Iris Fabrics Ltd. (9447)

Zirani Bazar, Kashimpur, Gazipur

24.MARCH.2014

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Site Observations

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Priority Actions

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Problems Observed Summary

ITEM 1: (Priority 1) Slab loadings were quite high throughout Building A in localized areas due to high storage loads. The dormitory is being used for excessively high levels of storage during its construction.

ITEM 2: (Priority 2) Soil bearing capacity does not appear adequate to safely support the loads developed at the footing level of Building A.

ITEM 3: (Priority 2) Storage shed steel roof truss framing appears poorly constructed within the north most storage shed. Other sheds have steel beam roof framing.

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Identified Priority 1 Concerns

Reduce Storage Loading

Priority 1 Concern

Storage levels were higher than desirable in localized areas distributed throughout Building A.

Storage levels were very high and widely distributed throughout the Dormitory.

High Levels of Storage

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Identified Priority 2 Concerns

Verify Foundation Design
Assess Shed Roof Trusses

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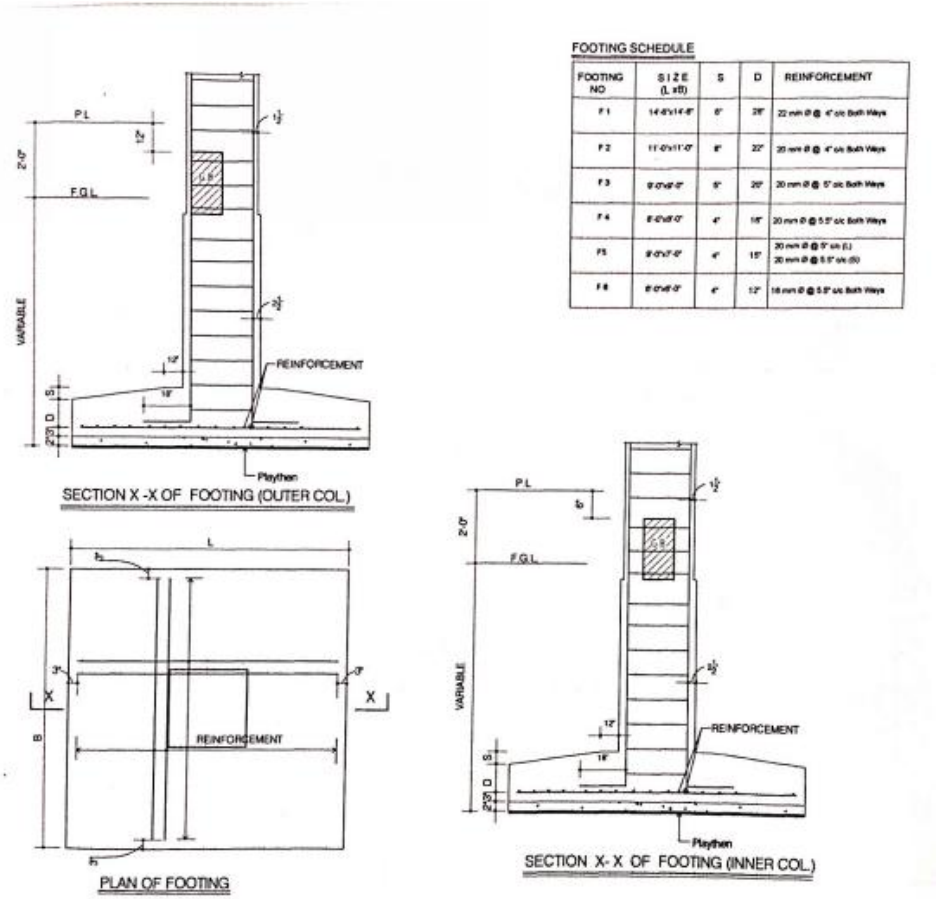

