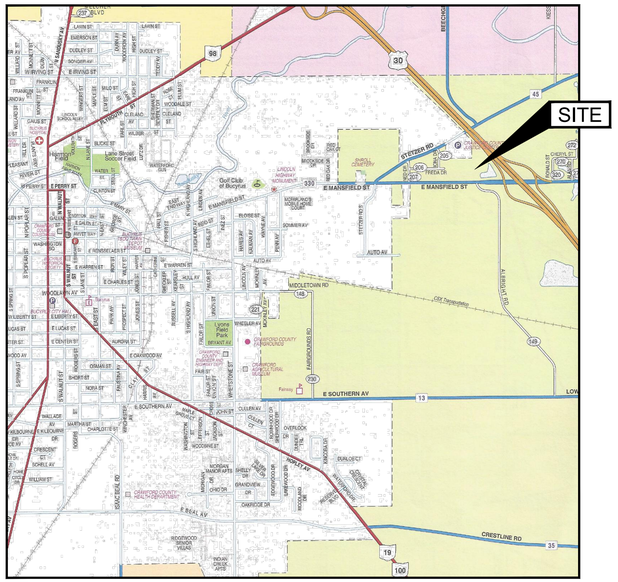


LOCATION MAP

LATITUDE: N 40-48-46
LONGITUDE: W 82-56-18

SCALE: NONE

N

CONSTRUCTION PLANS FOR:

CRAWFORD CO. COMMISSIONERS TITLE OFFICE

SITUATED IN THE STATE OF OHIO, COUNTY OF CRAWFORD, WHETSTONE TOWNSHIP, AND BEING PART OF THE NORTHWEST QTR. OF SECTION 5, TOWNSHIP-3-S, RANGE-17-E

OWNER

CRAWFORD COUNTY BOARD OF COMMISSIONERS
112 E MANSFIELD ST SUITE 304
BUCYRUS, OHIO 44820
(419) 562-5876

I HEREBY STATE THAT THESE PLANS HAVE BEEN PREPARED WITH OUR KNOWLEDGE AND CONCURRENCE AND REPRESENT OUR INTENT AND INTEREST.

DOUG WEISENAUER - COMMISSIONER DATE

TIM LEY - COMMISSIONER DATE

LARRY SCHMIDT - COMMISSIONER DATE

Ohio Utilities Protection Service
Call 811 before you dig

INDEX OF SHEETS

CRAWFORD COUNTY OFFICIALS

DOUG WEISENAUER	COMMISSIONER
TIM LEY	COMMISSIONER
LARRY SCHMIDT	COMMISSIONER

EASEMENT REFERENCE

City's No.	County Recorder Volume	County Recorder Page	Grantor

REVISIONS

No.	Description	Approval	Date

AS BUILT

Plans Prepared By :

Makeever & Associates, Inc.
P.O. BOX 325, 1810 E. MANSFIELD ST.
BUCYRUS, OHIO 44820
Phone: (419) 562-7757 Fax: (419) 562-4717

DYLAN J. WYATT

E-86763
Ohio Reg. No. Date

STATE OF OHIO
DYLAN J. WYATT
E-86763
REGISTERED
PROFESSIONAL ENGINEER

Signatures below signify only concurrence with the general purpose and general location of the project. All technical details remain the responsibility of the engineer preparing the plans.

ENG. FILE NO.
IMP. ACCT. NO.
CONTRACT NO.
COMPLETION DATE
CONTRACTOR

CRAWFORD COUNTY COMMISSIONERS TITLE OFFICE

Scale : Horiz. = AS NOTED
Vert. = AS NOTED
Original Sheet Size = 24"x36"
Original Date : 02/26/2024

Sheet No. : 1 OF 13
S:\2023\210\001\A
Dwg. No. : 2023-210-001C

GENERAL NOTES

WHERE SPECIFIED, THE CURRENT STATE OF OHIO DEPARTMENT OF TRANSPORTATION CONSTRUCTION AND MATERIAL SPECIFICATIONS (O.D.O.T. NUMBERS) SHALL APPLY EXCEPT AS MODIFIED OR EXPANDED HEREIN OR IN THE TECHNICAL SPECIFICATIONS

UNDERGROUND UTILITIES

THE LOCATIONS OF THE UNDERGROUND UTILITIES AS SHOWN ON THE PLANS WERE OBTAINED FROM THE OWNERS OF THE UTILITY. THE LOCATION OF THE EXISTING UTILITIES AS SHOWN ON THESE PLANS IS APPROXIMATE. THE EXACT LOCATION SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. THE EXISTING UTILITIES IN THE PROJECT AREA SHALL BE PROTECTED DURING CONSTRUCTION.

UTILITIES NOTIFICATION

AT LEAST TWO (2) WORKING DAYS PRIOR TO COMMENCING CONSTRUCTION OPERATIONS IN AN AREA WHICH MAY INVOLVE UNDERGROUND UTILITY FACILITIES, THE CONTRACTOR SHALL NOTIFY THE FOLLOWING COMPANIES:

1. OHIO UTILITY PROTECTION SERVICE (811)
2. CITY OF BUCYRUS

MAINTAINING TRAFFIC

THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING AND CONTROLLING TRAFFIC ON ALL STREETS AND ROADS AFFECTED BY CONSTRUCTION AND SHALL, PRIOR TO ANY CONSTRUCTION, SUBMIT A CONSTRUCTION SCHEDULE TO THE CITY OF MARION, OHIO FOR APPROVAL INDICATING DATES AND DURATION OF EACH PHASE OF CONSTRUCTION.

ALL CONSTRUCTION SIGNS AND TEMPORARY TRAFFIC CONTROL AND PROTECTION DEVICES SHALL BE ERECTED AND MAINTAINED IN ACCORDANCE WITH "OHIO DEPARTMENT OF TRANSPORTATION MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS," AND O.D.O.T. ITEM 614 - MAINTAINING TRAFFIC. PAYMENT FOR MAINTAINING TRAFFIC SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE PROJECT.

TESTING OF MATERIALS

ANY MATERIALS DELIVERED OR OTHERWISE INCORPORATED INTO THE PROJECT MAY BE SUBJECTED TO TESTING BY THE ENGINEER TO INSURE COMPLIANCE WITH SPECIFICATIONS. TESTS PERFORMED WILL BE PAID FOR BY THE OWNER WITH NO ADDITIONAL COST ASSUMED BY THE CONTRACTOR.

MISCELLANEOUS ITEMS

THE CONTRACTOR SHALL REMOVE ANY MAILBOX, STREET SIGNS, YARD LIGHTS, FENCES, LAWN ORNAMENTS, ETC. WHICH COULD BE DAMAGED DURING THE COURSE OF CONSTRUCTION AND RESET SAME AFTER CONSTRUCTION HAS PASSED THE AREA.

ANY CATCH BASINS, LAWNS, DRIVEWAYS, OR OTHER VARIOUS ITEMS DISTURBED DURING THE CONSTRUCTION OF THE PROJECT SHALL BE REPAIRED TO A LIKE OR BETTER CONDITION. PAYMENT OF THIS WORK SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE PROJECT.

TRENCH PROTECTION

THE CONTRACTOR SHALL PROVIDE SHORING, SHEETING, BRACING, TRENCH BOX, ETC., AS REQUIRED TO PROTECT EXISTING STRUCTURES, UTILITIES, WORKMEN, ETC. PAYMENT OF THIS WORK SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE PROJECT.

BACKFILLING SHALL FOLLOW IMMEDIATELY BEHIND CONSTRUCTION AND ONLY THE MINIMUM LENGTH OF TRENCH REQUIRED FOR CONSTRUCTION SHALL BE OPEN AT ANY GIVEN TIME.

CONCRETE

ALL CONCRETE UTILIZED WITHIN THIS PROJECT SHALL BE O.D.O.T. CLASS "QC MISC" UNLESS OTHERWISE STATED. CONTRACTOR SHALL APPLY CURE AND SEAL TO TO ALL CONCRETE INSTALLED AS A PART OF THE PROJECT. PAYMENT FOR CONCRETE SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE PROJECT.

CLEARING AND GRUBBING

THIS WORK SHALL CONSIST OF CLEARING, GRUBBING, SCALPING, REMOVAL OF TREES AND STUMPS, AND DISPOSING OF ALL VEGETATION AND DEBRIS WITHIN THE LIMITS OF THE PROJECT AREA AS DIRECTED BY THE ENGINEER. PAYMENT FOR CLEARING AND GRUBBING SHALL BE INCLUDED IN THE CONTRACT PRICES FOR THE PROJECT.

AGGREGATE BACKFILL

CONTRACTOR SHALL USE O.D.O.T. ITEM 304 BACKFILL IN ALL UTILITY TRENCHES IN ALL DISTURBED ASPHALT OR PROPOSED ASPHALT AREAS UNLESS OTHERWISE NOTED. PAYMENT FOR AGGREGATE BACKFILL MATERIAL SHALL BE INCLUDED IN THE CONTRACT PRICES FOR THE PROJECT.

EARTH BACKFILL

THE CONTRACTOR SHALL BE RESPONSIBLE FOR PLACING SUITABLE EARTH BACKFILL IN ALL GRASS AREAS. THE TOP 6 INCHES OF THE FILL MATERIAL SHALL BE TOPSOIL. PAYMENT FOR EARTH BACKFILL MATERIAL AND TOPSOIL SHALL BE INCLUDED IN THE CONTRACT PRICES FOR THE PROJECT.

SEEDING AND MULCHING

ALL GRASS AREAS DISTURBED DURING THE COURSE OF THE CONTRACT SHALL BE PROPERLY SEEDED, MULCHED, AND FERTILIZED ACCORDING TO O.D.O.T. ITEM 659. PAYMENT FOR SEEDING AND MULCHING SHALL BE INCLUDED IN THE CONTRACT PRICES FOR THE PROJECT.

EXCAVATION

CONTRACTOR SHALL REMOVE ALL TOPSOIL ENCOUNTERED PRIOR TO PLACING PROPOSED FILL MATERIAL AND REPLACE WITH SUITABLE CLAY SOIL TO SUBGRADE ELEVATIONS. IN CUT AREAS, A MINIMUM OF 12" OF 203 MATERIAL SHALL BE REMOVED AND PLACED TO PROPER GRADE AND COMPACTION. PAYMENT FOR EXCAVATION SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE PROJECT.

PROOF ROLLING AND SOFT SUBGRADE REPAIRS

UPON COMPLETION OF PREPARING THE SUBGRADE AND PRIOR TO THE PLACEMENT OF THE OVERLYING COURSE, THE CONTRACTOR SHALL PROOF ROLL THE SUBGRADE WITH A LEGALLY FULLY LOADED TANDEM AXLE DUMP TRUCK IN THE PRESENCE OF AN ENGINEER. ANY SOFT SUBGRADE ENCOUNTERED, IN WHICH SATISFACTORY STABILITY CANNOT BE OBTAINED BY MOISTURE CONTROL AND COMPACTION, SHALL HAVE THE UNSTABLE MATERIAL EXCAVATED TO A DEPTH REQUIRED BY AN ENGINEER. SUITABLE MATERIAL SHALL THEN BE PLACED IN THE EXCAVATED AREA, COMPACTED, AND SHAPED TO CONFORM WITH PLAN LINES. THE REPAIRED AREAS SHALL THEN BE PROOF ROLLED TO VERIFY THEIR STABILITY. PAYMENT FOR PROOF ROLLING AND SUBGRADE REPAIRS SHALL BE INCLUDED IN THE CONTRACT PRICES FOR THE PROJECT.

STORM SEWERS

THE CONTRACTOR MAY USE THE FOLLOWING MATERIAL SPECIFICATIONS IN PREPARING THE UNIT PRICE BID FOR THE STORM SEWER CONDUIT.

1. AASHTO M-294 TYPE "S" CORRUGATED POLYETHYLENE **PERFORATED** PIPE WITH BUILT IN BELL AND SPIGOT (PER ASTM M-249) WITH GASKETS (PER ASTM F-477) FOR SIZES: 12"

2. ADS N-12 ST IB PIPE (PER ASTM F-2648) WITH BUILT IN **PERFORATED** BELL AND SPIGOT (PER ASTM F-2648) WITH GASKETS (PER ASTM F-477) FOR SIZES: 12"

TO INSURE PROPER HORIZONTAL AND VERTICAL ALIGNMENT OF THE STORM SEWERS DURING CONSTRUCTION, THE CONTRACTOR SHALL USE A LASER ALIGNMENT DEVICE CAPABLE OF BOTH HORIZONTAL AND VERTICAL ADJUSTMENT.

ALL TRENCHES FOR THE STORM SEWER SHALL CONFORM TO STANDARD DRAWING STM-5 BEDDING FOR STORM SEWERS LOCATED IN STANDARD DRAWINGS. PAYMENT FOR STORM SEWER TRENCH AND BEDDING SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE PROJECT.

CATCH BASINS SHALL CONFORM TO ODOT STANDARD DETAILS CB-1 & CB-2 AS SHOWN IN THE STANDARD DETAILS.

FORCE MAIN

THE CONTRACTOR MAY USE THE FOLLOWING MATERIAL SPECIFICATIONS IN PREPARING THE UNIT PRICE BID FOR THE 1.5" FORCEMAIN CONDUIT.

1) HIGH DENSITY POLYETHYLENE (HDPE) PIPE, 1.5" DR-11 MEETING ASTM F-714, ASTM F-2620 AND ASTM D-2321.

MECHANICAL JOINT RETAINER GLANDS AND CONCRETE THRUST BLOCKS SHALL BE USED ON ALL BENDS.

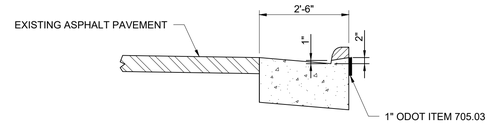
ALL TRENCHES FOR THE FORCEMAIN SHALL CONFORM TO STANDARD DRAWING SAN-29 BEDDING FOR FORCE MAIN LOCATED IN THE STANDARD DETAILS. NO SEPARATE PAYMENT FOR TRENCH AND BEDDING WILL BE MADE. COST SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR THE PROJECT.

ALL PVC PRESSURE PIPE AND FITTINGS MUST BE PRESSURE TESTED IN ACCORDANCE WITH STANDARD AWWA C605-06, *UNDERGROUND INSTALLATION OF POLYVINYL CHLORIDE (PVC) PRESSURE PIPE AND FITTINGS FOR WATER* IN THE PRESENCE OF THE ENGINEER.

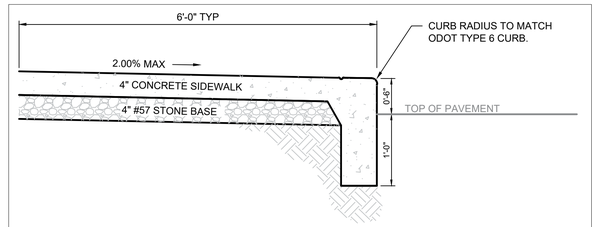
THE LEAKAGE EXFILTRATION OR INFILTRATION SHALL NOT EXCEED 100 GALLONS PER INCH OF PIPE DIAMETER PER MILE PER DAY FOR ANY SECTION OF THE SYSTEM.

PAVEMENT REPAIR

ALL PAVEMENT DISTURBED DURING THE COURSE OF THE CONTRACT SHALL BE REPAIRED IN ACCORDANCE WITH STANDARD DRAWING PR-3. NO ADDITIONAL PAYMENT WILL BE MADE FOR ASPHALT OBTAINED AND INCORPORATED INTO THE PROJECT. PAYMENT FOR ASPHALT CONCRETE SURFACE COURSE SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE PROJECT.

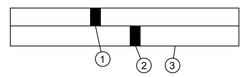


CURB CUT DETAIL AT DRIVEWAYS
PROFILE VIEW



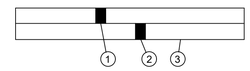
COMBINED SIDEWALK AND CURB TYPICAL SECTION
SCALE: NONE

TYPICAL LIGHT DUTY CONCRETE PAVEMENT SECTION



1. ITEM 452 NON-REINFORCED CONCRETE PAVEMENT, WITH QC MISC, 6"
2. ITEM 304 LIMESTONE AGGREGATE BASE, 8"
3. ITEM 204 SUBGRADE COMPACTION

TYPICAL HEAVY DUTY CONCRETE PAVEMENT SECTION



1. ITEM 452 NON-REINFORCED CONCRETE PAVEMENT, WITH QC MISC, 8"
2. ITEM 304 LIMESTONE AGGREGATE BASE, 8"
3. ITEM 204 SUBGRADE COMPACTION

CIVIL SITE QUANTITIES

Ref. Item	ODOT Item	Description	Quantity	Units
1	MISC	Saw Cut Curb for Drive Entrances	155.1	LF
2	203	Topsoil Removed from Site	221.3	CY
3	651	Topsoil Stockpiled	1450.5	CY
4	651	Placing Stockpiled Topsoil	1450.5	CY
5	203	Excavation	2366.5	CY
6	203	Embankment	2366.5	CY
7	204	Subgrade Compaction	4383	SY
8	304	Limestone Aggregate Base, 8"	979	CY
9	703	#57 Stone, 4" Sidewalks	24.3	CY
10	452	Non-Reinforced Concrete Pavement, Class QC-MS, 6"	2025	SY
11	452	Non-Reinforced Concrete Pavement, Class QC-MS, 8"	2358	SY
12	607	4' Chain Link Fence, Vinyl Coated Black	573	LF
13	608	6' Concrete Walk w/ integrated curb	1973	SF
14	608	Curb Ramps w/Detectable Warning	180	SF
15	609	Curb, Type 6	1294.3	LF
16	611	6" N-12 Storm Conduit, Perforated	276.7	LF
17	611	12" N-12 Storm Conduit, Perforated	485.8	LF
18	611	Connect Roof Drains to Storm Conduit	4	EA
19	611	Roof Drain Cleanout	2	EA
20	611	Catch Basin, CB-1 Detail	5.0	EA
21	611	Outlet Structure, CB-2	1.0	EA
22	611	Headwall, HW-1 Detail	2.0	EA
23	611	E One WH101 Lift Station	1.0	LS
24	611	1.5" DR11 HDPE Force Main Conduit	394.0	LF
25	611	611 Connect to Existing 6" Sanitary Sewer	1.0	EA
26	638	1" DR9 HDPE Water Service Connection	790.0	LF
27	641	Island Marking	738.0	SF
28	641	Parking Stall Lines	560.0	LF
29	641	Handicap Parking Symbols	2.0	EA
30	659	Seeding & Mulching	5,150.0	SY
31	659	Commercial Fertilizer	0.46	TON
32	623	Construction Layout Stakes	1.0	LS
33	614	Maintaining Traffic	1.0	LS
34	624	Mobilization	1.0	LS
35	823	Stormwatere Pollution Prevention Plan	1.0	LS

CIVIL SITE QUANTITIES NOTE

QUANTITIES SHOWN IN THE PRECEDING TABLE ARE FOR INFORMATIONAL PURPOSES IN DEVELOPING THE OVERALL LUMP SUM PROJECT PRICE. CONTRACTOR IS RESPONSIBLE FOR PERFORMING QUANTITY TAKE-OFFS AND ADDRESSING ANY DISCREPANCIES WITH THE APPROPRIATE PARTY BEFORE SUBMITTING A BID FOR THE WORK.

EASEMENT REFERENCE

City's No.	County Recorder Volume	County Recorder Page	Grantor

REVISIONS

No.	Description	Approval	Date

AS BUILT

Plans Prepared By :
Makeever & Associates, Inc.
P.O. BOX 325, 1810 E. MANSFIELD ST.
BUCYRUS, OHIO 44820
Phone: (419) 562-7757 Fax: (419) 562-4717
DYLAN J. WYATT
E-86763
Ohio Reg. No.
Date
STATE OF OHIO
DYLAN J. WYATT
E-86763
REGISTERED
PROFESSIONAL ENGINEER

GENERAL NOTES

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Dwg. No. : 2023-210-001C

N

0 30 60

SCALE 1" = 30'

BENCHMARKS & CONTROL

BENCHMARK #1 - PAINTED BOLT OF FIRE HYDRANT AT SOUTHWEST CORNER OF SITE AND THE NORTH RIGHT-OF-WAY LINE OF EAST MANSFIELD ST.
N - 417809.81
E - 1846537.69
ELEV. - 1039.97

BENCHMARK #2 - PAINTED BOLT OF FIRE HYDRANT AT SOUTH SIDE OF SITE AND THE NORTH RIGHT-OF-WAY LINE OF EAST MANSFIELD ST.
N - 417810.42
E - 1846857.75
ELEV. - 1040.02

BENCHMARK #3 - PAINTED BOLT OF FIRE HYDRANT AT SOUTHEAST CORNER OF SITE AND THE NORTH RIGHT-OF-WAY LINE OF EAST MANSFIELD ST.
N - 417817.37
E - 1847303.02
ELEV. - 1035.05

BENCHMARK #4 - PONY SPIKE IN POWER POLE ON THE EAST SIDE OF SITE ALONG ASPHALT DRIVE.
N - 417985.34
E - 1847282.76
ELEV. - 1037.14

BENCHMARK #5 - TOP OF 1/2" PIN SET WITH YELLOW CAPS STAMPED "MAK. TRAV. "
N - 418206.54
E - 1846959.10
ELEV. - 1036.61

BENCHMARK #6 - TOP OF 1/2" PIN SET WITH YELLOW CAPS STAMPED "MAK. TRAV. "
N - 417824.20
E - 1847207.24
ELEV. - 1033.39

EXISTING SANITARY STRUCTURES

SSMH 1624
T.C. - 1036.21
INV. 10" CLAY (N) = 1032.01
INV. 10" CLAY (SW) = 1031.81

EXISTING STORM STRUCTURES

CB 1369
T.C. - 1031.85
INV. 12" CPP (NE) = 1030.00

CB 1390
T.C. - 1032.03
INV. 12" CPP (NW) = 1028.78
INV. 12" CPP (E) = 1028.78

CI 1425
T.C. - 1032.48
INV. 4" CPP (N) = 1029.63
INV. 4" CPP (S) = 1029.68
INV. 12" CPP (SW) = 1029.38
PRO INV. 10" N-12 (W) = 1029.48
INV. 12" CPP (E) = 1029.28

CI 1426
INV. 12" CPP (W) = 1029.00
INV. 4" CPP (S) = 1029.60
INV. 12" CPP (SE) = 1029.00
INV. 12" CPP (W) = 1029.00

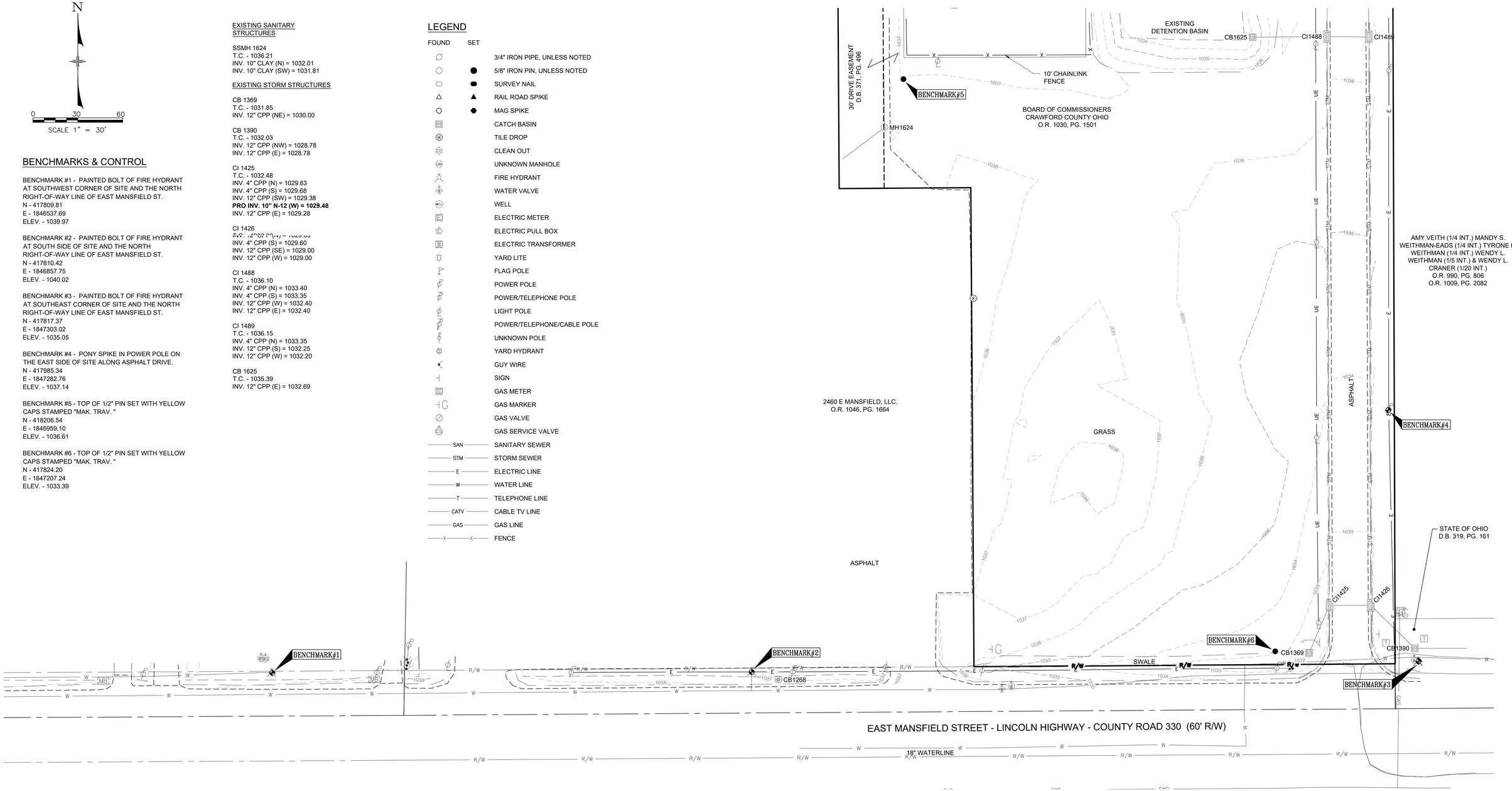
CI 1488
T.C. - 1036.10
INV. 4" CPP (N) = 1033.40
INV. 4" CPP (S) = 1033.35
INV. 12" CPP (W) = 1032.40
INV. 12" CPP (E) = 1032.40

CI 1489
T.C. - 1036.15
INV. 4" CPP (N) = 1033.35
INV. 12" CPP (S) = 1032.25
INV. 12" CPP (W) = 1032.20

CB 1625
T.C. - 1035.39
INV. 12" CPP (E) = 1032.69

LEGEND

FOUND	SET	
		3/4" IRON PIPE, UNLESS NOTED
		5/8" IRON PIN, UNLESS NOTED
		SURVEY NAIL
		RAIL ROAD SPIKE
		MAG SPIKE
		CATCH BASIN
		TILE DROP
		CLEAN OUT
		UNKNOWN MANHOLE
		FIRE HYDRANT
		WATER VALVE
		WELL
		ELECTRIC METER
		ELECTRIC PULL BOX
		ELECTRIC TRANSFORMER
		YARD LITE
		FLAG POLE
		POWER POLE
		POWER/TELEPHONE POLE
		LIGHT POLE
		POWER/TELEPHONE/CABLE POLE
		UNKNOWN POLE
		YARD HYDRANT
		GUY WIRE
		SIGN
		GAS METER
		GAS MARKER
		GAS VALVE
		GAS SERVICE VALVE
SAN		SANITARY SEWER
STM		STORM SEWER
E		ELECTRIC LINE
W		WATER LINE
T		TELEPHONE LINE
CATV		CABLE TV LINE
GAS		GAS LINE
X		FENCE



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DYLAN J. WYATT

E-86763
Ohio Reg. No. Date

STATE OF OHIO
DYLAN J. WYATT
E-86763
REGISTERED PROFESSIONAL ENGINEER

EXISTING LAYOUT

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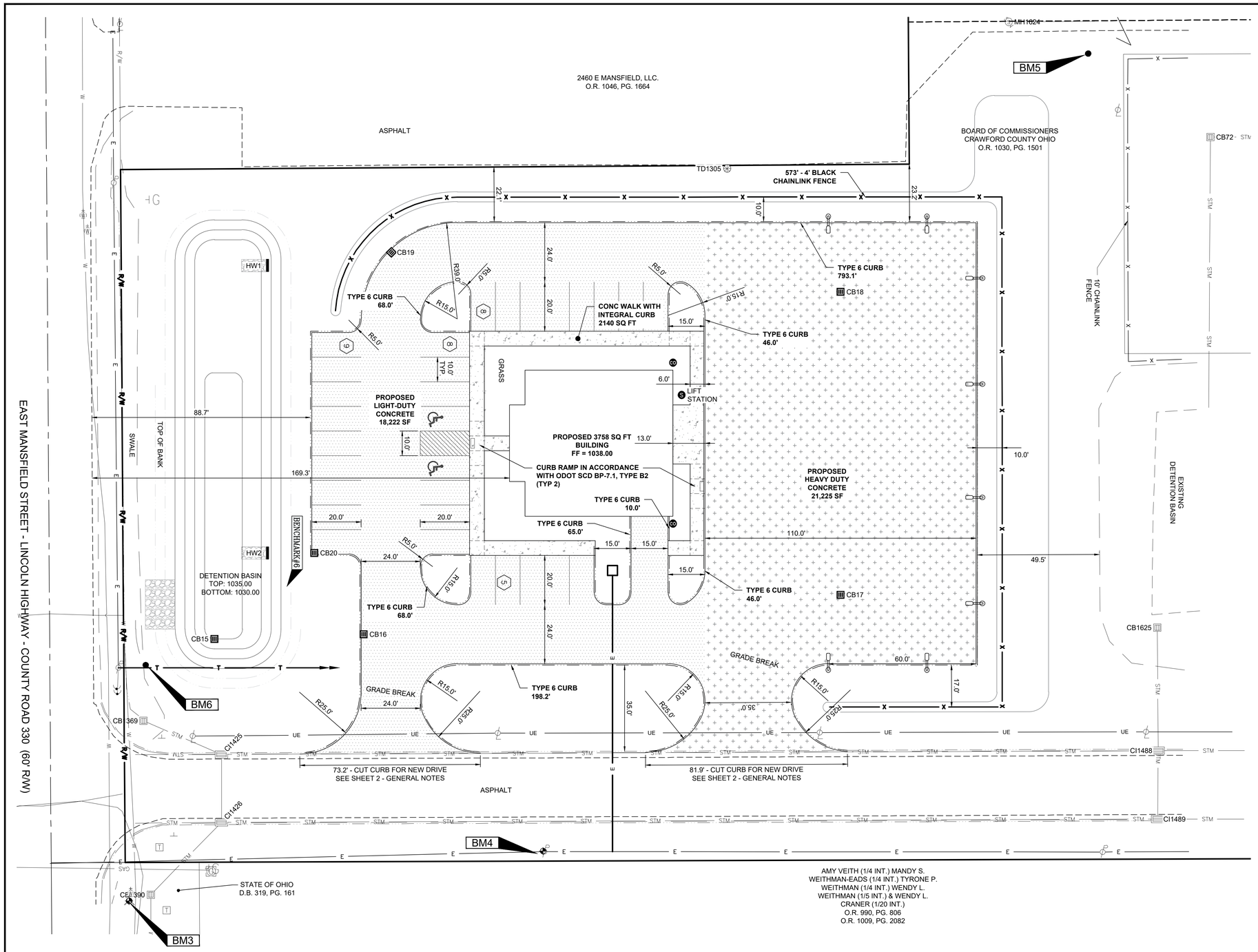

PARKING SUMMARY

PARKING STALLS	28
ADA STALLS	1
ADA VAN STALLS	1
TOTAL STALLS	30

N

0 20 40

SCALE 1" = 20'

EXISTING SANITARY STRUCTURES

SSMH 1624
T.C. - 1036.21
INV. 10" CLAY (N) = 1032.01
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T.C. - 1032.30
INV. 12" CPP (N) = 1029.05
INV. 4" CPP (S) = 1029.60
INV. 12" CPP (SE) = 1029.00
INV. 12" CPP (W) = 1029.00

CI 1488
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INV. 12" CPP (W) = 1032.20

CB 1625
T.C. - 1035.39
INV. 12" CPP (E) = 1032.69

PROPOSED STORM STRUCTURES

CB 16 (CB-1 DETAIL)
T.C. - 1034.15
INV. 12" N-12 (N) = 1031.80
INV. 12" N-12 (SW) = 1031.75

CB 17 (CB-1 DETAIL)
T.C. - 1035.50
INV. 12" N-12 (S) = 1032.75

CB 18 (CB-1 DETAIL)
T.C. - 1035.50
INV. 12" N-12 (S) = 1032.75

CB 19 (CB-1 DETAIL)
T.C. - 1035.31
INV. 12" N-12 (N) = 1031.84
INV 6" N-12 (NE) = 1032.14
INV. 12" N-12 (S) = 1031.74

CB 20 (CB-1 DETAIL)
T.C. - 1034.70
INV. 12" N-12 (NE) = 1031.65
INV 6" N-12 (N) = 1032.00
INV. 12" N-12 (S) = 1031.60

CB 15 (CB-2 AS OUTLET STRUCTURE)
T.C. - 1033.50
INV. 10" N-12 (E) = 1030.00
INV WQV 13/16" DIA. ORIFICE (W) = 1030.00
INV. 3" DIA. ORIFICE (W) = 1031.98

HW 1 (HW-1 DETAIL)
INV. 12" N-12 (N) = 1031.50

HW 2 (HW-1 DETAIL)
INV. 12" N-12 (N) = 1031.50

BENCHMARKS & CONTROL

BENCHMARK #1 - PAINTED BOLT OF FIRE HYDRANT AT SOUTHWEST CORNER OF SITE AND THE NORTH RIGHT-OF-WAY LINE OF EAST MANSFIELD ST.
N - 417809.81
E - 1846537.69
ELEV. - 1039.97

BENCHMARK #2 - PAINTED BOLT OF FIRE HYDRANT AT SOUTH SIDE OF SITE AND THE NORTH RIGHT-OF-WAY LINE OF EAST MANSFIELD ST.
N - 417810.42
E - 1846857.75
ELEV. - 1040.02

BENCHMARK #3 - PAINTED BOLT OF FIRE HYDRANT AT SOUTHEAST CORNER OF SITE AND THE NORTH RIGHT-OF-WAY LINE OF EAST MANSFIELD ST.
N - 417817.37
E - 1847303.02
ELEV. - 1035.05

BENCHMARK #4 - PONY SPIKE IN POWER POLE ON THE EAST SIDE OF SITE ALONG ASPHALT DRIVE.
N - 417985.34
E - 1847282.76
ELEV. - 1037.14

BENCHMARK #5 - TOP OF 1/2" PIN SET WITH YELLOW CAPS STAMPED "MAK. TRAV. "
N - 418206.54
E - 1846959.10
ELEV. - 1036.61

BENCHMARK #6 - TOP OF 1/2" PIN SET WITH YELLOW CAPS STAMPED "MAK. TRAV. "
N - 417824.20
E - 1847207.24
ELEV. - 1033.39

EASEMENT REFERENCE

City's No.	County Recorder Volume	County Recorder Page	Grantor

REVISIONS

No.	Description	Approval	Date

AS BUILT

Plans Prepared By :
Makeever & Associates, Inc.
P.O. BOX 325, 1810 E. MANSFIELD ST.
BUCYRUS, OHIO 44820
Phone: (419) 562-7757 Fax: (419) 562-4717
DYLAN J. WYATT
E-86763
Ohio Reg. No. Date
STATE OF OHIO DYLAN J. WYATT E-86763 REGISTERED PROFESSIONAL ENGINEER

PROPOSED LAYOUT

ENG. FILE NO.
IMP. ACCT. NO.
CONTRACT NO.
COMPLETION DATE
CONTRACTOR

CRAWFORD COUNTY COMMISSIONERS TITLE OFFICE

Scale : Horiz. = AS NOTED
Vert. = AS NOTED
Original Sheet Size = 24"x36"
Date : 02/26/2024

Sheet No. : 4 OF 13
S:\2023\210\001\A
Dwg. No. : 2023-210-001C

BOUNDARY	AREA (SQ. FT.)	CUT (CU. YD.)	FILL (CU. YD.)	NET (CU. YD.)
TOPSOIL CUT (6")	90317	1672.54	0.00	- 1672.54
TOPSOIL STOCKPILE FOR REUSE		0.00	1451.21	1451.21
TOPSOIL EXPORTED FROM SITE			221.33	221.33
DIRT WORK TO SUBGRADE	90317	2366.48	2366.48	0.00
LESS TOPSOIL, PAVEMENT & STONE				

N

0 20 40

SCALE 1" = 20'

EXISTING SANITARY STRUCTURES

SSMH 1624
T.C. - 1036.21
INV. 10" CLAY (N) = 1032.01
INV. 10" CLAY (SW) = 1031.81

EXISTING STORM STRUCTURES

CB 1369
T.C. - 1031.85
INV. 12" CPP (NE) = 1030.00

CB 1390
T.C. - 1032.03
INV. 12" CPP (NW) = 1028.78
INV. 12" CPP (E) = 1028.78

CI 1425
T.C. - 1032.48
INV. 4" CPP (N) = 1029.63
INV. 4" CPP (S) = 1029.68
INV. 12" CPP (SW) = 1029.38
PRO INV. 10" N-12 (W) = 1029.48
INV. 12" CPP (E) = 1029.28

CI 1426
T.C. - 1032.30
INV. 12" CPP (N) = 1029.05
INV. 4" CPP (S) = 1029.60
INV. 12" CPP (SE) = 1029.00
INV. 12" CPP (W) = 1029.00

CI 1488
T.C. - 1036.10
INV. 4" CPP (N) = 1033.40
INV. 4" CPP (S) = 1033.35
INV. 12" CPP (W) = 1032.40
INV. 12" CPP (E) = 1032.40

CI 1489
T.C. - 1036.15
INV. 4" CPP (N) = 1033.35
INV. 12" CPP (S) = 1032.25
INV. 12" CPP (W) = 1032.20

CB 1625
T.C. - 1035.39
INV. 12" CPP (E) = 1032.69

PROPOSED STORM STRUCTURES

CB 16 (CB-1 DETAIL)
T.C. - 1034.15
INV. 12" N-12 (N) = 1031.80
INV. 12" N-12 (SW) = 1031.75

CB 17 (CB-1 DETAIL)
T.C. - 1035.50
INV. 12" N-12 (S) = 1032.75

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INV. 12" N-12 (S) = 1032.75

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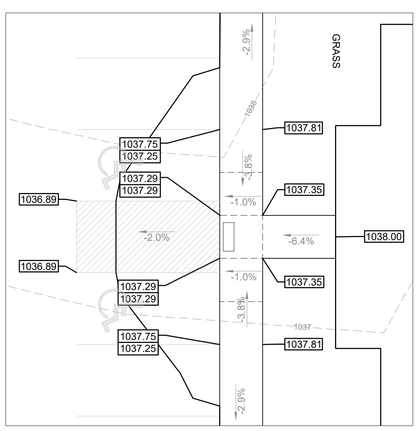
T.C. - 1035.31
INV. 12" N-12 (N) = 1031.84
INV 6" N-12 (NE) = 1032.14
INV. 12" N-12 (S) = 1031.74

CB 20 (CB-1 DETAIL)
T.C. - 1034.70
INV. 12" N-12 (NE) = 1031.65
INV 6" N-12 (N) = 1032.00
INV. 12" N-12 (S) = 1031.60

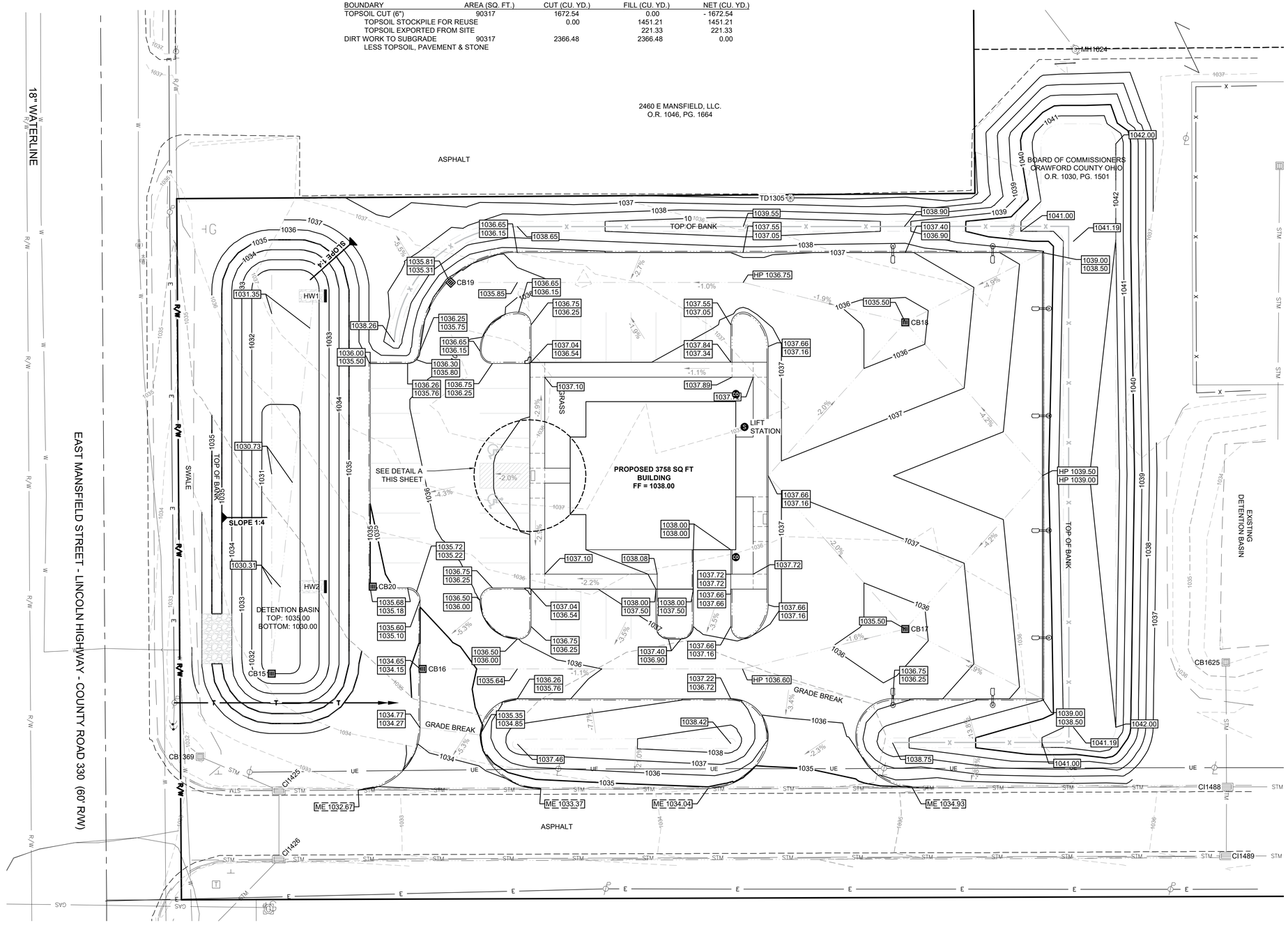
CB 15 (CB-2 AS OUTLET STRUCTURE)
T.C. - 1033.50
INV. 10" N-12 (E) = 1030.00
INV WQV 13/16" DIA. ORIFICE (W) = 1030.00
INV. 3" DIA. ORIFICE (W) = 1031.98

HW 1 (HW-1 DETAIL)
INV. 12" N-12 (N) = 1031.50

HW 2 (HW-1 DETAIL)
INV. 12" N-12 (N) = 1031.50



DETAIL A
SCALE 1" = 10'



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DYLAN J. WYATT

E-86763
Ohio Reg. No.

Date

STATE OF OHIO
DYLAN J. WYATT
E-86763
REGISTERED
PROFESSIONAL ENGINEER

GRADING PLAN

ENG. FILE NO.
IMP. ACCT. NO.
CONTRACT NO.
COMPLETION DATE
CONTRACTOR

CRAWFORD COUNTY COMMISSIONERS TITLE OFFICE

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S:\2023\210\001\A
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N

0 20 40

SCALE 1" = 20'

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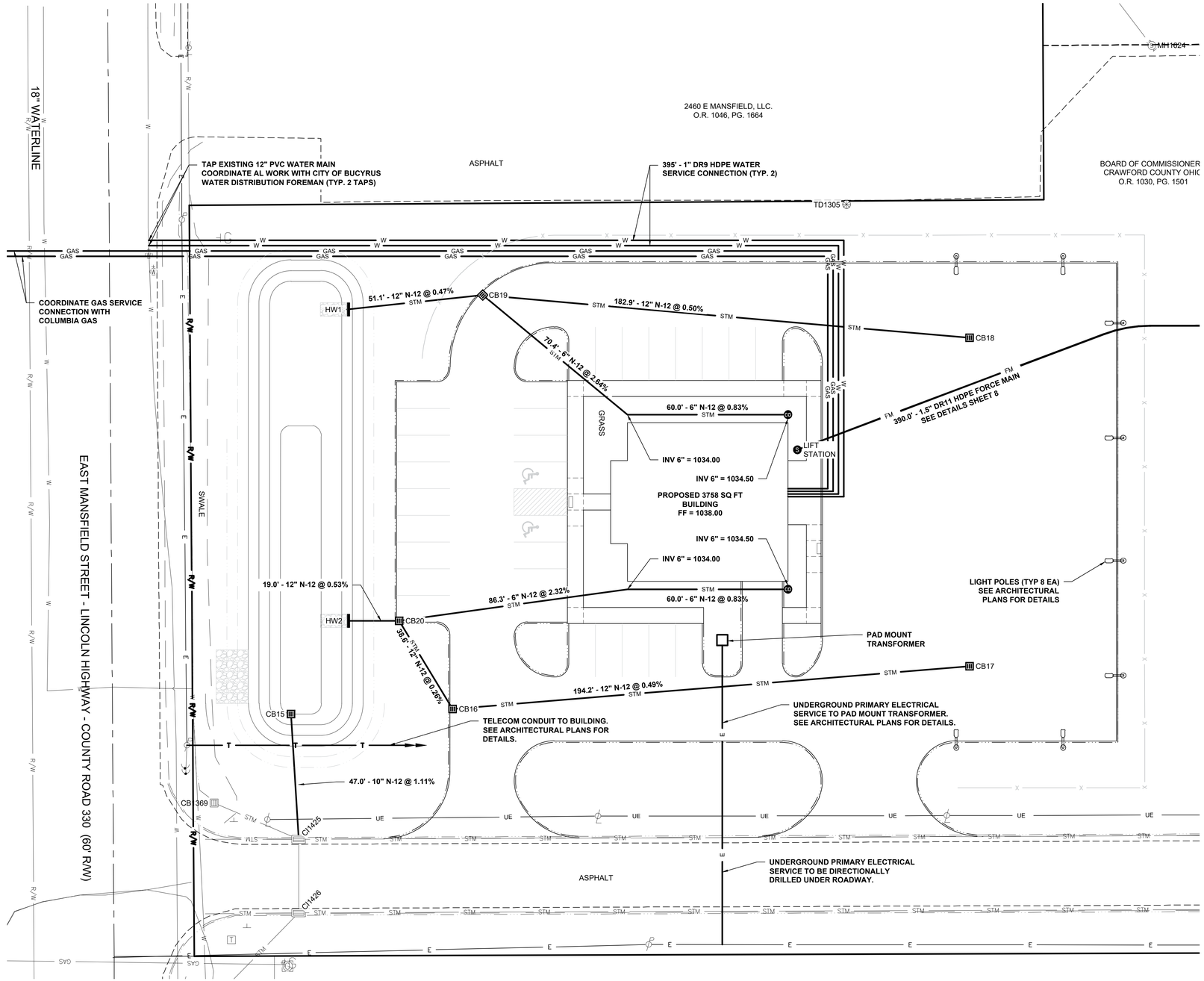

LEGEND

FOUND	SET	
		3/4" IRON PIPE, UNLESS NOTED
	●	5/8" IRON PIN, UNLESS NOTED
		SURVEY NAIL
	▲	RAIL ROAD SPIKE
	⬢	MAG SPIKE
		CATCH BASIN
		TILE DROP
		CLEAN OUT
		UNKNOWN MANHOLE
		FIRE HYDRANT
		WATER VALVE
		WELL
		ELECTRIC METER
		ELECTRIC PULL BOX
		ELECTRIC TRANSFORMER
		YARD LITE
		FLAG POLE
		POWER POLE
		POWER/TELEPHONE POLE
		LIGHT POLE
		POWER/TELEPHONE/CABLE POLE
		UNKNOWN POLE
		YARD HYDRANT
		GUY WIRE
		SIGN
		GAS METER
		GAS MARKER
		GAS VALVE
		GAS SERVICE VALVE
SAN		SANITARY SEWER
STM		STORM SEWER
E		ELECTRIC LINE
W		WATER LINE
T		TELEPHONE LINE
CATV		CABLE TV LINE
GAS		GAS LINE
X		FENCE

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DYLAN J. WYATT

E-86763
Ohio Reg. No.

Date

STATE OF OHIO
DYLAN J. WYATT
E-86763
REGISTERED
PROFESSIONAL ENGINEER

UTILITY PLAN

ENG. FILE NO.
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S:\2023\210\001\A
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N

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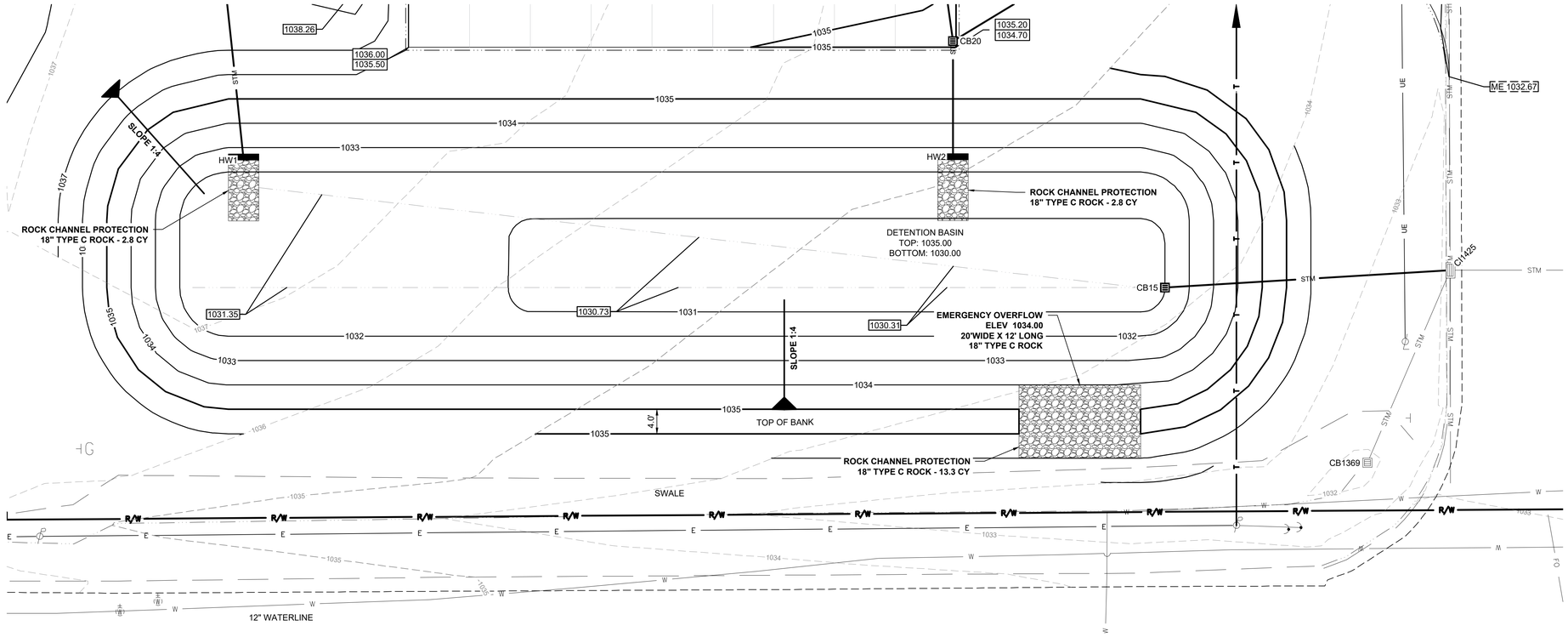


DESIGN CRITICAL STORM CALCULATION

PRE-CONSTRUCTION 1 YEAR STORM RUNOFF = 0.105 AC-FT
POST-CONSTRUCTION 1 YEAR STORM RUNOFF = 0.200 AC-FT

(0.200-0.105) / 0.105 X 100 = 90.5% RUNOFF VOLUME INCREASE

10 YEAR RETURN PERIOD STORM CRITICAL

CRAWFORD COUNTY COMMISSIONERS DETENTION DESIGN STORM INFORMATION

Return Period (yr)	Pre-Construction Peak Outflow (cfs)	Allowable Outflow (cfs)	Post-Construction Peak Outflow (cfs)	Percent of Allowable Outflow (%)	Detention Basin Peak Elev (ft)
1	1.14	1.14	0.34	29.8%	1032.30
2	1.72		0.54	47.4%	1032.57
5	2.64		0.86	75.4%	1032.97
10	3.46		1.11	97.4%	1033.29
25	4.65	4.65	1.45	31.2%	1033.57
50	5.69	5.69	2.88	50.6%	1033.66
100	6.84	6.84	5.53	80.8%	1033.78

WATER QUALITY VOLUME ORIFICE SIZE

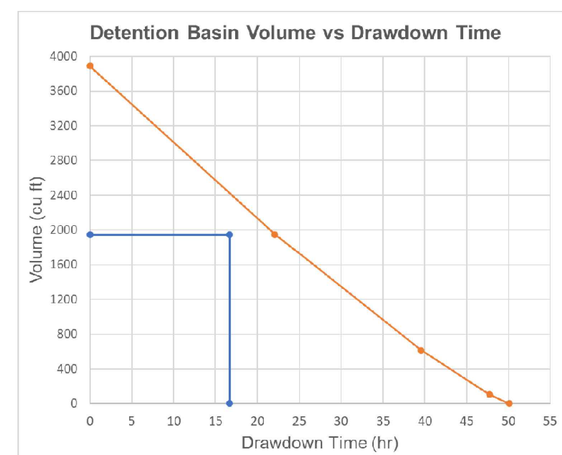
2/8/2023

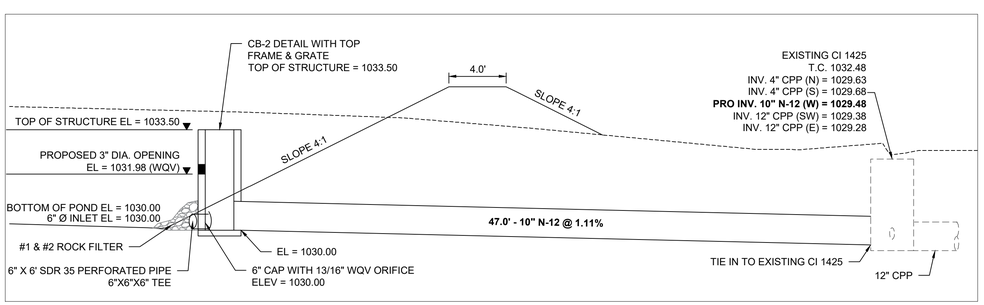
Basin Bottom Elev.	1030.00	ft
Orifice Coeficient	0.60	%
WQv Depth	1.98	ft
Average Head	0.99	ft
Average Allowed Outflow	0.02229	cfs
Orifice Area	0.00360	sq-ft
Maximum Orifice Dia.	0.924	in

WATER QUALITY VOLUME DETENTION BASIN

2/8/2024

Total Watershed Area	1.570	ac
Percent Impervious	63.96	%
Basin Area At WQv	4398	sf
Precipitation Depth	0.90	in
Runoff Coefficient	0.626	
Water Quality Volume	0.0737	ac-ft
120% WQv	0.0884	ac-ft
120% WQv Elevation	1031.98	ft





OUTLET STRUCTURE DETAIL

SCALE: NONE

DETENTION BASIN SPECIFICATIONS

Elevation (ft)	Area (sq ft)	Average Area (sq ft)	Volume (cu ft)	Cumulative Volume (cu ft)
1035.00	9347			24418
1034.50	8464	8906	4453	19966
1034.00	7606	8035	4018	15948
1033.50	6774	7190	3595	12353
1033.00	5966	6370	3185	9168
1032.50	5184	5575	2788	6381
1032.00	4427	4806	2403	3978
1031.98	4398	4412	88	3890
1031.50	3695	4046	1942	1947
1031.00	1637	2666	1333	614
1030.50	408	1023	511	103
1030.00	4	206	103	0

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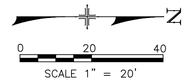
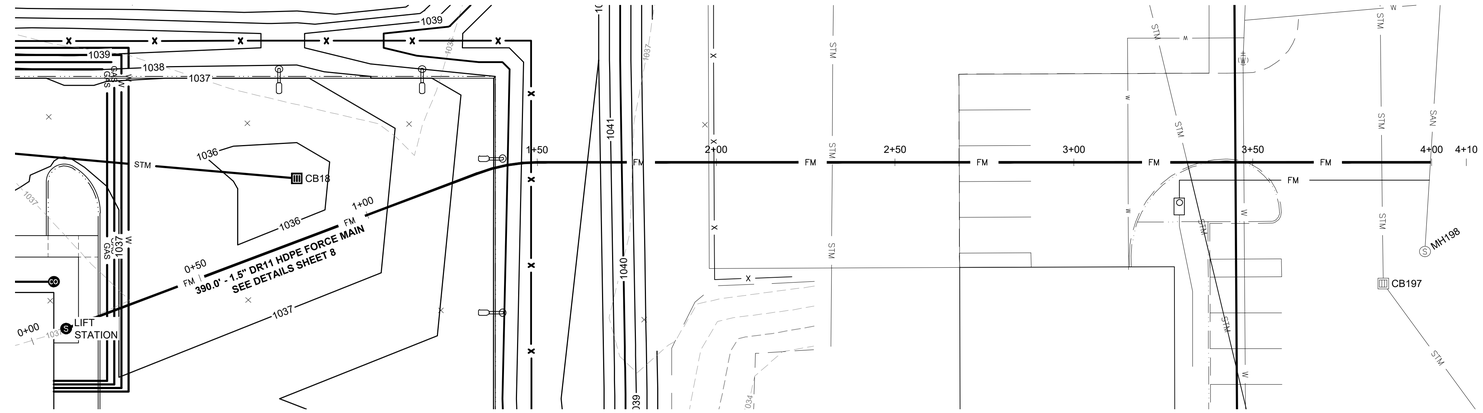
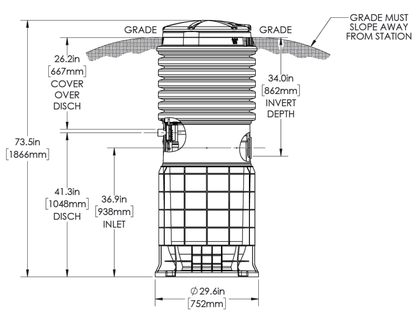




NA0057P04

WH101-74



JVL	JG	9/14/2023	F	1:16
DR BY	CHKD	DATE	ISSUE	SCALE

NOTE: DIMENSIONS ARE FOR REF ONLY

CONCRETE BALLAST NOT REQUIRED

DISCHARGE: 1-1/4in FEMALE SOCKET (STANDARD)

INLET: EPDM GROMMET FOR 4in DWV PIPE (STANDARD)

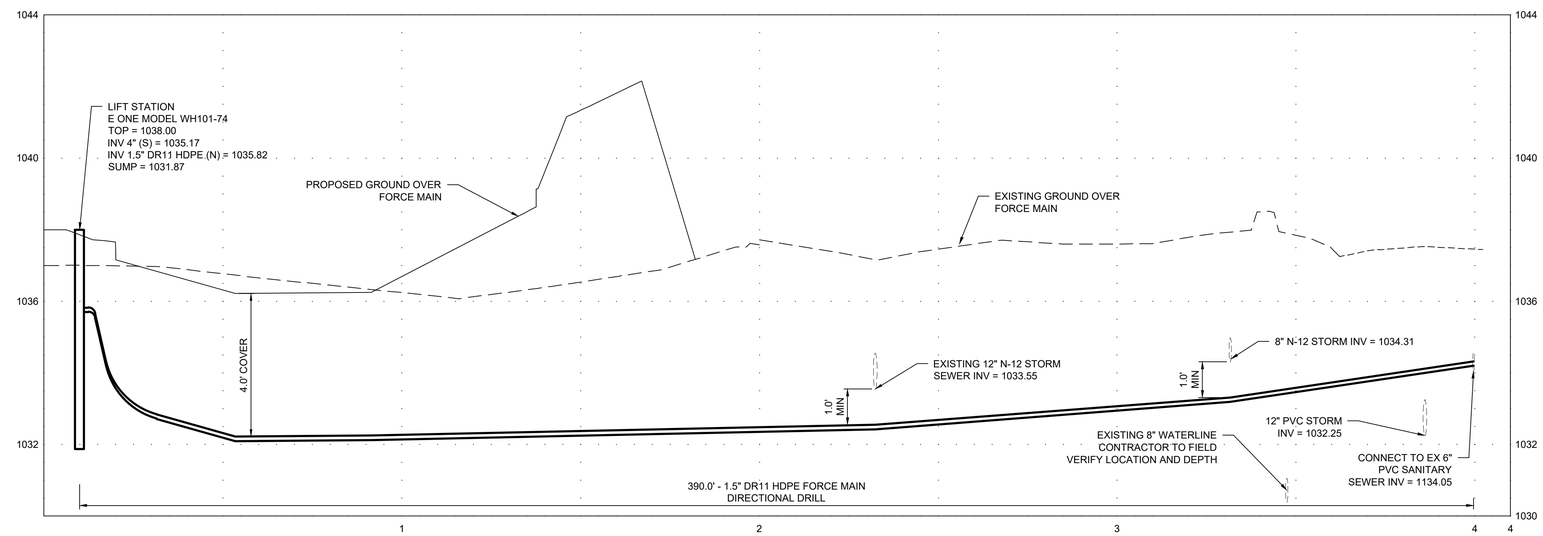
e|one SEWER SYSTEMS

MODEL WH101-74
CUT SHEET

NA0057P04

NOTES

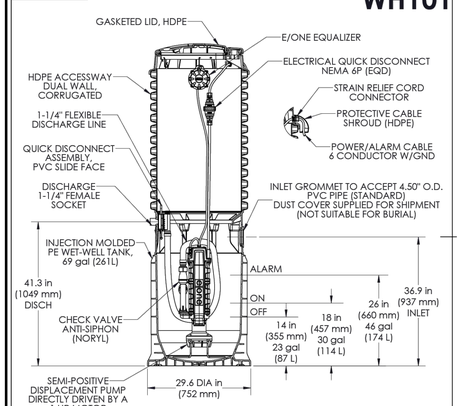
1. ALL WORK TO BE IN ACCORDANCE WITH CURRENT NATIONAL ELECTRIC CODE (NEC) REQUIREMENTS.
2. ALL UNDERGROUND WIRE, CONDUIT AND TRENCHING SHALL BE FURNISHED BY CONTRACTOR, COORDINATE ALL REQUIREMENTS WITH OWNERS REPRESENTATIVE.
3. PUMP CONTROL PANEL TO BE INSTALLED ON PROPOSED BUILDING AT 42" ABOVE FINISHED GRADE.
4. THE SIMPLEX PUMP CONTROL PANEL SHALL BE PROVIDED ON ACCORDANCE WITH THE SPECIFICATIONS PROVIDED BY THE MANUFACTURER, INCLUDING THE OPTIONAL HOUR METER.



FORCE MAIN PROFILE VIEW
SCALE: HORIZONTAL 1" = 20'
VERTICAL 1" = 2'

NA0057P02

WH101



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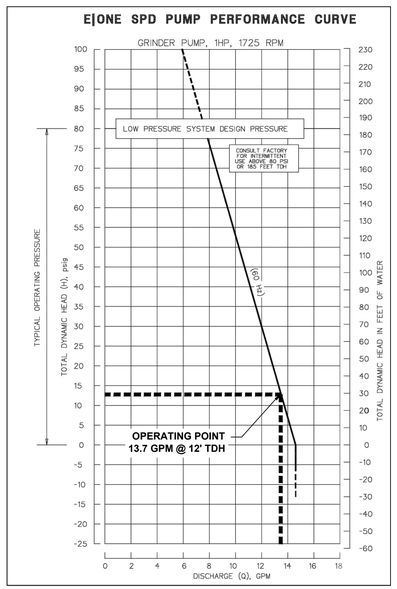
e|one SEWER SYSTEMS

MODEL WH101
DETAIL SHEET

NA0057P02



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Ohio Reg. No.

Date

STATE OF OHIO
DYLAN J. WYATT
E-86763
REGISTERED
PROFESSIONAL ENGINEER

LIFT STATION DETAILS

ENG. FILE NO.
IMP. ACCT. NO.
CONTRACT NO.
COMPLETION DATE
CONTRACTOR

CRAWFORD COUNTY COMMISSIONERS TITLE OFFICE

Scale : Horiz. = AS NOTED
Vert. = AS NOTED
Original Sheet Size = 24"x36"
Date : 02/26/2024

Sheet No. : 8 OF 13
S:\2023\210\001\A
Dwg. No. : 2023-210-001C

SCALE 1" = 20'

EXISTING SANITARY STRUCTURES

SSMH 1624
T.C. - 1036.21
INV. 10" CLAY (N) = 1032.01
INV. 10" CLAY (SW) = 1031.81

EXISTING STORM STRUCTURES

CB 1369
T.C. - 1031.85
INV. 12" CPP (NE) = 1030.00

CB 1390
T.C. - 1032.03
INV. 12" CPP (NW) = 1028.78
INV. 12" CPP (E) = 1028.78

CI 1425
T.C. - 1032.48
INV. 4" CPP (N) = 1029.63
INV. 4" CPP (S) = 1029.68
INV. 12" CPP (SW) = 1029.38
PRO INV. 10" N-12 (W) = 1029.48
INV. 12" CPP (E) = 1029.28

CI 1426
T.C. - 1032.30
INV. 12" CPP (N) = 1029.05
INV. 4" CPP (S) = 1029.60
INV. 12" CPP (SE) = 1029.00
INV. 12" CPP (W) = 1029.00

CI 1488
T.C. - 1036.10
INV. 4" CPP (N) = 1033.40
INV. 4" CPP (S) = 1033.35
INV. 12" CPP (W) = 1032.40
INV. 12" CPP (E) = 1032.40

CI 1489
T.C. - 1036.15
INV. 4" CPP (N) = 1033.35
INV. 12" CPP (S) = 1032.25
INV. 12" CPP (W) = 1032.20

CB 1625
T.C. - 1035.39
INV. 12" CPP (E) = 1032.69

PROPOSED STORM STRUCTURES

CB 16 (CB-1 DETAIL)
T.C. - 1034.15
INV. 12" N-12 (N) = 1031.80
INV. 12" N-12 (SW) = 1031.75

CB 17 (CB-1 DETAIL)
T.C. - 1035.50
INV. 12" N-12 (S) = 1032.75

CB 18 (CB-1 DETAIL)
T.C. - 1035.50
INV. 12" N-12 (S) = 1032.75

CB 19 (CB-1 DETAIL)
T.C. - 1035.31
INV. 12" N-12 (N) = 1031.84
INV 6" N-12 (NE) = 1032.14
INV. 12" N-12 (S) = 1031.74

CB 20 (CB-1 DETAIL)
T.C. - 1034.70
INV. 12" N-12 (NE) = 1031.65
INV 6" N-12 (N) = 1032.00
INV. 12" N-12 (S) = 1031.60

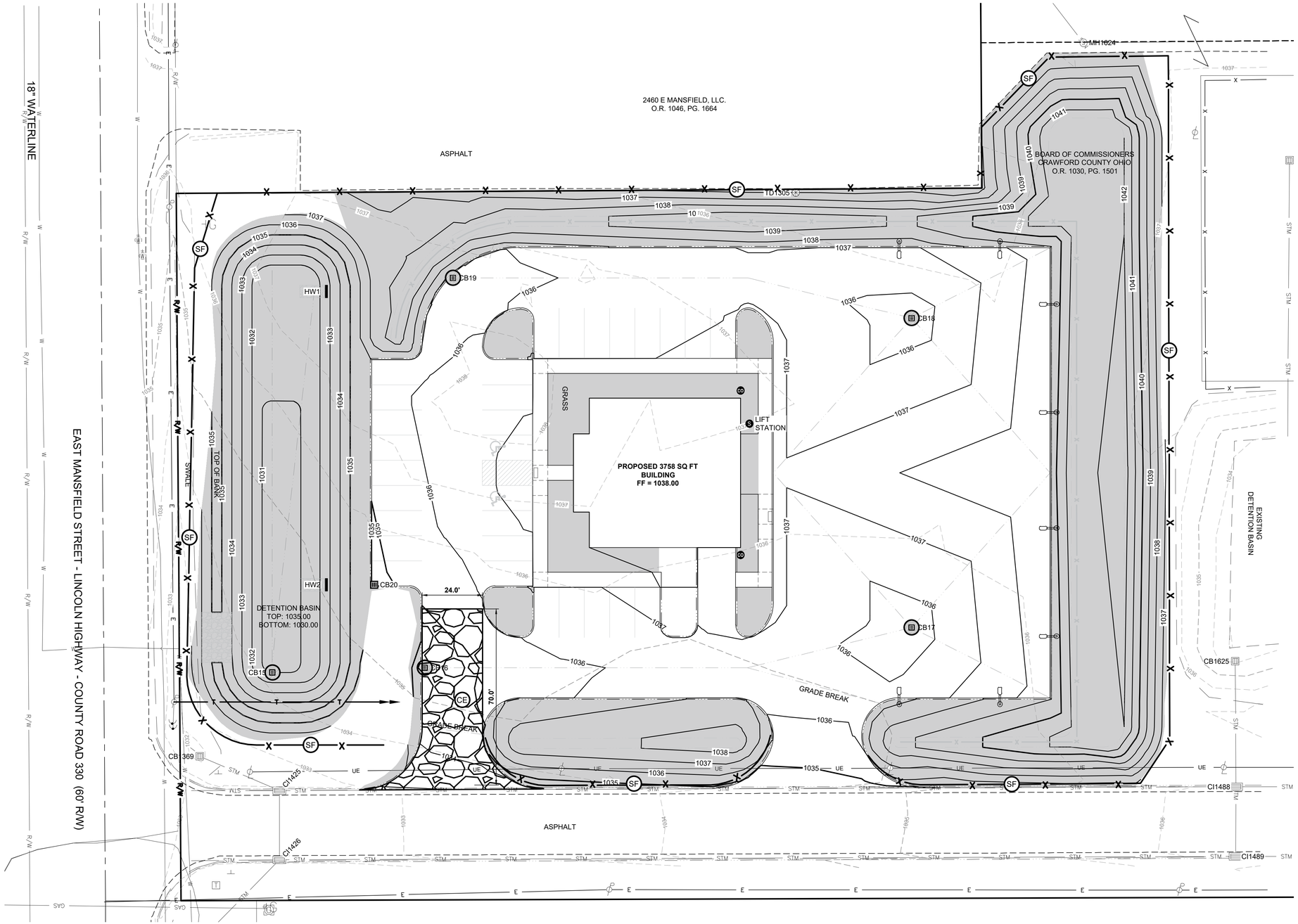
CB 15 (CB-2 AS OUTLET STRUCTURE)
T.C. - 1033.50
INV. 10" N-12 (E) = 1030.00
INV WQV 13/16" DIA. ORIFICE (W) = 1030.00
INV. 3" DIA. ORIFICE (W) = 1031.98

HW 1 (HW-1 DETAIL)
INV. 12" N-12 (N) = 1031.50

HW 2 (HW-1 DETAIL)
INV. 12" N-12 (N) = 1031.50

LEGEND

- SF — SILT FENCE - 1238 FT
- INLET PROTECTION - 5 EA
- PS — PERMANENT SEEDING - 44,458 SF
- CE — CONSTRUCTION ENTRANCE



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Plans Prepared By :

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STORM WATER ROUTING

OVERALL RUNOFF WILL BE COLLECTED IN CATCH BASINS AND WILL FLOW THROUGH A SERIES OF STORM SEWER PIPES. THESE STORM SEWERS IN TURN FLOW INTO THE SEDIMENT/WATER QUALITY BASIN. THE OUTLET FOR THIS SEDIMENT/WATER QUALITY BASIN WILL BE CONSTRUCTED WITH A CONCRETE STRUCTURE AND RIPRAP CHANNEL PROTECTION IN ACCORDANCE WITH ODOT SPECIFICATIONS. THE SEDIMENT/WATER QUALITY BASIN AND OUTLET STRUCTURE WILL BE CONSTRUCTED IN ACCORDANCE WITH ODOT SPECIFICATIONS.

