

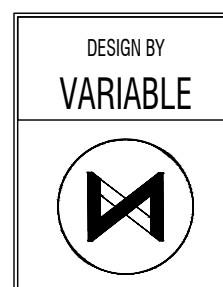
# PROPOSED DIVING PLATFORM

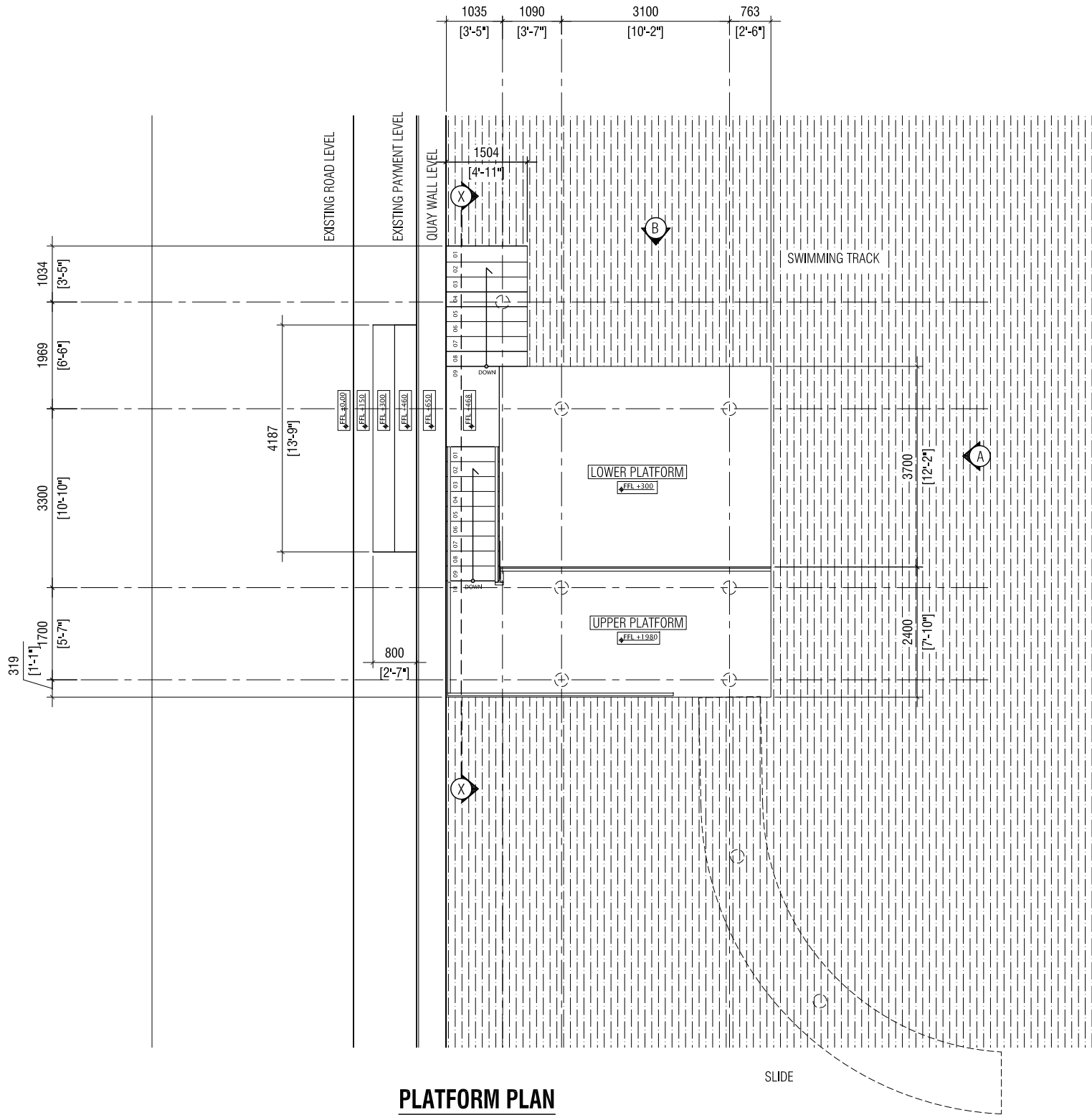
K. MALE' , MALDIVES

OCTOBER 2020

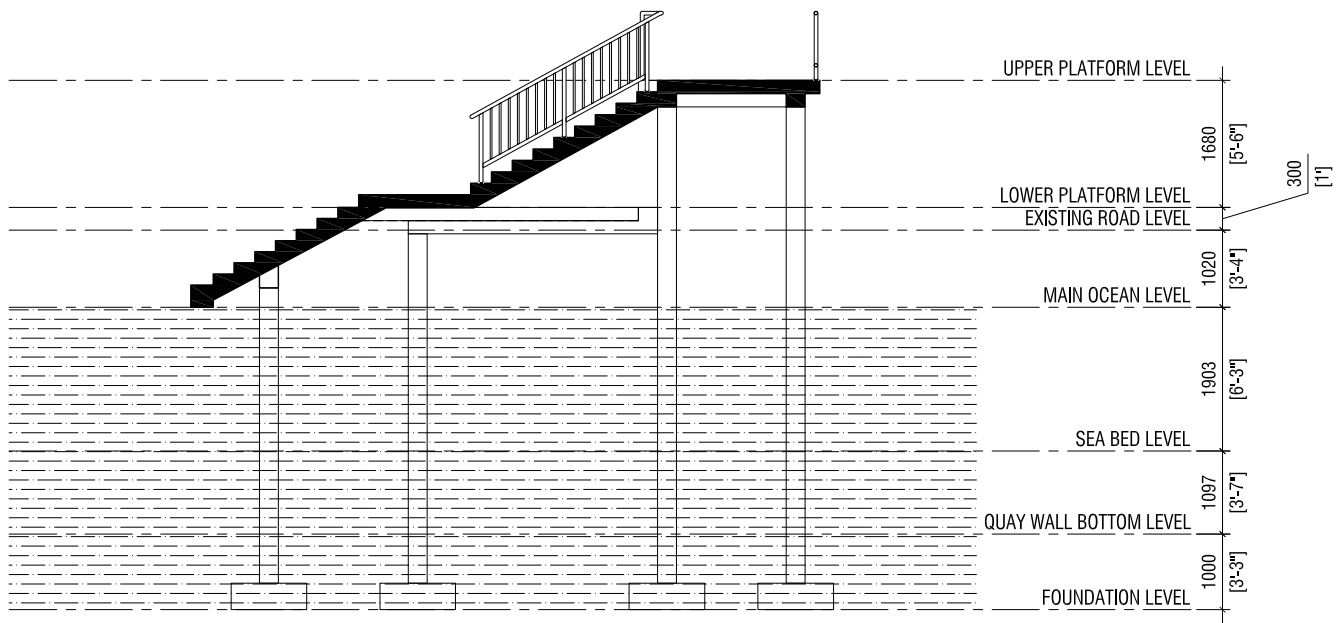
CLIENT : SWIMMING ASSOCIATION

ARCHITECTURAL & STRUCTURAL DRAWINGS

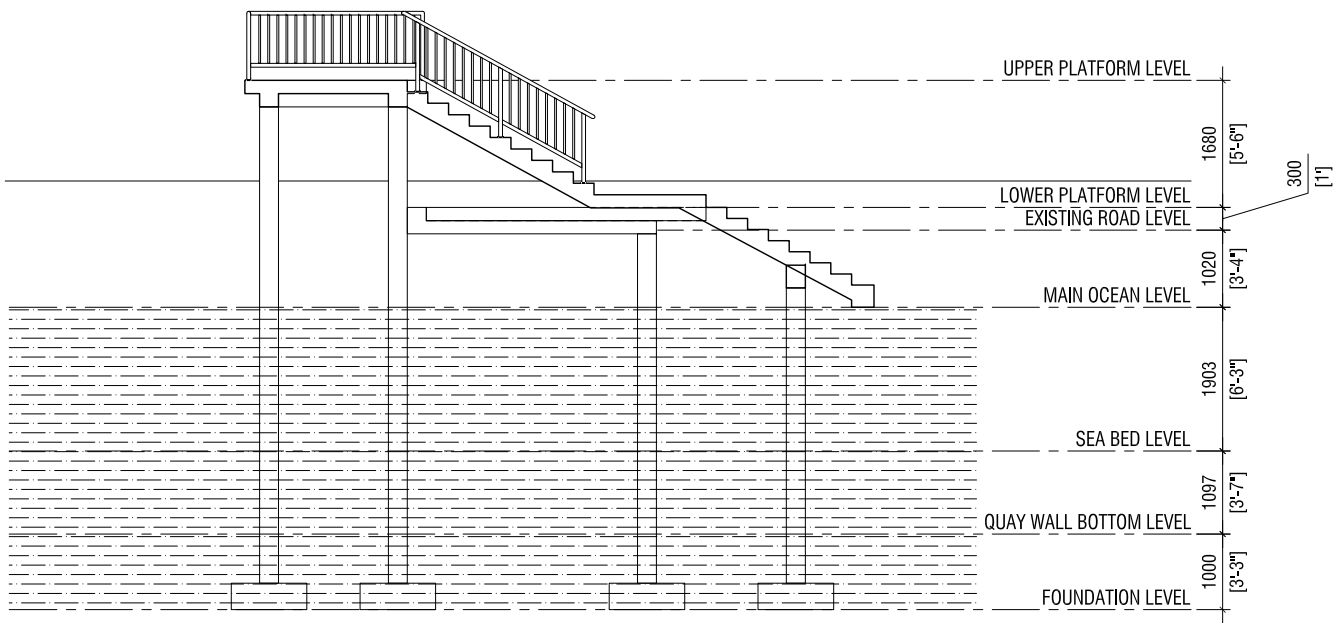




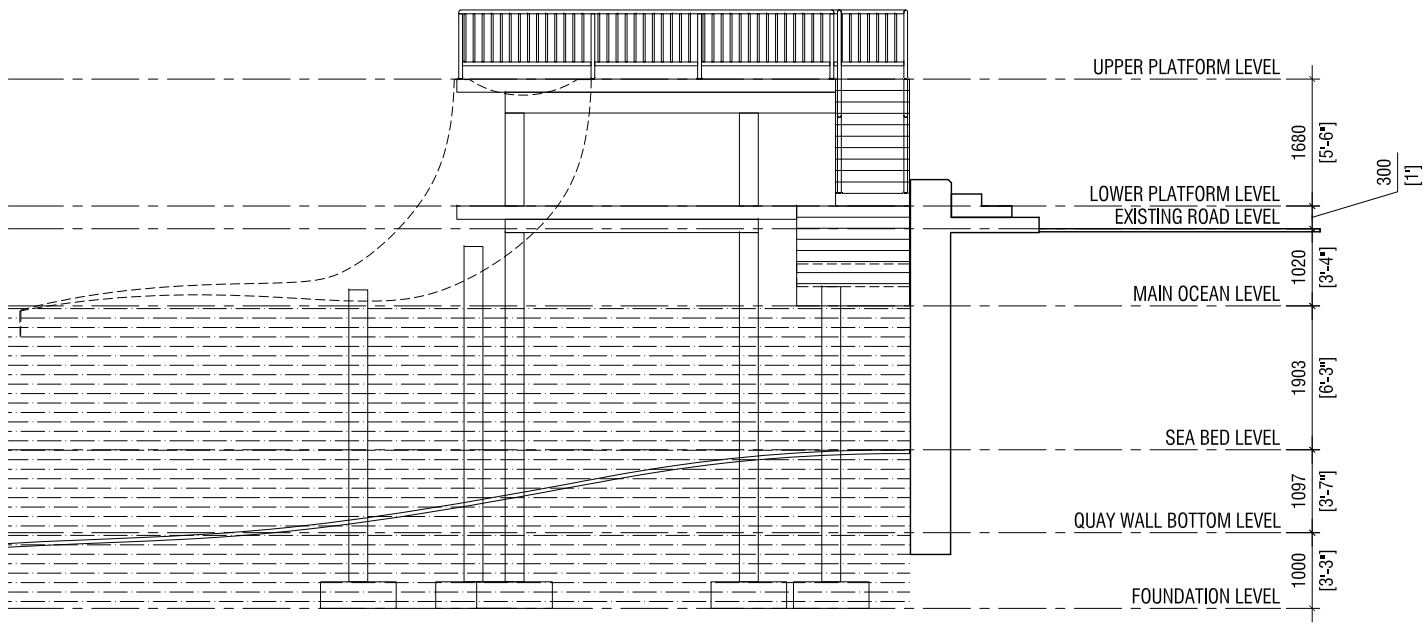
DESIGN BY VARIABLE	PROJECT NAME :		SWIMMING TRACK PLATFORM , K.MALE' , MALDIVES		
	ARCHITECT :	HAMRAU AHMED FATHUHEE	CLIENT NAME :	SWIMMING ASSOCIATION	DWG NO:
	ARCHITECTURAL CHECKER :	-	DRAWN BY :	HUSSAIN AZEEM	A-01
	CIVIL ENGINEER :	AHMED ZUHAL ZAEEM	DATE :	OCTOBER 2020	
	STRUCTURAL CHECKER :	-	PAPER SIZE :	A3	



