWN	S.C.	- SOLID CORE		
DF.	- DRINKING FOUNTAIN	KG	- KILOGRAM	SCHE.	- SCHEDULE		
DIA	- DIAMETER	KITC.	- KITCHEN	S.D.	- STORM DRAIN		
DIAG.	- DIAGONAL			SECT.	- SECTION		
DIFF	- DIFFUSER	LAM.	- LAMINATE(D)	SEW.	- SEWER		
DIM.	- DIMENSION	LAV.	- LAVATORY	SF	- SQUARE FEET/FOOT		
DISP	- DISPOSAL	LCC	- LEAD COATED COPPER	SHT.	- SHEET		
DIV.	- DIVISION	LOC	- LOCATION	SHWR	- SHOWER		
DMPR	- DAMPER	L.F.	- LINEAR FOOT	SIM.	- SIMILAR		
DN	- DOWN	LG	- LONG	S.O.G	- SLAB ON GRADE		
D.O.	- DOOR OPENING	LGTH.	- LENGTH	SPEC.	- SPECIFICATION		
DPFG	- DAMPPROOFING	LH	- LEFT HAND	SPKLR	- SPRINKLER		
DPTN	- DEMOUNTABLE PARTITION	LIN	- LINEAR	SPKR	- SPEAKER		
DR	- DOOR	LL	- LIVE LOAD	SQ.	- SQUARE		
DRN	- DRAIN	LLH	- LONG LEG HORIZONTAL	S/S	- SANITARY SINK		
DW	- DISHWASHER	LLV	- LONG LEG VERTICAL	S.S	- STAINLESS STEEL		
DWG(S)	- DRAWING(S)	LN	- LINE	S.STL	- STAINLESS STELLA		
DWR	- DRAWER	LT	- LIGHTING	ST	- STREET		
		LTG	- LIGHTINGING	STA.	- STATION		
E	- EAST	LT. WT.	- LIGHTING WEIGHT	STC	- SOUND TRANSMISSION CLASS		
EA.	- EACH			STD	- STANDARD		
E.F.	- EXHAUST FAN	MACH	- MACHINE	STL	- STEEL		
E.J.	- EXPANSION JOINT	MAN	- MANUAL	STOR.	- STORAGE		
EL.	- ELEVATION	M.A.T	- MINERAL ACOUSTIC TILE	STRG	- STRINGER		
ELEC.	- ELECTRICAL	MAX	- MAXIMUM	STRL	- STRUCTURAL		
ELEV.	- ELEVATOR	M.B.	- MARKER BOARD	STRUCT.	- STRUCTURAL		
EMERG.	- EMERGENCY	MECH	- MECHANICAL	SUBCTG	- SUBCATEGORY		
ENCL.	- ENCLOSURE	MED.	- MEDIUM	SUSP.	- SUSPENDED		
EQ	- EQUAL	MEMB	- MEMBRANE	SYS	- SYSTEM		
EQUIP	- EQUIPMENT	MEZZ.	- MEZZANINE				
ESCAL	- ESCALATOR	MFR	- MANUFACTURER				
E.W.C.	- ELECTRICAL WATER COOLER	MH	- MANHOLE				
EXH.	- EXHAUST	MIN.	- MINIMUM				
EXP.	- EXPANSION	MISC	- MISCELLANEOUS				
EXIST.	- EXISTING	M.O.	- MASONRY OPENING				
EXTR.	- EXTERIOR	MTD	- MOUNTED				
		MTG	- MOUNTING				
		MTL.	- METAL				
		MULL	- MULLION				

MANEUVERING CLEARANCES FOR ALL ACCESSIBLE DOORS





NOTE :
ALL ACCESSIBLE DOOR OPENINGS TO BE ABLE TO PASS A 32"Ø X60"H CYLINDER.

DOOR OPENING CLEARANCE CT (1008.1.1)

GENERAL NOTES

1. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO COMMENCING WORK AND BRING ANY DISCREPANCIES TO THE ATTENTION OF THE ARCHITECT.

2. CONTRACTOR SHALL NOTIFY THE ARCHITECT IMMEDIATELY OF DISCREPANCIES IN THE DRAWINGS.

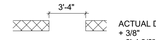
3. DO NOT SCALE DRAWINGS, USE WRITTEN DIMENSIONS ONLY.

4. ALL DIMENSIONS ARE ROUGH FRAMING DIMENSIONS. DIMENSIONS ARE FROM FACE OF METAL STUD WALL, TO FACE OF CONCRETE BLOCK, TO CENTER LINE OF STRUCTURAL GRID. SEE WALL TYPES FOR ADDITIONAL INFORMATION.

5. GENERAL REQUIREMENTS FOR MASONRY WALLS WHERE NOT SPECIFICALLY DETAILED OTHERWISE.

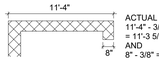
A. ALL MASONRY DIMENSIONS ARE SHOWN AS MODULAR DIMENSIONS UNLESS OTHERWISE NOTED.
B. MASONRY DIMENSIONS:
UNLESS OTHERWISE INDICATED ALL MASONRY PLAN DIMENSIONS ARE NOMINAL, WITH 'NOMINAL' DEFINED TO MEAN ACTUAL DIMENSION SHOWN OR DIMENSION SHOWN +- 3/8".

MASONRY DIMENSIONS ARE DEFINED TO BE 3/8" LARGER THAN DIMENSIONS SHOWN EXAMPLE:



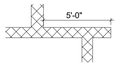
ACTUAL DIMENSION IS 3'-4" + 3/8" = 3'-4 3/8"

OVERALL DIMENSIONS OF MASONRY WALL LENGTH OR THICKNESS ARE DEFINED TO BE 3/8" SMALLER THAN DIMENSIONS SHOWN EXAMPLE:



ACTUAL DIMENSIONS ARE
11'-4" - 3/8"
= 11'-3 5/8"
AND
8" - 3/8" = 7 5/8"

DIMENSIONS FROM INSIDE TO OUTSIDE CORNERS ARE ACTUAL EXAMPLE:



ACTUAL DIMENSION IS 5'-0"

INSIDE DIMENSIONS OF MASONRY WALL ARE DEFINED TO BE 3/8" LARGER THAN DIMENSIONS SHOWN EXAMPLE:

ACTUAL DIMENSION IS
10'-0" + 3/8"
= 10'-0 3/8"

6. THE TERM "TYPICAL" IS USED TO DEFINE A GENERAL CONDITION THAT WILL APPLY TO ALL SUCH CONDITIONS EXCEPT AS OTHERWISE NOTED.

7. ALL INTERIOR WALL SHALL TERMINATE AT BOTTOM OF METAL DECK OR BOTTOM OF STRUCTURAL STEEL.

8. ALL SMOKE WALLS OR FIRE RATED PARTITIONS WHICH TERMINATE AT UNDERSIDE OF METAL DECK SHALL HAVE FLUTES AT METAL DECK FILLED SOLID WITH FIRE SAFING INSULATION.

9. STAIR ENCLOSURES SHALL HAVE NO PENETRATIONS OR OPENINGS FOR WIRING, PIPING, DUCTS, ETC.. EXCEPT FOR THOSE REQUIRED TO SERVE THE STAIR.

10. ALL PIPES, CONDUITS, CABLES, WIRES, DUCTS, ETC., THAT PASS THROUGH FLOOR, SMOKE BARRIERS, FIRE RATED PARTITIONS AND FIRE WALLS SHALL HAVE THE SPACE BETWEEN THE PENETRATING ITEM AND THE WALL FILLED WITH EITHER FIRE RESISTANT JOINT SEALER OR FIRE SAFING INSULATION.

11. FIRESTOPPING SHALL BE PROVIDED IN CONNECTIONS BETWEEN HORIZONTAL AND VERTICAL SPACES SUCH AS SOFFITS, DROPPED CEILINGS AND COVE CEILINGS. FIRESTOPPING SHALL CONSIST OF APPROVED NON-COMBUSTIBLE MATERIALS, SECURELY FASTENED IN PLACE AND SHALL BE CONTINUOUSLY MAINTAINED. FIRESTOPPING SHALL NOT BE CONCEALED FROM VIEW UNTIL INSPECTED AND APPROVED.

12. INTERIOR WALL AND CEILING FINISHES SHALL BE CLASS A OR B. INTERIOR FINISHES IN STAIRS, CORRIDORS, LOBBIES AND EXITS SHALL BE CLASS A. FLOOR COVERINGS WITHIN STAIRS, CORRIDORS OR EXITS SHALL BE CLASS I OR II.

13. COORDINATE LOCATION OF ELECTRICAL DEVICES; I.E.: LIGHTINGS, SWITCHES, OUTLETS, FIRE ALARM DEVICES, SPEAKERS, ETC..; WITH ELECTRICAL DRAWINGS AND LOCATIONS INDICATED ON ARCHITECTURAL REFLECTED CEILING PLANS AND INTERIOR ELEVATIONS. IF CONFLICT ARISES BETWEEN ELECTRICAL DRAWINGS AND, ARCHITECTURAL DRAWINGS CONTRACTOR SHALL NOTIFY ARCHITECT PRIOR TO INSTALLATION OF DEVICE.

14. PATH ALL OPENINGS IN WALLS, CEILINGS AND FLOORS TO MATCH CONSTRCUTION ASSEMBLIES WHERE ELECTRICAL, PLUMBING AND MECHANICAL CONDUITS, PIPES, ETC. HAVE BEEN REMOVED.

15. HARDWARE NOTES;

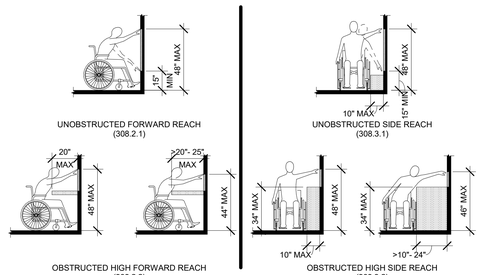
A. ALL RATED DOORS SHALL HAVE CLOSERS AND POSITIVE LATCHING LOCKSETS OR LATCHSETS.
B. ALL DOORS EXITING 50 OR MORE PEOPLE SHALL HAVE PANIC EXIT DEVICES.
C. ALL DOORS LEADING TO HAZARDOUS SPACES SHALL HAVE TACTILE WARNING. HAZARDOUS AREAS INCLUDE: CUSTODIAL SPACES, BOILER ROOM, MECHANICAL ROOMS AND ELECTRICAL CLOSETS.
D. ACCESSIBLE DOOR HARDWARE FOR PEOPLE WITH DISABILITIES SHALL BE PROVIDED TO COMPLY WITH UNIFORM FEDERAL ACCESSIBILITY STANDARDS.

16. ACCESSIBILITY NOTES:

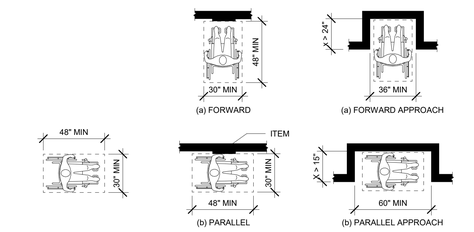
A. ALL PROGRAMS ARE ACCESSIBLE TO PERSONS WITH DISABILITIES.
B. ALL ROOMS USED BY PERSONS WITH DISABILITIES HAVE ACCESSIBLE WORK STATIONS.
C. ALL ACCESSIBLE ELEMENTS ARE MARKED WITH THE INTERNATIONAL SYMBOL OF ACCESSIBILITY AND THE ACCESSIBLE ROUTE HAS 36 INCH MINIMUM CLEARANCE THROUGHOUT (32 INCH CLEARANCE FOR DOORWAYS).
D. ALL ITEMS SHALL COMPLY WITH SECTION 804, REHABILITATION ACT 1973.
E. ALL LABS & SHOPS USED BY PERSON W/ DISABILITIES HAVE ACCESSIBLE EMERGENCY EYEWASH & BODY WASH STATION

REACH RANGES AND CLEAR FLOOR SPACE

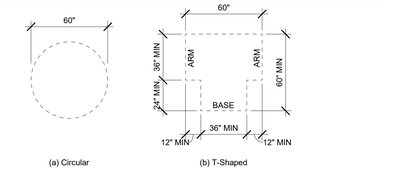
ALL REQUIREMENTS ARE BASED ON ICC/ANSI A117.1 /2009 W/CT STATE AMENDMENTS



REACH RANGES



CLEAR FLOOR SPACE



SIZE OF WHEELCHAIR TURNING SPACE (304.3)

WHEELCHAIR TURNING SPACE

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PROJECT

SCHEMATIC DESIGN

KEY PLAN

DRAWING TITLE

GENERAL INFORMATION

STATE PROJ. NO.	
PROJ. NO.	200802
SCALE	As indicated
DATE	03/30/22
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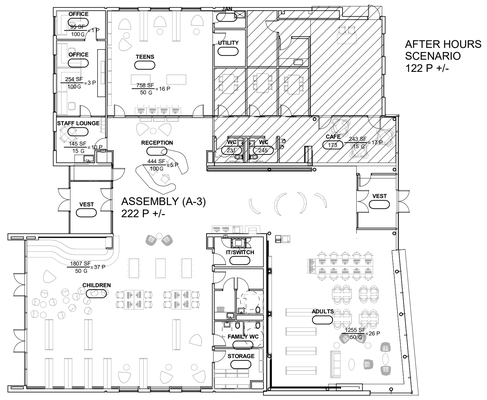

AFTER HOURS
SCENARIO
122 P +/-

AREAS OF LIBRARY TO BE OPENED AFTER HOURS

1 FIRST FLOOR PLAN - Code
1/16" = 1'-0"

1. **USE GROUP CLASSIFICATION (IBC CHAPTER 3)**
   PRIMARY A3 (ASSEMBLY)

2. **CONSTRUCTION TYPE (IBC CHAPTER 6)**
   MINIMUM TYPE REQUIRED TYPE VB (NON-SPRINKLERED)
   ACTUAL TYPE PROVIDED TYPE VB (NON-SPRINKLERED)

3. **BUILDING HEIGHT (IBC CHAPTER 5)**
   (E) ALLOWABLE HEIGHT (STORY/FEET) 1 STORIES / 40 FEET (NON-SPRINKLERED)
   ACTUAL HEIGHT (STORY/FEET) 1 STORIES / 24' - 6"
   STORIES ABOVE GRADE 1 STORIES

4. **BUILDING AREA (IBC CHAPTER 5)**
   BUILDING AREA (EACH FLOOR INSIDE FACE OF WALL & OVERHANGS)

   FIRST FLOOR: 8,929 SF
   RENOVATION: 5,636 SF
   ADDITION: 3,293 SF
   TOTAL: 9,949 SF (8,929 SF + 1,020 ROOF OVERHANGS)

8. **FIRE RESISTANT RATINGS OF STRUCTURAL ELEMENTS (IBC TABLE 601)**

	REQUIRED	PROVIDED
STRUCTURAL FRAME: INCLUDING COLUMNS, GIRDERS, TRUSSES	0	0
BEARING WALLS - EXTERIOR	NA	NA
BEARING WALLS - INTERIOR	NA	NA
NONBEARING WALLS AND PARTITIONS (EXT.) SEPARATION <5'	1	1
NONBEARING WALLS AND PARTITIONS (EXT.) SEPARATION ≥5' < TO 10'	1	1
NONBEARING WALLS AND PARTITIONS (EXT.) SEPARATION ≥10' <TO 30'	0	0
NONBEARING WALLS AND PARTITIONS (INTERIOR)	0	0
FLOOR CONSTRUCTION (INCLUDING SUPPORTING BEAMS AND JOISTS)	0	0
ROOF CONSTRUCTION (INCLUDING SUPPORTING BEAMS AND JOISTS)	0	0
FIRE WALLS	NA	NA
EXIT ENCLOSURES (LESS THAN 4 STORIES	NA	NA
SHAFT ENCLOSURES (LESS THAN 4 STORIES)	NA	NA
MIXED USE SEPARATION	NA	NA
FIRE SEPARATIONS, SMOKE BARRIERS		

9. **OCCUPANCY LOAD**
   DESIGN LOAD FOR EACH FLOOR:
   FIRST FLOOR 222

   TOTAL EXIT CAPACITY FOR EACH FLOOR:
   FIRST FLOOR 825

   DESIGN TOTAL FOR BUILDING: 222
   TOTAL EXIT CAPACITY FOR BUILDING: 825

10. **MODIFICATIONS**
    NO

11. **ACCESSIBLE BUILDING**
    DESIGNATED

12. **MINIMUM PLUMBING FIXTURE COUNT**

	ASSEMBLY(A3)	TOTAL REQUIRED	TOTAL PROVIDED
WC FEMALE	111/65 = 2	= 2	= 3
WC MALE	111/125 = 1	= 1	= 2
LAVS	222/200 = 2	= 2	= 4
DRINKING F.	222/500 = 1	= 1	= 2
SERVICE SINK	1	= 1	= 1

DESIGN TOTAL:

A3 : TOTAL OCCUPANCY = 222

12. **MINIMUM PLUMBING FIXTURE COUNT -AFTER HOURS SCENARIO**

	ASSEMBLY(A3)	TOTAL REQUIRED	TOTAL PROVIDED
WC FEMALE	61/65 = 1	= 1	= 1
WC MALE	61/125 = 1	= 1	= 1
LAVS	122/200 = 1	= 1	= 2
DRINKING F.	122/500 = 1	= 1	= 2
SERVICE SINK	1	= 1	= 0

DESIGN TOTAL:

A3 : TOTAL OCCUPANCY = 122

13. **SPRINKLER PROTECTION**
    NON SPRINKLERED

DRAWING LEGEND

- XXX — ROOM NUMBER
- 875 / 20 =43P — ROOM OCCUPANCY LOAD: AREA IN SQUARE FEET / OCCUPANCY LOAD FACTOR = ROOM OCCUPANCY LOAD
- 191 — MAX.. ALLOWABLE EGRESS OCCUPANCY OF STAIR
- 440 — MAX.. ALLOWABLE OCCUPANCY OF CORRIDOR
- X / 165 — EXIT CAPACITY: ACTUAL EGRESS OCCUPANCY OF DOOR OR STAIR / MAX.. ALLOWABLE EGRESS OCCUPANCY OF DOOR OR STAIR
- ACCESSIBLE AREA OR EXIT
- ACCESSIBLE AT GRADE (FLUSH CONDITION)
- ® — REQUIRED EXTERIOR EXIT
- AOR — AREA OF REFUGE
- SMOKE RESISTANT CONSTRUCTION (TIGHT TO DECK ABOVE SEAL ALL PENETRATIONS TO RESIST PASSAGE OF SMOKE)
- 3 HOUR FIRE RATED WALL (TIGHT TO DECK ABOVE)
- 2 HOUR FIRE RATED WALL (TIGHT TO DECK ABOVE)
- 1 HOUR FIRE RATED WALL (TIGHT TO DECK ABOVE)
- -1 HR RATED CEILING (HORIZONTAL SHAFT WALL) -1HR RATED ROOF STRUCTURE UL DESIGN NO P734 (FINISH RATING) -1 HR RATED FLOOR UL DESIGN NO D759 (FINISH RATING)
- -2 HR RATED CEILING (HORIZONTAL SHAFT WALL) -2 HR RATED FLOOR UL DESIGN NO D759 (FINISH RATING)
- LINE OF LUMINESCENT WALL BASE

DOOR CLEAR EGRESS WIDTHS

GENERAL SPACES:
.2 FACTOR

X / 145	2'-8" DOOR (29" CLR.)
X / 155	2'-10" DOOR (31" CLR.)
X / 165	3'-0" DOOR (33" CLR.)
X / 175	3'-2" DOOR (35" CLR.)
X / 190	3'-5" DOOR (38" CLR.)
X / 225	4'-0" DOOR (45" CLR.)
X / 330	6'-0" DOOR (66" CLR.)
X / 350	6'-4" DOOR (70" CLR.)
X / 355	6'-5" DOOR (71" CLR.)
X / 360	6'-6" DOOR (72" CLR.)
X / 370	6'-8" DOOR (74" CLR.)
X / 390	7'-0" DOOR (78" CLR.)
X / 395	7'-1" DOOR (79" CLR.)
X / 400	7'-2" DOOR (80" CLR.)
X / 405	7'-3" DOOR (81" CLR.)

TABLE 1004.1.2
MAXIMUM FLOOR AREA ALLOWANCES PER OCCUPANT

ASSEMBLY UNCONCENTRATED	=	15 NET
CLASSROOM	=	20 NET
SHOPS AND OTHER VOCATIONAL AREAS	=	50 NET
LOCKER ROOMS	=	50 GROSS
EXERCISE ROOMS	=	50 GROSS
OFFICE	=	100 GROSS
ACCESSORY STORAGE AREAS AND MECH... EQUIP. RM...	=	300 GROSS

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PROJECT

SCHEMATIC DESIGN

KEY PLAN

DRAWING TITLE

CODE PLAN

STATE PROJ. NO.	
PROJ. NO.	220103
SCALE	As indicated
DATE	03/30/22
DRAWN BY	Author
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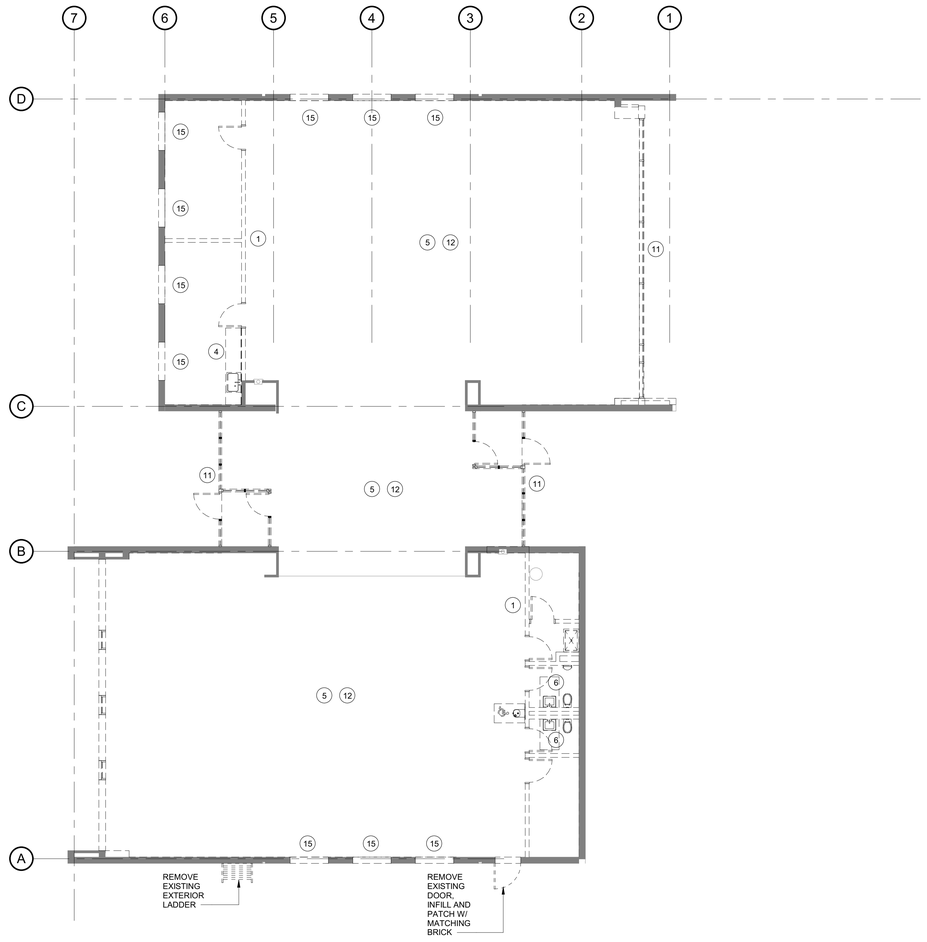
A0.02



1 FIRST FLOOR PLAN - Demo
1/8" = 1'-0"

GENERAL DEMO NOTES

1. SEE MECH. / ELEC. / PLUMBING / ABATEMENT DRAWINGS FOR ADDITIONAL DEMOLITION INFORMATION, TRENCHING, AND CUTTING RELATED TO NEW M.E.P SYSTEMS.

2. ALL INFORMATION ON DEMOLITION PLANS HAVE BEEN COMPLETED FROM EXISTING DRAWINGS AND LIMITED FIELD OBSERVATIONS. THE CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS AND COORDINATE DEMOLOTION WITH WITH ALL NEW CONSTRUCTION AND WITH ALL TRADES. NO ATTEMPT HAS BEEN MADE TO ILLUSTRATE ALL REQUIRED DEMOLITION. THE CONTRACTOR IS ULTIMATELY RESPONSIBLE FOR ALL DEMOLITION NECESSARY TO COMPLETE THE WORK.

3. PROVIDE STEEL LINTELS PER STRUCTURAL DWGS AT NEW OPENINGS IN EXISTING MASONRY WALLS AS REQUIRED.

4. THE CONTRACTOR SHALL BE RESPONSIBLE TO PATCH & REPAIR ALL EXISTING WORK DISTURBED BY DEMOLITION ACTIVITIES IN A MANNER THAT RESULT IN A COMPLETE AND FINISHED PRODUCT. THIS PATCH & REPAIR INCLUDES ALL FINISHES NEEDED TO MATCH ADJACENT SURFACES.

5. IF A WALL OR SURFACE HAS BEEN WORKED ON, THAT WALL OR SURFACE SHALL BE PATCHED & REPAIRED WITH A COMPLETE FINISH, TO THE NEAREST CORNER, CHANGE OF PLANE OR OTHER JUNCTURE WHICH ALLOWS FOR SMOOTH & CLEAN TRANSITION FROM NEWLY FINISHED SURFACE TO THE SURROUNDING EXISTING SURFACE; i.e., THE INTENT IS TO ELIMINATE THE APPERANCE OF A PATCHED CONDITION.

6. IT IS NOT THE INTENT TO SHOW EVERY PIECE OR ITEM TO BE REMOVED IN DEMOLOTION WORK. MECHANICAL, ELECTRICAL, AND OTHER WORK RELATED TO A WALL OR AREA SCHEDULED FOR DEMOLITION AND REMOVAL SHALL BE PERFORMED WHETHER SO NOTED OR NOT.

7. PATCH AND REPAIR ANY EXISTING CEILING, FLOORING AND/OR WALL FINISHES DAMAGED DURING THE INSULATION OF NEW WALL, PIPING, DUCTWORK, OR UNDER THIS PROJECT.

8. DEMO INCLUDE FULL TEAR UP OF ROOF DOWN TO EXISTING STRUCTURE

DEMOLITION KEYNOTES

1. REMOVE WALL AS INDICATED
2. REMOVE DOOR AND FRAME
3. REMOVE WINDOW
4. REMOVE CASEWORK
5. REMOVE FLOORING DOWN TO CONCRETE SLAB REMOVE BASE
6. REMOVE PLUMBING FIXTURE, CAP ASSOCIATED PIPING AT NEAREST MAIN, SEE PLUMBING DEMO DWGS
7. REMOVE MARKER BOARD AND TURN OVER TO THE OWNER
8. REMOVE BULLETIN BOARD AND TURN IT OVER TO THE OWNER
9. REMOVE SMART BOARD AND TURN IT OVER TO THE OWNER
10. REMOVE TV AND TV MOUNT, AND TURN IT OVER TO THE OWNER
11. REMOVE CURTAIN WALL FRAME AND GLASS
12. REMOVE CEILING
13. REMOVE LOCKERS
14. REMOVE KITCHEN EQUIPMENTS
15. CREATE OPENINGS WITHIN EXISTING MASONRY WALLS FOR WINDOWS

DEMOLITION PLAN LEGEND

- (1) KEYED DEMOLITION NOTE SYMBOL
- EXISTING CONSTRUCTION TO BE REMOVED
- EXISTING CONSTRUCTION TO REMAIN
- EXISTING AREAS WHERE DEMOLITION WORK TO BE DONE

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PROJECT

SCHEMATIC DESIGN

KEY PLAN

DRAWING TITLE

FIRST FLOOR DEMO

STATE PROJ. NO.	
PROJ. NO.	220103
SCALE	As indicated
DATE	03/30/22
DRAWN BY	Author
APPROVED BY	Approver

ISSUE DATES

NO.	DATE	PURPOSE

D1.01

1 FIRST FLOOR PLAN
1/8" = 1'-0"

GENERAL NOTES

1. ALL PARTITIONS SHALL BE TYPE M42 UNLESS OTHERWISE NOTED. M42 CONSISTS OF 2 LAYERS 5/8" GYP BD, 3-5/8" MET STUD @ 16" OC & 3-1/2" SOUND ATTENUATION BATTS.

