



Rural development & agrarian reform

Department:
Rural Development & Agrarian Reform
PROVINCE OF THE EASTERN CAPE

BID FOR THE CONSTRUCTION OF 300 SEATER EXAM HALL AT THE TSOLO AGRICULTURAL AND RURAL DEVELOPMENT INSTITUTE

LOCATION: TSOLO

VOLUME 4 – DRAWINGS & DETAILS

BID NO - SCMU8-21/22-0106

Head Office: Supply Chain Management Private Bag X 0040 Bhisho 5605 Contact: Name: Nosibusiso Mateta Telephone: 040 605 5263 / 079 505 9722	Consultants: Intsika Architects & Principal Agents 1 st Floor, Leadwood House, Cedarsquare Bonza Bay Road, Beacon Bay, East London 5241 Contact: Name: Cobus Gouws Telephone: 043 748 2949
Tenderer	
CSD Number:	
OGIS Number:	
Preference Points Claimed:	
Closing date on tender: 9th December 2021 Time at: 11:00 am	

CONSTRUCTION OF 300 SEATER EXAM HALL AT THE TSOLO AGRICULTURAL
AND RURAL DEVELOPMENT INSTITUTE
FOR
DEPARTMENT OF RURAL DEVELOPMENT AND AGRARIAN REFORM



TABLE OF CONTENTS

VOLUME 1	TENDERING PROCEDURES
	T1.1 Notice and Invitation to Tender
	T1.2 Tender Data
	T1.3 Standard Conditions of Tender
VOLUME 2	RETURNABLE DOCUMENTS
	T2.1. List of Returnable Documents
	T2.2 Returnable Schedules required only for Tender Evaluation Purposes
	T2.2. Other Documents required only for Tender Evaluation Purposes
	T2.2 Returnable Schedules that will be incorporated into the Contract
	T2.2 Other Documents that will be incorporated into the Contract
	C1.1 Form of Offer and Acceptance
	C1.2 Contract Data (Data provided by the Contractor)
	<i>C2. Pricing Data</i>
	C2.1 Pricing Instructions
	C2.2 Bills of Quantities
VOLUME 3	THE CONTRACT
	<i>C1 Agreement and Contract Data</i>
	C1.2 Contract Data
	C1.2 Occupational Health and Safety Agreement
	C1.3 Form of Guarantee
	<i>C2. Pricing Data</i>
	C2.1 Pricing Instructions
	<i>C3 Scope of Work</i>
	C3.1 Scope of Work
	<i>C3.2 SPECIFICATIONS - Particular and Generic Specifications</i>
	C3.2.1 Architectural Specifications
	C3.2.2 Electrical Detailed Project Specific Specifications
	C3.2.3 Occupational Health and Safety Specification
	C3.2.4 HIV/AIDS Specification
	C3.2.5 Environmental Management Plan
	C3.2.6 Local Content Guidelines & Completed Example of Template
	<i>C4 Site Information</i>
	C4.1 Site Information
VOLUME 4	DRAWINGS AND DETAILS
	<i>C5 DRAWINGS</i>
	C5.1 Schedule of Contract Drawings

PART C5: DRAWINGS & DETAILS

**EASTERN CAPE PROVINCIAL GOVERNMENT
DEPARTMENT OF RURAL DEVELOPMENT AND AGRARIAN REFORM**

**BID FOR THE CONSTRUCTION OF 300 SEATER EXAM HALL AT THE TSOLO
AGRICULTURAL AND RURAL DEVELOPMENT INSTITUTE AT TSOLO**

C.5.1 Schedule of Contract Drawings

The following drawings form part of this contract:

Architectural Drawings:

DRAWING NUMBER	DESCRIPTION
253 A.01.1	Site Locality Plan
253 A.01.2	Site Plan
253 A.01.3	Floor Plans
253 A.01.4	Elevations
253 A.01.5	Sections
253 A.02.1	Kitchen Joinery Schedule
253 A.01.6.1.1 – 6.1.9	Door Schedules D01 – D09
253 A.01.6.2.1 – 6.2.4	Window Schedules W01 – W04
253 A.01.6.3.1 – 6.3.2	Shop Front 01 – Shop Front 04
-	Glazed Stainless Steel Balustrades

Civil Drawings:

DRAWING NUMBER	DESCRIPTION
34435-CIV-0	Survey Layout
34435-CIV-1	Civil Services Layout
34435-CIV-2	Earthworks Layout
34435-DET-1	Standard Details
34435-DET-2	Water Meter & Isolating Valve Chamber Details

Structural Drawings:

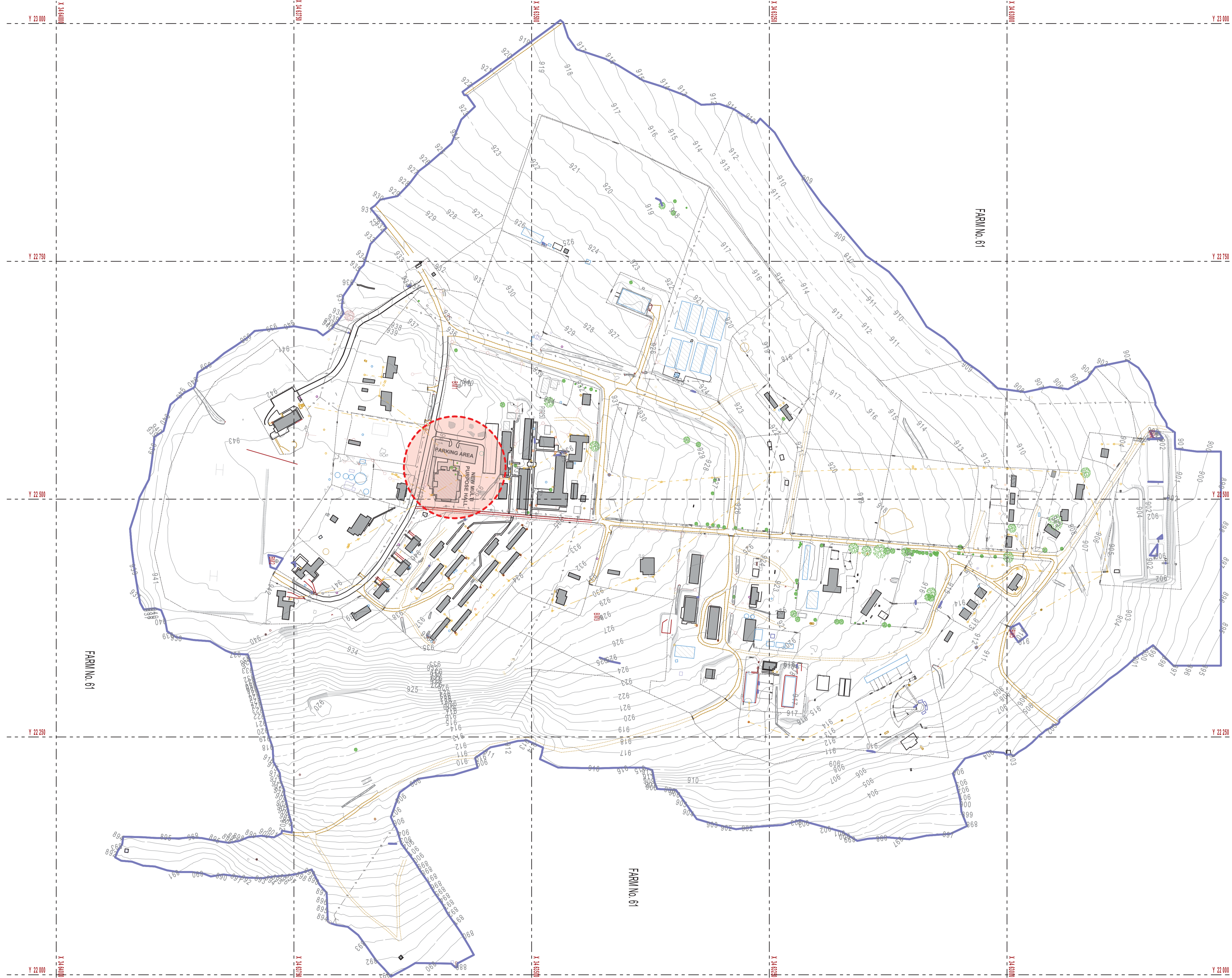
DRAWING NUMBER	DESCRIPTION
D34435S – 200-01 Rev A	Structural General Notes
D34435S – 201-01 Rev A	Foundations
D34435S – 201-02 Rev A	Surface Beds
D34435S – 201-03 Rev A	First Floor Slabs
D34435S – 202-01 Rev A	Building Sections
D34435S – 210-01 Rev A	Steel Roof Layout
D34435S – 210-02 Rev A	Sliding Gate
D34435S – 210-03 Rev A	Steel Stairs
D34435S – 211-01 Rev A	Steel Roof Sections & Details
D34435S – 220-01 Rev B	Timber Roof & Stage


Electrical Drawings:

DRAWING NUMBER	DESCRIPTION
D34435.00-340-01 Rev A	Fire Detection Layout
D34435.00-350-01 Rev A	Lightning Protection Layout
D34435.00-370-01 Rev A	GF Small Power Layout
D34435.00-370-02 Rev A	Balcony Small Power Layout
D34435.00-380-01 Rev A	Electrical Lighting Layout
D34435.00-380-02 Rev A	FF Electrical Lighting Layout
D34435.00-380-03 Rev A	General Area Electrical Lighting Layout

Mechanical Drawings:

DRAWING NUMBER	DESCRIPTION
34435.00-720-01	Fire Layout
34435.00-741-01	HVAC Layout





INTSIKA
architects

This drawing is property of IntsiKa Architects (Pty) Ltd. Copyright is reserved by them and the drawing is issued on the condition that it is not copied, reproduced, required or disclosed to any unauthorized person, without consent of IntsiKa Architects (Pty) Ltd.

GENERAL NOTES

The contractor is to keep a full set of drawings on site, contractor is responsible for the correct setting out of the building on site with reference to boundaries and building lines, contractor to verify all levels and dimensions on site and check same against architects and engineers drawings before commencing work. Figure dimensions to be used in preference to scaled dimensions, large scale details to be used where available, errors, discrepancies or omissions are to be reported to the architect immediately for clarification before work is undertaken.

These drawings are to be read in conjunction with structural engineers, civil engineers, mechanical engineer or plumbing consultant's drawings where applicable.

All work and material used to comply with SARS standards and NATIONAL BUILDING REGULATIONS ACT 103 of 1977 and amendments thereto as well as the by-laws of the relevant local authority.

All new construction HEALTH AND SAFETY Regulations to be strictly complied with.

REVISIONS

RevID	ChID	Change Name	Date

PROJECT TEAM

Principal Consultant / Architect:
INTSIKA Architects (Pty) Ltd.

Phone: (+27) 043 748 2949
Cell: (+27) 082 572 8748
Fax: (+27) 043 748 1702
E-Mail: rob@intsiKa.com
Web: www.intsiKa.com

1st Floor, Leadwood House, Cedarsquare
Bancroft Road, Beacon Bay,
East London, 5241


Quantity Surveyors:
BISIWE VAN NIEKERK INC. Quantity Surveyors
Willem Van Niekerk Tel: 043 - 7211043
Fax: 043 - 7211239
Cell: 0824921695
E-mail: willem@biswiwe.co.za

Structural, Civil, Mechanical & Electrical Engineers:
BVI Border Engineers
Werner De Lange Tel: 043 - 7222738
Fax: 043 - 7437698
Cell: 0825780674
E-mail: Werner@bvi.co.za

CLIENT

TSOLO AGRICULTURE & RURAL DEVELOPMENT INSTITUTE

Private Bag X1008, Tsoilo, 5170
Tel: +27 (47) 542 3700


Department of Rural Development & Agrarian Reform
MINISTRY OF THE RUSTERS CARE

OFFICE OF THE DIRECTOR: ENGINEERING SERVICES

PROJECT

300-SEATER EXAM HALL AT THE TSOLO AGRICULTURAL AND RURAL DEVELOPMENT INSTITUTE.

LOCATION

FARM NO: 61
Tsoilo

ISSUED FOR

TENDER

DRAWING

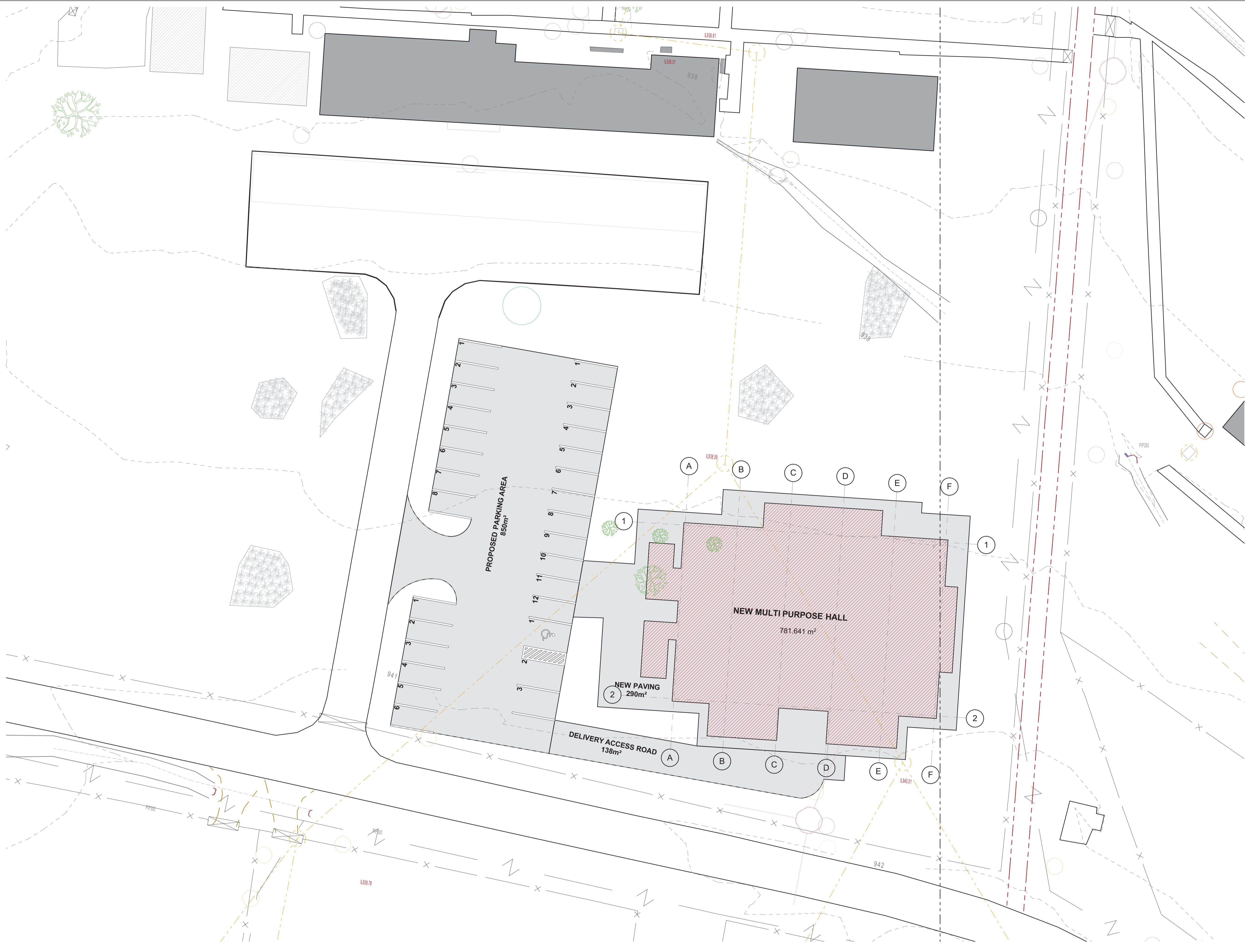
SITE LOCALITY PLAN

PROJECT NO. 253
DRAWING NO. A.01.1
Scale: See Drawing
Date: 10/22/2021
DRAFTING AND DESIGN TEAM
Drawn by: Cobus Gouws
Checked by: Cobus Gouws

APPROVAL DRAWING

Name: J.J. Gouws SACAP No. 21345
Signed: Date:
Practice: IntsiKa Architects SAIA No. P13725

Z:\Project\253 TARDI Exam HALL\ARCH CAD\EXAMINATION HALL 17-09-2021.dwg



This drawing is property of Intsika Architects (Pty) Ltd. Copyright is reserved by them and the drawing is issued on the condition that it is not copied, reproduced, required or disclosed to any unauthorized person, without consent of Intsika Architects (Pty) Ltd.

GENERAL NOTES

The contractor is to keep a full set of drawings on site, contractor is responsible for the correct setting out of the building on site with reference to boundaries and building lines, contractor to verify all levels and dimensions on site and check same against architect and engineers drawings before commencing work. Figure dimensions to be used in preference to scaled dimensions, large scale details to be used where available, errors, discrepancies or omissions are to be reported to the architect immediately for clarification before work is undertaken.

These drawings are to be read in conjunction with structural engineers, civil engineers, mechanical engineer or plumbing consultant's drawings where applicable.

All work and material used to comply with SARS standards and NATIONAL BUILDING REGULATIONS ACT 103 of 1977 and amendments thereto as well as the by-laws of the relevant local authority.

All new construction HEALTH AND SAFETY Regulations to be strictly complied with.

REVISIONS

RevID	ChID	Change Name	Date

PROJECT TEAM

Principal Consultant / Architect:
INTSIKA Architects (Pty) Ltd.

Phone: (+27) 043 748 2949
Cell: (+27) 082 872 8748
Fax: (+27) 043 748 1702
E-Mail: rob@intsika.com
Web: www.intsika.com

1st Floor, Leadwood House, Cedarsquare
Business Bay Road, Beacon Bay,
East London, 5241

Quantity Surveyors:
BISIWE VAN NIEKERK INC. Quantity Surveyors
Willem Van Niekerk Tel: 043 - 7211043
Fax: 043 - 7211239
Cell: 0824921695
E-mail: willem@biswiwe.co.za

Structural, Civil, Mechanical & Electrical Engineers:
BVI Border Engineers
Werner De Lange Tel: 043 - 7222738
Fax: 043 - 7437698
Cell: 0825780674
E-mail: WernerDL@bvi.co.za

CLIENT

TSOLO AGRICULTURE & RURAL DEVELOPMENT INSTITUTE

Private Bag X1008, Tsolo, 5170
Tel: +27 (47) 542 3700



PROJECT

300-SEATER EXAM HALL AT THE TSOLO AGRICULTURAL AND RURAL DEVELOPMENT INSTITUTE.

LOCATION

FARM NO: 61
Tsolo

ISSUED FOR

TENDER

DRAWING

SITE PLAN

PROJECT NO.	253
DRAWING NO.	A.012
Scale:	See Drawing
Date:	10/22/2021
DRAFTING AND DESIGN TEAM	
Drawn by:	Cobus Gouws
Checked by:	Cobus Gouws

APPROVAL DRAWING

Name: J.J. Gouws SACAP No. 21345
Signed: Date:
Practice: Intsika Architects SAIA No. P13725

GENERAL NOTES

The contractor is to keep a full set of drawings on site, contractor is responsible for the correct setting out of the building on site with reference to boundaries and building lines, contractor to verify all levels and dimensions on site and check same against architects and engineers drawings before commencing work. Figure dimensions to be used in preference to scaled dimensions, large scale details to be used where available, errors, discrepancies or omissions are to be reported to the architect immediately for clarification before work is undertaken.

These drawings are to be read in conjunction with structural engineers, civil engineers, mechanical engineer or planning consultant's drawings where applicable.

All work and material used to comply with SARS standards and NATIONAL BUILDING REGULATIONS ACT 103 of 1977 and amendments thereto as well as the by-laws of the relevant local authority.

All new construction HEALTH AND SAFETY Regulations to be strictly complied with.

REVISIONS

RevID	Chd	Change Name	Date

PROJECT TEAM

Principal Consultant / Architect:
INTSIKA Architects (Pty) Ltd.
Phone: (+27) 043 748 2949
Cell: (+27) 082 872 8748
Fax: (+27) 043 748 1702
E-Mail: rob@intsiKa.com
Web: www.intsiKa.com
1st Floor, Leadwood House, Cedarsquare
Business Bay Road, Beacon Bay,
East London, 5241

Quantity Surveyors:
BISIWE VAN NIEKERK INC. Quantity Surveyors
Willem Van Niekerk Tel: 043 - 7211043
Fax: 043 - 7211239
Cell: 0824921695
E-mail: willem@bisiwe.co.za

Structural, Civil, Mechanical & Electrical Engineers:
BVI Border Engineers
Werner De Lange Tel: 043 - 7222738
Tel: 043 - 7437698
Cell: 0825780674
E-mail: WernerDL@bvi.co.za

CLIENT

TSOLO AGRICULTURE & RURAL DEVELOPMENT INSTITUTE
Private Bag X1008, Tsolo, 5170
Tel: +27 (47) 542 3700



PROJECT

300-SEATER EXAM HALL AT THE TSOLO AGRICULTURAL AND RURAL DEVELOPMENT INSTITUTE.

LOCATION

FARM NO: 61
Tsolo

ISSUED FOR

TENDER

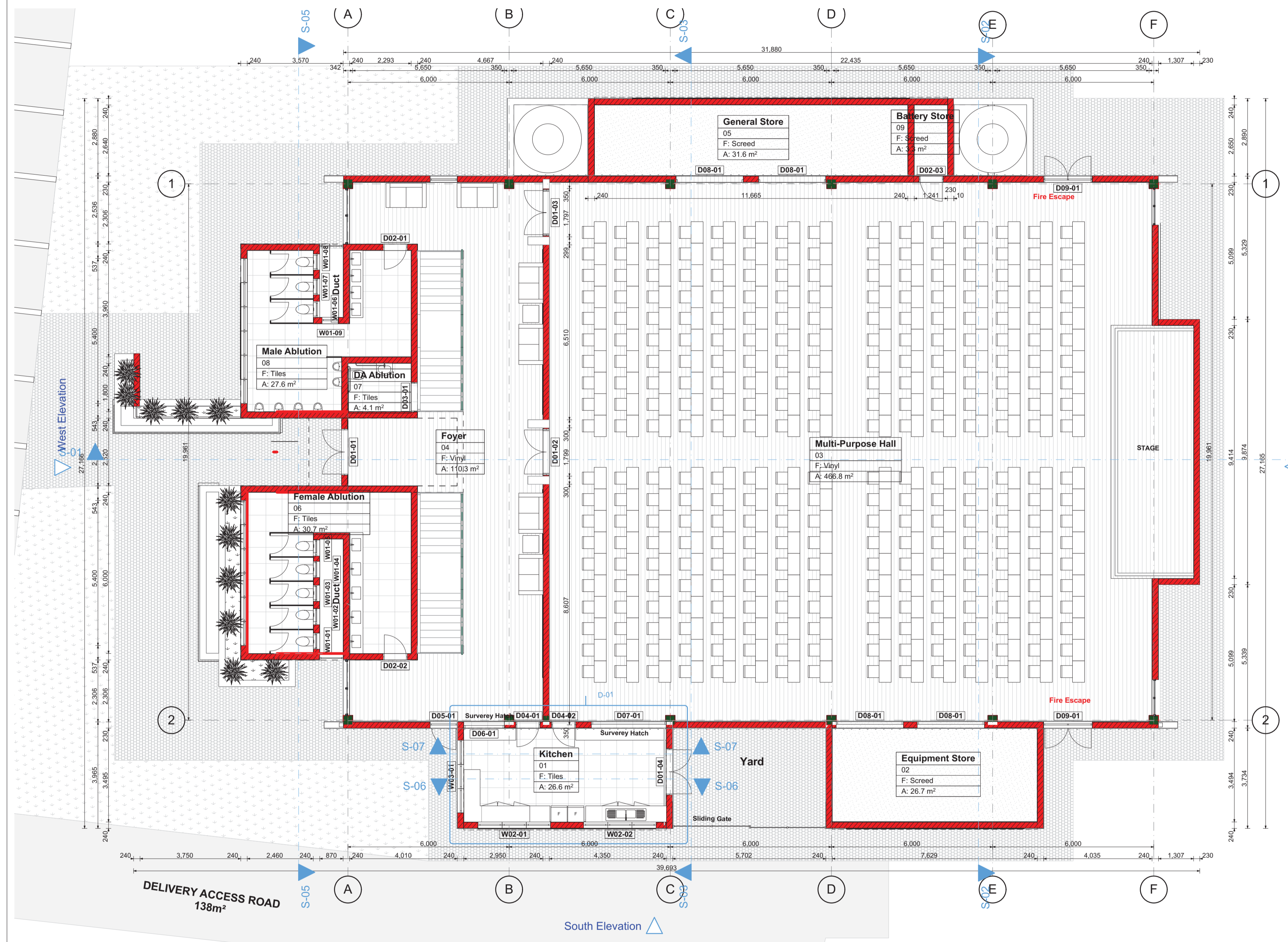
DRAWING

FLOOR PLANS

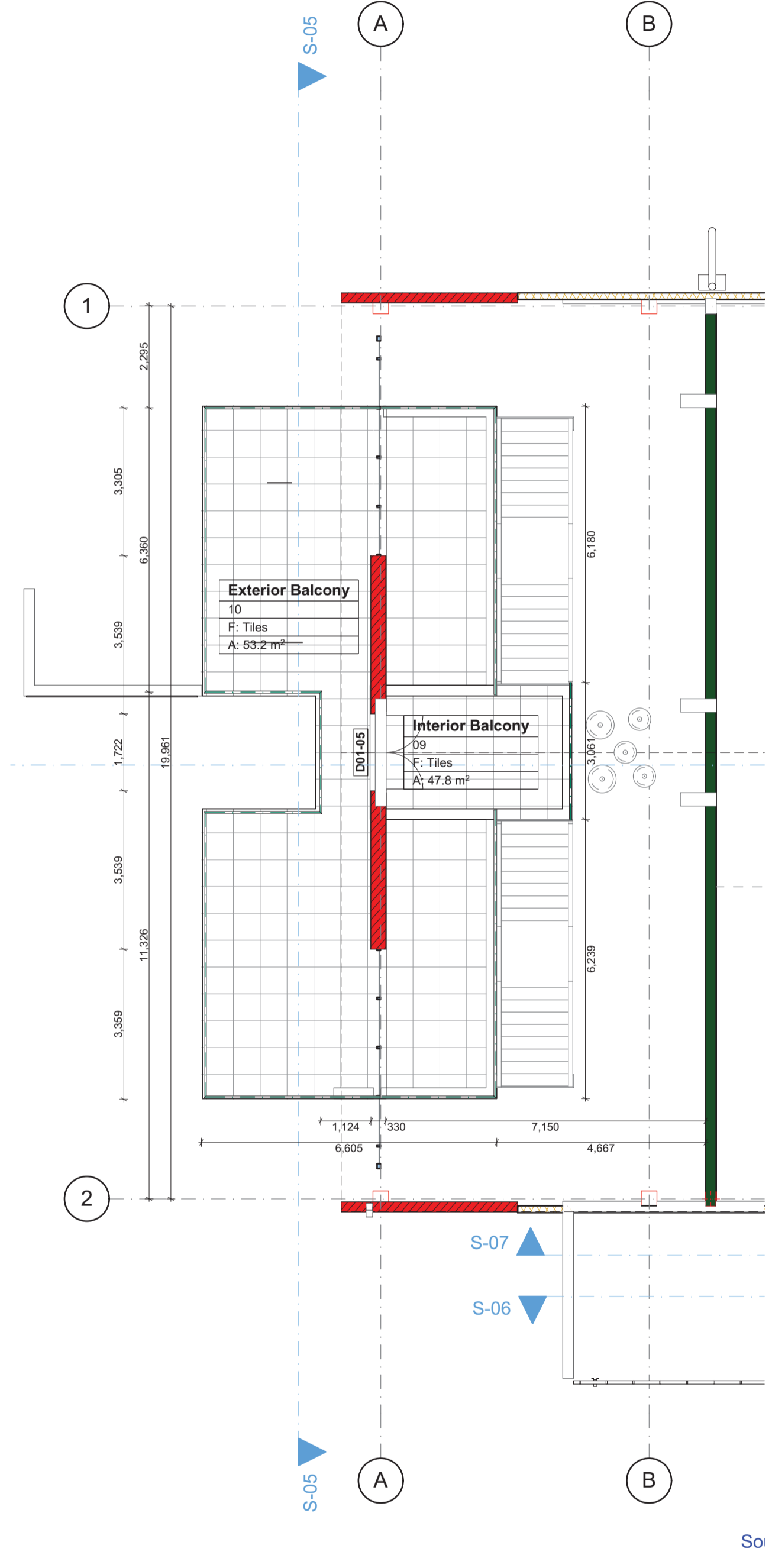
PROJECT NO.	253
DRAWING NO.	A.01.3
Scale:	See Drawing
Date:	10/22/2021
DRAFTING AND DESIGN TEAM	
Drawn by:	Cobus Gouws
Checked by:	Cobus Gouws

APPROVAL DRAWING

Name: J.J. Gouws SACAP No. 21345
Signed: _____ Date: _____
Practice: IntsiKa Architects SAIA No. P13725



0. Ground Floor 1:100



1. Story 1:100

GENERAL NOTES

The contractor is to keep a full set of drawings on site, contractor is responsible for the correct setting out of the building on site with reference to boundaries and building lines, contractor to verify all levels and dimensions on site and check same against architect and engineers drawings before commencing work. Figures/dimensions to be used in preference to scaled dimensions, large scale details to be used where available, errors, discrepancies or omissions are to be reported to the architect immediately for clarification before work is undertaken.

These drawings are to be read in conjunction with structural engineers, civil engineers, mechanical engineer or plumbing consultant's drawings where applicable.

All work and material used to comply with SARS standards and NATIONAL BUILDING REGULATIONS ACT 103 of 1977 and amendments thereto as well as the by-laws of the relevant local authority.

All new construction HEALTH AND SAFETY Regulations to be strictly complied with.

REVISIONS

RevID	ChID	Change Name	Date

PROJECT TEAM

Principal Consultant / Architect:
INTSIKA Architects (Pty) Ltd.
Phone: (+27) 043 748 2949
Cell: (+27) 082 872 8748
Fax: (+27) 043 748 1702
E-Mail: intsi@intsika.com
Web: www.intsika.com

Quantity Surveyors:
BISIWE VAN NIEKERK INC. Quantity Surveyors
Willem Van Niekerk Tel: 043 - 7211043
Fax: 043 - 7211239
Cell: 0824921695
E-mail: willem@biswise.co.za

Structural, Civil, Mechanical & Electrical Engineers:
BVI Border Engineers
Werner De Lange Tel: 043 - 7222738
Fax: 043 - 7437698
Cell: 0825780674
E-mail: WernerD@bvi.co.za

CLIENT

TSOLO AGRICULTURE & RURAL DEVELOPMENT INSTITUTE
Private Bag X1008, Tsolo, 5170
Tel: +27 (47) 542 3700

rural development & agrarian reform
Department of Rural Development & Agrarian Reform
PROVINCE OF THE EASTERN CAPE
OFFICE OF THE DIRECTOR: ENGINEERING SERVICES

PROJECT

300-SEATER EXAM HALL AT THE TSOLO AGRICULTURAL AND RURAL DEVELOPMENT INSTITUTE.

LOCATION

FARM NO: 61
Tsolo

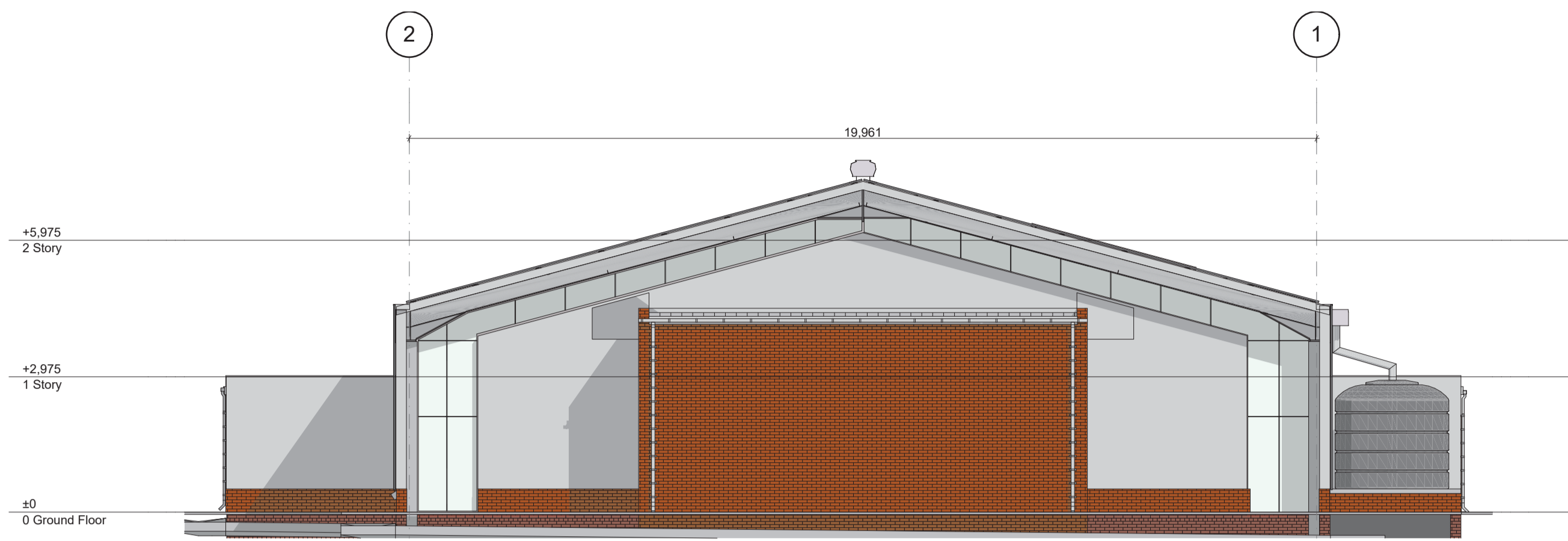
ISSUED FOR

TENDER

DRAWING

ELEVATIONS

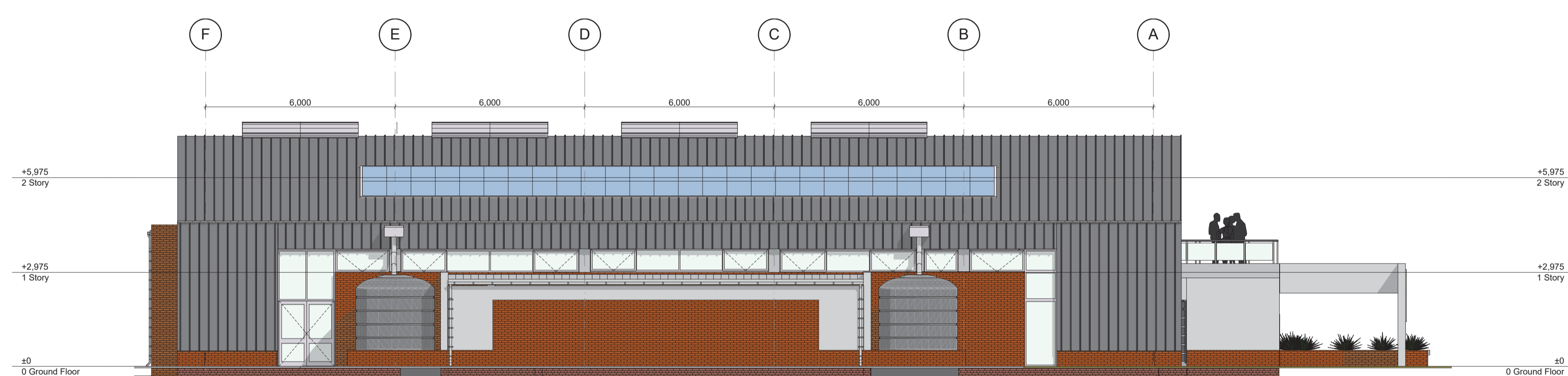
PROJECT NO.	253
DRAWING NO.	A.014
Scale:	See Drawing
Date:	10/22/2021
DRAFTING AND DESIGN TEAM	
Drawn by:	Cobus Gouws
Checked by:	Cobus Gouws
APPROVAL DRAWING	
Name: J.J. Gouws	SACAP No. 21345
Signed:	Date:
Practice: Intsika Architects	SAA No. P13725



East Elevation 1:100



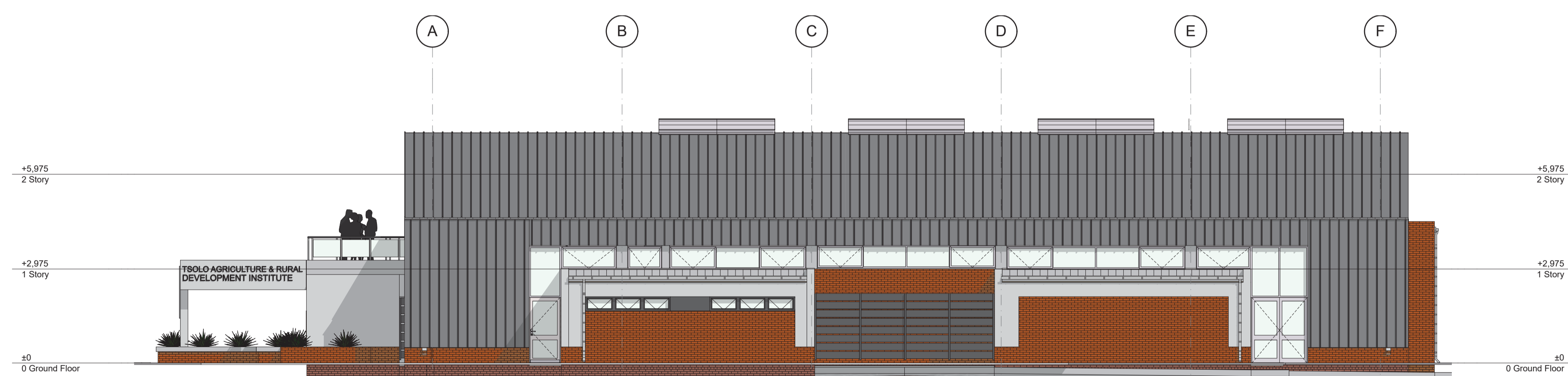
West Elevation 1:100



North Elevation 1:100



Generic Perspective (1)



South Elevation 1:100



Generic Perspective (2)

GENERAL NOTES

The contractor is to keep a full set of drawings on site, contractor is responsible for the correct setting out of the building on site with reference to boundaries and building lines, contractor to verify all levels and dimensions on site and check same against architect and engineer drawings before commencing work. Figures/dimensions to be used in preference to scaled dimensions, large scale details to be used where available, errors, discrepancies or omissions are to be reported to the architect immediately for clarification before work is undertaken.

These drawings are to be read in conjunction with structural engineers, civil engineers, mechanical engineer or plumbing consultant's drawings where applicable.

All work and material used to comply with SABS standards and NATIONAL BUILDING REGULATIONS ACT 103 of 1977 and amendments thereto as well as the by-laws of the relevant local authority.

All new construction HEALTH AND SAFETY Regulations to be strictly complied with.

REVISIONS

RevID	ChID	Change Name	Date

PROJECT TEAM

Principal Consultant / Architect:
INTSIKA Architects (Pty) Ltd.
Phone: (+27) 043 748 2949
Cell: (+27) 082 872 8748
Fax: (+27) 043 748 1702
E-Mail: rob@intsika.com
Web: www.intsika.com

1st Floor, Leadwood House, Cedarsquare
Business Bay Road, Beacon Bay,
East London, 5241

Quantity Surveyors:
BISIWE VAN NIEKERK INC. Quantity Surveyors
Willem Van Niekerk Tel: 043 - 7211043
Fax: 043 - 7211239
Cell: 0824921695
E-mail: willem@biswi.co.za

Structural, Civil, Mechanical & Electrical Engineers:
BVI Border Engineers
Werner De Lange Tel: 043 - 7222738
Fax: 043 - 7437698
Cell: 0825780674
E-mail: WernerDL@bvi.co.za

CLIENT

TSOLO AGRICULTURE & RURAL DEVELOPMENT INSTITUTE
Private Bag X1008, Tsolo, 5170
Tel: +27 (47) 542 3700

rural development & agrarian reform
Department of Rural Development and Agrarian Reform
PROVINCE OF THE EASTERN CAPE
OFFICE OF THE DIRECTOR: ENGINEERING SERVICES

PROJECT

300-SEATER EXAM HALL AT THE TSOLO AGRICULTURAL AND RURAL DEVELOPMENT INSTITUTE.

LOCATION

FARM NO: 61
Tsolo

ISSUED FOR

TENDER

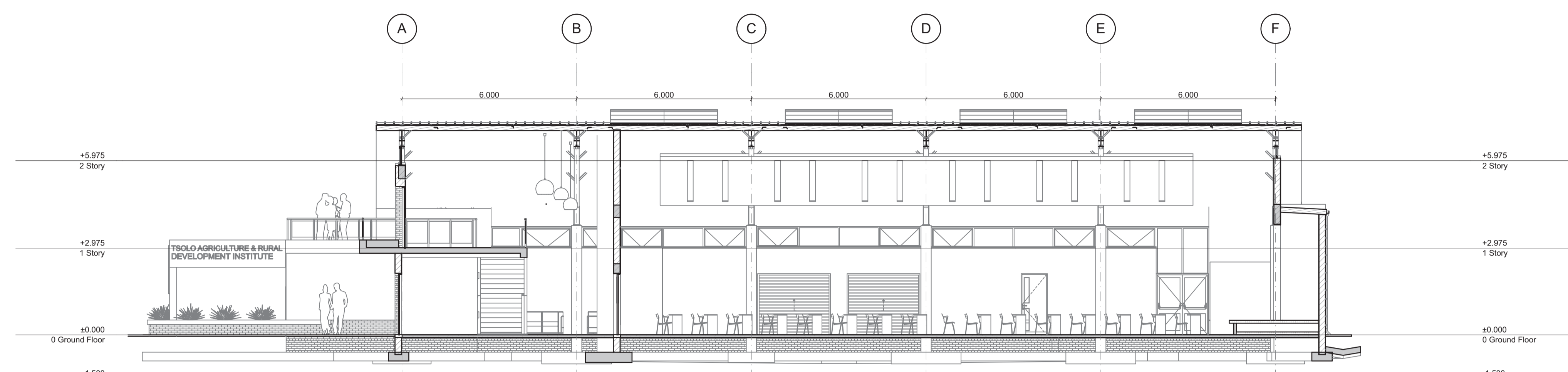
DRAWING

SECTIONS

PROJECT NO. 253
DRAWING NO. A.01.5
Scale: See Drawing
Date: 10/22/2021
DRAFTING AND DESIGN TEAM
Drawn by: Cobus Gouws
Checked by: Cobus Gouws

APPROVAL DRAWING

Name: J.J. Gouws SACAP No. 21345
Signed: Date:
Practice: Intsika Architects SAIA No. P13725



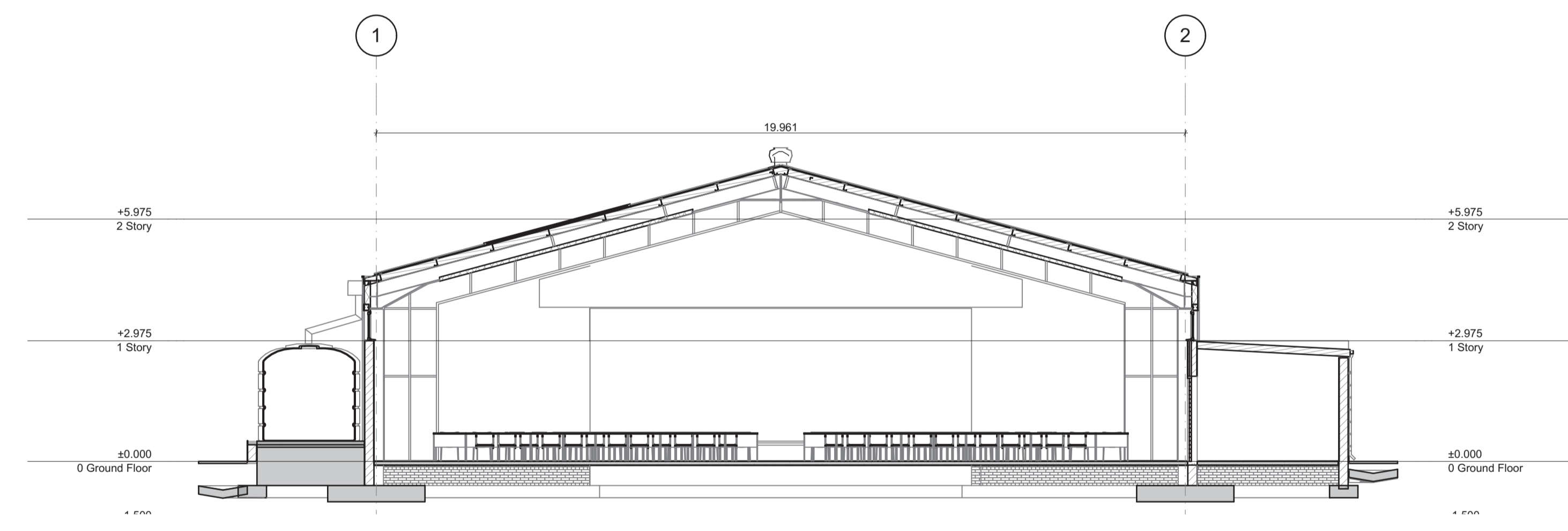
S-01

Building Section

1:100



Generic Perspective (3)



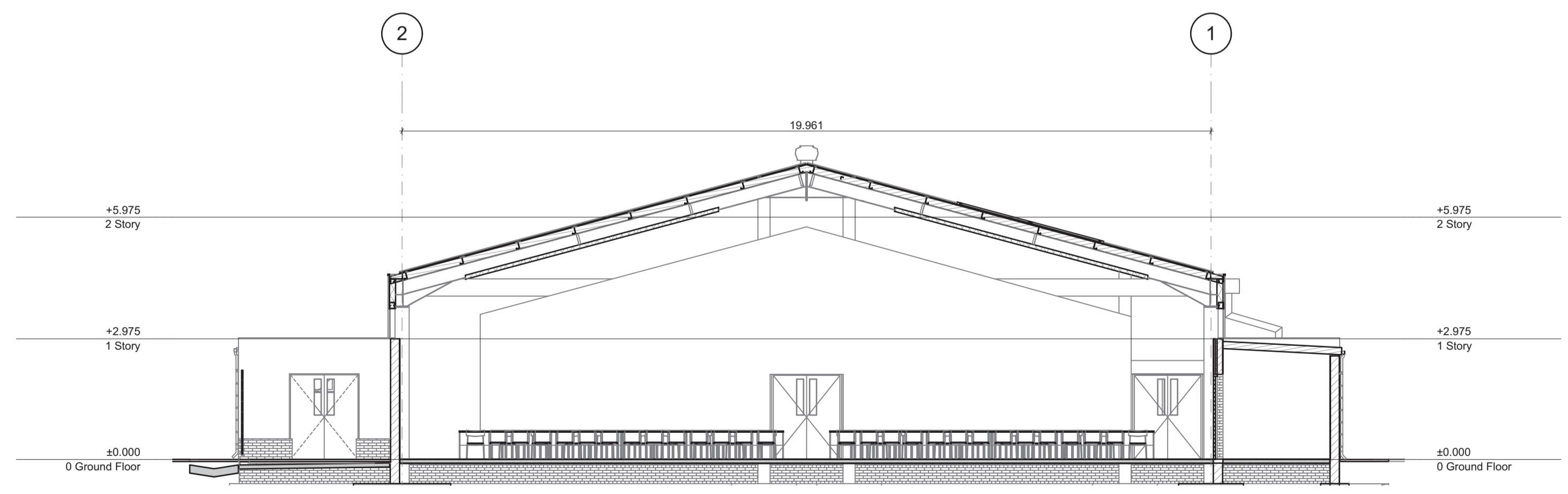
S-02

Building Section

1:100



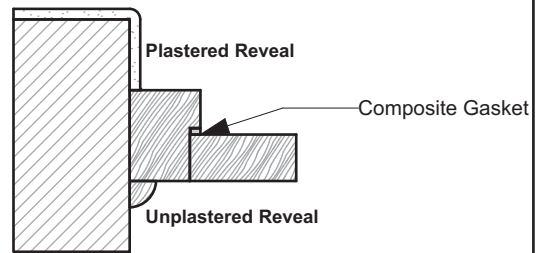
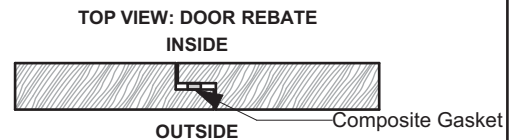
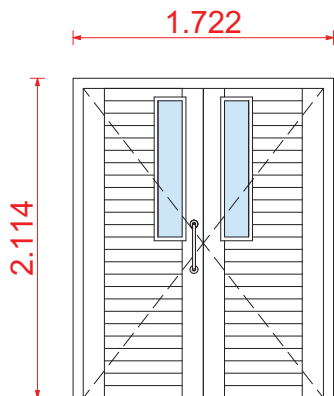
Generic Perspective (4)



S-03

Building Section

1:100



GENERAL NOTES TO CONTRACTOR

- 1.) Door frame profiles are manufactured according to SABS specification No. 1129 of 1977
- 2.) Always check the frames when building for squareness and plumb as they cannot be corrected afterwards
- 3.) After building in the contractor is to take all necessary measures to protect the frames from any on-site damage.

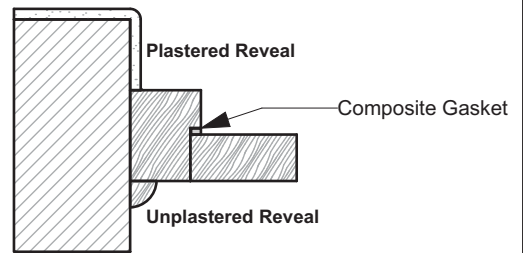
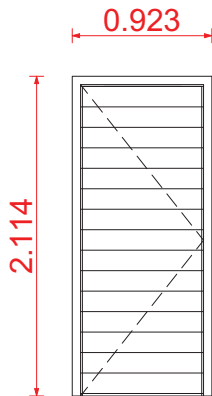
	Type:	Quantity:	Type Mark:
	1722 x 2114mm	05	D 01
<p>Doors Discription: Swartland Cape Culture SD30 horizontal slatted hardwood door, each panel size 813 x 2032mm high.</p> <ul style="list-style-type: none"> • Door range: Cape Culture • Door: SD 30 • Size: 813 x 2032mm high • Guarantee: 10 year. <p>Finish: Plascon Velvagio Satin to exterior new wood.</p> <p>Surface to be dry, sound and clean. Wash knots and resinous areas with Lacquer Thinners (ILS 1) and coat with Woodcare Knot Seal (PK 2) and apply one coat of Plascon Woodcare Pretreatment (WWP 1), overcoated within 48 hours with a moisture content, measured with a Doser Hygrometer (or equivalent), of BD 2 scale (A1-A5) < 14% or less. Prime with one coat Wood Primer (UC 2) with an overcoating time of 16 hours and finish with two coats Velvagio Satin (VLO) with 16 hours drying time between coats, for a maintenance cycle of 3 years in a C5 - coastal/marine environment.</p>	<p>Frame Discription: Swartland Cape Culture Heavy duty SK3 Door Frame. 2144(H) x 1722(W) 86mm X 76mm with 44mm rebate. Constructed from solid laminated wood and fitted with Composite Gaskets to prevent drafts. Outward opening</p> <p>Finish: Plascon Velvagio Satin to exterior new wood.</p> <p>Surface to be dry, sound and clean. Wash knots and resinous areas with Lacquer Thinners (ILS 1) and coat with Woodcare Knot Seal (PK 2) and apply one coat of Plascon Woodcare Pretreatment (WWP 1), overcoated within 48 hours with a moisture content, measured with a Doser Hygrometer (or equivalent), of BD 2 scale (A1-A5) < 14% or less. Prime with one coat Wood Primer (UC 2) with an overcoating time of 16 hours and finish with two coats Velvagio Satin (VLO) with 16 hours drying time between coats, for a maintenance cycle of 3 years in a C5 - coastal/marine environment.</p>		
<p>Ironmongery: Refer to Ironmongery Schedule</p>	<p>Glazing: 6.35mm GSA SmartGlass™ Intruderprufe@NS Clear laminated safety glass, complying with SANS 1263 Part 1, 2 or 3 with name of the manufacturer permanently marked on each sheet visible after glazing, glazed in accordance with NBR N schedule 1 and SABS 0137.</p>		

**QUANTITIES TO BE VERIFIED PRIOR TO PLACEMENT OF ORDER.
MASONRY OPENINGS TO BE VERIFIED ON SITE PRIOR TO COMMENCEMENT OF MANUFACTURE.
SUPPLIED AND FITTED IN ACCORDANCE WITH ALL SABS AND NBR STANDARDS**



1st Floor, Office 4A,
Leadwood House, Cedar Square,
Bonza Bay Road, Beacon Bay,
East London 5241
TEL 043 726 7786
rob@intsika.com

MANUFACTURING FACILITY -IW4 IN ZONE 1A	DRAWN BY: C.G.	CHECKED BY: C.G
ERF NO: 92817	SCALE: 1: 50	
ISSUED FOR TENDER	DATE: 10/22/2021	PRINTING DATE: 10/22/2021
DRAWING NAME D01	DRAWING NO: A.01.6.1.1	REVISION



GENERAL NOTES TO CONTRACTOR

- 1.) Door frame profiles are manufactured according to SABS specification No. 1129 of 1977
- 2.) Always check the frames when building for squareness and plumb as they cannot be corrected afterwards
- 3.) After building in the contractor is to take all necessary measures to protect the frames from any on-site damage.

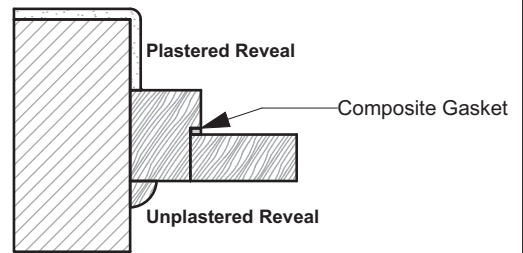
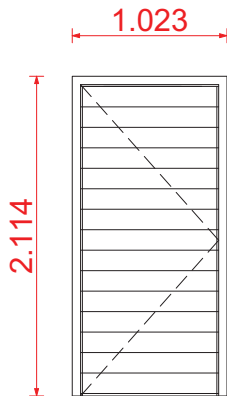
	Type: 923 x 2114mm	Quantity: 03	Type Mark: D 02
<p>Doors Discription: Swartland Cape Culture MDF - Horizontal MDFHRZH Heavy Duty Interior Doors</p> <ul style="list-style-type: none"> • Door range: Cape Culture • Door: SD 30 • Size: 813 x 2032mm high • Guarantee: 10 year. <p>Finish: Plascon Velvagio Satin to exterior new wood.</p> <p>Surface to be dry, sound and clean. Wash knots and resinous areas with Lacquer Thinners (ILS 1) and coat with Woodcare Knot Seal (PK 2) and apply one coat of Plascon Woodcare Pretreatment (WWP 1), overcoated within 48 hours with a moisture content, measured with a Doser Hygrometer (or equivalent), of BD 2 scale (A1-A5) < 14% or less. Prime with one coat Wood Primer (UC 2) with an overcoating time of 16 hours and finish with two coats Velvagio Satin (VLO) with 16 hours drying time between coats, for a maintenance cycle of 3 years in a C5 - coastal/marine environment.</p>	<p>Frame Discription: Swartland Cape Culture Heavy duty SK1 Door Frame. 2114(H) x 923(W) 86mm X 76mm with 44mm rebate. Constructed from solid laminated wood and fitted with Composite Gaskets to prevent drafts.</p> <p>Finish: Plascon Velvagio Satin to exterior new wood.</p> <p>Surface to be dry, sound and clean. Wash knots and resinous areas with Lacquer Thinners (ILS 1) and coat with Woodcare Knot Seal (PK 2) and apply one coat of Plascon Woodcare Pretreatment (WWP 1), overcoated within 48 hours with a moisture content, measured with a Doser Hygrometer (or equivalent), of BD 2 scale (A1-A5) < 14% or less. Prime with one coat Wood Primer (UC 2) with an overcoating time of 16 hours and finish with two coats Velvagio Satin (VLO) with 16 hours drying time between coats, for a maintenance cycle of 3 years in a C5 - coastal/marine environment.</p>		
<p>Ironmongery: Refer to Ironmongery Schedule</p>	<p>Glazing:</p>		

**QUANTITIES TO BE VERIFIED PRIOR TO PLACEMENT OF ORDER.
MASONRY OPENINGS TO BE VERIFIED ON SITE PRIOR TO COMMENCEMENT OF MANUFACTURE.
SUPPLIED AND FITTED IN ACCORDANCE WITH ALL SABS AND NBR STANDARDS**



1st Floor, Office 4A,
Leadwood House, Cedar Square,
Bonza Bay Road, Beacon Bay,
East London 5241
TEL 043 726 7786
rob@intsika.com

MANUFACTURING FACILITY -IW4 IN ZONE 1A	DRAWN BY: C.G.	CHECKED BY: C.G
ERF NO: 92817	SCALE: 1: 50	
ISSUED FOR TENDER	DATE: 10/22/2021	PRINTING DATE: 10/22/2021
DRAWING NAME D02	DRAWING NO: A.01.6.1.2	REVISION



GENERAL NOTES TO CONTRACTOR

- 1.) Door frame profiles are manufactured according to SABS specification No. 1129 of 1977
- 2.) Always check the frames when building for squareness and plumb as they cannot be corrected afterwards
- 3.) After building in the contractor is to take all necessary measures to protect the frames from any on-site damage.

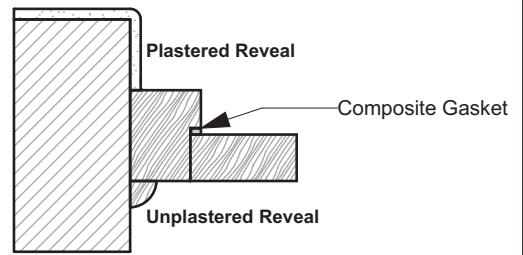
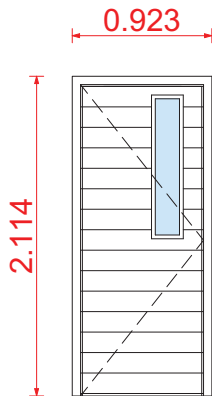
	Type: 923 x 2114mm	Quantity: 01	Type Mark: D 03
<p>Doors Discription: Swartland Cape Culture MDF - Horizontal MDFHRZH Heavy Duty Interior Doors</p> <ul style="list-style-type: none"> • Door range: Cape Culture • Door: SD 30 • Size: 913 x 2032mm high • Guarantee: 10 year. <p>Finish: Plascon Velvagio Satin to exterior new wood.</p> <p>Surface to be dry, sound and clean. Wash knots and resinous areas with Lacquer Thinners (ILS 1) and coat with Woodcare Knot Seal (PK 2) and apply one coat of Plascon Woodcare Pretreatment (WWP 1), overcoated within 48 hours with a moisture content, measured with a Doser Hygrometer (or equivalent), of BD 2 scale (A1-A5) < 14% or less. Prime with one coat Wood Primer (UC 2) with an overcoating time of 16 hours and finish with two coats Velvagio Satin (VLO) with 16 hours drying time between coats, for a maintenance cycle of 3 years in a C5 - coastal/marine environment.</p>	<p>Frame Discription: Swartland Cape Culture Heavy duty SK1 Door Frame. 2114(H) x 1023(W) 86mm X 76mm with 44mm rebate. Constructed from solid laminated wood and fitted with Composite Gaskets to prevent drafts.</p> <p>Finish: Plascon Velvagio Satin to exterior new wood.</p> <p>Surface to be dry, sound and clean. Wash knots and resinous areas with Lacquer Thinners (ILS 1) and coat with Woodcare Knot Seal (PK 2) and apply one coat of Plascon Woodcare Pretreatment (WWP 1), overcoated within 48 hours with a moisture content, measured with a Doser Hygrometer (or equivalent), of BD 2 scale (A1-A5) < 14% or less. Prime with one coat Wood Primer (UC 2) with an overcoating time of 16 hours and finish with two coats Velvagio Satin (VLO) with 16 hours drying time between coats, for a maintenance cycle of 3 years in a C5 - coastal/marine environment.</p>		
<p>Ironmongery: Refer to Ironmongery Schedule</p>	<p>Glazing:</p>		

**QUANTITIES TO BE VERIFIED PRIOR TO PLACEMENT OF ORDER.
MASONRY OPENINGS TO BE VERIFIED ON SITE PRIOR TO COMMENCEMENT OF MANUFACTURE.
SUPPLIED AND FITTED IN ACCORDANCE WITH ALL SABS AND NBR STANDARDS**



1st Floor, Office 4A,
Leadwood House, Cedar Square,
Bonza Bay Road, Beacon Bay,
East London 5241
TEL 043 726 7786
rob@intsika.com

MANUFACTURING FACILITY -IW4 IN ZONE 1A	DRAWN BY: C.G.	CHECKED BY: C.G
ERF NO: 92817	SCALE: 1: 50	
ISSUED FOR TENDER	DATE: 10/22/2021	PRINTING DATE: 10/22/2021
DRAWING NAME D03	DRAWING NO: A.01.6.1.3	REVISION



GENERAL NOTES TO CONTRACTOR

- 1.) Door frame profiles are manufactured according to SABS specification No. 1129 of 1977
- 2.) Always check the frames when building for squareness and plumb as they cannot be corrected afterwards
- 3.) After building in the contractor is to take all necessary measures to protect the frames from any on-site damage.