WASTE MATERIALS

ALL WASTE MATERIALS WILL BE COLLECTED AND REMOVED FROM THE SITE DAILY. NO CONSTRUCTION WASTE MATERIALS WILL BE BURIED ONSITE. ALL PERSONNEL WILL BE INSTRUCTED REGARDING THE CORRECT PROCEDURE FOR WASTE DISPOSAL. NOTICE STATING THESE PRACTICES WILL BE POSTED IN THE OFFICE TRAILER AND THE CONTRACTOR, THE INDIVIDUAL WHO MANAGES THE DAY-TO-DAY SITE OPERATIONS, WILL BE RESPONSIBLE FOR SEEING THAT THESE PROCEDURES ARE FOLLOWED DURING THE CONSTRUCTION PHASE OF THE PROJECT.

TOXIC OR HAZARDOUS WASTE

ALL HAZARDOUS WASTE MATERIALS WILL BE DISPOSED OF IN THE MANNER SPECIFIED BY LOCAL OR STATE REGULATION OR BY THE MANUFACTURER. SITE PERSONNEL WILL BE INSTRUCTED IN THESE PRACTICES AND THE CONTRACTOR, THE INDIVIDUAL WHO MANAGES DAY-TO-DAY SITE OPERATIONS, WILL BE RESPONSIBLE FOR SEEING THAT THESE PRACTICES ARE FOLLOWED.

SANITARY WASTE

PORTABLE SANITARY WASTE FACILITIES WILL BE PROVIDED ONSITE AND THE COLLECTED WASTE DISPOSED OF PROPERLY.

WASTE DISPOSAL

CONTRACTOR SHALL KEEP CONTAINERS AVAILABLE ON SITE FOR DISPOSAL OF DEBRIS, TRASH, HAZARDOUS OR PETROLEUM WASTES.

CLEAN HARD FILL

BRICKS, HARDENED CONCRETE, AND SOIL WASTE THAT ARE CONTAMINATED SHALL NOT BE LOCATED NEAR CATCH BASINS, WATERCOURSES, DRAINAGE DITCHES, FIELD DRAINS AND OTHER STORM WATER DRAINAGE AREAS.

CONSTRUCTION AND DEMOLITION DEBRIS

CONSTRUCTION AND DEMOLITION DEBRIS WASTE WILL BE DISPOSED OF IN AN OHIO EPA APPROVED C&DD LANDFILL AS REQUIRED BY OHIO REVISED CODE (ORC) 3714.

CONSTRUCTION CHEMICAL COMPOUNDS

MIXING OR STORAGE OF COMPOUNDS SUCH AS FERTILIZERS, LIME, ASPHALT, AND CONCRETE SHALL NOT BE LOCATED NEAR CATCH BASINS, WATERCOURSES, DRAINAGE DITCHES, FIELD DRAINS AND OTHER STORM WATER DRAINAGE AREAS. THIS LOCATION WILL BE DETERMINED BY THE CONSTRUCTION MANAGER.

EQUIPMENT FUELING AND MAINTENANCE

DESIGNATED AREAS FOR FUELING AND/OR PERFORMING VEHICLE MAINTENANCE SHALL BE IN LOCATED AWAY FROM WATERCOURSES, DRAINAGE DITCHES, FIELD DRAINS AND OTHER STORM WATER DRAINAGE AREAS. THIS LOCATION WILL BE DETERMINED BY THE CONSTRUCTION MANAGER.

NO STORAGE TANKS SHALL BE KEPT ON SITE.

CONCRETE WASH WATER

DESIGNATED AREAS FOR CONCRETE CHUTES OR OTHER WASH WATER SHALL BE LOCATED AWAY FROM WATERCOURSES, DRAINAGE DITCHES, FIELD DRAINS AND OTHER STORM WATER DRAINAGE AREAS. THIS LOCATION WILL BE DETERMINED BY THE CONSTRUCTION MANAGER.

CONTAMINATED SOILS

ALL CONTAMINATED SOILS BY PETROLEUM OR OTHER CHEMICAL SPILLS MUST BE TREATED AND/OR DISPOSED IN OHIO EPA APPROVED SOLID WASTE MANAGEMENT FACILITIES OR HAZARDOUS WASTE TREATMENT, STORAGE OR DISPOSAL FACILITIES.

SPILL REPORTING REQUIREMENTS

IN AN EVENT OF A SMALL RELEASE, LESS THAN 25 GALLONS OF PETROLEUM WASTE, THE CONTRACTOR SHALL USE PETROLEUM BASED AND CONCRETE CURING COMPOUNDS PER MANUFACTURES HANDLING PROCEDURES.

IN AN EVENT OF A LARGE RELEASE, MORE THAN 25 GALLON OF PETROLEUM WASTE, THE CONTRACTOR SHALL CONTACT OHIO EPA (AT 1-800-282-9378), THE LOCAL FIRE DEPARTMENT AND THE LOCAL EMERGENCY PLANNING COMMITTEE (LEPC) WITHIN 30 MINUTES OF A SPILL OF 25 OR MORE GALLONS.

OPEN BURNING

OPEN BURNING IS ONLY PERMITTED IN RESTRICTED AREAS FOR BARBECUES, HEATING, AND CERTAIN OCCUPATIONAL PURPOSES (AS DEFINED IN OAC 3745-19).

NO OPEN BURNING IS ALLOWED IN A NON-RESTRICTED AREA WHICH IS WITHIN 1000 FEET OF AN INHABITED BUILDING. OPEN BURNING IN AN UNRESTRICTED AREA IS LIMITED TO SCRAP LUMBER, WOODEN FENCE POSTS, AGRICULTURAL, LAND CLEARING, OR LANDSCAPE WASTES.

DUST CONTROLS/SUPPRESSANTS

CONTRACTOR SHALL KEEP DUST TO A MINIMUM BY SPRINKLING DUST SUPPRESSANT. THE DUST SUPPRESSANT SHALL BE KEPT AWAY FROM CATCH BASINS, WATERCOURSES, DRAINAGE DITCHES, FIELD DRAINS AND OTHER STORM WATER DRAINAGE AREAS.

AIR PERMITTING REQUIREMENTS

CONTRACTOR SHALL BEWARE THAT AIR POLLUTION PERMITS MAY BE REQUIRED FOR ACTIVITIES INCLUDING, BUT NOT LIMITED TO, MOBILE CONCRETE BATCH PLANTS, MOBILE ASPHALT PLANTS, CONCRETE CRUSHERS, AND LARGE GENERATORS.

SPILL PREVENTION CONTROL AND COUNTERMEASURES (SPCC) PLAN

INVENTORY OF MATERIALS

THE MATERIALS OR SUBSTANCES LISTED BELOW ARE EXPECTED TO BE PRESENT ONSITE DURING CONSTRUCTION:

- CONCRETE
- DETERGENTS
- PAINTS (ENAMEL AND LATEX)
- METAL STUDS
- MASONRY BLOCK
- TAR
- FERTILIZERS
- PETROLEUM BASED PRODUCTS
- CLEANING SOLVENTS
- WOOD
- ROOFING SHINGLES
- LAMPS (INCLUDES FLUORESCENT LAMPS)

SPILL PREVENTION

MATERIAL MANAGEMENT PRACTICES:
THE FOLLOWING ARE THE MATERIAL MANAGEMENT PRACTICES THAT WILL BE USED TO REDUCE THE RISK OF SPILLS OR OTHER ACCIDENTAL EXPOSURE OF MATERIALS AND SUBSTANCES TO STORM WATER RUNOFF.

GOOD HOUSEKEEPING:
THE FOLLOWING GOOD HOUSEKEEPING PRACTICES WILL BE FOLLOWED ONSITE DURING THE CONSTRUCTION.

- AN EFFECT WILL BE MADE TO STORE ONLY ENOUGH PRODUCT REQUIRED TO DO THE JOB.
- ALL MATERIALS STORED ONSITE WILL BE STORED IN A NEAT, ORDERLY MANNER IN THEIR APPROPRIATE CONTAINERS AND, IF POSSIBLE, UNDER A ROOF OR OTHER ENCLOSURE.
- PRODUCT WILL BE KEPT IN THEIR ORIGINAL CONTAINERS WITH THE ORIGINAL MANUFACTURER'S LABEL.
- SUBSTANCES WILL NOT BE MIXED WITH ONE ANOTHER UNLESS RECOMMENDED BY THE MANUFACTURER.
- WHENEVER POSSIBLE, ALL OF A PRODUCT WILL BE USED UP BEFORE DISPOSING OF THE CONTAINER.
- MANUFACTURER'S RECOMMENDATIONS FOR PROPER USE AND DISPOSAL WILL BE FOLLOWED.
- THE SITE SUPERINTENDENT WILL INSPECT DAILY TO ENSURE PROPER USE AND DISPOSAL OF MATERIALS ONSITE.
- MATERIAL SAFETY AND DATA SHEETS WILL BE AVAILABLE UPON REQUEST.
- THE CONTRACTOR CAN USE PROTECTED STORAGE AREAS FOR INDUSTRIAL OR CONSTRUCTION MATERIALS TO MINIMIZE EXPOSURE TO SUCH MATERIALS TO STORM WATER.

HAZARDOUS PRODUCTS:
THESE PRACTICES ARE USED TO REDUCE THE RISKS ASSOCIATED WITH HAZARDOUS MATERIALS.

- PRODUCTS WILL BE KEPT IN ORIGINAL CONTAINERS UNLESS THEY ARE NOT RESEALABLE.
- ORIGINAL LABELS AND MATERIAL SAFETY DATA SHEETS (MSDS) WILL BE RETAINED ON SITE.
- IF SURPLUS PRODUCT MUST BE DISPOSED OF, MANUFACTURE'S OR LOCAL AND STATE RECOMMENDED METHODS FOR PROPER DISPOSAL WILL BE FOLLOWED.

PRODUCT SPECIFIC PRACTICES

THE FOLLOWING PRODUCT PRACTICES WILL BE FOLLOWED ONSITE:

PETROLEUM PRODUCTS:
ALL ONSITE VEHICLES WILL BE MONITORED FOR LEAKS AND RECEIVE REGULAR PREVENTATIVE MAINTENANCE TO REDUCE THE CHANCE OF LEAKAGE. PETROLEUM PRODUCTS WILL BE STORED IN TIGHTLY SEALED CONTAINERS WHICH ARE CLEARLY LABELED. ANY ASPHALT SUBSTANCES USED ONSITE WILL BE APPLIED ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS.

FERTILIZERS:
FERTILIZERS USED WILL BE APPLIED PER OHIO DEPARTMENT OF TRANSPORTATION (ODOT) SPECIFICATIONS. ONCE APPLIED, FERTILIZER WILL BE WORKED INTO THE SOIL TO LIMIT EXPOSURE TO STORM SEWER. STORAGE WILL BE IN A COVERED SHED OR OFFICE. THE CONTENTS OF ANY PARTIALLY USED BAGS OF FERTILIZER WILL BE TRANSFERRED TO A SEALABLE PLASTIC BIN TO AVOID SPILLS.

PAINTS:
ALL CONTAINERS WILL BE TIGHTLY SEALED AND STORED WHEN NOT REQUIRED FOR USE. EXCESS PAINT WILL NOT BE DISCHARGED TO THE STORM SEWER SYSTEM BUT WILL BE PROPERLY DISPOSED OF ACCORDING TO MANUFACTURER'S INSTRUCTIONS OR STATE AND LOCAL REGULATIONS.

CONCRETE TRUCKS:
CONCRETE TRUCKS WILL WASH OUT OR DISCHARGE SURPLUS CONCRETE ONLY IN AREAS DESIGNATED. THESE DESIGNATED AREAS SHALL BE LOCATED AWAY FROM WATERCOURSES, DRAINAGE DITCHES, FIELD DRAINS AND OTHER STORM WATER DRAINAGE AREAS. THE LOCATION WILL BE DETERMINED BY THE CONSTRUCTION MANAGER.

SPILL CONTROL PRACTICES

IN ADDITION TO THE GOOD HOUSEKEEPING AND MATERIAL MANAGEMENT PRACTICES DISCUSSED IN THE PREVIOUS SECTIONS OF THIS PLAN, THE FOLLOWING PRACTICES WILL BE FOLLOWED FOR SPILL PREVENTION AND CLEANUP:

- MANUFACTURER'S RECOMMENDED METHODS FOR SPILL CLEANUP WILL BE CLEARLY POSTED AND SITE PERSONNEL WILL BE MADE AWARE OF THE PROCEDURES AND THE LOCATION OF THE INFORMATION AND CLEANUP SUPPLIES.
- MATERIALS AND EQUIPMENT NECESSARY FOR SPILL CLEANUP WILL BE KEPT IN THE MATERIAL STORAGE AREA ONSITE. EQUIPMENT AND MATERIALS MAY INCLUDE BUT NOT BE LIMITED TO BROOMS, DUST PANS, MOPS, RAGS, GLOVES, GOGGLES, KITTY LITTER, SAND, SAWDUST, AND PLASTIC AND METAL TRASH CONTAINERS SPECIFICALLY FOR THIS PURPOSE.
- ALL SPILLS WILL BE CLEANED UP IMMEDIATELY AFTER DISCOVERY.
- THE SPILL AREA WILL BE KEPT WELL VENTILATED AND PERSONNEL WILL WEAR APPROPRIATE PROTECTIVE CLOTHING TO PREVENT INJURY FROM CONTACT WITH A HAZARDOUS SUBSTANCE.
- SPILLS OF TOXIC OR HAZARDOUS MATERIAL WILL BE REPORTED TO THE APPROPRIATE STATE OR LOCAL GOVERNMENT AGENCY, REGARDLESS OF THE SIZE.
- THE SPILL PREVENTION PLAN WILL BE ADJUSTED TO INCLUDE MEASURES TO PREVENT THIS TYPE OF SPILL FROM REOCCURRING AND HOW TO CLEAN UP THE SPILL IF THERE IS ANOTHER ONE. A DESCRIPTION OF THE SPILL, WHAT CAUSED IT, AND THE CLEANUP MEASURES WILL ALSO BE INCLUDED.
- THE CONTRACTOR, RESPONSIBLE FOR DAY-TO-DAY SITE OPERATIONS, WILL BE IN CHARGE OF SPILL PREVENTION AND CLEANUP. HE WILL DESIGNATE AT LEAST TWO OTHER SITE PERSONNEL WHO WILL RECEIVE SPILL PREVENTION AND CLEANUP TRAINING. THESE INDIVIDUALS WILL EACH BECOME RESPONSIBLE FOR A PARTICULAR PHASE OF PREVENTION AND CLEANUP. THE NAMES OF RESPONSIBLE SPILL PERSONNEL WILL BE POSTED IN THE MATERIAL STORAGE AREA.

PROCESS WASTEWATER/LEACHATE MANAGEMENT

ALL PROCESS WASTEWATERS, (WHICH INCLUDES EQUIPMENT WASHING, LEACHATE ASSOCIATED WITH ON-SITE WASTE DISPOSAL, AND CONCRETE WASH-OUTS) SHALL BE COLLECTED AND DISPOSED OF PROPERLY TO A PUBLICLY OWNED TREATMENT WORKS.

OFFSITE VEHICLE TRACKING

A STABILIZED CONSTRUCTION ENTRANCE HAS BEEN PROVIDED TO HELP REDUCE VEHICLE TRACKING OF SEDIMENT. THE PAVED STREETS ADJACENT TO THE SITE ENTRANCE WILL BE MAINTAINED TO REMOVE ANY EXCESS MUD, DIRT, OR ROCK TRACKED FROM THE SITE. DUMP TRUCKS HAULING MATERIAL FROM THE CONSTRUCTION SITE WILL BE COVERED WITH A TARPAULIN.

CERTIFICATION OF COMPLIANCE WITH FEDERAL, STATE, AND LOCAL REGULATIONS

THE STORM WATER POLLUTION PREVENTION PLAN REFLECTS THE COUNTY REQUIREMENTS FOR STORM WATER MANAGEMENT AND EROSION AND SEDIMENT CONTROL. TO ENSURE COMPLIANCE THIS PLAN WAS ESTABLISHED BASED ON A STORM WATER POLLUTION PREVENTION PLAN EXAMPLE PROVIDED BY THE OHIO EPA.

MAINTENANCE/INSPECTION PROCEDURES

THESE ARE THE INSPECTION AND MAINTENANCE PRACTICES THAT WILL BE USED TO MAINTAIN EROSION AND SEDIMENT CONTROLS:

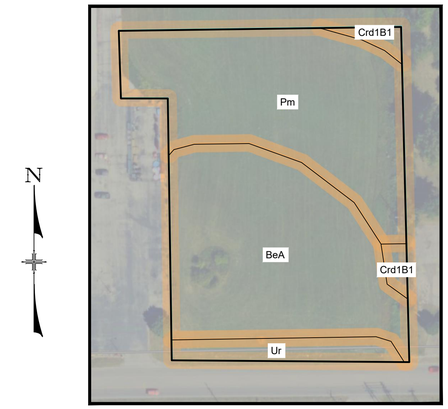
1. ALL CONTROL MEASURES WILL BE INSPECTED AT LEAST ONCE EACH WEEK AND FOLLOWED ANY STORM EVENT OF 0.5 INCHES OR GREATER BY A QUALIFIED INSPECTION PERSONNEL.
2. ALL MEASURES WILL BE MAINTAINED IN GOOD WORKING ORDER; REPAIRS REQUIRED WILL BE COMPLETED WITHIN 24 HOURS OF REPORT.
3. SEDIMENT WILL BE REMOVED FROM SILT FENCE WHEN IT HAS REACHED ONE-THIRD THE HEIGHT OF THE FENCE.
4. SILT FENCE WILL BE INSPECTED FOR DEPTH OF SEDIMENT AND TEARS, TO SEE IF THE FABRIC IS SECURELY ATTACHED TO THE FENCE POST, AND TO SEE IF THE FENCE POSTS ARE FIRMLY IN THE GROUND.
5. SEDIMENT IN THE DRAINAGE SWALES WILL BE REMOVED.
6. TEMPORARY AND PERMANENT SEEDING AND PLANTING WILL BE INSPECTED FOR BARE SPOTS, WASHOUTS, AND HEALTHY GROWTH.
7. A MAINTENANCE INSPECTION REPORT WILL BE MADE AFTER EACH INSPECTION. A COPY OF THE REPORT FORM TO BE COMPLETED BY THE INSPECTOR IS ATTACHED.
8. THE CONTRACTOR WILL BE RESPONSIBLE FOR THE INSPECTIONS, SUCH REPAIRS AND FILLING OUT THE INSPECTION AND MAINTENANCE REPORT.
9. INSPECTIONS MAY BE REDUCED TO MONTHLY PLUS RAIN EVENTS IF SITE IS DORMANT.
10. REPAIR OR REPLACE MISSING OR SUB-FUNCTIONAL BMPS WITHIN 3 DAYS FOR NON-SEDIMENT PONDS AND 10 DAYS FOR SEDIMENT PONDS.
11. DOCUMENT INSPECTIONS WITH OHIO STORM WATER POLLUTION PREVENTION PLAN TEM[LATE REPORTS. MAINTAIN RECORDS FOR THREE YEARS.

NON-STORM DISCHARGES

IT IS EXPECTED THAT THE FOLLOWING NON-STORM DISCHARGE WILL OCCUR FROM THE SITE DURING THE CONSTRUCTION PERIOD:

- WATER FROM WATER LINE FLUSHINGS
- PAVEMENT WASH WATERS (WHERE NO SPILLS OR LEAKS OF TOXIC HAZARDOUS MATERIALS HAVE OCCURRED).
- UNCONTAMINATED GROUND WATER (FROM DEWATERING EXCAVATION).

ALL NON-STORM WATER DISCHARGES WILL BE DIRECTED TO DRAINAGE SWALES PRIOR TO DISCHARGE.



SOILS MAP
NTS

SITE DESCRIPTION

PROJECT NAME AND LOCATION:	CRAWFORD COUNTY COMMISSIONERS TITLE OFFICE
(LATITUDE, LONGITUDE, OR ADDRESS)	N 40-48-46
	W 82-56-18
NAME AND ADDRESS:	CRAWFORD COUNTY BOARD OF COMMISSIONERS
	112 E. MANSFIELD ST
	SUITE 304
	BUCYRUS, OH 44820

DESCRIPTION: (PURPOSE AND TYPES OF SOIL DISTURBING ACTIVITIES)

THIS PROJECT IS FOR THE DEVELOPMENT OF A NEW BUILDING, PARKING LOT & DETENTION BASIN.

SOIL DISTURBING ACTIVITIES WILL INCLUDE: SITE PREPARATION, BUILDING AND PARKING LOT CONSTRUCTION.

SITE AREA:	THE SITE AREA OF 1.973 ACRES WILL HAVE 1.973 ACRES DISTURBED BY THE ABOVE LISTED CONSTRUCTION ACTIVITIES
RUNOFF COEFFICIENT:	PRE-CONSTRUCTION COEFFICIENT OF THE SITE IS CN = 80.0
	POST-CONSTRUCTION COEFFICIENT FOR THE SITE WILL BE CN = 89.2
IMPERVIOUS AREA:	PRE-CONSTRUCTION IMPERVIOUS AREA = 0.0%
	POST-CONSTRUCTION IMPERVIOUS AREA = 51.3%
EXISTING SOIL TYPES:	URBAN LAND (Ur)
	BENNINGTON SILT LOAM, 0 TO 2 PERCENT SLOPES (BeA)
	CARDINGTON SILT LOAM, 2 TO 6 PERCENT SLOPES (Crd1B1)
	PEWAMO SILTY CLAY LOAM, LOW CARBONATE TILL, 0 TO 2 PERCENT SLOPES (Pm)
EXISTING LAND USE:	THIS SITE WAS PREVIOUSLY A GRASSY FIELD.

SEQUENCE OF CONSTRUCTION SCHEDULE ACTIVITIES:

THE ORDER OF ACTIVITIES WILL BE AS FOLLOWS:

1. CLEAR AND GRUB AREA WITHIN CONSTRUCTION LIMITS
2. INSTALL SILT FENCE, AND SEDIMENT CONTROLS WITHIN 7 DAYS OF GRUBBING ACTIVITIES
3. INSTALL STABILIZED CONSTRUCTION ENTRANCE
4. REMOVE TOPSOIL FROM SITE AND STOCK PILE
5. STABILIZE STOCKPILES WITHIN 7 DAYS OF LAST CONSTRUCTION ACTIVITY
6. PERFORM SITE GRADING ACTIVITIES
7. INSTALL UNDERGROUND UTILITIES
8. INSTALL SEDIMENT AND EROSION CONTROLS AROUND ALL CATCH BASINS AND DETENTION BASIN
9. INSTALL PARKING AREA
10. CONSTRUCT BUILDING ADDITION
11. COMPLETE GRADING AND INSTALL PERMANENT SEEDING WITHIN 7 DAYS OF LAST CONSTRUCTION ACTIVITY
12. REMOVE ACCUMULATED SEDIMENT FROM SEDIMENT AND EROSION CONTROL DEVICES (CONTINUAL EVENT)
13. WHEN ALL CONSTRUCTION ACTIVITY IS COMPLETED AND THE SITE IS STABILIZED, REMOVE SEDIMENT AND EROSION CONTROL AND RESEED ANY AREAS DISTURBED BY THIS REMOVAL
14. OWNER TO PROVIDE MAINTENANCE

NAME OF RECEIVING WATERS:	EXISTING STORM RUNOFF DISCHARGES TO AN EXISTING STORM SEWER SYSTEM.

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Plans Prepared By :
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P.O. BOX 325, 1810 E. MANSFIELD ST.
BUCYRUS, OHIO 44820
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EROSION AND SEDIMENT CONTROL

1. THE IMPLEMENTATION OF EROSION AND SEDIMENT CONTROL PRACTICES SHALL CONFORM TO THE OHIO DEPARTMENT OF NATURAL RESOURCES' RAINWATER AND LAND DEVELOPMENT MANUAL (1996), AND THE OHIO EPA'S NPDES PERMIT PROGRAM FOR THE DISCHARGE OF STORM WATER. IF CONFLICTS EXIST REGARDING THE EROSION AND SEDIMENT CONTROL PRACTICES, THE MORE RESTRICTIVE SHALL APPLY.

2. EROSION AND SEDIMENT CONTROL PRACTICES NOT ALREADY ON THIS PLAN MAY BE NECESSARY DUE TO UNFORESEEN ENVIRONMENTAL CONDITIONS AND/OR CHANGES IN DRAINAGE PATTERNS CAUSED BY EARTH-MOVING ACTIVITY. ADDITIONAL PRACTICES SHALL BE IMPLEMENTED AT THE DEVELOPER'S EXPENSE AS DIRECTED BY THE OWNER, ENGINEER, OEPA OR GOVERNING AUTHORITY.

3. THE DEVELOPER AND/OR HIS CONSTRUCTION SUPERINTENDENT SHALL HAVE OVERALL RESPONSIBILITY FOR THE IMPLEMENTATION OF THIS STORM WATER POLLUTION PREVENTION PLAN. THEY SHALL ALSO BE RESPONSIBLE FOR MAKING ALL CONTRACTORS AND SUB-CONTRACTORS AWARE OF THE PROVISIONS ON THIS PLAN.

4. REPAIRS TO ANY EROSION AND SEDIMENT CONTROL MEASURES, STRUCTURES, DEVICES, OR RELATED ITEMS SHALL BE MADE WITHIN 14 DAYS.

5. SEDIMENT BASINS/TRAPS AND PERIMETER SEDIMENT CONTROLS SHALL BE IMPLEMENTED AS THE FIRST STEP OF GRADING AND WITHIN SEVEN DAYS FROM THE START OF THE GRUBBING AND CLEARING OPERATIONS AND SHALL CONTINUE TO FUNCTION UNTIL UPLAND AREAS ARE PERMANENTLY STABILIZED.

6. STREAMS, INCLUDING BEDS AND BANKS, SHALL BE RESTABILIZED IMMEDIATELY AFTER IN-CHANNEL WORK IS COMPLETED, INTERRUPTED, OR STOPPED.

OHIO ENVIRONMENTAL PROTECTION AGENCY NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM NOTES

1. THIS CONTRACT DRAWING SHALL BE MADE AVAILABLE ON SITE AT ALL TIMES AND PRESENTED UPON REQUEST.

2. ALL TEMPORARY AND PERMANENT EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE INSPECTED AT LEAST ONCE EVERY SEVEN CALENDAR DAYS AND WITHIN 24 HOURS AFTER ANY STORM EVENT GREATER THAN 0.50" OF RAIN PER 24-HOUR PERIOD. PERMANENT RECORDS OF MAINTENANCE AND INSPECTION MUST BE MAINTAINED FOR 2 YEARS AFTER THE COMPLETION OF CONSTRUCTION AND THE FILING OF THE NOTICE OF TERMINATION (NOT) PER THE OHIO EPA NPDES PERMIT AND SHOULD INCLUDE THE NAME OF THE INSPECTOR, MAJOR OBSERVATIONS, DATE OF INSPECTION, CERTIFICATION OF COMPLIANCE, AND CORRECTIVE MEASURES TAKEN.

3. NO SOLID OR LIQUID WASTE SHALL BE DISCHARGED INTO STORM WATER RUNOFF. SOLIDS, SANITARY AND TOXIC WASTE MUST BE DISPOSED OF IN A PROPER MANNER IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS. IT IS PROHIBITED TO BURN, BURY OR POUR OUT ONTO THE GROUND OR INTO THE STORM SEWERS ANY SOLVENTS, PAINTS, STAINS, GASOLINES, DIESEL FUEL, USED MOTOR OIL, HYDRAULIC FLUID, ANTIFREEZE, CEMENT CURING COMPOUNDS, AND OTHER SUCH TOXIC AND HAZARDOUS WASTE. WASH OUT OF CEMENT TRUCKS SHOULD OCCUR IN A DIKED, DESIGNATED AREA WHERE THE WASHINGS CAN COLLECT AND BE DISPOSED OF PROPERLY WHEN THEY HARDEN. STORAGE TANKS SHOULD BE LOCATED IN DIKED AREAS AWAY FROM ANY DRAINAGE CHANNELS. THE DIKED AREA SHOULD HOLD A VOLUME 110% OF THE LARGEST TANK.

4. THE DEVELOPER SHALL ENSURE A NOTICE OF TERMINATION (NOT) IS FILED PER THE OHIO EPA NPDES PERMIT REQUIREMENTS.

CONSTRUCTION ENTRANCE

STONE SIZE - NO. 2 (2-1/2" TO 1-1/2") OR ITS EQUIVALENT.

LENGTH - AS EFFECTIVE, BUT NOT LESS THAN 50 FEET.

THICKNESS - NOT LESS THAN EIGHT (8) INCHES.

WIDTH - TWENTY (20) FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS.

FILTER CLOTH - WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE.

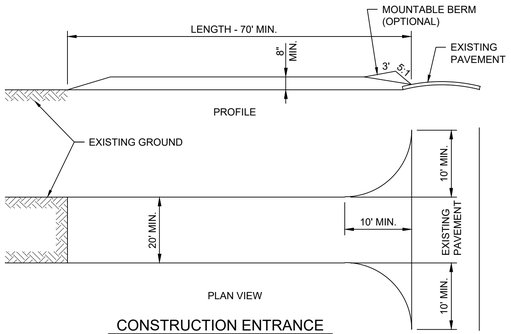
SURFACE WATER - ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED ACROSS THE ENTRANCE.

WASHING - WHEN NECESSARY, WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE WHICH DRAINS INTO AN APPROVED SEDIMENT TRAP. ALL SEDIMENT SHALL BE PREVENTED FROM ENTERING ANY STORM DRAIN, DITCH OR WATERCOURSE THROUGH USE OF SAND BAGS, GRAVEL, BOARDS OR OTHER APPROVED METHODS.

MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHT-OF-WAY MUST BE REMOVED IMMEDIATELY.

PERIODIC INSPECTION AND REQUIRED MAINTENANCE SHALL BE PERFORMED AFTER EACH RAIN.

THIS CONSTRUCTION SHALL INCLUDE ALL MATERIALS AND COSTS RELATIVE TO CONSTRUCTING, MAINTAINING, REMOVAL AND RESTORATION OF STABILIZED ENTRANCE WITHIN THE VARIOUS CONSTRUCTION ITEMS.



CONSTRUCTION ENTRANCE
SCALE: NONE

SILT FENCE NOTES

SILT FENCE SEDIMENT BARRIER UTILIZES STANDARD STRENGTH OR EXTRA STRENGTH SYNTHETIC FILTER FABRICS. IT IS DESIGNED FOR SITUATIONS IN WHICH ONLY SHEET OR OVERLAND FLOWS ARE EXPECTED.

THE HEIGHT OF A SILT FENCE SHALL NOT EXCEED 36 INCHES (HIGHER FENCES MAY IMPOUND VOLUMES OF WATER SUFFICIENT TO CAUSE FAILURE TO THE STRUCTURE)

THE FILTER FABRIC SHALL BE PURCHASED IN A CONTINUOUS ROLL CUT TO THE LENGTH OF THE BARRIER TO AVOID THE USE OF JOINTS. WHEN JOINTS ARE NECESSARY FILTER CLOTH SHALL BE SPLICED TOGETHER ONLY AT A SUPPORT POST WITH A MINIMUM 6-INCH OVERLAYS AND SECURELY SEALED.

WHEN STANDARD STRENGTH FILTER FABRIC IS USED A WIRE MESH SUPPORT FENCE SHALL BE FASTENED SECURELY TO THE UPSLOPE SIDE OF THE POSTS USING HEAVY DUTY WIRE STAPLES AT LEAST 1 INCH LONG, TIE WIRES OR HOG RINGS. THE WIRE SHALL EXTEND INTO THE TRENCH A MINIMUM OF 2 INCHES AND SHALL NOT EXTEND MORE THAN 36 INCHES ABOVE THE ORIGINAL GROUND SURFACE.

POSTS SHALL BE SPACED A MAXIMUM OF 10 FEET APART AT THE BARRIER LOCATION AND DRIVEN SECURELY INTO THE GROUND (MINIMUM OF 12 INCHES). WHEN EXTRA STRENGTH FABRIC IS USED WITHOUT THE WIRE SUPPORT, FENCE POST SPACING SHALL NOT EXCEED 6 FEET.

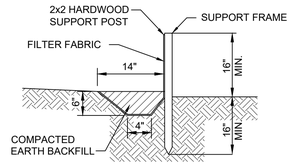
A TRENCH SHALL BE EXCAVATED APPROXIMATELY 4 INCHES WIDE AND 4 INCHES DEEP ALONG THE LINE OF POSTS AND UPSLOPE FROM THE BARRIER.

THE STANDARD STRENGTH FILTER FABRIC SHALL BE STAPLED OR WIRED TO THE FENCE AND 8 INCHES OF THE FABRIC SHALL BE EXTENDED INTO THE TRENCH. THE FABRIC SHALL NOT EXTEND MORE THAN 36 INCHES ABOVE THE ORIGINAL GROUND SURFACE. FILTER FABRIC SHALL NOT BE STAPLED TO EXISTING TREES.

WHEN EXTRA STRENGTH FILTER FABRIC AND CLOSER POST SPACING ARE USED THE WIRE MESH SUPPORT FENCE MAY BE ELIMINATED. IN SUCH A CASE THE FILTER FABRIC IS STAPLED OR WIRED DIRECTLY TO THE POSTS.

THE TRENCH SHALL BE BACKFILLED AND SOIL COMPACTED OVER THE FILTER FABRIC.

SILT FENCES SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFUL PURPOSE BUT NOT BEFORE THE UPSLOPE AREA HAS BEEN PERMANENTLY STABILIZED.



SILT FENCE DETAIL
SCALE: NONE

INLET PROTECTION

INSTALLATION: STAND GRATE ON END, PLACE CASTING IN BAG, FLIP GRATE OVER SO THAT OPEN END IS UP, PULL BACK SLACK, TUCK FLAP IN. BE SURE END OF GRATE IS COMPLETELY COVERED BY FLAP OR BAG WILL NOT FIT PROPERLY. HOLDING HANDLES, CAREFULLY PLACE THE BAG WITH GRATE INSERTED INTO CATCH BASIN FRAME. NO CASTING SHALL BE WRAPPED WITH LOOSE GEOSYNTHETIC MATERIAL, ONLY A BAG TYPE SYSTEM IS ACCEPTABLE.

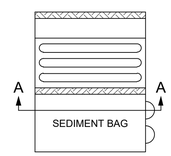
MAINTENANCE: AFTER SILT HAS DRIED, REMOVE IT FROM THE SURFACE OF THE BAG WITH BROOM.

SEDIMENT BAGS SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL.

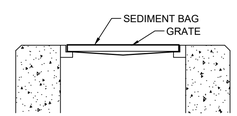
NECESSARY REPAIRS TO BARRIERS OR REPLACEMENT OF SEDIMENT BAGS SHALL BE ACCOMPLISHED PROMPTLY.

SEDIMENT DEPOSITS SHOULD BE REMOVED AFTER EACH RAINFALL. SEDIMENT DEPOSITS MUST BE REMOVED WHEN THE LEVEL OF DEPOSITION REACHES APPROXIMATELY ONE-HALF THE HEIGHT OF THE BARRIER.

ANY SEDIMENT DEPOSITS REMAINING IN PLACE AFTER THE SEDIMENT BAG BARRIER IS NO LONGER REQUIRED SHALL BE DRESSED TO CONFORM TO THE EXISTING GRADE, PREPARED AND SEEDED.



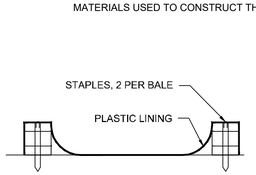
TO BE USED ON CATCH BASINS



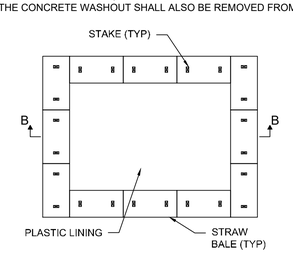
SECTION A
SCALE: NONE

CONCRETE WASHOUT

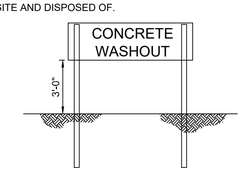
- THE CONCRETE WASHOUT SIGN SHALL BE WITHIN 30' OF THE CONCRETE WASHOUT.
- WASHOUT FACILITIES SHALL BE CLEANED OR REPLACED AND READY FOR USE ONCE THE WASHOUT IN 75% FULL.
- WHEN THE CONCRETE WASHOUT IN NO LONGER NEEDED, THE HARDENED CONCRETE SHOULD BE REMOVED FROM THE SITE AND DISPOSED OF. MATERIALS USED TO CONSTRUCT THE CONCRETE WASHOUT SHALL ALSO BE REMOVED FROM THE SITE AND DISPOSED OF.



SECTION B-B
NOT TO SCALE



PLAN
NOT TO SCALE



CONCRETE WASHOUT SIGN
NOT TO SCALE

TEMPORARY AND PERMANENT SEEDING

THE LIMITS OF SEEDING AND MULCHING AREA AS SHOWN WITHIN THE PLAN SEEDING HAS BEEN ASSUMED TO BE 5' OUTSIDE THE WORK LIMITS OR RIGHT-OF-WAY WHICHEVER IS GREATER. ALL AREAS NOT DESIGNATED TO BE SEEDED SHALL REMAIN UNDER NATURAL GROUND COVER. THOSE AREAS DISTURBED OUTSIDE THE SEEDING LIMITS SHALL BE SEEDED AND MULCHED AT THE CONTRACTOR'S EXPENSE.

THE CONTRACTOR SHALL MAINTAIN A BUFFER STRIP AS DESIGNATED ON THE PLAN TO PREVENT SEDIMENT FROM LEAVING SITE. THIS STRIP SHALL BE MAINTAINED AT ALL TIMES AND NO SOIL SHALL BE PLACED ON THIS STRIP.

TEMPORARY SEED SHALL BE APPLIED BETWEEN CONSTRUCTION OPERATIONS ON SOIL THAT WILL NOT BE GRADED OR REWORKED FOR 45 DAYS OR MORE. THESE IDLE AREAS SHOULD BE SEEDED AS SOON AS POSSIBLE AFTER GRADING OR SHALL BE SEEDED WITHIN 7 DAYS. SEVERAL APPLICATIONS OF TEMPORARY SEEDING ARE NECESSARY ON TYPICAL CONSTRUCTION PROJECTS.

PERMANENT VEGETATION SHALL NOT BE CONSIDERED ESTABLISHED UNTIL GROUND COVER IS ACHIEVED WHICH, IN THE OPINION OF THE APPROVING AGENCY, PROVIDES ADEQUATE COVER AND IS MATURE ENOUGH TO CONTROL SOIL EROSION SATISFACTORILY AND TO SURVIVE ADVERSE WEATHER CONDITIONS.

TEMPORARY SEEDING SPECIES SELECTION

SEEDING DATES	SPECIES	LB/1,000 SF.	LB./AC.
MARCH 1 TO AUGUST 15	OATS	3	4 BUSHEL
	TALL FESCUE	1	40
	ANNUAL RYEGRASS	1	40
	PERENNIAL RYEGRASS	1	40
	TALL FESCUE	1	40
	ANNUAL RYEGRASS	1	40
AUGUST 16 TO NOVEMBER 1	RYE	3	2 BUSHEL
	TALL FESCUE	1	40
	ANNUAL RYEGRASS	1	40
	WHEAT	3	2 BUSHEL
	TALL FESCUE	1	40
	ANNUAL RYEGRASS	1	40
	PERENNIAL RYEGRASS	1	40
	TALL FESCUE	1	40
	ANNUAL RYEGRASS	1	40
NOVEMBER 1 TO SPRING SEEDING	USE MULCH ONLY, SODDING PRACTICES OR DORMANT SEEDING		

NOTE: OTHER APPROVED SEED SPECIES MAY BE SUBSTITUTED

PERMANENT SEEDING

SEED MIX	SEED RATE LB./1,000 SF.	SEED RATE LB./AC.	NOTES
GENERAL USE			
CREEPING RED FESCUE	1/2-1	20-40	
DOMESTIC RYEGRASS	1/4-1/2	10-20	
KENTUCKY RYEGRASS	1/4-1/2	10-20	
TALL FESCUE	1	40	
DWARF FESCUE	1	40	
STEEP BANKS OR CUT SLOPES			
TALL FESCUE	1	40	
CROWN VETCH	1/4	10	DO NOT SEED LATER THAN AUGUST
TALL FESCUE	1/2	20	
FLAT PEA	1/2	20	DO NOT SEED LATER THAN AUGUST
TALL FESCUE	1/2	20	
ROAD DITCHES AND SWALES			
TALL FESCUE	1	40	
DWARF FESCUE	2 1/4	90	
KENTUCKY RYEGRASS		5	
LAWNS			
KENTUCKY BLUEGRASS	1 1/2	60	
PERENNIAL RYEGRASS	1 1/2	60	
KENTUCKY BLUEGRASS	1 1/2	60	FOR SHADED AREAS
CREEPING RED FESCUE	1 1/2	60	

EASEMENT REFERENCE

City's No.	County Recorder Volume	County Recorder Page	Grantor

REVISIONS

No.	Description	Approval	Date

AS BUILT

Plans Prepared By :
Makeever & Associates, Inc.
P.O. BOX 325, 1810 E. MANSFIELD ST.
BUCYRUS, OHIO 44820
Phone: (419) 562-7757 Fax: (419) 562-4717
DYLAN J. WYATT
E-86763
Ohio Reg. No.
Date
STATE OF OHIO DYLAN J. WYATT E-86763 REGISTERED PROFESSIONAL ENGINEER

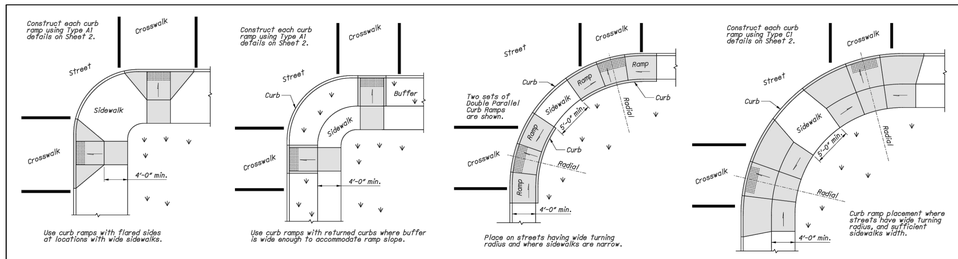
SWP3 DETAILS

ENG. FILE NO.
IMP. ACCT. NO.
CONTRACT NO.
COMPLETION DATE
CONTRACTOR

CRAWFORD COUNTY COMMISSIONERS TITLE OFFICE

Scale : Horiz. = AS NOTED
Vert. = AS NOTED
Original Sheet Size = 24"x36"
Date : 02/26/2024

Sheet No. : 11 OF 13
S:\2023\210\001\A
Dwg. No. : 2023-210-001C

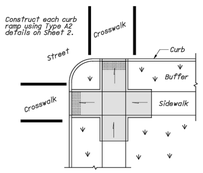


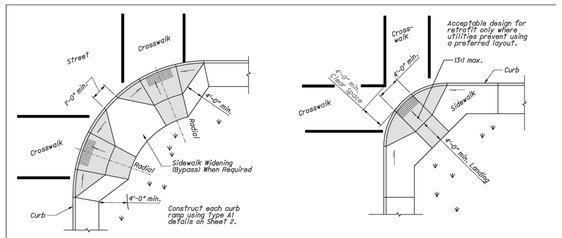
PERPENDICULAR CURB RAMPS

PARALLEL CURB RAMPS

COMBINATION CURB RAMPS

PREFERRED CONSTRUCTION PLACEMENT





PERPENDICULAR RAMPS

DIAGONAL RAMP (Type D)

ACCEPTABLE CONSTRUCTION PLACEMENT

NOTES

GENERAL: This drawing shows curb ramp types details and placement examples for curb ramp construction, including the installation of detectable warnings.

Curb ramp types are shown on Sheet 2 and include Perpendicular, Parallel, and Combined types as specified to be constructed in the locations shown on the project plans.

Curb ramps added to an existing intersection or walk should be individually detailed on the project plans to assure that the design is appropriate for site constraints and all items can be constructed to ADA standards. The contractor may adjust the placement of curb ramps if existing field conditions warrant with the approval of the Engineer.

PAYMENT: Measure and pay for the ramp area within the shaded limits of this drawing as Item 608 Curb Ramp, Square Foot. This includes the cost of any curb or curb and gutter, detectable warnings, landing areas and any additional materials, installation, grading, forming, and finishing required within the shaded area.

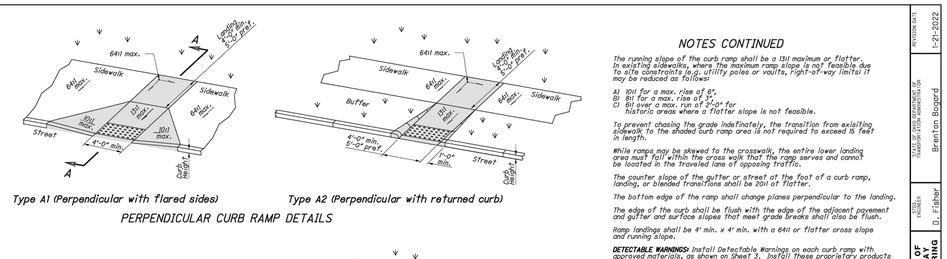
Work beyond the shaded ramp/landing area is paid for as curb (609) and walk (608). Removal of existing curb, walk for existing curb ramps are paid under Item 202.

For at-grade crossing locations where only detectable warnings are required in order to acheive ADA compliance, measure and pay for the strip of detectable warnings as Item 608 Detectable Warning, Square Foot. the work to cost the lines in plans will also require removal of existing pavement (Item 202) to the nearest joint, or if no joint exists, a minimum of 4 feet.

THIS DRAWING REPLACES BP-7.1 DATED 7-20-2018.

OFFICE OF ROADWAY ENGINEERING | STATE OF OHIO DEPARTMENT OF TRANSPORTATION CLARENCE E. MIDDLETON | NEW CURB RAMPS (with Detectable Warnings) | SCD NUMBER BP-7.1 | 1 / 3

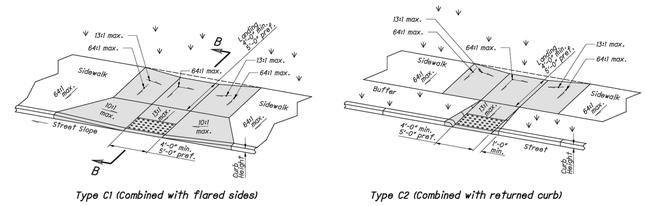
REVISION DATE 1-21-2022 | STATE OF OHIO DEPARTMENT OF TRANSPORTATION SUPERVISING ENGINEER Brenton Bogard | CADD ENGINEER D. Fisher



Type A1 (Perpendicular with flared sides)

Type A2 (Perpendicular with returned curb)

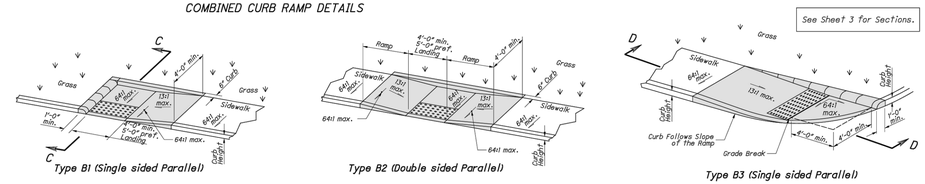
PERPENDICULAR CURB RAMP DETAILS



Type C1 (Combined with flared sides)

Type C2 (Combined with returned curb)

COMBINED CURB RAMP DETAILS



Type B1 (Single sided Parallel)

Type B2 (Double sided Parallel)

Type B3 (Single sided Parallel)

PARALLEL CURB RAMP DETAILS

NOTES CONTINUED

The running slope of the curb ramp shall be a 13:1 maximum or flatter. In existing sidewalks, where the maximum ramp slope is not feasible due to site constraints (e.g. utility poles or vaults, right-of-way limits) it may be reduced as follows:

A) 10:1 for a max. rise of 6".
B) 8:1 for a max. rise of 3".
C) 6:1 over a max. run of 2'-0" for historic areas where a flatter slope is not feasible.

To prevent chasing the grade indefinately, the transition from existing sidewalk to the shaded curb ramp area is not required to exceed 15 feet in length.

While ramps may be skewed to the crosswalk, the entire lower landing area must fall within the cross walk that the ramp serves and cannot be located in the traveled lane of opposing traffic.

The counter slope of the gutter or street at the foot of a curb ramp, landing, or blended transitions shall be 20:1 or flatter.

The bottom edge of the ramp shall change planes perpendicular to the landing.

The edge of the curb shall be flush with the edge of the adjacent pavement and gutter and surface slopes that meet grade breaks shall also be flush.

Ramp landings shall be 4' min. x 4' min. with a 64:1 or flatter cross slope and running slope.

DETECTABLE WARNINGS: Install Detectable Warnings on each curb ramp with approved materials, as shown on Sheet 3. Install these proprietary products as per manufacturer's written instructions.

DRAINAGE: Contractor is to ensure the base of each constructed curb ramp allows for proper drainage, without exceeding allowable cross slope or ramp slopes. Vertical change in level exceeding ¼" between the 1) pavement and gutter, and 2) gutter and ramp, are not allowed.

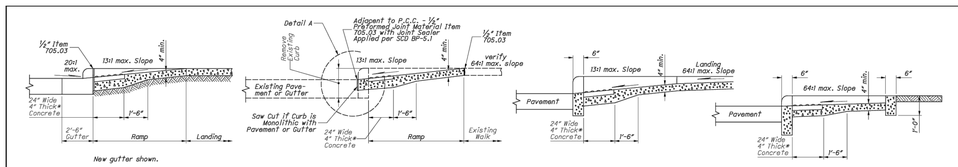
SURFACE TEXTURE: Texture concrete surfaces by coarse brooming transverse To the ramp slopes to be rougher than the adjacent walk.

JOINTS: Provide expansion joints in the curb ramp as extensions of walk joints and consistent with Item 608.03 requirements for a new concrete walk. Provide a ½" Item 705.03 expansion joint filler around the edge of ramps built in existing concrete walks. Lines shown on this drawing indicate the ramp edges and slope changes, and do not necessarily indicate joint lines.

THIS DRAWING REPLACES BP-7.1 DATED 7-20-2018.

OFFICE OF ROADWAY ENGINEERING | STATE OF OHIO DEPARTMENT OF TRANSPORTATION CLARENCE E. MIDDLETON | NEW CURB RAMPS (with Detectable Warnings) | SCD NUMBER BP-7.1 | 2 / 3

REVISION DATE 1-21-2022 | STATE OF OHIO DEPARTMENT OF TRANSPORTATION SUPERVISING ENGINEER Brenton Bogard | CADD ENGINEER D. Fisher

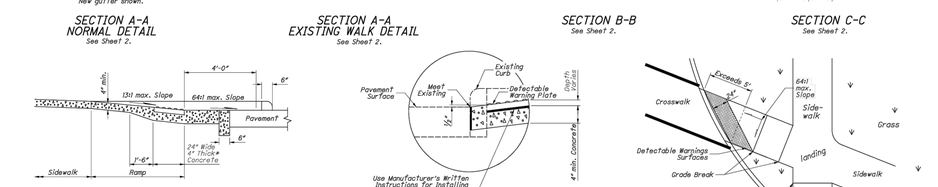


SECTION A-A NORMAL DETAIL
See Sheet 2.

SECTION A-A EXISTING WALK DETAIL
See Sheet 2.

SECTION B-B
See Sheet 2.

SECTION C-C
See Sheet 2.



SECTION D-D
See Sheet 2.
*Where possible, pour ramp area integral with the curb, otherwise use 6" thick walk.

DETAIL A

DETECTABLE WARNING ALIGNMENT FOR DIRECTIONAL CURB RAMPS

DETECTABLE WARNINGS NOTES

GENERAL: Detectable Warnings are a distinctive surface pattern of truncated domes which are detectable by cane or underfoot to alert people with vision impairments of their approach to streets and hazardous drop-offs.

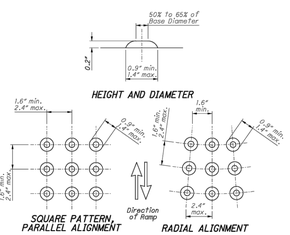
PLACEMENT: Detectable warnings are to be installed at any location where pedestrians might cross paths with vehicular traffic lanes, such as the base of curb ramps or at blended curbs. A 24" strip of domes is to be installed for the full width of the ramp or walk. Typical street corner placement locations are shown on Sheet 1.

Some detectable warning products require a concrete border for proper installation. The concrete border should not exceed 2". Where the back of curb edge is tooled to provide a radius, the border dimension should be measured from the end of the radius.

The depth of concrete underneath detectable warning products shall be a minimum of 4". See DETAIL A.

ALIGNMENT: Truncated domes should be aligned with the primary direction of the ramp as shown on the DETECTABLE WARNING ALIGNMENT Detail. Normally the detectable warnings should be flush with the back of the curb, but for skewed conditions see DETECTABLE WARNING ALIGNMENT Detail. For non-standard layouts, detectable warning materials may have to be mitered and placed segmentally.

PRODUCTS & COLORS: Color of the detectable warnings should contrast with surrounding concrete walk and ramp. Black is not an acceptable color. Approved products and guidance on color may be found on the Office of Roadway Engineering Service's Detectable Warnings Approved List. Install products as per manufacturer's printed instructions.

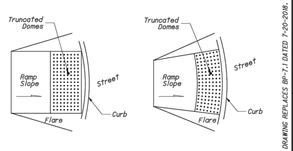


HEIGHT AND DIAMETER

SQUARE PATTERN, PARALLEL ALIGNMENT

RADIAL ALIGNMENT

TRUNCATED DOMES DETAILS

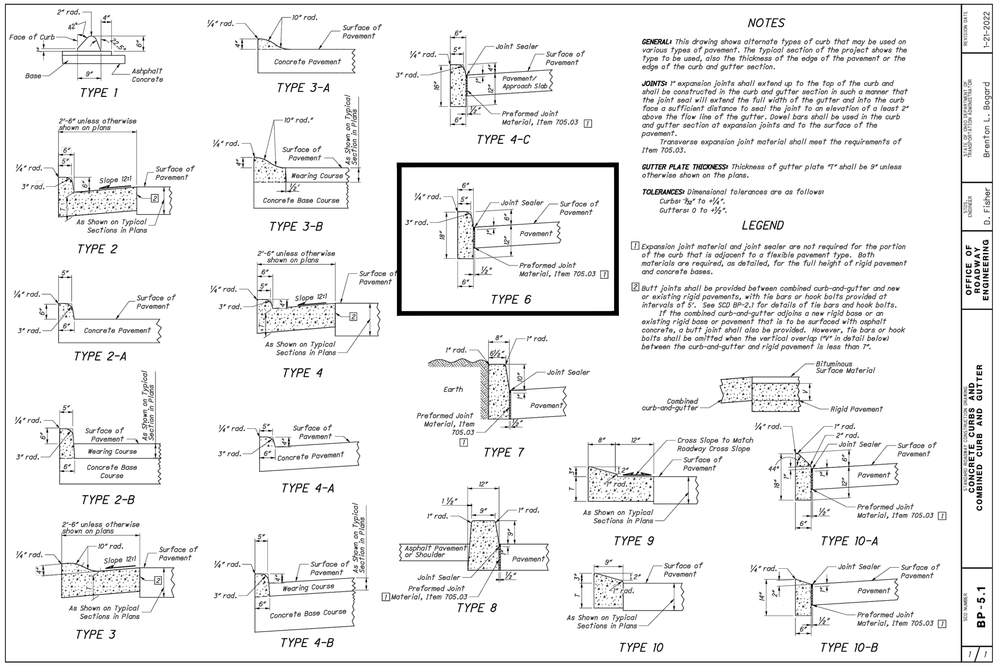


DOME ALIGNMENT ON RADIUSED CURB

THIS DRAWING REPLACES BP-7.1 DATED 7-20-2018.

OFFICE OF ROADWAY ENGINEERING | STATE OF OHIO DEPARTMENT OF TRANSPORTATION CLARENCE E. MIDDLETON | NEW CURB RAMPS (with Detectable Warnings) | SCD NUMBER BP-7.1 | 3 / 3

REVISION DATE 1-21-2022 | STATE OF OHIO DEPARTMENT OF TRANSPORTATION SUPERVISING ENGINEER Brenton Bogard | CADD ENGINEER D. Fisher



NOTES

GENERAL: This drawing shows alternate types of curb that may be used on various types of pavement. The typical section of the project shows the Type To be used, also the thickness of the edge of the pavement or the edge of the curb and gutter section.

JOINTS: 1" expansion joints shall extend up to the top of the curb and shall be constructed in the curb and gutter section in such a manner that the joint seal will extend the full width of the gutter and into the curb face a sufficient distance to seal the joint to an elevation of a least 2" above the flow line of the gutter. Dowel bars shall be used in the curb and gutter section at expansion joints and to the surface of the pavement.

Transverse expansion joint material shall meet the requirements of Item 705.03.

GUTTER PLATE THICKNESS: Thickness of gutter plate "T" shall be 9" unless otherwise shown on the plans.

TOLERANCES: Dimensional tolerances are as follows
Curbs: ⅛" to +¼".
Gutters: 0 to +½".

LEGEND

[1] Expansion joint material and joint sealer are not required for the portion of the curb that is adjacent to a flexible pavement type. Both materials are required, as detailed, for the full height of rigid pavement and concrete bases.

[2] Butt joints shall be provided between combined curb-and-gutter and new or existing rigid pavements, with tie bars or hook bolts provided at intervals of 5'. See SCD BP-2.1 for details of tie bars and hook bolts.
If the combined curb-and-gutter adjoins a new rigid base or an existing rigid base or pavement that is to be surfaced with asphalt concrete, a butt joint shall also be provided. However, tie bars or hook bolts shall be omitted when the vertical overlap ("X" in detail below) between the curb-and-gutter and rigid pavement is less than 1".

THIS DRAWING REPLACES BP-5.1 DATED 1-21-2022.

OFFICE OF ROADWAY ENGINEERING | STATE OF OHIO DEPARTMENT OF TRANSPORTATION CLARENCE E. MIDDLETON | CONCRETE CURBS AND COMBINED CURB AND GUTTER | SCD NUMBER BP-5.1 | 1 / 1

REVISION DATE 1-21-2022 | STATE OF OHIO DEPARTMENT OF TRANSPORTATION SUPERVISING ENGINEER Brenton L. Bogard | CADD ENGINEER D. Fisher

EASEMENT REFERENCE			
City's No.	County Recorder Volume	County Recorder Page	Grantor

REVISIONS			
No.	Description	Approval	Date
AS BUILT			

Plans Prepared By :

Makeever & Associates, Inc.
P.O. BOX 325, 1810 E. MANSFIELD ST.
BUCYRUS, OHIO 44820
Phone: (419) 562-7757 Fax: (419) 562-4717

DYLAN J. WYATT

E-86763
Ohio Reg. No. Date

STATE OF OHIO
DYLAN J. WYATT
E-86763
REGISTERED
PROFESSIONAL ENGINEER

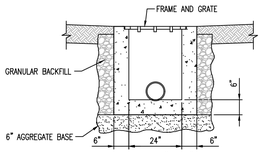
STANDARD DETAILS

ENG. FILE NO.
IMP. ACCT. NO.
CONTRACT NO.
COMPLETION DATE
CONTRACTOR

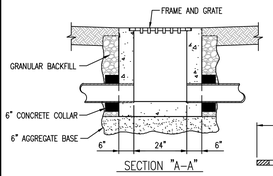
CRAWFORD COUNTY COMMISSIONERS TITLE OFFICE

Scale : Horiz. = AS NOTED
Vert. = AS NOTED
Original Sheet Size = 24"x36"
Date : 02/26/2024

Sheet No. : 12 OF 13
S:\2023\210\001\A
Dwg. No. : 2023-210-001C



SECTION "B-B"



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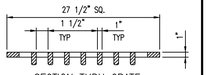
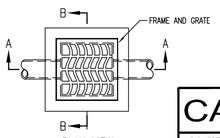
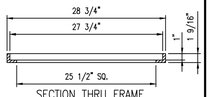


SECTION THRU GRATE



PLAN VIEW



SECTION THRU FRAME

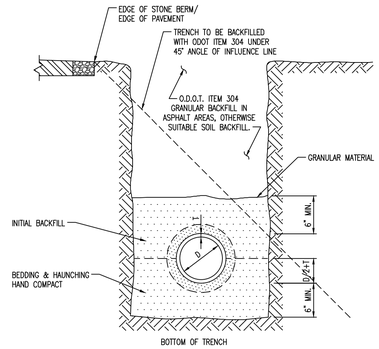
NOTES:

1. FRAME AND GRATE SHALL BE NEENAH ENTERPRISES, INC. MODEL R-4859-S SINUSOIDAL HEAVY DUTY CATCH BASIN GRATE WITH MATCHING FRAME PRECAST INTO CONCRETE CATCH BASIN OR AN APPROVED EQUAL.
2. THE BEARING AREAS OF FRAME AND GRATE SHALL BE SO FITTED AND FINISHED AS TO PROVIDE A FIRM AND EVEN SEAT FOR ALL PORTIONS OF THE GRATE IN THE FRAME. NO PROJECTIONS SHALL EXIST ON BEARING AREAS OF EITHER CASTING. THE GRATE SHALL SEAT IN ITS FRAME WITHOUT ROCKING.
3. PRECAST CATCH BASIN SHALL BE PER ODOT STANDARD 2-2-B
4. OPENINGS FOR PIPES SHALL BE O.D. +2 INCHES WHEN FABRICATED OR FIELD CUT.
5. TILES CONNECTED TO THE CATCH BASIN SHALL BE SECURED BY PLACING A 6 INCH PORTLAND CEMENT CONCRETE COLLAR AROUND THE TILE.

CATCH BASIN

MAKEEVER & ASSOCIATES, INC.
ENGINEERS AND SURVEYORS
BUCYRUS, OHIO

STANDARD DWG. NO. CB-2



NOTE:

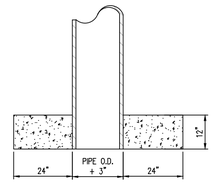
GRANULAR MATERIAL USED FOR BEDDING, HAUNCHING AND INITIAL BACKFILL SHALL CONFORM TO A.S.T.M. NO. 57, CRUSHED AGGREGATE:

MAXIMUM TRENCH WIDTH AT TOP OF PIPE SHALL BE AS FOLLOWS.
FOR PIPE 24" ID OR LESS MAXIMUM TRENCH = O.D. OF PIPE + 24"
FOR PIPE GREATER THAN 24" ID MAXIMUM TRENCH = O.D. OF PIPE + 30"

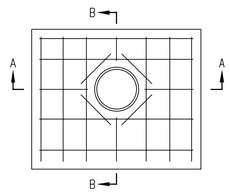
BEDDING FOR STORM SEWERS

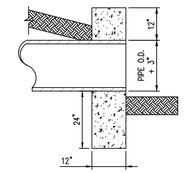
MAKEEVER & ASSOCIATES, INC.
ENGINEERS AND SURVEYORS
BUCYRUS, OHIO

STANDARD DWG. NO. STM-5



SECTION "A-A"





SECTION "B-B"

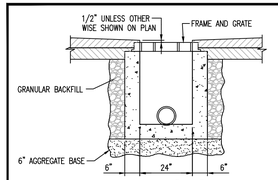
NOTES:

1. STEEL REINFORCING TO BE #4 BAR, TYPICAL EACH FACE.
2. ALL REBAR SHALL HAVE A CLEAR COVER OF 3" FROM ANY FACE.
3. OPENINGS FOR PIPE SHALL BE O.D. +3 INCHES WHEN FABRICATED OR FIELD CUT. GAP TO BE FILLED WITH NON-SHRINKING GROUT.

HEADWALL

MAKEEVER & ASSOCIATES, INC.
ENGINEERS AND SURVEYORS
BUCYRUS, OHIO

STANDARD DWG. NO. HW-1



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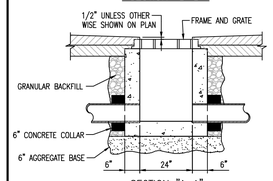
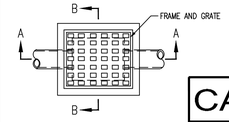


SECTION "A-A"



PLAN VIEW

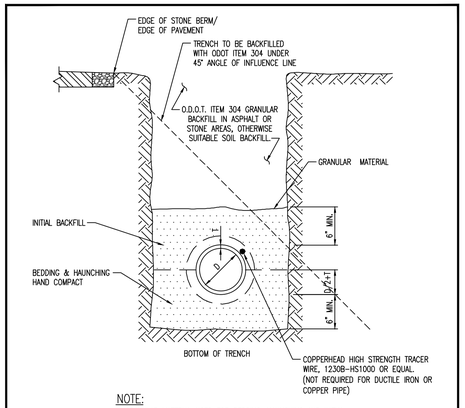
NOTES:

1. FRAME AND GRATE SHALL BE EAST JORDAN IRON WORKS MODEL 5250 HEAVY DUTY CATCH BASIN FRAME AND GRATE OR NEENAH R-3405 AS MANUFACTURED BY NEENAH FOUNDRY COMPANY OR AN APPROVED EQUAL.
2. THE BEARING AREAS OF FRAME AND GRATE SHALL BE SO FITTED AND FINISHED AS TO PROVIDE A FIRM AND EVEN SEAT FOR ALL PORTIONS OF THE GRATE IN THE FRAME. NO PROJECTIONS SHALL EXIST ON BEARING AREAS OF EITHER CASTING. THE GRATE SHALL SEAT IN ITS FRAME WITHOUT ROCKING.
3. PRECAST CATCH BASIN SHALL BE PER ODOT STANDARD 2-2-B
4. OPENINGS FOR PIPES SHALL BE O.D. +2 INCHES WHEN FABRICATED OR FIELD CUT.
5. TILES CONNECTED TO THE CATCH BASIN SHALL BE SECURED BY PLACING A 6 INCH PORTLAND CEMENT CONCRETE COLLAR AROUND THE TILE.

CATCH BASIN

MAKEEVER & ASSOCIATES, INC.
ENGINEERS AND SURVEYORS
BUCYRUS, OHIO

STANDARD DWG. NO. CB-1



NOTE:

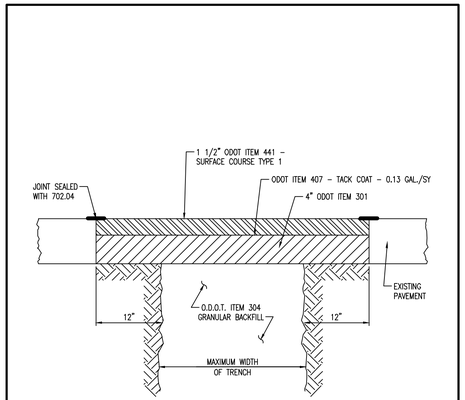
GRANULAR MATERIAL USED FOR BEDDING, HAUNCHING AND INITIAL BACKFILL SHALL CONFORM TO A.S.T.M. NO. 57, CRUSHED AGGREGATE:

MAXIMUM TRENCH WIDTH AT TOP OF PIPE SHALL BE AS FOLLOWS. FOR PIPE 24" ID OR LESS MAXIMUM TRENCH = O.D. OF PIPE + 24" FOR PIPE GREATER THAN 24" ID MAXIMUM TRENCH = O.D. OF PIPE + 30"

BEDDING FOR WATERLINES

MAKEEVER & ASSOCIATES, INC.
ENGINEERS AND SURVEYORS
BUCYRUS, OHIO

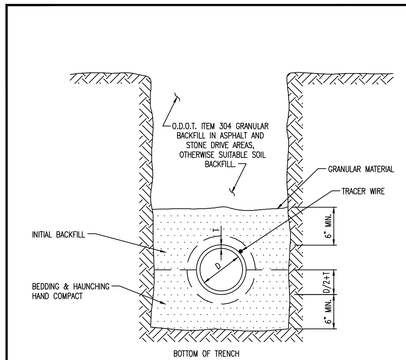
STANDARD DWG. NO. W-6



PAVEMENT REPAIR

MAKEEVER & ASSOCIATES, INC.
ENGINEERS AND SURVEYORS
BUCYRUS, OHIO

STANDARD DWG. NO. PR-3



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FOR PIPE GREATER THAN 24" ID MAXIMUM TRENCH = O.D. OF PIPE + 30"

BEDDING FOR FORCE MAIN

MAKEEVER & ASSOCIATES, INC.
ENGINEERS AND SURVEYORS
BUCYRUS, OHIO

STANDARD DWG. NO. SAN-29

EASEMENT REFERENCE			
City's No.	County Recorder Volume	County Recorder Page	Grantor

REVISIONS			
No.	Description	Approval	Date
AS BUILT			

Plans Prepared By :
Makeever & Associates, Inc.
P.O. BOX 325, 1810 E. MANSFIELD ST.
BUCYRUS, OHIO 44820
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Scale : Horiz. = AS NOTED
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Original Sheet Size = 24"x36"
Date : 02/26/2024

Sheet No. : 13 OF 13
S:\2023\210\001\A
Dwg. No. : 2023-210-001C

Crawford Co. Title Office & Crawford Co. Solid Waste District

New Office Building

2538 E. Mansfield St.
Bucyrus, OH 44820

ABBREVIATIONS

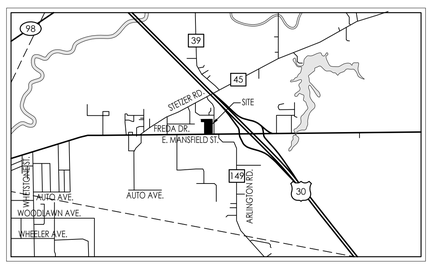
A.B.	ANCHOR BOLT	D.F.	DRINKING FOUNTAIN	HVAC	HEATING, VENTILATION, AIR CONDITIONING	R	RADIUS
A.P.	ACCESS PANEL	E	EAST			REF	REFERENCE
ACOUS	ACOUSTICAL	EA	EACH	HGT	HEIGHT	REINF	REINFORCED
A.F.F.	ABOVE FINISH FLOOR	ELEC	ELECTRICAL	H.C.	HOLLOW CORE	REQD	REQUIRED
ADJ	ADJACENT	E.W.C.	ELECTRIC WATER COOLER	H.M.	HOLLOW METAL	RES	RESILIENT
AGGR	AGGREGATE	E.P.	ELECTRICAL PANEL BOARD	HR	HOUR	R.A.	RETURN AIR
A.C.	AIR CONDITIONING	EL, ELEV	ELEVATION	INCL	INCLUDE	R.H.	RIGHT HAND
ALT	ALTERNATE	ELV	ELEVATOR	I.D.	INSIDE DIAMETER	R.O.W.	RIGHT OF WAY
ALUM	ALUMINUM	EMER	EMERGENCY	INSUL	INSULATION	R	RISER
L	ANGLE	EQ	EQUAL	INT	INTERIOR	R.D.	ROOF DRAIN
APPD	APPROVED	EQPT	EQUIPMENT	JT	JOINT	RM	ROOM
APPROX	APPROXIMATE	EXIST, EXG	EXISTING	L.H.	LEFT HAND	R.O.	ROUGH OPENING
ARCH	ARCHITECTURAL	EXP	EXPANSION	LGTH	LENGTH	SECT	SECTION
A.D.	AREA DRAIN	E.J.	EXPANSION JOINT	LTL	LINTEL	SCHED	SCHEDULE
ASPH	ASPHALT	EXPO	EXPOSED	M/E/P	MECHANICAL, ELECTRICAL & PLUMBING	SHTG	SHEATHING
@	AT	EXT	EXTERIOR			SHT	SHEET
BRG	BEARING	F.O.C.	FACE OF CONCRETE	MFR	MANUFACTURER	SH	SHELL
BM	BEAM	F.O.F.	FACE OF FINISH	MAS	MASONRY	SIM	SIMILAR
BITUM	BITUMINOUS	F.O.S.	FACE OF STUD	M.O.	MASONRY OPENING	S.C.	SOLID CORE
BLK	BLOCK	FIN	FINISH	MTL	MATERIAL	S	SOUTH
BLKG	BLOCKING	F.A.	FIRE ALARM	MAX	MAXIMUM	S.F.	SQUARE FEET or FOOT
BD	BOARD	F.E.	FIRE EXTINGUISHER	MECH	MECHANICAL	SPEC	SPECIFICATIONS
B.O.	BOTTOM OF	F.E.C.	FIRE EXTINGUISHER CABINET	MEMB	MEMBRANE	SQ	SQUARE
BOT	BOTTOM	FRPF	FIREPROOF	MTL	METAL	S.S.	SOLID SURFACE
BLDG	BUILDING	FLG	FLASHING	MIN	MINIMUM	SST	STAINLESS STEEL
C.B.	CATCH BASIN	F.B.	FLAT BAR	MISC	MISCELLANEOUS	STD	STANDARD
CEM	CEMENT	FL	FLOOR	MTD	MOUNTED	STL	STEEL
C.J.	CONTROL JOINT	F.D.	FLOOR DRAIN	MUL	MULLION	STRUCT	STRUCTURAL
CLKG	CAULKING	FLUOR	FLUORESCENT	NOM	NOMINAL	SYM	SYMMETRICAL
CLG	CEILING	FT	FOOT or FEET	N	NORTH	TEL	TELEPHONE
CLR	CLEAR	FTG	FOOTING	N.I.C.	NOT IN CONTRACT	THK	THICK
C.M.U.	CONCRETE MASONRY UNIT	FDN	FOUNDATION	N.T.S.	NOT TO SCALE	T.C.	TOP OF CURB
C.O.	CLEAN OUT	FRM	FRAME	NO or #	NUMBER	T.O.	TOP OF
CTR	CENTER	FRMG	FRAMING	O.C.	ON CENTER	T.O.P.	TOP OF PAVEMENT
C/L	CENTERLINE	F.R.T.	FIRE RETARDANT TREATED	OPNG	OPENING	T.O.W.	TOP OF WALL
COL	COLUMN	F.S.	FULL SIZE	OPP	OPPOSITE	T&G	TONGUE AND GROOVE
CONC	CONCRETE	F.S.W.	FIRE SEPARATION WALL	OA	OVERALL	TYP	TYPICAL
CONN	CONNECTION	FURR	FURRING	O.D.	OUTSIDE DIMENSION	UNF	UNFINISHED
CONST	CONSTRUCTION	GA	GAUGE	P.E.M.B.	PRE-ENGINEERED METAL BUILDING	U.N.O.	UNLESS NOTED OTHERWISE
CONTR	CONTRACTOR	GALV	GALVANIZED	PR	PAIR	V.B.	VAPOR BARRIER
CRS	COURSE	G.C.	GENERAL TRADES CONTRACTOR	PNL	PANEL	V.C.T.	VINYL COMPOSITION TILE
DEMO	DEMOLITION OR DEMOLISH	GL	GLASS or GLAZING	PL	PLATE	VERT	VERTICAL
DTL	DETAIL	GD	GRADE, GRADING, GARBAGE	P.LAM	PLASTIC LAMINATE	WP	WATERPROOF
DIA	DIAMETER		DISPOSAL	PLWD	PLYWOOD	W.R.B.	WATER-RESISTIVE BARRIER
DIM	DIMENSION	GND	GROUND	PT	POINT	W	WEST or WIDTH
DR	DOOR	GYP	GYPSUM	P.S.I.	POUNDS PER SQUARE INCH	W/	WITH
D.O.	DOOR OPENING	HDW	HARDWARE	P.S.F.	POUNDS PER SQUARE FOOT	W/O	WITHOUT
DBL	DOUBLE	HDR	HEADER	P.C.	PRECAST CONCRETE or PORTLAND CEMENT	WD	WOOD
DWG	DRAWING	HTG	HEATING			W.R.B.	WATER-RESISTIVE BARRIER
						W.W.F.	WELDED WIRE FABRIC

SYMBOLS

- 3 — CODED NOTE
- 1 — REVISION NUMBER
- 401-A1 — DOOR TAG
- W1 — WINDOW TAG
- 3 — WALL TAG
- 101 — ROOM NUMBER
- 2 / A12 — DETAIL NUMBER / SHEET NUMBER — A/A1.2
- A / A3.1 — BUILDING SECTION
- A / A3.5 — WALL SECTION

NOTE: MATERIAL & SYMBOLS ARE OFFICE STANDARDS & ARE NOT ALL NECESSARILY INCLUDED.