**SECTION X-X**  
SCALE 1:100



**ELEVATION-A**  
SCALE 1:100



**ELEVATION-B**  
SCALE 1:100

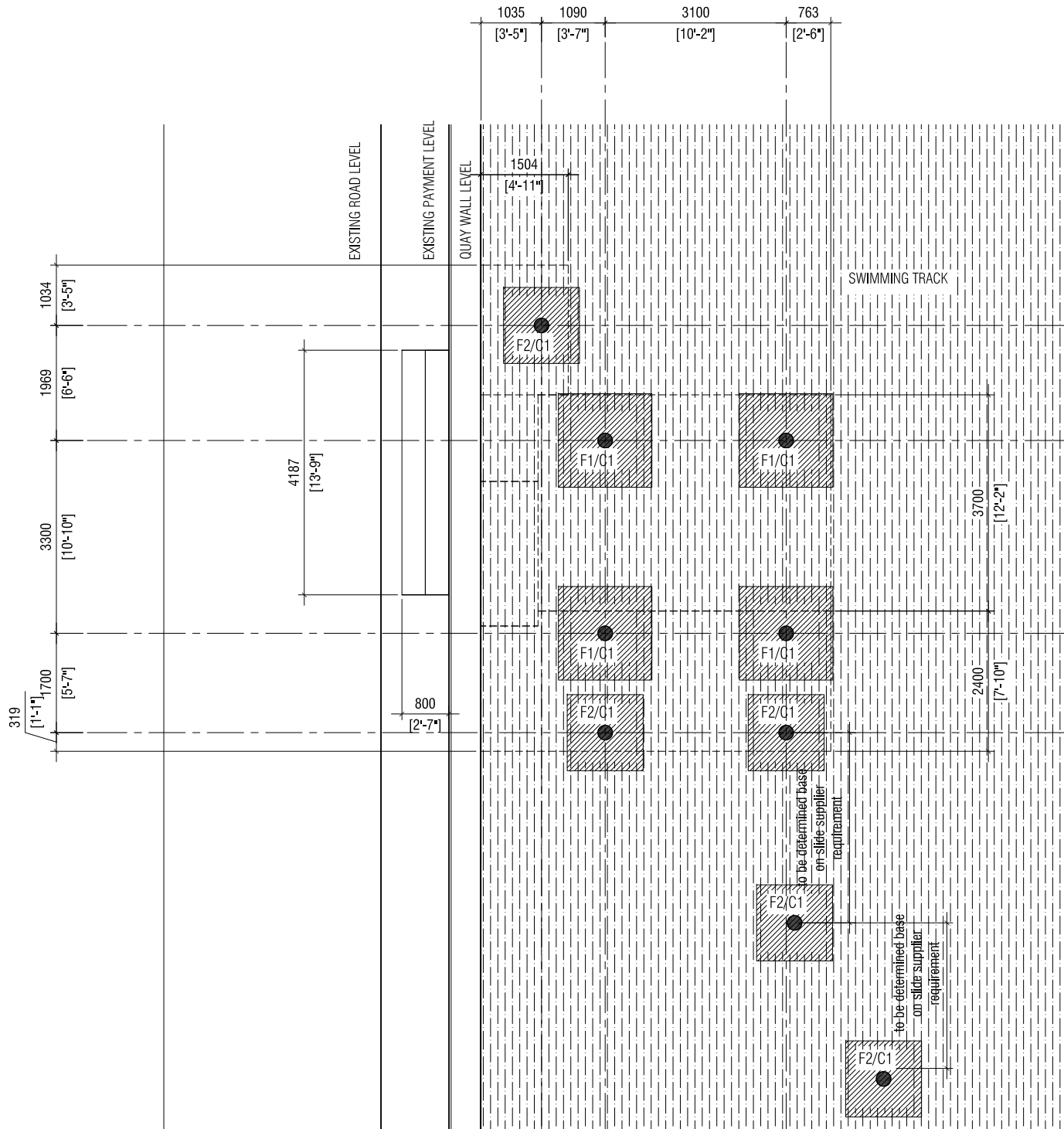
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	ARCHITECTURAL CHECKER :	-	DRAWN BY :	HUSSAIN AZEEM	A-02
	CIVIL ENGINEER :	AHMED ZUHAL ZAEEM	DATE :	OCTOBER 2020	
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<div>1. GENERAL NOTES</div> <div><div>1.1. DO NOT SCALE THE DRAWINGS. ALL DIMENSIONS SHALL BE READ FROM THE DRAWING OR COMPUTED. ELEVATIONS ARE IN MILLIMETERS, DISTANCES AND REINFORCEMENT BAR SIZES ARE IN MILLIMETERS</div><div>1.2. IN THE INTERPRETATION OF THESE DRAWINGS, INDICATED DIMENSIONS SHALL GOVERN AND DISTANCES OR SIZES SHALL NOT BE SCALED FOR CONSTRUCTION PURPOSES.</div><div>1.3. ANY DISCREPANCIES OR CONFLICT IN THE SETTING OUT LINES, LEVELS, DETAILS, LOCATIONS, SIZES, REINFORCEMENT ETC. OF THE STRUCTURAL MEMBER SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO COMMENCEMENT OF WORK.</div><div>1.4. ALL REINFORCED CONCRETE WORK SHALL BE DONE IN ACCORDANCE WITH THE BRITISH STANDARDS. REINFORCED CONCRETE IS DESIGNED AS PER BS 8110-1-1998. STRUCTURAL STEEL WORK IS DESIGNED AS PER BS5950-1-2005</div><div>1.5. THE CONTRACTOR SHALL PRODUCE SHOP DRAWINGS AND SCHEDULES AS REQUIRED FOR COMPLETION OF THE WORKS AND RECORD DRAWINGS OF THE AS-BUILT AND BUILDER WORKS FOR THE CONSULTANT'S APPROVAL.</div><div>1.6. CONTRACTOR SHALL DO FULL COORDINATION BETWEEN STRUCTURAL, ARCHITECTURAL AND MEP DRAWINGS IN WET AREAS TO ALLOW FOR DRAINAGE PIPES.</div><div>1.7. ALL MATERIALS TO BE USED IN CONJUNCTIONS SHALL COMPLY WITH THE REQUIREMENTS OF THE SPECIFIED CODES, STANDARDS AND ORDINANCE OF RELEVANT BUILDING AUTHORITIES UNLESS NOTED OTHERWISE IN THE PROJECT SPECIFICATION AND/OR DRAWINGS.</div><div>1.8. ALL DIMENSIONS AND LEVELS SHOWN ON THE DRAWINGS SHALL BE VERIFIED BY THE CONTRACTOR. ANY DISCREPANCIES SHALL BE BROUGHT TO CONSULTANT'S ATTENTION PRIOR TO CONSTRUCTION.</div><div>1.9. THE CONTRACTOR SHALL ENSURE THAT DURING CONSTRUCTION, NO PART OF THE STRUCTURE IS OVERSTRESSED BY EXCESSIVE CONSTRUCTION LOADS UNTIL THEIR COMPLETION. TEMPORARY BRACING AND PROPPING TO BE PROVIDED WERE REQUIRED.</div><div>1.10. ONCE THE EXCAVATION IS DONE TO A SPECIFIED DEPTH, THE CONTRACTOR IS TO INFORM THE SITE ENGINEER IF THE SOIL PROFILE DEFERS FROM THE GIVEN SOIL REPORT.</div><div>1.11. THE CONTRACTOR SHALL COMPLY WITH ALL REQUIREMENTS OF THE LOCAL REGULATIONS AND REQUIREMENTS OF ALL CONCERNED AUTHORITIES.</div><div>1.12. QUALITY OF CONCRETE FINISH FOR ALL NON-PLASTERED COLUMNS AND BEAMS IS TO BE IN ACCORDANCE WITH - FAIR FACED CONCRETE AS REFLECTED ON THE ARCHITECTURAL DRAWINGS AND SPECIFICATIONS.</div><div>1.13. EVERY BATCH OF CONCRETE WORKS IS TO BE TESTED BY CUBE TESTING FOR THE CONCRETE STRENGTH AT 14 AND 28 DAYS.</div><div>1.14. ANY STRUCTURAL REQUIREMENTS SPECIFIED BY RELEVANT AUTHORITIES, WHICH ARE NOT COVERED IN NOTES AND SPECIFICATIONS ARE ASSUMED TO BE DULY CONSIDERED BY THE CONTRACTOR.</div><div>1.15. ALL TYPICAL DETAILS AND NOTES SHOWN ON DRAWINGS SHALL APPLY UNLESS NOTED OTHERWISE, TYPICAL DETAIL MAY NOT NECESSARY BE INDICATED ON THE PLANS BUT SHALL STILL APPLY AS SHOWN OR DESCRIBED IN THE DETAILS WHERE PARTICULAR DETAILS ARE NOTED ON THE DRAWINGS THE SPECIFIED DETAILS SHALL BE USED.