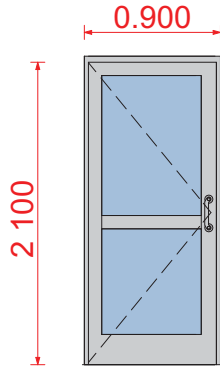
	Type:	Quantity:	Type Mark:
	923 x 2114mm	02	D 04
<p>Doors Discription: Swartland Cape Culture MDF - Horizontal MDFHRZH Heavy Duty Interior Doors</p> <ul style="list-style-type: none"> • Door range: Cape Culture • Door: SD 30 • Size: 813 x 2032mm high • Guarantee: 10 year. <p>Finish: Plascon Velvagio Satin to exterior new wood.</p> <p>Surface to be dry, sound and clean. Wash knots and resinous areas with Lacquer Thinners (ILS 1) and coat with Woodcare Knot Seal (PK 2) and apply one coat of Plascon Woodcare Pretreatment (WWP 1), overcoated within 48 hours with a moisture content, measured with a Doser Hygrometer (or equivalent), of BD 2 scale (A1-A5) < 14% or less. Prime with one coat Wood Primer (UC 2) with an overcoating time of 16 hours and finish with two coats Velvagio Satin (VLO) with 16 hours drying time between coats, for a maintenance cycle of 3 years in a C5 - coastal/marine environment.</p>	<p>Frame Discription: Swartland Cape Culture Heavy duty SK1 Door Frame. 2114(H) x 923(W) 86mm X 76mm with 44mm rebate. Constructed from solid laminated wood and fitted with Composite Gaskets to prevent drafts.</p> <p>Finish: Plascon Velvagio Satin to exterior new wood.</p> <p>Surface to be dry, sound and clean. Wash knots and resinous areas with Lacquer Thinners (ILS 1) and coat with Woodcare Knot Seal (PK 2) and apply one coat of Plascon Woodcare Pretreatment (WWP 1), overcoated within 48 hours with a moisture content, measured with a Doser Hygrometer (or equivalent), of BD 2 scale (A1-A5) < 14% or less. Prime with one coat Wood Primer (UC 2) with an overcoating time of 16 hours and finish with two coats Velvagio Satin (VLO) with 16 hours drying time between coats, for a maintenance cycle of 3 years in a C5 - coastal/marine environment.</p>		
<p>Ironmongery: Refer to Ironmongery Schedule</p>	<p>Glazing: 6.35mm GSA SmartGlass™ Intruderprufe@NS Clear laminated safety glass, complying with SANS 1263 Part 1, 2 or 3 with name of the manufacturer permanently marked on each sheet visible after glazing, glazed in accordance with NBR N schedule 1 and SABS 0137.</p>		

**QUANTITIES TO BE VERIFIED PRIOR TO PLACEMENT OF ORDER.
 MASONRY OPENINGS TO BE VERIFIED ON SITE PRIOR TO COMMENCEMENT OF MANUFACTURE.
 SUPPLIED AND FITTED IN ACCORDANCE WITH ALL SABS AND NBR STANDARDS**



1st Floor, Office 4A,
 Leadwood House, Cedar Square,
 Bonza Bay Road, Beacon Bay,
 East London 5241
 TEL 043 726 7786
 rob@intsika.com

MANUFACTURING FACILITY -IW4 IN ZONE 1A	DRAWN BY: C.G.	CHECKED BY: C.G
ERF NO: 92817	SCALE: 1: 50	
ISSUED FOR TENDER	DATE: 10/22/2021	PRINTING DATE: 10/22/2021
DRAWING NAME D04	DRAWING NO: A.01.6.1.4	REVISION



GENERAL NOTES TO CONTRACTOR

- 1.) All aluminium glazed doors, windows, curtain walls and louvred doors and panels that are purpose / custom made are to be manufactured as per manufacturers specifications all in accordance with AAMSA, SAGA, NBR and SABS regulations.
- 2.) Aluminium frames are not to be built in but must be installed in opening prepared by the contractor.
- 3.) The contractor is to inform the aluminium manufacturer as to when the openings are ready for measurement - All dimensions to be checked and verified on site prior to commencement of manufacture.
- 4.) As far as possible all glazed aluminium doors and windows to be factory glazed and wrapped in protective plastic.
- 5.) After installation the contractor is to take all necessary measures to protect the aluminium units from any on site damage including scratched glass and mortar stained aluminium frames. Any and all damaged units will be replaced at the contractors cost.
- 6.) Curtain wall design to be as per AGI Sheerline design endorsed by AGI Solutions (Pty) Ltd.
- 7.) All glazing to be in strict accordance with SAGA regulations and illustrate the appropriate mark to confirm type of glass used, i.e. toughend glass.

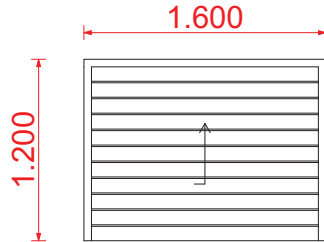
Type: 900 x 2100mm	Quantity: 01	Type Mark: D05
Discription: Wispeco Aluminium, Cealco CLIP 44 Hinged Door, with R4 (85mm) Bottom Rail		
Frame: 25 micron Natural Anodised Aluminium protective coating		
Ironmongery: Refer to Ironmongery Schedule		
Glazing: 6.35mm PG SmartGlass, SolarVue® PVB laminated safety safety glass, Grey HL complying with SANS 1263 Part 1, 2 or 3 with name of the manufacturer permanently marked on each sheet visible after glazing, glazed in accordance with NBR N schedule 1 and SABS 0137.		

**QUANTITIES TO BE VERIFIED PRIOR TO PLACEMENT OF ORDER.
MASONRY OPENINGS TO BE VERIFIED ON SITE PRIOR TO COMMENCEMENT OF MANUFACTURE.
SUPPLIED AND FITTED IN ACCORDANCE WITH ALL SABS AND NBR STANDARDS**



1st Floor, Office 4A,
Leadwood House, Cedar Square,
Bonza Bay Road, Beacon Bay,
East London 5241
TEL 043 726 7786
rob@intsika.com

MANUFACTURING FACILITY -IW4 IN ZONE 1A	DRAWN BY: C.G.	CHECKED BY: C.G
ERF NO: 92817	SCALE: 1: 50	
ISSUED FOR TENDER	DATE: 10/22/2021	PRINTING DATE: 10/22/2021
DRAWING NAME D05	DRAWING NO: A.01.6.1.5	REVISION



GENERAL NOTES TO CONTRACTOR

- 1.) All aluminium glazed doors, windows, curtain walls and louvred doors and panels that are purpose / custom made are to be manufactured as per manufacturers specifications all in accordance with AAMSA, SAGA, NBR and SABS regulations.
- 2.) Aluminium frames are not to be built in but must be installed in opening prepared by the contractor.
- 3.) The contractor is to inform the aluminium manufacturer as to when the openings are ready for measurement - All dimensions to be checked and verified on site prior to commencement of manufacture.
- 4.) As far as possible all glazed aluminium doors and windows to be factory glazed and wrapped in protective plastic.
- 5.) After installation the contractor is to take all necessary measures to protect the aluminium units from any on site damage including scratched glass and mortar stained aluminium frames. Any and all damaged units will be replaced at the contractors cost.
- 6.) Curtain wall design to be as per AGI Sheerline design endorsed by AGI Solutions (Pty) Ltd.
- 7.) All glazing to be in strict accordance with SAGA regulations and illustrate the appropriate mark to confirm type of glass used, i.e. toughend glass.

Type:

1600 x 1200mm

Quantity:

01

Type Mark:

D06


Discription:

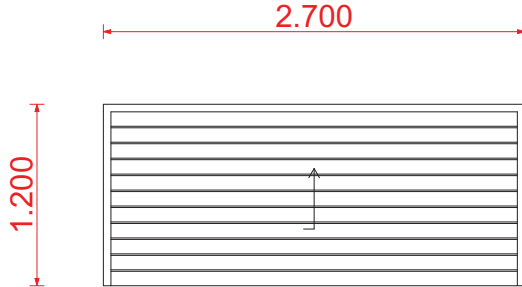
Xpanda Aluminium push pull roller shutter in natural anodised finish, size 1600 x 1,200mm high with 450mm headroom with 130mm clearance on free side and 130mm clearance on operator side, 50mm wide extruded slates, 75mm wide side guides, Xpanda Rol-Lok, with pressed steel canopy cover and weather strip T-bar to bottom edge, with perimeter framing plugged and screwed to reveal at maximum 300mm centres to concrete or brickwork.

**QUANTITIES TO BE VERIFIED PRIOR TO PLACEMENT OF ORDER.
MASONRY OPENINGS TO BE VERIFIED ON SITE PRIOR TO COMMENCEMENT OF MANUFACTURE.
SUPPLIED AND FITTED IN ACCORDANCE WITH ALL SABS AND NBR STANDARDS**



1st Floor, Office 4A,
Leadwood House, Cedar Square,
Bonza Bay Road, Beacon Bay,
East London 5241
TEL 043 726 7786
rob@intsika.com

MANUFACTURING FACILITY -IW4 IN ZONE 1A	DRAWN BY: C.G.	CHECKED BY: C.G
ERF NO: 92817	SCALE: 1: 50	
ISSUED FOR TENDER	DATE: 10/22/2021	PRINTING DATE: 10/22/2021
DRAWING NAME D06	DRAWING NO: A.01.6.1.6	REVISION 



GENERAL NOTES TO CONTRACTOR

- 1.) All aluminium glazed doors, windows, curtain walls and louvred doors and panels that are purpose / custom made are to be manufactured as per manufacturers specifications all in accordance with AAMSA, SAGA, NBR and SABS regulations.
- 2.) Aluminium frames are not to be built in but must be installed in opening prepared by the contractor.
- 3.) The contractor is to inform the aluminium manufacturer as to when the openings are ready for measurement - All dimensions to be checked and verified on site prior to commencement of manufacture.
- 4.) As far as possible all glazed aluminium doors and windows to be factory glazed and wrapped in protective plastic.
- 5.) After installation the contractor is to take all necessary measures to protect the aluminium units from any on site damage including scratched glass and mortar stained aluminium frames. Any and all damaged units will be replaced at the contractors cost.
- 6.) Curtain wall design to be as per AGI Sheerline design endorsed by AGI Solutions (Pty) Ltd.
- 7.) All glazing to be in strict accordance with SAGA regulations and illustrate the appropriate mark to confirm type of glass used, i.e. toughend glass.

Type:

2700 x 1200mm

Quantity:

01

Type Mark:

D07

Discription:

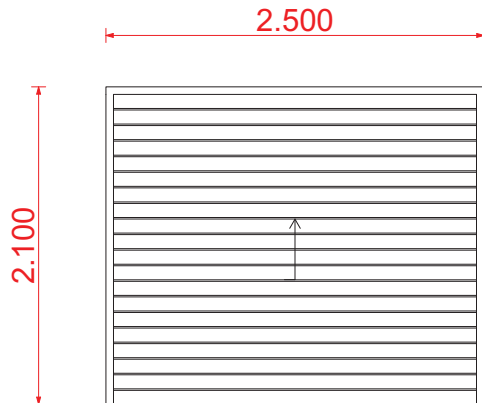
Xpanda Aluminium push pull roller shutter in natural anodised finish, size 2700 x 1,200mm high with 450mm headroom with 130mm clearance on free side and 130mm clearance on operator side, 50mm wide extruded slates, 75mm wide side guides, Xpanda Rol-Lok, with pressed steel canopy cover and weather strip T-bar to bottom edge, with perimeter framing plugged and screwed to reveal at maximum 300mm centres to concrete or brickwork.

**QUANTITIES TO BE VERIFIED PRIOR TO PLACEMENT OF ORDER.
MASONRY OPENINGS TO BE VERIFIED ON SITE PRIOR TO COMMENCEMENT OF MANUFACTURE.
SUPPLIED AND FITTED IN ACCORDANCE WITH ALL SABS AND NBR STANDARDS**



1st Floor, Office 4A,
Leadwood House, Cedar Square,
Bonza Bay Road, Beacon Bay,
East London 5241
TEL 043 726 7786
rob@intsika.com

MANUFACTURING FACILITY -IW4 IN ZONE 1A	DRAWN BY: C.G.	CHECKED BY: C.G
ERF NO: 92817	SCALE: 1: 50	
ISSUED FOR TENDER	DATE: 10/22/2021	PRINTING DATE: 10/22/2021
DRAWING NAME D07	DRAWING NO: A.01.6.1.7	REVISION



GENERAL NOTES TO CONTRACTOR

- 1.) All aluminium glazed doors, windows, curtain walls and louvred doors and panels that are purpose / custom made are to be manufactured as per manufacturers specifications all in accordance with AAMSA, SAGA, NBR and SABS regulations.
- 2.) Aluminium frames are not to be built in but must be installed in opening prepared by the contractor.
- 3.) The contractor is to inform the aluminium manufacturer as to when the openings are ready for measurement - All dimensions to be checked and verified on site prior to commencement of manufacture.
- 4.) As far as possible all glazed aluminium doors and windows to be factory glazed and wrapped in protective plastic.
- 5.) After installation the contractor is to take all necessary measures to protect the aluminium units from any on site damage including scratched glass and mortar stained aluminium frames. Any and all damaged units will be replaced at the contractors cost.
- 6.) Curtain wall design to be as per AGI Sheerline design endorsed by AGI Solutions (Pty) Ltd.
- 7.) All glazing to be in strict accordance with SAGA regulations and illustrate the appropriate mark to confirm type of glass used, i.e. toughend glass.

Type:

2440 x 2100mm

Quantity:

04

Type Mark:

D08

Discription:

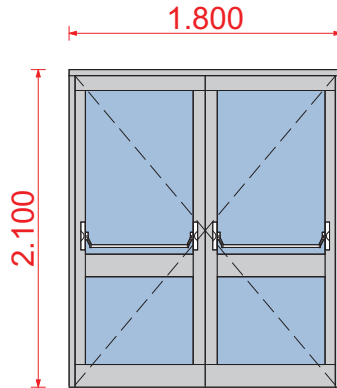
Xpanda Aluminium push pull roller shutter in natural anodised finish, size 2440 x 2,100mm high with 450mm headroom with 130mm clearance on free side and 130mm clearance on operator side, 50mm wide extruded slates, 75mm wide side guides, Xpanda Rol-Lok, with pressed steel canopy cover and weather strip T-bar to bottom edge, with perimeter framing plugged and screwed to reveal at maximum 300mm centres to concrete or brickwork.

**QUANTITIES TO BE VERIFIED PRIOR TO PLACEMENT OF ORDER.
MASONRY OPENINGS TO BE VERIFIED ON SITE PRIOR TO COMMENCEMENT OF MANUFACTURE.
SUPPLIED AND FITTED IN ACCORDANCE WITH ALL SABS AND NBR STANDARDS**



1st Floor, Office 4A,
Leadwood House, Cedar Square,
Bonza Bay Road, Beacon Bay,
East London 5241
TEL 043 726 7786
rob@intsika.com

MANUFACTURING FACILITY -IW4 IN ZONE 1A	DRAWN BY: C.G.	CHECKED BY: C.G
ERF NO: 92817	SCALE: 1: 50	
ISSUED FOR TENDER	DATE: 10/22/2021	PRINTING DATE: 10/22/2021
DRAWING NAME D08	DRAWING NO: A.01.6.1.8	REVISION



GENERAL NOTES TO CONTRACTOR

- 1.) All aluminium glazed doors, windows, curtain walls and louvred doors and panels that are purpose / custom made are to be manufactured as per manufacturers specifications all in accordance with AAMSA, SAGA, NBR and SABS regulations.
- 2.) Aluminium frames are not to be built in but must be installed in opening prepared by the contractor.
- 3.) The contractor is to inform the aluminium manufacturer as to when the openings are ready for measurement - All dimensions to be checked and verified on site prior to commencement of manufacture.
- 4.) As far as possible all glazed aluminium doors and windows to be factory glazed and wrapped in protective plastic.
- 5.) After installation the contractor is to take all necessary measures to protect the aluminium units from any on site damage including scratched glass and mortar stained aluminium frames. Any and all damaged units will be replaced at the contractors cost.
- 6.) Curtain wall design to be as per AGI Sheerline design endorsed by AGI Solutions (Pty) Ltd.
- 7.) All glazing to be in strict accordance with SAGA regulations and illustrate the appropriate mark to confirm type of glass used, i.e. toughend glass.

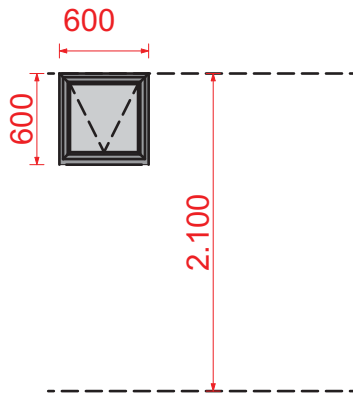
Type: 1800 x 2100mm	Quantity: 02	Type Mark: D09
Discription: Wispeco Aluminium, Cealco CLIP 44 Hinged Door, with R4 (85mm) Bottom Rail		
Frame: 25 micron Natural Anodised Aluminium protective coating		
Ironmongery: Refer to Ironmongery Schedule		
Glazing: 6.35mm PG SmartGlass, SolarVue® PVB laminated safety safety glass, Grey HL complying with SANS 1263 Part 1, 2 or 3 with name of the manufacturer permanently marked on each sheet visible after glazing, glazed in accordance with NBR N schedule 1 and SABS 0137.		

QUANTITIES TO BE VERIFIED PRIOR TO PLACEMENT OF ORDER.
MASONRY OPENINGS TO BE VERIFIED ON SITE PRIOR TO COMMENCEMENT OF MANUFACTURE.
SUPPLIED AND FITTED IN ACCORDANCE WITH ALL SABS AND NBR STANDARDS



1st Floor, Office 4A,
 Leadwood House, Cedar Square,
 Bonza Bay Road, Beacon Bay,
 East London 5241
 TEL 043 726 7786
 rob@intsika.com

MANUFACTURING FACILITY -IW4 IN ZONE 1A	DRAWN BY: C.G.	CHECKED BY: C.G
ERF NO: 92817	SCALE: 1: 50	
ISSUED FOR TENDER	DATE: 10/22/2021	PRINTING DATE: 10/22/2021
DRAWING NAME D09	DRAWING NO: A.01.6.1.9	REVISION



GENERAL NOTES TO CONTRACTOR

- 1.) All aluminium glazed doors, windows, curtain walls and louvred doors and panels that are purpose / custom made are to be manufactured as per manufacturers specifications all in accordance with AAMSA, SAGA, NBR and SABS regulations.
- 2.) Aluminium frames are not to be built in but must be installed in opening prepared by the contractor.
- 3.) The contractor is to inform the aluminium manufacturer as to when the openings are ready for measurement - All dimensions to be checked and verified on site prior to commencement of manufacture.
- 4.) As far as possible all glazed aluminium doors and windows to be factory glazed and wrapped in protective plastic.
- 5.) After installation the contractor is to take all necessary measures to protect the aluminium units from any on site damage including scratched glass and mortar stained aluminium frames. Any and all damaged units will be replaced at the contractors cost.
- 6.) Curtain wall design to be as per AGI Sheerline design endorsed by AGI Solutions (Pty) Ltd.
- 7.) All glazing to be in strict accordance with SAGA regulations and illustrate the appropriate mark to confirm type of glass used, i.e. toughend glass.

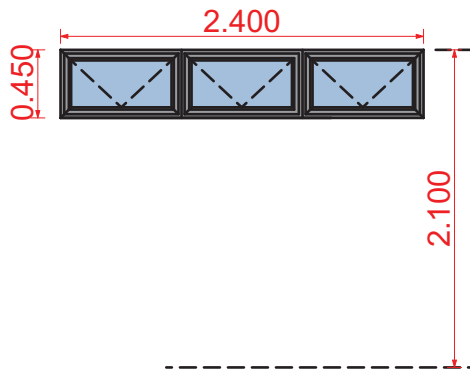
Type: 600 x 600mm	Quantity: 09	Type Mark: W 01
Discription: Wispeco Aluminium top hung aluminium window, size 600 x 600mm able to meet the mechanical performance requirements of SANS 613 for wind loads of up to 1500Pa with surfaces to receive 60-80µm Matt Black powder coating (for architectural applications), supplied by a manufacturer complying with SANS 1578 and applied in accordance with SANS 1796 by an approved applicator, glazing shall be executed strictly in conformance with glass manufacturer's recommendations and SANS 10137:2011 all in accordance with SANS 10400 Parts B, N, XA, fitted in accordance with Wispeco Casement 340 system, plugged and screwed to brickwork or concrete.		
Frame: 60-80µm CHARCOAL powder coating		
Ironmongery: As supplied by manufacturer		
Glazing: 6.75mm Decorlam laminated safety glass, complying with SANS 1263 Part 1, 2 or 3 with name of the manufacturer permanently marked on each sheet visible after glazing, glazed in accordance with NBR N schedule 1 and SABS 0137.		
Burglar Bars:		

QUANTITIES TO BE VERIFIED PRIOR TO PLACEMENT OF ORDER.
MASONRY OPENINGS TO BE VERIFIED ON SITE PRIOR TO COMMENCEMENT OF MANUFACTURE.
SUPPLIER TO BE IN ACCORDANCE WITH ALL SABS AND NBR STANDARDS



1st Floor, Office 4A,
Leadwood House, Cedar Square,
Bonza Bay Road, Beacon Bay,
East London 5241
TEL 043 726 7786
rob@intsika.com

MANUFACTURING FACILITY -IW4 IN ZONE 1A	DRAWN BY: C.G.	CHECKED BY: C.G
ERF NO: 92817	SCALE: 1: 50	
ISSUED FOR TENDER	DATE: 10/22/2021	PRINTING DATE: 10/22/2021
DRAWING NAME W01	DRAWING NO: A.01.6.2.1	REVISION



GENERAL NOTES TO CONTRACTOR

- 1.) All aluminium glazed doors, windows, curtain walls and louvred doors and panels that are purpose / custom made are to be manufactured as per manufacturers specifications all in accordance with AAMSA, SAGA, NBR and SABS regulations.
- 2.) Aluminium frames are not to be built in but must be installed in opening prepared by the contractor.
- 3.) The contractor is to inform the aluminium manufacturer as to when the openings are ready for measurement - All dimensions to be checked and verified on site prior to commencement of manufacture.
- 4.) As far as possible all glazed aluminium doors and windows to be factory glazed and wrapped in protective plastic.
- 5.) After installation the contractor is to take all necessary measures to protect the aluminium units from any on site damage including scratched glass and mortar stained aluminium frames. Any and all damaged units will be replaced at the contractors cost.
- 6.) Curtain wall design to be as per AGI Sheerline design endorsed by AGI Solutions (Pty) Ltd.
- 7.) All glazing to be in strict accordance with SAGA regulations and illustrate the appropriate mark to confirm type of glass used, i.e. toughend glass.

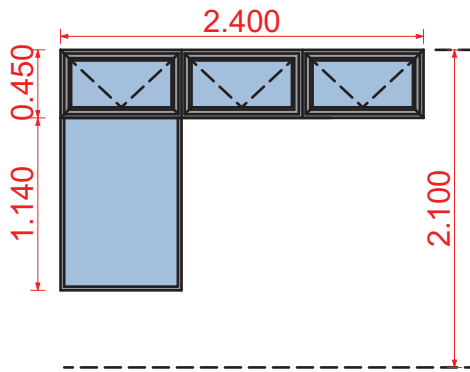
Type: 2400 x 450mm	Quantity: 02	Type Mark: W 02
Discription: Wispeco Aluminium top hung aluminium window, size 2400 x 600mm able to meet the mechanical performance requirements of SANS 613 for wind loads of up to 1500Pa with surfaces to receive 60-80µm Matt Black powder coating (for architectural applications), supplied by a manufacturer complying with SANS 1578 and applied in accordance with SANS 1796 by an approved applicator, glazing shall be executed strictly in conformance with glass manufacturer's recommendations and SANS 10137:2011 all in accordance with SANS 10400 Parts B, N, XA, fitted in accordance with Wispeco Casement 340 system, plugged and screwed to brickwork or concrete.		
Frame: 60-80µm CHARCOAL powder coating		
Ironmongery: As supplied by manufacturer		
Glazing: 6.35mm GSA SmartGlass™ Intruderprufe@NS Clear laminated safety glass, complying with SANS 1263 Part 1, 2 or 3 with name of the manufacturer permanently marked on each sheet visible after glazing, glazed in accordance with NBR N schedule 1 and SABS 0137.		
Burglar Bars: 6 mm thick, 30 mm wide, clear polycarbonate InvisiBars™ Fitted directly into wooden and aluminium frames over opening sections. Maximum distance of 120mm-130mm between each bar. Stainless steel pop rivets. Polyethylene cover caps (colour matched to frame) fitted over installation points. If bar spans greater than 950mm, a vertical support or aluminium support is required to reduce flexibility in horizontal bar.		

QUANTITIES TO BE VERIFIED PRIOR TO PLACEMENT OF ORDER.
MASONRY OPENINGS TO BE VERIFIED ON SITE PRIOR TO COMMENCEMENT OF MANUFACTURE.
SUPPLIER TO BE IN ACCORDANCE WITH ALL SABS AND NBR STANDARDS



1st Floor, Office 4A,
 Leadwood House, Cedar Square,
 Bonza Bay Road, Beacon Bay,
 East London 5241
 TEL 043 726 7786
 rob@intsika.com

MANUFACTURING FACILITY -IW4 IN ZONE 1A	DRAWN BY: C.G.	CHECKED BY: C.G
ERF NO: 92817	SCALE: 1: 50	
ISSUED FOR TENDER	DATE: 10/22/2021	PRINTING DATE: 10/22/2021
DRAWING NAME W02	DRAWING NO: A.01.6.2.2	REVISION



GENERAL NOTES TO CONTRACTOR

- 1.) All aluminium glazed doors, windows, curtain walls and louvred doors and panels that are purpose / custom made are to be manufactured as per manufacturers specifications all in accordance with AAMSA, SAGA, NBR and SABS regulations.
- 2.) Aluminium frames are not to be built in but must be installed in opening prepared by the contractor.
- 3.) The contractor is to inform the aluminium manufacturer as to when the openings are ready for measurement - All dimensions to be checked and verified on site prior to commencement of manufacture.
- 4.) As far as possible all glazed aluminium doors and windows to be factory glazed and wrapped in protective plastic.
- 5.) After installation the contractor is to take all necessary measures to protect the aluminium units from any on site damage including scratched glass and mortar stained aluminium frames. Any and all damaged units will be replaced at the contractors cost.
- 6.) Curtain wall design to be as per AGI Sheerline design endorsed by AGI Solutions (Pty) Ltd.
- 7.) All glazing to be in strict accordance with SAGA regulations and illustrate the appropriate mark to confirm type of glass used, i.e. toughend glass.

Type:

1590 x 2400mm

Quantity:

01

Type Mark:

W 03

Description:

Wispeco Aluminium top hung aluminium window, size 1590 x 2400mm able to meet the mechanical performance requirements of SANS 613 for wind loads of up to 1500Pa with surfaces to receive 60-80µm Matt Black powder coating (for architectural applications), supplied by a manufacturer complying with SANS 1578 and applied in accordance with SANS 1796 by an approved applicator, glazing shall be executed strictly in conformance with glass manufacturer's recommendations and SANS 10137:2011 all in accordance with SANS 10400 Parts B, N, XA, fitted in accordance with Wispeco Casement 340 system, plugged and screwed to brickwork or concrete.

Frame:

60-80µm CHARCOAL powder coating

Ironmongery:

As supplied by manufacturer

Glazing:

6.35mm GSA SmartGlass™ Intruderprufe@NS Clear laminated safety glass, complying with SANS 1263 Part 1, 2 or 3 with name of the manufacturer permanently marked on each sheet visible after glazing, glazed in accordance with NBR N schedule 1 and SABS 0137.

Burglar Bars:

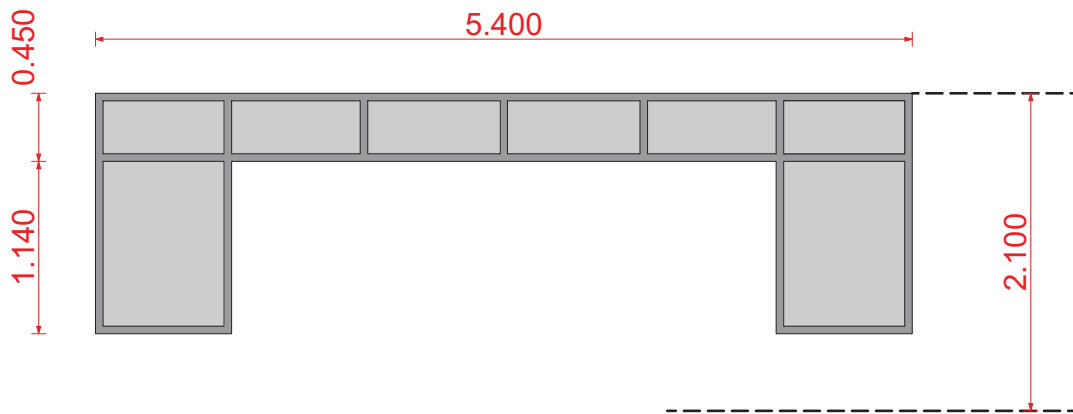
6 mm thick, 30 mm wide, clear polycarbonate InvisiBars™ Fitted directly into wooden and aluminium frames over opening sections. Maximum distance of 120mm-130mm between each bar. Stainless steel pop rivets. Polyethylene cover caps (colour matched to frame) fitted over installation points. If bar spans greater than 950mm, a vertical support or aluminium support is required to reduce flexibility in horizontal bar.

**QUANTITIES TO BE VERIFIED PRIOR TO PLACEMENT OF ORDER.
MASONRY OPENINGS TO BE VERIFIED ON SITE PRIOR TO COMMENCEMENT OF MANUFACTURE.
SUPPLIER TO BE IN ACCORDANCE WITH ALL SABS AND NBR STANDARDS**



1st Floor, Office 4A,
Leadwood House, Cedar Square,
Bonza Bay Road, Beacon Bay,
East London 5241
TEL 043 726 7786
rob@intsika.com

MANUFACTURING FACILITY -IW4 IN ZONE 1A	DRAWN BY: C.G.	CHECKED BY: C.G
ERF NO: 92817	SCALE: 1: 50	
ISSUED FOR TENDER	DATE: 10/22/2021	PRINTING DATE: 10/22/2021
DRAWING NAME W03	DRAWING NO: A.01.6.2.3	REVISION



GENERAL NOTES TO CONTRACTOR

- 1.) All aluminium glazed doors, windows, curtain walls and louvred doors and panels that are purpose / custom made are to be manufactured as per manufacturers specifications all in accordance with AAMSA, SAGA, NBR and SABS regulations.
- 2.) Aluminium frames are not to be built in but must be installed in opening prepared by the contractor.
- 3.) The contractor is to inform the aluminium manufacturer as to when the openings are ready for measurement - All dimensions to be checked and verified on site prior to commencement of manufacture.
- 4.) As far as possible all glazed aluminium doors and windows to be factory glazed and wrapped in protective plastic.
- 5.) After installation the contractor is to take all necessary measures to protect the aluminium units from any on site damage including scratched glass and mortar stained aluminium frames. Any and all damaged units will be replaced at the contractors cost.
- 6.) Curtain wall design to be as per AGI Sheerline design endorsed by AGI Solutions (Pty) Ltd.
- 7.) All glazing to be in strict accordance with SAGA regulations and illustrate the appropriate mark to confirm type of glass used, i.e. toughend glass.

Type: 5400x 1590mm	Quantity: 02	Type Mark: W 04
Discription: Wispeco Aluminium top hung aluminium window, size 5400 x 1590mm able to meet the mechanical performance requirements of SANS 613 for wind loads of up to 1500Pa with surfaces to receive 60-80µm Matt Black powder coating (for architectural applications), supplied by a manufacturer complying with SANS 1578 and applied in accordance with SANS 1796 by an approved applicator, glazing shall be executed strictly in conformance with glass manufacturer's recommendations and SANS 10137:2011 all in accordance with SANS 10400 Parts B, N, XA, fitted in accordance with Wispeco Casement 340 system, plugged and screwed to brickwork or concrete.		
Frame: 60-80µm CHARCOAL powder coating		
Ironmongery: As supplied by manufacturer		
Glazing: 6.35mm GSA SmartGlass™ Intruderprufe@NS Clear laminated safety glass, complying with SANS 1263 Part 1, 2 or 3 with name of the manufacturer permanently marked on each sheet visible after glazing, glazed in accordance with NBR N schedule 1 and SABS 0137.		
Burglar Bars:		

QUANTITIES TO BE VERIFIED PRIOR TO PLACEMENT OF ORDER.
MASONRY OPENINGS TO BE VERIFIED ON SITE PRIOR TO COMMENCEMENT OF MANUFACTURE.
SUPPLIER TO BE IN ACCORDANCE WITH ALL SABS AND NBR STANDARDS



1st Floor, Office 4A,
Leadwood House, Cedar Square,
Bonza Bay Road, Beacon Bay,
East London 5241
TEL 043 726 7786
rob@intsika.com

MANUFACTURING FACILITY -IW4 IN ZONE 1A	DRAWN BY: C.G.	CHECKED BY: C.G
ERF NO: 92817	SCALE: 1: 50	
ISSUED FOR TENDER	DATE: 10/22/2021	PRINTING DATE: 10/22/2021
DRAWING NAME W04	DRAWING NO: A.01.6.2.4	REVISION

316 stainless steel bushed
8mm toughened safety glass

Top Rail

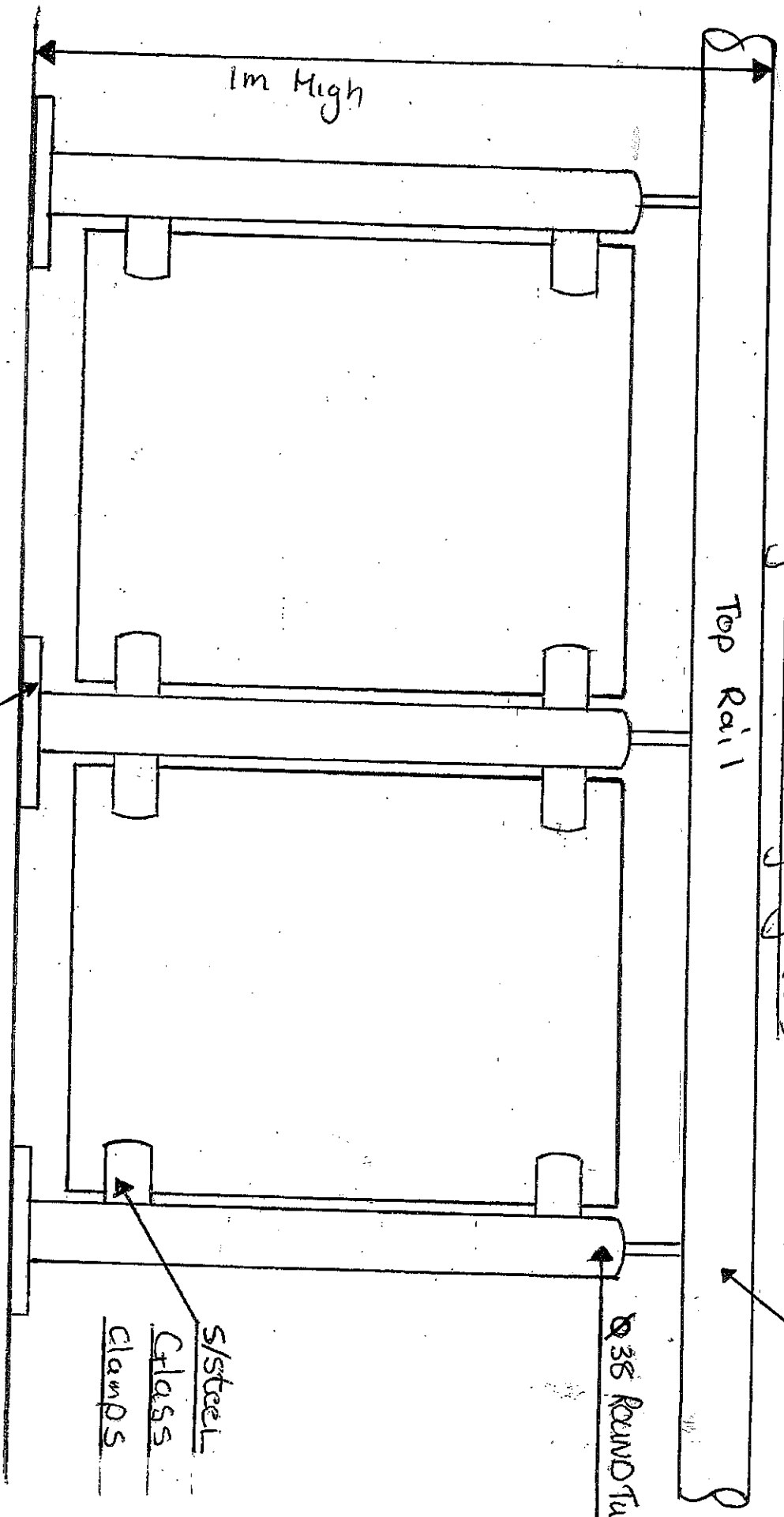
1m High

Ø80mm Round Tub

Ø38 Round Tub

s/steel
Glass
clamps

s/steel washer to
COVER HOLE



GENERAL NOTES

The contractor is to keep a full set of drawings on site, contractor is responsible for the correct setting out of the building on site with reference to boundaries and building lines, contractor to verify all levels and dimensions on site and check same against architects and engineers drawings before commencing work. Figure dimensions to be used in preference to scaled dimensions, large scale details to be used where available, errors, discrepancies or omissions are to be reported to the architect immediately for clarification before work is undertaken.

These drawings are to be read in conjunction with structural engineers, civil engineers, mechanical engineer or planning consultant's drawings where applicable.

All work and material used to comply with SABS standards and NATIONAL BUILDING REGULATIONS ACT 103 of 1977 and amendments thereto as well as the by-laws of the relevant local authority.

All new construction HEALTH AND SAFETY Regulations to be strictly complied with.

REVISIONS

RevID	ChID	Change Name	Date

PROJECT TEAM

Principal Consultant / Architect:
INTSIKA Architects (Pty) Ltd.
 Phone: (+27) 043 748 2949
 Cell: (+27) 082 872 8748
 Fax: (+27) 043 748 1702
 E-Mail: rob@intsika.com
 Web: www.intsika.com

1st Floor, Leadwood House, Cedarsquare
 Bonas Bay Road, Beacon Bay,
 East London, 5241

Quantity Surveyors:
BISWE VAN NIEKERK INC. Quantity Surveyors
 Willem Van Niekerk Tel: 043 - 7211043
 Fax: 043 - 7211239
 Cell: 0824921695
 E-mail: willem@biswe.co.za

Structural, Civil, Mechanical & Electrical Engineers:
BVI Border Engineers
 Werner De Lange Tel: 043 - 7222738
 Fax: 043 - 7437698
 Cell: 0825780674
 E-mail: WernerDL@bvi.co.za

CLIENT

TSOLO AGRICULTURE & RURAL DEVELOPMENT INSTITUTE
 Private Bag X1008, Tsoilo, 5170
 Tel: +27 (47) 542 3700



OFFICE OF THE DIRECTOR: ENGINEERING SERVICES

PROJECT

300-SEATER EXAM HALL AT THE TSOLO AGRICULTURAL AND RURAL DEVELOPMENT INSTITUTE.

LOCATION

FARM NO: 61
 Tsoilo

ISSUED FOR

TENDER

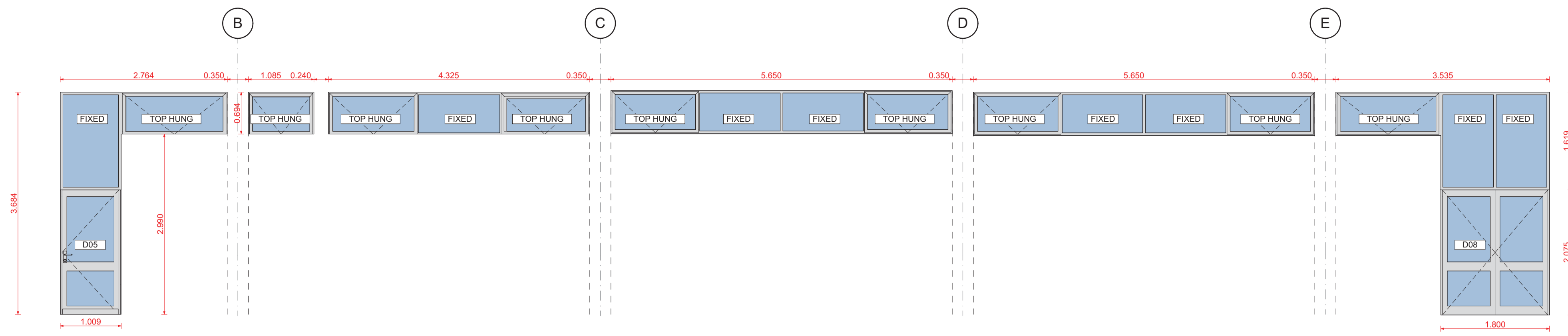
DRAWING

SF 01 & 02

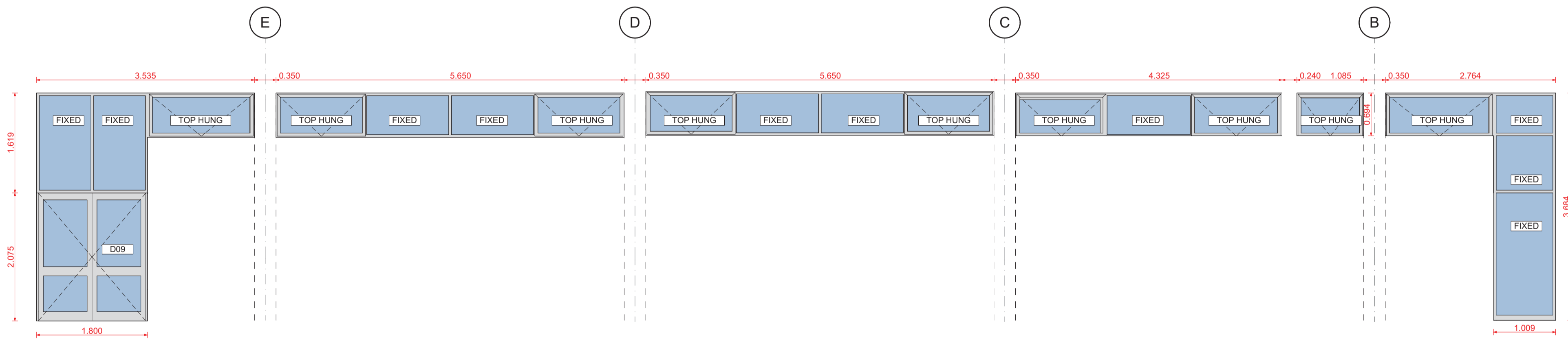
PROJECT NO.	253
DRAWING NO.	A.01.6.3.1
Scale:	See Drawing
Date:	10/22/2021
DRAFTING AND DESIGN TEAM	
Drawn by:	Cobus Gouws
Checked by:	Cobus Gouws

APPROVAL DRAWING

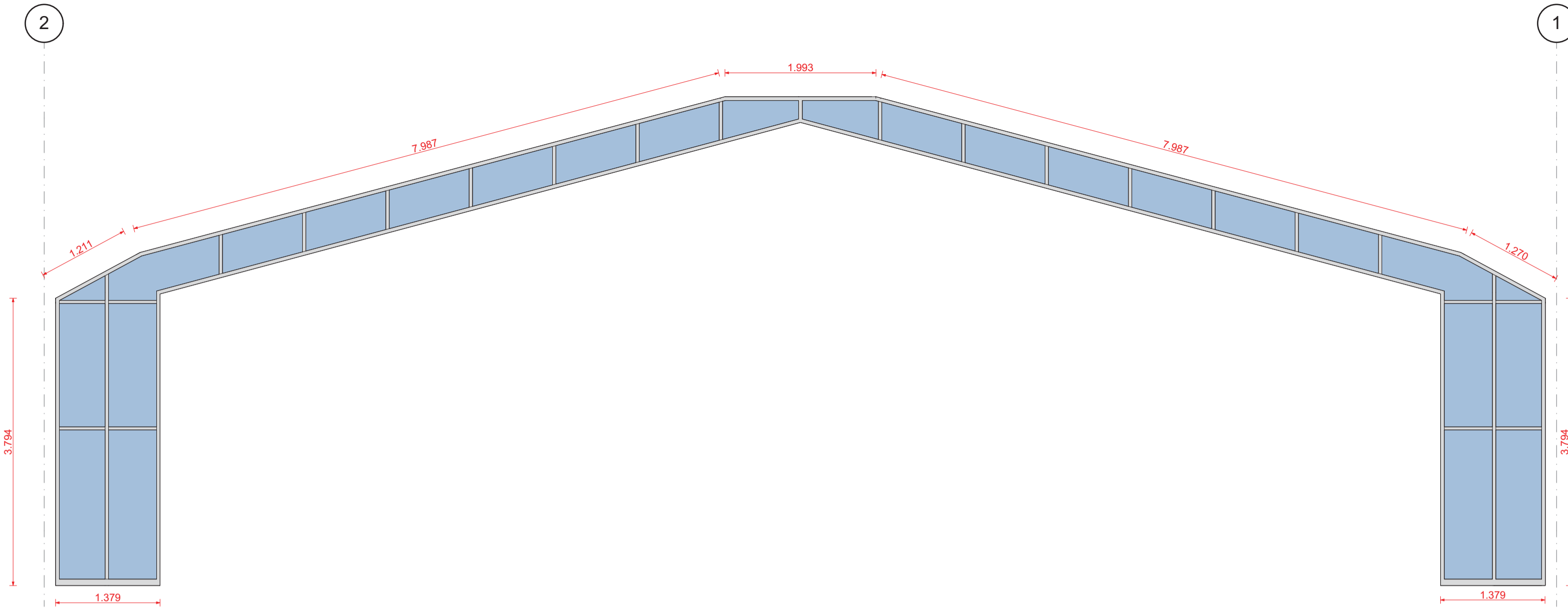
Name: J.J. Gouws SACAP No. 21345
 Signed: _____ Date: _____
 Practice: Intsika Architects SAIA No. P13725



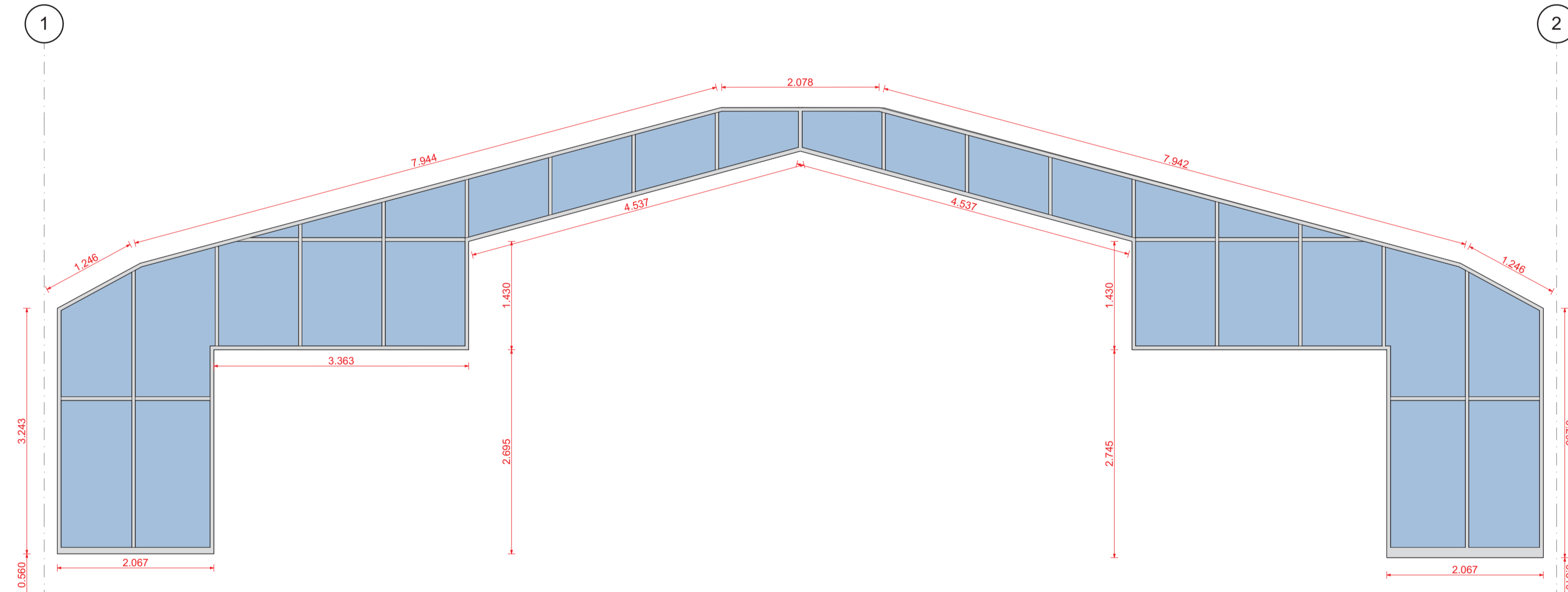
GENERAL NOTES TO CONTRACTOR	Type:	Quantity:	Type Mark:
1.) All aluminium glazed doors, windows, curtain walls and louvred doors and panels that are purpose / custom made are to be manufactured as per manufacturers specifications all in accordance with AMMSA, SAGA, NBR and SABS regulations. 2.) Aluminium frames are not to be built in but must be installed in opening prepared by the contractor. 3.) The contractor is to inform the aluminium manufacturer as to when the openings are ready for measurement - All dimensions to be checked and verified on site prior to commencement of manufacture. 4.) As far as possible all glazed aluminium doors and windows to be factory glazed and wrapped in protective plastic. 5.) After installation the contractor is to take all necessary measures to protect the aluminium units from any on site damage including scratched glass and mortar stained aluminium frames. Any and all damaged units will be replaced at the contractors cost. 6.) Curtain wall design to be as per AGI Sheerline design endorsed by AGI Solutions (Pty) Ltd. 7.) All glazing to be in strict accordance with SAGA regulations and illustrate the appropriate mark to confirm type of glass used, i.e. toughend glass.	Description: SHEERLINE CLIP 44 Shopfront System, with R4 (85mm) Bottom Rail Frame: 25 micron Natural Anodised Aluminium protective coating Ironmongery: As supplied by manufacturer Glazing: 6.35mm GSA SmartGlass™ Solarshield® S30 Grey laminated safety glass, complying with SANS 1263 Part 1, 2 or 3 with name of the manufacturer permanently marked on each sheet visible after glazing, glazed in accordance with NBR N schedule 1 and SABS 0137.	01	SF 01
QUANTITIES TO BE VERIFIED PRIOR TO PLACEMENT OF ORDER. MASONRY OPENINGS TO BE VERIFIED ON SITE PRIOR TO COMMENCEMENT OF MANUFACTURE. SUPPLIER TO BE IN ACCORDANCE WITH ALL SABS AND NBR STANDARDS			



GENERAL NOTES TO CONTRACTOR	Type:	Quantity:	Type Mark:
1.) All aluminium glazed doors, windows, curtain walls and louvred doors and panels that are purpose / custom made are to be manufactured as per manufacturers specifications all in accordance with AMMSA, SAGA, NBR and SABS regulations. 2.) Aluminium frames are not to be built in but must be installed in opening prepared by the contractor. 3.) The contractor is to inform the aluminium manufacturer as to when the openings are ready for measurement - All dimensions to be checked and verified on site prior to commencement of manufacture. 4.) As far as possible all glazed aluminium doors and windows to be factory glazed and wrapped in protective plastic. 5.) After installation the contractor is to take all necessary measures to protect the aluminium units from any on site damage including scratched glass and mortar stained aluminium frames. Any and all damaged units will be replaced at the contractors cost. 6.) Curtain wall design to be as per AGI Sheerline design endorsed by AGI Solutions (Pty) Ltd. 7.) All glazing to be in strict accordance with SAGA regulations and illustrate the appropriate mark to confirm type of glass used, i.e. toughend glass.	Description: SHEERLINE CLIP 44 Shopfront System, with R4 (85mm) Bottom Rail Frame: 25 micron Natural Anodised Aluminium protective coating Ironmongery: As supplied by manufacturer Glazing: 6.35mm GSA SmartGlass™ Solarshield® S30 Grey laminated safety glass, complying with SANS 1263 Part 1, 2 or 3 with name of the manufacturer permanently marked on each sheet visible after glazing, glazed in accordance with NBR N schedule 1 and SABS 0137.	01	SF 02
QUANTITIES TO BE VERIFIED PRIOR TO PLACEMENT OF ORDER. MASONRY OPENINGS TO BE VERIFIED ON SITE PRIOR TO COMMENCEMENT OF MANUFACTURE. SUPPLIER TO BE IN ACCORDANCE WITH ALL SABS AND NBR STANDARDS			



GENERAL NOTES TO CONTRACTOR 1.) All aluminium glazed doors, windows, curtain walls and louvred doors and panels that are purpose / custom made are to be manufactured as per manufacturers specifications all in accordance with AAMSA, SAGA, NBR and SABS regulations. 2.) Aluminium frames are not to be built in but must be installed in opening prepared by the contractor. 3.) The contractor is to inform the aluminium manufacturer as to when the openings are ready for measurement - All dimensions to be checked and verified on site prior to commencement of manufacture. 4.) As far as possible all glazed aluminium doors and windows to be factory glazed and wrapped in protective plastic. 5.) After installation the contractor is to take all necessary measures to protect the aluminium units from any on site damage including scratched glass and mortar stained aluminium frames. 6.) Curtain wall design to be as per AGI Sheerline design endorsed by AGI Solutions (Pty) Ltd. 7.) All glazing to be in strict accordance with SAGA regulations and illustrate the appropriate mark to confirm type of glass used, i.e. toughend glass.	Type:	Quantity:	Type Mark:
	SHEERLINE CLIP 44 Shopfront System, with R4 (85mm) Bottom Rail	01	SF 03
	Description:		
	Frame:	25 micron Natural Anodised Aluminium protective coating	
	Ironmongery:	As supplied by manufacturer	
	Glazing:	6.35mm GSA SmartGlass™ Solarshield® S30 Grey laminated safety glass, complying with SANS 1263 Part 1, 2 or 3 with name of the manufacturer permanently marked on each sheet visible after glazing, glazed in accordance with NBR N schedule 1 and SABS 0137.	
QUANTITIES TO BE VERIFIED PRIOR TO PLACEMENT OF ORDER. MASONRY OPENINGS TO BE VERIFIED ON SITE PRIOR TO COMMENCEMENT OF MANUFACTURE. SUPPLIER TO BE IN ACCORDANCE WITH ALL SABS AND NBR STANDARDS			



GENERAL NOTES TO CONTRACTOR 1.) All aluminium glazed doors, windows, curtain walls and louvred doors and panels that are purpose / custom made are to be manufactured as per manufacturers specifications all in accordance with AAMSA, SAGA, NBR and SABS regulations. 2.) Aluminium frames are not to be built in but must be installed in opening prepared by the contractor. 3.) The contractor is to inform the aluminium manufacturer as to when the openings are ready for measurement - All dimensions to be checked and verified on site prior to commencement of manufacture. 4.) As far as possible all glazed aluminium doors and windows to be factory glazed and wrapped in protective plastic. 5.) After installation the contractor is to take all necessary measures to protect the aluminium units from any on site damage including scratched glass and mortar stained aluminium frames. 6.) Curtain wall design to be as per AGI Sheerline design endorsed by AGI Solutions (Pty) Ltd. 7.) All glazing to be in strict accordance with SAGA regulations and illustrate the appropriate mark to confirm type of glass used, i.e. toughend glass.	Type:	Quantity:	Type Mark:
	SHEERLINE CLIP 44 Shopfront System, with R4 (85mm) Bottom Rail	01	SF 04
	Description:		
	Frame:	25 micron Natural Anodised Aluminium protective coating	
	Ironmongery:	As supplied by manufacturer	
	Glazing:	6.35mm GSA SmartGlass™ Solarshield® S30 Grey laminated safety glass, complying with SANS 1263 Part 1, 2 or 3 with name of the manufacturer permanently marked on each sheet visible after glazing, glazed in accordance with NBR N schedule 1 and SABS 0137.	
QUANTITIES TO BE VERIFIED PRIOR TO PLACEMENT OF ORDER. MASONRY OPENINGS TO BE VERIFIED ON SITE PRIOR TO COMMENCEMENT OF MANUFACTURE. SUPPLIER TO BE IN ACCORDANCE WITH ALL SABS AND NBR STANDARDS			



This drawing is property of Intsika Architects (Pty) Ltd. Copyright is reserved by them and the drawing is issued on the condition that it is not copied, reproduced, required or disclosed to any unauthorized person, without consent of Intsika Architects (Pty) Ltd.

GENERAL NOTES

The contractor is to keep a full set of drawings on site, contractor is responsible for the correct setting out of the building on site with reference to boundaries and building lines, contractor to verify all levels and dimensions on site and check same against architects and engineers drawings before commencing work. Figured dimensions to be used in preference to scaled dimensions, large scale details to be used where available, errors, discrepancies or omissions are to be reported to the architect immediately for clarification before work is undertaken.

These drawings are to be read in conjunction with structural engineers, civil engineers, mechanical engineer or plumbing consultant's drawings where applicable.

All work and material used to comply with SABS standards and NATIONAL BUILDING REGULATIONS ACT 103 of 1977 and amendments thereto as well as the by-laws of the relevant local authority.

All new construction HEALTH AND SAFETY Regulations to be strictly complied with.

REVISIONS

RevID	Chd	Change Name	Date

PROJECT TEAM

Principal Consultant / Architect:
INTSIKA Architects (Pty) Ltd.
Phone (+27) 043 748 2949
Cell (+27) 082 872 8748
Fax (+27) 043 748 1702
E-Mail rob@intsika.com
Web www.intsika.com

1st Floor, Leadwood House, Cedarsquare
Bonas Bay Road, Beacon Bay,
East London, 5241

Quantity Surveyors:
BISIWE VAN NIEKERK INC. Quantity Surveyors
Willem Van Niekerk Tel: 043 - 7211043
Fax: 043 - 7211239
Cell: 0824921695
E-mail: willem@bisiwe.co.za

Structural, Civil, Mechanical & Electrical Engineers:
BVI Border Engineers
Werner De Lange Tel: 043 - 7222738
Fax: 043 - 7437698
Cell: 0825780674
E-mail: WernerDL@bvi.co.za

CLIENT

TSOLO AGRICULTURE & RURAL DEVELOPMENT INSTITUTE
Private Bag X1008, Tsolo, 5170
Tel: +27 (47) 542 3700



OFFICE OF THE DIRECTOR: ENGINEERING SERVICES

PROJECT
300-SEATER EXAM HALL AT THE TSOLO AGRICULTURAL AND RURAL DEVELOPMENT INSTITUTE.

LOCATION
FARM NO: 61
Tsolo

ISSUED FOR
TENDER

DRAWING
SF 03 & 04

PROJECT NO.	253
DRAWING NO.	A.01.6.3.2
Scale:	See Drawing
Date:	10/22/2021
DRAFTING AND DESIGN TEAM	
Drawn by:	Cobus Gouws
Checked by:	Cobus Gouws

APPROVAL DRAWING
Name: J.J. Gouws SACAP No. 21345
Signed: Date:
Practice: Intsika Architects SAIA No. P13725

GENERAL NOTES

The contractor is to keep a full set of drawings on site, contractor is responsible for the correct setting out of the building on site with reference to boundaries and building lines, contractor to verify all levels and dimensions on site and check same against architect and engineers drawings before commencing work. Figure dimensions to be used in preference to scaled dimensions, large scale details to be used where available, errors, discrepancies or omissions are to be reported to the architect immediately for clarification before work is undertaken.

These drawings are to be read in conjunction with structural engineers, civil engineers, mechanical engineer or plumbing consultant's drawings where applicable.

All work and material used to comply with SABS standards and NATIONAL BUILDING REGULATIONS ACT 103 of 1977 and amendments thereto as well as the by-laws of the relevant local authority.

All new construction HEALTH AND SAFETY Regulations to be strictly complied with.

REVISIONS

RevID	ChID	Change Name	Date

PROJECT TEAM

Principal Consultant / Architect:
INTSIKA Architects (Pty) Ltd.
Phone: (+27) 043 748 2949
Cell: (+27) 082 872 8748
Fax: (+27) 043 748 1702
E-Mail: rob@intsiKa.com
Web: www.intsiKa.com

1st Floor, Leadwood House, Cedarsquare
Business Bay Road, Beacon Bay,
East London, 5241

Quantity Surveyors:
BISIWE VAN NIEKERK INC. Quantity Surveyors
Willem Van Niekerk Tel: 043 - 7211043
Fax: 043 - 7211239
Cell: 0824921695
E-mail: willem@biswiwe.co.za

Structural, Civil, Mechanical & Electrical Engineers:
BVI Border Engineers
Werner De Lange Tel: 043 - 7222738
Fax: 043 - 7437698
Cell: 0825780674
E-mail: WernerDL@bvi.co.za

CLIENT

TSOLO AGRICULTURE & RURAL DEVELOPMENT INSTITUTE
Private Bag X1008, Tsoilo, 5170
Tel: +27 (47) 542 3700



OFFICE OF THE DIRECTOR: ENGINEERING SERVICES

PROJECT
300-SEATER EXAM HALL AT THE TSOLO AGRICULTURAL AND RURAL DEVELOPMENT INSTITUTE.