2. ALL PARTITIONS SHALL RUN TO THE UNDERSIDE OF DECK OR BEAM ABOVE.

3. AREAS IN SHADED GREY ARE MILLWORK.

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KEY PLAN

DRAWING TITLE

FIRST FLOOR PLAN

STATE PROJ. NO.	
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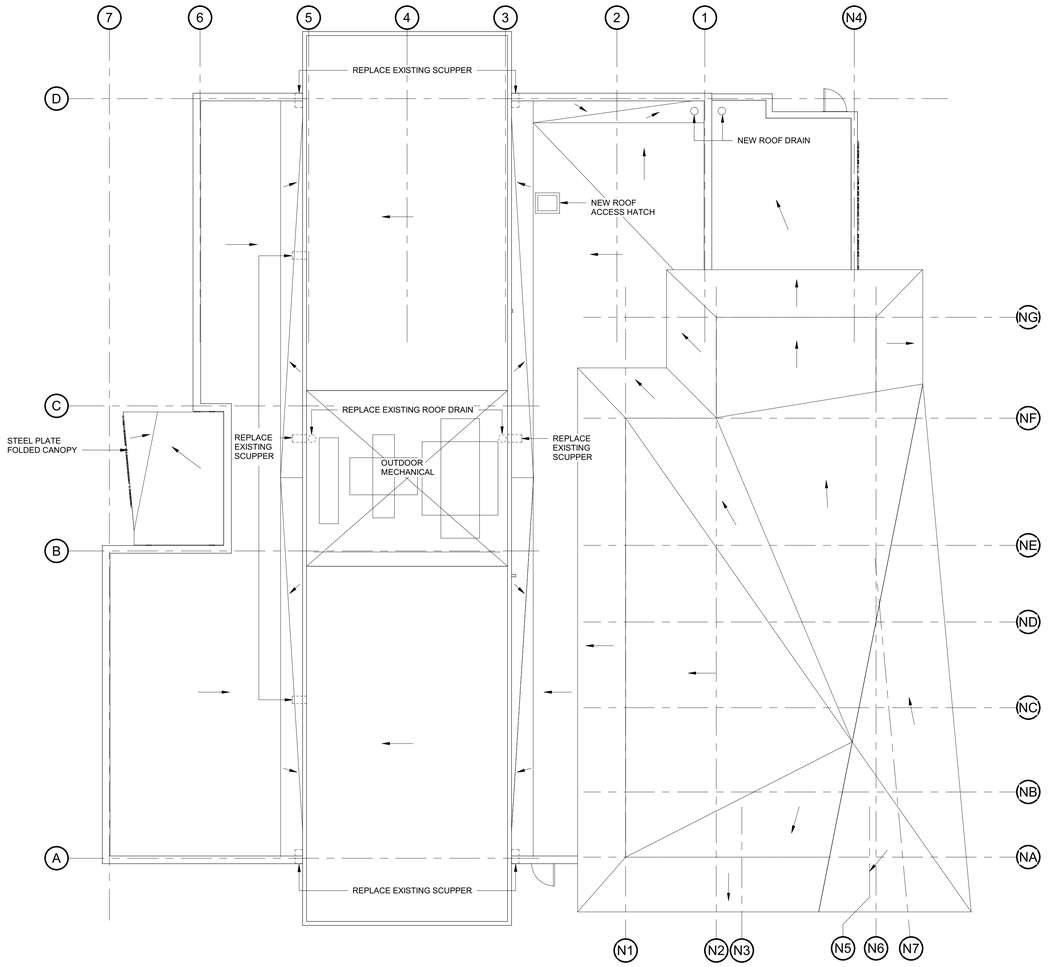
SCALE	As indicated
DATE	03/30/22
DRAWN BY	Author
APPROVED BY	Approver

ISSUE DATES

NO.	DATE	PURPOSE

A1.01



1 ROOF PLAN
1/8" = 1'-0"

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PROJECT

SCHEMATIC DESIGN

KEY PLAN

DRAWING TITLE

ROOF PLAN

STATE PROJ. NO.	
PROJ. NO.	220103
SCALE	1/8" = 1'-0"
DATE	03/30/22
DRAWN BY	Author
APPROVED BY	Approver

ISSUE DATES

NO.	DATE	PURPOSE

A1.11

1 FIRST FLOOR RCP
1/8" = 1'-0"

CEILING LEGEND

- 2X2 ACT
- GWB
- METAL PANEL
- WOOD PANEL
- WOOD SLATS
- RETURN DIFFUSER
- SUPPLY DIFFUSER
- SPRINKLER
- CEILING MOUNTED CAMERA
- CIRCLE CEILING MOUNTED SPEAKER
- SQUARE CEILING MOUNTED SPEAKER

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PROJECT

SCHEMATIC DESIGN

KEY PLAN

DRAWING TITLE

FIRST FLOOR REFLECTED CEILING PLAN

STATE PROJ. NO.	
PROJ. NO.	220103
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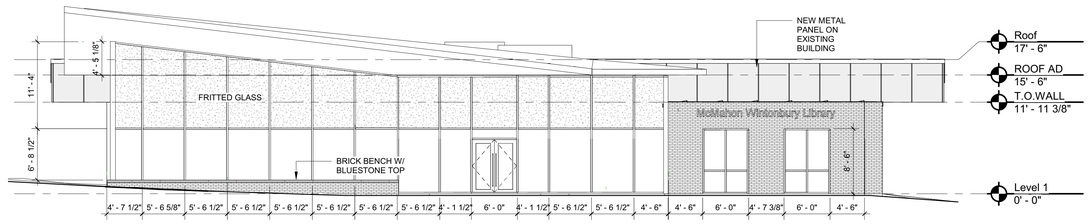
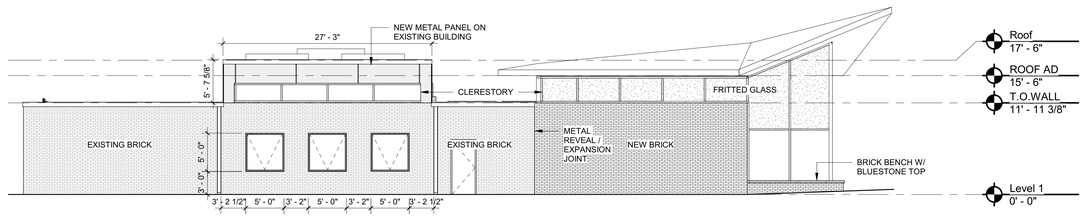
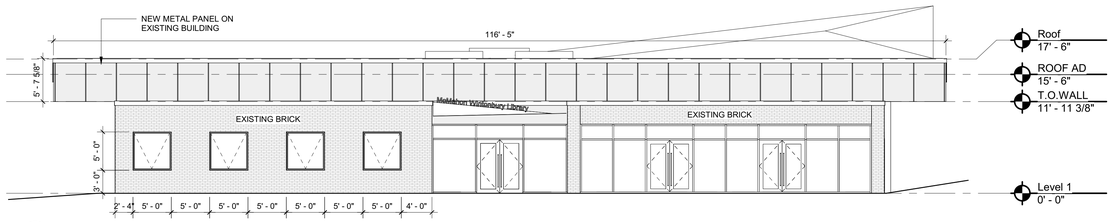


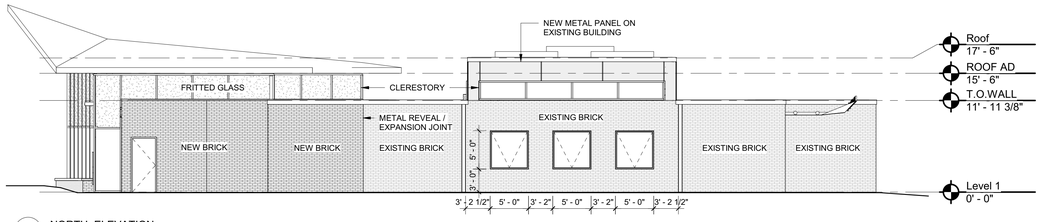
1 EAST ELEVATION
1/8" = 1'-0"



2 SOUTH ELEVATION
1/8" = 1'-0"



3 WEST ELEVATION
1/8" = 1'-0"



4 NORTH ELEVATION
1/8" = 1'-0"

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BLOOMFIELD PUBLIC LIBRARY
McMAHON WINTONBURY LIBRARY ADDITION & RENOVATIONS

1015 BLUE HILLS AVE.
BLOOMFIELD, CT 06002

PROJECT

SCHEMATIC DESIGN

KEY PLAN

DRAWING TITLE

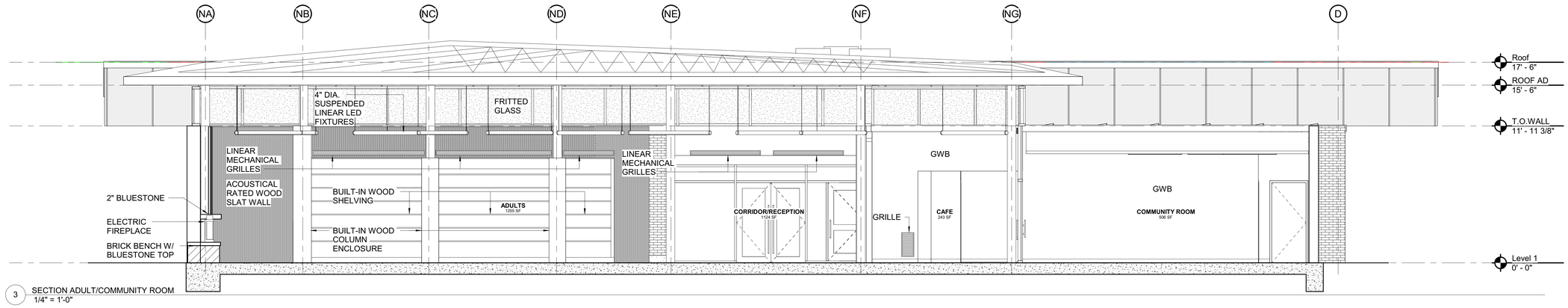
EXTERIOR ELEVATIONS

STATE PROJ. NO.	
PROJ. NO.	220103
SCALE	1/8" = 1'-0"
DATE	03/30/22
DRAWN BY	Author
APPROVED BY	Approver

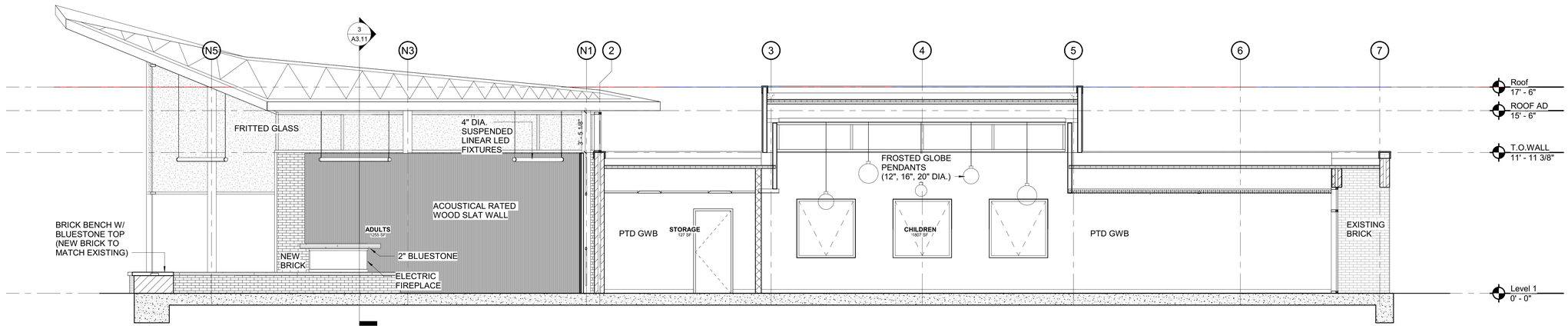
ISSUE DATES

NO.	DATE	PURPOSE

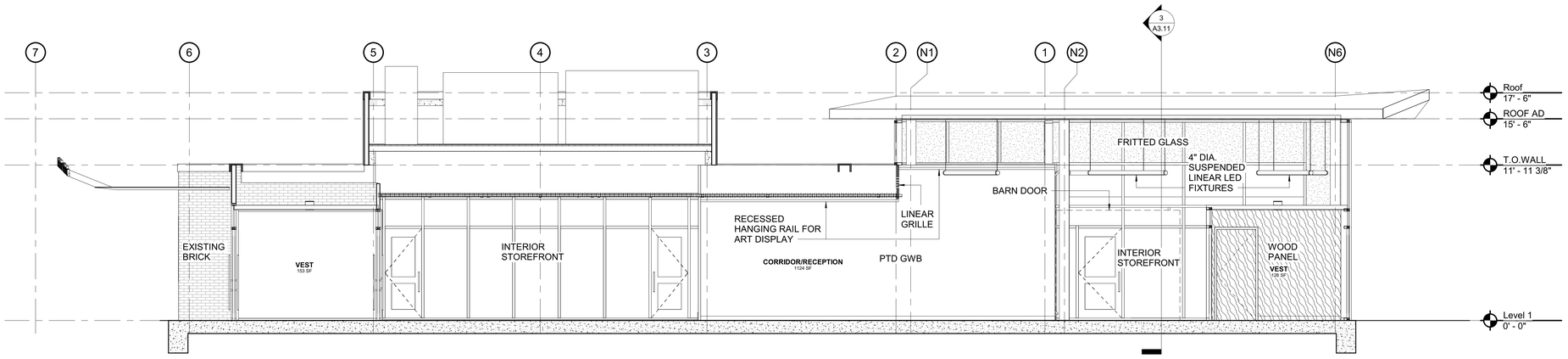
A3.01



3 SECTION ADULT/COMMUNITY ROOM
1/4" = 1'-0"



2 SECTION THRU ADULT SPACE
1/4" = 1'-0"



1 SECTION CORRIDOR/RECEPTION
1/4" = 1'-0"

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PROJECT

SCHEMATIC DESIGN

KEY PLAN

DRAWING TITLE

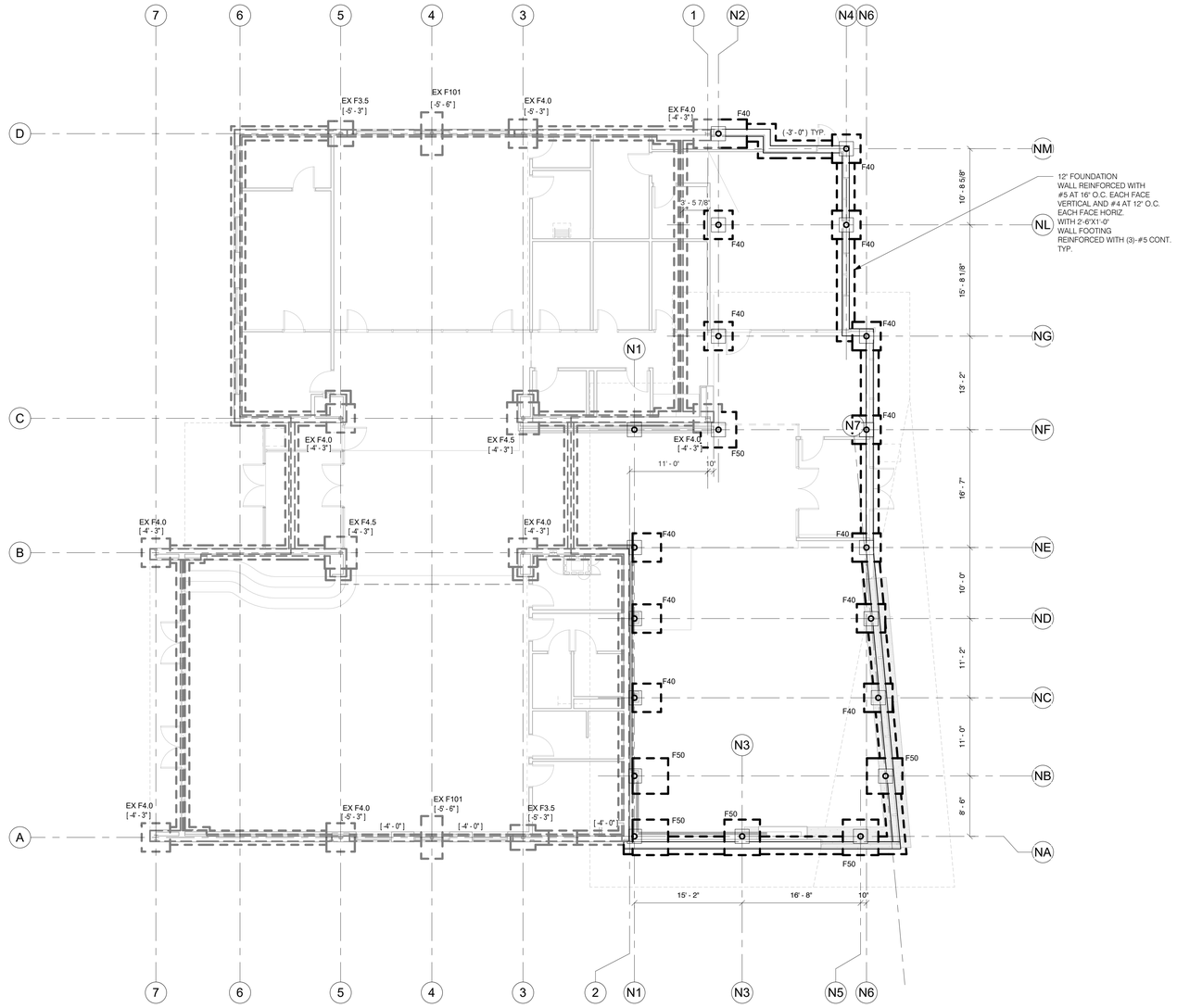
BUILDING SECTIONS

STATE PROJ. NO.	
PROJ. NO.	220103
SCALE	1/4" = 1'-0"
DATE	03/30/22
DRAWN BY	Author
APPROVED BY	Approver

ISSUE DATES

NO.	DATE	PURPOSE

A3.11



1 FOUNDATION AND FIRST FLOOR PLAN

1/8" = 1'-0"

FOUNDATION NOTES:

1. TOP OF CONCRETE SLAB ELEVATION= REFER TO PLAN
2. FLOOR CONSTRUCTION: 5" NORMAL WEIGHT CONCRETE SLAB REINF. WITH 6X6-W2.9XW2.9 W.W.F. (CHAIRED). REFER TO GENERAL NOTES FOR SUBGRADE REQUIREMENTS.
3. PROVIDE SAWCUT JOINTS IN SLAB ON GRADE PER NOTE #4 ON DRAWINGS S-700 , AND "TYPICAL SLAB ON GRADE DETAILS" ON SHEET S-600
4. TOP OF FOOTING ELEVATION (X'-X") GIVEN FROM MAIN LEVEL ELEVATION (0'-0").
5. COORDINATE ALL SLAB ON GRADE DEPRESSIONS WITH ARCH'L DRAWINGS.
6. COORDINATE ALL PLUMBING INVERTS AND LOCATIONS WITH PLUMBING & SITE DRAWINGS REFER TO TYPICAL DETAIL ON DRAWING S-600 FOR SUB SURFACE PIPING THROUGH FOUNDATION WALLS.
7. "C.J." INDICATES FOUNDATION WALL CONTROL JOINT. REFER TO TYPICAL DETAIL ON DRAWING S-600
8. R INDICATES RADON REMOVAL PIT. COORDINATE WITH PLUMBING DRAWINGS.

FOOTING SCHEDULE 2.0 TONS/SF

Mark	Footing Size			Reinf Each Way		Remarks
	Length	Width	Thickness	No.	Size	
F40	4' - 0"	4' - 0"	1' - 3"	7	#4	
F50	5' - 0"	5' - 0"	1' - 3"	6	#5	

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PROJECT

SCHEMATIC DESIGN

KEY PLAN

DRAWING TITLE

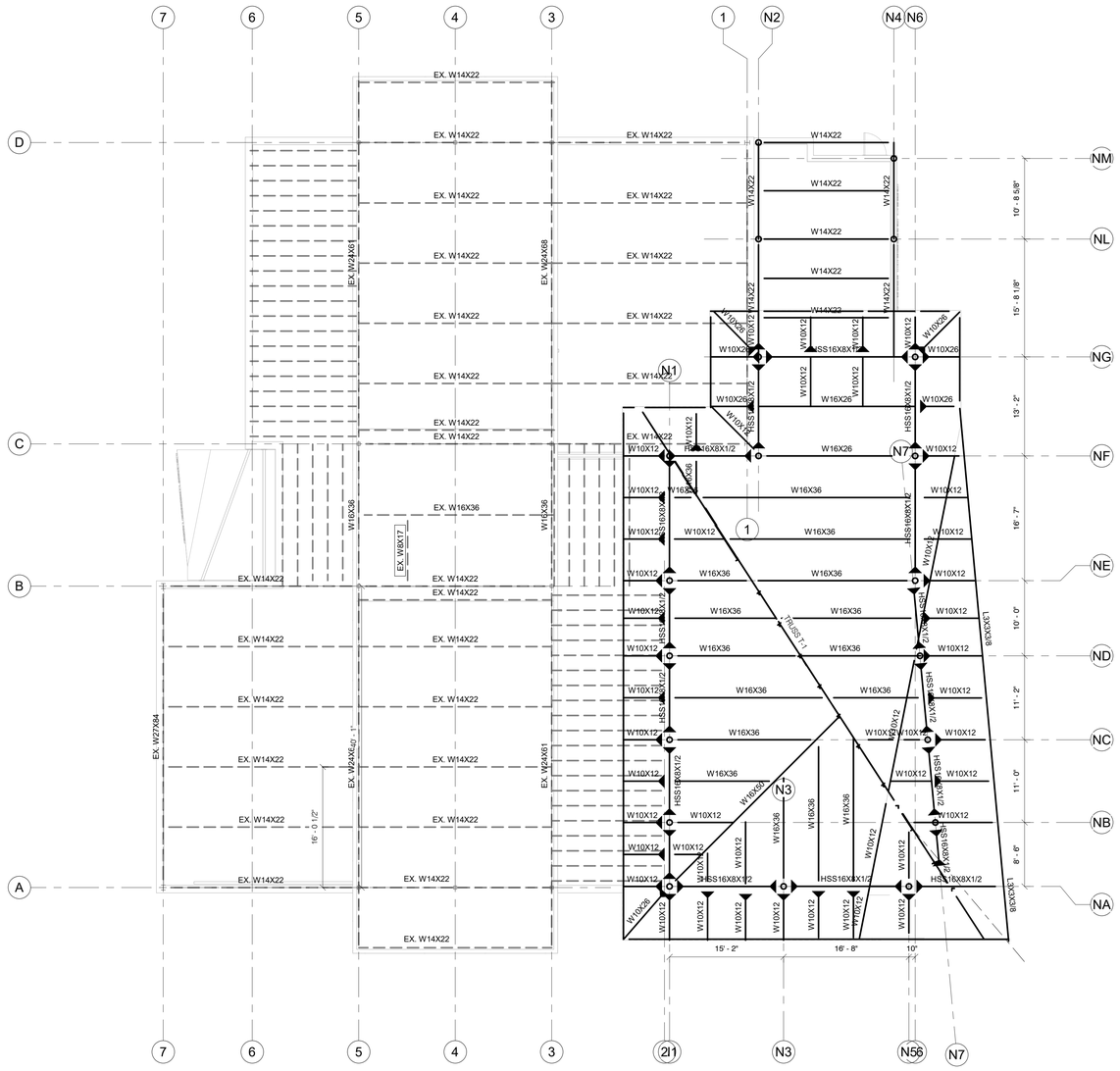
FOUNDATION PLAN

STATE PROJ. NO.	
PROJ. NO.	200802
SCALE	1/8" = 1'-0"
DATE	3/31/2022
DRAWN BY	AC
APPROVED BY	Approver

ISSUE DATES

NO.	DATE	PURPOSE

S-101

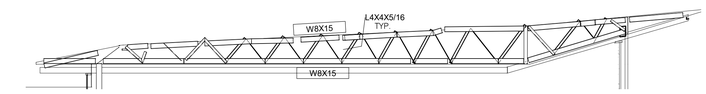


1 ROOF FRAMING PLAN

1/8" = 1'-0"

ROOF CONSTRUCTION NOTES:

1. D1.5 — TYPICAL ROOF CONSTRUCTION: 1 1/2 "X20GA. GALVANIZED TYPE "B" METAL ROOF DECK, REFER TO GENERAL NOTES FOR FASTENING REQUIREMENTS.
2. D3.0 — INDICATES: 3.0" - 20 GAUGE ACOUSTIC ROOF DECK CEILING SYSTEM. REFER TO GENERAL NOTES FOR FASTENING REQUIREMENTS.
3. * — * INDICATES MOMENT CONNECTION, REFER TO TYPICAL DETAILS ON DRAWING S-601
4. ALL BEAM FRAMING SHALL HAVE EQUAL SPACING BETWEEN COLUMNS, UNLESS NOTED OTHERWISE.
5. REFER TO DRAWING S-601 FOR ALL ROOF FRAMES AT OPENINGS. COORDINATE ALL OPENING LOCATIONS WITH ARCHITECTURAL AND MECHANICAL DRAWINGS.
6. REFER TO MECHANICAL AND ARCHITECTURAL DRAWINGS FOR ALL OPENING, DRAINS AND EQUIPMENT. PROVIDE FRAMES PER TYPICAL DETAILS
7. CONTRACTOR TO FIELD VERIFY ALL EXISTING FRAMING SIZES, SPACING AND LOCATIONS PRIOR TO SUBMITTING SHOP DRAWINGS



2 TRUSS T-1

1/8" = 1'-0"

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PROJECT

SCHEMATIC DESIGN

KEY PLAN

DRAWING TITLE

ROOF FRAMING PLAN

STATE PROJ. NO.	
PROJ. NO.	200802
SCALE	1/8" = 1'-0"
DATE	3/31/2022
DRAWN BY	AC
APPROVED BY	Approver

ISSUE DATES

NO.	DATE	PURPOSE

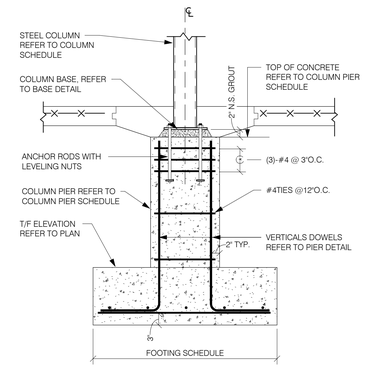
S-102

COLUMN SCHEDULE AREA A

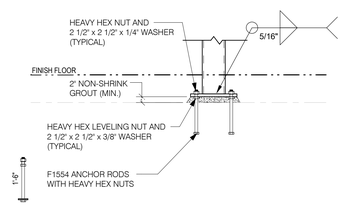
Roof																						Roof
17' - 6"	Pipe8XS	Pipe8XS	Pipe8XS	Pipe8XS	Pipe8XS	Pipe8XS	Pipe8XS	Pipe8XS	Pipe8XS	Pipe8XS	Pipe8XS	Pipe8XS	Pipe8XS	Pipe8XS	Pipe8XS	Pipe8XS	Pipe8XS	Pipe8XS	Pipe8XS	Pipe8XS	Pipe8XS	17' - 6"
Level 1																						Level 1
0"																						0"
Column Locations	**NM(2' - 1 1/2")-1(1' - 6 1/16")**	**N1-NA**	**N1-NB**	**N1-NC**	**N1-ND**	**N1-NE**	**N1-NF**	**N2-NF**	**N2-NG**	**N2-NL**	**N3-NA**	**N4-NL**	**N4-NM**	**N5-NA**	**N6-NE**	**N6-NF**	**N6-NG**	**N7-NB**	**N7-NC**	**N7-ND**		

COLUMN PIER SCHEDULE AREA A			
GRID	T/CONC	BASE PLATE	PIER
N1-NA	0"		
N1-NB	0"		
N1-NC	0"		
N1-ND	0"		
N1-NE	0"		
N1-NF	0"		
N2-NF	0"		
N2-NG	0"		
N2-NL	0"		
N3-NA	0"		
N4-NL	0"		
N4-NM	0"		
N5-NA	0"		
N6-NE	0"		
N6-NF	0"		
N6-NG	0"		
N7-NB	0"		
N7-NC	0"		
N7-ND	0"		
NM(2' - 1 1/2")-1(1' - 6 1/16")	0"		

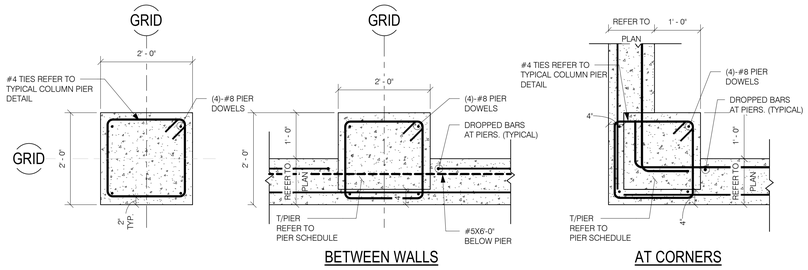
NOTE:
1. IF NO PIER DETAIL DESIGNATION IS GIVEN. COLUMN SITS DIRECTLY ON FOOTING OR STEEL BEAM.
2. REFER TO DRAWING S200 FOR BASE PLATE DETAILS
3. TOP OF CONCRETE IS GIVEN FROM MAIN LEVEL FINISHED FLOOR ELEVATION (0'-0")



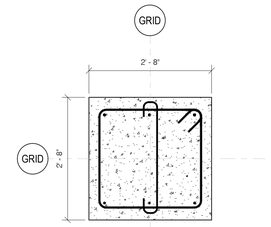
1 TYPICAL COLUMN PIER DETAIL
3/4" = 1'-0"



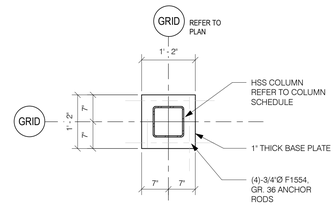
3 TYPICAL COLUMN BASE PLATE DETAIL
3/4" = 1'-0"



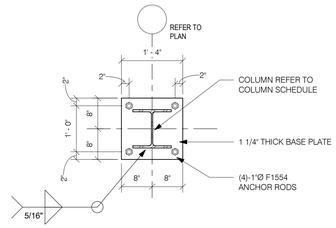
P1 PIER DETAIL
3/4" = 1'-0"



P2 PIER DETAIL P2
3/4" = 1'-0"



BASE PLATE BP-1



BASE PLATE BP-2

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PROJECT

SCHEMATIC DESIGN

KEY PLAN

DRAWING TITLE

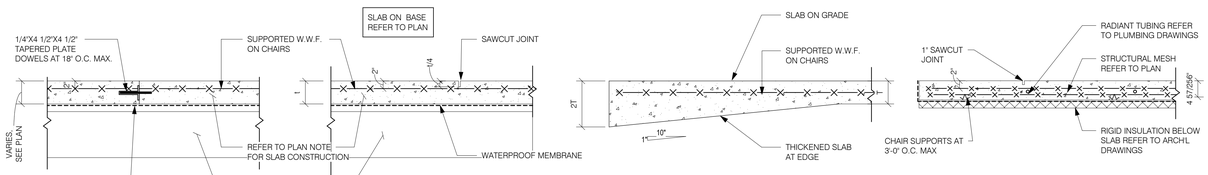
COLUMN SCHEDULE AND DETAILS

STATE PROJ. NO.	
PROJ. NO.	200802
SCALE	As indicated
DATE	3/31/2022
DRAWN BY	AC
APPROVED BY	Approver

ISSUE DATES

NO.	DATE	PURPOSE

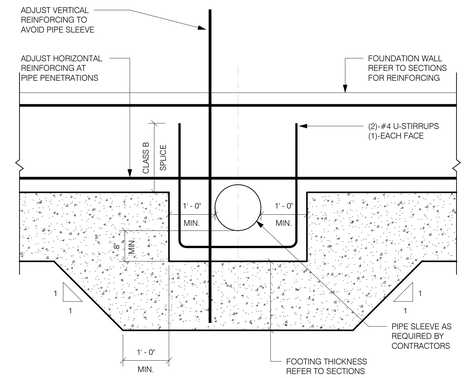
S-200



CONSTRUCTION JOINT | SAWCUT SLAB JOINT | TYPICAL THICKENED EDGE | TYPICAL SLAB AT RADIANT HEAT

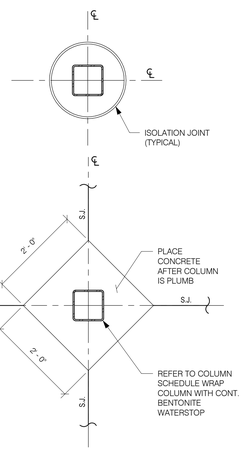
NOTE:
CONTRACTOR SHALL SUBMIT A PLAN INDICATING THE PROPOSED LOCATION OF CONTROL AND CONSTRUCTION JOINTS PRIOR TO PLACING CONCRETE FOR SLAB.
REFER TO GENERAL NOTES FOR SUBGRADE PREPERATION. REMOVE ALL FILL MATERIALS BELOW SLAB ON GRADE

1 TYPICAL SLAB ON GRADE DETAIL -RADIANT
3/4" = 1'-0"

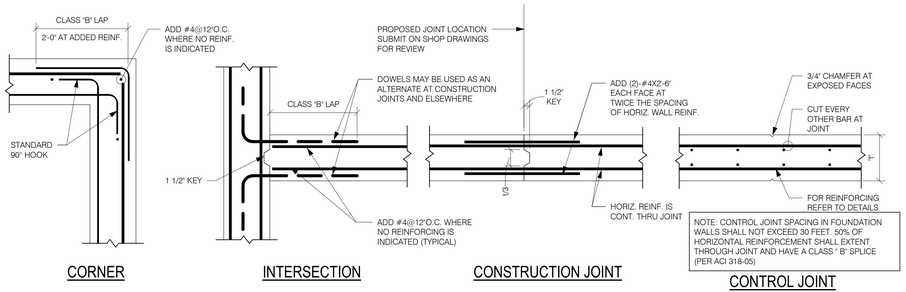


NOTE: DO NOT PLACE PENETRATIONS THROUGH COLUMNS PIERS OR FOOTINGS.
REFER TO PLAN FOR LOCATIONS AND COORDINATE WITH SITE, MECHANICAL, PLUMBING, ELECTRICAL, AND FIRE PROTECTION DRAWINGS.

