

DARREE FIELDS STORAGE ADDITION 2012

6259 COSGRAY ROAD
DUBLIN, OHIO 43017

For
CITY OF DUBLIN - Parks & Open Space

6555 Shier-Rings Road
Dublin, Ohio 43016
Phone: 614.410.4700
Fax: 614.761.6512

PERMIT RESUBMITTAL: DECEMBER 14, 2012

Project Directory:

FORD & ASSOCIATES
ARCHITECTS

1500 WEST FIRST AVENUE
COLUMBUS, OHIO 43212
Phone: 614.488.6252
Fax: 614.488.9963

Mechanical-Electrical Engineer: McMullen Engineering Co., Inc.

100 South State Street
Westerville, Ohio 43081
Phone: 614.895.9408
Fax: 614.895.9450

Structural Engineer: Shirk & O'Donovan Consulting Engineers, Inc.

370 East Wilson Bridge Road
Worthington, OH 43085
Phone: 614.436.6465
Fax: 614.436.6485

Code Review Information:

| | |
|-----------------|--|
| BUILDING CODE | OHIO BUILDING CODE (OBC) - 2011 |
| MECHANICAL CODE | OHIO MECHANICAL CODE (OMC) - 2011 |
| PLUMBING CODE | OHIO PLUMBING CODE (OPC) - 2011 |
| ELECTRICAL CODE | OHIO BUILDING CODE (OBC), CHAPTER 27 - 2011 NATIONAL ELECTRIC CODE (NEC) - 2011 |

USE GROUPS: U-UTILITY & MISCELLANEOUS OBC SECTION 312

BUILDING HEIGHT & AREA: OBC TABLE 503

| USE | CONST. TYPE | ALLOWABLE AREA | ACTUAL AREA | ALLOWABLE HEIGHT | ACTUAL HEIGHT |
|-----------|-------------|----------------|-------------|-------------------|-------------------|
| U-UTILITY | VB | 5,500 S.F. | 400 S.F. | 1 STORY 40'-0" | 1 STORY 21'-0" |

CONSTRUCTION TYPE: VB, UNPROTECTED OBC SECTION 802.5

FIRE RESISTANCE RATING REQUIREMENTS OBC TABLE 601

| BUILDING ELEMENT - TYPE VB | REQUIRED RATING |
|---|-----------------|
| STRUCTURAL FRAME | 0 HR. |
| BEARING WALLS - EXTERIOR & INTERIOR | 0 HR. |
| NON-BEARING WALLS & PARTITIONS - INTERIOR | 0 HR. |
| FLOOR CONSTRUCTION (INCLUDING BEAMS & JOISTS) | 0 HR. |
| ROOF CONSTRUCTION (INCLUDING BEAMS & JOISTS) | 0 HR. |

INTERIOR WALL & CEILING FINISH REQUIREMENTS OBC TABLE 803.5

| USE GROUP: U- NONSPRINKLERED | FINISH CLASS |
|---|-----------------|
| VERTICAL EXITS & EXIT PASSAGE WAYS | NO RESTRICTIONS |
| EXIT ACCESS CORRIDORS & OTHER EXIT WAYS | NO RESTRICTIONS |
| ROOMS AND ENCLOSED SPACES | NO RESTRICTIONS |

FIRE PROTECTION SYSTEMS OBC CHAPTER 9
NO AUTOMATIC SPRINKLER SYSTEMS ARE REQUIRED OR PROVIDED.

| |
|--|
| PORTABLE FIRE EXTINGUISHERS OBC SECTION 906.2, 906.3 AND TABLE 906.3(1) |
| PROVIDE PORTABLE FIRE EXTINGUISHER WITH A RATING OF NOT LESS THAN 4A:80:BC ((10)LBS) PER OBC 906.2 & 906.3 & TABLE 906.3(1). |

FIRE ALARM & DETECTION SYSTEMS OBC SECTION 907
NO FIRE ALARM OR DETECTION SYSTEMS ARE REQUIRED OR PROVIDED.

| OCCUPANT LOAD: OBC TABLE 1004.1.1 | | | |
|-----------------------------------|----------|-------------|---------------|
| USE | AREA | S.F./PERSON | OCCUPANT LOAD |
| STORAGE | 400 S.F. | 300 | 2 |
| TOTAL | | | 2 |

EGRESS WIDTH PER OCCUPANT OBC TABLE 1005.1
U OCCUPANCY (W/OUT SPRINKLERS): 0.2 INCHES
REQUIRED: 25 OCCUPANTS X 0.2 INCHES = 4.0 INCHES TOTAL
PROVIDED: 204 INCHES (DOORS 100A, 100B)

| |
|---|
| LENGTH OF TRAVEL: OBC TABLE 1021.2 |
| U USE W/OUT SPRINKLERS: 75'-0" MAX. PERMITTED |
| U USE W/OUT SPRINKLERS: 35'-11" MAX. PROVIDED |

| |
|--|
| MINIMUM NUMBER OF EXITS FOR OCCUPANT LOAD OBC TABLE 1018.1 |
| NUMBER OF EXITS REQUIRED: 1 |
| NUMBER OF EXITS PROVIDED: 1 |

General Construction Notes:

- THE USE OF THESE DOCUMENTS IS RESTRICTED TO THE ORIGINAL SITE FOR WHICH THEY WERE PREPARED. REUSE OR REPRODUCTION OF THE DOCUMENTS, (WHOLE OR IN PART) FOR ANY OTHER PURPOSE IS PROHIBITED. FORD & ASSOCIATES ARCHITECTS, INC. RETAINS ALL RIGHTS OF OWNERSHIP.
- THE A.I.A. DOCUMENT A201-2007, GENERAL CONDITIONS OF THE CONTRACT FOR CONSTRUCTION, SHALL APPLY TO THE PROJECT. A COPY OF THE GENERAL CONDITIONS IS AVAILABLE AT THE OFFICES OF FORD & ASSOCIATES ARCHITECTS, INC.
- THE CONTRACTOR AND SUB-CONTRACTORS SHALL BE SOLELY RESPONSIBLE FOR COMPLYING WITH ALL FEDERAL, STATE, AND LOCAL SAFETY REQUIREMENTS TOGETHER WITH EXERCISING PRECAUTIONS AT ALL TIMES FOR THE PROTECTION OF PERSONS INCLUDING EMPLOYEES AND PROPERTY. IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND SUB-CONTRACTORS TO INITIATE, MAINTAIN, AND SUPERVISE ALL SAFETY REQUIREMENTS, PRECAUTIONS, AND PROGRAMS IN CONNECTION WITH THE WORK.
- THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE ALL WORK AND FOR THE MEANS, METHODS, PROCEDURES, TECHNIQUES, AND SEQUENCE OF CONSTRUCTION.
- GENERAL CONTRACTOR SHALL PROVIDE ALL REQUIRED PERMITS, FEES, AND INSPECTIONS AS MAY BE REQUIRED BY GOVERNING BODIES HAVING LEGAL JURISDICTION.
- THE GENERAL CONTRACTOR IS TO GUARANTEE ALL WORK INCLUDING WORK DONE BY SUB-CONTRACTORS FOR A PERIOD OF ONE (1) YEAR COMMENCING WITH THE DATE OF SUBSTANTIAL COMPLETION OF THE WORK.
- GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SCHEDULING AND MONITORING OF ON-SITE TESTING AND INSPECTION SERVICES AS LISTED IN THE PROJECT MANUAL AND GENERAL CONDITIONS A201.
- WHEN CONTRACTOR ACCEPTS DELIVERY OF ALL ITEMS NOTED ON PLANS EITHER IN CONTRACT OR NOT IN CONTRACT HE SHALL BE RESPONSIBLE FOR LOSS AND/OR DAMAGE TO THESE ITEMS.
- GENERAL CONTRACTOR TO HAVE JOB PHONE ON PREMISES DURING ENTIRE CONSTRUCTION PERIOD.
- THE GENERAL CONTRACTOR & EACH SUBCONTRACTOR IS TO HAVE A FULL TIME QUALIFIED SUPERVISOR ON THE SITE AT ALL TIMES WHILE WORK IS BEING PERFORMED.
- THE CONTRACTOR SHALL MAINTAIN FOR THE ENTIRE DURATION OF THE WORK ALL EXITS, EXIT LIGHTING, FIRE PROTECTION DEVICES, AND ALARMS IN CONFORMANCE WITH ALL APPLICABLE CODES AND ORDINANCES.
- THE GENERAL CONTRACTOR IS TO VERIFY ALL DIMENSIONS AND EXISTING FIELD CONDITIONS WITH THE DRAWINGS. IN PARTICULAR: OVERALL WALL DIMENSIONS, SOIL CONDITIONS, INCOMING UTILITIES, ETC. GENERAL CONTRACTOR IS TO REPORT IMMEDIATELY TO THE ARCHITECT ANY VARIANCES OR FIELD CONDITIONS THAT MAY CAUSE CONSTRUCTION PROBLEMS PRIOR TO COMMENCING WORK.
- DO NOT SCALE DRAWINGS. WRITTEN DIMENSIONS GOVERN. ALL PARTITION LOCATIONS, ALL DOOR AND OPENING LOCATIONS SHALL BE SHOWN ON FLOOR PLAN. IN CASE OF CONFLICT NOTIFY THE ARCHITECT. FLOOR PLAN BY ARCHITECT SUPERSEDES ALL OTHER PLANS. ALL DIMENSIONS MARKED "CLEAR" SHALL BE MAINTAINED AND SHALL ALLOW FOR THICKNESS OF ALL FINISHES INCLUDING CARPET, PAD, CERAMIC TILE, V.C.T., SLATWALL, ETC.
- ALL DIMENSIONS SHOWN ARE TO FACE OF MASONRY (BLOCK OR BRICK) OR FRAMING UNLESS SPECIFICALLY NOTED OTHERWISE.
- ALL DIMENSIONS ON ARCHITECTURAL DRAWINGS LOCATING STRUCTURAL ELEMENTS ARE TO CENTERLINE OF STEEL COLUMNS AND STEEL BEAMS UNLESS NOTED OTHERWISE.
- ALL DIMENSIONS SHOWN ARE NOMINAL DIMENSIONS UNLESS SPECIFICALLY NOTED OTHERWISE.
- EGRESS DOORS SHALL BE PROVIDED PER OBC SECTIONS 1014 THROUGH 1024.
- ALL DOOR HANDLES SHALL BE OF THE LEVER TYPE. HARDWARE SHALL BE MOUNTED NO HIGHER THAN 48" ABOVE FINISH FLOOR.
- ALL ACCESS PANELS SHALL BE 24"x30" UNLESS OTHERWISE NOTED.
- ALL GLASS UNITS LOCATED IN HAZARDOUS LOCATIONS AS INDICATED IN OBC 2403.3 SHALL COMPLY WITH TEST REQUIREMENTS OF CONSUMER PRODUCT SAFETY COMMISSION 16, CFR PART 1201 FOR HUMAN IMPACT LOADS.
- ALL SAW CUTTING AND CORING LOCATIONS SHALL BE REVIEWED IN FIELD BY THE GENERAL CONTRACTOR PRIOR TO CUTTING/CORING.
- ALL WOOD IS TO BE FIRE-RETARDANT TREATED PER AWPA C20 AND C27 AND SHALL NOT HAVE A FLAME SPREAD OF GREATER THAN 25 WHEN TESTED IN ACCORDANCE WITH ASTM E-84. PER OBC SECTION 2303.2.
- ALL EXTERIOR WOOD BLOCKING IS TO BE PRESSURE TREATED PER AWPA U1 AND M4.
- ALL FASTENERS, CONNECTORS, OR OTHER HARDWARE IN DIRECT CONTACT WITH PRESERVATIVE TREATED OR FIRE RETARDANT TREATED WOOD SHALL BE STAINLESS STEEL TYPE 304 OR TYPE 316, OR HOT-DIPPED GALVANIZED STEEL ASTM A653, CLASS G-185 WITH 1.85 OUNCES OF ZINC PER SQUARE FOOT TO REDUCE THE CORROSION PROCESS.
- FIREBLOCKING SHALL BE INSTALLED IN CONCEALED SPACES OF STUD WALL AND PARTITIONS, INCLUDING FURRED OR STUDDOFF SPACES OF MASONRY OR CONCRETE WALLS, AND AT THE CEILING AND FLOOR OR ROOF LEVELS. PER OBC SECTION 717.2.2.
- FIREBLOCKING SHALL BE INSTALLED AT ALL INTERCONNECTIONS BETWEEN VERTICAL AND HORIZONTAL SPACES SUCH AS OCCUR AT SOFFITS OVER CABINETS, DROP CEILINGS, GYVE CEILINGS AND SIMILAR LOCATIONS. PER OBC SECTION 717.2.3.
- REQUIRED FLAME SPREAD RATING, INTERIOR FINISH OF WALLS AND CEILINGS SHALL HAVE A FLAME SPREAD RATING NOT GREATER THAN THAT DESIGNATED BY THE CLASS PRESCRIBED FOR THE VARIOUS GROUPS LISTED IN OBC TABLE 803.5, WHEN TESTED IN ACCORDANCE WITH OBC SECTION 803.2.
- PROVIDE PORTABLE FIRE EXTINGUISHERS WITH U.L. LABEL AND A RATING OF NOT LESS THAN 4A:80:BC WITH 75 FT TRAVEL DISTANCE TO ALL POSITIONS OF BUILDING OR AS DIRECTED BY THE FIRE DEPARTMENT FIELD INSPECTOR.

Accessibility Information:

- ACCESS TO THESE FACILITIES SHALL BE PROVIDED AT PRIMARY ENTRANCES.
- THE SLOPE OF PUBLIC WALKS SHALL NOT EXCEED A MAX. CROSS SLOPE OF 2 %.
- WALKING SURFACES SLOPING GREATER THAN 2 % SHALL BE SLIP RESISTANT.
- PROVIDE A 54" X 60" MIN. LANDING ON PULL SIDE OF DOOR WITH AN 18" MIN. CLEAR WIDTH ON THE STRIKE SIDE OF DOOR PER ANSI A117.1 - 2003.
- WALKS SHALL EXTEND A MINIMUM OF 18" TO THE SIDE OF THE STRIKE EDGE OF DOOR OR GATE THAT SWINGS TOWARD THE WALK.
- EVERY REQUIRED EXIT DOORWAY SHALL BE SIZED FOR A DOOR NOT LESS THAN 3'-2" WIDE X 8'-0" HIGH CAPABLE OF OPENING 90 DEGREES AND MOUNTED SO THAT THE CLEAR WIDTH OF THE EXIT SHALL BE 32" MIN.
- THRESHOLD TO BE A MAX. 1/2" ABOVE ADJACENT FINISH FLOOR. RAISED THRESHOLDS AT ACCESSIBLE DOORWAYS SHALL BE BEVELED WITH A SLOPE NO GREATER THAN 1:2 PER ANSI A117.1 - 2003.
- MAXIMUM EFFORT TO OPERATE DOORS SHALL NOT EXCEED 5 LBS. FOR INTERIOR DOORS AND 15 LBS. FOR EXTERIOR DOORS.
- THE BOTTOM 10" OF ALL DOORS EXCEPT AUTOMATIC SLIDERS SHALL HAVE A SMOOTH UNINTERRUPTED SURFACE.
- THE BUILDING SHALL COMPLY WITH ACCESSIBLE AND USABLE BUILDINGS AND FACILITIES ANSI A117.1 - 2003 INCLUDING, BUT NOT NECESSARILY LIMITED TO, OBC CHAPTER 11.
- CONTROLS AND OPERATING MECHANISMS SHALL BE ACCESSIBLE AND HAVE MOUNTING HEIGHTS COMPLYING WITH ANSI A117.1 - 2003.
- ALL ROOM, DIRECTIONAL, AND INFORMATION SIGNS SHALL BE ACCESSIBLE DESIGN COMPLYING WITH ANSI A117.1 - 2003.

List of Drawings:

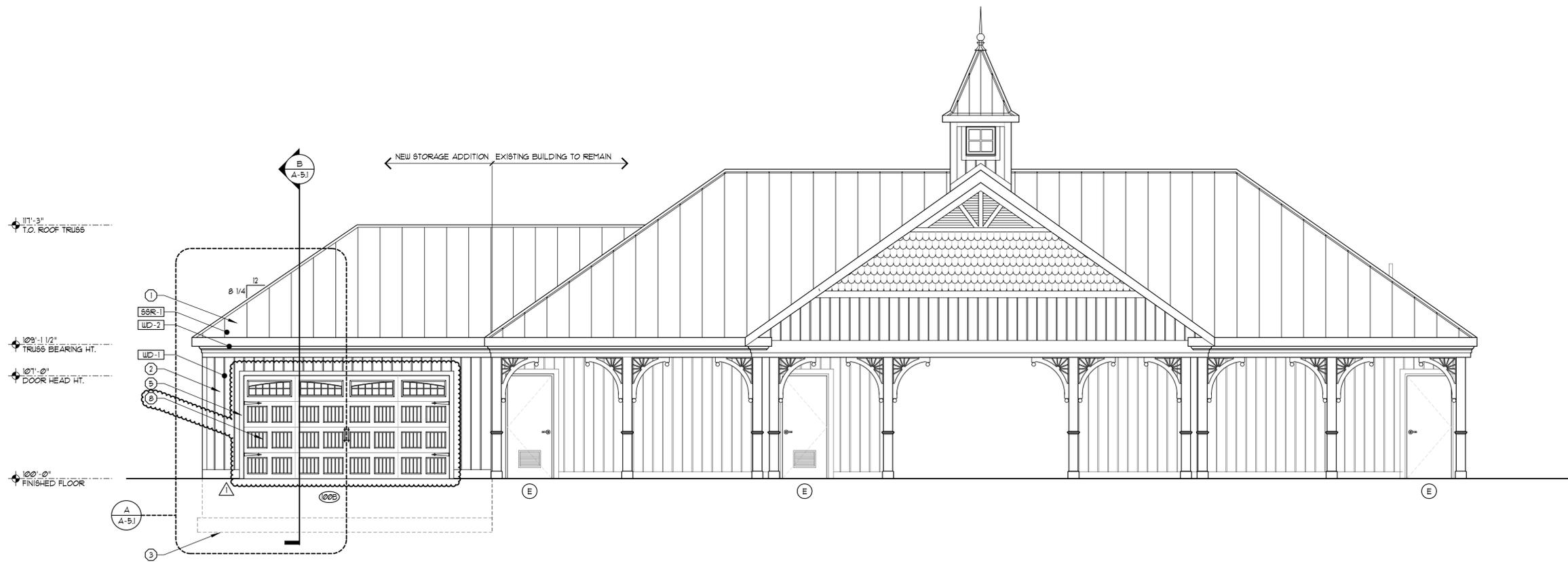
| GENERAL | REVISION | DATE |
|---|----------|-------------------|
| COVER SHEET | △ | DECEMBER 14, 2012 |
| SITE DRAWINGS | | |
| SD-1.1 SITE PLAN AND NOTES | | NOVEMBER 20, 2012 |
| ARCHITECTURAL DRAWINGS | | |
| A-1.1 BUILDING FLOOR PLAN AND NOTES | △ | DECEMBER 14, 2012 |
| A-2.1 BUILDING ELEVATIONS AND NOTES | △ | DECEMBER 14, 2012 |
| A-2.2 BUILDING ELEVATION AND NOTES | △ | DECEMBER 14, 2012 |
| A-3.1 BUILDING ROOF PLAN | △ | DECEMBER 14, 2012 |
| A-4.1 DOOR, HARDWARE SCHEDULES AND DETAILS | △ | DECEMBER 14, 2012 |
| A-5.1 WALL SECTIONS AND PARTIAL ELEVATIONS | △ | DECEMBER 14, 2012 |
| STRUCTURAL DRAWINGS | | |
| S-1 STRUCTURAL NOTES | | NOVEMBER 20, 2012 |
| S-2 STRUCTURAL NOTES | | NOVEMBER 20, 2012 |
| ELECTRICAL DRAWINGS | | |
| ME-1.1 FLOOR PLAN MECHANICAL & ELECTRICAL | △ | DECEMBER 14, 2012 |
| ME-1.2 MECHANICAL & ELECTRICAL SPECIFICATIONS | △ | DECEMBER 14, 2012 |