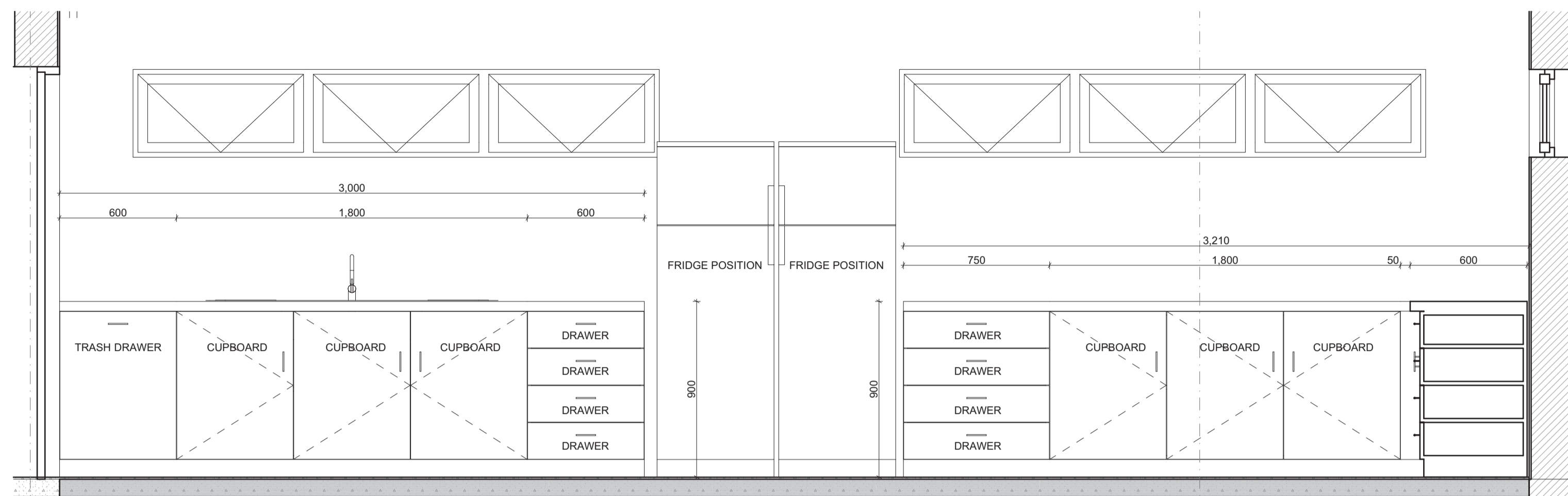
LOCATION
FARM NO: 61
Tsoilo

ISSUED FOR
TENDER

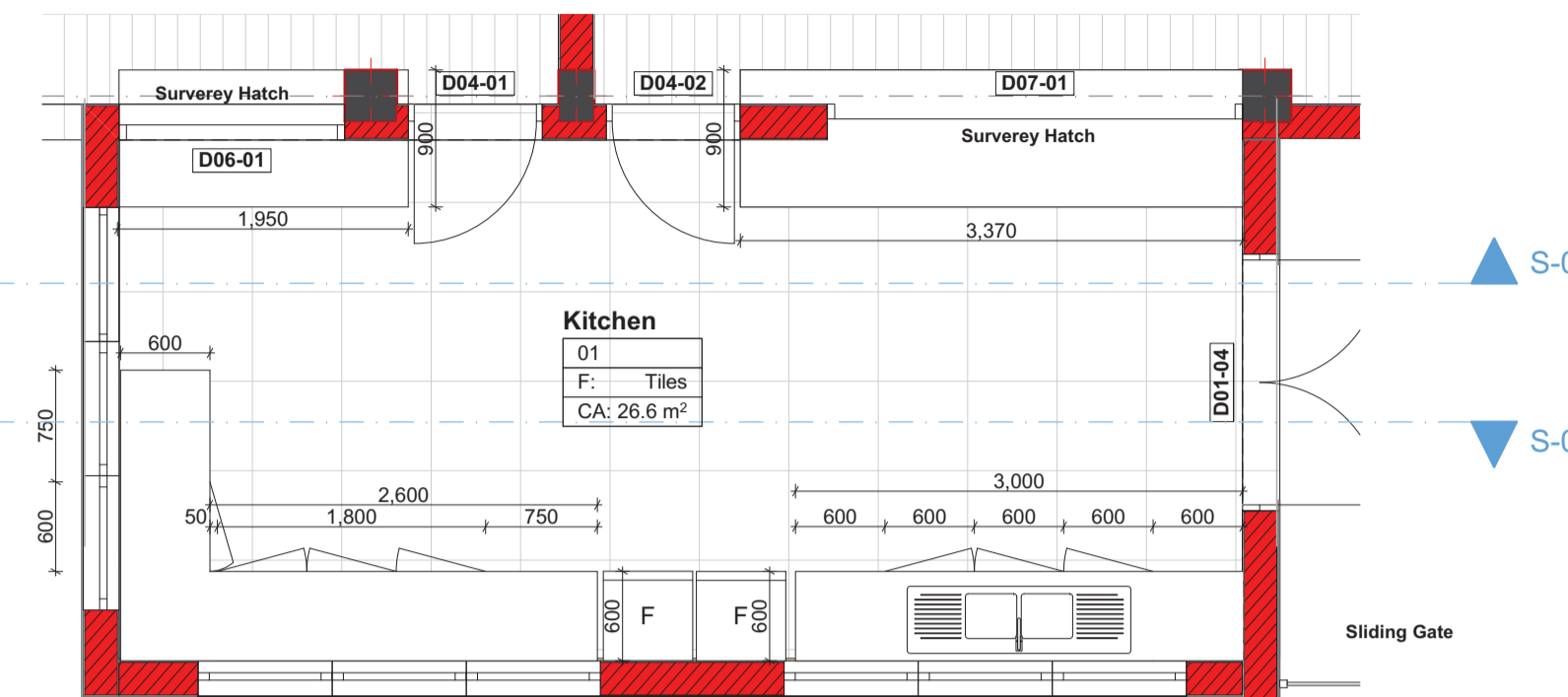
DRAWING
Kitchen Joinery Schedule

PROJECT NO.	253
DRAWING NO.	A.02.1
Scale:	See Drawing
Date:	10/22/2021
DRAFTING AND DESIGN TEAM	
Drawn by:	Cobus Gouwes
Checked by:	Cobus Gouwes

APPROVAL DRAWING
Name: J.J. Gouwes SACAP No. 21345
Signed: _____ Date: _____
Practice: IntsiKa Architects SAIA No. P13725



S-06 Building Section 1:20



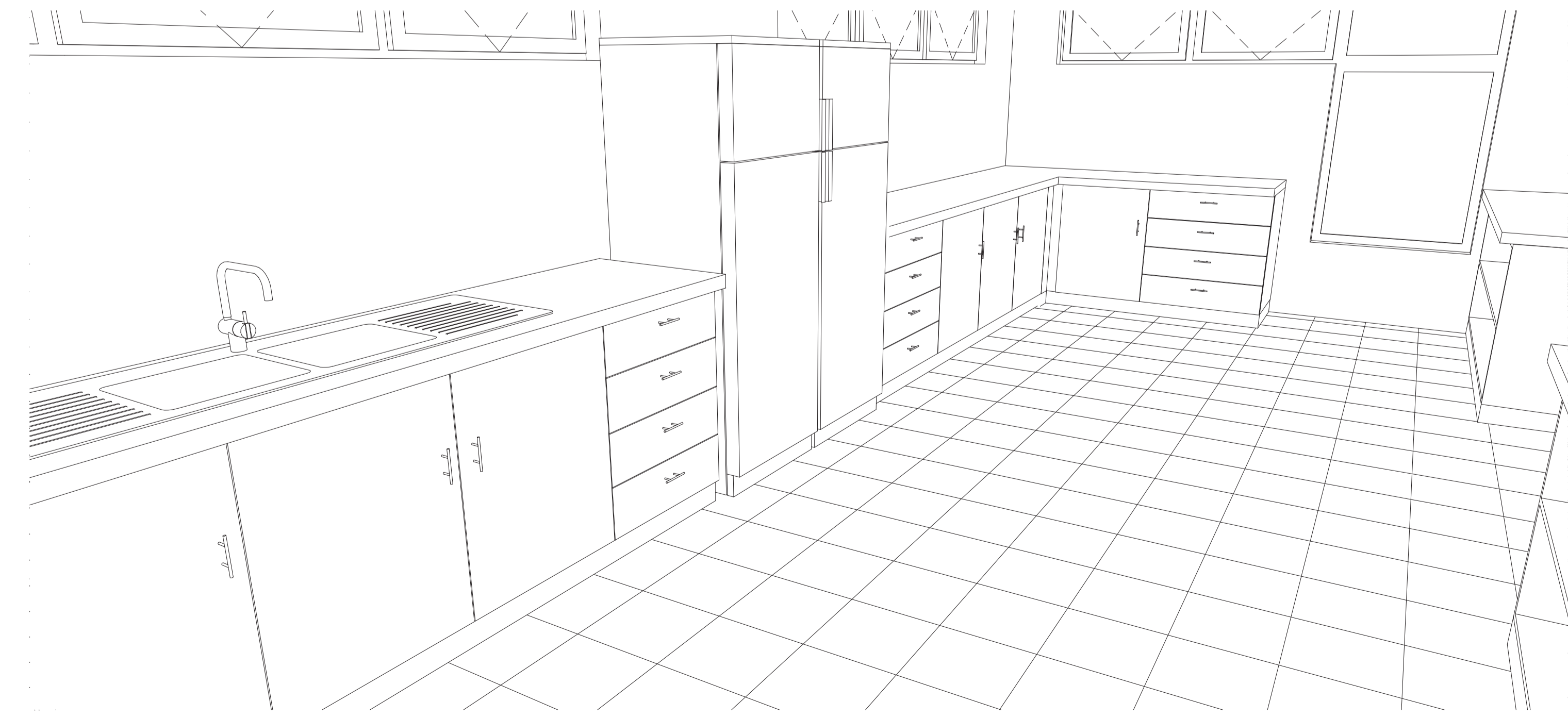
D-01 Detail 1:50

Joinery Specifications

- Kitchen Tops**
32mm Rustenburg Granite fixed with silicone and polished edges
- Faces of Cupboards & Drawers**
PG Bison 16mm thick MelaWood® in Verzasca Oak™Linear™, manufactured in accordance with SANS 1763:1998, constructed using 1830mm wide BisonBord® boards in accordance with the approved shop drawings.
• 2mm Heavy duty impact edging
- Carcasses**
PG Bison 16mm thick MelaWood® in Folkstone Grey™Peen™, manufactured in accordance with SANS 1763:1998, constructed using 1830mm wide BisonBord® boards in accordance with the approved shop drawings.
- Kick Plate**
100x 20mm Meranti Kickplate with 1mm Brushed Stainless steel 204 cover.
- Hinges**
GRASS® Nexis Click-on 110° opening angle screw-in hinge in nickel plated finish (Item No: 146.322.53.0815) with 2D-cross mounting plate with 2 point fixing (Item No: 314.493.71.0215) and plain hinge cover cap, fixed with 3,5 x 15mm nickel plated chipboard screws including Soft Close closing mechanism (Item No: 924.200.40.0215).
- Drawer Runners**
500mm Heavy Duty bearing drawer runners with soft closers.
- Handles**
170mm Brushed Satin Nickel bar handle SKU# 8373



S-07 Building Section 1:20



3D-03 Perspective

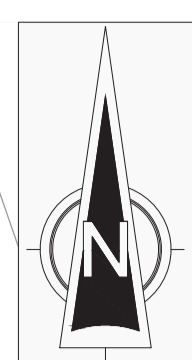
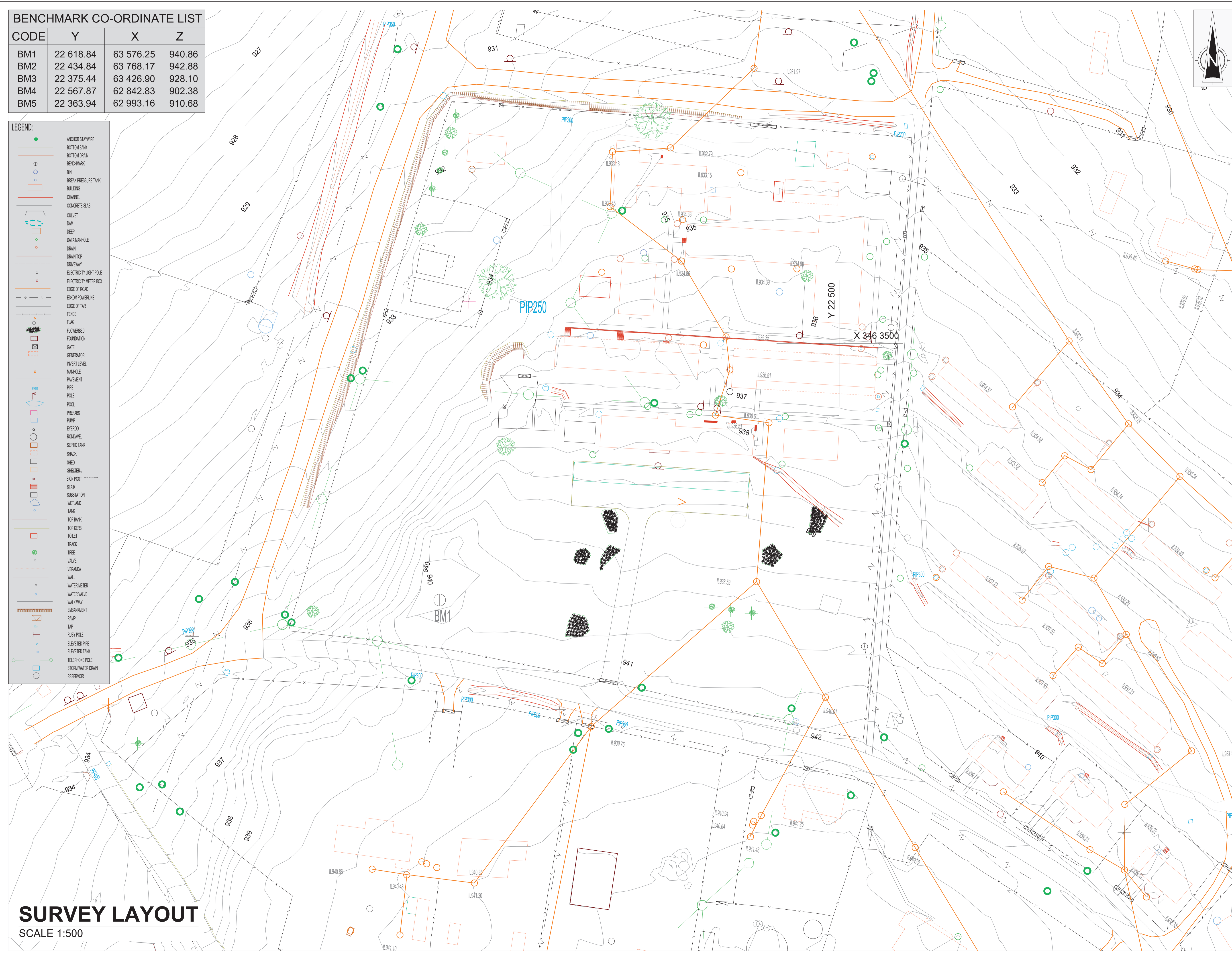
BENCHMARK CO-ORDINATE LIST

CODE	Y	X	Z
BM1	22 618.84	63 576.25	940.86
BM2	22 434.84	63 768.17	942.88
BM3	22 375.44	63 426.90	928.10
BM4	22 567.87	62 842.83	902.38
BM5	22 363.94	62 993.16	910.68

LEGEND:

- ANCHOR STAYWIRE
- BOTTOM BANK
- BOTTOM DRAIN
- BENCHMARK
- BIN
- BREAK PRESSURE TANK
- BUILDING
- CHANNEL
- CONCRETE SLAB
- CULVERT
- DAM
- DEEP
- DATA MANHOLE
- DRAIN
- DRAIN TOP
- DRIVEWAY
- ELECTRICITY LIGHT POLE
- ELECTRICITY METER BOX
- EDGE OF ROAD
- ESKOM POWERLINE
- EDGE OF FAR
- FENCE
- FLAG
- FLOWERBED
- FOUNDATION
- GATE
- GENERATOR
- INVERT LEVEL
- MANHOLE
- PAVEMENT
- PIPE
- POLE
- POOL
- PREFABS
- PUMP
- EYEROD
- RONDVEL
- SEPTIC TANK
- SHACK
- SHED
- SHELTER
- SIGN POST
- STAR
- SUBSTATION
- WETLAND
- TANK
- TOP BANK
- TOP KERB
- TOILET
- TRACK
- TREE
- VALVE
- VERANDA
- WALL
- WATER METER
- WATER VALVE
- WALK WAY
- EMBANKMENT
- RAMP
- TAP
- RUBBISH POLE
- ELEVATED PIPE
- ELEVATED TANK
- TELEPHONE POLE
- STORM WATER DRAIN
- RESERVOIR

SURVEY LAYOUT
SCALE 1:500



**ENGINEERING
PROCUREMENT
MANAGEMENT**

This drawing is property of BVI Consulting Engineers (Pty) Ltd. Copyright is reserved by them and the drawing is issued on the condition that it is not copied, reproduced, retained or disclosed to any unauthorised person, without the consent of BVI Consulting Engineers (Pty) Ltd.

GENERAL NOTES

The contractor is to keep a full set of drawings on site. Contractor is responsible for the correct setting out of the building on site with reference to boundaries and building lines, contractor to verify all levels and dimensions on site and check same against architect and engineers drawings before commencing work. Figure dimensions to be used in preference to scaled dimensions. Large scale details to be used where available. Errors, discrepancies or omissions are to be reported to the architect immediately for clarification before work is undertaken.

These drawings are to be read in conjunction with structural engineers, civil engineers, mechanical engineers or planning consultants' drawings where specified.

All work and material used to comply with SABS standards and NATIONAL BUILDING REGULATIONS SANS 10400 and amendments thereto as well as the by-laws of the relevant local authority.

All new construction HEALTH AND SAFETY Regulations to be strictly complied with.

REVISIONS

REV.	DATE	DESCRIPTION	BY
T	09/21	FIRST ISSUE FOR TENDER	M.S

PROJECT TEAM

Principal Agent / Architect:
INTSIKA Architects (Pty) Ltd.

2nd Floor The Ridge, 3 Bera Terrace Bera
East London, 5201
043 - 725 7766
Rob Gillard - 082 872 8748
rob@intsika.com

Quantity Surveyors:
BISIWE VAN NIEKERK INC. Quantity Surveyors

Willem Van Niekerk
Tel: 043 - 7211043
Fax: 043 - 7211239
Cell: 0824921695
willem@biswise.co.za

Civil Engineers:
BVI BORDER

1st Floor, Esprit House, St Helena Drive
East London, 5241
043 - 722 2738
Werner de Lange - 082 578 0674
Werner@bvi.co.za

CLIENT

TSOLO AGRICULTURE & RURAL DEVELOPMENT INSTITUTE.
Private Bag X1008,
Tsoelo, 5170
Tel: 047 - 542 3700



PROJECT

300 SEATER EXAM HALL AT THE
TSOLO AGRICULTURAL &
RURAL DEVELOPMENT INSTITUTE.

LOCATION

FARM NO: 61
TSOLO

ISSUED FOR

MUNICIPAL SUBMISSION

DRAWING

SURVEY LAYOUT

PROJECT NO.	34435
DRAWING NO.	34435-CIV-0
Scale:	1:500
Date:	26/08/2021
DRAFTING AND DESIGN TEAM	
Designed by:	M.A. STEYN
Drawn by:	J.A. JONKER
Checked by:	W. DE LANGE
APPROVAL DRAWING	
Name:	M. STEYN
Signed:	Date:
Practice: BVI BORDER	

GENERAL NOTES

The contractor is to keep a full set of drawings on site. Contractor is responsible for the correct setting out of the building on site with reference to boundaries and building lines. Contractor to verify all levels and dimensions on site and check same against architects and engineers drawings before commencing work. Figure dimensions to be used in preference to scaled dimensions. Large scale details to be used where available. Errors, discrepancies or omissions are to be reported to the architect immediately for clarification before work is undertaken.

These drawings are to be read in conjunction with structural engineers, civil engineers, mechanical engineers or planning consultants' drawings where specified.

All work and material used to comply with SABS standards and NATIONAL BUILDING REGULATIONS SABS 10400 and amendments thereto as well as the by-laws of the relevant local authority.

All new construction HEALTH AND SAFETY Regulations to be strictly complied with.

BENCHMARK CO-ORDINATE LIST			
CODE	Y	X	Z
BM1	22 618.84	34 63576.25	940.86
BM2	22 434.84	34 63768.17	942.88
BM3	22 375.44	34 63426.90	928.10
BM4	22 567.87	34 62842.83	902.38
BM5	22 363.94	34 62993.16	910.68

REVISIONS

REV.	DATE	DESCRIPTION	BY
T	09/21	FIRST ISSUE FOR TENDER	M.S

PROJECT TEAM

Principal Agent / Architect:
INTSIKA Architects (Pty) Ltd.

INTSIKA
Architects
2nd Floor The Ridge, 3 Bera Terrace Bera
East London, 5201
043 - 726 7766
Rob Gillard - 082 872 8748
rob@intsiika.com

Quantity Surveyors:

BISIWE VAN NIEKERK INC. Quantity Surveyors

BISIWE VAN NIEKERK INC.
Quantity Surveyors & Project Managers

Willem Van Niekerk
Tel: 043 - 7211043
Fax: 043 - 7211239
Cell: 0824921695
willem@bisiwe.co.za

Civil Engineers:

BVI BORDER

bvi
ENGINEERING
PROCUREMENT
MANAGEMENT

1st Floor, Esprit House, St Helena Drive
East London, 5241
043 - 722 2738
Werner de Lange - 082 578 0674
Werner.d@bvi.co.za

CLIENT

TSOLO AGRICULTURE & RURAL DEVELOPMENT INSTITUTE:

Private Bag X1008,
Tsoelo, 5170
Tel: 047 - 542 3700

rural development & agrarian reform
Department:
Rural Development & Agrarian Reform
PROVINCE OF THE EASTERN CAPE

PROJECT

300 SEATER EXAM HALL AT THE
TSOLO AGRICULTURAL &
RURAL DEVELOPMENT INSTITUTE.

LOCATION

FARM NO: 61
TSOLO

ISSUED FOR

MUNICIPAL SUBMISSION

DRAWING

CIVIL SERVICES LAYOUT

PROJECT NO. 34435
DRAWING NO. 34435-CIV-1
Scale: 1:200
Date: 26/08/2021

DRAFTING AND DESIGN TEAM

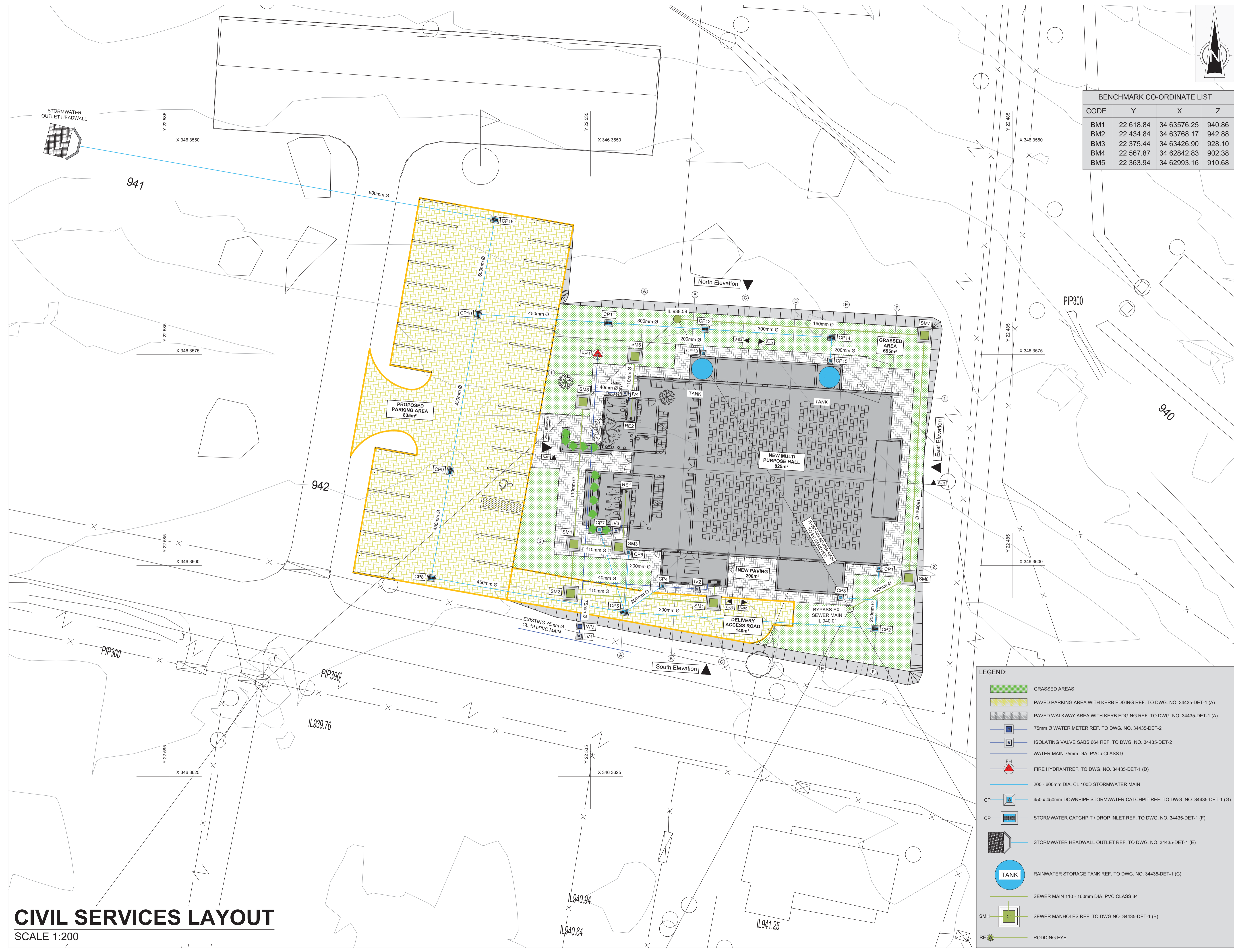
Designed by: M.A. STEYN
Drawn by: J.A. JONKER
Checked by: W.D. LANGE

APPROVAL DRAWING

Name: M. STEYN

Signed: _____ Date: _____

Practice: BVI BORDER



LEGEND:

	GRASSED AREAS
	PAVED PARKING AREA WITH KERB EDGING REF. TO DWG. NO. 34435-DET-1 (A)
	PAVED WALKWAY AREA WITH KERB EDGING REF. TO DWG. NO. 34435-DET-1 (A)
	75mm Ø WATER METER REF. TO DWG. NO. 34435-DET-2
	ISOLATING VALVE SABS 664 REF. TO DWG. NO. 34435-DET-2
	WATER MAIN 75mm DIA. PVCu CLASS 9
	FIRE HYDRANTREF. TO DWG. NO. 34435-DET-1 (D)
	200 - 600mm DIA. CL 100D STORMWATER MAIN
	450 x 450mm DOWNPIPE STORMWATER CATCHPIT REF. TO DWG. NO. 34435-DET-1 (G)
	STORMWATER CATCHPIT / DROP INLET REF. TO DWG. NO. 34435-DET-1 (F)
	STORMWATER HEADWALL OUTLET REF. TO DWG. NO. 34435-DET-1 (E)
	RAINWATER STORAGE TANK REF. TO DWG. NO. 34435-DET-1 (C)
	SEWER MAIN 110 - 160mm DIA. PVC CLASS 34
	SEWER MANHOLES REF. TO DWG. NO. 34435-DET-1 (B)
	RODDING EYE

CIVIL SERVICES LAYOUT

SCALE 1:200

GENERAL NOTES

The contractor is to keep a full set of drawings on site. Contractor is responsible for the correct setting out of the building on site with reference to boundaries and building lines, contractor to verify all levels and dimensions on site and check same against architects and engineers drawings before commencing work. Figure dimensions to be used in preference to scaled dimensions. Large scale details to be used where available. Errors, discrepancies or omissions are to be reported to the architect immediately for clarification before work is undertaken.

These drawings are to be read in conjunction with structural engineers, civil engineers, mechanical engineers or planning consultants' drawings where specified.

All work and material used to comply with SABS standards and NATIONAL BUILDING REGULATIONS SANS 10400 and amendments thereto as well as the by-laws of the relevant local authority.

All new construction HEALTH AND SAFETY Regulations to be strictly complied with.

REVISIONS

REV.	DATE	DESCRIPTION	BY
T	09/21	FIRST ISSUE FOR TENDER	M.S.

BENCHMARK CO-ORDINATES			
CODE	Y	X	Z
BM1	22 618.84	34 63576.25	940.86
BM2	22 434.84	34 63768.17	942.88
BM3	22 375.44	34 63426.90	928.10
BM4	22 567.87	34 62842.83	902.38
BM5	22 363.94	34 62993.16	910.68

PLATFORM SETTING OUT CO-ORDINATES			
CODE	Y	X	Z
P1	22 544.950	34 63604.058	940.530
P2	22 497.131	34 63612.571	940.530
P3	22 494.464	34 63571.886	940.130
P4	22 538.706	34 63568.986	940.130

PROJECT TEAM

Principal Agent / Architect:
INTSIKA Architects (Pty) Ltd.

2nd Floor The Ridge, 3 Bera Terrace Bera
East London, 5201
043 - 726 7766
Rob Gillard - 082 872 8748
rob@intsika.com

Quantity Surveyors:
BISIWE VAN NIEKERK INC. Quantity Surveyors

BISIWE VAN NIEKERK INC.
Quantity Surveyors & Project Managers
Willem Van Niekerk
Tel: 043 - 721 1043
Fax: 043 - 721 1239
Cell: 0824921695
willem@biswe.co.za

Civil Engineers:
BVI BORDER

1st Floor, Esprit House, St Helena Drive
East London, 5241
043 - 722 2738
Werner de Lange - 082 578 0674
Werner.d@bvi.co.za

CLIENT

TSOLO AGRICULTURE & RURAL DEVELOPMENT INSTITUTE.
Private Bag X1008,
Tsoelo, 5170
Tel: 047 - 542 3700

rural development & agrarian reform
Department:
Rural Development & Agrarian Reform
PROVINCE OF THE EASTERN CAPE

PROJECT

300 SEATER EXAM HALL AT THE
TSOLO AGRICULTURAL &
RURAL DEVELOPMENT INSTITUTE.

LOCATION

FARM NO: 61
TSOLO

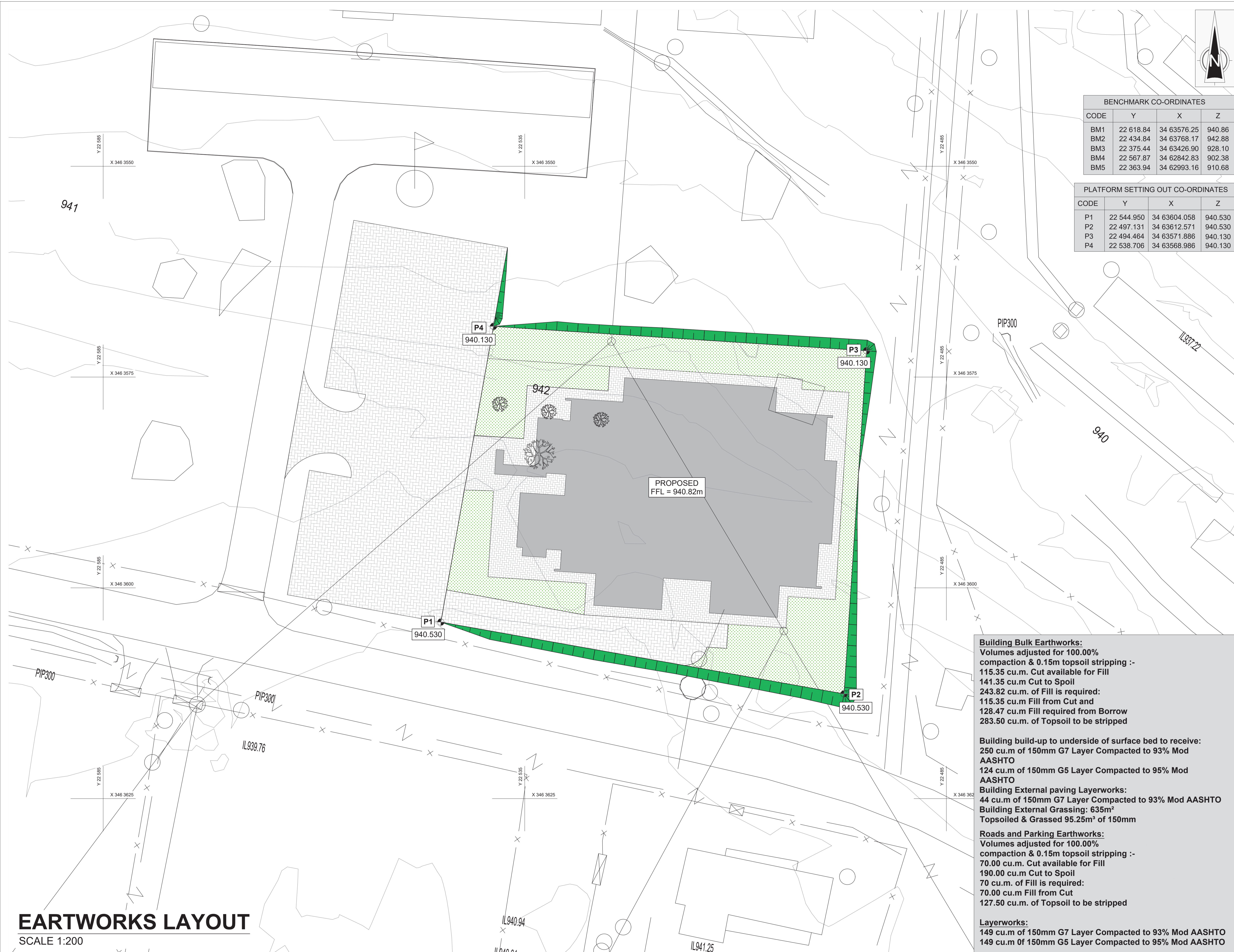
ISSUED FOR

MUNICIPAL SUBMISSION

DRAWING

EARTHWORKS LAYOUT

PROJECT NO.	34435
DRAWING NO.	34435-CIV-2
Scale:	1:200
Date:	26/08/2021
DRAFTING AND DESIGN TEAM	
Designed by:	M.A. STEYN
Drawn by:	J.A. JONKER
Checked by:	W.D. LANGE
APPROVAL DRAWING	
Name:	M. STEYN
Signed:	Date:
Practice: BVI BORDER	



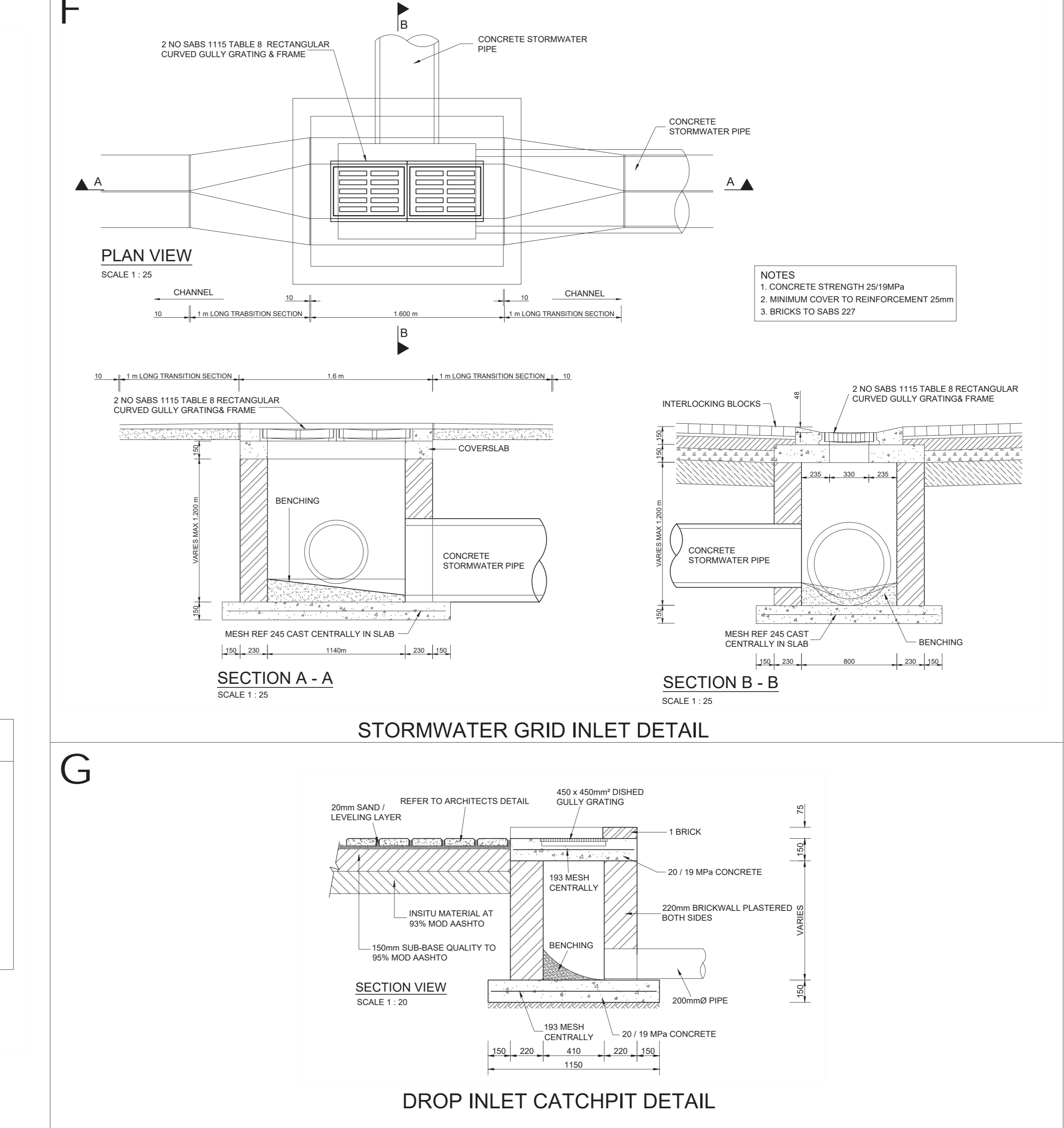
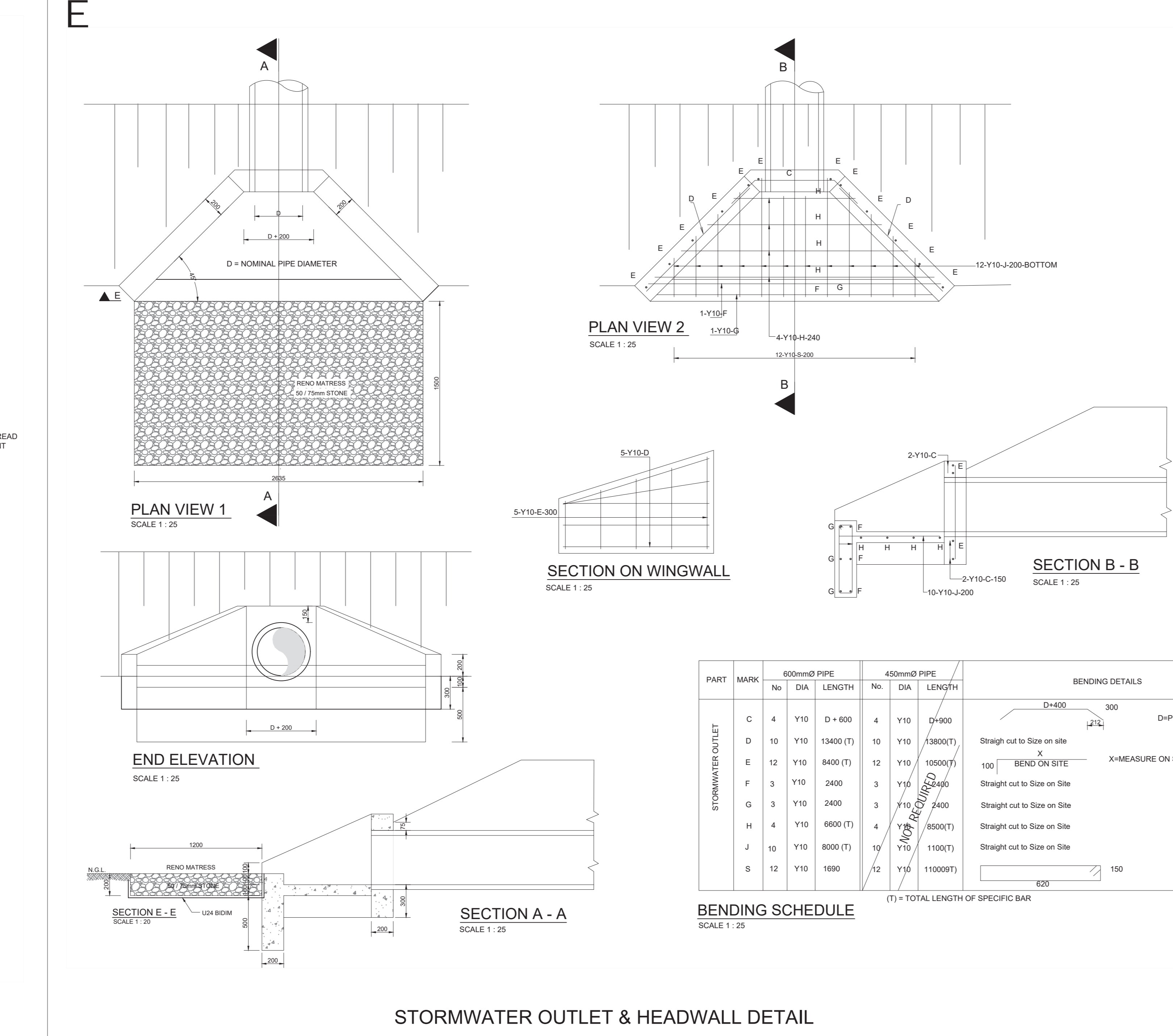
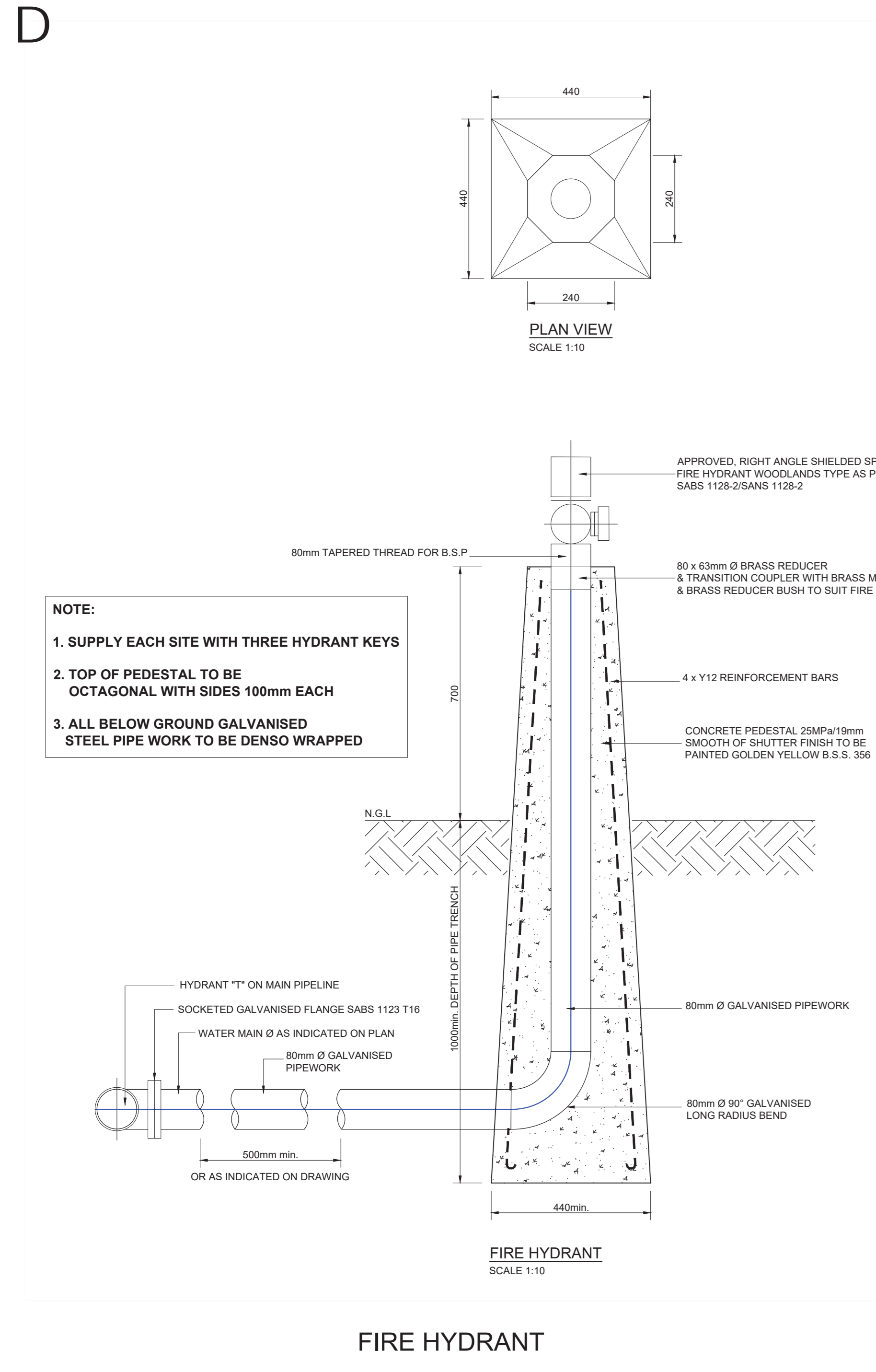
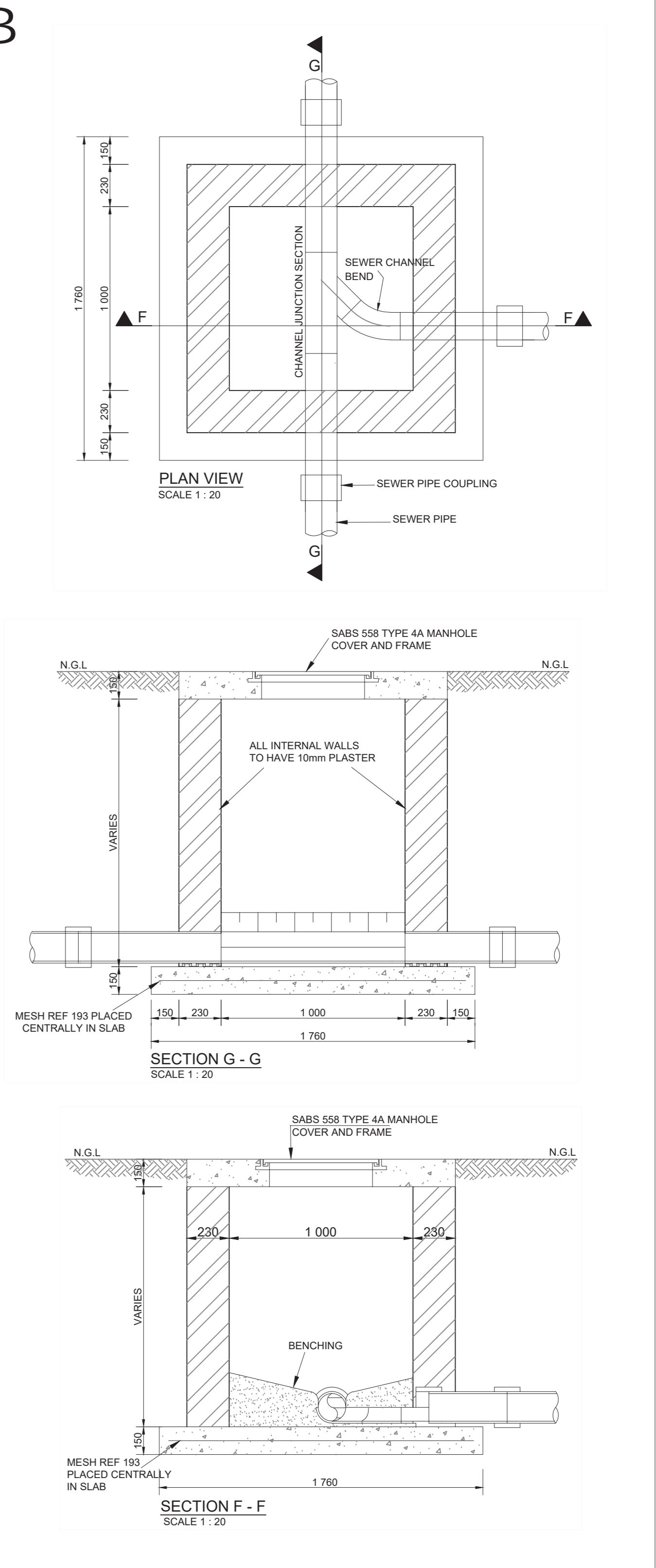
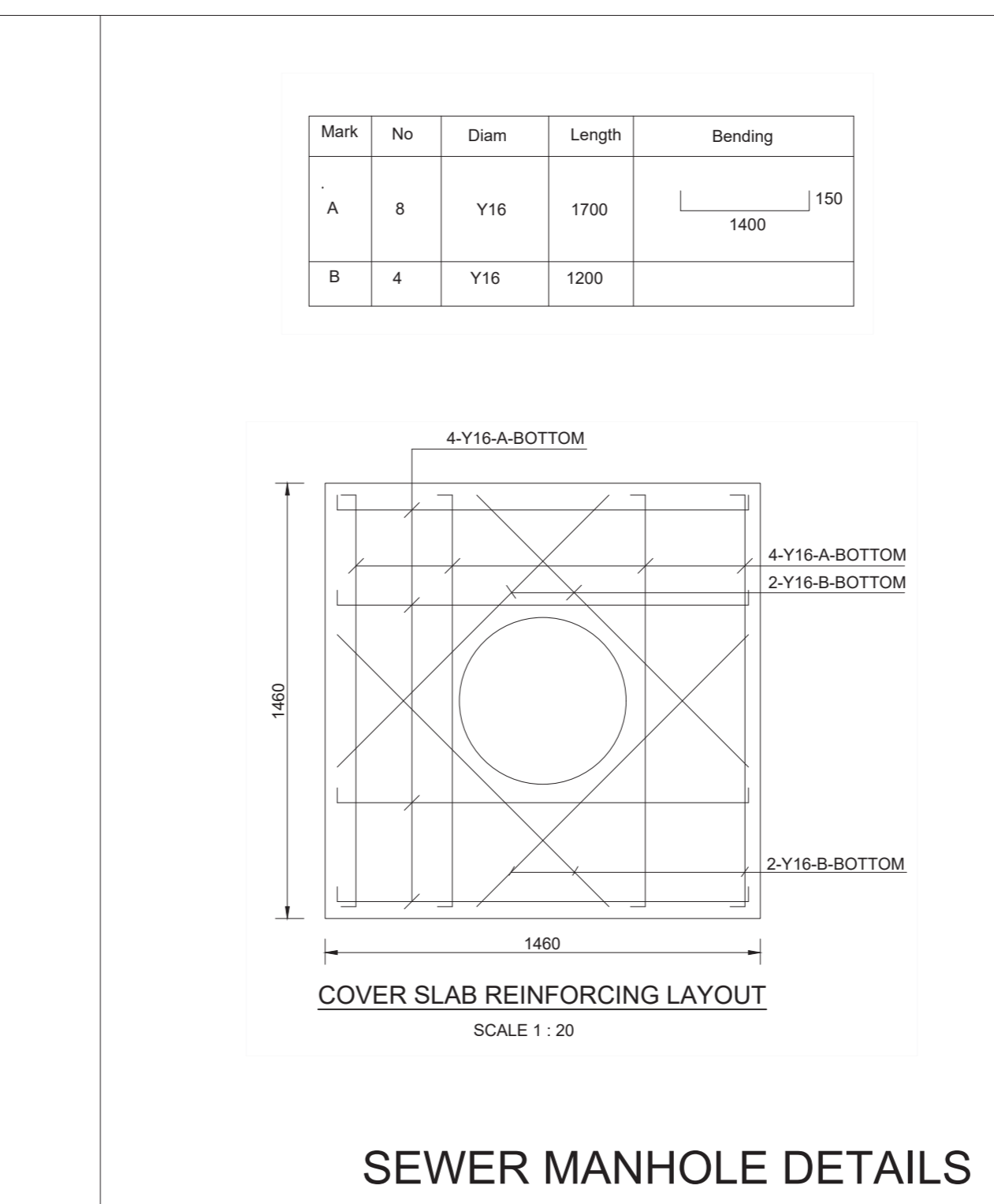
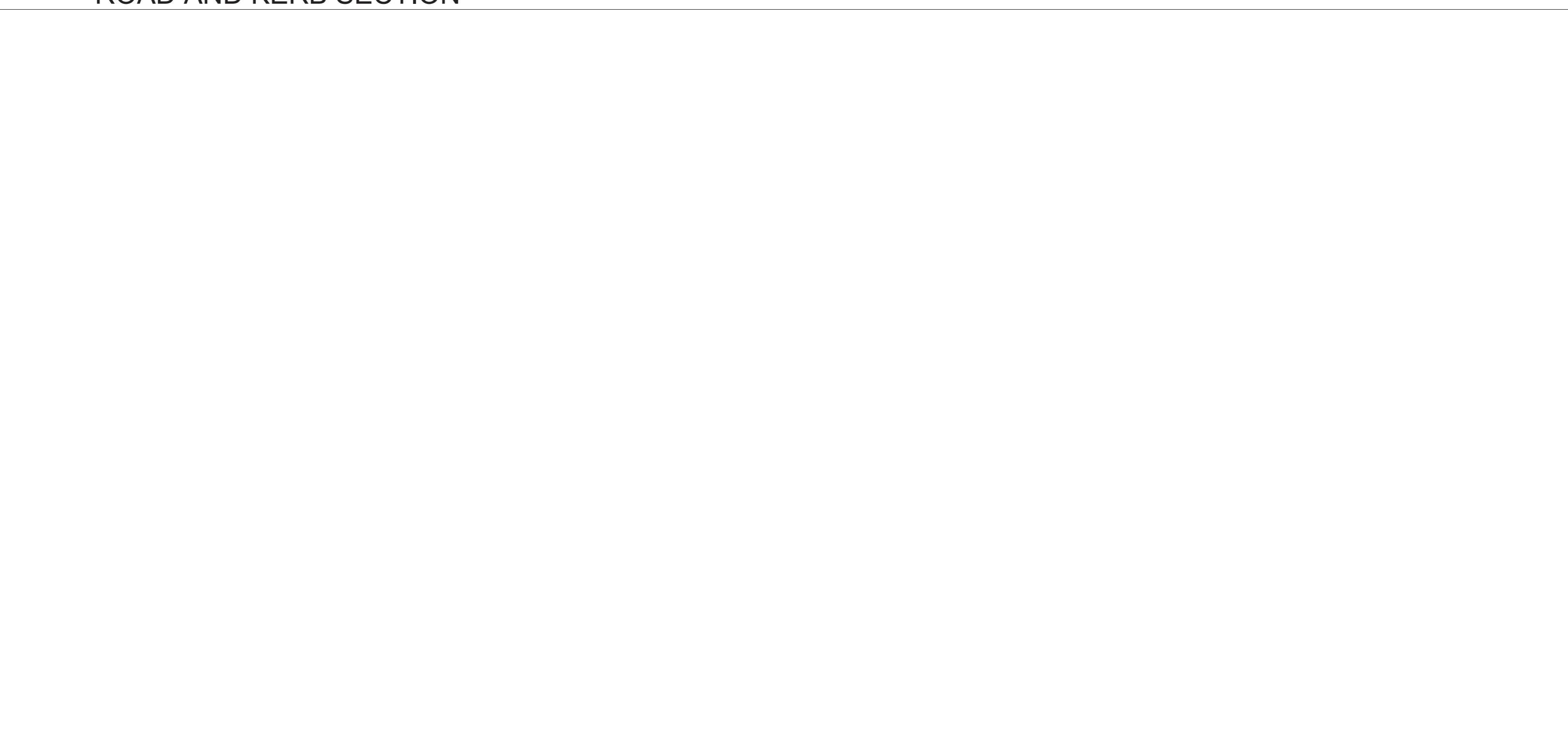
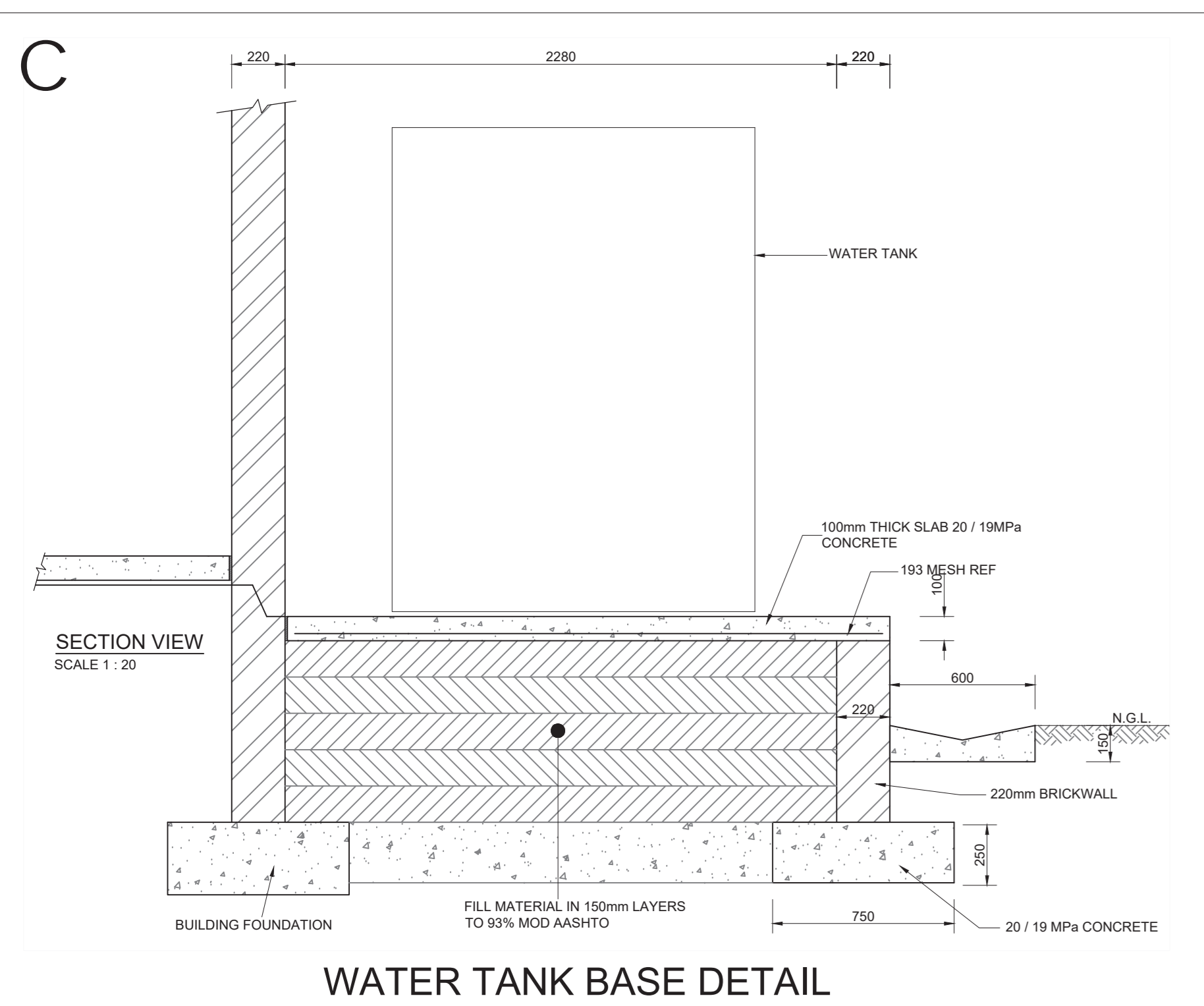
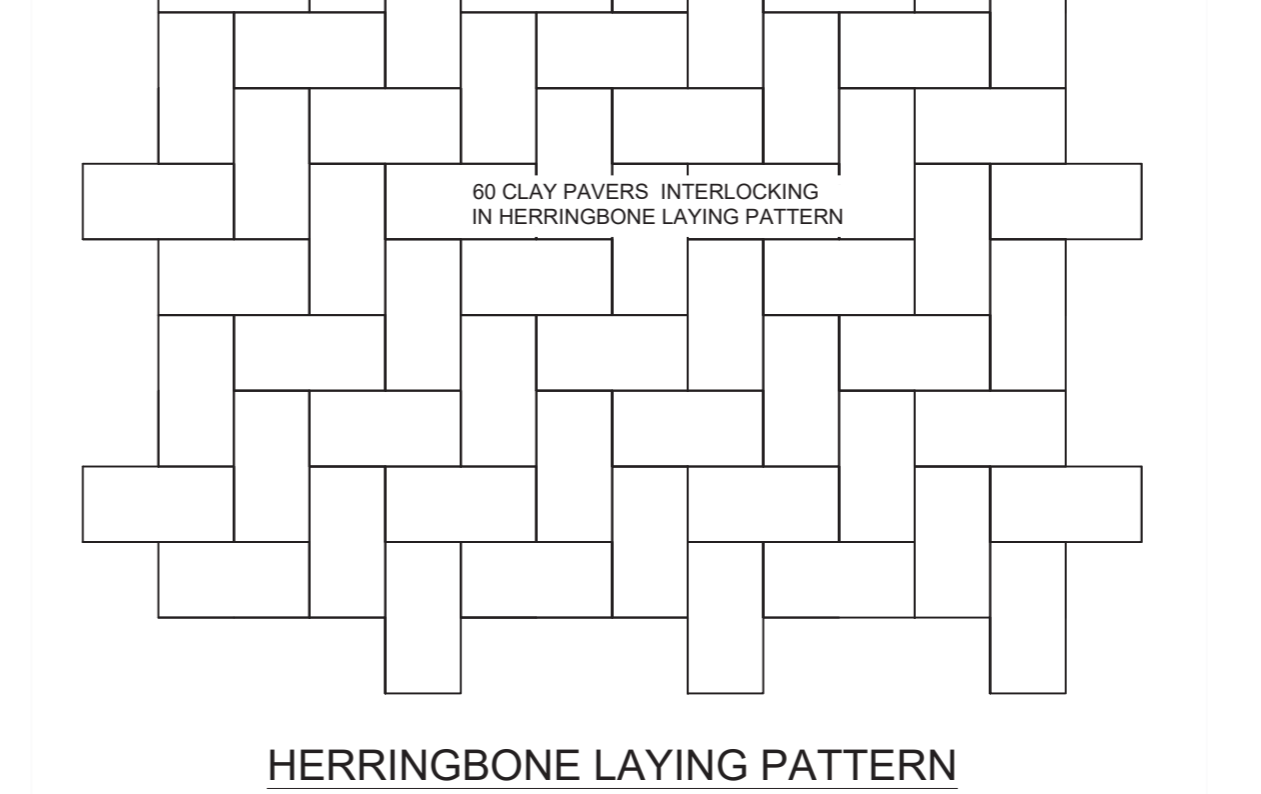
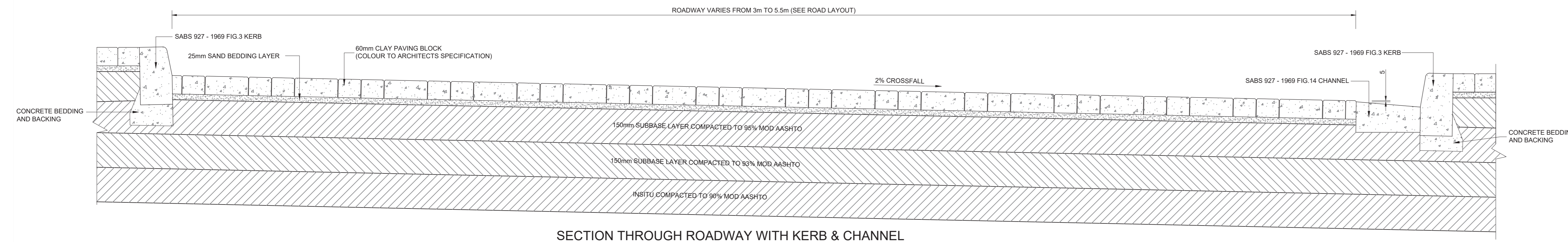
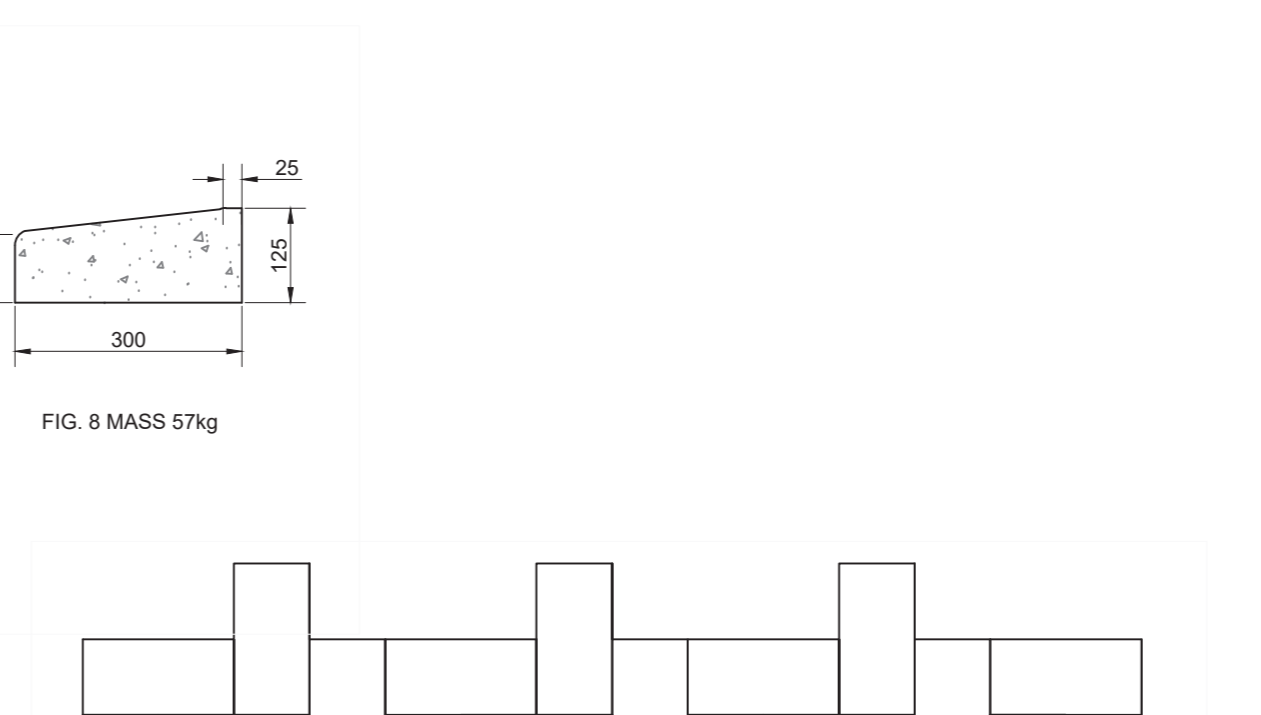
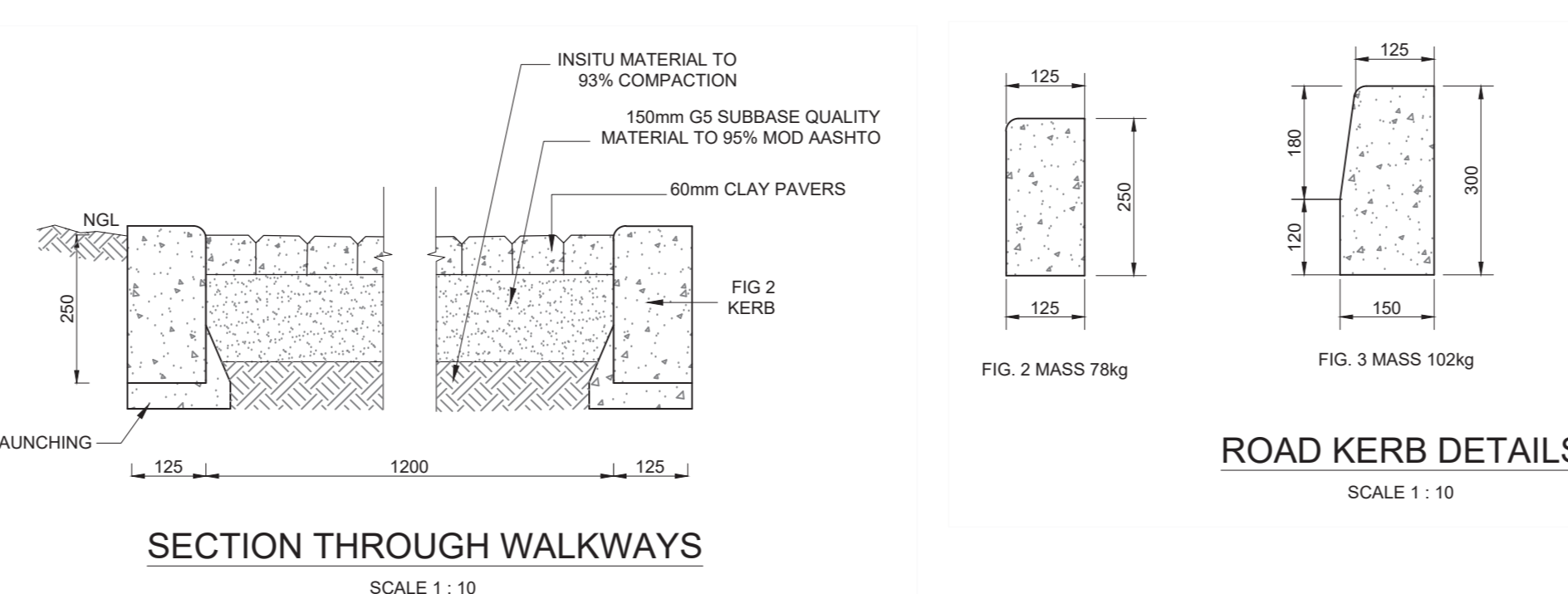
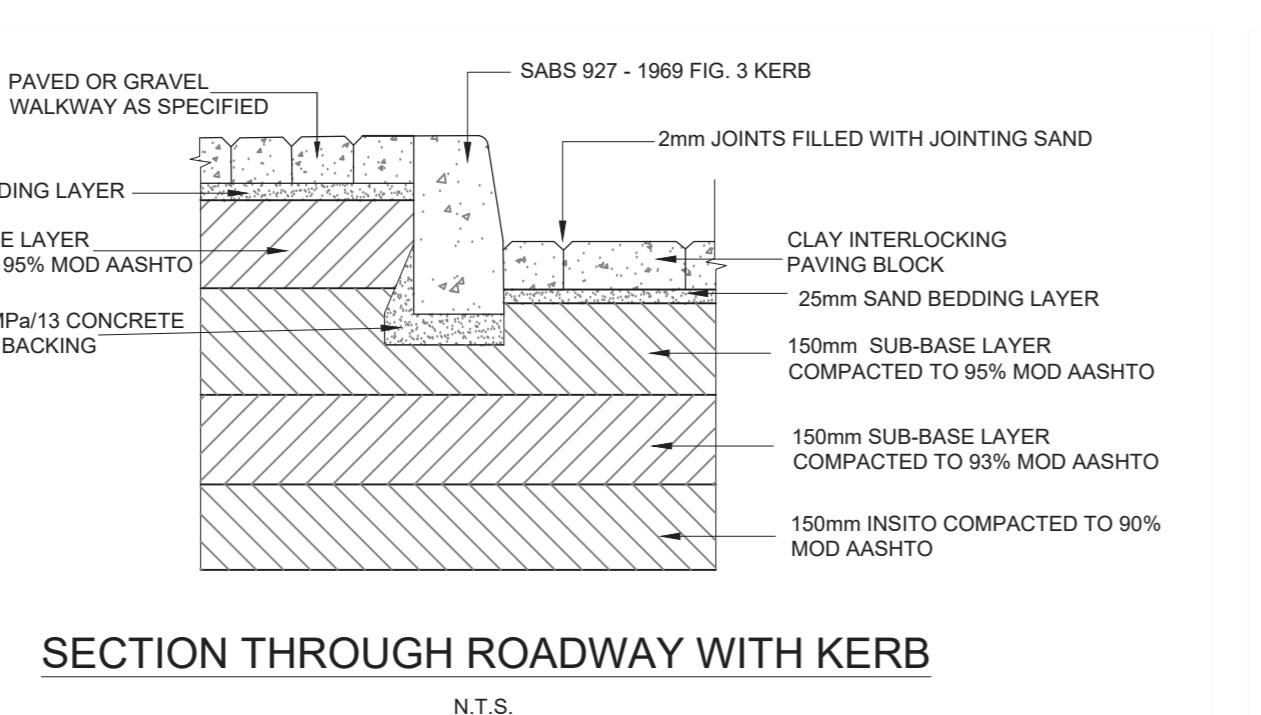
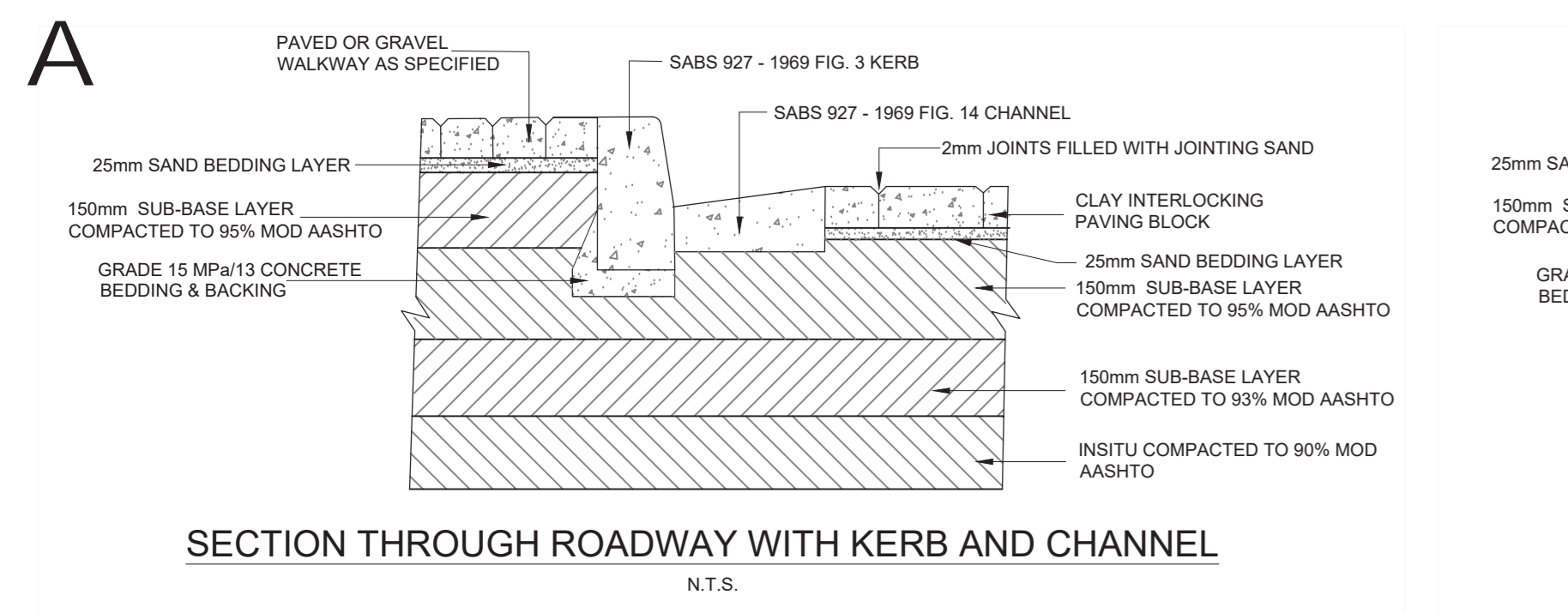
Building Bulk Earthworks:
Volumes adjusted for 100.00% compaction & 0.15m topsoil stripping :-
115.35 cu.m. Cut available for Fill
141.35 cu.m Cut to Spoil
243.82 cu.m. of Fill is required:
115.35 cu.m Fill from Cut and
128.47 cu.m Fill required from Borrow
283.50 cu.m. of Topsoil to be stripped

