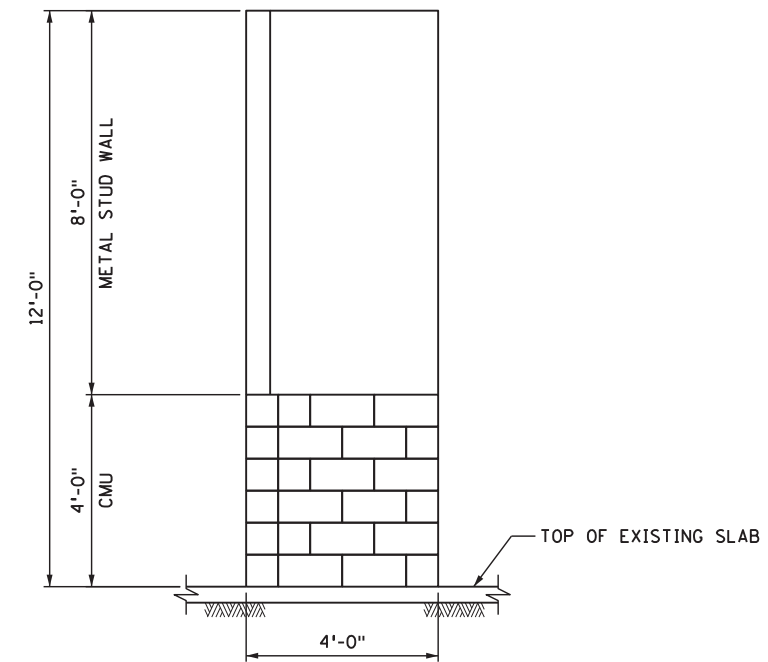
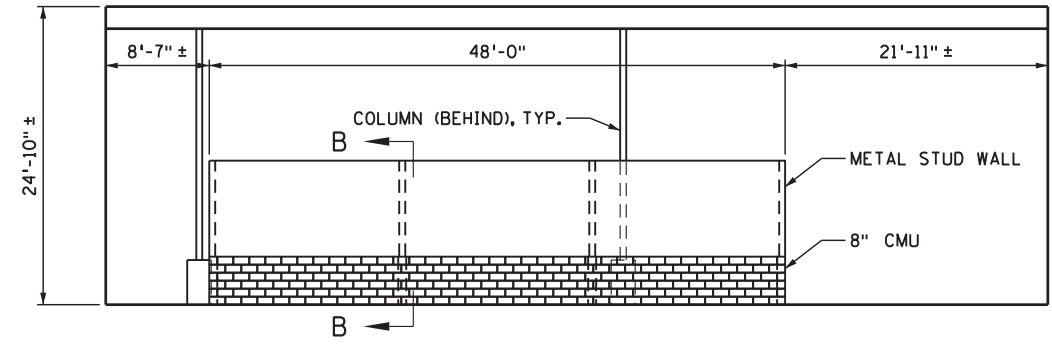
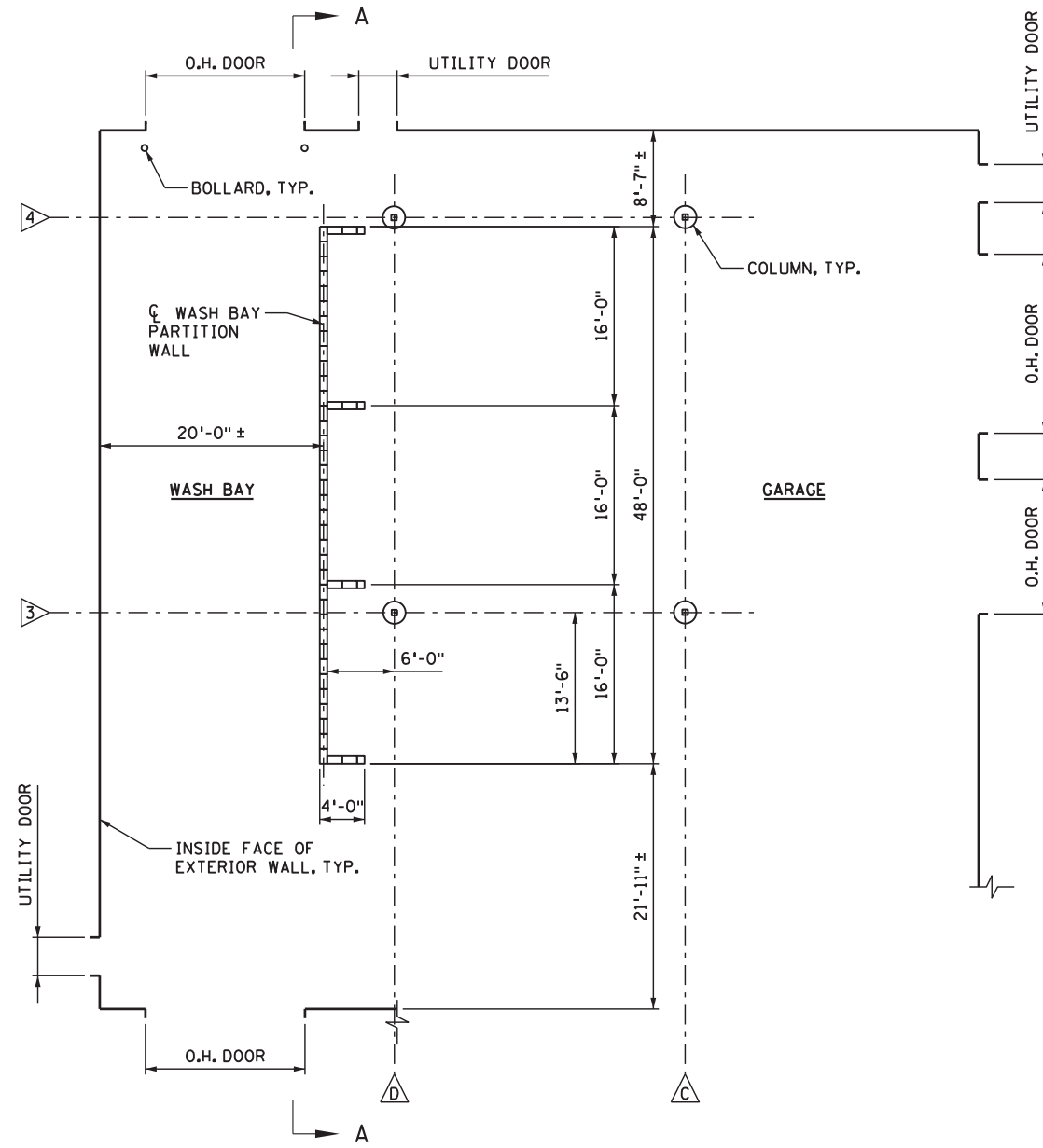