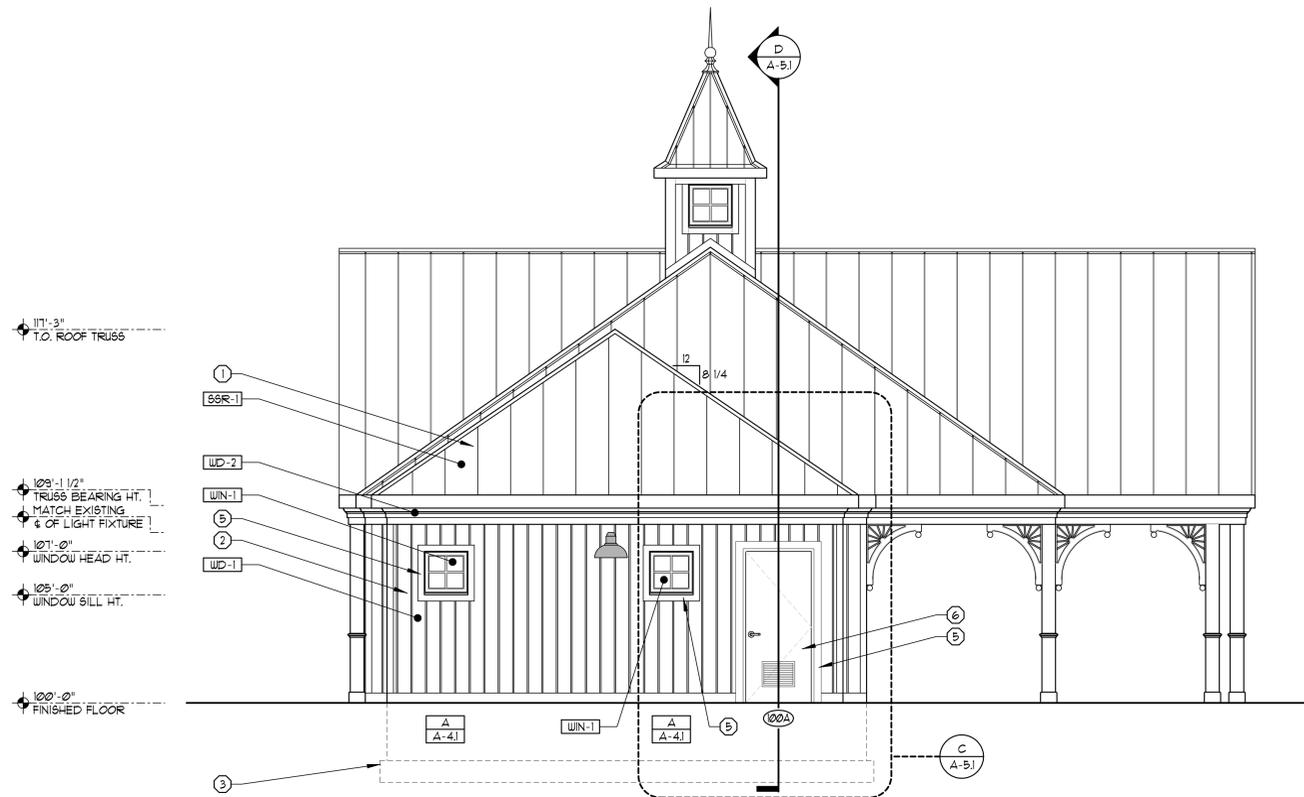
DARREE FIELDS STORAGE ADDITION 2012
6259 Cosgray Road
Dublin, Ohio 43017

FAA# 12153.00

| | |
|---------------------|--------------------------------------|
| Issued For | Date |
| Issued For | Date |
| Design Development: | OCT 15, 2012 |
| Owner Review: | NOV 15, 2012 |
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A WEST BUILDING ELEVATION
SCALE: 1/4" = 1'-0"



B NORTH BUILDING ELEVATION
SCALE: 1/4" = 1'-0"

| SYMBOL LEGEND | |
|---------------|--|
| ○ | PLAN CODED NOTE TAG (SEE THIS SHEET FOR SCHEDULE) |
| ○ | EXISTING DOOR TAG (SEE SHEET A-41 FOR DOOR SCHEDULE) |
| ○ | DOOR NUMBER TAG (SEE SHEET A-41 FOR DOOR SCHEDULE) |
| □ | WINDOW TAG (SEE SHEET A-41 FOR WINDOW ELEVATIONS) |
| □ | MATERIAL / FINISH TAG (SEE THIS SHEET FOR FINISH SCHEDULE) |

| ELEVATION CODED NOTES | |
|--|---|
| ① PREFINISHED STANDING SEAM METAL ROOF, (66R-1). | ⑦ RELOCATED WINDOW UNIT. |
| ② VERTICAL BOARD AND BATTEN SIDING, PAINT. | ⑧ SECTIONAL OVERHEAD "CARRIAGE-STYLE" GARAGE DOOR w/ ELECTRIC OPENER (SEE DOOR AND FRAME SCHEDULE SHEET A-41) |
| ③ LINE OF C.I.P. CONCRETE/CMU FOUNDATION | ⑨ 1 x 8 SMOOTH CEDAR FASCIA, PAINT. |
| ④ ALUMINUM CLAD WOOD WINDOW. SEE WINDOW TYPES, SHEET A-41. | ⑩ PAINT GRADE DECORATIVE WOOD CROWN MOULDING TRIM, PAINT, -MATCH EXISTING. |
| ⑤ 1 x 4 SMOOTH CEDAR TRIM, PAINT. | ⑪ 1 x 6 SMOOTH CEDAR TRIM, PAINT. |
| ⑥ HOLLOW METAL DOOR AND FRAME - PAINT (PT-1) (SEE DOOR AND FRAME SCHEDULE SHEET A-41). | |

| MATERIAL FINISH KEY | | |
|---------------------|--------------------------------------|--|
| MARK | TYPE | NOTES |
| 66R-1 | PREFINISHED STANDING SEAM METAL ROOF | DMI, SNAP ON SEAM HIGH PROFILE 6615-18 w/ LOW BEAD STIFFENER. FINISH - WEATHERED ZINC. |
| WIN-1 | WINDOWS | FELLA ARCHITECT SERIES FIXED CASEMENT WINDOW. COLOR TO BE FELLA STANDARD WHITE. |
| WD-1 | VERTICAL BOARD AND BATTEN SIDING | 3/8" TEXTURED WOOD SHEATHING w/1" WIDE x 3/4" DEEP WOOD BATTEN STRIPS @ 8" o.c. (PAINT). |
| WD-2 | CEDAR WOOD CORNICE AND TRIM | CLEAR CEDAR, PAINT - SEE SECTIONS FOR SIZES & PROFILES |

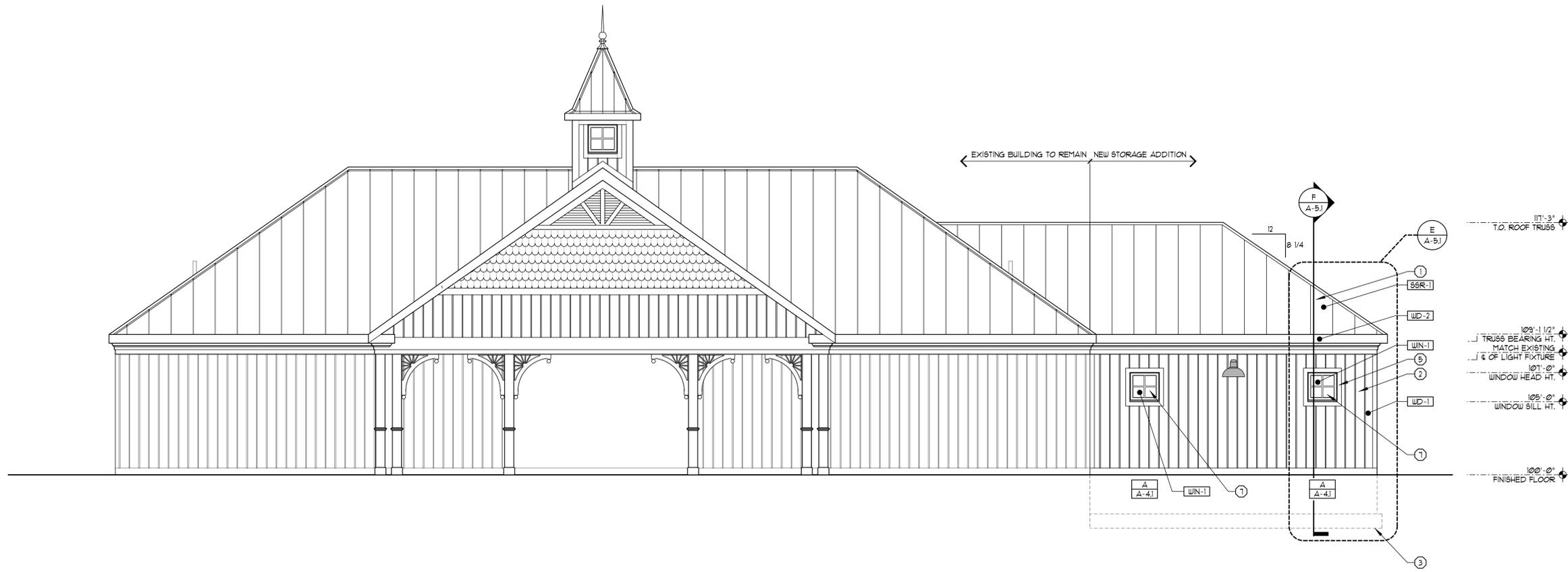
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| PRELIMINARY | | OCT. 15, 2012 |
| OWNER REVIEW | | NOV. 15, 2012 |
| PERMIT | | NOV. 20, 2012 |
| PERMIT RESUBMITTAL | △ | DEC. 14, 2012 |

BUILDING ELEVATIONS AND NOTES

FAA #12153.00

A-2.1

DARREE FIELDS



A EAST BUILDING ELEVATION
SCALE: 1/4" = 1'-0"

| SYMBOL LEGEND | |
|---------------|---|
| ○ | PLAN CODED NOTE TAG (SEE THIS SHEET FOR SCHEDULE) |
| ○ | EXISTING DOOR TAG (SEE SHEET A-4.1 FOR DOOR SCHEDULE) |
| ○ | DOOR NUMBER TAG (SEE SHEET A-4.1 FOR DOOR SCHEDULE) |
| □ | WINDOW TAG (SEE SHEET A-4.1 FOR WINDOW ELEVATIONS) |
| □ | MATERIAL / FINISH TAG (SEE THIS SHEET FOR FINISH SCHEDULE) |

| ELEVATION CODED NOTES | |
|-----------------------|--|
| ① | PREFINISHED STANDING SEAM METAL ROOF, (SSR-1). |
| ② | VERTICAL BOARD AND BATTEN SIDING, PAINT. |
| ③ | LINE OF C.I.P. CONCRETE/CMU FOUNDATION |
| ④ | ALUMINUM CLAD WOOD WINDOW, SEE WINDOW TYPES, SHEET A-4.1. |
| ⑤ | 1 x 4 SMOOTH CEDAR TRIM, PAINT. |
| ⑥ | HOLLOW METAL DOOR AND FRAME - PAINT (PT-1) (SEE DOOR AND FRAME SCHEDULE SHEET A-4.1). |
| ⑦ | RELOCATED WINDOW UNIT. |
| ⑧ | SECTIONAL OVERHEAD "CARRIAGE-STYLE" GARAGE DOOR w/ ELECTRIC OPENER (SEE DOOR AND FRAME SCHEDULE SHEET A-4.1) |
| ⑨ | 1 x 8 SMOOTH CEDAR FASCIA, PAINT. |
| ⑩ | PAINT GRADE DECORATIVE WOOD CROWN MOULDING TRIM, PAINT, -MATCH EXISTING. |
| ⑪ | 1 x 6 SMOOTH CEDAR TRIM, PAINT. |

| MATERIAL FINISH KEY | | |
|---------------------|--------------------------------------|--|
| MARK | TYPE | NOTES |
| SSR-1 | PREFINISHED STANDING SEAM METAL ROOF | DMI, SNAP ON SEAM HIGH PROFILE S&S-18 w/ LOW BEAD STIFFENER. FINISH - WEATHERED ZINC. |
| WIN-1 | WINDOW | PELLA ARCHITECT SERIES FIXED CASEMENT WINDOW. COLOR TO BE PELLA STANDARD WHITE. |
| WD-1 | VERTICAL BOARD AND BATTEN SIDING | 3/8" TEXTURED WOOD SHEATHING w/1" WIDE x 3/4" DEEP WOOD BATTEN STRIPS @ 8" o.c. (PAINT). |
| WD-2 | CEDAR WOOD CORNICE AND TRIM | CLEAR CEDAR, PAINT - SEE SECTIONS FOR SIZES & PROFILES |

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BUILDING ELEVATION AND NOTES
FAA #12153.00

A-2.2
DARREE FIELDS

DARREE FIELDS STORAGE ADDITION 2012
6259 COSGRAY ROAD
DUBLIN, OHIO 43017
For **CITY OF DUBLIN - Parks & Open Space**
6555 SHIER-RINGS ROAD
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BUILDING ROOF PLAN

FAA #12153.00

A-3.1

DARREE FIELDS

ROOF PLAN GENERAL NOTES

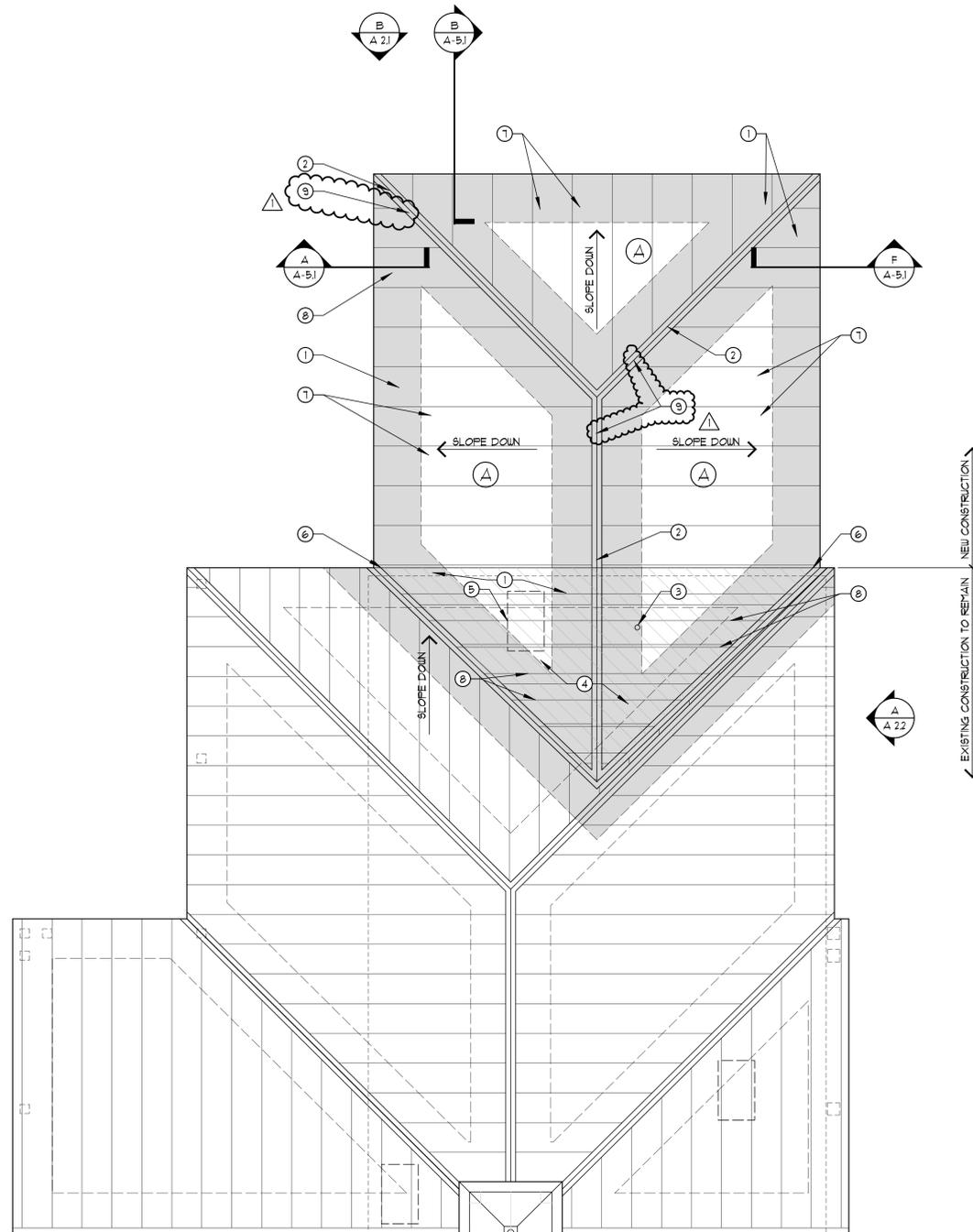
- ALL VENT STACKS AND ROOF PENETRATIONS TO BE PAINTED TO MATCH METAL ROOFING, PROVIDE ROOFING MANUFACTURER'S STANDARD DETAILS FOR ALL PENETRATIONS.
- ALL FLASHINGS, LOUVERS, AND/OR SCREENS ARE TO BE FABRICATED PURSUANT TO ARCHITECTURAL METAL SHEET METAL MANUAL AS PUBLISHED BY SMACNA.
- COORDINATE EXACT LOCATIONS OF ALL MECHANICAL EQUIPMENT, VENTS, EXHAUST FANS, AND/OR PIPING WITH HVAC AND PLUMBING SHEETS. (ALL PENETRATIONS MAY NOT BE SHOWN, COORDINATE AS REQUIRED WITH ALL TRADES).
- PROVIDE SELF-ADHERING SHEET UNDERLAYMENT MEMBRANE FROM EAVE/RAKE TO 2'-0" UPSLOPE, 2'-0" EITHER SIDE OF ALL RIDGES, VALLEYS, AND HIPS.
- ALL EXPOSED FLASHINGS, COPINGS, FASCIA, GUTTERS, AND DOWNSPOUTS TO BE PRE-FINISHED, COLOR TO MATCH METAL ROOFING.
- ALL OVERFRAMED ROOF AREAS ARE TO BE VENTED TO PROVIDE A MINIMUM OF 22" X 36" OPENING IN LOWER ROOF SHEATHING TO ALLOW AIR MOVEMENT THROUGH TO UPPER ROOF AREA.
- MATCH EXISTING ROOF SLOPE.