Building build-up to underside of surface bed to receive:
250 cu.m of 150mm G7 Layer Compacted to 93% Mod AASHTO
124 cu.m of 150mm G5 Layer Compacted to 95% Mod AASHTO
Building External paving Layerworks:
44 cu.m of 150mm G7 Layer Compacted to 93% Mod AASHTO
Building External Grassing: 635m²
Topsoiled & Grassed 95.25m³ of 150mm

Roads and Parking Earthworks:
Volumes adjusted for 100.00% compaction & 0.15m topsoil stripping :-
70.00 cu.m. Cut available for Fill
190.00 cu.m Cut to Spoil
70 cu.m. of Fill is required:
70.00 cu.m Fill from Cut
127.50 cu.m. of Topsoil to be stripped

Layerworks:
149 cu.m of 150mm G7 Layer Compacted to 93% Mod AASHTO
149 cu.m of 150mm G5 Layer Compacted to 95% Mod AASHTO

EARTWORKS LAYOUT
SCALE 1:200



BENDING SCHEDULE
SCALE 1:25

PART	MARK	600mm Ø PIPE		450mm Ø PIPE		BENDING DETAILS
		No	LENGTH	No	LENGTH	
STORMWATER OUTLET	C	4	Y10 D=600	4	Y10 D=450	Straight out to Size on Site
	D	10	Y10 13400 (T)	10	Y10 13800 (T)	
	E	12	Y10 8400 (T)	12	Y10 10500 (T)	100 BEND ON SITE X X=MEASURE ON SITE
	F	3	Y10 2400	3	Y10 2400	
	G	3	Y10 2400	3	Y10 2400	Straight out to Size on Site
	H	4	Y10 6800 (T)	4	Y10 8000 (T)	
	J	10	Y10 8000 (T)	10	Y10 11000 (T)	Straight out to Size on Site
	S	12	Y10 1600	12	Y10 11000 (T)	

(T) - TOTAL LENGTH OF SPECIFIC BAR

GENERAL NOTES
 This drawing is property of BVI Consulting Engineers (Pty) Ltd. Copyright is reserved by them and the drawing is issued on the condition that it is not copied, reproduced, retained or distributed in any unauthorised manner without the written consent of BVI Consulting Engineers (Pty) Ltd.

The contractor is to keep a full set of drawings on site, contractor is responsible for the correct setting out of the building on site with reference to boundaries and building lines, contractor to verify all levels and dimensions on site and check same against architects and engineers drawings before commencing work. Figures and dimensions to be used in preference to scaled dimensions, large scale details to be used where available, errors, discrepancies or omissions are to be reported to the architect immediately for clarification before work is undertaken.

These drawings are to be read in conjunction with structural engineers, civil engineers, mechanical engineers or plumbing consultant's drawings where specified.

All work and material used to comply with SABS standards and NATIONAL BUILDING REGULATIONS SABS 1500 and amendments thereto as well as by law of the relevant local authority.

All new construction HEALTH AND SAFETY Regulations to be strictly complied with.

REVISIONS

REV.	DATE	DESCRIPTION	BY
T	09/21	FIRST ISSUE FOR TENDER	M.S.

PROJECT TEAM

Principal Agent / Architect:
INTSISKA Architects (Pty) Ltd.
 2nd Floor The Ridge, 3 Berea Terrace Berea East London, 5201
 043 - 726 7788
 Rob Gilman - 082 872 8748
 rob@intsika.com

Quantity Surveyors:
BISIWE VAN NIEKERK INC.
 Quantity Surveyors & Project Managers
 Willem Van Niekerk
 Tel: 043 - 7211043
 Fax: 043 - 7211239
 Cell: 08249221695
 willem@bisuwe.co.za

Civil Engineers:
BVI BORDER
 1st Floor, Esprit House, St Helena Drive East London, 5241
 043 - 722 2738
 Werner de Lange - 082 578 0674
 WernerDL@bvi.co.za

CLIENT
TSOLO AGRICULTURE & RURAL DEVELOPMENT INSTITUTE:
 Private Bag X1008, Tsoelo, 5170
 Tel: 047 - 542 3700

rural development & agrarian reform
 Department: Rural Development & Agrarian Reform
 PROVINCE OF THE EASTERN CAPE

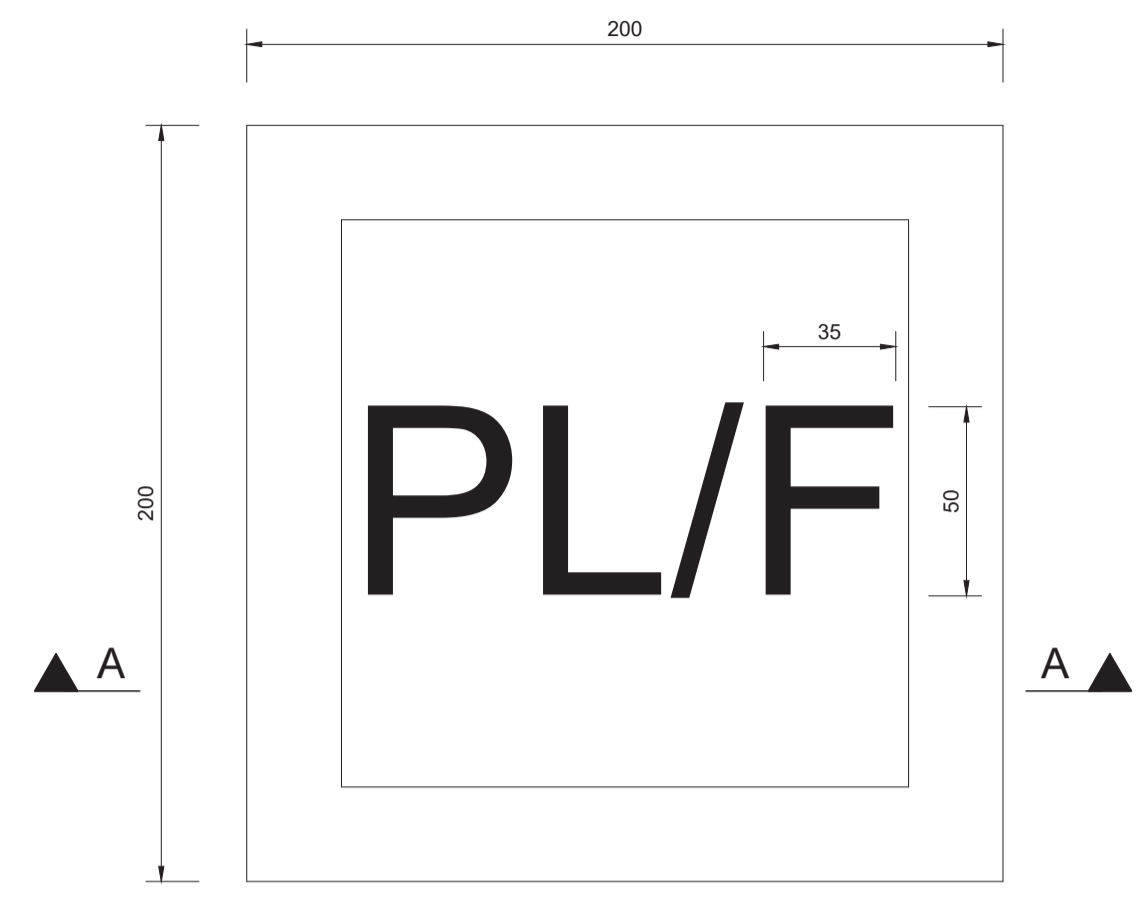
PROJECT
 300 SEATER EXAM HALL AT THE
 TSOLO AGRICULTURAL &
 RURAL DEVELOPMENT INSTITUTE.

LOCATION
 FARM NO: 61
 TSOLO

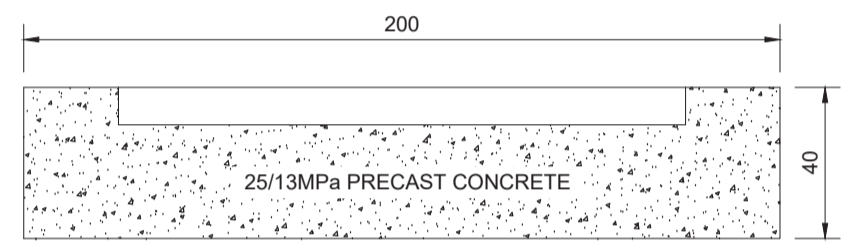
ISSUED FOR
MUNICIPAL SUBMISSION

DRAWING
STANDARD DETAILS

PROJECT NO.	34435
DRAWING NO.	34435-DET-1
Scale:	AS SHOWN
Date:	25/08/2021
DRAFTING AND DESIGN TEAM	
Designed by:	M.A. STEYN
Drawn by:	J.A. JONKER
Checked by:	W.D. LANGE
APPROVAL DRAWING	
Name:	M. STEYN
Signed:	Date:
Practice:	BVI BORDER

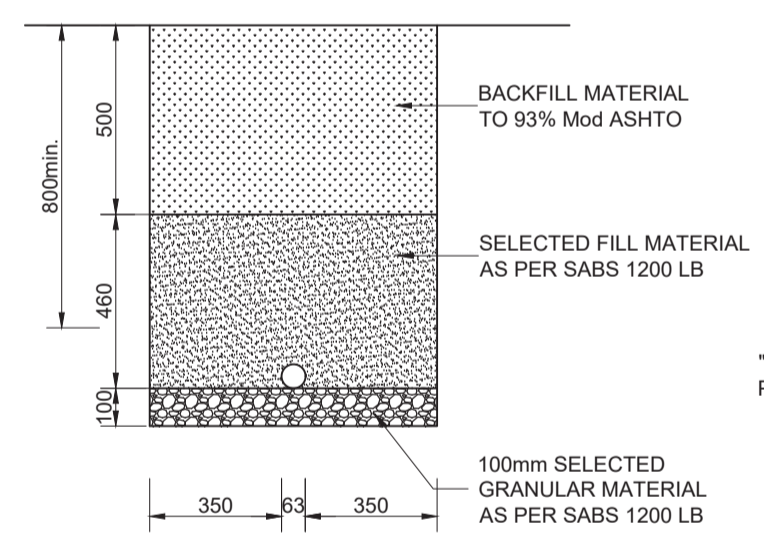


PLAN & LETTERING DETAIL
SCALE 1:2

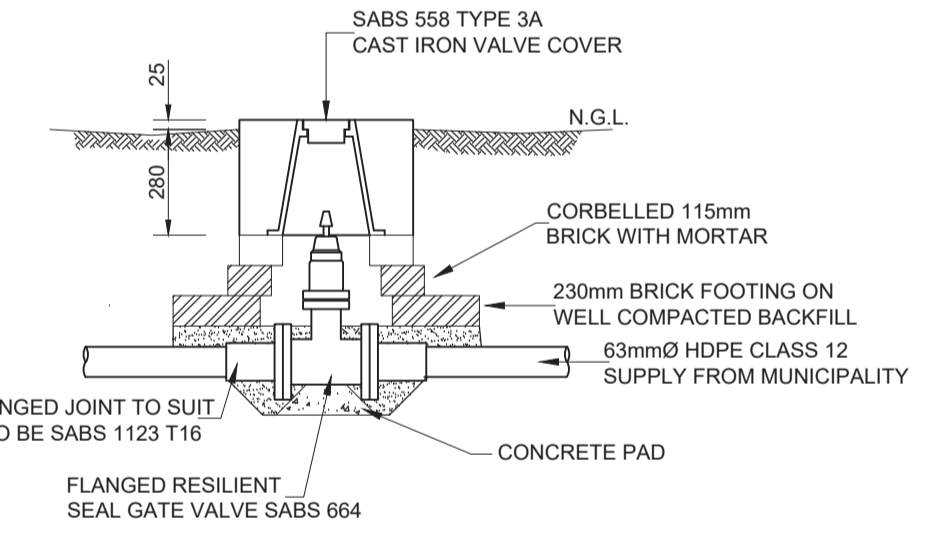


SECTION A - A
SCALE 1:2

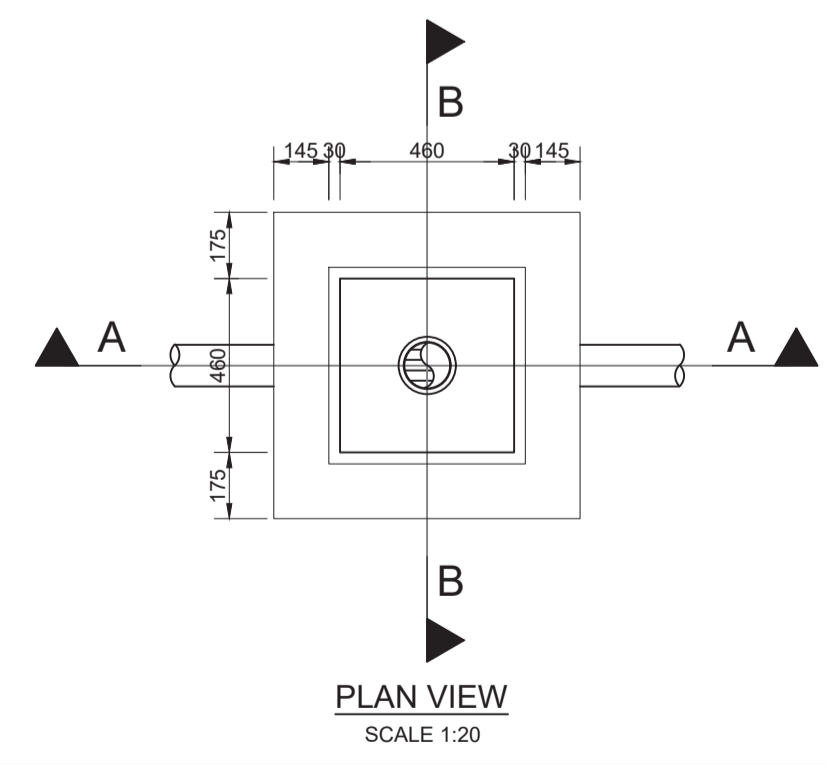
PIPELINE MARKER SET IN CONCRETE SURFACE



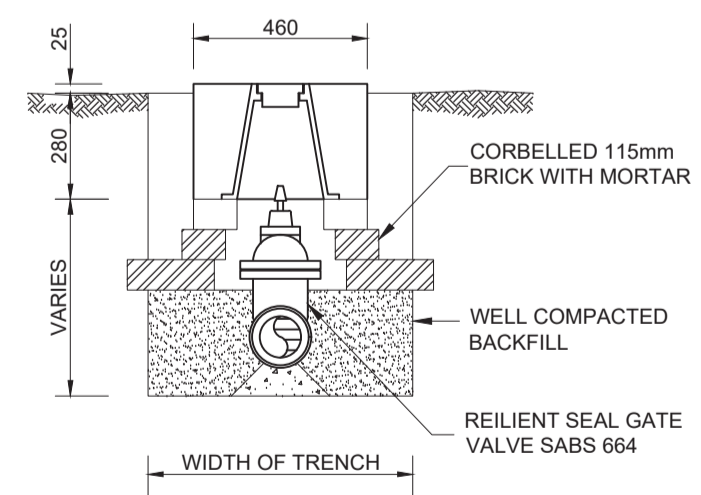
TYPICAL TRENCH EXCAVATION
SCALE 1:20



SECTION A - A
SCALE 1:20



PLAN VIEW
SCALE 1:20

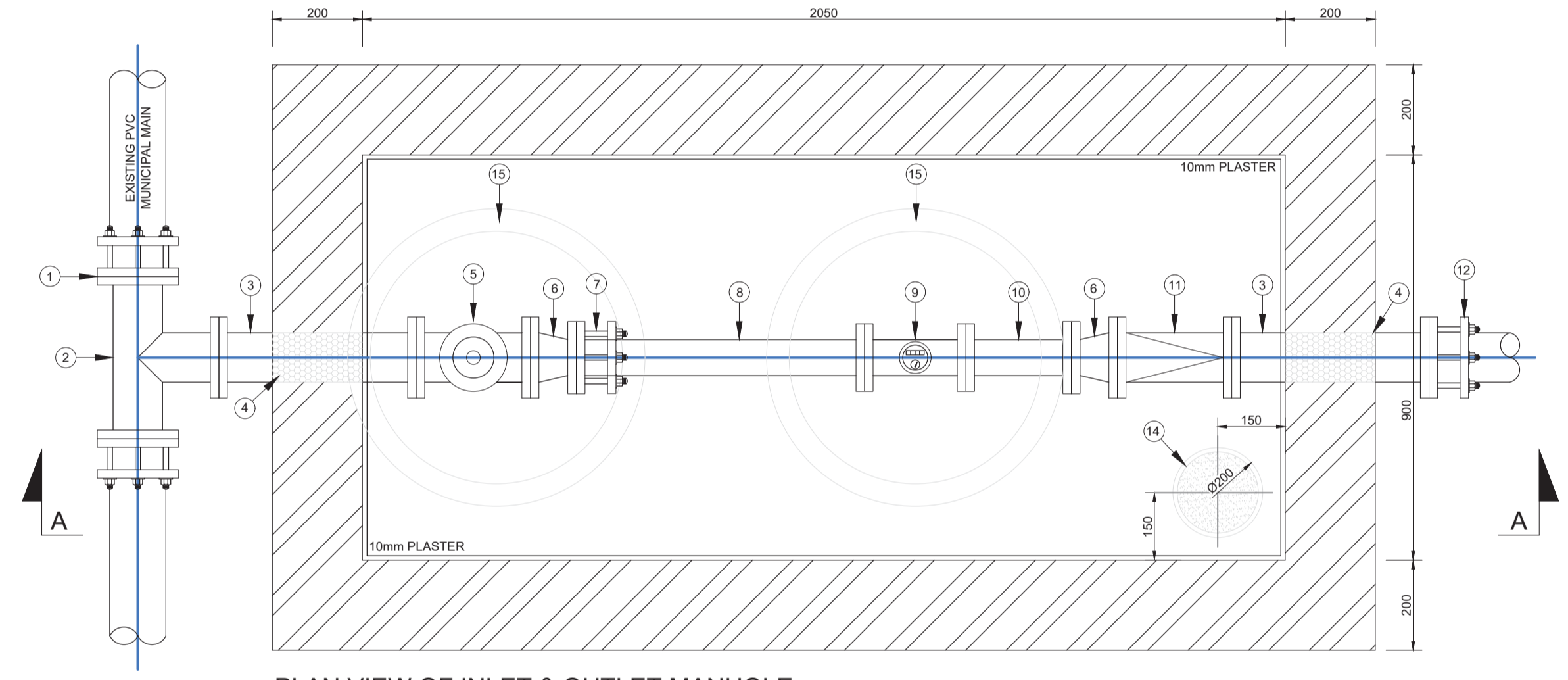


SECTION B - B
SCALE 1:20

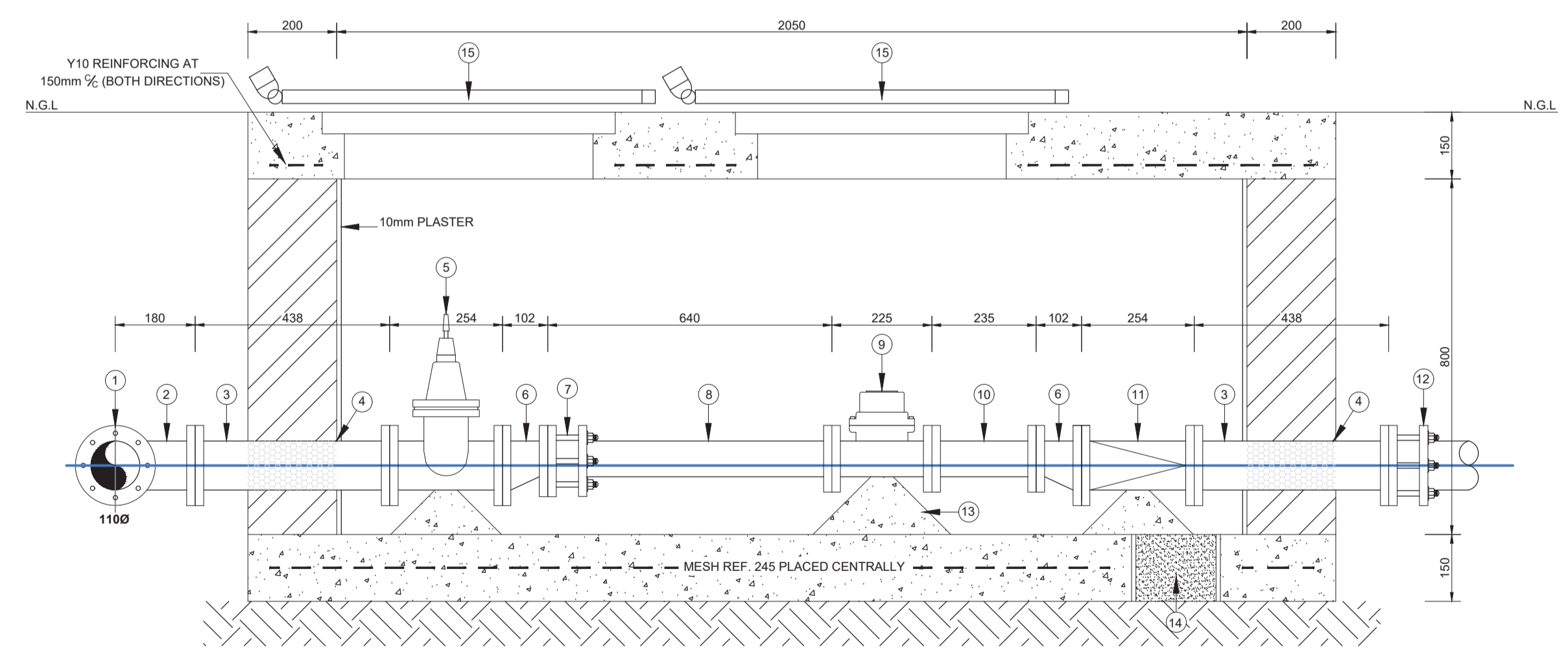
ISOLATING VALVE & TRENCH DETAIL

LEGEND:

- ① 125mm Ø VJ FLANGED ADAPTOR STEPPED COUPLING TO SUIT MUNICIPAL MAIN
- ② 110mm Ø S/S GRADE 304 EQUAL TEE FLANGED ALL ENDS TO SABS 1123 T16
- ③ 438mm LONG x 110mm Ø S/S GRADE 304 EXTENSION PIECE FLANGED BOTH ENDS
- ④ DENZO WRAPPED PIPE PROTECTION
- ⑤ 100mm Ø CLASS 16 RSV SABS 664 GATE VALVE RIGHT HAND CLOSING WITH VALVE CAP FLANGED TO SABS 1123 T16
- ⑥ 100 x 80mm Ø S/S GRADE 304 ECCENTRIC REDUCER FLANGED BOTH ENDS SABS 1123 T16
- ⑦ 80mm Ø FLANGE ADAPTOR FLANGES SABS 1123 T16
- ⑧ 640mm LONG x 80mm Ø S/S GRADE 304 EXTENSION PIECE FLANGED BOTH ENDS SABS 1123 T16
- ⑨ 80mm Ø BULK WATER METER HELIX 4000 WITH PULSE OUTPUT FLANGED BOTH ENDS SABS 1123 T16
- ⑩ 235mm LONG x 80mm Ø S/S GRADE 304 EXTENSION PIECE FLANGED BOTH ENDS SABS 1123 T16
- ⑪ 100mm Ø CAST IRON NON - RETURN VALVE OF THE SWING TYPE
- ⑫ 110mm Ø VJ FLANGE ADAPTOR TO SUIT MAIN PIPELINE
- ⑬ HAUNCHING
- ⑭ 200mm Ø DRAIN WITH 13mm NO-FINES CONCRETE
- ⑮ TYPE 1B MANHOLE COVER & FRAME COMPLETE WITH LOCKING DEVICE AS PER MUNICIPAL DETAILS



PLAN VIEW OF INLET & OUTLET MANHOLE
SCALE 1:10



SECTION A - A
SCALE 1:10

80mm Ø WATER METER INSTALLATION



This drawing is property of BVI Consulting Engineers (Pty) Ltd. Copyright is reserved by them and the drawing is issued on the condition that it is not copied, reproduced, retained or disclosed to any unauthorized person, without the consent of BVI Consulting Engineers (Pty) Ltd.

GENERAL NOTES

The contractor is to keep a full set of drawings on site. Contractor is responsible for the correct setting out of the building on site with reference to boundaries and building lines. Contractor to verify all levels and dimensions on site and check same against architect and engineers drawings before commencing work. Figure dimensions to be used in preference to scaled dimensions. Large scale details to be used where available. Errors, discrepancies or omissions are to be reported to the architect immediately for clarification before work is undertaken.

These drawings are to be read in conjunction with structural engineers, civil engineers, mechanical engineers and plumbing consultants' drawings where specified.

All work and material used to comply with SABS standards and NATIONAL BUILDING REGULATIONS SABS 1040B and amendments thereto as well as the by-laws of the relevant local authority.

All new construction HEALTH AND SAFETY Regulations to be strictly complied with.

REVISIONS

REV.	DATE	DESCRIPTION	BY
T	09/21	FIRST ISSUE FOR TENDER	M.S.

PROJECT TEAM

Principal Agent / Architect:
INTSIKA Architects (Pty) Ltd.
 INTSIKA Architects
2nd Floor The Ridge, 3 Berea Terrace Berea
East London, 5201
043 - 725 7766
Rob Gillard - 082 872 8748
rob@intsiika.com

Quantity Surveyors:

BISIWE VAN NIEKERK INC.
Quantity Surveyors & Project Managers
Willem Van Niekerk
Tel: 043 - 721 1043
Fax: 043 - 721 1239
Cell: 0824921695
willem@bisiwe.co.za

Civil Engineers:

bvi
1st Floor, Esprit House, St Helena Drive
East London, 5241
043 - 722 2738
Werner de Lange - 082 578 0674
Werner@bvi.co.za

CLIENT

TSOLO AGRICULTURE & RURAL DEVELOPMENT INSTITUTE:
 Private Bag K1008,
Tsole, 5170
Tel: 047 - 542 3700

rural development & agrarian reform
Department:
Rural Development & Agrarian Reform
PROVINCE OF THE EASTERN CAPE

PROJECT

300 SEATER EXAM HALL AT THE
TSOLO AGRICULTURAL &
RURAL DEVELOPMENT INSTITUTE.

LOCATION

FARM NO: 61
TSOLO

ISSUED FOR

MUNICIPAL SUBMISSION

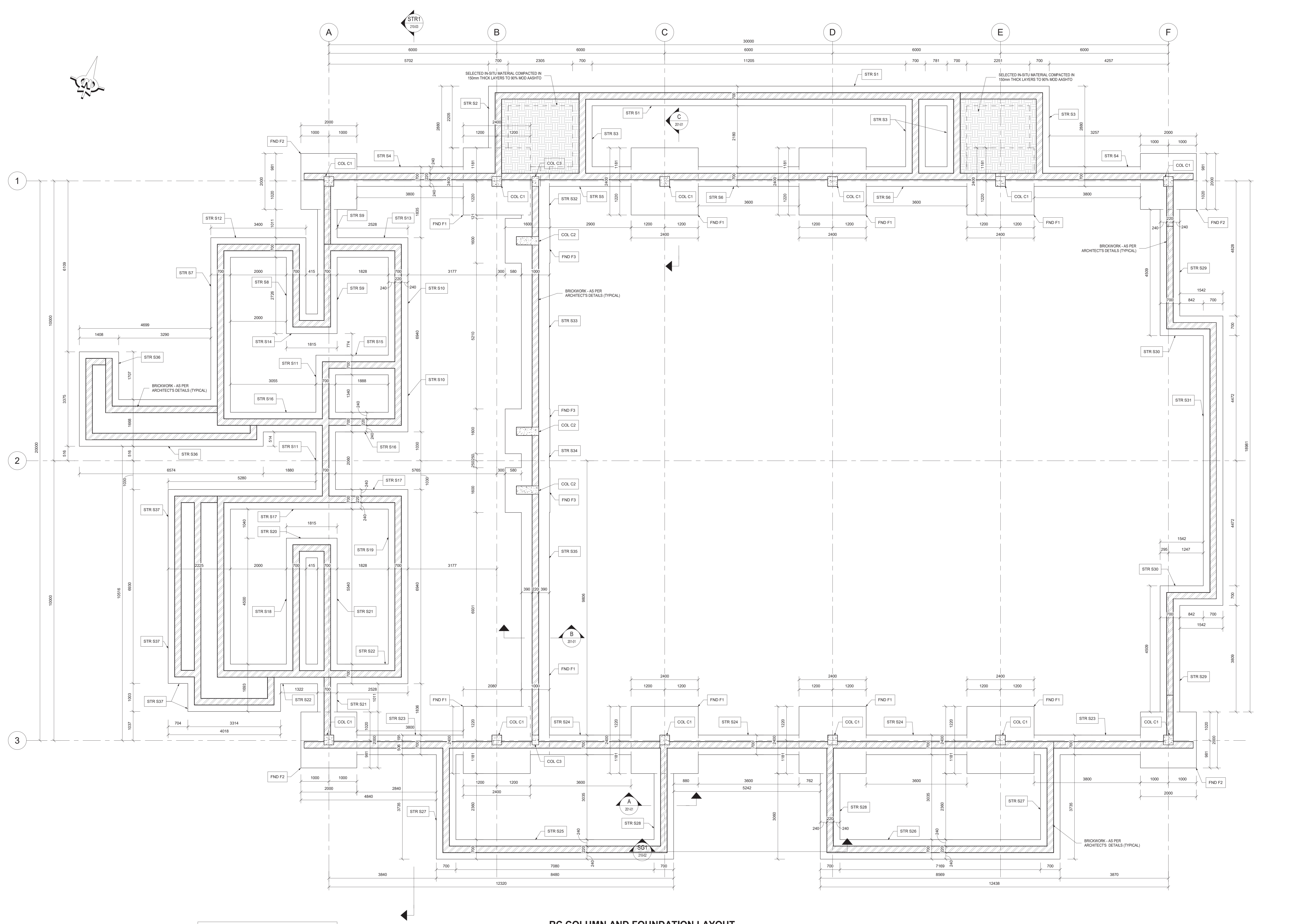
DRAWING

WATER METER & ISOLATING
VALVE CHAMBER DETAIL

PROJECT NO. 34435
DRAWING NO. 34435-DET-2
Scale: AS SHOWN
Date: 26/08/2021
DRAFTING AND DESIGN TEAM
Designed by: M.A. STEYN
Drawn by: J.A. JONKER
Checked by: W.D. LANGE

APPROVAL DRAWING

Name: M. STEYN
Signed: _____ Date: _____
Practise: BVI BORDER



RC PAD FOUNDATION LEGEND:		
No.	SIZE	QTY
FND F1	2400x2400x400mm THICK RC PAD FOUNDATION	8
FND F2	3000x3000x400mm THICK RC PAD FOUNDATION	4
FND F3	1500x1500x400mm THICK RC PAD FOUNDATION	3

RC STRIP FOUNDATION LEGEND:		
No.	SIZE	QTY
STR S1	700x300mm THICK RC STRIP FOUNDATION	1
STR S2	700x300mm THICK RC STRIP FOUNDATION	1
STR S3	700x300mm THICK RC STRIP FOUNDATION	4
STR S4	700x300mm THICK RC STRIP FOUNDATION	2
STR S5	700x300mm THICK RC STRIP FOUNDATION	1
STR S6	700x300mm THICK RC STRIP FOUNDATION	1
STR S7	700x300mm THICK RC STRIP FOUNDATION	1
STR S8	700x300mm THICK RC STRIP FOUNDATION	1
STR S9	700x300mm THICK RC STRIP FOUNDATION	1
STR S10	700x300mm THICK RC STRIP FOUNDATION	1
STR S11	700x300mm THICK RC STRIP FOUNDATION	1
STR S12	700x300mm THICK RC STRIP FOUNDATION	1
STR S13	700x300mm THICK RC STRIP FOUNDATION	1
STR S14	700x300mm THICK RC STRIP FOUNDATION	1
STR S15	700x300mm THICK RC STRIP FOUNDATION	1
STR S16	700x300mm THICK RC STRIP FOUNDATION	1
STR S17	700x300mm THICK RC STRIP FOUNDATION	1
STR S18	700x300mm THICK RC STRIP FOUNDATION	1
STR S19	700x300mm THICK RC STRIP FOUNDATION	1
STR S20	700x300mm THICK RC STRIP FOUNDATION	1
STR S21	700x300mm THICK RC STRIP FOUNDATION	1
STR S22	700x300mm THICK RC STRIP FOUNDATION	1
STR S23	700x300mm THICK RC STRIP FOUNDATION	1
STR S24	700x300mm THICK RC STRIP FOUNDATION	1
STR S25	700x300mm THICK RC STRIP FOUNDATION	1
STR S26	700x300mm THICK RC STRIP FOUNDATION	1
STR S27	700x300mm THICK RC STRIP FOUNDATION	1
STR S28	700x300mm THICK RC STRIP FOUNDATION	1
STR S29	700x300mm THICK RC STRIP FOUNDATION	1
STR S30	700x300mm THICK RC STRIP FOUNDATION	1
STR S31	700x300mm THICK RC STRIP FOUNDATION	1
STR S32	700x300mm THICK RC STRIP FOUNDATION	1
STR S33	700x300mm THICK RC STRIP FOUNDATION	1
STR S34	700x300mm THICK RC STRIP FOUNDATION	1
STR S35	700x300mm THICK RC STRIP FOUNDATION	1
STR S36	700x300mm THICK RC STRIP FOUNDATION	1
STR S37	700x300mm THICK RC STRIP FOUNDATION	1

RC COLUMNS LEGEND:		
No.	SIZE	QTY
COL C1	300x300mm RC COLUMN	12
COL C2	800x400mm RC COLUMN	3
COL C3	300x300mm RC COLUMN	2

NOTES / LEGEND

GENERAL

1. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT ALL MATERIALS AND WORKMANSHIP CONFORM WITH THE DETAILS AND SPECIFICATIONS SHOWN ON THIS DRAWING AND ALL RELEVANT SABS SPECIFICATIONS, RESPECTIVE OF WHETHER THE ENGINEER HAS INSPECTED THE WORKS ON SITE OR NOT.
2. ALL DIMENSIONS AND LEVELS TO BE CHECKED ON SITE AND CORRELATED WITH THE ARCHITECT'S DRAWINGS BEFORE CONSTRUCTION COMMENCES.
3. ALL WRITTEN DIMENSIONS USED IN PREFERENCE TO SCALING.
4. ALL WATERPROOFING DETAILS TO BE IN ACCORDANCE WITH THE ARCHITECT'S SPECIFICATION AND INSTRUCTIONS.

FOUNDATIONS:

1. EXCAVATIONS FOR ALL FOUNDATIONS TO BE CHECKED AND APPROVED BY THE ENGINEER PRIOR TO CASTING OF ANY CONCRETE.
2. ALL FOUNDATIONS TO BE FOUNDED ON SOUND IN-SITU MATERIAL. NO FOUNDATION WILL BE ALLOWED ON ANY FILL.
3. TOP OF FOUNDATION LEVEL TO BE MIN 30mm BELOW FINAL OUTSIDE CURB AND LEVEL OR FFL, WHICHEVER IS THE LOWER.

CONCRETE:

CONCRETE CUBIC STRENGTH MIN AT 28 DAYS:

- BLINDING LAYER: -15MPa/15mm STONE
- RC PAD FOUNDATIONS: -15MPa/15mm STONE
- RC STRIP FOUNDATIONS: -15MPa/15mm STONE
- RC APPROX / V-DRAINS: -15MPa/15mm STONE
- RC SURFACE BEDS: -15MPa/15mm STONE
- RC COLUMNS: -15MPa/15mm STONE
- RC BEAMS: -15MPa/15mm STONE
- RC SLABS: -15MPa/15mm STONE

3. CONCRETE COVER TO REINFORCING:

- RC PAD FOUNDATIONS: 50mm (ALL SIDES)
- RC STRIP FOUNDATIONS: 50mm (ALL SIDES)
- RC APPROX / V-DRAINS: 50mm (FROM TOP)
- RC SURFACE BEDS: 50mm (FROM TOP)
- RC COLUMNS: 40mm (ALL SIDES)
- RC BEAMS: 40mm (ALL SIDES)
- RC SLABS: 40mm (ALL SIDES)

3. ALL REINFORCING FIXED WITH THE SPECIFIED COVER MUST BE INSPECTED AND APPROVED IN WRITING BY THE ENGINEER PRIOR TO ANY CONCRETE BEING CAST.

4. THE STANDARD SPECIFICATIONS SABS 100 (EXCLUDING PAYMENTS CLAUSES) IS APPLICABLE.

5. ALL CONCRETE TO BE PROPERLY CURED BY KEEPING SURFACES CONTINUOUSLY DAMP, AT LEAST 7 DAYS AFTER CASTING. CONCRETE SLABS TO BE COVERED WITH MOST SAND OR PLASTIC MEMBRANE DURING THIS PERIOD. COLUMNS TO BE WRAPPED IN PLASTIC IMMEDIATELY AFTER REMOVAL OF SHEETING.

6. ROOF SHEETING AS PER ARCHITECT'S DETAILS. ALL FLASHINGS AS PER ARCHITECT'S DETAILS.

DO NOT SCALE DRAWING
IF IN DOUBT REFER TO DRAWING OFFICE

CLIENT PLAN NUMBER
D34435S-201-01

NUMBER	DRAWING DESCRIPTION
D34435S-201-01	GENERAL STRUCTURAL NOTES

APPROVED BY COUNCIL / CLIENT

CITY ENGINEER / CLIENT REG. NO. DATE

AMENDMENTS CODE

A.Y. / REPORT DESIGN TENDER / A: BY CLIENT
 00-99 / CONSTRUCTION / B: BY ARCHITECT
 Z / AS BUILT / C: BY MECHANICAL OR ELECTRICAL
 / D: BY BVI
 / E: BY OTHER ()

DATE	INITIAL CODE	REVISION DESCRIPTION
2021/10/27	C.P. TD	ISSUED FOR TENDER PURPOSES ONLY

OFFICES

bvi ENGINEERING PROFESSIONAL MANAGEMENT
 BVI Consulting Engineers KZN PTY (Ltd)
 Registration no. 1580902207

Visit or contact us online at www.bviengroup.co.za

PROVINCE OFFICE EMAIL
 KZN Durban +27 31 268 8382 dbv@bvi.co.za

CLIENT

TSOLO AGRICULTURE & RURAL DEVELOPMENT INSTITUTE
 Private Bag X1008, Tsoelo, 5170
 Tel: +27 (47) 542 3700
 rural development & agrarian reform

OFFICE OF THE DIRECTOR, ENGINEERING SERVICES

300-SEATER EXAM HALL AT THE TSOLO AGRICULTURAL AND RURAL DEVELOPMENT INSTITUTE

DRAWING TITLE

RC FOUNDATION - LAYOUT AND DETAILS

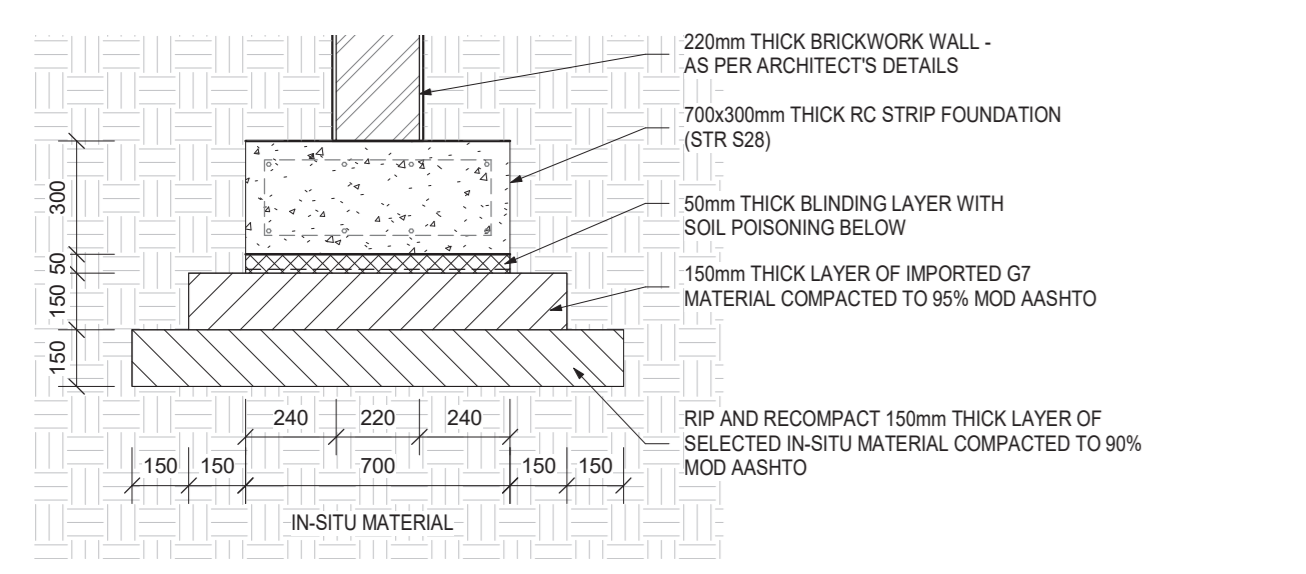
APPROVED BY BVI

ENGINEER/TECHNOLOGIST	REG. NO.	DATE
202001098		

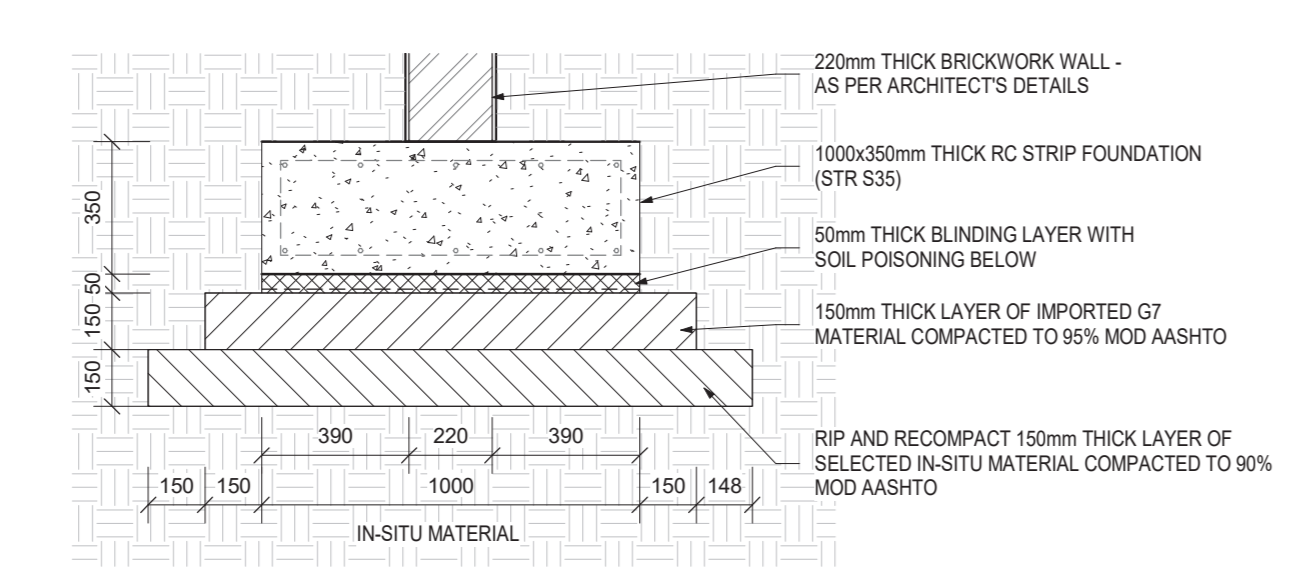
SCALE	As indicated	DRAWN	C.P.
DESIGNED	PvN	CHECKED	PvN
PLAN NUMBER	REV. NO.	DATE SAVED	
D34435S-201-01	T	2021/10/27 08:20:55	

NOTE:
ALL RC STRIP FOUNDATIONS AND RC PAD FOUNDATIONS TOP OF CONCRETE LEVEL TO BE 30mm BELOW THE SURFACE BED LEVEL.

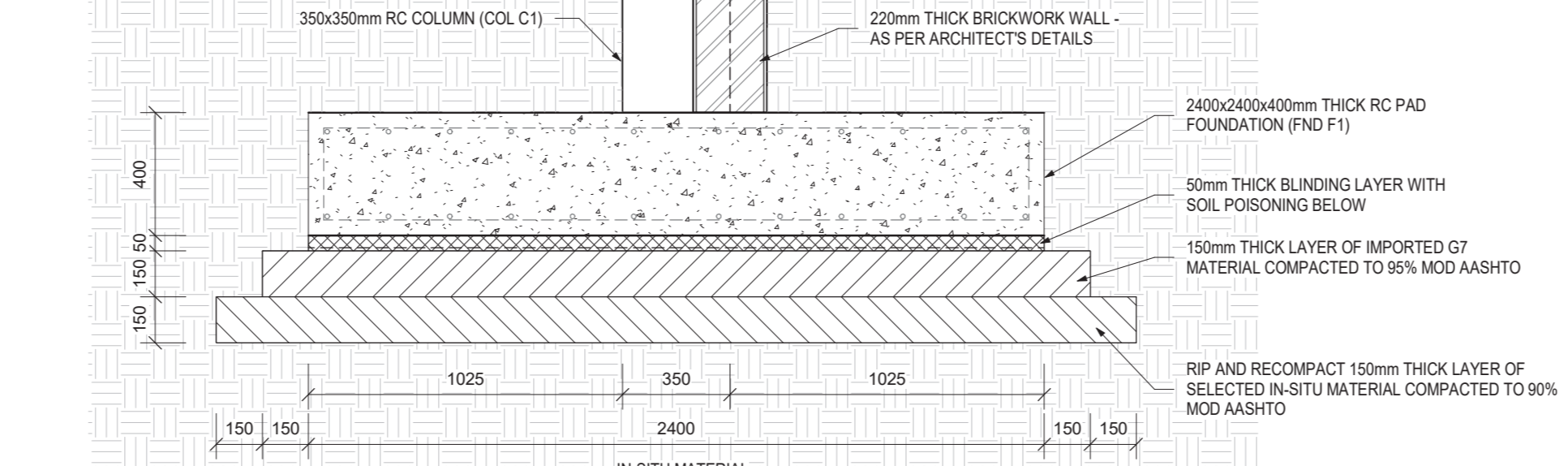
RC COLUMN AND FOUNDATION LAYOUT
SCALE 1:50



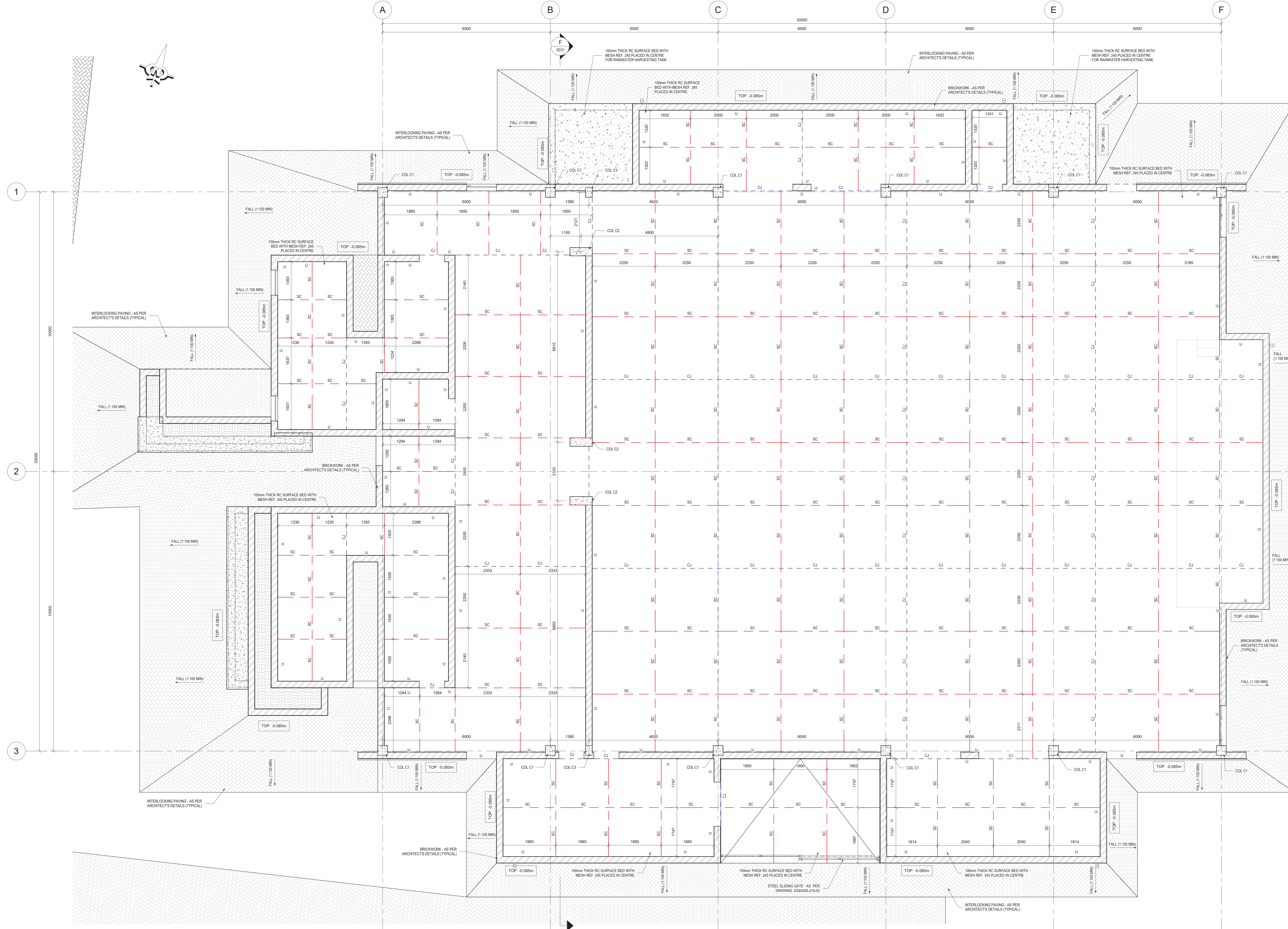
SECTION A-A
SCALE 1:20



SECTION B-B
SCALE 1:20



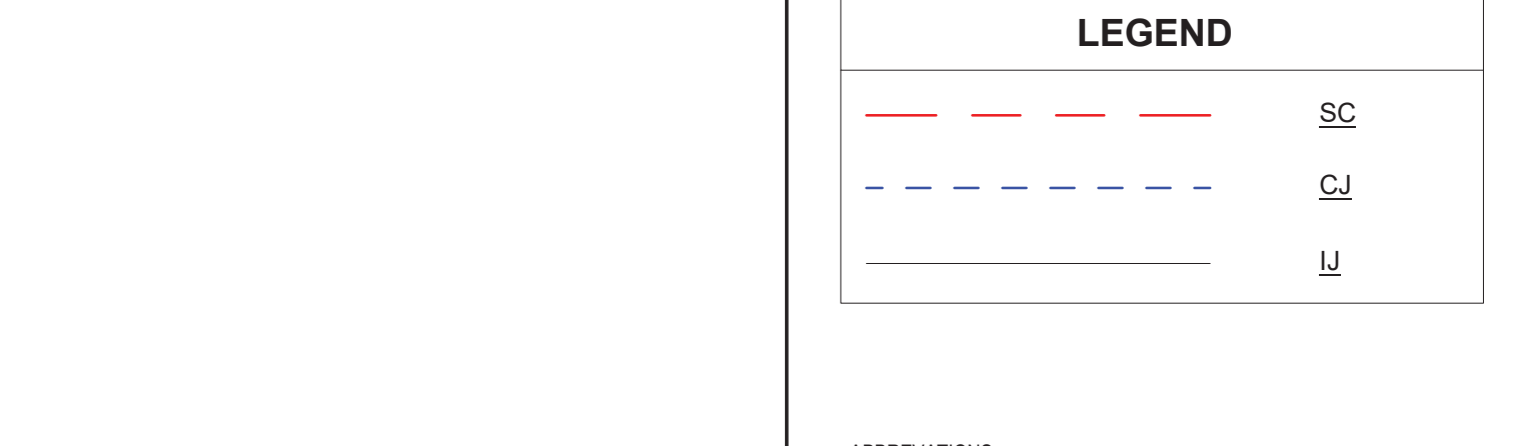
SECTION C-C
SCALE 1:20



RC COLUMNS LEGEND	NOTES / LEGEND
No. SIZE QTY	GENERAL
COL C1 300x300mm RC COLUMN 12	1. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT ALL MATERIALS AND WORKMANSHIP CONFORM WITH THE DETAILS AND SPECIFICATIONS SHOWN ON THIS DRAWING AND ALL RELEVANT SABS SPECIFICATIONS, IRRESPECTIVE OF WHETHER THE ENGINEER HAS INSPECTED THE WORKS ON SITE OR NOT.
COL C2 800x300mm RC COLUMN 3	2. ALL DIMENSIONS AND LEVELS TO BE CHECKED ON SITE AND CORRELATED WITH THE ARCHITECT'S DRAWINGS BEFORE CONSTRUCTION COMMENCES.
COL C3 350x200mm RC COLUMN 2	3. ALL WRITTEN DIMENSIONS USED IN PREFERENCE TO SCALING.
	4. ALL WATERPROOFING DETAILS TO BE IN ACCORDANCE WITH THE ARCHITECT'S SPECIFICATION AND INSTRUCTIONS.