VICINITY PLAN



GENERAL NOTES

A. THE ARCHITECT'S RESPONSIBILITY IS LIMITED TO THE ITEMS SHOWN ON THE ARCHITECTURAL DRAWINGS.OBTAIN ARCHITECT'S SPECIFIC APPROVAL PRIOR TO DEVIATING FROM THE DRAWINGS. FOLLOW THE BEST TRADE PRACTICES AND ENGINEERING FOR THE ITEMS NOT SPECIFICALLY DETAILED AND INDICATED.

B. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO FOLLOW ALL APPLICABLE SAFETY CODES AND REGULATIONS DURING ALL PHASES OF CONSTRUCTION.

C. PROVIDE ADEQUATE TEMPORARY SUPPORT FOR WORK BEING CUT AND PATCHED TO PREVENT FAILURE. DO NOT ENDANGER OTHER WORK. PROVIDE ADEQUATE PROTECTION OF OTHER WORK DURING CUTTING AND PATCHING TO PREVENT DAMAGE. CUT WORK BY METHODS LEAST LIKELY TO DAMAGE WORK TO BE RETAINED AND WORK ADJOINING.

D. ALL DIMENSIONS SHALL BE VERIFIED AT THE JOB BY THE GENERAL CONTRACTOR AND EACH SUB-CONTRACTOR. THE ARCHITECT MUST BE NOTIFIED OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK.

E. DIMENSIONS ARE WITNESSED TO FACE OF MASONRY OR TO FACE OF STUD UNLESS OTHERWISE NOTED.

F. DETAILS SHOWN ON THE ARCHITECTURAL DRAWINGS ARE PART OF THE STRUCTURAL REQUIREMENTS.

G. CONSTRUCTION JOINTS PERMITTED ONLY WHERE SHOWN OR AS APPROVED BY THE ARCHITECT.

H. ALL CONNECTIONS ARE TO DEVELOP THE FULL STRENGTH OF THE FRAMING MEMBERS UNLESS OTHERWISE APPROVED.

I. PROVIDE LINTELS OF ADEQUATE SIZE FOR ANY OPENINGS NOT SPECIFICALLY INDICATED, FOR DUCTWORK, PIPES, LOUVERS, GRILLS, DAMPERS, ETC.

J. IN GENERAL, NEW MATERIALS AND MATERIALS FOR REPAIR CONDITIONS, SHALL MATCH SIMILAR ITEMS IN QUALITY, DETAIL, PROFILE, AND FINISH, AS THOSE ALREADY BUILT INTO THE WORK.

K. COORDINATE LOCATIONS AND/OR ELEVATIONS OF FLOOR DRAINS, REGISTERS, ACCESS PANELS, GRILLES, LOUVERS, CONVECTORS, CABINET UNIT HEATERS, PANELS, ETC., WITH MECHANICAL AND ELECTRICAL CONTRACTORS.

L. SIZE AND LOCATION OF ALL FLOOR, WALL OR ROOF OPENINGS TO BE VERIFIED WITH TRADE AFFECTED BEFORE PROCEEDING WITH WORK.

M. THE GENERAL CONTRACTOR SHALL COMPLY WITH ALL BUILDING CODE REQUIREMENTS OF THE LOCAL GOVERNING AUTHORITY, AND SHALL OBTAIN AND PAY FOR ALL REQUIRED PERMITS, FEES, AND INSPECTIONS, WITH THE EXCEPTION OF FEES REQUIRED FOR THE PLUMBING, H.V.A.C., AND ELECTRICAL PORTIONS OF THE WORK, WHICH ARE THE RESPONSIBILITY OF THE RESPECTIVE SUBCONTRACTORS.

N. G.C. RESPONSIBLE FOR COORDINATING SMOKE DETECTION SYSTEM ACCEPTANCE TESTS WITH THE BUILDING DEPARTMENT.

O. G.C. SHALL PROVIDE A SET OF CONSTRUCTION DOCUMENTS AT THE SITE OF THE WORK AND SHALL BE OPEN FOR INSPECTION BY THE BUILDING OFFICIAL AT ALL TIMES WHILE SUCH WORK IS IN PROGRESS PER OBC 106.3.1

P. SPACE SHALL NOT BE OCCUPIED UNTIL THE BUILDING OFFICIAL HAS ISSUED THE CERTIFICATE OF OCCUPANCY.

Q. ALL MEANS OF EGRESS DOORS SHALL BE READILY OPENABLE FROM SIDE WHICH EGRESS IS TO BE MADE WITHOUT THE USE OF A KEY OR SPECIAL KNOWLEDGE.

R. PRIOR TO ANY EXCAVATION, CONTACT THE OHIO UTILITIES PROTECTION SERVICE (OUPS) AT (800) 362-2764 OR WWW.OUPS.ORG.

S. TEMPORARY FACILITIES USED IN CONJUNCTION WITH WORK SHALL BE REMOVED UPON COMPLETION OF PROJECT. G.C. TO COORDINATE PERMITS/REQUIREMENTS WITH BUILDING DEPARTMENT.

T. CONTRACTOR SHALL PROVIDE ONE (1) SET OF AS-BUILT DRAWINGS TO THE OWNER AFTER SUBSTANTIAL COMPLETION OF THE PROJECT AND WALK THE OWNER THROUGH NOTES MADE ON THE DRAWINGS THAT DESCRIBE FIELD CHANGES TO THE CONTRACT DOCUMENTS.

U. IN THE ABSENCE OF LOCAL, STATE OR FEDERALS LAWS OR ORDINANCES REGULATING CONSTRUCTION SAFETY, THE PROVISIONS OF OBC CHAPTER 33 SHALL GOVERN SAFETY DURING CONSTRUCTION AS WELL AS THE PROTECTION OF ADJACENT PUBLIC AND PRIVATE PROPERTIES.

W. ALL EXTERIOR WINDOWS ARE TO BE WEATHER STOPPED AND ALL EXTERIOR DOORS ARE TO BE PROVIDED WITH WEATHERSTRIPPING.

X. TEMPERED AND/OR SAFETY GLAZING SHALL BE PROVIDED IN THE FOLLOWING LOCATIONS:

X.A. GLAZING IN ALL DOORS (SWINGING, SLIDING AND BIFOLD)

X.B. GLAZING IN A FIXED OR OPERABLE PANEL ADJACENT TO A DOOR TO WHICH THE NEAREST VERTICAL EDGE IS WITHIN A 24" ARC OF THE DOOR IN A CLOSED POSITION.

X.C. ADDITIONAL LOCATIONS AS INDICATED.

Y. PROVIDE SOLID BLOCKING AS REQUIRED FOR THE MOUNTING OF CABINETS, PLUMBING FIXTURES, RESTROOM ACCESSORIES, ETC.

Z. PROVIDE EDGE STRIPS, REDUCER STRIPS, TRANSITION STRIPS, ETC AT ALL FLOORING MATERIAL TRANSITIONS.

AA. PROVIDE MOISTURE RESISTANT GYP BD IN RESTROOMS.

AB. PROVIDE CEMENTITIOUS BACKING BOARD AT ALL SURFACES TO RECEIVE WALL TILE.

INDEX OF DRAWINGS

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DELEGATED DESIGN ITEMS (BY CONTRACTOR)

ROOF TRUSS DESIGN:
ROOF TRUSS WILL BE INSTALLED IN AREA OF WORK. THESE DESIGNS WILL BE SUBMITTED TO THE A.H.J. AS A DELEGATED DESIGN ITEM TO A LICENSED TRUSS ENGINEER.

DELEGATED DESIGN ITEMS (BY OWNER)

BUILDING DATA AND SECURITY:
DATA AND SECURITY SYSTEM INSTALLED IN AREA OF WORK. E.C. TO INSTALL CONDUITS PER ELECTRICAL DRAWINGS.

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CRAWFORD COUNTY STATE OF OHIO

PROJECT
Crawford Co.
Title Office & Crawford Co. Solid Waste District
New Office Building
2538 E. Mansfield St.
Bucyrus, OH 44820

STATE OF OHIO
PAUL K. OMNESS
13997
REGISTERED ARCHITECT

Paul K. Omness, OH License #13997
Expiration Date: 2025-12-31

SHEET INFORMATION

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Title Sheet

SHEET NUMBER

T1.01

GENERAL ACCESSIBILITY NOTES:

1. ALL INDICATED DIMENSIONS ARE CLEAR/FINISH VALUES.
2. REFERENCED STANDARD IS ANSI A117.1-2009.
3. INDICATED NOTES AND DIAGRAMS ILLUSTRATE COMMON CONDITIONS ADDRESSED WITHIN ANSI A117.1. GENERAL CONTRACTOR SHOULD REFERENCE COMPLETE ANSI A117.1-2009 FOR CONDITIONS NOT DESCRIBED WITHIN THESE NOTES.
4. CHANGES IN LEVEL - VERTICAL (303.2): CHANGES IN LEVEL OF 1/4" HIGH MAXIMUM SHALL BE PERMITTED TO BE VERTICAL. REFER TO FIG 303.2.
5. CHANGES IN LEVEL - BEVELED (303.3): CHANGES IN ELEVATION BETWEEN 1/4" AND 1/2" SHALL BE BEVELED WITH A SLOPE NOT STEEPER THAN 1:2. REFER TO FIG 303.3.
6. CHANGES IN LEVEL - RAMPED (303.4): CHANGES IN LEVEL GREATER THAN 1/2" SHALL BE RAMPED PER 405 OR 406.
7. TURNING SPACE - FLOOR OR GROUND SURFACES (304.2): FLOOR OR GROUND SURFACES OF A TURNING SPACE SHALL COMPLY WITH 302. CHANGES IN LEVEL ARE NOT PERMITTED.
   EXCEPTION: SLOPES NOT STEEPER THAN 1:48 SHALL BE PERMITTED.
8. TURNING SPACE - SIZE (304.3): TURNING SPACE SHALL COMPLY WITH COMPLY WITH ONE OF THE FOLLOWING OPTIONS:
   CIRCULAR SPACE (304.3.1): THE TURNING SPACE SHALL BE A SPACE OF 60" IN DIAMETER MINIMUM. THE SPACE SHALL BE PERMITTED TO INCLUDE TOE AND KNEE SPACE COMPLYING WITH 306.
   T-SHAPED SPACE (304.3.2): THE TURNING SPACE SHALL BE A T-SHAPED SPACE WITHIN A 60" SQUARE MINIMUM WITH ARMS AND BASE 36" WIDE MINIMUM. EACH ARM OF THE T SHALL BE CLEAR OF OBSTRUCTIONS 12" MINIMUM IN EACH DIRECTION AND THE BASE SHALL BE CLEAR OF OBSTRUCTIONS 24" MINIMUM. THE SPACE SHALL BE PERMITTED TO INCLUDE KNEE AND TOE CLEARANCES COMPLYING WITH 306 AT THE END OF EITHER THE BASE OR ONE ARM.
9. CLEAR FLOOR OR GROUND SPACE (305.2): FLOOR OR GROUND SURFACES OF A CLEAR FLOOR OR GROUND SPACE SHALL COMPLY WITH 302. CHANGES IN LEVEL ARE NOT PERMITTED
   EXCEPTION: SLOPES NOT STEEPER THAN 1:48 SHALL BE PERMITTED.
10. CLEAR FLOOR OR GROUND SPACE - SIZE (305.3): THE CLEAR FLOOR OR GROUND SPACE SHALL BE 30" MINIMUM BY 48" MINIMUM. REFER TO FIG 305.5.
11. CLEAR FLOOR OR GROUND SPACE - KNEE CLEARANCE (305.4): UNLESS OTHERWISE SPECIFIED, CLEAR FLOOR OR GROUND SPACE SHALL BE PERMITTED TO INCLUDE KNEE AND TOE CLEARANCE COMPLYING WITH 306.
12. CLEAR FLOOR OR GROUND SPACE - APPROACH (305.6): ONE FULL UNOBSTRUCTED SIDE OF THE CLEAR FLOOR OR GROUND SPACE SHALL ADJOIN AN ACCESSIBLE ROUTE OR ADJOIN ANOTHER CLEAR FLOOR OR GROUND SPACE.
13. CLEAR FLOOR OR GROUND SPACE - MANEUVERING CLEARANCE (305.7): WHERE A CLEAR FLOOR OR GROUND SPACE IS LOCATED IN AN ALCOVE OR OTHERWISE CONFINED ON ALL OR PART OF THREE SIDES, ADDITIONAL MANEUVERING CLEARANCES SHALL BE PROVIDED AS FOLLOWS:
    PARALLEL APPROACH (305.7.1): ALCOVES SHALL BE 60" WIDE MINIMUM WHERE THE DEPTH EXCEEDS 15". REFER TO FIG 305.7.2
    FORWARD APPROACH (305.7.1): ALCOVES SHALL BE 36" WIDE MINIMUM WHERE THE DEPTH OF THE ALCOVE EXCEEDS 24". REFER TO FIG 305.7.2
14. TOE CLEARANCE (306.2): REFER TO FIG 306.2.
    GENERAL (306.2.1): SPACE UNDER AN ELEMENT BETWEEN THE FINISH FLOOR OR GROUND AND 9" ABOVE THE FINISH FLOOR OR GROUND SHALL BE CONSIDERED TOE CLEARANCE AND SHALL COMPLY WITH 306.2.
    MAXIMUM DEPTH (306.2.2): TOE CLEARANCE SHALL EXTEND 25" MAXIMUM UNDER AN ELEMENT.
    MINIMUM DEPTH (306.2.3): WHERE TOE CLEARANCE IS REQUIRED AT AN ELEMENT AS PART OF A CLEAR FLOOR SPACE, THE TOE CLEARANCE SHALL EXTEND 17" MINIMUM UNDER THE ELEMENT.
    ADDITIONAL CLEARANCE (306.2.4): SPACE EXTENDING GREATER THAN 6" BEYOND THE AVAILABLE KNEE CLEARANCE AT 9" ABOVE THE FINISH FLOOR OR GROUND SHALL NOT BE CONSIDERED TOE CLEARANCE.
    WIDTH (306.2.5): TOE CLEARANCE SHALL BE 30" WIDE MINIMUM.
15. KNEE CLEARANCE (306.3): REFER TO FIG 306.3
    GENERAL (306.3.1): SPACE UNDER AN ELEMENT BETWEEN 9" AND 27" ABOVE THE FINISH FLOOR OR GROUND SHALL BE CONSIDERED KNEE CLEARANCE AND COMPLY WITH 306.3.
    MAXIMUM DEPTH (306.3.2): KNEE CLEARANCE SHALL EXTEND 25" MAXIMUM UNDER AN ELEMENT AT 9" ABOVE THE FINISH FLOOR OR GROUND.
    MINIMUM REQUIRED DEPTH (306.3.3): WHERE KNEE CLEARANCE IS REQUIRED UNDER AN ELEMENT AS PART OF A CLEAR FLOOR SPACE, THE KNEE CLEARANCE SHALL BE 11" DEEP MINIMUM AT 9" ABOVE THE FINISH FLOOR OR GROUND, AND 8" DEEP AT 27" ABOVE THE FINISH FLOOR OR GROUND.
    CLEARANCE REDUCTION (306.3.4): BETWEEN 9" AND 27" ABOVE THE FINISH FLOOR OR GROUND, THE KNEE CLEARANCE SHALL BE PERMITTED TO REDUCE AT A RATE OF 1" IN DEPTH FOR EACH 6" IN HEIGHT.
    WIDTH (306.3.5): KNEE CLEARANCE SHALL BE 30" WIDE MINIMUM.
16. FORWARD REACH - UNOBSTRUCTED (308.2.1): WHERE A FORWARD REACH IS UNOBSTRUCTED, THE HIGH FORWARD REACH SHALL BE 48" MAXIMUM AND THE LOW FORWARD REACH SHALL BE 15" MINIMUM ABOVE THE FINISH FLOOR OR GROUND. REFER TO FIG 308.2.1.
17. FORWARD REACH - OBSTRUCTED (308.2.2): WHERE A HIGH FORWARD REACH IS OVER AN OBSTRUCTION, THE CLEAR SPACE SHALL EXTEND BENEATH THE ELEMENT FOR A DISTANCE OF NOT LESS THAN THE REQUIRED REACH DEPTH OVER THE OBSTRUCTION. THE HIGH FORWARD REACH SHALL BE 48" MAXIMUM WHERE THE REACH DEPTH IS 20" MAXIMUM. WHERE THE DEPTH EXCEEDS 20", THE HIGH FORWARD REACH SHALL BE 44" MAXIMUM AND THE REACH DEPTH SHALL BE 25" MAXIMUM. REFER TO FIG 308.2.2
18. SIDE REACH - UNOBSTRUCTED (308.3): WHERE A CLEAR FLOOR OR GROUND SPACE ALLOWS A PARALLEL APPROACH TO AN ELEMENT AND THE EDGE OF THE CLEAR FLOOR SPACE IS 10" MAXIMUM FROM THE ELEMENT, THE HIGH SIDE REACH SHALL BE 48" MAXIMUM AND THE LOW SIDE REACH SHALL BE 15" MINIMUM ABOVE THE FINISH FLOOR OR GROUND. REFER TO FIG 308.3.1
    EXCEPTION: EXISTING ELEMENTS THAT ARE NOT MORE ALTERED ARE PERMITTED AT 54" MAXIMUM ABOVE THE FLOOR.
19. SIDE REACH - OBSTRUCTED (308.3.2): WHERE A CLEAR FLOOR OR GROUND SPACE ALLOWS A PARALLEL APPROACH TO AN ELEMENT AND THE HIGH SIDE REACH IS OVER AN OBSTRUCTION, THE HEIGHT OF THE OBSTRUCTION SHALL BE 34" MAXIMUM AND THE DEPTH OF THE OBSTRUCTION SHALL BE 24" MAXIMUM. THE HIGH SIDE REACH SHALL BE 48" MAXIMUM FOR A REACH DEPTH OF 10" MAXIMUM. WHERE THE REACH DEPTH EXCEEDS 10", THE HIGH SIDE REACH SHALL BE 46" FOR A REACH DEPTH OF 24" MAXIMUM. REFER TO FIG 308.3.1.

ACCESSIBLE ROUTE NOTES:

1. WALKING SURFACES - SLOPE (403.3): THE RUNNING SLOPE OF WALKING SURFACES SHALL NOT BE STEEPER THAN 1:20. THE CROSS SLOPE OF WALKING SURFACES SHALL NOT BE STEEPER THAN 1:48.
2. WALKING SURFACES - CLEAR WIDTH (403.5): THE MINIMUM CLEAR WIDTH OF WALKING SURFACES SHALL BE 36"
   EXCEPTION: THE CLEAR WIDTH SHALL BE PERMITTED TO BE REDUCED TO 32" MINIMUM FOR A LENGTH OF 24" MAXIMUM PROVIDED THAT REDUCED WIDTH SEGMENTS ARE SEPARATED BY SEGMENTS THAT ARE 48" LONG MINIMUM AND 36" WIDE MINIMUM. REFER TO FIG 403.5.
3. CLEAR WIDTH AT 180° TURN (403.5.1): WHERE AN ACCESSIBLE ROUTE MAKES A 180 DEGREE TURN AROUND A ELEMENT WHICH IS LESS THAN 48" WIDE, CLEAR WIDTH SHALL BE 42" MINIMUM APPROACHING THE TURN, 48" MINIMUM AT THE TURN AND 42" MINIMUM LEAVING THE TURN. REFER TO FIG 403.5.1 (A)
   EXCEPTION: SECTION 402.5.1 SHALL NOT APPLY WHERE THE CLEAR WIDTH DURING THE TURN IS 60" MINIMUM. REFER TO FIG 403.5.1 (B).
4. PASSING SPACES (403.5.2): AN ACCESSIBLE ROUTE WITH A CLEAR WIDTH LESS THAN 60" SHALL PROVIDE PASSING SPACES AT INTERVALS OF 200' MAXIMUM. PASSING SPACES SHALL BE EITHER: A SPACE 60" MINIMUM BY 60" MINIMUM; OR AN INTERSECTION OF TWO WALKING SURFACES PROVIDING A T-SHAPED SPACE COMPLYING WITH 304.3.2 WHERE THE BASE AND ARMS OF THE T-SHAPED SPACE EXTEND 48" MINIMUM BEYOND THE INTERSECTION.

ACCESSIBLE DOOR NOTES:

1. NOTES AND DIAGRAMS APPLY TO ALL DOORS, DOORWAYS AND GATES THAT ARE PART OF AN ACCESSIBLE ROUTE.
2. ALL INDICATED DIMENSIONS ARE CLEAR/FINISH VALUES.
3. DOUBLE-LEAF DOORS AND GATES (404.2.1): AT LEAST ONE ACTIVE LEAF SHALL COMPLY WITH 404.2.2 & 404.2.3.
4. CLEAR WIDTH (404.2.2): DOOR OPENINGS SHALL PROVIDE A CLEAR WIDTH OF 32" MINIMUM. CLEAR OPENINGS OF DOORWAYS WITH SWINGING DOORS SHALL BE MEASURED BETWEEN THE FACE OF THE DOOR AND THE STOP, WITH THE DOOR OPEN 90 DEGREES. OPENINGS MORE THAN 24" IN DEPTH AT DOORS AND DOORWAYS WITHOUT DOORS SHALL PROVIDE PROVIDE A CLEAR OPENING OF 36" MINIMUM. THERE SHALL BE NO PROJECTIONS INTO THE REQUIRED CLEAR OPENING LOWER THAN 34" ABOVE THE FINISH FLOOR OR GROUND. PROJECTIONS INTO THE CLEAR OPENING WIDTH BETWEEN 34" AND 80" ABOVE THE FINISH FLOOR OR GROUND SHALL N0T EXCEED 4".
   EXCEPTION 1: DOOR CLOSERS AND DOOR STOPS SHALL BE PERMITTED TO BE 78" MINIMUM ABOVE THE FINISH FLOOR OR GROUND.
   EXCEPTION 2: IN ALTERATIONS, A PROJECTION OF 5/8" MAXIMUM INTO THE REQUIRED CLEAR OPENING WIDTH SHALL BE PERMITTED FOR THE LATCH SIDE STOP.
5. MANEUVERING CLEARANCES AT SWINGING DOORS AND GATES (404.2.3): REFER TO FIG 404.2.3.2 FOR MANEUVERING CLEARANCES.
6. MANEUVERING CLEARANCES AT DOORWAYS WITHOUT DOORS (404.2.3.4): REFER TO 404.2.3.4 FOR MANEUVERING CLEARANCES.
7. DOORS IN SERIES AND GATES IN SERIES (404.2.5): REFER TO FIG 404.2.5 FOR MANEUVERING CLEARANCES.
8. DOOR AND GATE HARDWARE (404.2.6): HANDLES, PULLS, LATCHES, LOCKS AND OTHER OPERABLE PARTS ON DOORS SHALL HAVE A SHAPE THAT IS EASY TO GRASP WITH ONE HAND AND DOES NOT REQUIRE TIGHT GRASPING, PINCHING OR TWISTING OF THE WRIST TO OPERATE. OPERABLE PARTS OF A SUCH HARDWARE SHALL BE 34" MINIMUM AND 48" MAXIMUM ABOVE FINISH FLOOR OR GROUND. WHERE SLIDING DOORS ARE IN THE FULLY OPEN POSITION, OPERATING HARDWARE SHALL BE EXPOSED AND USABLE FROM BOTH SIDES.
   EXCEPTION: LOCKS USED ONLY FOR SECURITY PURPOSES AND NOT USED FOR NORMAL OPERATIONS SHALL NOT BE REQUIRED TO COMPLY WITH SECTION 404.2.6.
12. DOOR AND GATE CLOSERS (404.2.7.1): DOOR CLOSERS AND GATE CLOSERS SHALL BE ADJUSTED SO THAT FROM AN OPEN POSITION OF 90 DEGREES, THE TIME REQUIRED TO MOVE THE DOOR TO A POSITION OF 12 DEGREES FROM THE LATCH IS 5 SECONDS MINIMUM.
13. SPRING HINGES (404.2.8.2): DOOR AND GATE SPRING HINGES SHALL BE ADJUSTED SO THAT FROM THE OPEN POSITION OF 70 DEGREES, THE DOOR OR GATE SHALL MOVE TO THE CLOSED POSITION IN 1.5 SECONDS MINIMUM.
14. DOOR AND GATE OPENING FORCE (404.2.8): FIRE DOORS SHALL HAVE A MINIMUM CLOSING FORCE ALLOWABLE BY THE APPROPRIATE ADMINISTRATIVE AUTHORITY. THE FORCE FOR PUSHING OR PULLING OPEN A DOOR OR GATE OTHER THAN FIRE DOORS SHALL BE AS FOLLOWS:
    INTERIOR HINGED DOORS AND GATES: 5 POUNDS MAXIMUM
    SLIDING OR FOLDING DOORS: 5 POUNDS MAXIMUM
    THESE FORCES DO NOT APPLY TO THE FORCE REQUIRED TO RETRACT LATCH BOLTS OR DISENGAGE OTHER DEVICES THAT HOLD THE DOOR IN A CLOSED POSITION.
15. AUTOMATIC DOORS (404.3): AUTOMATIC DOORS AND AUTOMATIC GATES SHALL COMPLY WITH ANSI/BHMA A156.10 LISTED IN SECTION 105.2.4. LOW-ENERGY AND POWER-ASSISTED DOORS SHALL COMPLY WITH ANSI/BHMA A156.19 LISTED IN SECTION 105.2.3.
    EXCEPTION: DOORS, DOORWAYS AND GATES DESIGNED TO BE OPERATED ONLY BY SECURITY PERSONNEL SHALL NOT BE REQUIRED TO COMPLY WITH SECTIONS 404.3.2, 404.3.4 & 404.3.5.
16. THRESHOLDS (404.2.4) THRESHOLDS, IF PROVIDED AT DOORWAYS, SHALL BE 1/2" HIGH MAXIMUM. RAISED THRESHOLDS AND CHANGES IN LEVEL AT DOORWAYS SHALL COMPLY WITH 302 AND 303.

ACCESSIBLE SIGNAGE:

1. REQUIRED SIGNAGE LOCATIONS
   DIRECTIONAL AND INFORMATIONAL SIGNS: SIGNS THAT PROVIDE DIRECTION TO OR INFORMATION ABOUT INTERIOR SPACES AND FACILITIES OF THE SITE SHALL COMPLY WITH 703.2.
   MEANS OF EGRESS - EXIT DOORS: DOOR AT EXIT PASSAGEWAYAYS, EXIT DISCHARGE AND EXIT STAIRWAYS SHALL BE IDENTIFIED BY TACTILE SIGNS COMPLYING WITH 703.1, 703.2 AND 703.3.
   MEANS OF EGRESS - AREAS OF REFUGE: SIGNS REQUIRED BY BUILDING CODE TO PROVIDE INSTRUCTIONS IN AREAS OF REFUGE SHALL COMPLY WITH 703.1, 703.2 & 703.3.
   MEANS OF EGRESS - DIRECTIONAL SIGNS: SIGNS REQUIRED BY BUILDING CODE TO PROVIDE DIRECTIONS TO AN ACCESSIBLE MEANS OF EGRESS SHALL COMPLY WITH 703.2.
   PARKING: ACCESSIBLE PARKING SPACES COMPLYING WITH 502.
   ENTRANCES: WHERE NOT NOT ALL ENTRANCES COMPLY WITH 404, ENTRANCES COMPLYING WITH 404 SHALL BE IDENTIFIED BY THE INTERNATIONAL SYMBOL OF ACCESSIBILITY. DIRECTIONAL SIGNS COMPLYING WITH 703.2 THAT INDICATE THE LOCATION OF THE NEAREST ENTRANCE COMPLYING WITH 404 SHALL BE PROVIDED AT ENTRANCES THAT DO NOT COMPLY WITH 404
   ELEVATORS: WHERE EXISTING ELEVATORS DO NOT COMPLY WITH 407, ELEVATORS COMPLYING WITH 407 SHALL BE CLEARLY IDENTIFIED WITH THE INTERNATIONAL SYMBOL OF ACCESSIBILITY.
   TOILET ROOMS AND BATHING ROOMS: SIGNS SHALL COMPLY WITH 703.2 AND SHALL INCLUDE THE INTERNATIONAL SYMBOL OF ACCESSIBILITY. WHERE EXISTING TOILET OR BATHING ROOMS DO NOT COMPLY WITH 603, THE TOILET OR BATHING ROOMS COMPLYING WITH 603 SHALL BE IDENTIFIED BY THE INTERNATIONAL SYMBOL OF ACCESSIBILITY. WHERE CLUSTERED SINGLE USER TOILET OR BATHING FACILITIES ARE PERMITTED TO USE EXCEPTIONS TO STANDARDS, TOILET ROOMS OR BATHING FACILITIES COMPLYING WITH 603 SHALL BE IDENTIFIED BY THE INTERNATIONAL SYMBOL OF ACCESSIBILITY UNLESS ALL TOILET ROOMS AND BATHING FACILITIES COMPLY WITH 603.
   TTY'S: PUBLIC TTY'S SHALL BE IDENTIFIED BY THE INTERNATIONAL SYMBOL OF TTY.
   ASSISTIVE LISTENING SYSTEMS: SIGNS SHALL COMPLY WITH 703.2 AND INCLUDE THE INTERNATIONAL SYMBOL OF ACCESS FOR HEARING LOSS
2. GENERAL (703.1): ACCESSIBLE SIGNS SHALL COMPLY WITH 703. TACTILE SIGNS SHALL CONTAIN BOTH RAISED CHARACTERS AND BRAILLE. WHERE BOTH VISUAL AND TACTILE CHARACTERS ARE REQUIRED, EITHER ONE SIGN WITH BOTH VISUAL AND TACTILE CHARACTERS, OR TWO SIGNS, ONE WITH VISUAL, AND ONE WITH TACTILE CHARACTERS, SHALL BE PROVIDED.
6. VISUAL CHARACTERS (703.2): VISUAL CHARACTERS SHALL COMPLY WITH 703.2.1
   CASE (703.2.2): CHARACTERS SHALL BE UPPERCASE OR LOWERCASE OR A COMBINATION OF BOTH.
   STYLE (703.2.3): CHARACTERS SHALL BE CONVENTIONAL IN FORM. CHARACTERS SHALL NOT BE ITALIC, OBLIQUE, SCRIPT, HIGHLY DECORATIVE, OR OF OTHER UNUSUAL FORMS.
   CHARACTER HEIGHT (703.2.4): THE UPPERCASE LETTER "I" SHALL BE USED TO DETERMINE THE ALLOWABLE HEIGHT OF ALL CHARACTERS OF A FONT. THE UPPER CASE OF THE FONT SHALL HAVE A MINIMUM VIEWING HEIGHT COMPLYING WITH TABLE 703.2.4. VIEWING DISTANCE SHALL BE MEASURED AS THE HORIZONTAL DISTANCE BETWEEN THE CHARACTER AND AN OBSTRUCTION PREVENTING FURTHER APPROACH TO THE SIGN.
   CHARACTER WIDTHS (703.2.5): CHARACTERS SHALL BE SELECTED FROM FONTS WHERE THE WIDTH OF THE UPPERCASE "O" IS 55 PERCENT MINIMUM AND 110 PERCENT MAXIMUM OF THE HEIGHT OF THE UPPERCASE LETTER "I".
   STROKE WIDTH (703.2.6): STROKE THICKNESS OF THE UPPERCASE "I" SHALL BE 10 PERCENT MINIMUM AND 30 PERCENT MAXIMUM OF THE HEIGHT OF THE CHARACTER.
   CHARACTER SPACING (703.2.7): CHARACTER SPACING SHALL BE MEASURED BETWEEN THE TWO CLOSEST POINTS OF ADJACENT CHARACTERS, EXCLUDING WORD SPACES. SPACING BETWEEN INDIVIDUAL CHARACTERS SHALL BE 10 PERCENT MINIMUM AND 35 MAXIMUM OF CHARACTER HEIGHT.
   LINE SPACING (703.2.8): SPACING BETWEEN BASELINES OF SEPARATE LINES OF CHARACTERS WITHIN A MESSAGE SHALL BE 135 PERCENT MINIMUM AND 170 PERCENT MAXIMUM OF THE CHARACTER HEIGHT.
   HEIGHT FROM FINISH FLOOR OR GRADE (703.2.9): VISUAL CHARACTERS SHALL BE 40" MINIMUM ABOVE THE FINISH FLOOR OR GROUND MEASURED TO THE BASELINE OF THE CHARACTER.
      EXCEPTION: VISUAL CHARACTERS INDICATING ELEVATOR CAR CONTROLS SHALL NOT BE REQUIRED TO COMPLY WITH 703.2.9.
   FINISH AND CONTRAST (703.2.10): CHARACTERS AND THEIR BACKGROUND SHALL HAVE A NON-GLARE FINISH. CHARACTERS SHALL CONTRAST WITH THEIR BACKGROUND WITH EITHER LIGHT CHARACTERS ON A DARK BACKGROUND OR DARK CHARACTERS ON A LIGHT BACKGROUND.
7. RAISED CHARACTERS (703.3.1): RAISED CHARACTERS SHALL COMPLY WITH 703.3 AND SHALL BE DUPLICATED IN BRAILLE COMPLYING WITH 703.4.
   DEPTH (703.3.2): RAISED CHARACTERS SHALL BE 1/32" MINIMUM ABOVE THEIR BACKGROUND.
   CASE (703.3.3): CHARACTERS SHALL BE UPPERCASE
   STYLE (703.3.4): CHARACTERS SHALL BE SANS SERIF. CHARACTERS SHALL NOT BE ITALIC, OBLIQUE, SCRIPT, HIGHLY DECORATIVE, OR OF OTHER UNUSUAL FORMS.
   CHARACTER HEIGHT (703.3.5): CHARACTER HEIGHT MEASURED VERTICALLY FROM THE BASELINE OF THE CHARACTER SHALL BE 5/8" MINIMUM AND 2" MAXIMUM BASED ON THE HEIGHT OF THE UPPERCASE LETTER "I".
      EXCEPTION: WHERE SEPARATE RAISED AND VISUAL CHARACTERS ARE PROVIDE WITH THE SAME INFORMATION ARE PROVIDED, RAISED CHARACTER HEIGHT SHALL BE PERMITTED TO BE 1/2" MINIMUM.
   CHARACTER WIDTH (703.3.6): CHARACTERS SHALL BE SELECTED FROM FONTS WHERE THE WIDTH OF THE UPPERCASE LETTER "O" IS 55 PERCENT MINIMUM AND 110 PERCENT MAXIMUM OF THE HEIGHT OF THE LETTER "I".
   STROKE WIDTH (703.3.7): STROKE THICKNESS OF THE UPPERCASE "I" SHALL BE 15 PERCENT MAXIMUM OF THE HEIGHT OF THE CHARACTER MEASURED AT THE TOP SURFACE OF THE CHARACTER AND 30 PERCENT MAXIMUM OF THE HEIGHT OF THE UPPERCASE LETTER "I" MEASURED AT THE BASE OF THE CHARACTER. WHEN CHARACTERS ARE BOTH VISUAL AND RAISED, THE STROKE WIDTH SHALL BE 10 PERCENT MINIMUM OF THE HEIGHT OF THE UPPERCASE "I".
   CHARACTER SPACING (703.3.8): CHARACTER SPACING SHALL BE MEASURED BETWEEN THE TWO CLOSEST POINTS OF ADJACENT RAISED CHARACTERS WITHIN A MESSAGE, EXCLUDING WORD SPACES. SPACING BETWEEN INDIVIDUAL RAISED CHARACTERS SHALL BE 1/8" MINIMUM MEASURED AT THE TOP SURFACE OF THE CHARACTERS, 1/16" MINIMUM MEASURED AT THE BASE OF THE CHARACTERS AND FOUR TIMES THE RAISED STROKE WIDTH MAXIMUM. CHARACTERS SHALL BE SEPARATED FROM RAISED BORDERS AND DECORATIVE ELEMENTS 3/8" MINIMUM.UM.
   LINE SPACING (703.3.9): SPACING BETWEEN THE BASELINES OF SEPARATE LINES OF RAISED CHARACTERS WITHIN A MESSAGE SHALL BE 135 PERCENT MINIMUM AND 170 PERCENT MAXIMUM OF THE RAISED CHARACTER HEIGHT.
   HEIGHT FROM FINISH FLOOR OR GRADE (703.3.10): RAISED CHARACTERS SHALL BE 48" MINIMUM ABOVE THE FINISH FLOOR OR GROUND MEASURED TO THE BASELINE OF THE LOWEST RAISED CHARACTER AND 60" MAXIMUM ABOVE THE FLOOR MEASURED TO THE BASELINE OF THE HIGHEST RAISED CHARACTER.
      EXCEPTION: RAISED CHARACTERS INDICATING ELEVATOR CAR CONTROLS SHALL NOT BE REQUIRED TO COMPLY WITH 703.3.10.
   LOCATION (703.3.11): WHERE A SIGN CONTAINING RAISED CHARACTERS AND BRAILLE IS PROVIDED AT A DOOR, THE SIGN SHALL BE LOCATED ALONGSIDE THE DOOR AT THE LATCH SIDE. WHERE A SIGN CONTAINING RAISED CHARACTERS OR BRAILLE IS PROVIDED AT DOUBLE DOORS WITH ONE ACTIVE LEAF, THE SIGN SHALL BE LOCATED ON THE INACTIVE LEAF. WHERE A SIGN CONTAINING RAISED CHARACTERS AND BRAILLE IS PROVIDED AT DOUBLE DOORS WITH TWO ACTIVE LEAFS, THE SIGN SHALL BE LOCATED TO THE RIGHT OF THE RIGHT-HAND DOOR. WHERE THERE IS NO WALL SPACE AT THE LATCH SIDE OF A SINGLE DOOR OR AT THE RIGHT SIDE OF DOUBLE DOORS, SIGNS SHALL BE LOCATED ON THE NEAREST ADJACENT WALL. SIGNS CONTAINING RAISED CHARACTERS AND BRAILLE SHALL BE LOCATED SO THAT A CLEAR FLOOR SPACE OF 18" MINIMUM BY 18" MINIMUM, CENTERED ON THE TACTILE CHARACTERS, IS PROVIDED BEYOND THE ARC OF ANY DOOR SWING BETWEEN THE CLOSED POSITION AND 45 DEGREE OPEN POSITION.
      EXCEPTION: SIGNS WITH RAISED CHARACTERS AND BRAILLE SHALL BE PERMITTED ON THE PUSH SIDE OF DOORS WITH CLOSERS AND WITHOUT HOLD-OPEN DEVICES.
   FINISH AND CONTRAST (703.3.12): CHARACTERS AND THEIR BACKGROUND SHALL HAVE A NON-GLARE FINISH. CHARACTERS SHALL CONTRAST WITH THEIR BACKGROUND WITH EITHER LIGHT CHARACTERS ON A DARK BACKGROUND OR DARK CHARACTERS ON A LIGHT BACKGROUND.
      EXCEPTION: WHERE SEPARATE RAISED CHARACTERS AND VISUAL CHARACTERS WITH THE SAME INFORMATION ARE PROVIDED, RAISED CHARACTERS ARE NOT REQUIRED TO HAVE NON-GLARE FINISH OR TO CONTRAST WITH THEIR BACKGROUND
8. BRAILLE (703.4.1): BRAILLE SHALL BE CONTRACTED (GRADE 2) AND SHALL COMPLY WITH 703.4
   UPPERCASE LETTERS (703.4.2): THE INDICATION OF AN UPPERCASE LETTER OR LETTERS SHALL ONLY BE USED BEFORE THE FIRST WORD OF SENTENCES, PROPER NOUNS AND NAMES, INDIVIDUAL LETTERS OF THE ALPHABET, INITIALS AND ACRONYMS.
   DIMENSIONS (703.4.3): BRAILLE DOTS SHALL HAVE A DOMED OR ROUNDED SHAPE AND SHALL COMPLY WITH TABLE 703.4.3.
   POSITION (703.4.4): BRAILLE SHALL BE POSITIONED BELOW THE CORRESPONDING TEXT. IF IT IS MULTI-LINED, BRAILLE SHALL BE PLACED BELOW THE ENTIRE TEXT. BRAILLE SHALL BE SEPARATED 3/8" MINIMUM FROM ANY OTHER RAISED CHARACTERS AND 3/8" MINIMUM FROM RAISED BORDERS AND DECORATIVE ELEMENTS. BRAILLE CHARACTERS ON ELEVATOR CAR CONTROLS SHALL BE SEPARATED BY 3/16" MINIMUM AND SHALL BE LOCATED EITHER DIRECTLY BELOW OR ADJACENT TO THE CORRESPONDING RAISED CHARACTERS OR SYMBOLS.
   HEIGHT FROM FINISH FLOOR OR GRADE (703.4.5): RAISED CHARACTERS SHALL BE 48" MINIMUM AND 60" MAXIMUM ABOVE THE FLOOR MEASURED TO THE BASELINE OF THE BRAILLE CELLS.
      EXCEPTION: RAISED CHARACTERS INDICATING ELEVATOR CAR CONTROLS SHALL NOT BE REQUIRED TO COMPLY WITH 703.4.5.
9. PICTOGRAMS (703.5.1): PICTOGRAMS SHALL COMPLY WITH 703.5.
   PICTOGRAM FIELDS (703.5.2): PICTOGRAMS SHALL HAVE A FIELD HEIGHT OF 6" MINIMUM. CHARACTERS AND BRAILLE SHALL NOT BE LOCATED IN THE PICTOGRAM FIELD.
   FINISH AND CONTRAST (703.5.3): PICTOGRAMS AND THEIR FIELD SHALL HAVE A NON-GLARE FINISH. PICTOGRAMS SHALL CONTRAST THEIR FIELD WITH EITHER A LIGHT PICTOGRAM ON A DARK FIELD OR A DARK PICTOGRAM ON A LIGHT FIELD.
10. SYMBOLS OF ACCESSIBILITY (703.6.1): SYMBOLS OF ACCESSIBILITY SHALL COMPLY WITH 703.6.
    FINISH AND CONTRAST (703.6.2): SYMBOLS OF ACCESSIBILITY AND THEIR BACKGROUND SHALL HAVE A NON-GLARE FINISH. SYMBOLS OF ACCESSIBILITY SHALL CONTRAST WITH THEIR BACKGROUND WITH EITHER A LIGHT SYMBOL ON A DARK BACKGROUND OR A DARK SYMBOL ON A LIGHT BACKGROUND.
11. SYMBOLS OF ACCESSIBILITY (703.6.3):
    INTERNATIONAL SYMBOL OF ACCESSIBILITY (703.6.3.1)
    INTERNATIONAL SYMBOL OF TTY (703.6.3.2)
    INTERNATIONAL SYMBOL OF ACCESS FOR HEARING LOSS (703.6.3.3)
    VOLUME CONTROL TELEPHONES (703.6.3.4)

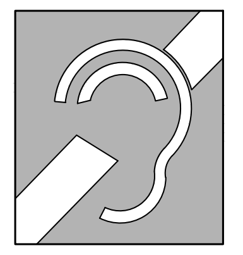


FIG 703.6.3.3 INTERNATIONAL SYMBOL OF ACCESS FOR HEARING LOSS

FIG 703.6.3.4 VOLUME CONTROL TELEPHONE

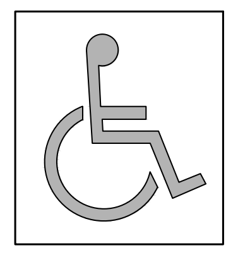


FIG 703.6.3.1 - INTERNATIONAL SYMBOL OF ACCESSIBILITY

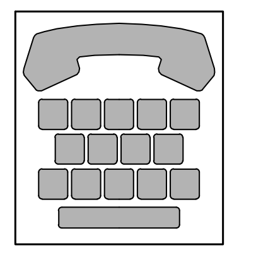


FIG 703.6.3.2 INTERNATIONAL SYMBOL OF TTY

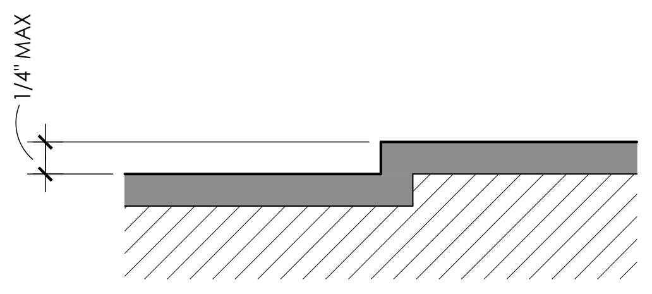


FIG 303.2 - VERTICAL CHANGE IN LEVEL

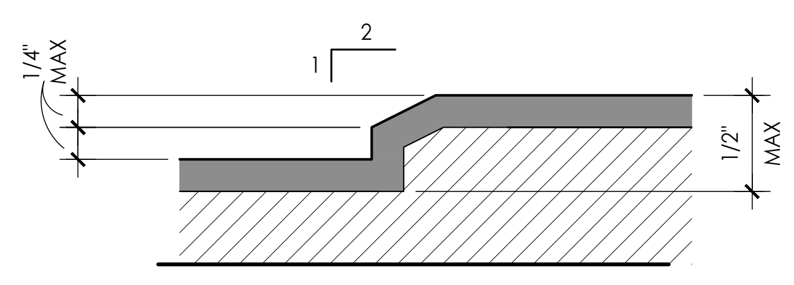


FIG 303.3 (A) - BEVELED CHANGE IN LEVEL

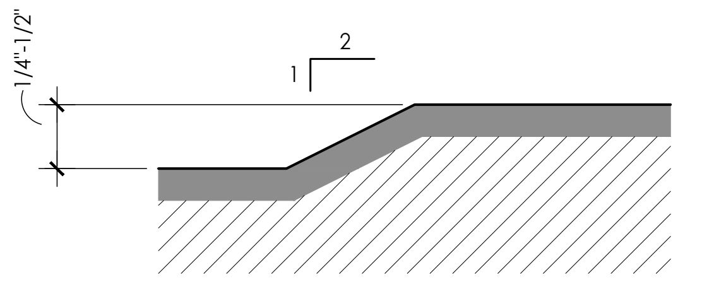


FIG 303.3 (B) - BEVELED CHANGE IN LEVEL

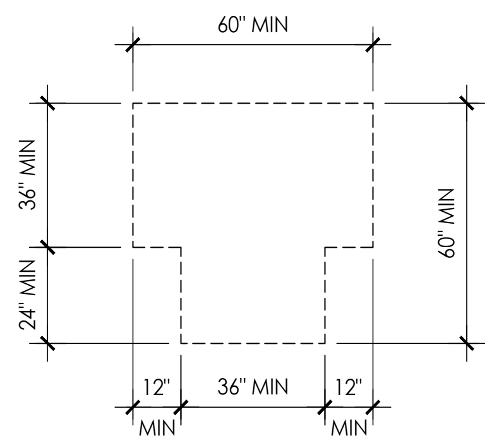
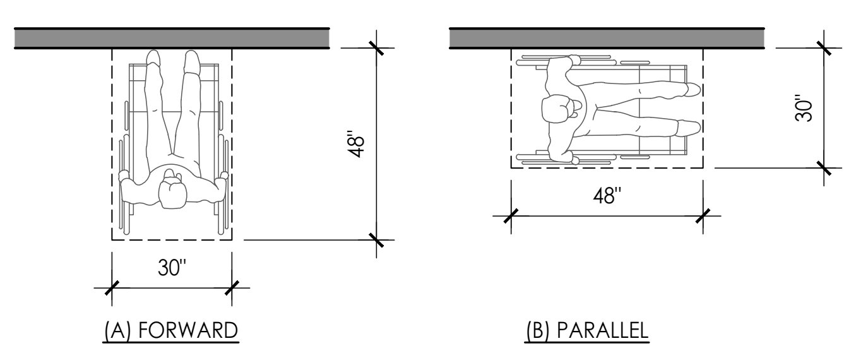


FIG 304.3.2 - T-SHAPED TURNING SPACE



(A) FORWARD

(B) PARALLEL

FIG 305.5 - POSITION OF CLEAR FLOOR OR GROUND SPACE

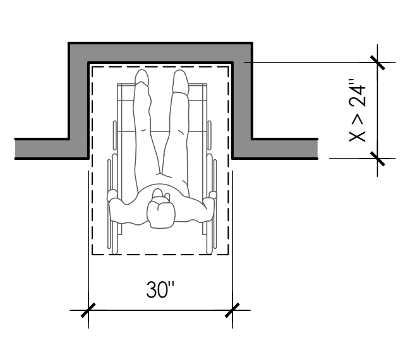


FIG 305.7.1 - MANEUVERING CLEARANCE IN AN ALCOVE, FORWARD APPROACH

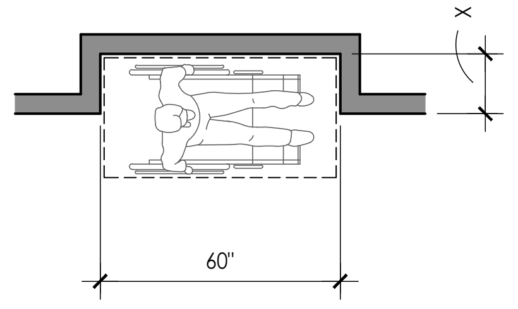
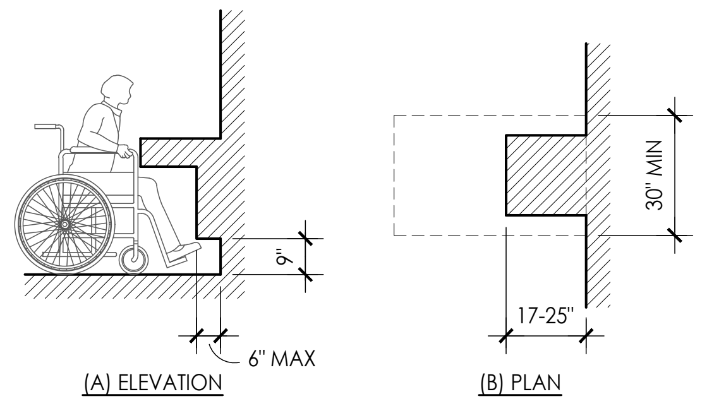


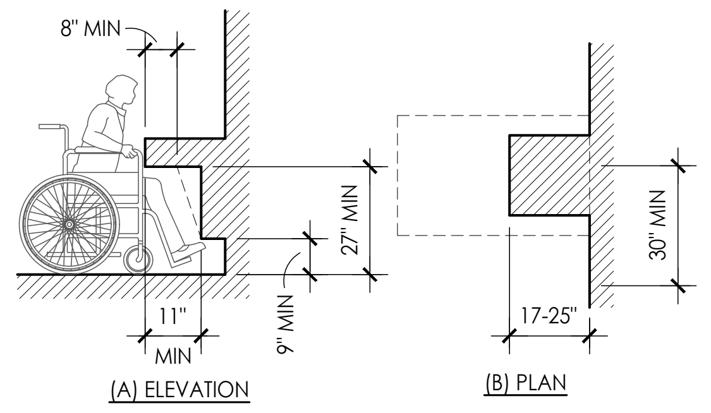
FIG 305.7.2 - MANEUVERING CLEARANCE IN AN ALCOVE, PARALLEL APPROACH



(A) ELEVATION

(B) PLAN

FIG 306.2 - TOE CLEARANCE



(A) ELEVATION

(B) PLAN

FIG 306.3 - KNEE CLEARANCE

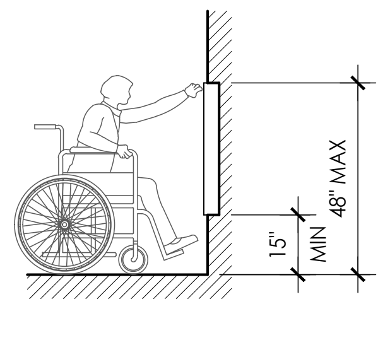


FIG 308.2.1 - UNOBSTRUCTED FORWARD REACH

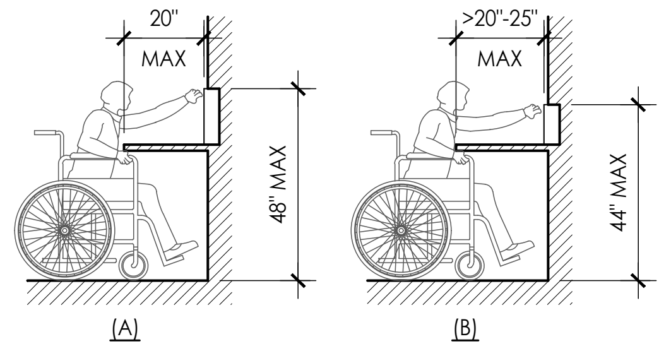


FIG 308.2.2 - OBSTRUCTED HIGH FORWARD REACH

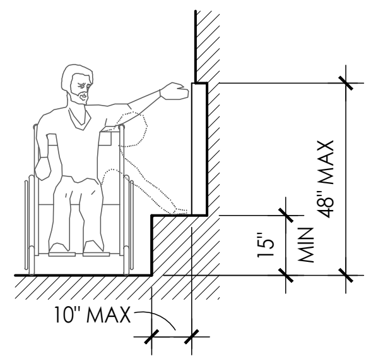


FIG 308.3.1 - UNOBSTRUCTED SIDE REACH

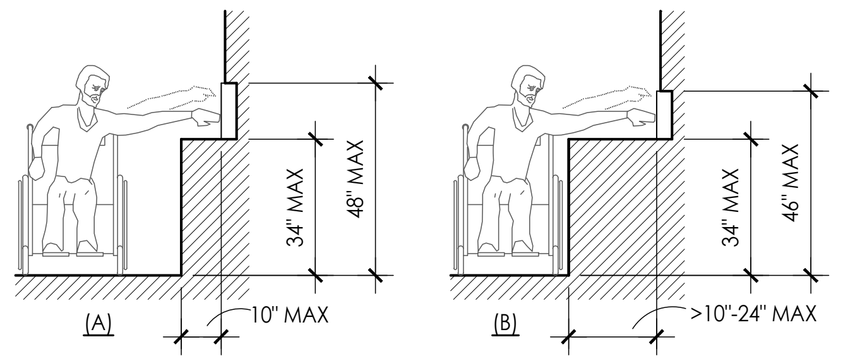


FIG 308.3.2 - OBSTRUCTED HIGH SIDE REACH

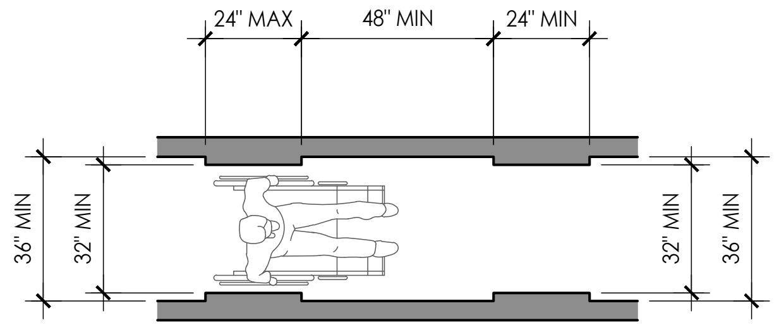


FIG 403.5 - CLEAR WIDTH OF AN ACCESSIBLE ROUTE

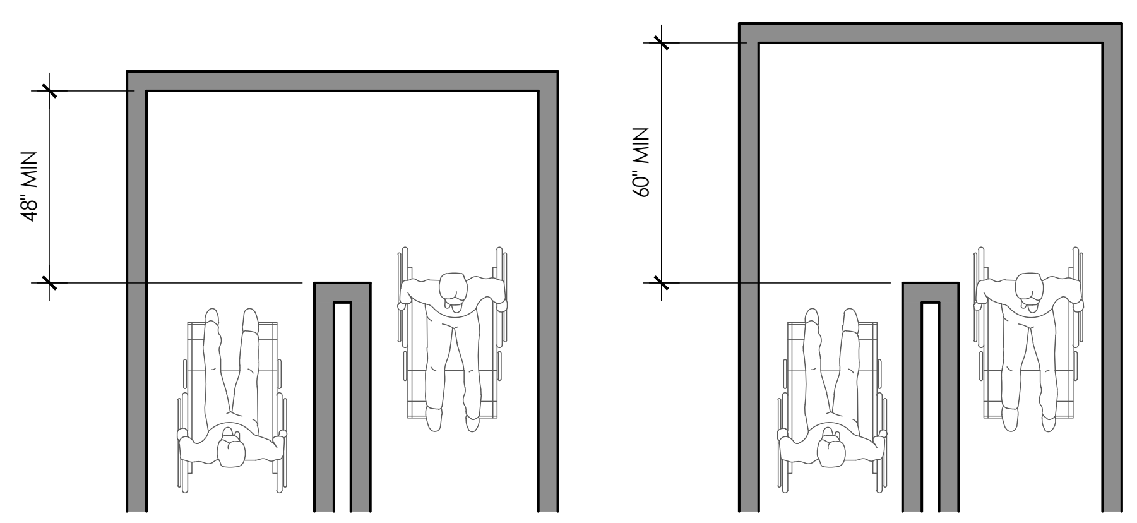
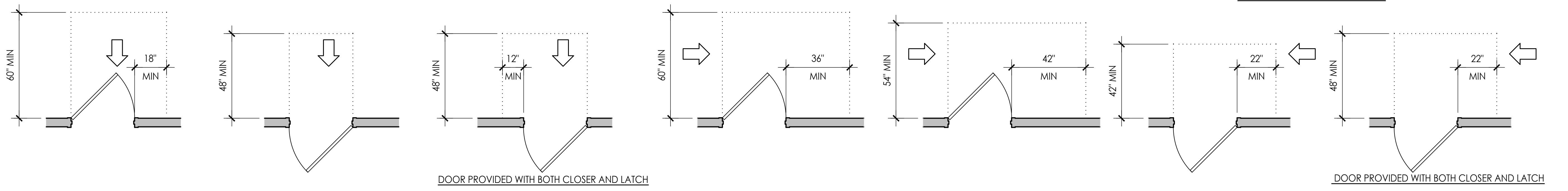


FIG 403.5.1 - CLEAR WIDTH AT TURN



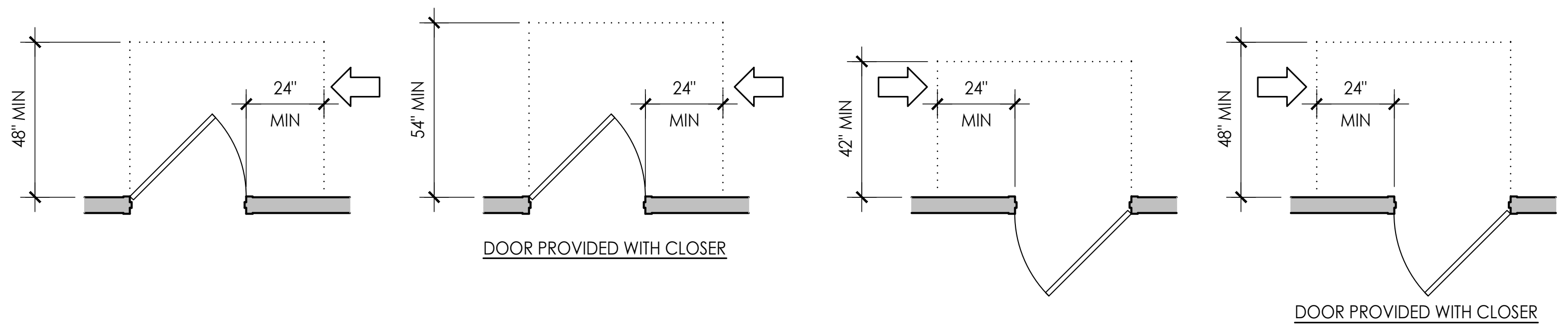
[A] - FRONT APPROACH, PULL SIDE

[B] - FRONT APPROACH, PUSH SIDE

[C] - HINGE APPROACH, PULL SIDE

[D] - HINGE APPROACH, PULL SIDE

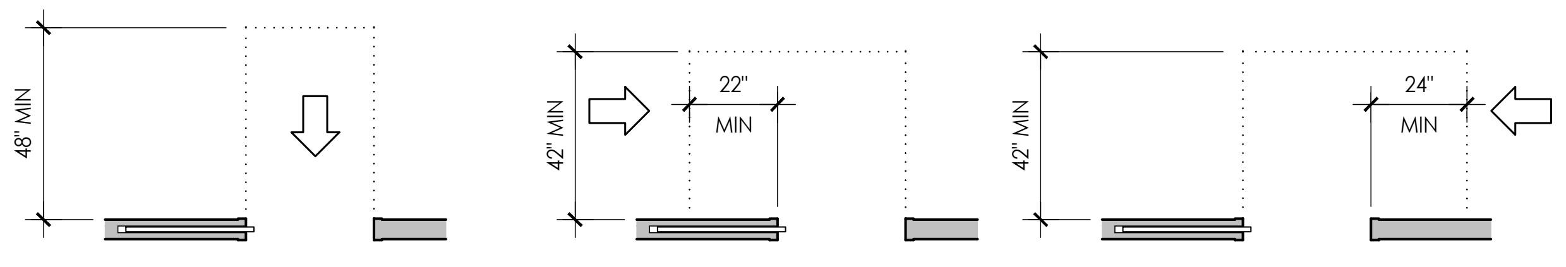
[E] - HINGE APPROACH, PUSH SIDE



[F] - LATCH APPROACH, PULL SIDE

[G] - LATCH APPROACH, PUSH SIDE

FIG 404.2.3.2 - MANEUVERING CLEARANCES AT MANUAL SWINGING DOORS AND GATES

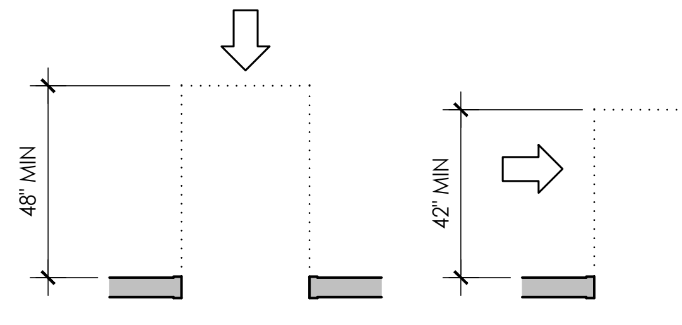


[A] - FRONT APPROACH

[A] - POCKET OR HINGE APPROACH

[C] - STOP OR LATCH APPROACH

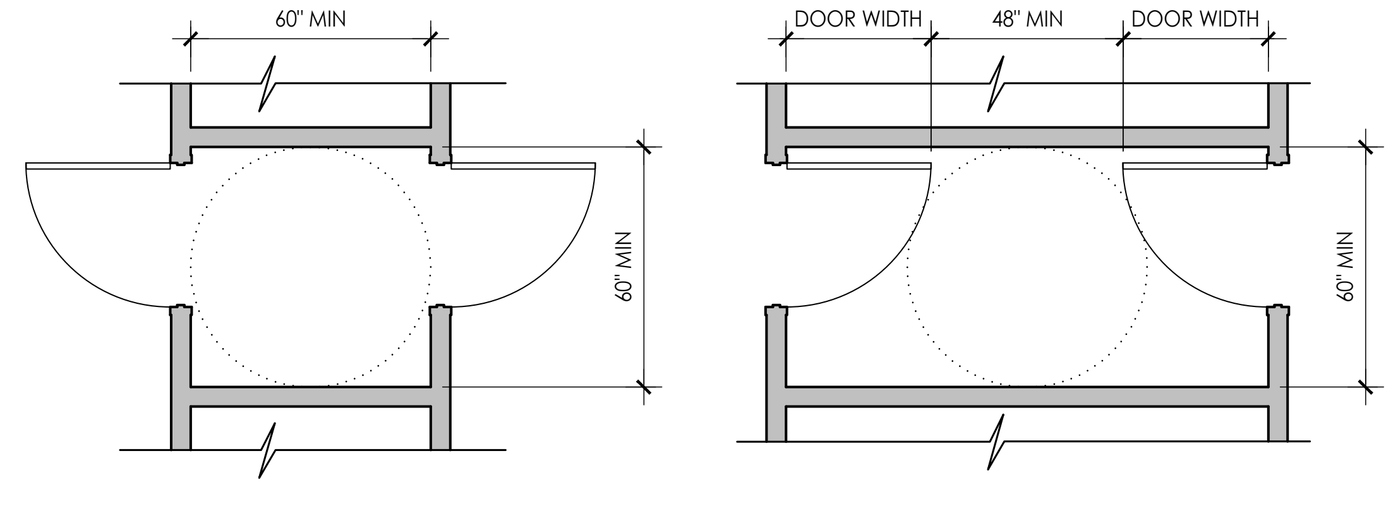
FIG 404.2.3.3 - MANEUVERING CLEARANCES AT SLIDING AND FOLDING DOORS

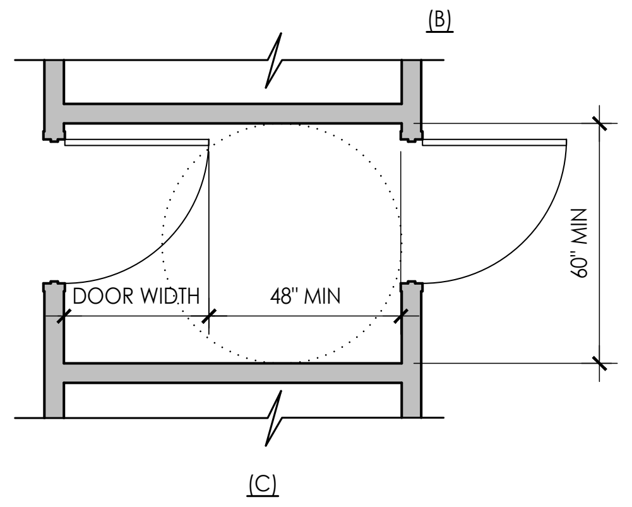


[A] - FRONT APPROACH

[B] - SIDE APPROACH

FIG 404.2.3.4 - MANEUVERING CLEARANCES AT DOORWAYS WITHOUT DOORS





[C]

FIG 404.2.6 - DOORS IN SERIES AND GATES IN SERIES

Architect

OMNESS DESIGN, INC.
140 FAIRFAX ROAD
MARION, OHIO 43302

PROJECT
Crawford Co.
Title Office & Crawford Co. Solid Waste District
New Office Building
2538 E. Mansfield St.
Bucyrus, OH 44820

STATE OF OHIO
PAUL K.
OMNESS
13997
REGISTERED ARCHITECT

Paul K. Omness, OH License #13997
Expiration Date: 2025-12-31

SHEET INFORMATION

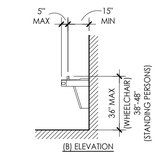
Project #: 23-122
Issued For: Permit/Bid
Date: 2024-02-26
Revisions:

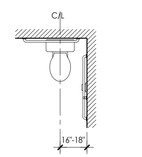
SHEET TITLE

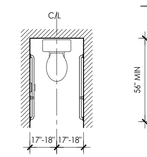
Accessibility Requirements

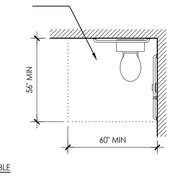
SHEET NUMBER

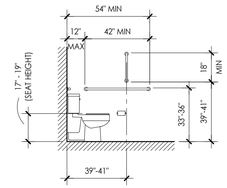
T1.02

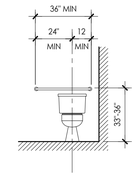


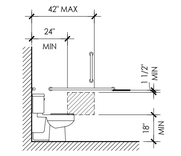


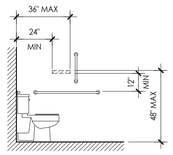


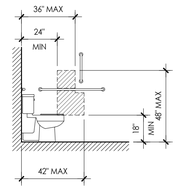


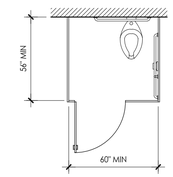


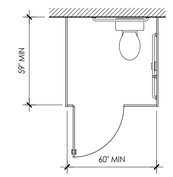


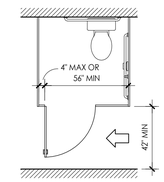


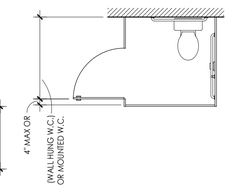


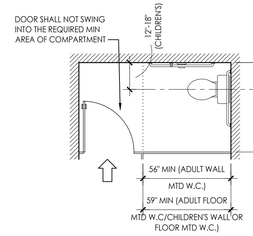


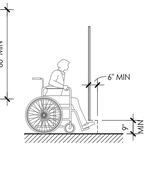


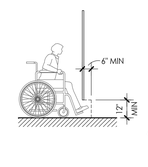


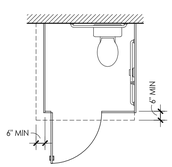


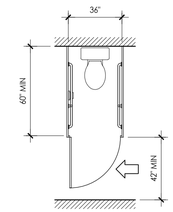


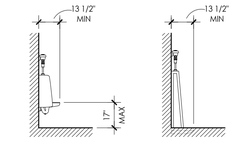


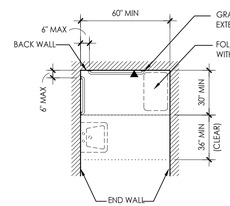


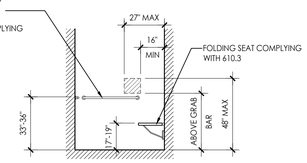


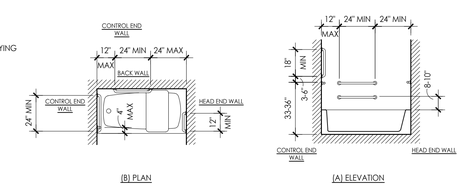












ACCESSIBLE PLUMBING FIXTURES AND ACCESSORIES:

DRINKING FOUNTAINS:

1. CLEAR FLOOR SPACE (602.2): UNITS SHALL HAVE A CLEAR FLOOR OR GROUND SPACE COMPLYING WITH 305 POSITIONED FOR A FORWARD APPROACH AND CENTERED ON UNIT. KNEE AND TOE CLEARANCE COMPLYING WITH 306 SHALL BE PROVIDED.
2. OPERABLE PARTS (602.3): OPERABLE PARTS SHALL COMPLY WITH 309.
3. SPOUT HEIGHT (602.4): SPOUT OUTLETS OF WHEELCHAIR ACCESSIBLE DRINKING FOUNTAINS SHALL BE 36" MAXIMUM ABOVE THE FINISH FLOOR OR GROUND. SPOUT OUTLETS OF DRINKING FOUNTAINS FOR STANDING PERSONS SHALL BE 38" MINIMUM AND 43" MAXIMUM ABOVE THE FINISH FLOOR OR GROUND.
4. SPOUT LOCATION (602.5): THE SPOUT SHALL BE LOCATED 15" MINIMUM FROM THE VERTICAL SUPPORT AND 5" MAXIMUM FROM THE FRONT EDGE OF THE UNIT, INCLUDING BUMPERS. WHERE ONLY A PARALLEL APPROACH IS PROVIDED, THE SPOUT SHALL BE LOCATED 3 1/2" FROM THE FRONT EDGE OF THE DRINKING FOUNTAIN, INCLUDING BUMPERS. REFER TO FIG 602.5.
5. WATER FLOW (602.6): THE SPOUT SHALL PROVIDE A WATER FLOW OF 4" HIGH MINIMUM IN HEIGHT. THE ANGLE OF THE WATER STREAM FROM SPOUTS WITHIN 3" OF THE FRONT OF THE FOUNTAIN SHALL BE 30 DEGREES MAXIMUM, AND FROM SPOUTS BETWEEN 3" AND 5" FROM THE FRONT OF THE DRINKING FOUNTAIN SHALL BE 15 DEGREES MAXIMUM, MEASURED HORIZONTALLY RELATIVE TO THE FRONT OF THE DRINKING FOUNTAIN.