</div><div>1.16. THE DESIGN LIFE OF THE STRUCTURE OF THIS PROJECT SHALL MAINTAIN A MINIMUM OF 50 YEARS LIFE PERIOD. THE PRIMARY STRUCTURAL COMPONENTS ARE TO BE DESIGNED AND DETAILED TO SATISFY THIS REQUIREMENT. CONCRETE MIX SUPPLIER SHALL SUBMIT A LIFE CYCLE ANALYSIS WHICH REFLECT A 50 YEARS DESIGN LIFE WITHOUT MAINTENANCE. INSPECTION AND REPAIR REQUIREMENT DURING THIS PERIOD.</div><div>1.17. VARIABLE LOADS APPLIED ARE AS FOLLOWS: PLATFORM = 5KPa</div></div>	<div>2. CONCRETE</div> <div><div>2.1. ALL CONCRETE WORKS SHALL CONFORM TO THE BS8110-1-1998</div><div>2.2. A GRADE OF C30 INDICATES THAT CONCRETE SHALL HAVE A Fcu COMPRESSIVE STRENGTH OF 30MPa ESTABLISHED FROM TEST CUBES AT 28 DAYS.</div><div>2.3. CONCRETE MIX DESIGN SHALL COMPLY WITH BS8500-1:2006.</div><div>2.4. CONTRACTOR SHALL IMPLEMENT A TRIAL MIX IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS &amp; AUTHORITY REQUIREMENTS. TRIAL MIX RESULTS SHALL BE SUBMITTED FOR ENGINEER'S REVIEW &amp; APPROVAL PRIOR TO COMMENCING CONCRETING.</div><div>2.5. CONTRACTOR SHALL SUBMIT THE DETAILS OF ADDITIVES, PLASTICIZERS, MICRO SILICA, CURING COMPOUNDS, WATERPROOFING AGENTS, ETC. APPLICATION SHOULD FOLLOW STRICTLY THE MANUFACTURER RECOMMENDATION. IT IS CONTRACTORS RESPONSIBILITY TO ENSURE THAT ALL CONSTITUENTS OF CONCRETE ARE COMPATIBLE TO EACH OTHER.</div><div>2.6. MAXIMUM PERCENTAGE (BY WEIGHT) OF SALT CONTENTS PERMISSIBLE IN AGGREGATES USED FOR CONCRETE, HOLLOW BLOCKS &amp; HOURS BLOCKS, ETC. SHALL BE AS FOLLOWS: a) ACID SOLUBLE CHLORIDES IN AGGREGATE - (FINE 0.03%, COARSE 0.02%) b) ACID SOLUBLE SULPHATE IN AGGREGATE - (FINE 0.3%, COARSE 0.2%)</div><div>2.7. CONCRETE SHALL BE CURED BY AN APPROVED MEANS IN ACCORDANCE WITH THE SPECIFICATIONS PROVIDED IF ANY, OR A APPROVED CURING METHOD BY THE CONSULTANT.</div><div>2.8. AGGREGATES SHALL BE FROM APPROVED SOURCE AND IN ACCORDANCE WITH THE SPECIFICATIONS.</div><div>2.9. CEMENT TO BE USED IS SULPHUR RESISTANT CEMENT</div><div>2.10. CONSTRUCTION JOINTS: a) THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER FOR APPROVAL A PLAN MARKED UP SHOWING THE LOCATION OF ALL CONSTRUCTION JOINTS. b) HORIZONTAL CONSTRUCTION JOINTS SHALL NOT BE MADE IN BEAMS, UNLESS APPROVED BY THE CONSULTANT OR ENGINEERS. c) VERTICAL CONSTRUCTION JOINTS MAY BE LOCATED AT MIDSPAN OF SLABS OR BEAMS AFTER REVIEWED AND APPROVED BY THE ENGINEERS. d) CONTRACTOR SHALL SUBMIT SHEAR FRICTION AND THE ADDITIONAL REQUIRED REINFORCEMENT CALCULATION OF CONSTRUCTION JOINT (AT ANY LOCATION) FOR ENGINEERS REVIEW AND APPROVAL.</div></div>	<div>3. REINFORCEMENT</div> <div><div>3.1. THE REINFORCEMENT USED IN THE REINFORCED CONCRETE SHALL BE ROUND, DEFORMED TYPE 2 BARS MARKED AS (T) TO INDICATE HIGH YIELD STRENGTH OF 460N/mm2 TO BS4449 OR TYPE 500B TO EC-EN. THE CARBON EQUIVALENT OF REINFORCEMENT BARS SHOULD NOT EXCEED 0.51 FOR GRADE 460.