Plotted by: dan.streeter at 9:45:24 AM
 Plotted on: 1/19/2018
 File path: P:\PROJECTS\1158-1-MPRB Master Contract 17-18\2 - Production\C - Work\CD\4022 1_2 Wash Ave\4022_Site Plan.dgn



I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

Michael D. Speedling
 PRINTED OR TYPED NAME: MICHAEL D. SPEEDLING L.I.C. NO.: 20760 DATE: 1/19/2018

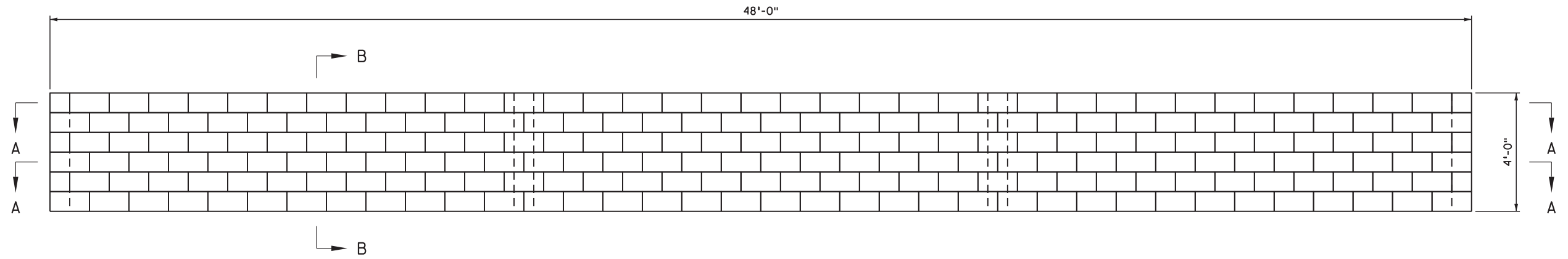


Olson & Nesvold Engineers, P.S.C.
 7825 Washington Ave. S., Suite 100
 Bloomington, MN 55439-2431