2 TYPICAL DETAIL OF PIPE PENETRATIONS THRU FOUNDATION WALLS
3/4" = 1'-0"

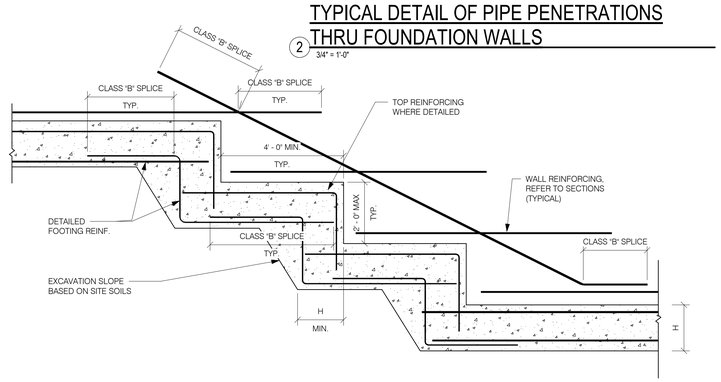


3 TYPICAL SLAB CONSTRUCTION JOINTS AT COLUMNS
3/4" = 1'-0"

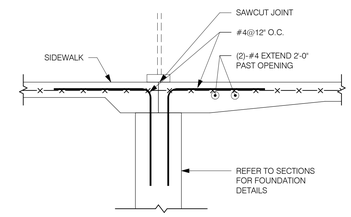


CORNER | INTERSECTION | CONSTRUCTION JOINT | CONTROL JOINT
NOTED 'CJ' ON PLAN

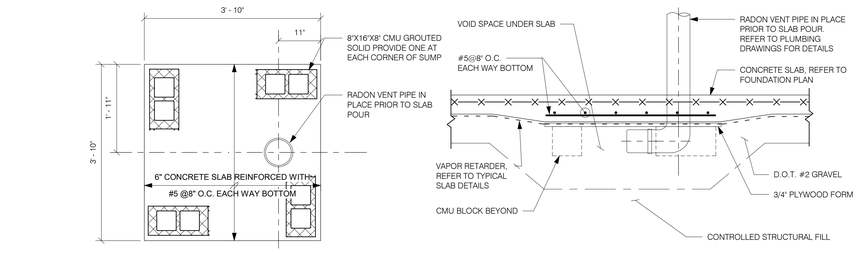
4 TYPICAL WALL REINFORCING DETAIL
3/4" = 1'-0"



5 TYPICAL STEPPED FOOTING DETAIL
1/2" = 1'-0"

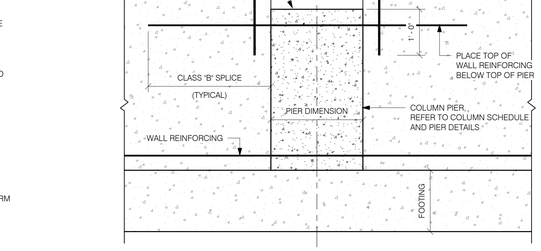


6 TYPICAL FOUNDATION AT DOORS
3/4" = 1'-0"



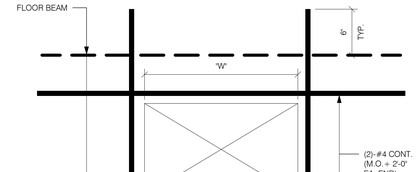
RADON SUMP LOCATIONS NOTED ON FOUNDATION PLAN WITH SYMBOL SHOWN AT LEFT.

7 TYPICAL SLAB ON GRADE RADON SUMP DETAIL
3/4" = 1'-0"



NOTE: REFER TO SECTIONS FOR REINFORCING.

8 TYPICAL WALL REINFORCING DETAIL
3/4" = 1'-0"

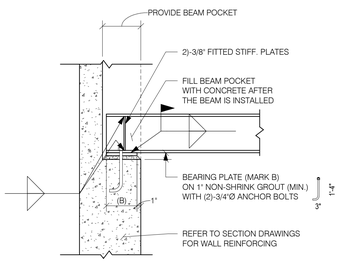


NOTES:
1. FOR OPENINGS WITH 'W' GREATER THAN 4'-0' SUBMIT LOCATION FOR REVIEW.
2. FOR STEEL FRAME, REFER TO TYPICAL FLOOR OPENING DETAIL
3. COORDINATE QUANTITY AND LOCATIONS WITH MECHANICAL, ELECTRICAL AND PLUMBING DRAWINGS.

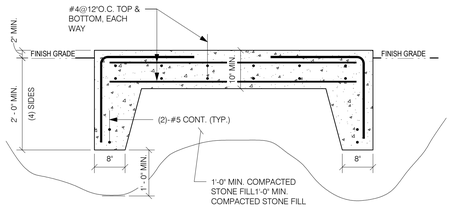
9 TYPICAL SLAB OPENING DETAIL
1 1/2" = 1'-0"

LAP SCHEDULE

SIZE	4500 PSI	
	TOP	OTHERS
#3	24"	19"
#4	32"	25"
#5	40"	31"
#6	48"	37"
#7	70"	54"
#8	80"	62"
#9	91"	70"

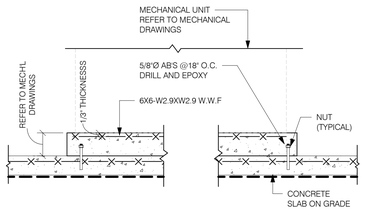


10 TYPICAL BEAM BEARING PLATE DETAIL
3/4" = 1'-0"



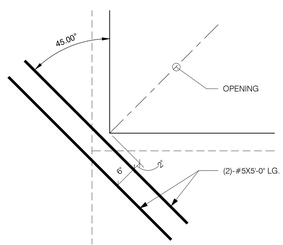
1. COORDINATE WITH MECHANICAL DRAWING FOR QUANTITY, SIZE AND LOCATION. 2. PROVIDE PADS AT GENERATORS, REFRIDGERATOR AND FREEZER UNITS. COORDINATE WITH ELECTRICAL & KITCHEN DRAWINGS FOR SIZE AND LOCATION.

11 TYPICAL CONCRETE EQUIPMENT PAD ON GRADE
3/4" = 1'-0"

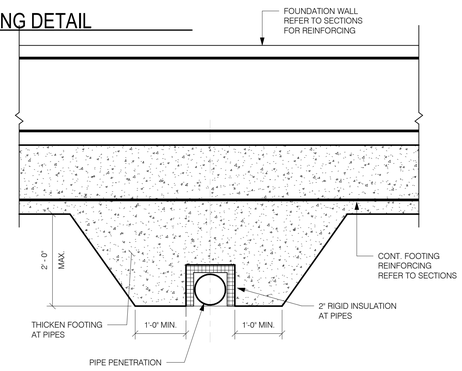


1. COORDINATE WITH MECHANICAL DRAWING FOR QUANTITY, SIZE AND LOCATION

12 TYPICAL NEW CONCRETE PAD ON CONCRETE SLAB ON GRADE
3/4" = 1'-0"



13 TYPICAL AT REENTRANT SLAB CORNERS
3/4" = 1'-0"



NOTE:
DO NOT LOCATE PENETRATIONS THROUGH COLUMN FOOTINGS.
COORDINATE WITH SITE, MECHANICAL, PLUMBING, ELECTRICAL, AND FIRE PROTECTION DRAWINGS, FOR LOCATIONS AND ELEVATIONS

14 TYPICAL DETAIL OF PIPE PENETRATIONS BELOW WALL FOOTING
3/4" = 1'-0"

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BLOOMFIELD, CT 06002

PROJECT
SCHEMATIC DESIGN

KEY PLAN

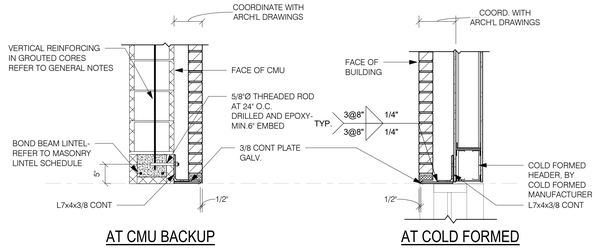
DRAWING TITLE
TYPICAL DETAILS

STATE PROJ. NO.	
PROJ. NO.	200802
SCALE	As indicated
DATE	3/31/2022
DRAWN BY	AC
APPROVED BY	Approver

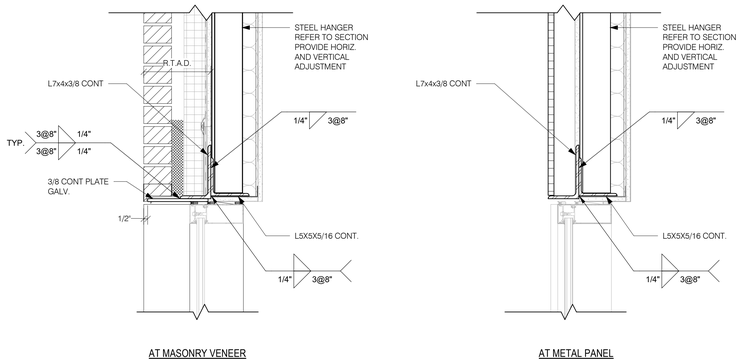
ISSUE DATES

NO.	DATE	PURPOSE

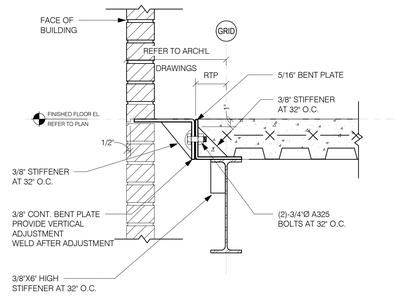
S-600



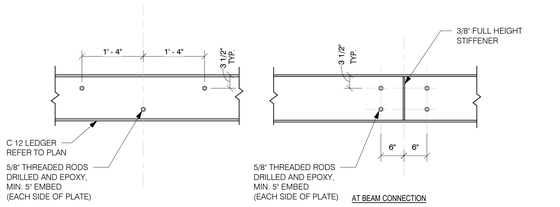
1 TYPICAL EXTERIOR LOOSE LINTEL.
3/4" = 1'-0"



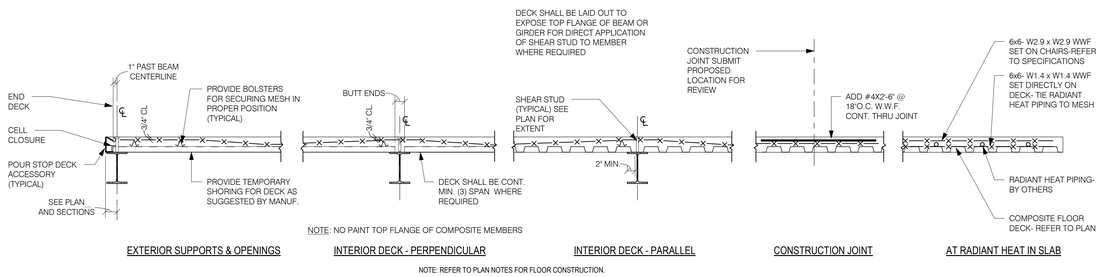
2 TYPICAL HUNG ANGLE DETAIL.
1 1/2" = 1'-0"



3 TYPICAL RELIEVING ANGLE.
1 1/2" = 1'-0"

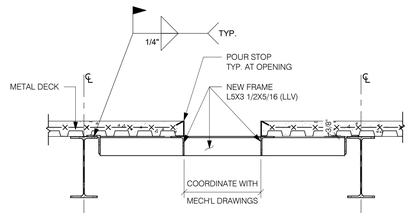


4 TYPICAL LEDGER BOLTING DETAIL
3/4" = 1'-0"



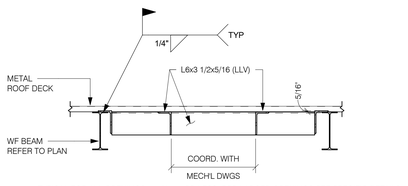
NOTE: REFER TO PLAN NOTES FOR FLOOR CONSTRUCTION.

5 TYPICAL SUPPORTED SLAB DETAILS
3/4" = 1'-0"



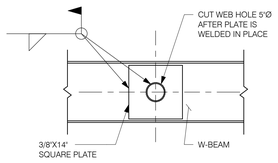
1. TYPICAL FOR ALL OPENINGS.
2. FRAMES TO BE SHOP WELDED ASSEMBLY.
3. FOR LOCATION, SIZE AND QUANTITY REQUIRED SEE ARCH'L AND MECH'L. DRAWINGS.

6 TYPICAL FLOOR OPENING DETAIL
3/4" = 1'-0"

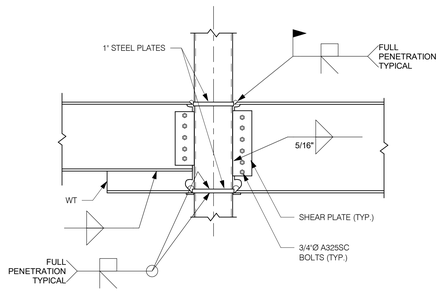


1. TYPICAL FOR ALL OPENINGS 4'-0"X4'-0" OR LESS. FOR LARGER OPENINGS SEE SPECIFIC DETAILS.
2. SIMILAR FRAMES FOR ROOF DRAIN OPENINGS.
3. FRAMES TO BE SHOP WELDED ASSEMBLY.
4. FOR LOCATION, SIZE AND QUANTITY REQUIRED SEE ARCH'L. AND MECH'L. DRAWINGS.

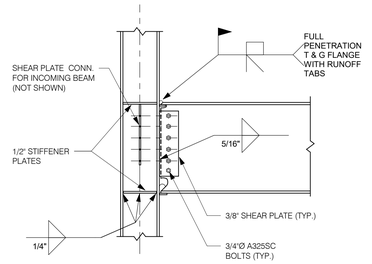
7 TYPICAL ROOF FRAME OPENING DETAIL (W BEAM)
3/4" = 1'-0"



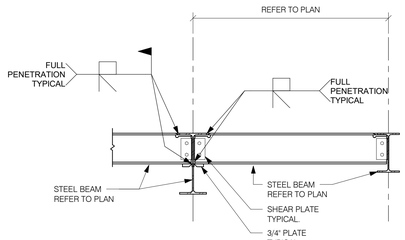
8 PIPE PENETRATION DETAIL
3/4" = 1'-0"



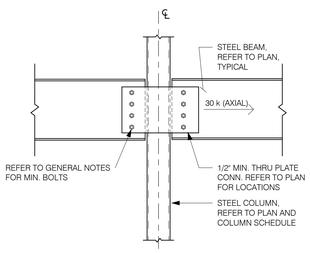
9 TYPICAL MOMENT CONNECTION DETAIL
3/4" = 1'-0"



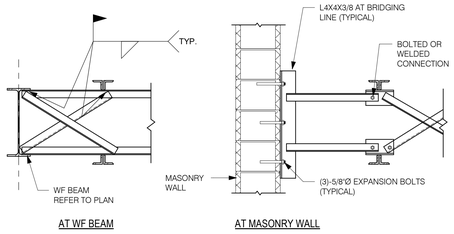
10 TYPICAL MOMENT CONNECTION DETAIL
3/4" = 1'-0"



11 TYPICAL WF OUTRIGGER DETAIL
3/4" = 1'-0"



12 TYPICAL THRU PLATE CONNECTION DETAIL
3/4" = 1'-0"



13 TYPICAL BRIDGING DETAIL
3/4" = 1'-0"

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BLOOMFIELD, CT 06002

PROJECT
SCHEMATIC DESIGN

KEY PLAN

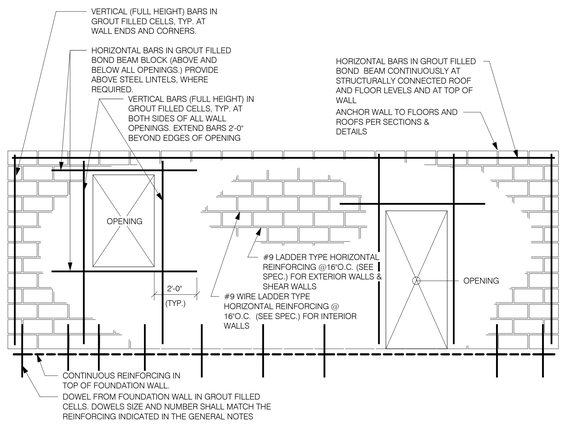
DRAWING TITLE
TYPICAL DETAILS

STATE PROJ. NO.	
PROJ. NO.	200802
SCALE	As indicated
DATE	3/31/2022
DRAWN BY	AC
APPROVED BY	Approver

ISSUE DATES

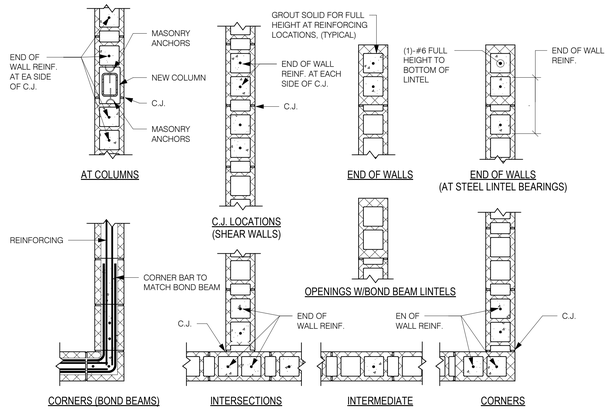
NO.	DATE	PURPOSE

S-601



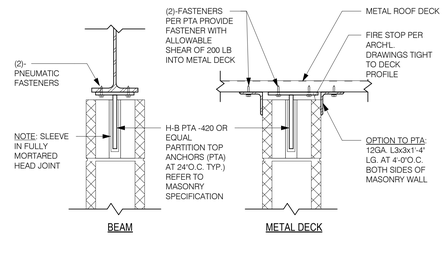
NOTE: REFER TO CONCRETE MASONRY GENERAL NOTES ON DRAWING FOR WALL REINFORCING REQUIREMENTS.

1 TYPICAL CMU WALL REINFORCEMENT DETAIL
3/4" = 1'-0"



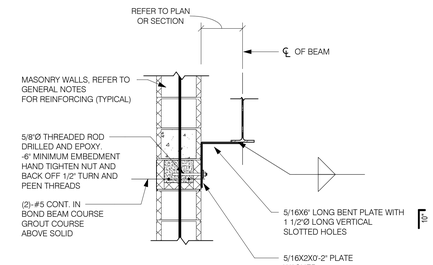
NOTES:
1. REINFORCING DETAILS APPLY TO ALL CMU WALLS. FOR ACTUAL REINFORCING REQUIREMENTS, REFER TO GENERAL NOTES ON DRAWINGS
2. PROVIDE DOWELS FROM CONCRETE FOUNDATIONS TO CMU WALL ABOVE. SIZE AND NUMBER TO MATCH WALL REINFORCING.

2 TYPICAL CMU REINFORCING PLAN DETAILS
3/4" = 1'-0"

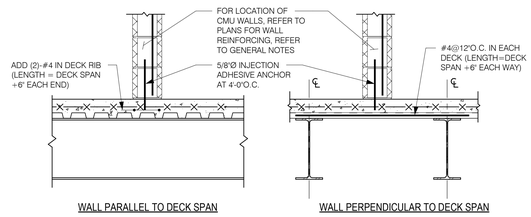


NOTE: APPLIES TO INTERIOR WALLS ONLY.

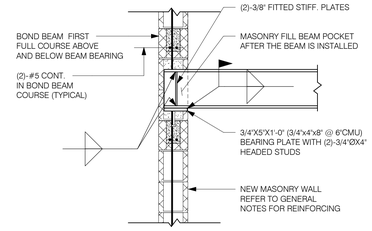
3 TYPICAL TOP OF WALL MASONRY ANCHORAGE TO STEEL
1 1/2" = 1'-0"



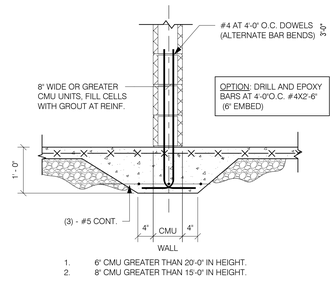
4 TYPICAL BEAM TO MASONRY CONNECTION
3/4" = 1'-0"



5 TYP. DETAIL OF CMU PARTITION ON SUPPORTED SLAB
3/4" = 1'-0"



6 TYPICAL BEAM BEARING PLATE AT NEW CMU
3/4" = 1'-0"



1. 6" CMU GREATER THAN 20'-0" IN HEIGHT.
2. 8" CMU GREATER THAN 15'-0" IN HEIGHT.

7 TYPICAL THICKENED SLAB DETAIL
3/4" = 1'-0"

MASONRY LINTEL SCHEDULE

MARK	CMU	OPENING WIDTH	LINTEL
	10" & 12" BLOCK	6'-1" TO 12'-0"	(2)-#6 CONT. TOP AND BOTTOM
	10" & 12" BLOCK	UP TO 6'-0"	(2)-#5 CONT.
	8" BLOCK	UP TO 5'-0"	(2)-#5 CONT.
	8" BLOCK	5'-1" TO 10'-0"	(2)-#6 CONT. TOP AND BOTTOM
	6" BLOCK	UP TO 6'-0"	(1)-#5 CONT.
	INTERIOR 4" MASONRY	UP TO 6'-0"	L5X3 1/2X5/16 (4" MIN. BEARING)
	INTERIOR 4" MASONRY	6'-0" TO 10'-0"	L7X4X3/8 (4" MIN. BEARING)

NOTE:

1. PROVIDE LINTELS WHERE NEEDED. NOT SHOWN ON THE DRAWINGS
2. ALL EXTERIOR STEEL SHALL BE HOT DIPPED GALVANIZED
3. COORDINATE ALL OPENINGS WITH ARCHT.& MECH DRAWINGS.
4. GROUT ALL JAMBS SOLID PER TYPICAL CMU WALL REINF. DETAILS.

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PROJECT

SCHEMATIC DESIGN

KEY PLAN

DRAWING TITLE

TYPICAL DETAILS

STATE PROJ. NO.	
PROJ. NO.	200802
SCALE	As indicated
DATE	3/31/2022
DRAWN BY	AC
APPROVED BY	Approver

ISSUE DATES

NO.	DATE	PURPOSE

S-602

ABBREVIATIONS

AC	AIR COMPRESSOR
AD	ACCESS DOOR
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AHU	AIR HANDLING UNIT
AMB	AMBIENT
APROX	APPROXIMATE
AS	AIR SEPERATOR
ATC	AUTOMATIC TEMPERATURE CONTROL
AVG	AVERAGE
AWT	AVERAGE WATER TEMPERATURE
BAS	BUILDING AUTOMATION SYSTEM
BDD	BACK DRAFT DAMPER
BFW	BOILER FEED WATER
BHP	BRAKE HORSEPOWER
BMS	BULIDING MANAGEMENT SYSTEM
BTUH	BRITISH THERMAL UNITS PER HOUR
CC	COOLING COIL
CD	CONDENSATE DRAIN
CDR	CONDENSER WATER RETURN
CDS	CONDENSER WATER SUPPLY
CFM	CUBIC FEET PER MINUTE
CFP	CHEMICAL FEED PUMPS
CHWR	CHILLED WATER RETURN
CHWS	CHILLED WATER SUPPLY
CLG	CEILING
CO	CLEANOUT
CO2	CARBON DIOXIDE
COMP	COMPRESSOR
COND	CONDENSER
CONV	CONVECTOR
CP	CONDENSATE PUMP
CPU	CENTRAL PROCESSING UNIT
CT	COOLING TOWER
CU	CONDENSING UNIT
CU FT	CUBIC FEET
CUH	CABINET UNIT HEATER
CV	COEFFICIENT, VALVE FLOW
CV	CONSTANT VOLUME
D	DEPTH
DB	DRY BULB TEMPERATURE
dB	DECIBEL
DEG or °	DEGREE
DIA or Ø	DIAMETER
DN	DOWN
DP	DIFFERENTIAL PRESSURE
DWG	DRAWING
DX	DIRECT EXPANSION
EA	EXHAUST AIR
EAT	ENTERING AIR TEMPERATURE
EBB	ELECTRIC BASEBOARD RADIATION
EDR	EQUIVALENT DIRECT RADIATION
EF	EXHAUST FAN
EFF	EFFICIENCY
ELEC	ELECTRICAL
ESP	EXTERNAL STATIC PRESSURE
ET	EXPANSION TANK
EUH	ELECTRIC UNIT HEATER
EVAP	EVAPORATOR
EWB	ENTERING WET BULB TEMPERATURE
EWT	ENTERING WATER TEMPERATURE
F	FAHRENHEIT
FCU	FAN COIL UNIT
FD	FIRE DAMPER
FD	FLOOR DRAIN
FD/SB	FIRE DAMPER WITH INTEGRAL SECURITY BARS
FM	FLOW METER
FOB	FLAT ON BOTTOM
FOF	FUEL OIL FILL
FOR	FUEL OIL RETURN
FOS	FUEL OIL SUPPLY
FOT	FLAT ON TOP
FOV	FUEL OIL VENT
FPM	FEET PER MINUTE
FPS	FEET PER SECOND
FS	FLOOR SINK
FSD	FIRE/SMOKE DAMPER
FT	FOOT OR FEET
G	GAS
GA	GAUGE
GAL	GALLONS
GND	GROUND
GPH	GALLONS PER HOUR
GPM	GALLONS PER MINUTE
GR	GRAINS
H	HEIGHT
H/C	HEATING/COOLING
HC	HEATING COIL
HD	HEAD
HP	HORSEPOWER
HPC	HIGH PRESSURE CONDENSATE
HPG	HIGH PRESSURE GAS
HPS	HIGH PRESSURE STEAM
HR	HOUR(S)
HT	HEAT
HTHW	HIGH TEMPERATURE HOT WATER

ABBREVIATIONS

HTHWR	HIGH TEMPERATURE HOT WATER RETURN
HTHWS	HIGH TEMPERATURE HOT WATER SUPPLY
HTR	HEATER
HUM	HUMIDIFIER
HV	HEATING/VENTILATION UNIT
HW	HOT WATER
HWR	HOT WATER RETURN
HWRP	HOT WATER RETURN PUMP
HWRR	HOT WATER REVERSE RETURN
HWS	HOT WATER SUPPLY
HX	HEAT EXCHANGER
HZ	FREQUENCY (CYC, PER SEC.)
ID	INSIDE DIAMETER
IN	INCHES
IN WG	INCHES OF WATER, GAUGE (PRESS.)
IW	INDIRECT WASTE
KEF	KITCHEN EXHAUST FAN
KW	KILOWATT
L	LENGTH
LA	LABORATORY COMPRESSED AIR
LAT	LEAVING AIR TEMPERATURE
LAV	LAVATORY
LBS/HR	POUNDS PER HOUR
LF	LINEAR FEET
LPC	LOW PRESSURE CONDENSATE
LPS	LOW PRESSURE STEAM
LV	LABORATORY VACUUM
LWT	LEAVING WATER TEMPERATURE
MA	MIXED AIR
MAU	MAKE-UP AIR UNIT
MAX	MAXIMUM
MBH	BTU PER HOUR (THOUSAND)
MD	MOTORIZED DAMPER
MECH	MECHANICAL
MFR	MANUFACTURER
MH	METAL HALIDE
MIN	MINIMUM
MPC	MEDIUM PRESSURE CONDENSATE
MPS	MEDIUM PRESSURE STEAM
N2	NITROGREN
N2O	NITROUS OXIDE
N.C.	NORMALLY CLOSED
N.O.	NORMALLY OPEN
N.T.S.	NOT TO SCALE
N/A	NOT APPLICABLE
NEC	NATIONAL ELECTRICAL CODE
NIC	NOT IN CONTRACT
OA	OUTSIDE AIR
PCD	PUMPED CONDENSATE DRAIN (COOLING)
PCR	PUMPED CONDENSATE RETURN (STEAM)
PD	PRESSURE DROP
PH or Ø	PHASE
PRV	PRESSURE REDUCING VALVE
PSI	POUNDS PER SQUARE INCH
PT	POTENTIAL TRANSFORMER
PVC	POLYVINYL CHLORIDE
RA	RETURN AIR
RG	REFRIGERANT GAS
RH	RELATIVE HUMIDITY
RHC	REHEAT COIL
RHG	REFRIGERANT HOT GAS
RL	REFRIGERANT LIQUID
RM	ROOM
RPD	REDUCED PRESSURE DEVICE
RPM	REVOLUTIONS PER MINUTE
RTU	ROOFTOP UNIT
S&R	SUPPLY AND RETURN
SA	SUPPLY AIR
SCP	STEAM CONDENSATE PUMP
SD	SMOKE DAMPER
SP	STATIC PRESSURE
SPEC	SPECIFICATION
SQ	SQUARE
SS	STAINLESS STEEL
STD	STANDARD
T'STAT	THERMOSTAT
TD	TEMPERATURE DIFFERENCE
TEMP	TEMPERATURE
TSP	TOTAL STATIC PRESSURE
TYP	TYPICAL
UH	UNIT HEATER
V	VOLTAGE
VAC	VACUUM
VAV	VARIABLE AIR VOLUME
VD	VOLUME DAMPER
VEL	VELOCITY
VFD	VARIABLE FREQUENCY DRIVE
VIF	VERIFY IN FIELD
VOL	VOLUME
W	WATT
W	WIDTH
WB	WET BULB TEMPERATURE
WP	WEATHERPROOF
WPD	WATER PRESSURE DROP
WWM	WELDED WIRE MESH

HVAC SYMBOLS

	RECTANGULAR, FLAT OVAL OR ROUND AIR DUCT
	AIR DUCT WITH ACOUSTICAL LINING
	SUPPLY AIR DUCT UP
	SUPPLY AIR DUCT DOWN
	RETURN AIR DUCT UP
	RETURN AIR DUCT DOWN
	EXHAUST AIR DUCT UP
	EXHAUST AIR DUCT DOWN
	TURNING VANES
AD	ACCESS DOOR
	FLEXIBLE DUCT CONNECTION
	CEILING SUPPLY DIFFUSERS
	CEILING RETURN / EXHAUST GRILLE
	HARD DUCTED DIFFUSER OR GRILLE WITH FULL SIZE BOTTOM TAKE-OFF
	DIRECTION OF SUPPLY OR OUTDOOR AIRFLOW
	DIRECTION OF RETURN OR EXHAUST AIRFLOW
	DOOR UNDERCUT
BDD	BACK DRAFT DAMPER
VD	VOLUME DAMPER
FD	FIRE DAMPER
FD/SB	FIRE DAMPER WITH INTEGRAL SECURITY BARS
(FS)	FIRE/SMOKE DAMPER
(SD)	SMOKE DAMPER SYSTEM AND ASSOCIATED DEVICES PER SPECIFICATIONS AND MEP DETAILS
M	MOTORIZED DAMPER
H	HUMIDIFIER TUBE/PANEL
XXX	SUPPLY PIPING, REFER TO ABBREVIATION LIST FOR DESIGNATION (XXX)
XXX	RETURN PIPING, REFER TO ABBREVIATION LIST FOR DESIGNATION (XXX)
DS	DUCT SMOKE DETECTOR WITH REMOTE INDICATING LIGHT AND TEST SWITCH
(SP)	DUCT STATIC PRESSURE SENSOR
(DP)	DIFFERENTIAL PRESSURE SENSOR
VFD	VARIABLE FREQUENCY DRIVE
AFS	AIR FLOW STATION
SA	DUCT SOUND ATTENUATOR
T	ROOM THERMOSTAT
T	ROOM TEMPERATURE SENSOR
CO	CARBON MONOXIDE SENSOR
C	CARBON DIOXIDE SENSOR
H	HUMIDISTAT
	FINNED TUBE RADIATION
FM	FLOW METER
RC	VRF REMOTE CONTROL