ROOF PLAN MATERIAL KEY

- (A) DMI SNAP ON SEAM HIGH PROFILE 6615-10 WITH LOW BEAD STIFFENER FINISH - WEATHERED ZINC.

ROOF PLAN CODED NOTES

- (1) PROVIDE WR. GRACE ICE AND WATER SHIELD 2'-0" UP SLOPE OF ALL VALLEYS, WALL INTERSECTIONS, AND RIDGES.
- (2) CONTINUOUS METAL VENTED RIDGE/HIP CLOSURE BY STANDING SEAM METAL ROOF MANUFACTURER.
- (3) EXISTING PLUMBING VENT STACK - EXTEND THROUGH NEW ROOF.
- (4) REMOVE EXISTING STANDING SEAM METAL ROOF PANELS AND INSTALL VALLEY FL DIRECTLY OVER EXIST. ROOF SHEATHING, CONNECT FL. TO EACH EXIST. ROOF TRUSS (THRU SHEATHING) w/ (3) 1/2" OF NAILS, TYP.
- (5) PROVIDE A 22"x36" OPENING IN EXISTING ROOF SHEATHING INTO NEW ROOF OVERLAY FRAMING.
- (6) NEW PREFINISHED METAL VALLEY FLASHING.
- (7) PRE-ENGINEERED WOOD ROOF TRUSSES AT 24" o.c. (TYP.)
- (8) 2 x 6 OVERLAY RAFTERS AT 16" o.c.
- (9) CONTINUOUS METAL VENTED RIDGE/HIP CLOSURE BY STANDING SEAM METAL ROOF MANUFACTURER TO MATCH EXISTING.



(A) PARTIAL BUILDING ROOF PLAN
SCALE: 1/4" = 1'-0"

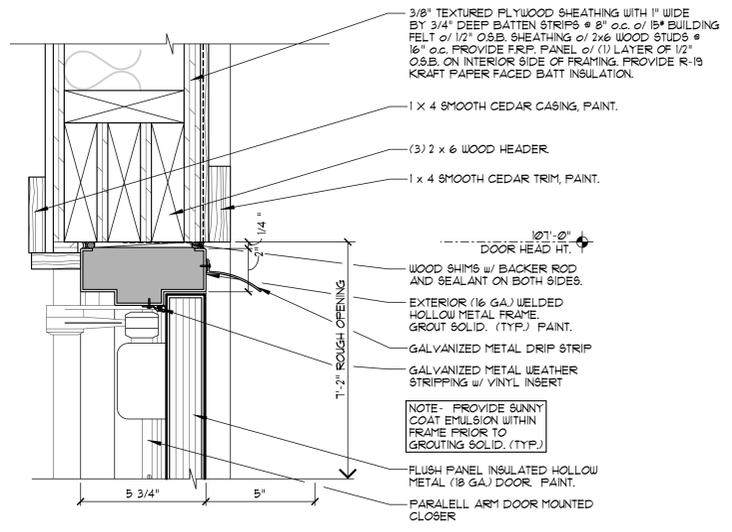


| DOOR HARDWARE SCHEDULE | | | | |
|---------------------------|-------------|------------|---------------------|--------|
| HARDWARE SET #1 (STORAGE) | | | | |
| QTY. | DESCRIPTION | MANUF. | NUMBER | FINISH |
| 1/2 FR | HINGES | HAGER | 1193 4.5x4.5 | U832D |
| 1 | LOCKSET | SARGENT | 8204 LNB | U832D |
| 3 | SILENCERS | HAGER | 3070 | GRAY |
| 1 | SWEEP | NAT. GUARD | 200NA x 36 (36") | ALUM. |
| 1 | WEATHERSEAL | NAT. GUARD | 160 x 3684 (36") | ALUM. |
| 1 | WALL STOP | HAGER | 255W | U826D |
| 1 | DOOR SHOE | NAT. GUARD | 112N | ALUM. |
| 1 | THRESHOLD | NAT. GUARD | 513 x 36 x FA (36") | ALUM. |
| 1 | CLOSER | SARGENT | 281 SRI ARM/BODY | U826D |

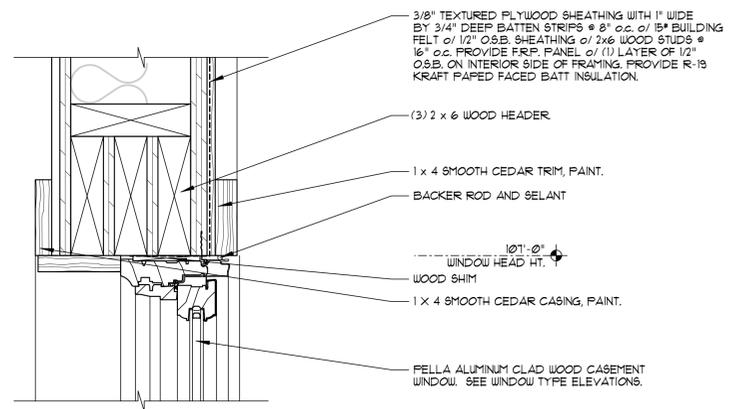
| DOOR AND FRAME SCHEDULE | | | | | | | | | | | | | | | |
|-------------------------|----------------------|------------------------|------|--------------|--------|-------|--------------|--------|----------|-------|-------|-----------|---------------------|----------|--|
| MARK | DESCRIPTION/LOCATION | SIZE | DOOR | | | FRAME | | | DETAILS | | | HARDWARE | FIRE RESIST. RATING | COMMENTS | |
| | | | TYPE | MATERIAL | FINISH | TYPE | MATERIAL | FINISH | HEAD | JAMB | SILL | | | | |
| 000A | STORAGE | 3'-0" x 7'-0" x 1 1/4" | A | HOLLOW METAL | PAINT | I | HOLLOW METAL | PAINT | A/ A-4.1 | A-4.1 | A-4.1 | I | -- | -- | |
| 000B | STORAGE | 14'-0" x 7'-0" x STD | B | STEEL | PAINT | -- | STEEL | -- | -- | -- | -- | BY MANUF. | -- | -- | |

DOOR # HARDWARE GENERAL NOTES:

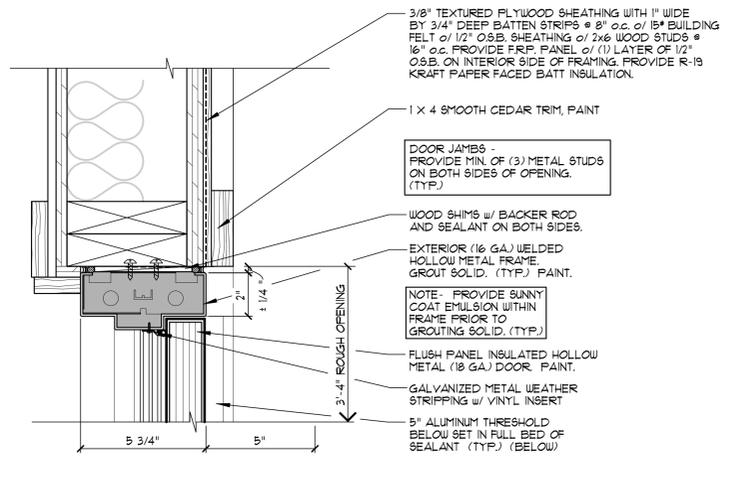
- ALL DOOR HANDSETS TO BE MOUNTED AT 44" - 48" AFF.
- ALL DOOR LOCKSETS / PASSAGE SETS SHALL BE OF THE LEVER HANDLE TYPE. HARDWARE SHALL BE MOUNTED NO HIGHER THAN 48" ABOVE FINISHED FLOOR. PROVIDE LEVER HARDWARE AT ALL HANDICAPPED ACCESSIBLE DOORS. MAXIMUM PULL FORCES FOR INTERIOR DOORS TO BE 50 LBS FORCE. MAXIMUM PULL FORCES FOR EXTERIOR DOORS TO BE 150 LBS FORCE.
- PER ADAAG 4.16.6 - MINIMUM MANEUVERING CLEARANCE AT DOORS THAT ARE NOT AUTOMATIC OR POWER-ASSISTED / FOR FRONT APPROACHES TO PUSH SIDE OF DOORS, NOT EQUIPPED WITH LATCH AND CLOSER SHALL HAVE MANEUVERING SPACE THAT IS THE SAME WIDTH AS DOOR OPENING AND EXTENDS 48-INCHES MINIMUM PERPENDICULAR TO THE DOORWAY.
- ALL LOCKSETS TO BE PROVIDED WITH A REMOVABLE CONSTRUCTION CORE SUPPLIED BY OWNER'S MAINTENANCE STAFF. CONTRACTOR TO COORDINATE WITH OWNER FOR PERMANENT CORE AND MASTER KEYING.



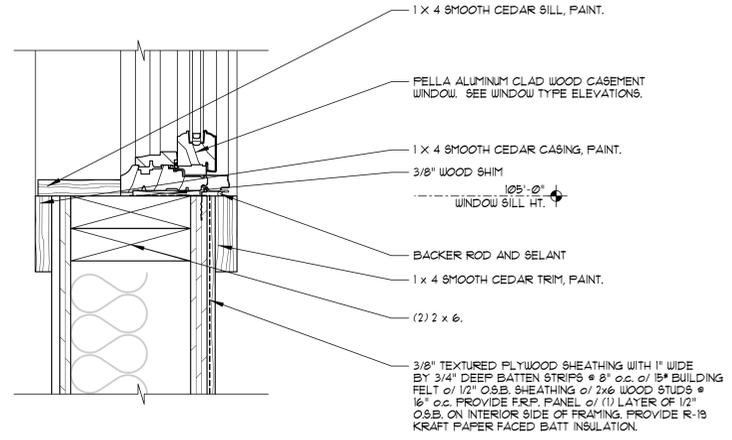
A HEAD DETAIL - SERVICE DOOR
SCALE: 3" = 1'-0"



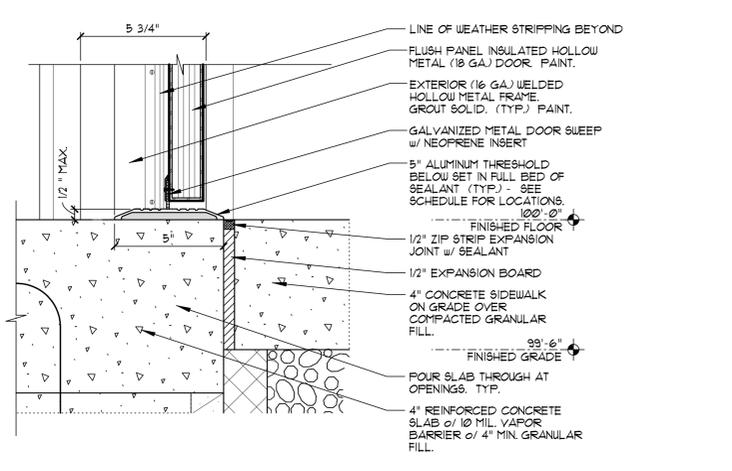
C WINDOW HEAD DETAIL
SCALE: 3" = 1'-0"



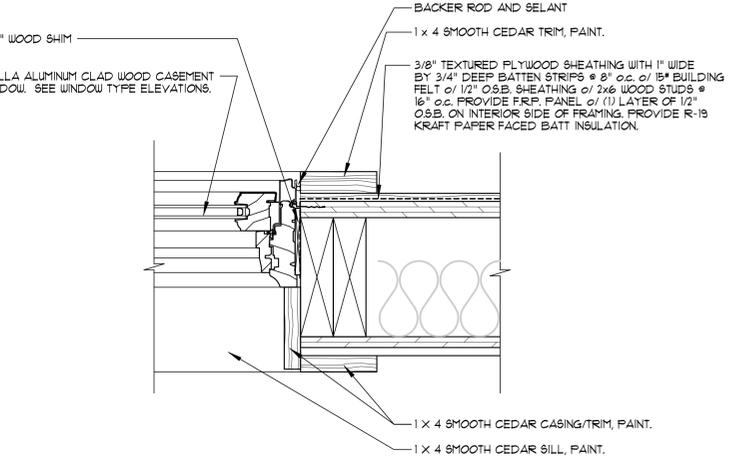
B JAMB DETAIL - SERVICE DOOR
SCALE: 3" = 1'-0"



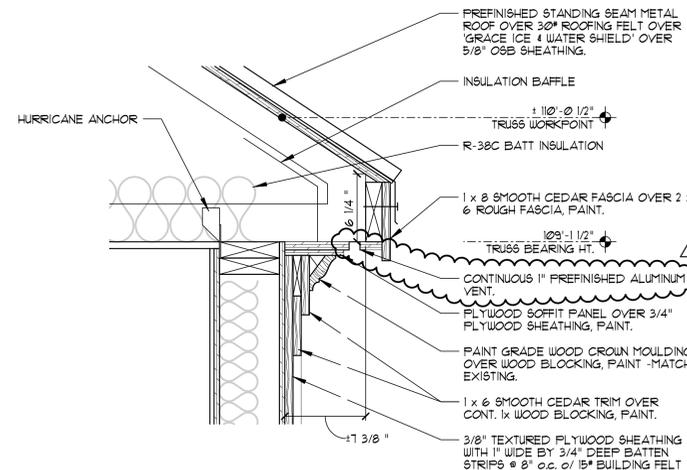
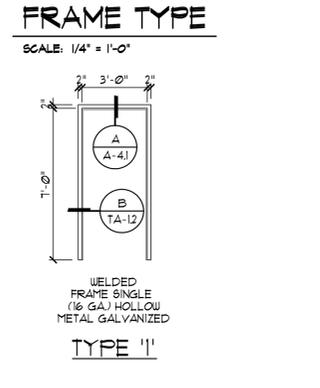
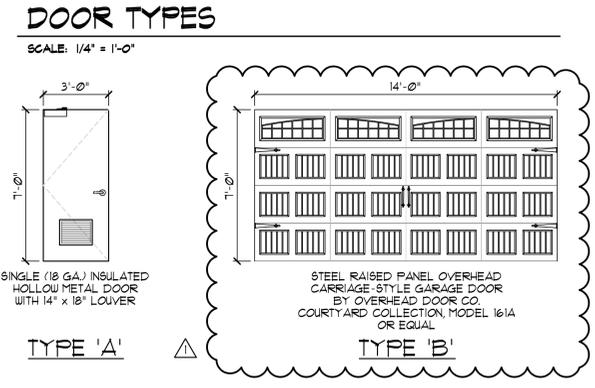
E WINDOW SILL DETAIL
SCALE: 3" = 1'-0"



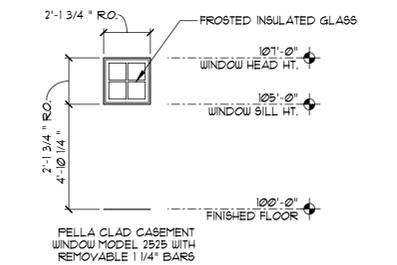
D SILL DETAIL - SERVICE DOOR
SCALE: 3" = 1'-0"



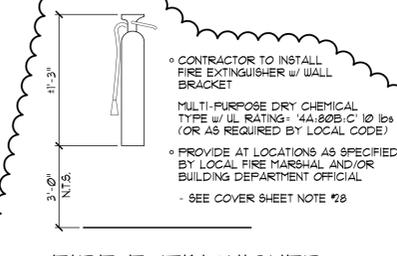
F WINDOW JAMB DETAIL
SCALE: 3" = 1'-0"



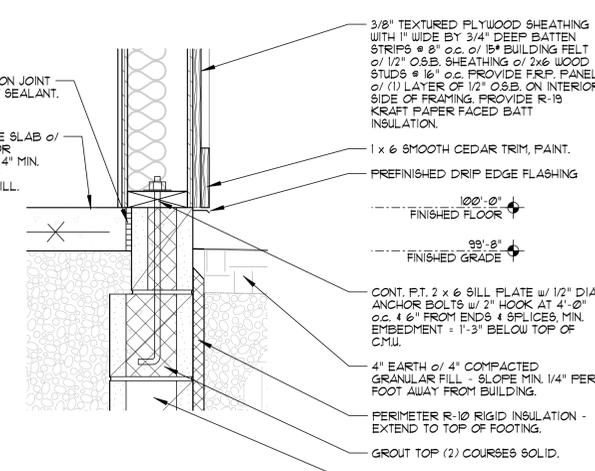
G SECTION DETAIL
SCALE: 1 1/2" = 1'-0"



A WINDOW ELEVATION
SCALE: 1/4" = 1'-0"



J FIRE EXTINGUISHER
SCALE: N.T.S.



H SECTION DETAIL
SCALE: 1 1/2" = 1'-0"

FORD & ASSOCIATES

1500 West First Avenue
Columbus, Ohio 43212
P: 614.488.6252
F: 614.488.9963

ARCHITECTS

DARREE FIELDS STORAGE ADDITION 2012

6259 COSGRAY ROAD
DUBLIN, OHIO 43071

For **CITY OF DUBLIN - Parks & Open Space**
DUBLIN, OHIO 43071

6555 SHER-RINGS ROAD

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| ISSUE | REVISION | DATE |
|--------------------|----------|---------------|
| PRELIMINARY | | OCT. 15, 2012 |
| OWNER REVIEW | | NOV. 15, 2012 |
| PERMIT | | NOV. 20, 2012 |
| PERMIT RESUBMITTAL | △ | DEC. 14, 2012 |

DOOR, HARDWARE SCHEDULES AND DETAILS

FAA #12153.00

A-4.1

DARREE FIELDS

| ISSUE | REVISION | DATE |
|--------------------|----------|---------------|
| PRELIMINARY | | OCT. 15, 2012 |
| OWNER REVIEW | | NOV. 15, 2012 |
| PERMIT | | NOV. 20, 2012 |
| PERMIT RESUBMITTAL | △ | DEC. 14, 2012 |

WALL SECTIONS AND PARTIAL ELEVATIONS

FAA #12153.00

A-5.1

DARREE FIELDS

CONSTRUCTION NOTES

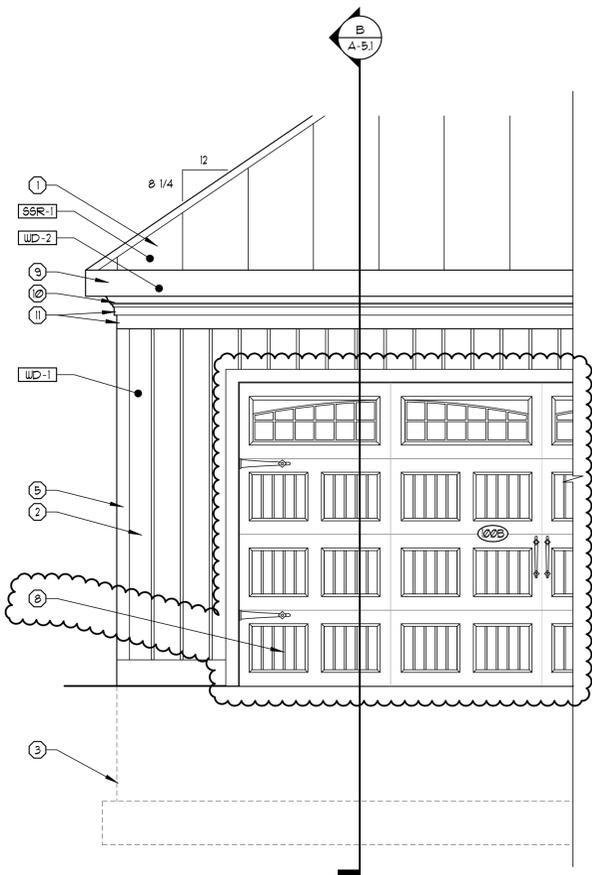
- ALL FASTENERS, CONNECTORS, OR OTHER HARDWARE IN DIRECT CONTACT WITH PRESERVATIVE TREATED OR FIRE RETARDANT TREATED WOOD SHALL BE STAINLESS STEEL TYPE 304 OR TYPE 316, OR HOT-DIPPED GALVANIZED STEEL ASTM A653, CLASS G-185 WITH 125 OUNCES OF ZINC PER SQUARE FOOT TO REDUCE THE CORROSION PROCESS.
- SEE STRUCTURAL SHEETS FOR ALL WOOD STUD FRAMING CONFIGURATIONS, SIZES, AND SPACING.
- ALL EXTERIOR WOOD BLOCKING TO BE MOISTURE RESISTANT PRESERVATIVE TREATED (P.P.T.) PER ALUFA C1, C2, C3, C4, C5, C14, C15, C16, C22, C23, C28, C31, C33, 4 M4.
- ALL SEAMS IN BATT INSULATION TO BE TAPED TO ENSURE CONTINUITY OF VAPOR BARRIER.
- ALL SHEATHING IS TO BE ATTACHED TO METAL FRAMING BY THE USE OF NON-REVERSING SCREWS. NO NAIL FASTENERS ARE PERMITTED.