WATER CLOSETS AND TOILET COMPARTMENTS:

1. LOCATION (604.2): THE WATER CLOSET SHALL BE POSITIONED WITH A WALL OR PARTITION TO THE REAR AND ONE SIDE. THE CENTERLINE OF THE WATER CLOSET SHALL BE 16" MINIMUM TO 18" MAXIMUM FROM THE SIDE WALL OR PARTITION, EXCEPT THAT THE WATER CLOSET SHALL BE 17" MINIMUM AND 19" MAXIMUM FROM THE SIDE WALL OF PARTITION IN THE AMBULATORY ACCESSIBLE TOILET PARTITION SPECIFIED IN 604.10.
2. CLEARANCE WIDTH (604.3.1): CLEARANCE AROUND A WATER CLOSET SHALL BE 60" MINIMUM MEASURED PERPENDICULAR FROM THE SIDE WALL. REFER TO FIG 604.3.
3. CLEARANCE DEPTH (604.3.2): CLEARANCE AROUND A WATER CLOSET SHALL BE 56" MINIMUM IN DEPTH, MEASURED PERPENDICULAR FROM THE REAR WALL. REFER TO FIG 604.3.
4. CLEARANCE OVERLAP (604.3.3): THE REQUIRED CLEARANCE AROUND THE WATER CLOSET SHALL BE PERMITTED TO OVERLAP THE WATER CLOSET, ASSOCIATED GRAB BARS, DISPENSERS, SANITARY NAPKIN DISPOSAL UNITS, COAT HOOKS, SHELVES, ACCESSIBLE ROUTES, CLEAR FLOOR SPACE AND CLEARANCES REQUIRED AT OTHER FIXTURES, AND THE TURNING SPACE. NO OTHER FIXTURES OR OBSTRUCTIONS SHALL BE LOCATED WITHIN THE REQUIRED WATER CLOSET CLEARANCE.
5. SEATS (604.4): THE HEIGHT OF A WATER CLOSET ABOVE THE FINISH FLOOR SHALL BE 17" MINIMUM AND 19" MAXIMUM MEASURED TO THE TOP OF THE SEAT. SEATS SHALL NOT BE SPRUNG TO RETURN TO A LIFTED POSITION.
6. GRAB BARS (604.5): GRAB BARS FOR WATER CLOSETS SHALL COMPLY WITH 609.
7. GRAB BARS - SIDEWALL (604.5.1): THE SIDE WALL GRAB BAR SHALL BE 42" LONG MINIMUM, LOCATED 12" MAXIMUM FROM THE REAR WALL AND EXTENDING 54" MINIMUM FROM THE REAR WALL. IN ADDITION, A VERTICAL GRAB BAR 18" MINIMUM IN LENGTH SHALL BE MOUNTED WITH THE BOTTOM OF THE BAR AT 39" MINIMUM AND 41" MAXIMUM ABOVE THE FLOOR, AND THE CENTERLINE OF THE BAR LOCATED 39" MINIMUM AND 41" MAXIMUM FROM THE REAR WALL. REFER TO FIG 604.5.1.
8. GRAB BARS - REAR WALL (604.5.2) THE REAR WALL GRAB BAR SHALL BE 36" LONG MINIMUM AND EXTEND FROM THE CENTERLINE OF THE WATER CLOSET 12" MINIMUM ON ONE SIDE AND 24" MINIMUM ON THE OTHER SIDE. REFER TO FIG 604.5.2
9. FLUSH CONTROLS (604.6): FLUSH CONTROLS SHALL BE HAND OPERATED OR AUTOMATIC. HAND OPERATED FLUSH CONTROLS SHALL COMPLY WITH 309. FLUSH CONTROLS SHALL BE LOCATED ON THE OPEN SIDE OF THE WATER CLOSET EXCEPT IN AMBULATORY ACCESSIBLE COMPARTMENTS COMPLYING WITH 604.10.
10. DISPENSERS (604.7): TOILET PAPER DISPENSERS SHALL COMPLY WITH 309.4 WHERE DISPENSER IS LOCATED ABOVE GRAB BAR, THE OUTLET OF THE DISPENSER SHALL BE LOCATED WITHIN AN AREA 24" MINIMUM AND 36" MAXIMUM FROM THE REAR WALL. WHERE DISPENSER IS LOCATED BELOW THE GRAB BAR, THE OUTLET OF THE DISPENSER SHALL BE LOCATED WITHIN AN AREA 24" MINIMUM AND 42" MAXIMUM FROM THE REAR WALL. THE OUTLET OF THE DISPENSER SHALL BE LOCATED 18" MINIMUM AND 48" MAXIMUM ABOVE THE FLOOR. DISPENSERS SHALL NOT BE OF A TYPE THAT CONTROL DELIVERY, OR DO NOT ALLOW CONTINUOUS PAPER FLOW.. REFER TO FIG 604.7.
11. WHEELCHAIR ACCESSIBLE COMPARTMENT MINIMUM AREA (604.9.2.1): WHEELCHAIR ACCESSIBLE COMPARTMENTS SHALL BE 60" WIDE MINIMUM MEASURED PERPENDICULAR TO THE SIDE WALL, AND 56" DEEP MINIMUM FOR WALL HUNG WATER CLOSETS AND 59" DEEP MINIMUM FOR FLOOR MOUNTED WATER CLOSETS MEASURED PERPENDICULAR TO THE REAR WALL. WHEELCHAIR ACCESSIBLE COMPARTMENTS FOR CHILDREN'S USE SHALL BE 60" WIDE MINIMUM MEASURED PERPENDICULAR TO THE SIDE WALL, AND 59" DEEP MINIMUM FOR WALL HUNG AND FLOOR MOUNTED WATER CLOSETS MEASURED PERPENDICULAR TO THE REAR WALL. REFER TO FIG 604.9.2
12. WHEELCHAIR ACCESSIBLE COMPARTMENT DOORS (604.9.3): TOILET COMPARTMENT DOORS, INCLUDING HARDWARE, SHALL COMPLY WITH 404 EXCEPT THAT IF THE APPROACH IS TO THE LATCH SIDE OF THE COMPARTMENT DOOR, CLEARANCE BETWEEN THE DOOR SIDE OF THE COMPARTMENT AND ANY OBSTRUCTION SHALL BE 42" MINIMUM. THE DOOR SHALL BE SELF-CLOSING. A DOOR PULL COMPLYING WITH 404.2.6 SHALL BE PLACED ON BOTH SIDES OF THE DOOR NEAR THE LATCH. TOILET COMPARTMENT DOORS SHALL NOT SWING INTO THE MINIMUM REQUIRED COMPARTMENT AREA. REFER TO FIG 604.9.3.1.
13. WHEELCHAIR ACCESSIBLE COMPARTMENT APPROACH (604.9.4): COMPARTMENTS SHALL BE ARRANGED FOR LEFT-HAND OR RIGHT-HAND APPROACH TO THE WATER CLOSET.
14. TOE CLEARANCE AT CLEARANCE AT COMPARTMENTS (604.9.5.1): THE FRONT PARTITION AND AT LEAST ONE SIDE PARTITION SHALL PROVIDE A CLEARANCE OF 9" MINIMUM ABOVE THE FINISH FLOOR AND 6" DEEP MINIMUM BEYOND THE COMPARTMENT-SIDE FACE OF THE PARTITION, EXCLUSIVE OF PARTITION SUPPORT MEMBERS.

EXCEPTION 1: TOE CLEARANCE AT THE FRONT PARTITION IS NOT REQUIRED IN A COMPARTMENT GREATER THAN 62" DEEP WITH A WALL-HUNG WATER CLOSET OR 65" WITH A FLOOR-MOUNTED WATER CLOSET.

EXCEPTION 2: TOE CLEARANCE AT THE SIDE PARTITION IS NOT REQUIRED IN A COMPARTMENT GREATER THAN 66" WIDE.

15. TOE CLEARANCE AT COMPARTMENTS FOR CHILDREN'S USE (604.9.5.2): THE FRONT PARTITION AND AT LEAST ONE SIDE PARTITION SHALL PROVIDE A CLEARANCE OF 12" MINIMUM ABOVE THE FINISH FLOOR AND 6" DEEP MINIMUM BEYOND THE COMPARTMENT-SIDE FACE OF THE PARTITION, EXCLUSIVE OF PARTITION SUPPORT MEMBERS.

EXCEPTION 1: TOE CLEARANCE AT THE FRONT PARTITION IS NOT REQUIRED IN A COMPARTMENT GREATER THAN 65" DEEP.

EXCEPTION 2: TOE CLEARANCE AT THE SIDE PARTITION IS NOT REQUIRED IN A COMPARTMENT GREATER THAN 66" WIDE.

16. WHEELCHAIR ACCESSIBLE COMPARTMENT GRAB BARS (604.9.6): GRAB BARS SHALL COMPLY WITH 609. A SIDE-WALL GRAB BAR COMPLYING WITH 604.5.1 SHALL BE PROVIDED AND BE LOCATED ON THE WALL CLOSEST TO THE WATER CLOSET. IN ADDITION, A REAR-WALL GRAB BAR COMPLYING WITH 604.5.2 SHALL BE PROVIDED.
17. AMBULATORY ACCESSIBLE COMPARTMENTS - SIZE (604..10.2): AMBULATORY ACCESSIBLE COMPARTMENTS SHALL HAVE A DEPTH OF 60" AND A WIDTH OF 36".
18. AMBULATORY ACCESSIBLE COMPARTMENTS - DOORS (604.10.3): TOLET COMPARTMENT DOORS, INCLUDING HARDWARE, SHALL COMPLY WITH 404, EXCEPT THAT IF THE APPROACH IS TO THE LATCH SIDE OF THE COMPARTMENT DOOR, CLEARANCE BETWEEN THE DOOR SIDE OF THE COMPARTMENT AND ANY OBSTRUCTION SHALL BE 42" MINIMUM. THE DOOR SHALL BE SELF-CLOSING. A DOOR PULL COMPLYING WITH 404.2.6 SHALL BE PLACED ON BOTH SIDES OF THE DOOR NEAR THE LATCH. TOILET COMPARTMENT DOORS SHALL NOT SWING INTO THE MINIMUM REQUIRED COMPARTMENT AREA. REFER TO FIG 604.10
19. AMBULATORY ACCESSIBLE COMPARTMENTS - GRAB BARS (604.10.4): GRAB BARS SHALL COMPLY WITH 609. A SIDE-WALL GRAB BAR COMPLYING WITH 604.5.1 SHALL BE PROVIDED ON BOTH SIDES OF THE COMPARTMENT.
20. COATS, HOOKS AND SHELVES (604.8): COAT HOOKS PROVIDED WITHIN TOILET COMPARTMENTS SHALL BE 48" MAXIMUM ABOVE THE FLOOR. SHELVES SHALL BE 40" MINIMUM AND 48" MAXIMUM ABOVE THE FLOOR.

URINALS

1. HEIGHT AND DEPTH (605.2): URINALS SHALL BE THE STALL-TYPE OR WALL-HUNG TYPE WITH THE RIM 17" MAXIMUM ABOVE FINISH FLOOR OR GROUND. URINALS SHALL BE 13 1/2" DEEP MINIMUM MEASURED FROM THE OUTER FACE OF THE URINAL RIM TO THE BACK OF THE FIXTURE. REFER TO FIG 605.2.
2. CLEAR FLOOR SPACE (605.3): A CLEAR FLOOR OR GROUND SPACE COMPLYING WITH 305 POSITIONED FOR FORWARD APPROACH SHALL BE PROVIDED.
3. FLUSH CONTROLS (605.4): FLUSH CONTROLS SHALL BE HAND OPERATED OR AUTOMATIC. HAND OPERATED FLUSH CONTROLS SHALL COMPLY WITH 309

LAVATORIES

1. CLEAR FLOOR SPACE (606.2): A CLEAR FLOOR SPACE COMPLYING WITH 305.3, POSITIONED FOR A FORWARD APPROACH. KNEE AND TOE CLEARANCE COMPLYING WITH 306 SHALL BE PROVIDED. THE DIP OF THE OVERFLOW SHALL NOT BE CONSIDERED IN DETERMINING THE KNEE AND TOE CLEARANCES.

EXCEPTION 1:A PARALLEL APPROACH COMPLYING WITH 305 AND CENTERED ON THE SINK SHALL BE PERMITTED TO A KITCHEN SINK IN A SPACE WHERE A COOK TOP OR CONVENTIONAL RANGE IS NOT PROVIDED.

2. HEIGHT (606.3): LAVATORIES AND SINKS SHALL BE INSTALLED WITH THE FRONT OF THE HIGHER OF THE RIM OR COUNTER SURFACE 34" MAXIMUM ABOVE THE FINISH FLOOR OR GROUND.
3. FAUCETS (606.4): CONTROLS FOR FAUCETS SHALL COMPLY WITH 309. HAND-OPERATED METERING FAUCETS SHALL REMAIN OPEN FOR 10 SECONDS MINIMUM.
4. EXPOSED PIPES AND SURFACES (606.6): WATER SUPPLY AND DRAIN PIPES UNDER LAVATORIES AND SINKS SHALL BE INSULATED OR OTHERWISE CONFIGURED TO PROTECT AGAINST CONTACT. THERE SHALL BE NO SHARP OR ABRASIVE SURFACES UNDER LAVATORIES OR SINKS.

MIRRORS

1. HEIGHT (603.3): MIRRORS LOCATED ABOVE LAVATORIES OR COUNTERTOPS SHALL BE INSTALLED WITH THE BOTTOM EDGE OF THE REFLECTING SURFACE 40" MAXIMUM ABOVE THE FINISH FLOOR OR GROUND. MIRRORS NOT LOCATED ABOVE LAVATORIES OR COUNTERTOPS SHALL BE INSTALLED WITH THE BOTTOM EDGE OF THE REFLECTING SURFACE 40" MAXIMUM ABOVE THE FINISH FLOOR OR GROUND.

EXCEPTION: OTHER THAN WITHIN ACCESSIBLE DWELLING OR SLEEPING UNITS, MIRRORS ARE NOT REQUIRED OVER LAVATORIES OR COUNTERS IF A MIRROR IS LOCATED WITHIN THE SAME TOILET OR BATHING ROOM AND MOUNTED WITH THE BOTTOM EDGE OF THE REFLECTING SURFACE AT 35" MAXIMUM ABOVE THE FLOOR.

BATHTUBS

1. CLEARANCE (607.2): A CLEARANCE IN FRONT OF BATHTUBS EXTENDING THE LENGTH OF THE BATHTUB AND 30 INCHES MINIMUM IN DEPTH SHALL BE PROVIDED. WHERE A PERMANENT SEAT IS PROVIDED AT THE HEAD END OF THE BATHTUB, THE CLEARANCE SHALL EXTEND 12 INCHES MINIMUM BEYOND THE WALL AT THE HEAD END OF THE BATHTUB.
2. SEAT (607.3): A PERMANENT SEAT AT THE HEAD END OF THE BATHTUB OR A REMOVABLE IN-TUB SEAT SHALL BE PROVIDED. SEATS SHALL COMPLY WITH SECTION 610.
3. GRAB BARS - BATHTUBS WITH PERMANENT SEATS (607.4.1)
    - 3.1. BACK WALL (607.4.1.1): TWO HORIZONTAL GRAB BARS SHALL BE PROVIDED ON THE BACK WALL, ONE COMPLYING WITH SECTION 609.4 AND THE OTHER LOCATED 8 INCHES MINIMUM AND 10 INCHES MAXIMUM ABOVE THE RIM OF THE BATHTUB. EACH GRAB BAR SHALL BE LOCATED 15 INCHES MAXIMUM FROM THE HEAD END WALL AND EXTEND TO 12 INCHES MAXIMUM FROM THE CONTROL END WALL.
    - 3.2. CONTROL END WALL (607.4.1.2): A HORIZONTAL GRAB BAR 24 INCHES MINIMUM IN LENGTH SHALL BE PROVIDED ON THE CONTROL END WALL BEGINNING NEAR THE FRONT EDGE OF THE BATHTUB AND EXTENDING TOWARD THE INSIDE CORNER OF THE BATHTUB. A VERTICAL GRAB BAR 18 INCHES MINIMUM IN LENGTH SHALL BE PROVIDED ON THE CONTROL END WALL 3 INCHES MINIMUM AND 6 INCHES MAXIMUM ABOVE THE HORIZONTAL GRAB BAR, AND 4 INCHES MAXIMUM INWARD FROM THE FRONT EDGE OF THE BATHTUB.
4. GRAB BARS - BATHTUBS WITHOUT PERMANENT SEATS (607.4.2)
    - 4.1. BACK WALL (607.4.2.1): TWO HORIZONTAL GRAB BARS SHALL BE PROVIDED ON THE BACK WALL, ONE COMPLYING WITH SECTION 609.4 AND THE OTHER LOCATED 8 INCHES MINIMUM AND 10 INCHES MAXIMUM ABOVE THE RIM OF THE BATHTUB. EACH GRAB BAR SHALL BE 24 INCHES MINIMUM IN LENGTH, LOCATED 24 INCHES MAXIMUM FROM THE HEAD END WALL AND EXTEND TO 12 INCHES MAXIMUM FROM THE CONTROL END WALL.
    - 4.2. CONTROL END WALL (607.4.2.2): CONTROL END WALL GRAB BARS SHALL COMPLY WITH 607.4.1.2.
    - 4.3. HEAD END WALL (607.4.2.3): A HORIZONTAL GRAB BAR 12 INCHES MINIMUM IN LENGTH SHALL BE PROVIDED ON THE HEAD END WALL AT THE FRONT EDGE OF THE BATHTUB.
5. EXCEPTION: GRAB BARS SHALL NOT BE REQUIRED TO BE INSTALLED IN A BATHING FACILITY FOR A SINGLE OCCUPANT ACCESSED ONLY THROUGH A PRIVATE OFFICE AND NOT FOR COMMON USE OR PUBLIC USE, PROVIDED REINFORCEMENT HAS BEEN INSTALLED IN WALLS AND LOCATED SO AS TO PERMIT THE INSTALLATION OF GRAB BARS COMPLYING WITH SECTION 607.4.
6. CONTROLS (607.5): CONTROLS, OTHER THAN DRAIN STOPPERS, SHALL BE PROVIDED ON AN END WALL, LOCATED BETWEEN THE BATHTUB RIM AND GRAB BAR, AND BETWEEN THE OPEN SIDE OF THE BATHTUB AND THE CENTERLINE OF THE WIDTH OF THE BATHTUB. CONTROLS SHALL COMPLY WITH SECTION 309.4.
7. HAND SHOWER (607.6): A HAND SHOWER WITH A HOSE 59 INCHES MINIMUM IN LENGTH THAT CAN BE USED AS BOTH A FIXED SHOWER HEAD AND AS A HAND SHOWER, SHALL BE PROVIDED. THE HAND SHOWER SHALL HAVE A CONTROL WITH A NONPOSITIVE SHUT-OFF FEATURE. WHERE PROVIDED, AN ADJUSTABLE-HEIGHT HAND SHOWER MOUNTED ON A VERTICAL BAR SHALL BE INSTALLED SO AS TO NOT OBSTRUCT THE USE OF GRAB BARS.

SHOWER COMPARTMENTS

1. TRANSFER-TYPE SHOWER COMPARTMENTS
    - 1.1. SIZE: (608.2.1.1) TRANSFER-TYPE SHOWER COMPARTMENTS SHALL HAVE A CLEAR INSIDE DIMENSION OF 36" IN WIDTH AND 36" IN DEPTH, MEASURED AT THE CENTER PONT OF OPPOSING SIDES. AT ENTRY, 36" MINIMUM IN WIDTH SHALL BE PROVIDED.
    - 1.2. CLEARANCE (608.2.1.2): A CLEARANCE OF 48" MINIMUM IN LENGTH MEASURED PERPENDICULAR FROM THE CONTROL WALL, AND 36" MINIMUM IN DEPTH SHALL BE PROVIDED ADJACENT TO THE OPEN FACE OF THE COMPARTMENT.
    - 1.3. SEAT (608.2.1.3): A FOLDING OR NON-FOLDING SEAT COMPLYING WITH SECTION 610 SHALL BE PROVIDED ON THE WALL OPPOSITE THE CONTROL WALL. EXCEPTION - A SEAT IS NOT REQUIRED TO BE INSTALLED IN A SHOWER FOR A SINGLE OCCUPANT ACCESSED ONLY THROUGH A PRIVATE OFFICE AND NOT FOR COMMON OR PUBLIC USE; PROVIDED REINFORCEMENT HAS BEEN INSTALLED IN WALLS AND LOCATED SO AS TO PERMIT THE INSTALLATION OF A SHOWER SEAT.
2. GRAB BARS (608.3): GRAB BARS SHALL COMPLY WITH SECTION 609 AND SHALL BE PROVIDED IN ACCORDANCE WITH SECTION 608.3. WHERE MULTIPLE GRAB BARS ARE USED, REQUIRED HORIZONTAL GRAB BARS SHALL BE INSTALLED AT THE SAME HEIGHT ABOVE THE FLOOR. EXCEPTION - GRAB BARS ARE NOT REQUIRED TO BE INSTALLED IN A SHOWER FOR A SINGLE OCCUPANT, ACCESSED ONLY THROUGH A PRIVATE OFFICE AND NOT FOR COMMON OR PUBLIC USE, PROVIDED REINFORCEMENT HAS BEEN INSTALLED IN WALLS AND LOCATED SO AS TO PERMIT THE INSTALLATION OF GRAB BARS COMPLYING WITH SECTION 608.3.
    - 2.1. TRANSFER-TYPE SHOWERS (608.3.1)
        - 2.1.1. HORIZONTAL GRAB BARS (608.3.1.1): HORIZONTAL GRAB BARS SHALL BE PROVIDED ACROSS THE CONTROL WALL AND ON THE BACK WALL TO A POINT 18" FROM THE CONTROL WALL. HORIZONTAL GRAB BARS SHALL BE INSTALLED 33" MINIMUM AND 36" MAXIMUM ABOVE THE FLOOR MEASURED TO THE TOP OF THE GRIPPING SURFACE.
        - 2.1.2. VERTICAL GRAB BAR (608.3.1.2): A VERTICAL GRAB BAR 18" IN LENGTH SHALL BE PROVIDED ON THE CONTROL END WALL 3" MINIMUM AND 6" MAXIMUM ABOVE THE HORIZONTAL GRAB BAR, AND 4" MAXIMUM INWARD FROM THE FRONT EDGE OF THE SHOWER.
3. CONTROLS
    - 3.1. TRANSFER-TYPE SHOWERS (608.4.2) IN TRANSFER-TYPE SHOWERS, THE CONTROLS AND HAND SHOWER SHALL BE LOCATED:
        - 3.1.1. ON THE CONTROL WALL OPPOSITE THE SEAT.
        - 3.1.2. AT A HEIGHT OF 38" MINIMUM AND 48" MAXIMUM ABOVE THE SHOWER FLOOR,
        - 3.1.3. 15" MAXIMUM FROM THE CENTERLINE OF THE CONTROL WALL TOWARD THE SHOWER OPENING.
4. HAND SHOWERS (608.5): A HAND SHOWER WITH A HOSE OF 59" MINIMUM IN LENGTH, THAT CAN BE USED BOTH AS A FIXED SHOWER HEAD AND AS A HAND SHOWER, SHALL BE PROVIDED. THE HAND SHOWER SHALL HAVE A CONTROL WITH A NONPOSITIVE SHUT-OFF FEATURE, WHERE PROVIDED, AN ADJUSTABLE=HEIGHT HAND SHOWER MOUNTED ON A VERTICAL BAR SHALL BE INSTALLED SO AS TO NOT OBSTRUCT THE USE OF GRAB BARS.
5. THRESHOLDS (608.6): THRESHOLDS IN ROLL- TYPE SHOWER COMPARTMENTS SHALL BE 12/" MAXIMUM IN HEIGHT IN ACCORDANCE WITH 303. IN TRANSFER-TYPE SHOWER COMPARTMENTS, THRESHOLDS 1/2" MAXIMUM IN HEIGHT SHALL BE BEVELED, ROUNDED OR VERTICAL. EXCEPTION - IN EXISTING FACILITIES, IN TRANSFER-TYPE SHOWER COMPARTMENTS WHERE PROVISION OF A THRESHOLD 1/2" IN HEIGHT WOULD DISTURB THE STRUCTURAL REINFORCEMENT OF THE FLOOR SLAB, A THRESHOLD 2" MAXIMUM IN HEIGHT SHALL BE PERMITTED.

GRAB BARS:

1. CROSS SECTION (609.2): GRAB BARS SHALL HAVE A CROSS SECTION COMPLYING WITH 609.2.1 OR 609.2.2.
2. CIRCULAR CROSS SECTION (609.2.1): GRAB BARS WITH CIRCULAR CROSS SECTIONS SHALL HAVE AN OUTSIDE DIAMETER OF 1 1/4" MINIMUM AND 2" MAXIMUM.
3. NON-CIRCULAR CROSS SECTION (609.2.2): GRAB BARS WITH A NON-CIRCULAR CROSS SECTIONS SHALL HAVE A CROSS-SECTION DIMENSION OF 2" MAXIMUM AND A PERIMETER DIMENSION OF 4" MINIMUM AND 4.8" MAXIMUM.
4. SPACING (609.3): THE SPACE BETWEEN THE WALL AND THE GRAB BAR SHALL BE 1 1/2". THE SPACE BETWEEN THE GRAB BAR AND PROJECTING OBJECTS BELOW AND AT THE ENDS SHALL BE 1 1/2" MINIMUM. THE SPACE BETWEEN THE GRAB BAR AND PROJECTING OBJECTS ABOVE SHALL BE 12" MINIMUM.
   EXCEPTION 1: THE SPACE BETWEEN THE GRAB BARS AND SHOWER CONTROLS, SHOWER FITTINGS, AND OTHER GRAB BARS ABOVE THE GRAB BAR SHALL BE 1 1/2" MINIMUM
   EXCEPTION 2: RECESSED DISPENSERS PROJECTING FROM THE WALL 1/4" MAXIMUM MEASURED FROM THE FACE OF THE DISPENSER AND COMPLYING WITH SECTION 604.7 SHALL BE PERMITTED WITHIN THE 12" SPACE ABOVE AND THE 1 1/2" SPACES BELOW AND AT THE ENDS OF THE GRAB BARS.
5. POSITION OF GRAB BARS (609.4.1): GRAB BARS SHALL BE INSTALLED IN A HORIZONTAL POSITION, 33" MINIMUM AND 36" MAXIMUM ABOVE THE FINISH FLOOR MEASURED TO THE TOP OF THE GRIPPING SURFACE OR SHALL BE INSTALLED AS REQUIRED BY ITEMS 1 THROUGH 3 BELOW.
    1. THE LOWER GRAB BAR ON THE BACK WALL OF A BATH TUB SHALL COMPLY WITH SECTION 607.4.1.1 OR 607.4.2.1.
    2. VERTICAL GRAB BARS SHALL COMPLY WITH SECTIONS 604.5.1, 604.4.1.2.2, 607.4.2.2 AND 608.3.1.2.
    3. GRAB BARS PRIMARILY FOR CHILDREN'S USE SHALL COMPLY WITH 609.4.2
6. SURFACE HAZARDS (609.5): GRAB BARS AND ANY WALL OR OTHER SURFACES ADJACENT TO GRAB BARS SHALL BE FREE OF SHARP AND ABRASIVE ELEMENTS AND SHALL HAVE ROUND EDGES.
7. FITTINGS (609.6): GRAB BARS SHALL NOT ROTATE WITHIN THEIR FITTINGS.
8. INSTALLATION (609.7): GRAB BARS SHALL BE INSTALLED IN ANY MANNER THAT PROVIDES A GRIPPING SURFACE AT THE SPECIFIED LOCATIONS AND THAT DOES NOT OBSTRUCT THE REQUIRED CLEAR FLOOR SPACE.B HORIZONTAL AND VERTICAL GRAB BARS SHALL BE PERMITTED TO BE SEPARATE BARS, A SINGLE BAR PIECE, OR A COMBINATION THEREOF.
9. STRUCTURAL STRENGTH (609.8): ALLOWABLE STRESSES SHALL NOT BE EXCEEDED FOR MATERIALS USED WHEN A VERTICAL OR HORIZONTAL FORCE OF 250 POUNDS IS APPLIED AT ANY POINT ON THE GRAB BAR, FASTENER, MOUNTING DEVICE, OR SUPPORTING STRUCTURE.

(B) ELEVATION

(A) PLAN

FIG 602.5 - DRINKING FOUNTAIN SPOUT LOCATION

(A) WHEELCHAIR ACCESSIBLE WATER CLOSETS

(B) AMBULATORY ACCESSIBLE WATER CLOSETS

FIG 604.2 - WATER CLOSET LOCATION

FIG 604.3 - SIZE OF CLEARANCE FOR WATER CLOSETS

FIG 604.5.1 - SIDE WALL GRAB BAR AT WATER CLOSETS

FIG 604.5.2 - REAR WALL GRAB BAR AT WATER CLOSETS

604.7 (A) - DISPENSER OUTLET LOCATION (PROTRUDING DISPENSER BELOW GRAB BAR)

604.7 (B) - DISPENSER OUTLET LOCATION (PROTRUDING DISPENSER ABOVE GRAB BAR)

604.7 (C) - DISPENSER OUTLET LOCATION (RECESSED DISPENSER)

(A) ADULT WALL HUNG WATER CLOSET

(B) ADULT FLOOR MOUNTED WATER CLOSET & CHILDREN'S WATER CLOSET

FIG 604.9.2 - WHEELCHAIR ACCESSIBLE TOILET COMPARTMENTS

FIG 604.9.3.1 (A) - WHEELCHAIR ACCESSIBLE COMPARTMENT DOOR OPENINGS (FRONT PARTITION)

FIG 604.9.3.1 (B) - WHEELCHAIR ACCESSIBLE COMPARTMENT DOOR OPENINGS (SIDE WALL OR PARTITION)

FIG 604.9.3.1 (C) - WHEELCHAIR ACCESSIBLE COMPARTMENT DOOR OPENINGS (ALTERNATE)

(A) ELEVATION - ADULT

(B) ELEVATION - CHILDREN

(C) PLAN

FIG 604.9.5 - WHEELCHAIR ACCESSIBLE TOILET COMPARTMENT TOE CLEARANCE

FIG 604.10 - AMBULATORY ACCESSIBLE TOILET COMPARTMENT

(A) WALL HUNG TYPE

(B) STALL TYPE

FIG 605.2 - HEIGHT AND DEPTH OF URINALS

FIG 608.2.2 & 608.3.2 - ROLL-IN SHOWER COMPARTMENT SIZE AND CLEARANCE

FIG 608.4.2 - ROLL-IN SHOWER CONTROL & HANDSHOWER LOCATION

(B) PLAN

(A) ELEVATION

FIG 607.4.2 - GRAB BARS-BATHTUBS WITHOUT PERMANENT SEATS

FIG 608.2.1 & 608.3.1 - TRANSFER-TYPE SHOWER COMPARTMENT SIZE AND CLEARANCE

(A) (CIRCULAR)

(B) (NONCIRCULAR)

(C) (NONCIRCULAR)

FIG 609.2 - SIZE OF GRAB BARS

FIG 609.3 - SPACING OF GRAB BARS

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Expiration Date: 2025-12-31

SHEET INFORMATION

Project #: 23-122
Issued For: Permit/Bid
Date: 2024-02-26
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SHEET TITLE

Accessibility Requirements

SHEET NUMBER

T1.03

Design No. U305

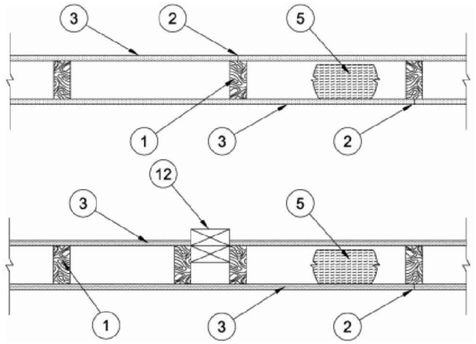
August 15, 2013

Bearing Wall Rating — 1 Hr

Finish Rating — See Items 3, 3A, 3D, 3E, 3F, 3G, 3H, 3J and 3L.

STC Rating - 56 (See Item 9)

Load Restricted for Canadian Applications — See Guide BXUV7



1. **Wood Studs —** Nom 2 by 4 in. spaced 16 in. OC max, effectively firestopped.

2. **Joints and Nail-Heads —** Joints covered with joint compound and paper tape. Joint compound and paper tape may be omitted when square edge boards are used. As an alternate, nom 3/32 in. thick gypsum veneer plaster may be applied to the entire surface of Classified veneer baseboard with the joints reinforced with paper tape. Nailheads exposed or covered with joint compound.

3. **Gypsum Board* —** 5/8 in. thick paper or vinyl surfaced, with beveled, square, or tapered edges, applied either horizontally or vertically. Gypsum panels nailed 7 in. OC with 6d cement coated nails 1-7/8 in. long, 0.0915 in. shank diam and 15/64 in. diam heads. When used in wdths other than 48 in., gypsum panels are to be installed horizontally. For an alternate method of attachment of gypsum panels, refer to Item 6, 6A or 6B, **Steel Framing Members***.

When Item 6 ,6B, or 6C **Steel Framing Members***, are used, gypsum panels attached to furring channels with 1 in. long Type S bugle-head steel screws spaced 12 in. OC.

When Item 6A, **Steel Framing Members***, is used, two layers of gypsum panels attached to furring channels. Base layer attached to furring channels with 1 in. long Type S bugle-head steel screws spaced 12 in. OC. Face layer attached to furring channels with 1-5/8 in. long Type S bugle-head steel screws spaced 12 in. OC. All joints in face layers staggered with joints in base layers. One layer of gypsum board attached to opposite side of wood stud without furring channels as described in Item 3.

When Item 7, resilient channels are used, 5/8 in. thick, 4 ft wide gypsum panels applied vertically. Screw attached furring channels with 1 in. long, self-drilling, self-tapping Type S or S-12 steel screws spaced 8 in. OC, vertical joints located midway between studs.

4. **Steel Corner Fasteners — (Optional) —** For use at wall corners. Channel shaped, 2 in. long by 1 in. high on the back side with two 1/8 in. wide cleats protruding into the 5/8 in. wide channel, fabricated from 24 gauge galv steel. Fasteners applied only to the end or cut edge (not along tapered edges) of the gypsum board, no greater than 2 in. from corner of gypsum board, max spacing 16 in. OC. Nailed to adjacent stud through tab using one No. 6d cement coated nail per fastener. Corners of wall board shall be nailed to top and bottom plate using No. 6d cement coated nails.

5. **Batts and Blankets* —** (Optional - Required when Item 6A is used) Glass fiber or mineral wool insulation. Placed to completely or partially fill the stud cavities. When Item 6A is used, glass fiber or mineral wool insulation shall be placed to completely fill the stud cavities and shall be secured to the studs 24 in. OC with staples, nails or screws.

7. **Furring Channel —** Optional - Not Shown - For use on one side of the wall - Resilient channels, 25 MSG galv steel, spaced vertically 24 in. OC, flange portion screw attached to one side of studs with 1-1/4 in. long diamond shaped point, double lead Phillips head steel screws. When resilient channels are used, insulation, Items 5C or 5D is required.

7A. **Steel Framing Members* —** Optional - Not Shown - Used as an alternate method to attach resilient channels (Item 7) to one side of studs only. Clips attached at each intersection of the resilient channel and the wood studs (Item 1). Resilient channels are friction fitted into clips, and then clips are secured to the wood stud with min. 1-3/4 in. long diamond shaped point, double lead Phillips head steel screws through the center hole of the clip and the resilient channel flange.

8. **Caulking and Sealants —** (not shown, optional) A bead of acoustical sealant applied around the partition perimeter for sound control.

9. **STC Rating —** The STC Rating of the wall assembly is 56 when it is constructed as described by Items 1 through 6, except:

A. Item 2, above - Nailheads Shall be covered with joint compound.

B. Item 2, above - Joints As described, shall be covered with fiber tape and joint compound.

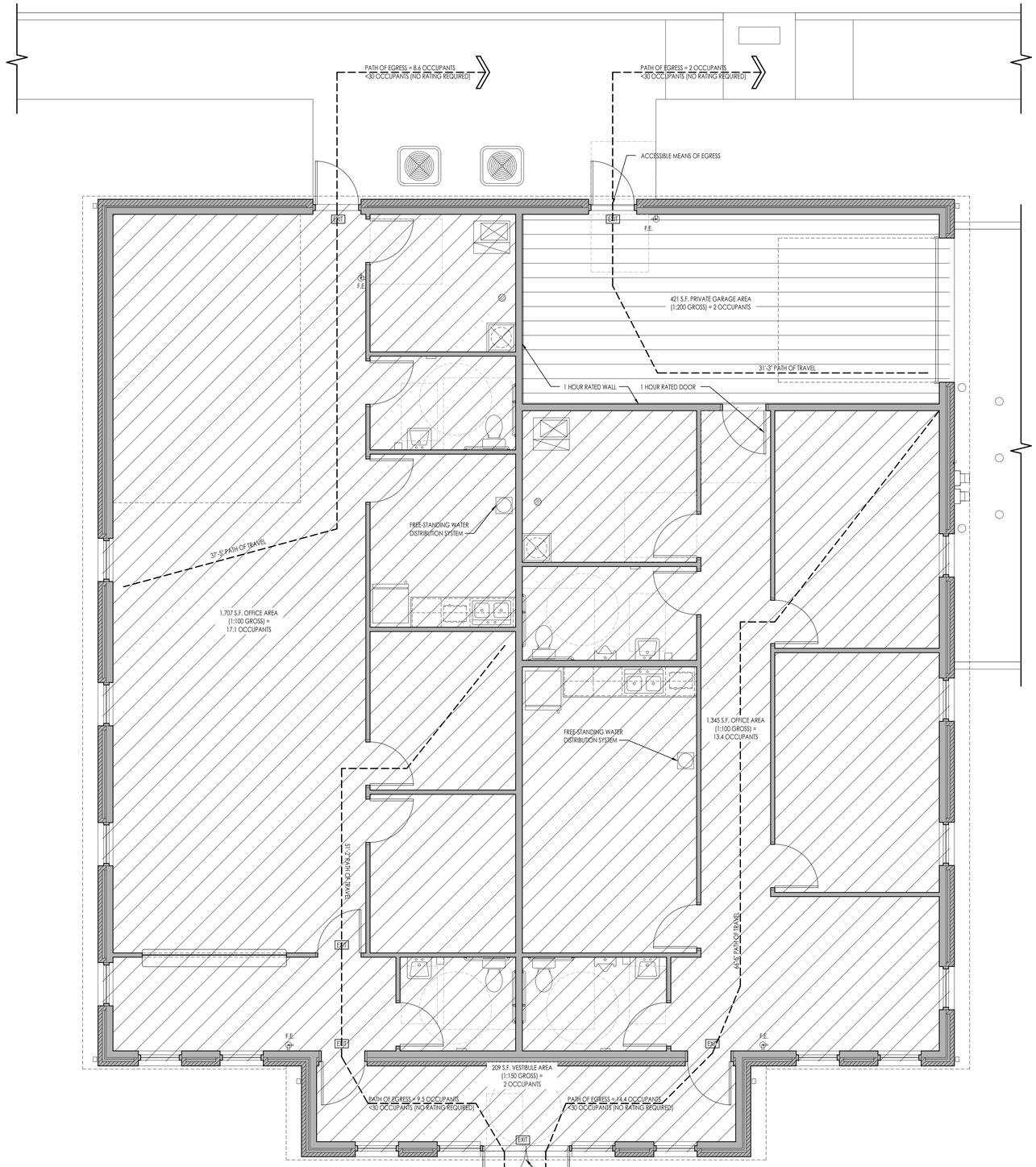
C. Item 5, above - Batts and Blankets* The cavities formed by the studs shall be friction fit with R-19 unfaced fiberglass insulation batts measuring 6-1/4 in. thick and 15-1/4 in. wide.

D. Item 6, above - Steel Framing Members* Type RSIC-1 clips shall be used to attach gypsum board to studs on either side of the wall assembly.

E. Item 8, above - Caulking and Sealants (not shown) A bead of acoustical sealant shall be applied around the partition perimeter for sound control.

F. Steel Corner Fasteners (Item 4), Fiber, Sprayed (Items 5A and 5B) and Steel Framing Members (Item 6A), not evaluated as alternatives for obtaining STC rating.

10. **Wall and Partition Facings and Accessories* —** (Optional, Not shown) — Nominal 1/2 in. thick, 4 ft wide panels, for optional use as an additional layer on one or both sides of the assembly. Panels attached in accordance with manufacturer's recommendations. When the QR-510 panel is installed between the wood framing and the UL Classified gypsum board, the required UL Classified gypsum board layer(s) is/are to be installed as indicated as to fastener type and spacing, except that the required fastener length shall be increased by a minimum of 1/2 in. Not evaluated or intended as a substitute for the required layer(s) of UL Classified Gypsum Board.



A Code Plan

1/4" = 1'-0"

BUILDING CODE DATA

PROJECT SCOPE:
THE PROJECT ENTAILS THE NEW BUILD OF A MIXED USE SEPARATED OFFICE BUILDING WITH A PRIVATE GARAGE. THE PRIVATE GARAGE IS INTENDED FOR THE STORAGE OF VEHICLES ONLY. WITH NO PROVISIONS FOR REPAIRING OR SERVICING SUCH VEHICLES.

APPLICABLE CODES:

OHIO BUILDING CODE (O.B.C.)	2017 EDITION (WITH 2018 AMENDMENTS)
OHIO MECHANICAL CODE (O.M.C.)	2017 EDITION (WITH 2018 AMENDMENTS)
OHIO PLUMBING CODE (O.P.C.)	2017 EDITION (WITH 2018 AMENDMENTS)
OHIO FIRE CODE (O.F.C.)	2017 EDITION (WITH 2018 AMENDMENTS)
NATIONAL ELECTRIC CODE (N.E.C.)	2020 EDITION NFPA 70
ASHRE 90.1 ENERGY COMPLIANCE	2010 EDITION
ANSI A117.1 - ACCESSIBLE BUILDINGS	2009 EDITION

USE GROUPS (CHAPTER 3)
ENTIRE BUILDING: MIXED-USE SEPARATED
OFFICES: B-USE
PRIVATE GARAGE: S-1 USE

CONSTRUCTION TYPE (602.2)
TYPE VB - UNSPRINKLERED, 1-STORY BUILDING

BUILDING AREA: VALUES INDICATED BELOW ARE GROSS

OVERALL BUILDING:	3,682 S.F.
OFFICES & VESTIBULE:	3,261 S.F.
PRIVATE GARAGE:	421 S.F.

ALLOWABLE HEIGHT (TABLE 504.3)
40' PERMITTED, 15'-4" AT ROOF RIDGE

ALLOWABLE NUMBER OF STORIES (TABLE 504.4)
1 STORY PERMITTED, 1 STORY PROPOSED

NON-SPRINKLERED MIXED USE ALLOWABLE AREAS (MAX SF PER OBC TABLE 506.2)
B-BUSINESS AND S-1 STORAGE EQUALLY RESTRICTIVE - 9,000 S.F.

FIRE RESISTANCE RATINGS (OBC TABLE 601 & 705.5)

PRIMARY STRUCTURE	0 HR
BEARING WALLS	0 HR (EXTERIOR), 0 HR (INTERIOR)
NON-BEARING INTERIOR	0 HR
FLOOR	0 HR
ROOF	0 HR
EXTERIOR WALLS (TABLE 705.5)	X < 5' = 1 HR; 5' < X < 10' = 1 HR; 10' < X < 30' = 0 HR; X > 30' = 0 HR

INTERIOR FINISHES (TABLE 803.11 B-USE AS MOST RESTRICTIVE, NON-SPRINKLERED)

INTERIOR STAIRS AND EXIT PASSAGEWAYS	CLASS A
INTERIOR CORRIDORS AND EXIT ENCLOSURES	CLASS B
ROOMS & ENCLOSED SPACES	CLASS C

FIRE EXTINGUISHERS (906.3(1), NFPA 10)
B-USE (LOW HAZARD) AND S-1 USE (MODERATE HAZARD) - 10lbs A/B/C PORTABLE FIRE EXTINGUISHERS (F.E.) SHALL BE INSTALLED WITH 75 FEET MAX TRAVEL DISTANCE (SEE ADJACENT PLAN).

FIRE ALARM (907.2.2 GROUP B)
SEE HVAC PLANS FOR DUCT DETECTOR REQUIREMENTS
BUILDING FIRE ALARM SYSTEM NOT REQUIRED AND NOT PROVIDED

OCCUPANCY (TABLE 1004.1.2)
SEE ADJACENT PLAN FOR PATHS OF EGRESS AND OCCUPANCY CALCULATIONS

OFFICE AREAS AND VESTIBULES (B-USE):	31 OCCUPANTS
PRIVATE GARAGE (U-USE):	2 OCCUPANTS
TOTAL BUILDING OCCUPANT LOAD:	33 OCCUPANTS

EGRESS WIDTH (1005.3.2)
33 OCCUPANTS x 0.2" EACH = 6.6" REQUIRED, 34" MIN. PROVIDED

NUMBER OF EXITS
PER TABLE 1006.2.1: 1 EXIT REQUIRED WITH 100'-0" MAX TRAVEL DISTANCE (B & S-1 USE) IN VARIOUS SPACES OF PLAN
PER 1009.1: 1 EXIT FROM OFFICES REQUIRED TO BE HANDICAP ACCESSIBLE: 1 ACCESSIBLE EXIT PROVIDED
PER 1009.1: 1 EXIT FROM PRIVATE GARAGE REQUIRED TO BE HANDICAP ACCESSIBLE: 1 ACCESSIBLE EXIT PROVIDED

CORRIDORS (1020.1)
CORRIDORS ARE NOT REQUIRED WHERE THE OCCUPANT LOAD SERVED BY SUCH CORRIDOR IS LESS THAN 30. ALL OCCUPANCIES SERVED ARE LESS THAN 30; REFER TO CODE PLAN

PLUMBING FIXTURE REQUIREMENTS (TABLE 2902.1)

BUSINESS USE:	
WATER CLOSETS (1/50):	0.62 REQUIRED, 4 PROVIDED
LAVATORIES (1/80):	0.39 REQUIRED, 4 PROVIDED
DRINKING FOUNTAIN (1/100):	0.31 REQUIRED, 1 FREE-STANDING WATER DISTRIBUTION SYSTEM PROVIDED PER IPC 410.4
MOP SINK:	1 REQUIRED, 2 PROVIDED
S-1 STORAGE USE:	
WATER CLOSETS (1/100):	0.02 REQUIRED, 2 PROVIDED
LAVATORIES (1/100):	0.02 REQUIRED, 2 PROVIDED
DRINKING FOUNTAIN (1,000):	0.002 REQUIRED, 1 FREE-STANDING WATER DISTRIBUTION SYSTEM PROVIDED PER IPC 410.4
MOP SINK:	1 REQUIRED, 1 PROVIDED

OCCUPANCY LEGEND

S-1 STORAGE

B-BUSINESS

Architect

OMNESS DESIGN, INC.
140 FAIRFAX ROAD
MARION, OHIO 43302

PROJECT
Crawford Co.
Title Office & Crawford Co. Solid Waste District
New Office Building
2538 E. Mansfield St.
Bucyrus, OH 44820

STATE OF OHIO
PAUL K. OMNESS
13997
REGISTERED ARCHITECT

Paul K. Omness, OH License #13997
Expiration Date: 2025-12-31

SHEET INFORMATION

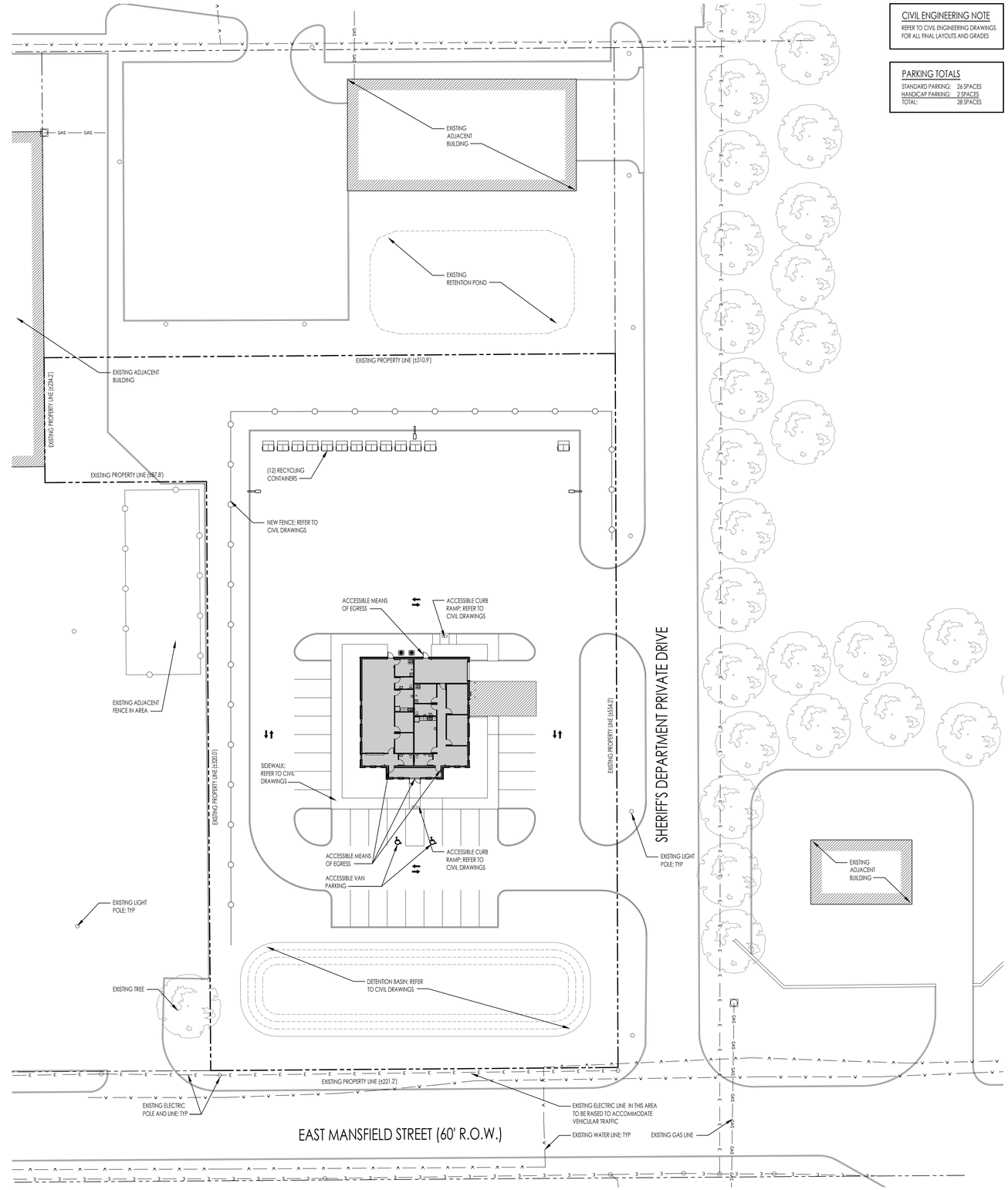
Project #:	23-122
Issued For:	Permit/Bid
Date:	2024-02-26
Revisions:	

SHEET TITLE

Code Data, Egress Plan & FIRE RATINGS

SHEET NUMBER

T1.04



A Site Plan
1/32" = 1'-0"

CIVIL ENGINEERING NOTE

REFER TO CIVIL ENGINEERING DRAWINGS FOR ALL FINAL LAYOUTS AND GRADES

PARKING TOTALS

STANDARD PARKING:	26 SPACES
HANDICAP PARKING:	2 SPACES
TOTAL:	28 SPACES

Architect

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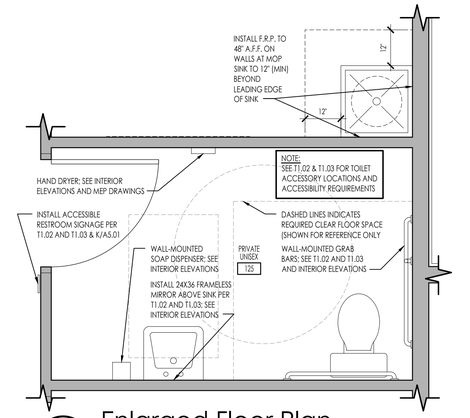
Revisions:	

SHEET TITLE

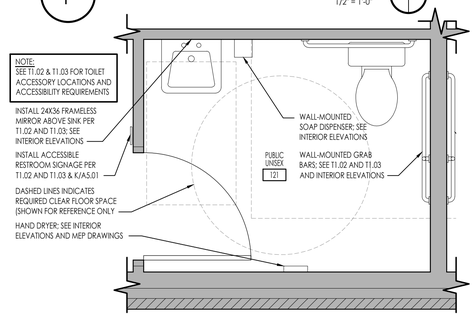
Architectural Site Plan

SHEET NUMBER

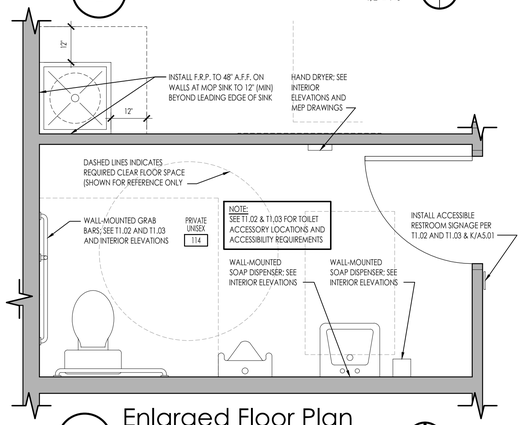
SP.01



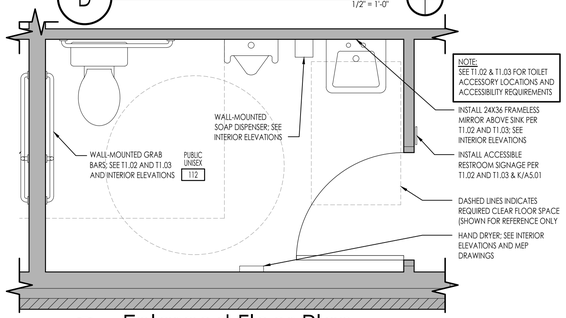
F Enlarged Floor Plan
1/2" = 1'-0"



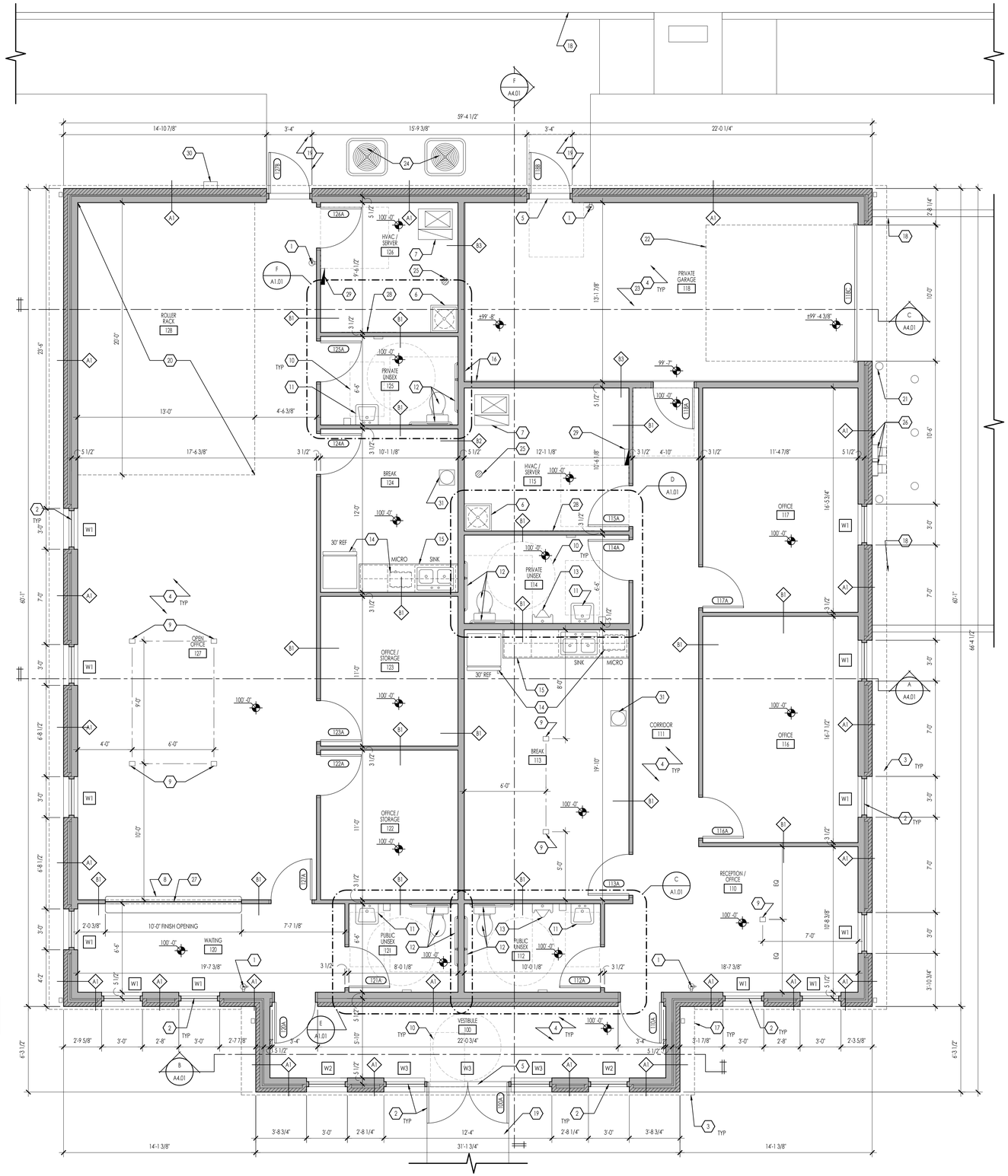
E Enlarged Floor Plan
1/2" = 1'-0"



D Enlarged Floor Plan
1/2" = 1'-0"



C Enlarged Floor Plan
1/2" = 1'-0"



B Floor Plan
1/4" = 1'-0"

GENERAL PLAN NOTES

A. ALL INDICATED DIMENSIONS ON FLOOR PLAN ARE TO FACE OF MASONRY / FACE OF STUD UNLESS NOTED OTHERWISE.

B. DOOR JAMBS TO LOCATE 4" OFF OF ADJACENT WALLS UNLESS NOTED OTHERWISE.

C. G.C. TO COORDINATE ALL REQUIRED MASONRY AND FRAMED ROUGH OPENINGS WITH SELECTED DOORS AND WINDOWS.

D. WALL LEGEND INTENDED TO GIVE A GENERAL OVERVIEW OF SHEATHING MATERIALS. VERIFY ALL SHEATHING MATERIALS AND THICKNESSES W/ SECTIONS AND STRUCTURAL DRAWINGS.

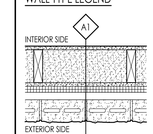
E. COORDINATE REQUIRED CONCRETE BLOCK/BRICK ELEVATIONS AND STEPS W/ SLOPING GRADES. REFER TO CIVIL DRAWINGS AND WALL SECTIONS.

F. REFER TO SPECIFICATIONS AND INTERIOR ELEVATIONS FOR RESTROOM ACCESSORIES; REFER TO PLUMBING DRAWINGS FOR FIXTURE SPECS.

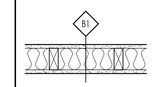
PLAN CODED NOTES

1. FIRE EXTINGUISHER "FE" INSTALLED PER NFPA 10 AND OBC 906 - MULTIPURPOSE DRY-CHEMICAL TYPE: UL-RATED 10 LB. NOMINAL CAPACITY, WITH MONOAMMONIUM PHOSPHATE-BASED DRY CHEMICAL IN MANUFACTURER'S STANDARD ENAMELED CONTAINER; G.C. TO LOCATE FINAL LOCATIONS WITH FIRE OFFICAL
2. PREFINISHED ALUMINUM STOREFRONT SYSTEM; SEE ELEVATIONS AND DOOR AND WINDOW SCHEDULE FOR REQUIREMENTS
3. DASHED LINES INDICATE ROOF OVERHANG ABOVE; SEE ELEVATIONS AND SECTIONS
4. 4" CONCRETE SLAB ON GRADE: SEE STRUCTURAL FOR REINFORCING; PREP: VAPOR BARRIER; AGGREGATE BASE AND OTHER REQUIREMENTS; SEE ELECTRICAL, PLUMBING, AND LOW VOLTAGE PLANS FOR UNDER-SLAB CONDUIT LOCATIONS AND REQUIREMENTS PRIOR TO COMMENCEMENT
5. PROVIDE ACCESSIBLE THRESHOLDS AT EACH DOOR LOCATION; SEE DOOR DETAILS
6. 24"x24" FLOOR MOP BASIN WITH WALL-MOUNTED WATER HEATER ABOVE; SEE PLUMBING; PROVIDE F.R.P. TO 4'-0" A.F.F. AT 12" BEYOND LEADING EDGE ON ADJACENT GYP BD WALLS
7. HVAC UNITS; REFER TO MEP DRAWINGS
8. SERVICE COUNTER; REFER TO ELEVATIONS AND DETAILS
9. FLOOR BOXES; REFER TO ELECTRICAL DRAWINGS; COORDINATE WITH INSTALLATION OF SLAB
10. DASHED LINES INDICATE REQUIRED ACC CLEAR FLOOR SPACE; REFER TO SEE T1.02 & T1.03
11. LAVATORY; SEE T1.02 & T1.03; INSTALL IN-WALL BLOCKING AS REQUIRED; SEE INTERIOR ELEVATIONS AND MEP DRAWINGS
12. WATER CLOSET AND ASSOCIATED GRAB BARS; SEE T1.02 & T1.03; INSTALL IN WALL BLOCKING AS REQUIRED; SEE INTERIOR ELEVATIONS AND MEP DRAWINGS
13. URINAL; SEE T1.02 & T1.03; INSTALL IN-WALL BLOCKING AS REQUIRED; SEE INTERIOR ELEVATIONS AND MEP DRAWINGS
14. KITCHENETTE APPLIANCE SHOWN FOR REFERENCE ONLY; COORDINATE FIXTURE WITH TENANT PRIOR TO COMMENCEMENT; REFER TO MEP DRAWINGS
15. P. LAM. COUNTERTOP; SEE INT ELEVATIONS; DASHED LINES INDICATE CABINETS; SEE SECTIONS
16. LINE INDICATES CHANGE IN ELEVATION OF SLAB ON GRADE; REFER TO SECTIONS AND DETAILS
17. ROOF DRAIN DOWNSPOUT; SEE ROOF PLAN FOR LOCATIONS AND ROOF DETAILS FOR CONFIGURATION; SEE CIVIL ENGINEERING DRAWINGS FOR CONNECTION TO REST OF SITE
18. EDGE OF PARKING LOT CURB; REFER TO SITE PLAN AND CIVIL DRAWINGS
19. SIDEWALK; REFER TO SITE PLAN AND CIVIL DRAWINGS
20. ROLLER RACK PROVIDED BY OWNER; G.C. TO COORDINATE FLOOR TREATMENT/FINISH IN THIS AREA WITH OWNER; REFER TO STRUCTURAL
21. CONCRETE BOLLARDS; REFER TO DETAILS
22. DASHED LINE INDICATES OVERHEAD DOOR ABOVE: REFER TO DOOR SCHD AND ELEVATIONS
23. SLAB TO BE SLOPED 1/8" PER FOOT; REFER TO SECTIONS AND DETAILS
24. CONDENSING UNITS; REFER TO MEP DRAWINGS
25. FLOOR DRAIN: REFER TO MEP DRAWINGS
26. ELECTRICAL METER BANKS AND DISCONNECT; REFER TO MEP DRAWINGS
27. PLEXIGLASS RECEPTION WINDOW; REFER TO ELEVATIONS AND DETAILS
28. 48"X48" PLYWOOD MOUNTED AT 60" A.F.F.; COORD WITH INSTALL OF WATER HEATER AND ELEC PANEL
29. ELECTRICAL PANEL; REFER TO MEP DRAWINGS
30. CONTROL PANEL FOR LIFT STATION MOUNTED TO C.M.U.; PROVIDE SMOOTH FACE C.M.U. BEHIND CONTROL PANEL; REFER TO ELEVATIONS, MEP AND CIVIL DRAWINGS
31. FREE-STANDING WATER DISTRIBUTION SYSTEM BY OWNER

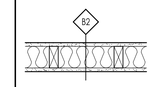
WALL TYPE LEGEND



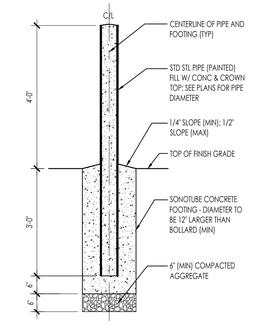
4" SPLIT FACE OR SMOOTH CMU VENEER (REFER TO ELEVATIONS FOR CONFIGURATION); ALL EXTERIOR CMU EXPOSED ABOVE GRADE TO RECEIVE WEATHER SEAL SILOXANE PD (BASIS OF DESIGN: PROSOCO SURE CLEAN OR EQUAL); C.M.U. VENEER TO BE ON 2" AIRSPACE ON R-3.8 MIN 3/4" CONT RIGID INSULATION ON BUILDING W.R.B. (SEE SPECS) ON 5/8" DENSGLASS ON 2X6 WOOD STUDS; PROVIDE R-20 MIN OPEN CELL INSULATION (IN STUD CAVITY) AND 5/8" GYP BD TO UNDERSIDE OF DECK; (M.R. OR GREENBOARD) AT RESTROOM, WATER HEATER; GARAGE OR MOP SINK LOCATIONS; REFER TO BUILDING AND WALL SECTIONS



2X4, 2X6 OR 2X8 WOOD STUDS @ 16" O.C. WITH 5/8" GYP BD EACH SIDE (M.R. OR GREENBOARD) AT RESTROOM, WATER HEATER; GARAGE OR MOP SINK LOCATIONS; PROVIDE BATT INSULATION IN CAVITIES



2X4, 2X6 OR 2X8 WOOD STUDS @ 16" O.C. WITH 5/8" TYPE 'X' GYP BD EACH SIDE TO UNDERSIDE OF DECK, 1-HOUR RATED (PER UL NO. U305; REFER TO FIRE RATINGS SHEET) (M.R. OR GREENBOARD) AT RESTROOM, WATER HEATER; GARAGE OR MOP SINK LOCATIONS; PROVIDE BATT INSULATION IN CAVITIES



A Bollard Detail
1/2" = 1'-0"

Architect

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140 FAIRFAX ROAD
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PROJECT
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New Office Building

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STATE OF OHIO
PAUL K. OMNESS
13997
REGISTERED ARCHITECT

Paul K. Omness, OH License #13997
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SHEET INFORMATION

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Revisions:	

SHEET TITLE

Floor Plan

SHEET NUMBER

A1.01

ROOF SYSTEM BASIS OF DESIGN: REFER TO SPECIFICATIONS; INSTALL PER MFR INSTRUCTIONS

NOTE:
FLASHING, FASTENERS AND METAL ACCESSORIES TO BE OF THE SAME METAL AS ROOFING MATERIAL

VENTILATION CALCULATIONS

AREA A (VESTIBULE):

TOTAL AREA: 194 S.F.

TOTAL RIDGE AND SOFFIT VENTILATION REQUIRED:

1/150 < AREA VENTILATED = (1/150) X 194 S.F. = 1.29 S.F.

TOTAL RIDGE AND SOFFIT VENTILATION PROVIDED: 1.98 S.F.

RIDGE VENTILATION PROVIDED:

31.40 S.I. X LN FT = 31.40 S.I. X 5.25 LN FT = 164.85 S.I. = 1.14 S.F.

SOFFIT VENTILATION PROVIDED:

2(11.52 S.I. X LN FT) = 2(11.52 S.I. X 5.25 LN FT) = 120.96S.I. = .84 S.F.

AREA B (OFFICES):

TOTAL AREA: 2,627 S.F.

TOTAL RIDGE AND SOFFIT VENTILATION REQUIRED:

1/150 < AREA VENTILATED = (1/150) X 2,627 S.F. = 17.51 S.F.

TOTAL RIDGE AND SOFFIT VENTILATION PROVIDED: 17.62 S.F.

ATTIC VENT VENTILATION PROVIDED:

60 S.I. X QUANTITY OF VENTS = 60 S.I. X 1 = 60 S.I. = .42 S.F.

RIDGE VENTILATION PROVIDED:

31.40 S.I. X LN FT = 31.40 S.I. X 45.5 LN FT = 1,428.70 S.I. = 9.92 S.F.

SOFFIT VENTILATION PROVIDED:

2(11.52 S.I. X LN FT) = 2(11.52 S.I. X 45.5 LN FT) = 1,048.32 S.I. = 7.28 S.F.

AREA C (OFFICES):

TOTAL AREA: 402 S.F.