- FOUNDATIONS:**
- EXCAVATIONS FOR ALL FOUNDATIONS TO BE CHECKED AND APPROVED BY THE ENGINEER PRIOR TO CASTING OF ANY CONCRETE.
 - ALL FOUNDATIONS TO BE FOUND ON SOUND NATURAL MATERIAL. NO FOUNDATION WILL BE ALLOWED ON ANY FILL.
 - TOP OF FOUNDATION LEVEL TO BE MIN 300mm BELOW FINAL OUTSIDE GROUND LEVEL OR FFL, WHICHEVER IS THE LOWER.

- CONCRETE:**
- CONCRETE CURE STRENGTH MIN. AT 28 DAYS:
- BINDING LAYER - 100mm² 19mm STONE
 - RC PAD FOUNDATIONS - 200mm² 19mm STONE
 - RC STRIP FOUNDATIONS - 200mm² 19mm STONE
 - RC APPROX. V-DRAINS - 200mm² 19mm STONE
 - RC SURFACE BEDS - 200mm² 19mm STONE
 - RC COLUMNS - 300mm² 19mm STONE
 - RC BEAMS - 300mm² 19mm STONE
 - RC SLABS - 300mm² 19mm STONE
- 2. CONCRETE COVER TO REINFORCING:**
- RC PAD FOUNDATIONS - 50mm (ALL SIDES)
 - RC STRIP FOUNDATIONS - 50mm (ALL SIDES)
 - RC APPROX. V-DRAINS - 50mm (FROM TOP)
 - RC SURFACE BEDS - 50mm (ALL SIDES)
 - RC COLUMNS - 40mm (ALL SIDES)
 - RC BEAMS - 40mm (ALL SIDES)
 - RC SLABS - 40mm (ALL SIDES)



- ABBREVIATIONS:**
- SC: SAW-CUT JOINT
 - C.J.: CONSTRUCTION JOINT
 - U: ISOLATION JOINT
 - RC: REINFORCED CONCRETE

DO NOT SCALE DRAWING
 IF IN DOUBT, REFER TO DRAWING OFFICE

CLIENT PLAN NUMBER
D34435S-201-02

NUMBER	DRAWING DESCRIPTION
D34435S-200-01	GENERAL STRUCTURAL NOTES
D34435S-202-01	BUILDING SECTIONS

APPROVED BY COUNCIL / CLIENT

CITY ENGINEER / CLIENT	REG. NO.	DATE

A.Y.	REPORT/DESIGN/RENDER	BY	BY CLIENT
1	AS BUILT		

DATE	INITIAL CODE	REVISION DESCRIPTION
2021/10/27	C.P. TD	ISSUED FOR TENDER PURPOSES ONLY

OFFICES

Obvi ENGINEERING CONSULTANTS
 BVI Consulting Engineers KZN PTY (LTD)
 Registration no. 168803027

Visit or contact us online at www.bvigrp.co.za

PROVINCE: KZN OFFICE: Durban E-MAIL: obvi@bvi.co.za

TSOLO AGRICULTURE & RURAL DEVELOPMENT INSTITUTE
 Private Bag X1008, Tsoalo, 5170
 Tel: +27 (47) 542 3700

OFFICE OF THE DIRECTOR: ENGINEERING SERVICES

300-SEATER EXAM HALL AT THE TSOLO AGRICULTURAL AND RURAL DEVELOPMENT INSTITUTE

DRAWING TITLE

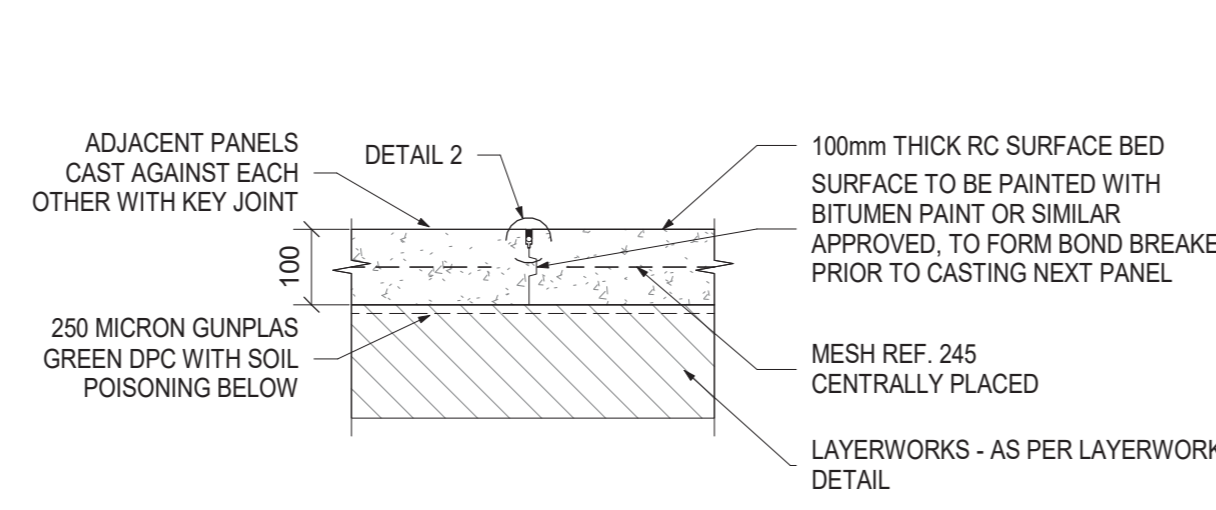
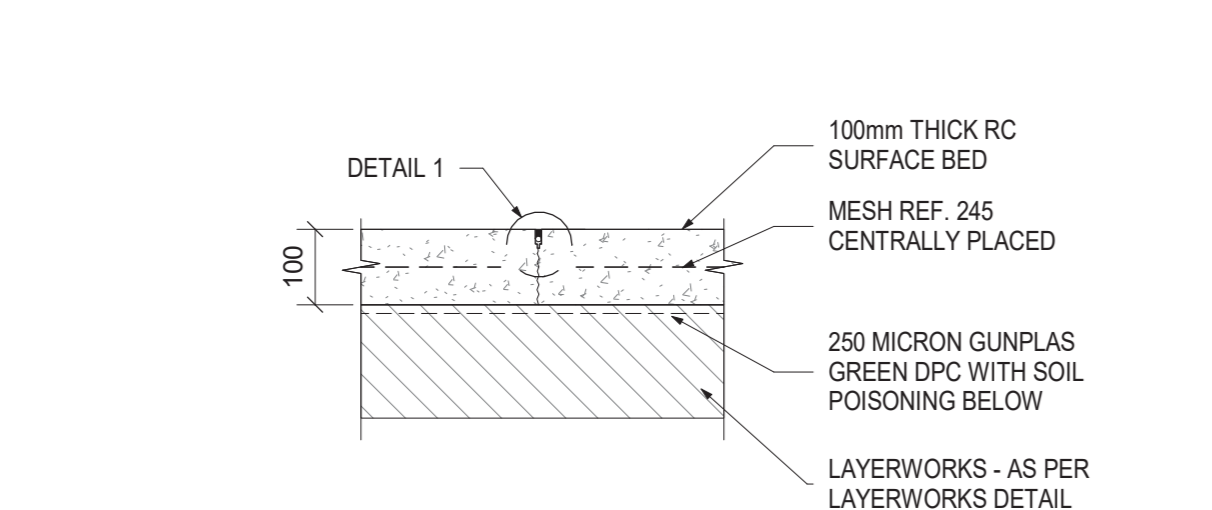
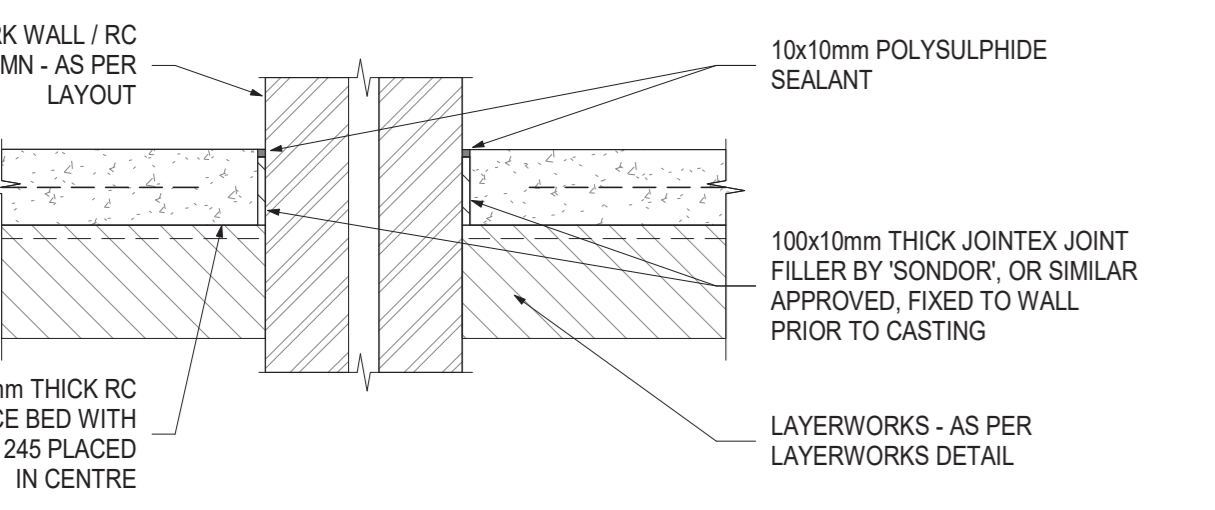
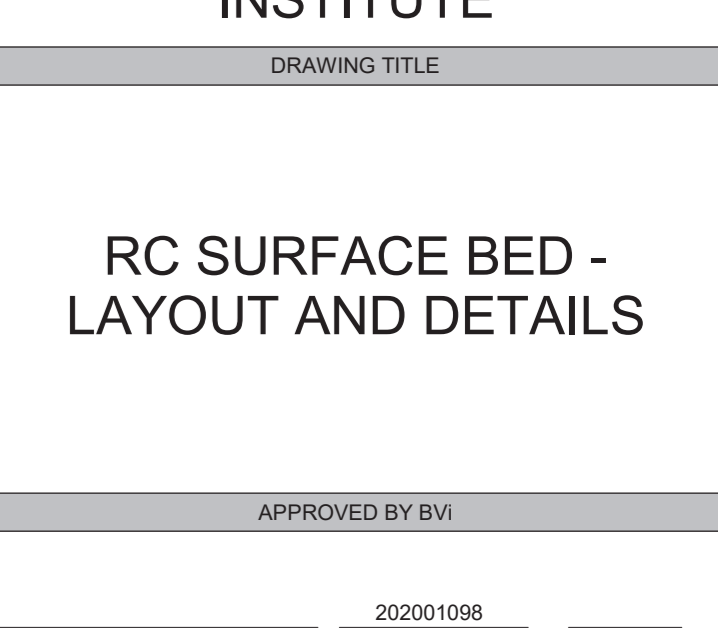
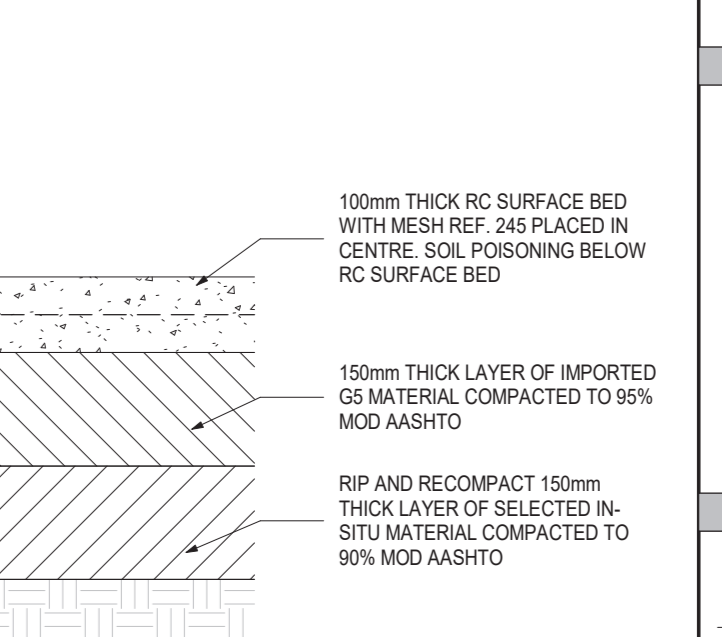
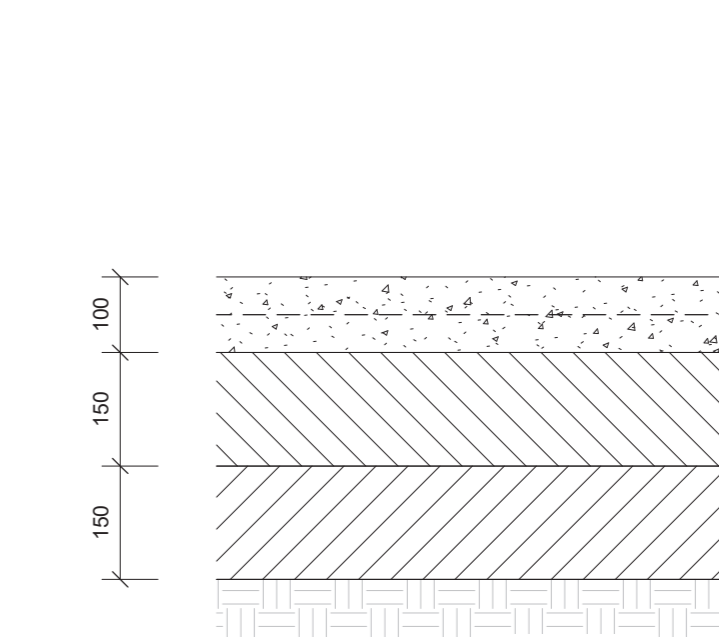
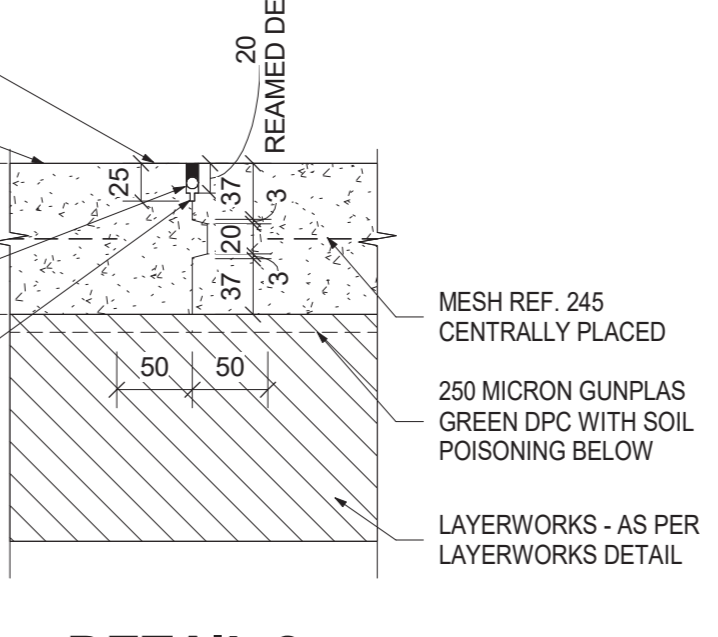
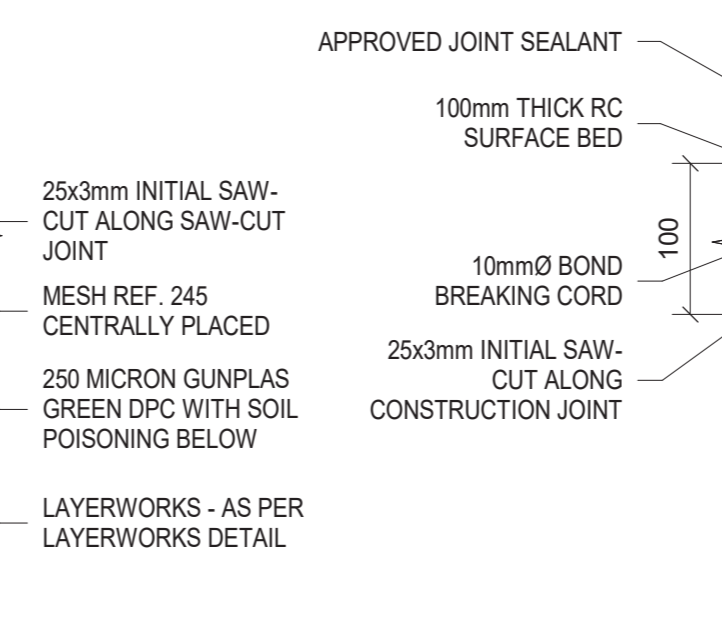
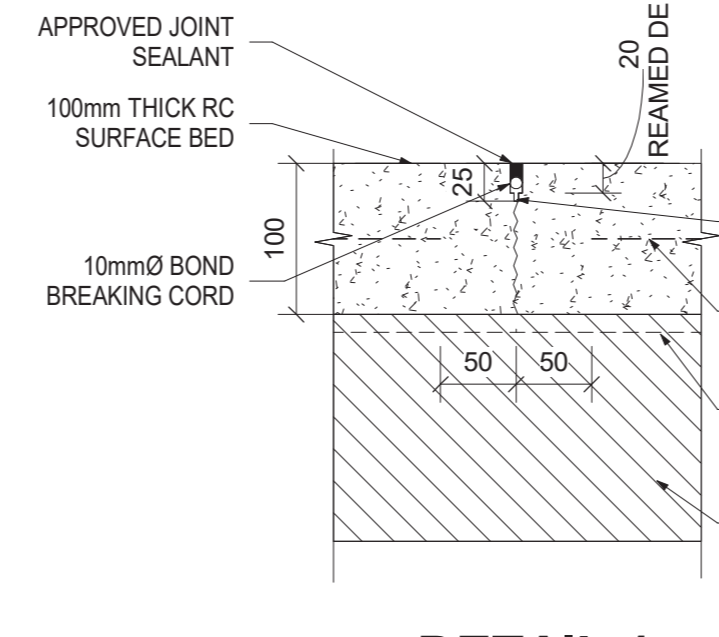
APPROVED BY BVI

ENGINEER/TECHNOLOGIST	REG. NO.	DATE

SCALE	As indicated	DRAWN	C.P.
DESIGNED	P.V.N	CHECKED	P.V.N
PLAN NUMBER	REV. NO.	DATE SAVED	

D34435S-201-02 T 2021/10/27 08:20:14

RC SURFACE BED LAYOUT
 SCALE 1:30



ISOLATION JOINT DETAIL (IJ)
 1:10

KEY-LESS SAW-CUT JOINT DETAIL (SC)
 1:10

KEY CONSTRUCTION JOINT DETAIL (C.J.)
 1:10

DETAIL 1
 1:10

DETAIL 2
 1:10

DETAIL 3
 1:10

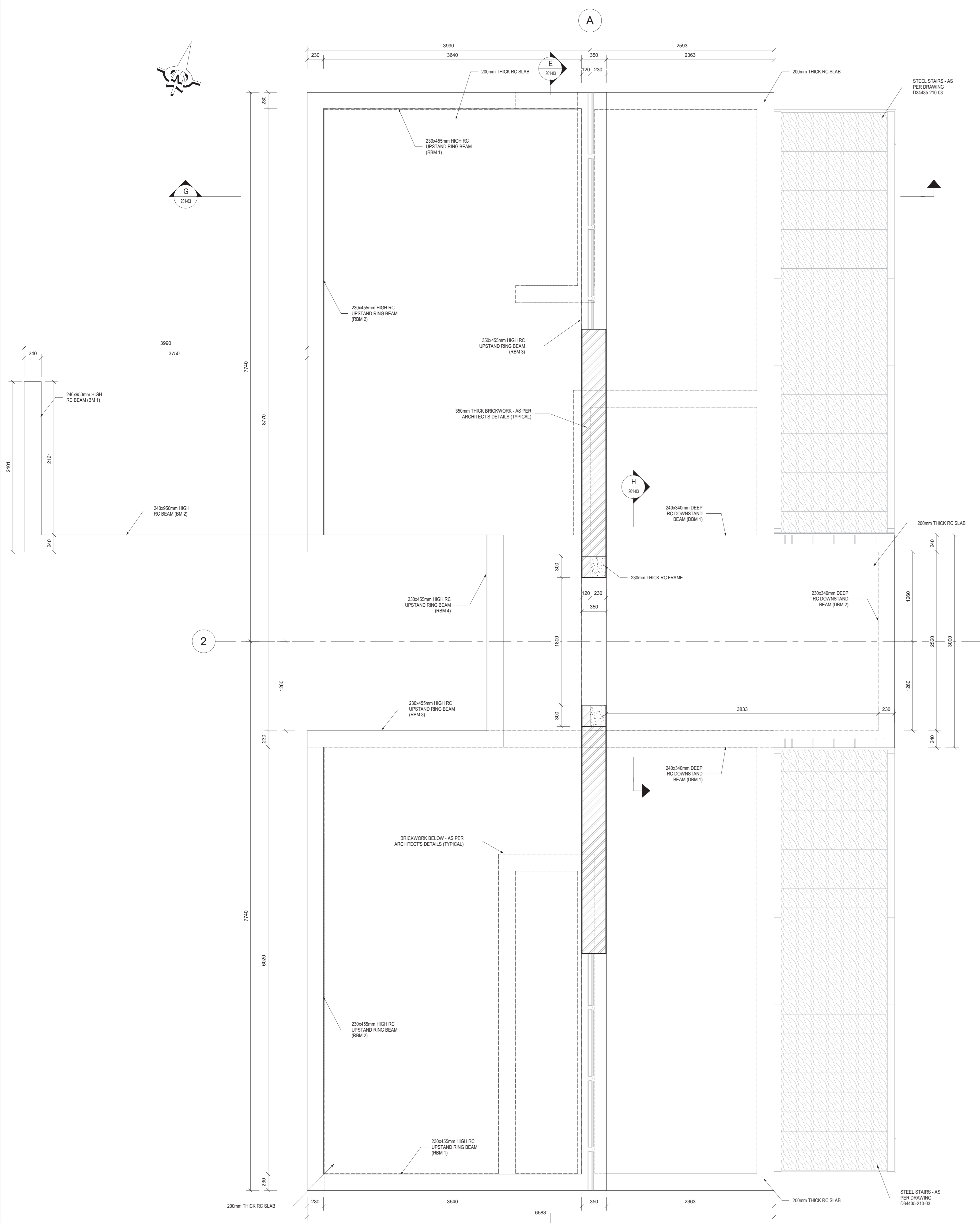
DETAIL 4
 1:10

DETAIL 5
 1:10

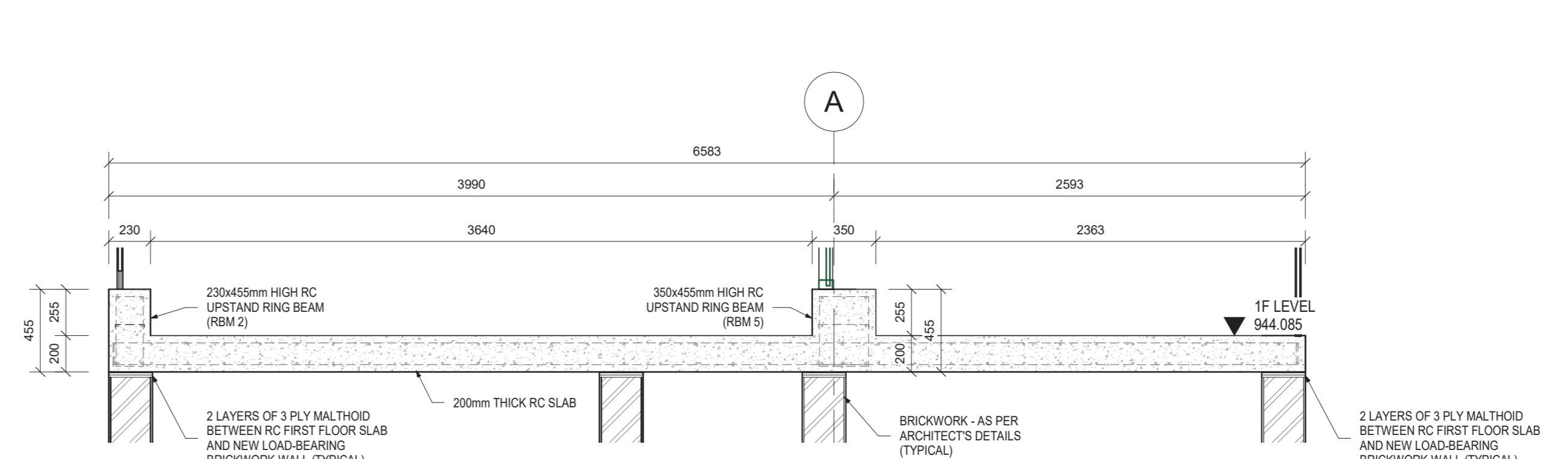
DETAIL 6
 1:10

LAYERWORKS DETAIL
 SCALE 1:10

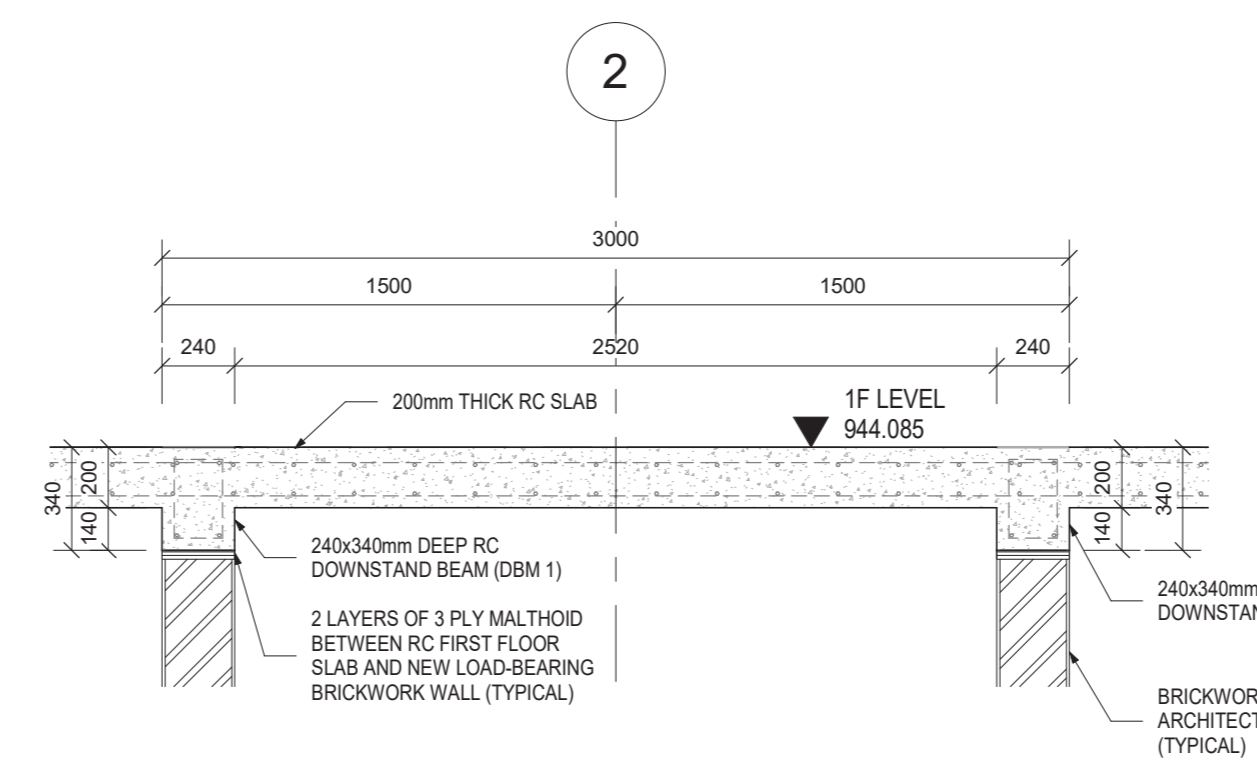
NOTE: CUT WHEN AGGREGATE IS NO LONGER RIPPED OUT.
 KEY JOINTS AND SAW-CUT JOINTS ARE INTERCHANGEABLE.
 SAW-CUTTING TO BE DONE WITHIN 48 HOURS OF CASTING.



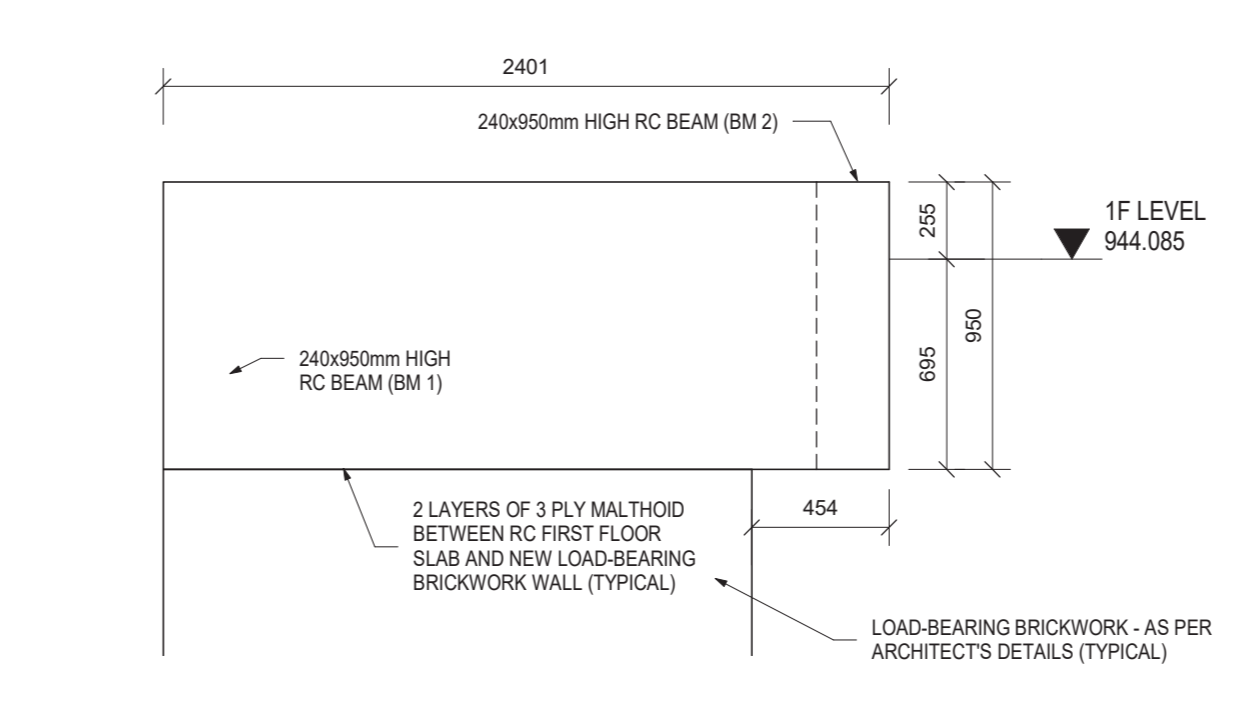
RC BEAM AND FIRST FLOOR LAYOUT
SCALE 1:25



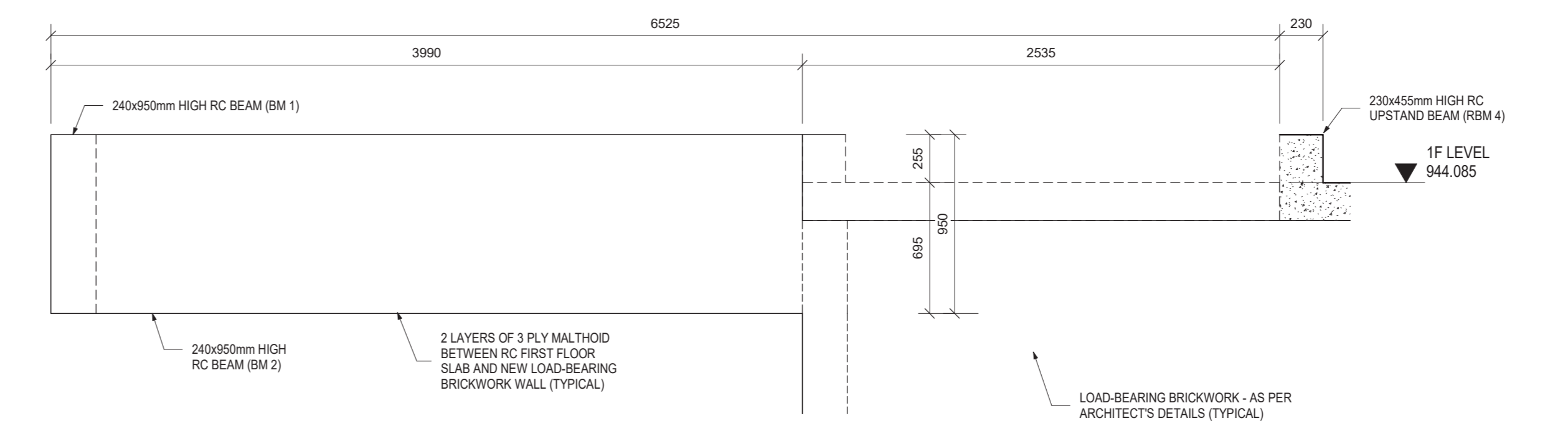
SECTION G-G
SCALE 1:25



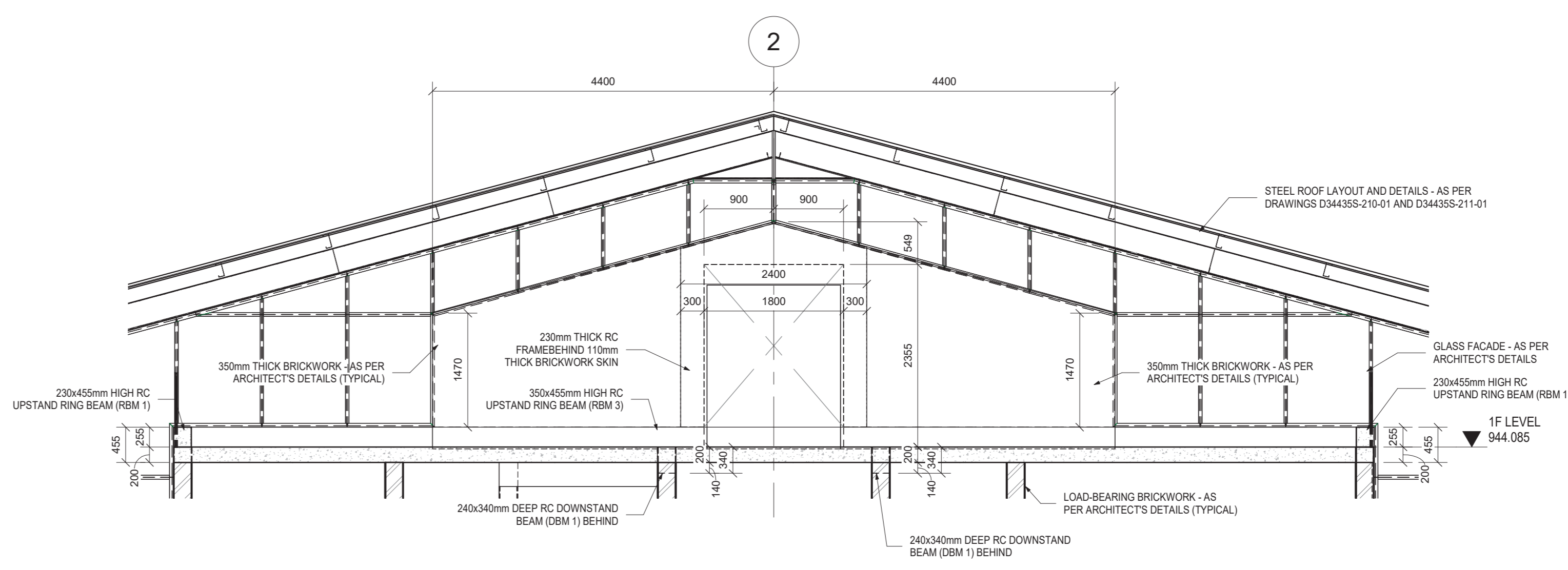
SECTION H-H
SCALE 1:25



ELEVATION - RC BEAM 1 (BM 1 - 240x950mm HIGH)
SCALE 1:25



ELEVATION - RC BEAM 2 (BM 2 - 240x950mm HIGH)
SCALE 1:25



SECTION E-E
SCALE 1:50

RC BEAM LEGEND		
No.	SIZE	QTY
RBM 1	230x455mm HIGH RC UPSTAND RING BEAM	2
RBM 2	230x455mm HIGH RC UPSTAND RING BEAM	2
RBM 3	350x455mm HIGH RC UPSTAND RING BEAM	1
RBM 4	230x455mm HIGH RC UPSTAND RING BEAM	1
DBM 1	240x950mm HIGH RC DOWNSTAND BEAM	2
DBM 2	230x455mm HIGH RC DOWNSTAND BEAM	1
BM 1	240x950mm HIGH RC BEAM	1
BM 2	240x950mm HIGH RC BEAM	1

NOTES / LEGEND

GENERAL

1. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT ALL MATERIALS AND WORKMANSHIP CONFORM WITH THE DETAILS AND SPECIFICATIONS SHOWN ON THIS DRAWING AND ALL RELEVANT SABS SPECIFICATIONS. RESPECTS OF WHETHER THE ENGINEER HAS INSPECTED THE WORKS ON SITE OR NOT.
2. ALL DIMENSIONS AND LEVELS TO BE CHECKED ON SITE AND CORRELATED WITH THE ARCHITECT'S DRAWINGS BEFORE CONSTRUCTION COMMENCES.
3. ALL WRITTEN DIMENSIONS USED IN PREFERENCE TO SCALING.
4. ALL WATERPROOFING DETAILS TO BE IN ACCORDANCE WITH THE ARCHITECT'S SPECIFICATION AND INSTRUCTIONS.

FOUNDATIONS

1. EXCAVATIONS FOR ALL FOUNDATIONS TO BE CHECKED AND APPROVED BY THE ENGINEER PRIOR TO CASTING OF ANY CONCRETE.
2. ALL FOUNDATIONS TO BE FOUND ON SOUND INSTANT MATERIAL, NO FOUNDATION WILL BE ALLOWED ON ANY FILL.
3. TOP OF FOUNDATION LEVEL TO BE MIN 300mm BELOW FINAL OUTSIDE GROUND LEVEL OR FILL, WHICHEVER IS THE LOWER.

CONCRETE

CONCRETE CUBE STRENGTH MIN. AT 28 DAYS

BLINDING LAYER: - 100mm² STONE

RE PAD FOUNDATIONS: - 200mm² STONE

RE STRIP FOUNDATIONS: - 200mm² STONE

RE APPROX. V-DRAINS: - 200mm² STONE

RE SURFACE BEDS: - 200mm² STONE

RE COLUMNS: - 200mm² STONE

RE BEAMS: - 200mm² STONE

RE SLABS: - 200mm² STONE

2. CONCRETE COVER TO REINFORCING:

RE PAD FOUNDATIONS: - 50mm (ALL SIDES)

RE STRIP FOUNDATIONS: - 50mm (ALL SIDES)

RE APPROX. V-DRAINS: - 50mm (FROM TOP)

RE SURFACE BEDS: - 50mm (FROM TOP)

RE COLUMNS: - 40mm (ALL SIDES)

RE BEAMS: - 40mm (ALL SIDES)

RE SLABS: - 40mm (ALL SIDES)

3. ALL REINFORCING FIXED WITH THE SPECIFIED COVER MUST BE INSPECTED AND APPROVED IN WRITING BY THE ENGINEER PRIOR TO ANY CONCRETE BEING CAST.

4. THE STANDARD SPECIFICATIONS SABS 1200 (EXCLUDING PAYMENTS CLAUSES) IS APPLICABLE.

5. ALL CONCRETE TO BE PROPERLY CURED BY KEEPING SURFACES CONTINUOUSLY DAMP AT LEAST 7 DAYS AFTER CASTING. CONCRETE SLABS TO BE COVERED WITH MOIST SAND OR PLASTIC MEMBRANE DURING THIS PERIOD. COLUMNS TO BE WRAPPED IN PLASTIC IMMEDIATELY AFTER REMOVAL OF SHUTTERS.

6. ROOF SHEETING AS PER ARCHITECT'S DETAILS. ALL FLASHINGS AS PER ARCHITECT'S DETAILS.

ABBREVIATIONS

RC: REINFORCED CONCRETE
RBM: RING BEAM
DBM: DOWNSTAND BEAM

DO NOT SCALE DRAWING
IF IN DOUBT, REFER TO DRAWING OFFICE

CLIENT PLAN NUMBER
D34435S-201-03

REFERENCE DRAWINGS

NUMBER	DRAWING DESCRIPTION
D34435S-200-01	GENERAL STRUCTURAL NOTES

APPROVED BY COUNCIL / CLIENT

CITY ENGINEER / CLIENT REG. NO. DATE

AMENDMENTS CODE

A.Y	REPORT/DESIGN/TENDER	IA: BY CLIENT	IB: BY ARCHITECT	IC: BY MECHANICAL OR ELECTRICAL	ID: BY BVI	IE: BY OTHER ()
00-99	CONSTRUCTION					
Z	AS BUILT					

DATE INITIAL CODE REVISION DESCRIPTION

DATE	INITIAL	CODE	REVISION DESCRIPTION
2021/10/27	C.P.	TID	ISSUED FOR TENDER PURPOSES ONLY

OFFICES

bvi ENGINEERING PROCUREMENT MANAGEMENT
BVI Consulting Engineers KZN PTY (Lid)
Visit or contact us online at www.bvigroup.co.za

PROVINCE OFFICE KZN Durban +27 31 266 8382 dbn@bvigroup.co.za

CLIENT

TSOLO AGRICULTURE & RURAL DEVELOPMENT INSTITUTE
Private Bag X1008, Tsolo, 5170
Tel: +27 (47) 542 3700

OFFICE OF THE DIRECTOR ENGINEERING SERVICES

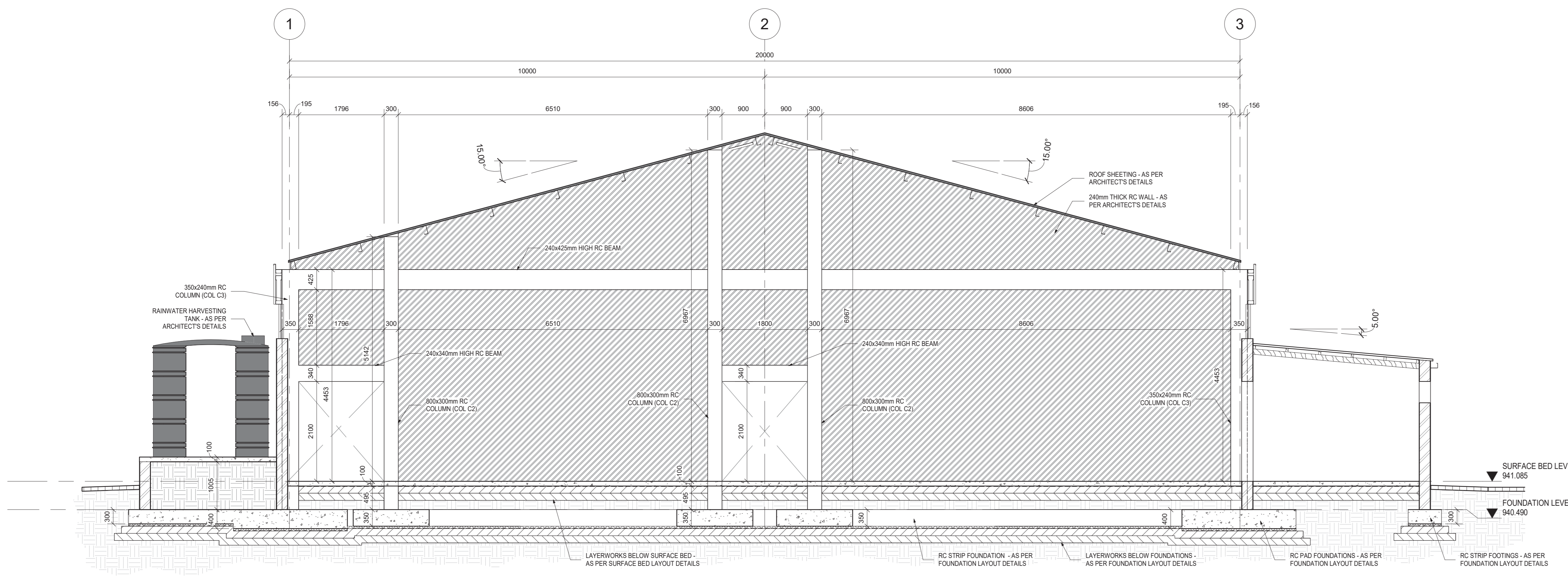
300-SEATER EXAM HALL AT THE TSOLO AGRICULTURAL AND RURAL DEVELOPMENT INSTITUTE

DRAWING TITLE

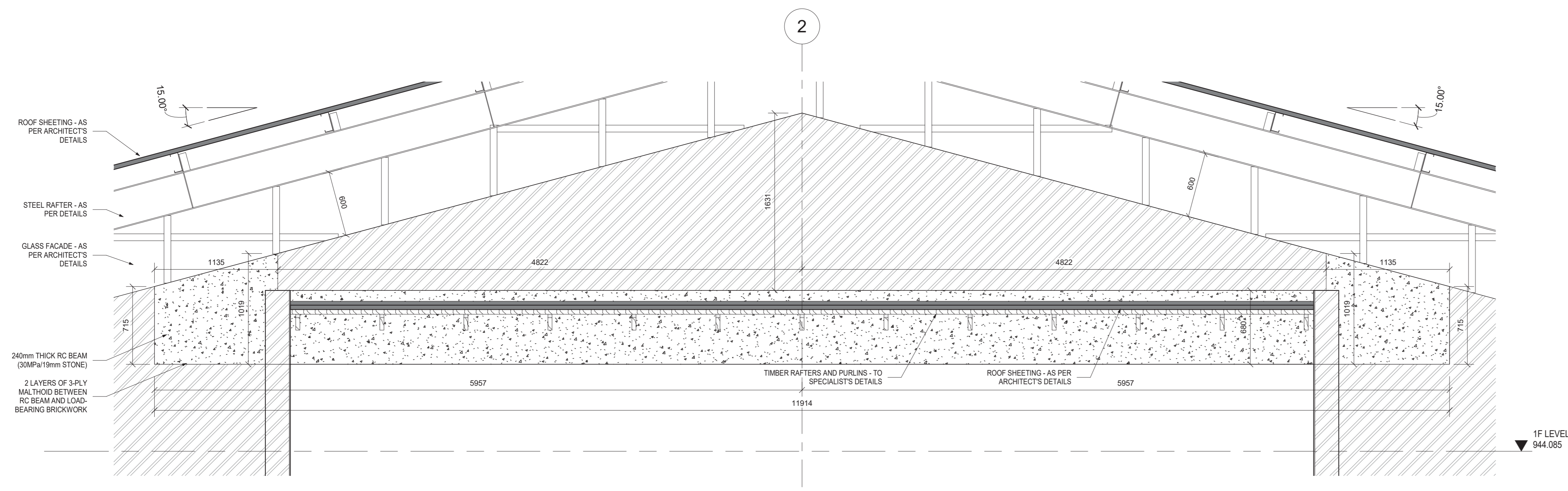
RC FIRST FLOOR - LAYOUT AND DETAILS

APPROVED BY BVI

ENGINEER/TECHNOLOGIST	REG. NO.	DATE
202001098		
SCALE	As indicated	DRAWN C.P.
DESIGNED P.vN	CHECKED P.vN	
PLAN NUMBER	REV. NO.	DATE SAVED
D34435S-201-03	T	2021/10/27 08:19:33



SECTION F-F
SCALE 1:50



SECTION B1-B1 - RC BEAM AT GRIDLINE F
SCALE 1:25

NOTES / LEGEND

- GENERAL
1. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT ALL MATERIALS AND WORKMANSHIP CONFORM WITH THE DETAILS AND SPECIFICATIONS SHOWN ON THIS DRAWING, AND ALL RELEVANT SABS SPECIFICATIONS, RESPECTIVE OF WHETHER THE ENGINEER HAS INSPECTED THE WORKS ON SITE OR NOT.
 2. ALL DIMENSIONS AND LEVELS TO BE CHECKED ON SITE AND CORRELATED WITH THE ARCHITECT'S DRAWINGS BEFORE CONSTRUCTION COMMENCES.
 3. ALL WRITTEN DIMENSIONS USED IN PREFERENCE TO SCALING.
 4. ALL WATERPROOFING DETAILS TO BE IN ACCORDANCE WITH THE ARCHITECT'S SPECIFICATION AND INSTRUCTIONS.
- FOUNDATIONS
1. EXCAVATIONS FOR ALL FOUNDATIONS TO BE CHECKED AND APPROVED BY THE ENGINEER PRIOR TO CASTING OF ANY CONCRETE.
 2. ALL FOUNDATIONS TO BE FOUNDED ON SOUND INSITU MATERIAL, NO FOUNDATION WILL BE ALLOWED ON ANY FILL.
 3. TOP OF FOUNDATION LEVEL TO BE MIN 300mm BELOW FINAL OUTSIDE GROUND LEVEL OR FFL, WHICHEVER IS THE LOWER.
- CONCRETE
- CONCRETE CURE STRENGTH MIN. AT 28 DAYS:
- BLINDING LAYER: - 15MPa/15mm STONE
 - RC PAD FOUNDATIONS: - 25MPa/15mm STONE
 - RC STRIP FOUNDATIONS: - 25MPa/15mm STONE
 - RC ANCHORS / V GRABS: - 25MPa/15mm STONE
 - RC SURFACE BEDS: - 25MPa/15mm STONE
 - RC COLUMNS: - 30MPa/15mm STONE
 - RC BEAMS: - 30MPa/15mm STONE
 - RC SLABS: - 30MPa/15mm STONE
3. CONCRETE COVER TO REINFORCING:
- RC PAD FOUNDATIONS: - 50mm (ALL SIDES)
 - RC STRIP FOUNDATIONS: - 50mm (FROM TOP)
 - RC ANCHORS / V GRABS: - 50mm (FROM TOP)
 - RC SURFACE BEDS: - 50mm (FROM TOP)
 - RC COLUMNS: - 40mm (ALL SIDES)
 - RC BEAMS: - 40mm (ALL SIDES)
 - RC SLABS: - 40mm (ALL SIDES)
3. ALL REINFORCING FIXED WITH THE SPECIFIED COVER MUST BE INSPECTED AND APPROVED IN WRITING BY THE ENGINEER PRIOR TO ANY CONCRETE BEING CAST.
4. THE STANDARD SPECIFICATIONS SABS 1200 (EXCLUDING PAYMENTS CLAUSES) APPLICABLE.
5. ALL CONCRETE TO BE PROPERLY CURED BY KEEPING SURFACES CONTINUOUSLY DAMP, AT LEAST 7 DAYS AFTER CASTING. CONCRETE SLABS TO BE COVERED WITH MOIST SAND OR PLASTIC MEMBRANE DURING THIS PERIOD. COLUMNS TO BE WRAPPED IN PLASTIC IMMEDIATELY AFTER REMOVAL OF SHUTTLERS.
6. ROOF SHEETING AS PER ARCHITECT'S DETAILS. ALL FLASHINGS AS PER ARCHITECT'S DETAILS.

DO NOT SCALE DRAWING
IF IN DOUBT REFER TO DRAWING OFFICE

CLIENT PLAN NUMBER
D34435S-202-01

REFERENCE DRAWINGS	
NUMBER	DRAWING DESCRIPTION
D34435S-202-01	GENERAL STRUCTURAL NOTES

APPROVED BY COUNCIL / CLIENT

CITY ENGINEER / CLIENT	REG. NO.	DATE

AMENDMENTS CODE	
A.Y.	DESCRIPTION
00-99	CONSTRUCTION
1	AS BUILT
2	AS BUILT

DATE	INITIAL CODE	REVISION DESCRIPTION
2021/10/27	C.P.	ISSUED FOR TENDER PURPOSES ONLY

OFFICES

bvi ENGINEERING CONSULTANTS & PROJECT MANAGEMENT
BVI Consulting Engineers KZN PTY (Ltd)
Registration no. 158-0502207

Visit or contact us online at www.bvieng.co.za

PROVINCE OFFICE KZN
Durban +27 31 268 8382 dbr@bvieng.co.za

CLIENT

TSOLO AGRICULTURE & RURAL DEVELOPMENT INSTITUTE
Private Bag X1008, Tsoelo, 5170
Tel: +27 (47) 542 3700

rural development & agrarian reform

OFFICE OF THE DIRECTOR, ENGINEERING SERVICES

PROJECT

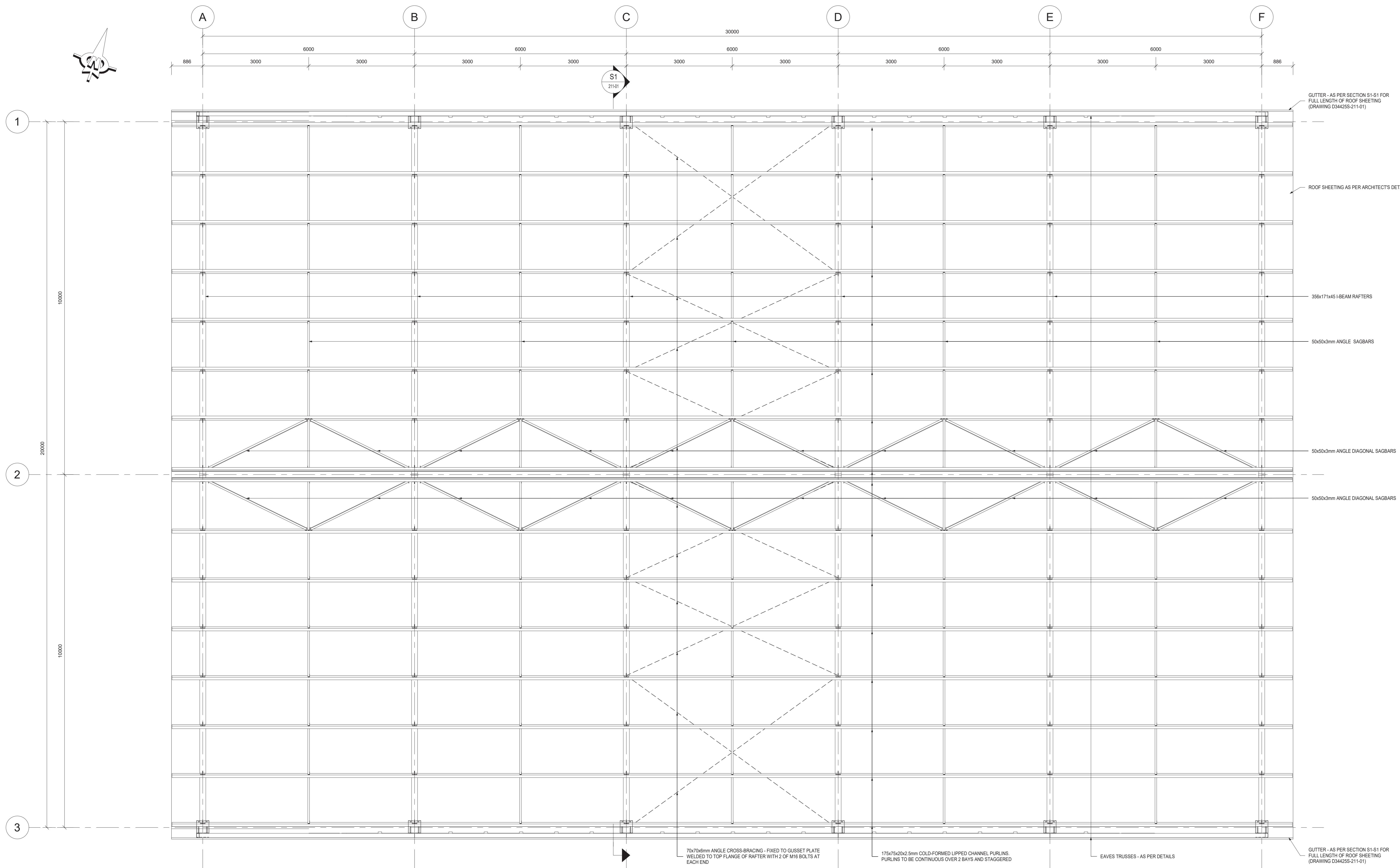
300-SEATER EXAM HALL AT THE TSOLO AGRICULTURAL AND RURAL DEVELOPMENT INSTITUTE

DRAWING TITLE

BUILDING SECTIONS

APPROVED BY BVI

ENGINEER/TECHNOLOGIST	REG. NO.	DATE
	202001098	
SCALE	As Indicated	DRAWN C.P.
DESIGNED P.vN	CHECKED P.vN	
PLAN NUMBER	REV. NO.	DATE SAVED
D34435S-202-01	T	2021/10/27 08:17:26



STEEL ROOF LAYOUT
SCALE 1:50

- NOTES / LEGEND**
1. ALL MATERIAL, FABRICATION AND ERECTION OF STRUCTURAL STEEL TO COMPLY WITH SABS 0162 - 1984 AND SABS 1209 - 1993
 2. ALL WELDS TO BE 6mm CONTINUOUS FILLET OR THE WELD THROAT THICKNESS TO BE THE THICKNESS OF THE THINNESS OF THE TWO PARENT METALS.
 3. WELDING CODE:
- SIZE OF WELD TOP OF LINE FAR SIDE FILLET WELD ALL ROUND
- SIZE OF WELD BOTTOM OF LINE NEAR SIDE SITE WELD
4. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS TO THE ENGINEER FOR APPROVAL PRIOR TO MANUFACTURE. ONLY STRUCTURAL SIZES, CONNECTIONS AND SPLICES WILL BE CHECKED. FINAL DIMENSIONS AND FITTING OF MEMBERS SHALL REMAIN THE CONTRACTOR'S RESPONSIBILITY.
 5. THE CONTRACTOR IS RESPONSIBLE FOR STABILISING THE STRUCTURE AND MAINTAINING IT IN THE CORRECT POSITION DURING ERECTION.
 6. STRUCTURAL STEELWORK SHALL BE COMPLETED BY THE MANUFACTURER, CLEANED AND PAINTED WITH SPECIFIED PRIMER IN WORKSHOP BEFORE TRANSPORTATION TO SITE.
 7. STRUCTURAL STEEL TO BE OF GRADE S355W.
 8. ALL BOLTS TO BE OF GALVANISED GRADE 8.8.
 9. BOLTS SHALL NOT HAVE THREADS WITHIN THE SHEAR PLANES.
 10. ALL HOLES TO BE DRILLED AT STANDARD BACKMARK.
 11. BASE PLATES TO BE PROPERLY GROUDED UP AND PAINTED PRIOR TO BACKLIFTING BEING DONE.
 12. ALL BOX OR CIRCULAR SECTION ENDS TO BE CLOSED WITH 14mm THICK PLATES.
 13. WHERE THICKER PLATES ARE USED, LONGER BOLTS MUST BE USED TO ENSURE THAT SUFFICIENT LENGTH OF THREAD ARE TAKEN UP BY THE NUTS.
 14. ALL STEEL MEMBERS TO BE HOT-DIPPED GALVANISED.