ELEVATION CODED NOTES

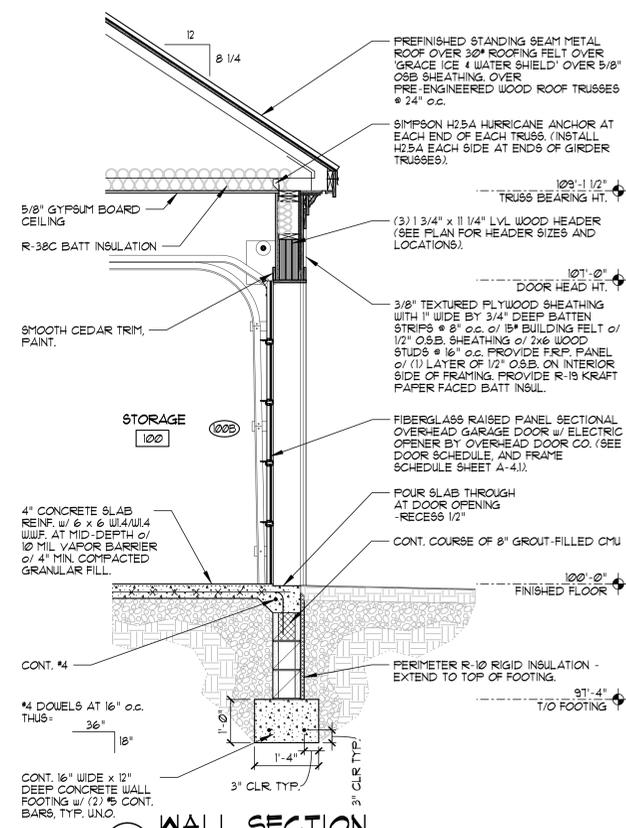
- | | |
|---|--|
| ① PREFINISHED STANDING BEAM METAL ROOF, (SSR-1) | ⑩ RELOCATED WINDOW UNIT. |
| ② VERTICAL BOARD AND BATTEN SIDING, PAINT. | ⑪ SECTIONAL OVERHEAD "CARRIAGE" STYLE GARAGE DOOR w/ ELECTRIC OPENER (SEE DOOR AND FRAME SCHEDULE SHEET A-4.1) |
| ③ LINE OF C.I.P. CONCRETE/CMU FOUNDATION | ⑫ 1 x 8 SMOOTH CEDAR FASCIA, PAINT. |
| ④ ALUMINUM CLAD WOOD WINDOW SEE WINDOW TYPES, SHEET A-4.1. | ⑬ 1 x 4 SMOOTH CEDAR TRIM, PAINT. |
| ⑤ 1 x 4 SMOOTH CEDAR TRIM, PAINT. | ⑭ PAINT GRADE DECORATIVE WOOD CROWN MOULDING TRIM, PAINT. MATCH EXISTING. |
| ⑥ HOLLOW METAL DOOR AND FRAME - PAINT (PT-1) (SEE DOOR AND FRAME SCHEDULE SHEET A-4.1). | ⑮ 1 x 6 SMOOTH CEDAR TRIM, PAINT. |

MATERIAL FINISH KEY

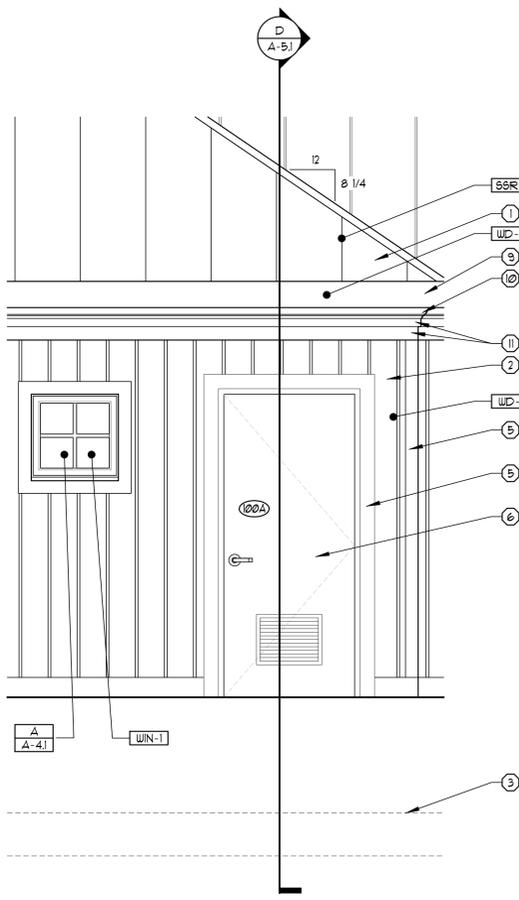
| MARK | TYPE | NOTES |
|-------|--------------------------------------|---|
| SSR-1 | PREFINISHED STANDING BEAM METAL ROOF | DMI, SNAP ON SEAM HIGH PROFILE 8015-18 w/ LOW BEAD STIFFENER. FINISH - WEATHERED ZINC. |
| WIN-1 | WINDOWS | FELLA ARCHITECT SERIES FIXED CASEMENT WINDOW. COLOR TO BE FELLA STANDARD WHITE. |
| WD-1 | VERTICAL BOARD AND BATTEN SIDING | 3/8" TEXTURED WOOD SHEATHING w/ 1" WIDE x 3/4" DEEP WOOD BATTEN STRIPS @ 8" o.c. (PAINT). |
| WD-2 | CEDAR WOOD CORNICE AND TRIM | CLEAR CEDAR, PAINT - SEE SECTIONS FOR SIZES & PROFILES |



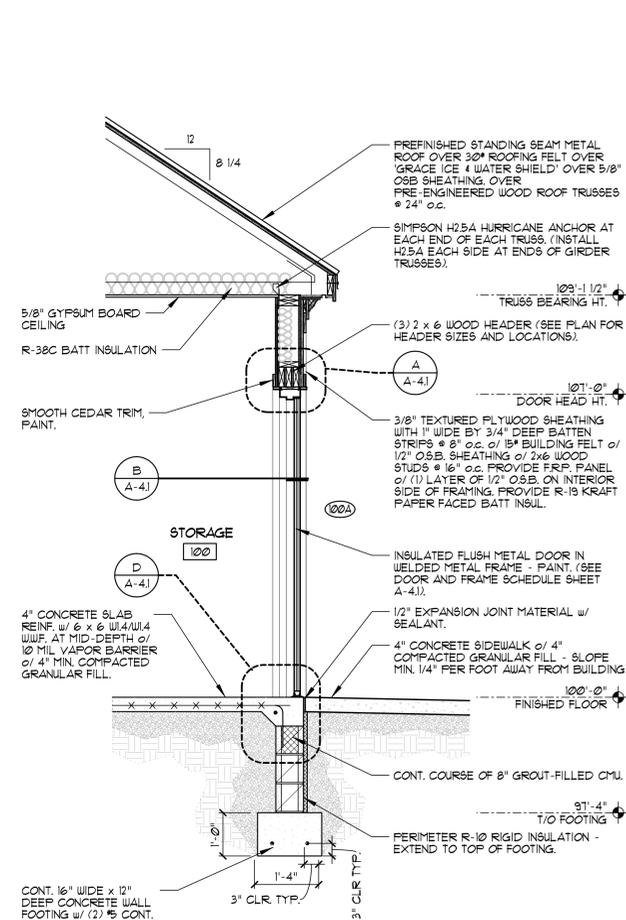
A PARTIAL BUILDING ELEVATION
SCALE: 1/2" = 1'-0"



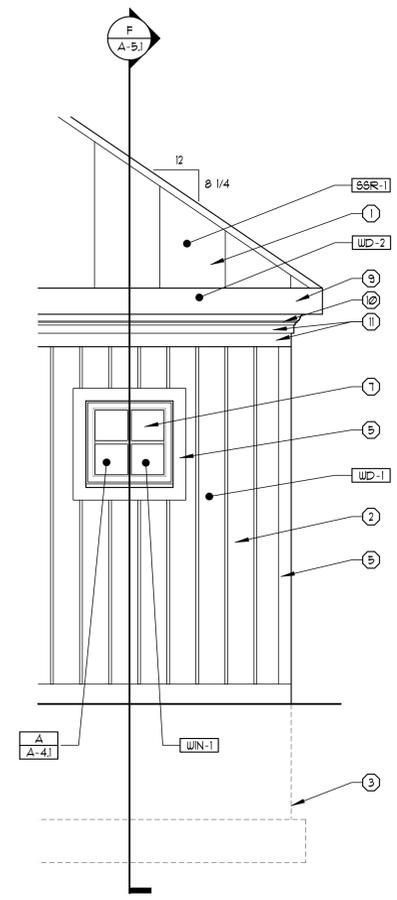
B WALL SECTION
SCALE: 1/2" = 1'-0"



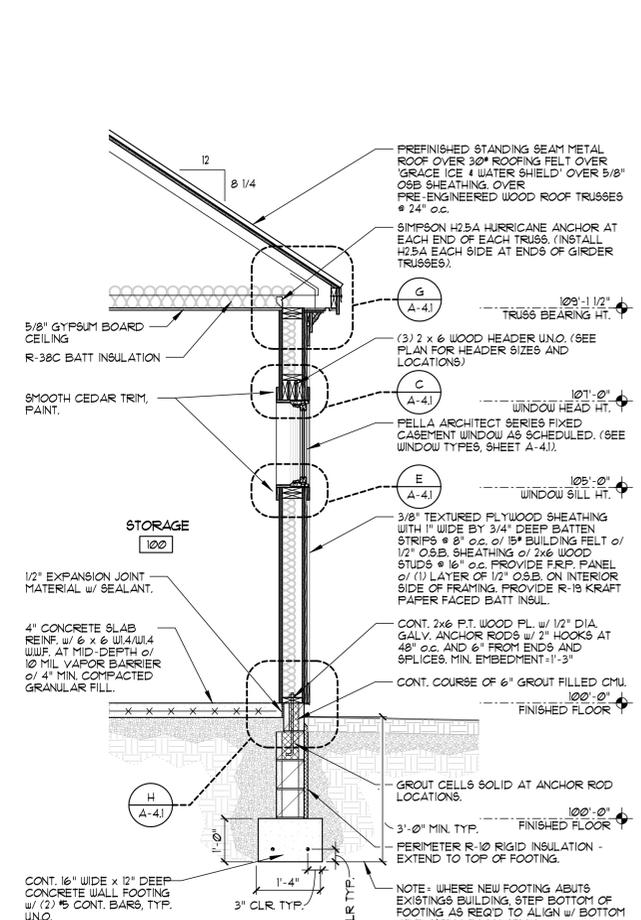
C PARTIAL ELEVATION
SCALE: 1/2" = 1'-0"



D WALL SECTION
SCALE: 1/2" = 1'-0"



E PARTIAL ELEVATION
SCALE: 1/2" = 1'-0"



F WALL SECTION
SCALE: 1/2" = 1'-0"

STRUCTURAL NOTES

- A. GENERAL
- THE STRUCTURE IS DESIGNED TO BE SELF-SUPPORTING AND STABLE AFTER CONSTRUCTION IS FULLY COMPLETED. THE CONTRACTOR IS SOLELY RESPONSIBLE TO DETERMINE ERECTION PROCEDURE AND SEQUENCE TO ENSURE THE SAFETY OF THE BUILDING AND ITS COMPONENT PARTS DURING CONSTRUCTION, INCLUDING PROVISIONS FOR CHANGEABLE WEATHER UNTIL THE BUILDING IS ENCLOSED AND CONDITIONED. THE CONTRACTOR SHALL DESIGN, INSTALL AND SUBSEQUENTLY REMOVE ANY SHORING, SHEETING, TEMPORARY BRACING, GUYS OR TIEDOWNS NECESSARY TO MAINTAIN SAFETY AND STRUCTURAL STABILITY DURING CONSTRUCTION.
 - THE CONTRACTOR IS SOLELY RESPONSIBLE TO FOLLOW ALL APPLICABLE SAFETY CODES, BUILDING CODES AND GOVERNING REGULATIONS WITH JURISDICTION OVER THE CONSTRUCTION SITE DURING ALL PHASES OF CONSTRUCTION.
 - SHOULD ANY OF THE DETAILED INSTRUCTIONS SHOWN ON THE PLANS CONFLICT WITH THESE STRUCTURAL NOTES, THE SPECIFICATIONS, OR WITH EACH OTHER, THE STRICTEST PROVISION SHALL GOVERN.
 - GOVERNING CODE: 2011 OHIO BUILDING CODE, INCLUDING ALL ADOPTED REFERENCE STANDARDS AND MATERIAL SPECIFICATIONS REFERENCED THEREIN.
 - DESIGN CRITERIA
 - FLOOR LIVE LOADS 100 PSF
 - ROOF LOADING
 - DESIGN ROOF LIVE LOAD (MINIMUM) 25 PSF
 - ROOF SNOW LOADS:
 - GROUND SNOW LOAD 25 PSF
 - FLAT-ROOF SNOW LOAD 21 PSF
 - SNOW EXPOSURE FACTOR 1.0
 - SNOW LOAD IMPORTANCE FACTOR 1.0
 - THERMAL FACTOR 1.2
 - WIND LOADING
 - BASIC WIND SPEED 90 MPH.
 - WIND IMPORTANCE FACTOR 1.0
 - OCCUPANCY CATEGORY II
 - WIND EXPOSURE CATEGORY C
 - INTERNAL PRESSURE COEFFICIENT +0.18, -0.18
 - COMPONENTS AND CLADDING:
 - ROOF +10 PSF, -26 PSF
 - WALLS +18 PSF, -24 PSF
 - SEISMIC DESIGN CRITERIA
 - SEISMIC IMPORTANCE FACTOR 1.0
 - OCCUPANCY CATEGORY II
 - MAPPED SPECTRAL RESPONSE ACCELERATIONS:
 - SHORT PERIOD 0.156
 - 1 SECOND PERIOD 0.059
 - SITE CLASS D
 - SPECTRAL RESPONSE COEFFICIENTS:
 - DESIGN SPECTRAL RESPONSE ACCELERATION AT SHORT PERIODS = 0.166
 - DESIGN SPECTRAL RESPONSE ACCELERATION AT 1 SECOND PERIOD = 0.095
 - SEISMIC DESIGN CATEGORY B

STRUCTURAL NOTES PAGE 1

- BASIC SEISMIC-FORCE-RESISTING-SYSTEM: LIGHT-FRAMED SHEAR WALLS WITH WOOD STRUCTURAL PANEL SHEATHING
 - DESIGN BASE SHEAR 0.35 KIPS
 - SEISMIC RESPONSE COEFFICIENT, Cs 0.03
 - RESPONSE MODIFICATION FACTOR, R 6-1/2
 - ANALYSIS PROCEDURE: EQUIVALENT LATERAL FORCE PROCEDURE
- SPECIAL INSPECTIONS: IN ACCORDANCE TO OBC CHAPTER 17, THE OWNER SHALL EMPLOY INSPECTION AGENCIES TO PERFORM SPECIAL INSPECTIONS DURING CONSTRUCTION INCLUDING INSPECTIONS OF SHOP-FABRICATED ITEMS WHEN APPLICABLE. ALL INSPECTION AGENCIES, INCLUDING FABRICATION FACILITIES WHEN REQUIRED, SHALL BE QUALIFIED AND APPROVED BY THE BUILDING OFFICIAL. THE FOLLOWING TYPES OF WORK REQUIRE SPECIAL INSPECTIONS (REFER TO OTHER DISCIPLINES FOR SPECIAL INSPECTIONS OF NON-STRUCTURAL SYSTEMS WHERE REQUIRED):
 - SOILS.
 - CONCRETE CONSTRUCTION.
 - MASONRY CONSTRUCTION.
 - WOOD CONSTRUCTION.
- COORDINATE ALL DIMENSIONS AND ELEVATIONS WITH THE ARCHITECTURAL DRAWINGS. SEE THE ARCHITECTURAL DRAWINGS FOR DIMENSIONS AND ELEVATIONS NOT SHOWN. ALL DIMENSIONS AND ELEVATIONS SHOWN ON THE STRUCTURAL DRAWINGS ARE INTENDED TO AUGMENT, NOT SUPERSEDE, THOSE SHOWN ON THE ARCHITECTURAL DRAWINGS. DO NOT SCALE THE DRAWINGS. DRAWINGS MAY NOT BE TO SCALE.
- EXISTING BUILDING: INSTALL TEMPORARY SUPPORTS AND OTHER MEASURES AS REQUIRED TO PREVENT DAMAGE TO THE EXISTING BUILDING DURING CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE FOR THE DESIGN, INSTALLATION AND FINAL CLEARANCE OF REQUIRED NEEDLING, SHORING, UNDERPINNING OR BRACING OF THE EXISTING BUILDING. FIELD VERIFY ALL EXISTING DIMENSIONS, ELEVATIONS AND CONDITIONS WHICH AFFECT THE NEW CONSTRUCTION PRIOR TO THE START OF WORK. EXISTING CONDITIONS SHOWN ON THE DRAWINGS ARE ASSUMED, HAVE NOT BEEN CONFIRMED, ARE NOT GUARANTEED AND MAY CONFLICT WITH THE NEW WORK REQUIRED. FIELD VERIFY THAT THE EXISTING FRAMING AFFECTED BY THE NEW WORK IS IN SOUND CONDITION AND DOES NOT DISPLAY VISIBLE SIGNS OF DISTRESS OR DETERIORATION OR HAS BEEN PREVIOUSLY MODIFIED OR ALTERED. IMMEDIATELY NOTIFY THE ARCHITECT OF ANY DISCREPANCIES BETWEEN THE INFORMATION SHOWN ON THE DRAWINGS AND ACTUAL FIELD CONDITIONS; DO NOT PROCEED WITH THAT PORTION OF WORK UNTIL ALL DISCREPANCIES HAVE BEEN RESOLVED. THE CONTRACTOR SHALL SUBMIT A FIELD SURVEY SHOWING ALL DISCREPANCIES BETWEEN THE EXISTING CONDITIONS AND THE NEW WORK. BASED ON THE REPORTED FIELD CONDITIONS, THE ARCHITECT WILL SUBMIT SUPPLEMENTAL INSTRUCTIONS FOR ALL WORK (NEW OR EXISTING) REQUIRING MODIFICATION.
- SHOP DRAWINGS
 - SUBMIT THE FOLLOWING SHOP DRAWINGS TO THE ARCHITECT FOR REVIEW PRIOR TO FABRICATION:
 - CONCRETE REINFORCING AND MIX DESIGNS FOR EACH CLASS OF CONCRETE.
 - PRE-ENGINEERED, PRE-FABRICATED TRUSSES
 - THE CONTRACTOR SHALL REVIEW AND ACCEPT FULL RESPONSIBILITY FOR DIMENSIONAL CORRECTNESS. ALL SHOP DRAWINGS MUST BEAR THE APPROVAL STAMP OF THE CONTRACTOR (TO INCLUDE INITIALS, DATE AND DISPOSITION), PRIOR TO REVIEW BY THE ARCHITECT OR ENGINEER. THE ENGINEER WILL RETURN ALL SHOP DRAWINGS, UNREVIEWED, THAT DO NOT BEAR THE APPROVAL STAMP OF THE CONTRACTOR.