TOTAL RIDGE AND SOFFIT VENTILATION REQUIRED:

1/150 < AREA VENTILATED = (1/150) X 402 S.F. = 2.68 S.F.

TOTAL SOFFIT VENTILATION PROVIDED: 2.82 S.F.

ATTIC VENT VENTILATION PROVIDED:

60 S.I. X QUANTITY OF VENTS = 60 S.I. X 4 = 240 S.I. = 1.67 S.F.

SOFFIT VENTILATION PROVIDED:

11.25 S.I. X LN FT = 11.25 S.I. X 14.75 LN FT = 165.94 S.I. = 1.15 S.F.

AREA D (GARAGE):

TOTAL AREA: 403 S.F.

TOTAL RIDGE AND SOFFIT VENTILATION REQUIRED:

1/150 < AREA VENTILATED = (1/150) X 403 S.F. = 2.69 S.F.

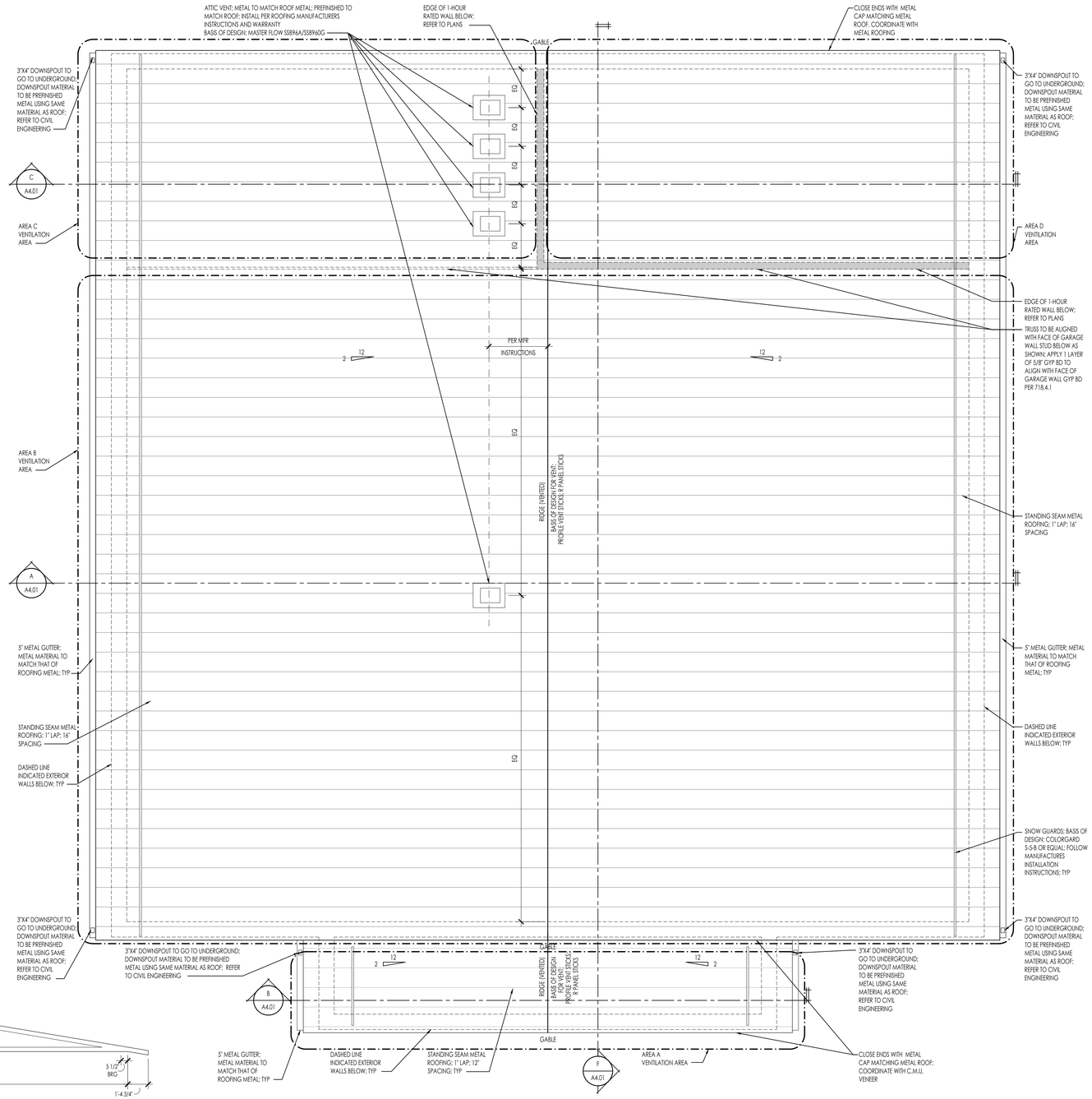
TOTAL RIDGE AND SOFFIT VENTILATION PROVIDED: 3.46 S.F.

RIDGE VENTILATION PROVIDED:

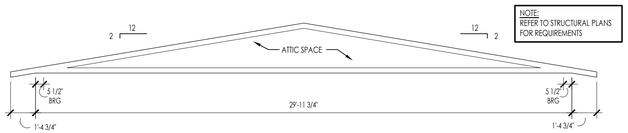
23.40 S.I. X LN FT = 23.40 S.I. X 14.25 LN FT = 333.45 S.I. = 2.32 S.F.

SOFFIT VENTILATION PROVIDED:

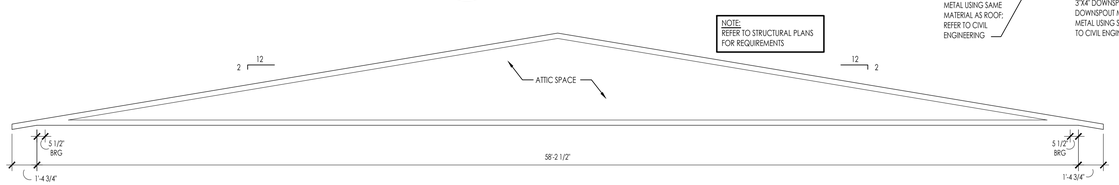
11.52 S.I. X LN FT = 11.52 S.I. X 14.25 LN FT = 164.16 S.I. = 1.14 S.F.



A Roof Plan
1/4" = 1'-0"



C Truss Profile
1/4" = 1'-0"



B Truss Profile
1/4" = 1'-0"

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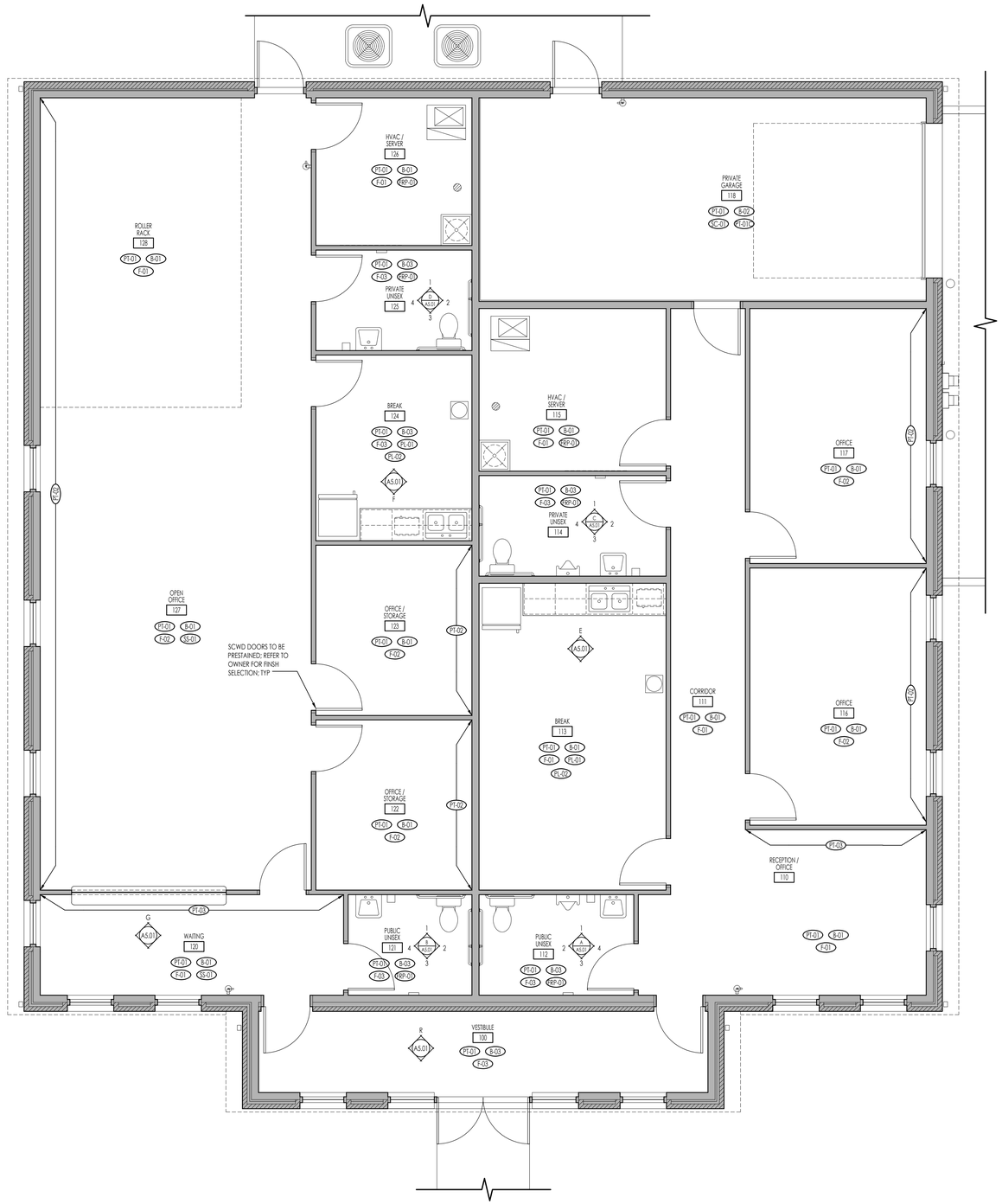
Roof Plan

SHEET NUMBER

A1.02



A Finish Plan
1/4" = 1'-0"

ROOM FINISH LEGEND (XX.XX)

MARK	MANUFACTURER	PATTERN	COLOR	REMARKS
PAINT				
PT-01	SHERWIN WILLIAMS OR EQUAL	EGGSHELL	SW 9682	
PT-01C	SHERWIN WILLIAMS OR EQUAL	EGGSHELL	SW 9682	GYP BD CEILING
PT-02	SHERWIN WILLIAMS OR EQUAL	EGGSHELL	SW 9129	
PT-03	SHERWIN WILLIAMS OR EQUAL	EGGSHELL	SW 6579	
FLOOR FINISHES				
F-01	MOHAWK GROUP (REFORESTATION - LARGE AND LOCAL	9.25X59 BRICK ASHLAR	RACEHORSE - 939	
F-02	MOHAWK GROUP (FLUX FOUNDATION - SHAPE AND FLOW)	24X24 BRICK ASHLAR	LEVI - 957	
F-03	DALTILE (ADVANTAGE)	12X24 CERAMIC TILE	TRUMPET GREY - EP22	
SC-01	SEALED CONCRETE			
WALL BASE				
B-01	MOHAWK GROUP	4" VINYL BASE	CHARCOAL	
B-02	PAINTED WOOD BASE	1X4 POPLAR	AS SELECTED BY OWNER	
B-03	DALTILE	3" BULLNOSE CERAMIC	TRUMPET GREY - EP22	
WALL FINISH				
FRP-01	CRANE COMPOSITES	PEBBLED FIBER REINFORCED PANEL	WHITE	
PLASTIC LAMINATE				
PL-01	FORMICA (CABINET)	PREMIUM LAMINATE - MATTE	MOUSE - 928	
PL-02	FORMICA (COUNTER)	PREMIUM LAMINATE - ETCHINGS	PALOMA POLAR 6698	
SOLID SURFACE				
SS-01	FORMICA	SOLID SURFACE	ARTIC	

GENERAL FINISH NOTES

A. REFER TO OWNER'S SUPPLIED SCHEDULE AND TO SPECIFIC NOTES AND/OR SPECIFIC DETAILS. ALSO SEE INTERIOR ELEVATION SHEETS AND RELATED DETAILS.

B. ALL AREAS TO BE PAINTED UNLESS NOTED OTHERWISE.

C. GYPSUM WALLBOARD WALLS, CEILINGS, SOFFITS, FASCIAS, LIGHT POCKETS AND SIMILAR AREAS SHALL BE MADE READY FOR PAINTING. SEE SCHEDULE FOR PAINT COLOR OR APPLICATION OF OTHER FINISH MATERIAL.

D. WALL SURFACES SHALL BE PREPARED FOR PAINT AND APPLIED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATION. PROVIDE MINIMUM TWO COATS OVER PRIMER AS REQUIRED. RE-PAINT AND TOUCH-UP WHERE DEEMED NECESSARY BY PROJECT ARCHITECT BEFORE COMPLETION.

E. WALL SURFACES RECEIVING VINYL AND/OR FABRIC WALLCOVERING SHALL RECEIVE ONE COAT OF PRIMER PAINT IN FLAT FINISH.

F. ALL WALLCOVERING IS TO BE APPLIED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

G. EXAMINE MATERIAL FOR COLOR VARIATIONS OR DEFECTS AND ADVISE PROJECT ARCHITECT PRIOR TO CUTTING OF MATERIAL. FAILURE TO DO SO WILL RESULT IN THE GENERAL REPLACEMENT AND/OR REINSTALLATION OF THESE GOODS.

H. WHERE FLOORING TRANSITIONS OCCUR IN DOORWAYS, LOCATE SEAMS UNDER CENTER OF DOOR.

I. PROVIDE AND INSTALL WOOD WALL BASE WHERE INDICATED; MITER AT ALL CORNERS.

J. CONTRACTOR IS TO PROVIDE A PROTECTIVE COVERING FOR FLOORING MATERIAL (I.E. CARPET, TILE, MARBLE, ETC.) DURING CONSTRUCTION.

K. REFER TO BUILDING CODE DATA ON T1.04 FOR FINISH CLASS REQUIREMENTS FOR BUILDING COMPONENTS.

L. U.N.O. FLOORING TO BE CENTERED IN ROOM.

M. PROVIDE VINYL REDUCER STRIPS WHERE DISSIMILAR FLOORING MATERIALS MEET: FLOORING CONTRACTOR TO SUBMIT SAMPLES TO PROJECT ARCHITECT FOR APPROVAL.

N. INSPECT SUB FLOORING AT SURFACES TO RECEIVE NEW FLOORING. REPAIR AND PREP UNDERLAYMENT AS REQUIRED. ANY PORTIONS OF FLOORING WITH SIGNS OF SUB FLOORING FAILURE TO BE INSPECTED AND REPAIRED AS REQUIRED.

O. ALL GYPSUM BOARD WALL SURFACES TO BE PAINTED; COLOR PER FINISH PLAN; REPAIR/REPLACE ANY DAMAGED AREAS OF EXISTING DRYWALL AS REQUIRED.

P. ALL DOOR AND FRAMES TO BE PAINTED; COLOR TO MATCH ADJACENT WALL U.N.O.

Q. ALL GYPSUM BOARD WALL SURFACES IN RESTROOMS TO BE PAINTED WITH A SCRUBBABLE ENAMEL PAINT; COLOR PER FINISH PLAN AND SCHEDULE

R. REFER TO WALL SCHEDULE FOR SURFACE TREATMENT OF BLOCK

Architect

OMNESS DESIGN, INC.
140 FAIRFAX ROAD
MARION, OHIO 43302

PROJECT
Crawford Co.
Title Office & Crawford Co. Solid Waste District
New Office Building
2538 E. Mansfield St.
Bucyrus, OH 44820

STATE OF OHIO
PAUL K. OMNESS
13997
REGISTERED ARCHITECT

Paul K. Omness, OH License #13997
Expiration Date: 2025-12-31

SHEET INFORMATION

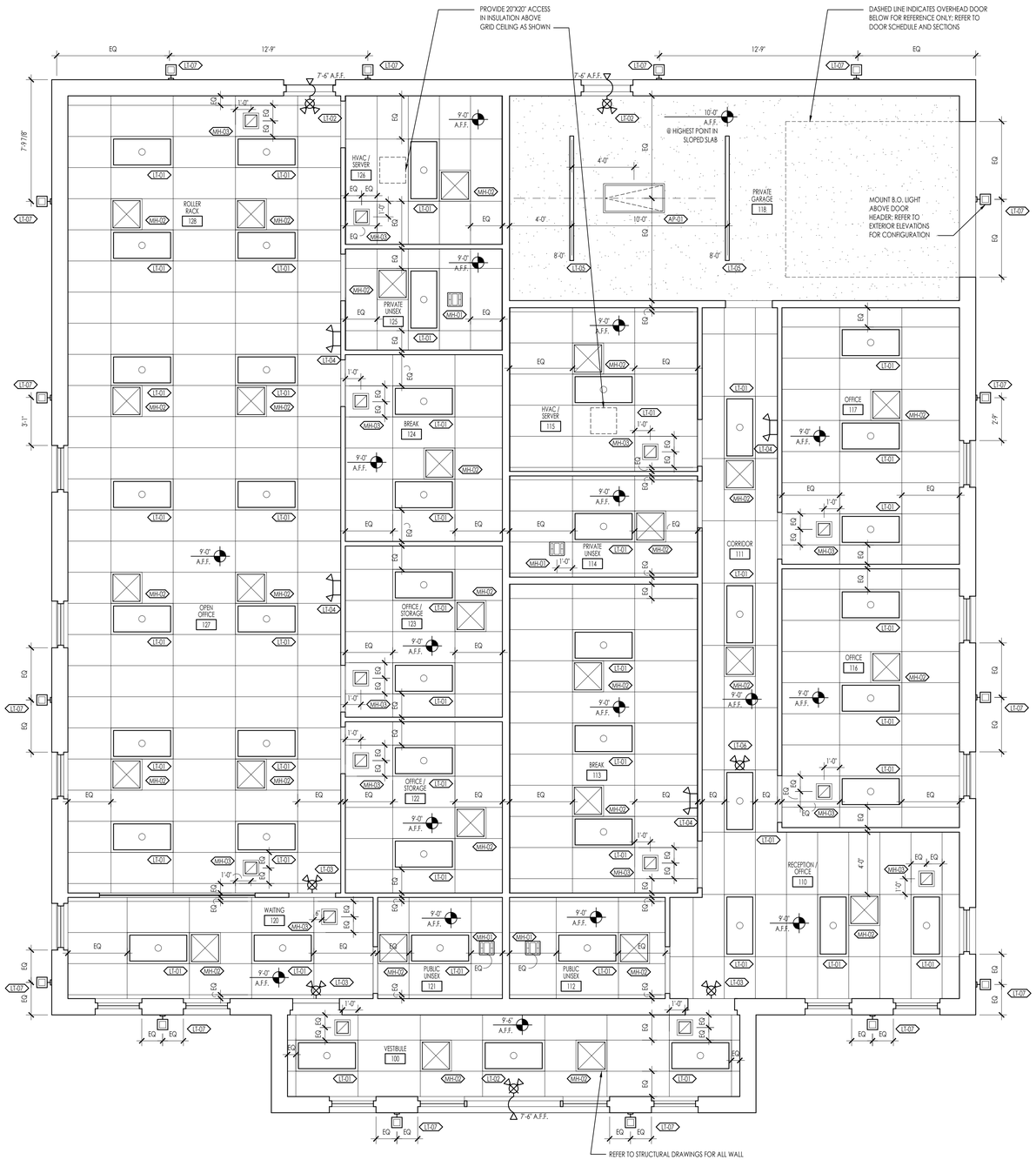
Project #: 23-122
Issued For: Permit/Bid
Date: 2024-02-26
Revisions:

SHEET TITLE

Finish Plan

SHEET NUMBER

A1.03



B Reflected Ceiling Plan

1/4" = 1'-0"

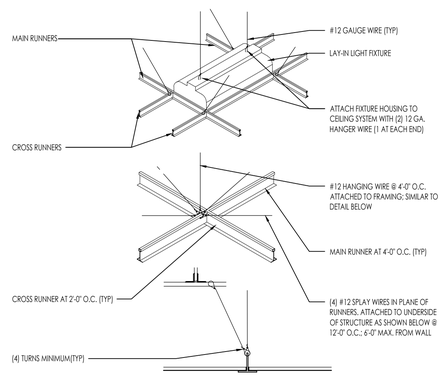
CEILING LEGEND XX-XX

ITEM NO.	SYMBOL	EQUIPMENT CATEGORY	MANUFACTURER	MODEL	COLOR/FINISH	REMARKS
CEILING ELEMENTS						
-		24"x48"x5/8" ACOUSTIC CEILING TILE	-	15/16" EXPOSED "T" CEILING GRID	WHITE	REFER TO CEILING PLAN REFER TO DETAIL A/A2.01
-		(1) 5/8" GYP BD CEILING	-	-	REFER TO PLANS	APPLIED DIRECTLY TO BOTTOM OF JOISTS ABOVE
AP-01		1 HOUR RATED SCISSOR ATTIC LADDER ACCESS HATCH	BASIS OF DESIGN: FAKRO OR APPROVED EQUAL	22.5" X 47"		CEILING RECESSED AS SHOWN; INSTALL PER MANUFACTURERS INSTURCTIONS CENTER BETWEEN TRUSSES
MECHANICAL						
MH-01		EXHAUST FAN	-	-	-	CEILING MOUNT IN MIDDLE OF GRID AS SHOWN UNLESS OTHERWISE NOTED REFER TO MEP
MH-02		SUPPLY DIFFUSER	-	-	-	REFER TO MEP
MH-03		RETURN GRILLE	-	-	-	REFER TO MEP
LIGHTING						
LT-01		2X4 LAY-IN LED FIXTURE	-	-	-	REFER TO MEP
LT-02		EMERGENCY EXIT SIGN/LIGHT COMBO AND EXTERIOR EMERGENCY LIGHT	-	-	-	WALL MOUNTED REFER TO MEP
LT-03		EMERGENCY EXIT SIGN/LIGHT COMBO	-	-	-	WALL MOUNTED REFER TO MEP
LT-04		EMERGENCY LIGHT FIXTURE	-	-	-	REFER TO MEP
LT-05	##	LED STRIP LIGHT CEILING MOUNTED	-	-	-	REFER TO MEP
LT-06		EMERGENCY EXIT SIGN/LIGHT COMBO	-	-	-	CEILING MOUNTED REFER TO MEP
LT-07		EXTERIOR LIGHT WALL PACK	-	-	-	MOUNT @ 10'-0" TO BOTTOM U.N.O. REFER TO ELEVATIONS AND MEP

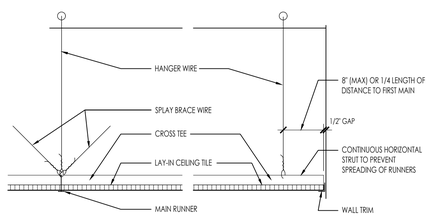
RCP GENERAL NOTES

A. SEE MEP DRAWINGS FOR LOCATION AND TYPE OF SUPPLY & RETURN AIR DIFFUSERS, EXHAUST FANS, THERMOSTATS, AND OTHER RELATED HVAC DEVICES, REQUIREMENTS AND CALCULATIONS.

B. SEE ELECTRICAL DRAWINGS FOR LOCATIONS AND TYPES OF POWER LIGHTING FIXTURES, CIRCUITS, SWITCHES, AND OTHER RELATED ELECTRICAL DEVICES, REQUIREMENTS AND CALCULATIONS.



LATERAL BRACING FOR SUSPENDED CEILING MUST BE PROVIDED PER CODE REQUIREMENTS WHERE CEILING LOADS ARE LESS THAN 5# PER FT. AND NOT SUPPORTING INTERIOR PARTITIONS. CEILING BRACING SHALL BE PROVIDED BY (4) #12 GAUGE WIRES SECURED TO THE MAIN RUNNER WITHIN 2" OF THE CROSS RUNNER INTERSECTIONS AND SPLAYED 90 DEGREES FROM THE PLANE OF THE CEILING. THESE HORIZONTAL RESTRAINT POINTS SHALL BE PLACED AT 12'-0" O.C. IN BOTH DIRECTIONS, WITH THE FIRST POINT WITHIN 4'-0" FROM EACH WALL. ATTACHMENT OF THE RESTRAINT WIRES TO THE STRUCTURE ABOVE SHALL BE ADEQUATE FOR THE LOAD IMPOSED.



A Lay-In Grid Detail

1" = 1'-0"

Architect

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STATE OF OHIO
PAUL K. OMNESS
13997
REGISTERED ARCHITECT

Paul K. Omness, OH License #13997
Expiration Date: 2025-12-31

SHEET INFORMATION

Project #:	23-122
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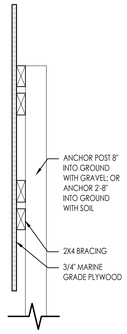
SHEET TITLE

Reflected Ceiling Plan

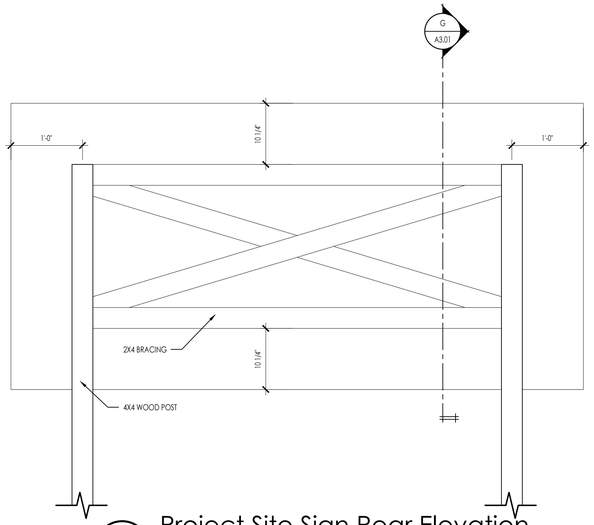
SHEET NUMBER

A2.01



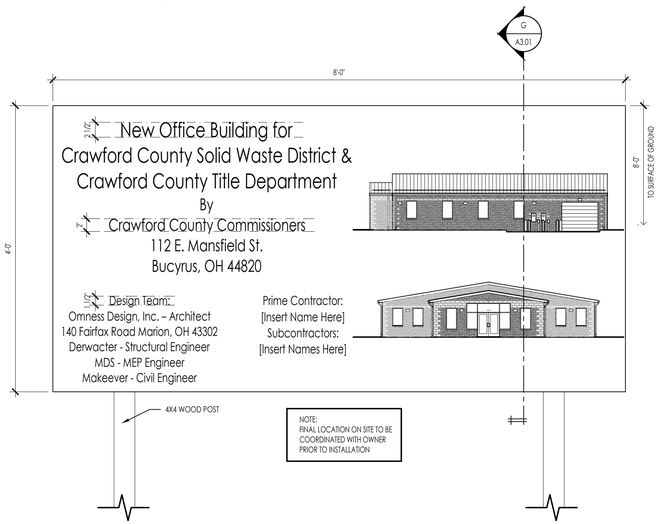
G Project Site Sign Section

1" = 1'-0"



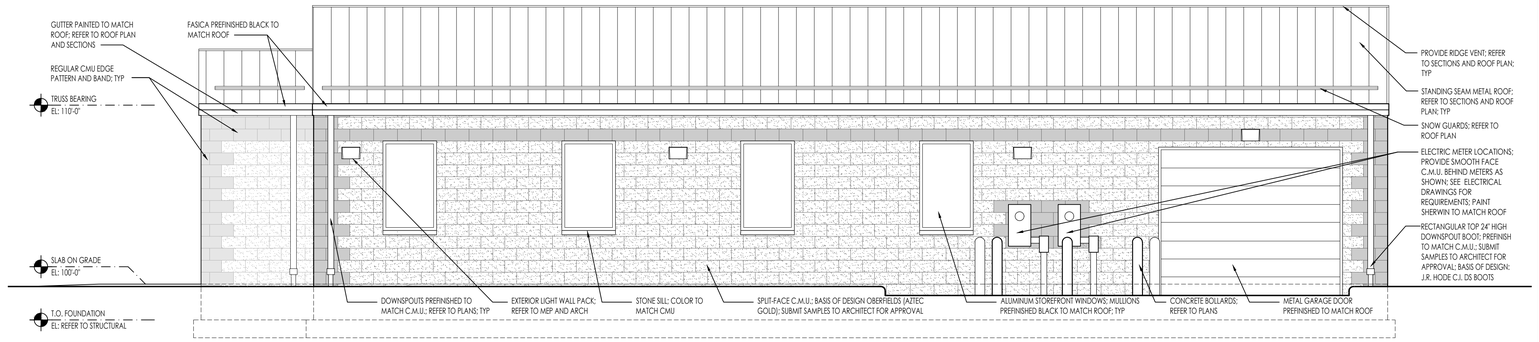
D Project Site Sign Rear Elevation

1" = 1'-0"



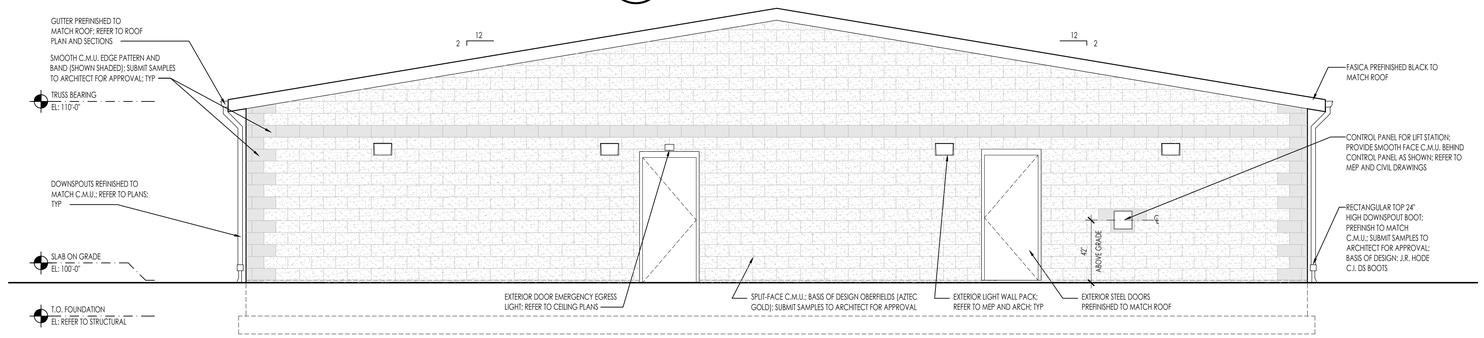
B Project Site Sign Front Elevation

1" = 1'-0"



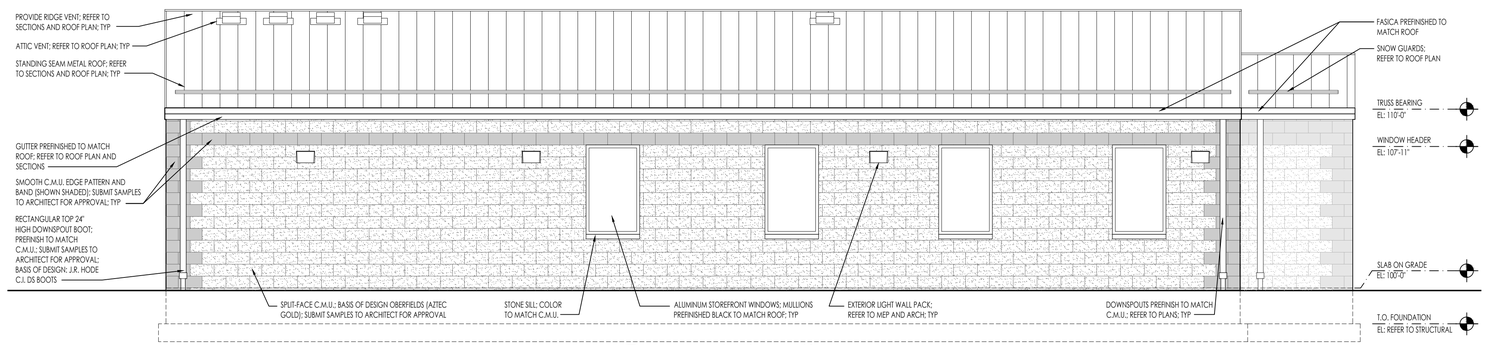
F East Elevation

1/4" = 1'-0"



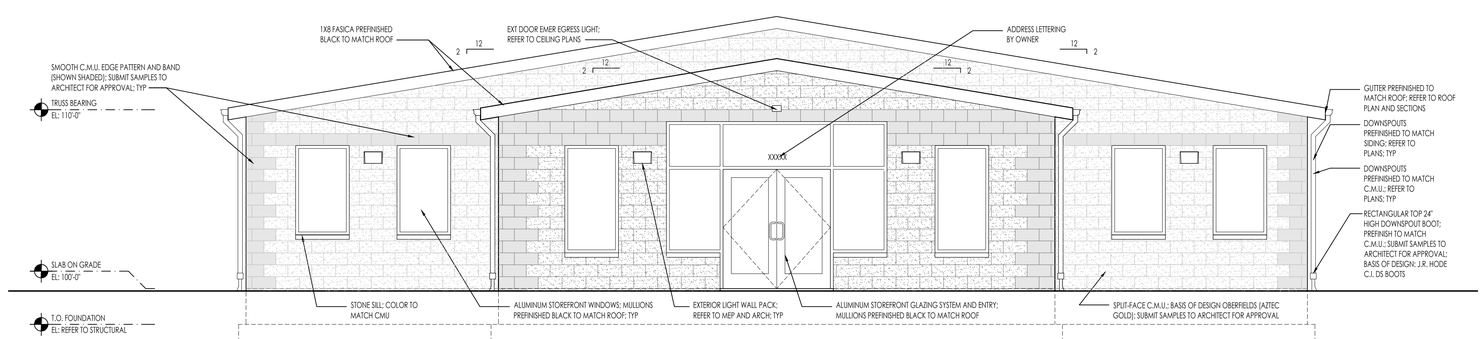
E North Elevation

1/4" = 1'-0"



C West Elevation

1/4" = 1'-0"



A South Elevation

1/4" = 1'-0"

Architect

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SHEET INFORMATION

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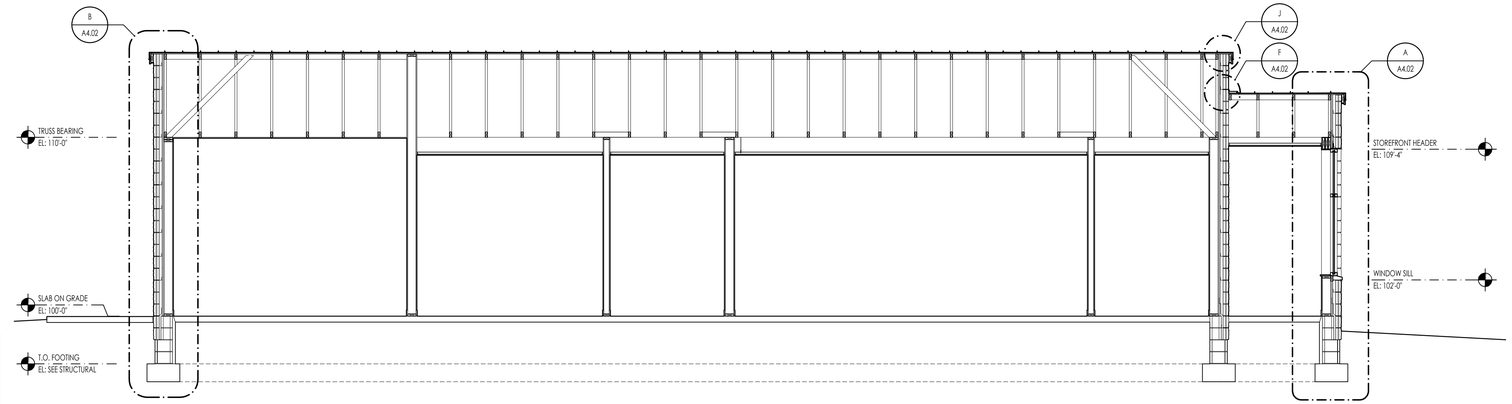
SHEET TITLE

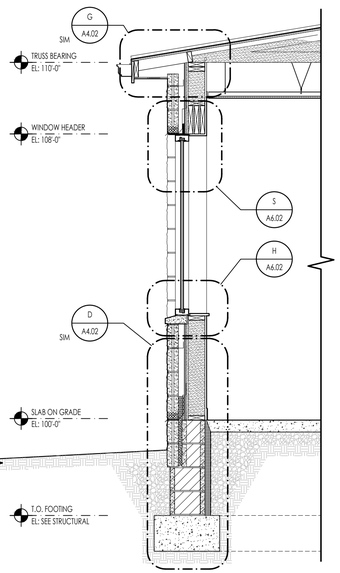
Exterior Elevations

SHEET NUMBER

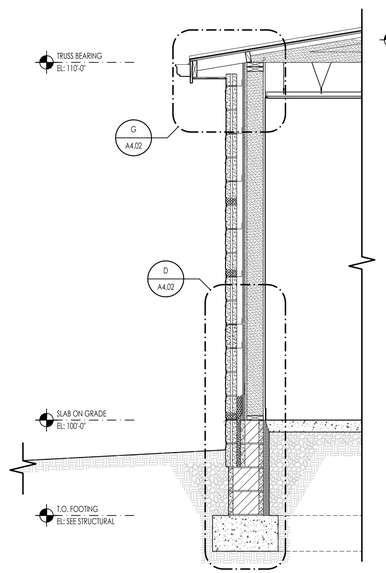
A3.01



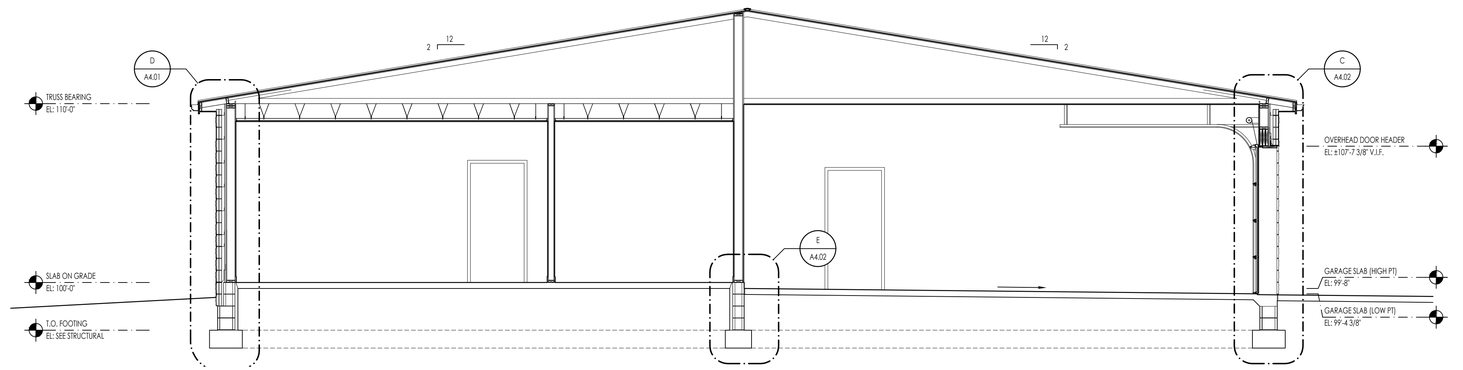
F Building Section
1/4" = 1'-0"



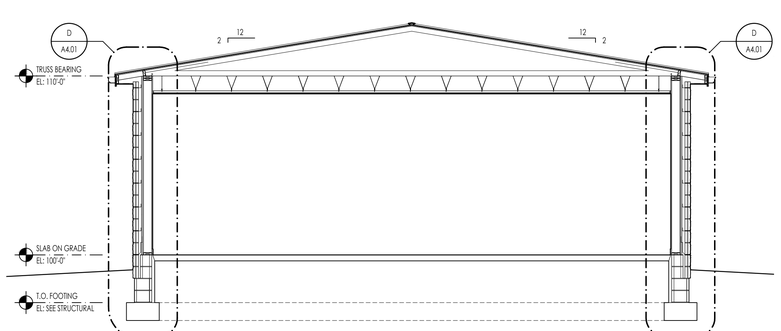
E Wall Section
1/2" = 1'-0"



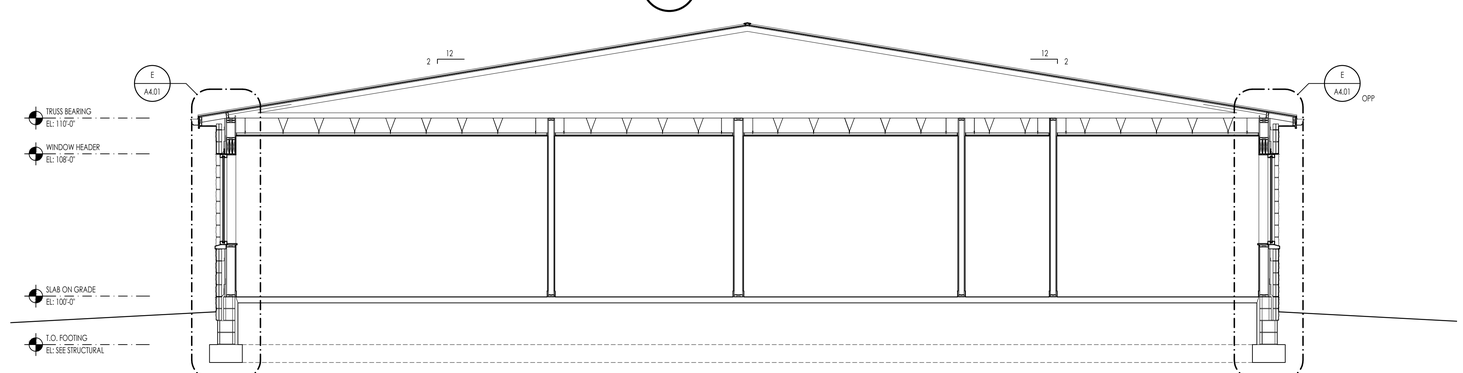
D Wall Section
1/2" = 1'-0"



C Building Section
1/4" = 1'-0"



B Building Section
1/4" = 1'-0"



A Building Section
1/4" = 1'-0"

Architect
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140 FAIRFAX ROAD
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PROJECT
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STATE OF OHIO
PAUL K. OMNESS
13997
REGISTERED ARCHITECT

Paul K. Omness, OH License #13997
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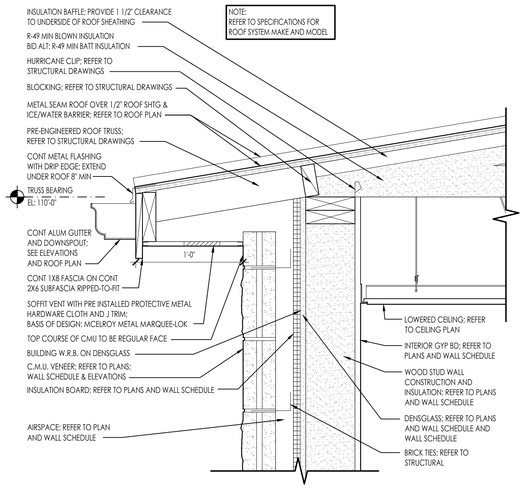
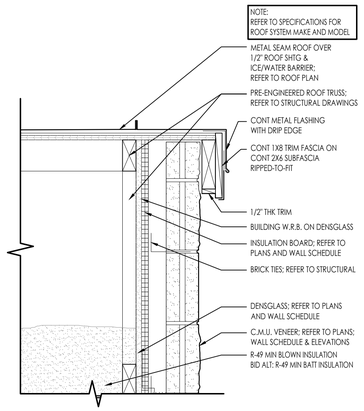
SHEET TITLE
Building & Wall Sections

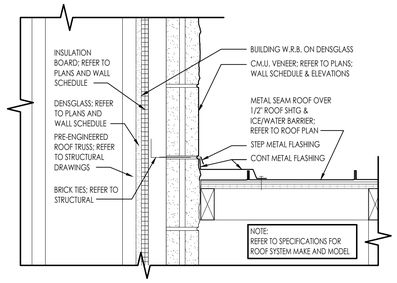
SHEET NUMBER
A4.01



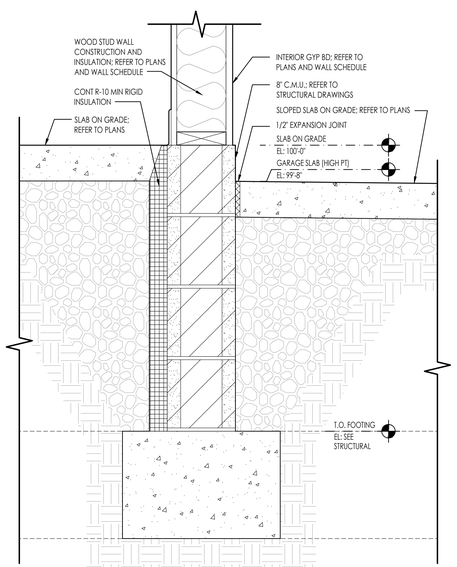
G Soffit Detail
1-1/2" = 1'-0"



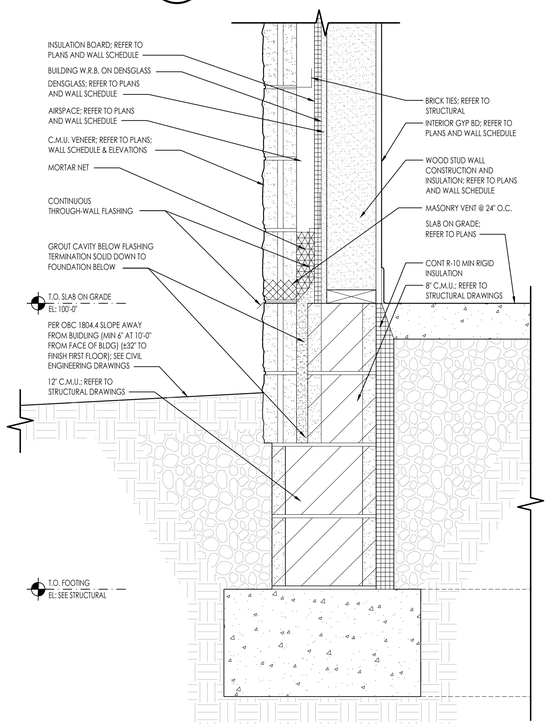
J Roof Detail
1-1/2" = 1'-0"



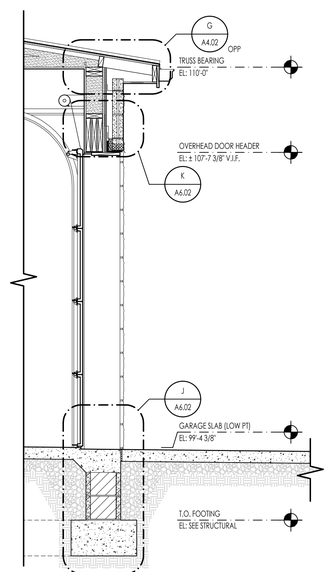
F Roof Detail
1-1/2" = 1'-0"



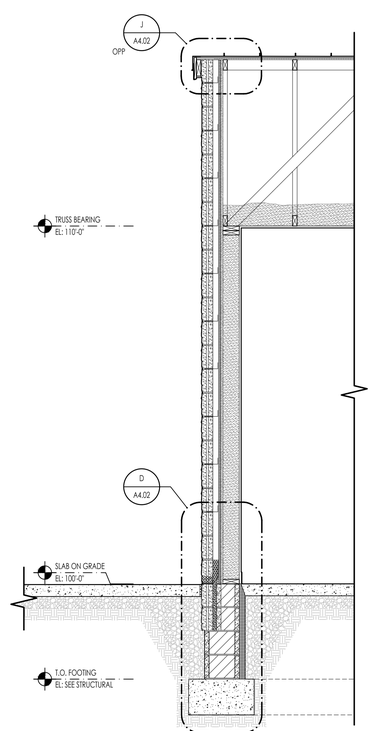
E Foundation Detail
1-1/2" = 1'-0"



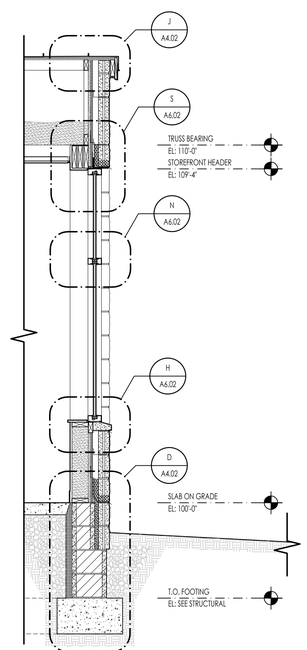
D Wall and Foundation Detail
1-1/2" = 1'-0"



C Wall Section
1/2" = 1'-0"



B Wall Section
1/2" = 1'-0"



A Wall Section
1/2" = 1'-0"

Architect
OMNESS DESIGN, INC.
140 FAIRFAX ROAD
MARION, OHIO 43302

CRAWFORD COUNTY STATE OF OHIO

PROJECT
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STATE OF OHIO
PAUL K. OMNESS 13997
REGISTERED ARCHITECT

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Expiration Date: 2025-12-31

SHEET INFORMATION

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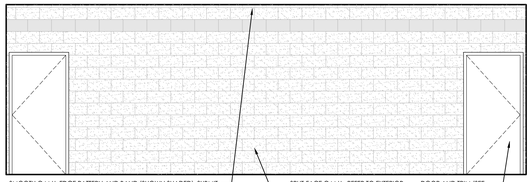
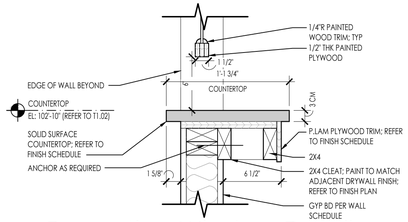
SHEET TITLE
Wall Sections & Details

SHEET NUMBER
A4.02



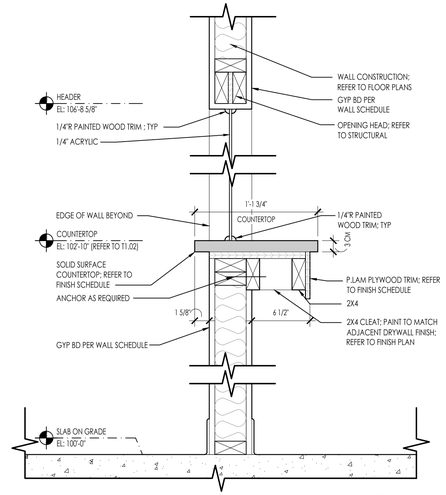
R Vestibule C.M.U. Wall Elevation

1/4" = 1'-0"



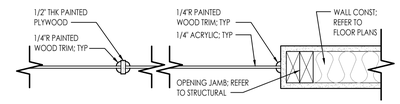
P Reception Window Detail

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



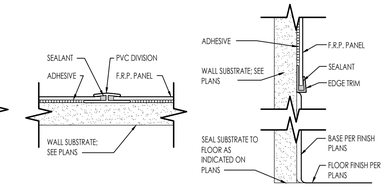
L Reception Window Detail

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



N Reception Window Detail

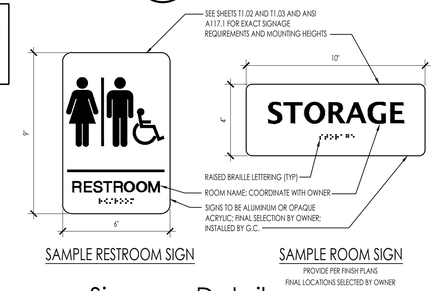
1-1/2" = 1'-0"



M F.R.P. Detail

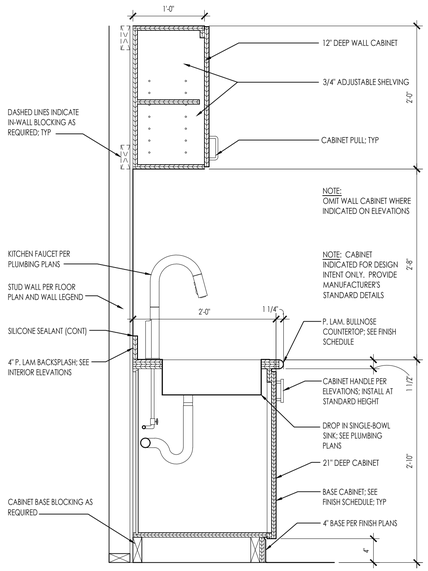
6" = 1'-0"

NOTE:
EVERY ROOM AND SPACE AND EXIT TO RECEIVE TACTILE SIGNAGE; MOUNT SIGN PER REQUIREMENTS IN DETAIL AS WELL AS SHEETS T1.02 AND T1.03



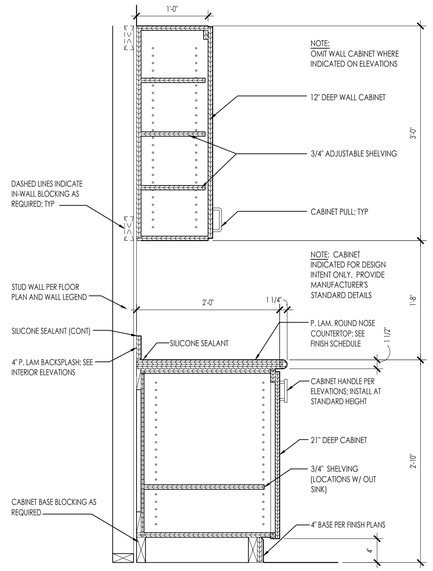
K Signage Detail

3" = 1'-0"



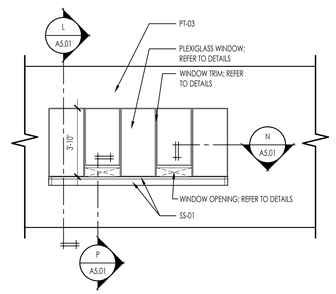
J Kitchennette Cabinet/Sink Detail

1" = 1'-0"



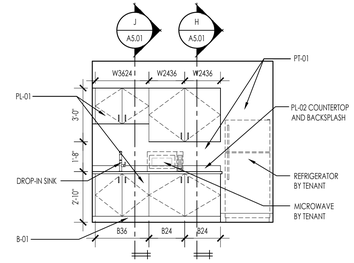
H Kitchennette Cabinet Detail

1" = 1'-0"



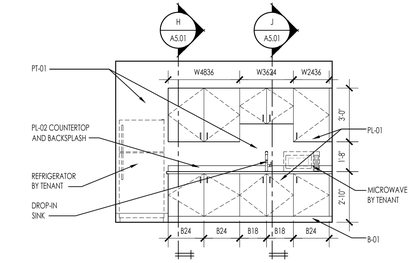
G Waiting Room Window Elevations

1/4" = 1'-0"



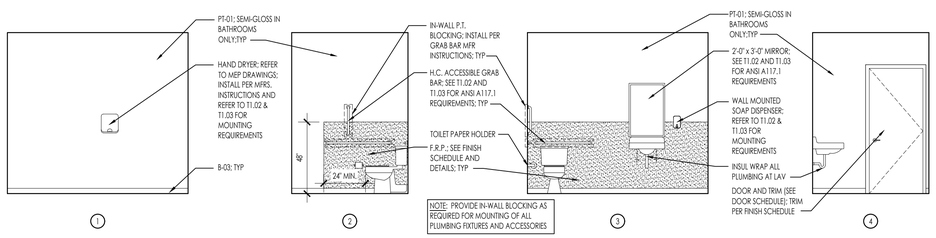
F Break '124' Elevation

1/4" = 1'-0"



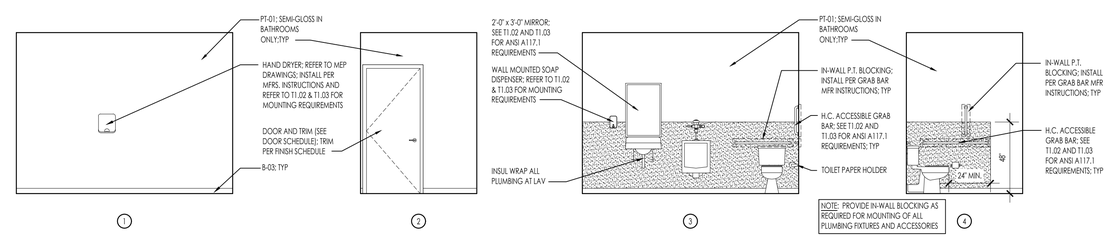
E Break '113' Elevation

1/4" = 1'-0"



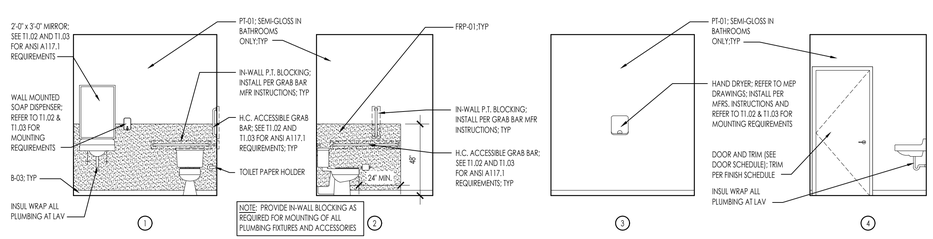
D Private Unisex '125' Elevations

1/4" = 1'-0"



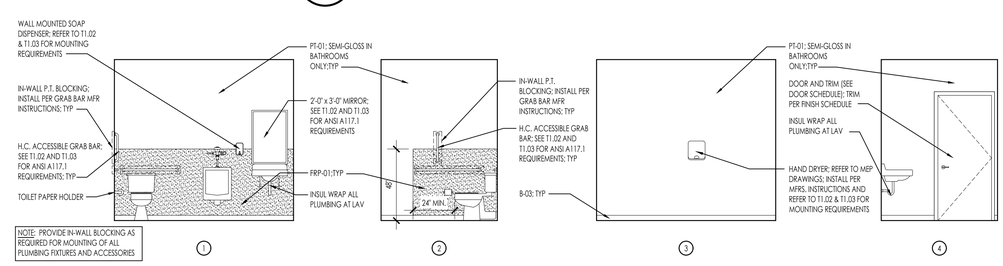
C Private Unisex '114' Elevations

1/4" = 1'-0"



B Public Unisex '121' Elevations

1/4" = 1'-0"



A Public Unisex '112' Elevations

1/4" = 1'-0"

Architect

OMNESS DESIGN, INC.
140 FAIRFAX ROAD
MARION, OHIO 43302

CRAWFORD COUNTY STATE OF OHIO

PROJECT
Crawford Co.
Title Office & Crawford Co. Solid Waste District
New Office Building
2538 E. Mansfield St.
Bucyrus, OH 44820

STATE OF OHIO
PAUL K. OMNESS
13997
REGISTERED ARCHITECT

Paul K. Omness, OH License #13997
Expiration Date: 2025-12-31

SHEET INFORMATION

Project #:	23-122
Issued For:	Permit/Bid
Date:	2024-02-26
Revisions:	

SHEET TITLE

Interior Elevations and Details

SHEET NUMBER

A5.01

DOOR SCHEDULE

NO.	DOOR DESCRIPTION		FRAME MATERIAL	FRAME FINISH	LEAF MATERIAL	LEAF FINISH	HARDWARE SET	NOTE/REMARKS
	TYPE	SIZE						
100A	D	(2) 3'-0" x 6'-8" DOUBLE STOREFRONT DOOR	ALUM	SEE ELEVS	ALUM/GLASS	SEE ELEVS	04	1,2
110A	A	3'-0" X 6'-8" SWING DOOR	HM	PT-01	SCWD	PRE-STAIN	07	2,3,4,5
112A	A	3'-0" X 6'-8" SWING DOOR	HM	PT-01	SCWD	PRE-STAIN	02	2,3,4,5
113A	A	3'-0" X 6'-8" SWING DOOR	HM	PT-01	SCWD	PRE-STAIN	08	2,3,4,5
114A	A	3'-0" X 6'-8" SWING DOOR	HM	PT-01	SCWD	PRE-STAIN	02	2,3,4,5
115A	C	3'-0" X 6'-8" SWING DOOR	HM	PT-01	SCWD	PRE-STAIN	03	2,3,4,5
116A	A	3'-0" X 6'-8" SWING DOOR	HM	PT-01	SCWD	PRE-STAIN	01	2,3,4,5
117A	A	3'-0" X 6'-8" SWING DOOR	HM	PT-01	SCWD	PRE-STAIN	01	2,3,4,5
118A	B	3'-0" X 6'-8" SWING DOOR	HM	PT-01	HM	PT-01	03	2,3,4,5,6
118B	B	3'-0" X 6'-8" SWING DOOR	HM	SEE ELEVS	HM	SEE ELEVS	05	1,2,3,5,6
118C	E	8'-0" X 10'-0" OVERHEAD DOOR	ALUM	SEE ELEVS	ALUM	SEE ELEVS	06	1,2,5,6
120A	A	3'-0" X 6'-8" SWING DOOR	HM	PT-01	SCWD	PRE-STAIN	07	2,3,4,5
121A	A	3'-0" X 6'-8" SWING DOOR	HM	PT-01	SCWD	PRE-STAIN	02	2,3,4,5
122A	A	3'-0" X 6'-8" SWING DOOR	HM	PT-01	SCWD	PRE-STAIN	01	2,3,4,5
123A	A	3'-0" X 6'-8" SWING DOOR	HM	PT-01	SCWD	PRE-STAIN	01	2,3,4,5
124A	A	3'-0" X 6'-8" SWING DOOR	HM	PT-01	SCWD	PRE-STAIN	08	2,3,4,5
125A	A	3'-0" X 6'-8" SWING DOOR	HM	PT-01	SCWD	PRE-STAIN	02	2,3,4,5
126A	C	3'-0" X 6'-8" SWING DOOR	HM	PT-01	SCWD	PRE-STAIN	03	2,3,4,5
127A	A	3'-0" X 6'-8" SWING DOOR	HM	PT-01	SCWD	PRE-STAIN	07	2,3,4,5
127B	B	3'-0" X 6'-8" SWING DOOR	HM	SEE ELEVS	HM	SEE ELEVS	09	1,2,3,5,6; 1-HOUR FIRE RATED DOOR

NOTES/REMARKS
1. SEE EXTERIOR ELEVATIONS FOR FINISH INFORMATION.
2. INSTALL HARDWARE PER MANUFACTURER'S INSTRUCTIONS.
3. H.M. DOOR FRAME TO BE KNOCK-DOWN TYPE. SEE DETAILS FOR ADDITIONAL WELDED / KNOCK-DOWN FRAME REQUIREMENTS.
4. SEE FINISH PLAN AND SCHEDULE FOR FINISH INFORMATION.
5. HOLLOW METAL FRAME TO BE SHOP PRIMED AND PAINTED IN THE FIELD.
6. HOLLOW METAL LEAF TO BE SHOP PRIMED AND PAINTED IN THE FIELD.