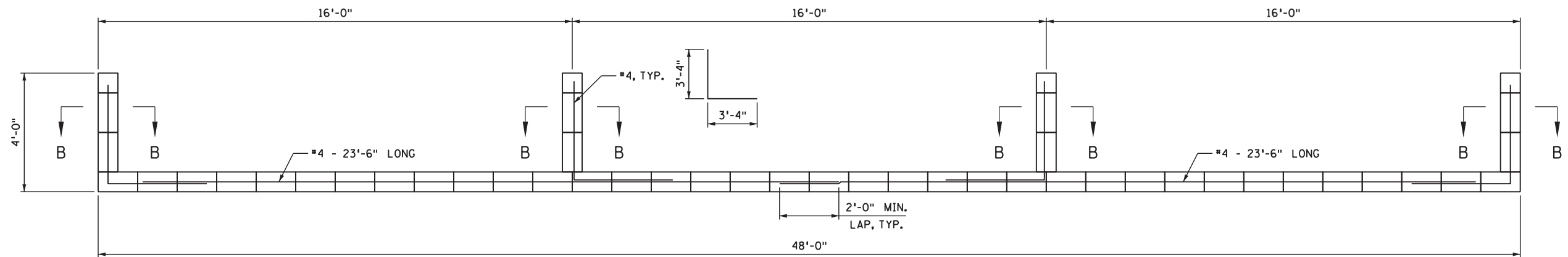
TITLE: 4022 1/2 WASHINGTON AVE
 MAINT. BLDG.
 WASH BAY PARTITION WALL

SHEET
 S-1

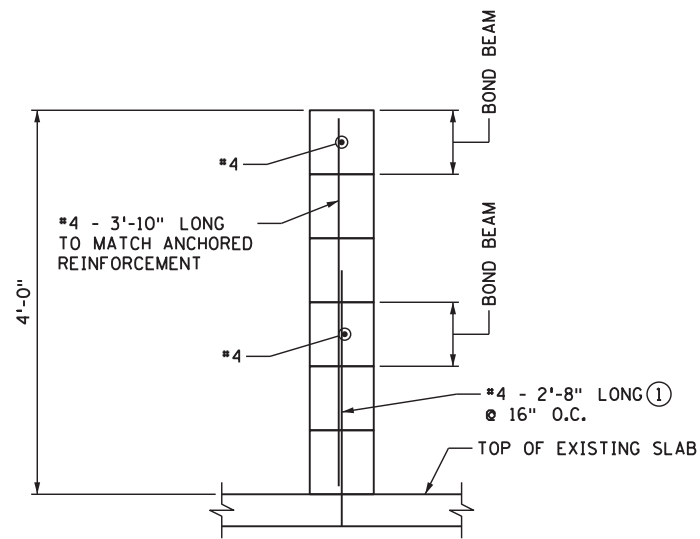
Plotted by: dan.streeter at 9:45:57 AM
 Plotted on: 1/19/2018
 File path: P:\PROJECTS\1159-1-MPRB Master Contract 17-18\2 - Production\C - Work\CD\4022_1_2 Wash Ave\4022_Block Wall Details.dgn



CMU WALL ELEVATION



SECTION A-A
 TYPICAL REINFORCEMENT IN BOND BEAM



SECTION B-B

NOTES:

- ① DRILL AND ADHESIVE ANCHOR INTO EXISTING FLOOR SLAB. USE HILTI RE 500V3, POWERS PURE 50+ OR APPROVED EQUAL. INSTALL WITH 4" MINIMUM EMBEDMENT IN ACCORDANCE WITH MANUFACTURER'S REQUIREMENTS.
- PROVIDE CONCRETE MASONRY UNITS FROM A SINGLE MANUFACTURER COMPLYING WITH ASTM C-90 FREE OF CRACKS, CHIPS AND OTHER DEFECTS. PLACE CONCRETE MASONRY IN 1/2 RUNNING BOND WITH 3/8" BED AND HEAD JOINTS. TOOL ALL JOINTS CONCAVE.
- PROVIDE MORTAR COMPLYING WITH ASTM C-270.
- FILL ALL CORES AND BOND BEAMS WITH GROUT COMPLYING WITH ASTM C-476. PROVIDE GROUT WITH A 28-DAY MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI.
- PROVIDE UNCOATED, DEFORMED STEEL REINFORCING BARS MEETING THE REQUIREMENTS OF ASTM-615 GRADE 60.
- CONSTRUCT MASONRY IN ACCORDANCE WITH ACI 530.1.