FITTINGS AND VALVES

	BACKFLOW PREVENTOR
	STRAINER OR STRAINER WITH BLOW-DOWN VALVE HOSE END, CAP AND CHAIN
	PIPE ELBOW UP OR PIPE TEE UP
	PIPE ELBOW DOWN
	PIPE TEE DOWN
	TAKEOFF FROM BOTTOM OF MAIN PIPE
	TAKEOFF FROM TOP OF MAIN PIPE
	IN-LINE EXPANSION COMPENSATOR
	PIPE ANCHOR
	COMPANION FLANGE
	PIPE CAP OR CAPPED END OF PIPE
	UNION
	PIPE GUIDES
	PUMP
	DIRECTION OF FLUID FLOW
	VALVE ON RISER
	VALVE ON DROP
	AIR VENT
	FLOW SENSOR
	2-WAY CONTROL VALVE
	3-WAY CONTROL VALVE
	BALL VALVE
	CALIBRATED BALANCING VALVE
	SHUT-OFF VALVE (SEE SPECIFICATIONS FOR APPLICATION TYPE)
	BUTTERFLY VALVE
	CHECK VALVE
	GLOBE VALVE
	GATE VALVE
	PRESSURE REDUCING VALVE
	TRIPLE DUTY VALVE
	OS&Y VALVE
	DRAIN VALVE WITH HOSE END, CAP & CHAIN OR WALL HYDRANT / HOSE BIBB
M	MOTORIZED BUTTERFLY VALVE
	PRESSURE RELIEF SAFETY VALVE
A	AQUASTAT
T	TEMPERATURE SENSOR WITH SEPARABLE SOCKET IN IMMERSIBLE WELL
T	TEMPERATURE GAUGE WITH SEPARABLE SOCKET IN IMMERSIBLE WELL
	THERMOMETER WITH SEPARABLE SOCKET IN IMMERSIBLE WELL
P	PRESSURE GAUGE
P	PRESSURE SENSOR WITH SYPHON (STEAM)
FLEX	FLEXIBLE CONNECTOR

DUCT SIZING	
20x12	RECTANGULAR DUCT
20/12	FLAT OVAL DUCT
20"ø	ROUND DUCT

HVAC GENERAL NOTES

1. ALL WORK SHALL BE PERFORMED IN COMPLIANCE WITH CURRENT APPLICABLE CODES, ORDINANCES, THE REGULATORY AGENCIES HAVING JURISDICTION AND THE SPECIFICATIONS. THE SPECIFICATIONS MAY EXCEED THE REQUIREMENTS OF THE CODE, IN WHICH CASE, THE SPECIFICATION MUST BE FOLLOWED.
2. THE INTENT OF THESE DOCUMENTS IS FOR THE MEP TRADES TO FURNISH AND INSTALL COMPLETE MECHANICAL AND ELECTRICAL SYSTEMS. THE SPECIFIED HVAC SYSTEM SHALL BE COMPLETE IN ALL RESPECTS; OPERATIONAL, TESTED, ADJUSTED, APPROVED BY THE AUTHORITIES HAVING JURISDICTION AND READY FOR BENEFICIAL USE BY THE OWNER.
3. THE TRADES SHALL OBTAIN AND REVIEW ALL CONTRACT DOCUMENTS BEFORE SUBMITTING A BID. INFORMATION IS PROVIDED ON THE VARIOUS DRAWINGS, SCHEDULES, SPECIFICATIONS AND ALL OF THE VARIOUS DOCUMENTS IN THE BIDDING PACKAGE. THE CONTRACT DOCUMENTS ARE COMPLEMENTARY AND FORM A TOTAL PROJECT DESIGN AND INFORMATION SOURCE FOR CONSTRUCTION PURPOSES.
4. THE DRAWINGS ARE DIAGRAMMATIC AND INDICATE THE GENERAL ARRANGEMENT OF SYSTEMS AND WORK INCLUDED IN THE CONTRACT. COORDINATE LOCATIONS OF EQUIPMENT WITH OTHER TRADES BEFORE AND DURING CONSTRUCTION. ANY MODIFICATION TO THE EQUIPMENT LAYOUT, REQUIRED FOR INSTALLATION, IS TO BE PERFORMED UNDER THE CONTRACT AGREEMENT, AT NO ADDITIONAL COST. REFER TOP DETAILS, SCHEDULES AND SPECIFICATIONS FOR ADDITIONAL INFORMATION.
5. THE CONTRACTOR SHALL BECOME THOROUGHLY FAMILIAR WITH THE PROJECT DOCUMENTS OF ALL TRADES. THE DRAWINGS ARE DIAGRAMMATIC AND SHOW THE GENERAL ARRANGEMENT OF EQUIPMENT AND PIPING. THE CONTRACTOR SHALL COORDINATE THE EXACT LOCATION OF EQUIPMENT AND PIPING INSTALLATION WITH ALL THE TRADES BEFORE COMMENCING WORK.
6. EQUIPMENT SHALL BE INSTALLED IN ACCESSIBLE LOCATIONS, WHEN EQUIPMENT MUST BE LOCATED ABOVE AN INACCESSIBLE CEILING (GYP BOARD OR EQUIVALENT), OR BEHIND A WALL, AN APPROPRIATE ACCESS DOOR SHALL BE PROVIDED. IF AN ACCESS DOOR IS REQUIRED, IT SHALL BE OF A RATING APPROPRIATE FOR THE WALL/CEILING IN WHICH IT IS TO BE INSTALLED. THE CONTRACTOR SHALL COORDINATE LOCATIONS OF ACCESS PANELS FOR ALL VALVES AND DEVICES, REQUIRING ACCESS, WITH THE ARCHITECT, PRIOR TO INSTALLATION OF SUCH DEVICES OR OTHER APPURTENANCES.
7. WHERE A CONFLICT OCCURS BETWEEN THE DOCUMENTS, IT SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT. CARRY AS PART OF THE BID THE LARGER QUANTITY AND/OR MORE EXPENSIVE ITEM(S).
8. THIS CONTRACT SHALL INCLUDE ALL THE NECESSARY PIPING, FITTINGS, TRANSITIONS ETC. AS REQUIRED TO INSTALL PIPING AND EQUIPMENT, AND TO AVOID ANY CONFLICTS WITH OTHER TRADES AND THE BUILDING STRUCTURE. THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR ANY ASSUMPTIONS, OMISSIONS OR ERRORS HE MAKES AS A RESULT OF HIS FAILURE TO COORDINATE WITH OTHER TRADES OR BECOME FULLY FAMILIAR WITH THE PROJECT DOCUMENTS OF ALL TRADES.
9. DO NOT INSTALL ANY PIPING OVER ELECTRICAL PANELS, TRANSFORMERS, SPECIAL EQUIPMENT, OR THROUGH ELECTRICAL ROOMS, DATA ROOMS, ELEVATOR MACHINE ROOM, STAIRWELL OR STAIRWELL WALLS THAT ARE NOT ASSOCIATED WITH OR SERVE THE RESPECTIVE ROOMS. COORDINATE THE LOCATION OF ELECTRICAL EQUIPMENT IN THE FIELD AND ADJUST AS NECESSARY.
10. INSTALL SMOKE DETECTORS IN BOTH SUPPLY & RETURN AIR DUCTS FOR AIR HANDLING EQUIPMENT 2,000 CFM AND GREATER.
11. PROVIDE SMOKE DAMPERS IN BOTH SUPPLY & RETURN AIR DUCTS FOR AIR HANDLING EQUIPMENT 15,000 CFM AND GREATER.
12. PROVIDE SMOKE DAMPERS AND SMOKE DETECTORS AT DUCT PENETRATIONS OF SMOKE-BRRIERS, AND AT ELEVATOR SHAFT VENTS PER CODE REQUIREMENTS.
13. PROVIDE FIRE DAMPERS AT DUCT PENETRATIONS OF FIRE-RATED CONSTRUCTION, INCLUDING WALLS, SHAFTS AND FLOOR PENETRATIONS. COORDINATE WITH ARCHITECTURAL DRAWINGS.
14. PROVIDE AN AUTOMATIC TEMPERATURE CONTROL SYSTEM COMPLETE IN ALL REGARDS. ALL ZONES, VAV'S AND SYSTEM SHALL BE THERMOSTATICALLY CONTROLLED. REVIEW THE PLANS AND SPECIFICATIONS OF ALL MEP TRADES FOR A COMPLETE SCOPE OF THE WORK.
15. PIPING SHALL BE SUPPORTED FROM STRUCTURE ABOVE. TO MAXIMIZE HEAD ROOM, INSTALL PIPING TIGHT TO BOTTOM OF BEAMS WHEN RUNNING PERPENDICULAR TO BEAM; INSTALL PIPING TIGHT TO FLOOR SLAB WHEN RUNNING PARALLEL TO BEAM; PROVIDE ALL NECESSARY FITTINGS AND TRANSITIONS.
16. PROVIDE THROTTLING VALVES AND SHUT-OFF VALVES AS INDICATED IN SPECIFICATIONS IN ADDITION TO THOSE INDICATED ON THE DOCUMENTS.
17. INSTALL ALL EQUIPMENT VALVES AS REQUIRED BY MANUFACTURERS INSTRUCTIONS AND RECOMMENDATIONS AND AS DETAILED.
18. PROVIDE AIR VENTS AT ALL HIGH POINTS AND DRAINS AT ALL LOW POINTS.
19. PROVIDE PRESSURE RELIEF DOORS FOR AIR SYSTEMS, PER THE SPECIFICATIONS.
20. PROVIDE MOTORIZED DAMPERS AT ALL PERMANENT OPENINGS (EXHAUST, SUPPLY, RELIEF, O.A. INTAKES, MAKE-UP AIR, SMOKE VENTS, ETC.) EXCEPT DRYER, KITCHEN, AND FUME EXHAUST AND PROVIDE A MEANS TO CONTROL THE DAMPER OPERATION.
21. ALL SUPPLY RECTANGULAR 90° ELBOWS SHALL HAVE TURNING VANES.
22. PROVIDE DUCT TAKE-OFF TYPES AND VOLUME DAMPERS PER THE SPECIFICATIONS AND DUCT TAKE-OFF DETAILS ON DRAWINGS. TAKE-OFFS SHOWN ON FLOOR PLANS DO NOT REPRESENT THE SPECIFIC TYPE OF TAKE-OFF REQUIRED; CONSULT THE DETAILS AND SPECIFICATIONS.
23. PROVIDE VOLUME DAMPERS ON ALL SUPPLY, EXHAUST, AND RETURN BRANCH DUCTS.
24. COORDINATE AND VERIFY LOCATIONS OF ALL ITEMS REQUIRING ACCESS WITH ARCHITECT IN FIELD., INCLUDING VALVES, VOLUME DAMPERS, FIRE DAMPERS, ETC.
25. ALL EQUIPMENT LOCATED ON THE ROOF THAT REQUIRES SERVICING SHALL BE LOCATED A MINIMUM 10'-0" FROM EDGE OF THE ROOF.
26. ALL EXPOSED DUCTWORK SHALL BE FLAT, OVAL, OR ROUND. COORDINATE WITH ARCHITECT'S CEILING PLANS AND IDENTIFY ON DUCTWORK SHOP DRAWINGS.
27. ALL DUCTWORK AND PIPING CROSSING SEISMIC JOINTS SHALL ACCOMMODATE DIFFERENTIAL MOTION. REFER TO DETAILS AND SPECIFICATIONS FOR MORE INFORMATION. SEE ARCHITECTURAL AND STRUCTURAL DRAWINGS FOR LOCATIONS.
28. ALL THERMOSTATS LOCATED ON OUTSIDE WALL SHALL HAVE INSULATED PAD BEHIND.
29. ALL MOTORIZED DAMPERS SHALL BE WIRED BY ATC CONTRACTOR, COORDINATE VOLTAGE REQUIREMENTS WITH EQUIPMENT.
30. ALL TOILETS & BATHROOMS SHALL HAVE 3/4" UNDERCUT DOORS.
31. ALL LOUVERS ARE SELECTED AND SCHEDULED BY ARCHITECT. LOUVER TAGS ARE SHOWN FOR COORDINATION ONLY.
32. SEISMICALLY SUPPORT THE EQUIPMENT AS REQUIRED BY CODE, THE AUTHORITY HAVING JURISDICTION, AND/OR AS SPECIFIED. SUBMIT ENGINEERED INSTALLATION DETAILS PER THE SPECIFICATIONS. THE CONTRACTOR'S SEISMIC ENGINEER SHALL REVIEW THE INSTALLATION AND PROVIDE A DETAILED REPORT FOR THE RECORD.
33. PROVIDE PIPE EXPANSION COMPENSATION FOR THE VARIOUS PIPING SYSTEMS. SUBMIT ENGINEERED DETAILS FOR APPROVAL AND VERIFY INSTALLATION IS IN ACCORDANCE WITH THE CODE. THE CONTRACTOR'S CONSULTING ENGINEER SHALL REVIEW THE INSTALLATION AND PROVIDE A REPORT OF THE FINDINGS.

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PROJECT

SCHEMATIC DESIGN

KEY PLAN

DRAWING TITLE

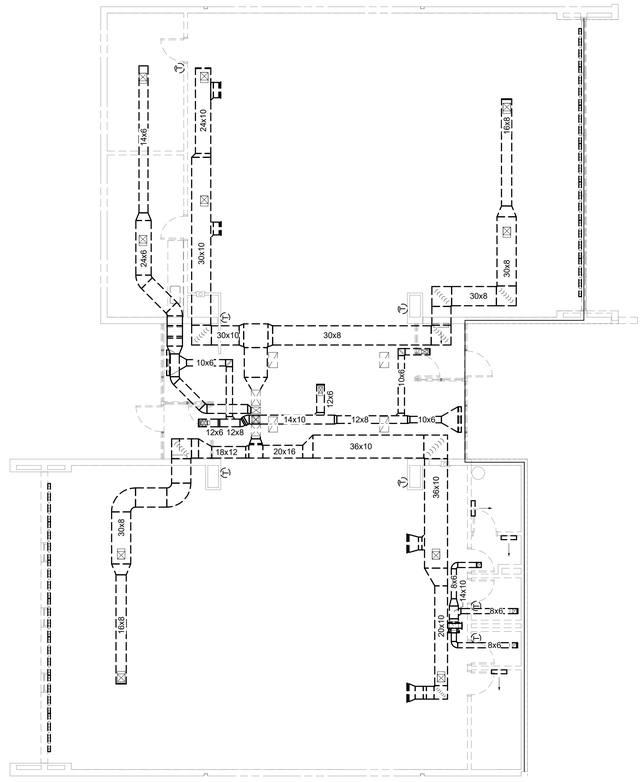
MECHANICAL GENERAL INFORMATION

STATE PROJ. NO.	
PROJ. NO.	200802
SCALE	As Indicated
DATE	03/30/22
DRAWN BY	ME
APPROVED BY	Approver

ISSUE DATES

NO.	DATE	PURPOSE

M0.01



1 FIRST FLOOR MECHANICAL DEMOLITION PLAN
1/8" = 1'-0"

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MD1.01

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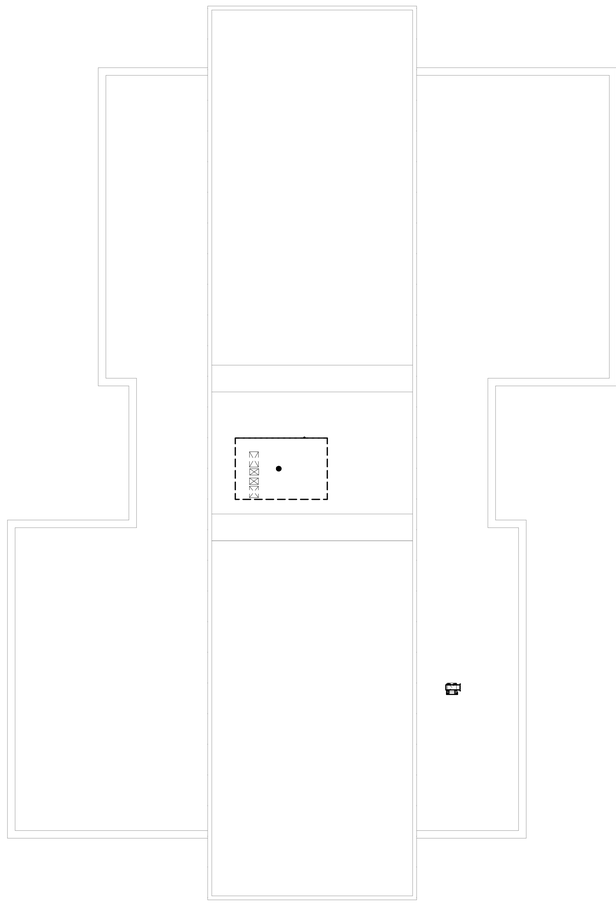

1 ROOF MECHANICAL DEMOLITION PLAN
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PROJECT NORTH

SCHEMATIC DESIGN

KEY PLAN

DRAWING TITLE

ROOF MECHANICAL DEMOLITION PLAN

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SCALE	1/8" = 1'-0"
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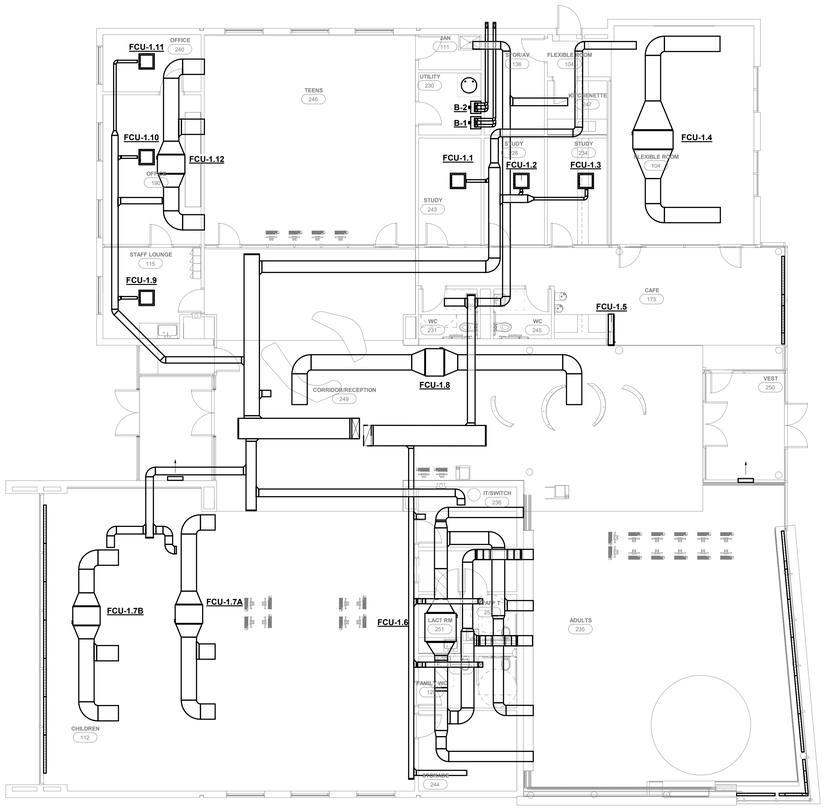

1 FIRST FLOOR MECHANICAL DUCT PLAN
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MECHANICAL DUCT PLAN

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SCALE	1/8" = 1'-0"
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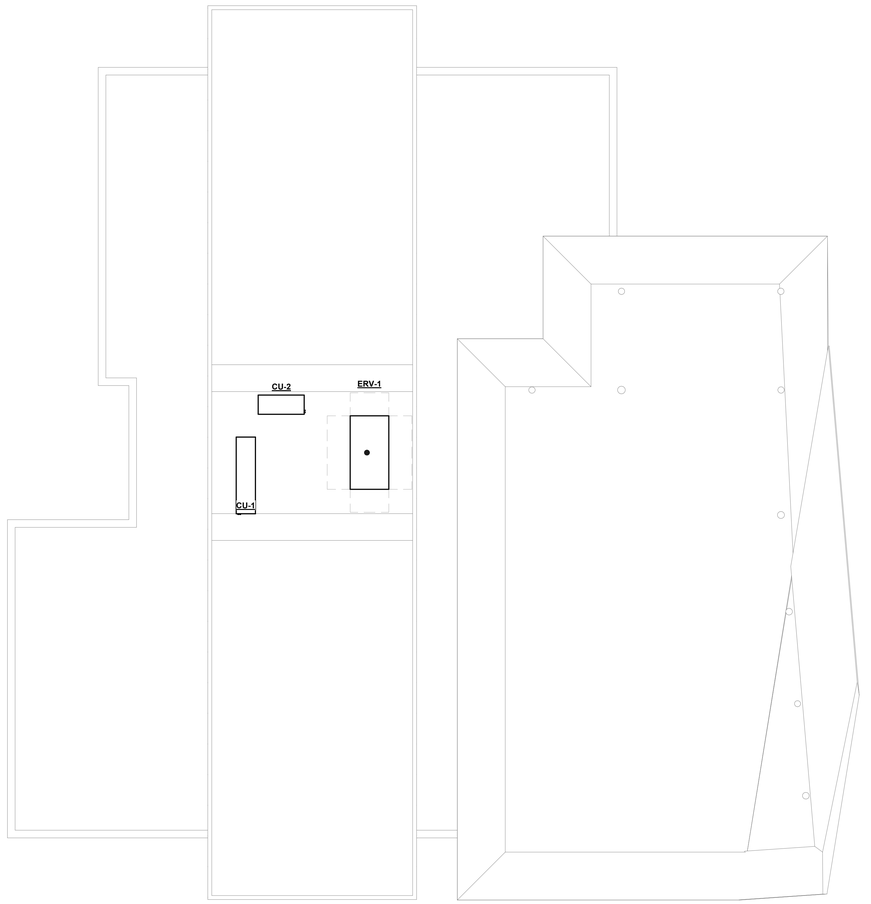

1 MECHANICAL ROOF PLAN
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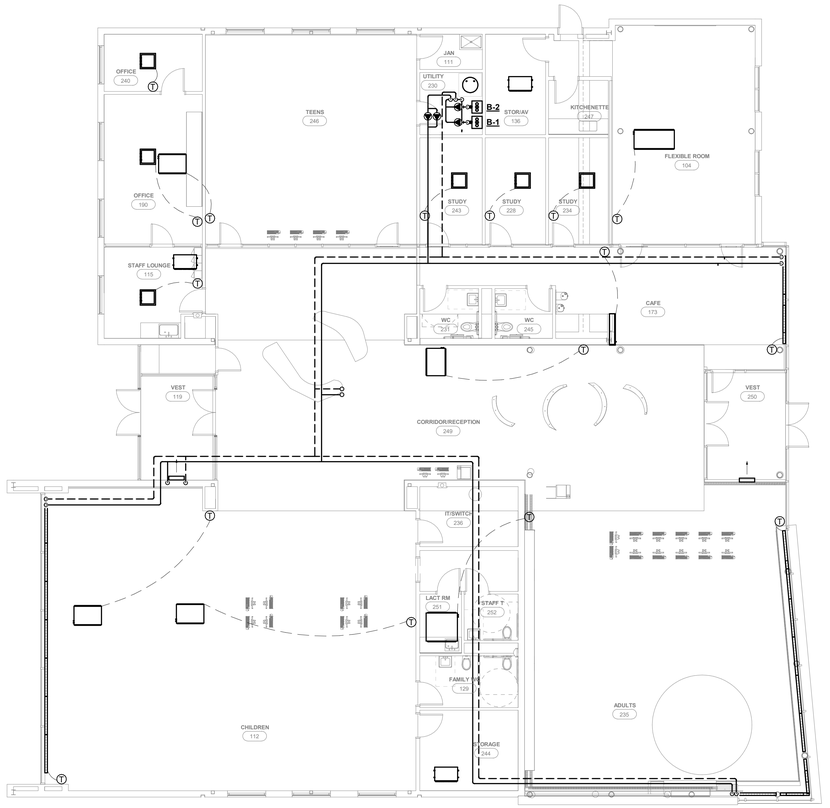

1 FIRST FLOOR MECHANICAL PIPE PLAN
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ELECTRICAL SYMBOL LIST

NOTE: ALL MOUNTING HEIGHTS GIVEN ARE TO CENTERLINE OF DEVICE UNLESS NOTED OTHERWISE.

SYMBOL	DESCRIPTION
	PENDANT MOUNTED LIGHT FIXTURE
	PENDANT MOUNTED LIGHT FIXTURE
	CEILING MOUNTED LIGHT FIXTURE
	WALL MOUNTED LIGHT FIXTURE
	SURFACE MOUNTED LIGHT FIXTURE
	RECESSED DOWN LIGHT FIXTURE
	RECESSED 2'X4' LIGHT FIXTURE
	RECESSED 2'X2' LIGHT FIXTURE
	WALL MOUNTED FIXTURE
	LINEAR FIXTURE
	SINGLE FACE EXIT SIGN WITH BATTERY AND DIRECTIONAL ARROWS UNIVERSAL MOUNT
	DOUBLE FACE EXIT SIGN WITH BATTERY AND DIRECTIONAL ARROWS UNIVERSAL MOUNT
	EMERGENCY BATTERY UNIT WITH TWO DIRECTIONAL HEADS
	EMERGENCY REMOTE, WEATHERPROOF, WITH DOUBLE DIRECTIONAL HEADS
S	SINGLE POLE TOGGLE SWITCH
S_3	THREE WAY TOGGLE SWITCH
S_4	FOUR WAY TOGGLE SWITCH
S_K	SINGLE POLE KEYED TOGGLE SWITCH
S_{3K}	THREE WAY KEYED TOGGLE SWITCH MOUNT
S_{4K}	FOUR WAY KEYED TOGGLE SWITCH MOUNT
S_T	THERMAL OVERLOAD SWITCH - MOUNT AT FRACTIONAL HP MOTORS
S_D	DIMMER SWITCH
S_{PS}	PROJECTION SCREEN SWITCH
S_{OC}	WALL MOUNTED DUAL TECHNOLOGY OCCUPANCY SENSOR SWITCH
B	DOORBELL BUZZER/CHIME - MOUNT 7'-0" A.F.F.
OS OS	CEILING MOUNTED DUAL TECHNOLOGY OCCUPANCY SENSOR
PC	PHOTOCELL
E/G	EMERGENCY ELECTRIC/GAS SHUTOFF PUSHBUTTON OPERATOR
	GROUNDED DUPLEX RECEPTACLE
A	GROUNDED DUPLEX RECEPTACLE - MOUNT ABOVE COUNTER OR BACKSPLASH 42" A.F.F.
C	GROUNDED DUPLEX RECEPTACLE - MOUNT AT CEILING
GFI	GROUNDED DUPLEX GFI RECEPTACLE
WP	GROUNDED DUPLEX GFI RECEPTACLE "WEATHERPROOF WHILE IN-USE" COVER
S	GROUNDED DUPLEX RECEPTACLE - STUB UP TO 24" A.F.F. ON 1" (MIN) RGS CONDUIT
PM	VERTICAL PLUGMOLD WITH OUTLETS AT 12" O.C. - 5' LONG
MW	GROUNDED GFI DUPLEX RECEPTACLE DEDICATED FOR MICROWAVE OVEN - VERIFY EXACT MOUNTING LOCATION
	GROUNDED DOUBLE DUPLEX RECEPTACLE
	GROUNDED 240V RECEPTACLE
USB	GROUNDED GFI DUPLEX RECEPTACLE WITH INTEGRAL USB CHARGING PORT
	GROUNDED SIMPLEX RECEPTACLE
	SPECIAL PURPOSE RECEPTACLE - MATCH NEMA CONFIGURATION OF EQUIPMENT SERVED
	FLOOR MOUNTED DEVICES AS LISTED ABOVE
	RECESSED MOUNTED PANELBOARD
	SURFACE MOUNTED PANELBOARD
PP	COMBINATION POWER/TEL/DATA POLE
	TELEPHONE/DATA OUTLETS
WAP	WIRELESS ACCESS POINT (WAP - WIRELESS ACCESS POINT) INCLUDE CAT 5e CABLE
F	MANUAL FIRE ALARM PULL STATION - MOUNT AT 48" A.F.F.
H	HEAT DETECTOR
H 200°	HEAT DETECTOR 200°
S	AREA SMOKE DETECTOR
S_D	DUCT SMOKE DETECTOR
S_{CO}	AREA COMBINATION SMOKE AND CARBON MONOXIDE DETECTOR
S_E	ELEVATOR RETURN SMOKE DETECTOR
CO	FIRE ALARM CARBON MONOXIDE DETECTOR
M_{RTS}	FIRE ALARM REMOTE TEST SWITCH
M	MAGNETIC DOOR HOLDER
	FIRE ALARM VISUAL ONLY INDICATING UNIT - MOUNT AT 6'-6" A.F.F.
	FIRE ALARM SPEAKER/VISUAL INDICATING UNIT - MOUNT AT 6'-6" A.F.F.
R	LIGHTING CONTROL RELAY
$_{AOM}$	FIRE ALARM ADDRESSABLE OUTPUT MODULE
$_{AIM}$	FIRE ALARM ADDRESSABLE INPUT MODULE
S_{VC}	SPEAKER VOLUME CONTROL
FACP	FIRE ALARM CONTROL PANEL
FAA	FIRE ALARM REMOTE ANNUNCIATOR PANEL
HGMP	HAZARDOUS GAS MONITOR PANEL FURNISHED BY DIV. 25, WIRED BY DIV. 26
	EMERGENCY "CALL-FOR-AID" BUZZER/LIGHT - MOUNT AT 7'-6" A.F.F.
S_A	EMERGENCY "CALL-FOR-AID" SWITCH - MOUNT 48" A.F.F. WITH PULL CORD TO 6" A.F.F.

SYMBOL	DESCRIPTION
M/S	EMERGENCY SWITCH - MOUNT AT 48" A.F.F. - M=MASTER - S=SLAVE
J	JUNCTION BOX
J TC	JUNCTION BOX WITH 120V POWER FOR TEMPERATURE CONTROLS
	JUNCTION BOX FOR CATV OUTLET WITH 1 1/4" CONDUIT TO CEILING
	MOTOR
	NON-FUSED DISCONNECT SWITCH
	FUSED DISCONNECT SWITCH
	MAGNETIC MOTOR STARTER
	COMBINATION DISCONNECT SWITCH/MAGNETIC MOTOR STARTER
	BRANCH CIRCUIT WIRING
	BRANCH CIRCUIT FEEDER
	ELECTRICAL GROUND
	FLEXIBLE EQUIPMENT CONNECTION
	FIXED/HARD - WIRED EQUIPMENT CONNECTION
TC	TIMECLOCK
C	CONTACTOR
	SECURITY SYSTEM CAMERA
DL	SECURITY SYSTEM DOOR LOCK
	SECURITY SYSTEM MOTION SENSOR
CR	SECURITY SYSTEM CARD READER
DC	SECURITY SYSTEM DOOR CONTACT
KP	SECURITY SYSTEM KEY PAD
FS	FLOW SWITCH
TS	TAMPER SWITCH
PS	PRESSURE SWITCH
	WALL MOUNTED SPEAKER
	CEILING MOUNTED SPEAKER
IC	INTERCOM STATION
	COMBINATION SPEAKER/CLOCK
	CLOCK

ELECTRICAL LEGEND NOTES:
1. ALL SYMBOLS MAY NOT BE USED.