HARDWARE SET 01 (OFFICES)
(3) HINGE: SB81 4.5 X 4.5 - 652 (IVE)
(1) OFFICE LOCK: 1511BDC QUA - 626 (FAL)
(1) SFIC CORE: C607 - 626 (FAL)
(1) SILENCER: SR64 - GRY (IVE)
(1) OVERHEAD STOP: SC60A-3077DS - 689 (FAL)

HARDWARE SET 02 (UNISEX RESTROOMS)
(3) HINGE: SB81 4.5 X 4.5 - 652 (IVE)
(1) PRIVACY LOCK: MA301 OCCUPIED/VACANT QGM - 626 (FAL)
(1) KICKPLATE: 8400 8" X 1 1/2" LDW B-CS - 630 (IVE)
(1) WALL STOP: WS406/407CCV - 630 (IVE)
(1) SILENCER: SR64 - GRY (IVE)

HARDWARE SET 03 (JANITOR CLOSET/UTILITY/SERVER)
(3) HINGE: SB81 4.5 X 4.5 - 652 (IVE)
(1) STOREROOM LOCK: 15818DC QUA - 626 (FAL)
(1) SURFACE CLOSER: SC71 REG - 689 (FAL)
(1) MOP PLATE: 8400 4" X 1" LDW B-CS - 630 (IVE)
(1) KICKPLATE: 8400 8" X 1 1/2" LDW B-CS - 630 (IVE)
(1) SILENCER: SR64 - GRY (IVE)

HARDWARE SET 04 (ALUMINUM STOREFRONT ENTRY)
(6) HINGE: SB81 4.5 X 4.5 - 652 (IVE)
(2) PULL HANDLE: 3HJK5 BF157.28 - 626 (ROCKWOOD)
(2) CVR EXIT DEVICE: 3600 SERIES - C2 (FIRST CHOICE)
(1) CYLINDER: MATCH OWNER'S MASTER KEYING SYSTEM
(2) CLOSER W/ STOP ARM: SC60A-3077DS - 689 (FAL)
(2) WEATHER SWEEP
(1) THRESHOLD

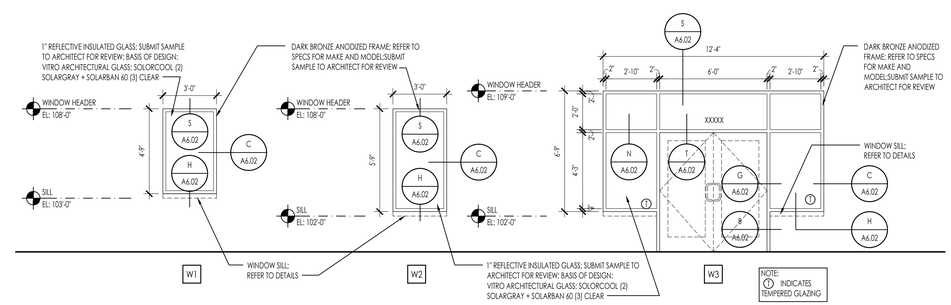
HARDWARE SET 05 (EXTERIOR DOORS)
(3) CONT HINGE: 112XY - 628 (IVE)
(1) CYLINDER: MATCH OWNER'S MASTER KEYING SYSTEM
(1) SFIC CORE: C607 - 626 (FAL)
(1) SURFACE CLOSER: SC71 SS - 689 (FAL)
(1) KICK PLATE: 8400 8" X 1-1/2" LDW B-CS - 630 (IVE)
(1) RAIN DRIP: 142AA - AA (ZER)
(1) GASKETING: 429AA-S - AA (ZER)
(1) DOOR SWEEP: 8198AA - AA (ZER)
(1) THRESHOLD: 655A - A (ZER)

HARDWARE SET 06 (OVERHEAD DOOR)
ALL HARDWARE BY DOOR SUPPLIER; COORDINATE LOCKING MECHANISM WITH OWNER

HARDWARE SET 07 (OPEN OFFICE/RECEPTION)
(3) CONT HINGE: SB81 4.5 X 4.5 - 652 (IVE)
(1) CYLINDER: MATCH OWNER'S MASTER KEYING SYSTEM
(1) SFIC CORE: C607 - 626 (FAL)
(1) SURFACE CLOSER: SC71 SS - 689 (FAL)
(1) KICK PLATE: 8400 8" X 1-1/2" LDW B-CS - 630 (IVE)

HARDWARE SET 08 (BREAK ROOM)
(3) HINGE: SB81 4.5 X 4.5 - 652 (IVE)
(1) PASSAGE SET: T101 DAN - 626 (FAL)
(1) SURFACE CLOSER: SC71 REG OR PA AS REQ - 689 (FAL)
(1) MOP PLATE: 8400 4" X 1" LDW B-CS -630 (IVE)
(1) KICK PLATE: 8400 4" X 1-1/2" LDW B-CS - 630 (IVE)
(1) WALL STOP: WS406/407CCV - 630 (IVE)
(1) GASKETING: 4885BK PSA - BK (ZER)

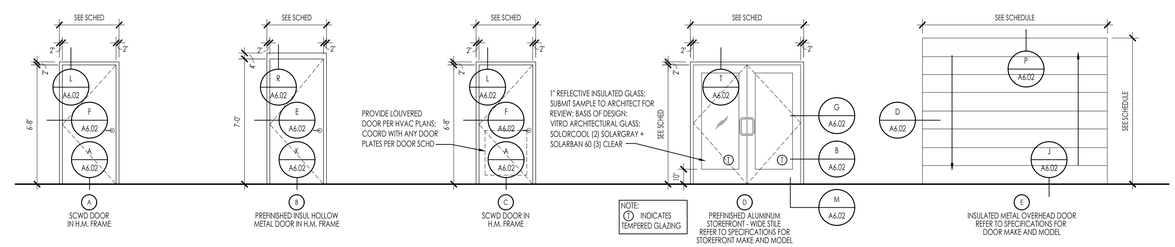
HARDWARE SET 09 (EXTERIOR DOORS WITHOUT DOOR CLOSER)
(3) CONT. HINGE: 112XY - 628 (IVE)
(1) CYLINDER: MATCH OWNER'S EXISTING
(1) SFIC CORE: C607 - 626 (FAL)
(1) KICK PLATE: 8400 8" X 1- 1/2" LDW B-CS - 630 (IVE)
(1) RAIN DRIP: 142AA - AA (ZER)
(1) GASKETING: 429AA-S - AA (ZER)
(1) DOOR SWEEP: 8198AA - AA (ZER)
(1) THRESHOLD: 655A - A (ZER)



B Window Elevations

1/4" = 1'-0"

NOTE: COORDINATE ALL FINISHES WITH ARCHITECT IN SUBMITTALS PRIOR TO ORDER



A Door Elevations

1/4" = 1'-0"

NOTE: COORDINATE ALL FINISHES WITH ARCHITECT IN SUBMITTALS PRIOR TO ORDER

Architect
OMNESS DESIGN, INC.
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STATE OF OHIO
PAUL K. OMNESS
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REGISTERED ARCHITECT

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SHEET INFORMATION

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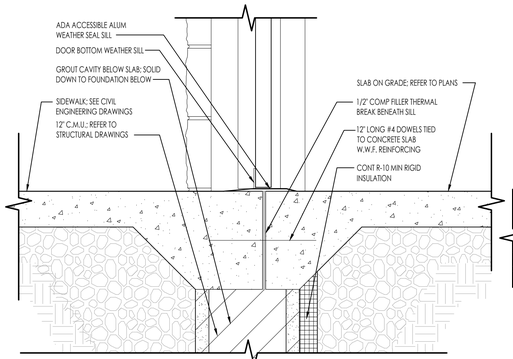
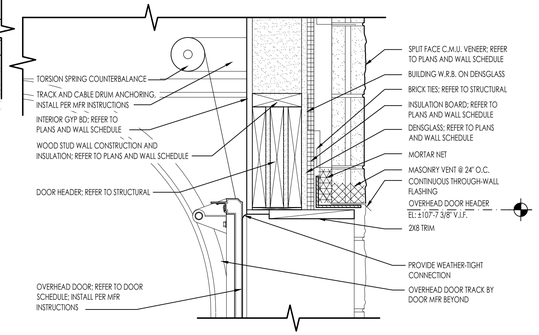
Revisions:

SHEET TITLE
Door Schedule

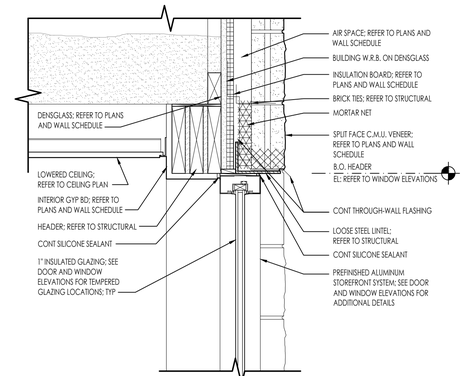
SHEET NUMBER
A6.01



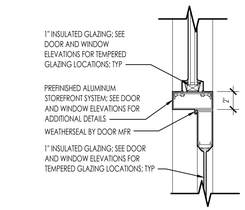
V Transition Detail
1-1/2" = 1'-0"



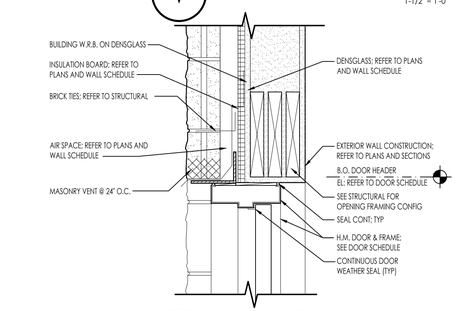
P Head Detail
1-1/2" = 1'-0"



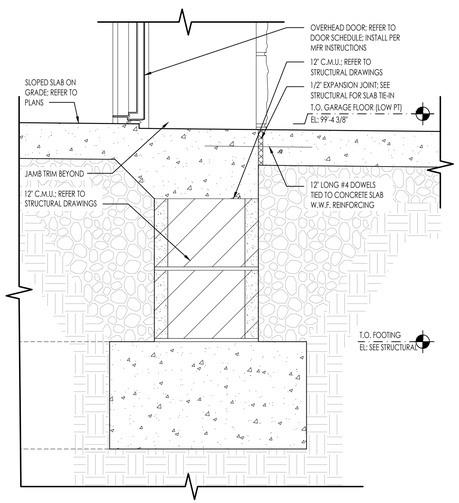
S Head Detail
1-1/2" = 1'-0"



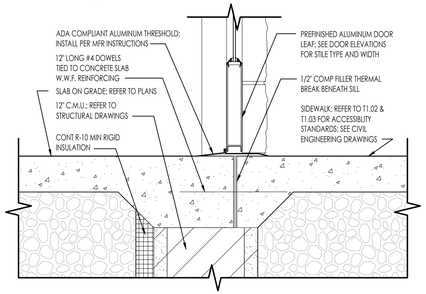
T Head Detail
1-1/2" = 1'-0"



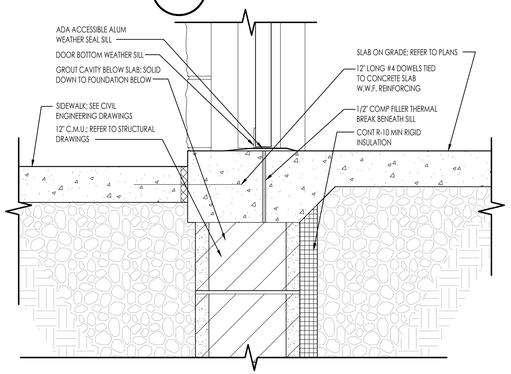
R Head Detail
1-1/2" = 1'-0"



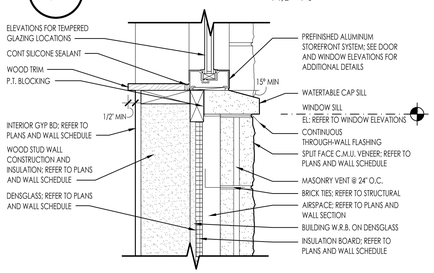
J Sill Detail
1-1/2" = 1'-0"



M Transition Detail
1-1/2" = 1'-0"

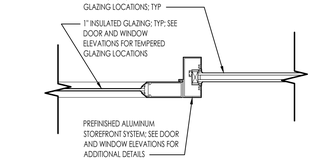


K Transition Detail
1-1/2" = 1'-0"

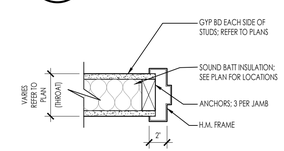


H Sill Detail
1-1/2" = 1'-0"

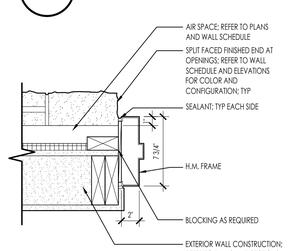
L Head Detail
1-1/2" = 1'-0"



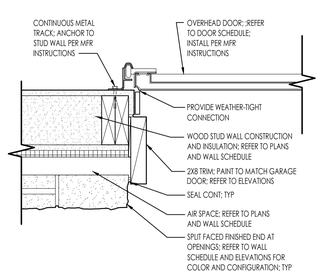
G Jamb Detail
1-1/2" = 1'-0"



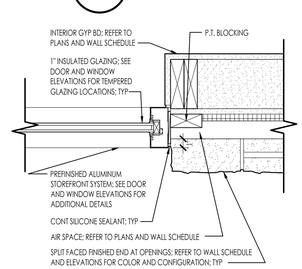
F Jamb Detail
1-1/2" = 1'-0"



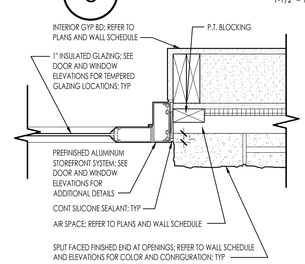
E Jamb Detail
1-1/2" = 1'-0"



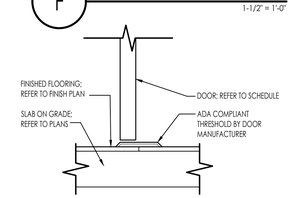
D Jamb Detail
1-1/2" = 1'-0"



C Jamb Detail
1-1/2" = 1'-0"



B Jamb Detail
1-1/2" = 1'-0"



A Transition Detail
1-1/2" = 1'-0"

Architect

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SHEET INFORMATION

Project #:	23-122
Issued For:	Permit/Bid
Date:	2024-02-26
Revisions:	

SHEET TITLE

Door And Window Details

SHEET NUMBER

A6.02

GOVERNING CODE: 2017 OHIO BUILDING CODE

1. DEAD LOADS
   BUILDING ROOF
   A. TOP CHORD = 10.0 PSF
   B. BOTTOM CHORD = 10.0 PSF
   C. TOTAL DEAD LOAD = 20.0 PSF
2. ROOF LIVE LOADS:
   A. MINIMUM ROOF LIVE LOAD = 20 PSF
   FLOOR LIVE LOADS:
   A. FIRST FLOOR: = 100 PSF
3. ROOF SNOW DESIGN PARAMETERS
   A. GROUND SNOW LOAD Pg = 20.0 PSF
   B. FLAT ROOF SNOW LOAD Pf = 20.2 PSF
   C. MINIMUM UNIFORM DESIGN SNOW LOAD = 20.2 PSF
   D. SNOW EXPOSURE FACTOR Ce = 1.0
   E. SNOW LOAD IMPORTANCE FACTOR I = 1.2
   F. THERMAL FACTOR Ct = 1.1
   G. DRIFTING SNOW AND UNBALANCED SNOW PER ASCE 7-10.
4. WIND DESIGN PARAMETERS
   A. ULTIMATE DESIGN WIND SPEED Vult = 120 MPH
   B. NOMINAL DESIGN WIND SPEED Vasd = 93 MPH
   C. RISK CATEGORY= IV
   D. WIND EXPOSURE CATEGORY = C
   E. INTERNAL PRESSURE COEFFICIENT = +/-0.18
   F. WIND DESIGN PRESSURES FOR COMPONENTS AND CLADDING:

COMPONENT AND CLADDING WIND PRESSURES
(BASED UPON WIND VELOCITY Vult)
REFER TO ASCE7-10 TABLE 30.7-2 FOR COMPONENT AND CLADDING ZONES, a = 6.0'

	ZONE	EFFECTIVE WIND AREA (SF)	POSITIVE PRESSURE (PSF)	NEGATIVE PRESSURE (PSF)
ROOF	1	10	19.2	-30.5
		50	16.0	-28.5
		100	16.0	-27.7
	2	10	19.2	-53.1
		50	16.0	-43.2
		100	16.0	-39.0
	3	10	19.2	-78.6
		50	16.0	-66.7
		100	16.0	-61.6
OVERHANGS	2	10	19.2	-66.2
		50	16.0	-62.2
		100	16.0	-62.2
	3	10	19.2	-104.6
		50	16.0	-80.8
		100	16.0	-70.7
WALLS	4	10	33.3	-36.2
		50	29.9	-32.7
		100	28.4	-31.2
	5	10	33.3	-44.7
		50	29.9	-37.7
		100	28.4	-34.7

5. SEISMIC DESIGN PARAMETERS
   A. SEISMIC IMPORTANCE FACTOR = 1.5
   B. SEISMIC OCCUPANCY CATEGORY = IV
   C. MAXIMUM CONSIDERED EARTHQUAKE GROUND MOTION AT 0.2 SECOND PERIOD, S_S=11.7%g
   D. MAXIMUM CONSIDERED EARTHQUAKE GROUND MOTION AT 1.0 SECOND PERIOD, S_1=6.1%g
   E. SITE CLASS = D
   F. SDS = 0.125g
   G. SD1 = 0.098g
   H. SEISMIC DESIGN CATEGORY = B
   I. BUILDING SYSTEM: BEARING WALL SYSTEMS
   J. SEISMIC RESISTING SYSTEM: LIGHT FRAMED WOOD WALLS WITH WOOD SHEAR PANELS
   K. RESPONSE MODIFICATION FACTOR, R: 6.5
   L. DESIGN BASE SHEAR: 0.065W

REINFORCING FOR CONCRETE:

1. REINFORCING SHALL CONFORM TO ASTM A615, GRADE 60 OR ASTM A706, UNLESS NOTED OTHERWISE. ALL WELDED REINFORCING BARS SHALL CONFORM TO ASTM A706.
2. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A185 (SHEETS FORM, NOT ROLLED)
3. MINIMUM CONCRETE COVER, UNLESS NOTED OTHERWISE:
   A. UNFORMED SURFACE IN CONTACT WITH THE GROUND: 3 IN.
   B. FORMED SURFACES EXPOSED TO EARTH OR WEATHER:
      #6 BARS AND LARGER 2 IN.
      #5 BARS AND SMALLER 1 1/2 IN.
   C. FORMED SURFACES NOT EXPOSED TO EARTH OR WEATHER:
      BEAMS, GIRDERS, AND COLUMNS 1 1/2 IN.
      SLABS, WALLS, AND JOISTS
      #11 BARS AND SMALLER 3/4 IN.
      #14 AND #18 BARS 1 1/2 IN.
4. LAP SPLICES SHALL BE IN ACCORDANCE WITH THE FOLLOWING TABLE, UNLESS NOTED OTHERWISE.

BAR SIZE	CLASS B SPLICE LAP LENGTH (INCHES)	COMPRESSION SPLICE LAP LENGTH (INCHES)	BAR SIZE	CLASS B SPLICE LAP LENGTH (INCHES)	COMPRESSION SPLICE LAP LENGTH (INCHES)
#3	22	12	#8	72	30
#4	29	15	#9	81	34
#5	36	19	#10	89	38
#6	43	23	#11	98	42
#7	63	27			

5. COMPRESSION DOWEL EMBEDMENT: 22 BAR DIAMETERS, UNLESS NOTED OTHERWISE.
6. BASE PLATES, ANCHOR RODS, SUPPORT ANGLES, ETC., BELOW GRADE SHALL BE COVERED WITH A MINIMUM OF 3" OF CONCRETE.

USE OF THESE DOCUMENTS:

1. THESE DOCUMENTS SHALL NOT BE REPRODUCED IN ANY MANNER FOR THE PRODUCTION OF FABRICATION OR ERECTION SUBMITTALS. REPRODUCTION OF THESE DOCUMENTS IN THAT MANNER CONSTITUTES COPYRIGHT INFRINGEMENT. ANY DOCUMENTS SUBMITTED FOR REVIEW THAT CONTAIN ANY IMAGE, SKETCH, DETAIL, ETC. FROM THESE DOCUMENTS WILL BE REJECTED.
2. ELECTRONIC VERSIONS OF THESE DOCUMENTS ARE THE PROPERTY OF DERWACTER & ASSOCIATES, LLC. ELECTRONIC OR CAD FILES WILL NOT BE MADE AVAILABLE FOR CONSTRUCTION PURPOSES.

STRUCTURAL LUMBER:

1. SPECIFICATIONS AND STANDARDS: DESIGN AND DETAILING OF WOOD FRAMING AND CONNECTIONS SHALL CONFORM TO THE 2015 INTERNATIONAL BUILDING CODE AND THE 2012 EDITION OF THE "NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION" ISSUED BY THE NATIONAL FOREST PRODUCTS ASSOCIATION REFERENCED THERE-IN
2. MATERIALS: THE MATERIALS USED FOR THE WORK OF THIS PROJECT ARE TO COMPLY WITH THE MINIMUM STANDARDS OF QUALITY LISTED BELOW; UNLESS SPECIFICALLY NOTED OTHERWISE IN THE CONTRACT DOCUMENTS.

MINIMUM STRUCTURAL PROPERTIES FOR DIMENSIONAL LUMBER

		STRUCTURAL PROPERTIES		
LOCATION	SIZE	Fb (psi)	Fv (psi)	E (ksi)
ALL	2X4	875	135	1400
	2X6	875	135	1400
	2X8	1250	175	1600
	2X10	1050	175	1600
	2X12	1000	175	1600
	6x6	1200	170	1600

3. ALL STRUCTURAL LUMBER SHALL BE KILN DRIED TO A MAXIMUM MOISTURE CONTENT OF 15%.
4. ALL WOOD MEMBERS EXPOSED TO THE ELEMENTS SHALL BE PRESERVATIVE PRESSURE TREATED. ALL WOOD MEMBERS SECURED TO OR PLACED AGAINST CONCRETE, MASONRY, AND/OR EARTH ARE TO BE PRESERVATIVE PRESSURE TREATED FOR GROUND CONTACT.
5. STRUCTURAL WOOD MEMBERS ARE NOT TO BE CUT, COPED, OR MODIFIED, OTHER THAN CUTTING TO LENGTH OR MAKING PROVISIONS FOR FASTENERS. MAKE ALL CUTS TRUE AND SQUARE FOR FULL BEARING AT STRUCTURAL JOINTS.
6. CONNECT ALL WOOD FRAMING SECURELY TOGETHER WITH NAILS, SPIKES, OR FRAMING ANGLES, IN ACCORDANCE WITH TABLE 2304.10 OF THE 2015 INTERNATIONAL BUILDING CODE. FASTENERS USED TO CONNECT PRESERVATIVE PRESSURE TREATED LUMBER SHALL BE OF STAINLESS STEEL OR HOT DIPPED GALVANIZED STEEL. PROVIDE PLYWOOD NAILING AS RECOMMENDED BY THE AMERICAN PLYWOOD ASSOC.
7. THE CONTRACTOR SHALL SUBMIT PRODUCT DATA TO THE ARCHITECT PRIOR TO THE START OF CONSTRUCTION INDICATING COMPLIANCE WITH THIS SECTION.

NAILS IN WOOD CONSTRUCTION

NAIL PENNYWEIGHT	NAIL SHANK DIAMETER (INCH)	NAIL LENGTH	F_{yb} (PSI)
10d x 1 1/2	0.148	1 1/2	90,000
10d COMMON	0.148	3	90,000
16d SINKER	0.148	3 1/4	90,000
16d COMMON	0.162	3 1/2	90,000
8d COMMON	0.131	2 1/2	90,000

REINFORCED CONCRETE:

1. MATERIALS:
   A. SPECIFICATIONS: IN GENERAL, COMPLY WITH ACI 301 "SPECIFICATIONS FOR STRUCTURAL CONCRETE".

CAST-IN PLACE CONCRETE

LOCATION	CLASS	f'c (PSI)	MIN. CEMENT (LBS)	MIN. AIR CONTENT	MAX. W/C RATIO	NOTES
FOOTINGS	I	3,000	517	ENTRAPPED	.50	
INTERIOR SLAB ON GRADE	II	3,500	540	ENTRAPPED	.45	
EXTERIOR SLAB ON GRADE	III	4,500	564	6% +/- 1%	.45	

   B. SUBMIT CONCRETE MIX DESIGN FOR APPROVAL IN ACCORDANCE TO ACI 301. MIX DESIGNS SHALL INCLUDE ALL BACKUP DATA MATERIAL WITH COMPRESSIVE STRENGTH BREAKS BASED ON EXPERIENCE OR TRIAL MIX PER ACI 301. SUBMIT THREE (3) SETS FOR REVIEW. THE MIX DESIGNS MUST INCLUDE THE BATCH IDENTIFICATION NUMBER AND THE CLASS IDENTIFICATION FROM THE TABLE ABOVE. FAILURE TO INCLUDE BOTH OF THESE ITEMS WILL RESULT IN THE RETURN OF THE MIX DESIGNS WITHOUT REVIEW.
2. FIELD MANUAL: PROVIDE AT LEAST ONE COPY OF THE ACI FIELD REFERENCE MANUAL, SP-15, IN THE FIELD OFFICE AT ALL TIMES.
3. CONTINGENCIES: PROVIDE SUPPORTS AS REQUIRED TO MAINTAIN ALIGNMENT OF SCHEDULED REINFORCING. SUCH SUPPORTS ARE TO BE REFLECTED IN THE BID. THE USE OF CLAY BRICK IS NOT ACCEPTABLE.
4. FOOTINGS:
   A. DOWELS IN FOOTINGS TO MATCH SIZE AND SPACING OF VERTICAL WALL REINFORCING.
   B. PROVIDE CONTROLLED LOW-STRENGTH MATERIAL (CLSM) UNDER FOUNDATIONS FOR ACCIDENTAL
      OVER-EXCAVATION, SOFT SPOTS AND TRENCHES.
5. CONSTRUCTION JOINTS:
   A. PROVIDE CONSTRUCTION JOINTS AT ALL POUR STOP LOCATIONS. ALL CONSTRUCTION JOINTS ARE TO BE DOWELED, USE 3/4" SMOOTH DOWELS 1'-0" LONG EMBEDDED 6" EACH SIDE GREASE ONE END OR PROVIDE SLEEVE, UNLESS WHERE NOTED OTHERWISE ON DRAWINGS.

FOUNDATIONS - GENERAL:

1. THE FOUNDATIONS HAVE BEEN DESIGNED IN WITH TABLE 1806.2 OF THE 2017 OHIO BUILDING CODE FOR CLAY, SANDY CLAY, SILTY CLAY, CLAYEY SILT, SILT AND ANDY SILT (CL, ML, MH, AND CH). FOOTINGS SHALL BEAR ON SOILS CAPABLE OF SUSTAINING A NET ALLOWABLE BEARING PRESSURE OF 1.5 KSF UNDER SERVICE LIVE AND DEAD LOAD. ISOLATED SPREAD FOOTINGS SHALL BEAR ON SOIL CAPABLE OF SUSTAINING A NET ALLOWABLE BEARING PRESSURE OF 1.5 KSF UNDER SERVICE LIVE AND DEAD LOAD.
2. FOOTINGS MAY BE POURED INTO AN EARTH-FORMED TRENCH IF SOIL CONDITIONS PERMIT.
3. ALL BEARING MATERIAL SHALL BE INSPECTED BY THE INDEPENDENT TESTING AGENCY PRIOR TO CONCRETE PLACEMENT. THE INDEPENDENT TESTING AGENCY SHALL BE THE SOLE JUDGE AS TO THE SUITABILITY OF THE BEARING MATERIAL TO ACHIEVE THE DESIGN VALUES LISTED. FOOTING ELEVATIONS SHALL BE ADJUSTED AS REQUIRED.
4. BOTTOM OF EXTERIOR FOOTINGS SHALL BEAR 36" BELOW FINAL GRADE. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE TO ADJUST BOTTOM OF FOOTING ELEVATIONS SHOWN IN THE DOCUMENTS AS REQUIRED TO ENSURE MINIMUM FOOTING EMBEDMENT AND TO REACH THE REQUIRED BEARING ELEVATION AS SHOWN IN THE GEOTECHNICAL ENGINEERING REPORT.
5. FOUNDATION WALLS THAT RETAIN EARTH SHALL BE BRACED AGAINST BACKFILLING PRESSURES UNTIL FLOOR SLABS AT TOP AND BOTTOM ARE IN PLACE AND CURED.
6. WHERE FOUNDATION WALLS ARE TO HAVE EARTH PLACED ON EACH SIDE, PLACE FILL SIMULTANEOUSLY SO AS TO MAINTAIN A COMMON ELEVATION ON EACH SIDE OF THE WALL.
7. FOUNDATION CONCRETE SHALL HAVE REACHED A MINIMUM COMPRESSIVE STRENGTH OF 2,000 PSI BEFORE BEING LOADED. STRENGTHS SHALL BE VERIFIED BY TEST.
8. DERWACTER & ASSOCIATES, LLC RECOMMENDS THAT A LICENSED PROFESSION ENGINEER BE RETAINED TO VALIDATE THE PRESUMPTIVE VALUES INDICATED. THE OWNER ASSUMES ALL RISKS ASSOCIATED WITH BUILDING SETTLEMENT OR FOUNDATION COSTS ASSOCIATED WITH THE ONSITE SOILS.

GENERAL NOTES:

1. ANY CHANGES MADE TO THE DESIGN IDENTIFIED ON THESE DRAWINGS AND/OR ASSOCIATED SPECIFICATIONS SHALL BE SUBMITTED TO THE ENGINEER OF RECORD FOR REVIEW AND APPROVAL PRIOR TO MAKING ANY MODIFICATIONS TO THE PROJECT. ANY LIABILITY AS A RESULT OF DESIGN MODIFICATIONS, AS WELL AS ANY COSTS ASSOCIATED WITH SUCH MODIFICATIONS, MADE WITHOUT THE WRITTEN APPROVAL OF ENGINEER OF RECORD SHALL BECOME THE RESPONSIBILITY OF THE CONTRACTOR.
2. THE STRUCTURE IS DESIGNED TO BE SELF-SUPPORTING AND STABLE AFTER THE BUILDING IS FULLY COMPLETED. IT IS SOLELY THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE ERECTION PROCEDURES AND SEQUENCE, AND TO ENSURE THE STABILITY OF THE BUILDING AND ITS COMPONENT PARTS, AND THE ADEQUACY OF TEMPORARY OR INCOMPLETE CONNECTIONS, DURING ERECTION. THIS INCLUDES THE ADDITION OF ANY SHORING, SHEETING, TEMPORARY GUYS, BRACING OR TIEDOWNS THAT MIGHT BE NECESSARY. SUCH MATERIAL IS NOT SHOWN ON THE DRAWINGS. IF APPLIED, THEY SHALL BE REMOVED AS CONDITIONS PERMIT, AND SHALL REMAIN THE CONTRACTOR'S PROPERTY. THE ENGINEER HAS NO EXPERTISE IN, AND TAKES NO RESPONSIBILITY FOR, CONSTRUCTION MEANS AND METHODS OR JOB SITE SAFETY DURING CONSTRUCTION. PROCESSING AND/OR APPROVING SUBMITTALS MADE BY THE CONTRACTOR WHICH MAY CONTAIN INFORMATION RELATED TO CONSTRUCTION METHODS OR SAFETY ISSUES, OR PARTICIPATION IN MEETINGS WHERE SUCH ISSUES MIGHT BE DISCUSSED, SHALL NOT BE CONSTRUED AS VOLUNTARY ASSUMPTION BY THE ENGINEER OF ANY RESPONSIBILITY FOR SAFETY PROCEDURES.
3. IT IS SOLELY THE RESPONSIBILITY OF EACH CONTRACTOR TO FOLLOW ALL APPLICABLE SAFETY CODES AND REGULATIONS DURING ALL PHASES OF CONSTRUCTION. THE ENGINEER IS NOT ENGAGED IN, AND DOES NOT SUPERVISE CONSTRUCTION.
4. SHOULD ANY OF THE DETAILED INSTRUCTIONS SHOWN ON THE PLANS CONFLICT WITH THESE STRUCTURAL NOTES, OR WITH EACH OTHER, THE STRICTEST PROVISION SHALL GOVERN.

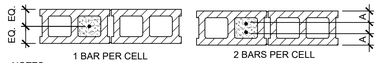
REINFORCED MASONRY:

1. REINFORCED MASONRY SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH, f'm, OF 2000 PSI. MASONRY UNITS SHALL BE NORMAL WEIGHT BLOCK CONFORMING TO ASTM C90, AND SHALL HAVE A MINIMUM NET AREA COMPRESSIVE STRENGTH OF 2000 PSI. MORTAR SHALL CONFORM TO ASTM C270, TYPE S, WITH A MINIMUM COMPRESSIVE STRENGTH OF 2,000 PSI. TYPE M SHALL BE USED FOR MORTAR IN CONTACT WITH SOIL. MINIMUM GROUT COMPRESSIVE STRENGTH SHALL EQUAL OR EXCEED f'm, BUT NOT BE LESS THAN 2500 PSI.
2. REINFORCING BARS SHALL CONFORM TO ASTM A615, GRADE 60, UNLESS NOTED OTHERWISE.
3. CONTINUOUS WIRE REINFORCING (JOINT REINFORCING) SHALL BE HOT DIPPED GALVANIZED, LADDER TYPE FORMED FROM 9 GAUGE COLD - DRAWN STEEL WIRE COMPLYING WITH ASTM A82. JOINT REINFORCING SHALL BE SPACED AT 16" O.C. VERTICALLY IN ALL MASONRY WALLS AND PIERS, U.N.O.
4. FOR VERTICAL CONTROL JOINTS IN MASONRY WALLS SEE SEPARATE NOTES THIS SHEET.
5. ALL REINFORCED CELLS, ALL CELLS BELOW GRADE AND ALL CELLS BELOW FINISH FLOOR SHALL BE GROUTED SOLID.
6. AT VERTICAL REINFORCING LOCATIONS, PROVIDE DOWEL FROM FOOTING TO MATCH SIZE AND SPACING OF VERTICAL WALL REINFORCING. DOWELS SHALL BE EMBEDDED INTO THE FOOTING MINIMUM 9" INCHES AND SHALL HAVE A 90 DEGREE STANDARD HOOK.
7. WHEN A FOUNDATION DOWEL DOES NOT LINE UP WITH A VERTICAL BLOCK CORE, IT SHALL NOT BE SLOPED MORE THAN ONE HORIZONTAL IN 6 VERTICAL. DOWELS MAY BE GROUTED INTO A CELL IN VERTICAL ALIGNMENT, EVEN THOUGH IT IS IN A CELL ADJACENT TO THE VERTICAL WALL REINFORCING.
8. REINFORCING STEEL SHALL BE SECURED IN PLACE BEFORE GROUTING STARTS.
9. ALL REINFORCING LAP SPLICES SHALL BE IN ACCORDANCE WITH THE MASONRY REINFORCING LAP SPLICE LENGTH SCHEDULE, U.N.O. SPLICE VERTICAL SHALL BE WIRED TOGETHER. LAP SPLICES BETWEEN ADJACENT BARS SHALL BE STAGGERED A MINIMUM OF 24 BAR DIAMETERS.
10. VERTICAL BARS SHALL BE HELD IN POSITION AT TOP AND BOTTOM AND AT INTERVALS NOT EXCEEDING 96 DIAMETERS OF THE REINFORCING BAR WITH REBAR POSITIONERS. BARS SHALL BE ANCHORED IN PLACE PRIOR TO GROUTING.
11. VERTICAL REINFORCING BARS SHALL HAVE A MINIMUM CLEARANCE OF 3/4 OF AN INCH FROM THE MASONRY AND NOT LESS THAN ONE BAR DIAMETER BETWEEN BARS.
12. VERTICAL CELLS THAT WILL BE GROUTED SHALL HAVE A VERTICAL ALIGNMENT TO MAINTAIN A CONTINUOUS UNOBSTRUCTED CELL AREA NOT LESS THAN 3"x4".
13. GROUT SHALL BE PLACED IN LIFTS NOT TO EXCEED 5 FEET. THE TOTAL HEIGHT OF 8-INCH (NOMINAL) OR LARGER MASONRY TO BE GROUTED PRIOR TO THE ERECTION OF ADDITIONAL MASONRY SHALL NOT EXCEED 24 FEET.
14. GROUTING SHALL BE STOPPED 1 1/2" BELOW THE TOP OF A COURSE SO AS TO FORM A KEY AT THE POUR JOINT.
15. GROUTING OF MASONRY BEAMS OVER OPENINGS SHALL BE DONE IN ONE CONTINUOUS OPERATION.
16. ALL BOLTS, ANCHORS, ETC., INSERTED IN THE WALLS, SHALL BE GROUTED SOLID INTO POSITION. CELLS AT ANCHOR LOCATIONS SHALL BE GROUTED TO MINIMUM 6" ABOVE AND 6" BELOW THE CENTERLINE OF THE ANCHOR.

MASONRY REBAR LAP SPLICES

BLOCK SIZE	6"	8"		12"	
BAR SIZE	1 BAR PER CELL	1 BAR PER CELL	2 BARS PER CELL	1 BAR PER CELL	2 BARS PER CELL
#3	18"*	18"*	18"*	18"*	18"*
#4	24"*	24"*	24"*	24"*	24"*
#5	30"*	30"*	30"*	30"*	30"*

* VALUES ARE CONTROLLED BY MINIMUM 48 BAR DIAMETERS PER THE "STANDARD PRACTICE FOR BRACING MASONRY WALLS UNDER CONSTRUCTION."



1 BAR PER CELL 2 BARS PER CELL

NORMAL BLOCK	"A"
8"	2 7/8"
10"	3"
12"	3"

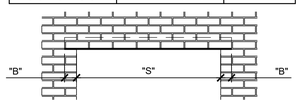
NOTES:
1. REINFORCEMENT LAPS SHALL OCCUR ABOVE THE FLOOR LINE, WHERE LARGER BAR SIZE SHALL EXTEND FROM WALL BELOW.
2. TOLERANCES FOR PLACEMENT OF VERTICAL REINFORCING IS +/-1/2 INCH.
3. FOLLOW TABLE FOR EDGE DISTANCES UNLESS NOTED OTHERWISE ON DETAILS.
4. SECURE REINFORCING IN PLATE TO PREVENT DISPLACEMENT BY CONSTRUCTION LOADS OR BY PLACEMENT OF GROUT.
5. REBAR LAP SPLICES AS NOTED IN SCHEDULE.
6. FOR 6" BLOCK, JOINT MORTAR FINS SHALL BE REMOVED FROM CELLS FOR PLACEMENT OF #5 OR #6 BARS.
7. CONTRACTOR MAY ELECT TO PROVIDE MECHANICAL REINFORCEMENT SPLICES TO MINIMIZE CONGESTION OF VERTICAL BARS. MECHANICAL COUPLERS SHALL BE FABRICATED BY LENTON OR APPROVED EQUAL AND DEVELOP 125% OF REINFORCEMENT STRENGTH.

MASONRY VENEER:

1. MASONRY VENEER IS A NON-STRUCTURAL ELEMENT AND SHALL BE PROVIDED AS SHOWN ON THE ARCHITECTURAL DRAWINGS, INCLUDING CONTROL AND EXPANSION JOINTS.
2. MASONRY VENEER SHALL BE ANCHORED TO THE SUPPORTING STRUCTURE USING GALVANIZED CARBON STEEL WIRE TIES (ASTM A 82) UNLESS NOTED OTHERWISE.
3. LOCATE MASONRY VENEER TIES IN THE MORTAR JOINTS AND SPACE A MAXIMUM OF 16 INCHES ON CENTER VERTICALLY AND A MAXIMUM OF 16 INCHES ON CENTER HORIZONTALLY. THE HORIZONTAL SPACING OF A GIVEN ROW SHALL BE STAGGERED RELATIVE TO THE ADJACENT ROWS.
4. USE MASONRY VENEER TIES APPROPRIATE FOR THE TYPE OF CONSTRUCTION FROM ONE OF THE FOLLOWING MANUFACTURERS:
   A. DUR-O-WAL, INC.
   B. HECKMANN BUILDING PRODUCTS, INC.
   C. HOHMANN & BANARD, INC.
5. SUBMIT ALL COMPONENTS PROPOSED FOR USE TO THE A/E FOR REVIEW.
6. PROVIDE GALVANIZED STEEL BRICK LINTELS PER THE BELOW SCHEDULE.

LOOSE LINTEL TABLE

SPAN (S)	ANGLE	BEARING (B)
0'-0" < S <= 4'-0"	L4x3x5/16 (LLH)	4"
4'-0" < S <= 6'-0"	L4x4x5/16	6"
6'-0" < S <= 8'-0"	L6x4x5/16 (LLV)	6"



PREFABRICATED WOOD TRUSS SPECIFICATIONS:

1. MATERIALS:
   A. STRUCTURAL LUMBER: MINIMUM PROPERTIES OF DOUGLAS-FIR-LARCH NO. 2 OR SOUTHERN PINE NO. 2 PER THE 2015 NATIONAL DESIGN SPECIFICATION, OR APPROVED EQUAL. OTHER NO. 2 SPECIES MUST BE SUBMITTED TO ENGINEER FOR APPROVAL.
   B. METAL CONNECTOR PLATES: COLD STORAGE: GALVANIZED SHEET STEEL ASTM A446, GRADE A, COATING CLASS G60 PER ASTM A525. MANUFACTURED WITH HOLES, PLUGS, TEETH, OR PRONGS UNIFORMLY SPACED AND FORMED.
2. DESIGN CRITERIA:
   B. LOADING DESIGN PARAMETERS:
      TOP CHORD - LIVE, RAIN AND SNOW LOADS: AS INDICATED UNDER GOVERNING CODE NOTES.
      TOP CHORD DEAD LOAD: 10.0 PSF
      BOTTOM CHORD DEAD LOAD: 10.0 PSF
      NET WIND UPLIFT: (0.6D + W) ASD
      MECHANICAL ROOF TOP UNITS: COORDINATE WITH MECHANICAL PLAN WEIGHTS. ADDITIONAL SEISMIC AND WIND LOADS SPECIFIED PER PLAN AND SECTION.
   C. DESIGN OF MEMBERS AND CONNECTIONS IS TO BE BY A PROFESSIONAL ENGINEER, REGISTERED IN THE STATE WHICH THIS BUILDING IS LOCATED, EXPERIENCED IN SIMILAR DESIGN, RETAINED BY THE MANUFACTURER.
   D. WOOD TRUSSES SHALL BE DESIGNED IN ACCORDANCE WITH IN ACCORDANCE WITH THE GOVERNING BUILDING CODE AND APPROVED ENGINEERING PRACTICE.
   E. TRUSS TO TRUSS CONNECTIONS, INCLUDING PIGGY BACK TO SUPPORTING TRUSSES, SHALL BE DESIGNED BY THE TRUSS MANUFACTURER.
   F. THE DESIGN AND MANUFACTURE OF METAL-PLATE-CONNECTED WOOD TRUSSES SHALL COMPLY WITH ANSI/TPI 1.
   G. THE TRUSS SUBMITTAL PACKAGE SHALL EXHIBIT THE SEAL OF THE ENGINEER RESPONSIBLE FOR THE TRUSS AND/OR LATERAL RESTRAINT BRACING DESIGN. THE TRUSS SUBMITTAL PACKAGE SHALL BE SUBMITTED TO THE ARCHITECT AND ENGINEER FOR REVIEW.
   H. THE TRUSS SUBMITTAL PACKAGE SHALL INCLUDE THE FOLLOWING INFORMATION:
      1. THE TRUSS DESIGN DRAWING OF EACH INDIVIDUAL TRUSS.
      2. THE TRUSS PLACEMENT DIAGRAM THAT IDENTIFIES THE PROPOSED LOCATION FOR EACH INDIVIDUALLY DESIGNATED TRUSS AND REFERENCES THE CORRESPONDING TRUSS DESIGN DRAWING.
      3. THE PERMANENT INDIVIDUAL TRUSS MEMBER RESTRAINT/BRACING METHOD AND DETAILS AND ANY OTHER DETAILS GERMANE TO THE TRUSSES.
      4. COVER/TRUSS INDEX SHEET SIGNED AND SEALED BY THE ENGINEER IN RESPONSIBLE CHARGE (NOTE THAT THE BELOW PACKAGE IS THE RESPONSIBILITY OF THE TRUSS MANUFACTURER) THAT INCLUDE:
         a. IDENTIFICATION OF THE BUILDING/PROJECT WITH LOCATION
         b. IDENTIFICATION OF THE CONSTRUCTION DOCUMENTS WITH DRAWING NUMBER AND REVISION DATE.
         c. SPECIFIED BUILDING CODE.
         d. COMPUTER PROGRAM USED.
         e. ROOF DEAD AND LIVE/SNOW LOADS INCLUDING DRIFTING SNOW AND UNBALANCED SNOW.
         f. FLOOR DEAD AND LIVE LOADS.
         g. WIND LOAD CRITERIA FROM REFERENCE CODE.
         h. ADDITIONAL DESIGN LOADS SUCH AS PONDING AND MECHANICAL LOADS.
         i. A LISTING OF THE INDIVIDUAL IDENTIFICATION NUMBERS AND DATES OF EACH TRUSS DESIGN DRAWING REFERENCED BY THE COVER/TRUSS INDEX SHEET.
   H. MEMBER SIZES SHOWN ARE MINIMUM SIZES.
   I. MAXIMUM LIVE LOAD DEFLECTION IS TO BE L/360.
   J. MAXIMUM TOTAL LOAD DEFLECTION IS TO BE L/240.
   K. TOTAL LOAD MAXIMUM GIRDER TRUSS DEFLECTION IS TO BE L/360.
3. MISCELLANEOUS:
   A. BOLT ALL MULTIPLE MEMBER TRUSSES TOGETHER AS RECOMMENDED BY THE TRUSS MFR. TO DISTRIBUTE STRESSES ACROSS PLYS.
   B. VERIFY ALL DIMENSIONS, ELEVATIONS AND SLOPES PRIOR TO MANUFACTURING. REPORT ANY DISCREPANCIES IMMEDIATELY TO THE ARCHITECT.
   C. WOOD TRUSSES SHALL BE DESIGNED AND FABRICATED TO CONFORM TO THE GEOMETRIES SHOWN ON THE DRAWINGS. WEB CONFIGURATIONS ARE TO BE DETAILED AS REQUIRED BY THE DESIGNER/ FABRICATOR.
   D. PROVIDE AND INSTALL BRIDGING FOR PREFABRICATED WOOD TRUSSES AS INDICATED ON THE TRUSS MANUFACTURER'S SHOP DRAWINGS.
   E. PROVIDE AND INSTALL PERMANENT TRUSS BRACING IN ACCORDANCE WITH THE REFERENCED STANDARDS, AND AS INDICATE ON THE APPROVED SHOP DRAWINGS.
   F. THE TRUSS MANUFACTURER SHALL PROVIDE AN SBCA STANDARD JOBSITE PACKAGE FOR WOOD TRUSSES AS DESCRIBED IN SBC ASSOCIATION RESEARCH REPORT SRR NO. 1509-06 THAT INCLUDES A TRUSS SUBMITTAL PACKAGE DELIVERED TO THE JOBSITE WITH THE TRUSSES.

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CRAWFORD COUNTY STATE OF OHIO

PROJECT
Crawford Co.
Title Office & Crawford Co. Solid Waste District
New Office Building
2538 E. Mansfield St.
Bucyrus, OH 44820

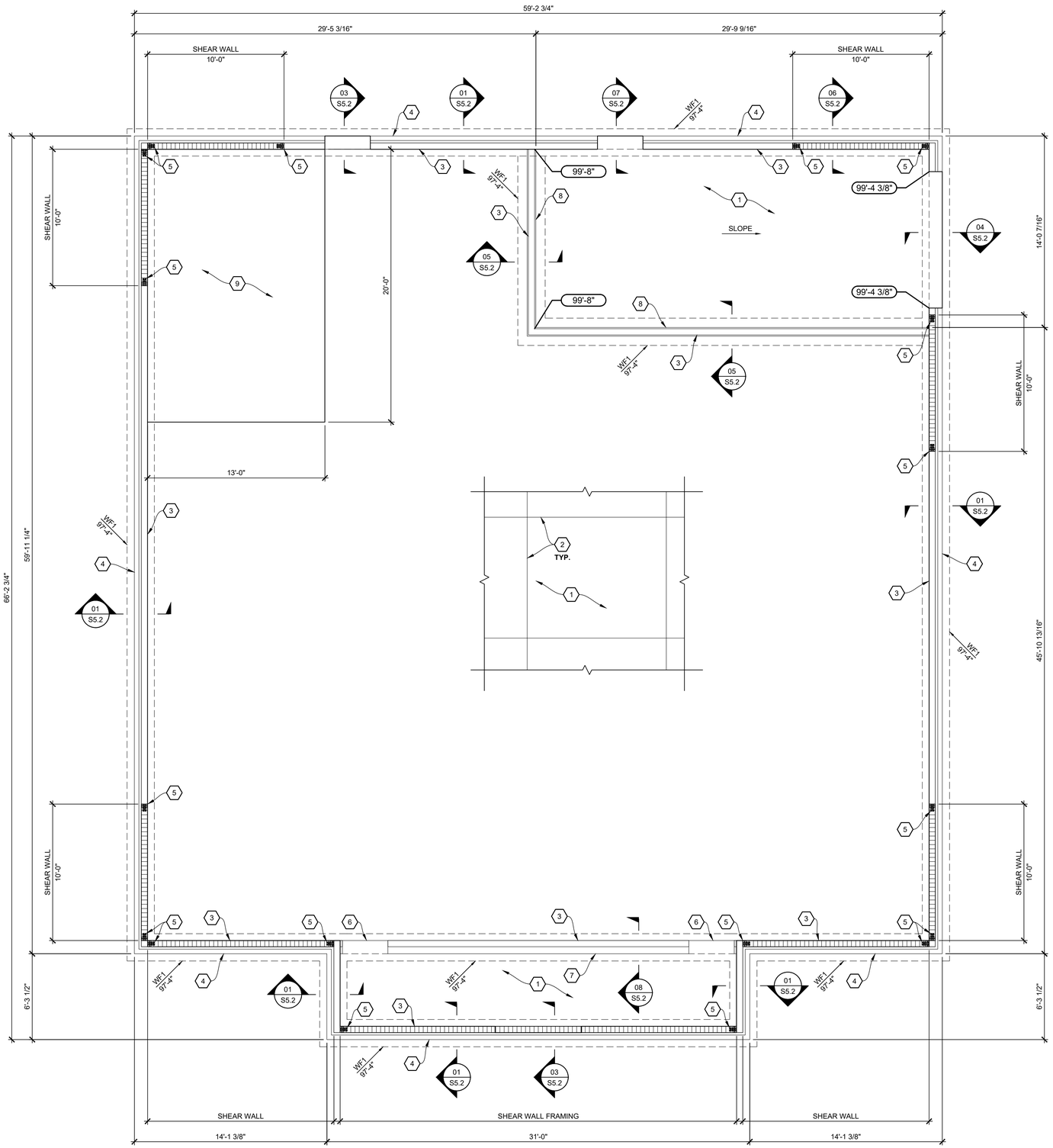
STATE OF OHIO
MATTHEW D DERWACTER
E-68641
REGISTERED
PROFESSIONAL ENGINEER
04-22-2024

SHEET INFORMATION

Project #: 23-122
Issued For: Permit/Bid
Date: 2024-04-22
Revisions:

SHEET TITLE
STRUCTURAL GENERAL NOTES

SHEET NUMBER
S0.1



01 **FOUNDATION PLAN**
SCALE: 1/4" = 1'-0"

FOUNDATION PLAN NOTES

A	SEE SHEET **S0.1** FOR GENERAL NOTES.
B	ALL ELEVATIONS ARE RELATIVE TO A FINISH FLOOR ELEVATION OF 100'-0" (REFERENCE ONLY).
C	STEPS IN FOOTING AS REQUIRED TO MAINTAIN FROST DEPTH. SEE **S5.1-03** FOR TYPICAL DETAIL.
D	COORDINATE DOOR OPENINGS AND STOOP LOCATIONS WITH ARCH. DRAWINGS.
E	SEE DETAIL **S5.1-01** FOR TYPICAL REINFORCING DETAILING.
F	SEE DETAIL **S5.1-02** FOR TYPICAL REINFORCING AT FOOTING CORNERS AND INTERSECTIONS.
G	SEE DETAIL **S5.1-05** FOR RE-ENTRANT SLAB REINFORCING, TYP. AT SLAB PENETRATIONS, DOOR OPENINGS, ETC.
H	SEE DETAIL **S5.1-06** FOR TYPICAL PIPE PENETRATIONS THROUGH FOUNDATIONS.
I	DIMENSIONS SHOWN FROM OUTSIDE FACE OF 12" CMU FOUNDATION WALL FRAMING, U.N.O. COORDINATE WITH ARCH. DRAWINGS.

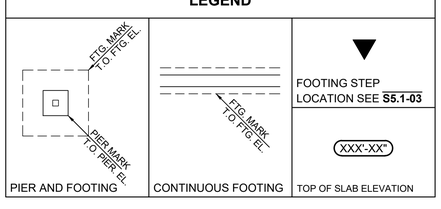
KEYED NOTES

#	
1	4" CONCRETE SLAB ON GROUND REINFORCED w/WWR 6x6-W1.4xW1.4 ON 15 MIL. VAPOR BARRIER OVER 6" FREE DRAINING COMPACTED GRANULAR BASE. TOP OF SLAB AT 100'-0", U.N.O.
2	SLAB CONTROL AND/OR CONSTRUCTION JOINTS, LOCATE AS SHOWN, SEE **S5.1-04** FOR DETAILS.
3	2x6 LOAD BEARING STUD WALL FRAMING, SEE NOTES ON SHEET **S3.1**.
4	12" CMU FOUNDATION WALL WITH 8" TOP COURSE, REINF. WITH #5 DOWELS AT 32"O.C., SEE **S5.2-01**.
5	SIMPSON HDU8-SDS 2.5 HOLD DOWN WITH SIMPSON SSTB 28 (7/8"Ø) ANCHOR WHERE SHOWN ON PLAN, SEE **S5.2-02**.
6	AT DOOR OPENING, HOLD FOUNDATION WALL DOWN 8".
7	12" CMU FOUNDATION WALL, REINF. WITH #5 DOWELS AT 32"O.C., SEE **S5.2-08**.
8	8" CMU FOUNDATION WALL, REINF. WITH #5 DOWELS AT 32"O.C., SEE **S5.2-05**.
9	6" CONCRETE SLAB ON GROUND REINFORCED w/WWR 6x6-W1.4xW1.4 ON 15 MIL. VAPOR BARRIER OVER 6" FREE DRAINING COMPACTED GRANULAR BASE. TOP OF SLAB AT 100'-0", U.N.O.

CONTINUOUS WALL FOOTING SCHEDULE

MARK	SIZE	REINFORCING	
		LONGITUDINAL	TRANSVERSE
WF1	2'-0" x CONT. x 1'-4"	(2) #5 CONT., BOTTOM	NONE

LEGEND



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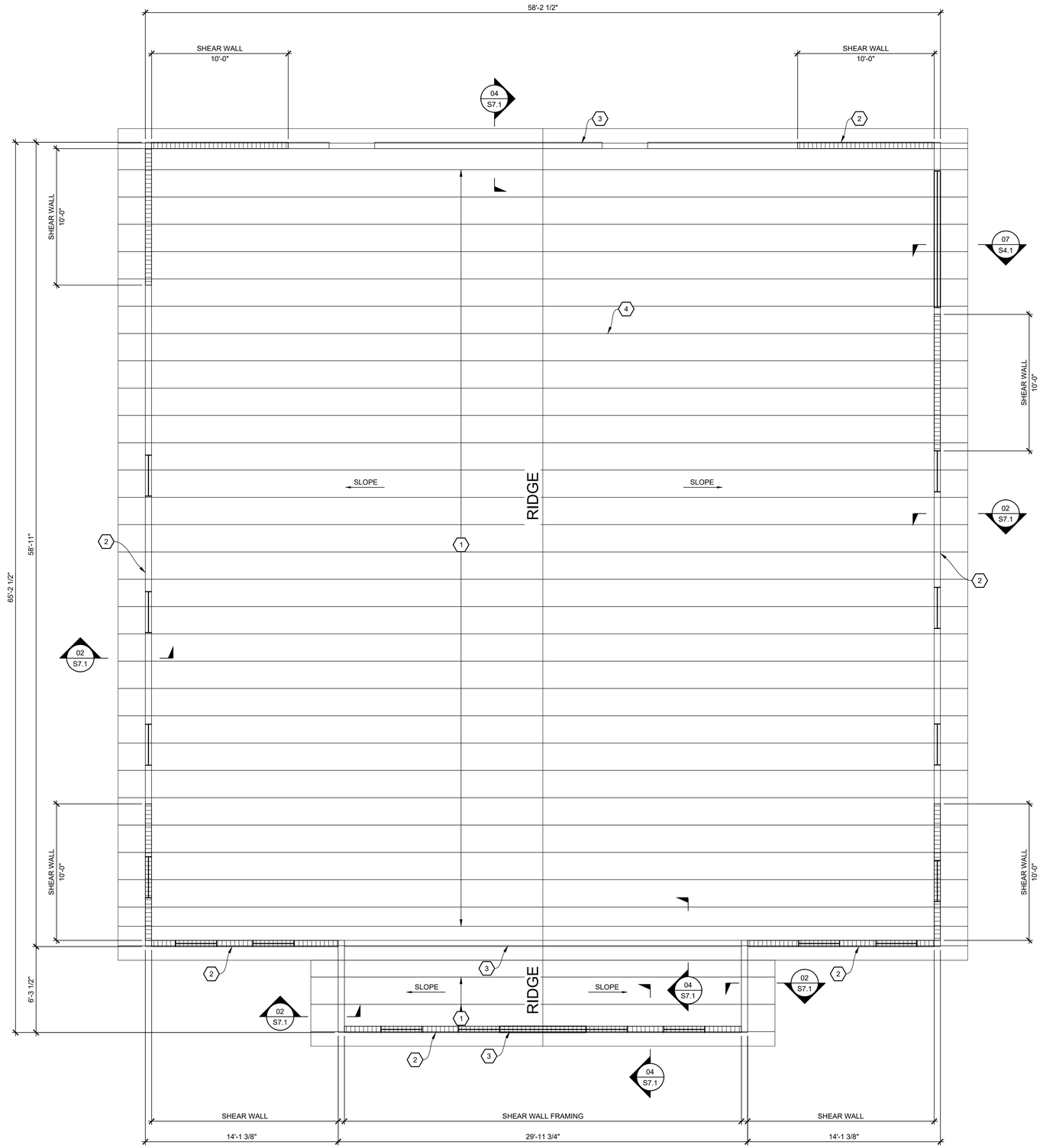
SHEET NUMBER
S1.1



01 **ROOF FRAMING PLAN**
SCALE: 1/4" = 1'-0"

FRAMING PLAN NOTES	
A	SEE SHEET **S0.1** FOR GENERAL NOTES.
B	ALL ELEVATIONS ARE RELATIVE TO A FINISH FLOOR ELEVATION OF 100'-0" (REFERENCE ONLY).
C	LOAD BEARING STUD WALL CONSTRUCTION TO BE 2x6 WOOD STUDS AT 16"O.C. WITH (2)2x CONT. TOP BEARING PLATE AND CONT. SILL PLATE. SILL PLATE TO BE PRESERVATIVE TREATED. CONNECT ALL STUDS TO TOP PLATE AND SILL PLATE WITH (2) 16d (x3 1/2") NAILS AT EACH END. FOR WALL SHEATHING SEE SCHEDULE THIS SHEET. SEE **S4.1-01** FOR TYPICAL WALL FRAMING ELEVATIONS. ALIGN WALL STUDS WITH ROOF TRUSSES. TOP OF WALL FRAMING AT 110'-0", U.N.O.
D	COORDINATE WALL OPENINGS SIZES AND LOCATIONS IN LOAD BEARING WALLS WITH ARCHITECTURAL DRAWINGS. FOR HEADER SCHEDULE AND FRAMING DETAILS, SEE **S4.1-02**.
E	FOR ALL INTERIOR, NON-LOAD BEARING STUD WALLS, SEE ARCH. SEE DETAIL **S4.1-06** FOR NON-LOAD BEARING WALL FASTENING TOP & BOTTOM.
F	ROOF CONSTRUCTION TO BE DIAPHRAGM WITH SPAN RATED WOOD SHEATHING, PER ROOF SHEATHING SCHEDULE THIS SHEET, ON PRE-ENGINEERED COMMON WOOD TRUSSES.
G	TRUSSES SHALL BE DESIGNED AS COMMON TRUSSES WITH BOTTOM CHORD BEARING. FOR TRUSS BEARING ELEVATION, SEE FRAMING PLAN.
H	DIMENSIONS SHOWN FROM OUTSIDE FACE OF STUD WALL FRAMING, U.N.O. COORDINATE WITH ARCH. DRAWINGS.

KEYED NOTES	
#	
1	ENGINEERED WOOD ROOF TRUSSES AT 2'-0"O.C., SEE FRAMING NOTES THIS SHEET.
2	LOAD BEARING 2x6 STUD WALL FRAMING, SEE FRAMING NOTES THIS SHEET.
3	ENGINEERED WOOD ROOF GABLE END TRUSS.
4	ALIGN FACE OF TRUSS WITH WALL BELOW. SEE ARCHITECTURAL FOR EXACT LOCATION. PROVIDE WITH GABLE END FRAMING AT 24" O.C. MAX.

ROOF SHEATHING SCHEDULE

SHEATHING	FASTENING	FASTENING SPACING - MAX.	
		SUPPORTED PANEL EDGES	INTERMEDIATE SUPPORTS
19/32 APA RATED SHEATHING 40/20 EXPOSURE 1	NAILS - #10d COMMON	6" O.C.	1'-0" O.C.

NOTE: ROOF SHEATHING SHALL BE ORIENTED WITH THE STRONG AXIS OF SHEATHING PERPENDICULAR TO THE ROOF TRUSSES AND SHALL NOT BE CUT SMALLER THAN 24" IN ANY DIRECTION. SEE DETAIL **S7.1-01** FOR ADDITIONAL INFORMATION.

EXTERIOR AND INTERIOR SHEAR WALL SHEATHING SCHEDULE

SHEATHING	FASTENING	FASTENING SPACING - MAX.		
		WALL TYPE	SUPPORTED PANEL EDGES A	INTERMEDIATE SUPPORTS
7/16 APA SPAN SHEATHING 24/16 EXPOSURE 1	NAILS - 0.131" DIA. SHANK COMMON NAILS, MIN. 1 1/2" PENETRATION INTO FRAMING	TYPICAL WALL	4"O.C.	12"O.C.
		SHEAR WALL	3"O.C.	6"O.C.

A. ALL FASTENERS MUST BE LOCATED A MINIMUM OF 3/8" FROM PANEL EDGES.

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E-68641
REGISTERED PROFESSIONAL ENGINEER
04-22-2024

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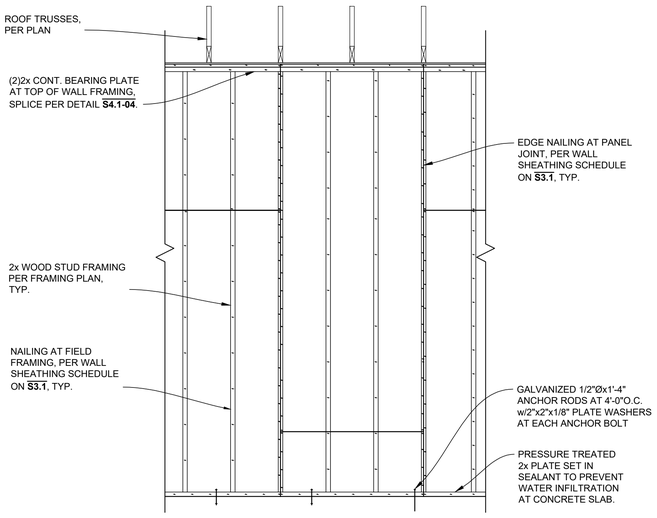
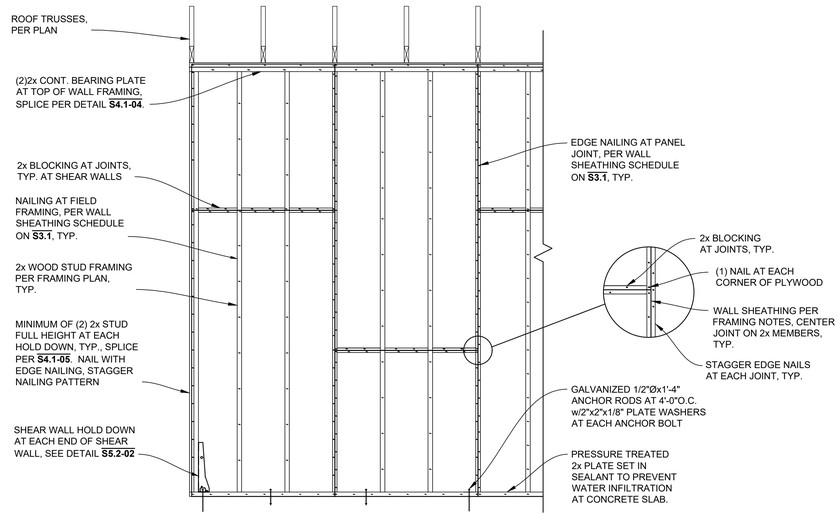
SHEET TITLE
ROOF FRAMING PLAN

SHEET NUMBER
S3.1

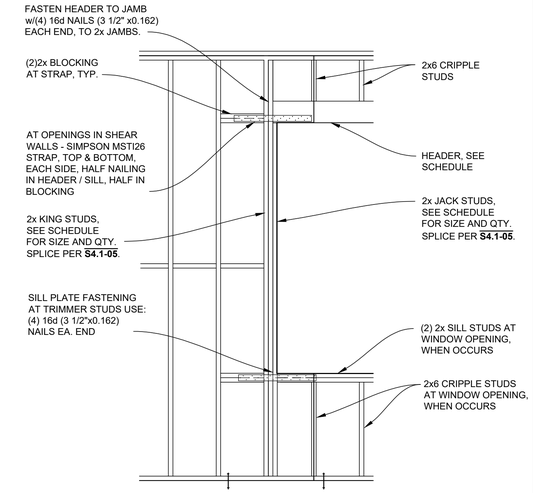


FRAMING AT TYPICAL WALLS



FRAMING AT SHEAR WALLS

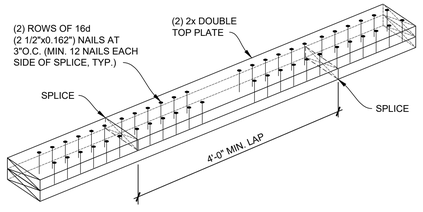
01 TYPICAL BEARING WALL FRAMING ELEVATIONS
SCALE: N/A



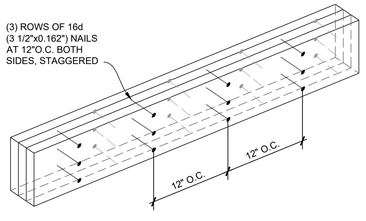
STUD WALL HEADER SCHEDULE				
ROUGH OPENING	STUD WALL LINTEL			BRICK LINTEL
	LINTEL *	JACK STUDS	KING STUDS	
S </= 4'-0"	(3)2x10 WITH (2)1/2" PLYWOOD SPACERS	(1) 2x	(2) 2x	SEE S0.1
4'-0" < S >/= 6'-0"	(3)2x12 WITH (2)1/2" PLYWOOD SPACERS	(2) 2x	(3) 2x	
6'-0" < S >/= 9'-0"	(3)1 3/4" x 9 1/2" 2.0E LVL **	(2) 2x	(4) 2x	
9'-0" < S >/= 12'-0"	(3)1 3/4" x 11 7/8" 2.0E LVL **	(2) 2x	(4) 2x	SEE S4.1-07

* SEE DETAIL S4.1-04 FOR HEADER SPLICE DETAIL
** FASTEN MULTI-PLY LVL PER MFR'S REQUIREMENTS.

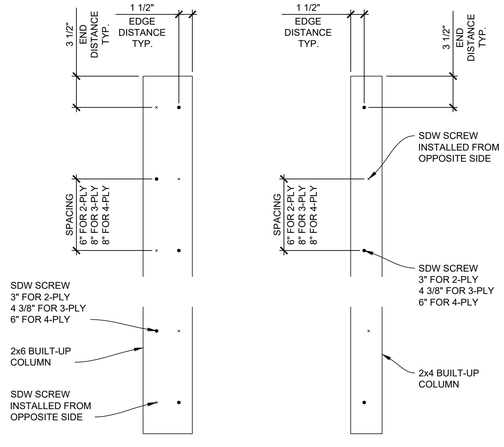
02 FRAMING AT WALL OPENINGS
SCALE: N/A



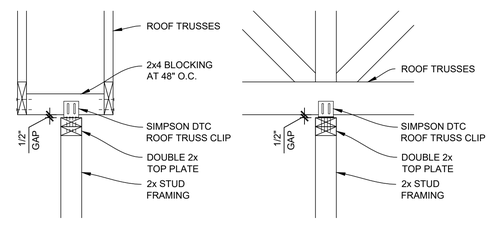
03 TOP PLATE SPLICE ISOMETRIC
SCALE: N/A



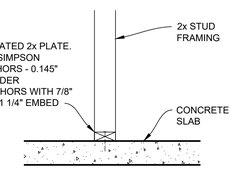
04 HEADER SPLICE ISOMETRIC
SCALE: N/A



05 TYPICAL MULTI-PLY COLUMN SPLICE
SCALE: N/A



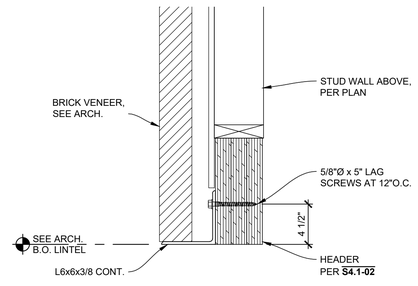
PARALLEL TO TRUSS **PERPENDICULAR TO TRUSS**



AT SIMPSON DTC ROOF TRUSS CLIP - NAILS SHOULD NOT BE DRIVEN COMPLETELY FLUSH AGAINST THE CONNECTOR TO ALLOW VERTICAL TRUSS MOVEMENT. FASTEN PER MANUFACTURER'S REQUIREMENTS.

TYPICAL WALL CONNECTION AT SLAB

06 INTERIOR STUD WALL BRACING
SCALE: N/A



07 BRICK LINTEL DETAIL
SCALE: 1 1/2" = 1'-0"

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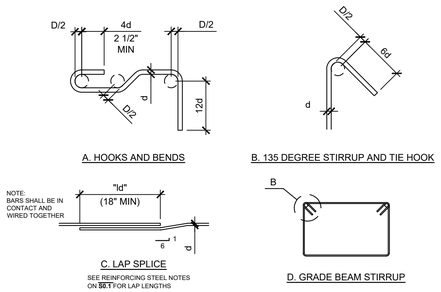
WALL FRAMING ELEVATIONS & DETAILS

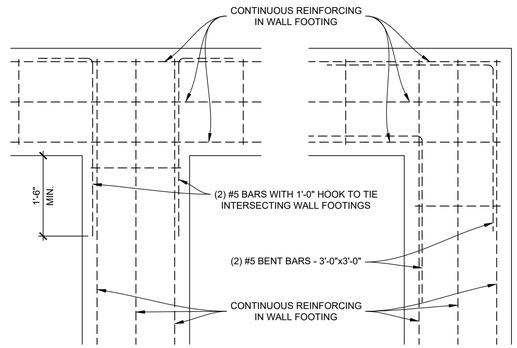
SHEET NUMBER

S4.1

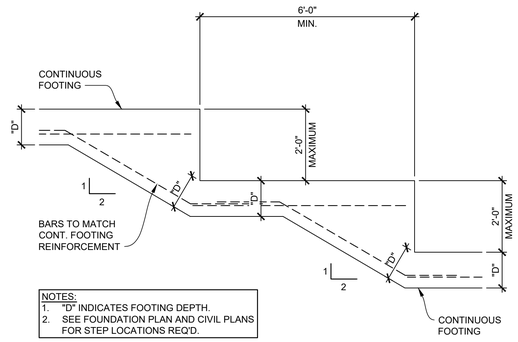


BEND DIAMETER SCHEDULE		
BAR SIZE	STANDARD BEND DIAMETER	REDUCED BEND DIAMATER FOR TIES AND STIRRUPS
#3 THROUGH #5	D = 6*d	D = 4*d
#6 THROUGH #8	D = 6*d	NA
#9 THROUGH #11	D = 8*d	NA
#14 AND #18	D = 10*d	NA

01 TYPICAL REINFORCEMENT DETAILS
SCALE: N/A

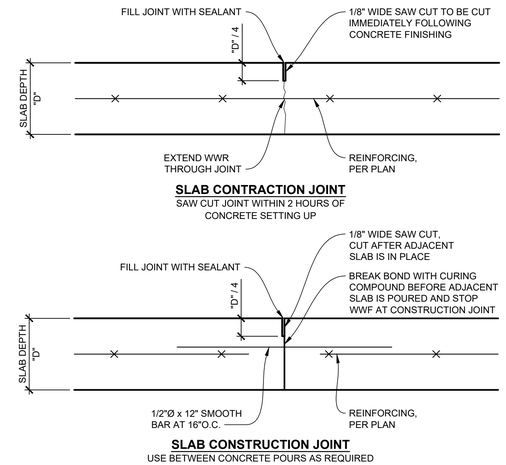


02 PLAN DETAIL AT INTERSECTING FOOTINGS
SCALE: N/A

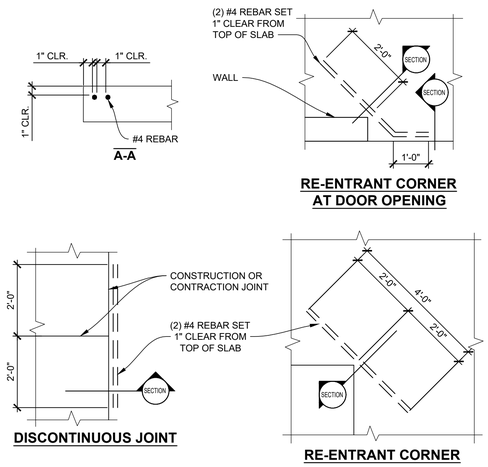


NOTES:
1. "D" INDICATES FOOTING DEPTH.
2. SEE FOUNDATION PLAN AND CIVIL PLANS FOR STEP LOCATIONS REQ'D.

03 TYPICAL FOUNDATION STEP
SCALE: N/A

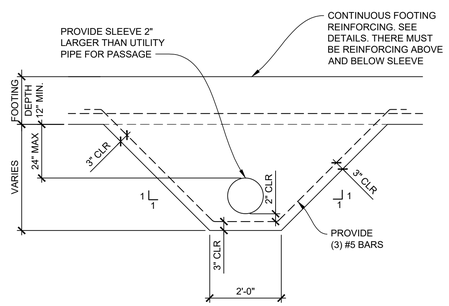


04 SLAB CONTRACTION AND CONSTRUCTION JOINT
SCALE: N/A

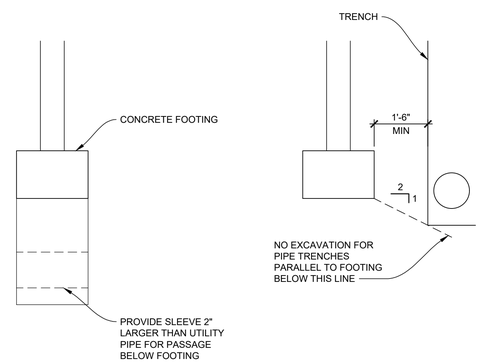


05 SLAB REINFORCEMENT
SCALE: N/A

NOTE:
WHEN TOP OF UTILITY PIPE IS MORE THAN 2'-0" BELOW FOOTING, CONCRETE ENCASEMENT IS NOT REQUIRED



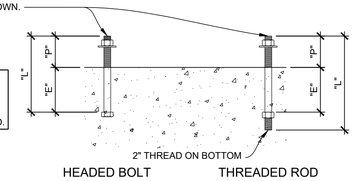
06 FOUNDATION SECTION AT PIPE PENETRATION
SCALE: N/A



ASTM F1554, GRADE 36 HEADED ANCHOR ROD OR ANCHOR ROD WITH THREADED END. PROVIDE STANDARD A563 HEX NUT & F436 WASHER ABOVE BASE PLATE. PROVIDE HEX NUT AT THE BOTTOM OF THREADED END, AS SHOWN.

NOTE:
DO NOT WET SET ANCHOR RODS.

NOTE:
THREADED PROJECTION ("P") SPECIFIED IS A MINIMUM. INCREASE PROJECTION AS REQUIRED.