</div><div>3.2. REINFORCEMENT DETAILS SHOWN ARE INDICATIVE. THE CONTRACTOR SHALL PREPARE DETAILED SHOP DRAWINGS &amp; FULL BAR SCHEDULES IN ACCORDANCE WITH THE DESIGN DRAWINGS AND SHALL BE CUT AND BENT IN ACCORDANCE WITH BS 8666 AND ACI 315-09 FOR THE ENGINEER'S APPROVAL AT LEAST FOUR WEEKS PRIOR TO COMMENCEMENT OF REINFORCED CONCRETE WORK AND AFTER COORDINATING WITH ALL CONCERNED PARTIES.</div><div>3.3. LAP LENGTHS AND ANCHORAGE LENGTHS OF REINFORCEMENT SHALL BE AS PER BS 8110-1-1998. ADDITIONAL LAPPING IF REQUIRED TO BE PROVIDED WITH ENGINEER'S APPROVAL. THE MINIMUM LAP LENGTH OF REINFORCEMENT SHALL BE THE MAXIMUM OF (45 BAR DIA. IN GENERAL AND 50 DIA. FOR TENSION) OR THE VALUES OF THE TABLE A.</div><div>3.4. TABLE A : SCHEDULE OF LAP SPLICES BAR DIA LAP SPLICES LENGTH (MM) 10 500 12 600 16 800 20 1000 25 1250</div><div>3.5. SPACER BARS IN BEAMS SHALL BE A MINIMUM T25 OR THE SIZE OF BAR IF GREATER AT 1000MM C/C; CHAIRS IN SLABS SHALL BE A MINIMUM T12@1000MM C/C; AND MINIMUM TIES IN WALLS SHALL BE T8@1000MM C/C.</div><div>3.6. CLEAR COVER TO REINFORCEMENT INCLUDING LINKS, STIRRUPS, AND TIES SHALL BE AS FOLLOWS: <div><div>a) STRUCTURE IN CONTACT WITH GROUND FOOTINGS = 50MM WALL AND COLUMN = 50MM GROUND BEAM = 50MM SLAB AT GROUND LEVEL = 50MM</div><div>b) SUPER STRUCTURE COLUMNS = 40MM BEAMS = 40MM SLABS = 30MM WALLS = 40MM ALL CONCRETE ELEMENTS IN CONTACT WITH WATER/SPLASH ZONE = 50MM</div></div></div><div>3.7. REINFORCEMENT BARS TO BE CUT, BENT OR ADJUSTED TO CLEAR ALL OPENINGS AND INTERFERING STRUCTURES TO SUIT AT SITE TO THE APPROVAL OF THE CONSULTANT OR ENGINEER.</div><div>3.8. FOR HOLES IN SLABS UP TO 300X300 SQ., REINFORCEMENT IS TO BE CUT AND REPLACEMENT BARS FIXED ADJACENT TO THE HOLE EXTENDING 45X BAR DIAMETER BEYOND THE HOLE.</div></div>	<div>4. FIRE RESISTANCE</div> <div><div>4.1. ALL STRUCTURAL CONCRETE MEMBERS BETWEEN UNITS ON BOUNDARIES ARE DESIGNED TO MAINTAIN FIRE RESISTANCE OF 2 HOURS.</div></div> <div>5. CRACKING</div> <div><div>5.1. THE CRACKING OF THE STRUCTURAL CONCRETE IN GENERAL IS RESTRICTED TO 0.30MM.</div></div> <div>6. EARTHWORK &amp; FOUNDATIONS</div> <div><div>6.1. FOUNDATION DETAIL DESIGN IS BASED ON THE ASSUMED SAFE ALLOWABLE BEARING CAPACITY HAS BEEN TAKEN AS 75kPa.</div><div>6.2. EXCAVATIONS FOR FOUNDATIONS DOWN TO FORMATION LEVEL SHALL BE CARRIED OUT BY MECHANICAL MEANS, EXCEPT FOR THE LAST 100MM OF EXCAVATION WHICH IS TO BE CARRIED OUT BY MANUAL METHODS AND RECOMMENDED BY GEOTECHNICAL CONSULTANT.</div><div>6.3. THE FORMATION LEVEL OF FOUNDATION IS TO BE INSPECTED AND APPROVED BY THE ENGINEER BEFORE COMMENCEMENT OF THE WORK.</div><div>6.4. SITE INSPECTION BY A QUALIFIED ENGINEER SHOULD BE CARRIED OUT AFTER COMPLETION OF THE EXCAVATION WORKS AND AFTER PREPARATION OF THE PROPOSED FOUNDATION LEVEL TO ENSURE THAT THE CONTACT SURFACE IS FREE FROM ANY LOOSE/SOFT LAYER AND PROPERLY PREPARED FOR THE FOUNDATION.</div></div> <div>7. CONCRETE WORKMANSHIP</div> <div><div>7.1. ALL CONCRETE WITHOUT PLASTER SHALL BE FAIR FINISH UNLESS NOTED OTHERWISE.</div><div>7.2. ALL CONCRETE SURFACE TO HAVE PLASTER ARE TO BE HACKED TO HAVE AN ADEQUATE SURFACE KEY.</div><div>7.3. ALL CONCRETE IS TO BE CURED BY AN APPROVED METHOD-WATER POUNDING OR CURING COMPOUND.</div></div>
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## GENERAL NOTES