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

Michael D. Speedling
 L.I.C. NO. 20760
 PRINTED OR TYPED NAME: MICHAEL D. SPEEDLING DATE: 1/19/2018

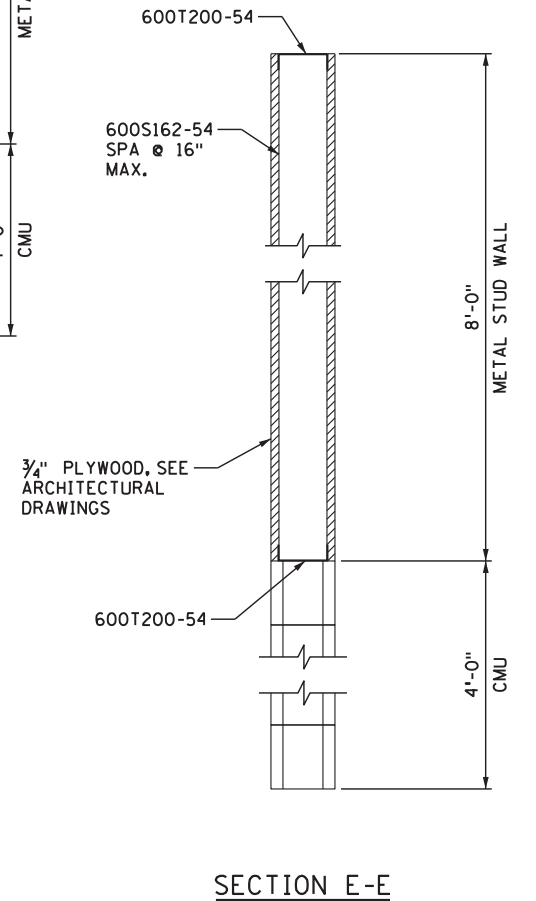