ANCHOR ROD DIMENSIONS				
BOLT DIAMETER	EMBEDMENT "E"	THREADED PROJECTION "P"	LENGTH "L"	
			HEADED BOLT	THREADED ROD
3/4"	12"	PER PEMB	12" + P	14" + P
7/8"	14"	PER PEMB	14" + P	16" + P
1"	14"	PER PEMB	14" + P	16" + P
1 1/8"	16"	PER PEMB	16" + P	18" + P
1 1/4"	18"	PER PEMB	18" + P	20" + P

07 ANCHOR ROD DETAILS
SCALE: N/A

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FOUNDATION DETAILS

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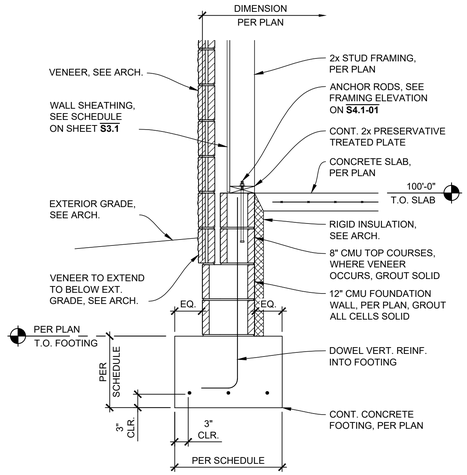
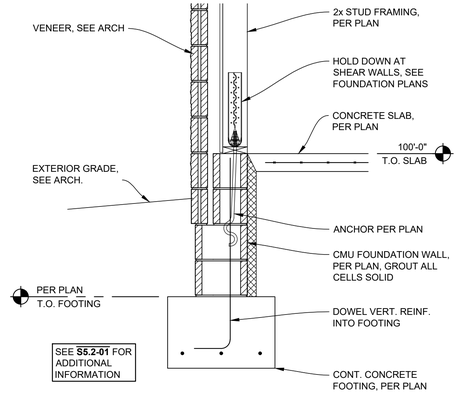
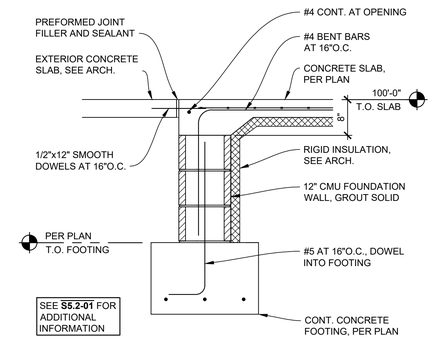


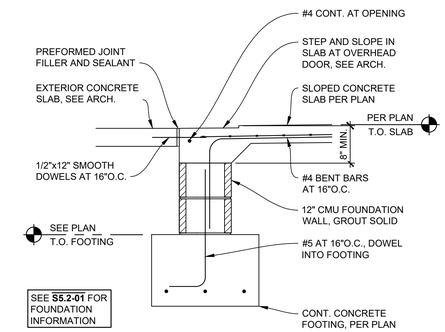
01 FOUNDATION SECTION
SCALE: 3/4" = 1'-0"



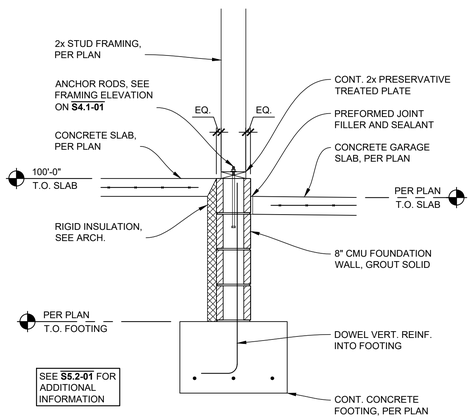
02 SECTION AT HOLD DOWN
SCALE: 3/4" = 1'-0"



03 FOUNDATION SECTION AT DOOR
SCALE: 3/4" = 1'-0"



04 SECTION @ OVERHEAD DOOR
SCALE: 3/4" = 1'-0"



05 FOUNDATION SECTION
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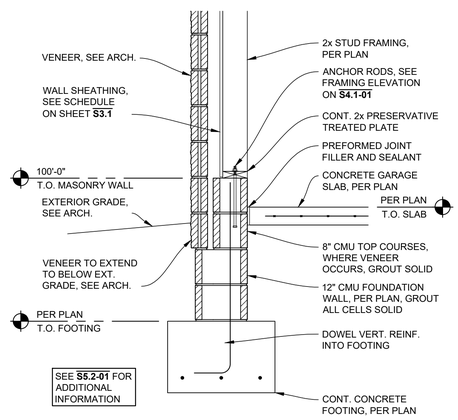
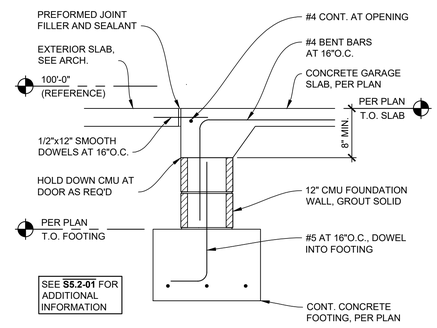
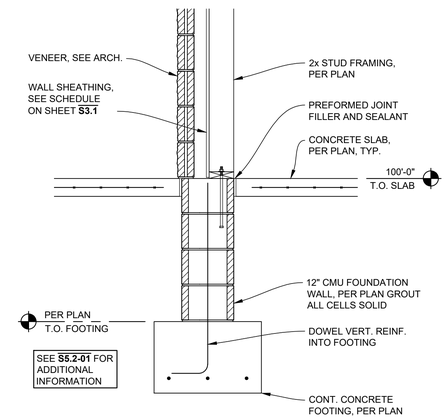


06 FOUNDATION SECTION
SCALE: 3/4" = 1'-0"



07 FOUNDATION SECTION AT DOOR
SCALE: 3/4" = 1'-0"



08 FOUNDATION SECTION
SCALE: 3/4" = 1'-0"

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FOUNDATION DETAILS

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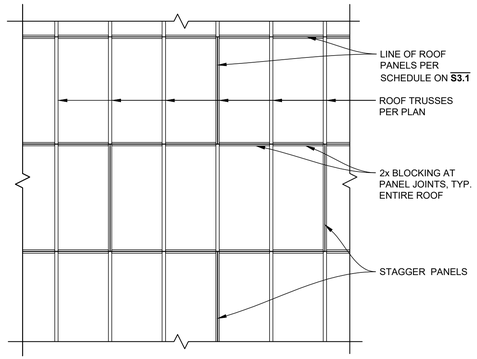
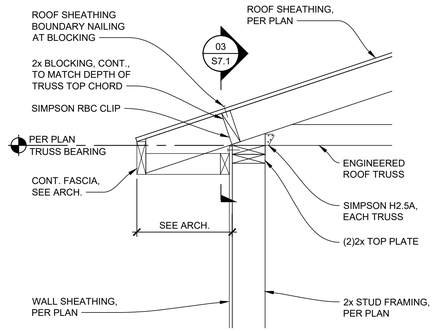
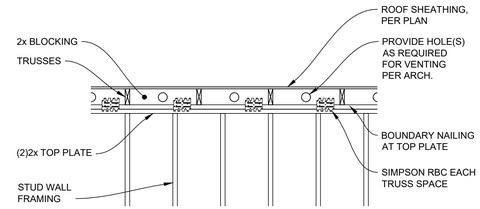
S5.2



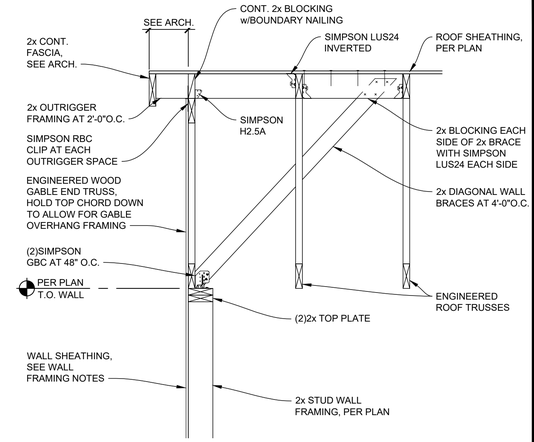
01 ENLARGED PLAN DETAIL AT DECK CONNECTION
SCALE: N/A



02 DETAIL
SCALE: 1" = 1'-0"



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



04 DETAIL
SCALE: 3/4" = 1'-0"

Architect

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SHEET TITLE

ROOF FRAMING DETAILS

SHEET NUMBER

S7.1

DERWACTER & ASSOCIATES, LLC
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FLOOR PLAN – SANITARY

SCALE 1/4" = 1'-0"

N

Architect

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CRAWFORD COUNTY STATE OF OHIO

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SHEET NUMBER

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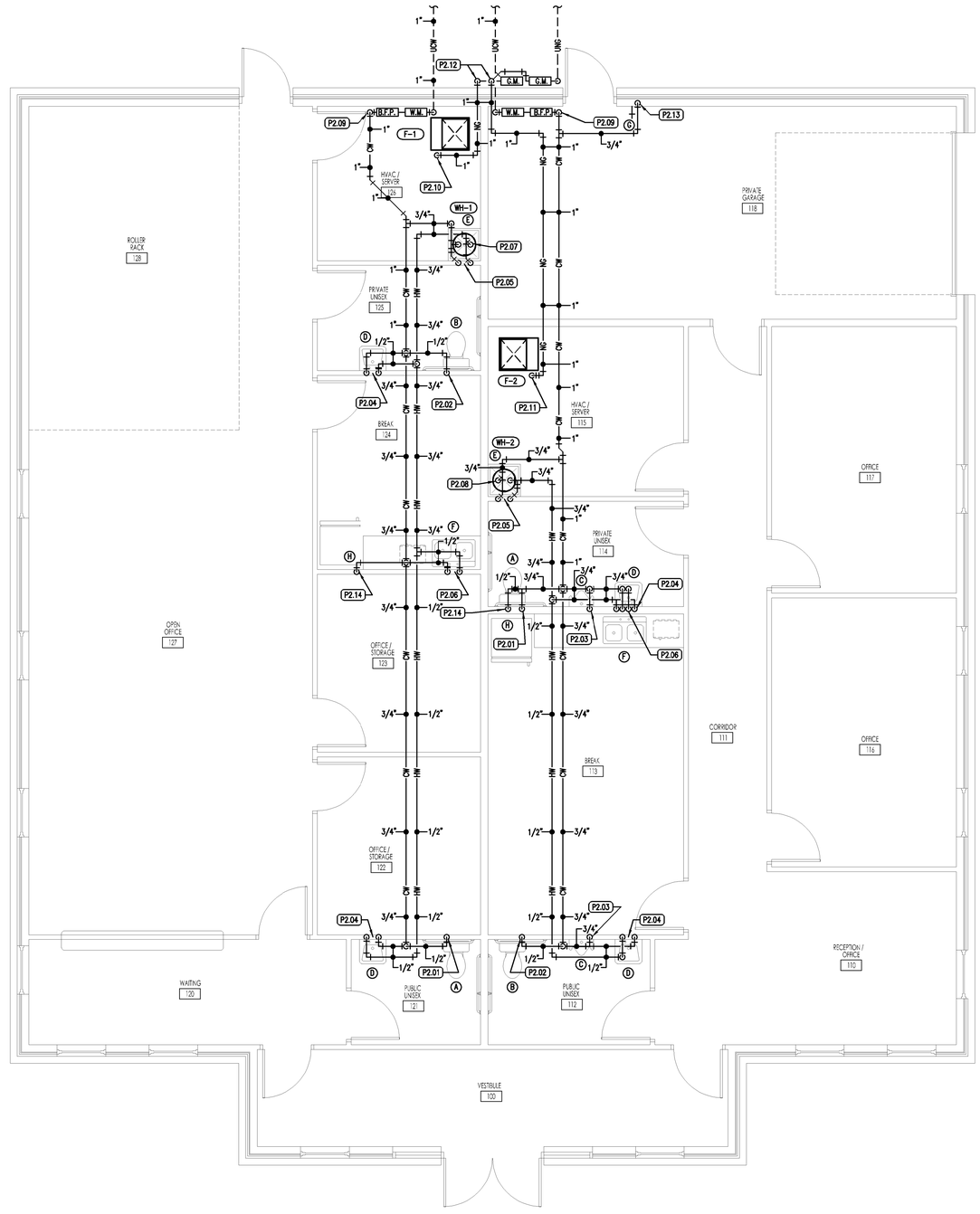


FLOOR PLAN – PLUMBING

SCALE 1/4" = 1'-0"

N

PLUMBING CODED NOTES

P2.01	1/2" COLD WATER FROM CEILING SPACE DOWN TO WATER CLOSET FIXTURE "A" AS REQUIRED.
P2.02	1/2" COLD WATER FROM CEILING SPACE DOWN TO WATER CLOSET FIXTURE "B" AS REQUIRED.
P2.03	3/4" COLD WATER FROM CEILING SPACE DOWN TO URINAL FIXTURE "C" AS REQUIRED.
P2.04	1/2" HOT & COLD WATER FROM CEILING SPACE DOWN TO LAVATORY FIXTURE "D" AS REQUIRED.
P2.05	1/2" HOT & COLD WATER FROM CEILING SPACE DOWN TO MOP SINK FIXTURE "E" AS REQUIRED.
P2.06	1/2" HOT & COLD WATER FROM CEILING SPACE DOWN TO COUNTER SINK FIXTURE "F" AS REQUIRED.
P2.07	3/4" HOT & COLD WATER FROM CEILING SPACE DOWN TO WATER HEATER FIXTURE "WH-1" AS REQUIRED.
P2.08	3/4" HOT & COLD WATER FROM CEILING SPACE DOWN TO WATER HEATER FIXTURE "WH-2" AS REQUIRED.
P2.09	1" COLD WATER UP FROM WATER SERVICE AS REQUIRED.
P2.10	1" NATURAL GAS FROM CEILING SPACE DOWN TO FURNACE "F-1" W/ GAS COCK, UNION & 6" DRIP LEG AS REQUIRED.
P2.11	1" NATURAL GAS FROM CEILING SPACE DOWN TO FURNACE "F-2" W/ GAS COCK, UNION & 6" DRIP LEG AS REQUIRED.
P2.12	1" NATURAL GAS UP FROM GAS SERVICE AS REQUIRED.
P2.13	3/4" COLD WATER FROM CEILING SPACE DOWN TO HOSE BIBB FIXTURE "G" AS REQUIRED.
P2.14	1/2" COLD WATER FROM CEILING SPACE DOWN TO ICE MAKER BOX FIXTURE "H" AS REQUIRED.

Architect

OMNESS DESIGN, INC.
140 FAIRFAX ROAD
MARION, OHIO 43302

CRAWFORD COUNTY STATE OF OHIO

PROJECT
Crawford Co.
Title Office & Crawford Co. Solid Waste District
New Office Building
2358 E. Mansfield St.
Bucyrus, OH 44820

STATE OF OHIO
REGISTERED PROFESSIONAL ENGINEER

SHEET INFORMATION

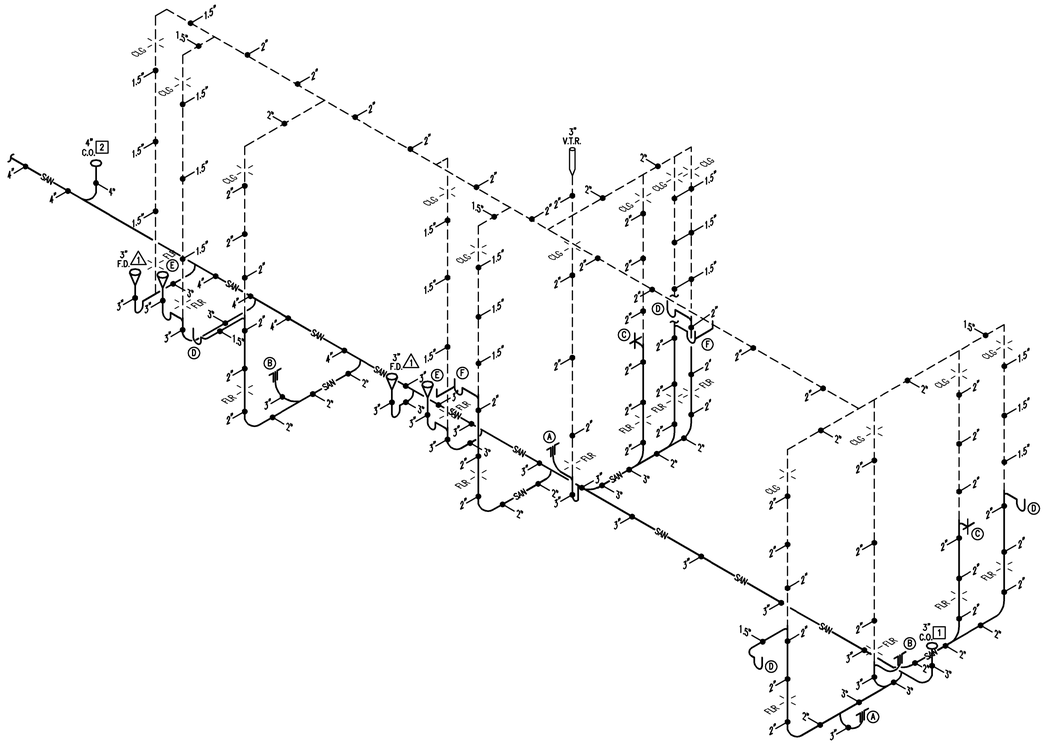
Project #:	23-122
Issued For:	Permit/Bid
Date:	2024-02-26
Revisions:	

SHEET TITLE

PLUMBING

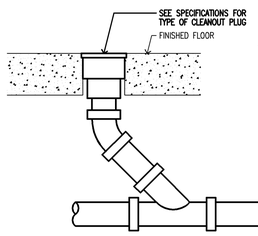
SHEET NUMBER

P1.02



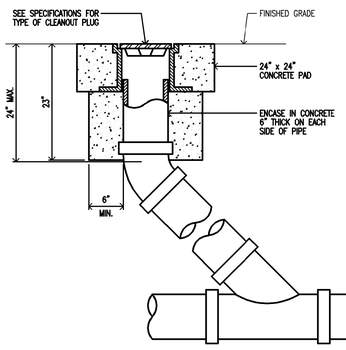
SANITARY STACK ISOMETRIC

SCALE: NONE



CLEANOUT (FLOOR TYPE) DETAIL

SCALE: NONE



CLEANOUT (GRADE TYPE) DETAIL

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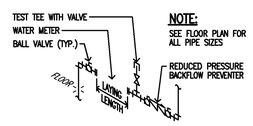
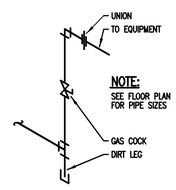


NOTE:
SEE FLOOR PLAN FOR ALL PIPE SIZES

LAYING LENGTH	
1" METER	10-3/4"

WATER METER DETAIL

SCALE: NONE



NOTE:
SEE FLOOR PLAN FOR PIPE SIZES

EQUIPMENT NATURAL GAS CONNECTION DETAIL

SCALE: NONE

FIXTURE SCHEDULE

SYM.	DESCRIPTION	CONNECTIONS (IN INCHES) HW	CW	TRAP	SAN	MT. HT.
A	AMERICAN STANDARD MODEL NO. 2154A.004.020 "CADET PRO" WATER CLOSET (AMERICAN STANDARD MODEL NO. 4188A.004.020 TANK WITH TRIP LEVER ON LEFT SIDE AND AMERICAN STANDARD MODEL NO. 3517A.101.020 ELONGATED BOWL WITH AMERICAN STANDARD MODEL NO. 5901.110.020 OPEN FRONT SEAT), HANDICAPPED, WATERSAVER (1.6 GPF), VITREOUS CHINA, CLOSE COUPLED, SIPHON JET, KEENEY MODEL NO. 2780PCLF (3/8") ANGLED HANDWHEEL STOP, KEENEY MODEL NO. K20288 ESCUTCHEON PLATE, KEENEY MODEL NO. PP23805 12" LONG (3/8") BRAIDED STAINLESS STEEL SUPPLY LINE, HERCULES MODEL NO. 90243 "JOHNI-RING" EXTRA THICK WAX RING, AND HERCULES MODEL NO. 90124 "JOHNI-BOLT" BRASS TOILET BOLTS	---	1/2	3	3	FLOOR (16½" RIM)
B	AMERICAN STANDARD MODEL NO. 2154A.005.020 "CADET PRO" WATER CLOSET (AMERICAN STANDARD MODEL NO. 4188A.005.020 TANK WITH TRIP LEVER ON RIGHT SIDE AND AMERICAN STANDARD MODEL NO. 3517A.101.020 ELONGATED BOWL WITH AMERICAN STANDARD MODEL NO. 5901.110.020 OPEN FRONT SEAT), HANDICAPPED, WATERSAVER (1.6 GPF), VITREOUS CHINA, CLOSE COUPLED, SIPHON JET, KEENEY MODEL NO. 2780PCLF (3/8") ANGLED HANDWHEEL STOP, KEENEY MODEL NO. K20288 ESCUTCHEON PLATE, KEENEY MODEL NO. PP23805 12" LONG (3/8") BRAIDED STAINLESS STEEL SUPPLY LINE, HERCULES MODEL NO. 90243 "JOHNI-RING" EXTRA THICK WAX RING, AND HERCULES MODEL NO. 90124 "JOHNI-BOLT" BRASS TOILET BOLTS	---	1/2	3	3	FLOOR (16½" RIM)
C	AMERICAN STANDARD MODEL NO. 6561.017.020 "TRIMBROOK" URINAL, HANDICAPPED, WALL HUNG (WALL HANGERS FURNISHED), WATERSAVER (1.0 GPF), VITREOUS CHINA, SIPHON JET, 3/4" TOP SPUD, INTEGRAL FLUSHING RIM, AMERICAN STANDARD MODEL NO. 6045.101.002 EXPOSED FLUSH VALVE (HANDLE SHALL BE MOUNTED OF LEFT SIDE OF FLUSH VALVE), AND SMITH MODEL NO. 0617 FIXTURE SUPPORT WITH BOTTOM BEARING PLATE	---	3/4	2	2	WALL (17" RIM)
D	AMERICAN STANDARD MODEL NO. 0356.015.020 "LUCERNE" (20x18) LAVATORY, HANDICAPPED, VITREOUS CHINA, WALL HUNG (WALL HANGERS FURNISHED), 3-HOLE CAST FOR AMERICAN STANDARD MODEL NO. 6540.177.002 "MONTERREY" GOOSENECK FAUCET WITH VANDAL RESISTANT WRIST BLADE HANDLES AND VANDAL RESISTANT (0.5 GPM) AERATOR, KEENEY MODEL NO. 5700PCCR (1-1/4") CAST BRASS OPEN GRID STRAINER WITH OFFSET TAILPIECE, KEENEY MODEL NO. 5303PC (1-1/4") CAST BRASS P-TRAP WITH CLEANOUT, KEENEY MODEL NO. 2780PCLF (3/8") ANGLED HANDWHEEL STOP (QTY. 2), KEENEY MODEL NO. K20288 ESCUTCHEON PLATE (QTY. 2), KEENEY MODEL NO. PP23809LF 12" LONG (3/8") BRAIDED STAINLESS STEEL SUPPLY LINE (QTY. 2), WATTS MODEL NO. LFUSG-B-M2 (ORDER NO. 0204143) THERMOSTATIC MIXING VALVE (ASSE 1070 CERTIFIED), KEENEY MODEL NO. PP23801LF 12" LONG (3/8") BRAIDED STAINLESS STEEL SUPPLY LINE (QTY. 2), AND TRUEBRO MODEL NO. 2018-AS-L "LAV-SHIELD" LAVATORY PROTECTIVE ENCLOSURE WITH TAMPER RESISTANT SCREWS	1/2	1/2	1-1/4	1-1/2	WALL (34" RIM)
E	MUSTEE MODEL NO. 63W PRECAST MOLDED STRUCTURAL FIBERGLASS MOP SERVICE BASIN WITH MUSTEE MODEL NO. 65.309 (3") DRAIN SEAL, MUSTEE MODEL NO. 62.301 REMOVABLE STAINLESS STEEL STRAINER, MUSTEE MODEL NO. 63.403 STAINLESS STEEL BUMPER GUARD (QTY. 2), MUSTEE MODEL NO. 67.2424 WALL GUARD WITH TWO PANELS AND CORNER BRACKET, MUSTEE MODEL NO. 65.600 MOP HANGER WITH THREE (3) SPRING LOADED RUBBER HOLDERS, MUSTEE MODEL NO. 65.70 HEAVY DUTY RUBBER HOSE WITH STAINLESS STEEL HOLDER WALL PLATE, AND AMERICAN STANDARD MODEL NO. 8344.212.004 UTILITY FAUCET WITH VACUUM BREAKER, TOP BRACE, LEVER HANDLES, AND HOSE THREADED SPOUT WITH BUCKET HOOK	1/2	1/2	3	3	FLOOR (10" RIM)
F	JUST MODEL NO. DL-2133-A-GR "STYLIST" (33x21) DOUBLE COMPARTMENT SINK, 18 GAUGE (TYPE 304) STAINLESS STEEL, SELF RIMMING; 3-HOLE PUNCHED FOR AMERICAN STANDARD MODEL NO. 6409.170.002 "MONTERREY" GOOSENECK FAUCET WITH VANDAL RESISTANT WRIST BLADE HANDLES AND VANDAL RESISTANT (1.5 GPM) AERATOR, KEENEY MODEL NO. 1438PC (1-1/2") CAST BRASS CRUMB CUP STRAINER (QTY. 2), KEENEY MODEL NO. 1409PC (1-1/2") CAST BRASS FLANGED TAILPIECE (QTY. 2), KEENEY MODEL NO. 5307PC (1-1/2") CAST BRASS P-TRAP WITH CLEANOUT (QTY. 2), KEENEY MODEL NO. 2780PCLF (3/8") ANGLED HANDWHEEL STOP (QTY. 2), KEENEY MODEL NO. K20288 ESCUTCHEON PLATE (QTY. 2), AND KEENEY MODEL NO. PP23802LF 16" LONG (3/8") BRAIDED STAINLESS STEEL SUPPLY LINE (QTY. 2)	1/2	1/2	1-1/2	1-1/2	COUNTER (36" RIM)
G	SMITH MODEL NO. 5609QT-SE-WC NON-FREEZE HOSE BIBB WITH VACUUM BREAKER, REMOVABLE T-HANDLE, AND 3/4" HOSE THREADED OUTLET	---	3/4	---	---	WALL (30")
H	OATEY MODEL NO. 39156 ICE MAKER OUTLET BOX WITH TOP MOUNTED QUARTER TURN SUPPLY STOP, AND KEENEY MODEL NO. PP25523 60" LONG (1/4") BRAIDED STAINLESS STEEL SUPPLY LINE	---	1/2	---	---	WALL (42" RIM)

DRAIN SCHEDULE

SYM.	DESCRIPTION	GRATE TYPE	DRAIN TYPE
1	SMITH MODEL NO. 2110L03-NB CAST IRON FLOOR DRAIN WITH FLASHING COLLAR, SPEEDI SET (PVC) OUTLET CONNECTION, AND SMITH MODEL NO. 2692-03 INLINE TRAP SEALER (ASSE 1072 CERTIFIED)	NICKEL BRONZE	GENERAL
2	SMITH MODEL NO. 2005L03-A06NB CAST IRON FLOOR DRAIN WITH FLASHING COLLAR, ADJUSTABLE STRAINER WITH ROUND TOP, SPEEDI-SET (PVC) OUTLET CONNECTION, AND SMITH MODEL NO. 2692-03 INLINE TRAP SEALER (ASSE 1072 CERTIFIED)	NICKEL BRONZE	TOILET AND SHOWER

CLEANOUT SCHEDULE

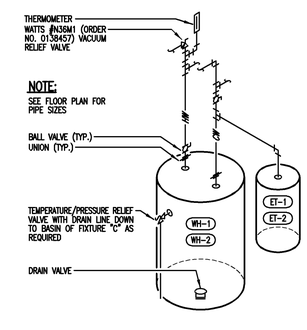
SYM.	DESCRIPTION	COVER TYPE	CLEANOUT TYPE
1	SMITH MODEL NO. 4033L03-NB CAST IRON CLEANOUT WITH BRONZE PLUG AND SPEEDI SET (PVC) OUTLET CONNECTION	NICKEL BRONZE	INTERIOR
2	SMITH MODEL NO. 4263L04-CI CAST IRON CLEANOUT WITH BRONZE PLUG AND SPEEDI SET (PVC) OUTLET CONNECTION	CAST IRON	EXTERIOR

WATER HEATER SCHEDULE

SYM.	MFR.	MODEL NO.	DESCRIPTION
WH-1	BRADFORD WHITE	LE120L3-3	ELECTRIC, GLASS LINED WATER HEATER, 20 GALLON CAPACITY, 2500 WATT ELEMENTS, VOLTAGE 208-1-60, 11 GALLON RECOVERY AT 90°F RISE, 3/4" HOT AND COLD WATER CONNECTIONS, 3-YEAR WARRANTY WEIGHT: 58 LBS. (SHIPPING)
WH-2	BRADFORD WHITE	LE120L3-3	ELECTRIC, GLASS LINED WATER HEATER, 20 GALLON CAPACITY, 2500 WATT ELEMENTS, VOLTAGE 208-1-60, 11 GALLON RECOVERY AT 90°F RISE, 3/4" HOT AND COLD WATER CONNECTIONS, 3-YEAR WARRANTY WEIGHT: 58 LBS. (SHIPPING)

EXPANSION TANK SCHEDULE

SYM.	MFR.	MODEL NO.	DESCRIPTION
ET-1	WATTS	PLT-5-M1 (ORDER NO. 0067370)	THERMAL DIAPHRAGM EXPANSION TANK, 2.1 GAL. VOLUME, 1.5 GAL. ACCEPTANCE @ 20 PSI, 8" DIA. x 11" HIGH TANK, 150 PSI MAXIMUM WORKING PRESSURE, 200°F MAXIMUM ALLOWABLE WORKING TEMPERATURE, 3/4" SYSTEM CONNECTION WEIGHT: 6 LBS. (SHIPPING)
ET-2	WATTS	PLT-5-M1 (ORDER NO. 0067370)	THERMAL DIAPHRAGM EXPANSION TANK, 2.1 GAL. VOLUME, 1.5 GAL. ACCEPTANCE @ 20 PSI, 8" DIA. x 11" HIGH TANK, 150 PSI MAXIMUM WORKING PRESSURE, 200°F MAXIMUM ALLOWABLE WORKING TEMPERATURE, 3/4" SYSTEM CONNECTION WEIGHT: 6 LBS. (SHIPPING)



NOTE:
SEE FLOOR PLAN FOR PIPE SIZES

ELECTRIC WATER HEATER DETAIL

SCALE: NONE

Architect
OMNESS DESIGN, INC.
140 FAIRFAX ROAD
MARION, OHIO 43302

PROJECT
Crawford Co.
Title Office & Crawford Co. Solid Waste District
New Office Building
2358 E. Mansfield St.
Bucyrus, OH 44820

STATE OF OHIO
JONATHAN BRONSON BOSELL
REGISTERED PROFESSIONAL ENGINEER

SHEET INFORMATION

Project #:	23-122
Issued For:	Permit/Bid
Date:	2024-02-26
Revisions:	

SHEET TITLE

PLUMBING

SHEET NUMBER

P1.03

PLUMBING SPECIFICATIONS

GENERAL CONDITIONS

A. REFERENCE
1. For purposes of clearness and legibility, Drawings are essentially diagrammatic and although size and location of equipment are drawn to scale wherever possible, Contractor shall make use of all data in all of the Contract Documents and shall verify this information at the building site. Dimensions given in figures on the Drawings take precedence over scaled dimensions.
2. Drawings and Specifications to be considered cooperative, and anything appearing in Specifications but not on Drawings or vice versa, shall be considered part of the Contract and must be executed.

B. QUALITY ASSURANCE
1. Codes and Permits – Deliver official record of approval, by governing agencies, to Engineer to transmit to Owner.

C. OPERATING INSTRUCTIONS
1. Provide to Owner, after all equipment is in operation and at an agreeable time, competent instructors for the purpose of training Owner's personnel in all phases of operation and maintenance of equipment and systems for both heating and cooling season.

D. DAMAGE AND EMERGENCY REPAIRS
1. Contractor will be held responsible for any damage that may be incurred on any installed work of other trades, by any workman employed in the installation of work under this Contract. Provide covering under workbench or under any work involving cutting and fitting of materials being installed, so as not to damage surrounding finished surfaces.

E. MATERIALS
1. Provide material and labor for that which is neither drawn nor specified but which is obviously a component part of and necessary to complete work which is customarily a part of work of similar character.
2. All materials, fixtures, and equipment shall be new, of the best grade, and installed according to manufacturer's recommendations. Additionally, the installation shall be according to the best standards of practices, complete with all accessories and connections necessary for proper operation, and in compliance with effective State or Local Code requirements.
3. Where piping passes through floor, ceiling or wall, close space between pipe and construction with fire stop putty.

PIPE AND PIPE FITTINGS

A. QUALITY ASSURANCE
1. Welding Materials and Procedures: Conform to ASME Code, 1980 Standards of the American Welding Society, OBBC Chapter 4101:8 Ohio Pressure Piping System Rules.
2. All piping systems in compliance with the Ohio Pressure Pressure System Rules must be performed by certified welders. Provide copies of welding certificate and mark all joints with certificate ID.

B. PRODUCTS
1. PIPE AND TUBE
   a. Steel Pipe: ASTM A53; Schedule 40 black.
   b. Ductile Iron Water Pipe: ANSI A21.51.
   c. Copper Water Tube: ASTM B88; type and temper as scheduled; seamless.
   d. PVC Plastic Pipe: ASTM D2665, Schedule 40.
2. PIPE AND TUBE JOINTS AND FITTINGS
   a. Malleable Iron Threaded Fittings: ASME B16.3.
   b. Malleable Iron Threaded Unions: Class 150.
   c. Ductile Iron Fittings: ANSI A21.10.
   d. Wrought Copper/Bronze Solder Joint Fittings: ASME B16.22 (pressure fittings).
   e. Solder: ASTM B32, Grade 95TA.
   f. PVC Pipe Fittings: ASTM D2665 for Schedule 40.
   g. Solvent for PVC Jointing: ASTM D2564.

C. INSTALLATION
1. General: Install pipe, tube and fittings in accordance with recognized industry practices which will achieve permanently–leakproof piping systems, capable of performing each indicated service without piping failure. Install each run with a minimum of joints and couplings, but with adequate and accessible unions for disassembly and maintenance/replacement of valves and equipment. Reduce sizes (where indicated) by use of reduced fittings. Align piping accurately at connections, with 1/16" misalignment tolerance.
2. Locate piping runs, except as otherwise indicated, vertically and horizontally (pitched to drain) and avoid diagonal runs wherever possible. Orient horizontal runs parallel with walls and column lines. Locate runs as shown or described by diagrams, details and notations or if not otherwise indicated, run piping in the shortest route which does not obstruct usable space or block access for servicing the building and its equipment. Hold piping close to walls, overhead construction, columns and other structural members. Wherever possible in finished and and occupied spaces, conceal piping from view.
3. Electrical Equipment Spaces: Do not run piping through transformer vaults and other electrical or electronic equipment spaces and enclosures.
4. Piping System Joints: Provide joints of the type indicated in each piping system.
   a. Thread pipe and fittings shall have cut threads full and clean using sharp dies. Ream threaded ends to remove burns and restore full inside diameter. Apply pipe joint compound, or pipe joint tape (Teflon) where recommended by pipe/fitting manufacturer, on male threads at each joint and tighten joint to leave not more than three threads exposed.
   b. Solder copper tube and fitting joints where indicated, in accordance with recognized industry practice. Cut tube ends squarely, ream to full inside diameter, and clean outside of tube ends and inside of fittings. Apply solder flux to joint areas of both tubes and fittings. Insert tube full depth into fitting, and solder in a manner which will draw solder full depth and circumference of joint. Wipe excess solder from joint before it hardens.
   c. Plastic Pipe/Tube Joints: Comply with manufacturer's instructions and recommendations and with applicable industry standards. Make solvent cemented joints ASTM D2665 and F402.
5. Insulating (Dielectric) Unions: Comply with manufacturer's instructions for installing unions. Install unions in a manner which will prevent galvanic action and stop corrosion where the "joining of ferrous and non–ferrous piping" is indicated.

D. CLEANING, FLUSHING, INSPECTION
1. General: Clean exterior surfaces of installed piping systems of superfluous materials and prepare for application of specified coatings (if any). Flush out piping systems with clean water before proceeding with required tests. Inspect each run of each system for completion of joints, supports and accessory items.

E. PIPING TEST
1. Test pressure piping in accordance with ANSI B31.
2. Repair piping systems sections which fail the required piping test, by disassembly and re–installation, using new materials to the extent required to overcome leakage. Do not use chemicals, stop–leak compounds, mastics or other temporary repair methods.
3. Drain test water from piping systems after testing and repair work has been completed.

F. SCHEDULE OF PIPE MATERIALS, JOINTS AND FITTINGS
1. Pipe and fittings for all services shall be as indicated on the following schedule:

SCHEDULE OF PIPE MATERIALS, JOINTS AND FITTINGS

Service	Above Grade	Below Grade	Pipe	Joints & Fittings
Natural Gas	X		Black Steel Schedule 40	Malleable Iron Class 150
Sanitary and Vent	X	X	PVC ASTM D2665 Schedule 40	ASTM D2665 With Solvent Weld (ASTM D2564) Cement) PVC Fittings
Domestic Water	X		Copper, Hard Type L	Soldered (Grade 95TA)
Domestic Water 3" & Larger		X	Ductile Iron Water Pipe	Push On Joints
Domestic Water 2.5" & Smaller		X	Copper, Soft Type K	Soldered (Grade 95TA)

PIPE HANGERS

A. PRODUCTS
1. PIPE HANGERS
   a. Hangers: Pipe sizes 1/2" to 1 1/2", adjustable wrought steel ring.
   b. Hangers: Pipe sizes 2" to 4", adjustable wrought steel clevis.
   c. Mutiple or Trapeze Hangers: Steel channels with welded spacers and hanger rods.
2. HANGER RODS
   a. Provide steel hanger rods, threaded both ends, threaded one end, or continuous threaded.

B. INSTALLATION
1. Use side beam brackets for suspending hangers from wood trusses.

C. SPACING REQUIREMENTS
1. Support horizontal steel and copper piping as follows:

Nominal Pipe Size (inch)	Distance Between Support (feet)	Hanger Rod Diameter (inch)
1/2	6	3/8
3/4 to 1 1/2	6	3/8
2 and 2 1/2	10	3/8
3 and 4	12	5/8

2. Install hangers to provide minimum 1/2" clear space between finished covering and adjacent work.
3. Install a hanger within one foot of each horizontal elbow.
4. Use hangers which are vertically adjustable 1 1/2" minimum after piping is erected.
5. Where several pipes can be installed in parallel and at same elevation, provide multiple or trapeze hangers.

PLUMBING

A. SUBMITTALS
1. Furnish Shop Drawings for all water heaters, plumbing fixtures, floor drains, and cleanouts.
2. Submit detailed Shop Drawings clearly indicating make, model, location, type, and size.

B. DOMESTIC WATER HEATER
1. Provide water heaters shown on Drawings:
   a. Factory insulated and steel jacketed storage tank with baked on finish.
   b. Temperature/Pressure relief valve, ASME rated.
   c. Glass lined storage tank with anode rod.
   d. 150 psi working pressure.
   e. 100% automatic shutoff upon pilot failure.
   f. Copper immersion heating elements, factory wired with fused contactors.
   g. Adjustable immersion stat and high temperature cutout.
   h. U.L. approved.
2. Water Heater to be Bradford White as described on Drawings. A.O. Smith, Lochinvar, or Rheem hot water heaters of equal size are acceptable.
3. Warranty:
   a. Water heater shall be covered by a 5–year limited warranty against tank failure due to corrosion or due to metal failure or overheating caused by buildup of sand, sediment, or sludge.

C. SANITARY DRAINAGE SYSTEMS
1. Run all drainage and vent piping as direct as possible. Actual location of drains, soil and waste piping shall meet the various building conditions. Do any work necessary to conceal piping.
2. Slope branch soil and waste pipes at an incline of at least 1/4" per foot of run. Make changes in direction of drainage piping by means of "Y" branches and 1/4, 1/8, or 1/16 bends except that sanitary "Ts" and crosses may be used in vertical stacks.
3. Provide cleanouts at base of all stacks, at changes of direction and as shown on Drawings. Cleanouts on undergroundlines shall extend up flush with finished floor or grade. Provide cleanouts not over 50 ft. o.c. along straight runs. Cleanouts shall be size of pipe to which it is installed up to 4" in diameter. Pipe over 4" in diameter shall have a 4" cleanout.
4. Terminate vent pipes at least 12" above roof. Make each vent terminal water–tight with the roof by using sheet lead (4 psf) with base not less than 24" in all directions from center of pipe and full height of pipe and turned down 2" inside of pipe.
5. Lay all sanitary sewers with full length of each section resting on a solid bed. Lay pipe starting at upgrade with spigot end of pipe pointing in direction of flow. All sanitary sewers shall be collected separately as shown on Drawings

D. DOMESTIC WATER SUPPLY SYSTEMS
1. Install water system as shown on Drawings with hot and cold water being supplied and connected to all fixtures and equipment.
2. Provide unions at all equipment valves, strainer, etc., to facilitate removal for repair or replacement without disturbing adjacent piping.
3. Provide temporary water service to area of construction for use of all trades. Plumbing Contractor shall be responsible for maintaining uninterrupted temporary water service throughout construction.
4. Chlorinate all domestic water systems. Flush out domestic system then hold a solution mixture of 50 ppm of chlorine in the system for a period of 24 hours. Drain and flush system until chlorine residual of .5 ppm. Chlorination shall be repeated if necessary and conform to AWWA Specifications C601–54 and be accepted by Local Health Dept.

E. NATURAL GAS PIPING SYSTEM
1. Connect to all building equipment requiring natural gas. Install drip leg and shut–off cock at each connection.

F. PLUMBING FIXTURES AND EQUIPMENT
1. Provide plumbing fixtures shown on Drawings and listed in Fixture Schedule. Fixtures as manufactured by Mansfield, Kohler, or Eljer are approved equal.
2. All countertop sinks to be individually valved under sinks using Wolverine Ball Valves.
3. Faucets and Flush Valves to have renewable seats and discs and chrome plated trim. Delany and Watrous flush valves and Delta Faucets are acceptable on Base Bid.
4 All fixtures to be supported as indicated on Fixture Schedule.
5. After installation, all connecting piping to be flushed and valves properly adjusted. Labels, plaster, stains and other foreign material to be removed from all fixtures so they are acceptable in and operation. Caulk all Fixtures at wall and floors.
6. Fixtures set to height as shown in schedule and in location shown on Drawings, plumb, level and substantially supported. Immediately after the setting of any fixture, fitting or piping, protect it adequately without extra cost to the Owner. At all stages of the installation, pipe openings must be protected against the entrance of foreign material.
7. Exposed piping to plumbing fixtures shall be chromium plated, iron pipe size, brass pipe and chromium plated stop valves where exposed and brass where concealed.
8. All fixtures shall be furnished and installed according to schedules on the Drawings. However, the Plumbing Contractor shall ascertain the correct amount of fixtures required by the plans as he will be held strictly responsible for furnishing and installing all items shown.
9. Contractor shall inform himself fully regarding peculiarities and limitations of space available for installation of all material and equipment to be installed under this Contract, and see that all equipment to be reached periodically for operation and maintenance is made easily accessible.

G. TESTS
1. Sanitary, Waste, and Vent Piping: All sanitary, storm, and water piping shall be tested per State Plumbing Code and/or requirements of Local Authority.

INSULATION

A. SUBMITTALS
1. Submit detailed Shop Drawings or descriptive literature for all insulation products to be used.
2. All insulation and accessories shall have composite (insulation, jacket, and adhesive) fire and smoke hazard ratings as tested under procedure ASTM–E–84, NFPA 255 and UL 723, not exceeding a flame spread of 25 and smoke developed 50. All calcium silicate shall be asbestos free to comply with OSHA regulations. The above requirements apply to pipe insulation and coverings used in plenums and shafts which act as active air ducts. All other areas shall have a 25 flame spread rating and 150 smoke developed as tested above. No polyethylene insulation acceptable.
3. Materials: All insulation work shall conform to the following schedule:

Service	Type	Size	Thickness	Cons. & Exp.
Domestic Hot Water	I II	2" and under	1" 1 1/2"	VB A.S.J. VB A.S.J.
Domestic Cold Water	I II	ALL	1"	VB A.S.J.

TYPES OF COVERING

ASJ – All Service Jacket
VB – Vapor Barrier

TYPES OF INSULATION

TYPE I

OFG – Owens–Corning One Piece Fiberglass Pipe Insulation, K = .23, Density = 4.0#/ft³.

JFG – Johns–Manville "Micro–Lok" Fiberglass Pipe Insulation, K = .23, Density = 4.0#/ft³.

KFG – Knauf Fiberglass Pipe Insulation, K = .23, Heavy Density.

TYPE II

APF – Armstrong Armaflex AP Pipe Insulation, K = .27 (1/2" on Domestic Hot and Cold Water Piping).

Architect

OMNESS DESIGN, INC.
140 FAIRFAX ROAD
MARION, OHIO 43302

CRAWFORD COUNTY STATE OF OHIO

PROJECT
Crawford Co.
Title Office & Crawford Co. Solid Waste District
New Office Building
2358 E. Mansfield St.
Bucyrus, OH 44820

STATE OF OHIO
JAMES A. BRONG
REGISTERED PROFESSIONAL ENGINEER

SHEET INFORMATION

Project #:	23-122
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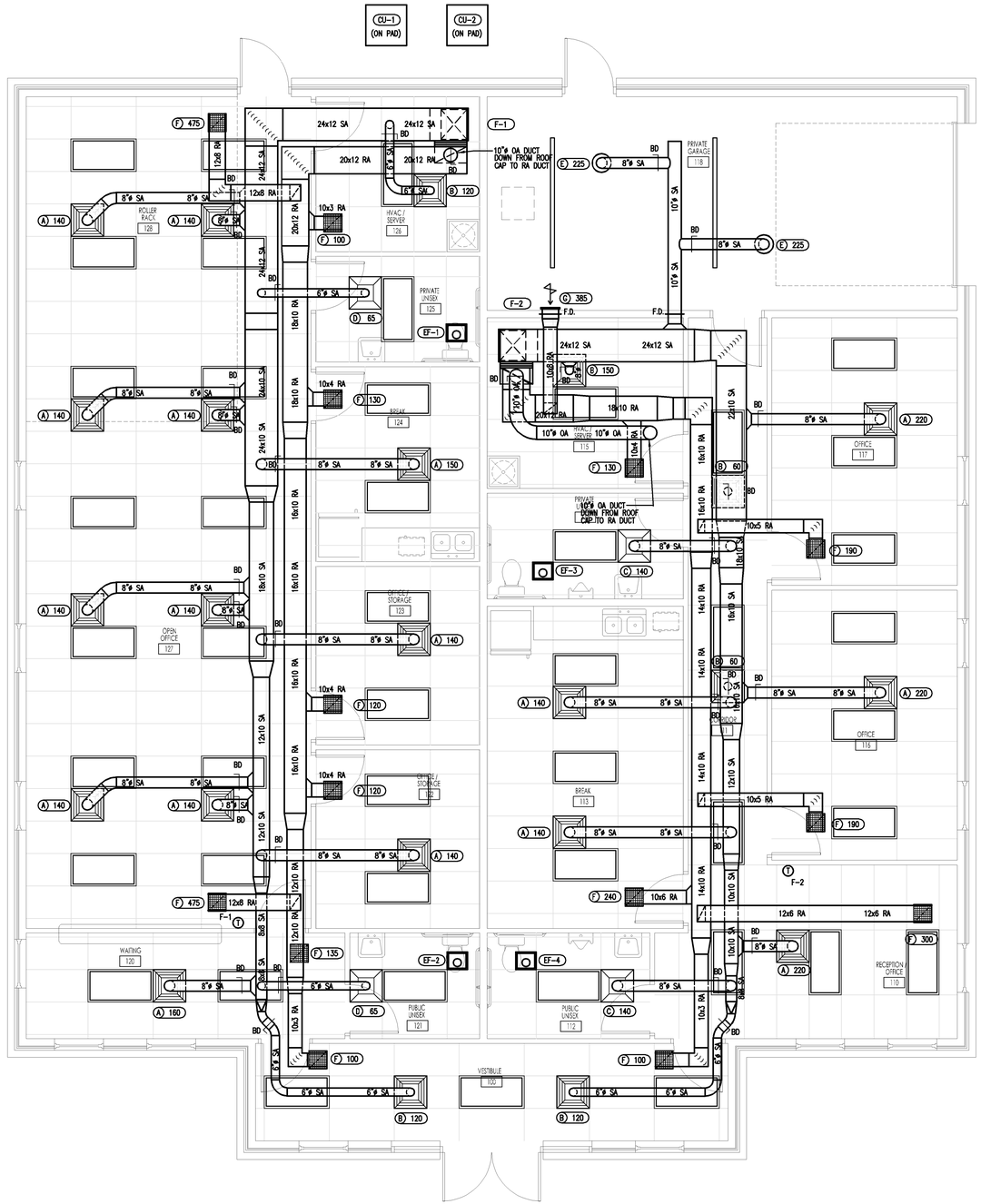
Revisions:	

SHEET TITLE

PLUMBING

SHEET NUMBER

P1.04



NOTE:
MAINTAIN 10'-0" MINIMUM FROM OUTSIDE AIR INTAKES TO EXHAUST AIR DISCHARGES.

FLOOR PLAN – HVAC

SCALE 1/4" = 1'-0"

N

Architect

OMNESS DESIGN, INC.
140 FAIRFAX ROAD
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CRAWFORD COUNTY STATE OF OHIO

PROJECT
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STATE OF OHIO
TIMOTHY J. BORON
REGISTERED PROFESSIONAL ENGINEER

SHEET INFORMATION

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SHEET TITLE

HVAC

SHEET NUMBER

M1.01

MECHANICAL SPECIFICATIONS

GENERAL CONDITIONS

A. REFERENCE
1. For purposes of clearness and legibility, Drawings are diagrammtic and although size and location of equipment are drawn to scale wherever possible, Contractor shall make use of all data in all of the Contract Documents and shall verify this information at the building site. Dimensions given in figures on the Drawings take precedence over scaled dimensions.
2. Drawings and Specifications to be considered cooperative, and anything appearing in Specifications but not on Drawings or vice versa, shall be considered part of the Contract and must be executed.

B. QUALITY ASSURANCE
1. Codes and Permits – Deliver official record of approval, by governing agencies, to Engineer to transmit to Owner.

C. OPERATING INSTRUCTIONS
1. Provide to Owner, after all equipment is in operation and at an agreeable time, competent instructors for the purpose of training Owner's personnel in all phases of operation and maintenance of equipment and systems for both heating and cooling season.

D. DAMAGE AND EMERGENCY REPAIRS
1. Contractor will be held responsible for any damage that may be incurred on any installed work of other trades, by any workman employed in the installation of work under this Contract. Provide covering under workbench or under any work involving cutting and fitting of materials being installed, so as not to damage surrounding finished surfaces.

D. MATERIALS
1. Provide material and labor for that which is neither drawn nor specified but which is obviously a component part of and necessary to complete work which is customarily a part of work of similar character.
2. All materials, fixtures, and equipment shall be new, of the best grade, and installed according to manufacturer's recommendations. Additionally, the installation shall be according to the best standards of practices, complete with all accessories and connections necesary for properoepration, and in compliance with effective State or Local Code requirements.

GAS FIRED FURNACE

A. SUBMITTALS
1. Submit detailed Shop Drawings clearly indicating make, model, type, size, and location.

B. Furnish and install, where shown on Drawings, gas fired furnace as manufactured by York. Furnace shall be vertical model with DX cooling coil, single speed blower, tubular aluminized steel primary heat exchanger with stainless steel tube/aluminum fin secondary heat exchanger, and rotatable inducer. Furnace shall be design certified by A.G.A. Laboratories.

C. Cabinet shall be constructed of heavy gauge, cold rolled steel with insulated vestibule and back panels. Safety interlock switch, located in control box, automatically turns power off to unit when blower compartment door is removed.

D. The controls shall have factory installed blower cooling relay, fan and limit controls, factory wired 24 volt control transformer, and controller.

E. Gas burner shall have automatic gas controls, including the following:
1. 100% safety shut–off.
2. Automatic safety pilot valve.
3. Automatic electric valve and gas pressure regulator.
4. Solid state electronic direct spark ignitor.

F. Gas fired furnace as manufactured by Carrier or Comfortmaker will be acceptable providing construction, capacity, and operating characteristics are equal to the specified equipment. The cost for any modifications to the building structure, the duct system, the natural gas piping system, the power wiring system, or the temperature control system (including interface points and interlock wiring) which is necessitated by the substitution of the other listed manufacturers, shall be borne by the Mechanical Contractor making the substitution.

G. Equipment manufacturer shall warrant parts and workmanship for one year from the date of substantial completion as determined by the Architect and/or Engineer.

H. Unit shall be completely tested by the manufacturer before shipment.

I. Every effort shall be made to minimize vibration, noise, and drafts through careful fabrication and erection.

AIR COOLED CONDENSING UNIT

A. SUBMITTALS
1. Submit detailed Shop Drawings clearly indicating make, model, type, size, location, capacity at the operating suction and liquid temps, voltage, and required fuse size.

B. Furnish and install, where shown on Drawings, air cooled condensing unit as manufactured by York. Unit shall use refrigerant R–410A, be completely assembled and factory assembled. Unit shall be complete with single or multiple hermetic compressors, condensing coils, condenser fan, fan motors, fan guards, refrigerant reservoir, charging valves, valves, crankcase heater (if required), high and low pressure safety switches, liquid line sight glass, filter drier, strainers, contactors, and overload protection for all motors and all controls to provide proper operation with pump down control. Unit shall have part winding and starters. The entire unit shall be housed in a fully weather proof casing of outdoor installation. Manufacturer shall furnish unit complete to provide oepration down to 40 degrees F outdoor temperature.

C. Air cooled condensing unit as manufactured by Carrier or Comfortmaker will be acceptable providing construction, capacity and operating characteristics are equal to the specified equipment. The cost for for any modifications to the building structure, the power wiring system, or the temperature control system (including interface points and interlock wiring) which is necessitated by the substitution of the other listed manufacturers, shall be borne by the Mechanical Contractor making the substitution.

D. REFRIGERANT PIPING AND ACCESSORIES
1. All piping shall be Type "ACR" Hard Drawn Copper Tubing. All fittings shall be Wrought or Forged Brass Type approved for refrigerant piping and all elbows shall be long turn pattern. All pipe and fittings shall be assembled with Siflos or Easyflow Silver Solder with approximate 1000 degrees F.
2. Refrigerant piping shall be sized as shown on Drawings. Mechanical Contractor shall confirm pipe sizing with selected unit manufacturer before proceeding with installation.
3. Assembly and Workmanship: All tubing and fittings shall be carefully and thoroughly cleaned and polished with steel wool. Prior to heating, coat all polished surfaces with a thin coat of flux. Heat fittings and tubing with oxyacetylene torch. Provide continual flow of inert gas (nitrogen) through tubing while brazing joints. Any overheated unsafe joints must be replaced before project is accepted.
4. Testing: Test all refrigerant piping as follows:
   a. Evacute entire system to 28 inch vacuum and hold said vacuum for 24 hours without leakage.
   b. Charge piping with inert gas to a pressure of not more than 300 psi and no less than 200 psi and hold pressure for 24 hours without leakage.
   c. During above test, remove or bypass any valves, gauges, etc., subject to damage by pressure exerted during test.
   d. Triple evacuate entire system and purge each time with approriate refrigerant. Insert refrigerant dryer with valves bypass arrangement for moisture removal during triple purge and evacuation process.
   e. Test all joints, after charging system with an alcohol fired or prestolite halide lead detector.
   f. Contractor shall include the fee for inspection as required by the Ohio Board of Building Standards Chapter BB–201 of Ohio Pressure Piping System Rules.
5. Refrigerant and Oil Charge: Charge entire system with accurate quantities of refrigerant (R–410A) and provide necessary oil for compressor and system requirements.
6. Specialties: Expansion valves, liquid line solenoid valves, liquid sight glass, strainers, hand valves, etc. are to be furnished by this Contractor in compliance with manufacturer's recommendation.
7. Miscellanous: Flexible pipe connections shall be furnished and installed where shown or required to permit free movement of piping and to prevent undue stress and vibrations at the compressor and air cooled condenser.
8. This Contractor shall make provisions to ensure oil return to compressor as required.

E. Equipment manufacturer shall provide one year parts and labor warranty, and four year extended compressor warranty. Contractor shall submit terms of parts and labor contract with equipment supplier for approval.

F. Equipment manufacturer shall provide start–up, test, and submit report to Engineer.

G. Every effort shall be made to minimize vibration and noise.

H. Condensing unit must be installed level!

AIR DISTRIBUTION

A. EXHAUST FANS
1. Submittals
   a. Submit detailed Shop Drawings clearly indicating make, model, location, type, and size.
2. Furnish and install, where shown on Drawings, exhaust fans as manufactured by Greenheck.
3. Exhaust fans as manufactured by Loren Cook, Penn, or Carnes will be acceptable providing construction, capacity and operating characteristics are equal.

B. LOW PRESSURE DUCTWORK
1. Ductwork shall be constructed of the following gauges, where velocity does not exceed 2500 FPM and static pressure does not exceed 2.0 WG. All is in accordance with ASHRAE and SMACNA Standards:
   a. Rectangular Ducts:

Largest Dimension	U.S. Gauge Galvanized Steel
To 12"	26
13" to 30"	24

   b. Round Ducts:

Duct Diameter	U.S. Gauge Galvanized Steel
To 13"	26
14" to 26"	24

2. All ductwork shall be constructed of galvanized steel complying with ASTM A527–71, lockforming quality. All toilet and shower room exhaust ducts shall be aluminum construction, and all joints welded or sealed with 3M Company #EC–1792 sealant. Sheetmetal must be fabricated so that the gauge of material being used is visible externally.
3. Duct fasteners shall comply with SMACNA MF–1.
4. Provide hot dipped galvanized steel fasteners, anchors, rods, straps, trim and angles for support of ductwork.
5. Provide turning vanes in all mitered elbows and where otherwise indicated. Vanes shall be 2" galvanized steel for up to and including 18" ducts and 4–1/2" for ducts over 18". Construction of vanes shall be double wall, fixed blade type for 90 degree elbows.
6. All joints and seams shall be sealed to SMACNA Class B Standards (100% sealing) with Duro–Dyne SAS–UL–C siliconized acrylic water based duct sealer.

C. GRILLES AND DIFFUSERS
1. Submittals
   a. Submit detailed Shop Drawings clearly indicating make, model, location, type, and size.
   b. Furnish and install, where shown on Drawings, grilles and diffusers as manufactured by Price.
   c. Grilles and diffusers as manufactured by Titus, Krueger, or Carnes will be acceptable providing construction, capacity, and operating characteristics are equal.
2. All grilles and diffusers shall have a factory applied off–white finish unless otherwise noted on Plans.
3. Ceiling Supply Diffusers: Fully adjustable air pattern, round or square with full flow damper. Diffusers shall be surface mount or lay–in frame to fit ceiling conatruction being used.
4. Egg Crate Return Grilles: Aluminum frame with aluminum core grid. Egg crate grilles shall be surface mount, lay–in, or panel mounted to fit ceiling construction being used.
5. Refer to Architectural Reflected Ceiling Plan for exact location of ceiling diffusers and ceiling construction being used.

D. FILTERS
1. Furrnish filters as manufactured by Koch, model Multi–Pleat XL8. Media shall be reinforced glass fiber supported by galvanized steel grids formed to the configuration of the pleats. The media pack shall be sealed into a galvanized frame. Filter shall have a rated average atmospheric dust spot efficiency of not less than 35 to 40% and an average synthetic arrestance of 95% when tested in accordance with ASHRAE Standards 52–76. The filter shall be capable of operating with variable face velocities up to 600 FPM without impairing performance. It shall have an initial resistance not to exceed the value selected from the capacity table and shall be classified by Underwriter Laboratories as Class II.
2. Spare Filters: One original and two sets of spare filters shall be supplied. One set is for use during the construction phase and a set shall be installed for testing and balancing. One complete set of unused filters shall be turned over to the Owner at completion of the project.
3. Filters as manufactured by Cambridge, Continental or American Air Filter will be acceptable providing construction, capacity, and operating characteristics are equal.

DUCTWORK AND ACCESSORIES

A. Provide all sheetmetal work, as shown on the Drawings, in accordance with the latest edition of the ASHRAE guide and data book, SMACNA Standards and this Specification, the most demanding of which shall be the minimum standard.

B. Install ductwork indicated on Drawings making all neccesary changes in cross sections and offsets, whether or not specifically indicated.

C. All changes in cross section shall be made without reducing the design area of the duct.

D. Cap all open ends of ductwork until connected to grilles, diffusers, and equipment to prevent entrance of debris, dust, etc.

E. Make changes in direction of ductwork, unless otherwise specified with square elbows and double thickness turning vanes; full radius elbows having inside radius equal to width of duct measured in plane of turn; or one–third radius elbows with inside radius equal to one–third duct width and a single vane radius of two–thirds duct width.

F. No pipe or other obstructions shall pass through air ducts.

G. Ducts shall not be hung from other ducts, pipe or conduit.

H. Duct dimensions are gross except of lined ducts where dimensions are for net free area.

I. All joints and seams in ducts shall be air–tight; poorly made joints, splits, visible holes at corners, etc. shall be reworked or new pieces of ductwork installed. Where excessive pulsating of ductwork or plenum housing is found, additional stiffeners shall be added. Any cracking, in the coating around seams or joints, or in any other part of the formed duct that is apparent upon inspection, shall be sufficient to warrant rejection.

J. Round duct joints in diameter through 60" shall be assembled and sealed as follows:
1. Approved sealer is applied to the male end of the couplings and fittings. After the joint is slipped together, sheetmetal screws are placed 1/2" from the joint bead for mechanical strength. Sealer is applied to the outside of the joint extending 1" on each side of the joint bead and covering the screw heads. Plastic backed tape is immediately applied over the wet sealer.
2. The duct sealer must be specifically formulated for the job of sealing the field joints for low–medium pressure systems. The sealer shall be compatible with plastic backed duct type so the two shall cure and bond together.

K. Install additional balancing dampers, where required by the Air Balance Contractor, to properly adjust the systems air volumes.

INSULATION

A. SUBMITTALS
1. Submit detailed Shop Drawings or descriptive literature for all insulation products to be used.
2. All insulation and accessories shall have composite (insulation, jacket, and adhesive) fire and smoke hazard ratings as tested under procedure ASTM E84, NFPA 255 and UL 723, not exceeding a flame spread of 25 and smoke developed 50. All calcium silicate shall be asbestos free to comply with OSHA regulations. The above requirements apply to pipe insulation and coverings used in plenums and shafts which act as active air ducts. All other areas shall have a 25 flame spread rating and 150 smoke developed as tested above, No polyethylene insulation is acceptable.
3. Materials: All insulation work shall conform to the following schedule:

Service	Type	Size	Thickness	Cons. & Exp.
Refrigerant Liquid & Suction	II	ALL	1/2"	A.P.F.
Exposed Ductwork	III	ALL	1"	A.S.J.
Concealed Ductwork	IV	ALL	2"	F.S.K.

TYPES OF COVERING

A.S.J. All Service Jacket
F.S.K. Foil Scrim Kraft
A.P.F. J.M. Aerotube or Armstrong ArmaFlex AP

TYPES OF INSULATION

TYPE II

A.P.F. Armstrong ArmaFlex AP Pipe Insulation
K = .27, Density = 6.0#/ft3

TYPE III

J.M.S. Johns–Manville Rigid "Spin–Glas" Duct Insulation
Density = 4.25#/ft3 with A.S.J. Facing.

O.V.S. Owens–Corning Rigid Vapor Seal Duct Insulation
Density = 6.0#/ft3 with A.S.J. Facing.

K.F.G. Knauf Insulation Board
Density = 3.0#/ft3 with A.S.J. Facing.

TYPE IV

J.M.M. Johns–Manville "Microlite" Flexible Fiberglass Duct Insulation,
Density = 0.6#/ft3 with F.S.K. Facing.

O.F.F. Owens–Corning Flexible Fiberglass Duct Insulation,
Density = 0.6#/ft with F.S.K. Facing.

K.F.G. Knauf Commercial Duct Wrapped Insulation
Density = 3/4#/ft with A.S.J. Facing.

FURNACE SCHEDULE

SYM.	HEATING MBH INPUT	HEATING MBH OUTPUT	AIR FLOW CFM @ 0.50" E.S.P.	MOTOR HP	ELECTRICAL VOLTAGE	ELECTRICAL UNIT MCA	ELECTRICAL MAX. FUSE	MFR. MODEL NO. (COIL)	MFR. MODEL NO. (FURNACE)	REMARKS
F–1	120	115	2000	1.0	120–1–60	14	20	YORK CF60	YORK TMPV1200240P11C	1,2,3,4
F–2	120	115	2000	1.0	120–1–60	14	20	YORK CF60	YORK TMPV1200240P11C	1,2,3,4

REMARKS:
1.) FACTORY SUPPLIED (FIELD INSTALLED) YORK SIDE RETURN FILTER RACK KIT
2.) FACTORY SUPPLIED (FIELD INSTALLED) YORK (3") CONCENTRIC VENT TERMINATION KIT
3.) FACTORY SUPPLIED (FIELD INSTALLED) YORK BLOWER–OFF DELAY KIT
4.) FACTORY SUPPLIED (FIELD INSTALLED) YORK THERMAL EXPANSION VALVE

CONDENSING UNIT SCHEDULE

SYM.	COOLING TEMP (F) OUTDOOR AMBIENT	COOLING CAPACITY TOTAL MBH	ELECTRICAL VOLTAGE	ELECTRICAL MCA	ELECTRICAL MAX. FUSE	REFRIGERANT	MFR. MODEL NO.	REMARKS
CU–1	95.0	60.0	208/230–1–60	32.7	50	R–410A	YORK YCJF60	1,2
CU–2	95.0	60.0	208/230–1–60	32.7	50	R–410A	YORK YCJF60	1,2

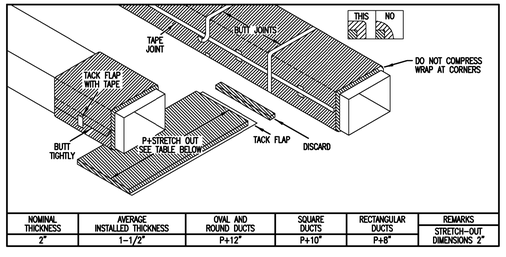
REMARKS:
1.) FACTORY SUPPLIED (FIELD INSTALLED) YORK LOW AMBIENT KIT
2.) FACTORY SUPPLIED (FIELD INSTALLED) YORK HARD START KIT

EXHAUST FAN SCHEDULE

SYM.	MFR.	MODEL NO.	CAPACITY CFM	CAPACITY S.P.	MOTOR WATTS	MOTOR AMPS	MOTOR VOLTAGE	REMARKS
EF–1	GREENHECK	SP–A110	75	0.25	19.4	0.16	120–1–60	VERTICAL DISCHARGE WITH GREENHECK MODEL NO. RDC–6 (6"ø) ROUND DUCT ADAPTER, AND GREENHECK MODEL NO. RJ–6x9 PITCHED ROOF CAP WITH BACKDRAFT DAMPER AND BIRDSCREEN
EF–2	GREENHECK	SP–A110	75	0.25	19.4	0.16	120–1–60	VERTICAL DISCHARGE WITH GREENHECK MODEL NO. RDC–6 (6"ø) ROUND DUCT ADAPTER, AND GREENHECK MODEL NO. RJ–6x9 PITCHED ROOF CAP WITH BACKDRAFT DAMPER AND BIRDSCREEN
EF–3	GREENHECK	SP–A190	150	0.25	54.2	0.45	120–1–60	VERTICAL DISCHARGE WITH GREENHECK MODEL NO. RDC–6 (6"ø) ROUND DUCT ADAPTER, AND GREENHECK MODEL NO. RJ–6x9 PITCHED ROOF CAP WITH BACKDRAFT DAMPER AND BIRDSCREEN
EF–4	GREENHECK	SP–A190	150	0.25	54.2	0.45	120–1–60	VERTICAL DISCHARGE WITH GREENHECK MODEL NO. RDC–6 (6"ø) ROUND DUCT ADAPTER, AND GREENHECK MODEL NO. RJ–6x9 PITCHED ROOF CAP WITH BACKDRAFT DAMPER AND BIRDSCREEN

GRILLE AND DIFFUSER SCHEDULE

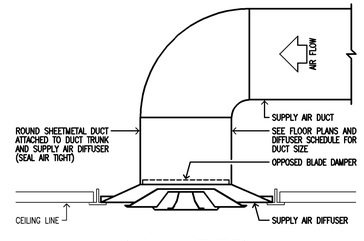
SYM.	MFR.	MODEL NO.	FACE SIZE	NECK SIZE	REMARKS
A	TITUS	TMS	24x24	8"ø	WITH TITUS MODEL NO. D–100 RADIAL SLIDING BLADE DAMPER, BORDER TYPE '3' (FULL FACE LAY–IN), FINISH '26' (WHITE)
B	TITUS	TMS	24x24	6"ø	WITH TITUS MODEL NO. D–100 RADIAL SLIDING BLADE DAMPER, BORDER TYPE '3' (FULL FACE LAY–IN), FINISH '26' (WHITE)
C	TITUS	TMS	12x12	8"ø	WITH TITUS MODEL NO. D–100 RADIAL SLIDING BLADE DAMPER, BORDER TYPE '3' (FULL FACE LAY–IN), FINISH '26' (WHITE)
D	TITUS	TMS	12x12	6"ø	WITH TITUS MODEL NO. D–100 RADIAL SLIDING BLADE DAMPER, BORDER TYPE '3' (FULL FACE LAY–IN), FINISH '26' (WHITE)
E	TITUS	TMR	–––	8"ø	WITH TITUS RADIAL SLIDING BLADE DAMPER, BORDER TYPE 'SURFACE', FINISH '26' (WHITE)
F	TITUS	50F	–––	12x12	BORDER TYPE '3' (24x24 PANEL MOUNT LAY–IN), FINISH '26' (WHITE).
G	TITUS	350RL	–––	12x10	BORDER TYPE (SURFACE MOUNT), FINISH '26' (WHITE).



NOMINAL THICKNESS	AVERAGE INSTALLED THICKNESS	OVAL AND ROUND DUCTS	SQUARE DUCTS	RECTANGULAR DUCTS	REMARKS STRETCH–OUT DIMENSIONS 2"
2"	1–1/2"	P+12"	P+10"	P+8"	

DUCT WRAP INSULATION DETAIL

SCALE: NONE



(LAY-IN TYPE)

SUPPLY AIR DIFFUSER DETAIL

SCALE: NONE

Architect
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HVAC

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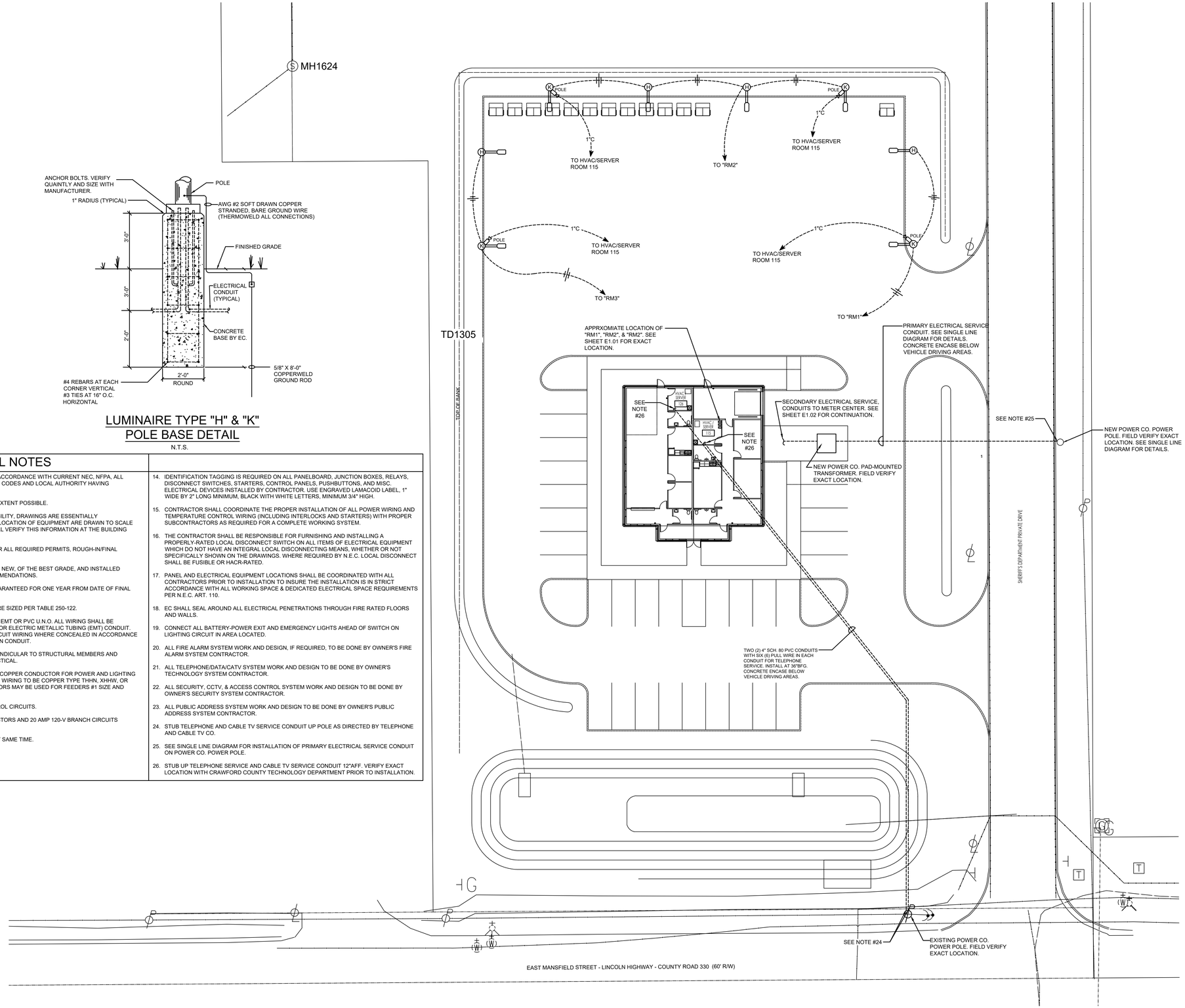
M1.02

LUMINAIRE TYPE "H" & "K" POLE BASE DETAIL

N.T.S.