FOOTING SCHEDULE

FOOTING NO	SIZE (L x B)	S	D	REINFORCEMENT
F1	14'-6"x14'-6"	6"	28"	22 mm @ 4" c/c Both Ways
F2	11'-0"x11'-0"	6"	22"	20 mm @ 4" c/c Both Ways
F3	9'-0"x9'-0"	6"	20"	20 mm @ 5" c/c Both Ways
F4	8'-0"x8'-0"	4"	18"	20 mm @ 5.5" c/c Both Ways
F5	9'-0"x7'-6"	4"	18"	20 mm @ 5" c/c (L) 20 mm @ 5.5" c/c (B)
F6	6'-0"x6'-0"	4"	12"	16 mm @ 5.5" c/c Both Ways

Storage levels were higher than desirable in localized areas distributed throughout Building A.

Priority 2 Concern

9.0 CONCLUSION & RECOMMENDATION:

CONCLUSION:

The overall investigation results of the site defines that **Shallow Foundation** is suitable for the best economic and structurally safe of the project.

RECOMMENDATION:

On the basis of aforesaid conclusion, the following recommendations are suggested for Proposed Industrial Park for **IRIS FABRICS LTD.;** Located: ZIRANI BAZAR, JOYDEBPUR, GAZIPUR.

The Bearing Capacity of Soil Under the Z-1, considered as Isolated Column footing **(Shallow Foundation)** in the following way:

To be Considered 1.00 Tsf. (F.S.=3.00) at a depth (8'-0") From E.G.L.

To be Considered 1.00 Tsf. (F.S.=3.00) at a depth (-14'-4") From B.M.

The Bearing Capacity of Soil Under the Z-2, considered as Isolated Column footing **(Shallow Foundation)** in the following way:

To be Considered 1.00 Tsf. (F.S.=3.00) at a depth (8'-0") From E.G.L.

To be Considered 1.00 Tsf. (F.S.=3.00) at a depth (-16'-4") From B.M.

The Bearing Capacity of Soil Under the Z-3, considered as Isolated Column footing **(Shallow Foundation)** in the following way:

To be Considered 1.25 Tsf. (F.S.=3.00) at a depth (6'-0") From E.G.L.

To be Considered 1.25 Tsf. (F.S.=3.00) at a depth (3'-6") From B.M.

The Bearing Capacity of Soil Under the Z-4, considered as Isolated Column footing **(Shallow Foundation)** in the following way:

To be Considered 1.25 Tsf. (F.S.=3.00) at a depth (6'-0") From E.G.L.

To be Considered 1.25 Tsf. (F.S.=3.00) at a depth (2'-1") From B.M.

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Foundation Overloading

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Priority 2 Concern

Roof framing in the storage shed utilizing truss framing was poorly build and employed questionable framing methods

Poorly Framed Roof Trusses in Storage Shed

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Identified Priority 3 Concerns

(None)

Item 1 and Actions

Storage above allowable live loads within Building A and Dormitory

Priority 1 (Immediate – Now)	• Reduce storage loads throughout factory Building A and throughout Dormitory to design load levels
Priority 2 (within 6 weeks)	• Factory engineer to develop and actively monitor a loading plan for all floor plates within the factory complex giving consideration to slab, column and foundation capacity.
Priority 3 (within 6 months)	• None

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Item 2 and Actions

Soil bearing capacity does not appear adequate to support spread footing loads

Priority 1 (Immediate – Now)	• None
Priority 2 (within 6 weeks)	• Detailed engineering assessment to be performed upon Building A foundations
Priority 3 (within 6 months)	• Implement all works mandated by the above mentioned detailed engineering assessment

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Item 3 and Actions

Storage shed framed with roof trusses appears poorly constructed.

Priority 1 (Immediate – Now)	• None
Priority 2 (within 6 weeks)	• Factory engineer to conduct a review of the storage shed roof truss framing to determine its adequacy
Priority 3 (within 6 months)	• Perform any remediation required to the shed roof truss framing or demolish the shed