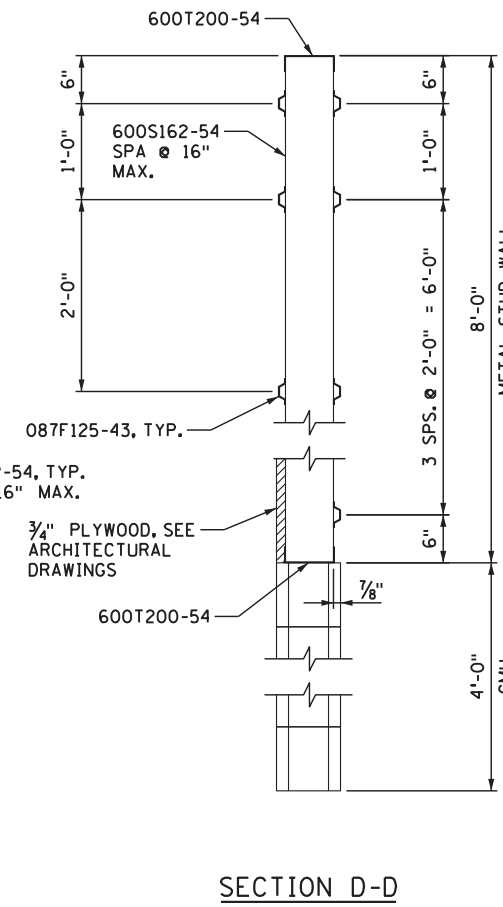
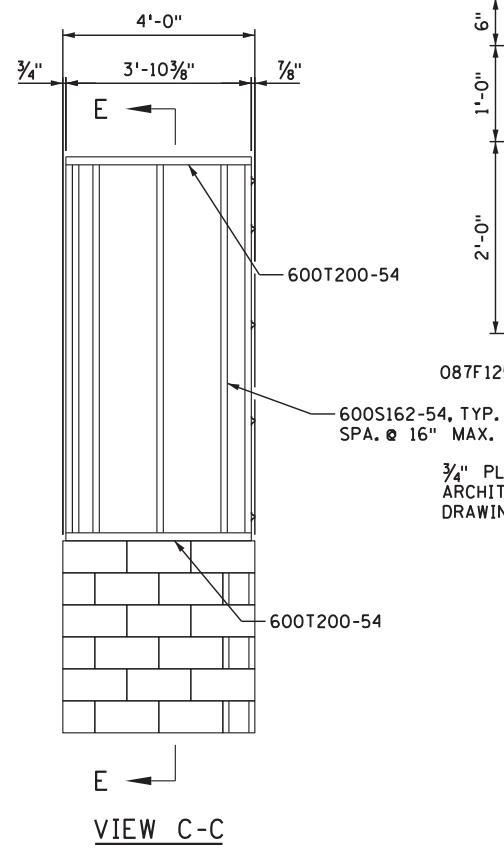
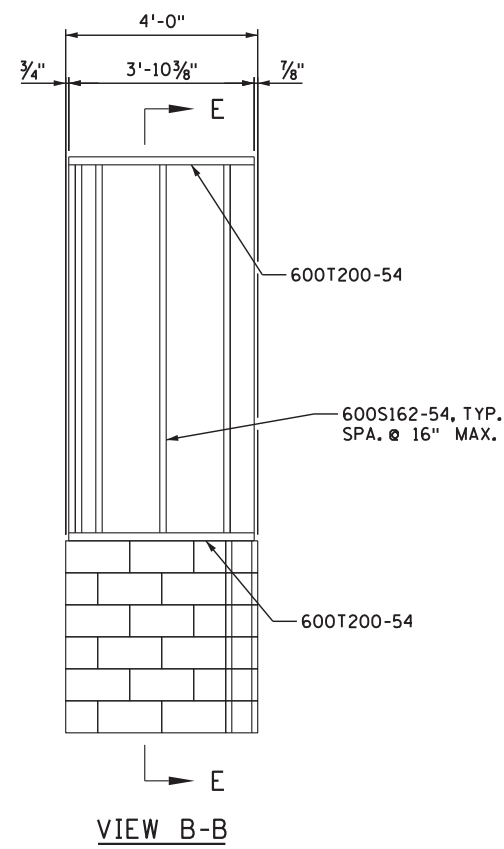
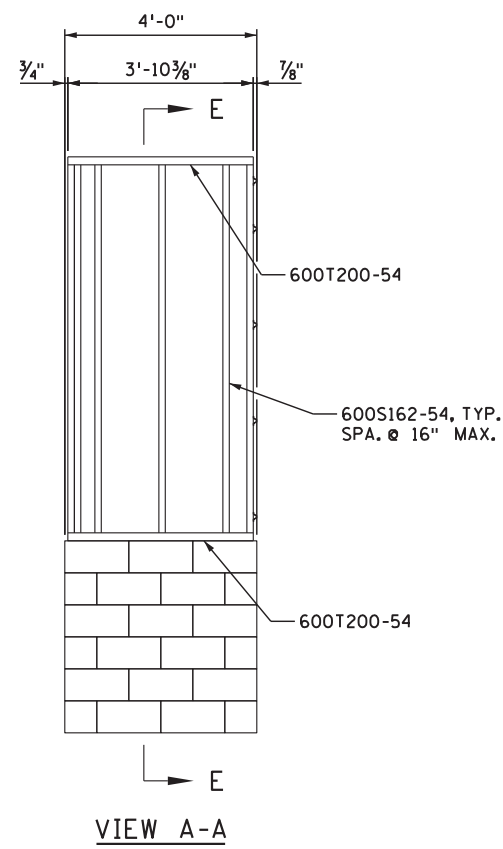
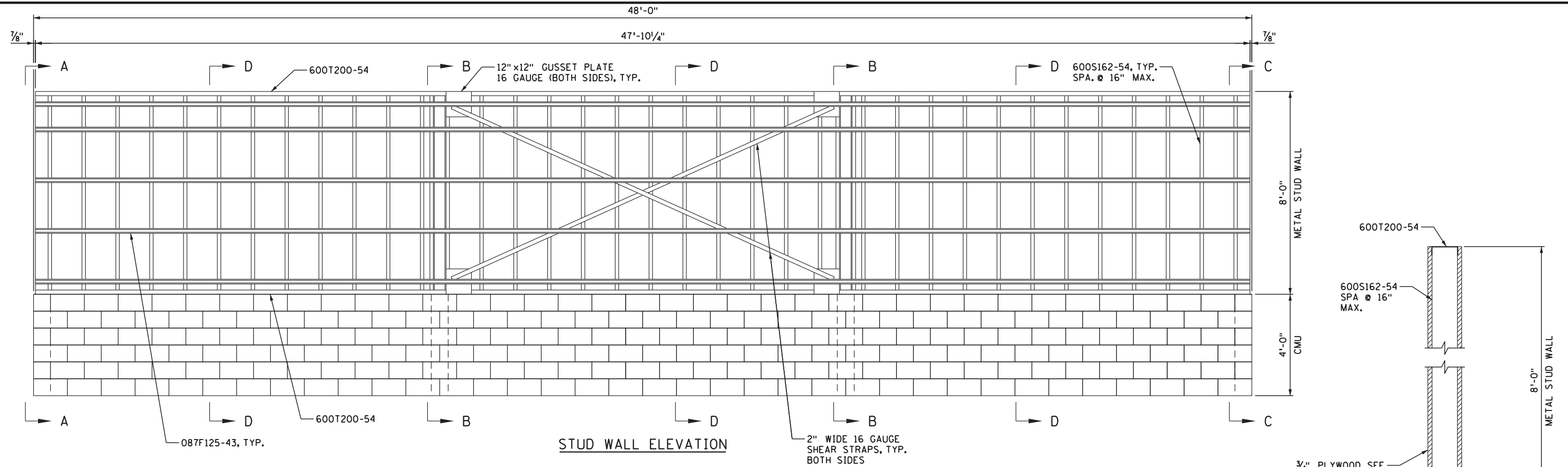