ABBREVIATIONS

A	AMPERE	KW	KILOWATT
AFF	ABOVE FINISHED FLOOR	MAU	MAKE-UP AIR UNIT
AFG	ABOVE FINISHED GRADE	NL	NIGHT LIGHT
AFI	ARC FAULT CIRCUIT INTERRUPTER	NLE	NEW LOCATION OF EXISTING
AHU	AIR HANDLING UNIT	OHD	OVERHEAD DOOR ELECTRIC OPERATOR
C	CONDUIT	P	POLE
CB	CIRCUIT BREAKER	PE	PRIMARY ELECTRIC SERVICE
CKT	CIRCUIT	PH or Ø	PHASE
CUH	CABINET UNIT HEATER	PNL	PANEL
DAC	DOOR ACCESS CONTROLLER	PVC	POLYVINYL CHLORIDE CONDUIT
EBB	ELECTRIC BASEBOARD	RAP	REMOTE ANNUNCIATOR PANEL
EBU	EMERGENCY BATTERY UNIT	RGS	RIGID GALVANIZED STEEL CONDUIT
EF	EXHAUST FAN	RLE	RELOCATE EXISTING
EM	EMERGENCY POWERED	RTU	ROOFTOP UNIT
EMT	ELECTRICAL METALLIC TUBING	SE	SECONDARY ELECTRIC SERVICE
ETR	EXISTING TO REMAIN	T	TELEPHONE SERVICE
EWC	ELECTRIC WATER COOLER	TV	TELEVISION
EWH	ELECTRIC WATER HEATER	TX	TRANSFORMER
FA	FIRE ALARM	UNO	UNLESS NOTED OTHERWISE
FACP	FIRE ALARM CONTROL PANEL	W	WIRE
FMC	FLEXIBLE METALLIC TUBING	WAP	WIRELESS ACCESS POINT
GFI	GROUND FAULT INTERRUPTER	WP	WEATHER PROOF
IG	ISOLATED GROUND		
JB	JUNCTION BOX		
KVA	KILOVOLT-AMP		

ELECTRICAL GENERAL NOTES

1. ALL WORK SHALL BE PERFORMED IN COMPLIANCE WITH CURRENT APPLICABLE CODES, ORDINANCES, THE REGULATORY AGENCIES HAVING JURISDICTION AND THE SPECIFICATIONS. THE SPECIFICATIONS MAY EXCEED THE REQUIREMENTS OF THE CODE, IN WHICH CASE, THE SPECIFICATION MUST BE FOLLOWED.
2. THE INTENT OF THESE DOCUMENTS IS FOR THE MEP TRADES TO FURNISH AND INSTALL COMPLETE MECHANICAL AND ELECTRICAL SYSTEMS. THE SPECIFIED ELECTRICAL SYSTEM SHALL BE COMPLETE IN ALL RESPECTS; OPERATIONAL, TESTED, ADJUSTED, APPROVED BY THE AUTHORITIES HAVING JURISDICTION AND READY FOR BENEFICIAL USE BY THE OWNER.
3. THE TRADES SHALL OBTAIN AND REVIEW ALL CONTRACT DOCUMENTS BEFORE SUBMITTING A BID. INFORMATION IS PROVIDED ON THE VARIOUS DRAWINGS, SCHEDULES, SPECIFICATIONS AND ALL OF THE VARIOUS DOCUMENTS IN THE BIDDING PACKAGE. THE CONTRACT DOCUMENTS ARE COMPLEMENTARY AND FORM A TOTAL PROJECT DESIGN AND INFORMATION SOURCE FOR CONSTRUCTION PURPOSES.
4. THE DRAWINGS ARE DIAGRAMMATIC AND INDICATE THE GENERAL ARRANGEMENT OF SYSTEMS AND WORK INCLUDED IN THE CONTRACT. COORDINATE LOCATIONS OF EQUIPMENT WITH OTHER TRADES BEFORE AND DURING CONSTRUCTION. ANY MODIFICATION TO THE EQUIPMENT LAYOUT, REQUIRED FOR INSTALLATION, IS TO BE PERFORMED UNDER THE CONTRACT AGREEMENT, AT NO ADDITIONAL COST. REFER TO DETAILS, SCHEDULES AND SPECIFICATIONS FOR ADDITIONAL INFORMATION.
5. THE CONTRACTOR SHALL BECOME THOROUGHLY FAMILIAR WITH THE PROJECT DOCUMENTS OF ALL TRADES. THE DRAWINGS ARE DIAGRAMMATIC AND SHOW THE GENERAL ARRANGEMENT OF EQUIPMENT AND CONDUITS. THE CONTRACTOR SHALL COORDINATE THE EXACT LOCATION OF EQUIPMENT AND CONDUITS INSTALLATION WITH ALL THE TRADES BEFORE COMMENCING WORK.
6. EQUIPMENT SHALL BE INSTALLED IN ACCESSIBLE LOCATIONS, WHEN EQUIPMENT MUST BE LOCATED ABOVE AN INACCESSIBLE CEILING (GYP BOARD OR EQUIVALENT), OR BEHIND A WALL, AN APPROPRIATE ACCESS DOOR SHALL BE PROVIDED. IF AN ACCESS DOOR IS REQUIRED, IT SHALL BE OF A RATING APPROPRIATE FOR THE WALL/CEILING IN WHICH IT IS TO BE INSTALLED. THE CONTRACTOR SHALL COORDINATE LOCATIONS OF ACCESS PANELS FOR ALL DEVICES, REQUIRING ACCESS, WITH THE ARCHITECT, PRIOR TO INSTALLATION OF SUCH DEVICES OR OTHER APPURTENANCES.
7. WHERE A CONFLICT OCCURS BETWEEN THE DOCUMENTS, IT SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT. CARRY AS PART OF THE BID THE LARGER QUANTITY AND/OR MORE EXPENSIVE ITEM(S).
8. THIS CONTRACT SHALL INCLUDE ALL THE NECESSARY CONDUITS, FITTINGS, TRANSITIONS ETC. AS REQUIRED TO INSTALL CONDUITS AND EQUIPMENT, AND TO AVOID ANY CONFLICTS WITH OTHER TRADES AND THE BUILDING STRUCTURE. THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR ANY ASSUMPTIONS, OMISSIONS OR ERRORS HE MAKES AS A RESULT OF HIS FAILURE TO COORDINATE WITH OTHER TRADES OR BECOME FULLY FAMILIAR WITH THE PROJECT DOCUMENTS OF ALL TRADES.
9. DO NOT INSTALL ANY ELECTRICAL PANELS, TRANSFORMERS, SPECIAL EQUIPMENT, BELOW PIPING OR THROUGH MECHANICAL ROOMS, THAT ARE NOT ASSOCIATED WITH OR SERVE THE RESPECTIVE ROOMS. COORDINATE THE LOCATION OF MECHANICAL EQUIPMENT IN THE FIELD AND ADJUST AS NECESSARY.
10. ALL HOMERUNS SHALL BE 2#12, 1#12G., 3/4"C TO 20A-1P CIRCUIT BREAKER IN PANEL DESIGNATED UNLESS OTHERWISE NOTED.
11. ALL 120 VAC (277 VAC) CIRCUITS EXCEEDING 150' IN LENGTH SHALL BE INCREASED TO 2#10, 1#10G, 3/4" CONDUIT UNLESS OTHERWISE NOTED.
12. ALL BRANCH CIRCUITS SHALL BE PROVIDED WITH SEPARATE NEUTRALS. USE OF COMMON NEUTRALS WILL NOT BE ALLOWED.
13. FIELD VERIFY WITH MANUFACTURER'S PROVIDED EXACT ELECTRICAL CHARACTERISTICS AND CONNECTION REQUIREMENTS OF ALL OPERATIONAL EQUIPMENT PRIOR TO MAKING ELECTRICAL POWER CONNECTION. FURNISH AND INSTALL SAFETY DISCONNECT AS REQUIRED BY NEC.
14. RECEPTACLES LOCATED WITHIN 6' OF A WATER SOURCE, OR OUTSIDE, AND WHERE REQUIRED BY CODE SHALL BE PROVIDED WITH GFCI PROTECTION, WHETHER INDICATED OR NOT.
15. EXTERIOR RECEPTACLES SHALL BE PROVIDED WITH "CAST ALUMINUM" LOCKABLE COVERS RATED "WEATHER-PROOF WHILE IN USE". LOCKS SHALL BE KEYED ALIKE.
16. ELECTRICAL CONTRACTOR SHALL PROVIDE ALL REQUIRED SLEEVES AND FIRE STOP FOR CONDUITS AND CABLES PENETRATING FIRE RATED WALLS AND FLOORS.
17. ELECTRICAL CONTRACTOR SHALL SEAL ALL CONDUITS PENETRATING EXTERIOR WALLS.
18. ALL WIRING SHALL BE IN CONDUIT, UNLESS OTHERWISE INDICATED. CONDUITS SHALL BE RUN CONCEALED IN NEW AND ABOVE CEILINGS.
19. ELECTRICAL CONTRACTOR SHALL COORDINATE ALL LOCATIONS OF EQUIPMENT WITH DIV. 21, 22 AND 23 PRIOR TO ROUGHING OR INSTALLING OUTLETS.
20. ELECTRICAL CONTRACTOR SHALL COORDINATE WITH THE OWNER, ALL LOCATIONS OF EQUIPMENT BEING FURNISHED BY THE OWNER PRIOR TO ROUGHING OR INSTALLING OUTLETS.
21. REFER TO ARCHITECTURAL DRAWINGS FOR ELEVATIONS AND EXACT LOCATION OF DEVICES PRIOR TO ROUGHING OR INSTALLATION OF OUTLETS.
22. ELECTRICAL CONTRACTOR SHALL COORDINATE THE LOCATION OF DUCT SMOKE DETECTORS WITH DIV. 23. DUCT SMOKE DETECTORS SHALL BE FURNISHED AND WIRED BY ELECTRICAL CONTRACTOR, INSTALLED BY DIV. 23.
23. ALL FIRE ALARM DEVICES LOCATED ON BUILDING EXTERIOR SHALL BE WEATHERPROOF RATED.
24. CONDUITS AND/OR WIRING SHALL NOT PENETRATE STAIR ENCLOSURES UNLESS SPECIFICALLY SERVING EQUIPMENT OR DEVICES LOCATED WITHIN STAIR ENCLOSURE.
25. WHERE INDICATED, PROVIDE FIXTURES WITH EMERGENCY BATTERY TO OPERATE LAMPS FOR 1 1/2 HOURS UPON LOSS OF NORMAL POWER. WIRE EMERGENCY BATTERY AND EXIT LIGHTS TO LINE SIDE OF AREA LIGHTING CIRCUIT.
26. DIRECTIONAL CHEVRONS SHALL CONFORM TO NFPA 5-10.4.1.2 AND SHALL BE IDENTIFIABLE AS A DIRECTIONAL INDICATOR AT A MINIMUM OF 40 FT. UNDER ALL SPACE CONDITIONS. PROVIDE DIRECTIONAL CHEVRONS AS INDICATED ON PLAN.
27. BRANCH CIRCUIT WIRING IS SHOWN ON THE FLOOR PLANS. NUMERALS ADJACENT TO THE HOMERUN SYMBOLS FOR LIGHTING, RECEPTACLES, MOTORS, APPLIANCES, ETC. INDICATE THE CIRCUIT NUMBER TO WHICH THE ITEMS ARE TO BE CONNECTED. PROVIDE BRANCH CIRCUIT WIRING FOR ALL ITEMS SHOWN IN ACCORDANCE WITH THESE GENERAL NOTES AND THE ELECTRICAL SPECIFICATIONS.
28. ALL 1 POLE, 15 AND 20 AMPERE BRANCH CIRCUITS SERVING RECEPTACLE OR LIGHTING SHALL BE 2 WIRE CIRCUITS PROVIDING AN INDIVIDUAL NEUTRAL CONDUCTOR FOR EACH UNGROUNDED (HOT) CIRCUIT CONDUCTOR. DO NOT SHARE NEUTRAL CONDUCTORS.
29. REFER TO ARCHITECTS REFLECTED CEILING PLAN FOR EXACT LOCATIONS OF CEILING MOUNTED DEVICES.
30. ALL EXPOSED CABLES OF ANY TYPE IN PLENUM CEILING SPACE SHALL BE PLENUM RATED.
31. CONTRACTOR SHALL PROVIDE ALL NECESSARY MISCELLANEOUS STEEL FOR THE SUPPORT OF ALL EQUIPMENT, PIPING, CONDUIT AND DUCTWORK. SUSPENDED FROM SLAB, STEEL, WALL OR TRUSSWORK.
32. ALL PENETRATIONS OF FLOORS AND WALLS (WHETHER OR NOT FIRE RESISTANCE RATED) SHALL BE PROVIDED WITH A THROUGH PENETRATION PROTECTION SYSTEM (FIRESTOPPING). EACH THROUGH - PENETRATION PROTECTION SYSTEM SHALL BE TESTED IN ACCORDANCE WITH ASTM E814 AND BE LISTED FOR THE TYPE OF FLOOR OR WALL ASSEMBLY PENETRATED AND THE TYPE OF PROTECTION SYSTEM.
33. IT IS NOT THE INTENTION TO SHOW EVERY FITTING, HANGER, WIRE OR DEVICE, ALL SUCH ITEMS SHALL BE FURNISHED AND INSTALLED AS NECESSARY FOR A COMPLETE SYSTEM.
34. SEE SPECIFICATION SECTION "ELECTRICAL IDENTIFICATION" FOR PROPERLY LABELING EQUIPMENT WIRING, BOXES, ETC.
35. CONTRACTOR SHALL DETERMINE THE QUANTITY OF CONDUCTORS REQUIRED FOR PROPER OPERATION OF ALL SWITCHING SCHEMES.
36. PROVIDE ALL BONDING AND GROUNDING REQUIRED BY THE NATIONAL ELECTRIC CODE, NFPA 70 AND AS REQUIRED BY LOCAL AUTHORITY HAVING JURISDICTION.
37. ALL REQUIRED BONDING CONDUCTORS SHALL BE MINIMUM #8 SOLID INSULATED COPPER, PROVIDE ALL NECESSARY FITTINGS, JUNCTION BOXES, END FITTINGS, ETC., FOR A COMPLETE, CONTINUOUS INSTALLATION.
38. ALL BONDING/GROUNDING CONNECTIONS SHALL BE MADE BY LISTED CLAMP OR CONNECTORS AS REQUIRED BY ARTICLE 250 OF NFPA 70, THE NATIONAL ELECTRIC CODE (CURRENT ADOPTED EDITION).
39. SEISMICALLY SUPPORT THE EQUIPMENT AS REQUIRED BY CODE, THE AUTHORITY HAVING JURISDICTION, AND/OR AS SPECIFIED. SUBMIT ENGINEERED INSTALLATION DETAILS PER THE SPECIFICATIONS. THE CONTRACTOR'S SEISMIC ENGINEER SHALL REVIEW THE INSTALLATION AND PROVIDE A DETAILED REPORT FOR THE RECORD.

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PROJECT

SCHEMATIC DESIGN

KEY PLAN

DRAWING TITLE

ELECTRICAL GENERAL INFORMATION

STATE PROJ. NO.	
PROJ. NO.	200802
SCALE	NTS
DATE	03/30/22
DRAWN BY	Author
APPROVED BY	Approver

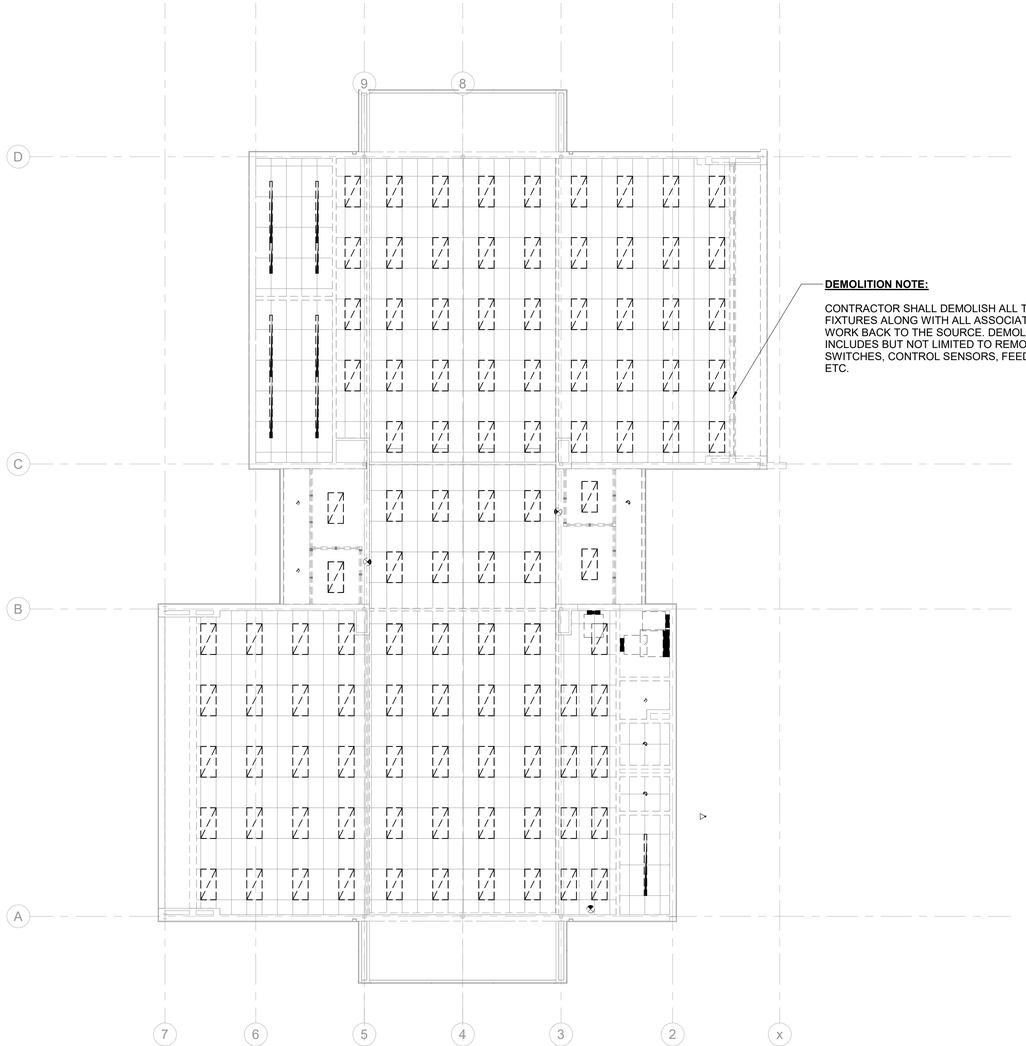
ISSUE DATES

NO.	DATE	PURPOSE

E0.01

ELECTRICAL DEMOLITION NOTES

1. BEFORE SUBMITTING BID, THE CONTRACTORS SHALL VISIT THE JOB SITE AND BECOME FULLY FAMILIAR WITH THE EXISTING CONDITIONS AND THE DOCUMENTS OF OTHER TRADES UNDER WHICH THEIR WORK WILL BE ACCOMPLISHED. THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR ANY ASSUMPTIONS, OMISSIONS OR ERRORS MADE AS A RESULT OF FAILURE TO BECOME FAMILIAR WITH THE EXISTING CONDITIONS.
2. THE CONTRACTOR SHALL COORDINATE AND SCHEDULE ANY DAILY INTERRUPTIONS OR SHUTDOWNS OF THE EXISTING SYSTEMS IN ADVANCE WITH OWNER'S DESIGNATED REPRESENTATIVE. THIS SHALL INCLUDE SERVICES INTERRUPTIONS AND CONNECTIONS, MECHANICAL AND ELECTRICAL DISRUPTIONS EFFECTING OTHER TRADES. INCLUDE ALL WORK REQUIRED TO ALLOW PHASED CONSTRUCTION WHERE NECESSARY.
3. DEMOLITION DRAWINGS ARE STRICTLY DIAGRAMMATIC AND SHOW GENERAL ARRANGEMENT AND APPROXIMATE LOCATION OF EXISTING MECHANICAL AND ELECTRICAL EQUIPMENT. IT IS NOT THE INTENT OF THESE DRAWINGS TO SHOW ALL EQUIPMENT, PIPING OR CONDUIT TO BE REMOVED. EQUIPMENT NOT BEING REUSED SHALL BE REMOVED, INCLUDING ALL ASSOCIATED HANGERS, SUPPORTS, PIPES, CONDUITS, WIRES, AND CONTROLS BACK TO THE POINT OF ORIGIN.
4. REFER TO THE ARCHITECTURAL DEMOLITION DRAWINGS AND SPECIFICATIONS FOR ADDITIONAL INFORMATION AND REQUIREMENTS. THE FULL EXTENT OF THE DEMOLITION AND RECONSTRUCTION SCOPE OF WORK SHALL BE DETERMINED BY THE ENTIRE SET OF BID DOCUMENTS.
5. THE CONTRACTORS SHALL COORDINATE THE DEMOLITION SCOPE OF WORK WITH THE GENERAL CONTRACTOR'S OR CONSTRUCTION MANAGER'S PHASING SCHEDULE PRIOR TO COMMENCEMENT OF WORK. CARE MUST BE TAKEN SO AS NOT TO DESTROY, REMOVE OR DEMOLISH ANY EQUIPMENT, APPURTENANCES OR DEVICES INTENDED TO REMAIN. PROVIDE TEMPORARY SERVICES AND SYSTEM MODIFICATIONS TO ACCOMMODATE CONTINUOUS OPERATION OF ACTIVE SYSTEM.
6. THE LOCATION OF EXISTING ELECTRICAL SYSTEM SHOWN ON FLOOR PLANS, IS BASED ON THE BEST AVAILABLE INFORMATION. THE CONTRACTOR SHALL FIELD VERIFY PRIOR TO COMMENCEMENT OF CONSTRUCTION, EXACT QUANTITY AND LOCATION(S) OF EXISTING EQUIPMENT, PANELS, CONDUITS, LIGHTING, ETC. TO BE REMOVED AND ADJUST AS NECESSARY.
7. ALL EQUIPMENT, AND ASSOCIATED WIRING, CONDUITS INDICATED TO BE REMOVED OR RELOCATED, SHALL BE DISCONNECTED AND REMOVED, INCLUDING HANGERS AND OTHER COMPONENTS. NO EQUIPMENT, WIRING OR CONDUITS SHALL BE ABANDONED IN PLACE, UNLESS SPECIFICALLY NOTED.
8. ALL SYSTEMS TO BE REMOVED SHALL BE REMOVED BACK TO THE POINT OF SOURCE. THE CONTRACTOR SHALL VERIFY WHICH SYSTEMS MUST REMAIN ACTIVE TO SERVE ADJACENT SPACES DURING CONSTRUCTION. SHOULD THE CONTRACTOR ENCOUNTER, DURING DEMOLITION OF EXISTING WALLS OR CHASES, ANY WIRING OR CONDUIT WHICH MUST REMAIN ACTIVE, IMMEDIATELY GIVE NOTICE TO THE ENGINEER, GENERAL CONTRACTOR OR CONSTRUCTION MANAGER.
9. ALL SALVAGEABLE MATERIALS OR EQUIPMENT TO BE REMOVED SHALL BE TURNED OVER TO THE OWNER AT THE END OF EACH DAY. ITEMS REMOVED AND NOT REUSED OR CLAIMED BY THE OWNER SHALL BECOME PROPERTY OF THE TRADE CONTRACTOR AND SHALL BE TRANSPORTED FROM THE SITE. SITE STORAGE OF REMOVED ITEMS WILL NOT BE PERMITTED.
10. PROPERLY DISPOSE OF ALL DEMOLISHED EQUIPMENT IN COMPLIANCE WITH CODES AND REGULATIONS; THIS APPLIES TO HAZARDOUS MATERIALS AND CONTAMINATED ITEMS TO BE DEMOLISHED.
11. THE CONTRACTOR SHALL OBTAIN EXISTING ELECTRICAL DRAWINGS FROM THE OWNER IF AVAILABLE TO HELP DETERMINE FULL SCOPE OF WORK.



DEMOLITION NOTE:

CONTRACTOR SHALL DEMOLISH ALL THE EXISTING LIGHT FIXTURES ALONG WITH ALL ASSOCIATED ELECTRICAL WORK BACK TO THE SOURCE. DEMOLITION WORK INCLUDES BUT NOT LIMITED TO REMOVAL OF LIGHTS, SWITCHES, CONTROL SENSORS, FEEDERS, CONDUITS ETC.

1 LIGHTING PLAN-DEMOLITION
1/8" = 1'-0"

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PROJECT

SCHEMATIC DESIGN

KEY PLAN

DRAWING TITLE

LIGHTING PLAN - DEMOLITION

STATE PROJ. NO.	
PROJ. NO.	200802
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DATE	03/30/22
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APPROVED BY	Approver

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NO.	DATE	PURPOSE

ED1.01

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6. THE LOCATION OF EXISTING ELECTRICAL SYSTEM SHOWN ON FLOOR PLANS, IS BASED ON THE BEST AVAILABLE INFORMATION. THE CONTRACTOR SHALL FIELD VERIFY PRIOR TO COMMENCEMENT OF CONSTRUCTION, EXACT QUANTITY AND LOCATION(S) OF EXISTING EQUIPMENT, PANELS, CONDUITS, LIGHTING, ETC. TO BE REMOVED AND ADJUST AS NECESSARY.
7. ALL EQUIPMENT, AND ASSOCIATED WIRING, CONDUITS INDICATED TO BE REMOVED OR RELOCATED, SHALL BE DISCONNECTED AND REMOVED, INCLUDING HANGERS AND OTHER COMPONENTS. NO EQUIPMENT, WIRING OR CONDUITS SHALL BE ABANDONED IN PLACE, UNLESS SPECIFICALLY NOTED.
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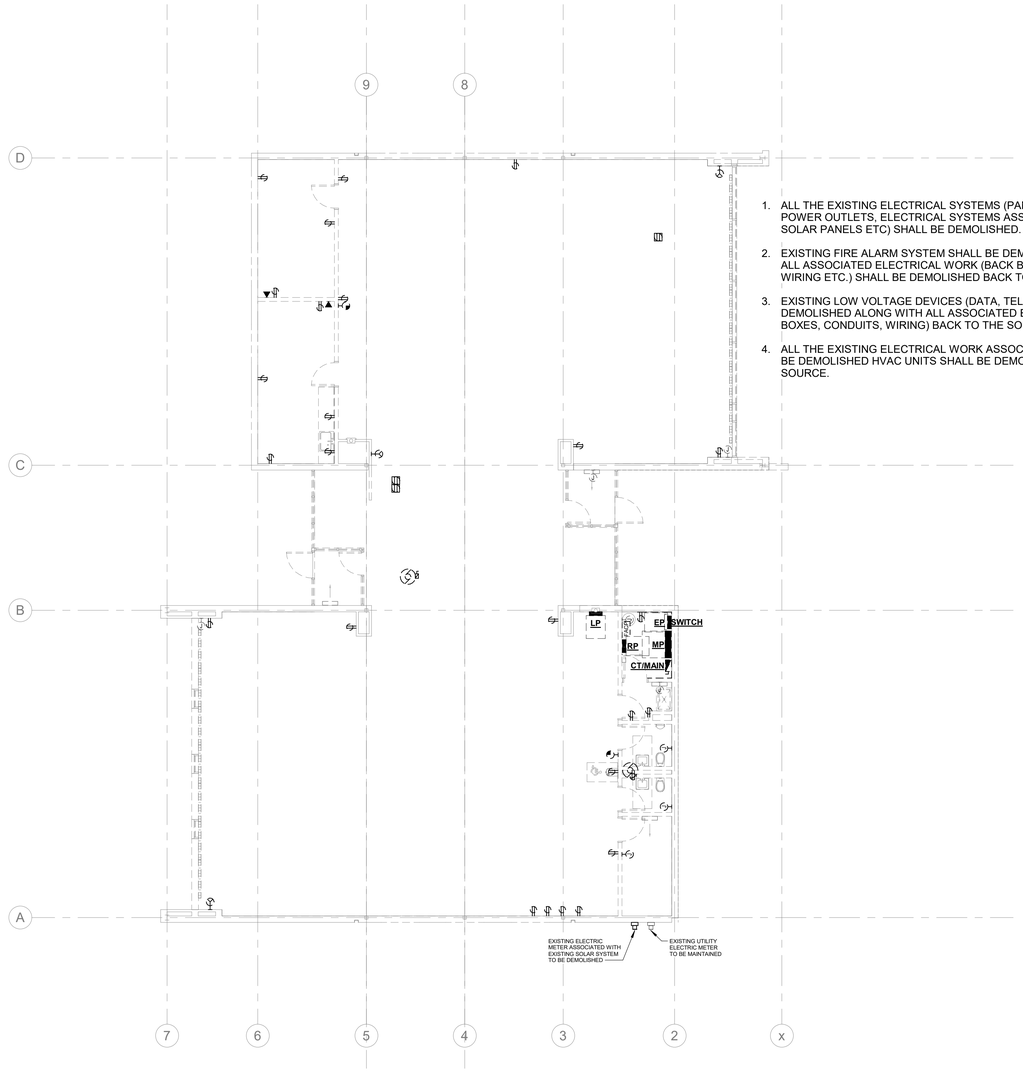
10. PROPERLY DISPOSE OF ALL DEMOLISHED EQUIPMENT IN COMPLIANCE WITH CODES AND REGULATIONS; THIS APPLIES TO HAZARDOUS MATERIALS AND CONTAMINATED ITEMS TO BE DEMOLISHED.
11. THE CONTRACTOR SHALL OBTAIN EXISTING ELECTRICAL DRAWINGS FROM THE OWNER IF AVAILABLE TO HELP DETERMINE FULL SCOPE OF WORK.



1. ALL THE EXISTING ELECTRICAL SYSTEMS (PANELS, DISCONNECTS, POWER OUTLETS, ELECTRICAL SYSTEMS ASSOCIATED WITH ROOF SOLAR PANELS ETC) SHALL BE DEMOLISHED.
2. EXISTING FIRE ALARM SYSTEM SHALL BE DEMOLISHED ALONG WITH ALL ASSOCIATED ELECTRICAL WORK (BACK BOXES, CONDUITS, WIRING ETC.) SHALL BE DEMOLISHED BACK TO THE SOURCE.
3. EXISTING LOW VOLTAGE DEVICES (DATA, TELEPHONE, ETC) SHALL BE DEMOLISHED ALONG WITH ALL ASSOCIATED ELECTRICAL WORK (BACK BOXES, CONDUITS, WIRING) BACK TO THE SOURCE.
4. ALL THE EXISTING ELECTRICAL WORK ASSOCIATED WITH EXISTING TO BE DEMOLISHED HVAC UNITS SHALL BE DEMOLISHED BACK TO THE SOURCE.