DO NOT SCALE DRAWING
IF IN DOUBT, REFER TO DRAWING OFFICE

CLIENT PLAN NUMBER
D34435S-210-01

NUMBER	DRAWING DESCRIPTION
D34435S-210-01	GENERAL STRUCTURAL NOTES
D34435S-211-01	STEEL ROOF - SECTIONS AND DETAILS

APPROVED BY COUNCIL / CLIENT

CITY ENGINEER / CLIENT	REG. NO.	DATE

AMENDMENTS CODE	
A-Y / REPORT DESIGN TENDER	A: BY CLIENT
00-99 / CONSTRUCTION	B: BY ARCHITECT
Z / AS BUILT	C: BY MECHANICAL OR ELECTRICAL
	D: BY BVI
	E: BY OTHER ()

DATE	INITIAL CODE	REVISION DESCRIPTION
2021/10/27	C.P.	ISSUED FOR TENDER PURPOSES ONLY

OFFICES

Visit or contact us online at www.bvi.co.za

PROVINCE OFFICE EMAIL
KZN Durban +27 31 268 8382 dbn@bvi.co.za

CLIENT

TSOLO AGRICULTURE & RURAL DEVELOPMENT INSTITUTE
Private Bag X1008, Tsoelo, 5170
Tel: +27 (47) 542 5700

rural development & agrarian reform

Office of the Director, Engineering Services

300-SEATER EXAM HALL AT THE TSOLO AGRICULTURAL AND RURAL DEVELOPMENT INSTITUTE

DRAWING TITLE

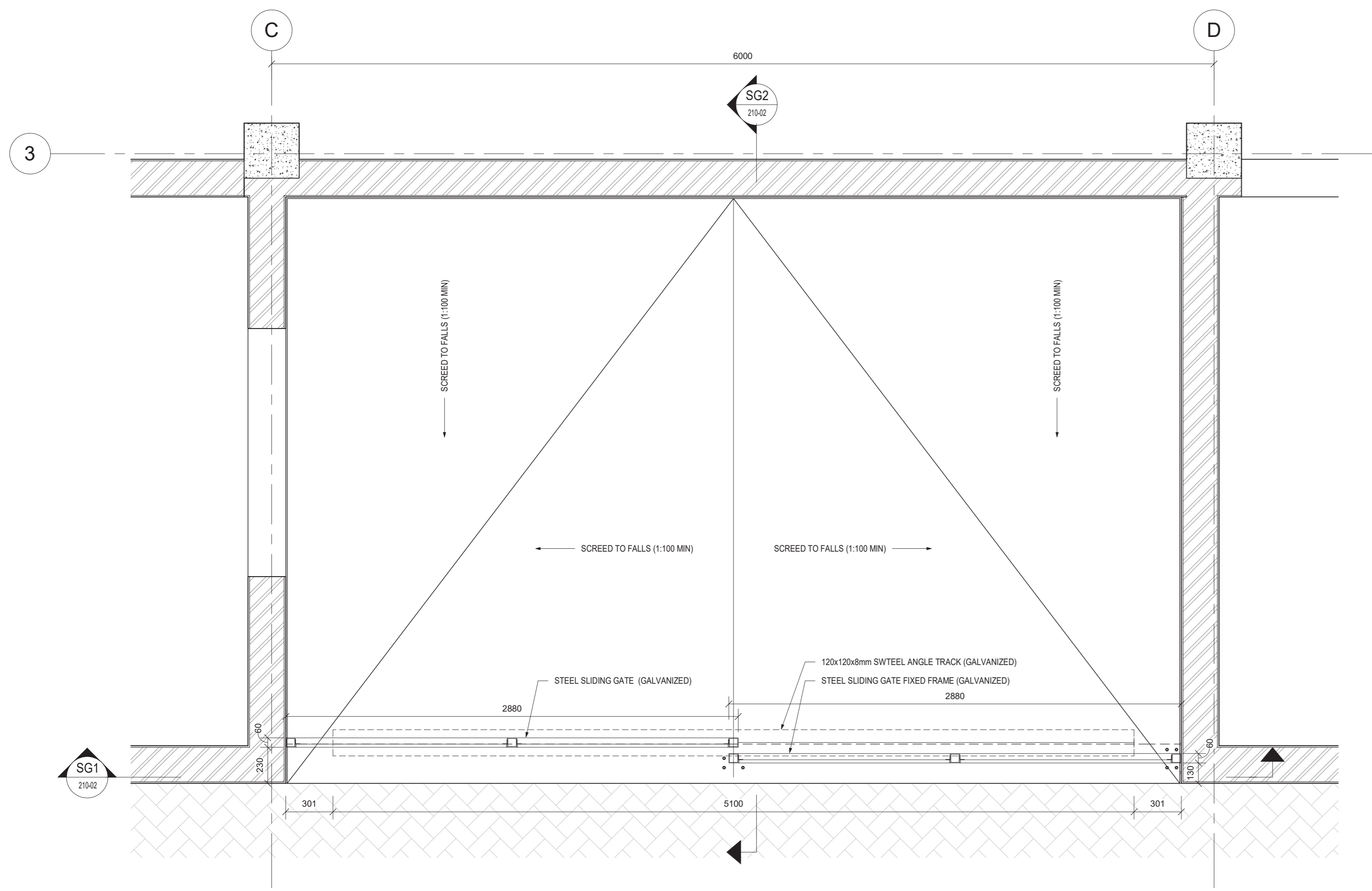
STEEL ROOF - LAYOUT

APPROVED BY BVI

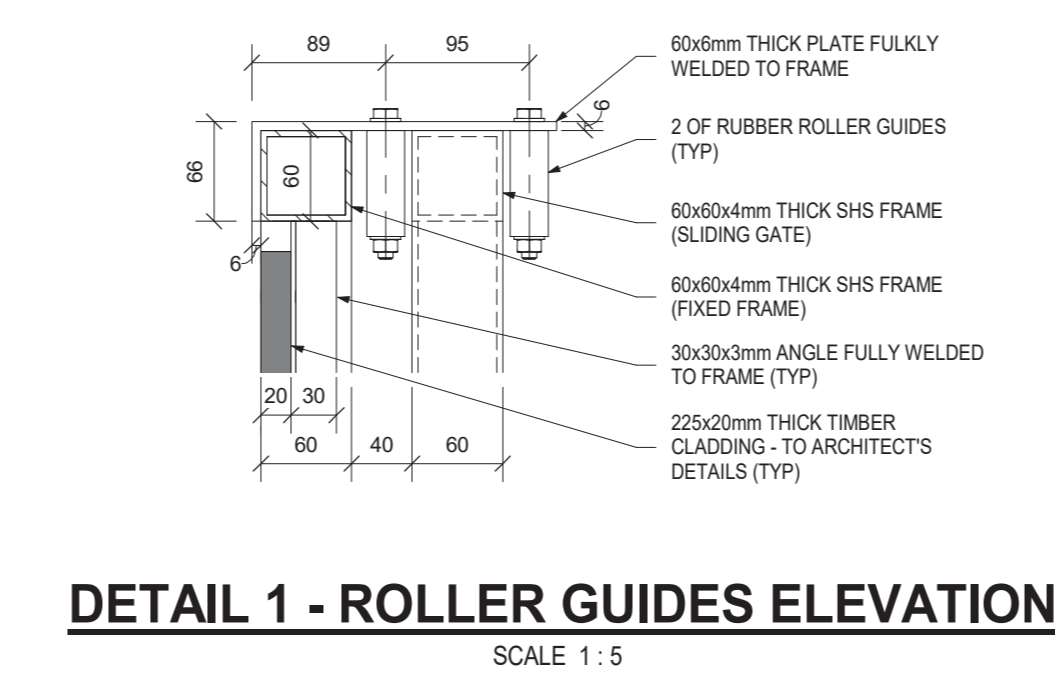
ENGINEER/TECHNOLOGIST	REG. NO.	DATE
	202001098	

SCALE	As indicated	DRAWN	C.P.
DESIGNED	PvN	CHECKED	PvN

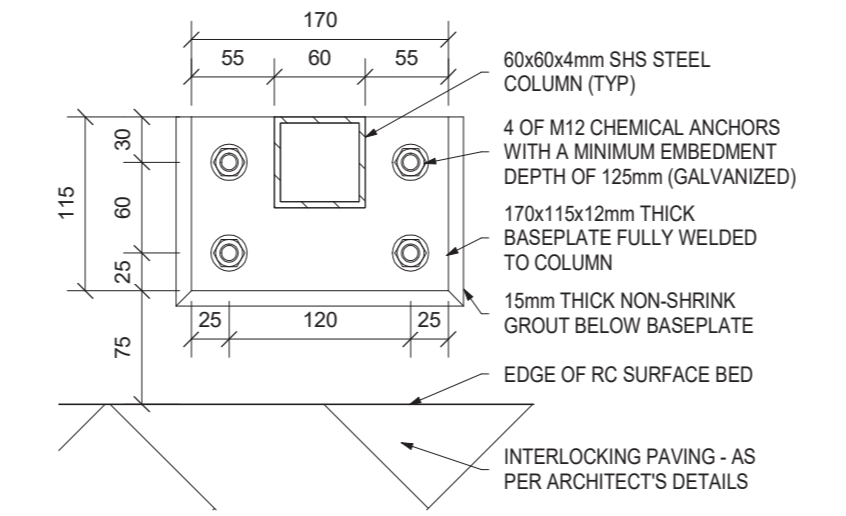
PLAN NUMBER	REV. NO.	DATE SAVED
D34435S-210-01	T	2021/10/27 08:16:42



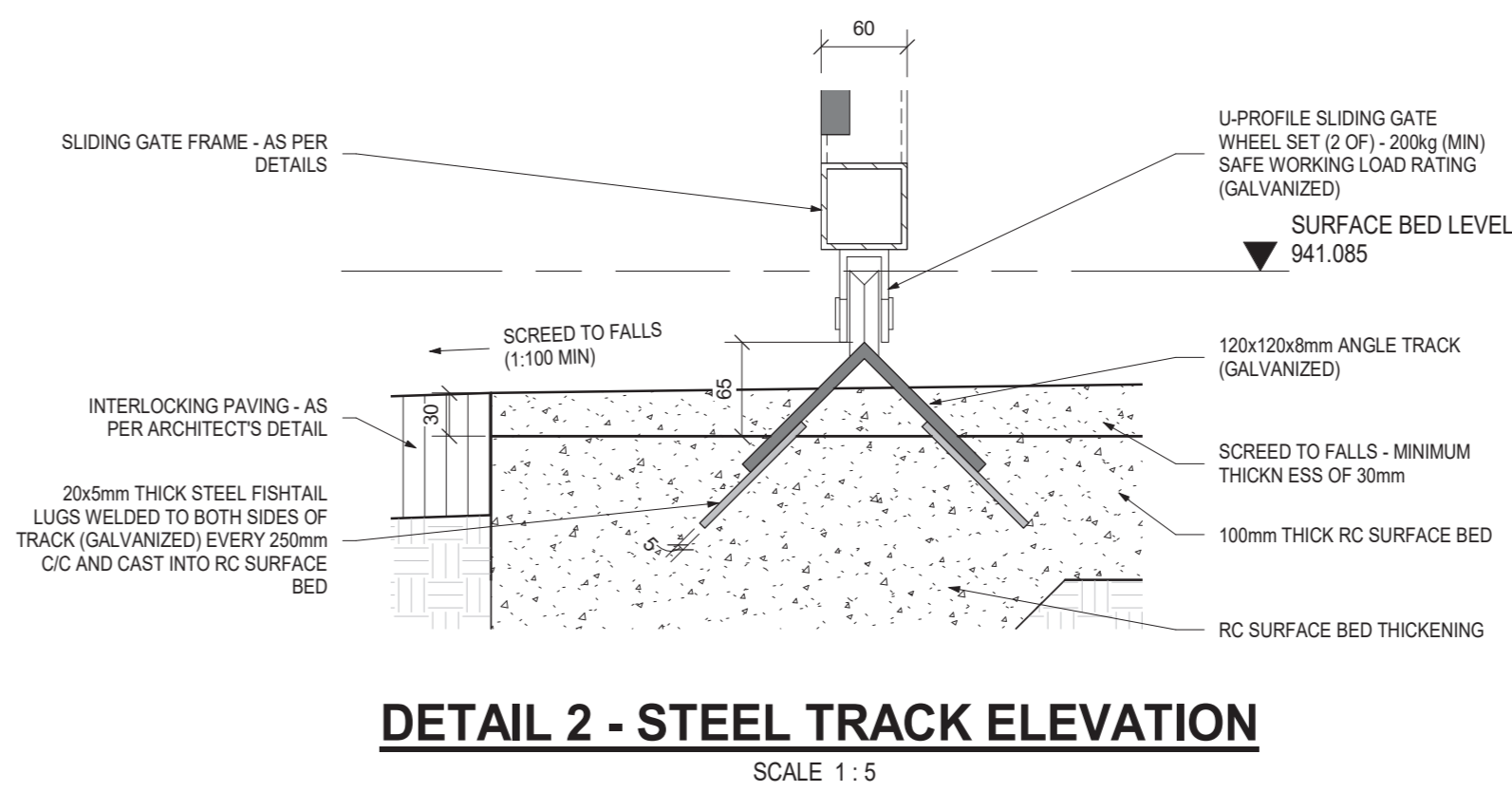
STEEL SLIDING GATE - LAYOUT
SCALE 1:20



DETAIL 1 - ROLLER GUIDES ELEVATION
SCALE 1:5



DETAIL 3 - BASEPLATE DETAIL - PLAN VIEW
SCALE 1:5



DETAIL 2 - STEEL TRACK ELEVATION
SCALE 1:5

- NOTES / LEGEND**
1. ALL MATERIAL, FABRICATION AND ERECTION OF STRUCTURAL STEEL TO COMPLY WITH SABS 0162 - 1984 AND SABS 12001 - 1983.
 2. ALL WELDS TO BE 6mm CONTINUOUS FILLET OR THE WELD THROAT THICKNESS TO BE THE THICKNESS OF THE THINNEST OF THE TWO PARENT METALS.
 3. WELDING CODE:
- GENERAL**
1. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT ALL MATERIALS AND WORKMANSHIP CONFORM WITH THE DETAILS AND SPECIFICATIONS SHOWN ON THIS DRAWING AND ALL RELEVANT SABS SPECIFICATIONS, IRRESPECTIVE OF WHETHER THE ENGINEER HAS INSPECTED THE WORKS ON SITE OR NOT.
 2. ALL DIMENSIONS AND LEVELS TO BE CHECKED ON SITE AND CORRELATED WITH THE ARCHITECT'S DRAWINGS BEFORE CONSTRUCTION COMMENCES.
 3. ALL WRITTEN DIMENSIONS USED IN PREFERENCE TO SCALING.
 4. ALL WATERPROOFING DETAILS TO BE IN ACCORDANCE WITH THE ARCHITECT'S SPECIFICATION AND INSTRUCTIONS.
- FOUNDATIONS**
1. EXCAVATIONS FOR ALL FOUNDATIONS TO BE CHECKED AND APPROVED BY THE ENGINEER PRIOR TO CASTING OF ANY CONCRETE.
 2. ALL FOUNDATIONS TO BE FOUNDED ON SOUND INSITU MATERIAL. NO FOUNDATION WILL BE ALLOWED ON ANY FILL.
 3. TOP OF FOUNDATION LEVEL TO BE MN 340mm BELOW FINAL OUTSIDE GROUND LEVEL OR PFL, WHICHEVER IS THE LOWER.
- CONCRETE**
- CONCRETE CURE STRENGTH MIN. AT 28 DAYS:
 SLABING - 15MPa/19
 RC PAD FOUNDATIONS, RC STRIP FOOTINGS, RC SLABS AND SURFACE BEDS - 30MPa/19
2. CONCRETE COVER TO REINFORCING:
 RC PAD FOUNDATIONS - 50mm (ALL SIDES)
 RC SHEAR WALLS - 40mm (ALL SIDES)
 3. ALL REINFORCING FIXED WITH THE SPECIFIED COVER MUST BE INSPECTED AND APPROVED IN WRITING BY THE ENGINEER PRIOR TO ANY CONCRETE BEING CAST.
 4. THE STANDARD SPECIFICATIONS SABS 1200 (EXCLUDING PAYMENTS CLAUSES) IS APPLICABLE.
 5. ALL CONCRETE TO BE PROPERLY CURED BY KEEPING SURFACES CONTINUOUSLY DAMP AT LEAST 7 DAYS AFTER CASTING. CONCRETE SABS TO BE COVERED WITH MOIST SAND OR PLASTIC MEMBRANE DURING THIS PERIOD. COLUMNS TO BE WRAPPED IN PLASTIC IMMEDIATELY AFTER REMOVAL OF SHUTTERS.

- GENERAL**
1. ALL MATERIAL, FABRICATION AND ERECTION OF STRUCTURAL STEEL TO COMPLY WITH SABS 0162 - 1984 AND SABS 12001 - 1983.
 2. ALL WELDS TO BE 6mm CONTINUOUS FILLET OR THE WELD THROAT THICKNESS TO BE THE THICKNESS OF THE THINNEST OF THE TWO PARENT METALS.
 3. WELDING CODE:
- GENERAL**
1. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT ALL MATERIALS AND WORKMANSHIP CONFORM WITH THE DETAILS AND SPECIFICATIONS SHOWN ON THIS DRAWING AND ALL RELEVANT SABS SPECIFICATIONS, IRRESPECTIVE OF WHETHER THE ENGINEER HAS INSPECTED THE WORKS ON SITE OR NOT.
 2. ALL DIMENSIONS AND LEVELS TO BE CHECKED ON SITE AND CORRELATED WITH THE ARCHITECT'S DRAWINGS BEFORE CONSTRUCTION COMMENCES.
 3. ALL WRITTEN DIMENSIONS USED IN PREFERENCE TO SCALING.
 4. ALL WATERPROOFING DETAILS TO BE IN ACCORDANCE WITH THE ARCHITECT'S SPECIFICATION AND INSTRUCTIONS.
- FOUNDATIONS**
1. EXCAVATIONS FOR ALL FOUNDATIONS TO BE CHECKED AND APPROVED BY THE ENGINEER PRIOR TO CASTING OF ANY CONCRETE.
 2. ALL FOUNDATIONS TO BE FOUNDED ON SOUND INSITU MATERIAL. NO FOUNDATION WILL BE ALLOWED ON ANY FILL.
 3. TOP OF FOUNDATION LEVEL TO BE MN 340mm BELOW FINAL OUTSIDE GROUND LEVEL OR PFL, WHICHEVER IS THE LOWER.
- CONCRETE**
- CONCRETE CURE STRENGTH MIN. AT 28 DAYS:
 SLABING - 15MPa/19
 RC PAD FOUNDATIONS, RC STRIP FOOTINGS, RC SLABS AND SURFACE BEDS - 30MPa/19
2. CONCRETE COVER TO REINFORCING:
 RC PAD FOUNDATIONS - 50mm (ALL SIDES)
 RC SHEAR WALLS - 40mm (ALL SIDES)
 3. ALL REINFORCING FIXED WITH THE SPECIFIED COVER MUST BE INSPECTED AND APPROVED IN WRITING BY THE ENGINEER PRIOR TO ANY CONCRETE BEING CAST.
 4. THE STANDARD SPECIFICATIONS SABS 1200 (EXCLUDING PAYMENTS CLAUSES) IS APPLICABLE.
 5. ALL CONCRETE TO BE PROPERLY CURED BY KEEPING SURFACES CONTINUOUSLY DAMP AT LEAST 7 DAYS AFTER CASTING. CONCRETE SABS TO BE COVERED WITH MOIST SAND OR PLASTIC MEMBRANE DURING THIS PERIOD. COLUMNS TO BE WRAPPED IN PLASTIC IMMEDIATELY AFTER REMOVAL OF SHUTTERS.

DO NOT SCALE DRAWING
IF IN DOUBT REFER TO DRAWING OFFICE

CLIENT PLAN NUMBER

D34435S-210-01

REFERENCE DRAWINGS	
NUMBER	DRAWING DESCRIPTION
D34435S-210-01	GENERAL STRUCTURAL NOTES

APPROVED BY COUNCIL / CLIENT

CITY ENGINEER / CLIENT REG. NO. DATE

AMENDMENTS CODE	
A.Y	REASON FOR DESIGN TENDER
00-99	CONSTRUCTION
1	AS BUILT
2	AS BUILT

DATE	INITIAL CODE	REVISION DESCRIPTION
2021/10/27	C.P.	ISSUED FOR TENDER PURPOSES ONLY

OFFICES

bvi ENGINEERING CONSULTANTS & PROJECT MANAGEMENT
 BVI Consulting Engineers KZN PTY (Ltd)
 Registration no: 186020207

Visit or contact us online at www.bvigroup.co.za

PROVINCE OFFICE E-MAIL
 KZN Durban +27 31 268 8382 dbn@bvi.co.za

CLIENT

TSOLO AGRICULTURE & RURAL DEVELOPMENT INSTITUTE
 Private Bag X1008, Tsoelo, 5170
 Tel: +27 (47) 542 3700
 rural development & agrarian reform

OFFICE OF THE DIRECTOR, ENGINEERING SERVICES

PROJECT TITLE

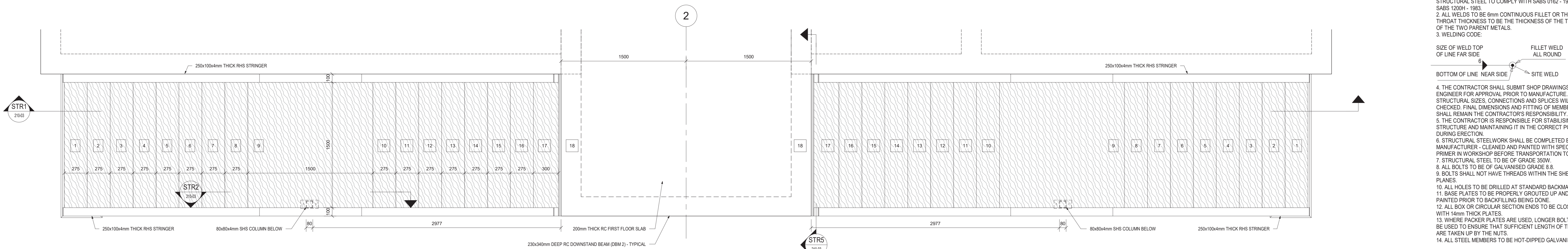
300-SEATER EXAM HALL AT THE TSOLO AGRICULTURAL AND RURAL DEVELOPMENT INSTITUTE

DRAWING TITLE

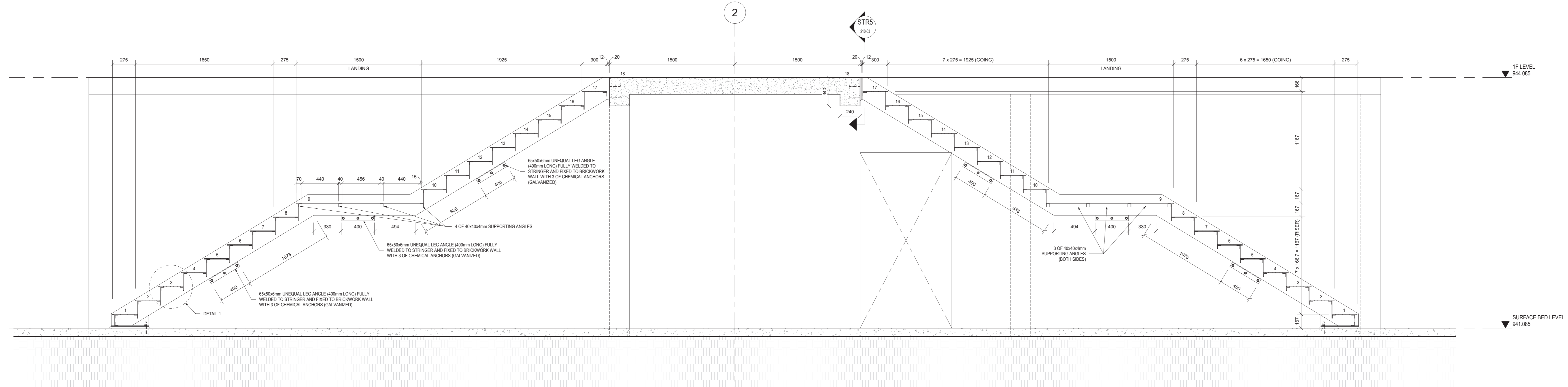
STEEL SLIDING GATE - LAYOUT AND DETAILS

APPROVED BY BVI

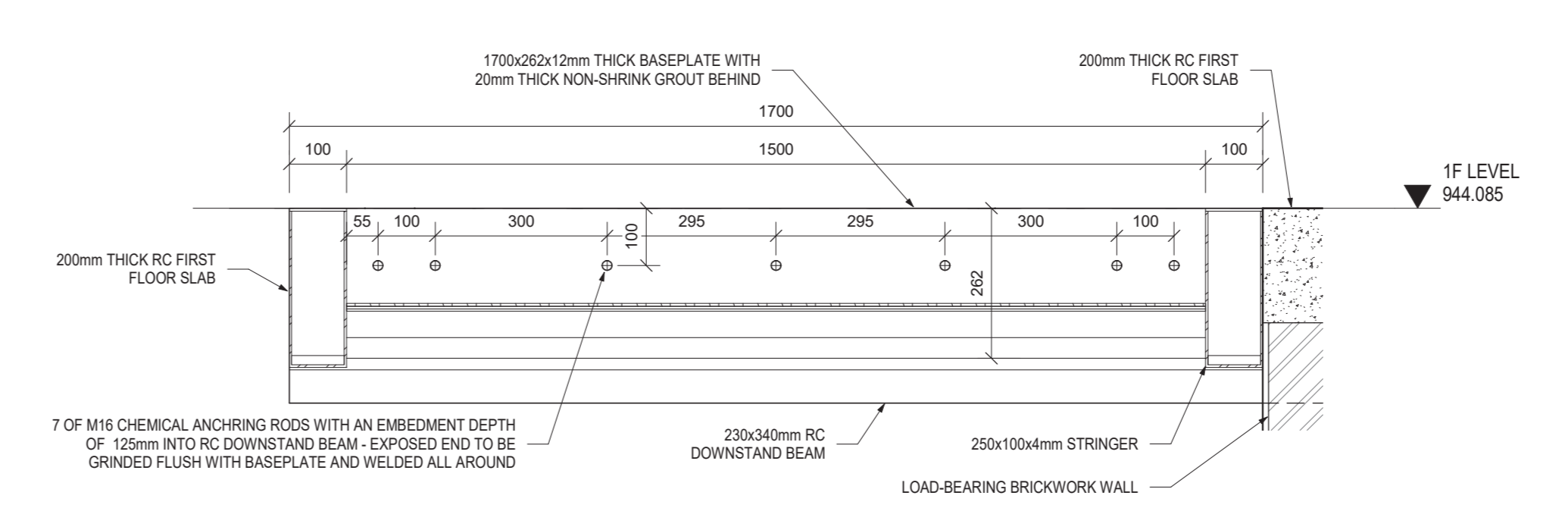
ENGINEER/TECHNOLOGIST	REG. NO.	DATE
202001098		
SCALE	As indicated	DRAWN C.P.
DESIGNED	PvN	CHECKED PvN
PLAN NUMBER	REV. NO.	DATE SAVED
D34435S-210-02	T	2021/10/27 08:16:03



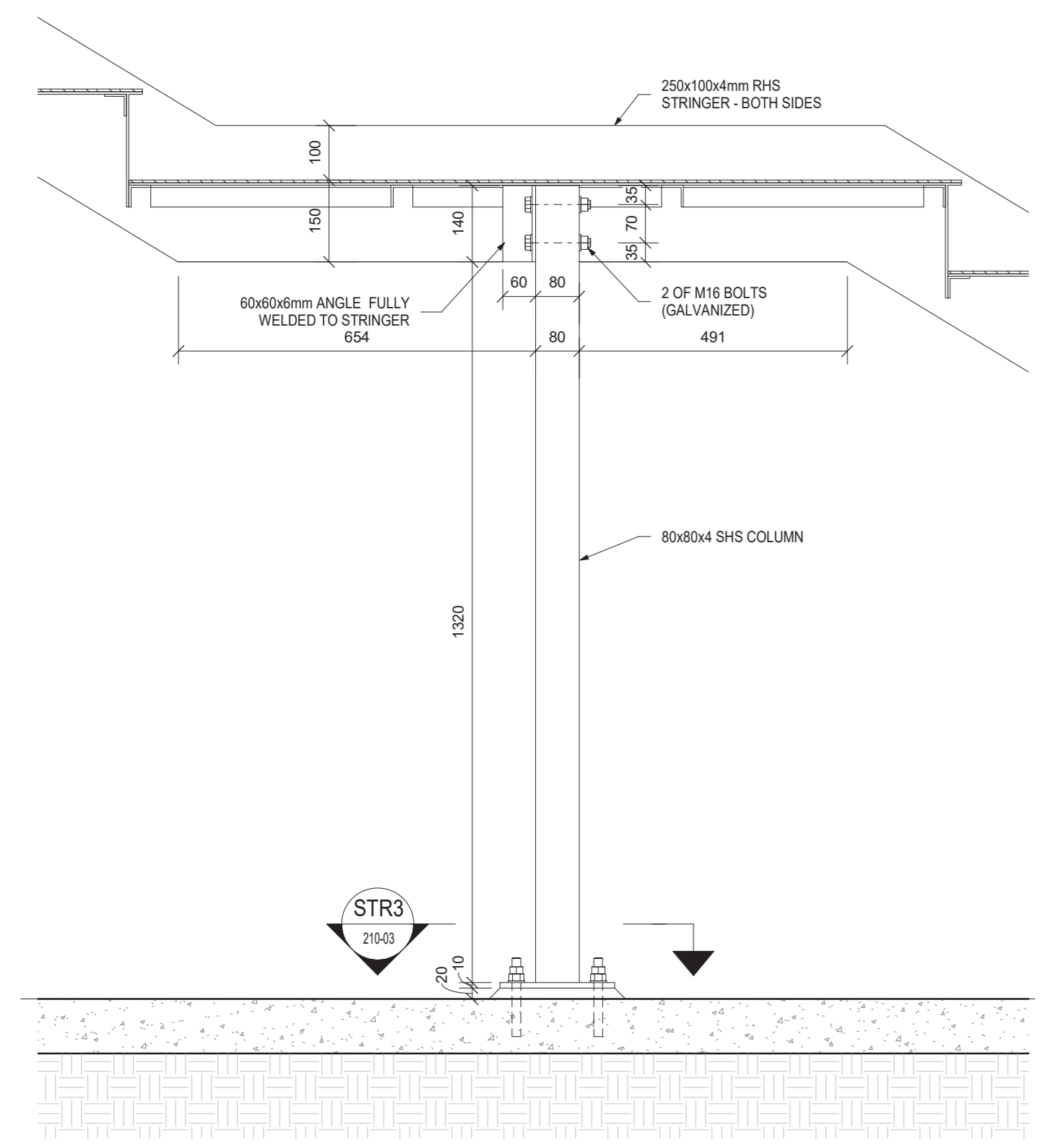
STEEL STAIRS - LAYOUT
SCALE 1:20



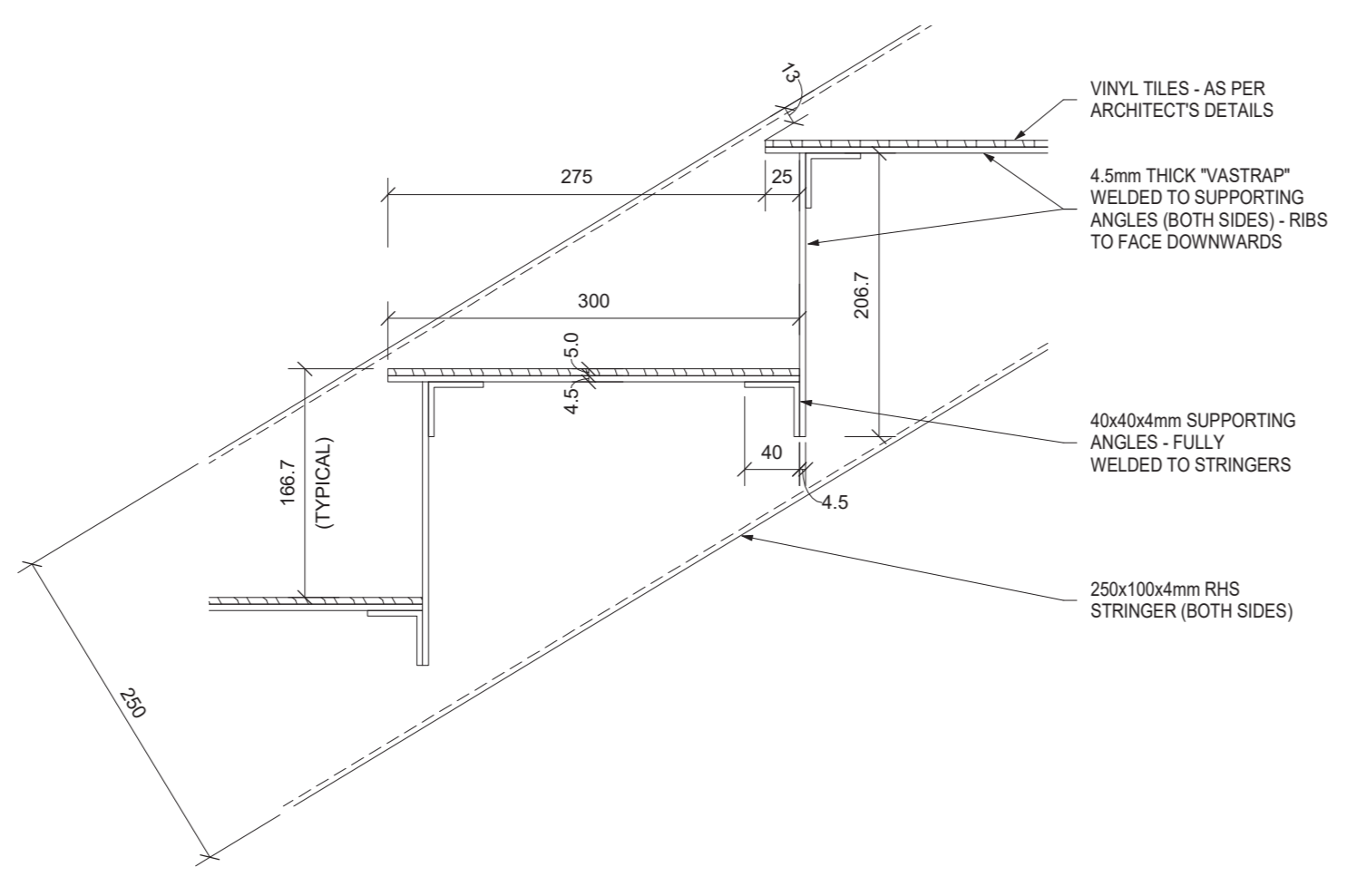
SECTION STR1-STR1
SCALE 1:20



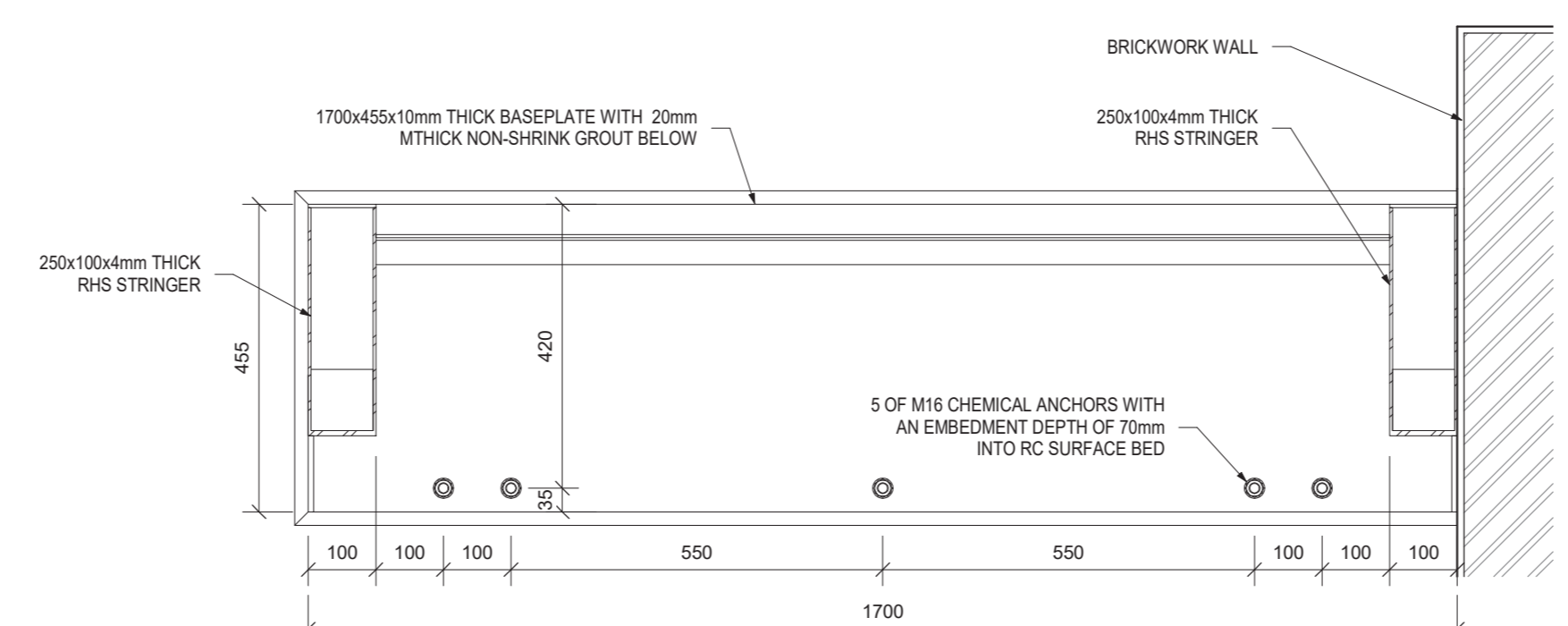
SECTION STR5-STR5
SCALE 1:10



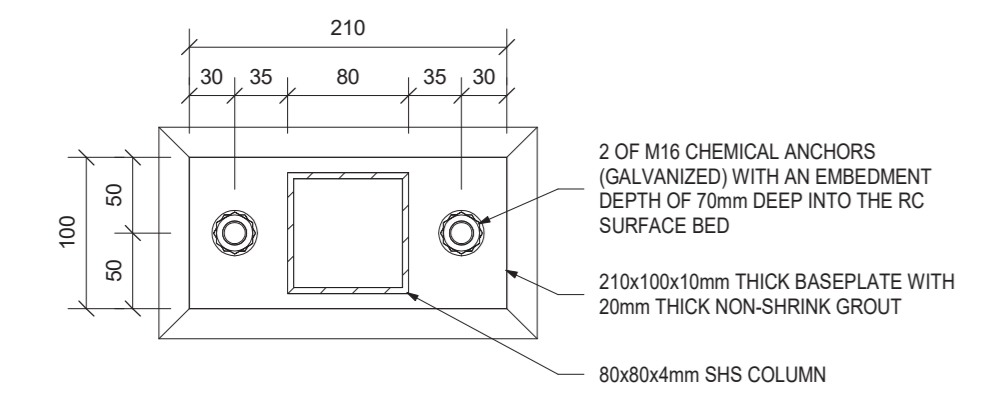
SECTION STR2-STR2
SCALE 1:10



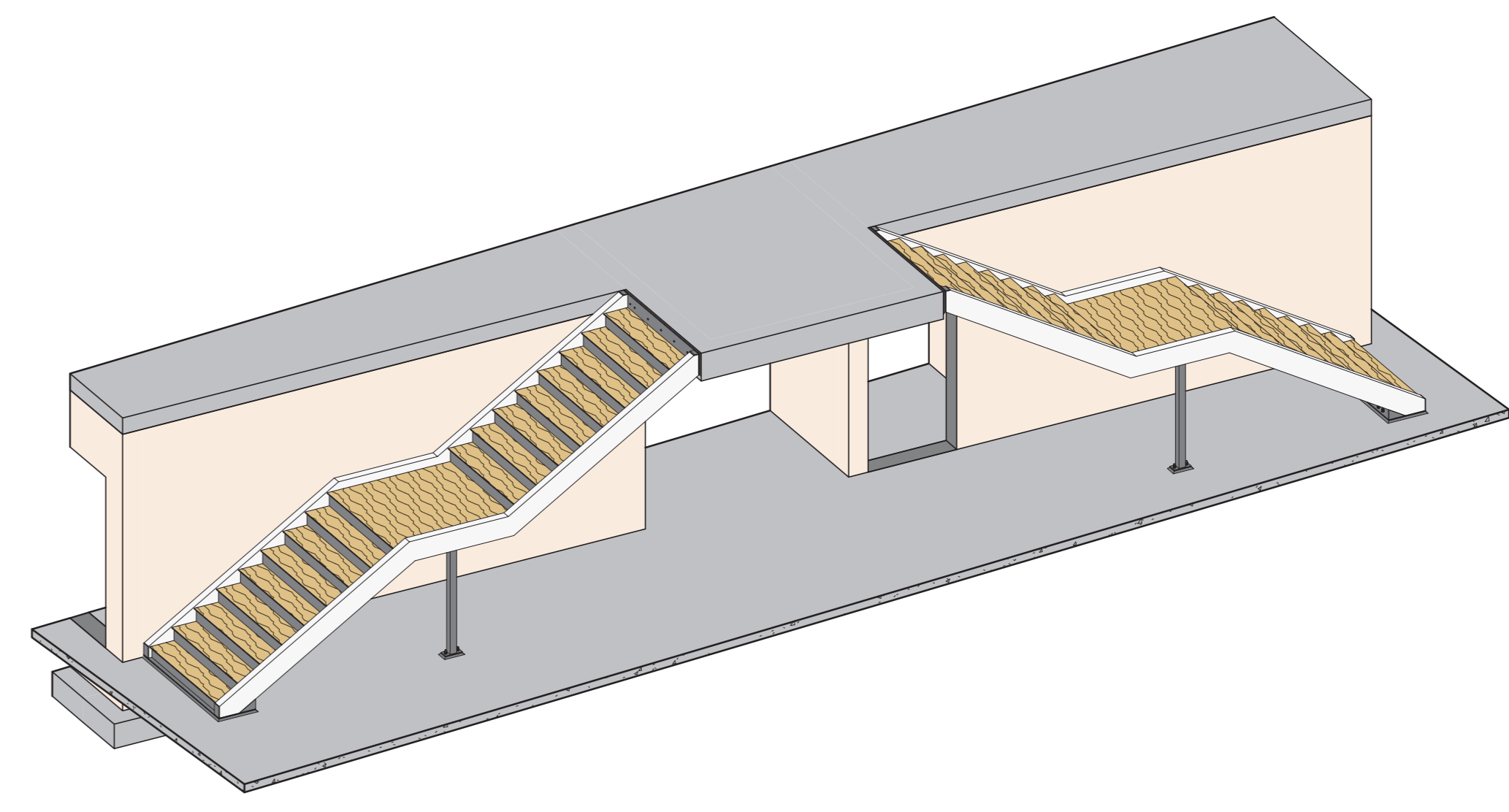
DETAIL 1 - STAIR TREADS TYPICAL DETAILS
SCALE 1:5



SECTION STR4-STR4
SCALE 1:10



SECTION STR3-STR3
SCALE 1:5



ISOMETRIC VIEW - STEEL STAIRS
SCALE

- NOTES / LEGEND**
- ALL MATERIAL, FABRICATION AND ERECTION OF STRUCTURAL STEEL TO COMPLY WITH SABS 0182 - 1984 AND SABS 1004-1983.
 - ALL WELDS TO BE 6mm CONTINUOUS FILLET OR THE WELD THROAT THICKNESS TO BE THE THICKNESS OF THE THINNEST OF THE TWO PARENT METALS.
 - WELDING CODE:
- SIZE OF WELD TOP OF LINE FAR SIDE
BOTTOM OF LINE NEAR SIDE
- FILLET WELD ALL ROUND
SITE WELD
- THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS TO THE ENGINEER FOR APPROVAL PRIOR TO MANUFACTURE. ONLY STRUCTURAL SIZES, CONNECTIONS AND SPLICES WILL BE CHECKED. FINAL DIMENSIONS AND FITTING OF MEMBERS SHALL REMAIN THE CONTRACTOR'S RESPONSIBILITY.
 - THE CONTRACTOR IS RESPONSIBLE FOR STABILISING THE STRUCTURE AND MAINTAINING IT IN THE CORRECT POSITION DURING ERECTION.
 - STRUCTURAL STEELWORK SHALL BE COMPLETED BY THE MANUFACTURER - CLEANED AND PAINTED WITH SPECIFIED PRIMER IN WORKSHOP BEFORE TRANSPORTATION TO SITE.
 - STRUCTURAL STEEL TO BE OF GRADE S355.
 - ALL BOLTS TO BE OF GALVANISED GRADE 8.8.
 - BOLTS SHALL NOT HAVE THREADS WITHIN THE SHEAR PLANES.
 - ALL HOLES TO BE DRILLED AT STANDARD BACKMARK.
 - BASE PLATES TO BE PROPERLY GROUDED UP AND PAINTED PRIOR TO BACKFILLING BEING DONE.
 - ALL BOX OR CIRCULAR SECTION ENDS TO BE CLOSED WITH 16mm THICK PLATES.
 - WHERE PACKER PLATES ARE USED, LONGER BOLTS MUST BE USED TO ENSURE THAT SUFFICIENT LENGTH OF THREAD ARE TAKEN UP BY THE NUTS.
 - ALL STEEL MEMBERS TO BE HOT-DIPPED GALVANISED.
- GENERAL**
1. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT ALL MATERIALS AND WORKMANSHIP CONFORM WITH THE DETAILS AND SPECIFICATIONS SHOWN ON THIS DRAWING, AND ALL RELEVANT SABS SPECIFICATIONS, IRRESPECTIVE OF WHETHER THE ENGINEER HAS INSPECTED THE WORKS ON SITE OR NOT.
2. ALL DIMENSIONS AND LEVELS TO BE CHECKED ON SITE AND CORRELATED WITH THE ARCHITECT'S DRAWINGS BEFORE CONSTRUCTION COMMENCES.
3. ALL WRITTEN DIMENSIONS USED IN PREFERENCE TO SCALING.
4. ALL WATERPROOFING DETAILS TO BE IN ACCORDANCE WITH THE ARCHITECT'S SPECIFICATION AND INSTRUCTIONS.
- FOUNDATIONS**
1. EXCAVATIONS FOR ALL FOUNDATIONS TO BE CHECKED AND APPROVED BY THE ENGINEER PRIOR TO CASTING OF ANY CONCRETE.
2. ALL FOUNDATIONS TO BE FOUNDED ON SOUND IN-SITU MATERIAL. NO FOUNDATION WILL BE ALLOWED ON ANY FILL.
3. TOP OF FOUNDATION LEVEL TO BE MIN 340mm BELOW FINAL OUTSIDE GROUND LEVEL OR FFL, WHICHEVER IS THE LOWER.
- CONCRETE**
- CONCRETE CUBE STRENGTH MIN. AT 28 DAYS:
BLINDING: -15MPa/19
RC PAD FOUNDATIONS, RC STRIP FOOTINGS, RC SLABS AND SURFACE BEDS: -30MPa/19
2. CONCRETE COVER TO REINFORCING:
RC PAD FOUNDATIONS: -50mm (ALL SIDES)
RC SHEAR WALLS: -40mm (ALL SIDES)
3. ALL REINFORCING FIXED WITH THE SPECIFIED COVER MUST BE INSPECTED AND APPROVED IN WRITING BY THE ENGINEER PRIOR TO ANY CONCRETE BEING CAST.
4. THE STANDARD SPECIFICATIONS SABS 1200 (EXCLUDING PAYMENTS CLAUSES) IS APPLICABLE.
5. ALL CONCRETE TO BE PROPERLY CURED BY KEEPING SURFACES CONTINUOUSLY DAMP AT LEAST 7 DAYS AFTER CASTING. CONCRETE SLABS TO BE COVERED WITH MOIST SAND OR PLASTIC MEMBRANE DURING THIS PERIOD. COLUMNS TO BE WRAPPED IN PLASTIC IMMEDIATELY AFTER REMOVAL OF SHUTTERS.

DO NOT SCALE DRAWING
IF IN DOUBT, REFER TO DRAWING OFFICE

CLIENT PLAN NUMBER

NUMBER	DRAWING DESCRIPTION
D34435S-210-01	GENERAL STRUCTURAL NOTES

APPROVED BY COUNCIL / CLIENT

CITY ENGINEER / CLIENT REG. NO. DATE

AMENDMENTS CODE

A.Y. / REPORT DESIGN TENDER	A. BY CLIENT
00-99 / CONSTRUCTION	B. BY ARCHITECT
Z / AS-BUILT	C. BY MECHANICAL OR ELECTRICAL
	D. BY BVI
	E. BY OTHER ()

DATE	INITIAL CODE	REVISION DESCRIPTION
2021/10/27	C.P.	ISSUED FOR TENDER PURPOSES ONLY

OFFICES



bvi ENGINEERING, PROCUREMENT, MANAGEMENT & CONSTRUCTION
BVI Consulting Engineers KZN PTY (Ltd)
Registration no. 158690220P

Visit or contact us online at www.bviigroup.co.za

PROVINCE OFFICE EMAIL
KZN Durban +27 31 268 8382 dbn@bvin.co.za

CLIENT



TSOLO AGRICULTURE & RURAL DEVELOPMENT INSTITUTE
Private Bag X1008, Tsoelo, 5170
Tel: +27 (47) 542 3700
rural development & agrarian reform
OFFICE OF THE DIRECTOR, ENGINEERING SERVICES

PROJECT

300-SEATER EXAM HALL AT THE TSOLO AGRICULTURAL AND RURAL DEVELOPMENT INSTITUTE

DRAWING TITLE

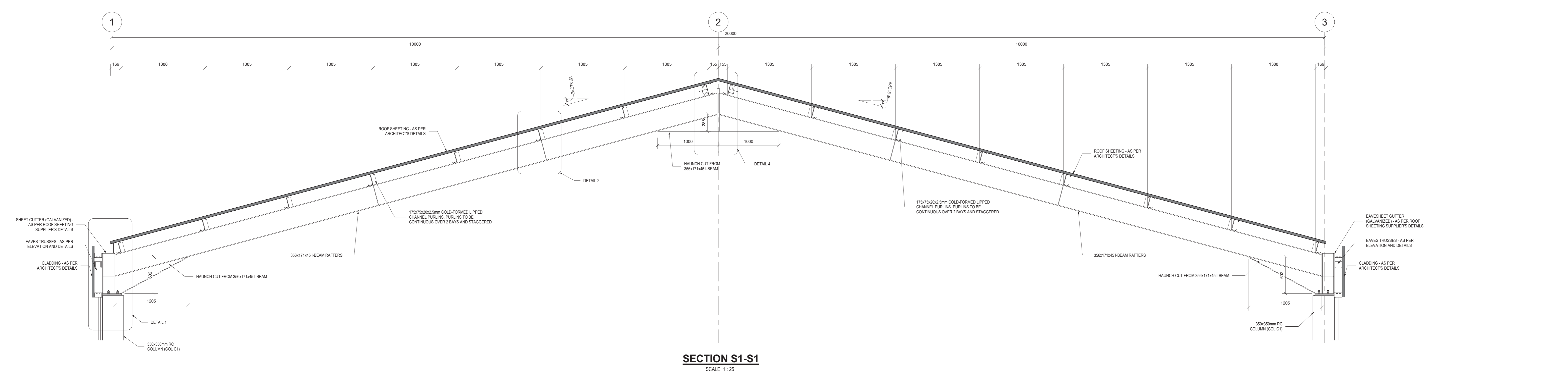
STEEL STAIRS - LAYOUT AND DETAILS

APPROVED BY BVI

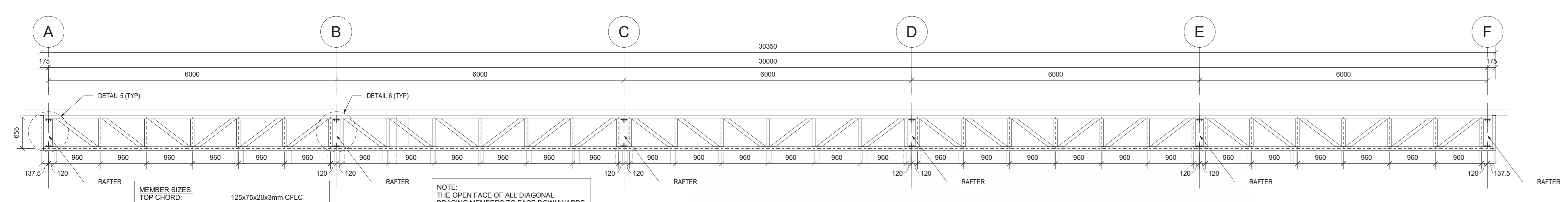
ENGINEER/TECHNOLOGIST	REG. NO.	DATE
	202001098	

SCALE	As indicated	DRAWN	C.P.
DESIGNED	PvN	CHECKED	PvN
PLAN NUMBER	REV. NO.	DATE SAVED	

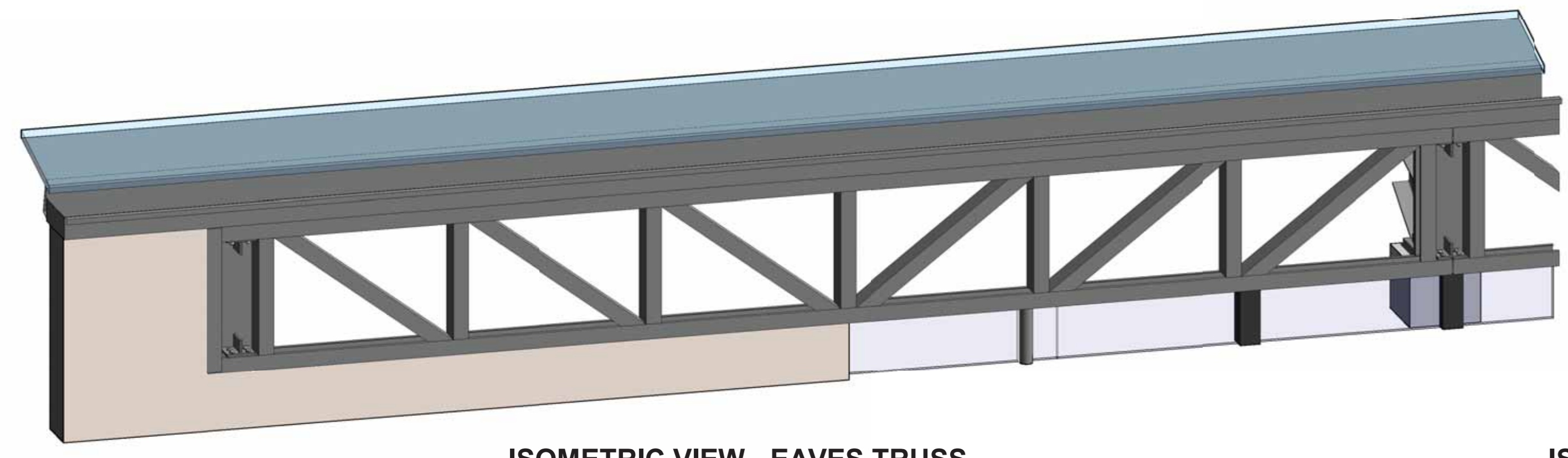
D34435S-210-03 T 2021/10/27 08:13:47



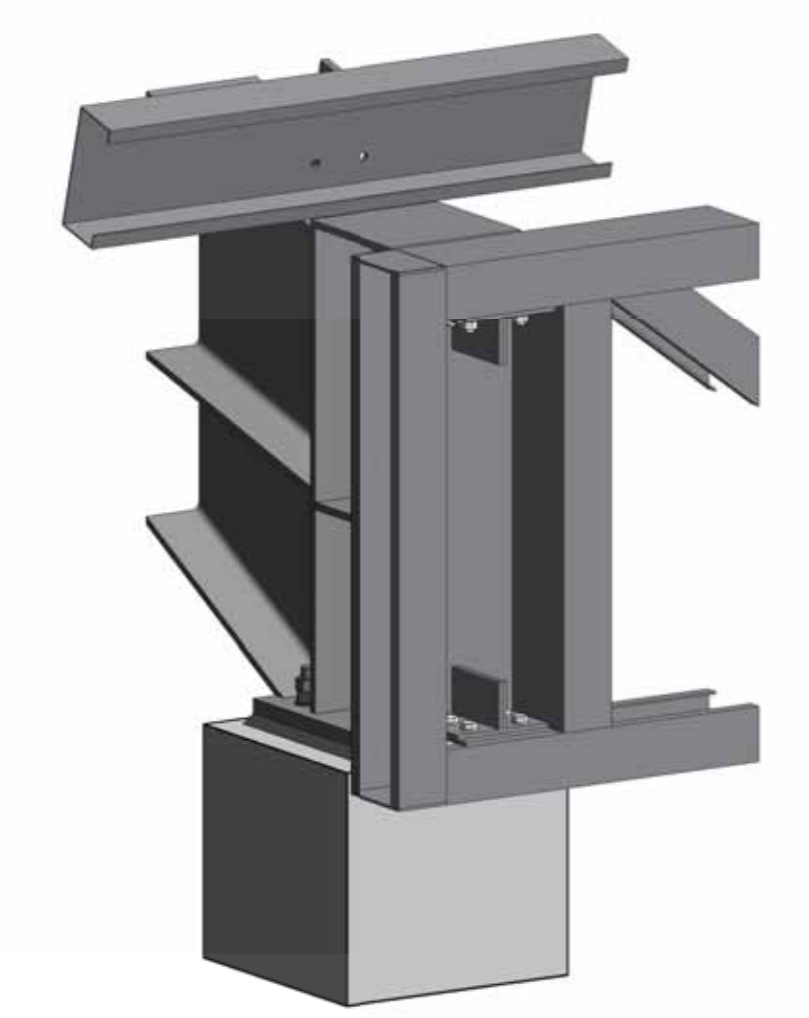
SECTION S1-S1
SCALE 1:25



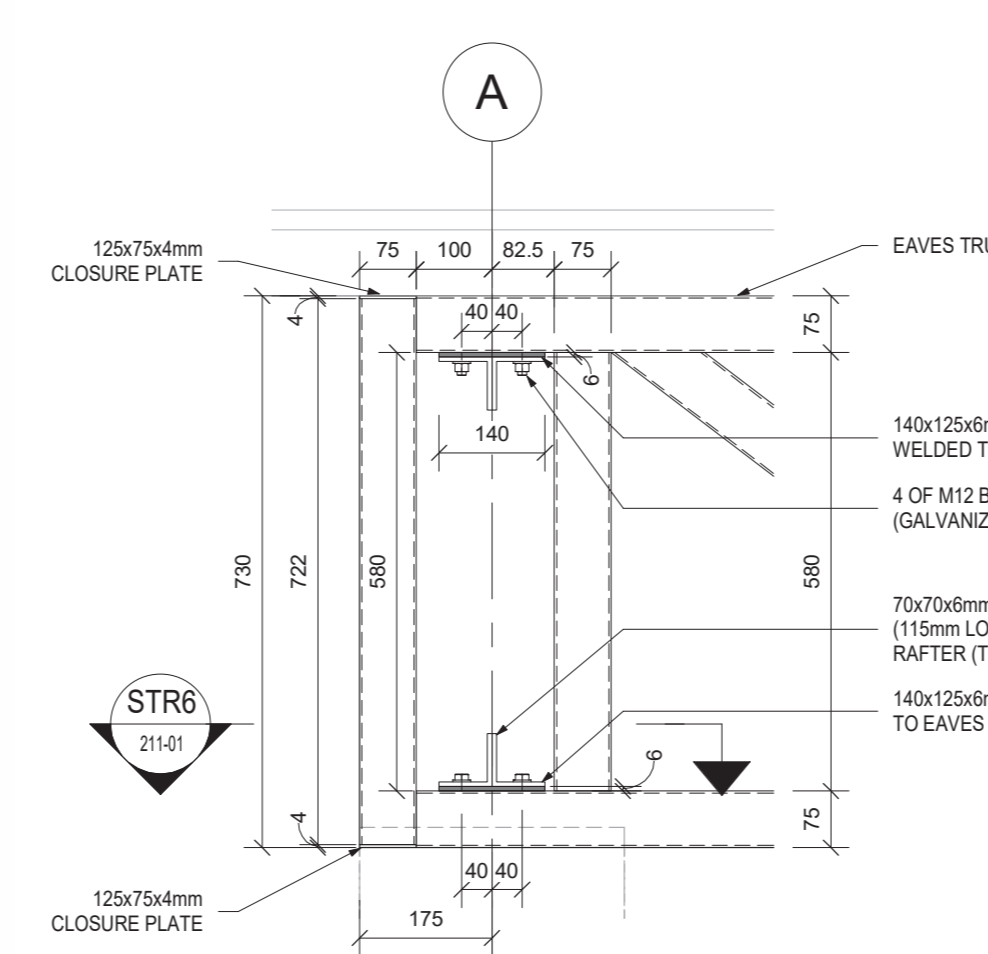
EAVES TRUSS - ELEVATION
SCALE 1:50



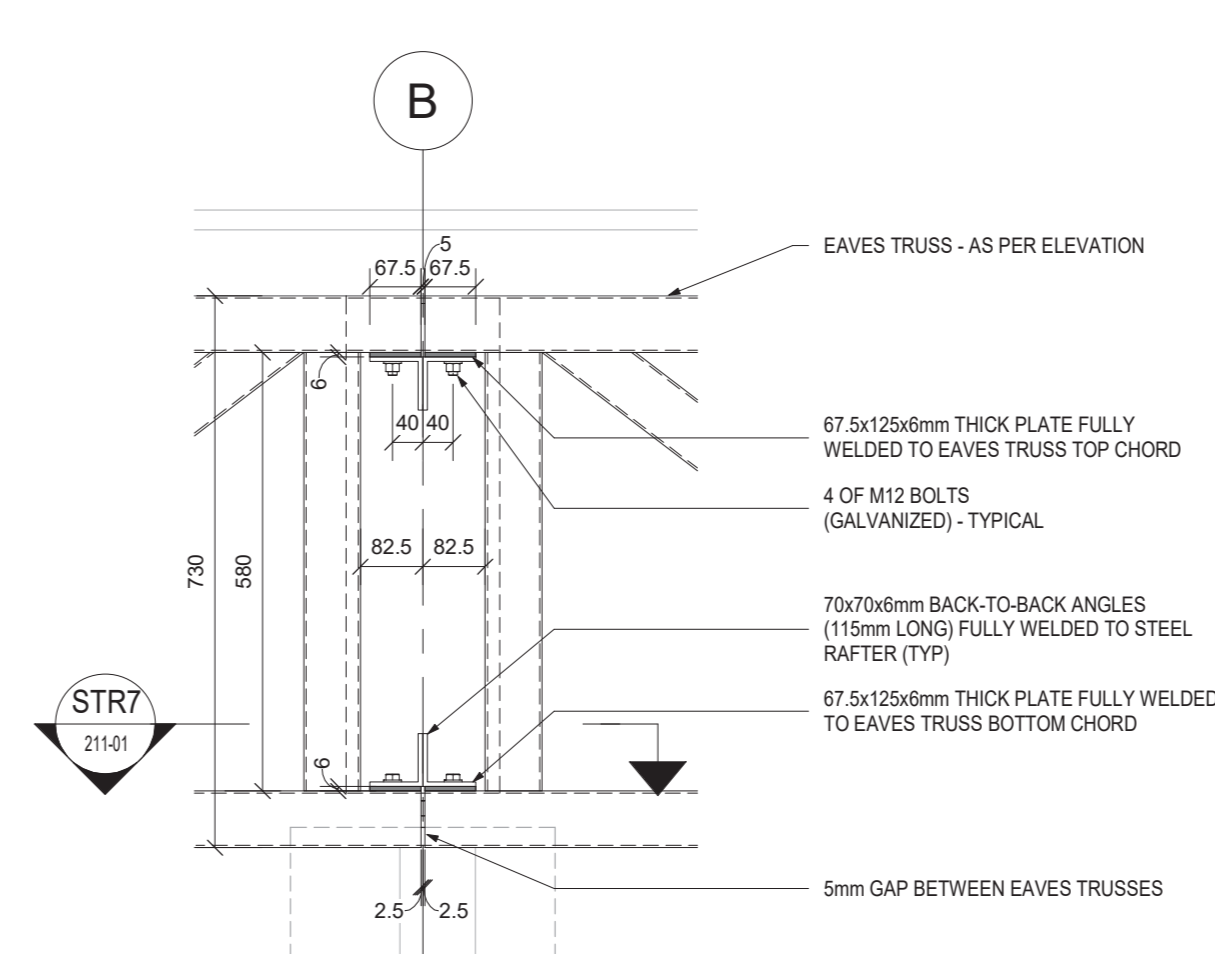
ISOMETRIC VIEW - EAVES TRUSS
SCALE



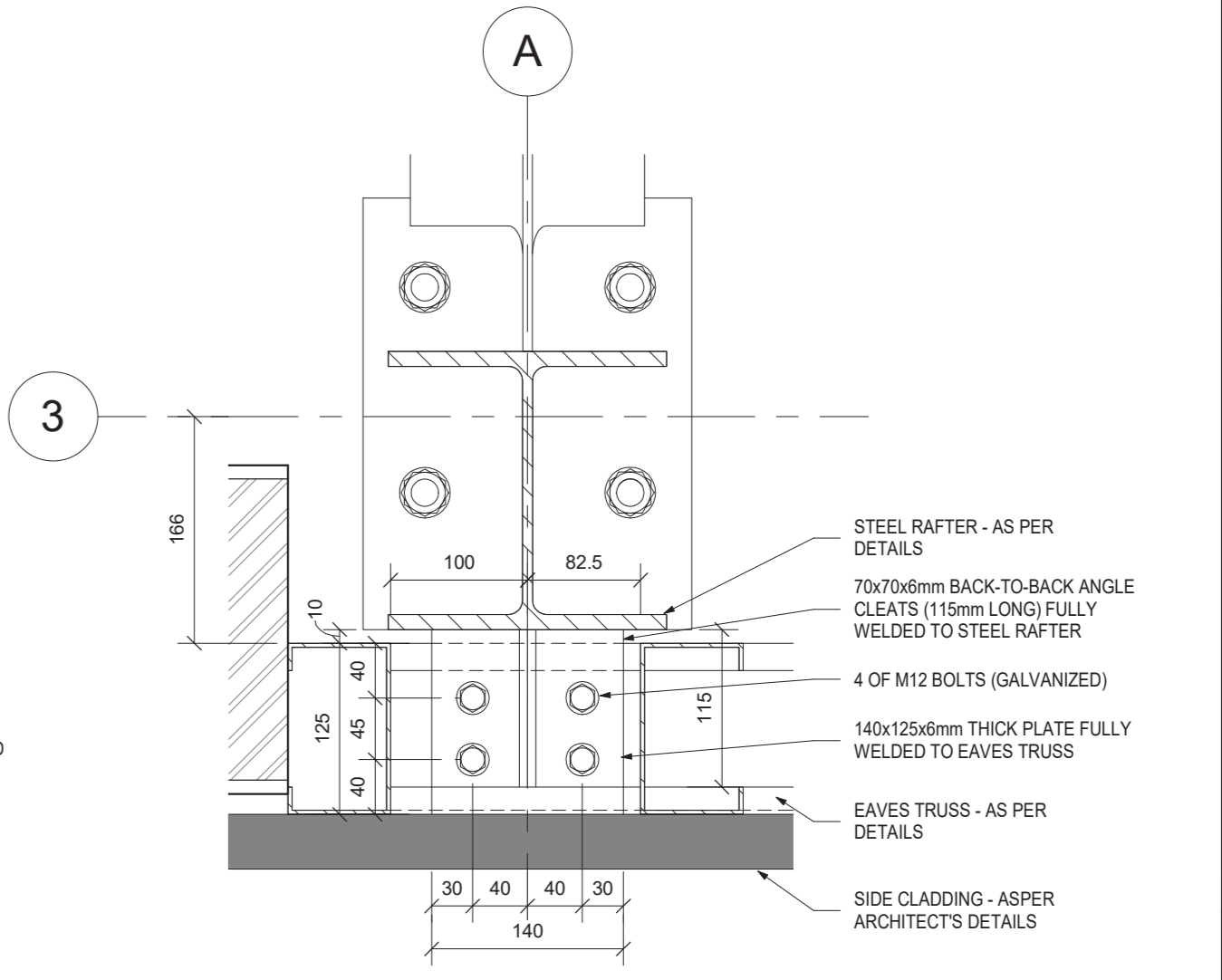
ISOMETRIC VIEW - EAVES TRUSS CONNECTION
SCALE