Olson & Nesvold Engineers, P.S.C.
 7825 Washington Ave. S., Suite 100
 Bloomington, MN 55439-2431


TITLE:
 CMU WALL DETAILS

SHEET
 S-2

Plotted by: dan.streeter at 9:46:20 AM
 Plotted on: 1/19/2018
 File path: P:\PROJECTS\1159-1-MPRB Master Contract 17-18\2 - Production\C - Work\CD\4022_Stud Wall Details 1.dgn



- NOTES:**
- PROVIDE STEEL WITH CP60 COATING CONFORMING WITH ASTM C-955.
 - ALL STEEL EXCEPT FURRING STRIPS FY = 50 KSI.
 - FURRING STRIPS FY = 33 KSI.
 - ALL FASTENERS #10 DIAMETER, CORROSION RESISTANT, SELF-DRILLING, SELF-TAPPING STEEL DRILL SCREWS CONFORMING WITH ASTM C-1513. USE LOW PROFILE TYPE HEADS AT LOCATIONS WHERE SHEATHING WILL BE IN CONTACT WITH THE FASTENER HEAD.
 - PROVIDE ONE FASTENER AT THE INTERSECTION OF STUDS INTERIOR TO THE GUSSET PLATES AND THE SHEAR STRAPS.
 - PROVIDE MOMENT CLIPS AND POST-INSTALLED ANCHORS AT THE BASE OF EACH INDIVIDUAL STUD AND STUD GROUPS AS SHOWN ON THE PLANS WITH A MINIMUM ALLOWABLE TENSION OF 2000 POUNDS.