1 POWER PLAN-DEMOLITION
1/8" = 1'-0"

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PROJECT

SCHEMATIC DESIGN

KEY PLAN

DRAWING TITLE

POWER PLAN - DEMOLITION

STATE PROJ. NO.	
PROJ. NO.	200802
SCALE	As indicated
DATE	03/30/22
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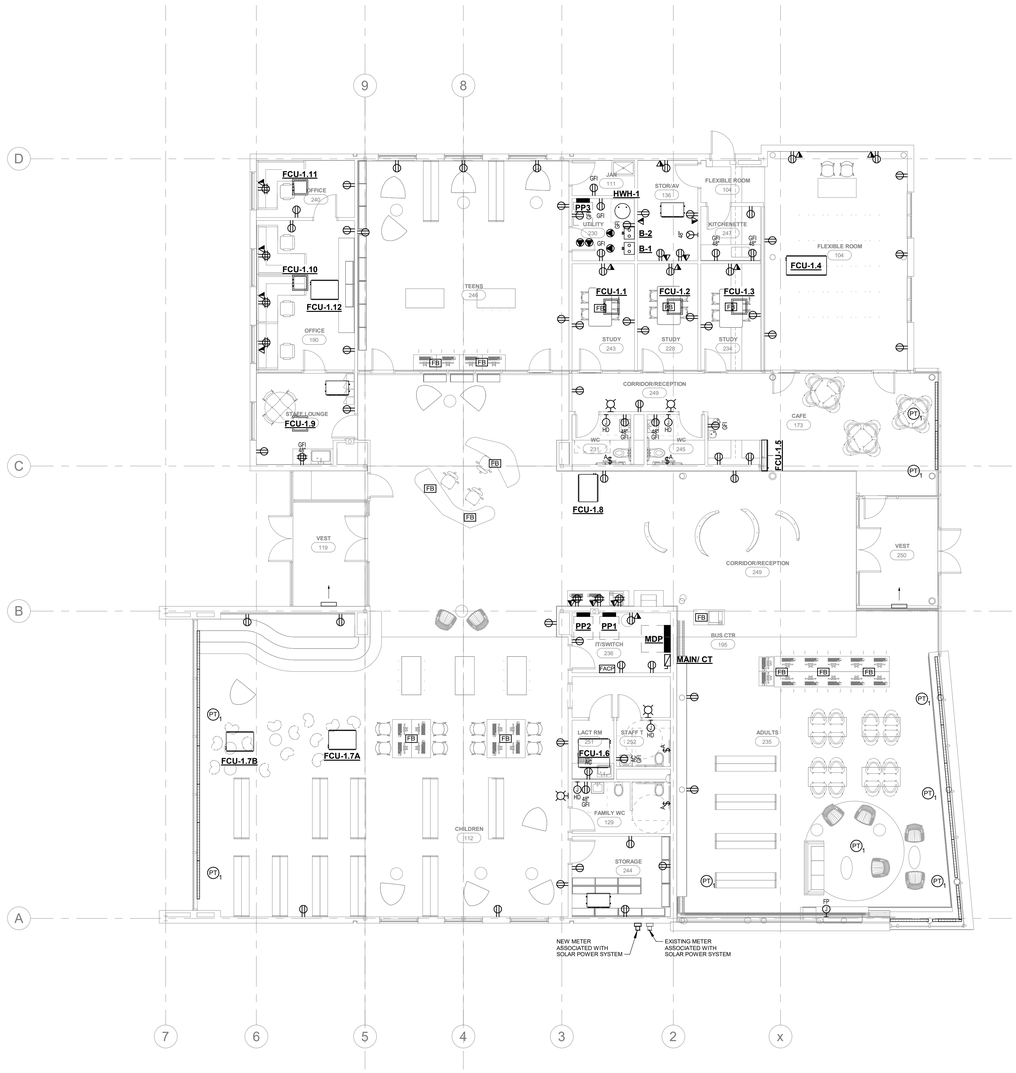

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SINGLE PHASE WIRE SCHEDULE

MOCP (1-POLE OR 2-POLE)	CONDUCTORS (1 PH, 2W) WITH GROUND	CONDUIT SIZE	CONDUCTORS (1 PH, 3W) WITH GROUND	CONDUIT SIZE
15A	2#12 & 1#12G	3/4"	3#12 & 1#12G	3/4"
20A	2#12 & 1#12G	3/4"	3#12 & 1#12G	3/4"
25A	2#10 & 1#10G	3/4"	3#10 & 1#10G	3/4"
30A	2#10 & 1#10G	3/4"	3#10 & 1#10G	3/4"
35A	2#8 & 1#10G	3/4"	3#8 & 1#10G	3/4"
40A	2#8 & 1#10G	3/4"	3#8 & 1#10G	3/4"
45A	2#6 & 1#10G	1"	3#6 & 1#10G	1"
50A	2#6 & 1#10G	1"	3#6 & 1#10G	1"
60A	2#4 & 1#10G	1"	3#4 & 1#10G	1-1/4"
70A	2#4 & 1#8G	1"	3#4 & 1#8G	1-1/4"
80A	2#3 & 1#8G	1-1/4"	3#3 & 1#8G	1-1/2"
90A	2#2 & 1#8G	1-1/4"	3#2 & 1#8G	1-1/2"
100A	2#1 & 1#8G	1-1/2"	3#1 & 1#8G	2"

THREE PHASE WIRE SCHEDULE

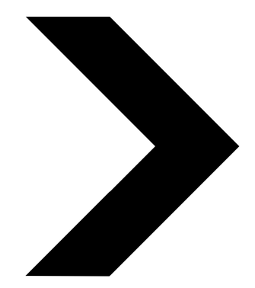
MOCP (3 POLE)	CONDUCTORS (3 PH, 3W) WITH GROUND	CONDUIT SIZE	CONDUCTORS (3 PH, 4W) WITH GROUND	CONDUIT SIZE
15A	3#12 & 1#12G	3/4"	4#12 & 1#12G	3/4"
20A	3#12 & 1#12G	3/4"	4#12 & 1#12G	3/4"
25A	3#10 & 1#10G	3/4"	4#10 & 1#10G	3/4"
30A	3#10 & 1#10G	3/4"	4#10 & 1#10G	3/4"
35A	3#8 & 1#10G	3/4"	4#8 & 1#10G	3/4"
40A	3#8 & 1#10G	3/4"	4#8 & 1#10G	3/4"
45A	3#6 & 1#10G	1"	4#6 & 1#10G	1"
50A	3#6 & 1#10G	1"	4#6 & 1#10G	1"
60A	3#4 & 1#10G	1-1/4"	4#4 & 1#10G	1-1/4"
70A	3#4 & 1#8G	1-1/4"	4#4 & 1#8G	1-1/4"
80A	3#3 & 1#8G	1-1/4"	4#3 & 1#8	1-1/4"
90A	3#2 & 1#8G	1-1/4"	4#2 & 1#8G	1-1/2"
100A	3#1 & 1#8G	1-1/2"	4#1 & 1#8G	2"
110A	3#1 & 1#6G	1-1/2"	4#1 & 1#6G	2"
125A	3#1/0 & 1#6G	1-1/2"	4#1/0 & 1#6G	2"
150A	3#1/0 & 1#6G	2"	4#1/0 & 1#6G	2"
175A	3#2/0 & 1#6G	2"	4#2/0 & 1#6G	2"
200A	3#3/0 & 1#6G	2"	4#3/0 & 1#6G	2-1/2"
225A	3#4/0 & 1#4G	2-1/2"	4#4/0 & 1#4G	2-1/2"
250A	3#250KCMIL & 1#4G	2-1/2"	4#250KCMIL & 1#4G	3"
300A	3#350KCMIL & 1#4G	3"	4#350KCMIL & 1#4G	3"
350A	3#500KCMIL & 1#3G	3"	4#500KCMIL & 1#3G	4"
400A	3#500KCMIL & 1#3G	3-1/2"	4#500KCMIL & 1#3G	4"
450A	(2)3#4/0 & 1#2G	(2) 3"	(2)4#4/0 & 1#2G	(2) 3"
500A	(2)3#250KCMIL & 1#2G	(2) 3"	(2)4#250KCMIL & 1#2G	(2) 3"
600A	(2)3#350KCMIL & 1#1G	(2) 3"	(2)4#350KCMIL & 1#1G	(2) 3"
700A	(2)3#500KCMIL & 1#1/0G	(2) 3-1/2"	(2)4#500KCMIL & 1#1/0G	(2) 4"
800A	(2)3#500KCMIL & 1#1/0G	(2) 3-1/2"	(2)4#500KCMIL & 1#1/0G	(2) 4"
900A	(3)3#350KCMIL & 1#2/0G	(3) 3"	(3)4#350KCMIL & 1#2/0G	(3) 3"
1000A	(3)3#500KCMIL & 1#2/0G	(3) 3-1/2"	(3)4#500KCMIL & 1#2/0G	(3) 3-1/2"
1200A	(4)3#350KCMIL & 1#3/0G	(4) 4"	(4)4#350KCMIL & 1#3/0G	(4) 4"
1600A	(4)3#600KCMIL & 1#4/0G	(4) 4"	(4)4#600KCMIL & 1#4/0G	(4) 4"
2000A	(6)3#400KCMIL & 1#250KCMIL G	(6) 3"	(6)4#400KCMIL & 1#250KCMIL G	(6) 3"
2500A	(8)3#400KCMIL & 1#250KCMIL G	(8) 3"	(8)4#400KCMIL & 1#250KCMIL G	(8) 3"

NOTES:

1. CONDUCTOR SIZES BASED UPON 75°C INSULATION.
2. UNLESS OTHERWISE INDICATED, CONDUCTOR SIZING SHALL MATCH THE SIZE INDICATED ABOVE FOR THE APPLICABLE OVERCURRENT DEVICE. PROVIDE LARGER CIRCUIT WHERE INDICATED.
3. MINIMUM SIZE CONDUIT IS 3/4" UNLESS OTHERWISE INDICATED IN THE SPECIFICATIONS OR ON THE DRAWINGS.
4. PROVIDE A 3-PHASE 4-WIRE CIRCUIT UNLESS DEVICE SERVED DOES NOT HAVE PROVISIONS FOR A NEUTRAL.
5. PROVIDE A 1-PHASE 3-WIRE CIRCUIT UNLESS DEVICE SERVED DOES NOT HAVE PROVISIONS FOR A NEUTRAL.
6. MINIMUM SIZE CONDUIT UNDERGROUND IS 4 INCH EXCEPT FOR SITE BRANCH CIRCUITS SUCH AS LIGHTING AND MISCELLANEOUS POWER AND SYSTEMS WHICH SHALL BE A MINIMUM OF 1 INCH.
7. PROVIDE TYPE OF RACEWAY OR CABLE AS INDICATED IN THE SPECIFICATIONS OR ON THE DRAWINGS.
8. CONDUIT AND WIRE SIZES SHOWN IN SCHEDULE ABOVE ARE BASED ON MAXIMUM CIRCUIT LENGTH OF 100'.
9. CONDUIT AND WIRE SIZES FOR CIRCUITS OVER 100' SHALL BE CALCULATED TO ACCOUNT FOR VOLTAGE DROP.

LIGHTING FIXTURE NOTES

1. TYPE 'EM' EMERGENCY FIXTURES AND TYPE 'X' EXIT SIGNS SHALL BE WIRED TO LINE SIDE OF AREA LIGHTING CIRCUIT TO SENSE LOSS OF NORMAL POWER AND PROVIDE CONTINUOUS TRICKLE CHARGE, AND SHALL OPERATE AT A MINIMUM OF 1 1/2 HOURS UPON LOSS OF NORMAL POWER. SEE SCHEDULE.
2. DIRECTIONAL CHEVRONS SHALL CONFORM TO NFPA AND SHALL BE IDENTIFIABLE AS A DIRECTIONAL INDICATOR AT A MINIMUM OF 40 FT. UNDER ALL SPACE CONDITIONS. SEE DETAIL BELOW.



EXIT SIGN DIRECTIONAL INDICATOR

3. ALL FIXTURES TO BE LED WITH 0-10V DRIVERS STANDARD. ALL FIXTURES TO BE COLOR TEMPERATURE 4000°K..
4. PROVIDE ERICO FASTENING PRODUCTS (CADDY) CAT. No. 515 OR 515A LIGHT FIXTURE SUPPORT CLIPS ON ALL RECESSED LIGHT FIXTURES. PROVIDE MINIMUM FOUR (4) PER FIXTURE.
5. IN ADDITION TO THE REQUIREMENTS OF THE IBC AND THE NEC, ALL RECESSED LIGHT FIXTURES SHALL BE PROVIDED WITH SUPPORT WIRES AT A MINIMUM OF FOUR (4) PER FIXTURE AND LOCATED NOT MORE THAN SIX (6") INCHES FROM EACH CORNER, EXTENDED AND ATTACHED TO THE BUILDING STRUCTURE. HANGER WIRES SHALL BE GALVANIZED CARBON STEEL, ASTM A641, SOFT TEMPER, PRE-STRETCHED WITH A YIELD STRESS LOAD OF AT LEAST THREE (3) TIMES DESIGN LOAD BUT NOT LESS THAN 12 GAUGE (0.106"). FOR ROUND FIXTURES OR FIXTURES SMALLER THAN THE CEILING GRID, PROVIDE A MINIMUM OF FOUR (4) WIRES PER FIXTURE AND LOCATE AT EACH CORNER OF THE CEILING GRID IN WHICH THE FIXTURE IS TO BE LOCATED. ADDITIONALLY, WHERE FIXTURES OF SIZES LESS THAN THE CEILING GRID ARE INDICATED TO BE CENTERED IN THE ACOUSTICAL PANEL, SUCH FIXTURES SHALL BE SUPPORTED WITH A MINIMUM OF TWO (2) 3/4" METAL CHANNELS SPANNING AND SECURED TO THE CEILING TEES.
6. VERIFY ALL LIGHT FIXTURE FINISHES WITH ARCHITECT PRIOR TO PURCHASE.
7. VERIFY ALL LIGHT FIXTURE MOUNTING HEIGHTS WITH ARCHITECT PRIOR TO INSTALLATION.
8. REFER TO DETAILS FOR LIGHT FIXTURE CONTROLS, AND SEQUENCE OF OPERATION.
9. ALL LIGHT FIXTURES SHALL BE AS SPECIFIED. ANY ALTERNATES OR SUBSTITUTIONS REQUIRE PRIOR WRITTEN APPROVAL FROM ARCHITECT PRIOR TO ISSUING SUBMITTALS. SUBMITTALS FOR ALTERNATES OR SUBSTITUTIONS SHALL BE REJECTED WITHOUT REVIEW IF SUBMITTED WITHOUT APPROVAL FROM ARCHITECT.
10. CONTRACTOR SHALL PROVIDE APPROPRIATE DIMMING DRIVERS TO ALL DECORATIVE LIGHT FIXTURES TO MAKE THEM WORK AS INTENDED.
11. CONTRACTOR TO COORDINATE WITH OWNER & SHALL PROVIDE EXTERIOR LIGHTS & SIGNAGE CONTROL (PHOTOCELL/TIMECLOCK) AS REQUIRED

IT/SECURITY NOTES

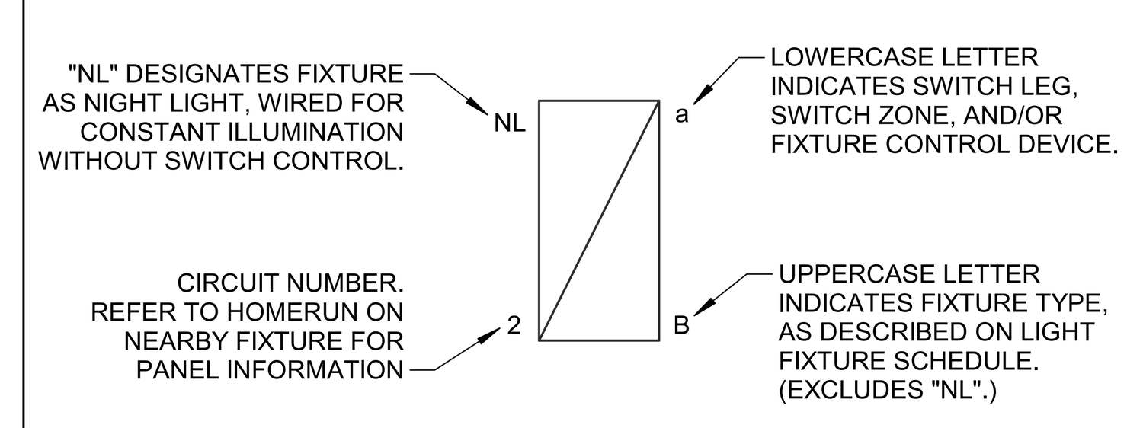
1. INDICATION HERE OF TEL/COM, SECURITY AND ACCESS CONTROL EQUIPMENT IS FOR COORDINATION PURPOSES ONLY. COORDINATE ACTUAL LOCATIONS, QUANTITIES AND ADDITIONAL REQUIREMENTS WITH RESPECTIVE VENDOR.
2. SECURITY CAMERAS AND WIRING PROVIDED BY OTHERS. PROVIDE BACKBOX WITH 1" CONDUIT TO ABOVE CEILING SPACE. COORDINATE EXACT LOCATIONS AND WIRING REQUIREMENTS WITH SECURITY VENDOR.
3. ACCESS CONTROL DEVICES AND WIRING PROVIDED BY OTHERS. PROVIDE BACKBOX WITH 1" CONDUIT TO ABOVE CEILING SPACE. COORDINATE EXACT LOCATIONS AND WIRING REQUIREMENTS WITH SECURITY VENDOR.
4. TELECOMMUNICATIONS DEVICES AND WIRING BY OTHERS. PROVIDE BACKBOX WITH 1"C TO ABOVE CEILING SPACE. COORDINATE EXACT LOCATIONS AND REQUIREMENTS WITH IT VENDOR.
5. SECURITY AND ACCESS CONTROL PANELS AND ASSOCIATED WIRING BY OTHERS. PROVIDE DUPLEX RECEPTACLE AT SECURITY PANEL LOCATION AS SHOWN FOR USE BY SECURITY VENDOR. PROVIDE QUADRUPLEX RECEPTACLE AT ACCESS CONTROL PANEL LOCATION AS SHOWN FOR USE BY SECURITY VENDOR.
6. COORDINATE ALL ACCESS CONTROL REQUIREMENTS WITH DOOR HARDWARE TO ENSURE PROPER OPERATION. PROVIDE 120V TO ALL POWER SUPPLIES AS NEEDED TO POWER ELECTRIFIED HARDWARE (ELECTRIC STRIKES, POWER ASSIST, PUSHBUTTON OPENERS, ETC).
7. PROVIDE ANY PATHWAY REQUIRED BETWEEN SECURITY/ACCESS CONTROL PANELS, IT RACK, AND ADMINISTRATIVE OFFICES. COORDINATE WITH OWNER FOR LOCATIONS.
8. PROVIDE 30A TWIST LOCK RECEPTACLE AT IT RACK FOR OWNERS USE IN POWERING OWNER SUPPLIED IT EQUIPMENT (PDU, UPS, ETC).

EQUIPMENT COORDINATION NOTES

1. UNLESS OTHERWISE NOTED, REFER TO WIRE SCHEDULE FOR EQUIPMENT CONDUCTOR SIZING.
2. REFER TO EQUIPMENT COORDINATION SCHEDULE FOR ALL ADDITIONAL INFORMATION.
3. UNLESS OTHERWISE NOTED, CONTRACTOR SHALL PROVIDE PROPOSED DISCONNECT SWITCH LOCATION FOR ENGINEER REVIEW PRIOR TO ROUGH-IN. IN ALL CASES, DISCONNECT SWITCH SHALL BE LOCATED WITHIN SIGHT OF EQUIPMENT SERVED.
4. DISCONNECT SWITCHES LOCATED OUTSIDE SHALL BE PROVIDED WITH NEMA 3R ENCLOSURE UNLESS OTHERWISE NOTED.

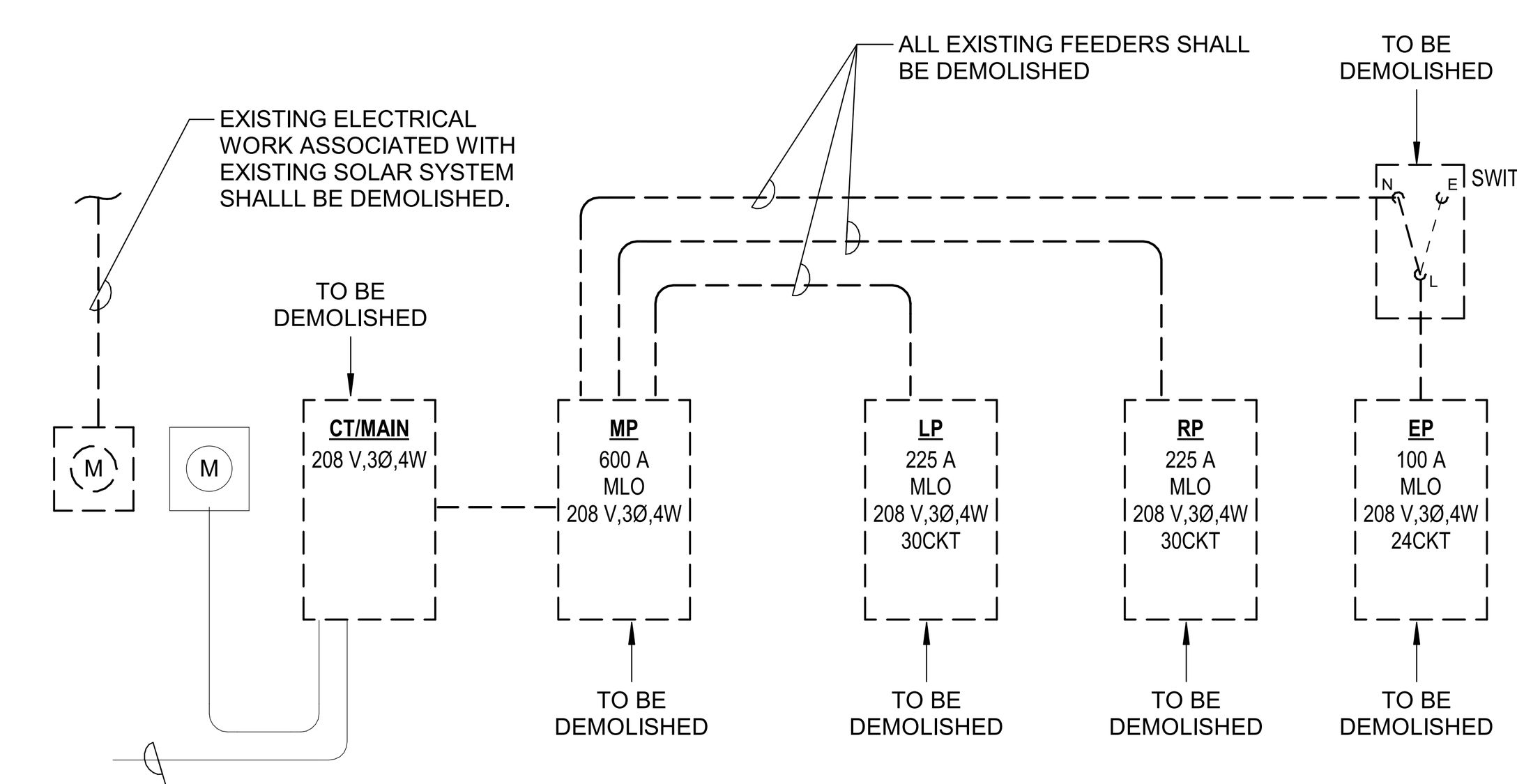
RTU-01 — EQUIPMENT TAG
PP1-1,5,7 — PANEL & CIRCUIT

LIGHT FIXTURE LABELLING DETAIL



NOTES:

1. UNSWITCHED LIGHTING BRANCH CIRCUIT WIRING WILL ONLY BE SHOWN TO A SINGLE FIXTURE FOR EACH CIRCUIT. PROVIDE REQUIRED CONDUCTORS IN 3/4" CONDUIT FOR SWITCHED WIRING TO ALL COMMON CONTROL FIXTURES.
2. PROVIDE ALL LOW VOLTAGE CONTROL WIRING AS REQUIRED FOR PROPER OPERATION OF ALL FIXTURES FROM ASSOCIATED CONTROLS (INCLUDES DIMMERS, OCCUPANCY SENSORS, SCENE CONTROL SWITCHES, ETC.).
3. REFER TO LIGHTING CONTROL RELAY PANEL SCHEDULES, WHERE APPLICABLE, FOR ADDITIONAL CONTROL INFORMATION.
4. FIXTURES WITHOUT SWITCH LEG OR OTHER CONTROL SCHEME DESIGNATION SHALL BE CONTROLLED BY THE CONTROL DEVICES WITHIN THE SAME ROOM OR AREA. (THIS INCLUDES ANY COMBINATION OF 3-WAY AND 4-WAY SWITCHES, SENSORS, SCENE CONTROLLERS, OR OTHER CONTROL DEVICES.)
5. REFER TO LIGHTING DETAILS FOR ADDITIONAL CONTROL REQUIREMENTS.

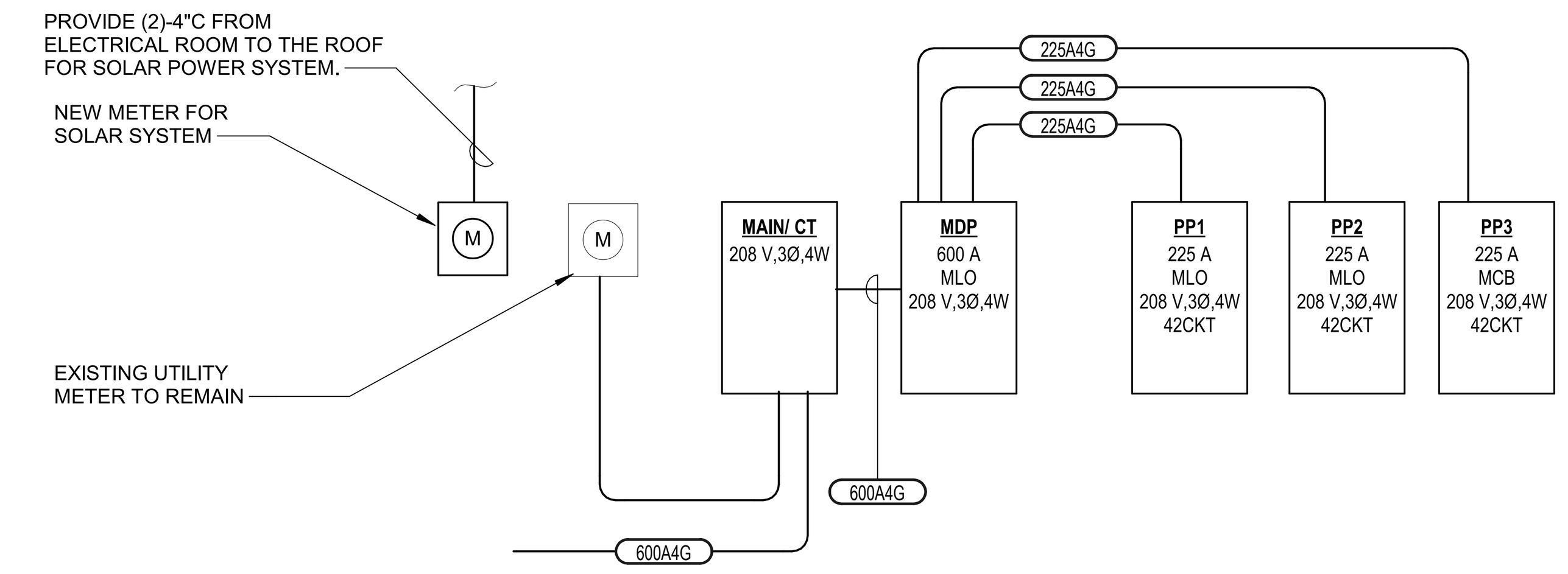


EXISTING POWER RISER DIAGRAM (FOR REFERENCE ONLY)

N.T.S.

FEEDER SCHEDULE

KEY	CONDUIT & CONNECTORS
225A4G	2-1/2" C - 4#4/0, 1#4G
600A4G	2 [2-1/2" C - 4#350, 1#1G]



NEW POWER RISER DIAGRAM

N.T.S.