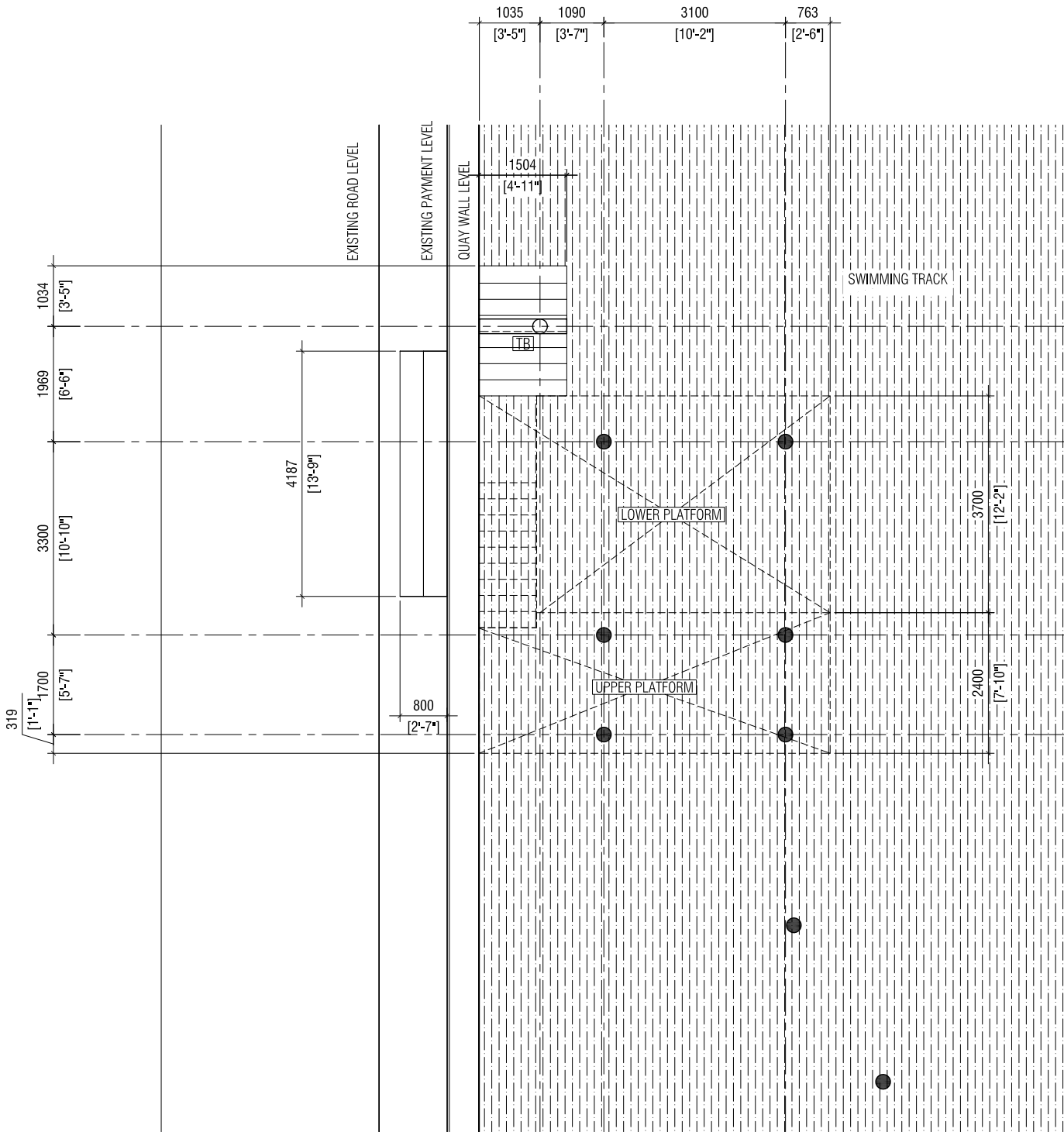
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	ARCHITECTURAL CHECKER :	-	DRAWN BY :	HUSSAIN AZEEM	S-01	
	CIVIL ENGINEER :	AHMED ZUHAL ZAEEM	DATE :	OCTOBER 2020		
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PLATFORM FOUNDATION PLAN