STRUCTURAL NOTES PAGE 2

- B. FOUNDATIONS
- NOTIFY THE ARCHITECT AS SOON AS POSSIBLE OF ANY UNUSUAL SOIL CONDITIONS, SUCH AS UNEXPECTED SPRING OR SEEPAGE WATER OR SOIL OF QUESTIONABLE BEARING CAPACITY.
 - BEAR ALL FOOTINGS ON FIRM UNDISTURBED SOIL OR ENGINEERED FILL HAVING A MINIMUM ALLOWABLE BEARING CAPACITY OF 1,500 POUNDS PER SQUARE FOOT.
 - BEAR PERIMETER FOOTINGS A MINIMUM OF 3'-0" BELOW EXTERIOR GRADE. STEP FOOTINGS AS REQUIRED TO COMPLY, REGARDLESS OF FOOTING STEPS AND GRADES SHOWN ON THE DRAWINGS.
 - RETAIN THE SERVICES OF A SOILS ENGINEER TO INSPECT AND APPROVE FOUNDATION EXCAVATIONS FOR THE BEARING CAPACITY INDICATED ABOVE. COORDINATE THE SCHEDULING OF THE SOILS ENGINEER'S SERVICES WITH THE ANTICIPATED DATE OF CONCRETE PLACEMENT.
 - KEEP FOUNDATION EXCAVATIONS FREE OF WATER AT ALL TIMES. REPLACE SOFT OR WEAKENED SOIL WITH CLASS IV CONCRETE OR ENGINEERED FILL.
 - THE EXISTENCE OF UNDERGROUND STRUCTURES AND/OR UTILITIES IS NOT KNOWN. USE EXTREME CARE WHEN EXCAVATING SO AS NOT TO DISTURB ANY EXISTING UNDERGROUND STRUCTURES AND/OR UTILITIES. COORDINATE WITH THE SURVEY AND WITH THE OWNER TO OBTAIN ANY INFORMATION AVAILABLE REGARDING EXISTING UTILITIES.
- C. REINFORCED CONCRETE
- ALL CONCRETE CONSTRUCTION SHALL CONFORM TO THE LATEST, ADOPTED EDITIONS OF THE STANDARDS AND MATERIAL SPECIFICATIONS REFERENCED HEREIN.
 - REFERENCE STANDARDS BY THE AMERICAN CONCRETE INSTITUTE (ACI)
 - ACI 301, "SPECIFICATIONS FOR STRUCTURAL CONCRETE," EXCEPT AS SPECIFICALLY MODIFIED IN THE SPECIFICATIONS AND/OR HEREIN.
 - ACI 318, "BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE."
 - ACI 308, "HOT WEATHER CONCRETING" AND ACI 308, "COLD WEATHER CONCRETING."
 - ACI 315, "DETAILS AND DETAILING OF CONCRETE REINFORCEMENT" UNLESS DETAILED OTHERWISE ON THE STRUCTURAL DRAWINGS.
 - MATERIALS
 - STRUCTURAL CONCRETE

| CLASS | LOCATION | f'c (psi) |
|-------|---|------------------|
| I | FOOTINGS | 3,000 |
| III | SLABS ON GRADE AND ALL EXTERIOR CONCRETE NOT OTHERWISE IDENTIFIED | 4,000 (with air) |
| IV | BACKFILL BELOW FOOTINGS | 1,500 |
 - ALL DEFORMED REINFORCING BARS: ASTM A615, GRADE 60.
 - ALL WELDED WIRE FABRIC: ASTM A185, DELIVERED IN FLAT SHEETS.

STRUCTURAL NOTES PAGE 3

- FIELD MANUAL: PROVIDE AT LEAST ONE COPY OF THE ACI FIELD REFERENCE MANUAL, SP-15, IN THE FIELD OFFICE AT ALL TIMES.
- FOOTINGS
 - INSTALL CORNER BARS AT FOOTING CORNERS TO MATCH HORIZONTAL REINFORCING. LAP CORNER BARS WITH HORIZONTAL FOOTING REINFORCING.
 - INSTALL LEAN CONCRETE (CLASS IV) UNDER FOUNDATIONS FOR ACCIDENTAL OVER-EXCAVATION, SOFT SPOTS AND TRENCHES.
- CONTROL/CONSTRUCTION JOINTS
 - CONSTRUCTION JOINTS ARE PERMITTED ONLY WHERE SHOWN ON THE DRAWINGS OR AS APPROVED BY THE STRUCTURAL ENGINEER. INSTALL KEYS IN ALL CONSTRUCTION JOINTS.
 - PROVIDE CONTROL JOINTS IN ALL INTERIOR SLABS ON GRADE, WHETHER SHOWN OR NOT, AT MAXIMUM INTERVALS OF SIXTEEN FEET, EACH WAY, UNLESS SHOWN OR NOTED OTHERWISE.
- CONCRETE COVER: UNLESS NOTED OTHERWISE, DETAIL REINFORCING TO PROVIDE MINIMUM CONCRETE COVER AS FOLLOWS:
 - CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH 3 INCHES
 - CONCRETE EXPOSED TO EARTH OR WEATHER
 - #5 BARS AND SMALLER 1-1/2 INCHES
 - OTHERS 2 INCHES
- ENGINEERED MASONRY CONSTRUCTION
 - ALL MASONRY CONSTRUCTION SHALL CONFORM TO THE LATEST, ADOPTED EDITIONS OF THE STANDARDS AND MATERIAL SPECIFICATIONS REFERENCED HEREIN.
 - REFERENCE STANDARDS
 - ACI 530/ASCE 5/TMS 402, "BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES."
 - ACI 530.1/ASCE 6/TMS 602, "SPECIFICATION FOR MASONRY STRUCTURES."
 - CONFORM COLD WEATHER MASONRY CONSTRUCTION TO PARAGRAPH 1.8.C.
 - CONFORM HOT WEATHER MASONRY CONSTRUCTION TO PARAGRAPH 1.8.D.
 - MATERIALS
 - CONCRETE BLOCK: ASTM C90, MINIMUM NET AREA COMPRESSIVE STRENGTH OF CONCRETE MASONRY UNITS: 2,500 PSI.
 - MORTAR: TYPE S, MINIMUM COMPRESSIVE STRENGTH: 1,800 PSI.
 - CORE FILL: ASTM C478, COARSE TYPE, MINIMUM COMPRESSIVE STRENGTH: 2,500 PSI.
 - BAR REINFORCING: ASTM A615, GRADE 60.
 - MISCELLANEOUS
 - FILL CORES SOLIDLY AROUND ANCHOR RODS.
 - LAY HOLLOW MASONRY UNITS WITH FULL MORTAR COVERAGE ON HORIZONTAL AND VERTICAL FACE SHELLS. PROVIDE FULL MORTAR COVERAGE IN THE STARTING COURSE ON FOOTINGS, AND WHEN ADJACENT TO CELLS OR CAVITIES TO BE REINFORCED OR FILLED WITH GROUT. LAY SOLID UNITS WITH FULL HEAD AND BED JOINTS.
- STRUCTURAL LUMBER

STRUCTURAL NOTES PAGE 4

- ALL STRUCTURAL LUMBER CONSTRUCTION SHALL CONFORM TO THE LATEST, ADOPTED EDITIONS OF THE STANDARDS AND MATERIAL SPECIFICATIONS REFERENCED HEREIN.
- REFERENCE STANDARD
 - NDS, "NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION" BY THE AMERICAN FOREST & PAPER ASSOCIATION (AF & PA).
- MATERIALS
 - ALL LUMBER SHALL COMPLY WITH THE REQUIREMENTS OF DOC PS 20. FURNISH LUMBER WITH EACH PIECE FACTORY-MARKED WITH GRADE STAMP OF INSPECTION AGENCY VERIFYING COMPLIANCE WITH GRADING RULE REQUIREMENTS AND IDENTIFYING GRADING AGENCY, GRADE, SPECIES, MOISTURE CONTENT AND MILL.
 - ALL WOOD STRUCTURAL PANELS SHALL COMPLY WITH REQUIREMENTS OF DOC PS 1, DOC PS 2, HPVA HP 1 AND APA PDS. FACTORY-MARK ALL WOOD STRUCTURAL PANELS WITH A GRADING STAMP OF THE INSPECTION AGENCY.
 - STUDS: SPRUCE-PINE-FIR, STUD GRADE OR BETTER, ACCORDING TO THE NATIONAL LUMBER GRADES AUTHORITY (NLGA), SEASONED AT 19% M.C.
 - STRUCTURAL LUMBER: SPRUCE-PINE-FIR NO. 2 OR BETTER, ACCORDING TO THE NATIONAL LUMBER GRADES ASSOCIATION (NLGA), SEASONED AT 19% M.C.
 - WOOD STRUCTURAL PANELS (PLYWOOD OR ORIENTED STRAND BOARD):
 - ROOF: 19/32" (5/8" NOMINAL), APA RATED SHEATHING, 40/20, EXPOSURE 1, U.N.O.
 - WALL: 19/32" (1/2" NOMINAL), APA RATED SHEATHING, 32/16, EXPOSURE 1.
 - FASTENERS
 - NAILS: COMMON STEEL WIRE NAILS, CONFORMING TO ASTM F1667.
 - WOOD SCREWS: FLAT HEAD, CONFORMING TO ANSI/ASME STANDARD B18.6.1.
 - BOLTS, NUTS AND WASHERS: CONFORM TO ASTM A307, ASTM A563 AND ASTM F436, RESPECTIVELY.
 - FIRE-RETARDANT TREATMENT: COMPLY WITH APPLICABLE REQUIREMENTS OF AFWA STANDARD U1. LABEL FIRE-RETARDANT-TREATED WOOD WITH APPROPRIATE IDENTIFICATION MARKING.
 - WOOD-PRESERVATIVE TREATMENT: COMPLY WITH THE APPLICABLE REQUIREMENTS OF AFWA STANDARD U1. MARK EACH TREATED ITEM WITH THE APPROPRIATE QUALITY MARK.
- CONNECTIONS: AS A MINIMUM, CONFORM CONNECTIONS FOR STRUCTURAL MEMBERS TO THE FASTENING SCHEDULE LISTED IN TABLE 2304.9.1 OF THE OHIO BUILDING CODE.
 - PROVIDE GALVANIZED CONNECTORS BY THE SIMPSON STRONG-TIE CO. INSTALL ALL CONNECTORS IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
 - WOOD STRUCTURAL PANELS, WOOD ROOF RAFTERS AND TRUSSES: NAILED, USE 8d COMMON NAILS SPACED AT 6 INCHES O.C. AT PANEL EDGES AND 12 INCHES O.C. AT INTERMEDIATE SUPPORTS. INSTALL PLYWOOD CLIPS AT MID-SPAN OF PLYWOOD BETWEEN SUPPORTS.
 - WOOD STRUCTURAL PANELS TO WOOD STUDS: USE 10d COMMON NAILS SPACED AT 6 INCHES O.C. AT PANEL EDGES AND 12 INCHES O.C. AT INTERMEDIATE SUPPORTS. BLOCK ALL EDGES WITH FULL-DEPTH BLOCKING.
 - PROVIDE GALVANIZED FASTENERS FOR ALL EXTERIOR APPLICATIONS AND FOR ALL FIRE-RETARDANT TREATED OR WOOD-PRESERVATIVE TREATED MATERIALS.
 - AT POSTS AND JAMBS OF OPENINGS, NAIL MULTIPLE STUDS TOGETHER WITH 8d NAILS AT 8" O.C., FULL LENGTH.
- MISCELLANEOUS
 - AT ALL EXTERIOR STUD WALLS, INSTALL A CONTINUOUS LINE OF SOLID BLOCKING AT MID-HEIGHT OF THE WALL, BUT AT NO GREATER THAN 5'-0" ON CENTER MAXIMUM.
 - UNLESS NOTED OTHERWISE, INSTALL MINIMUM DOUBLE JACK BEARING STUDS UNDER EACH END OF ALL BEAMS AND GIRDER TRUSSES, BUT NOT LESS THAN THE NUMBER REQUIRED TO PROVIDE FULL-WIDTH SOLID BEARING OF THE SUPPORTED MEMBERS.

STRUCTURAL NOTES PAGE 5

- INSTALL STANDARD THREE-STUD CORNER CONSTRUCTION AT INSIDE AND OUTSIDE CORNERS, PROVIDING NAILING SURFACES FOR SHEATHING. INSTALL BLOCKING AS REQUIRED.
 - AT DOOR AND WINDOW OPENINGS IN EXTERIOR WALLS, INSTALL A MINIMUM OF ONE JACK BEARING STUD AND ONE FULL-HEIGHT KING STUD AT EACH END OF HEADERS, UNLESS NOTED OR SCHEDULED OTHERWISE.
 - UNLESS NOTED OTHERWISE, AT EXTERIOR WALLS, INSTALL TRIPLE 2 X 6 HEADERS OVER OPENINGS IN 2 X 6 STUD WALLS.
 - INSTALL ONE LAYER OF 1/2" THICK WOOD STRUCTURAL PANEL BETWEEN EACH MEMBER OF DIMENSIONAL LUMBER HEADERS.
 - TREAT ALL EXTERIOR LUMBER OR LUMBER IN CONTACT WITH CONCRETE OR MASONRY WITH PRESERVATIVE IN ACCORDANCE WITH AWPA.
 - INSTALL WOOD STRUCTURAL PANEL WALL SHEATHING ON ALL EXTERIOR WALLS.
 - PROVIDE AND INSTALL TEMPORARY AND PERMANENT BRACING FOR PRE-ENGINEERED, PRE-FABRICATED WOOD TRUSSES AS INDICATED ON THE TRUSS MANUFACTURER'S APPROVED SHOP DRAWINGS.
 - HOT-DIP GALVANIZE ALL STEEL CONNECTORS AND PRODUCTS 14 GA. AND THICKER AFTER FABRICATION THAT ARE IN CONTACT WITH PRESERVATIVE-TREATED WOOD. PROVIDE MINIMUM 2.0 OZ. COATING, ALL SIDES, PER ASTM A123. PROVIDE HOT-DIPPED GALVANIZED CONNECTORS PER ASTM A153 OR STAINLESS STEEL CONNECTORS.
 - HOT-DIP GALVANIZE ALL STEEL CONNECTORS AND PRODUCTS LESS THAN 14 GA. THICK AFTER FABRICATION THAT ARE IN CONTACT WITH PRESERVATIVE-TREATED WOOD. PROVIDE MINIMUM 1.85 OZ. COATING, ALL SIDES, PER ASTM A653. PROVIDE HOT-DIPPED GALVANIZED CONNECTORS PER ASTM A153 OR STAINLESS STEEL CONNECTORS.
- LVL INDICATES LAMINATED VENEER LUMBER (MICRO-LAM MEMBER BY iLevel BY WEYERHAEUSER, OR EQUAL). CONNECT MULTIPLE MEMBERS TOGETHER AS FOLLOWS:
- DOUBLE MEMBERS: NAILED, USING (2) 16d NAILS SPACED AT 12" O.C., LOCATED 2" FROM TOP AND BOTTOM OF BEAM.
 - TRIPLE MEMBERS: BOLTED, USING 1/2" DIAMETER BOLTS SPACED AT 24" O.C., LOCATED 2" FROM TOP AND BOTTOM OF BEAM.
- F. PRE-ENGINEERED, PRE-FABRICATED WOOD TRUSSES
- THE DESIGN, FABRICATION AND INSTALLATION OF ALL PRE-ENGINEERED, PRE-FABRICATED WOOD TRUSSES SHALL CONFORM TO THE LATEST, ADOPTED EDITIONS OF THE STANDARDS AND MATERIAL SPECIFICATIONS REFERENCED HEREIN.
 - REFERENCE STANDARDS
 - NDS, "NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION" BY THE AMERICAN FOREST & PAPER ASSOCIATION (AF & PA).
 - TPI 1, "DESIGN STANDARDS FOR METAL-PLATE-CONNECTED WOOD TRUSS CONSTRUCTION" BY THE TRUSS PLATE INSTITUTE.
 - MATERIALS
 - THE TERM "TRUSS" USED IN THIS SECTION APPLIES TO TRUSSES THAT ARE DESIGNED AND FABRICATED AS SEPARATE ENGINEERED PRODUCTS, AND DELIVERED TO THE PROJECT SITE FOR INSTALLATION.
 - LUMBER: SPECIES PER DESIGN BY THE TRUSS MANUFACTURER, NO. 2 GRADE OR BETTER, 15% MAXIMUM M.C., EXCEPT THE TRUSS MANUFACTURER MAY USE STUD-GRADE FOR WEB MEMBERS.
 - DESIGN

STRUCTURAL NOTES PAGE 6

| ISSUE | REVISION | DATE |
|--------------------|----------|---------------|
| PRELIMINARY | | OCT. 15, 2012 |
| OWNER REVIEW | | NOV. 15, 2012 |
| PERMIT | | NOV. 20, 2012 |
| PERMIT RESUBMITTAL | | DEC. 14, 2012 |
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STRUCTURAL NOTES

