TDM

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Mr. Giovanni Leone
H2M architects + engineers
538 Broad Hollow Road, 4th Floor East
Melville, NY 11747

Re: Site Visit at
407 William Floyd Pkwy, Shirley, NY

Dear Mr. Leone,

TDM Consulting Engineer, P.C. has recently performed a site visit at the Mastic-Moriches-Shirley Library project located at 407 William Floyd Pkwy, Shirley, NY. There were several items that we investigated while on the site that will require remediation or further investigation. These items are as follows:

- Removal of intermediate steel wind girts along column line 1. See Fig. 1.
- Possible addition of column(s) at front entrance, waiting on architectural review of details for confirmation. See Fig. 2.
- Damaged/saw cut existing metal roof deck between existing grid lines H & J must be removed and replaced. See Fig. 3.
- Angle lintel on existing Wind girts along grid line 4 may be removed/modified to accommodate new wall makeup, waiting on architectural review of details for confirmation. See Fig. 4.
- The column located at P-4 appears to be encased in a brick pier, existing drawings call for bottom of column to be -0'-8" (could not confirm visually). See Fig. 5.
- Steel beams supporting existing curved masonry wall between grid lines 7/9 and O/P are not adequately supported. We will need to remove and replaced these existing steel beams with new steel beams and connections into existing steel columns and foundation wall. See Fig. 6a & 6b.
- End of beam near M-12 has no bearing below end. New bearing plate should be installed at this location. See Fig. 7a & 7b.
- All wind girts along angled wall between grid lines L/J and 12.7/14.7 have voids under their bearing plates at the slab level and no positive connection into the existing slab. Voids will need to be dry packed with non-shrink grout. (Discussions on site also included to remove these girts and replace with new light gage framing is possible, architect to confirm details and direction). See Fig. 8a & 8b.
- The wind girt located next to column L-12.7 has no support under its base plate. This girt will need to shift over to have full bearing over foundation wall. See Fig. 9
- Existing slab opening between grid lines 2/3 and H/H.6 may be infilled (architect to confirm), structural detail to infill slab will need to be provided.
- No retaining wall along angled wall between grid lines H/J and 12/12.7, we will need to provide a new retaining wall and footing at this location. Existing slab on grade that has voids under slab due to soil erosion should be chopped up and new slab poured in place on compacted soil and gravel. See Fig. 10a & 10b.
- Column located at K-14.7 had voids under bearing plate, this should be dry packed with no-shrink grout to achieve full bearing to the foundation wall. See Fig. 11

- Various steel beams bearing directly at the exterior foundation wall without the use of bearing plates.

Attached to this report are some pictures with the conditions as mentions in the previous bullet points.

Please call me should you have any questions or require additional information.

Very truly yours,

TDM Consulting Engineer, P.C.

Thomas Mirabile, P.E.

FIG. 1

FIG. 2

FIG. 3

FIG. 4

COLUMN APPEARS TO EXTEND FURTHER DOWN INTO BRICK PIER BUT COULD NOT CONFIRM.

FIG. 5

EXISTING BEAM IS COPED AND IMPROPERLY SUPPORTED

FIG. 6a

FIG. 6b


INSTALL NEW BEARING PLATE FOR FULL BEARING WITH FOUNDATION

FIG. 7a

INSTALL NEW BEARING PLATE FOR FULL BEARING WITH FOUNDATION

FIG. 7b

DRY PACK WITH NON-SHRINK GROUT, POSITIVELY FASTEN PLATES TO SLAB.

FIG. 8a

FIG. 8b

SHIFT WIND GIRT OVER TO
BEAR OVER FOUNDATION WALL.

FIG. 9


SOIL WILL NEED TO BE
RETAINED WITH NEW
RETAINING WALL AND FOOTING.

FIG. 10a

VOIDS UNDER SLAB ON GRADE, REMOVE SLAB AND REPLACE AFTER INSTALATION OF RETAINGIN WALL AND FOOTING

FIG. 10b

VOID UNDER COLUMN TO BE DRY PACKED WITH NON-SHRINK GROUT

FIG. 11