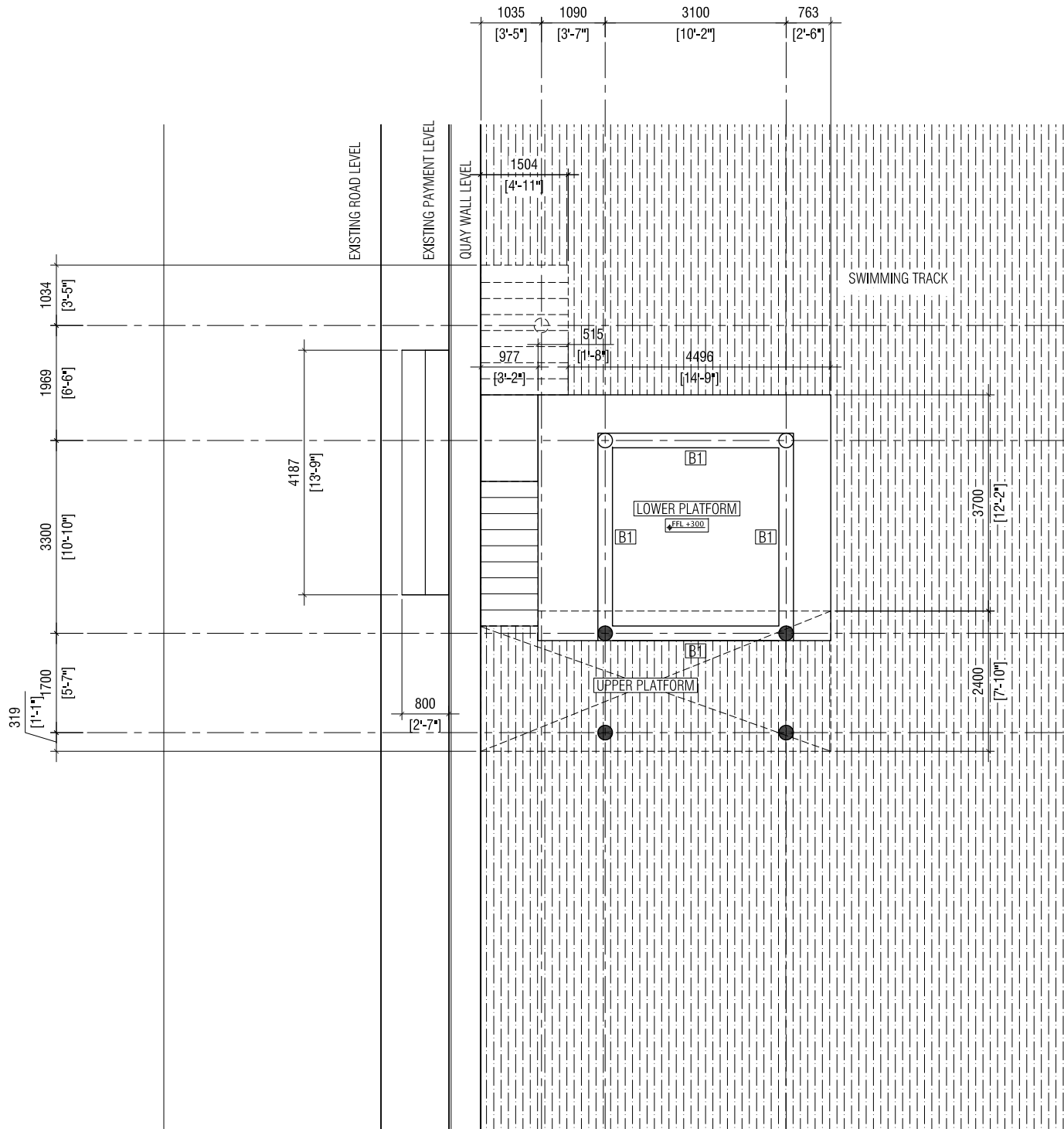
SCALE 1:100



STAIR BEAM PLAN

SCALE 1:100

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	ARCHITECT :	HAMRAU AHMED FATHUHEE	CLIENT NAME :	SWIMMING ASSOCIATION	DWG NO:
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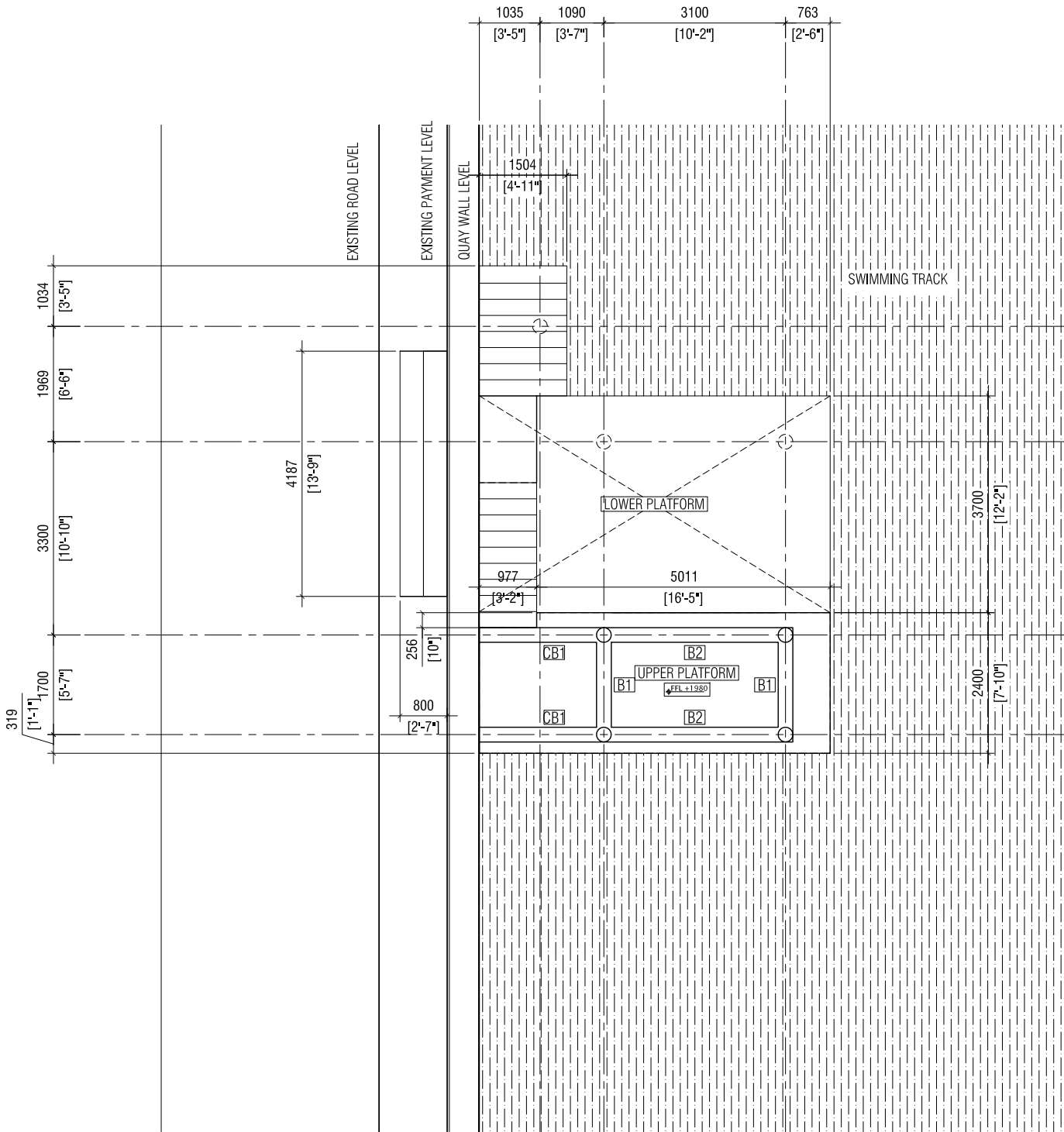


LOWER PLATFORM BEAM PLAN

SCALE 1:100

NOTE:-

ALL SLAB THICKNESS = 175MM  
TOP REINFORCEMENT = T12 @ 100 c/c B/W  
BOTTOM REINFORCEMENT = T12 @ 200 c/c B/W

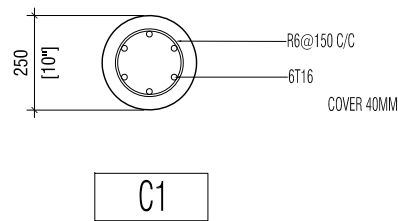


UPPER PLATFORM BEAM PLAN

SCALE 1:100