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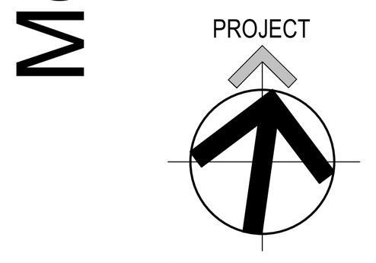
PROJECT



SCHEMATIC DESIGN

KEY PLAN

DRAWING TITLE

ELECTRICAL SCHEDULES

STATE PROJ. NO.	
PROJ. NO.	200802
SCALE	As indicated
DATE	03/30/22
DRAWN BY	Author
APPROVED BY	Approver

ISSUE DATES

NO.	DATE	PURPOSE

E3.01

ABBREVIATIONS

A	GENERAL SERVICE COMPRESSED AIR
A/AMP	AMPERE
AC	AIR COMPRESSOR
ACU	AIR CONDITIONING UNIT(S)
AD	ACCESS DOORS
AD	AREA DRAIN
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AHU	AIR HANDLING UNIT
AMB	AMBIENT
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE
APPROX	APPROXIMATE
AS	AIR SEPARATOR
AV	ACID VENT (CHEMICAL)
AVTR	ACID VENT THRU ROOF
AW	ACID WASTE
BFW	BOILER FEED WATER
BHP	BRAKE HORSEPOWER
BSMT	BASEMENT
BTU	BRITISH THERMAL UNITS
BTUH	BRITISH THERMAL UNITS/HOUR
C	CONNDESATE
C/B	CIRCUIT BREAKER
CER/CEG	CEILING EXHAUST REG./GRILLE
CFM	CUBIC FEET PER MINUTE
CFP	CHEMICAL FEED PUMPS
CHWR	CHILLED WATER RETURN
CHWS	CHILLED WATER SUPPLY
CI	CAST IRON
CLG	CEILING
CLPS	CLEAN LOW PRESSURE STEAM
CMPS	CLEAN MEDIUM PRESSURE STEAM
CMV	CEILING MOUNTED VENTILATOR
CO	CLEANOUT
CO2	CARBON DIOXIDE
COMP	COMPRESSOR
CP	CONDENSATE PUMP
CRU	COMPUTER ROOM UNIT
CT	COOLING TOWER
CU FT	CUBIC FEET
CUH	CABINET UNIT HEATER
CV	COEFFICIENT, VALVE FLOW
CW	COLD WATER
D	DEPTH
dB	DECIBEL
DC	DIRECT CURRENT
DCV	DOUBLE CHECK VALVE
DE	DEIONIZED PROCESS WATER
DEG or °	DEGREE
DI	DISTILLED WATER
DIA	DIAMETER
DN	DOWN
DWBP	DOMESTIC WATER BOOSTER PUMP
DWG	DRAWING
EF	EXHAUST FAN
EFF	EFFICIENCY
EHC	ELECTRICAL HEATING CABLES
ELEC	ELECTRICAL
ELEV	ELEVATOR
ETP	ELECTRIC TRAP PRIMER
EUH	ELECTRIC UNIT HEATER
EVAP	EVAPORATOR
EWC	ELECTRIC WATER COOLER
EWH	ELECTRIC WATER HEATER
EXH	EXHAUST
EXP	EXPANSION
F	FAHRENHEIT
FA	FIRE ALARM
FCU	FAN COIL UNIT
FD	FLOOR DRAIN
FDC	FIRE DEPARTMENT CONNECTION
FHC	FIRE HOSE CABINET
FM	FLOW METER
FP	FIRE PUMP
FPM	FEET PER MINUTE
FPS	FEET PER SECOND
FS	FLOOR SINK
FT	FOOR OR FEET
FVC	FIRE VALVE CABINET
G	GAS
GA	GAUGE
GAL	GALLONS
GND	GROUND
GPH	GALLONS PER HOUR
GPM	GALLONS PER MINUTE
GRU	GREASE RECOVERY UNIT
GW	GREASE WASTE
H	HEIGHT
HD	HEAD
HP	HORSEPOWER
HPG	HIGH PRESSURE GAS
HPS	HIGH PRESSURE STEAM
HR	HOUR(S)
HT	HEAT
HTR	HEATER
HUM	HUMIDIFIER
HVAC	HEATING, VENTILATION AND AIR CONDITIONING
HW	HOT WATER
HWR	HOT WATER RETURN

ABBREVIATIONS

HWRP	HOT WATER RETURN PUMP
HWS	HOT WATER SUPPLY
HX	HEAT EXCHANGE
ID	INSIDE DIAMETER
IEF	IN-LINE EXHAUST FAN
IN	INCHES
IN WG	INCHES OF WATER, GAUGE (PRESSURE)
IW	INDIRECT WASTE
JP	JOCKEY PUMP
KEF	KITCHEN EXHAUST FAN
KVA	KILOVOLT AMPERE
KW	KILOWATT
KWH	KITCHEN WATER HEATER
L	LENGTH
LA	LABORATORY COMPRESSED AIR
LAV	LAVATORY
LBS/HR	POUNDS PER HOUR
LF	LINEAR FEET
LG	LABORATORY GAS
LPC	LOW PRESSURE CONDENSATE
LPS	LOW PRESSURE STEAM
LV	LABORATORY VACUUM
MA	MEDICAL COMPRESSED AIR
MAGP	MASTER ALARM GAS PANEL
MAX	MAXIMUM
MBH	BTU PER HOUR (THOUSAND)
MECH	MECHANICAL
MFR	MANUFACTURER
MIN	MINIMUM
MPS	MEDIUM PRESSURE STEAM
MUAU	MAKE UP AIR UNIT
MV	MEDICAL VACUUM
N2	NITROGEN
N2O	NITROUS OXIDE
N.C.	NORMALLY CLOSED
N.O.	NORMALLY OPEN
N/A	NOT APPLICABLE
NIC	NOT IN CONTRACT
NTS	NOT TO SCALE
O	OXYGEN
OA	OUTSIDE AIR
OD	OUTSIDE DIAMETER
ORD	OVERFLOW ROOF DRAIN
ORL	OVERFLOW RAIN LEADER
P	POLE
PH / Ø	PHASE
PRESS	PRESSURE
PRV	PRESSURE REDUCING VALVE
PSI	POUNDS PER SQUARE INCH
PVC	POLYVINYL CHLORIDE
QTY	QUANTITY
RD	ROOF DRAIN
REF	ROOF EXHAUST FAN
RM	ROOM
RO	REVERSE OSMOSIS WATER
RPD/RPZ	REDUCED PRESSURE DEVICE
RPM	REVOLUTIONS PER MINUTE
RTU	ROOF TOP UNIT
RV	RADON VENT
RL	RAIN LEADER
S	SOIL
SAC	SHOP AIR COMPRESSOR
SCP	STEAM CONDENSATE PUMP
SEP	SEWAGE EJECTOR PUMP
SP	STATIC PRESSURE
SP	SUMP PUMP
SPEC	SPECIFICATION
SQ	SQUARE
SS	SOIL/STACK
ST	STORM
STD	STANDARD
SWH	STEAM WATER HEATER
TAG	IDENTIFICATION OF EQUIPMENT
TEMP	TEMPERATURE
TMV	THERMOSTATIC MIXING VALVE
TP	TRAP PRIMER
TW	TEMPERED WATER
TWR	TEMPERED WATER RETURN
TYP	TYPICAL
UH	UNIT HEATER
UR	URINAL
V	VENT
VAC	VACUUM
VEL	VELOCITY
VFC	VARIABLE FREQUENCY CONTROLLER
VIF	VERIFY IN FIELD
VOL	VOLUME
VTR	VENT THRU ROOF
W	WASTE
WC	WATER CLOSET
WG	WIREGUARD
WH	WALL HYDRANT (HOSE BIBB)
WHA	WATER HAMMER ARRESTER
WI	WIDTH
WP	WEATHERPROOF
WTG	WALL TRANSFER GRILLE
WV	WASTE AND VENT COMBINATION

PLUMBING SYMBOLS

- COLD WATER
- HOT WATER
- HOT WATER RECIRCULATING
- VENT
- SOIL OR WASTE PIPE
- RADON VENT
- OVERFLOW RAIN LEADER
- STORM DRAIN
- GAS PIPE
- (M) WATER METER ASSEMBLY
- [G] GAS METER ASSEMBLY

FITTINGS AND VALVES

- BALL VALVE
- DIRECTION OF FLUID FLOW
- GATE VALVE
- BUTTERFLY VALVE
- CALIBRATED BALANCING VALVE
- GAS COCK
- CHECK VALVE
- PRESSURE REDUCING VALVE
- THERMOSTATIC MIXING VALVE
- SOLENOID VALVE
- DRAIN VALVE WITH HOSE END, CAP & CHAIN OR HOSE BIBB
- WALL HYDRANT
- TAKEOFF FROM TOP OF MAIN PIPE
- TAKEOFF FROM BOTTOM OF MAIN PIPE
- UNION
- PIPE ELBOW UP OR PIPE TEE UP
- PIPE ELBOW DOWN
- PIPE TEE DOWN
- WALL CLEANOUT OR BLIND FLANGE
- FLOOR CLEANOUT
- "P" TRAP
- STRAINER OR STRAINER WITH BLOW-DOWN VALVE HOSE END, CAP AND CHAIN
- BACKFLOW PREVENTER (2 1/2" AND LARGER)
- PUMP
- WATER HAMMER ARRESTOR
- PIPE CAP OR CAPPED END OF PIPE
- AIR VENT
- PRESSURE RELIEF SAFETY VALVE
- AQUASTAT
- TEMPERATURE SENSOR WITH SEPARABLE SOCKET IN IMMERSIBLE WELL
- THERMOMETER WITH SEPARABLE SOCKET IN IMMERSIBLE WELL
- PRESSURE GAUGE

PLUMBING GENERAL NOTES

1. ALL WORK SHALL BE PERFORMED IN COMPLIANCE WITH CURRENT APPLICABLE CODES, ORDINANCES, THE REGULATORY AGENCIES HAVING JURISDICTION AND THE SPECIFICATIONS. THE SPECIFICATIONS MAY EXCEED THE REQUIREMENTS OF THE CODE, IN WHICH CASE, THE SPECIFICATION MUST BE FOLLOWED.
2. THE INTENT OF THESE DOCUMENTS IS FOR THE MEP TRADES TO FURNISH AND INSTALL COMPLETE MECHANICAL AND ELECTRICAL SYSTEMS. THE SPECIFIED PLUMBING SYSTEM SHALL BE COMPLETE IN ALL RESPECTS; OPERATIONAL, TESTED, ADJUSTED, APPROVED BY THE AUTHORITIES HAVING JURISDICTION AND READY FOR BENEFICIAL USE BY THE OWNER.
3. THE TRADES SHALL OBTAIN AND REVIEW ALL CONTRACT DOCUMENTS BEFORE SUBMITTING A BID. INFORMATION IS PROVIDED ON THE VARIOUS DRAWINGS, SCHEDULES, SPECIFICATIONS AND ALL OF THE VARIOUS DOCUMENTS IN THE BIDDING PACKAGE. THE CONTRACT DOCUMENTS ARE COMPLEMENTARY AND FORM A TOTAL PROJECT DESIGN AND INFORMATION SOURCE FOR CONSTRUCTION PURPOSES.
4. THE DRAWINGS ARE DIAGRAMMATIC AND INDICATE THE GENERAL ARRANGEMENT OF SYSTEMS AND WORK INCLUDED IN THE CONTRACT. COORDINATE LOCATIONS OF EQUIPMENT WITH OTHER TRADES BEFORE AND DURING CONSTRUCTION. ANY MODIFICATION TO THE EQUIPMENT LAYOUT, REQUIRED FOR INSTALLATION, IS TO BE PERFORMED UNDER THE CONTRACT AGREEMENT, AT NO ADDITIONAL COST. REFER TOP DETAILS, SCHEDULES AND SPECIFICATIONS FOR ADDITIONAL INFORMATION.
5. THE CONTRACTOR SHALL BECOME THOROUGHLY FAMILIAR WITH THE PROJECT DOCUMENTS OF ALL TRADES. THE DRAWINGS ARE DIAGRAMMATIC AND SHOW THE GENERAL ARRANGEMENT OF EQUIPMENT AND PIPING. THE CONTRACTOR SHALL COORDINATE THE EXACT LOCATION OF EQUIPMENT AND PIPING INSTALLATION WITH ALL THE TRADES BEFORE COMMENCING WORK.
6. EQUIPMENT SHALL BE INSTALLED IN ACCESSIBLE LOCATIONS, WHEN EQUIPMENT MUST BE LOCATED ABOVE AN INACCESSIBLE CEILING (GYP BOARD OR EQUIVALENT), OR BEHIND A WALL, AN APPROPRIATE ACCESS DOOR SHALL BE PROVIDED. IF AN ACCESS DOOR IS REQUIRED, IT SHALL BE OF A RATING APPROPRIATE FOR THE WALL/CEILING IN WHICH IT IS TO BE INSTALLED. THE CONTRACTOR SHALL COORDINATE LOCATIONS OF ACCESS PANELS FOR ALL VALVES AND DEVICES, REQUIRING ACCESS, WITH THE ARCHITECT, PRIOR TO INSTALLATION OF SUCH DEVICES OR OTHER APPURTENANCES.
7. WHERE A CONFLICT OCCURS BETWEEN THE DOCUMENTS, IT SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT. CARRY AS PART OF THE BID THE LARGER QUANTITY AND/OR MORE EXPENSIVE ITEM(S).
8. THIS CONTRACT SHALL INCLUDE ALL THE NECESSARY PIPING, FITTINGS, TRANSITIONS, OFFSETS, ETC. AS REQUIRED TO INSTALL PIPING, EQUIPMENT, MAINTAINING PROPER CLEARANCES AND TO AVOID ANY CONFLICTS WITH OTHER TRADES, AND THE BUILDING STRUCTURE. THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR ANY ASSUMPTIONS, OMISSIONS OR ERRORS HE MAKES AS A RESULT OF HIS FAILURE TO COORDINATE WITH OTHER TRADES OR BECOME FULLY FAMILIAR WITH THE PROJECT DOCUMENTS OF ALL TRADES.
9. DO NOT INSTALL ANY PIPING OVER ELECTRICAL PANELS, TRANSFORMERS, SPECIAL EQUIPMENT, OR THROUGH ELECTRICAL ROOMS, DATA ROOMS, ELEVATOR MACHINE ROOM, STAIRWELL OR STAIRWELL WALLS THAT ARE NOT ASSOCIATED WITH OR SERVE THE RESPECTIVE ROOMS. COORDINATE THE LOCATION OF ELECTRICAL EQUIPMENT IN THE FIELD AND ADJUST AS NECESSARY.
10. IT IS NOT THE INTENT OF THE DRAWINGS TO SHOW INDIVIDUAL BRANCH PIPING TO EACH PLUMBING FIXTURE; ONLY THE BRANCH PIPING TO GROUPS OF FIXTURES IS INDICATED. EACH AND EVERY FIXTURE SHALL BE PROPERLY PIPED TO WATER, WASTE, AND VENT PIPING SYSTEMS. REFER TO THE PLUMBING SCHEDULES FOR INDIVIDUAL PIPE SIZES TO EACH FIXTURE.
11. PROVIDE PROPER PIPING SYSTEM IDENTIFICATION LABELS, SLOPES FOR DRAIN PIPING, CLEANOUTS, HANGERS, ETC. IN ACCORDANCE WITH THE PLUMBING CODE.
12. REFER TO THE ARCHITECTURAL DRAWINGS FOR THE EXACT LOCATION AND MOUNTING HEIGHTS OF PLUMBING FIXTURES OR EQUIPMENT. ALL SUCH EQUIPMENT AND EQUIPMENT COLORS AND FINISHES SHALL BE COORDINATED WITH THE ARCHITECT. MOUNTING HEIGHTS SHALL BE APPROVED BY THE ARCHITECT.
13. INSTALL WATER HAMMER ARRESTORS (WHA) AT ALL QUICK CLOSING VALVES (FLUSH VALVES, SOLENOID VALVES, ETC.); SIZE SHALL BE BASED ON FIXTURE UNITS PER PDI STANDARDS AND INSTALLED PER MANUFACTURER'S RECOMMENDATION.
14. ALL PIPING, DRAINS, STRAINERS, FAUCETS, FAUCET AERATORS, FILTERS, ETC. SHALL BE THOROUGHLY CLEANED AND FLUSHED IMMEDIATELY BEFORE PROJECT COMPLETION. PROVIDE CERTIFICATION ON CONTRACTOR'S LETTER HEAD THAT THIS WORK HAS BEEN COMPLETED.
15. DOMESTIC WATER DROPS AND RISERS INSTALLED IN EXTERIOR WALLS SHALL BE INSTALLED ON THE WARM SIDE OF INSULATION AND THE LOCATION SHALL BE MADE INFILTRATION FREE.
16. BEFORE INSTALLATION, COORDINATE THE WORK WITH OWNER-FURNISHED EQUIPMENT, INCLUDING REQUIRED SERVICE CONNECTIONS, FACTORY START UPS AND INSTALLATION OF FIELD DEVICES.
17. PIPE ALL CONDENSATE DRAINS FROM MECHANICAL EQUIPMENT COOLING COILS, BY GRAVITY (INTERIOR AIR HANDLING UNITS, FAN COIL UNITS, AC UNITS, ETC.) TO FLOOR DRAINS, JANITOR'S SINKS OR OTHER APPROVED LOCATION THROUGH AN AIR GAP. EACH CONDENSATE DRAIN SHALL BE TRAPPED AT THE EQUIPMENT DRAIN OUTLET, REFER TO TRAP DETAILS ON DRAWINGS. COORDINATE EXACT LOCATION OF EQUIPMENT WITH THE HVAC CONTRACTOR AND ADJUST AS NECESSARY.
18. INSULATE ALL WASTE ABOVE SLAB RECEIVING CONDENSATE FROM EQUIPMENT INCLUDING "P" TRAPS AND BRANCH WASTE PIPING
19. ALL INDIRECT WASTE DRAINS SHALL BE PIPED TO FLOOR DRAINS, FUNNELS OR FIXED AIR GAP FITTINGS, THROUGH AIR GAP OR TO A SINK DRAIN TAILPIECE.
20. INSTALL TRAP PRIMERS OR TRAP GUARD SEALER FOR FLOOR DRAINS, HUB DRAINS AND FIXED AIR GAP FITTINGS, WHERE TRAP IS SUBJECT TO LOSS OF SEAL BY EVAPORATION, CONNECT TRAP PRIMER TO COLD WATER LINE. PROVIDE ISOLATION VALVES AND EXTEND SLOPED PRIMING LINE TO DRAIN TRAPS.
21. COORDINATE ALL PLUMBING EQUIPMENT REQUIRING POWER, FOR EXACT LOCATION AND POWER REQUIREMENTS WITH THE ELECTRICAL CONTRACTOR.
22. ALL EXTERIOR EXPOSED GAS PIPING SHALL BE PRIMED AND PAINTED.
23. FLOOR MOUNTED PLUMBING EQUIPMENT SHALL BE INSTALLED ON A 6" CONCRETE HOUSE-KEEPING PAD. COORDINATE SIZE AND FINAL LOCATION OF ALL CONCRETE PADS WITH THE STRUCTURAL ENGINEER. PADS SHALL BE MINIMUM 6" LARGER THAN THE EQUIPMENT IN BOTH HORIZONTAL DIRECTIONS.
24. COORDINATE EXACT LOCATION OF PLUMBING SERVICES ENTERING THE BUILDING WITH THE SITE CONTRACTOR AND UTILITY DRAWINGS PRIOR TO INSTALLATION. COORDINATE ALL FOUNDATION WALL PENETRATIONS AND INVERT ELEVATIONS WITH THE GENERAL CONTRACTOR AND/OR CONSTRUCTION MANAGER BEFORE COMMENCING WORK.
25. SEISMICALLY SUPPORT THE EQUIPMENT AS REQUIRED BY CODE, THE AUTHORITY HAVING JURISDICTION, AND/OR AS SPECIFIED. SUBMIT ENGINEERED INSTALLATION DETAILS PER THE SPECIFICATIONS. THE CONTRACTOR'S SEISMIC ENGINEER SHALL REVIEW THE INSTALLATION AND PROVIDE A DETAILED REPORT FOR THE RECORD.
26. PROVIDE PIPE EXPANSION COMPENSATION FOR THE VARIOUS PIPING SYSTEMS. SUBMIT ENGINEERED DETAILS FOR APPROVAL AND VERIFY INSTALLATION IS IN ACCORDANCE WITH THE CODE. THE CONTRACTOR'S CONSULTING ENGINEER SHALL REVIEW THE INSTALLATION AND PROVIDE A REPORT OF THE FINDINGS.

PLUMBING DEMOLITION GENERAL NOTES

1. BEFORE SUBMITTING BID, THE CONTRACTORS SHALL VISIT THE JOB SITE AND BECOME FULLY FAMILIAR WITH THE EXISTING CONDITIONS AND THE DOCUMENTS OF OTHER TRADES UNDER WHICH THEIR WORK WILL BE ACCOMPLISHED. THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR ANY ASSUMPTIONS, OMISSIONS OR ERRORS MADE AS A RESULT OF FAILURE TO BECOME FAMILIAR WITH THE EXISTING CONDITIONS.
2. THE CONTRACTOR SHALL COORDINATE AND SCHEDULE ANY DAILY INTERRUPTIONS OR SHUTDOWNS OF THE EXISTING SYSTEMS IN ADVANCE WITH OWNER'S DESIGNATED REPRESENTATIVE. THIS SHALL INCLUDE SERVICES INTERRUPTIONS, CONNECTIONS AND DISRUPTIONS EFFECTING OTHER TRADES (MECHANICAL AND ELECTRICAL). INCLUDE ALL WORK REQUIRED TO ALLOW PHASED CONSTRUCTION WHERE NECESSARY.
3. DEMOLITION DRAWINGS ARE STRICTLY DIAGRAMMATIC AND SHOW GENERAL ARRANGEMENT AND APPROXIMATE LOCATION OF EXISTING MECHANICAL AND ELECTRICAL EQUIPMENT. IT IS NOT THE INTENT OF THESE DRAWINGS TO SHOW ALL EQUIPMENT, PIPING OR CONDUIT TO BE REMOVED. EQUIPMENT NOT BEING REUSED SHALL BE REMOVED, INCLUDING ALL ASSOCIATED HANGERS, SUPPORTS, PIPES, CONDUITS, WIRES, AND CONTROLS BACK TO THE POINT OF ORIGIN.
4. REFER TO THE ARCHITECTURAL DEMOLITION DRAWINGS AND SPECIFICATIONS FOR ADDITIONAL INFORMATION AND REQUIREMENTS. THE FULL EXTENT OF THE DEMOLITION AND RECONSTRUCTION SCOPE OF WORK SHALL BE DETERMINED BY THE ENTIRE SET OF BID DOCUMENTS.
5. THE CONTRACTORS SHALL COORDINATE THE DEMOLITION SCOPE OF WORK WITH THE GENERAL CONTRACTOR'S OR CONSTRUCTION MANAGER'S PHASING SCHEDULE PRIOR TO COMMENCEMENT OF WORK. CARE MUST BE TAKEN SO AS NOT TO DESTROY, REMOVE OR DEMOLISH ANY EQUIPMENT, APPURTENANCES OR DEVICES INTENDED TO REMAIN. PROVIDE TEMPORARY SERVICES AND SYSTEM MODIFICATIONS TO ACCOMMODATE CONTINUOUS OPERATION OF ACTIVE SYSTEM.
6. THE LOCATION OF EXISTING PLUMBING SYSTEM SHOWN ON FLOOR PLANS, IS BASED ON THE BEST AVAILABLE INFORMATION. THE CONTRACTOR SHALL FIELD VERIFY PRIOR TO COMMENCEMENT OF CONSTRUCTION, EXACT QUANTITY AND LOCATION(S) OF EXISTING EQUIPMENT, PIPING, PLUMBING FIXTURES, ETC. TO BE REMOVED AND ADJUST AS NECESSARY.
7. ALL EQUIPMENT, PLUMBING FIXTURES AND ASSOCIATED PIPING INDICATED TO BE REMOVED OR RELOCATED, SHALL BE DISCONNECTED AND REMOVED, INCLUDING HANGERS AND OTHER COMPONENTS, UP TO NEAREST EXISTING ACTIVE MAIN OR BRANCH LINE AND CAPPED AS CLOSE TO THE ACTIVE LINE AS POSSIBLE. NO EQUIPMENT, PIPING, OR CONDUIT SHALL BE ABANDONED IN PLACE, UNLESS SPECIFICALLY NOTED.
8. ALL SYSTEMS TO BE REMOVED SHALL BE REMOVED BACK TO THE POINT OF SOURCE. THE CONTRACTOR SHALL VERIFY WHICH SYSTEMS MUST REMAIN ACTIVE TO SERVE ADJACENT SPACES DURING CONSTRUCTION. SHOULD THE CONTRACTOR ENCOUNTER, DURING DEMOLITION OF EXISTING WALLS OR CHASES, ANY PIPING OR CONDUIT WHICH MUST REMAIN ACTIVE, HE SHALL IMMEDIATELY GIVE NOTICE TO THE ENGINEER, GENERAL CONTRACTOR OR CONSTRUCTION MANAGER.
9. ALL SALVAGEABLE MATERIALS OR EQUIPMENT TO BE REMOVED SHALL BE TURNED OVER TO THE OWNER AT THE END OF EACH DAY. ITEMS REMOVED AND NOT REUSED OR CLAIMED BY THE OWNER SHALL BECOME PROPERTY OF THE TRADE CONTRACTOR AND SHALL BE TRANSPORTED FROM THE SITE. SITE STORAGE OF REMOVED ITEMS WILL NOT BE PERMITTED.
10. PROPERLY DISPOSE OF ALL DEMOLISHED EQUIPMENT IN COMPLIANCE WITH CODES AND REGULATIONS; THIS APPLIES TO HAZARDOUS MATERIALS AND CONTAMINATED ITEMS TO BE DEMOLISHED.
11. ANY UNDERGROUND PIPING CALLED FOR TO BE ABANDONED IN PLACE SHALL BE DISCONNECTED FROM ACTIVE MAINS, DRAINED AND CAPPED AT BOTH ENDS.
12. THE CONTRACTOR SHALL VERIFY EXACT LOCATION AND INVERT ELEVATION OF EXISTING BURIED SANITARY, WASTE OR STORM PIPING PRIOR TO ANY EXCAVATION FOR NEW PIPING CONNECTION AND SHALL NOTIFY ENGINEER OF ANY PROBLEMS.
13. EXISTING PIPING SERVING PLUMBING FIXTURES OR OTHER EQUIPMENT INDICATED TO REMAIN, BUT ARE IN CONFLICT WITH NEW EQUIPMENT INSTALLATION, SHALL BE REMOVED AND REROUTED AS NECESSARY TO ACCOMMODATE THE NEW SYSTEM INSTALLATION
14. THE CONTRACTOR SHALL OBTAIN EXISTING PLUMBING DRAWINGS FROM THE OWNER IF AVAILABLE TO HELP DETERMINE FULL SCOPE OF WORK.

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Hartford, CT 06106
860.547.1970

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ROCKY HILL, CT 06067
P: (860) 436-4336
F: (860) 436-4450
www.rzdesignassociates.com

BLOOMFIELD PUBLIC LIBRARY
McMAHON WINTONBURY LIBRARY ADDITION & RENOVATIONS

1015 BLUE HILLS AVE.
BLOOMFIELD, CT 06002

PROJECT

SCHEMATIC DESIGN

KEY PLAN

DRAWING TITLE

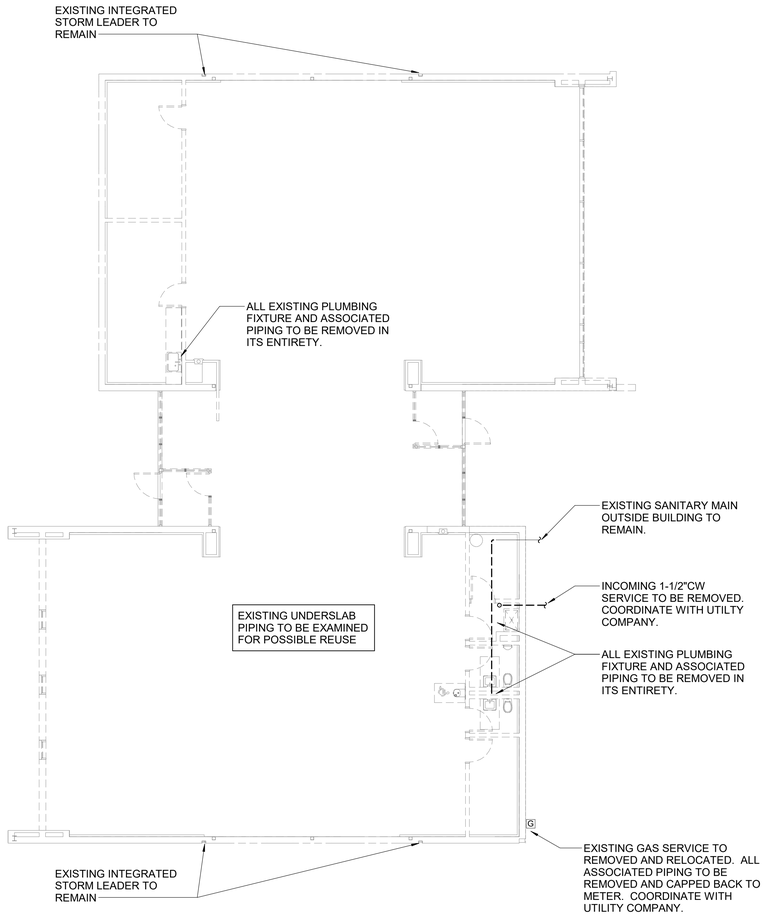
PLUMBING GENERAL INFORMATION

STATE PROJ. NO.	
PROJ. NO.	200802
SCALE	As indicated
DATE	03/30/22
DRAWN BY	MAW
APPROVED BY	Approver

ISSUE DATES

NO.	DATE	PURPOSE

P0.01



1 FIRST FLOOR PLUMBING DEMOLITION PLAN
1/8" = 1'-0"

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PROJECT

SCHEMATIC DESIGN

KEY PLAN

DRAWING TITLE

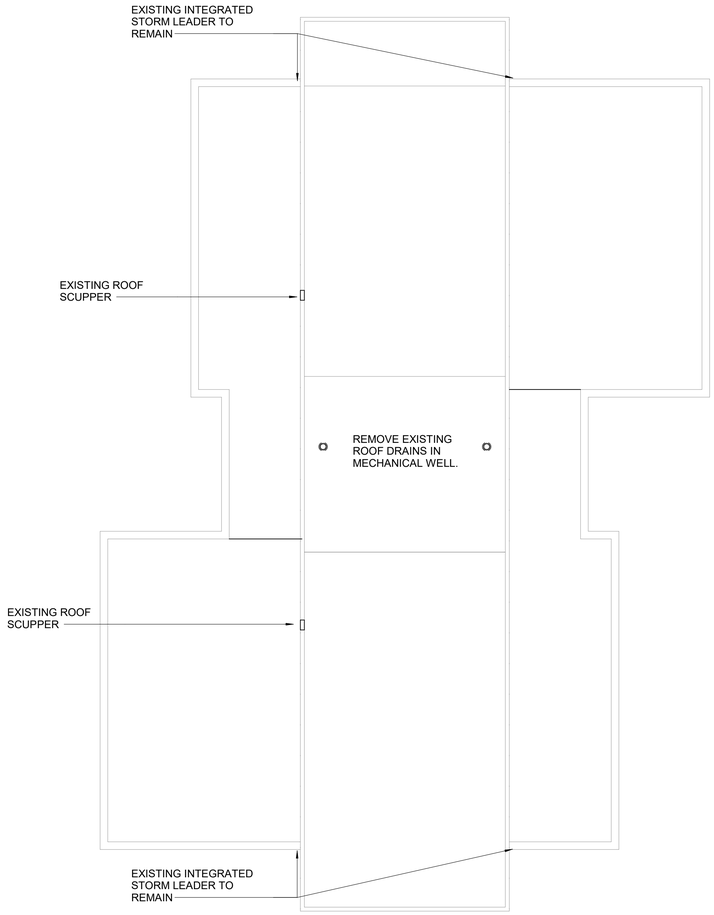
FIRST FLOOR PLUMBING DEMOLITION PLAN

STATE PROJ. NO.	
PROJ. NO.	200802
SCALE	1/8" = 1'-0"
DATE	03/30/22
DRAWN BY	MAW
APPROVED BY	Approver

ISSUE DATES

NO.	DATE	PURPOSE

PD1.01



1 ROOF PLUMBING DEMOLITION PLAN
1/8" = 1'-0"

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BLOOMFIELD PUBLIC LIBRARY
McMAHON WINTONBURY LIBRARY ADDITION &
RENOVATIONS
1015 BLUE HILLS AVE.
BLOOMFIELD, CT 06002

PROJECT

SCHEMATIC DESIGN

KEY PLAN

DRAWING TITLE

ROOF PLUMBING
DEMOLITION PLAN

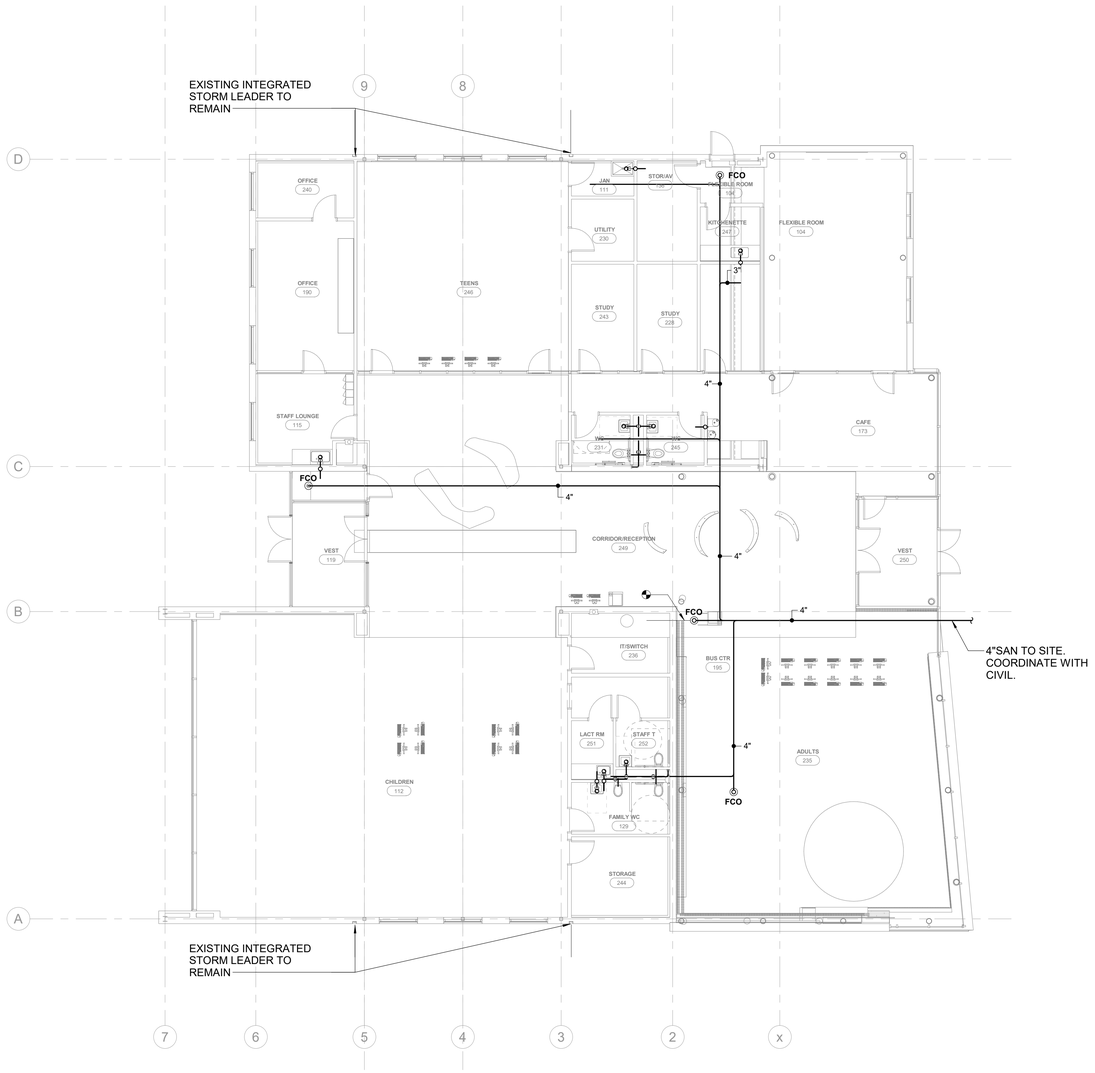
STATE PROJ. NO.	
PROJ. NO.	200802
SCALE	1/8" = 1'-0"
DATE	03/30/22
DRAWN BY	MAW
APPROVED BY	Approver