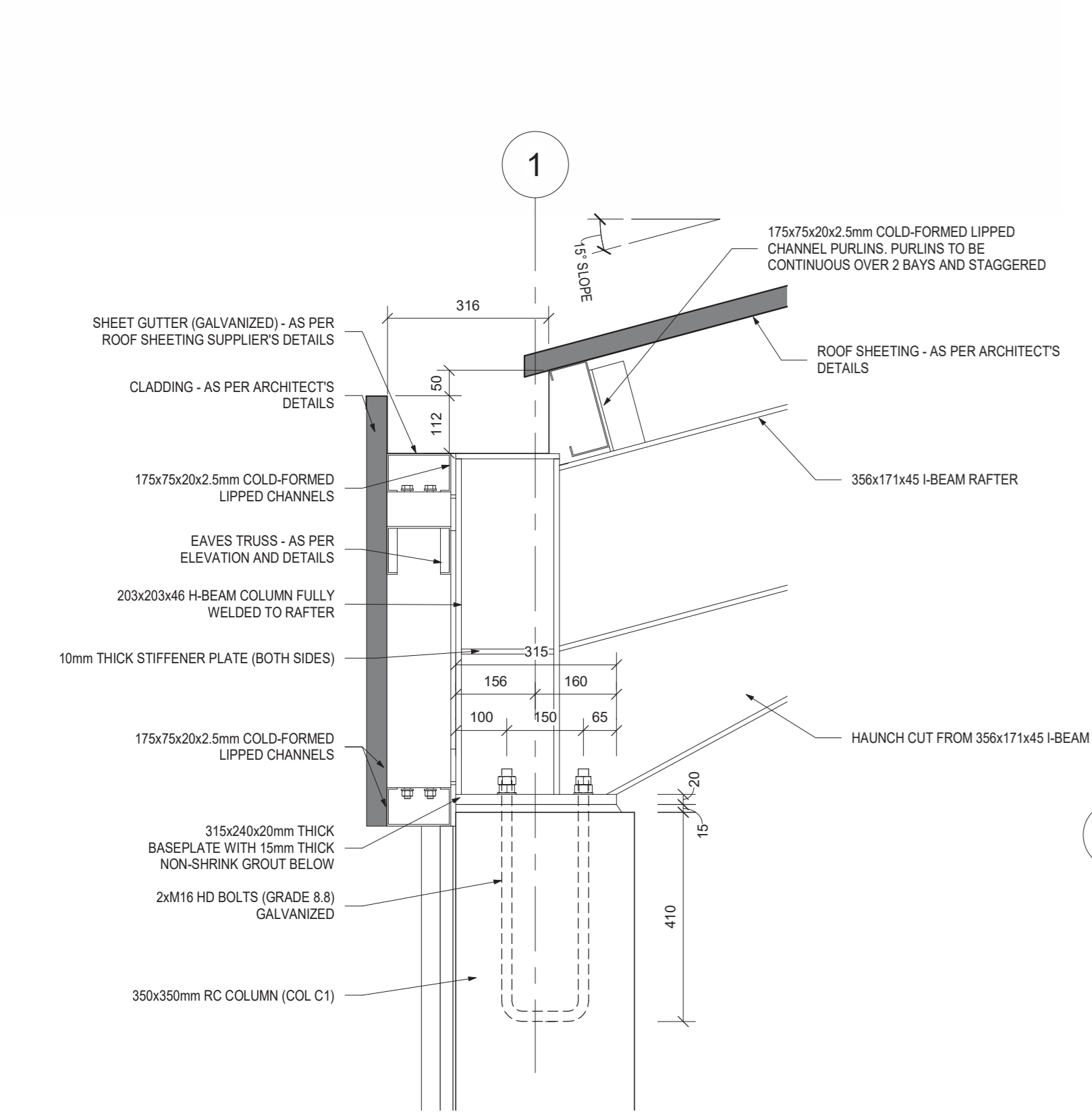
DETAIL 5 - EAVES TRUSS
SCALE 1:10



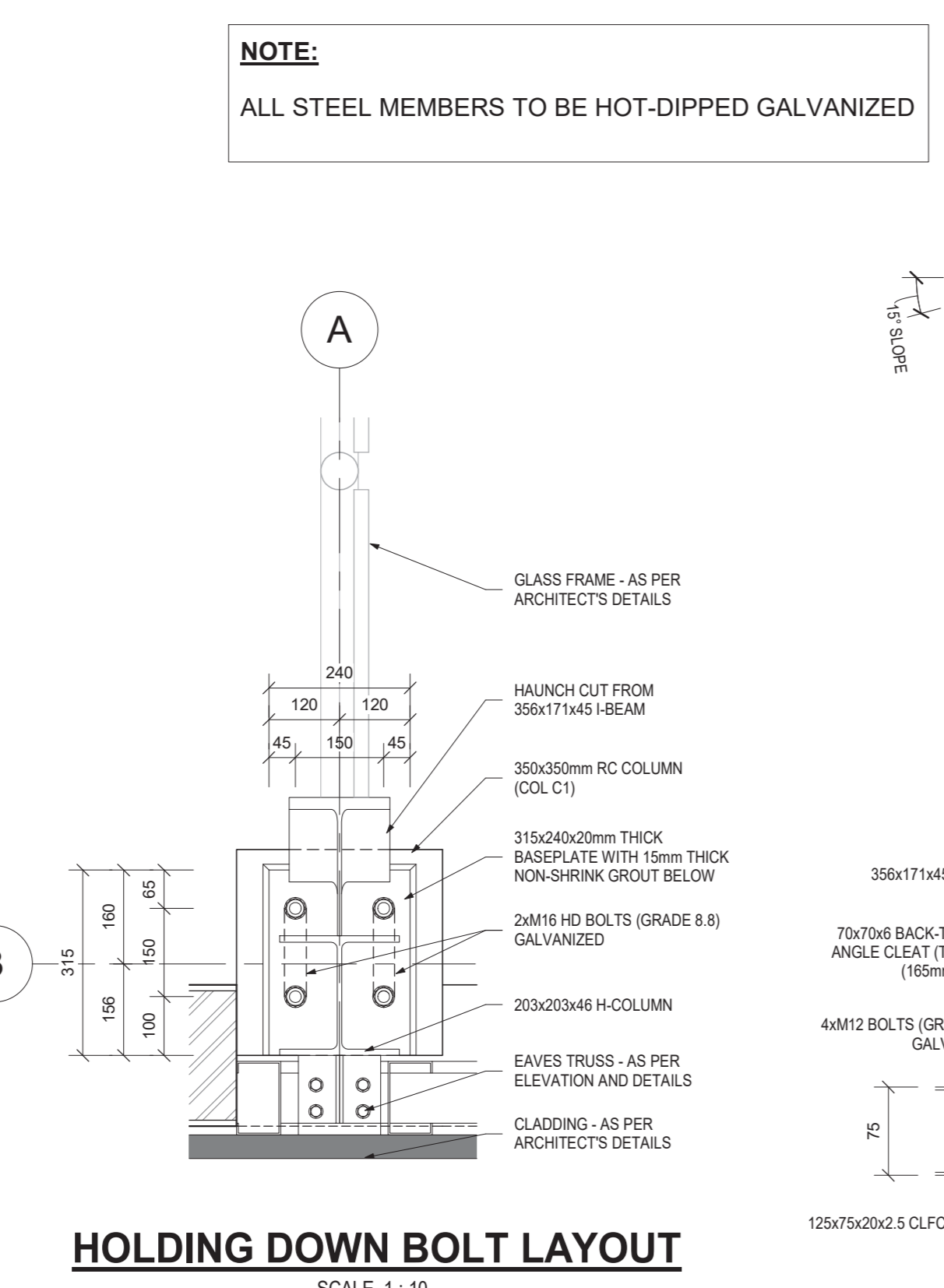
DETAIL 6 - EAVES TRUSS
SCALE 1:10



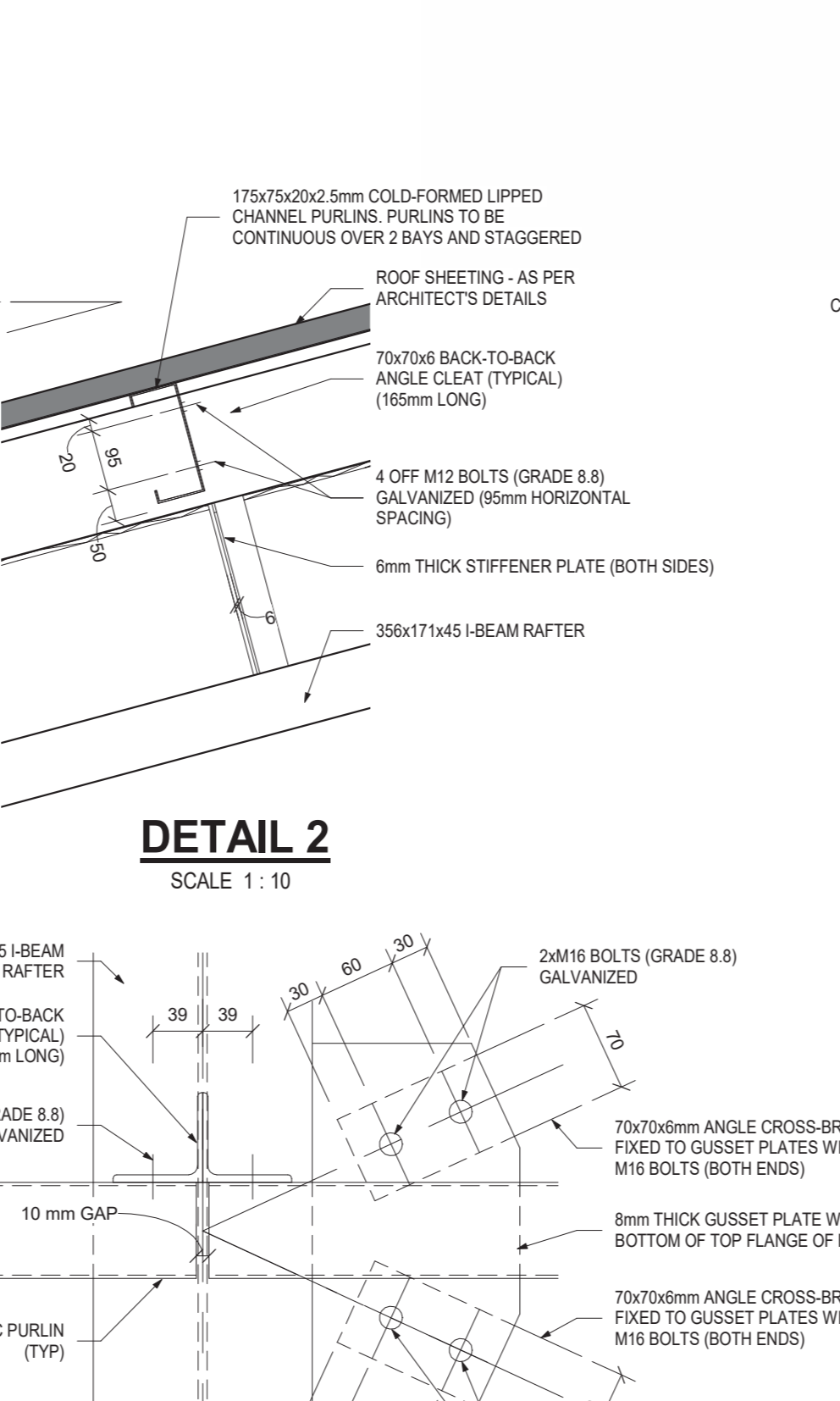
SECTION STR6-STR6
SCALE 1:5



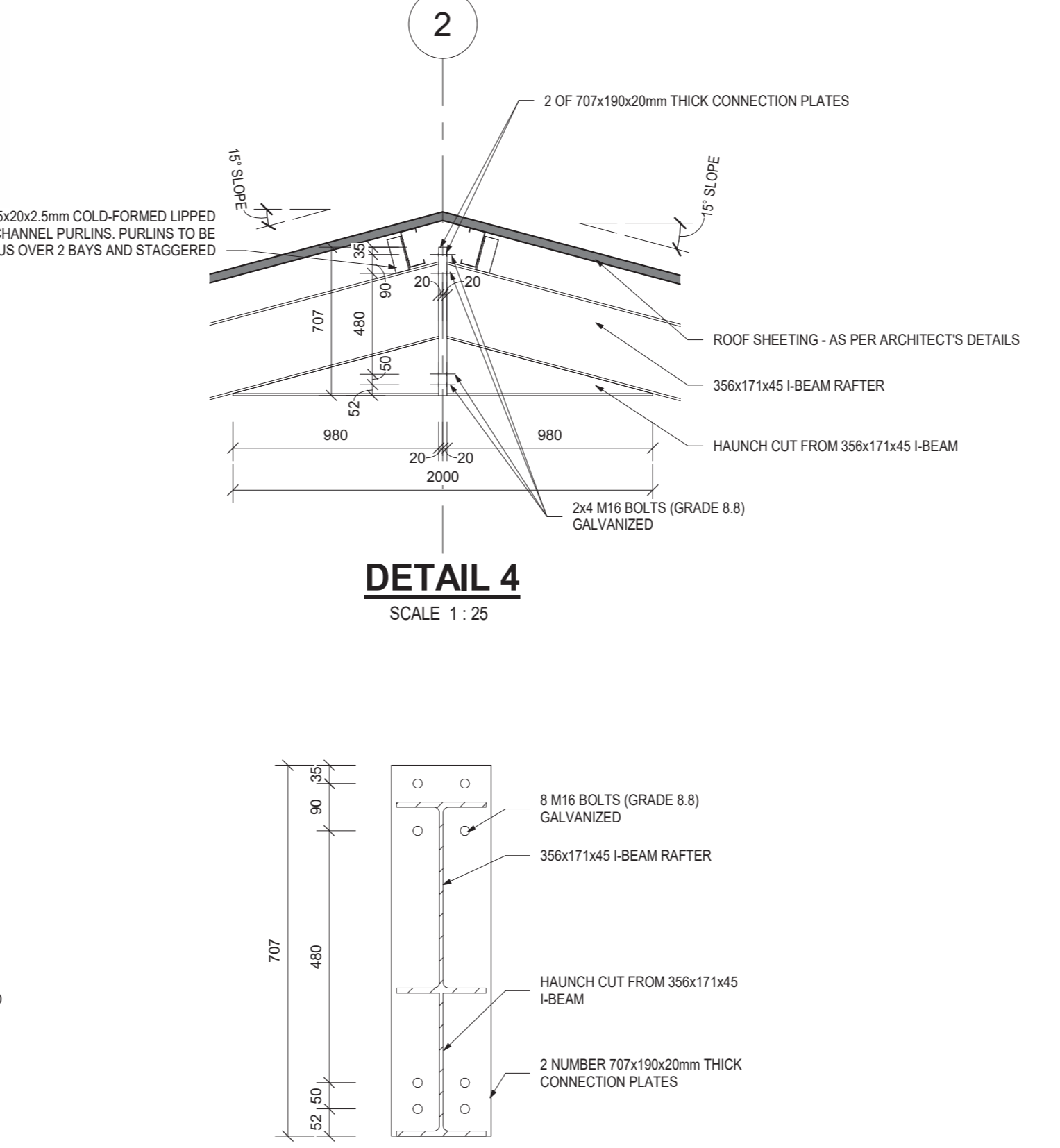
DETAIL 1 - HOLDING DOWN BOLT
SCALE 1:10



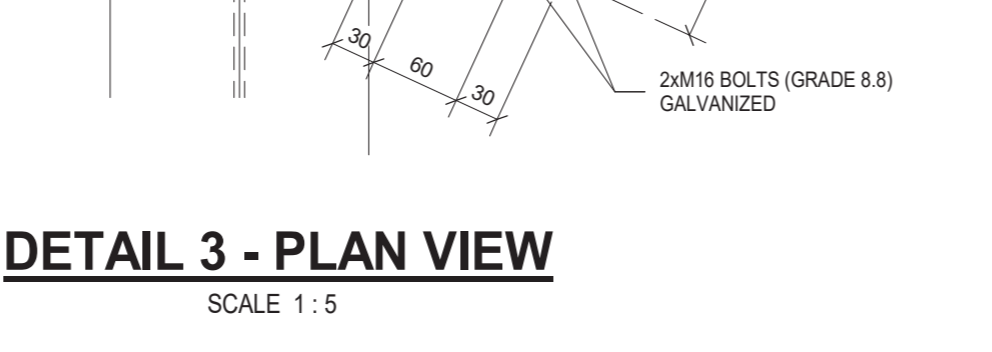
HOLDING DOWN BOLT LAYOUT
SCALE 1:10



DETAIL 2
SCALE 1:10



DETAIL 4 - CONNECTION PLATE - TYPICAL SECTION
SCALE 1:10



DETAIL 3 - PLAN VIEW
SCALE 1:5

NOTES / LEGEND

1. ALL MATERIAL, FABRICATION AND ERECTION OF STRUCTURAL STEEL TO COMPLY WITH SABS 0162 - 1984 AND SABS 12004 - 1983.
2. ALL WELDS TO BE 6mm CONTINUOUS FILLET OR THE WELD THROAT THICKNESS TO BE THE THICKNESS OF THE THINNEST OF THE TWO PARENT METALS.
3. WELDING CODE:
 - SIZE OF WELD TOP OF LINE FAR SIDE
 - SIZE OF WELD BOTTOM OF LINE NEAR SIDE
 - FILLET WELD ALL ROUND
 - SITE WELD
4. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS TO THE ENGINEER FOR APPROVAL PRIOR TO MANUFACTURE. ONLY STRUCTURAL SIZES, CONNECTIONS AND SPLICES WILL BE CHECKED. FINAL DIMENSIONS AND FITTING OF MEMBERS SHALL REMAIN THE CONTRACTOR'S RESPONSIBILITY.
5. THE CONTRACTOR IS RESPONSIBLE FOR STABILISING THE STRUCTURE AND MAINTAINING IT IN THE CORRECT POSITION DURING ERECTION.
6. STRUCTURAL STEELWORK SHALL BE COMPLETED BY THE MANUFACTURER, CLEANED AND PAINTED WITH SPECIFIED PRIMER IN WORKSHOP BEFORE TRANSPORTATION TO SITE.
7. STRUCTURAL STEEL TO BE OF GRADE S355.
8. ALL BOLTS TO BE OF GALVANISED GRADE 8.8.
9. BOLTS SHALL NOT HAVE THREADS WITHIN THE SHEAR PLANES.
10. ALL HOLES TO BE DRILLED AT STANDARD BACKMARK.
11. BASE PLATES TO BE PROPERLY GROUTED UP AND PAINTED PRIOR TO BACKLIFTING BEING DONE.
12. ALL BOX OR CIRCULAR SECTION ENDS TO BE CLOSED WITH 14mm THICK PLATES.
13. WHERE PACKER PLATES ARE USED, LONGER BOLTS MUST BE USED TO ENSURE THAT SUFFICIENT LENGTH OF THREAD ARE TAKEN UP BY THE NUTS.
14. ALL STEEL MEMBERS TO BE HOT-DIPPED GALVANIZED.

DO NOT SCALE DRAWING IF IN DOUBT REFER TO DRAWING OFFICE

CLIENT PLAN NUMBER: **D34435S-211-01**

NUMBER	DRAWING DESCRIPTION
D34435S-201-01	GENERAL STRUCTURAL NOTES
D34435S-201-01	RC FOUNDATION - LAYOUT AND DETAILS
D34435S-201-02	RC SURFACE BED - LAYOUT AND DETAILS
D34435S-201-03	BUILDING SECTIONS
D34435S-210-01	STEEL ROOF - LAYOUT

APPROVED BY COUNCIL / CLIENT

CITY ENGINEER / CLIENT	REG. NO.	DATE

AMENDMENTS CODE

A.Y. /	REPORT DESIGN/RENDERER	A. BY CLIENT
00-99 /	CONSTRUCTION	(B) BY ARCHITECT
1-5 /	AS-BUILT	(C) BY MECHANICAL OR ELECTRICAL
		(D) BY BVI
		(E) BY OTHER ()

DATE	INITIAL CODE	REVISION DESCRIPTION
2021/10/27	C.P.	ISSUED FOR TENDER PURPOSES ONLY

OFFICES

bvi ENGINEERING PROFESSIONAL MEMBERSHIP

Bvi Consulting Engineers KZN PTY (Ltd)
Registration no: 1580902027

Visit or contact us online at www.bvieng.co.za

PROVINCE	OFFICE	EMAIL
KZN	Durban	+27 31 268 8382 dbv@bvi.co.za

CLIENT

TSOLO AGRICULTURE & RURAL DEVELOPMENT INSTITUTE
Private Bag X1008, Tsoelo, 5170
Tel: +27 (47) 542 3700
rural development & agrarian reform

OFFICE OF THE DIRECTOR, ENGINEERING SERVICES

PROJECT:
300-SEATER EXAM HALL AT THE TSOLO AGRICULTURAL AND RURAL DEVELOPMENT INSTITUTE

DRAWING TITLE: **STEEL ROOF - SECTIONS AND DETAILS**

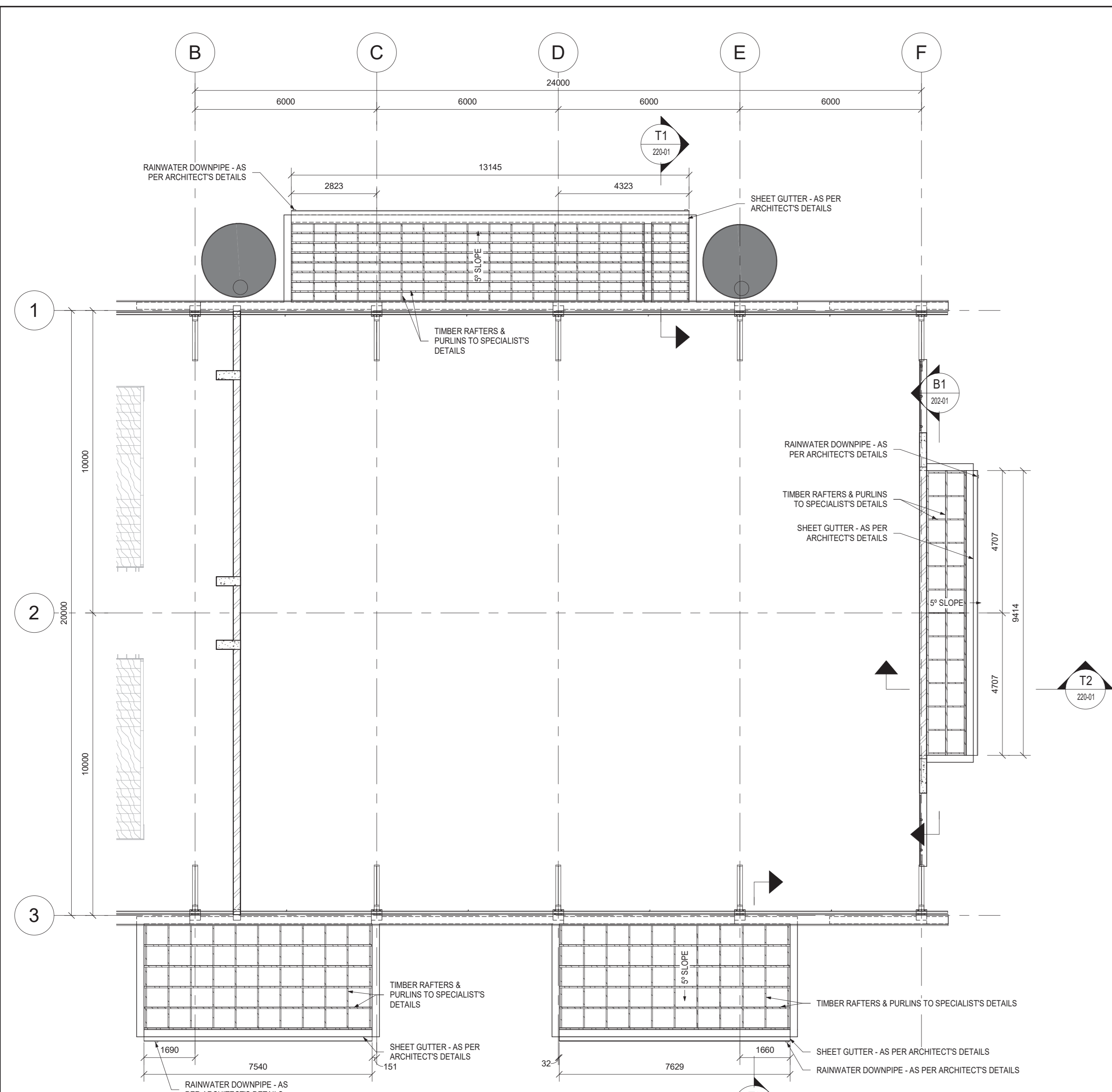
APPROVED BY BVI

ENGINEER/TECHNOLOGIST	REG. NO.	DATE
	202001098	

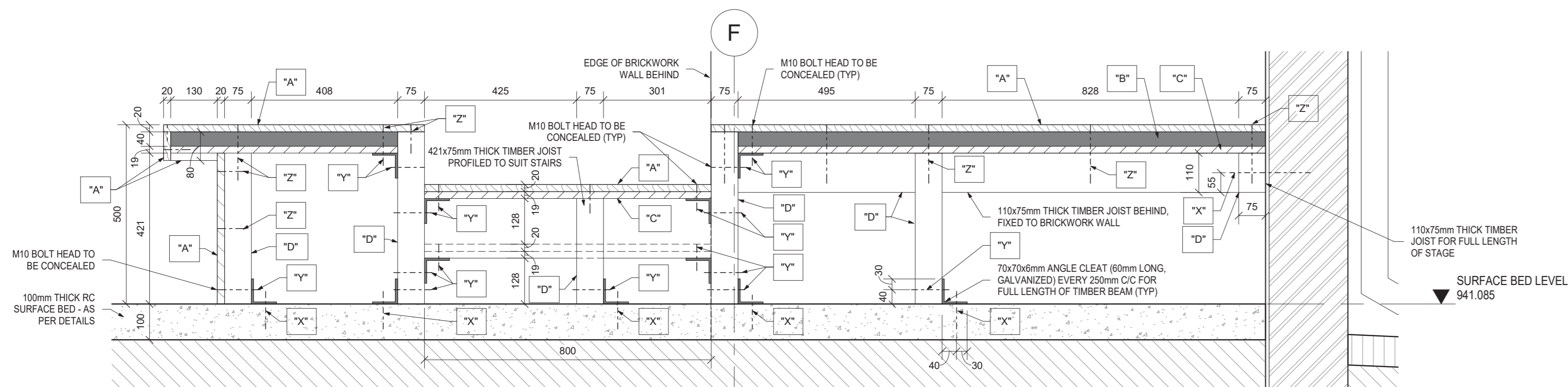
SCALE	As Indicated	DRAWN	C.P.
DESIGNED	PvN	CHECKED	PvN

PLAN NUMBER	REV. NO.	DATE SAVED
D34435S-211-01	T	2021/10/27 08:12:47

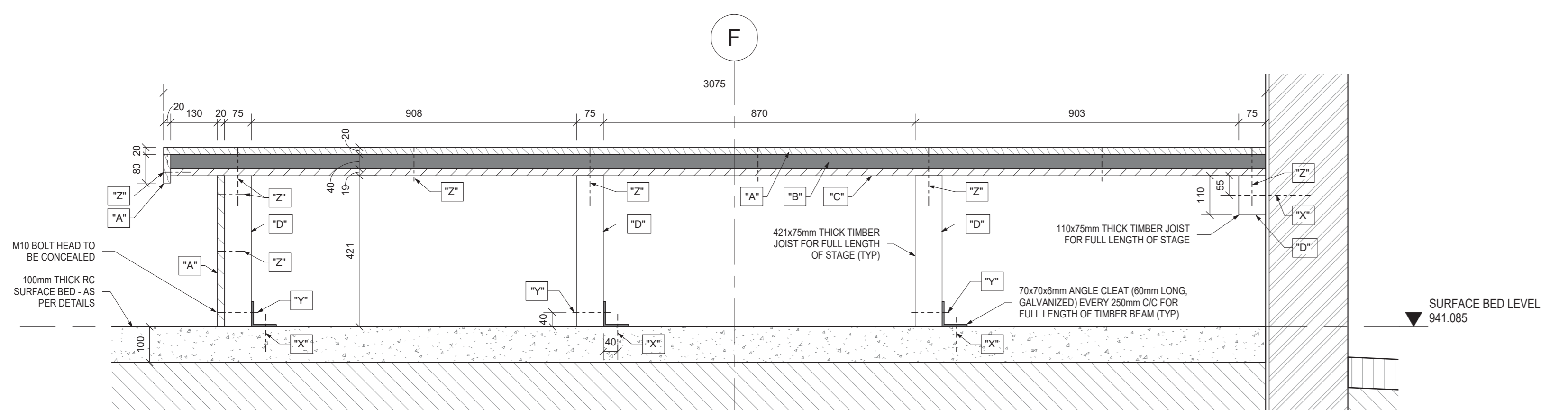
M:\Deltek Project\D34435\00 - Tsoelo Agri 300 Seater Exam Hall\Structural\Revit Model\Active Model\1 toso Agri-Rev A.rvt



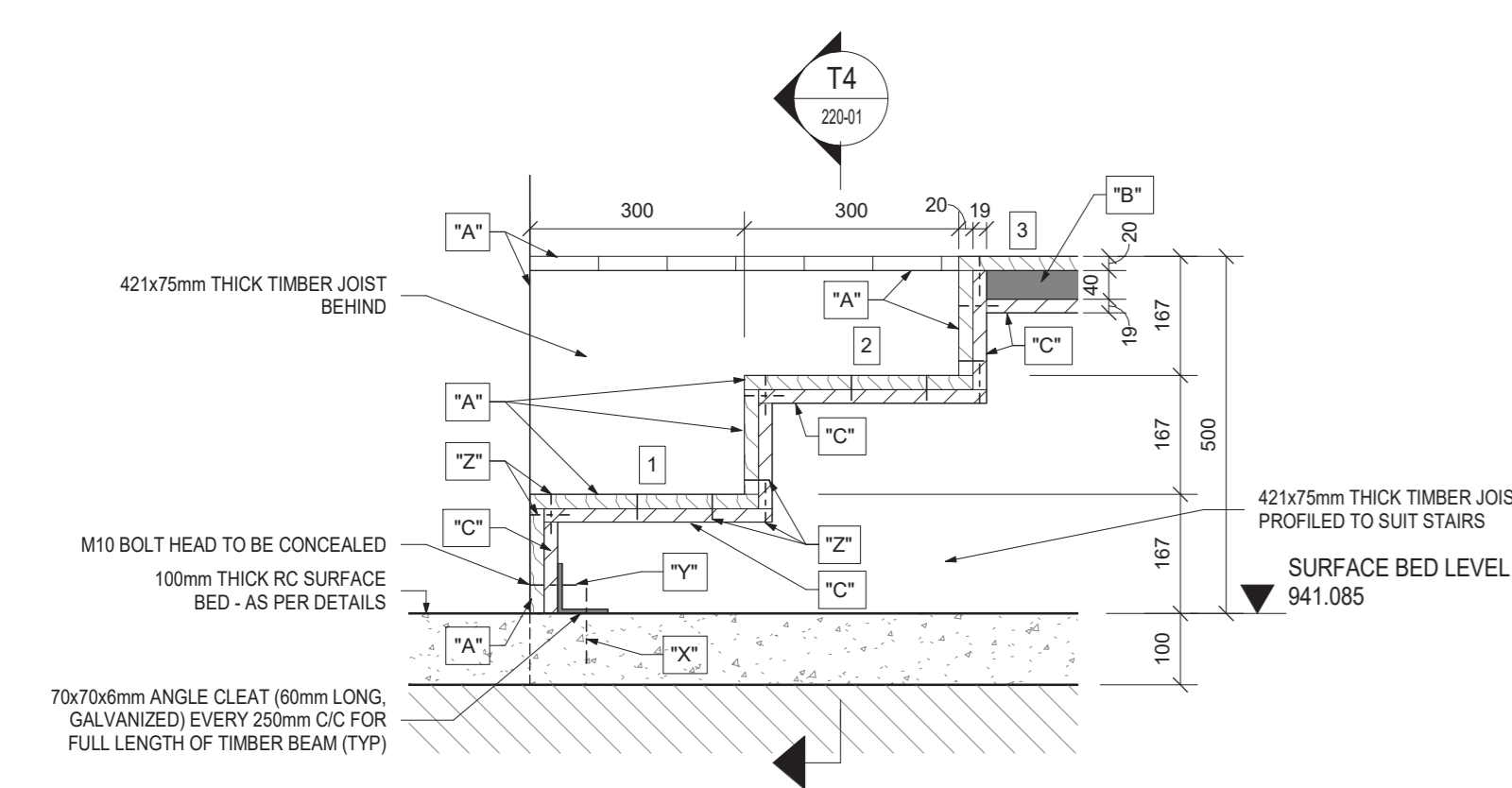
TIMBER ROOFS LAYOUT
SCALE 1:100



SECTION T4-T4
SCALE 1:10



SECTION T5-T5
SCALE 1:10



SECTION T6-T6
SCALE 1:10

LEGEND:

MATERIAL MARKED AS TYPE "A": STAGE TOP FINISH - USE 96x20mm THICK TONGUE AND GROOVE SALIGNA WOOD FLOORING WITH 3 COATS OF VARNISH.

MATERIAL MARKED AS TYPE "B": 40mm THICK "GETZNER" SYLOMER PAD LAYER TO ABSORB VIBRATION. TO SPECIALIST'S DETAILS.

MATERIAL MARKED AS TYPE "C": 19mm THICK SHUTTERBOARD LAYER.

MATERIAL MARKED AS TYPE "D": STRUCTURAL SUPPORTING JOISTS. USE SABS APPROVED GRADE 5 STRUCTURAL TIMBER MEMBERS (DIMENSIONS OF MEMBERS AS PER DETAILS).

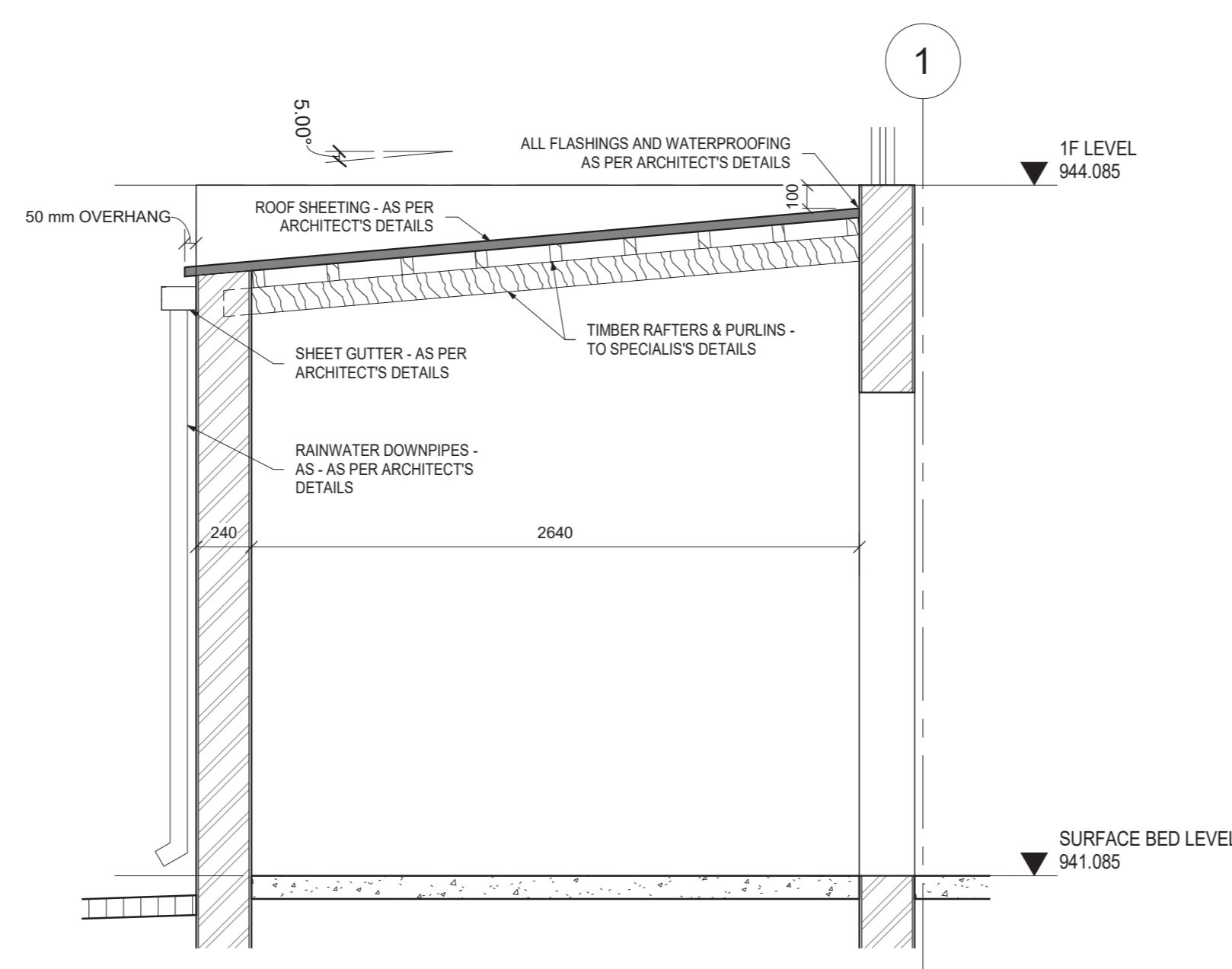
BOLTS MARKED AS TYPE "X": USE HELIX M10x100mm LONG "HUB3-H SCREW ANCHORS" - GALVANIZED (OR SIMILAR APPROVED) WITH A MINIMUM CONCRETE EMBEDMENT DEPTH OF 50mm.

BOLTS MARKED AS TYPE "Y": USE M10 BOLTS (GRADE 4.8) - GALVANIZED.

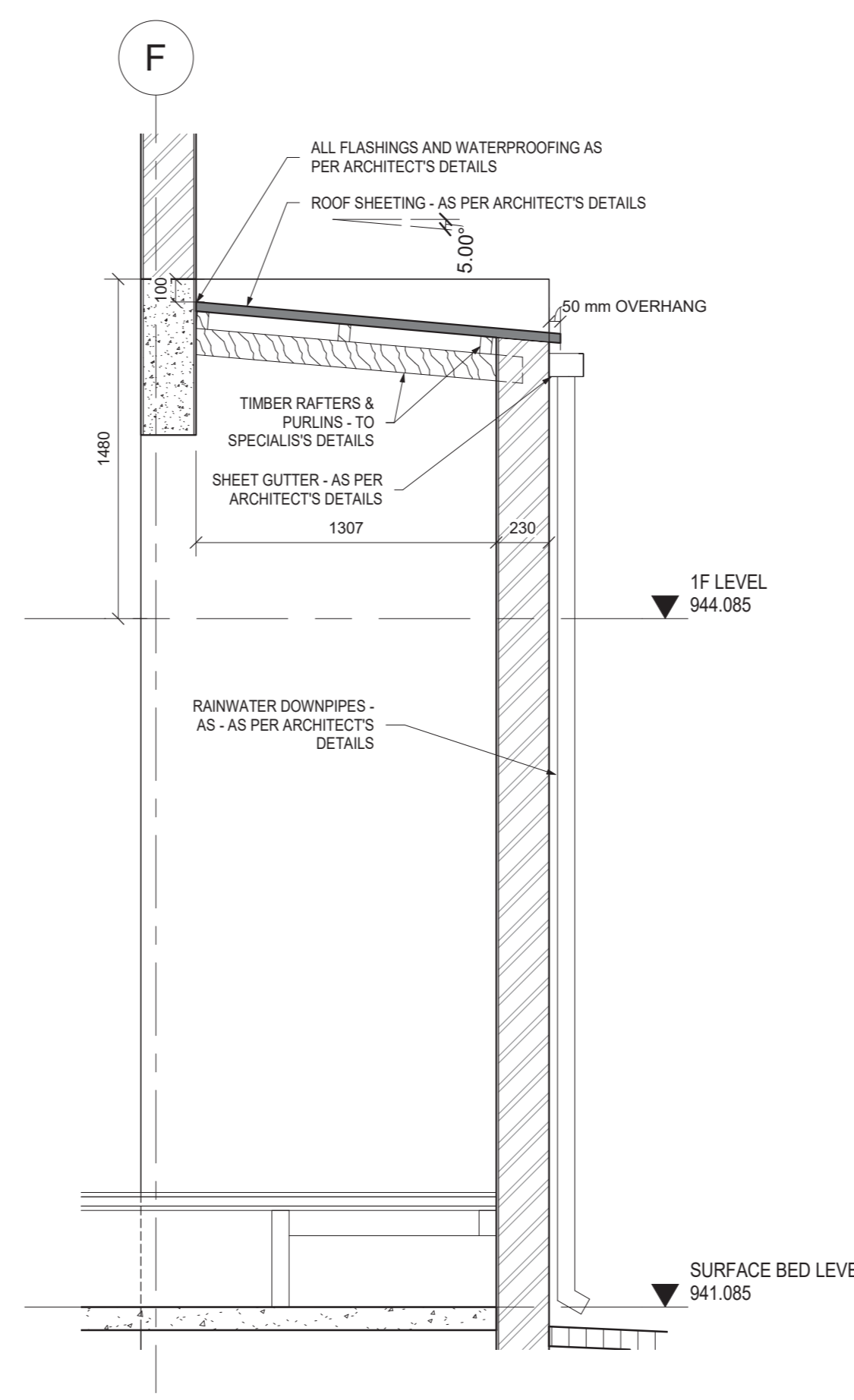
BOLTS MARKED AS TYPE "Z": SUITABLE CONCEALED NAILS TO BE USED TO NAIL THE WOOD FLOORING PLANKS TO THE SHUTTERBOARDS AND TO NAIL THE PERIMETER WOOD FINISH PLANKS TO THE STRUCTURAL TIMBER FRAME.

ALL BOLTS, NUTS & WASHERS TO BE HOT-DIPPED GALVANIZED.

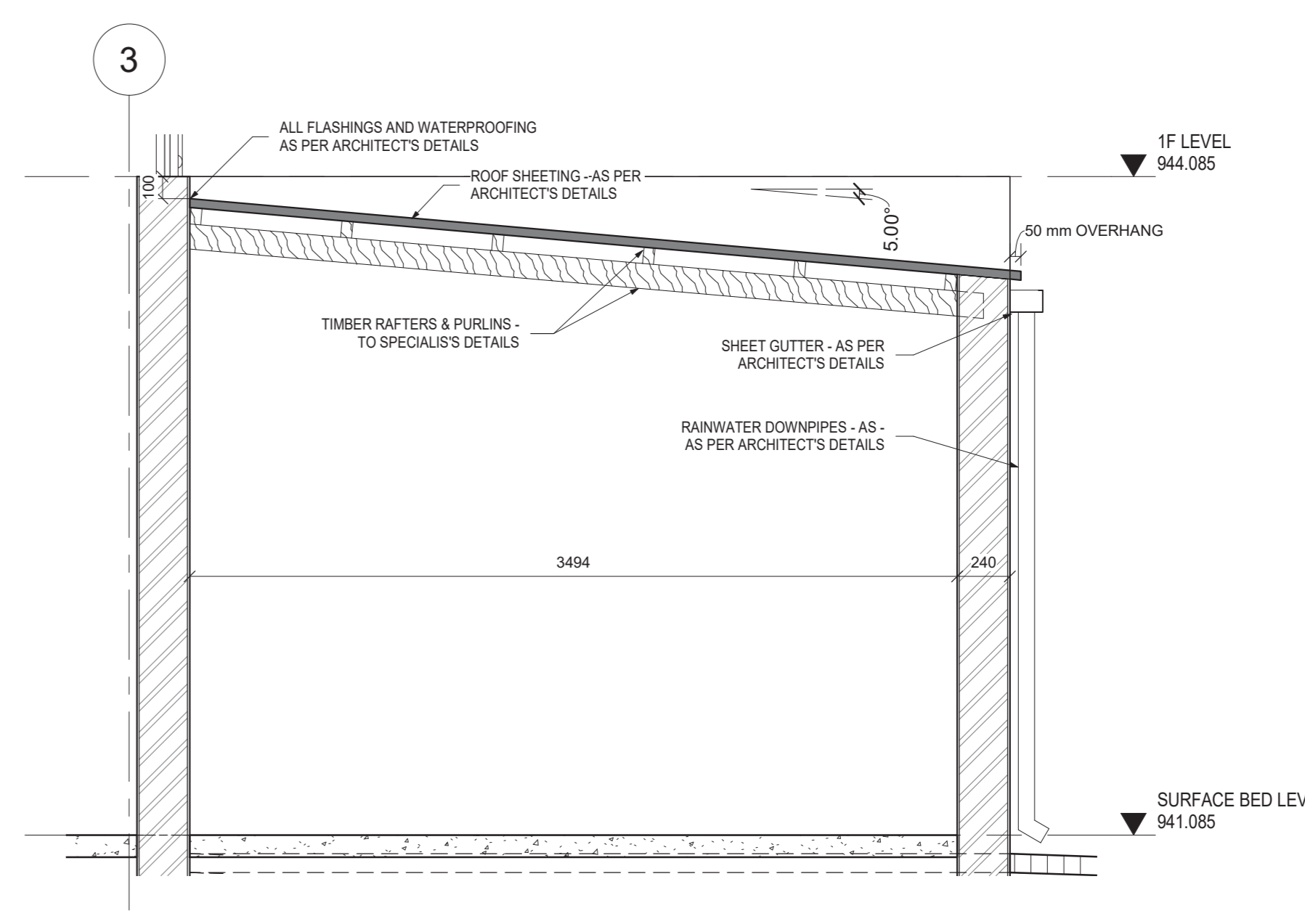
NOTE:
ALL TIMBER RAFTERS AND PURLINS TO BE SABS APPROVED GRADE 5 STRUCTURAL TIMBER MEMBERS.



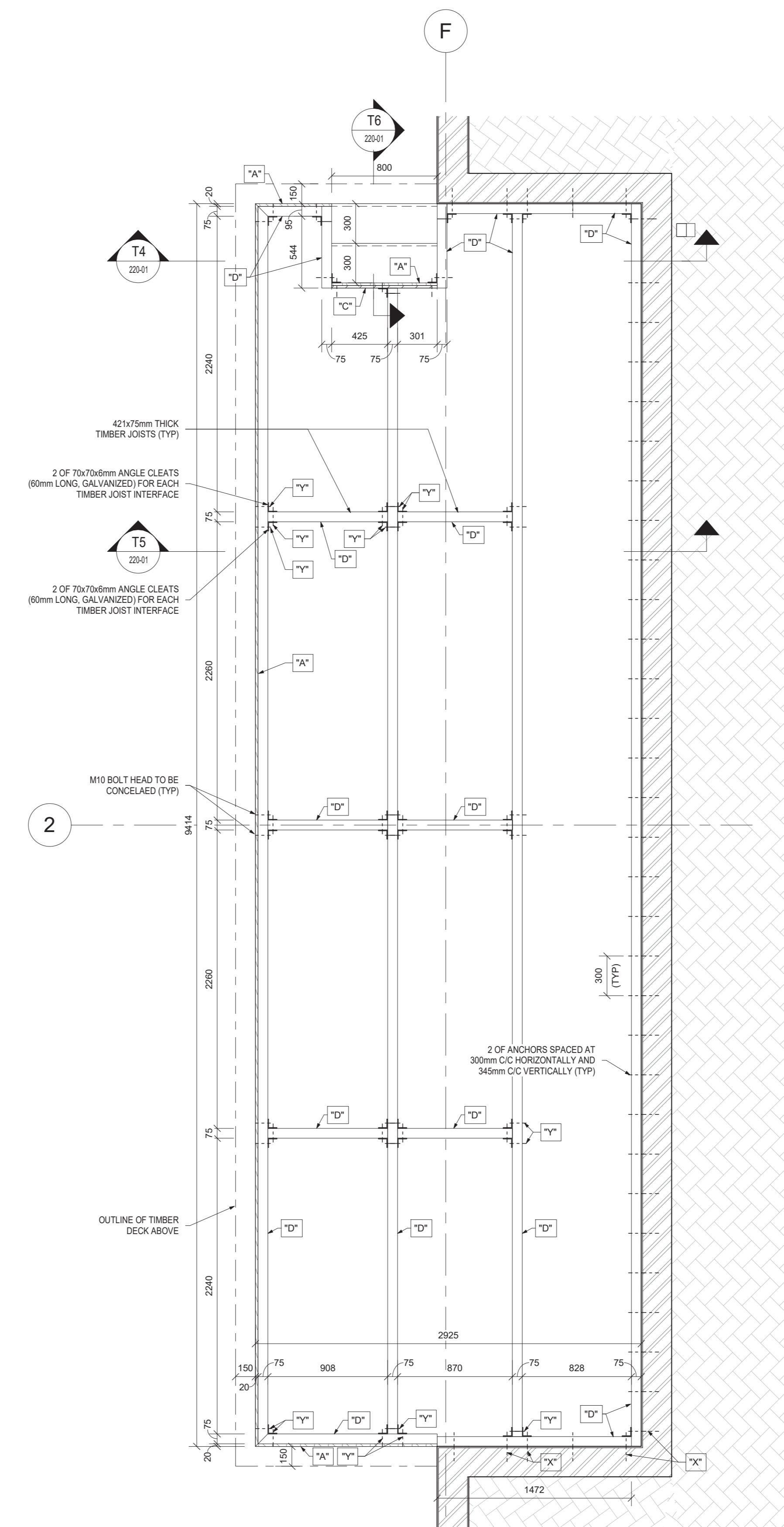
SECTION T1-T1
SCALE 1:25



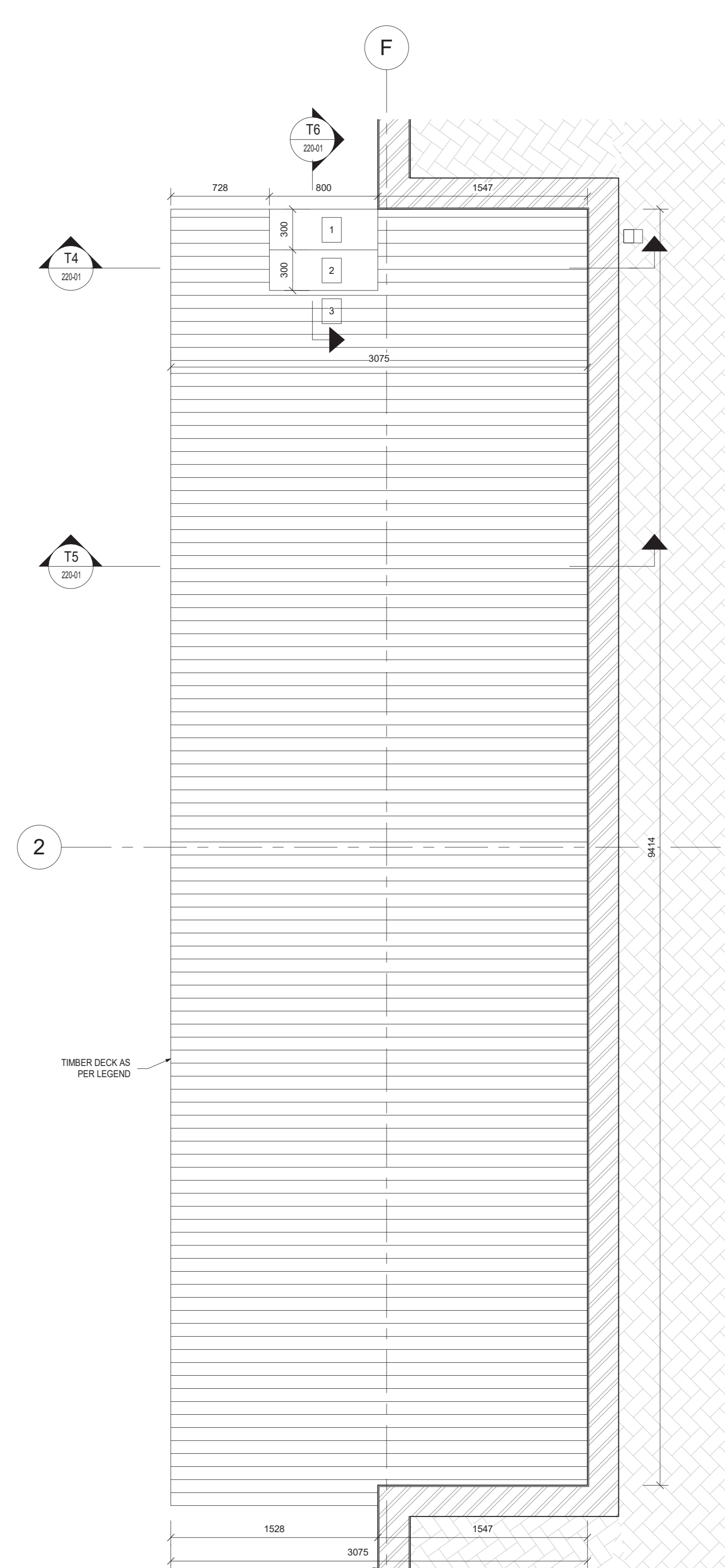
SECTION T2-T2
SCALE 1:25



SECTION T3-T3
SCALE 1:25



TIMBER STAGE SUPPORTING FRAME LAYOUT
SCALE 1:25



TIMBER STAGE DECK LAYOUT
SCALE 1:25

NOTES / LEGEND

- GENERAL**
1. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT ALL MATERIALS AND WORKMANSHIP CONFORM WITH THE DETAILS AND SPECIFICATIONS SHOWN ON THIS DRAWING, AND ALL RELEVANT SABS SPECIFICATIONS, IRRESPECTIVE OF WHETHER THE ENGINEER HAS INSPECTED THE WORKS ON SITE OR NOT.
 2. ALL DIMENSIONS AND LEVELS TO BE CHECKED ON SITE AND CORRELATED WITH THE ARCHITECT'S DRAWINGS BEFORE CONSTRUCTION COMMENCES.
 3. ALL WRITTEN DIMENSIONS USED IN PREFERENCE TO SCALING.
 4. ALL WATERPROOFING DETAILS TO BE IN ACCORDANCE WITH THE ARCHITECT'S SPECIFICATION AND INSTRUCTIONS.

- FOUNDATIONS**
1. EXCAVATIONS FOR ALL FOUNDATIONS TO BE CHECKED AND APPROVED BY THE ENGINEER PRIOR TO CASTING OF ANY CONCRETE.
 2. ALL FOUNDATIONS TO BE FOUNDED ON SOUND IN-SITU MATERIAL. NO FOUNDATION WILL BE ALLOWED ON ANY FILL.
 3. TOP OF FOUNDATION LEVEL TO BE MIN 30mm BELOW FINAL OUTSIDE GROUND LEVEL OR F.F.L. WHICHEVER IS THE LOWER.

- CONCRETE**
- CONCRETE CURE STRONG MIN. AT 28 DAYS:
- BLINDING: -15MPa/19
 - RC PAD FOUNDATIONS, RC STRIP FOOTINGS, RC SLABS AND SURFACE BEDS: -30MPa/19
2. CONCRETE COVER TO REINFORCING:
- RC PAD FOUNDATIONS: -50mm (ALL SIDES)
 - RC SHEAR WALLS: -40mm (ALL SIDES)
3. ALL REINFORCING FIXED WITH THE SPECIFIED COVER MUST BE INSPECTED AND APPROVED IN WRITING BY THE ENGINEER PRIOR TO ANY CONCRETE BEING CAST.
4. THE STANDARD SPECIFICATIONS SABS 1200 (EXCLUDING PAYMENTS CLAUSES) IS APPLICABLE.

5. ALL CONCRETE TO BE PROPERLY CURED BY KEEPING SURFACES CONTINUOUSLY DAMP AT LEAST 7 DAYS AFTER CASTING. CONCRETE SLABS TO BE COVERED WITH MOIST SAND OR PLASTIC MEMBRANE DURING THIS PERIOD. COLUMNS TO BE WRAPPED IN PLASTIC IMMEDIATELY AFTER REMOVAL OF SHUTTERS.