- a. THE TRUSS MANUFACTURER SHALL DESIGN, DETAIL, PROVIDE AND INSTALL ALL INTERNAL TRUSS COMPONENT CONNECTIONS.
 - b. THE TRUSS MANUFACTURER SHALL DESIGN AND DESIGNATE ALL TRUSS-TO-TRUSS HANGERS. THE CONTRACTOR SHALL FURNISH AND INSTALL ALL TRUSS-TO-TRUSS HANGERS IN ACCORDANCE WITH THE HANGER MANUFACTURER'S SPECIFICATIONS.
 - c. METAL CONNECTOR PLATES: USE GALVANIZED SHEET STEEL CONFORMING WITH ASTM A653, COATING CLASS G60 . MANUFACTURE WITH HOLES, PLUGS, TEETH, OR PRONGS UNIFORMLY SPACED AND FORMED.
 - d. IN ADDITION TO THE UNIFORM LOADS INDICATED BELOW, DESIGN TRUSSES FOR ALL SUPERIMPOSED DEAD LOADS INCLUDING BUT NOT LIMITED TO OVERLAY FRAMING, CHIMNEYS, MECHANICAL EQUIPMENT, ETC. DESIGN TRUSSES FOR THE EFFECTS OF DRIFTING SNOW WHERE APPLICABLE. DESIGN TRUSSES AND REQUIRED BRACING TO RESIST THE NET WIND UPLIFT INDICATED ON THE DRAWINGS.
 - e. DESIGN OF MEMBERS AND CONNECTIONS SHALL BE PERFORMED BY A PROFESSIONAL ENGINEER, REGISTERED IN THE STATE OF THE PROJECT, EXPERIENCED IN SIMILAR DESIGN, RETAINED BY THE MANUFACTURER.
 - f. DESIGN BOTTOM CHORDS OF GIRDER TRUSSES FOR THE END REACTIONS OF SUPPORTED TRUSSES.
 - g. DESIGN ALL TRUSSES FOR ADDITIONAL SERVICE LOADS INDICATED ON PLAN.
5. DESIGN LOADS
- a. ROOF LOADS:
 - 1. TOP CHORD DEAD LOAD: 10 PSF
 - 2. TOP CHORD LIVE LOAD: SEE PARAGRAPH A.5.b, GENERAL NOTES
 - 3. BOTTOM CHORD DEAD LOAD: 5 PSF
 - 4. BOTTOM CHORD LIVE LOAD: 20 PSF WHERE REQUIRED BY OBC BASED ON WEB CONFIGURATION
 - 5. WIND LOADING: SEE PARAGRAPH A.5.c, GENERAL NOTES
 - a. NET WIND UPLIFT: 12 PSF
 - b. DEFLECTIONS
 - 1. ROOF
 - a. MAXIMUM LIVE LOAD DEFLECTION: L/360, OR 0.75" MAXIMUM
 - b. MAXIMUM TOTAL LOAD DEFLECTION: L/240, OR 1.0" MAXIMUM
 - c. DESIGN ALL BRACING AND BRACING CONNECTIONS FOR ALL TRUSS TOP CHORDS, BOTTOM CHORDS AND WEB MEMBERS. PARTICULAR ATTENTION SHALL BE GIVEN TO AREAS IN THE FINISHED STRUCTURE WHICH CONTAIN TRUSSES WITH UN-SHEATHED TOP AND/OR BOTTOM CHORD MEMBERS.
6. SUBMITTALS
- a. SUBMIT TRUSS SHOP DRAWINGS WHICH EXHIBIT THE SEAL OF THE ENGINEER RESPONSIBLE FOR THE TRUSS DESIGN.
 - b. SUBMIT LAYOUT DRAWING WHICH INDICATES THE LOCATION OF EACH TRUSS.
 - c. SUBMIT HANGER CONNECTOR TYPES AND LOCATIONS.
 - d. INDICATE ALL TEMPORARY AND PERMANENT BRACING REQUIREMENTS OF TRUSS MEMBERS. IN AREAS WHERE TRUSS TOP CHORDS AND/OR BOTTOM CHORDS DO NOT RECEIVE SHEATHING, INDICATE THE REQUIRED CHORD BRACING AND BRACE SPACINGS FOR ALL APPLICABLE LOAD CASES. INDICATE ANCHORAGE OF "CAP" TRUSSES AND/OR "OVERLAY" TRUSSES.

STRUCTURAL NOTES PAGE 1

1500 West First Avenue
Columbus, Ohio 43212
P: 614.488.6252
F: 614.488.9963

DARREE FIELDS STORAGE ADDITION 2012

6259 COSGRAY ROAD
DUBLIN, OHIO 43017

For
CITY OF DUBLIN - Parks & Open Space
6555 SHIER-RINGS ROAD
DUBLIN, OHIO 43017

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| ISSUE | REVISION | DATE |
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STRUCTURAL NOTES

FAA #12153.00

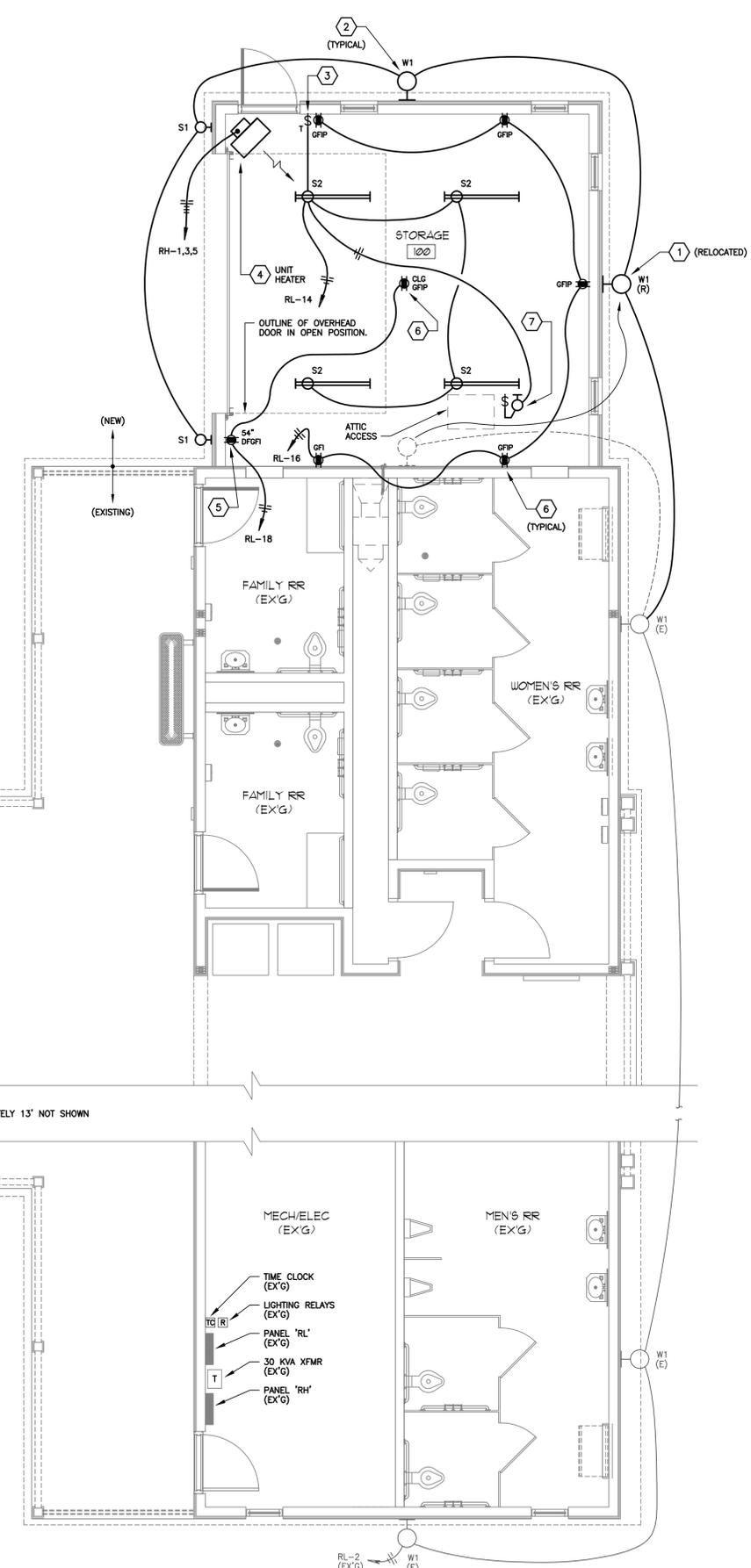
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DARREE FIELDS

ELECTRICAL LEGEND

| | | | | | |
|--|--|--|---|-----------|--|
| | WALL MOUNTED TEARDROP METAL HALIDE FIXTURE WITH FROSTED GLASS, 4W, WIRE GUARD, WET LABEL, 50 WATT METAL HALIDE LAMP, CAST HID BALLAST HOUSING, 120V, GLOSS WHITE FINISH. SPECTRUM #SP-GJ2WM-MH-50-120-GW-FZ-CF11 | | BRANCH CIRCUIT CONDUIT, 1/2" MINIMUM, CONCEALED BELOW SLAB OR IN CEILING OR WALLS. SLASH MARKS INDICATE NUMBER OF CONDUCTORS, #12 AWG, UNLESS NOTED OTHERWISE. | AFF | ABOVE FINISHED FLOOR |
| | 4" LONG (2) LAMP FLUORESCENT STRIP FIXTURE WITH ELECTRONIC BALLAST, FUSED, 120V, METALUX #SS-232-UNV-GL-EBB1 | | HOMERUN TO PANELBOARD, 3/4" MINIMUM. LETTER INDICATES PANEL, NUMBERS INDICATE CIRCUITS. | C | CONDUIT |
| | WALL MOUNTED DECORATIVE DOWNLIGHT WITH PRISMATIC GLASS DIFFUSER, 100 WATT METAL HALIDE LAMP, 120 VOLT, WHITE FINISH, FUSED. BASELITE #SBW1016/44-B1/44-MH100-FR3 | | SINGLE POLE SWITCH, M.H. 42" A.F.F. TO BOTTOM UNLESS NOTED OTHERWISE. | CLG | CEILING (MOUNTED) |
| | OCCUPANCY SENSOR SWITCH | | TIMER SWITCH - M.H. SAME AS SINGLE POLE SWITCH. | EUF | EXHAUST FAN |
| | TIME CLOCK | | 20 AMP. 120 VOLT NEMA 5-20 GROUNDING TYPE DUPLEX RECEPTACLE, M.H. 18" TO BOTTOM UNLESS OTHERWISE NOTED. | EUH | ELECTRIC UNIT HEATER |
| | LIGHTING RELAY | | 20 AMP. 120 VOLT NEMA 5-20 GROUNDING TYPE DUPLEX RECEPTACLE W/ SELF-CONTAINED GROUND FAULT INTERRUPTIONS PROVISIONS, M.H. 18" TO BOTTOM UNLESS OTHERWISE NOTED. | EX'G, (E) | EXISTING |
| | JUNCTION BOX | | 20 AMP. 120 VOLT NEMA 5-20R GROUNDING TYPE RECEPTACLE FED FROM LOAD SIDE OF GFI RECEPTACLE. M.H. 18" TO BOTTOM UNLESS NOTED OTHERWISE. PROVIDE "GFCI PROTECTED" LABEL ON WALLPLATE. | GFI | GROUND FAULT INTERRUPTOR |
| | MOTOR | | GROUND | GND | GROUND |
| | BRANCH CIRCUIT PANELBOARD (SURFACE MTD.) | | MOUNTING HEIGHT (ABOVE FINISHED FLOOR) | MH | MOUNTING HEIGHT (ABOVE FINISHED FLOOR) |
| | UNIT HEATER | | MOUNTED | MTD | MOUNTED |
| | | | RECEPTACLE | RCPT | RECEPTACLE |
| | | | RELOCATED | (R) | RELOCATED |
| | | | TYPICAL | (TYP) | TYPICAL |
| | | | WEATHERPROOF | WP | WEATHERPROOF |
| | | | CODED NOTE, NUMBER 2 IDENTIFICATION | (2) | CODED NOTE, NUMBER 2 IDENTIFICATION |

- ### ELECTRICAL CODED NOTES
- RELOCATE EXISTING EXTERIOR LIGHT FIXTURE AS INDICATED ON PLAN. TIE INTO EXISTING EXTERIOR LIGHTING CIRCUIT. USE #10 WIRING.
 - REFER TO ARCHITECTURAL ELEVATIONS FOR MOUNTING HEIGHT OF FIXTURE.
 - WALL MOUNTED DIGITAL TIME SWITCH WITH PROGRAMMABLE TIME OFF DELAY (PRESET TO 2 HOURS), BACKLIT LCD DISPLAY, PUSHBUTTON FOR MANUAL ON/OFF CONTROL, TIME SCROLL (MORE/LESS TIME DELAY) FOR TEMPORARY OVERRIDE OF PRESET DELAY, OPTIONAL FLASH AND AUDIBLE WARNINGS (SET FOR AUDIBLE WARNING), DECORATOR STYLE FORMAT, RELAY-BASED SWITCHING, 120/277 VOLT, 800 WATT MAXIMUM (Ø 120VAC), WHITE FINISH. PROVIDE PLACARD NEXT TO SWITCH ILLUSTRATING BASIC OPERATION OF SWITCH AS WELL AS OPERATION OF TIME SCROLL FUNCTION. WATT STOPPER #TS-400-W, or Equal.
 - WALL MOUNTED ELECTRIC UNIT HEATER WITH INTEGRAL THERMOSTAT, 5KW, 6 AMPS, 480V, 3PH, BERKO #HUHAAS48; or Equal. FIELD VERIFY EXACT LOCATION PRIOR TO ROUGH-IN.
 - WALL MOUNTED DEAD FRONT GROUND FAULT CIRCUIT INTERRUPTOR FOR OVERHEAD DOOR LIFT MOTOR OUTLET. 120 VAC, 20 AMP, 1.5 HP RATED, TRIP INDICATOR LIGHT, TEST AND RESET BUTTONS, DECORATOR STYLE WITH WHITE FINISH. LABEL DEVICE AS "OVERHEAD DOOR OUTLET TRIP RESET". HUBBELL #GFBF20WA; or Equal.
 - RECEPTACLE OUTLET FED FROM LOAD SIDE OF GROUND FAULT CIRCUIT INTERRUPTOR DEVICE.
 - PROVIDE PORCELAIN LAMP HOLDER WITH WIREGUARD, (1) 20 WATT A-LINE TYPE SELF BALLASTED COMPACT FLUORESCENT LAMP AND SWITCH. MOUNT IN ATTIC NEAR ACCESS OPENING.



EXISTING PANEL: "BOLD" DENOTES NEW, "ITALICS" DENOTES EXISTING

| PANEL: | MAIN BREAKER | NO | 100 AMP., 14,000 AIC | MOUNTING | SURFACE |
|-------------|----------------|-----|----------------------|---------------------|---------------|
| RH (EX'G) | MAIN LUGS ONLY | YES | 277 / 480 VOLTS | LOCATION | ELEC/MECH RM |
| TYPE | SOLID NEUTRAL | YES | 3 PH, 4 WIRE, 60 HZ | FED FROM | BALLFIELD PNL |
| Siemens P1E | GROUND BUS | YES | * = GFI BREAKER | ** = WITH 'LOCK-ON' | |

| CKT No. | BKR | LOAD | WIRE | CKT. KW | PHASE | CKT. KW | WIRE | LOAD | BKR | CKT No. |
|---------|------|-----------------------------|------|---------|-------|---------|------|-------------------------|------|---------|
| 1 | 3 | 20/3 UNIT HTR - STORAGE (1) | 12 | 1.7 | X | 9.1 | 8 | 30KVA XFMR | 50/3 | 2 |
| 2 | 3 | UNIT HTR | 10 | 2.5 | X | 0.7 | 10 | (R-1) LTG - EXTERIOR | 20/1 | 2 |
| 3 | 20/1 | WATER HEATER | 12 | 1.5 | X | 1.4 | 10 | (R-2) LTG - INTERIOR | 20/1 | 6 |
| 4 | 20/1 | RCPTS - RESTROOMS | 12 | 0.4 | X | 0.7 | 10 | (R-2) EXHAUST FANS | 20/1 | 8 |
| 5 | 20/1 | RCPT - VENDING | 12 | 1.0 | X | 0.2 | 10 | LTG - ELEC/MECH RM - EM | 20/1 | 10 |
| 6 | 20/1 | RCPT - VENDING | 12 | 1.0 | X | 0.1 | 12 | ** LIGHTING CONTROL | 20/1 | 12 |
| 7 | 25/1 | HAND DRYER | 12 | 2.3 | X | 0.2 | 12 | LTG - STORAGE (1) | 20/1 | 14 |
| 8 | 25/1 | HAND DRYER | 12 | 2.3 | X | 0.9 | 12 | RCPTS - STORAGE (1) | 20/1 | 16 |
| 9 | 25/1 | HAND DRYER | 12 | 2.3 | X | 1.2 | 12 | RCPT-OVERHEAD LIFT (1) | 20/1 | 18 |
| 10 | 25/1 | HAND DRYER | 12 | 2.3 | X | | | SPACE | 20 | 20 |
| 11 | 25/1 | HAND DRYER | 12 | 2.3 | X | | | SPACE | 22 | 22 |
| 12 | 25/1 | HAND DRYER | 12 | 2.3 | X | | | SPACE | 24 | 24 |
| 13 | 25/1 | HAND DRYER | 12 | 2.3 | X | | | SPACE | 26 | 26 |
| 14 | 20/1 | SPARE | | | | | | SPACE | 28 | 28 |
| 15 | 20/1 | SPARE | | | | | | SPACE | 29 | 29 |
| 16 | 20/1 | SPARE | | | | | | SPACE | 30 | 30 |

NOTES: (1) PROVIDE NEW CIRCUIT BREAKER. MATCH EXISTING EQUIPMENT TYPE.