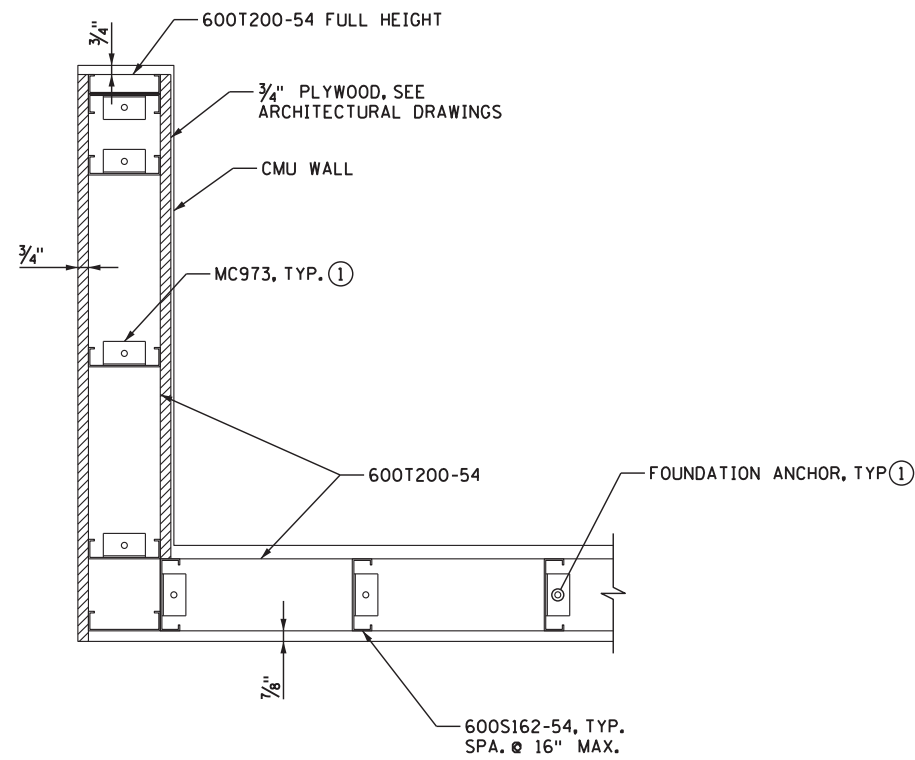
I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

 PRINTED OR TYPED NAME: MICHAEL D. SPEEDLING L.I.C. NO.: 20760 DATE: 1/19/2018



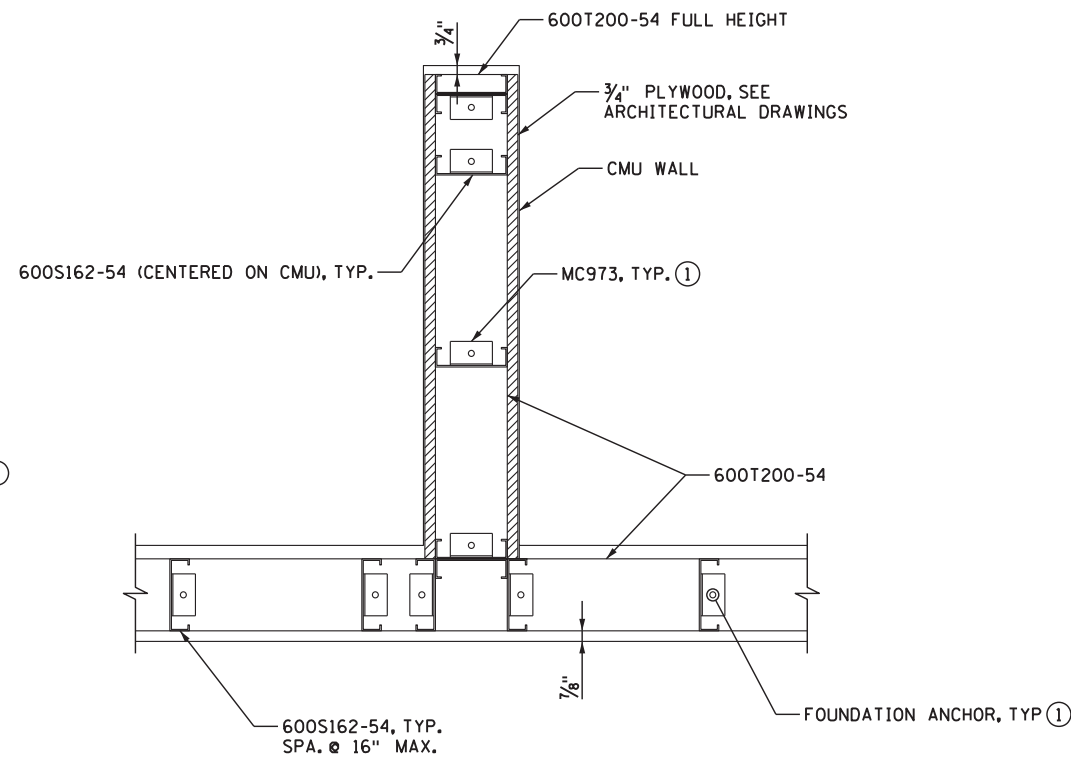
Olson & Nesvold Engineers, P.S.C.
 7825 Washington Ave. S., Suite 100
 Bloomington, MN 55439-2431