DO NOT SCALE DRAWING IF IN DOUBT REFER TO DRAWING OFFICE

CLIENT PLAN NUMBER
D34435S-211-01

NUMBER	DRAWING DESCRIPTION
D34435S-200-01	GENERAL STRUCTURAL NOTES

APPROVED BY COUNCIL / CLIENT

CITY ENGINEER / CLIENT REG. NO. DATE

AMENDMENTS CODE
A.Y. 1: REPORT DESIGN TENDER | A: BY CLIENT
00-99: CONSTRUCTION | B: BY ARCHITECT
2: AS BUILT | C: BY MECHANICAL OR ELECTRICAL
3: BY OTHER | D: BY BVI
E: BY OTHER

DATE	INITIAL CODE	REVISION DESCRIPTION
2021/10/27	C.P. TD	ISSUED FOR TENDER PURPOSES ONLY

OFFICES



BVI Consulting Engineers KZN PTY (Ltd)
Registration no: 158390202P

Visit or contact us online at www.bviigroup.co.za

PROVINCE OFFICE REG. NO. EMAIL
KZN Durban +27 31 268 8382 dbn@bvi.co.za

CLIENT
TSOLO AGRICULTURE & RURAL DEVELOPMENT INSTITUTE
Private Bag X1008, Tsoelo, 5170
Tel: +27 (47) 542 3700
rural development & agrarian reform
Department of Agriculture, Forestry and Fisheries
Minister of the Southern Cape

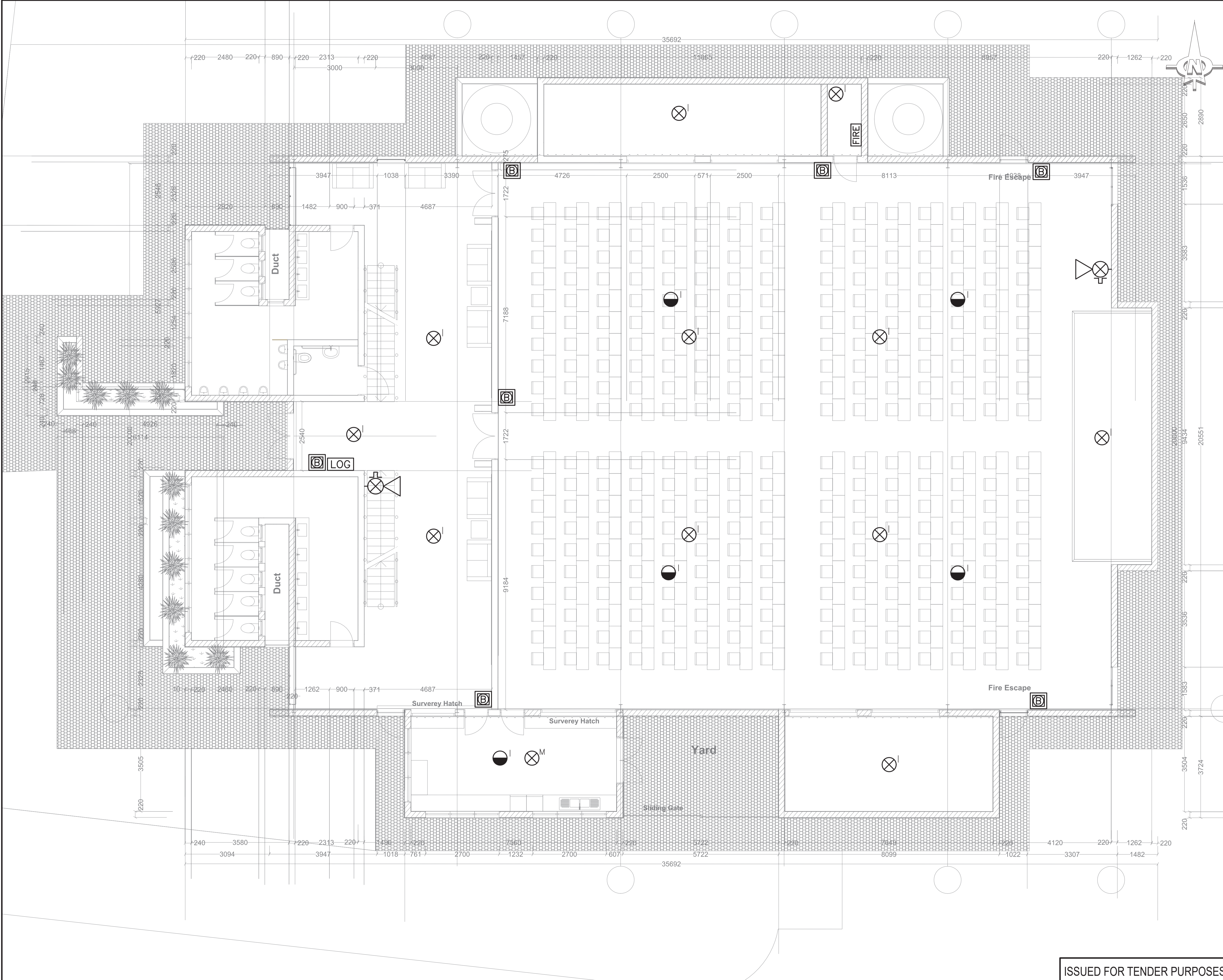
OFFICE OF THE DIRECTOR, ENGINEERING SERVICES
PROJECT:
300-SEATER EXAM HALL AT THE TSOLO AGRICULTURAL AND RURAL DEVELOPMENT INSTITUTE

DRAWING TITLE

TIMBER ROOFS & TIMBER STAGE - LAYOUT AND DETAILS

APPROVED BY BVI

ENGINEER/TECHNOLOGIST	REG. NO.	DATE
202001098		
SCALE	As Indicated	DRAWN T.C.
DESIGNED	PvN	CHECKED PvN
PLAN NUMBER	REV. NO.	DATE SAVED
D34435S-220-01	T	2021/10/27 08:10:36



NOTES / LEGEND

DETECTOR TYPES & POSITIONS
 M = MULTI CRITERIA
 I = IONISATION

- DETECTOR IN CEILING VOID
- DETECTOR AT CEILING LEVEL
- SIREN & STROBE
- BREAK-GLASS UNIT (FIRE)
- FIRE ALARM PANEL
- LOGBOOK HOLDER

APPROVED BY COUNCIL / CLIENT

CITY ENGINEER / CLIENT _____ REG. NO. _____ DATE _____

AMENDMENTS CODE

A.B.C.J. BEFORE TENDER
 TO / TENDER DRAWING
 0,1,2,3. / AFTER TENDER
 Z / AS BUILT

A. BY CLIENT
 B. BY ARCHITECT
 C. BY MECHANICAL OR ELECTRICAL
 D. BY BN
 E. BY OTHER ()

DATE	INITIAL	No./CODE	REVISION DESCRIPTION
17/09/2021	Z.N	AID	ISSUED FOR APPROVAL
22/10/2021	Z.N	TO/D	ISSUED FOR TENDER PURPOSES

OFFICES

PROVINCE	OFFICE	PHONE	EMAIL
City of Johannesburg	City of Johannesburg	(011) 944-1111	info@cityofjohannesburg.co.za
Free State	Free State	(051) 291-5400	info@fs.gov.za
Free State	Free State	(051) 442-2107	info@fs.gov.za
Free State	Free State	(051) 353-3400	info@fs.gov.za
Northern Cape	Northern Cape	(054) 337-6000	info@nc.gov.za
Northern Cape	Northern Cape	(057) 710-3014	info@nc.gov.za
KwaZulu Natal	KwaZulu Natal	(031) 298-8300	info@kz.gov.za
KwaZulu Natal	KwaZulu Natal	(031) 702-8112	info@kz.gov.za
Eastern Cape	Eastern Cape	(041) 374-4343	info@ec.gov.za
Eastern Cape	Eastern Cape	(041) 735-3888	info@ec.gov.za
Western Cape	Western Cape	(021) 527-7000	info@wc.gov.za

bvi ENGINEERING PROCUREMENT MANAGEMENT

Registration no. 19860015107

CLIENT

TSOLO AGRICULTURE & RURAL DEVELOPMENT INSTITUTE

Private Bag X1008, Tsoelo, 5170
 Tel: +27 (47) 542 3700

rural development & agrarian reform
 Department of Agriculture, Forestry and Fisheries
 REPUBLIC OF SOUTH AFRICA

OFFICE OF THE DIRECTOR: ENGINEERING SERVICES

PROJECT

TSOLO AGRI 300 SEATER EXAM HALL

DRAWING TITLE

FIRE DETECTION LAYOUT

APPROVED BY BVI

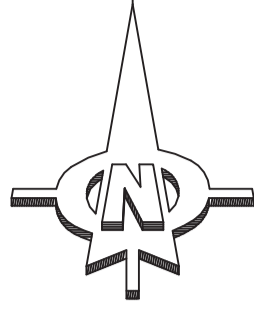
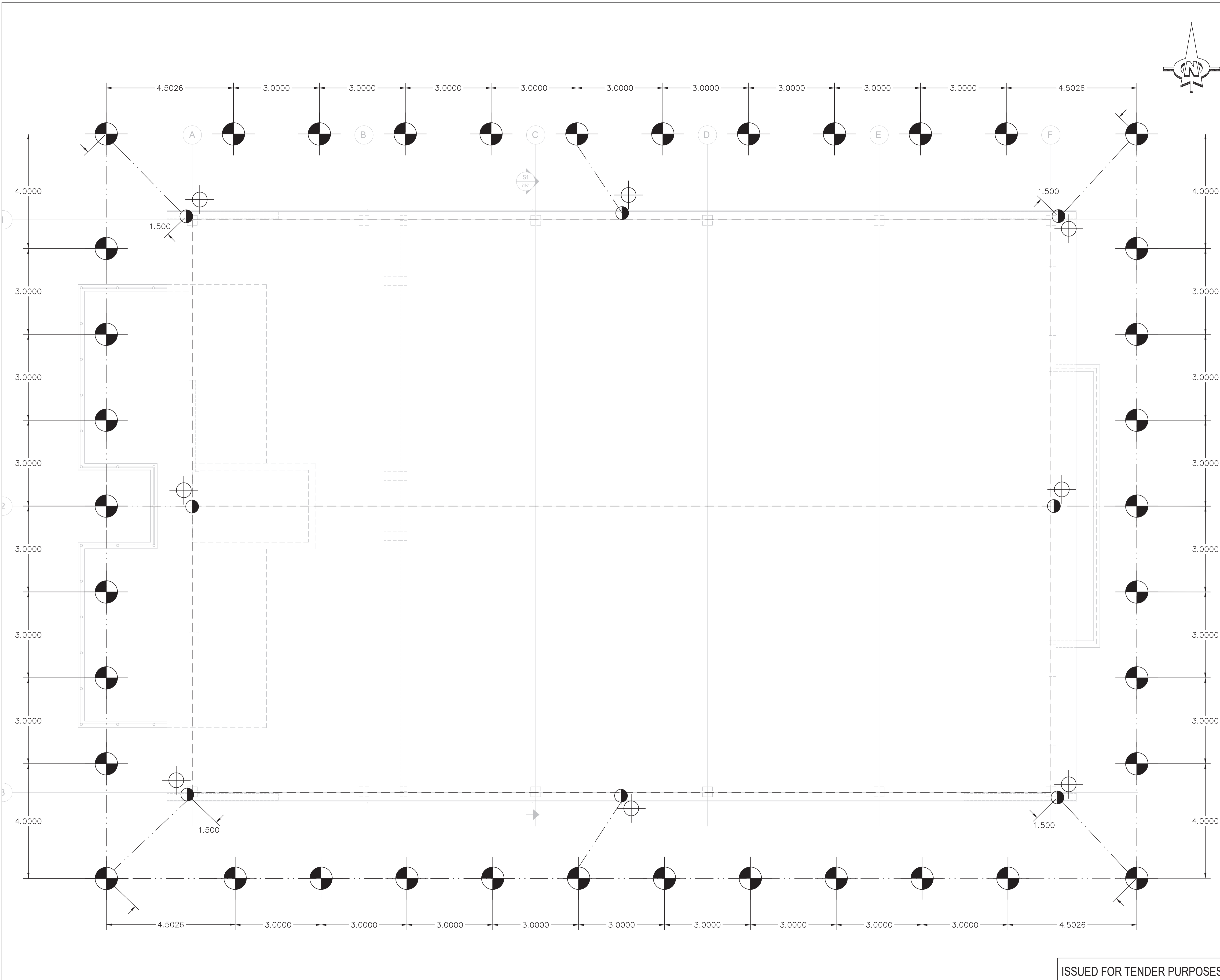
ENGINEER _____ 20110/01 _____ DATE _____
 REG. NO. _____

SCALE: N.T.S. DRAWN: P.L.
 DESIGNED: Z.N. CHECKED: Z.N.

ISSUED FOR TENDER PURPOSES

DRAWING NUMBER: D34435.00-340-01
 REVISION NO.: T0
 DATE SAVED: 22 October 2021

D34435.00-340-01 REV10.DWG



NOTES / LEGEND

LEGEND	
50mm ² Bare Copper Trench Earth Conductor Installed Not More Than 500mm Away From Building	---
10mm ² Aluminium Down Conductor Installed in 20mm \varnothing BOSAL Conduit	----
10mm \varnothing Aluminium Lightning Conductor on Aluminium Mounted Fixed to Roof with 2 Pack Epoxy Adhesive	----
1.5m SABS Approved Earth rod driven from 500mm Below Final Ground Level, 3m apart and tall to test point. Castweld joint at the rod and lug connection at test point.	⊕
Surface Mounted S15 Duo Weatherproof York Box Complete with PVC Sliding Lid and Stainless Steel Screws. Earth test point mounted on insulator on wall at 500mm above paving level. Connections lugged to test point. Risers to roof in PVC clad 70mm ² insulated copper earth conductors in PVC conduit on wall/concrete	⊕
Special connections copper to steel or copper to aluminium or aluminium to aluminium using Denso Paste or standard copper to copper connection as may be applicable	●

NOTES:

1. Compensate earth ring to be stranded bare copper material.
2. All metal doors in the buildings to be earthed and bonded.
3. All cable trays in the buildings to be earthed and bonded.
4. All metal equipment in the buildings to be earthed and bonded.
5. Contractor to ensure the buildings and equipment are earthed and bonded as per South African National Standards.
6. Interconnect All Buildings Earthing and Lightning Protection Systems to form an Equipotential Bonded System.
7. THIS DRAWING IS NOT FOR CONSTRUCTION. LIGHTNING PROTECTION SPECIALIST CONTRACTOR TO CONDUCT SOIL RESISTIVITY INVESTIGATIONS, RISK ASSESSMENT AND PRODUCE CONSTRUCTION DRAWINGS BASED ON THE RESULTS FOR ENGINEER'S COMMENT PRIOR TO PROCUREMENT OF MATERIALS AND EXECUTION OF WORKS.

APPROVED BY COUNCIL / CLIENT

CITY ENGINEER / CLIENT _____ REG. NO. _____ DATE _____

AMENDMENTS CODE

A.B.C.J. BEFORE TENDER	A. BY CLIENT
T.O. / TENDER DRAWING	B. BY ARCHITECT
0.1.2.3. / AFTER TENDER	C. BY MECHANICAL OR ELECTRICAL
Z. / AS BUILT	D. BY SA
	E. BY OTHER ()

DATE	INITIAL	No./CODE	REVISION DESCRIPTION
21/09/2021	Z.N	AID	ISSUED FOR APPROVAL
22/10/2021	Z.N	T0/D	ISSUED FOR TENDER PURPOSES

OFFICES

PROVINCE	OFFICE	No./CODE	E-MAIL
Gauteng	Johannesburg	(011) 940-1000	jo@bvi.co.za
Free State	Polokwane	(015) 291-5400	pol@bvi.co.za
	Kimberley	(053) 442-2100	kim@bvi.co.za
Northern Cape	Worcester	(053) 352-3400	wor@bvi.co.za
	Upington	(054) 337-6000	up@bvi.co.za
KwaZulu Natal	Springs	(031) 713-3014	sp@bvi.co.za
	Durban	(031) 298-4300	dur@bvi.co.za
	Empangeni	(030) 710-0100	emp@bvi.co.za
Eastern Cape	Port Elizabeth	(041) 375-4343	pe@bvi.co.za
	East London	(043) 725-3888	ed@bvi.co.za
Western Cape	Cape Town	(021) 527-7000	cap@bvi.co.za

Visit or contact us online at www.bvi.co.za



CLIENT

TSOLO AGRICULTURE & RURAL DEVELOPMENT INSTITUTE

Private Bag X1008, Tsolo, 5170
Tel: +27 (47) 542 3700

OFFICE OF THE DIRECTOR: ENGINEERING SERVICES

PROJECT

TSOLO AGRI 300 SEATER EXAM HALL

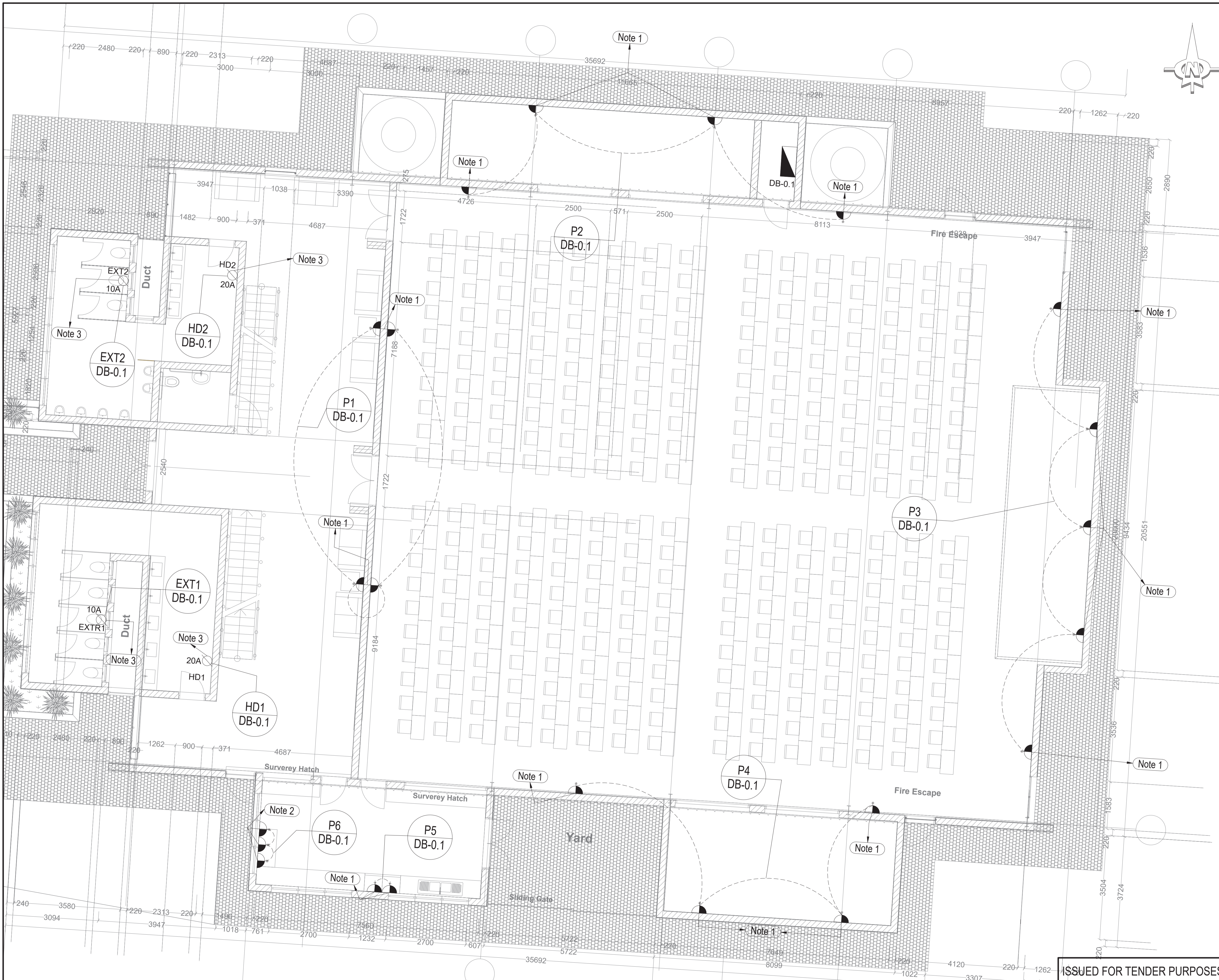
DRAWING TITLE

LIGHTNING PROTECTION LAYOUT

APPROVED BY BVI

ENGINEER	20/10/2021	DATE
SCALE	N.T.S	DRAWN
DESIGNED	Z.N	CHECKED
PLAN NUMBER	REVISION NO.	DATE SAVED

ISSUED FOR TENDER PURPOSES **D34435.00-350-01 T0** 22 October 2021



- NOTES / LEGEND**
- DB DISTRIBUTION BOARD
 - EXT SINGLE POLE EXTRACTOR FAN ISOLATOR POINT
 - HD SINGLE POLE HAND DRYER ISOLATOR POINT
 - 16A SWITCHED SOCKET
 - 16A SWITCHED SOCKET + EURO SOCKET
 - CB CIRCUIT IDENTIFIER

- NOTE LEGEND**
- Note 1 16A SWITCHED SOCKET + EURO SOCKET, MOUNTED 300mm AFFL.
 - Note 2 16A SWITCHED SOCKET + EURO SOCKET, MOUNTED 200mm ABOVE WORKTOP
 - Note 3 ISOLATOR MOUNTED 300MM BELOW CEILING HEIGHT

APPROVED BY COUNCIL / CLIENT

CITY ENGINEER / CLIENT _____ REG. NO. _____ DATE _____

AMENDMENTS CODE

A.B.C.J.	BEFORE TENDER	A.	BY CLIENT
K	TENDER DRAWING	B.	BY ARCHITECT
L1,2,3...	AFTER TENDER	C.	BY MECHANICAL OR ELECTRICAL
Z	AS BUILT	D.	BY BH
		E.	BY OTHER

DATE	INITIAL	No./CODE	REVISION DESCRIPTION
21/09/2021	Z.N	A/D	ISSUED FOR APPROVAL
22/10/2021	Z.N	T/D	ISSUED FOR TENDER PURPOSES

OFFICES

PROVINCE	OFFICE	PHONE	EMAIL
Free State	Free State	(051) 444 1111	ffs@bvi.co.za
Free State	Polokwane	(015) 291 5405	ppw@bvi.co.za
Free State	Stellenbosch	(021) 447 1237	stb@bvi.co.za
Free State	Worcester	(023) 324 3489	wor@bvi.co.za
Northern Cape	Upington	(054) 337 4800	up@bvi.co.za
Northern Cape	Suncook	(027) 712 3014	snk@bvi.co.za
Free State	Delarey	(051) 284 5562	del@bvi.co.za
Free State	Enseseng	(051) 774 8112	ens@bvi.co.za
Eastern Cape	Port Elizabeth	(041) 374 4343	pe@bvi.co.za
Eastern Cape	East London	(043) 758 3889	el@bvi.co.za
Western Cape	Capetown	(021) 827 7000	cap@bvi.co.za
Western Cape	Capetown	(021) 827 7000	cap@bvi.co.za



CLIENT

TSOLO AGRICULTURE & RURAL DEVELOPMENT INSTITUTE

Private Bag X1008, Tsolo, 5170
Tel: +27 (47) 542 3700

rural development & agrarian reform
Department of Agriculture, Forestry and Fisheries
PROVINCE OF THE EASTERN CAPE

OFFICE OF THE DIRECTOR: ENGINEERING SERVICES

PROJECT

TSOLO AGRI 300 SEATER EXAM HALL

DRAWING TITLE

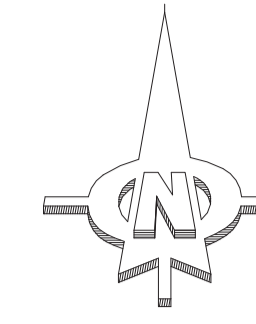
GROUND FLOOR SMALL POWER LAYOUT

APPROVED BY BV

ENGINEER	2010/01	DATE	
SCALE	N.T.S	DRAWN	H.M
DESIGNED	Z.N	CHECKED	Z.N
PLAN NUMBER	REVISION NO.	DATE SAVED	
DRAWING NUMBER	D34435.00-370-01	T0	22 October 2021

ISSUED FOR TENDER PURPOSES

D34435.00-370-01 REV T0.DWG



LEGEND

- 16A SWITCHED SOCKET + EURO SOCKET, WEATHERPROOF
- CB / DB

NOTE LEGEND

- Note 1** 16A SWITCHED SOCKET + EURO SOCKET, MOUNTED 300mm AFFL

APPROVED BY COUNCIL / CLIENT

CITY ENGINEER / CLIENT	REG. NO.	DATE
------------------------	----------	------

AMENDMENTS CODE

- | | |
|------------------------------|---------------------------------|
| A, B, C, J / BEFORE TENDER | A / BY CLIENT |
| T0 / TENDER DRAWING | B / BY ARCHITECT |
| 0, 1, 2, 3, J / AFTER TENDER | C / BY MECHANICAL OR ELECTRICAL |
| Z / AS BUILT | D / BY BVI |
| | E / BY OTHER () |

DATE	INITIAL	No./CODE	REVISION DESCRIPTION
16/09/2021	Z.N	AID	ISSUED FOR APPROVAL
22/10/2021	Z.N	T0/D	ISSUED FOR TENDER PURPOSES

OFFICES

PROVINCE	OFFICE	No./CODE	E-MAIL
City of Johannesburg	Midrand	(011) 946-1111	jo@bvi.co.za
Free State	Polokwane	(015) 291-5400	fs@bvi.co.za
	Bloemfontein	(051) 442-2121	bf@bvi.co.za
Northern Cape	Worcester	(027) 353-3400	nc@bvi.co.za
	Upington	(054) 337-6000	up@bvi.co.za
	Springsbok	(027) 713-3014	sp@bvi.co.za
KwaZulu Natal	Durban	(031) 298-8300	kn@bvi.co.za
	Empangeni	(035) 724-8112	emp@bvi.co.za
Eastern Cape	Port Elizabeth	(041) 374-4143	ec@bvi.co.za
	East London	(043) 726-3888	ed@bvi.co.za
Western Cape	Cape Town	(021) 527-7000	cap@bvi.co.za

CLIENT

TSOLO AGRICULTURE & RURAL DEVELOPMENT INSTITUTE
 Private Bag X1008, Tsolo, 5170
 Tel: +27 (47) 542 3700

rural development & agrarian reform
 Department of Agriculture, Forestry and Fisheries
 REPUBLIC OF SOUTH AFRICA

OFFICE OF THE DIRECTOR: ENGINEERING SERVICES

PROJECT

TSOLO AGRI 300 SEATER EXAM HALL

DRAWING TITLE

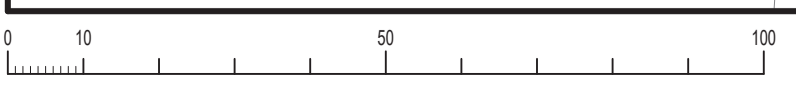
FIRST FLOOR SMALL POWER LAYOUT

APPROVED BY BVI

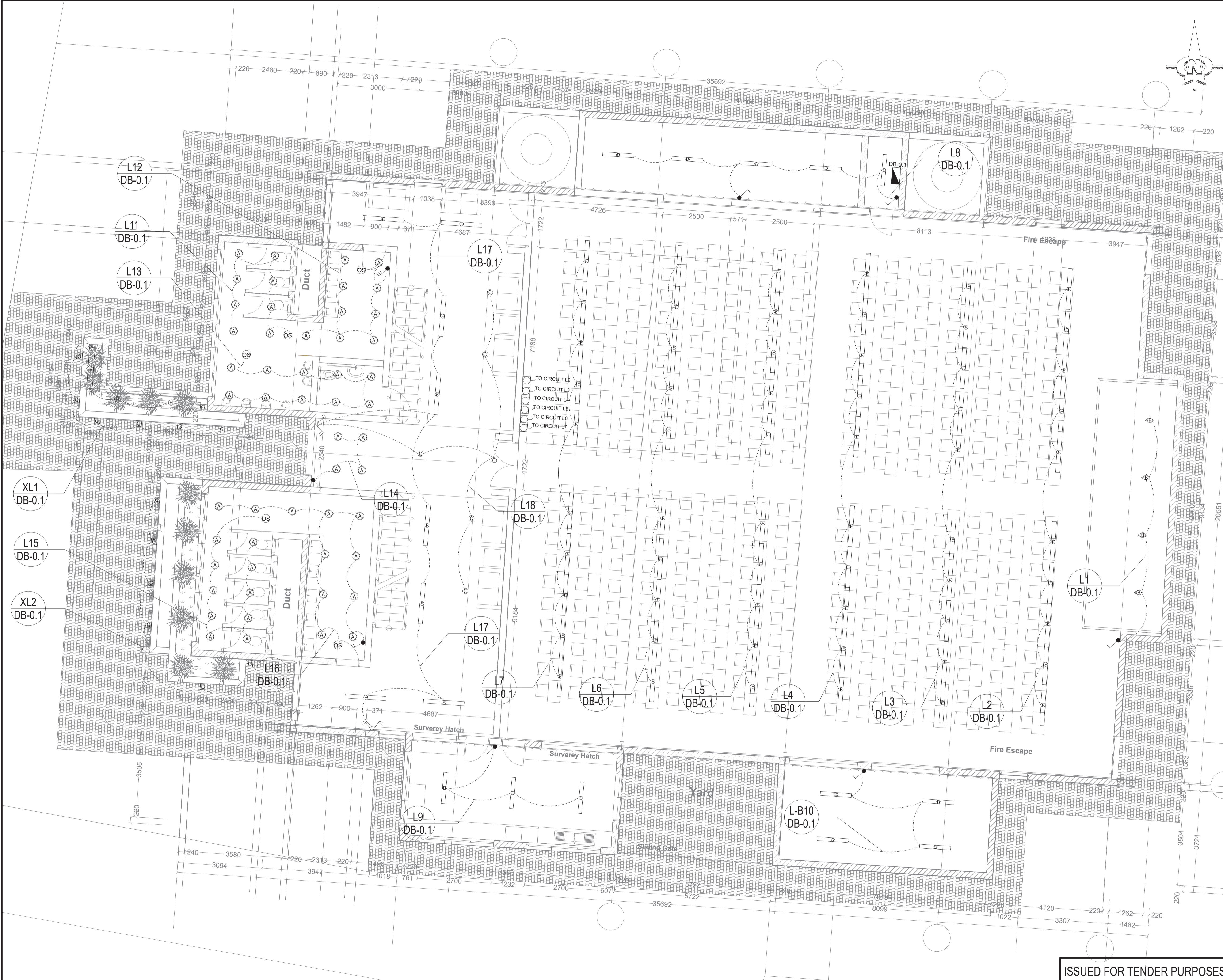
ENGINEER/TECHNOLOGIST	REG. NO.	DATE
SCALE: N.T.S.	DRAWN: H.M.	
DESIGNED: Z.N	CHECKED: Z.N	

DRAWING NUMBER: D34435.00-370-02	REVISION NO.: T0	DATE SAVED: 22 October 2021
----------------------------------	------------------	-----------------------------

ISSUED FOR TENDER PURPOSES



D34435.00-370-02 REV10.DWG



NOTES / LEGEND

- (A) 12W LED BULKHEAD
- (B) 32W LED SPOT LIGHT
- (C) 58W LED PENDANT
- (D) 35W 1150mm LED LINEAR LUMINAIRE
- (E) 24W 800mm LED FACADE LIGHT
- (F) 55W 1500mm LED LINEAR LUMINAIRE
- (G) 4W WALL MOUNTED LED LUMINAIRE
- (H) 6W LED DOWNLIGHT
- (I) SINGLE LEVER, ONE WAY SWITCH
- (J) THREE LEVER, ONE WAY SWITCH
- (K) TWO LEVER, TWO WAY SWITCH
- (L) DIMMER SWITCH
- (M) OCCUPANCY SENSOR
- (N) PHOTOCELL

APPROVED BY COUNCIL / CLIENT

CITY ENGINEER / CLIENT _____ REG. NO. _____ DATE _____

AMENDMENTS CODE

A.B.C. / BEFORE TENDER	A. BY CLIENT
T. / TENDER DRAWING	B. BY ARCHITECT
O.L2.3. / AFTER TENDER	C. BY MECHANICAL OR ELECTRICAL
Z. / AS BUILT	D. BY BM
	E. BY OTHER ()

DATE	INITIAL	No./CODE	REVISION DESCRIPTION
21/09/2021	Z.N	A/D	ISSUED FOR APPROVAL
22/10/2021	Z.N	T/O/D	ISSUED FOR TENDER PURPOSES

OFFICES

PROVINCE	OFFICE	PHONE	EMAIL
Gauteng	Johannesburg	(011) 946-1111	info@bvi.co.za
Free State	Polokwane	(015) 291-5400	info@bvi.co.za
	Bloemfontein	(051) 441-2107	info@bvi.co.za
Northern Cape	Worcester	(053) 353-3400	info@bvi.co.za
	Upington	(054) 337-6000	info@bvi.co.za
	Springs	(011) 713-3014	info@bvi.co.za
KwaZulu Natal	Durban	(031) 296-8300	info@bvi.co.za
	Empangeni	(035) 710-8112	info@bvi.co.za
Eastern Cape	Port Elizabeth	(041) 373-4343	info@bvi.co.za
	East London	(043) 735-3888	info@bvi.co.za
Western Cape	Cape Town	(021) 527-7000	info@bvi.co.za

bvi ENGINEERING PROCUREMENT MANAGEMENT

Registration no. 19860013107

CLIENT

TSOLO AGRICULTURE & RURAL DEVELOPMENT INSTITUTE

Private Bag X1008, Tsoilo, 5170
Tel: +27 (47) 542 3700

rural development & agrarian reform
Department of Agriculture, Forestry and Fisheries
REPUBLIC OF THE EASTERN CAPE
OFFICE OF THE DIRECTOR: ENGINEERING SERVICES

PROJECT

TSOLO AGRI 300 SEATER EXAM HALL

DRAWING TITLE

GROUND FLOOR ELECTRICAL LIGHTING LAYOUT

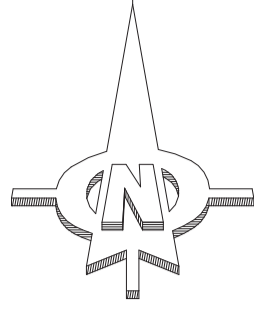
APPROVED BY bvi

ENGINEER	20110101	REG. NO.	DATE
SCALE	N.T.S	DRAWN	P.L
DESIGNED	Z.N	CHECKED	Z.N
PLAN NUMBER	REVISION NO.	DATE SAVED	
DRAWING NUMBER	T0	DATE SAVED	22 October 2021

ISSUED FOR TENDER PURPOSES

D34435.00-380-01

D34435.00-380-01 REV10.DWG



NOTES / LEGEND

- 1 18W WALL MOUNTED LED LUMINAIRE
- PC PHOTOCELL

APPROVED BY COUNCIL / CLIENT

CITY ENGINEER / CLIENT _____ REG. NO. _____ DATE _____

AMENDMENTS CODE

A.B.C.J. BEFORE TENDER
 TO / TENDER DRAWING
 0,1,2,3. / AFTER TENDER
 Z / AS BUILT

A. BY CLIENT
 B. BY ARCHITECT
 C. BY MECHANICAL OR ELECTRICAL
 D. BY BN
 E. BY OTHER ()

DATE	INITIAL	No./CODE	REVISION DESCRIPTION
21/09/2021	Z.N	A/D	ISSUED FOR APPROVAL
22/10/2021	Z.N	T/D	ISSUED FOR TENDER PURPOSES

OFFICES

PROVINCE	OFFICE	No./CODE	E-MAIL
Eastern Cape	Port Elizabeth	(041) 724-4343	ed@bvi.co.za
Free State	Bloemfontein	(051) 442-2121	fs@bvi.co.za
Western Cape	Cape Town	(021) 527-7000	wp@bvi.co.za
Eastern Cape	Port Elizabeth	(041) 724-4343	ed@bvi.co.za
Free State	Bloemfontein	(051) 442-2121	fs@bvi.co.za
Western Cape	Cape Town	(021) 527-7000	wp@bvi.co.za



Registration no. 19860013107

CLIENT

TSOLO AGRICULTURE & RURAL DEVELOPMENT INSTITUTE
 Private Bag X1008, Tsoelo, 5170
 Tel: +27 (47) 542 3700



PROJECT

TSOLO AGRI 300 SEATER EXAM HALL

DRAWING TITLE

FIRST FLOOR ELECTRICAL LIGHTING LAYOUT

APPROVED BY BVI

ENGINEER _____ 20110101 _____ DATE
 REG. NO. _____

SCALE	N.T.S	DRAWN	P.L
DESIGNED	Z.N	CHECKED	Z.N

DRAWING NUMBER	REVISION NO.	DATE SAVED
D34435.00-380-02	T0	22 October 2021

ISSUED FOR TENDER PURPOSES

D34435.00-380-02 REV10.DWG



NOTES / LEGEND

- Ⓧ 50W LED POLE MOUNTED LUMINAIRE
- Ⓧ PHOTOCELL

APPROVED BY COUNCIL / CLIENT

CITY ENGINEER / CLIENT _____ REG. NO. _____ DATE _____

AMENDMENTS CODE

A.B.C.J. BEFORE TENDER / TENDER DRAWING / 0.1,2,3.J. AFTER TENDER / Z / AS BUILT

A. BY CLIENT / B. BY ARCHITECT / C. BY MECHANICAL OR ELECTRICAL / D. BY BN / E. BY OTHER ()

DATE	INITIAL	No./CODE	REVISION DESCRIPTION
17/09/2021	Z.N	A/D	ISSUED FOR APPROVAL
22/10/2021	Z.N	T/D	ISSUED FOR TENDER PURPOSES

OFFICES

PROVINCE	OFFICE	No./CODE	E-MAIL
Eastern Cape	Port Elizabeth	(041) 724-4343	pe@bvi.co.za
Free State	Bloemfontein	(051) 442-2127	bf@bvi.co.za
North West	Pretoria	(011) 946-0127	pt@bvi.co.za
Western Cape	Cape Town	(021) 527-7000	ct@bvi.co.za
Eastern Cape	Port Elizabeth	(041) 724-4343	pe@bvi.co.za
Free State	Bloemfontein	(051) 442-2127	bf@bvi.co.za
North West	Pretoria	(011) 946-0127	pt@bvi.co.za
Western Cape	Cape Town	(021) 527-7000	ct@bvi.co.za

CLIENT

TSOLO AGRICULTURE & RURAL DEVELOPMENT INSTITUTE
 Private Bag X1008, Tsoelo, 5170
 Tel: +27 (47) 542 3700

PROJECT

TSOLO AGRI 300 SEATER EXAM HALL

DRAWING TITLE

GENERAL AREA ELECTRICAL LIGHTING LAYOUT

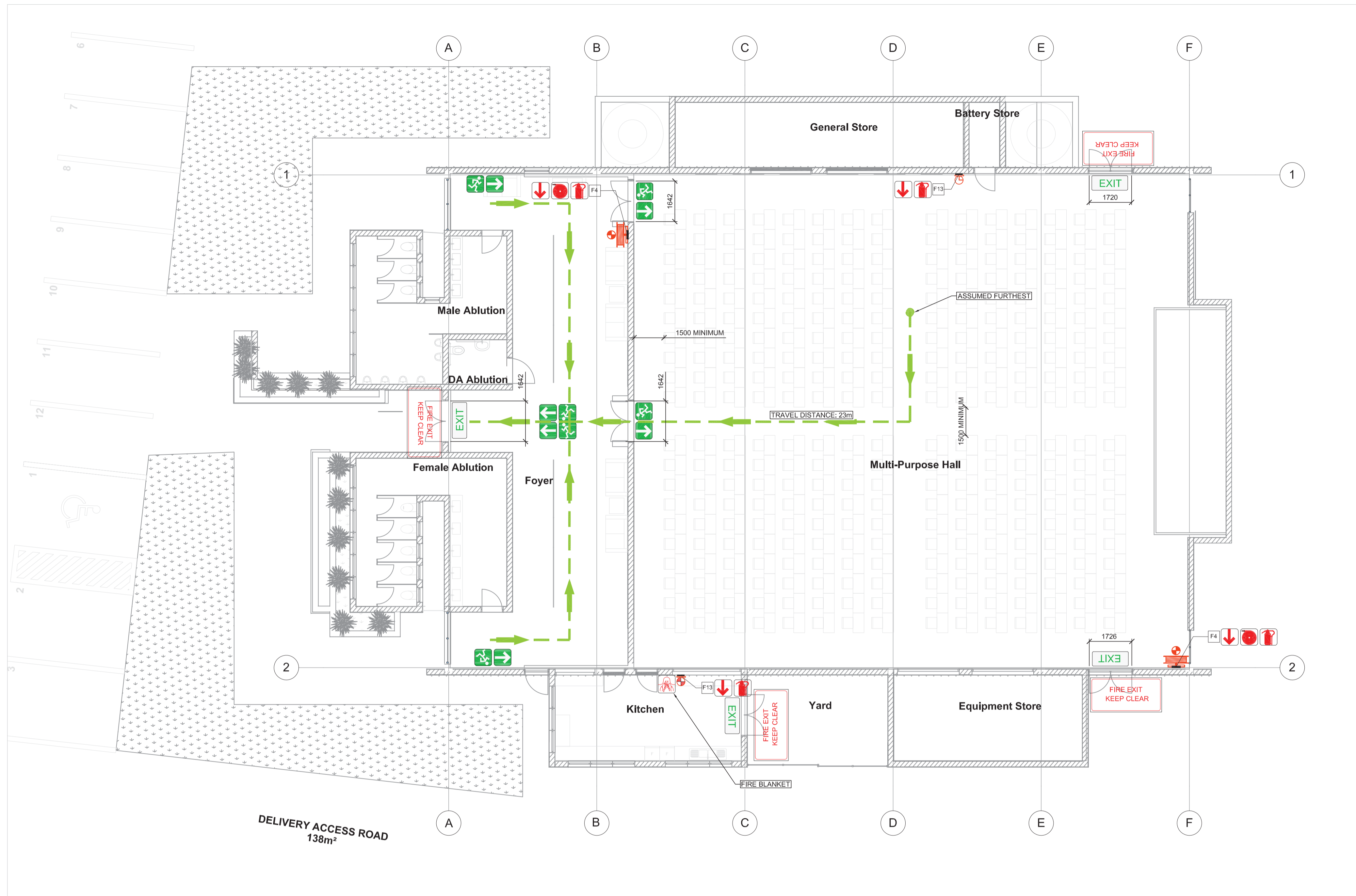
APPROVED BY BVI

ENGINEER _____ 20110101 _____ DATE
 REG. NO. _____

SCALE	N.T.S	DRAWN	P.L
DESIGNED	Z.N	CHECKED	Z.N

PLAN NUMBER	REVISION NO.	DATE SAVED
DRAWING NUMBER	D34435.00-380-03	T0
REVISION NO.	T0	22 October 2021

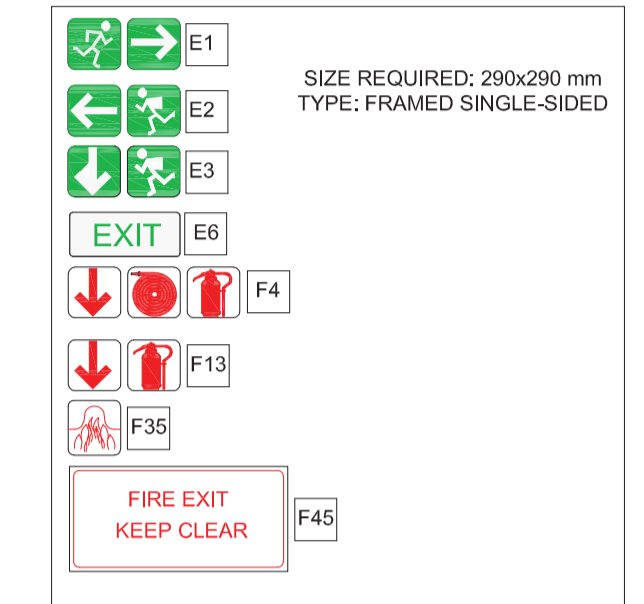
ISSUED FOR TENDER PURPOSES



FIRE NOTES

1. FIRE EXTINGUISHERS, FIRE HOSE REELS AND FIRE HYDRANTS TO SANS 10400-T
2. PRESSURE GAUGES TO BE INSTALLED AT EACH FIRE HOSE REEL
3. ALL FIRE EQUIPMENT SIGNAGE SHALL CONFORM TO SANS 1186.
4. ALL EQUIPMENT SIGNAGE SHALL BE PHOTO-LUMINESCENT TYPE, SIZE:290x290mm.
5. ALL SIGNAGE TO BE MECHANICALLY FIXED. HANGING SIGNAGE TO BE SUSPENDED FROM SOLID ROD/BRAKETS AND NOT CHAINS/ CABLES.
6. INTERNAL FIRE WATER RETICULATION SHALL BE CLASS 2 COPPER
7. PIPING RETICULATION SHALL BE PAINTED SIGNAL RED
8. FIRE SUPPLY CONNECTION 1 meter FROM BUILDING BY CIVIL ENGINEER AS INDICATED.
9. SITE FIRE HYDRANTS BY CIVIL ENGINEER

FIRE EQUIPMENT SIGNAGE



FIRE DESIGN SUMMARY SCHEDULE	
OCCUPANCY CLASSIFICATION	A3 - PLACE OF INSTRUCTION
FLOOR AREA	732m²
POPULATION	300
NUMBER OF ESCAPE ROUTES	4
TYPE OF FIRE EQUIPMENT INSTALLED	FIRE HOSE REELS & FIRE EXTINGUISHERS
NUMBER OF FIRE HYDRANTS	EXISTING EXTERNAL HYDRANTS
NUMBER OF FIRE HOSE REELS	2
NUMBER OF FIRE EXTINGUISHERS	3-OFF 4.5kg DCP & 5kg CO ₂
FIRE DETECTION	MANUAL FIRE DETECTION IN ACCORDANCE WITH SANS 10139. DESIGN BY ELECTRICAL ENGINEER.
SPRINKLER PROTECTED	NO
MECHANICAL SMOKE CONTROL / NATURAL VENTILATION	NATURAL VENTILATION - MINIMUM 3% OF FLOOR AREA IN UPPER THIRD OF EXTERNAL WALL.

FIRE LEGEND

SYMBOL	DESCRIPTION
	FIRE SUPPLY
	30m PVC FIRE HOSE REEL
	65mm RIGHT-ANGLE FIRE HYDRANT
	BOOSTER CONNECTION
	4.5kg DCP FIRE EXTINGUISHER
	5kg CO ₂ FIRE EXTINGUISHER

FOR TENDER

APPROVED BY COUNCIL / CLIENT

CITY ENGINEER / CLIENT	REG. NO.	DATE

AMENDMENTS CODE

A.B.C./J	BEFORE TENDER	A	BY CLIENT
T0	TENDER DRAWING	I	BY ARCHITECT
0,1,2...	AFTER TENDER	IC	BY MECHANICAL OR ELECTRICAL
Z	AS BUILT	IE	BY OTHER ()

DATE	INITIAL	No./CODE	REVISION DESCRIPTION
20/10/2021	A.N.T	T0/D	DRAWING ISSUED FOR TENDER

COPYRIGHT VESTS IN THIS DOCUMENT AND NO USE OR REPRODUCTION OR DUPLICATION THEREOF MAY OCCUR WITHOUT THE WRITTEN CONSENT OF BVI CONSULTING ENGINEERS

OFFICES

PROVINCE	OFFICE	PHONE	EMAIL
Gauteng	Tshwane	(012) 945-1111	gauteng@bvi.co.za
	Pretoria	(015) 255-5403	pretoria@bvi.co.za
Free State	Beaufortia	(051) 442-5127	fs@bvi.co.za
	Worcester	(053) 324-888	worcester@bvi.co.za
Northern Cape	Upington	(054) 535-4800	nc@bvi.co.za
	Springs	(011) 715-6880	spring@bvi.co.za
North West	Deurs	(011) 288-6102	nw@bvi.co.za
	Emangweni	(052) 774-6112	emangweni@bvi.co.za
Eastern Cape	Port Elizabeth	(041) 374-4343	ec@bvi.co.za
	East London	(043) 725-1444	el@bvi.co.za
Western Cape	Cape Town	(021) 527-7000	capetown@bvi.co.za



Registration no. 1266/0015/07

CLIENT

PROJECT

THE TSOLO AGRICULTURAL AND RURAL DEVELOPMENT INSTITUTE

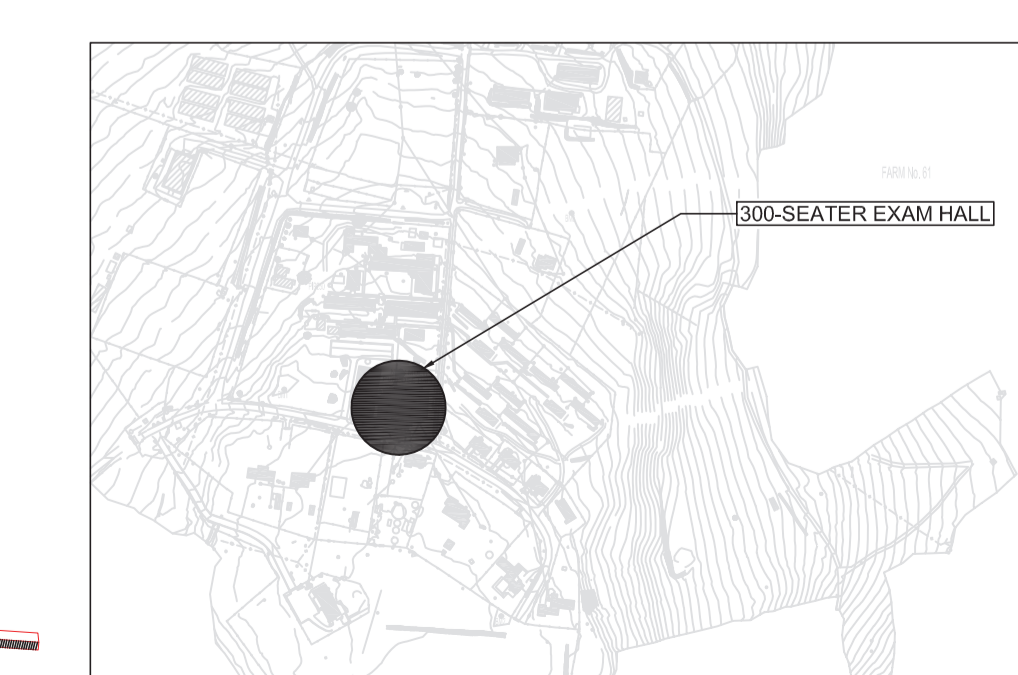
300-SEATER EXAM HALL HVAC LAYOUT

APPROVED BY BVI

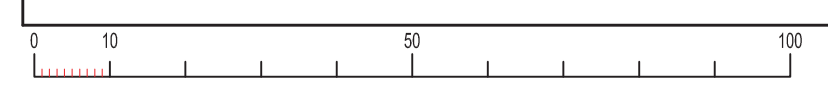
ENGINEER/TECHNOLOGIST	REG. NO.	DATE
	200970062	20/10/2021

SCALE	DRAWN	DATE
1:100 @ A1	A.NTOYISE	

DESIGNED	CHECKED
J.DU PLESSIS	A.MALGAS



- KEY PLAN -



GENERAL NOTES:

1. SHEET METAL DUCTING MUST BE GALVANISED MILD STEEL WITH MEZZ-FLANGES. ALL HVAC EQUIPMENT TO BE ADEQUATELY SUPPORTED AT REGULAR INTERVALS WITH SUITABLE THREADED ROD AND ANGLE BAR AS PER SABS 0193.
2. ALL DUCTWORK JOINTS MUST BE PROPERLY SEALED AND AIRTIGHT.
3. ALL DOORS TO TOILETS WITH MECHANICAL VENTILATION TO BE UNDERCUT MINIMUM 20mm.
4. THE HVAC CONTRACTOR TO WIRE BETWEEN THE HVAC EQUIPMENT AND HVAC DB OR ISOLATOR.
5. ALL ARTIFICIAL VENTILATION SYSTEMS MUST NOT EMIT A NOISE LEVEL OF WHICH CAUSE THE AMBIENT NOISE LEVEL TO EXCEED 50DBA MEASURED AT THE BOUNDARY OF PROPERTY.
6. ALL EQUIPMENT MUST BE MOUNTED ON ANTI-VIBRATION MOUNTINGS.
7. FINAL DISK VALVE POSITIONS AS PER ARCHITECT'S CO-ORDINATED CEILING LAYOUT - COLOUR TO ARCHITECT'S SPECIFICATION.
8. FINAL WEATHER LOUVRE POSITIONS AS PER ARCHITECT'S ELEVATION DRAWINGS COLOUR TO ARCHITECT'S SPECIFICATION.
9. SOUND ATTENUATORS MUST HAVE 100mm AIRGAPS WITH LENGTHS AS INDICATED.

NOTES TO BUILDER:

1. BUILDER TO PROVIDE PENETRATIONS THROUGH CONCRETE SLABS & BRICK WALLS FOR HVAC EQUIPMENT AND MAKE GOOD AFTER INSTALLATION OF HVAC EQUIPMENT.
2. FIRE STOPPING & SEALING OF ALL DUCT & PIPE ENTRIES TO ARCHITECT'S DETAIL.
3. ALL WEATHER LOUVRE PENETRATIONS THROUGH WALLS MUST BE COMPLETE WITH 25mm TIMBER FRAME FOR THE SCREW FIXING OF WEATHER LOUVRES & GRILLES.
4. DOOR GRILLES - 500x300 (UNLESS NOTED OTHERWISE) SUPPLIED BY AIR-CONDITIONING CONTRACTOR AND CUT AND FITTED - BY BUILDER.

NOTES TO ELECTRICAL CONTRACTOR:

1. PROVIDE POWER SUPPLY TO ALL HVAC ISOLATORS AS INDICATED ON DRAWING COMPLETE WITH CONDUITS, DRAW-WIRES & JUNCTION BOXES.
2. ELECTRICAL POWER SUPPLIES & ISOLATORS TO BE PROVIDED WITHIN A METER OF HVAC EQUIPMENT.
3. ISOLATORS TO FANS TO BE IN CEILING SPACE WITHIN A METER OF HVAC EQUIPMENT.

SYMBOL LEGEND

	ELECTRICAL POWER SUPPLY: 220V/SINGLE PHASE.
	DOORS TO BE UNDERCUT BY 20mm
	UNINSULATED DUCTING
	500x300mm DOOR GRILLE
	SOUND ATTENUATOR
	FAN

FOR TENDER

APPROVED BY COUNCIL / CLIENT

CITY ENGINEER / CLIENT	REG. NO.	DATE
------------------------	----------	------

AMENDMENT'S CODE

A,B,C... : BEFORE TENDER	A : BY CLIENT
T0 : TENDER DRAWING	B : BY ARCHITECT
0,1,2... : AFTER TENDER	C : BY MECHANICAL OR ELECTRICAL
Z : AS BUILT	D : BY BVI
	E : BY OTHER ()

DATE	INITIAL	No./CODE	REVISION DESCRIPTION
20/10/2021	A.N.T	T0/D	DRAWING ISSUED FOR TENDER

COPYRIGHT VESTS IN THIS DOCUMENT AND NO USE OR REPRODUCTION OR DUPLICATION THEREOF MAY OCCUR WITHOUT THE WRITTEN CONSENT OF BVI CONSULTING ENGINEERS

OFFICES

PROVINCE	OFFICE	PHONE	E-MAIL
Gauteng	Tshwane	(012) 940-1111	gauteng@bvi.co.za
	Pretoria	(015) 254-5403	pretoria@bvi.co.za
	Benoni	(011) 442-2127	benoni@bvi.co.za
Free State	Water	(057) 324-4888	water@bvi.co.za
	Umtata	(054) 334-4800	umtata@bvi.co.za
Northern Cape	Springs	(027) 715-8880	springs@bvi.co.za
	De Rust	(021) 284-8302	derust@bvi.co.za
KwaZulu Natal	Empangeni	(035) 724-6112	empangeni@bvi.co.za
	Port Elizabeth	(041) 374-4343	portelizabeth@bvi.co.za
Eastern Cape	East London	(043) 725-1444	eastlondon@bvi.co.za
	Cape Town	(021) 527-7000	capetown@bvi.co.za

Mail or contact us online at www.bvieng.co.za



Registration no. 10660215707



PROJECT

THE TSOLO AGRICULTURAL AND RURAL DEVELOPMENT INSTITUTE

DRAWING TITLE

300-SEATER EXAM HALL HVAC LAYOUT

APPROVED BY BVI

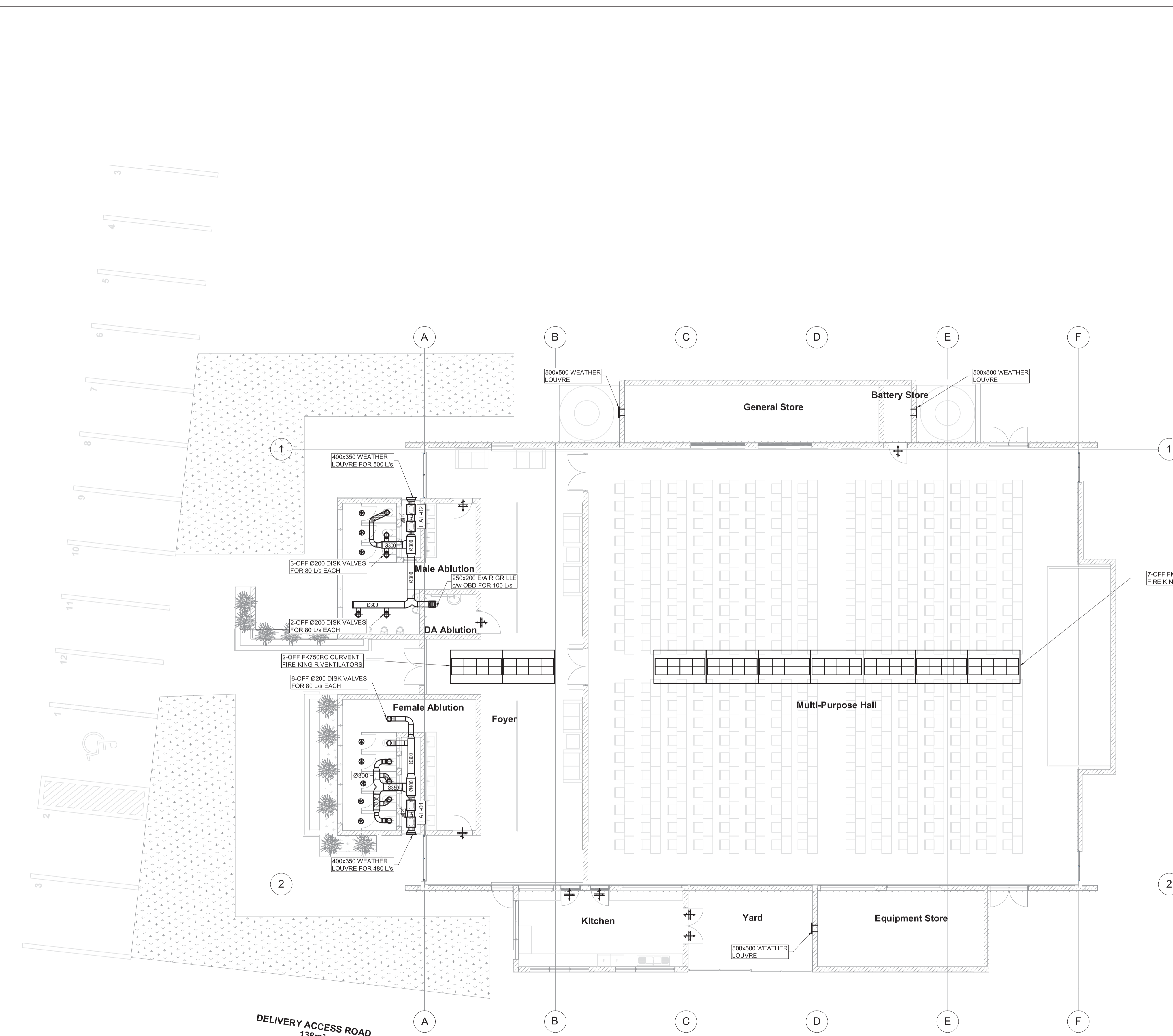
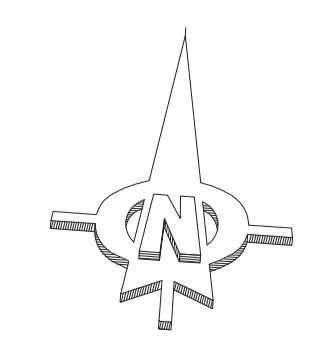
	200970062	20/10/2021
ENGINEER/TECHNOLOGIST	REG. NO.	DATE

SCALE	1:100 @ A1	DRAWN	A.NTOYISE
DESIGNED	J.DU PLESSIS	CHECKED	A.MALGAS

PLAN NUMBER	REVISION NO.	DATE SAVED
34435.00-741-01	T0	20 October 2021



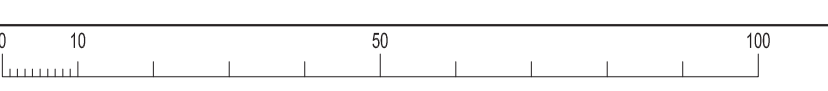
- KEY PLAN -



EQUIPMENT SCHEDULE
MECHANICAL VENTILATION FANS

FAN REFERENCE NUMBER	EAF-01	EAF-02
AREA SERVED	FEMALE ABLUTIONS	MALE ABLUTIONS & DA ABLUTIONS
AIR VOLUME (m ³ /s)	0.480	0.500
SIZE (Ø mm)	315	315
STATIC PRESSURE (Pa)	150	150
MOTOR (kW)	0.400	0.400
SPEED - MAXIMUM (rpm)	2880	2880
SOUND ATTENUATORS (discharge)	1.5D	1.5D
(suction)	1.5D	1.5D
(V / Ph / Hz)	230 / 1 / 50	230 / 1 / 50

DELIVERY ACCESS ROAD
138m²



34435.00-741-01 REV 0- 300-SEATER EXAM HALL HVAC LAYOUT.DWG