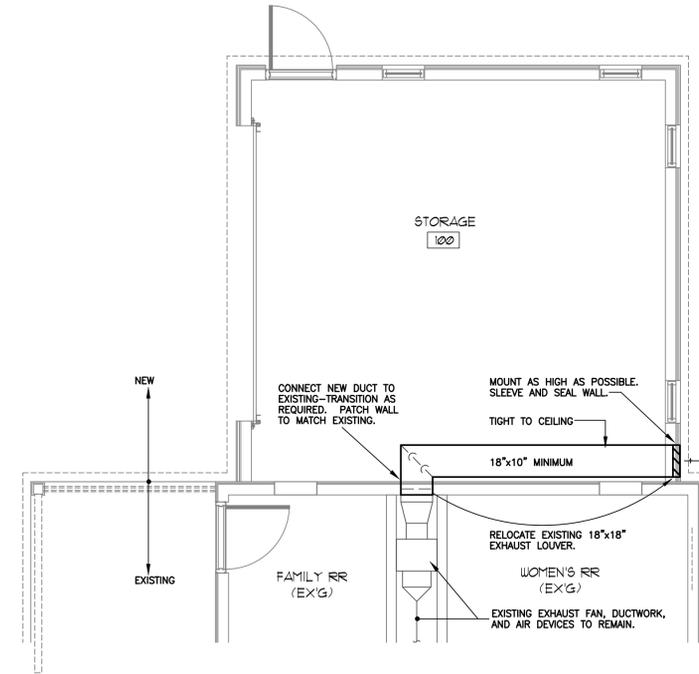
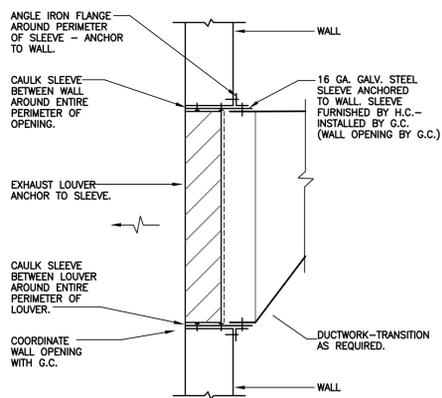
EXISTING PANEL: "BOLD" DENOTES NEW, "ITALICS" DENOTES EXISTING

| PANEL: | MAIN BREAKER | YES | 100 AMP., 10,000 AIC | MOUNTING | SURFACE |
|-------------|----------------|-----|----------------------|---------------------|--------------|
| RL (EX'G) | MAIN LUGS ONLY | NO | 120 / 208 VOLTS | LOCATION | ELEC/MECH RM |
| TYPE | SOLID NEUTRAL | YES | 3 PH, 4 WIRE, 60 HZ | FED FROM | PANEL 'RH' |
| Siemens P1C | GROUND BUS | YES | * = GFI BREAKER | ** = WITH 'LOCK-ON' | |

| CKT No. | BKR | LOAD | WIRE | CKT. KW | PHASE | CKT. KW | WIRE | LOAD | BKR | CKT No. |
|---------|------|-------------------|------|---------|-------|---------|------|-------------------------|------|---------|
| 1 | 30/2 | UNIT HEATER | 10 | 2.5 | X | 0.7 | 10 | (R-1) LTG - EXTERIOR | 20/1 | 2 |
| 2 | 20/1 | WATER HEATER | 12 | 1.5 | X | 1.4 | 10 | (R-2) LTG - INTERIOR | 20/1 | 6 |
| 3 | 20/1 | RCPTS - RESTROOMS | 12 | 0.4 | X | 0.7 | 10 | (R-2) EXHAUST FANS | 20/1 | 8 |
| 4 | 20/1 | RCPT - VENDING | 12 | 1.0 | X | 0.2 | 10 | LTG - ELEC/MECH RM - EM | 20/1 | 10 |
| 5 | 20/1 | RCPT - VENDING | 12 | 1.0 | X | 0.1 | 12 | ** LIGHTING CONTROL | 20/1 | 12 |
| 6 | 25/1 | HAND DRYER | 12 | 2.3 | X | 0.2 | 12 | LTG - STORAGE (1) | 20/1 | 14 |
| 7 | 25/1 | HAND DRYER | 12 | 2.3 | X | 0.9 | 12 | RCPTS - STORAGE (1) | 20/1 | 16 |
| 8 | 25/1 | HAND DRYER | 12 | 2.3 | X | 1.2 | 12 | RCPT-OVERHEAD LIFT (1) | 20/1 | 18 |
| 9 | 25/1 | HAND DRYER | 12 | 2.3 | X | | | SPACE | 20 | 20 |
| 10 | 25/1 | HAND DRYER | 12 | 2.3 | X | | | SPACE | 22 | 22 |
| 11 | 25/1 | HAND DRYER | 12 | 2.3 | X | | | SPACE | 24 | 24 |
| 12 | 20/1 | SPARE | | | | | | SPACE | 28 | 28 |
| 13 | 20/1 | SPARE | | | | | | SPACE | 29 | 29 |
| 14 | 20/1 | SPARE | | | | | | SPACE | 30 | 30 |

NOTES: (1) EXISTING SPARE CIRCUIT BREAKER. ADD NEW LOAD.

- ### HVAC GENERAL NOTES
- COORDINATE AND SCHEDULE ALL WORK WITH OTHER TRADES AND GENERAL CONTRACTOR.
 - ALL DUCT SIZES ARE INSIDE DIMENSIONS.
 - COORDINATE ALL EQUIPMENT AND DUCT RUNS WITH STRUCTURE, LIGHTS, CEILING, CONDUIT, PIPING, AND OTHER EQUIPMENT. HOLD DUCTWORK AS HIGH AS POSSIBLE.
 - COORDINATE EXACT LOCATION OF LOUVER WITH ARCHITECTURAL ELEVATIONS.
 - WALL OPENINGS BY G.C.



NORTH
FLOOR PLAN - MECHANICAL
SCALE: 1/4" = 1'-0"

NORTH
FLOOR PLAN - ELECTRICAL
SCALE: 1/4" = 1'-0"

DARREE FIELDS STORAGE ADDITION 2012
 6259 COSGRAY ROAD
 DUBLIN, OHIO 43071
 For
 CITY OF DUBLIN - Parks & Open Space
 6555 SHER-RINGS ROAD
 DUBLIN, OHIO 43071



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| PERMIT | | NOV. 20, 2012 |
| PERMIT RESUBMITAL | 1 | DEC. 14, 2012 |

FLOOR PLAN MECHANICAL & ELECTRICAL
 FM 12153.00

ME-1.1
 DARREE FIELDS

MECHANICAL SPECIFICATIONS

- 151010 BASIC HVAC REQUIREMENTS
- A. Refer to Instructions to Bidders, General Conditions, Supplementary Conditions, and the Sections of Division 1: General Requirements for specific requirements, responsibilities and methods relating to the Mechanical work.
 - B. Furnish all materials, labor, tools, transportation, incidentals and appurtenances to complete in every detail and leave in working order all items of work called for herein or shown on accompanying drawings. Include any minor items of work necessary to provide complete and fully operative systems whether specifically shown or not.
 - C. Comply with the following codes and standards:
 - OHO BUILDING CODE (OBC) 2011, based on (IBC) 2009.
 - OHO MECHANICAL CODE (OMC) 2011, based on (MCC) 2009.
 - OHO PLUMBING CODE (OPC) 2011, based on (IPC) 2009.
 - OHO FIRE CODE (OFC) 2011, based on (IFC) 2009.
 - INTERNATIONAL ENERGY CONSERVATION CODE (IECC) 2009 or ASHRAE 90.1 - 2007.
 - OBC CHAPTER 11 and ICC A117.1-2009, ACCESSIBILITY AND USABLE BUILDINGS AND FACILITIES.
 - NATIONAL FIRE PROTECTION (NFPA) 70 - 2011, NATIONAL ELECTRIC CODE (NEC).
 - D. Obtain and pay for all required permits, fees, inspections and tests. File drawings necessary to obtain permits, schedule necessary inspections and tests. Submit Certificates of inspection and approval upon completion of the work.
 - E. Material and equipment installed under this Contract shall be new, un-deteriorated, and of a quality not less than the minimum specified. All equipment shall be certified, listed and labeled by UL. Work must be performed by Licensed Contractors and State Codes. Contractors shall be certified by approving agencies for all work required.
 - F. Drawings are schematic and show approximate locations of work. Exact locations of equipment must be coordinated with other contractors and verified in the field. It is not intended that drawings indicate all necessary offsets, and it shall be the work of this Contractor to make the installation in such a manner as to conform to structure, avoid obstructions, preserve headroom and clearances and passageways clear. Significant deviations from Drawings must be approved by the Architect. The Architect reserves the right to make minor changes up to the time of roughing-in without additional cost.
 - G. If a conflict occurs between the Drawings and Specifications, the Contractor shall immediately call it to the attention of the Architect, who will determine which interpretation shall take precedence.
 - H. Guarantee all work executed under this Contract to be free from defective workmanship and/or materials. Should any defects develop within a period of one (1) year after final acceptance has been made, correct them and repair any damage that resulted from same at no additional cost.
 - I. Submit six (6) copies of shop drawings, product data and samples as required under Division 1, and as listed in these specifications.
 - J. Maintain a record set of prints showing exact location of all work. Record addendum and change orders, items and any deviations made from bid documents. Drawings shall be clean and undamaged, and shall not be used for any purpose other than recording deviations from working drawings and specifications. Maintain drawings at the job site and current for weekly inspection. Upon completion of work, deliver these drawings to Architect.
 - K. Submit two (2) bound copies of operation and maintenance manuals, 8-1/2" X 11" in three ring hard back binders. Format: Form 1000, Project, Title of Project, Address, Date of Submittal, Name and Address of Contractor, Name of Architect, Name of Engineer. Second page: Index of contents/A tabbed section for each specification section with a list of all equipment furnished under that section together with suppliers' names and addresses and a copy of each approved shop drawing. Also provide the following information where applicable: description of systems, operating instructions, maintenance and lubrication instructions, servicing instructions, manufacturer's information and parts lists, including sources of supply, equipment warranties, control diagrams, wiring diagrams, routine and 24 hour emergency information: name, address and telephone number of servicing agency, include names of personnel to be contacted for service arrangements.
 - L. After placing systems in operation, thoroughly instruct designated Owner's personnel on operation and maintenance of all equipment and systems. Provide a minimum of (8) hours total instruction: location of equipment and explanation of function, reference to operating instruction manuals for record and clarity, coordination of written and verbal instructions so that each is understood by personnel, explanation of control system, including panel. Specify maintenance performed by Owner.
 - M. Comply with applicable Section of Division 1: General Requirements, delivery, storage and handling procedures and requirements. ? as specified.
 - N. Locate existing utilities prior to beginning work. Reroute or replace existing utilities where necessary to permit installation of work. Should uncharted or incorrectly charted piping or other utilities be encountered during work operations, notify the Architect immediately for procedure directions. Cooperate with utility companies in maintaining active services and facilities in operation.
 - O. Whenever the Contractor furnishes equipment or material other than the Design Base Manufacturer specified, he is responsible for the cost and coordination of all modifications required not only for his work, but also for the work of all other Trades affected.
 - P. Contractor may submit substitutes of his choice, without prior approval, on the Substitution Sheet, Bid Schedule. Such substitutes will not form basis of award and may be considered only after selection of lowest bidder furnishing Base Design.
 - Q. Avoid cutting of concrete, masonry and other new work, by coordination and use of sleeves and inserts in the General Contractor of the locations of all sleeves and inserts required and deliver sleeves and inserts to the General Contractor for installation. Perform cutting and patching when required for installation of new work in existing construction. Cut holes through concrete, brick, tiles etc., when necessary by rotary core drilling. Patching shall match adjacent materials and shall be completed only by tradesmen skilled in the respective craft required.
 - R. Cutting of reinforced concrete and precast structural concrete prohibited unless approved by Structural Engineer. Cutting and drilling, when approved, shall be by the General Contractor.
 - S. Upon completion of work, all material and equipment furnished in this Contract shall be thoroughly cleaned of dirt, stickers, grease, rust, oil and other foreign matter. Prepare for finish painting, where painting is specified. Clean galvanized ductwork in exposed areas with diluted acetic acid. Finish painting of piping and equipment installed under this Contract is included under Division 9 except as noted. HVAC Contractor shall spot prime factory finished equipment surfaces that have not been damaged with zinc chromate primer. Repaint entire item matching original color.
- T. Protect surface, equipment, and materials during construction from damage from water, dirt, welding and cutting, spatters paint droppings, etc. Repair or replace any materials damaged during construction operations. All materials or equipment stored outside shall be elevated and protectively covered. Materials and equipment sensitive to weather or construction conditions shall be stored inside. Where necessary, sensitive equipment shall be stored in a heated area. Damaged equipment or materials must immediately be repaired or replaced by this Contractor, to the satisfaction of the Architect and at no additional cost to the Owner.
- U. Electrical Contractor to provide conduit and wiring for devices as indicated on Electrical Drawings and in Specifications. Any additional wiring required for equipment shall be the responsibility of this Contractor. All wiring to be installed in metal conduit and to comply with latest edition of National Electric Code, NFPA 70, and with the Electrical Division of these Specifications, Division 16. Furnish to the Electrical Contractor approved wiring diagrams required for equipment furnished. This Contractor will be responsible for the successful operation of systems.
- 15015 MECHANICAL DEMOLITION
- A. Coordinate the extent of required demolition for the HVAC work with the General Contractor. Contractors shall visit the site prior to their bid to fully familiarize themselves with the extent of this demolition. Schedule shutdown and reworking of all systems with Architect and General Contractor. Report discrepancies between drawings and actual conditions to Architect immediately.
 - B. Coordinate removal of existing equipment with General Contractor. All equipment and material removed and not chosen by Owner for salvage shall become the property of the Contractor and be disposed of by him.
 - C. The removal of equipment shall be done with care so as not to affect the structure or cause excessive patching. The removal of equipment shall be complete and include all piping rough-ins, electrical connections, pipe hangers and supports.
- 15130 SLEEVES
- A. This Contractor shall furnish 12 ga. sheet metal sleeves for all wall and floor openings required for his work. The General Contractor shall install all sleeves. Do not install sleeves through concrete joists, beam columns, or other structural members except where specifically indicated or approved by the Architect and Structural Engineer.
 - B. Furnish sleeves sized to provide an annular space of 1/2" between the passing pipe or pipe insulation. Sleeves shall be cut flush with each surface, except where clamping flanges are used. In rated firewalls, fire partitions, smoke stops and floors, fill annular space around pipe with fire stopping materials as specified in Section 15135. In sleeves through exterior wall, pack annular space with insulating material, seal and make waterproof. Seal off all spaces around rectangular ducts through walls with sheet metal collars.
- 15890 AIR DISTRIBUTION
- A. Furnish and install a complete air distribution system for the heating, ventilating and air conditioning systems and exhaust systems for the building as shown on the drawings and as herein specified. Include cleaning, testing, balancing and adjusting the air systems for proper air circulation to each area of the building. Submit complete duct lay-out shop drawing prior to start of construction.
 - B. Ductwork shall meet the requirements of: SMACNA - HVAC Duct Construction Standards, Metal and Flexible, NFPA 90A Standard for the Installation of Air Conditioning and Ventilating Systems, and OBC Mechanical Code, Chapter 6. Ductwork liner shall meet NFPA 90A and 90B Life Safety Standards and conform to the requirements of ASTM C1071.
 - C. Rectangular ducts shall be constructed and reinforced per SMACNA Duct Construction Standards, Section I. All ductwork shall be sealed in accordance with S.M.A.C.N.A. HVAC Duct Construction Standards (Seal Class C) by experienced personnel. Pressure sensitive tape shall not be used as the primary sealant for duct systems operating greater than 1.0" W.C.
 - P. All ductwork shall be constructed, joined, brood and supported in accordance with the latest Standards of SMACNA. All duct runs shall be coordinated with building conditions (structural, piping, etc.) and work by other contractors. Provide off-sets or duct size modifications as required for clearance. All changes must be approved by the Architect prior to installation. Run all ductwork concealed in finished areas.
- 16000 GENERAL ELECTRICAL PROVISIONS
- A. Provide electrical work as shown and specified. Furnish all material and labor to complete and leave in working order all items of work indicated, including any minor items of work necessary to provide a complete and fully operative lighting and electrical system.
 - B. Comply with the following codes and standards:
 - INTERNATIONAL ENERGY CONSERVATION CODE (IECC) 2009 or ASHRAE 90.1 - 2007.
 - OBC CHAPTER 11 and ICC A117.1-2009, ACCESSIBILITY AND USABLE BUILDINGS AND FACILITIES.
 - NATIONAL FIRE PROTECTION (NFPA) 70 - 2011, NATIONAL ELECTRIC CODE (NEC)
 - C. The following industry standards, specifications are also minimum requirements:
 1. The National Electrical Manufacturer's Association Standards (NEMA).
 2. The Manufacturer's Recommendation.
 3. Underwriter Laboratories Incorporated Standards (UL).
 4. American National Standards Institute (ANSI).
 - D. Test all parts of electrical systems for proper ground operation and provides system free from short circuits.
 1. Meager test all feeders and branch circuits of electrical systems.
 2. Test, adjust and balance all equipment and systems for proper performance.
 - E. All materials and equipment shall be new and of a quality specified. Workmanship shall conform to standards of best practice and all labor employed shall be competent to do work required.
 - F. Prior to submitting a bid, visit the site of the proposed construction to become thoroughly acquainted with existing utilities, working conditions, etc. Allowance will not be made for non-compliance with this condition after bidding.
 - G. Keep the premises free from accumulation of waste material, or rubbish caused by employees or work under this Division of the specification. At the completion of the work, remove all surplus materials, tools, etc., and leave the premises "broom-clean"? Remove all temporary wiring upon project completion.
 - H. After completion of work, marked-up "as-built" drawings shall be prepared and delivered to Owner. Accurately record location of all below grade wiring.
 - I. Upon completion of project, prepare and submit to the Architect for final distribution to the Owner, two (2) copies of an Electrical Operation and Maintenance Manual in a hard cover binder. Contents of manual shall consist of final shop drawings of panelboards and electrical equipment; one set of manufacturer's original commercially printed catalog data sheets of lighting fixtures and devices; part lists; safety, maintenance and operation instructions; and final list of electrical materials installed, listing manufacturer, catalog number, and local supplier or replacement and spare parts for each item.
 - J. Guarantee work executed under this Contract to be free from defective workmanship and/or materials. Should any defects develop within a period of one (1) year after final acceptance has been made, correct them and repair any damage that resulted from same at no expense whatsoever to Owner.
 - K. Submit for approval manufacturer's drawings and/or catalog cuts (six copies) for all lighting fixtures, switches, panelboards, and wiring devices. Review and stamp prior to submit.
 - L. The drawings indicate the general arrangement and location of the electrical work. Data presented on these drawings are as accurate as planning can determine, but field verification of all dimensions, locations, levels, etc., to suit field conditions is required. Review all architectural, structural and mechanical drawings and adjust all work to meet the requirements of conditions shown. The architectural drawings shall take precedence over all other drawings. Discrepancies between different plans, or between drawings and specifications, or regulations and codes governing the installation shall be brought to the attention of the Architect in writing before the date of bid opening. If discrepancies are not reported, bid the greater quantity or better quality, and appropriate adjustments will be made after contract award. Field measure and confirm mounting heights and location of electrical equipment with respect to counters, mechanical equipment, etc. Do not scale distances off the electrical drawings; use actual building dimensions.
 - M. In all cases switches controlling lighting are to be located on the strike side of doors. Location indicated for switches and outlets are approximate. Owner may make minor relocations at no additional charge.
 - N. Should structural elements prevent running of conduits, installation of outlets or cabinets as shown on the drawings, the necessary minor change, as determined by the Architect, shall be permitted.
 - O. Perform coring, cutting, chopping, fitting, repairing and finishing of the work necessary for the installation of the equipment of this Section. However, no cutting of the work of other trades or of any structural member shall be done without the consent of the Architect. Properly fill seal, fireproof and waterproof all openings, sleeves, and holes in slabs. Furnish and install all required sleeves and inserts.
 - P. Cooperate with other trades so that installation of electrical outlets and equipment will be properly coordinated. Check conduit, fixture, and other equipment locations with the other trades to avoid conflict with the piping, ductwork, steel, piping, beams, or other obstructions.
 - Q. During construction, protect all electrical equipment and materials from construction debris, moisture absorption and metallic corrosion.
 - R. Carefully check the locations of the outlet boxes and determine that they have not been disturbed during the installation of material of other trades.
 - S. Provide Micarta nameplates to identify panelboards, disconnect switches, starters, and other major equipment.
 - T. Cutting and Patching:
 1. Provide all required cutting and patching required to install new work. Cutting shall be by saw cut or core drill. Seal all wall penetrations watertight.
- 16012 ELECTRICAL DEMOLITION (PARTIAL)
- A. The Electrical Contractor shall remove existing electrical equipment as indicated. This equipment shall in general include:
 1. Selected lighting fixtures.
 2. Selected receptacles and appliance connections.
 3. Concealed conduit in walls or floors that are removed.
 4. Surface runs of conduit and wireway if wiring has been removed.
 5. Conduits concealed by construction may be abandoned in place, but wire must be removed.
 - B. All equipment that is required to be relocated as defined in General Conditions shall have all existing wiring conditions tagged and diagrammed prior to removal such that the equipment can be reconnected without requiring a wiring diagram from the Owner.