GENERAL NOTES

1. ALL ELECTRIC WORK SHALL BE IN STRICT ACCORDANCE WITH CURRENT NEC, NFPA, ALL APPLICABLE NATIONAL, STATE, AND LOCAL CODES AND LOCAL AUTHORITY HAVING JURISDICTION.
2. CONCEAL ALL WIRING TO THE GREATEST EXTENT POSSIBLE.
3. FOR PURPOSES OF CLEARNESS AND LEGIBILITY, DRAWINGS ARE ESSENTIALLY DIAGRAMMATIC AND ALTHOUGH SIZE AND LOCATION OF EQUIPMENT ARE DRAWN TO SCALE WHEREVER POSSIBLE, CONTRACTOR SHALL VERIFY THIS INFORMATION AT THE BUILDING SITE.
4. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL REQUIRED PERMITS, ROUGH-IN/FINAL INSPECTION, ETC.
5. ALL MATERIALS AND EQUIPMENT SHALL BE NEW, OF THE BEST GRADE, AND INSTALLED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.
6. WORKMANSHIP AND MATERIALS TO BE GUARANTEED FOR ONE YEAR FROM DATE OF FINAL ACCEPTANCE.
7. ALL CONDUITS TO CONTAIN A GROUND WIRE SIZED PER TABLE 250-122.
8. MINIMUM CONDUIT SIZE SHALL BE 3/4" FOR EMT OR PVC U.N.O. ALL WIRING SHALL BE INSTALLED IN POLYVINYL CHLORIDE (PVC) OR ELECTRIC METALLIC TUBING (EMT) CONDUIT. MC CABLE MAY BE USED FOR BRANCH CIRCUIT WIRING WHERE CONCEALED IN ACCORDANCE WITH NEC, BUT ALL HOMERUNS SHALL BE IN CONDUIT.
9. EXTEND RACEWAYS PARALLEL AND PERPENDICULAR TO STRUCTURAL MEMBERS AND SURFACE CONTOURS AS MUCH AS IS PRACTICAL.
10. ALL WIRING TO BE A MINIMUM OF #12 AWG COPPER CONDUCTOR FOR POWER AND LIGHTING CIRCUITS UNLESS NOTED OTHERWISE. ALL WIRING TO BE COPPER TYPE THHN, XHHW, OR THWN, 600-V (75° C). ALUMINUM CONDUCTORS MAY BE USED FOR FEEDERS #1 SIZE AND LARGER.
11. MINIMUM 14 AWG CONDUCTOR FOR CONTROL CIRCUITS.
12. MINIMUM 1O AWG FOR HOME RUN CONDUCTORS AND 20 AMP 120-V BRANCH CIRCUITS LONGER THAN 1OO FEET.
13. PULL ALL CONDUCTORS INTO RACEWAY AT SAME TIME.
14. IDENTIFICATION TAGGING IS REQUIRED ON ALL PANELBOARD, JUNCTION BOXES, RELAYS, DISCONNECT SWITCHES, STARTERS, CONTROL PANELS, PUSHBUTTONS, AND MISC. ELECTRICAL DEVICES INSTALLED BY CONTRACTOR. USE ENGRAVED LAMACOID LABEL, 1" WIDE BY 2" LONG MINIMUM, BLACK WITH WHITE LETTERS, MINIMUM 3/4" HIGH.
15. CONTRACTOR SHALL COORDINATE THE PROPER INSTALLATION OF ALL POWER WIRING AND TEMPERATURE CONTROL WIRING (INCLUDING INTERLOCKS AND STARTERS) WITH PROPER SUBCONTRACTORS AS REQUIRED FOR A COMPLETE WORKING SYSTEM.
16. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FURNISHING AND INSTALLING A PROPERLY-RATED LOCAL DISCONNECT SWITCH ON ALL ITEMS OF ELECTRICAL EQUIPMENT WHICH DO NOT HAVE AN INTEGRAL LOCAL DISCONNECTING MEANS, WHETHER OR NOT SPECIFICALLY SHOWN ON THE DRAWINGS. WHERE REQUIRED BY N.E.C. LOCAL DISCONNECT SHALL BE FUSIBLE OR HACR-RATED.
17. PANEL AND ELECTRICAL EQUIPMENT LOCATIONS SHALL BE COORDINATED WITH ALL CONTRACTORS PRIOR TO INSTALLATION TO INSURE THE INSTALLATION IS IN STRICT ACCORDANCE WITH ALL WORKING SPACE & DEDICATED ELECTRICAL SPACE REQUIREMENTS PER N.E.C. ART. 110.
18. EC SHALL SEAL AROUND ALL ELECTRICAL PENETRATIONS THROUGH FIRE RATED FLOORS AND WALLS.
19. CONNECT ALL BATTERY-POWER EXIT AND EMERGENCY LIGHTS AHEAD OF SWITCH ON LIGHTING CIRCUIT IN AREA LOCATED.
20. ALL FIRE ALARM SYSTEM WORK AND DESIGN, IF REQUIRED, TO BE DONE BY OWNER'S FIRE ALARM SYSTEM CONTRACTOR.
21. ALL TELEPHONE/DATA/CATV SYSTEM WORK AND DESIGN TO BE DONE BY OWNER'S TECHNOLOGY SYSTEM CONTRACTOR.
22. ALL SECURITY, CCTV, & ACCESS CONTROL SYSTEM WORK AND DESIGN TO BE DONE BY OWNER'S SECURITY SYSTEM CONTRACTOR.
23. ALL PUBLIC ADDRESS SYSTEM WORK AND DESIGN TO BE DONE BY OWNER'S PUBLIC ADDRESS SYSTEM CONTRACTOR.
24. STUB TELEPHONE AND CABLE TV SERVICE CONDUIT UP POLE AS DIRECTED BY TELEPHONE AND CABLE TV CO.
25. SEE SINGLE LINE DIAGRAM FOR INSTALLATION OF PRIMARY ELECTRICAL SERVICE CONDUIT ON POWER CO. POWER POLE.
26. STUB UP TELEPHONE SERVICE AND CABLE TV SERVICE CONDUIT 12"AFF. VERIFY EXACT LOCATION WITH CRAWFORD COUNTY TECHNOLOGY DEPARTMENT PRIOR TO INSTALLATION.



E ELECTRICAL SITE PLAN

1" = 20'-0"

Architect

OMNESS DESIGN, INC.
140 FAIRFAX ROAD
MARION, OHIO 43302

CRAWFORD COUNTY STATE OF OHIO

PROJECT
Crawford Co.
Title Office & Crawford Co. Solid Waste District
New Office Building
2538 E. Mansfield St.
Bucyrus, OH 44820

STATE OF OHIO
TIMOTHY J. BRONAL
REGISTERED PROFESSIONAL ENGINEER

SHEET INFORMATION

Project #:	23-122
Issued For:	Permit/Bid
Date:	2024-02-26
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SHEET TITLE

ELECTRICAL SITE PLAN

SHEET NUMBER

E1.00

GENERAL NOTES

1. ALL ELECTRIC WORK SHALL BE IN STRICT ACCORDANCE WITH CURRENT NEC, NFPA, ALL APPLICABLE NATIONAL, STATE, AND LOCAL CODES AND LOCAL AUTHORITY HAVING JURISDICTION.
2. CONCEAL ALL WIRING TO THE GREATEST EXTENT POSSIBLE.
3. FOR PURPOSES OF CLEARNESS AND LEGIBILITY, DRAWINGS ARE ESSENTIALLY DIAGRAMMATIC AND ALTHOUGH SIZE AND LOCATION OF EQUIPMENT ARE DRAWN TO SCALE WHEREVER POSSIBLE, CONTRACTOR SHALL VERIFY THIS INFORMATION AT THE BUILDING SITE.
4. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL REQUIRED PERMITS, ROUGH-IN/FINAL INSPECTION, ETC.
5. ALL MATERIALS AND EQUIPMENT SHALL BE NEW, OF THE BEST GRADE, AND INSTALLED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.
6. WORKMANSHIP AND MATERIALS TO BE GUARANTEED FOR ONE YEAR FROM DATE OF FINAL ACCEPTANCE.
7. ALL CONDUITS TO CONTAIN A GROUND WIRE SIZED PER TABLE 250-122.
8. MINIMUM CONDUIT SIZE SHALL BE 3/4" FOR EMT OR PVC U.N.O. ALL WIRING SHALL BE INSTALLED IN POLYVINYL CHLORIDE (PVC) OR ELECTRIC METALLIC TUBING (EMT) CONDUIT. MC CABLE MAY BE USED FOR BRANCH CIRCUIT WIRING WHERE CONCEALED IN ACCORDANCE WITH NEC, BUT ALL HOMERUNS SHALL BE IN CONDUIT.
9. EXTEND RACEWAYS PARALLEL AND PERPENDICULAR TO STRUCTURAL MEMBERS AND SURFACE CONTOURS AS MUCH AS IS PRACTICAL.
10. ALL WIRING TO BE A MINIMUM OF #12 AWG COPPER CONDUCTOR FOR POWER AND LIGHTING CIRCUITS UNLESS NOTED OTHERWISE. ALL WIRING TO BE COPPER TYPE THHN, XHHW, OR THWN, 600-V (75° C). ALUMINUM CONDUCTORS MAY BE USED FOR FEEDERS #1 SIZE AND LARGER.
11. MINIMUM 14 AWG CONDUCTOR FOR CONTROL CIRCUITS.
12. MINIMUM 1O AWG FOR HOME RUN CONDUCTORS AND 20 AMP 120-V BRANCH CIRCUITS LONGER THAN 1OO FEET.
13. PULL ALL CONDUCTORS INTO RACEWAY AT SAME TIME.
14. IDENTIFICATION TAGGING IS REQUIRED ON ALL PANELBOARD, JUNCTION BOXES, RELAYS, DISCONNECT SWITCHES, STARTERS, CONTROL PANELS, PUSHBUTTONS, AND MISC. ELECTRICAL DEVICES INSTALLED BY CONTRACTOR. USE ENGRAVED LAMACOID LABEL, 1" WIDE BY 2" LONG MINIMUM, BLACK WITH WHITE LETTERS, MINIMUM 3/4" HIGH.
15. CONTRACTOR SHALL COORDINATE THE PROPER INSTALLATION OF ALL POWER WIRING AND TEMPERATURE CONTROL WIRING (INCLUDING INTERLOCKS AND STARTERS) WITH PROPER SUBCONTRACTORS AS REQUIRED FOR A COMPLETE WORKING SYSTEM.
16. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FURNISHING AND INSTALLING A PROPERLY-RATED LOCAL DISCONNECT SWITCH ON ALL ITEMS OF ELECTRICAL EQUIPMENT WHICH DO NOT HAVE AN INTEGRAL LOCAL DISCONNECTING MEANS, WHETHER OR NOT SPECIFICALLY SHOWN ON THE DRAWINGS. WHERE REQUIRED BY N.E.C. LOCAL DISCONNECT SHALL BE FUSIBLE OR HACR-RATED.
17. PANEL AND ELECTRICAL EQUIPMENT LOCATIONS SHALL BE COORDINATED WITH ALL CONTRACTORS PRIOR TO INSTALLATION TO INSURE THE INSTALLATION IS IN STRICT ACCORDANCE WITH ALL WORKING SPACE & DEDICATED ELECTRICAL SPACE REQUIREMENTS PER N.E.C. ART. 110.
18. EC SHALL SEAL AROUND ALL ELECTRICAL PENETRATIONS THROUGH FIRE RATED FLOORS AND WALLS.
19. CONNECT ALL BATTERY-POWER EXIT AND EMERGENCY LIGHTS AHEAD OF SWITCH ON LIGHTING CIRCUIT IN AREA LOCATED.
20. ALL FIRE ALARM SYSTEM WORK AND DESIGN, IF REQUIRED, TO BE DONE BY OWNER'S FIRE ALARM SYSTEM CONTRACTOR.
21. ALL TELEPHONE/DATA/CATV SYSTEM WORK AND DESIGN TO BE DONE BY OWNER'S TECHNOLOGY SYSTEM CONTRACTOR.
22. ALL SECURITY, CCTV, & ACCESS CONTROL SYSTEM WORK AND DESIGN TO BE DONE BY OWNER'S SECURITY SYSTEM CONTRACTOR.
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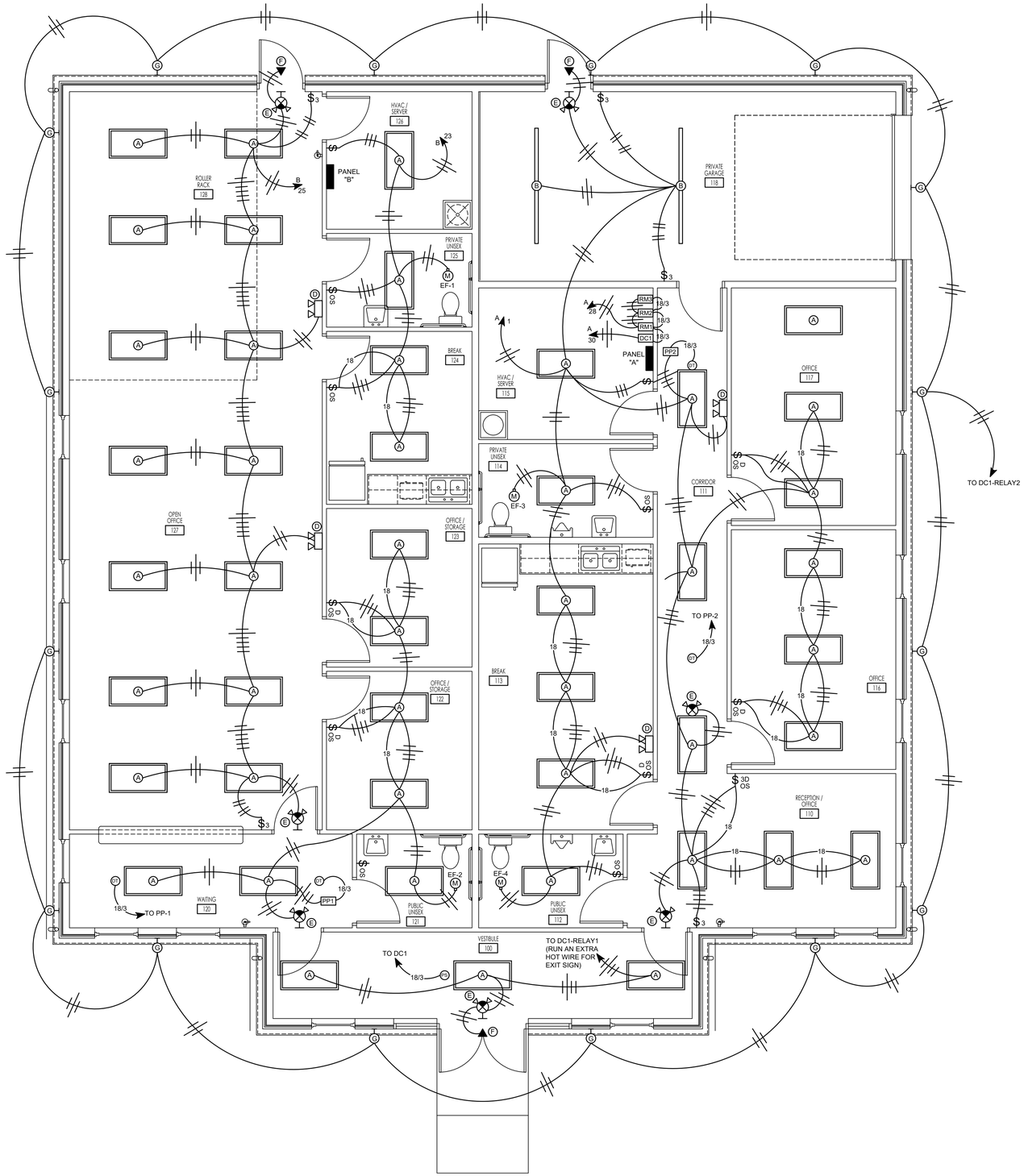

E LIGHTING - FLOOR PLAN

1/4" = 1'-0"

Architect

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140 FAIRFAX ROAD
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CRAWFORD COUNTY STATE OF OHIO

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STATE OF OHIO
REGISTERED PROFESSIONAL ENGINEER

SHEET INFORMATION

Project #:	23-122
Issued For:	Permit/Bid
Date:	2024-02-26
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SHEET TITLE

LIGHTING - FLOOR PLAN

SHEET NUMBER

E1.01

GENERAL NOTES

1. ALL ELECTRIC WORK SHALL BE IN STRICT ACCORDANCE WITH CURRENT NEC, NFPA, ALL APPLICABLE NATIONAL, STATE, AND LOCAL CODES AND LOCAL AUTHORITY HAVING JURISDICTION.
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9. EXTEND RACEWAYS PARALLEL AND PERPENDICULAR TO STRUCTURAL MEMBERS AND SURFACE CONTOURS AS MUCH AS IS PRACTICAL.
10. ALL WIRING TO BE A MINIMUM OF #12 AWG COPPER CONDUCTOR FOR POWER AND LIGHTING CIRCUITS UNLESS NOTED OTHERWISE. ALL WIRING TO BE COPPER TYPE THHN, XHHW, OR THWN, 600-V (75° C). ALUMINUM CONDUCTORS MAY BE USED FOR FEEDERS #1 SIZE AND LARGER.
11. MINIMUM 14 AWG CONDUCTOR FOR CONTROL CIRCUITS.
12. MINIMUM 1O AWG FOR HOME RUN CONDUCTORS AND 20 AMP 120-V BRANCH CIRCUITS LONGER THAN 1OO FEET.
13. PULL ALL CONDUCTORS INTO RACEWAY AT SAME TIME.
14. IDENTIFICATION TAGGING IS REQUIRED ON ALL PANELBOARD, JUNCTION BOXES, RELAYS, DISCONNECT SWITCHES, STARTERS, CONTROL PANELS, PUSHBUTTONS, AND MISC. ELECTRICAL DEVICES INSTALLED BY CONTRACTOR. USE ENGRAVED LAMACOID LABEL, 1" WIDE BY 2" LONG MINIMUM, BLACK WITH WHITE LETTERS, MINIMUM 3/4" HIGH.
15. CONTRACTOR SHALL COORDINATE THE PROPER INSTALLATION OF ALL POWER WIRING AND TEMPERATURE CONTROL WIRING (INCLUDING INTERLOCKS AND STARTERS) WITH PROPER SUBCONTRACTORS AS REQUIRED FOR A COMPLETE WORKING SYSTEM.
16. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FURNISHING AND INSTALLING A PROPERLY-RATED LOCAL DISCONNECT SWITCH ON ALL ITEMS OF ELECTRICAL EQUIPMENT WHICH DO NOT HAVE AN INTEGRAL LOCAL DISCONNECTING MEANS, WHETHER OR NOT SPECIFICALLY SHOWN ON THE DRAWINGS. WHERE REQUIRED BY N.E.C. LOCAL DISCONNECT SHALL BE FUSIBLE OR HACR-RATED.
17. PANEL AND ELECTRICAL EQUIPMENT LOCATIONS SHALL BE COORDINATED WITH ALL CONTRACTORS PRIOR TO INSTALLATION TO INSURE THE INSTALLATION IS IN STRICT ACCORDANCE WITH ALL WORKING SPACE & DEDICATED ELECTRICAL SPACE REQUIREMENTS PER N.E.C. ART. 110.
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19. CONNECT ALL BATTERY-POWER EXIT AND EMERGENCY LIGHTS AHEAD OF SWITCH ON LIGHTING CIRCUIT IN AREA LOCATED.
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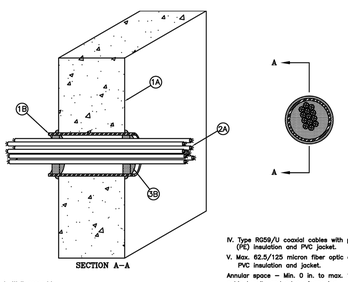
23. ALL PUBLIC ADDRESS SYSTEM WORK AND DESIGN TO BE DONE BY OWNER'S PUBLIC ADDRESS SYSTEM CONTRACTOR.
24. EC TO PROVIDE 1/2EMT CONDUIT FOR ALL OVERHEAD DOOR'S LOW VOLTAGE DEVICES AS DIRECTED BY OVERHEAD DOOR SUPPLIER. EC TO PROVIDE 1/2EMT EACH OVERHEAD DOOR LOW VOLTAGE DEVICE TO 9'-0"AFF AS DIRECTED BY OVERHEAD DOOR SUPPLIER. TERMINATE EACH END WITH PLASTIC BUSHINGS.



SECTION A–A

1. Wall assembly
   - 1A. Min. 6 in. NW or LW concrete or block wall capable of a 2 hr. rating. Max. diameter of penetrant opening is 4 in.
   - 1B. Optional – Max. 4 in. diameter steel, iron, or EMT sleeve tightly fit or cast into opening finished or projecting beyond the wall surfaces.
2. Penetrant
   - 2A. One or more of the following may be used, up to a max. 56% fill.
     - I. Max 1/C No. 350 MCM cable with XLPE insulation and jacket.
     - II. Max. RG/U No. 18 AWG (or smaller) copper conductor coaxial cables.
     - III. Max 4/C No. 12 AWG (or smaller) cable with PVC insulation and jacket.
     - IV. Type RG59/U coaxial cables with polyethylene (PE) insulation and PVC jacket.
     - V. Max. 62.5/125 micron fiber optic cables with PVC insulation and jacket.

   Annular space – Min. 0 in. to max. 1/8 in. between cable bundle and edge of opening.
3. Firestopping – FlameSafe® FS 1900 Series Sealant
   - 3A. Optional backer rod or mineral wool compressed into opening as a damming material.
   - 3B. Apply FS 1900 into annular space and between cables to a depth of 1 in. Add a 3/8 in. bead at point-of-contact around EMT.

NOTES

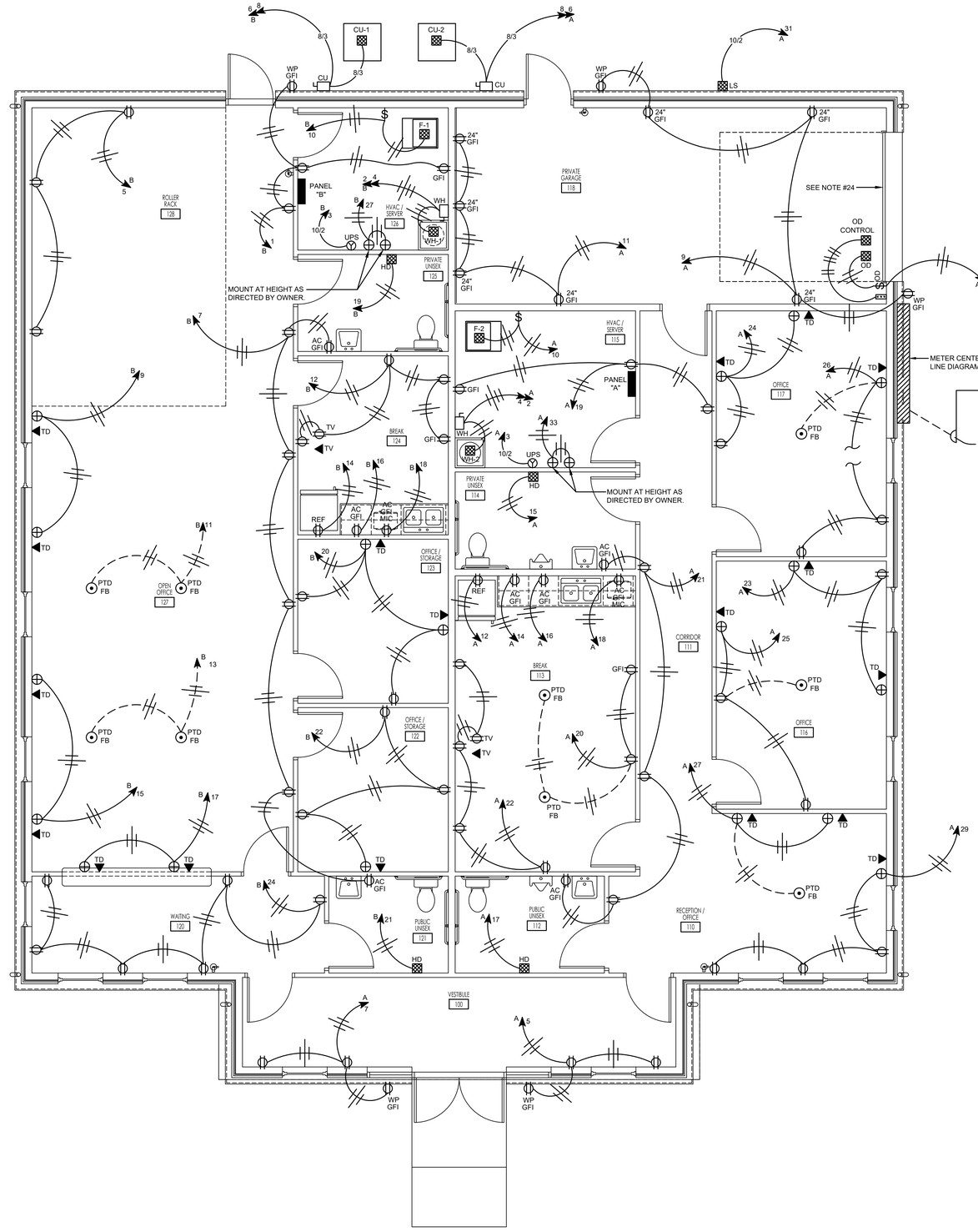
1. This system drawing is provided to aid in the installation and selection of the UL listed design. The user shall refer back to the UL listed design for complete information required for submittal and approval purposes.
2. System design evaluated to the UL 1479 (ASTM E814) Fire Tests of Through-Penetration Firestops.
3. Please refer to the UL Fire Resistance Directory for components requiring UL classification.
4. Shall comply with OBC Section 713.3.

Flamesafe® Firestopping Products

Firestop Assembly	
Product: FlameSafe FS 1900 Series or Equivalent Sealant.	
F Rating:	2 HOUR
UL System:	WJ3102
RS Dwg #	WJ3102

FIRE RATED ASSEMBLY PENETRATION DETAIL

N.T.S.



E POWER - FLOOR PLAN

1/4" = 1'-0"

Architect

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CRAWFORD COUNTY STATE OF OHIO

PROJECT
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STATE OF OHIO
TIMOTHY EDRON BOYD
E-73105
REGISTERED PROFESSIONAL ENGINEER

SHEET INFORMATION

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SHEET TITLE

POWER - FLOOR PLAN

SHEET NUMBER

E1.02

LEGEND

SYMBOL	DESCRIPTION
$	SINGLE POLE SWITCH WITH COVERPLATE. MOUNT AT 48"AFF TO CENTERLINE UNLESS OTHERWISE NOTED.
$3,4	3-WAY, 4-WAY SINGLE POLE SWITCH WITH COVERPLATE. MOUNT AT 48"AFF TO CENTERLINE UNLESS OTHERWISE NOTED.
$OS	SENSORWORX #SWX-123-WH OR EQUIVALENT DUAL TECHNOLOGY WALL PASSIVE OCCUPANCY SENSOR SWITCH WITH COVERPLATE. (3-WAY AND 4-WAY SHALL BE SIMILAR USING LINK WIRING). MOUNT T 48"AFF TO CENTERLINE UNLESS NOTED OTHERWISE.
$D OS	SENSORWORX #SWX-123-D-WH OR EQUIVALENT DUAL TECHNOLOGY WALL OCCUPANCY SENSOR SWITCH WITH 0-10V DIMMING AND COVERPLATE. (3-WAY AND 4-WAY SHALL BE SIMILAR USING LINK WIRING). MOUNT T 48"AFF TO CENTERLINE UNLESS NOTED OTHERWISE.
$OD	SINGLE POLE SWITCH FOR OVERHEAD DOOR INTAKE LOUVER. MOUNT NEXT TO OVERHEAD DOOR MOTOR AS DIRECTED OVERHEAD DOOR SUPPLIER. FIELD VERIFY EXACT LOCATION PRIOR TO ROUGH-IN.
OT	SENSORWORX #SWX-221-1 DUAL TECHNOLOGY, LOW VOLTAGE, LARGE MOTION 360°, CEILING SENSOR. MOUNT IN CEILING AS DIRECTED BY LUMINAIRE SUPPLIER.
PP7	SENSORWORX #SWX-900-AX 16A, 120/277V WITH AUXILIARY SWITCH INPUT. MOUNT IN JUNCTION BOX AT LOCATION AS DIRECTED BY POWER PACK SUPPLIER.
DC1	STEINEL #80208 OR EQUIVALENT DCS DIGITAL CONTROLLER WITH THREE (3) RELAYS AND INTERNAL TIME CLOCK. EC TO PROGRAM CONTROLLER AS DIRECTED BY OWNER. EC TO ALSO PROVIDE TRAINING TO OWNER FOR PROGRAMMING CONTROLLER. MOUNT ON WALL AS SHOWN AND AS DIRECTED BY OWNER & CONTROLLER SUPPLIER.
RM7	STEINEL #LDALI-RM5 OR EQUIVALENT SINGLE CHANNEL EXPANSION DIMMING RELAY MODULE. CONNECT TO DC1 AS DIRECTED BY MODULE SUPPLIER. EC TO PROGRAM CONTROLLER AS DIRECTED BY MODULE SUPPLIER.
PS	STEINEL #72504 OR EQUIVALENT PS-DCS CEILING PHOTO SENSOR. MOUNT IN CEILING AS DIRECTED BY LUMINAIRE SUPPLIER.
	20A, 125V, DUPLEX RECEPTACLE WITH COVERPLATE. MOUNT AT 18"AFF TO CENTERLINE UNLESS OTHERWISE NOTED. **GFI** - GROUND FAULT INTERRUPTING **WP** - WEATHERPROOF COVER **AC** - ABOVE COUNTERTOP **TV** - MOUNT AT 72"AFF TO CENTERLINE BEHIND "TV" AS DIRECTED BY GC. **REF** - MOUNT BEHIND REFRIGERATOR **MIC** - MOUNT BEHIND MICROWAVE. **OD** - CEILING MOUNT NEXT TO OVERHEAD DOOR (12HP, 120V, 1PH) AS DIRECTED BY OVERHEAD DOOR SUPPLIER.
UPS	30A, 125V, 2-POLE, 3-WIRE L5-30R TWIST LOCK RECEPTACLE FOR TECHNOLOGY SYSTEM UPS. MOUNT AT 18"AFF TO CENTERLINE UNLESS OTHERWISE NOTED. VERIFY SIZE, TYPE, VOLTAGE, & PHASE OF RECEPTACLE WITH OWNER'S TECHNOLOGY CONTRACTOR AND CHANGE IF NECESSARY.
	TWO (2) 20A, 125V, DUPLEX RECEPTACLES MOUNTED IN THE SAME BOX WITH COMMON COVERPLATE. MOUNT AT 18"AFF TO CENTERLINE UNLESS OTHERWISE NOTED.
PTD FB	HUBBELL #CFB45Q55CRE OR EQUIVALENT 4/5-GANG, CORROSION RESISTANCE POWER/TELEPHONE/DATA FLOOR BOX WITH #610GTCVRALUC FLUSH ALUMINUM POWDER COATED COVER WITH INSERT, (1) FB10MPNEMA2XG (2) 2-GANG PLATE WITH LOW VOLTAGE DIVIDER, AND (1) FB10MP2E 2-GANG DUPLEX OPENING PLATE. SEE ARCHITECTURAL SHEET A1.01 FOR EXACT LOCATION. VERIFY WITH ARCHITECT PRIOR TO ROUGH-IN. PROVIDE (2) 20A, 125V, DUPLEX GROUNDING TYPE RECEPTACLES. PROVIDE ALL NECESSARY ADAPTORS AND FLOOR BOX ACCESSORIES AS DIRECTED BY FLOOR BOX SUPPLIER AND OWNER'S TECHNOLOGY CONTRACTOR. SEE FLOOR BOX FACEPLATE DETAIL ON THIS SHEET.
	DISCONNECT SWITCH. FRAME SIZE/# OF POLES/# OF FUSES/VOLTAGE RATING/ ENCLOSURE TYPE.
CU	60A/2P/NF/250V/NEMA 3R DISCONNECT SWITCH FOR ROOFTOP CONDENSING UNIT.
WH	30A/2P/NF/250V/NEMA 1 DISCONNECT SWITCH FOR WATER HEATER. MOUNT NEXT TO WATER HEATER AS DIRECTED BY PC.
EF-1,2 M	EXHAUST FAN EF-1,2 (19.4W, 120V, 1PH). EXHAUST FAN CONTAINS A FACTORY INSTALLED DISCONNECT SWITCH.
EF-3,4 M	EXHAUST FAN EF-3,4 (54.2W, 120V, 1PH). EXHAUST FAN CONTAINS A FACTORY INSTALLED DISCONNECT SWITCH.
	RAISE, LOWER, STOP OVERHEAD DOOR PUSHBUTTON.

SYMBOL	DESCRIPTION
J	JUNCTION BOX.
	POWER PANEL
	POINT OF CONNECTION TO ELECTRICAL EQUIPMENT. VERIFY EXACT LOCATION WITH RESPECTIVE EQUIPMENT SUPPLIER PRIOR TO ROUGH-IN.
CU-1,2	POINT OF CONNECTION TO ROOFTOP CONDENSING UNIT UNIT CU-1,2 (32.7MCA, 208V, 1PH). CONNECT AS DIRECTED BY MC.
F-1,2	POINT OF CONNECTION TO FURNACE F-1,2 (14.0FLA, 120V, 1PH). FURNACE IS INSTALLED ABOVE CEILING. CONNECT AS DIRECTED BY MC.
WH1,2	POINT OF CONNECTION TO ELECTRIC WATER HEATER WH-1,2 (2.5KW, 208V, 1PH). CONNECT AS DIRECTED BY PC.
LS	POINT OF CONNECTION TO LIFT STATION CONTROL PANEL (1HP, 120V, 1PH). CONNECT AS DIRECTED BY LIFT STATION SUPPLIER.
HD	POINT OF CONNECTION TO HAND DRYER (12.2FLA, 120V, 1PH). CONNECT AS DIRECTED BY HAND DRYER SUPPLIER.
OD	POINT OF CONNECTION TO OVERHEAD DOOR MOTOR (1/2HP, 120V, 1PH). CONNECT AS DIRECTED BY OVERHEAD DOOR SUPPLIER.
OD CONTROL	POINT OF CONNECTION TO OVERHEAD DOOR MOTOR CONTROL. CONNECT AS DIRECTED BY OVERHEAD DOOR SUPPLIER.
TD	TELEPHONE/DATA SYSTEM OUTLET. EC TO PROVIDE SINGLE GANG EXTRA DEEP BOX. MOUNT AT 18" AFF TO CENTERLINE UNLESS NOTED. PROVIDE 1"C WITH PULL WIRE FROM OUTLET TO ABOVE ACCESSIBLE CEILING.
TV	TELEVISION SYSTEM OUTLET. EC TO PROVIDE SINGLE GANG EXTRA DEEP BOX. MOUNT AT 72" AFF TO CENTERLINE UNLESS NOTED. PROVIDE 1"C WITH PULL WIRE FROM OUTLET TO ABOVE ACCESSIBLE CEILING.
POLE	CCTV CAMERA TO BE FURNISHED, INSTALLED, AND WIRED BY OWNER'S SECURITY SYSTEM CONTRACTOR. PROVIDE ARM AND HAND HOLE WITH COVER ON POLE AS DIRECTED BY LUMINAIRE SUPPLIER AND SECURITY SYSTEM CONTRACTOR. PROVIDE 1"C WITH PULL WIRE FROM POLE TO LOCATION IN HVAC/SERVER ROOM 115 AS DIRECTED BY SECURITY SYSTEM CONTRACTOR. STUB CONDUIT IN POLE BASE AS DIRECTED BY LUMINAIRE SUPPLIER.
	CONDUIT CONCEALED
	CONDUIT UNDERGROUND OR BELOW SLAB.
A3	CONDUIT HOME RUN WITH CIRCUIT NUMBER
	HOT, NEUTRAL, GROUND
	HOT, NEUTRAL, GROUND, AND REDUNDANT GROUND FOR POWER BRANCH CIRCUITS IN PATIENT CARES IN POWER PLAN E3.
	HOT, NEUTRAL, SWITCH LEG, GROUND, AND REDUNDANT GROUND FOR SWITCHES AND SWITCH CIRCUITS IN PATIENT CARE AREAS IN LIGHTING PLAN E2.
	HOT, NEUTRAL, SWITCH LEG, AND GROUND, FOR SWITCH CIRCUITS IN NON-PATIENT CARE AREAS IN LIGHTING PLAN E2.
1"C	1" CONDUIT WITH PULL WIRE FOR CCTV SYSTEM CABLING. INSTALL AT 36"BFG.
18	2/C-#18AWG FOR 0-10V DIMMING CONTROL, 1/2"C
18/3	3/C-#18AWG FOR LIGHTING CONTROL, 1/2"C
10/2	2-#10CU, 1-#10CU GND, 3/4"C
10/3	3-#10CU, 1-#10CU GND, 3/4"C
8/3	3-#8CU, 1-#10CU GND, 1"C
BFG	BELOW FINISHED GRADE
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
BFC	BELOW FINISHED CEILING
EC	ELECTRICAL CONTRACTOR
MC	MECHANICAL CONTRACTOR
PC	PLUMBING CONTRACTOR
GC	GENERAL CONTRACTOR

LUMINAIRE SCHEDULE

TYPE	MFG	CAT NO.	VOLT	AMPS	MTG
A	DAY-BRITE - 2' X 4', LED LAY-IN GRID SWITCHABLE FLAT PANEL	2SBP3550L8CS-4-UNV-DIM	UNV	(1) 35/39/51W LED 3500K/4000K/5000K	CEILING RECESS
B	DAY-BRITE - 8'-0" LONG LED SWITCHABLE STRIP LUMINAIRE	SDS84998L8CST-UNV-DIM	UNV	(1) 40/60/80W LED 3500K/4000K/5000K	CEILING SURFACE
C	NOT USED	-	-	-	-
D	CHLORIDE - LED EMERGENCY LIGHT WITH 90 MINUTE BATTERY	CLU2-N-WH	120-277	INTEGRAL	WALL SURFACE
E	CHLORIDE - COMBINATION LED EXIT SIGN/ EMERGENCY LIGHT WITH REMOTE CAPABILITY & 90 MINUTE BATTERY BACK-UP	VLTCR3R	120/277	INTEGRAL	UNIVERSAL
F	CHLORIDE - LED REMOTE EMERGENCY LIGHT WITH TWIN HEADS	VLL2RGO	3.6V	INTEGRAL	WALL SURFACE ABOVE DOOR
G	GARDCO OR EQUIVALENT - 7,500 LUMEN WEDGE WALL PACK	GWM-A10-840-TX-UNV-XXX	UNV	(1) 45.0W LED, 4000K	WALL SURFACE AT HEIGHT AS SHOWN ON ARCHITECTURAL SHEET A2.01.
H	STONCO - AREA LIGHT, 12,329 LUMEN PARKING LOT LUMINAIRE GARDCO - 18'-0" HIGH STRAIGHT SQUARE ALUMINUM POLE.	**HEAD** - AL-100-NW-G1-AR-X-8-IMRI-XX **POLE** - SSACA-4-125-18-D1-XX	UNV	(1) 100.0W LED, 4000K	POLE MOUNTED
K	STONCO - AREA LIGHT, 12,329 LUMEN PARKING LOT LUMINAIRE GARCO - 18'-0" HIGH STRAIGHT SQUARE ALUMINUM POLE WITH ARM AND HAND HOLD WITH COVER FOR CCTV CAMERA AS DIRECTED BY LUMINAIRE SUPPLIER.	**HEAD** - AL-100-NW-G1-AR-X-8-IMRI-XX **POLE** - SSACA-4-125-18-D1-XX-VDA-AHH-NL1/2-CL1	UNV	(1) 100.0W LED, 4000K	POLE MOUNTED

NOTES:
1. SUBSCRIPT "NL" INDICATES LUMINAIRE TO BE CONNECTED AHEAD OF SWITCH TO ACT AS A "NIGHT LIGHT".
2. CONNECT ALL BATTERY-POWER EXIT AND EMERGENCY LIGHTS AHEAD OF SWITCH ON LIGHTING CIRCUIT IN AREA LOCATED.
3. VERIFY LED LAMP COLORS OF ALL LUMINAIRES WITH OWNER & ARCHITECT PRIOR TO ORDERING.
4. EQUIVALENT LUMINAIRES AS MANUFACTURED BY BARRON, LITHONIA & COOPER.

DISTRIBUTION PANEL SCHEDULE

PANEL: PANEL "A" TYPE: NEMA 1 MOUNTING: SURFACE

FEATURES: [X] GROUND BUS [X] SOLID NEUTRAL [X] MAIN LUGS ONLY

SERVICE: 200 AMPS 120/208 VOLTS 3 PHASE 4 WIRE 60 HZ 22,000 A.I.C.

	LOAD	WIRE SIZE	CB/P	CIRC. NO.	A B C	CIRC. NO.	CB/P	WIRE SIZE	LOAD		
	1117 LTG., 110-118	12	20/1	1		2	30/2	10	WH-2, 115	1250	
	2500 REC., 115 (UPS)	10	30/1	3		4	30/2	10	WH-2, 115	1250	
	720 REC., 100	12	20/1	5		6	50/2	8	CU-2, SITE	3401	
	720 REC., 100	12	20/1	7		8	50/2	8	CU-2, SITE	3401	
	900 REC., 118, SITE	12	20/1	9		10	20/1	12	F-2, 115	1680	
	720 REC., 118	12	20/1	11		12	20/1	12	REC., 113 (REF)	1500	GFI
GFI	1200 REC., 118 (OD)	12	20/1	13		14	20/1	12	REC., 113	1500	
	1464 HAND DRYER, 114	12	20/1	15		16	20/1	12	REC., 113	1500	
	1464 HAND DRYER, 112	12	20/1	17		18	20/1	12	REC., 113 (MICRO)	1500	
	540 REC., 111, 115	12	20/1	19		20	20/1	12	REC., 113	1080	
	900 REC., 110-112	12	20/1	21		22	20/1	12	REC., 113	900	
	900 REC., 116	12	20/1	23		24	20/1	12	REC., 117	900	
	720 REC., 116	12	20/1	25		26	20/1	12	REC., 117	720	
	1080 REC., 110	12	20/1	27		28	20/1	12	LTG., PARKING LOT	1024	
	900 REC., 110	12	20/1	29		30	30/1	12	LTG., 100,EXT. BLG.	873	
	1920 LIFT STATION	10	30/1	31		32	20/1	-	SPARE	-	
	720 REC., 115	12	20/1	33		34	20/1	-	SPARE	-	
	- SPARE	-	20/1	35		36	20/1	-	SPARE	-	
	- SPARE	-	20/1	37		38	20/1	-	SPARE	-	
	- SPARE	-	20/1	39		40	20/1	-	SPARE	-	
	SPARE	-	20/1	41		42	20/1	-	SPARE	-	

LOADS: A = 14,168W B = 13,918W C = 12,878W

TOTAL LOAD: 3 X PHC = 42,504W
= 118 AMPS @ 120/208 VOLTS, 3PH, 4W

NOTES:
1. "GFI" - INDICATES A "GFI" TYPE CIRCUIT BREAKER.

DISTRIBUTION PANEL SCHEDULE

PANEL: PANEL "B" TYPE: NEMA 1 MOUNTING: SURFACE

FEATURES: [X] GROUND BUS [X] SOLID NEUTRAL [X] MAIN LUGS ONLY

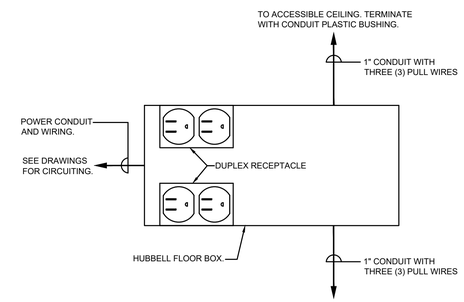
SERVICE: 200 AMPS 120/208 VOLTS 3 PHASE 4 WIRE 60 HZ 22,000 A.I.C.

	LOAD	WIRE SIZE	CB/P	CIRC. NO.	A B C	CIRC. NO.	CB/P	WIRE SIZE	LOAD		
	720 REC., 126,128	12	20/1	1		2	30/2	10	WH-1, 126	1250	
	2500 REC., 126 (UPS)	10	30/1	3		4	30/2	10	WH-1, 126	1250	
	540 REC., 128	12	20/1	5		6	50/2	8	CU-1, SITE	3401	
	1080 REC., 121,125,127	12	20/1	7		8	50/2	8	CU-1, SITE	3401	
	720 REC., 127	12	20/1	9		10	20/1	12	F-1, 126	1680	
	720 REC., 127	12	20/1	11		12	20/1	12	REC., 124	900	
	720 REC., 127	12	20/1	13		14	20/1	12	REC., 124	1500	GFI
	720 REC., 127	12	20/1	15		16	20/1	12	REC., 124	1500	
	720 REC., 127	12	20/1	17		18	20/1	12	REC., 124	1500	
	1464 HAND DRYER, 125	12	20/1	19		20	20/1	12	REC., 123	1080	
	1464 HAND DRYER, 121	12	20/1	21		22	20/1	12	REC., 122	900	
	600 LTG., 120-126	12	20/1	23		24	20/1	12	REC., 120	1080	
	714 LTG., 127,128	12	20/1	25		26	20/1	-	SPARE	-	
	720 REC., 126	12	20/1	27		28	20/1	-	SPARE	-	
	- SPARE	-	20/1	29		30	30/1	-	SPARE	-	
	- SPARE	-	20/1	31		32	20/1	-	SPARE	-	
	- SPARE	-	20/1	33		34	20/1	-	SPARE	-	
	- SPARE	-	20/1	35		36	20/1	-	SPARE	-	
	- SPARE	-	20/1	37		38	20/1	-	SPARE	-	
	- SPARE	-	20/1	39		40	20/1	-	SPARE	-	
	SPARE	-	20/1	41		42	20/1	-	SPARE	-	

LOADS: A = 11,929W B = 11,445W C = 9,461W

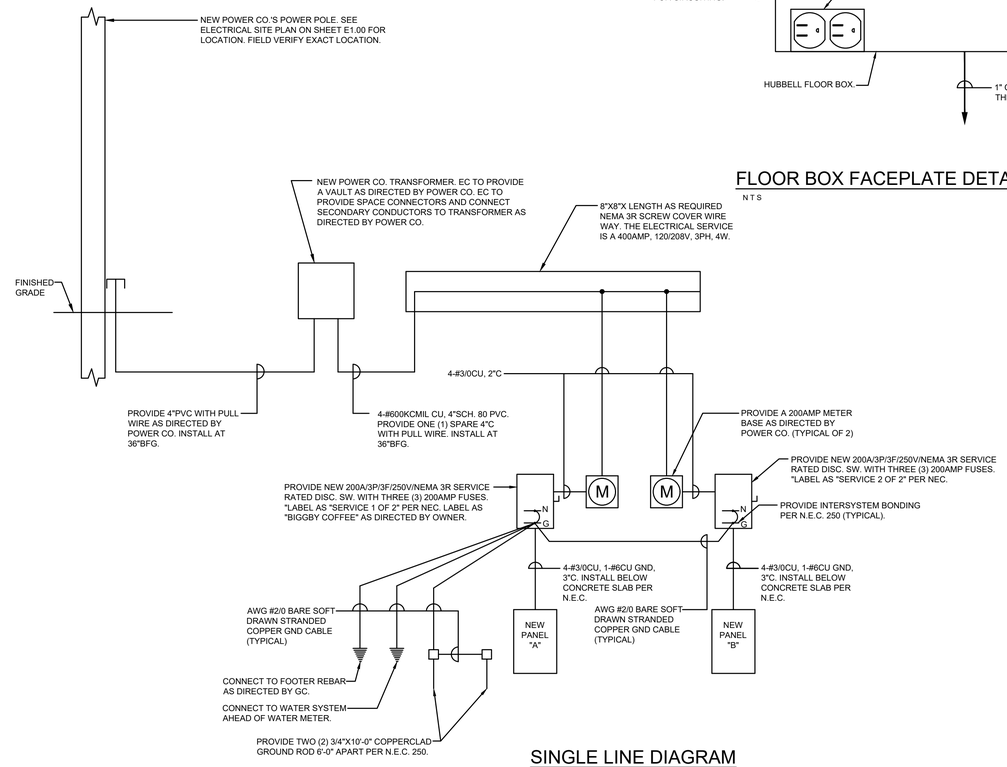
TOTAL LOAD: 3 X PHA = 35,787W
= 99 AMPS @ 120/208 VOLTS, 3PH, 4W

NOTES:
1. "GFI" - INDICATES A "GFI" TYPE CIRCUIT BREAKER.



FLOOR BOX FACEPLATE DETAIL FB PTD

N T S



SINGLE LINE DIAGRAM

N T S

Architect
OMNESS DESIGN, INC.
140 FAIRFAX ROAD
MARION, OHIO 43302

CRAWFORD COUNTY STATE OF OHIO

PROJECT
Crawford Co.
Title Office & Crawford Co. Solid Waste District
New Office Building
2538 E. Mansfield St.
Bucyrus, OH 44820

STATE OF OHIO TIMOTHY J. BORON REGISTERED PROFESSIONAL ENGINEER

SHEET INFORMATION

Project #: 23-122
Issued For: Permit/Bid
Date: 2024-02-26
Revisions:

SHEET TITLE

LEGEND/DETAILS
SCHEDULES
SINGLE LINE DIAG

SHEET NUMBER

E2.01

ELECTRICAL SPECIFICATIONS

1. **WORK INCLUDED:** WORK INCLUDED IS SUBJECT TO THE GENERAL CONDITIONS AND INSTRUCTIONS TO BIDDERS OF THE ENTIRE OPERATION. THE CONTRACTORS AND/OR SUBCONTRACTORS FOR THIS PORTION OF THE WORK ARE REQUIRED TO REFER ESPECIALLY THERETO.

1.a. THE WORK COVERED UNDER THIS SPECIFICATION SHALL INCLUDE ALL LABOR, MATERIALS, TOOLS, EQUIPMENT AND SERVICES NECESSARY FOR, OR INCIDENTAL TO PROPER INSTALLATION AND COMPLETION OF ELECTRICAL WORK AS INDICATED ON THE DRAWINGS OR HEREIN SPECIFIED, OR BOTH.

1.b. THE CONTRACT DOCUMENTS ARE COMPLIMENTARY AND WHAT IS CALLED FOR BY ONE SHALL BE AS BINDING AS IF CALL FOR BY ALL. IF THE DRAWINGS AND SPECIFICATIONS ARE IN CONFLICT, THE MOST COMPREHENSIVE SCOPE OF WORK AND BETTER QUALITY MATERIAL AS CALLED FOR IN ONE DOCUMENT SHALL BE USED FOR BIDDING PURPOSED. CONFLICT IN THE DRAWINGS AND SPECIFICATIONS SHALL BE SUBMITTED TO THE ARCHITECT-ENGINEER FOR CLARIFICATION. MISUNDERSTANDING OF DRAWINGS AND SPECIFICATIONS SHALL BE CLARIFIED BY THE ARCHITECT/ENGINEER WHOSE DECISION SHALL BE FINAL.

1.c. ALL PORTIONS OF OTHER SECTIONS OF SPECIFICATIONS AND DRAWINGS WHICH CAN BE MADE TO APPLY SHALL BE CONSIDERED A PART OF THE SPECIFICATIONS. THE ELECTRICAL CONTRACTOR SHALL REVIEW OTHER SECTIONS OF THE SPECIFICATIONS AND DRAWINGS AND INCLUDE IN HIS BID ALL ELECTRICAL WORK REQUIRED TO COMPLETE ALL WORK.

1.d. WHERE THE LETTER "EC" IS USED IN THESE SPECIFICATIONS IT IS RELATIVE TO THE ELECTRICAL CONTRACTOR.

1.e. ANY APPARATUS, APPLIANCE, MATERIAL, OR WORK NOT SHOWN ON THE DRAWINGS, BUT MENTIONED IN THE SPECIFICATIONS, OR VICE-VERSA, OR ANY INCIDENTAL ACCESSORIES NECESSARY TO MAKE THE WORK COMPLETE AND PERFECT ON ALL RESPECTS AND REDO FOR OPERATION EVEN IF NOT PARTICULARLY SPECIFIED, SHALL BE FURNISHED, DELIVERED AND INSTALLED BY THE EC WITHOUT ADDITIONAL EXPENSE TO THE OWNER.

1.f. MINOR DETAILS NOT USUALLY SHOWN OR SPECIFIED, BUT NECESSARY FOR PROPER INSTALLATION AND OPERATION, SHALL BE INCLUDED IN THE EC'S ESTIMATE, THE SAME AS IF HEREIN SPECIFIED OR SHOWN.

1.g. WITH SUBMISSION OF BID, THE EC SHALL GIVE WRITTEN NOTICE TO THE ARCHITECT OF ANY MATERIALS OR APPARATUS BELIEVED INADEQUATE OR UNSUITABLE, IN VIOLATION OF LAWS, ORDINANCES, RULES, AND ANY NECESSARY ITEMS OR WORK OMITTED. IN THE ABSENCE OF SUCH WRITTEN NOTICE, IT IS MUTUALLY AGREED THAT THE EC HAS INCLUDED THE COST OF ALL REQUIRED ITEMS IN HIS PROPOSAL, AND THAT HE WILL BE RESPONSIBLE FOR THE APPROVED SATISFACTORY FUNCTIONING OF OF THE ENTIRE SYSTEM WITHOUT EXTRA COMPENSATION.

2. **ELECTRICAL DRAWINGS:** THE DRAWINGS CONSTITUTE AN INTEGRAL PART OF THESE SPECIFICATIONS. THE DRAWINGS INDICATE THE GENERAL LAYOUT OF EQUIPMENT AND ALL DIMENSIONS AND CLEARANCES SHOULD BE VERIFIED IN THE FIELD. ALL DISCREPANCIES OF DIMENSIONS TO BE BROUGHT TO THE ATTENTION OF THE ARCHITECT-ENGINEER FOR DISPOSITION.

3. **ELECTRICAL DRAWINGS:** THE ARCHITECT/ENGINEER SHALL RESERVE THE RIGHT TO MAKE MINOR ADJUSTMENTS IN LOCATIONS OF OUTLETS, SWITCHES, FIXTURES, CONDUIT, ETC., AND EQUIPMENT WHERE HE CONSIDERS SUCH ADJUSTMENTS DESIRABLE IN THE INTEREST OF CONCEALING WORK OR PRESENTING A BETTER APPEARANCE WHERE EXPOSED. ANY SUCH CHANGES SHALL BE ANTICIPATED AND REQUESTED SUFFICIENTLY IN ADVANCE AS TO NOT CAUSE EXTRA WORK ON THE PART OF THE CONTRACTOR, OR UNDULY DELAY THE WORK. COORDINATE WORK IN ADVANCE WITH ALL OTHER TRADES AND REPORT IMMEDIATELY AND ANY DIFFICULTIES WHICH CAN BE ANTICIPATED.

4. **ADDENDA:** THE DRAWINGS MAY BE SUPERSEDED BY LATER REVISED OR DETAILED DRAWINGS OR SPECIFICATION ADDENDA. REFER TO GENERAL CONDITIONS AND INSTRUCTIONS TO BIDDERS.

5. **SHOP DRAWINGS:** BEFORE WORK IS DONE ON ANY ITEM OF EQUIPMENT, SUBMIT SIX (6) COPIES OF EACH OF THE FOLLOWING: SHOP DRAWINGS, CATALOG CUTS, MANUFACTURER'S CATALOG NUMBERS AND FULL AND COMPLETE INFORMATION FOR REVIEW. SUBMIT SHOP DRAWINGS CONTAINING OR MARKED WITH IDENTIFICATION AND INFORMATION DESCRIBED BELOW. ANY SHOP DRAWINGS NOT IN COMPLIANCE WITH THESE REQUIREMENTS WILL BE RETURNED, WITHOUT REVIEW, FOR CORRECTION AND RESUBMITTAL. ASSEMBLE AND SUBMIT IN LOGICALLY ARRANGED FOLDERS, ALL INSTRUCTION BULLETINS, LUBRICATION SCHEDULES, OPERATION INSTRUCTIONS, PARTS LISTS, PAMPHLETS FOR ELECTRICAL EQUIPMENT AND APPARATUS FURNISHED.

5.a. SHOP DRAWING IDENTIFICATION: INCLUDE PROJECT NAME AND ARCHITECT-ENGINEER'S JOB NUMBER, AND BY NAME, NUMBER AND INTENDED USE AS DESIGNATED BY THE CONTRACT DRAWINGS AND SPECIFICATION, SUCH AS "LIGHTING PANEL "LP-6".

5.b. SHOP DRAWING INFORMATION: INCLUDE FOLLOWING DATA: MANUFACTURER'S MODEL NUMBER OR CATALOG NUMBER, SIZE AND PERFORMANCE CURVES AND DATA. INDICATE OPERATING POINT ON CURVES AND TABULAR DATA FOR EACH PIECE OF EQUIPMENT THAT CURVES OR DATA REPRESENT. INDICATION OF ALL PERFORMANCE DATA, CONSTRUCTION MATERIAL FINISHES AND MODIFICATIONS TO MANUFACTURER'S STANDARD DESIGN SPECIFIED. ROUGHING-IN, FOUNDATION, AND SUPPORT POINTS DIMENSIONS IF APPLICABLE.

6. **OPERATING MANUALS AND PARTS LISTS:** IN ADDITION TO REQUIREMENTS OF GENERAL CONDITIONS, INCLUDE THE FOLLOWING: NAME, ADDRESS, AND TELEPHONE NUMBER OF LOCAL SUPPLIER OR MANUFACTURER'S REPRESENTATIVE FOR EACH PIECE OF EQUIPMENT. ASSEMBLE MANUALS IN SEPARATE BINDER OR BINDERS FOR EACH SYSTEM. INCLUDE CHARTS OR DIAGRAMS SHOWING ESSENTIAL FEATURES OF THE SYSTEM, AND INCLUDE A BRIEF DESCRIPTION OF THE SYSTEM. SUBMIT TWO (2) COPIES OF ABOVE BEFORE BINDING IN OPERATING MANUAL TO THE ARCHITECT-ENGINEER FOR APPROVAL.

7. **RECORD DRAWINGS:** RECEIVE FROM THE ARCHITECT-ENGINEER A COMPLETE SET OF DRAWINGS. NOTE IN RED PENCIL ON THIS SET ANY DEVIATIONS OF INSTALLATION. SUBMIT MARKED SET OF DRAWINGS TO THE ARCHITECT-ENGINEER.

8. **COORDINATION AND SCHEDULING:** ALL PHASES AND SCHEDULING OF WORK TO BE CLOSELY COORDINATED WITH THE OWNER AND AUTHORIZED IN WRITING BY THE OWNER AT LEAST ONE WEEK PRIOR TO THE EXECUTION OF ANY WORK.

9. **SUPERVISION:** THE CONTRACTOR SHALL HAVE AN EXPERIENCED SUPERINTENDENT CONSTANTLY ON THE SITE TO SUPERVISE ALL WORK OF ELECTRICAL CONTRACT.

10. **TEMPORARY ELECTRICAL SERVICE:** TEMPORARY ELECTRIC SERVICE SHALL BE PROVIDED AS REQUIRED.

11. **ALTERATIONS AND REHABILITATION OF EXISTING INSTALLATIONS:**

11.a. REMOVE EXISTING ELECTRICAL EQUIPMENT, DEVICES, OUTLETS, CONDUIT AND WIRING AS INDICATED OR REQUIRED.

11.b. CAP CONDUIT ENDS, PROVIDE COVERS FOR OPENINGS LEFT IN PANELBOARDS, OUTLETS, AND RACEWAYS TO PROVIDE A FINISHED FLUSH-APPEARANCE WHERE WORK HAS BEEN REMOVED.

11.c. WHERE WALLS ARE REMOVED, CUT OFF CONDUITS WHICH PROJECT FROM THE FLOOR INTO THE WALL BEING REMOVED, AS CLOSE TO THE FLOOR AS PRACTICABLE.

11.d. TAKE POSSESSION OF WIRING, CONDUIT AND MISCELLANEOUS ELECTRICAL EQUIPMENT REMOVE AND NOT REUSED. PROMPTLY REMOVE THESE MATERIALS FROM JOB SITE UNLESS OTHERWISE DIRECTED BY THE ARCHITECT/ENGINEER.

11.e. REMOVE FEEDERS OR CIRCUITS TO EQUIPMENT BEING REMOVED BACK TO THE SOURCE OF SUPPLY. IF OTHER EQUIPMENT, OUTLETS OR RECEPTACLES (TO REMAIN) ARE SUPPLIED BY THE SAME FEEDER OR CIRCUIT, PROVIDE WIRING TO MAINTAIN THE EQUIPMENT, OUTLETS OR RECEPTACLES IN SERVICE AND REMOVE UNUSED PORTIONS OF FEEDERS OR CIRCUITS TO NEAREST JUNCTION BOX AND TAPE ENDS OF CONDUCTORS.

11.f. DISCONNECT AND REMOVE OR RELOCATE ELECTRICAL ITEMS AFFECTED BY DEMOLITION WORK AND WHERE INTERFERENCE EXISTS AT FACILITIES TO BE EXTENDED.

11.g. WHEN SPECIFIC TYPES OF EQUIPMENT, METHODS OF CONNECTION, DISCONNECTION OR RELOCATION ARE NOT INDICATED, PROVIDE EQUIPMENT, DEVICES, WIRING AND WORKMANSHIP COMPATIBLE WITH THE EXISTING SYSTEM AND SATISFACTORY TO THE SYSTEM MANUFACTURER AND THE OWNER.

11.h. CERTAIN WORK UNDER THIS CONTRACT SHALL BE INSTALLED IN THE EXISTING BUILDING, THE LAYOUT BEING SUBSTANTIALLY CHANGED. COOPERATE WITH THE GENERAL CONTRACTOR THROUGHOUT IN THE REMOVAL OF OLD WORK.

12. **MATERIALS:** PROVIDE MATERIALS AND EQUIPMENT BEARING CERTIFICATION OF UL WHERE SUCH LABELS OR STAMPS ARE CUSTOMARY, REQUIRED, OR SPECIFIED.

13. **LICENSES AND PERMITS:** OBTAIN ALL REQUIRED LICENSES AND PERMITS AND, AT COMPLETION OF WORK, CERTIFICATES OF FINAL INSPECTION BY AUTHORITIES HAVING LOCAL JURISDICTION. PAY ALL CHARGES AND EXPENSES IN CONNECTION THEREWITH. DELIVER INSPECTION CERTIFICATES AS DIRECTED.

14. **CABLE TEST**: MAKE MEGGER TESTS ON CABLES BETWEEN EACH CONDUCTOR AND GROUND WITH OTHER CONDUCTORS IN A CABLE OR CONDUIT TIED TO GROUND. PERFORM OPERATIONAL TESTS ONLY ON ALL LIGHTING AND 120 VOLT RECEPTACLE CIRCUITS. PERFORM CONTINUITY TESTS ON ALL POWER AND CONTROL CIRCUITS. TEST CABLES FOR 208 VOLT SERVICE WITH A 500 VOLT MEGGER BETWEEN EACH PHASE AND GROUND, WITH TEST MAINTAINED UNTIL READINGS ARE STEADY FOR 3 MINUTES.

15. **GROUND TEST:** INSPECT ALL GROUND CONNECTIONS FOR CONTINUITY AND TIGHT ELECTRICAL AND MECHANICAL CONNECTIONS. TEST RESISTANCE AT VARIOUS POINTS USING BIDDLE GROUND OHMER, OR OTHER STANDARD METHOD. MAXIMUM PERMISSIBLE GROUND RESISTANCE IS 5 OHMS. CONNECT SYSTEM GROUND TO WATER METER AHEAD OF MAIN.

16. **GUARANTEE:** THIS CONTRACTOR SHALL GUARANTEE HIS WORKMANSHIP AND MATERIALS INCLUDING: INSTALLATION, PIPING, EQUIPMENT, MOTORS, WIRING AND CONTROLS FOR A PERIOD OF ONE (1) YEAR FROM THE DATE OF FINAL ACCEPTANCE AND LEAVE HIS WORK IN PERFECT ORDER AT COMPLETION. SHOULD DEFECTS DEVELOP WITHIN THE GUARANTEE PERIOD, THIS CONTRACTOR SHALL, UPON NOTICE OF SAME, REMEDY THE DEFECTS AND HAVE ALL DAMAGES TO OTHER WORK OR FURNISHING CAUSED BY THE DEFECTS OR THE WORK CORRECTING SAME REPAIRED AND/OR REPLACED AT HIS EXPENSE, TO THE CONDITION BEFORE SUCH DAMAGE. THE DATE OF FINAL ACCEPTANCE IS DEFINED AS THE DATE OF SIGNATURE OF THE OWNER ON THE FINAL PAYMENT OF THIS CONTRACT.

17. **RACEWAY AND FITTINGS:** USE ELECTRIC METALLIC TUBING (EMT) CONDUIT EXCEPT AS OTHERWISE INDICATED.

18. **CONDUIT SIZE:** MINIMUM CONDUIT SIZE SHALL BE 1/2" FOR EMT OR PVC U.N.O. ALL WIRING SHALL BE INSTALLED IN POLYVINYL CHLORIDE (PVC) OR ELECTRIC METALLIC TUBING (EMT) CONDUIT. MC CABLE MAY BE USED FOR BRANCH CIRCUIT WIRING WHERE CONCEALED IN ACCORDANCE WITH NEC, BUT ALL HOMERUNS SHALL BE IN CONDUIT.

19. **MOUNTING HEIGHTS:** UNLESS OTHERWISE INDICATED, THE FOLLOWING OUTLET HEIGHTS APPLY.

OUTLET ELEVATION	
LIGHTING SWITCHES	4'-0" ABOVE FINISHED FLOOR TO CENTERLINE
RECEPTACLE OUTLETS IN OFFICES AND FINISHED AREAS	1'-6" ABOVE FLOOR TO CENTERLINE. COORDIANTE MOUNTED HEIGHTS WITH OWNER PRIOR TO ROUGHY-IN.
LIGHTING PANELBOARDS	6'-8" FROM TOP OF PANEL TO ABOVE FINISHED FLOOR.
FIRE ALARM PULL STATION	4'-0" ABOVE FINISHED FLOOR TO CENTERLINE
FIRE ALARM HORN/STROBE OR STROBE ONLY DEVICES	6'-8" ABOVE FINISHED FLOOR OR 6" BELOW FINISHED CEILING TO CENTERLINE.
EMERGENCY LIGHT OUTLETS	8'-0" ABOVE FINISHED FLOOR TO CENTERLINE
EXIT LIGHT OUTLETS	0'-9" BELOW FINISHED CEILING TO CENTERLINE
BRACKET AND SPECIAL OUTLETS	AS INDICATED ON DRAWINGS

20. **CONDUCTOR TYPES**: ALL WIRING TO BE A MINIMUM OF #12 AWG COPPER CONDUCTOR FOR POWER AND LIGHTING CIRCUITS UNLESS NOTED OTHERWISE. ALL WIRING TO BE COPPER TYPE THHN, XHHW, OR THWN, 600-V (75° C). ALUMINUM CONDUCTORS MAY BE USED FOR FEEDERS #1 SIZE AND LARGER.

21. **GROUNDING:** GROUND RODS-COPPERWELD STEEL COMPANY. CONNECT-ORS-BURNDY, THOMAS & BETTS OR O.Z. THERMITE WELDING-CADWELD OR THERMOWELD. GROUND THE FOLLOWING: RECEPTACLES, SWITCH BOXES, LUMINARIES AND OTHER ELECTRICAL DEVICES AS REQUIRED BY NEC.

22. **POWER DISTRIBUTION PANELBOARDS:** MANUFACTURERS SHALL BE G.E., SIEMENS/I-T-E, SQUARE D OR CUTLER HAMMER. COMPLETELY FACTORY BUILT AND TESTED, TOTALLY ENCLOSED, DEAD FRONT TYPE PANELBOARDS. NEATLY TYPED DIRECTORY, WITH A CLEAR PLASTIC COVER, IN FRAME INSIDE EACH PANELBOARD DOOR. FULL-CAPACITY INSULATED SOLID NEUTRAL. SEPARATE GROUND BUS WITH LUGS AS REQUIRED IN ADDITION TO NEUTRAL BUS.

23. **CIRCUIT BREAKER PANELBAORD:** MANUFACTURERS SHALL BE GE, SIEMENS/ITE, SQUARE D OR CUTLER HAMMER. MOLDED CASE CIRCUIT BREAKERS, THERMAL MAGNETIC, QUICK-MAKE, QUICK-BREAK, AMBIENT COMPENSATED OR FACTORY-CALIBRATED FOR PANELBOARD INSTALLATION. HANDLES ARRANGED FOR PADLOCKING IN OFF POSITION. ALL MULTIPOLE BREAKERS TO BE COMMON TRIP. HANDLE TIES WILL NOT BE ACCEPTED. SPACES TO BE COMPLETE WITH BUSES AND HARDWARE READY FOR CIRCUIT BREAKER

24. **SAFETY AND DISCONNECT SWITCHES:** SAFETY AND DISCONNECT SWITCHES SHALL BE AS MANUFACTURED BY GENERAL ELECTRIC, SQUARE D, SIEMENS/ITE OR CUTLER HAMMER. FRONT-OPERATED, TYPE HD, SINGLE THROW, QUICK-MAKE, QUICK-BREAK , HP RATED, VISIBLE BLADE, SWITCHING UNIT. FUSIBLE TYPE TO BE PROVIDED WITH FUSE TERMINALS TO ACCOMMODATE TYPE OF FUSES INDICATED.

25. **FUSES:** PROVIDE FUSES AS FOLLOWS: FUSES 600 VOLTS AND LOWER. FOR MOTOR CIRCUITS, UL CLASS K-5, DUAL ELEMENT, 200,000 AIC SYMMETRICAL BUSS FRS FUSETRON, 600 VOLT RATING, BUS FRN FUSETRON, 250 VOLT RATING, OR SHAWMUT EQUIVALENT. FOR PANELBOARD SERVICES, UL CLASS RK-5, 200,000AIC SYMMETRICAL. OR BUSS LPN LOW PEAK, 250 VOLT RATING, OR SHAWMUT EQUIVALENT, AS INDICATED ON THE DRAWINGS. FURNISH ONE SET OF SPARE FUSES FOR EACH SIZE REQUIRED.

26. **WIRING DEVICES:** PROVIDE SPECIFICATION GRADE DEVICES AS INDICATED, OR EQUIVALENT, HUBBELL, PASS AND SEYMOUR, OR GENERAL ELECTRIC. SWITCHES TO BE RATED AT 20 AMPERES, 120 TO 277VOLTS, AC. WITH SHALLOW PLASTIC BODY, SCREW OR PRESSURE TERMINALS SUITABLE FOR NO. 12 AND NO. 10 WIRES, UNLESS OTHERWISE NOTED. ALL WALL SWITCHES AND 20 AMPERE CONVENIENCE RECEPTACLES TO HAVE AN IVORY FINISH. VERIFY COLOR OF ALL DEVICES AND COVERPLATES WITH OWNER PRIOR TO ORDERING. ELECTRICAL CONTRACTOR TO VERIFY THE TYPES AND STYLES OF PARTITIONS TO INSURE PROPER DEVICES BEFORE INSTALLATION. WIRE DEVICES AND COVERPLATES TO BE AS FOLLOWS:

26.a. **WALL SWITCHES:** STANDARD TYPE, PASS & SEYMOUR NO. CS20AC1-W, CS20AC3-W, OR CS20AC4-1 OR EQUIVALENT WHITE QUIET FLUSH TYPE TOGGLE SWITCH. VERIFY COLOR WITH OWNER PRIOR TO ORDERING.

26.b. **RECEPTACLES:**

26.b.1. DUPLEX TYPE - PASS & SEYMOUR CR20-W, 20 AMPERES, 125 VOLTS, 3-WIRE, OR EQUIVALENT WHITE GROUNDING TYPE, NEMA CONFIGURATION 5-20R. VERIFY COLOR WITH OWNER PRIOR TO ORDERING.

26.b.2. GROUND FAULT INTERRUPTING TYPE - PASS & SEYMOUR 2091-W 20 AMPERES, OR EQUIVALENT 125 VOLTS, 3-WIRE, WHITE, GROUND FAULT INTERRUPTING TYPE, NEMA CONFIGURATION 5-20R. VERIFY COLOR WITH OWNER PRIOR TO ORDERING.

26.b.3. DUPLEX TAMPER-RESISTANT RECEPTACLE - PASS & SEYMOUR NO. TR20W, 20-AMPERES, 125 VOLTS, 3-WIRE, GROUNDING TYPE, NEMA CONFIGURATION 5-20R.

26.c. **COVERPLATES:**

26.c.1. ALL COVERPLATES FOR INDOORS AND SIMILAR FINISHED AREA WIRING DEVICES TO BE #302 STAINLESS STEEL WITH BRUSHED SATIN FINISH AND FACE OPENINGS FOR THE INTENDED DEVICE.

27. ALL **FIRE ALARM SYSTEM** WORK AND DESIGN TO BE DONE BY OWNER'S FIRE ALARM SYSTEM CONTRACTOR. EC SHALL INCLUDE ALL FIRE SYSTEM WORK AND DESIGN IN THEIR BID AS DIRECTED BY OWNER'S FIRE ALARM CONTRACTOR.

28. ALL **TELEPHONE/DATA/CATV SYSTEM** WORK AND DESIGN TO BE DONE BY OWNER'S TECHNOLOGY SYSTEM CONTRACTOR.

29. ALL **SECURITY, CCTV, & ACCESS CONTROL SYSTEM** WORK AND DESIGN TO BE DONE BY OWNER'S SECURITY SYSTEM CONTRACTOR.

30. **ALLOWANCES;** ALLOWANCE FOR $10,000 TO BE INCLUDED IN BASE BID FOR SERVICE WORK BEYOND THE SCOPE SHOWN. USE ALLOWANCE TO BE AUTHORIZED OWNER IN WRITING. UNUSED PORTION TO REVERT TO OWNER.

Architect

OMNESS DESIGN, INC.
140 FAIRFAX ROAD
MARION, OHIO 43302

CRAWFORD COUNTY STATE OF OHIO

PROJECT
Crawford Co.
Title Office & Crawford Co. Solid Waste District
New Office Building
2538 E. Mansfield St.
Bucyrus, OH 44820

STATE OF OHIO
TIMOTHY J. BORONDA
REGISTERED PROFESSIONAL ENGINEER

SHEET INFORMATION

Project #:	23-122
Issued For:	Permit/Bid
Date:	2024-02-26
Revisions:	

SHEET TITLE

ELECTRICAL SPECIFICATIONS

SHEET NUMBER

E2.02