ISSUE DATES

NO.	DATE	PURPOSE

PD1.06

3/28/2022 11:42:37 AM BIM 360://Bloomfield Library - McMahon Building/MEP_21-300B Bloomfield Libraries-McMahon Wintonbury.rvt



1 FIRST FLOOR DRAINAGE PLAN
1/8" = 1'-0"

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BLOOMFIELD PUBLIC LIBRARY
McMAHON WINTONBURY LIBRARY ADDITION & RENOVATIONS

1015 BLUE HILLS AVE.
BLOOMFIELD, CT 06002

PROJECT

SCHEMATIC DESIGN

KEY PLAN

DRAWING TITLE

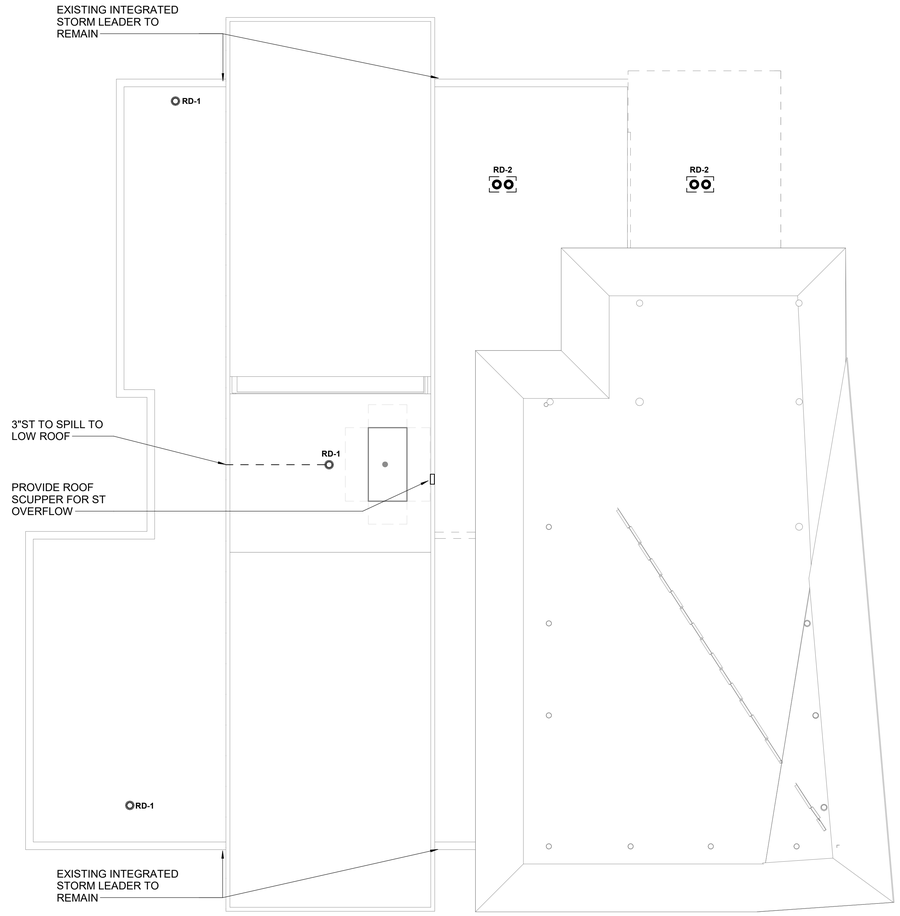
FIRST FLOOR DRAINAGE PLAN

STATE PROJ. NO.	
PROJ. NO.	200802
SCALE	1/8" = 1'-0"
DATE	03/30/22
DRAWN BY	MAW
APPROVED BY	Approver

ISSUE DATES

NO.	DATE	PURPOSE

P1.01



1 PLUMBING ROOF PLAN
1/8" = 1'-0"

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BLOOMFIELD, CT 06002

PROJECT

SCHEMATIC DESIGN

KEY PLAN

DRAWING TITLE

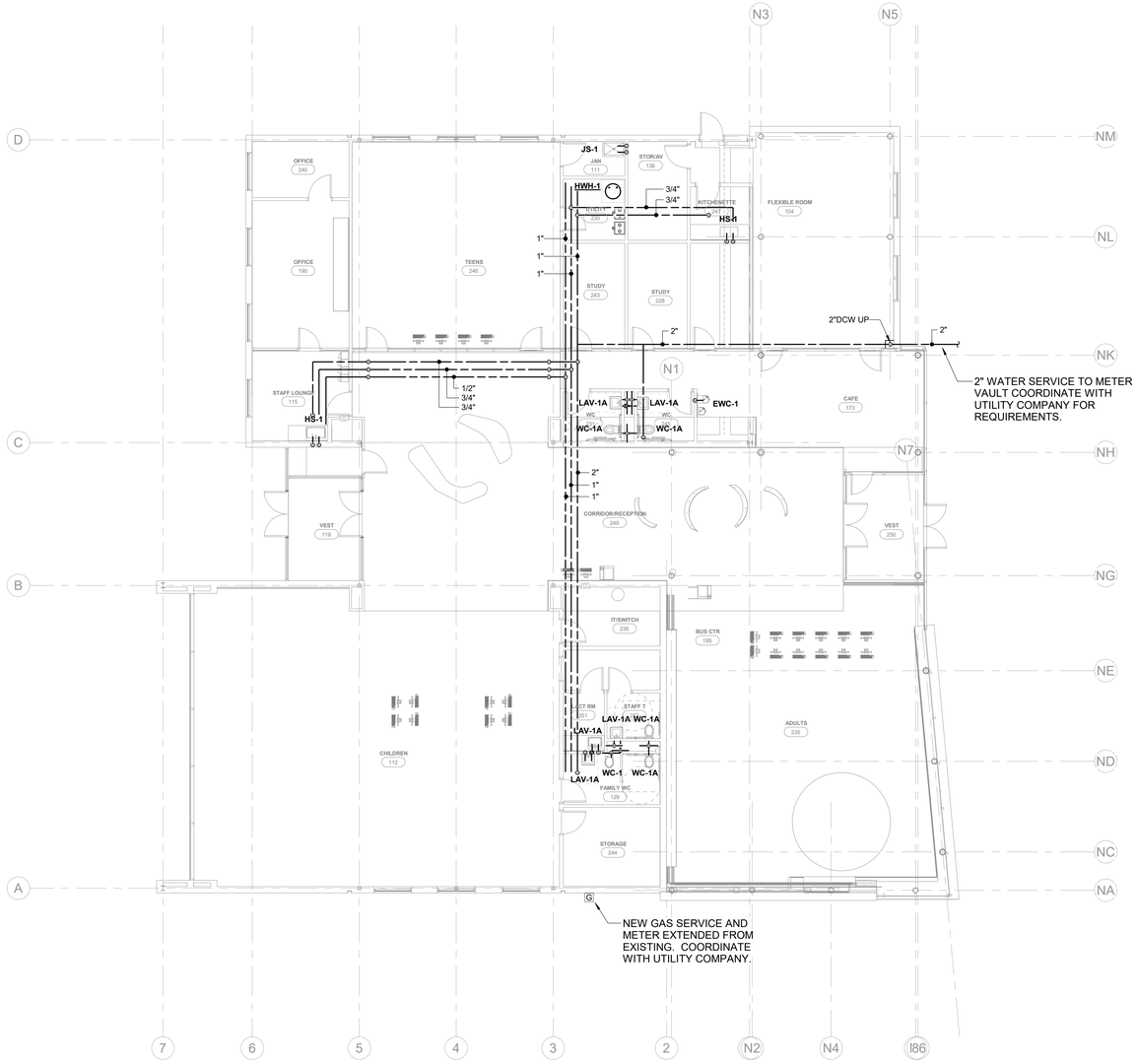
PLUMBING ROOF PLAN

STATE PROJ. NO.	
PROJ. NO.	200802
SCALE	1/8" = 1'-0"
DATE	03/30/22
DRAWN BY	MAW
APPROVED BY	Approver

ISSUE DATES

NO.	DATE	PURPOSE

P1.06



1 FIRST FLOOR PLUMBING SUPPLY PLAN
1/8" = 1'-0"

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McMAHON WINTONBURY LIBRARY ADDITION & RENOVATIONS

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BLOOMFIELD, CT 06002

PROJECT

SCHEMATIC DESIGN

KEY PLAN

DRAWING TITLE

FIRST FLOOR PLUMBING SUPPLY PLAN

STATE PROJ. NO.	
PROJ. NO.	200802
SCALE	1/8" = 1'-0"
DATE	03/30/22
DRAWN BY	MAW
APPROVED BY	Approver

ISSUE DATES

NO.	DATE	PURPOSE

P2.01

3/28/2022 11:42:35 AM BIM 360://Bloomfield Library - McMahon Building/MEP_21-300B Bloomfield Libraries-McMahon Wintonbury.rvt

APPENDIX

WELTI GEOTECHNICAL, P.C.

GEOTECHNICAL ENGINEERING

227 Williams Street · P.O. Box 397
Glastonbury, CT 06033-0397

(860) 633-4623 / FAX (860) 657-2514

March 3, 2022

Ms. Nancy P. Haynes
Purchasing and Risk Manager
Town of Bloomfield
800 Bloomfield Avenue
Bloomfield, CT 06002

Re: Geotechnical Study for Proposed Addition to McMahon Library, 1015 Blue Hills Avenue, Bloomfield, CT

Dear Ms. Haynes:

1.0 Herewith are the data from the test borings taken at the above referenced site. Two borings were drilled at the proposed building addition to a maximum depth of 51 feet. The borings locations are shown on the attached plan. *The borings were drilled by Clarence Welti Associates, Inc. and sampling was conducted by this firm solely to obtain indications of subsurface conditions as part of a geotechnical exploration program. No services were performed to evaluate subsurface environmental conditions.*

2.0 The **Subject Project** will include the construction of a one story slab on grade building addition with a footprint about 2,000 sf. The finished floor will match the floor level of the existing building at Elev. 125. The existing grades in the proposed building addition footprint range from about Elev.124 to Elev.125.

3.0 The **Geologic Origin** of the natural inorganic soils on the site is from glacial lake deposits to about 50 feet below grade. These deposits consist generally of stratified sands to about 20 feet overlying silt or clayey silt to the top of the weathered rock at 49 feet.

3.1 The **Soils Cross Section** from the borings is generally as follows:

Topsoil to 5" to 13"

FILL, fine to medium SAND, trace Silt and Glass; or fine to coarse SAND, little Silt and Gravel to 2 to 3 feet, medium compact

Fine to medium SAND, trace to little Silt to 20 feet, medium compact

SILT, trace to little fine Sand to 26 feet

Varved SILT and CLAY to 49 feet, medium stiff

Weathered Bedrock to 51+ feet, very dense

3.2 The **Water Table** was at 9 feet below the existing grades at the completion of the borings.

4.0 The **Criteria for Foundation Type and Loading** are as follows:

1. The maximum total settlement should not exceed 3/4" and the maximum differential settlement should not exceed ½ the maximum settlement over a length of 50 feet.

2. The Foundations and Structures must address the seismic section of the building code.

3. The Slab at Grade floors must not settle differentially more than ½" in excess of the structure subsidence.

4.1 Regarding item 2 (above), the seismic site soil profile classification is **"D"**. The mapped MCE spectral response acceleration values for Bloomfield, CT are $\mathbf{S_1 = 0.064}$ for one second period and $\mathbf{S_S = 0.180}$ for short period. For transfer of ground shear on crushed stone atop the silt/fine sand soils the ultimate friction factor can be **0.60.**

5.0 Regarding **Foundation Type,** the building can be supported on spread footings. The footings should be on the natural inorganic soils at frost protection depth, or on a controlled fill placed after the removal of any existing fill, topsoil and subsoils. Controlled fills should conform to section 6.0 below and should extend horizontally beyond the footings for a distance equal to at least the depth of fill beneath the footings. Based on the borings footings will fall on fine to medium sand with trace to little silt. It is recommended that the footings be place a 4" layer of 3/8" crushed stone atop the natural sands.

5.1 The **Allowable Bearing Pressure** on the crushed stone atop natural soils or on controlled fill can be 4,000 psf. The allowable loading can be increased by 1/3 for seismic or wind loading. At retaining walls the maximum pressure on the toe can be 50% higher than the average pressure, cited above.

5.2 The **Lateral Soil Loading** (static) on retaining walls that are part of the building should be based on at-rest pressure using the at-rest coefficient cited in the table below. Lateral soil loading on retaining walls apart from the building can be designed with active pressure using the coefficient cited below for level backfill. The ultimate sliding coefficient for concrete on the crushed stone atop natural soils or on controlled fill is **0.60.**

5.3 The **Frost Protection Depth** is 3.5 feet below the finish grades in areas, which are exposed to weather.

5.4 Summary of Foundation Design Parameters:

Parameter	Value
Allowable Bearing Pressure	4,000 psf
Soil Unit Weight (Backfill) *	125 pcf
Internal Friction Angle (Backfill) *	34°
At-Rest Pressure Coefficient, K_O	0.45
Active Pressure Coefficient, K_A (level backfill)	0.28
Ultimate Sliding Coefficient, concrete on crushed stone over soil or rock	0.60
Seismic Site Soil Profile Classification	D
Mapped MCE Spectral Response Acceleration for one second period, S_1	0.064
Mapped MCE Spectral Response Acceleration for short period, S_S	0.180
Frost Protection Depth	3.5 feet

* Backfill material conforming to section 6.0 below

6.0 Regarding **Controlled Fill, Backfill for Retaining Walls and Excavations at Columns and Walls, plus Slab at Grade Underlayment** (to 6" below the slab bottom) the material should conform to the following or be 3/8" crushed stone:

Percent Passing	Sieve Size
100	3.5"
50 - 100	3/4"
25 - 75	No.4

The fraction, passing the No.4 sieve should have less than 15%, passing the No. 200 sieve.

All backfill and fill must be compacted to at least 95% of modified optimum density.

6.0.1 All topsoil and existing fills should be removed under slabs on grade. There should be a minimum of 18" of controlled fill beneath the slab on grade. This should include 12" of material conforming to the gradation in section 6.0 above. The 6" immediately beneath the slab on grade should be with 3/4" processed aggregate base conforming to the gradation cited below. This material

should be compacted at least 95% of modified optimum density (ASTM 1557D) to provide a sub grade modulus equal to at least 250 pci. A vapor retarder is required beneath the slab on grade floors.

3/4" minus processed aggregate base

Percent Passing	Sieve Size
100	1.25"
90 - 100	1"
75 - 100	3/4"
10 - 35	1/4"
3 - 12	No. 100
0 - 5	No 200

7.0 Regarding **Earthwork,** excavations in the natural soils will fall in OSHA Class C. This will that excavations, which are unshored and exceed 5 feet in height, should be cut back to slopes less than 34° from the horizontal (1.5H:1V).

8.0 This report has been prepared for specific application to the subject project in accordance with generally accepted soil and foundation engineering practices. No other warranty, express or implied, is made. In the event that any changes in the nature, design and location of structures are planned, the conclusions and recommendations contained in this report should not be considered valid unless the changes are reviewed and conclusions of this report modified or verified in writing.

The analyses and recommendations submitted in this report are based in part upon data obtained from referenced explorations. The extent of variations between explorations may not become evident until construction. If variations then appear evident, it will be necessary to re-evaluate the recommendations of this report.

Welti Geotechnical, P.C., should perform a general review of the final design and specifications in order that geotechnical design recommendations may be properly interpreted and implemented as they were intended.

If you have any questions, please call our office.

Very truly yours,

Max Welti

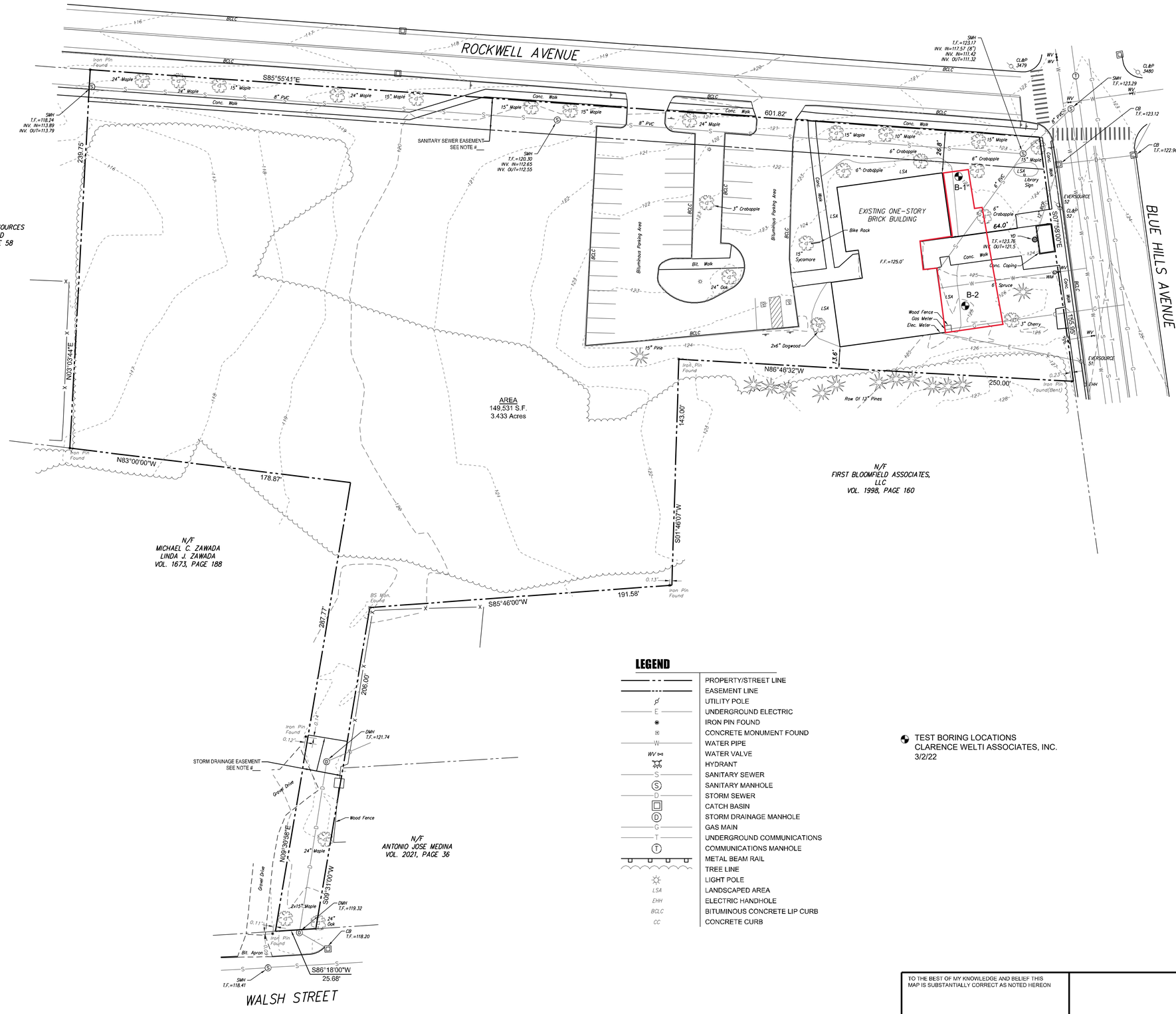
Max Welti, P.E.
President, Welti Geotechnical, P.C.

Clarence Welti

Clarence Welti Ph.D., P. E.
Vice President

APPENDIX

BORING LOCATION PLAN
+
TEST BORING LOGS



LEGEND

	PROPERTY/STREET LINE
	EASEMENT LINE
	UTILITY POLE
E	UNDERGROUND ELECTRIC
	IRON PIN FOUND
	CONCRETE MONUMENT FOUND
W	WATER PIPE
WV	WATER VALVE
	HYDRANT
S	SANITARY SEWER
S	SANITARY MANHOLE
D	STORM SEWER
	CATCH BASIN
D	STORM DRAINAGE MANHOLE
G	GAS MAIN
T	UNDERGROUND COMMUNICATIONS
T	COMMUNICATIONS MANHOLE
	METAL BEAM RAIL
	TREE LINE
	LIGHT POLE
LSA	LANDSCAPED AREA
EHH	ELECTRIC HANDHOLE
BCLC	BITUMINOUS CONCRETE LIP CURB
CC	CONCRETE CURB

TEST BORING LOCATIONS
CLARENCE WELTI ASSOCIATES, INC.
3/2/22

SURVEY NOTES:

1. THIS SURVEY AND MAP WERE PREPARED IN ACCORDANCE WITH THE REGULATIONS OF CONNECTICUT STATE AGENCIES SECTIONS 20-300b-1 THRU 20-300b-20 AND THE "STANDARDS FOR SURVEYS AND MAPS IN THE STATE OF CONNECTICUT" AS ADOPTED BY THE CONNECTICUT ASSOCIATION OF LAND SURVEYORS, INC. ON SEPTEMBER 26, 1996. IT IS A PROPERTY AND TOPOGRAPHIC MAP CONFORMING TO HORIZONTAL ACCURACY CLASS A-2 AND TOPOGRAPHIC ACCURACY CLASS T-2. IT IS INTENDED TO DEPICT THE DEED LINES, LINES OF OCCUPATION, EASEMENTS AND ENCROACHMENTS AFFECTING THE PROPERTY. THE PROPERTY/BOUNDARY DETERMINATION OPINION PRESENTED HEREON IS BASED ON A RESURVEY.
2. REFERENCE IS HEREBY MADE TO THE FOLLOWING MAPS ENTITLED:
A. "MAP OF LAND MRS. KATE MCCROSSEN, BLOOMFIELD, CONN." PREPARED BY ERWIN M. PECK, SCALE 1"=50' AND DATED DEC. 1924. BLOOMFIELD LAND RECORDS MAP #50.
B. "RIGHT OF WAY MAP TOWN OF BLOOMFIELD BLUE HILLS AVE. FROM HARTFORD CITY LINE NORTHERLY TO PARK AVE. ROUTE NO. 311" PREPARED BY CONNECTICUT HIGHWAY DEPARTMENT, SCALE 1"=40', DATED MARCH 31, 1928 AND REVISED JULY 1983.
C. "EASEMENT MAP SHOWING EASEMENT TO BE ACQUIRED FROM TOWN OF BLOOMFIELD #997-#1011 BLUE HILLS AVENUE BLOOMFIELD, CONNECTICUT" PREPARED BY BARAKOS-LANDINO DESIGN GROUP, SCALE 1"=30' AND DATED FEBRUARY 12, 1998. B.L.R. MAP #3636.
D. "THE SUBDIVISION OF WINTONBURY LIBRARY & ROBERT WATKINS CENTER PREPARED FOR TOWN OF BLOOMFIELD 1015 BLUE HILLS AVENUE & 73 ROCKWELL AVENUE BLOOMFIELD, CONNECTICUT" PREPARED BY ED LALLY, SCALE 1"=40', DATED DECEMBER 5, 2012 AND REVISED ON 12-19-12. B.L.R. MAP #71-54.
3. THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION AND EXISTING DRAWINGS. THE SURVEYOR MAKES NO GUARANTEES THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN-SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH THE SURVEYOR DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES.
4. BEARINGS ARE BASED ON NAD83. ELEVATIONS ARE BASED ON NAVD88.
5. THIS PARCEL IS SUBJECT TO A SANITARY SEWER EASEMENT IN FAVOR OF THE METROPOLITAN DISTRICT COMMISSION AS RECORDED IN VOLUME 72, PAGE 289 OF THE BLOOMFIELD LAND RECORDS.
6. THIS PARCEL IS SUBJECT TO A DRAINAGE EASEMENT IN FAVOR OF READCO BLOOMFIELD, LLC AS RECORDED IN VOLUME 842, PAGE 246 OF THE BLOOMFIELD LAND RECORDS.
7. THIS PARCEL IS ZONED GWB. SETBACKS ARE GENERALLY FRONT 25', SIDE 10' AND REAR 20'.

PROPERTY AND TOPOGRAPHIC SURVEY

LAND NOW OR FORMERLY OF

TOWN OF BLOOMFIELD

VOLUME 25, PAGE 455

#1015 BLUE HILLS AVENUE

BLOOMFIELD, CONNECTICUT

TO THE BEST OF MY KNOWLEDGE AND BELIEF THIS MAP IS SUBSTANTIALLY CORRECT AS NOTED HEREON

JONATHAN TARBOX L.S. #70075

REVISIONS:

Delta
SURVEYING SERVICES, LLC
(860) 944-4678
75 ELLINGTON AVE., ELLINGTON, CT.

JOB No.:	21-071
SCALE:	1"=30'
DATE:	FEBRUARY 25, 2022
DWG. NO.:	1
SHEET:	1 OF 1

CLARENCE WELTI ASSOC., INC.
P.O. BOX 397
GLASTONBURY, CONN 06033

CLIENT
TOWN OF BLOOMFIELD

PROJECT NAME
ADDITION TO MCMAHON LIBRARY
LOCATION
1015 BLUE HILLS AVENUE, BLOOMFIELD, CT

	AUGER	CASING	SAMPLER	CORE BAR.
TYPE	HSA		SS	
SIZE I.D.	3.75"		1.375"	
HAMMER WT.			140lbs	
HAMMER FALL			30"	

OFFSET
LINE & STA.
N. COORDINATE
E. COORDINATE

SURFACE ELEV. 124
HOLE NO. B-1

GROUND WATER OBSERVATIONS
AT 9.0 FT. AFTER 0 HOURS
AT FT. AFTER HOURS

START DATE 3/2/22
FINISH DATE 3/2/22

DEPTH	SAMPLE NO.	SAMPLE BLOWS/6"	SAMPLE DEPTH	A	STRATUM DESCRIPTION + REMARKS	ELEV.
0	1	3-6-20-26	0.0'-2.0'		TOPSOIL 0.40	
					BR.FINE-MED.SAND, TRACE SILT - FILL 1.0	
	2	20-20-21-25	2.0'-4.0'		RED/BR.FINE-CRS.SAND SAND, LITTLE SILT & GRAVEL - FILL	
					3.0	
	3	21-21-20-26	4.0'-6.0'		BR.FINE-MED.SAND, TRACE TO LITTLE SILT	120
5						
						115
10	4	5-5-7	10.0'-11.5'			
						110
15	5	4-4-8	15.0'-16.5'			
						105
20	6	4-10-14	20.0'-21.5'		20.0 GREY SILT, TRACE FINE SAND	
						100
25	7	3-3-4	25.0'-26.5'			
					26.0 GREY/BR.VARVED SILT AND CLAY	
						95
30	8	2-3-4	30.0'-31.5'			
						90
35						

LEGEND: COL. A:
SAMPLE TYPE: D=DRY A=AUGER C=CORE U=UNDISTURBED PISTON S=SPLIT SPOON
PROPORTIONS USED: TRACE=0-10% LITTLE=10-20% SOME=20-35% AND=35-50%

DRILLER: T. CZMYR
INSPECTOR:

CLARENCE WELTI ASSOC., INC. P.O. BOX 397 GLASTONBURY, CONN 06033	CLIENT TOWN OF BLOOMFIELD	PROJECT NAME ADDITION TO MCMAHON LIBRARY LOCATION 1015 BLUE HILLS AVENUE, BLOOMFIELD, CT

DEPTH	SAMPLE NO.	SAMPLE BLOWS/6"	SAMPLE DEPTH	A	STRATUM DESCRIPTION + REMARKS	ELEV.
	9	2-3-4	35.0'-36.5'			
40	10	2-2-2	40.0'-41.5'			85
45	11	2-1-2	45.0'-46.5'			80
					WEATHERED ROCK 49.0	75
50	12	12-20-60	50.0'-51.2'		BOTTOM OF BORING @ 51.3' 51.3	
55						70
60						65
65						60
70						55
75						50

LEGEND: COL. A:

SAMPLE TYPE: D=DRY A=AUGER C=CORE U=UNDISTURBED PISTON S=SPLIT SPOON

PROPORTIONS USED: TRACE=0-10% LITTLE=10-20% SOME=20-35% AND=35-50%

DRILLER: T. CZMYR
INSPECTOR:

SHEET 2 OF 2 | HOLE NO. **B-1**

CLARENCE WELTI ASSOC., INC.
P.O. BOX 397
GLASTONBURY, CONN 06033

CLIENT
TOWN OF BLOOMFIELD

PROJECT NAME
ADDITION TO MCMAHON LIBRARY
LOCATION
1015 BLUE HILLS AVENUE, BLOOMFIELD, CT

	AUGER	CASING	SAMPLER	CORE BAR.
TYPE	HSA		SS	
SIZE I.D.	3.75"		1.375"	
HAMMER WT.			140lbs	
HAMMER FALL			30"	

OFFSET
LINE & STA.
N. COORDINATE
E. COORDINATE

SURFACE ELEV. 125
HOLE NO. B-2

GROUND WATER OBSERVATIONS
AT 9.0 FT. AFTER 0 HOURS
AT FT. AFTER HOURS

START DATE 3/2/22
FINISH DATE 3/2/22

DEPTH	SAMPLE NO.	BLOWS/6"	DEPTH	A	STRATUM DESCRIPTION + REMARKS	ELEV.
0	1	3-3-5-4	0.0'-2.0'		TOPSOIL	125
					BR.FINE-MED.SAND, TRACE SILT & GLASS - FILL 1.1	
	2	3-2-3-8	2.0'-4.0'		BR.FINE-MED.SAND, TRACE TO LITTLE SILT 2.0	
	3	7-8-10-14	4.0'-6.0'			
5						120
10	4	4-9-13	10.0'-11.5'			115
15	5	6-9-8	15.0'-16.5'			110
20	6	6-8-13	20.0'-21.5'		GREY/BR.SILT, LITTLE FINE SAND 20.0	105
					BOTTOM OF BORING @ 21.5' 21.5	
25						100
30						95
35						90

LEGEND: COL. A:
SAMPLE TYPE: D=DRY A=AUGER C=CORE U=UNDISTURBED PISTON S=SPLIT SPOON
PROPORTIONS USED: TRACE=0-10% LITTLE=10-20% SOME=20-35% AND=35-50%

DRILLER: T. CZMYR
INSPECTOR:

SHEET 1 OF 1 | HOLE NO. **B-2**