ELECTRICAL SPECIFICATIONS

- DIVISION 16 ELECTRICAL SPECIFICATIONS
- 16000 GENERAL ELECTRICAL PROVISIONS
- A. Provide electrical work as shown and specified. Furnish all material and labor to complete and leave in working order all items of work indicated, including any minor items of work necessary to provide a complete and fully operative lighting and electrical system.
 - B. Comply with the following codes and standards:
 - INTERNATIONAL ENERGY CONSERVATION CODE (IECC) 2009 or ASHRAE 90.1 - 2007.
 - OBC CHAPTER 11 and ICC A117.1-2009, ACCESSIBILITY AND USABLE BUILDINGS AND FACILITIES.
 - NATIONAL FIRE PROTECTION (NFPA) 70 - 2011, NATIONAL ELECTRIC CODE (NEC)
 - C. The following industry standards, specifications are also minimum requirements:
 1. The National Electrical Manufacturer's Association Standards (NEMA).
 2. The Manufacturer's Recommendation.
 3. Underwriter Laboratories Incorporated Standards (UL).
 4. American National Standards Institute (ANSI).
 - D. Test all parts of electrical systems for proper ground operation and provides system free from short circuits.
 1. Meager test all feeders and branch circuits of electrical systems.
 2. Test, adjust and balance all equipment and systems for proper performance.
 - E. All materials and equipment shall be new and of a quality specified. Workmanship shall conform to standards of best practice and all labor employed shall be competent to do work required.
 - F. Prior to submitting a bid, visit the site of the proposed construction to become thoroughly acquainted with existing utilities, working conditions, etc. Allowance will not be made for non-compliance with this condition after bidding.
 - G. Keep the premises free from accumulation of waste material, or rubbish caused by employees or work under this Division of the specification. At the completion of the work, remove all surplus materials, tools, etc., and leave the premises "broom-clean"? Remove all temporary wiring upon project completion.
 - H. After completion of work, marked-up "as-built" drawings shall be prepared and delivered to Owner. Accurately record location of all below grade wiring.
 - I. Upon completion of project, prepare and submit to the Architect for final distribution to the Owner, two (2) copies of an Electrical Operation and Maintenance Manual in a hard cover binder. Contents of manual shall consist of final shop drawings of panelboards and electrical equipment; one set of manufacturer's original commercially printed catalog data sheets of lighting fixtures and devices; part lists; safety, maintenance and operation instructions; and final list of electrical materials installed, listing manufacturer, catalog number, and local supplier or replacement and spare parts for each item.
 - J. Guarantee work executed under this Contract to be free from defective workmanship and/or materials. Should any defects develop within a period of one (1) year after final acceptance has been made, correct them and repair any damage that resulted from same at no expense whatsoever to Owner.
 - K. Submit for approval manufacturer's drawings and/or catalog cuts (six copies) for all lighting fixtures, switches, panelboards, and wiring devices. Review and stamp prior to submit.
 - L. The drawings indicate the general arrangement and location of the electrical work. Data presented on these drawings are as accurate as planning can determine, but field verification of all dimensions, locations, levels, etc., to suit field conditions is required. Review all architectural, structural and mechanical drawings and adjust all work to meet the requirements of conditions shown. The architectural drawings shall take precedence over all other drawings. Discrepancies between different plans, or between drawings and specifications, or regulations and codes governing the installation shall be brought to the attention of the Architect in writing before the date of bid opening. If discrepancies are not reported, bid the greater quantity or better quality, and appropriate adjustments will be made after contract award. Field measure and confirm mounting heights and location of electrical equipment with respect to counters, mechanical equipment, etc. Do not scale distances off the electrical drawings; use actual building dimensions.
 - M. In all cases switches controlling lighting are to be located on the strike side of doors. Location indicated for switches and outlets are approximate. Owner may make minor relocations at no additional charge.
 - N. Should structural elements prevent running of conduits, installation of outlets or cabinets as shown on the drawings, the necessary minor change, as determined by the Architect, shall be permitted.
 - O. Perform coring, cutting, chopping, fitting, repairing and finishing of the work necessary for the installation of the equipment of this Section. However, no cutting of the work of other trades or of any structural member shall be done without the consent of the Architect. Properly fill seal, fireproof and waterproof all openings, sleeves, and holes in slabs. Furnish and install all required sleeves and inserts.
 - P. Cooperate with other trades so that installation of electrical outlets and equipment will be properly coordinated. Check conduit, fixture, and other equipment locations with the other trades to avoid conflict with the piping, ductwork, steel, piping, beams, or other obstructions.
 - Q. During construction, protect all electrical equipment and materials from construction debris, moisture absorption and metallic corrosion.
 - R. Carefully check the locations of the outlet boxes and determine that they have not been disturbed during the installation of material of other trades.
 - S. Provide Micarta nameplates to identify panelboards, disconnect switches, starters, and other major equipment.
 - T. Cutting and Patching:
 1. Provide all required cutting and patching required to install new work. Cutting shall be by saw cut or core drill. Seal all wall penetrations watertight.
- 16012 ELECTRICAL DEMOLITION (PARTIAL)
- A. The Electrical Contractor shall remove existing electrical equipment as indicated. This equipment shall in general include:
 1. Selected lighting fixtures.
 2. Selected receptacles and appliance connections.
 3. Concealed conduit in walls or floors that are removed.
 4. Surface runs of conduit and wireway if wiring has been removed.
 5. Conduits concealed by construction may be abandoned in place, but wire must be removed.
 - B. All equipment that is required to be relocated as defined in General Conditions shall have all existing wiring conditions tagged and diagrammed prior to removal such that the equipment can be reconnected without requiring a wiring diagram from the Owner.
- 16200 CONDUIT
- A. Rigid Galvanized Steel (RGS) may be used in all areas. Intermediate Metallic Conduit (IMC) may be used in indoor locations. Use electrical Metallic Tubing (EMT) in indoor locations not in contact with earth, not in concrete slabs or concrete walls and not subject to damage. Use flexible steel conduit not exceeding 36' for indoor final connections to mechanical equipment and not exceeding 72' for recessed removable fluorescent light fixtures. Use liquid-tight flexible steel conduit not exceeding 36' for outdoor final connections to equipment or in kitchens and wet locations.
 - B. Where the conduit enters outlet boxes, fixtures or cabinets, firmly fasten by double locknuts and bushings. Firmly fasten conduit to the building construction. Run exposed conduits parallel to the building lines, supported by appropriate hangers (Unistrut, T&B or Appleton) from structure. Support conduits on 5 foot intervals and within 3 feet of any box or fitting. Do not support conduits from ceiling, piping, ceiling supports, ductwork, or other conduits.
 - C. Conduit connectors shall be double locknut type. UL listed and labeled, with set-screw or compression fittings.
 - D. Conduit sizes shall be as required by code and as indicated or specified herein. Minimum conduit size 1/2"
 - E. All empty conduit systems shall have 200 lb. test pull cord to facilitate installation of future wire.
 - F. Conceal conduits and outlets within the building structure; except that conduits may be run exposed in certain areas as indicated on the drawings. Run conduit shown to be installed in cabinets, and casework directed by Architect.
- 16210 OUTLET, PULL AND JUNCTION BOXES
- A. Each switch, light, receptacle or other outlets shall be provided with a code gauge, galvanized steel outlet box, junction and pull boxes shall be code gauge, galvanized steel. Outlet boxes shall be of the one piece, knockout type, in general 4" square with plaster ring. Plaster rings shall be set to provide not more than 1/8" from wall surface to ring. In no case shall plaster ring project beyond surface of wall. Single gang rings similar to Steel City 52020 shall be used for boxes in unfinished brick #180 boxes may be used for unfinished masonry flush wall outlets. Center all outlet boxes in block course.
 - B. Boxes installed in poured cement floors shall be flush type cast iron with watertight gasketed covers, gray metallic finish. Where boxes are installed in floors with tile or carpet floor covering, covers shall be of the recessed type to accommodate the floor covering.
 - C. Boxes installed for the alarm, computer, security, and telephone system shall be provided with appropriate coverplates.
 - D. Unless otherwise specified, all wire shall be stranded Type THHN, THWN or XHHW copper. The wires shall be color-coded. Unless otherwise required by local ordinances, ground wires shall be green, neutral wires shall be white and phase wires shall be black (Phase A), red (Phase B), or blue (Phase C) for 120/208 volt and brown, orange, yellow (A,B,C) for 277/480 volt. Conductors shall be minimum #12 AWG unless otherwise indicated.
 - E. Do not install conductors until conduit system is complete. Use Mineraloc #100 or equivalent as a lubricant to facilitate the installation of the conductors in the conduit system.
 - F. All 1 phase branch circuits shall consist of 1 phase conductor and 1 neutral (120V) or 2 phase conductors (208V). All 3 phase branch circuits shall consist of 3 phase conductors. When two or three single phase circuits are shown to be combined, these circuits may share a single neutral. For isolated ground receptacles, provide one isolated ground conductor per circuit.
 - G. Install a green equipment wire in each panel feeder or branch circuit. Conduit and raceway systems shall not be used for equipment grounding means.
 - H. Grounding shall be in accordance with the latest edition of the National Electric Code, Article 250.
- 16230 METAL CLAD CABLE
- A. The Contractor, at his option, may use metal clad cable type "MC" (no BX or Type AC acceptable) for branch circuits when following conditions are met:
 1. Approved by local code jurisdiction.
 2. Maximum 20 AMP branch circuits.
 3. #12 or #10 stranded copper conductors with THHN insulation installed on insulated ground.
 4. Installed concealed above ceilings or in interior walls in dry locations only. (Exposed "MC" cable will not be allowed.)
 5. Installed in strict compliance with latest edition of National Electric Code and as described herein.
 - B. Metal clad cable shall be interlocking or continuous galvanized steel sheath type with continuous ground wire (using sheath as ground is unacceptable), #12 or #10 stranded copper conductor, 600 volt THHN insulation rated at 90°C, UL labeled.
 - C. References and Ratings for Cable:
 1. UL 83, 1479, 1569 and 1581.
 2. Shall meet all applicable OSHA and HUD requirements.
 3. Shall be UL rated for installation in environmental air handling spaces.
 4. Shall be rated for 3-hour firewall penetration.
 - D. Connectors shall be those specifically designed for use with MC cable (Romex and BX connectors are not acceptable).
 - E. "MC" cable shall be installed in strict compliance with all applicable articles of the National Electric Code and as described herein.
 - F. "MC" cable shall be installed in a neat and orderly manner, perpendicular and parallel to building lines.
 - G. Cable shall be installed in building concealed above ceiling or in interior walls only. No exposed "MC" cable will be allowed.
 - H. In any room, including mechanical, electrical, service rooms, stairwells, etc., where wiring cannot be concealed, it must be installed in conduit.
 - I. Where "MC" cable is installed in accessible attic spaces and run across the top of joists, studs or rafters, the cable shall be protected by guard strips in accordance with the National Electric Code. Guard strips are not required if the "MC" cable is installed parallel to the side rafters, studs, or joists.
 - J. Where "MC" cable is installed above accessible ceilings, the cable must be supported at code required intervals.
 - K. "MC" cable may be supported from conduit supports or provide independent support wires from structure with clips to secure cable. Clips shall be designed and manufactured for this use.
 - L. "MC" cable shall not be supported from conduits, piping, ductwork, ceiling grid wires, etc.
 - M. Do NOT allow "MC" cable to lay on ceiling grid system or be in contact with any piping or ductwork.
 - N. Do NOT expose "MC" cable on wall or surface mounted panelboard. Where "MC" cable is used for homerun circuit(s) to a surface mounted panelboard, one of the two following methods shall be used and shall be maintained throughout the life of the building:
 1. Provide EMT conduits from panelboard to above ceiling. Install "MC" cable in these conduits from above ceiling to panelboard.
 2. Provide wire in EMT conduit from panel to above ceiling, extend to first splice point in circuit. At that location "EMT" conduit with wire may be converted to "MC" cable.
 - O. Where "MC" cable penetrates fire rated construction, provide fire stopping per code and as approved by the local authority having jurisdiction.
 - P. At lighting fixture, device or equipment being fed by "MC" cable, provide an appropriate junction or outlet box for wiring connections and mounting. "MC" cable punched through wall, ceiling or into cabinetry is unacceptable.
- 16250 WIRING DEVICES
- A. Light switches shall be toggle quiet AC type, 120/277 volts, 20 amp specification grade, contacts shall be silver alloy and switch shall have one piece Lexter lever and cam. Terminals shall be spring loaded, color coded and suitable for side and back wiring. Hubbell #CSB120 or equal.
 - B. General purpose duplex receptacles shall be automatic grounding type, NEMA 5-20R configuration, finger-groove face, 20 amp, specification grade, with provisions for making wiring by means of spring-staked screws or side wiring with captive held binding screws, shall be constructed of arc-resistant material. Hubbell #CBRF20 or equal.
 - C. Ground fault interrupting (GFI) type receptacles shall be self-contained, automatic grounding type, NEMA 5-20R configuration, specification grade, with test and reset buttons. Hubbell #GF-5362 or equal.
 - D. All devices shall be white in color or as selected by Owner/Architect.
 - E. All wall outlet plates to be smooth satin finished stainless steel 302/304. Provide type of faceplates to match devices.
 - F. All non-locking 15 amp and 20 amp, 125 volt and 250 volt receptacles in damp or wet locations shall be listed as weather resistant.
- 16350 LIGHTING
- A. Furnish and install all lighting fixtures as indicated on drawings. Provide contactors and controls as indicated. Fluorescent ballasts shall be the electronic type with Class "A" sound rating and UL listed Class "P" factory installed.
 - B. Provide all necessary fittings required to support all fixtures, as well as wood or metal supports for surface and/or pendant fixtures on suspended ceilings. All fixtures are to be supported independent of ceiling system. Provide a minimum of (2) hanger wires similar to ceiling grid hanger wires from opposite corners of all lay-in lighting fixtures.
 - C. Provide all lamps as indicated on drawings.
 - D. Locate and aim adjustable fixtures as directed by the Owner's representative.
 - E. All linear fluorescent fixtures shall include a factory installed integral UL listed ballast disconnect to simultaneously break line and neutral connection to the ballast.
- 16600 TEMPERATURE CONTROL
- A. Unless otherwise indicated on the plans, all conduit, wiring, boxes, etc., for temperature controls shall be furnished and installed by the HVAC Contractor.
- END OF SECTION

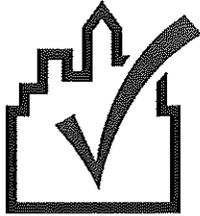
DARREE FIELDS STORAGE ADDITION 2012
6259 COSGRAY ROAD
DUBLIN, OHIO 43071
 For
CITY OF DUBLIN - Parks & Open Space
6555 SHER-RINGS ROAD
DUBLIN, OHIO 43071



| ISSUE | REVISION | DATE |
|--------------------|----------|---------------|
| PERMIT | | NOV. 20, 2012 |
| PERMIT RESUBMITTAL | ▲ | DEC. 14, 2012 |
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MECHANICAL & ELECTRICAL SPECIFICATIONS
 FM #12153.00

ME-1.2
DARREE FIELDS



COMcheck Software Version 3.9.1 Envelope Compliance Certificate

90.1 (2007) Standard

Section 1: Project Information

Project Type: **Addition**

Project Title : DARREE FIELDS STORAGE ADD'N 2012

Construction Site:
5265 COSGRAY ROAD
DUBLIN, OH 43017

Owner/Agent:
CITY OF DUBLIN
6555 SHIER-RINGS ROAD
DUBLIN, OH 43017

Designer/Contractor:
FORD AND ASSOCIATES
1500 W. FIRAT AVE.
COLUMBUS, OH 43212

Section 2: General Information

Building Location (for weather data): **Columbus, Ohio**
Climate Zone: **5a**
Building Type for Envelope Requirements: **Non-Residential**
Vertical Glazing / Wall Area Pct.: **2%**

| <u>Building Type</u> | <u>Floor Area</u> |
|----------------------|-------------------|
| Workshop | 400 |

Section 3: Requirements Checklist

Envelope PASSES: Design 1% better than code.

Climate-Specific Requirements:

| Component Name/Description | Gross Area or Perimeter | Cavity R-Value | Cont. R-Value | Proposed U-Factor | Budget U-Factor ^(a) |
|---|-------------------------|----------------|---------------|-------------------|--------------------------------|
| Roof 1: Attic Roof with Wood Joists | 400 | 38.0 | 0.0 | 0.027 | 0.027 |
| Exterior Wall 1: Wood-Framed, 16" o.c. | 540 | 19.0 | 1.3 | 0.060 | 0.064 |
| Window 1: Wood Frame:Double Pane, Tinted, SHGC 0.56 | 12 | --- | --- | 0.560 | 0.350 |
| Door 1: Insulated Metal, Swinging | 21 | --- | --- | 0.500 | 0.700 |
| Door 2: Insulated Metal, Non-Swinging | 100 | --- | --- | 0.500 | 0.500 |

(a) Budget U-factors are used for software baseline calculations ONLY, and are not code requirements.

Insulation:

- 1. Open-blown or poured loose-fill insulation has not been used in attic roof spaces with ceiling slope greater than 3 in 12.
- 2. Wherever vents occur, they are baffled to deflect incoming air above the insulation.
- 3. Recessed lights, equipment and ducts are not affecting insulation thickness.
- 4. No roof insulation is installed on a suspended ceiling with removable ceiling panels.
- 5. All exterior insulation is covered with protective material.
- 6. Cargo and loading dock doors are equipped with weather seals.

Fenestration and Doors:

- 7. Windows and skylights are labeled and certified by the manufacturer for U-factor and SHGC.
- 8. Fixed windows and skylights unlabeled by the manufacturer have been labeled using the default U-factor and SHGC.
- 9. Other unlabeled vertical fenestration, operable and fixed, that are unlabeled by the manufacturer have been site labeled using the default U-factor and SHGC. No credit has been given for metal frames with thermal breaks, low-emissivity coatings, gas fillings, or insulating spacers.

Air Leakage and Component Certification:

- 10. All joints and penetrations are caulked, gasketed, weather-stripped, or otherwise sealed.
- 11. Windows, doors, and skylights certified as meeting leakage requirements.
- 12. Component R-values & U-factors labeled as certified.
- 13. 'Other' components have supporting documentation for proposed U-Factors.

Section 4: Compliance Statement

Compliance Statement: The proposed envelope design represented in this document is consistent with the building plans, specifications and other calculations submitted with this permit application. The proposed envelope system has been designed to meet the 90.1 (2007) Standard requirements in COMcheck Version 3.9.1 and to comply with the mandatory requirements in the Requirements Checklist.

MARK D. BYDER - HVAC DESIGN

Name - Title

Mark D. Byder

Signature

11-12-12

Date

Project Notes:

STORAGE GARAGE ADDITION, SINGLE STORY, SLAB ON GRADE, WOOD FRAMED ATTIC ROOF WITH BATT INSULATION, WOOD FRAMED WALLS WITH BATT INSULATION, WOOD DOUBLE PANE FROSTED WINDOWS, INSULATED METAL DOORS, ENERGY CODE AND MEP DESIGN BY MCMULLEN ENGINEERING CO., INC., 100 S. STATE ST., WESTERVILLE, OHIO 4308, PHONE: 614-895-9408