TITLE: METAL STUD WALL DETAILS
 SHEET S-3

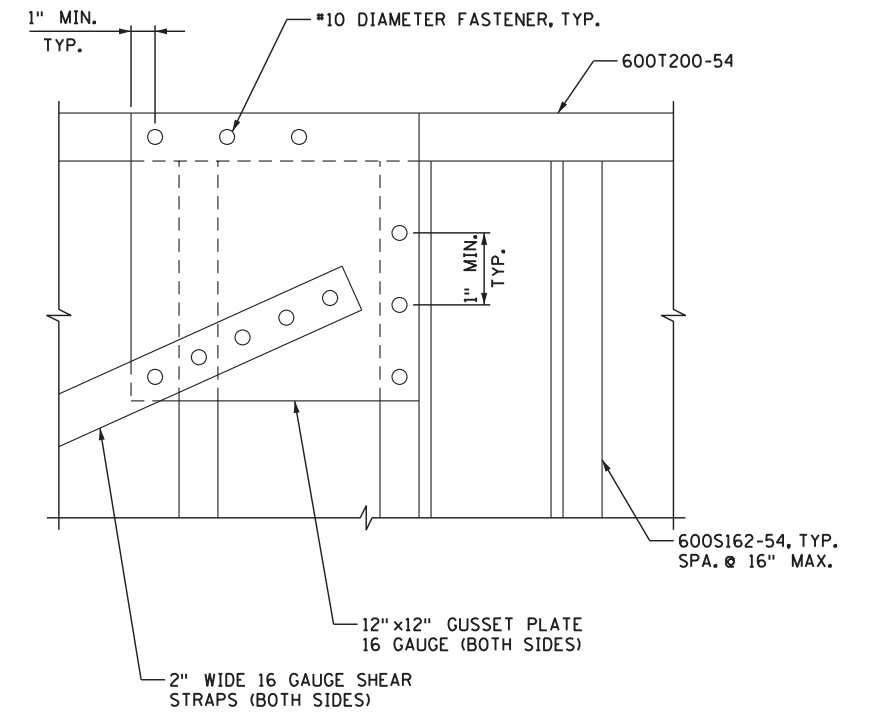
Plotted by: dan.streeter at 9:46:28 AM
 Plotted on: 1/19/2018
 File path: P:\PROJECTS\1159-1-MPRB Master Contract 17-18\2 - Production\C - Work\CD\4022 1-2 Wash Ave\4022_Stud Wall Details 2.dgn



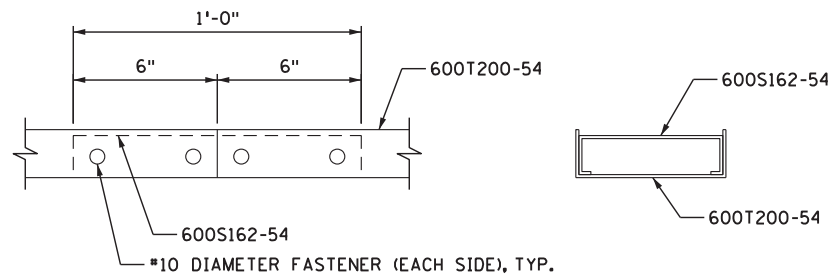
CORNER FRAMING
(FURRINGS CHANNEL NOT SHOWN)



INTERSECTION FRAMING
(FURRING CHANNELS NOT SHOWN)



GUSSET PLATE DETAIL
(FURRING CHANNELS NOT SHOWN)




ELEVATION

SECTION

TRACK SPLICE DETAIL

NOTES:

- ① PROVIDE A MINIMUM ALLOWABLE TENSION CAPACITY OF 2000 POUNDS AND A MINIMUM EMBEDMENT INTO BOND BEAM OF 3". TO BE PLACED AT EACH SINGLE STUD AND AS SHOWN IN CORNER FRAMING AND INTERSTION FRAMING.

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

 PRINTED OR TYPED NAME: MICHAEL D. SPEEDLING LIC. NO.: 20760 DATE: 1/19/2018



Olson & Nesvold Engineers, P.S.C.
 7825 Washington Ave. S., Suite 100
 Bloomington, MN 55439-2431

TITLE:	METAL STUD DETAILS	SHEET	S-4
--------	--------------------	-------	-----