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	CIVIL ENGINEER :	AHMED ZUHAL ZAEEM	DATE :	OCTOBER 2020	
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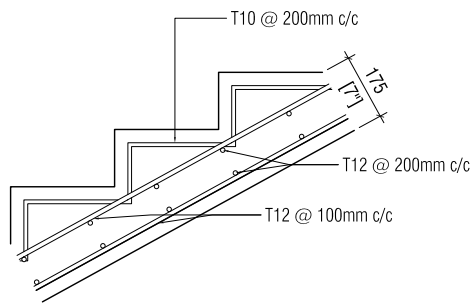
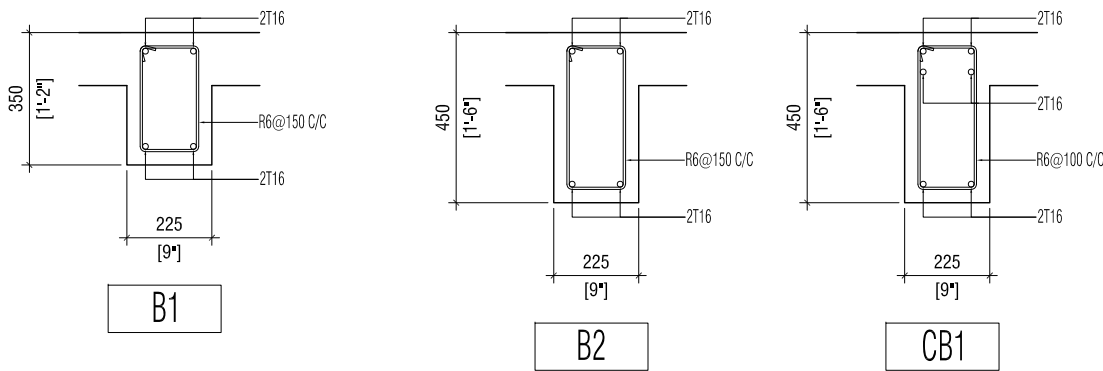
COLUMN DETAILS



FOUNDATION DETAILS

FOOTING	LENGTH/mm	WIDTH/mm	DEPTH/mm	REINFORCEMENT
F1	1600	1600	350	T10@150mm C/C BW T/B
F2	1300	1300	350	T10@150mm C/C BW T/B

BEAM DETAILS



STAIRCASE REINFORCEMENT DETAILS (SECTION)

STRUCTURAL DETAIL 1

SCALE 1:20

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